Status and Future Prospects for the Darkblotched Rockfish Resource in Waters off Washington, Oregon, and California in 2011

by

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Executive Summary

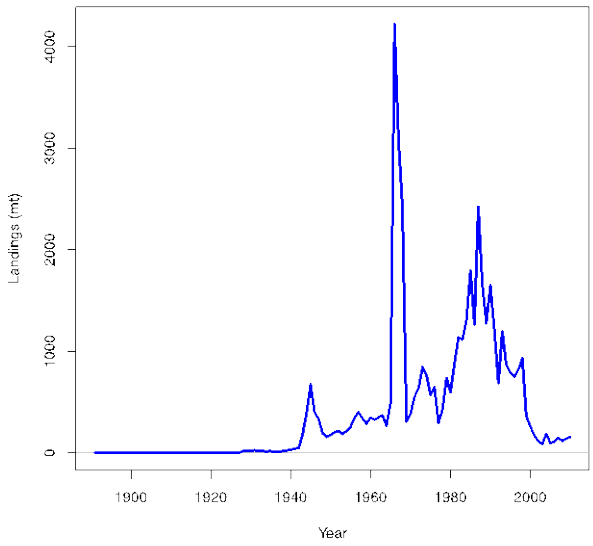
Stock

This updated assessment applies to the darkblotched rockfish (*Sebastes crameri*) resource in the combined US Vancouver, Columbia, Eureka and Monterey INPFC areas. The darkblotched rockfish (*Sebastes crameri*) population in these areas was modeled as a single stock as there are no clear stock delineations for darkblotched rockfish in U.S. waters. However, management actions on a coast-wide stock should account for problems in effort concentration because areas of high concentration do exist. In addition, with the stock extending northwards into Canadian waters, management and assessment of stock status might be improved through greater cooperation with British Columbia.

Catches

Darkblotched rockfish is primarily caught by bottom trawl gear. The largest landings of darkblotched (between 2,300 and 4,200 metric tons (mt)) were taken from 1966-1968, primarily by foreign vessels. From 1969 to 1981, the fishery proceeded with more moderate landings of between 200 and 1000 mt per year, with the foreign fishery ending in 1977. A second peak in landings occurred between 1982 and 1993, with landings exceeding 1,100 mt in 10 of 12 years, reaching over 2,400 mt in 1987. Management measures reduced landings to below 950 mt since 1994, below 400 mt since 1999, and below 200 mt in recent years.

Landings history from 1892-2010



Landings estimates for the past 10 years

Year	*Landings(mt)*
2001	*175*
2002	*112*
2003	*84*
2004	*188*
2005	*97*
2006	*107*
2007	*144*
2008	*116*
2009	*140*
2010	*155*

Data and Assessment

The last full assessment of darkblotched rockfish was conducted in 2007, and it was subsequently updated in 2009. This updated assessment uses the Stock Synthesis (SS) modeling framework, version 3.21d. New data and updates to the data used in the previous assessment were included in this new assessment.

Recently reconstructed Oregon historical landings replaced data used previously for the period 1928-1986. Landings data for 1983-2008 were checked and new landings data were added for 2009 and 2010. Fishery length compositions were updated by the addition of new 2009 and 2010 length compositions. The fishery conditional age-at-length data were updated to include otoliths collected and aged in 2009 and 2010. New discard estimates and discard length compositions for 2008 and 2009 were added.

Four fishery independent surveys were included in this updated assessment, as in the previous assessment. The NWFSC Bottom Trawl Survey was again treated as two separate survey indices (Shelf and Slope) and each index was updated with data from the 2009 and 2010 surveys. Two included historical surveys had no new data: the AFSC Slope Survey (1997 and 1999-2001) and the NMFS Triennial Survey (1980-2004). The "super years" from the AFSC Slope Survey continue to be excluded, as is the 1977 data from Triennial Shelf Survey. GLMM-based biomass indices and CV's were recalculated for all four surveys with updated software using a gamma distribution rather than the lognormal previously modeled. All length compositions for the NWFSC Slope and Shelf Survey were reconstructed for 2003-2010, as were the conditional age-at-length compositions. The AFSC Slope Survey conditional age-at-length compositions from 2001 and the fishery discard age data from 2004 and 2005 remain unchanged.

A number of sources of uncertainty were explicitly included in this assessment. For example, allowance was made for uncertainty in natural mortality and the parameters of the stock-recruitment relationship. There were additional sources of uncertainty that were not included in the current model, including the degree of connection between the stocks of darkblotched rockfish off British Columbia and those in US waters; the effect of the PDO, ENSO and other climatic variables on recruitment, growth and survival of darkblotched rockfish; and gender-based differences in survival.

The reference case, on which this update is based, was selected (in 2007) by extensive model testing with an attempt to balance the sources of uncertainty. In this assessment, the steepness has been updated to 0.76 from 0.6 based upon information from a new meta-analytic prior (Martin Dorn, pers.com.) and the model fit. In addition, selectivity for the NWFSC slope survey has been modeled in the current assessment as a dome-shaped function, rather than the asymptotic function previously assumed.

Reference Points and Management Performance

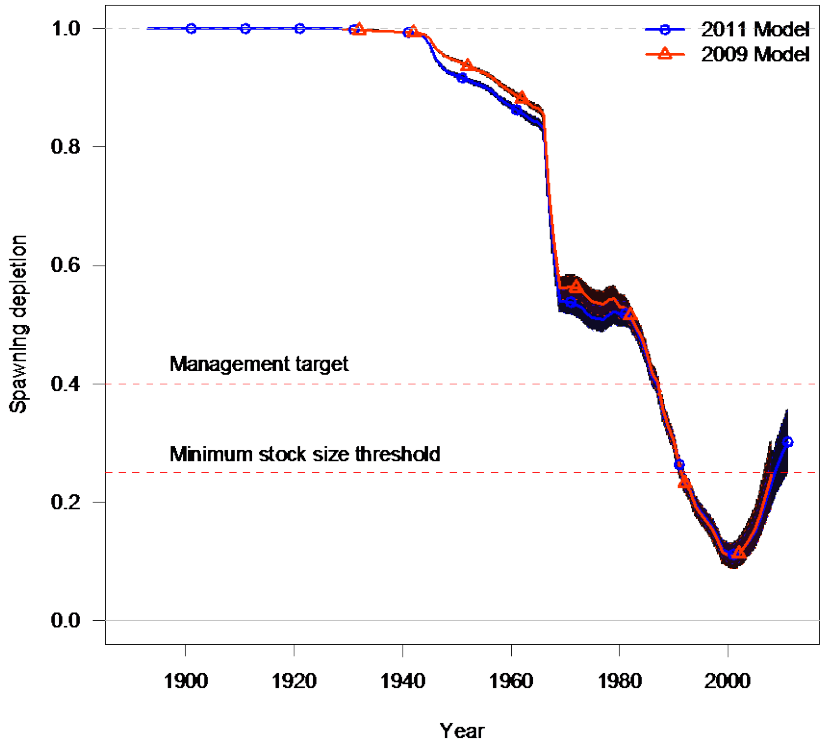
For West Coast rockfish, a stock is considered overfished when it is below 25% of unfished spawning biomass (or output), and recovered when it reaches 40% of unfished spawning biomass. Overfishing is considered to be occurring when catch exceeds the OFL specified for a particular year. The point estimate for the depletion of the spawning output at the start of 2011 is 30.2%. This assessment suggests that darkblotched rockfish on the West Coast is above the overfished threshold, but below the management target of 40% of unfished spawning biomass. The spawning output appears to have increased steadily over the past 10 years (which is essentially the same period in which a formal rebuilding plan has been in place). Since 2003, overfishing is estimated to have occurred once, with estimated catch barely exceeding the OFL by 2 mt in 2004.

Summary of past 10 years

Year	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011
OFL (previously ABC)	302-349	187	205	240	269	294	456	487	437	440	508
ACL (previously OY	130	168	172	240	269	200	290	330	285	291	298
Landings(mt)	175	112	84	188	97	107	144	116	140	155	NA
*Discards(mt)**	95	151	115	54	26	104	137	111	133	147	NA
*Catch (mt)**	270	263	199	242	123	211	281	227	273	302	NA
F (%)	4.23	3.66	2.47	2.70	1.26	1.98	2.46	1.88	2.15	2.26	2.14
Expl. Rate (%)	4.23	3.66	2.47	2.70	1.26	1.98	2.46	1.88	2.15	2.26	2.14
1+ Biomass	6,382	7,172	8,046	8,959	9,778	10,670	11,420	12,035	12,722	13,344	13,926
Sp. Output	3,262	3,383	3,610	3,947	4,363	5,058	5,911	6,766	7,568	8,231	8,808
Sp. Out. sd	292	314	344	382	431	499	587	681	768	847	918
Sp. Out. cv	0.053	0.057	0.062	0.069	0.078	0.090	0.106	0.123	0.139	0.153	0.166
Recruits(10^3)	1,162	1,034	1,997	2,682	2,792	2,100	2,002	5,330	841	2,505	2,544
Rec. sd	186	147	240	319	347	303	329	844	367	2,007	2,038
Rec. cv	0.082	0.065	0.105	0.140	0.153	0.133	0.145	0.372	0.161	0.883	0.897
Depletion	0.112	0.116	0.124	0.135	0.150	0.173	0.203	0.232	0.259	0.282	0.302
Depl. sd	0.009	0.009	0.010	0.011	0.013	0.015	0.017	0.020	0.023	0.025	0.027
Depl. cv	0.045	0.049	0.054	0.060	0.067	0.078	0.092	0.106	0.120	0.132	0.144

* The *discard* reported in this table is a model estimate, and *catch* is equal to landings plus the model-based discard estimates.

Estimated depletion level, 1892-2011for the base model (open circles) and 1928 to 2009 for the 2009 update assessment (triangles).



Summary of major quantities from assessment

	Value	*sd*	*cv*
$SpOut_0$ (10^8 eggs)	29,168	643	0.022
B_0 (mt)(1+ Biomass)	32,710	724	0.022
R_0 (10^3 fish)	3,008	71	0.024
$SpOut_{msy}$ (10^8 eggs)	13,334	294	0.022
F_{msy}	0.036	1.5e-4	0.004
Basis for above	$F_{50\%SPR}$		
Exploitation rate at MSY	0.036		
MSY	657		

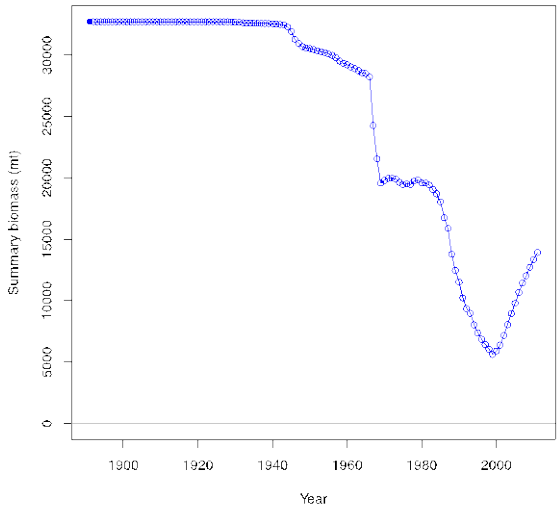
Summary of Darkblotched rockfish reference points

	$F_{msy}=F_{spr}$ (0.5)	$F_{msy} = F_{Btarg}(B_{40})$	Calculated F_{msy}
SPR	0.5	0.45	0.30
F	0.036	0.043	0.068
Exploitation Rate	0.036	0.043	0.068
MSY (mt)	657	704	774
Sp. Out. msy	13,334	11,667	7,068
B/B0 (Sp. Out.)	0.46	0.40	0.24

Stock Biomass

The point estimates of summary (age 1+) biomass show an upward trend over the past ten years, nearly doubling during that time.

1+ Biomass Levels from 1892 to 2010



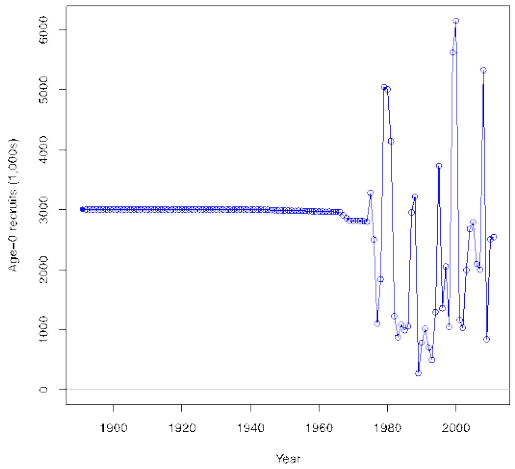
Biomass estimates for the past 10 years

Year	*Total 1+ biomass(mt)*
2002	7,172
2003	8,046
2004	8,959
2005	9,778
2006	10,670
2007	11,420
2008	12,035
2009	12,722
2010	13,344
2011	13,926

Recruitment

The first year for which recruitment appears to be reliably estimated is 1975. The recruitment pattern for darkblotched rockfish is similar to that of many rockfish species, with highly variable recruitment from year to year. With a few exceptions, the 1980's and 1990's provided rather poor year-classes compared with average historical recruitment levels, however there appear to be very high recruitments in 1999, 2000 and 2008.

Recruitment estimates (1892-2010)



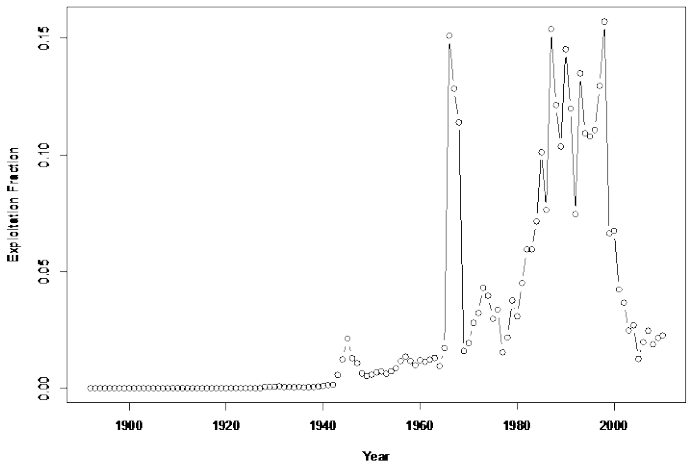
Recruitment estimates for the past 10 years (Thousands of age-0 recruits)

Year	*Recruitment*
2002	1,034
2003	1,997
2004	2,682
2005	2,792
2006	2,100
2007	2,002
2008	5,330
2009	841
2010	2,505
2011	2,544

Exploitation Status

The exploitation rate (percent of biomass taken) on fully-selected animals peaked near 15% in the mid-1960's when foreign fishing was intensive. The exploitation rate dropped by the late 1960's, but increased slowly and steadily from the late 1970's to 1987 at 15% and remained high until 1998 with the continuing decline in exploitable biomass. Over the past 12 years the exploitation rate has fallen from over 6% to below 4%.

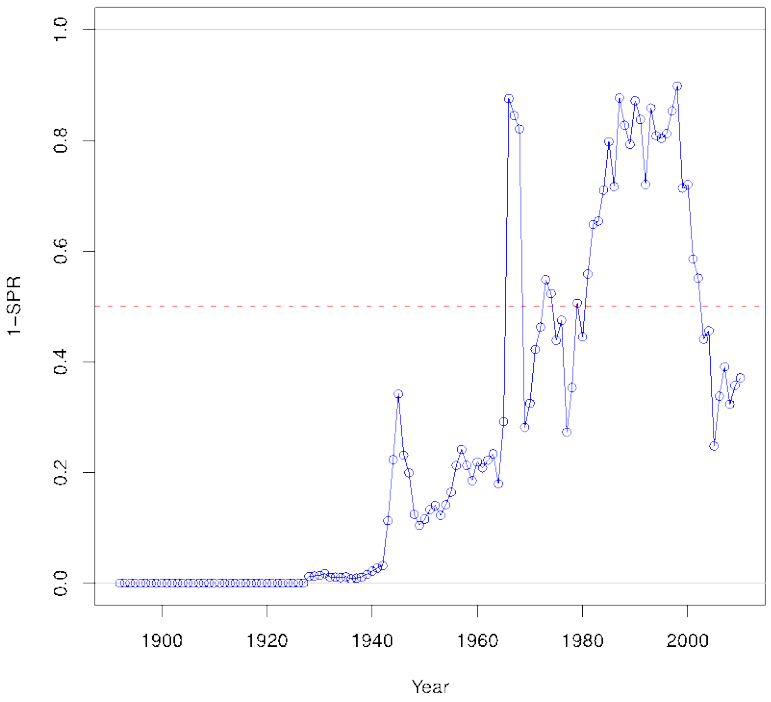
Exploitation Fraction (1892-2010)



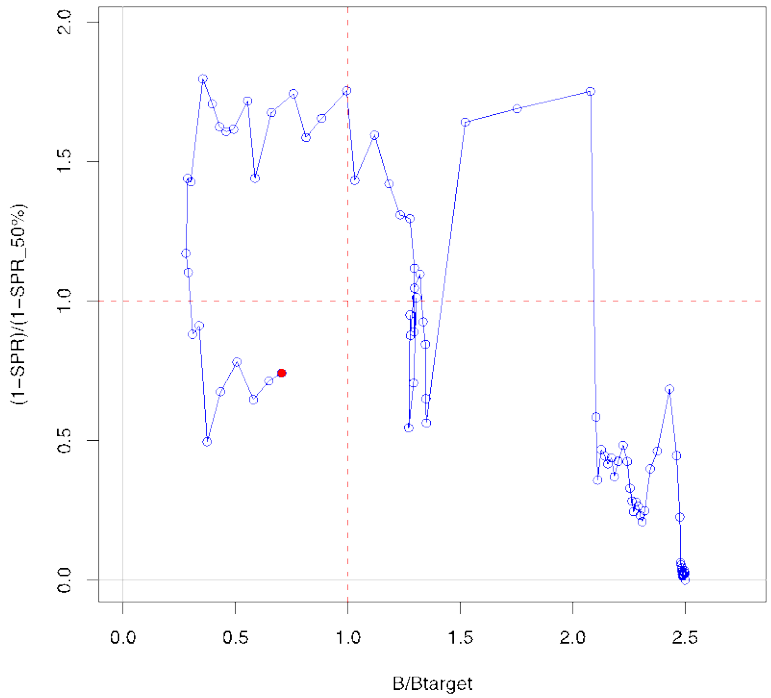
Exploitation Fraction the past 10 years

Year	*Exploitation rate*
2002	4.23 %
2003	3.66 %
2004	2.47 %
2005	2.70 %
2006	1.26 %
2007	1.98 %
2008	2.46 %
2009	1.88 %
2010	2.15 %
2011	2.26 %

One minus SPR for 1892-2010



Relative Fishing Intensity versus B/Btarget for 1892-2010



Decision table

The major axes of uncertainty in the model are steepness and natural mortality. The decision table below uses spawner-recruit steepness (*h*) as the major axis of uncertainty. In the base model, steepness was fixed at the level of 0.76 (Dorn prior). The decision table was developed to bracket model uncertainty in darkblotched rockfish productivity (rather than natural mortality as in the 2007 full assessment and 2009 update assessment). Alternative steepness values were calculated as the 12.5% and 87.5% quantiles from the prior distribution on *h*, which resulted in steepness values of 0.54 and 0.95 for the low and the high states of nature, respectively. The three catch series are based upon SPR = 71.9% ("Low Catch"), SPR = 64.9% (Medium Catch), and 40:10 rule catches ("High Catch").

Decision table

			Low State h = 0.54		Medium State h = 0.76		High State h = 0.95	
	YEAR	Catch	Sp. Out	% Depl	Sp. Out	% Depl	Sp. Out	% Depl
	2013	236	3821	12.7	9863	33.8	13767	47.8
	2014	247	3922	13.0	10422	35.7	14628	50.7
Low Catch	2015	255	4019	13.4	11001	37.7	15524	53.9
calculated from	2016	262	4099	13.6	11555	39.6	16379	56.8
71.9%SPR	2017	269	4164	13.8	12054	41.3	17129	59.4
applied to the	2018	276	4224	14.0	12503	42.9	17763	61.6
base model	2019	282	4288	14.3	12917	44.3	18297	63.5
	2020	288	4358	14.5	13305	45.6	18749	65.0
	2021	295	4433	14.7	13672	46.9	19134	66.4
	2022	300	4512	15.0	14021	48.1	19462	67.5
	2013	317	3821	12.7	9863	33.8	13852	48.1
	2014	330	3859	12.8	10359	35.5	14653	50.8
Medium Catch	2015	339	3888	12.9	10869	37.3	15483	53.7
calculated from	2016	346	3896	13.0	11349	38.9	16266	56.4
64.9% SPR	2017	354	3888	12.9	11771	40.4	16939	58.8
applied to the	2018	361	3875	12.9	12143	41.6	17493	60.7
base model	2019	368	3866	12.9	12479	42.8	17947	62.3
	2020	375	3864	12.9	12791	43.9	18320	63.6
	2021	381	3866	12.9	13084	44.9	18626	64.6
	2022	388	3871	12.9	13360	45.8	18879	65.5
	2013	485	3821	12.7	9863	33.8	13852	48.1
	2014	506	3729	12.4	10227	35.1	14521	50.4
High Catch	2015	521	3613	12.0	10590	36.3	15202	52.7
Buffered	2016	533	3468	11.5	10910	37.4	15823	54.9
40-10 Rule	2017	543	3301	11.0	11165	38.3	16325	56.6
	2018	551	3130	10.4	11366	39.0	16705	58.0
	2019	559	2965	9.9	11532	39.5	16985	58.9
	2020	566	2807	9.3	11676	40.0	17187	59.6
	2021	571	2654	8.8	11805	40.5	17328	60.1
	2022	575	2502	8.3	11924	40.9	17424	60.4

Future Research Needs

Future research needs include:

- Reconstruction of Washington historical catch.
- Investigation into the best available methods and data for constructing and using conditional age at length compositions from data taken across space and time within years.
- A thorough investigation of historical darkblotched rockfish mortality in the shrimp fishery.
- Mapping of “trawlable” and “untrawlable” habitat and construction of a prior on survey q.

1. Introduction

This assessment used combined data from the International North Pacific Fisheries Commission (INPFC) U.S. Vancouver, Columbia, Eureka and Monterey areas. The darkblotched rockfish (*Sebastes crameri*) population in these areas was modeled as a single stock.

Darkblotched rockfish (*Sebastes crameri*) are found from the Bering Sea to near Santa Catalina I., California at depths of 29-549 m (16-300 fm; Eschmeyer et al.1983). Commercially important concentrations are found from Northern CA through the Canadian border, on or near the bottom, in depths of approximately 183-366 m (100-200 fm) (Figure 1). This species co-occurs with an assemblage of slope rockfish, including Pacific ocean perch (*Sebastes alutus*), splitnose rockfish (*Sebastes diploproa*), yellowmouth rockfish (*Sebastes reedi*), and sharpchin rockfish (*Sebastes zacentrus)*. Pacific ocean perch and darkblotched rockfish are the most abundant members of that assemblage off the coasts of Oregon and Washington, but splitnose rockfish and darkblotched rockfish dominate off the northern coast of California. In the early years of the fishery, darkblotched rockfish were designated as part of the "Pacific ocean perch" market category for red-colored northern slope rockfish.

There are no clear stock delineations for darkblotched rockfish in U.S. waters. No distinct breaks are seen in the fishery landings and catch distributions (Figure 1). Survey catches imply a continuous distribution over most of the range, with the largest catches occurring over a swath of latitude and depth. For the purpose of this assessment, the species is treated as a unit stock from the Mexican border to the U.S.-Canadian border. However, management actions on a coast-wide stock should account for problems in effort concentration because areas of high concentration do exist.

Additional information on stock genetics, sexually dimorphic growth, migration to deeper waters, and historical fishing practices can be found in the last full assessment (Hamel, 2007).

2. Data

The last full assessment of darkblotched rockfish was conducted in 2007, and it was subsequently updated in 2009. This update assessment differs from the traditional update paradigm in that input data used in the previous update have been reanalyzed, and time series they represent were reconstructed. As these reconstructed time series are considered to reflect better practice and information, they were incorporated in this assessment. We first note changes to datasets used in the 2009 update assessment, and then describe each data source.

2.1 Changes to data used for previous assessments

Catch Data

Landed catch for the Oregon historical fishery had been reconstructed by NWFSC and Oregon Fish and Wildlife scientists, and these data were used in place of the Oregon catch stream that had been used in the 2009 update assessment. In addition, there were two new years of data added to all catch streams.

Discard Rates

The discard rates from the West Coast Groundfish Observer Program had been recalculated, and the new ones were used for this assessment.

Survey Data

The darkblotched rockfish assessment uses fishery data from the Alaska Fisheries Science Center (AFSC) triennial and slope surveys, as well as slope and shelf surveys performed by the Northwest Fisheries Science Center (NWFSC). As the former two surveys ended some time ago, their results were not updated for the present assessment. The NWFSC surveys had undergone data review, and as a result the length- and age-at-length-compositions were reconstructed for the assessment, as well as the weighting factors (effective sample sizes) for each year of survey.

Abundance Indices

The software previously used for generating the survey abundance indices is no longer functional, and a new GLMM was used to construct new CPUE timeseries for all four surveys. The model for deriving CPUEs used in the previous update modeled the zero catches as a lognormal distribution; the new model uses a gamma distribution, as that distribution is determined to be more appropriate for the observed data than the lognormal distribution. This is considered an improvement to the previous GLMM model.

Stock-Recruit Steepness

The 2007 full assessment assumed a steepness of 0.6 (estimated and then fixed in the model). In the 2009 update assessment, the value of steepness was kept unchanged (fixed at 0.6). In the 2011 assessment, when steepness is estimated within the model, estimated values tends to be high (hitting the upper bound). It is clear from the current data and model that it is not possible to consistently estimate a realistic value for steepness; therefore we adopted the mean of the current meta-analytic prior for steepness provided by Martin Dorn (pers. com.), h = 0.76.

2.2. Fishery removals and regulations

Darkblotched landings information was obtained for the fishery off the West Coast of the continental United States from 1892 through 2010 (Figure 2; Tables 4-5). Reconstructed Oregon historical landings were updated for 1892-1986 (Mark Karnowski, pers. com.). For Washington, darkblotched landings during the period 1928-1962 were estimated by apportioning combined rockfish landings using the earliest available species proportions in a given area. Since the fleet fished shallower than 100 fm in years before 1945-1948, the available darkblotched proportions were reduced for those years. Landings from 1963-1977 were mainly available in the literature, but some estimation was required. The 1978-1980 landings were taken from CalCom and Tagart (1985). Landings from 1983-2009 were extracted from PacFIN on May 6, 2011. The 2010 landings were estimates from the Pacific Fishery Management Council Groundfish Management Team 2010 in-season scorecard, and darkblotched bycatch information from the At-Sea-Hake Observer Program was taken from the Northwest Regional office website (NWR, 2011) for 2005-2010.

Discards

The new discard rates for 2002-2010 (Table 3) were obtained from the West Coast Groundfish Observer Program. Additional information on past discards can be found in Hamel (2007).

Fishery Length compositions

Fishery length compositions (Figures 3-6) were estimated from PacFIN for the years 1977-1978 and 1981-2010. Fishery length compositions were constructed using BDS data retrieved from PacFIN on May 6, 2011. Length, age and sex data were acquired at the trip level, and then aggregated to the state level as was done in the 2007 assessment, and 2009 update. For each trip, the length composition of the sampled individuals was scaled up to represent the length composition of the trip landings through use of an expansion factor. In this assessment, the expansion factor was calculated as:

$$\text{Expansion Factor} = (WT_{total}/WT_{sampled})^{0.9}$$

with total weight divided by sample weight being the equivalent of total estimated number over sampled number. The exponent 0.9 was used in acknowledgment of the reduced information that occurs with any expansion to the trip level. The initial effective N value (input N) for each state was calculated via Stewart's Method (Ian Stewart, pers. com.), which for fisheries is:

$$N_{effective} = N_{trips} + 0.138N_{fish} \quad \text{if } N_{fish}/N_{trips} < 44$$
$$N_{effective} = 7.06N_{trips} \quad \text{if } N_{fish}/N_{trips} \geq 44$$

The geometric mean was adjusted to account for the lack of proportional sampling in each state as in Hamel (2007). The input $N_{effective}$ was capped at 500 in this assessment.

The length composition of discarded darkblotched rockfish in 1986 was estimated using data from observed groundfish trawls in that year (Rogers, 2005). The length compositions of discards in more recent years (2002-2010) were calculated with observer data from boats using bottom trawl gear. Individual lengths were scaled up by a straight expansion factor to the total discard for each observed tow. Due to significant missing sex data across the full range of length bins, all discard length-, age- and conditional age-at-length compositions were developed as combined-sex length compositions (Figures 7-8). Input N values for discard length compositions were calculated via Stewart's Method (Table 6B).

Fishery conditional age-at-length compositions

Conditional age-at-length compositions were constructed from age and length data available from PacFIN for the years 2003-2010. These years were used because all of the ages in PacFIN for those years were from otoliths aged between 2004 and 2010, a period in which ageing methods have been invariant, with three agers doing all of the ageing. Double-read analysis indicates minimal or no bias between agers and relatively good precision. In constructing conditional age-at-length compositions, instead of expanding samples up to trips, as with the length data, each age-at-length data point was considered independent for the purposes of creating each composition, although total input N (across all length bins) was still based on Stewart's method as described above. This total input N was spread among the length bins according to the number of fish contributing to data in that bin. For the early years, in keeping with the 2007 assessment (Hamel, 2007), this update only uses data from the years 1991 and 1998 (Table 7).

Since rockfish grow significantly in a single year and fishing occurs throughout the year, length bins were pooled according to estimated growth for each age. The bins were 0-10 cm, 11-15 cm, 16-20 cm, 21-24 cm, 25-27 cm, and 28-30 cm, with two-centimeter bins for length from 31 cm to 50 cm, and a plus group at 51 cm and above. The compositions and input sample sizes (Table 7) were developed by the same method as described above for the PacFIN data. Residuals for the age-at-length compositions are shown in Figures 26-30.

2.3. Surveys

NMFS Cruises

The results from four fishery-independent surveys are used in this assessment:

1. The NMFS Triennial Shelf Survey that was conducted every third year from 1977-2004
2. The AFSC Slope Survey for the years 1997 and 1999-2001.
3. The NWFSC Slope Survey for the years 1999-2010.
4. The shelf portion of the NWFSC survey for the years 2003-2010.

Neither the 1977 Triennial Shelf Survey, due to concerns about the first year of the survey's implementation, nor the AFSC Slope Survey "super years", consisting of combined data from multiple years of partial coastal coverage, were used in this assessment. The "POP" survey from 1979 and 1985 was not used, as selectivity likely changed between the two survey years which used separate methods. The previous solution of mirroring the AFSC Slope Survey was unlikely to produce realistic selectivities for the POP survey. These two years of data were also relatively insignificant given the other data available.

Indices

In the 2007 and 2009 assessments, indices of abundance were derived for the four surveys based on a Generalized Linear Mixed Model (GLMM) following the methods of Helser et al (2004, Table 8), including vessel-specific differences in catchability (via inclusion of random effects) .. The GLMM approach explicitly models both the zero and positive catches, as well as allowing for skewness in the distribution of catch rates through the use of a Gamma or lognormal error structure. Coefficients of variation (CVs) about the indices were produced using an MCMC technique.

The GLMM indices for this update were generated for all four surveys using the same basic method but using software reprogrammed by John Wallace (John.Wallace@noaa.gov) to use OpenBUGS (http://www.openbugs.info/) from the statistical language R. Although point estimates and confidence intervals differed slightly between the two implementations applied to data through 2008, the basic trends were largely unchanged. Any discrepancies may likely be attributed to the use of the Gamma rather than the lognormal error structure, as in past assessments.

GLMM results are reported coastwide, combining the U.S. Vancouver and Columbia INPFC areas with the Eureka and Monterey INPFC areas. While darkblotched rockfish are occasionally seen in the Conception INPFC area, the numbers there are negligible compared to those further north. Depth ranges were limited to those which were covered in all years of each survey.

Length compositions

Length compositions were derived for each survey, except for the 1999 NWFSC Slope Survey, for which length data were not available and the 2004 Triennial Survey where age compositions, instead of length compositions, were used (Figures 9-24).

Length, age, and sex data were acquired at the tow level, and then aggregated within INPFC areas and depth strata. For each trip, the length composition of the sampled individuals was scaled up to represent the length composition of the trip landings through use of an expansion factor. In this assessment, the expansion factor was calculated as:

$$\text{Expansion Factor} = (WT_{total}/WT_{sampled})$$

with total weight divided by sample weight being the equivalent of total estimated number over sampled number. No down weighting exponent was used, as the survey data are taken at the tow level rather than the trip level. The initial effective N (input N) were calculated via Stewart's Method (Ian Stewart, pers. Comm.), which for surveys is

$$N_{effective} = N_{trips} + 0.0707 N_{fish} \quad \text{if } N_{fish}/N_{trips} < 55$$
$$N_{effective} = 4.89 N_{trips} \quad \text{if } N_{fish}/N_{trips} \geq 55$$

where N_{fish} is the total number of fish sampled across all trips (Table 6C).

Age compositions

The 2004 Triennial Survey age composition is included in this assessment as derived in the 2005 assessment (Figures 25).

Conditional-age-at length compositions

Conditional age-at-length compositions were constructed from age and length data using the same methods as for survey length compositions. These compositions were constructed for the 2001 AFSC Slope Survey and the 2003-2010 NWFSC Slope and Shelf Surveys (see Figures 31-35 for the residuals for the survey compositions). These years and surveys were used because all of the ages were from otoliths aged between 2004 and 2010, a period in which ageing methods have been invariant, with three agers doing all of the ageing. Total input N for each year was based on Stewart's method as described above (Table 7). This total input N was distributed among the length bins according to the number of fish contributing to data in that bin.

A summary of data sources and years included in the base model is given in Table 9.

2.4. Biology and life history

Natural mortality

In the 2000 and 2003 assessments, M = 0.05 was selected based on fit to the data (Rogers et al. 2000). Lenarz (1993) suggested a range of natural morality estimates (0.025-0.05) based on a maximum age range of 60-105 years, using Hoenig's method. In 2005, indirect estimates of M for darkblotched rockfish from Gunderson et al. (2003) were considered in selecting a value for M. Gunderson estimated M based on a meta-analysis of the relationship of the Gonadosomatic Index or GSI (ovary weight/somatic body weight). This method produced a value of M = 0.107

for darkblotched rockfish with a 95% confidence interval of 0.07-0.14. The 2005 and 2007 assessments used 0.07 based on balancing the estimates using GSI and Hoenig's method.

However, the correct interval to use when conducting meta-analyses and predicting an unobserved point is a prediction interval, not a confidence interval. The prediction interval for both Hoenig's method and the GSI method are quite large ((0.005 - 0.375) for Hoenig's (using log-log regression), and either (-0.186 - 0.323) (untransformed) or (0.062-0.205) (log-log) for Gunderson's method). In addition, the values of both maximum age and GSI for darkblotched are towards the edge of the data used in constructing the meta-analyses, so assuming a linear relationship in either space is somewhat suspect. Therefore it is hard to define what the correct prediction interval is for either method. However, observation error in the data used in the meta-analysis can cause prediction intervals to be too wide, and therefore the situation may not be quite as dire. In any case, M continues to be a very difficult parameter to pin down. In this updated assessment, M was not changed from the value used in the last assessment. In so far as this value does balance the point estimates well, there is support for using this value.

Sex ratio, maturation and fecundity

In this assessment, the sex ratio at birth is assumed to be 1:1. Maturity-at-length for females was based on the work of Nichol (1990) with 50% maturity occurring at 34.5 cm (Figure 36):

$$P_{Mat} = \frac{1}{-e^{(-0.6449L+22.2)}}$$

Fecundity-at-weight was derived by converting Nichol's (1990) fecundity-at-length equation (Figure 37) using his length-weight relationship:

$$Eggs = 14{,}580W + 132{,}500W^2,$$

where W = weight is in kg.

Length-weight relationship

The length-weight relationship was estimated by Rogers (2005) using available survey data. Sexes were combined because means did not differ substantially. The equation was fit to mean weight at length from 6374 fish measured in West Coast surveys:

$$W = 0.000021L^{2.96142}$$

where W is weight (kg) and L is fork length (cm). This equation differs slightly from Nichol's (1990) equation, but this difference in the weight-length relationship results in quite minimal changes to the resultant weight and fecundity-at-age estimates.

Length at age

Length at age was estimated within the assessment model. No latitudinal or temporal changes in length at age were assumed, although male and female growth rate and L_∞ were estimated separately. The CV of length at age was also estimated and allowed to change linearly with mean length at age (Figure 38).

3. Assessment model

3.1 History of Modeling approaches

There have been eight previous assessments of darkblotched rockfish off of the U. S. West Coast (Lenarz 1993, Rogers et al. 1996, Rogers et al. 2000, Methot and Rogers 2001, Rogers 2003, Rogers 2005, Hamel 2007, Wallace and Hamel 2009). These assessments began with life-history-based analyses of sustainable catch rates and have progressed to statistical age-based modeling. The first full assessment of the darkblotched rockfish stock was conducted in 2000. That assessment was updated twice in 2001 and 2003. The 2005 and 2007 assessments were the second and third full assessments for this species. Hamel (2007) gives a detailed history on each of the assessments prior to 2007.

3.2 Current Model

Model

This assessment uses Stock Synthesis (SS) version 3.21d, released by Dr. Richard Methot in May 2011. The modeling period begins in 1892, assuming the stock was in an unfished equilibrium condition prior to that. Assessment includes one bottom trawl fishery. The base model's parameters, both those that were estimated and those that were fixed, are given in Table 10.

Length and age bins

The length frequency bins were the same as in the 2007 and 2009 assessments. The first bin contained all fish less than 7 cm, followed 1 cm length bins up to 32 cm, and then 2 cm bins from 33-34 cm to 49-50 cm, and a maximum bin of all fish $\geq$ 51cm in length.

Growth

Growth parameters were estimated within the model, including the size at age 1.7, the size at age 29, the von Bertalanffy growth rate parameter (K) and the CV of length at age 1.7. Exponential offsets were also estimated for the CV at age 29, for male size at age 29 and for von Bertalanffy K. Table 11 gives the estimates of these values for the current model and those arrived at in the previous assessment.

Recruitment, stock-recruitment steepness and natural mortality

R_0 is estimated in the model, along with recruitment deviations from 1975 through 2009, with σ_r = 0.8. Stock-recruitment steepness is fixed at 0.76following the PFMC request to revisit steepness and consider the recent estimates of much higher values than previously assumed (0.6 in the previous update). Natural mortality is set at 0.07 which is the value used in the 2005, 2007, and

2009 assessments. This value balances the estimates from various meta-analyses. See Hamel (2007) for more details.

Selectivity and Retention

In the previous update assessment, the double normal selectivity function was used for the fishery and each survey, along with the inflection point and slope of the logistic retention function. Various blocking schemes on fishery selectivity were tested in an effort to account for changes in depth of fishing and codend mesh size. However, these blocks resulted either in unrealistic selectivity patterns due to the sparseness or vagaries of the data, or almost no change at all.

During the course of this (enhanced) update, a time block on fishery selectivity corresponding to the implementation of Rockfish Conservation Areas (2003) was considered, allowing fishery selectivity to be domed shaped. However, this resulted in negligible change in the selectivity pattern. Therefore, as in 2007 full assessment and 2009 update assessment, a single selectivity pattern was assumed for all years of the fishery.

The pattern of retention has changed in recent years due to regulations (Table 1 & 3; Figure 39), so retention was blocked to reflect these changes. The length at the inflection point was allowed to change in 2000 and the asymptotic retention was allowed to change at 2000, 2004, and 2006. Modeled and observed discards reflecting this new approach to retention are shown in Figures 45 and 46.

Unlike the final runs for the 2007 and 2009 assessments, the NWFSC Slope Survey selectivity was found to be domed shaped. With only four years of data in 2007, the model found the selectivity to be asymptotic, but with eight years of data, a moderately strong dome was found. The other surveys were assumed to be domed shaped (Figures 41-44), as in the 2007 and 2009 assessments.

Weighting

Iterative re-weighting was applied as was done for the 2007 base model and the details can be found there (Hamel, 2007). That single re-weighting scheme was used for this update using the new reweighting parameters. .

4. Results

4.1. Reference model results

Figures 48-51 show the time trajectories of the estimates of summary biomass, fishery exploitation rate, recruitment, and depletion in spawning output. The fit to the stock-recruitment relationship (Figure 50) indicates a substantial amount of variability. The exploitation rate first peaked just under 15% in 1966-1968 due to fishing by foreign fleets. The two highest exploitation rates were attained in 1987 (15%) and 1998 (16%), averaging 11-12% in the intervening years. The fishing mortality rate has been less than 4% over the past 9 years.

Figure 52 provide a comparison of the time trajectories of spawning output, depletion, and summary (1+) biomass for the current and the 2009 update assessments. The fits of the base model to the various indices are summarized in Figures 53 and 54 (survey biomass indices), and

Figures 3-8 and 11-28 (composition data). The estimated growth parameters are given in Table 11.

4.2. Retrospective analysis

Retrospective analyses were conducted as if the assessment were carried out in the years from 2006 to 20010 (without the last 1-5 years of data). The retrospective pattern seen in Figure 55 suggests that data from the most recent years drive the model results.

5. Future research

Future research needs include:

- Reconstruction of Washington historical catch
- Investigation into the best available methods and data for constructing and using conditional age at length compositions from data taken across space and time within years.

- A thorough investigation of historical darkblotched rockfish mortality in the shrimp fishery.

- Mapping of "trawlable" and "untrawlable" habitat and construction of a prior on survey q.

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Table 1. Recent management regulations affecting darkblotched rockfish landings.

Area	Year	Period	2-mo landing limit for slope rockfish (lbs)	RCA Depth (fm)		Small footrope required
				min	max	
N of 40° 10'	2003	Jan-Dec	1,800	0-100	200-250	shoreward of RCA
	2004	Jan-Apr	4,000	60-75	200	shoreward of RCA
		May-Sep	8,000	60-75	150	shoreward of RCA
		Oct	8,000	0	250	shoreward of RCA
		Nov-Dec	1,800	0	250	shoreward of RCA
	2005	Jan-Dec	4,000	75-100	200	[*] shoreward of RCA
	2006	Jan-Feb	2,000	75	200	[*] shoreward of RCA
		Mar-Jun	4,000	75	200	[*] shoreward of RCA
		Jul-Dec	1,000	75-100	200	[*] shoreward of RCA
	2007	Jan-Apr	4,000	75 (Jan-Mar)	250 (Jan-Mar)	[*] shoreward of RCA
		Mar-Dec	1,500	[#] 60-75	150-200	[*] shoreward of RCA
	2008	Jan-Apr	4,000	[#] 75 (Jan-Mar)	250 (Jan-Mar)	[*] shoreward of RCA
		May-Dec	1,500	[#] 60-75	150-200	[*] shoreward of RCA
	2009	Jan-Aug	1,500	[#] 75-100	150-200	[*] shoreward of RCA
		Sep-Dec	4,000	[#] 75	200	[*] shoreward of RCA
	2010	Jan-Apr	6,000	[#] 75	200	[*] shoreward of RCA
		May-Aug	2,000	[#] 75-100	150-200	[*] shoreward of RCA
		Sep-Oct	4,000	[#] 75	200	[*] shoreward of RCA
		Nov	4,000 (mo)	[#] 75	200	[*] shoreward of RCA
		Dec	0	[#] 75	250	[*] shoreward of RCA
40 °10' to 38°	2003	Jan-Dec	1,800	0-60	200-250	shoreward of RCA
	2004	Jan-Apr	7,000	75	150	shoreward of RCA
		May-Sep	50,000	75-100	150	shoreward of RCA
		Oct	50,000	75	150	shoreward of RCA
		Nov-Dec	10,000	0	200	shoreward of RCA
	2005	Jan-Feb	4,000	75	200	shoreward of RCA
		Mar-Oct	8,000	100	200	shoreward of RCA
		Nov-Dec	1,000	75	200	shoreward of RCA
	2006	Jan-Feb	4,000	75	200	shoreward of RCA
		Mar-Jun	8,000	100	200	shoreward of RCA
		Jul-Dec	1,000	75	200	shoreward of RCA
	2007	Jan-Jun	15,000	100	150-200	shoreward of RCA
		Jul-Oct	10,000	100	150	shoreward of RCA
		Nov-Dec	15,000	100	200	shoreward of RCA
	2008	Jan-Dec	15,000	100	150	shoreward of RCA
	2009	Jan-Jun	15,000	100	150	shoreward of RCA
		Jul-Aug	10,000	100	150	shoreward of RCA
		Sep-Oct	15,000	100	150	shoreward of RCA
		Nov-Dec	16,000	100	150	shoreward of RCA
	2010	Jan-Dec	15,000	100	150	shoreward of RCA

[*] Use of selective flatfish gear (which is a type of small footrope gear) was required.

[#] During these periods, the RCA extended to the shore north of 48°10' N. lat. This was also the case during April-September 2007 and all of 2008 in the area between 42°40.5' N. lat. and 43°20.83' N. lat.

Table 2. Management performance (Bold indicates overfishing).

Year	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011
OFL (previously ABC)	302-349	187	205	240	269	294	456	487	437	440	508
ACL (previously OY	130	168	172	240	269	200	290	330	285	291	298
Landings(mt)	175	112	84	188	97	107	144	116	140	155	NA
*Modeled Discards(mt)**	95	151	115	54	26	104	137	111	133	147	NA
*Modeled total Catch (mt)**	270	263	199	242	123	211	281	227	273	302	NA

* These total catch values are based on model-based estimates of discard. These are not the estimates which are used to determine whether overfishing has occurred.

Table 3. Input discard rates used in the assessment.

Year	Discard %	CV
1986	5	0.3
2000	32	0.2
2001	41	0.2
2002	56	0.1
2003	60.2	0.1
2004	16	0.1
2005	22.4	0.1
2006	49.4	0.1
2007	48.6	0.1
2008	53.1	0.1
2009	54.3	0.1

Table 4. Estimates of darkblotched rockfish landings from 1928-1977 for Oregon, Washington, and foreign fleets.

Year	California	Oregon	Washington	Foreign	Total
1928	18	0			18
1929	19	0			19
1930	21	0	0		21
1931	26	0	0		26
1932	16	0	0		16
1933	16	0	0		16
1934	15	0	0		15
1935	17	0	0		17
1936	11	0	0		11
1937	13	1	0		14
1938	16	0	0		16
1939	23	1	0		24
1940	20	13	0		33
1941	22	19	0		41
1942	12	36	0		48
1943	57	125	0		182
1944	177	218	0		395
1945	334	337	2		673
1946	189	209	1		399
1947	199	130	1		330
1948	99	89	3		191
1949	70	86	1		157
1950	73	101	2		176
1951	106	96	2		204
1952	78	136	2		216
1953	87	96	2		185
1954	79	136	2		217
1955	131	123	2		256
1956	149	189	7		345
1957	190	205	4		399
1958	180	153	6		339
1959	139	142	5		286
1960	151	189	7		347
1961	120	197	8		325
1962	107	235	7		349
1963	136	225	8		369
1964	85	175	8		268
1965	97	380	8		485
1966	84	320	8	3807	4219
1967	102	262	8	2706	3078
1968	110	17	8	2288	2423
1969	65	80	11	153	309
1970	77	145	6	149	377
1971	91	174	9	278	552
1972	111	148	3	374	636
1973	1	67	9	768	845
1974	253	144	24	346	767
1975	66	102	109	293	570
1976	136	322	72	118	648
1977	120	130	45		295

Table 5. Estimated landings for 1978-2010. State values from PacFIN (extracted May 6, 2011) except for 1978-1982 Oregon landings (Mark Karnowski, ODFW, pers. comm.). At-Sea Hake "landings" (including discards) from Vanessa Tuttle, At-Sea Hake Observer Program (pers. comm.) for 1991-2010, and extended back to 1981 using a ratio estimator from years with data.

Year	California	Oregon	Washington	Other	At Sea Hake	Total
1978	78	156	189			423
1979	159	497	81			737
1980	164	334	98			596
1981	522	266	37		46	870
1982	170	941	24		3	1137
1983	510	582	22		0	1114
1984	596	625	82		11	1314
1985	802	848	111		36	1797
1986	417	622	215		10	1264
1987	1647	686	68		19	2420
1988	750	789	108		8	1655
1989	441	737	91		6	1275
1990	870	764	16		0	1651
1991	333	774	54		45	1206
1992	187	451	20		29	687
1993	285	892	9		8	1194
1994	292	550	9		15	866
1995	366	342	28		49	787
1996	408	309	19		6	748
1997	452	342	22		4	820
1998	497	395	20		14	929
1999	113	227	10		11	362
2000	114	129	9		8	259
2001	87	66	8	2	12	175
2002	50	52	7	0	3	112
2003	11	61	2	5	4	84
2004	39	134	7	1	7	188
2005	18	65	1	2	11	97
2006	23	71	2	1	11	107
2007	41	87	3	1	12	144
2008	34	72	3	1	6	116
2009	47	88	2	1	1	140
2010	17	152	7	1	13	183*

* Note that the 2010 value in this table was not used in the assessment; the value used was taken from the Pacific Fishery Management Council Groundfish Management Team 2010 in-season scorecard, as is customary in the NWFSC groundfish assessments.

Table 6A. Raw numbers of fish and trips sampled and input Ns used for fisheries length compositions. Any input 'N' that was greater than 500 was capped at 500.

Year	WA fish	OR fish	CA fish	Total Fish	WA trips	OR trips	CA trips	Total Trips	Input N	ReWt N
1977	0	304	0	0	5	0	304	5	22	13.86
1978	0	200	0	0	2	0	200	2	9	5.67
1981	0	0	199	0	0	31	199	31	44	27.72
1982	0	300	459	0	2	57	759	59	89	56.07
1983	0	0	792	792	0	0	115	115	165	103.95
1984	0	70	1925	1995	0	1	161	162	332	209.16
1985	0	201	2967	3168	0	2	207	209	485	305.55
1986	0	0	2437	2437	0	0	145	145	267	168.21
1987	0	0	2704	2704	0	0	124	124	410	258.3
1988	0	0	1343	1343	0	0	93	93	185	116.55
1989	0	0	1107	1107	0	0	92	92	135	85.05
1990	0	100	873	973	0	1	91	92	179	112.77
1991	0	200	764	964	0	2	75	77	143	90.09
1992	0	0	429	429	0	0	49	49	57	35.91
1993	0	0	566	566	0	0	56	56	66	41.58
1994	0	200	595	795	0	2	51	53	118	74.34
1995	0	188	793	981	0	7	55	62	182	114.66
1996	370	833	1044	2247	28	23	81	132	426	268.38
1997	586	802	947	2335	32	22	58	112	405	255.15
1998	456	541	1353	2350	28	13	80	121	413	260.19
1999	342	430	773	1545	26	9	41	76	250	157.5
2000	653	224	906	1783	20	7	53	80	275	173.25
2001	892	1005	897	2794	25	30	60	115	471	296.73
2002	1129	610	994	2733	48	20	48	116	440	277.2
2003	580	1447	590	2617	28	60	38	126	456	287.28
2004	616	1305	562	2483	20	58	33	111	430	270.9
2005	117	1275	571	1963	9	54	34	97	360	226.8
2006	505	1457	1309	3271	10	62	73	145	500	315
2007	579	2155	1840	4574	22	79	89	190	500	315
2008	350	2689	2188	5227	12	102	104	218	500	315
2009	359	2829	1464	4652	11	137	69	217	482	303.66
2010	209	2856	1099	4164	5	136	62	203	466	293.58

Table 6B. Raw numbers of fish and hauls sampled and input Ns used for discard length composition data.

Year	Fish	Hauls	Input N	ReWt N
1986			100	63
2002	674	70	127	80.01
2003	856	93	159	100.17
2004	783	123	177	111.51
2005	1529	255	319	200.97
2006	1159	296	276	173.88
2007	574	170	188	118.44
2008	263	73	76	47.88
2009	1167	324	367	231.21
2010	115	31	40	25.2

Table 6C. Raw numbers of fish and hauls sampled and input Ns used for survey length composition data.

Survey	Year	Fish	Hauls	Input N	ReWt N
Triennial	1980	656	11	54	38.34
	1983	4438	43	210	149.1
	1986	1834	38	168	119.28
	1989	6054	85	416	295.36
	1992	1445	33	135	95.85
	1995	2389	106	275	195.25
	1998	2943	110	318	225.78
	2001	2980	184	395	280.45
	2004	3578	152	405	287.55
AFSC slope	1997	313	20	42	24.36
	1999	228	26	42	24.36
	2000	223	20	36	20.88
	2001	324	14	37	21.46
NW slope	2000	296	25	46	40.48
	2001	494	45	79	69.52
	2002	1027	54	123	108.24
	2003	1742	64	183	161.04
	2004	557	53	82	72.16
	2005	1023	49	117	102.96
	2006	1133	66	144	126.72
	2007	1074	65	137	120.56
	2008	1130	60	139	122.32
	2009	1401	64	163	143.44
	2010	992	51	121	106.48
NW shelf	2003	633	36	80	80
	2004	505	37	71	71
	2005	960	61	129	129
	2006	792	64	120	120
	2007	1012	67	138	138
	2008	517	51	88	88
	2009	897	62	125	125
	2010	1247	66	154	154

Table 7. Number of trips (fishery) or hauls, number of fish, and total input N's for conditional age-at-length and age compositions used in the assessment.

Fleet	Year	Trips/Hauls	Fish	Total input N	ReWT N
Fishery	1991	33	354	46	46
	1998	51	854	44	44
	2003	85	1900	633	633
	2004	38	1168	432	432
	2005	51	1121	416	416
	2006	61	1421	523	523
	2007	78	1991	817	817
	2008	69	1815	678	678
	2009	46	1186	1186	1186
	2010	29	783	783	783
Discard					
	2004	47	246	81	81
	2005	80	504	150	150
Triennial	(Age composition)				
	2004	134	1121	213	106.5
AFSC slope					
	2001	18	191	32	32
NWFSC					
slope	2003	64	465	465	116.25
	2004	53	349	349	87.25
	2005	49	401	401	100.25
	2006	66	491	491	122.75
	2007	65	515	515	128.75
	2008	60	492	492	123
	2009	64	610	610	152.5
	2010	51	428	428	107
NWFSC					
shelf	2003	36	280	280	42
	2004	37	238	238	35.7
	2005	61	394	394	59.1
	2006	63	442	442	66.3
	2007	67	452	452	67.8
	2008	51	256	256	38.4
	2009	62	521	521	78.15
	2010	66	469	469	70.35

Table 8. GLMM-based biomass indices used in the assessment model.

Triennial Shelf Survey

	Total Biomass	
Year	Median	SD of the log
1980	6809	0.113
1983	15998	0.083
1986	8969	0.095
1989	4275	0.088
1992	7588	0.103
1995	6152	0.096
1998	3193	0.095
2001	3917	0.096
2004	8891	0.101

AFSC Slope Survey

	Total Biomass	
Year	Median	SD of the log
1997	1606.293	0.248
1999	2756.346	0.227
2000	934.142	0.245
2001	1992.919	0.283

NWFSC Slope Survey

	Total Biomass	
Year	Median	SD of the log
1999	2205.061	0.193
2000	10663.288	0.228
2001	2153.85	0.205
2002	3025.156	0.206
2003	29534.603	0.22
2004	3359.529	0.233
2005	21951.282	0.265
2006	4921.375	0.163
2007	4954.338	0.157
2008	4144.408	0.172
2009	7452.022	0.162
2010	3570.572	0.18

NWFSC Shelf Survey

	Total Biomass	
Year	Median	SD of the log
2003	2329.28	0.227
2004	3684.936	0.217
2005	2346.148	0.164
2006	1518.052	0.168
2007	2053.659	0.158
2008	4203.075	0.18
2009	1494.096	0.155
2010	1894.938	0.163

Table 9. Data sources and years included in the Base Model.

Indices	Years
Triennial Shelf	1980 1983 1986 19891992 1995 1998 2001 2004
AFSC Slope	1997 1999-2001
NWFSC Slope	2000-2010
NWFSC Shelf	2003-2010
Discard	1986, 2000-2009
Length Comps	
Fishery landings	1977-1978, 1981-2010
Fishery discard	1986, 2002-2010
Triennial Shelf	1980 1983 1986 19891992 1995 1998 2001
AFSC Slope	1997 1999-2001
NWFSC Slope	2000-2010
NWFSC Shelf	2003-2010
Age Comps	
Triennial Shelf	2004
Age-at-length	
Fishery landings	1991, 1998, 2003-2010
Fishery discard	2004 2005
AFSC Slope	2001
NWFSC Slope	2003-2010
NWFSC Shelf	2003-2010

Table 10. Parameters in the base model.

Mortality and growth			
1	0.07	Fixed	Natural mortality (M)
2	0	Fixed	Old offset
3	14.9483	Estimated	Size at age 1.7 (in cm)
4	42.9753	Estimated	Size at age 29 (females)
5	0.189212	Estimated	Von-Bertalanffy K (females)
6	0.0637649	Estimated	cv of size at age (young)
7	-0.160972	Estimated	cv of size at age offset (old)
8	0	Fixed	M offset Male
9	0	Fixed	M offset old male
10	0	Fixed	Male offset for size at age 1.7
11	-0.10074	Estimated	Male offset for size at age 29
12	0.195935	Estimated	Male offset for K
13	0	Fixed	offsest for cv of young Male
14	0	Fixed	offset for cv of old Male
biology_parms			
15	0.000021	Fixed	scalar for weight at length
16	2.96142	Fixed	Exponent for weight at length
17	34.59	Fixed	size at 50% maturity
18	-0.6429	Fixed	logistic parameter for maturity ogive
19	0.1458	Fixed	eggs/kg intercept
20	1.325	Fixed	Fecundity slope
21	2.10E-05	Fixed	scalar for weight at length
22	2.96142	Fixed	Exponent for weight at length
#_size_sel:	Fishery		Fishery selectivity
1	34.1483	Estimated	Peak
2	1.27053	Estimated	Width of peak
3	3.23256	Estimated	VarAscend
4	0.6	Fixed	Var Descending
5	-2.18071	Estimated	Initial
6	9	Fixed	Final
#_retention	Fishery		
7	25.1436	Estimated	size at 50% selectivity through 1999
8	1.90246	Estimated	logarithmic slope
9	1	Fixed	final
10	0	Fixed	intial
#_size_sel:	Triennial		
11	20.3275	Estimated	Peak
12	-6	Fixed	Width of peak (Low Bound)
13	0.964574	Estimated	VarAscend
14	4.39938	Estimated	Var Descending
15	-0.757411	Estimated	Initial
16	-2.76084	Estimated	Final

Table 10 continued. Parameters in the base model.

#_size_sel:	AFSC sl		
17	22.9088	Estimated	Peak
18	-0.91626	Estimated	Width of peak
19	2.2367	Estimated	VarAscend
20	2.10759	Estimated	Var Descending
21	-5	Fixed	Initial
22	-3.99523	Estimated	Final
#_size_sel:	NWFSC sl		
23	24.8894	Estimated	Peak
24	-0.3	Estimated	Width of peak
25	3.13663	Estimated	VarAscend
26	0.1	Estimated	Var Descending
27	-5	Fixed	Initial
28	0.319545	Fixed	Final
#_size_sel:	NWFSC sh		
29	16.3307	Estimated	Peak
30	-1.33176	Estimated	Width of peak
31	-0.5	Fixed	VarAscend
32	3.11801	Estimated	Var Descending
33	-1.24347	Estimated	Initial
34	-5	Fixed	Final
sel_parm_blockparms			
35	26.3846	Estimated	size at 50% selectivity 2000 - 2003
36	0.68443	Estimated	final retention 2000 - 2001
37	0.449862	Estimated	final retention 2002-2003
38	0.821107	Estimated	final retention 2004 - 2005
39	0.527161	Estimated	final retention 2006 - 2010

Table 11. Growth parameters estimated in the model. All length units are in centimeters.

Update model year	2009	2011
Female length at age 1.7	14.8	14.9483
Female length at age 29	42.73	42.9753
Female VBK	0.2	0.189212
Female CV of length at age, at age 1.7	0.066	0.0637649
Female CV of length at age, exponential offset (old)	-0.179	-0.160972
Male offset at age 1.7	0	0
Male offset at age 29	-0.098	-0.10074
Male offset for K	0.187	0.195935
Male offsest for CV at age 1.7	0	0
Male CV of length at age, exponential offset (old)	0	0

Table 12. Time series of total and summary biomass, spawning output, depletion, recruitment and F.

Year	Total Biom.	Sum. Biom.	Sp. Out.	Depletion (%)	Recruit	F (%)
1928	32,726	32,709	29,167	100.0	3,008	0.06
1929	32,708	32,691	29,150	99.9	3,008	0.06
1930	32,689	32,673	29,131	99.9	3,008	0.07
1931	32,670	32,653	29,111	99.8	3,008	0.08
1932	32,646	32,630	29,087	99.7	3,008	0.05
1933	32,633	32,617	29,072	99.7	3,008	0.05
1934	32,621	32,605	29,059	99.6	3,007	0.05
1935	32,611	32,595	29,047	99.6	3,007	0.05
1936	32,599	32,583	29,033	99.5	3,007	0.04
1937	32,594	32,577	29,026	99.5	3,007	0.04
1938	32,587	32,570	29,017	99.5	3,007	0.05
1939	32,577	32,561	29,007	99.4	3,007	0.07
1940	32,561	32,545	28,989	99.4	3,007	0.10
1941	32,537	32,521	28,964	99.3	3,007	0.13
1942	32,505	32,489	28,931	99.2	3,006	0.15
1943	32,468	32,452	28,892	99.1	3,006	0.57
1944	32,300	32,283	28,724	98.5	3,005	1.23
1945	31,928	31,912	28,354	97.2	3,002	2.13
1946	31,295	31,278	27,719	95.0	2,996	1.29
1947	30,957	30,940	27,358	93.8	2,993	1.08
1948	30,702	30,686	27,073	92.8	2,990	0.63
1949	30,599	30,583	26,934	92.3	2,989	0.52
1950	30,538	30,521	26,839	92.0	2,988	0.58
1951	30,464	30,448	26,737	91.7	2,987	0.68
1952	30,369	30,353	26,617	91.3	2,986	0.72
1953	30,268	30,252	26,496	90.8	2,985	0.62
1954	30,203	30,187	26,413	90.6	2,984	0.73
1955	30,112	30,095	26,306	90.2	2,983	0.86
1956	29,986	29,969	26,167	89.7	2,981	1.16
1957	29,779	29,762	25,950	89.0	2,979	1.35
1958	29,526	29,510	25,688	88.1	2,976	1.16
1959	29,344	29,328	25,489	87.4	2,974	0.99
1960	29,222	29,206	25,347	86.9	2,973	1.20
1961	29,047	29,031	25,155	86.2	2,971	1.13
1962	28,902	28,886	24,992	85.7	2,969	1.22
1963	28,741	28,725	24,814	85.1	2,967	1.30
1964	28,568	28,552	24,624	84.4	2,965	0.95
1965	28,504	28,488	24,538	84.1	2,964	1.72
1966	28,230	28,214	24,255	83.2	2,961	15.11
1967	24,270	24,254	20,449	70.1	2,910	12.83
1968	21,560	21,545	17,759	60.9	2,863	11.39
1969	19,594	19,579	15,734	53.9	2,818	1.60
1970	19,807	19,791	15,711	53.9	2,818	1.93
1971	19,974	19,959	15,686	53.8	2,817	2.80
1972	19,983	19,967	15,563	53.4	2,814	3.23
1973	19,918	19,903	15,413	52.8	2,810	4.30
1974	19,654	19,638	15,114	51.8	2,803	3.96
1975	19,479	19,461	14,908	51.1	3,284	2.97
1976	19,513	19,499	14,892	51.1	2,504	3.37
1977	19,473	19,467	14,823	50.8	1,104	1.54
1978	19,757	19,747	15,073	51.7	1,845	2.17

Table 12 continued. Time series of total and summary biomass, spawning output, depletion, recruitment and F.

Year	Total Biom.	Sum. Biom.	Sp. Out.	Depletion (%)	Recruit	F (%)
1979	19,854	19,827	15,223	52.1	5,045	3.76
1980	19,616	19,588	15,106	51.7	5,012	3.08
1981	19,594	19,572	15,117	51.6	4,144	4.50
1982	19,421	19,414	14,888	50.7	1,229	5.95
1983	19,061	19,056	14,374	48.8	875	5.95
1984	18,705	18,700	13,801	46.7	1,091	7.15
1985	18,048	18,043	13,049	44.0	991	10.11
1986	16,773	16,768	12,019	40.3	1,061	7.64
1987	15,902	15,886	11,602	38.8	2,959	15.39
1988	13,793	13,776	10,296	34.2	3,221	12.13
1989	12,450	12,449	9,493	31.3	274	10.36
1990	11,526	11,522	8,836	29.0	787	14.52
1991	10,231	10,225	7,695	25.0	1,018	11.98
1992	9,360	9,356	6,848	22.1	704	7.46
1993	8,975	8,972	6,461	20.7	496	13.49
1994	8,037	8,030	5,735	18.2	1,296	10.92
1995	7,400	7,379	5,345	16.7	3,733	10.78
1996	6,864	6,857	5,002	15.4	1,361	11.06
1997	6,456	6,445	4,630	14.1	2,057	12.96
1998	6,065	6,059	4,138	12.3	1,047	15.71
1999	5,649	5,618	3,506	10.1	5,624	6.64
2000	5,931	5,898	3,354	9.5	6,152	6.74
2001	6,389	6,382	3,262	9.1	1,162	4.23
2002	7,177	7,172	3,383	9.3	1,034	3.66
2003	8,057	8,046	3,610	9.9	1,997	2.47
2004	8,974	8,959	3,947	10.8	2,682	2.70
2005	9,793	9,778	4,363	11.9	2,792	1.26
2006	10,681	10,670	5,058	13.9	2,100	1.98
2007	11,431	11,420	5,911	16.3	2,002	2.46
2008	12,064	12,035	6,766	18.7	5,330	1.88
2009	12,727	12,722	7,568	21.0	841	2.15
2010	13,358	13,344	8,231	22.9	2,505	2.26
2011	13,940	13,926	8,808	24.5	2,544	NA

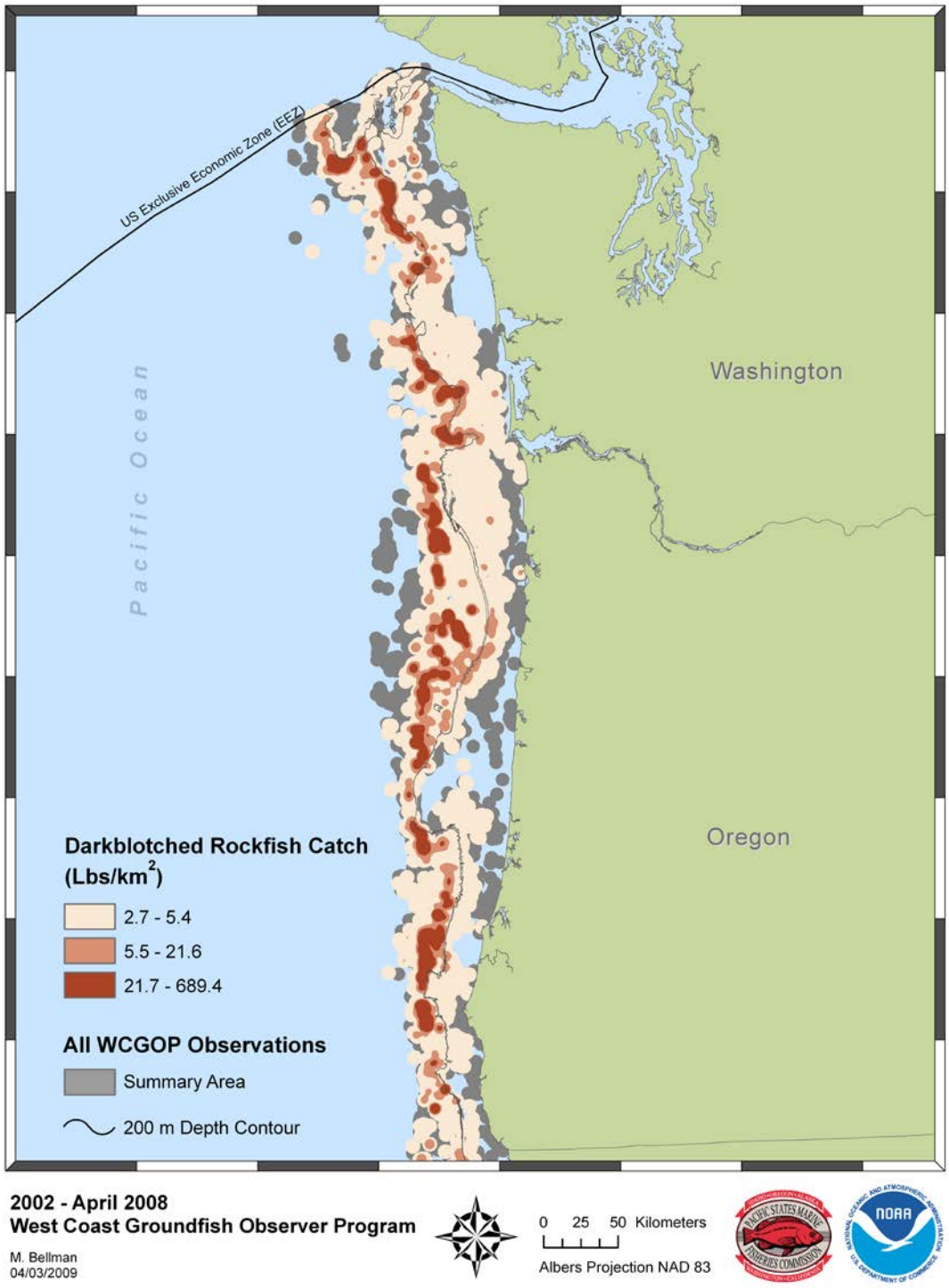


Figure 1. Map of density of occurrence of darkblotched rockfish off of (A) Washington and Oregon and (B) Northern and Central California (next page) from 2002 – April 2008.

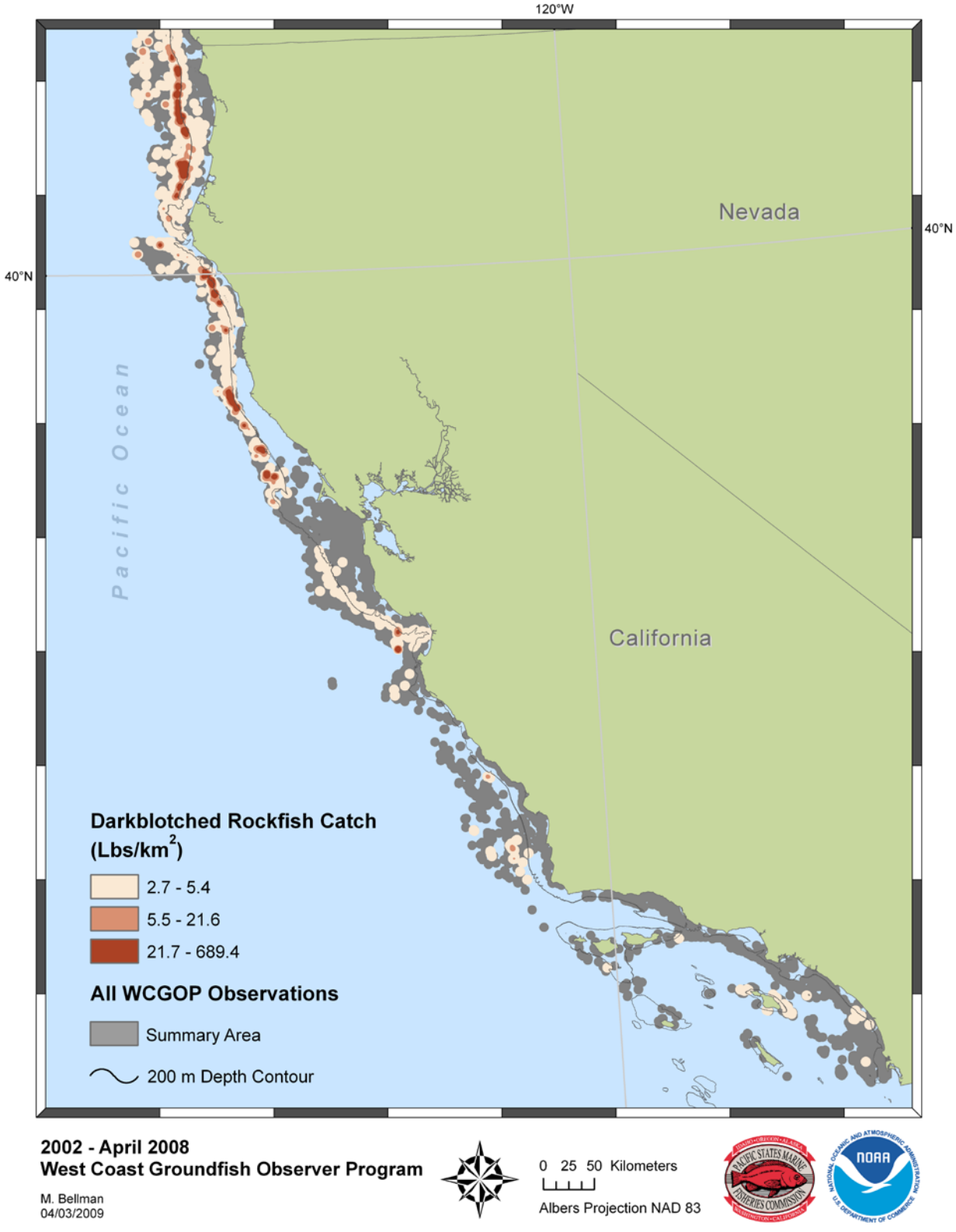


Figure 1 (cont.)

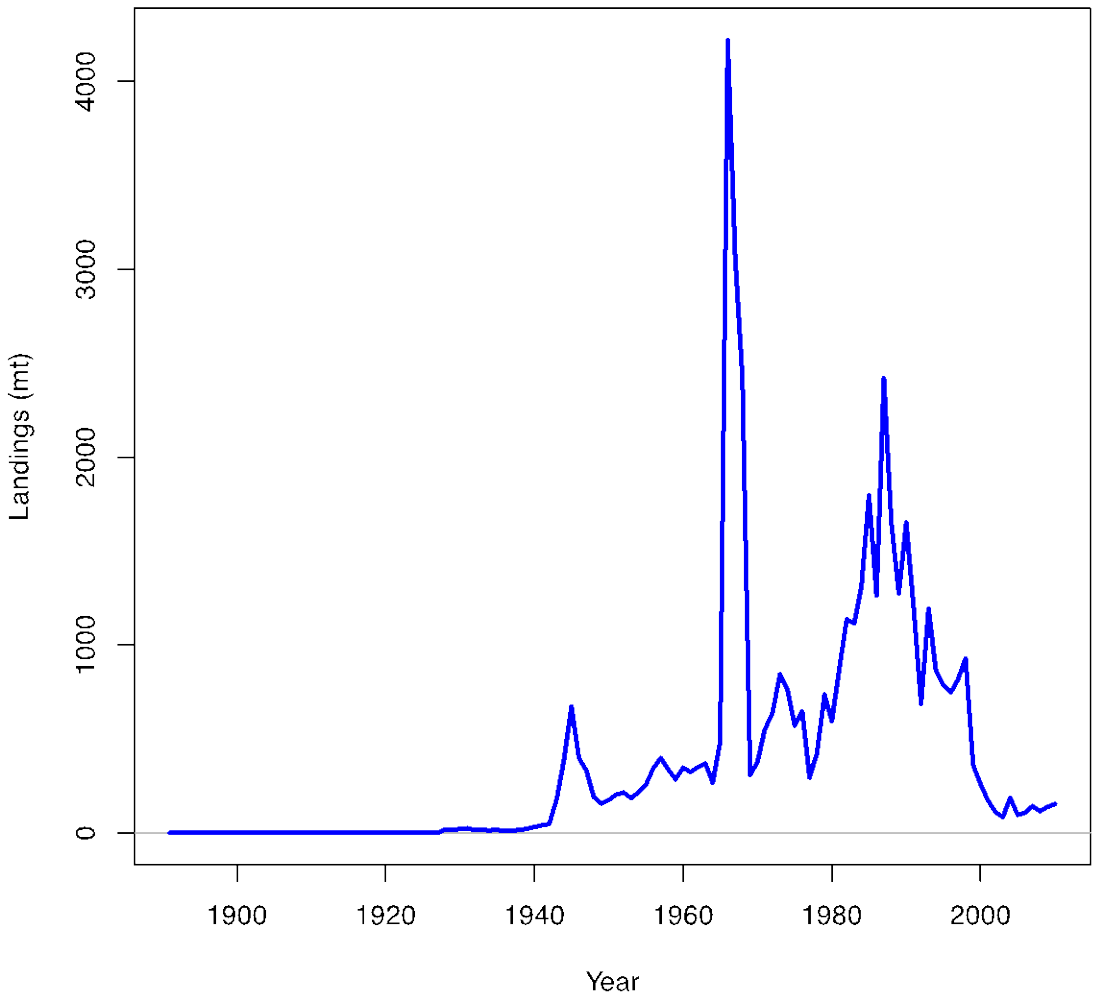


Figure 2. Time series of estimated fishery landings.

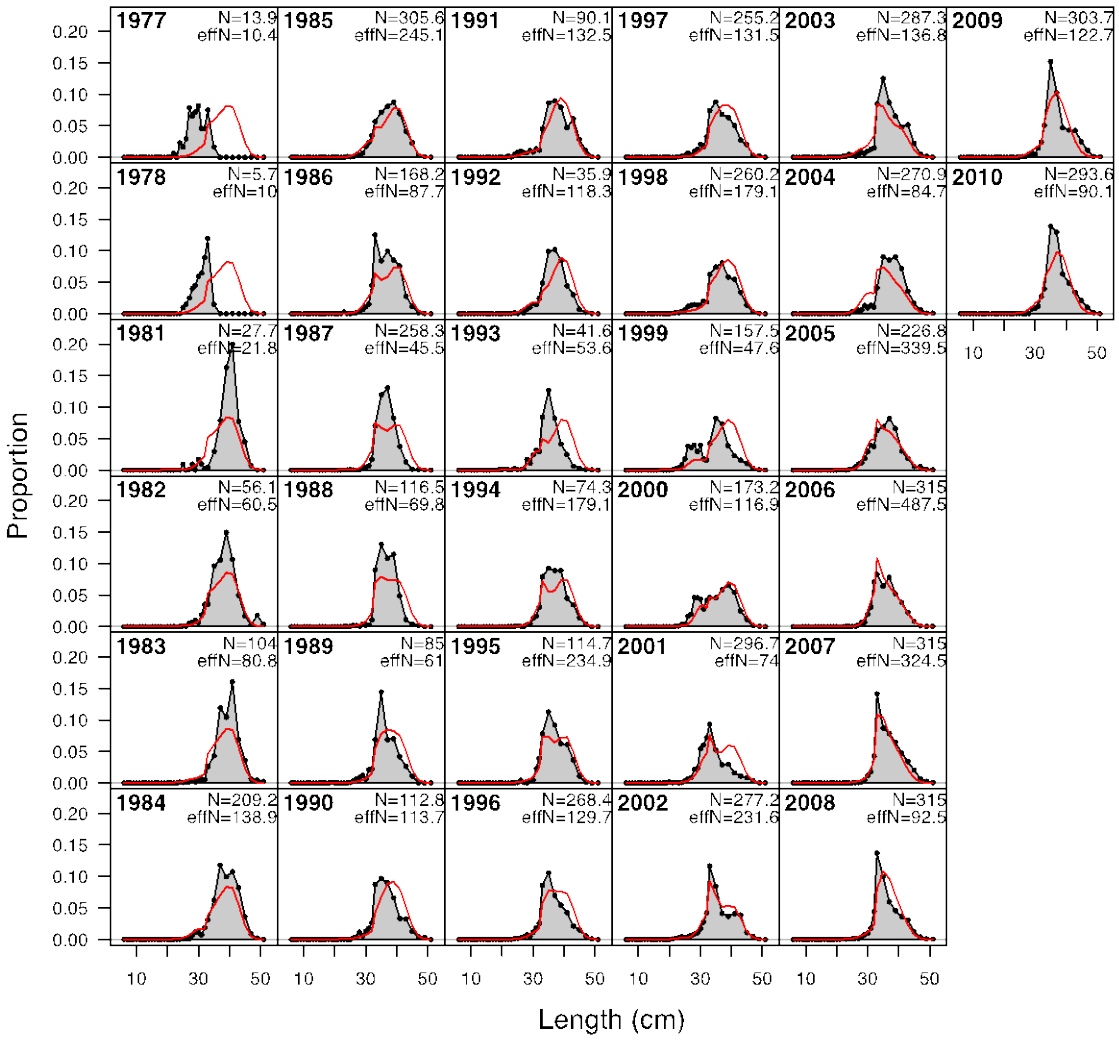


Figure 3. Female fishery length compositions and model fits.

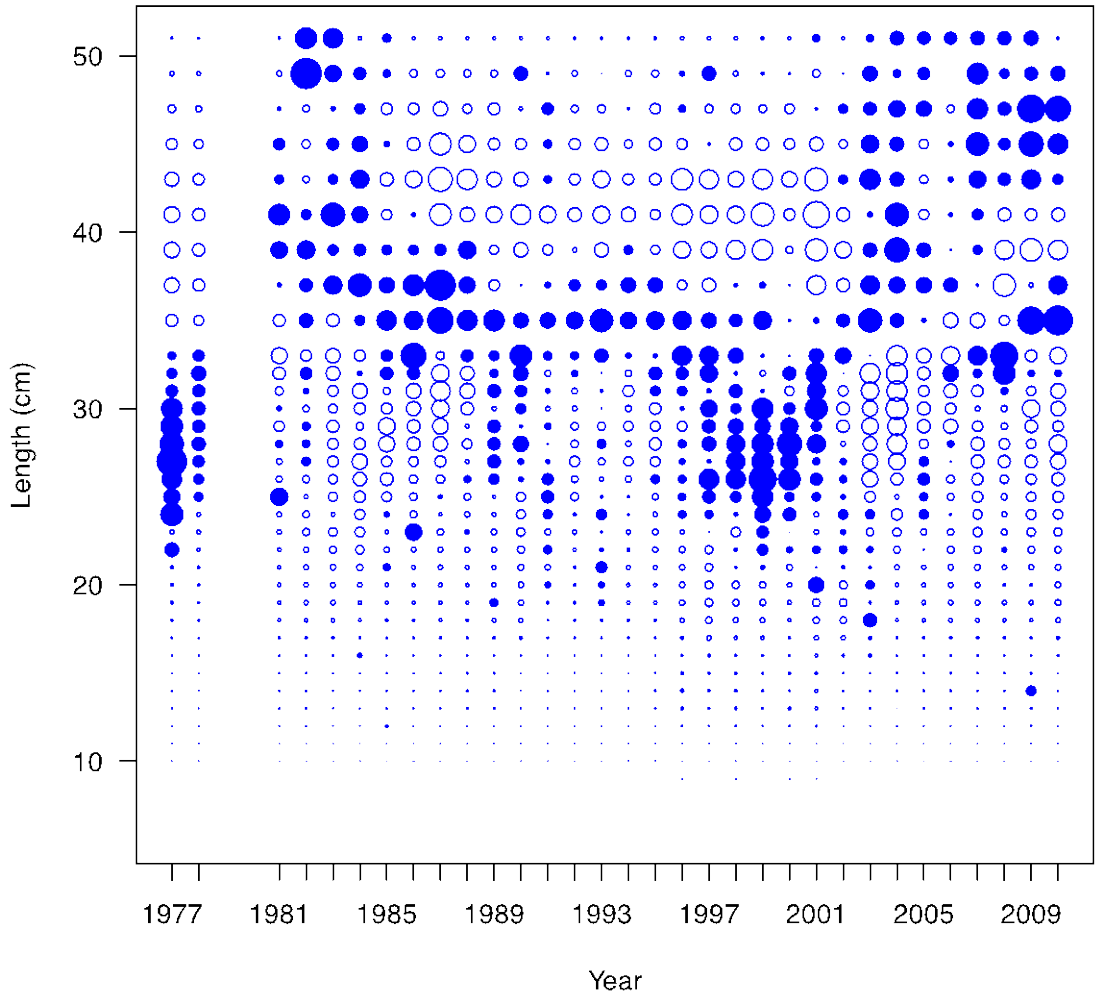


Figure 4. Pearson residuals for female length-composition fits to fishery data.

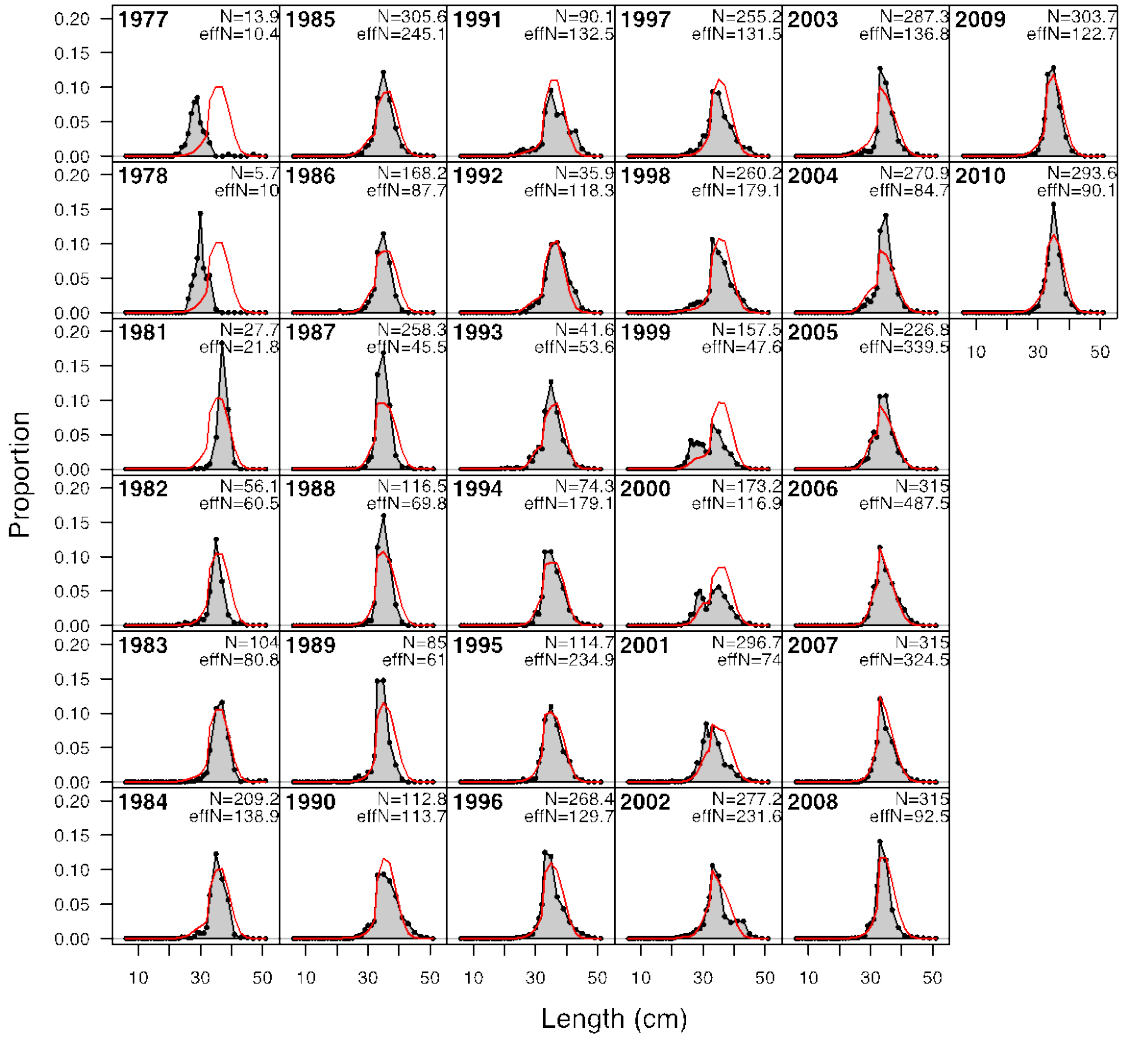


Figure 5. Male fishery lengths compositions and model fits

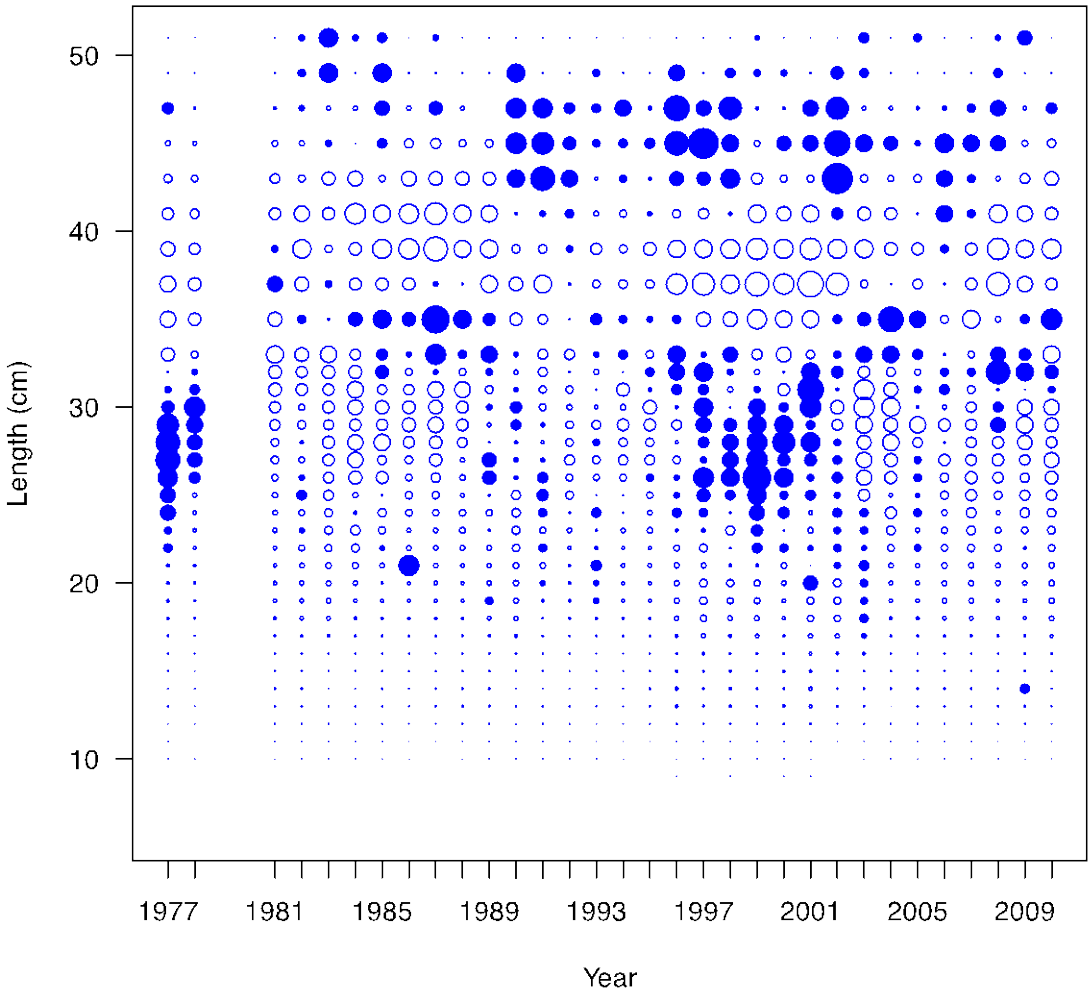


Figure 6. Pearson residuals for male length-composition fits to fishery data.

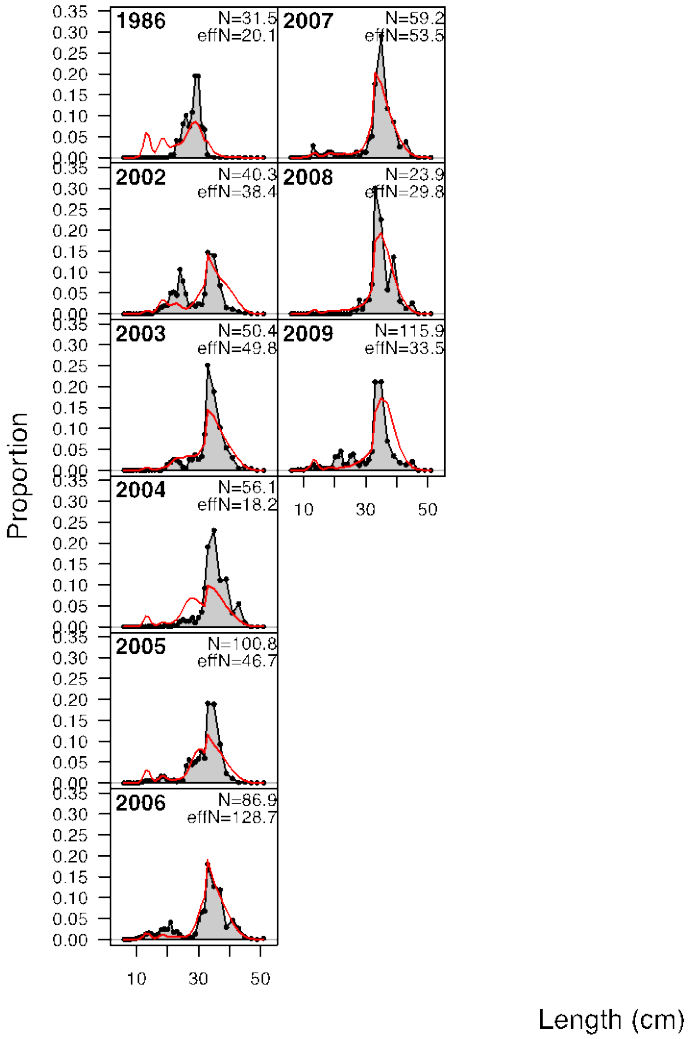


Figure 7. Combined-sex fishery discard length compositions and model fits.

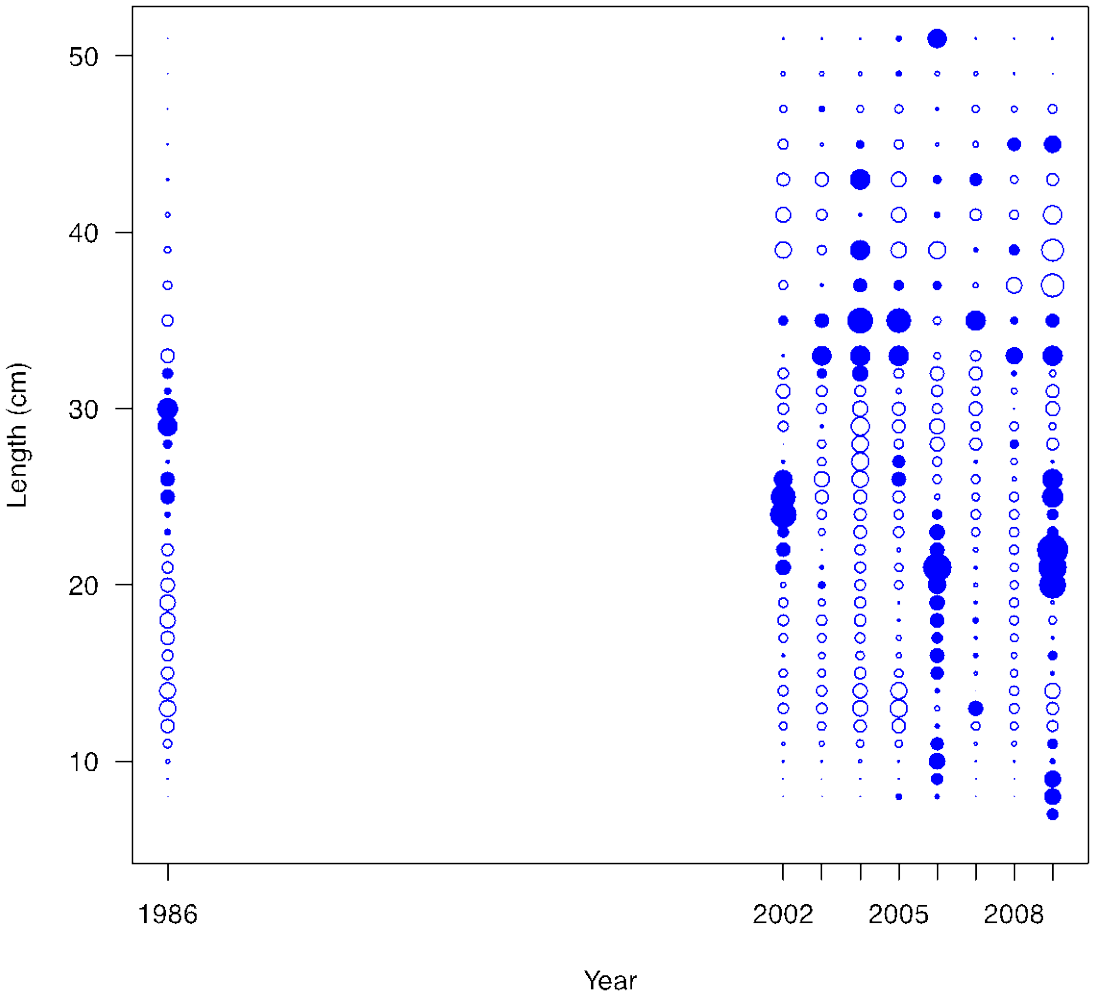


Figure 8. Pearson residuals for length-composition fits to fishery discard data.

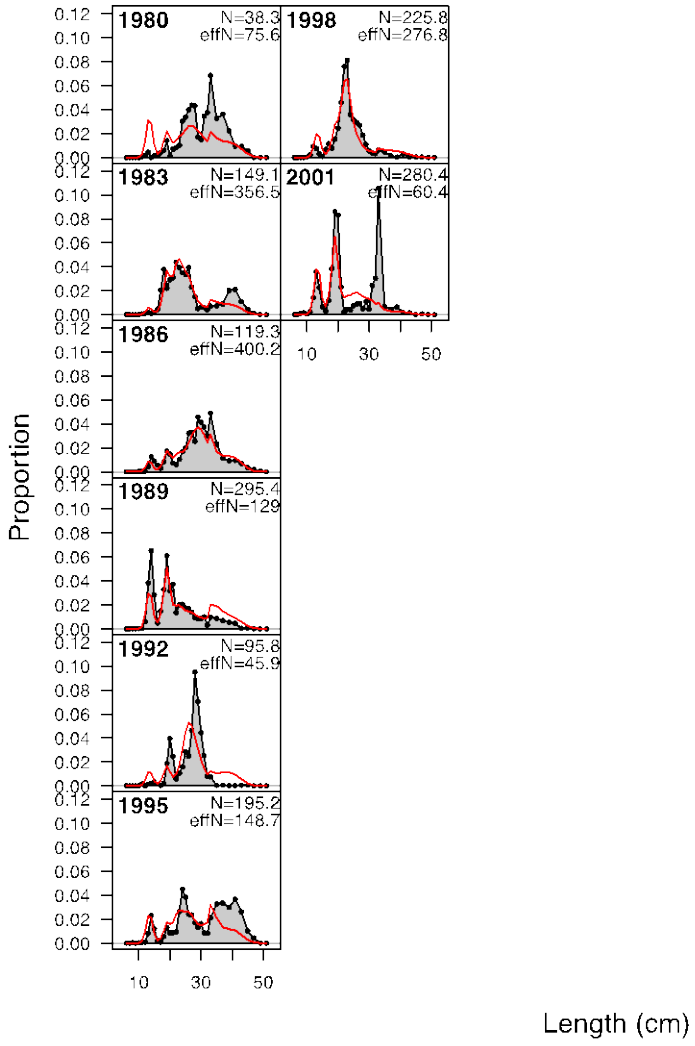


Figure 9. Triennial Shelf Survey female length compositions and model fits.

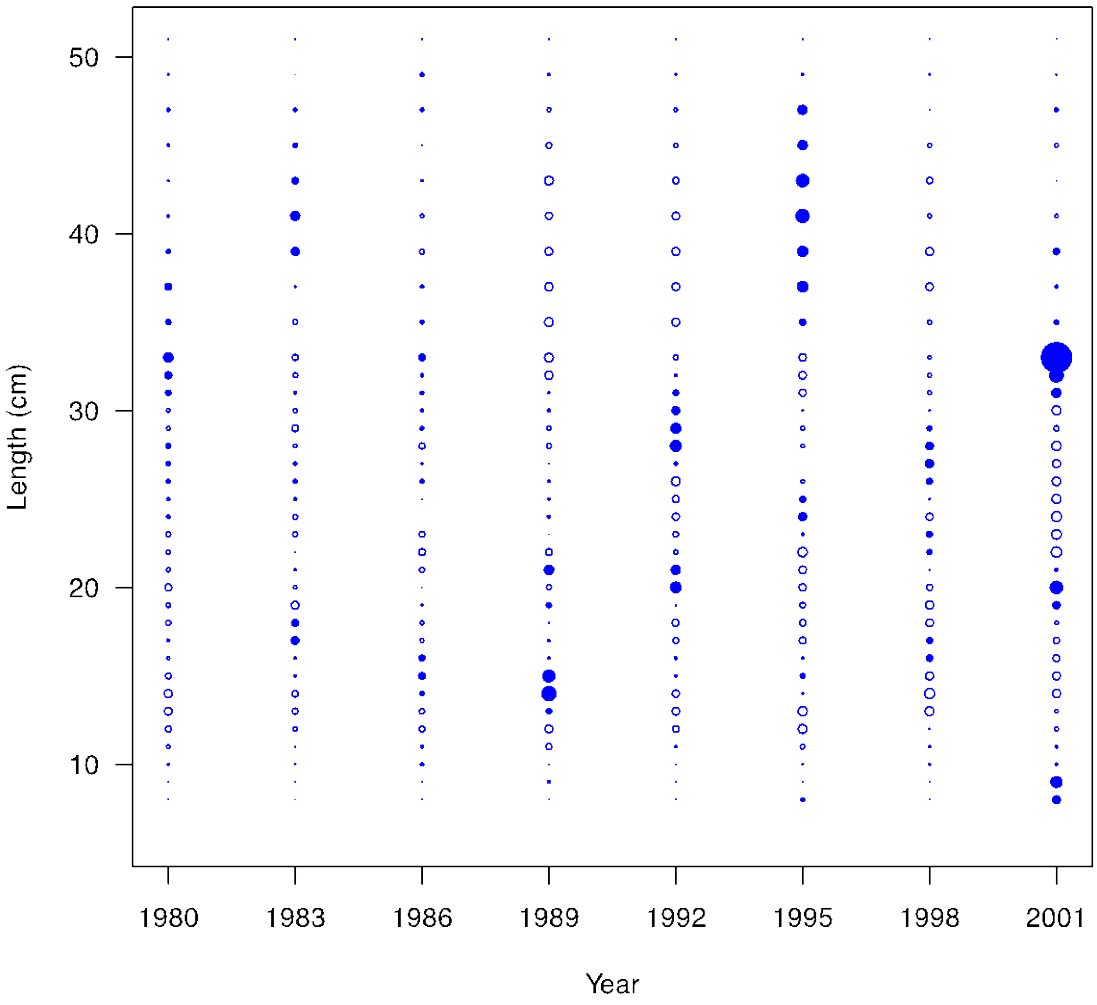


Figure 10. Pearson residuals for female length-composition fits to Triennial Survey data.

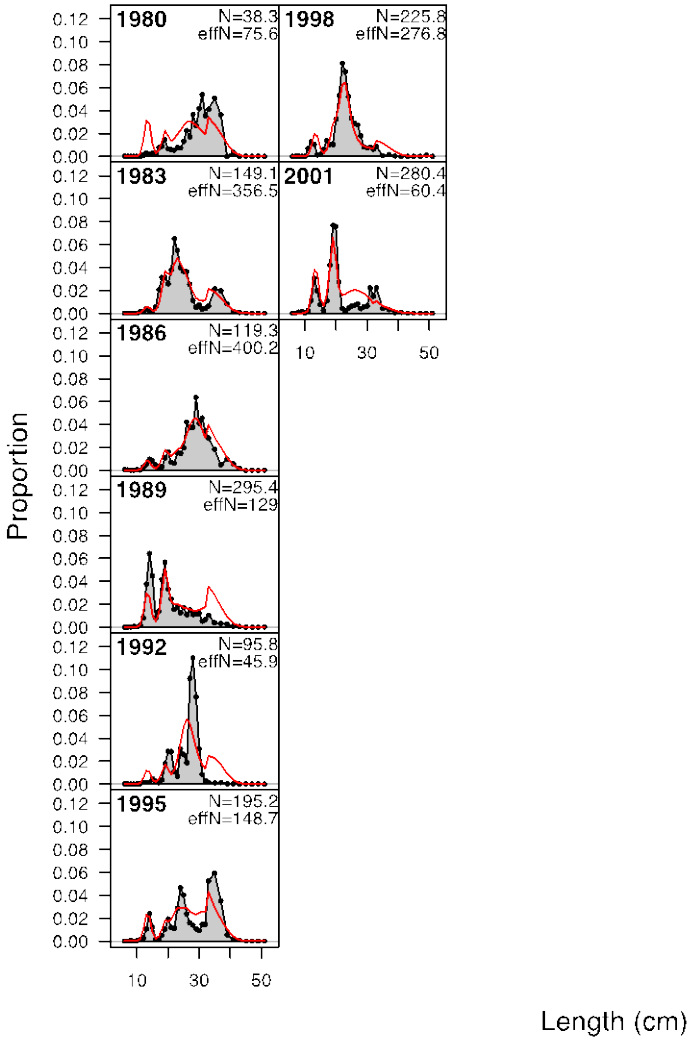


Figure 11. Triennial Shelf Survey male length compositions and model fits

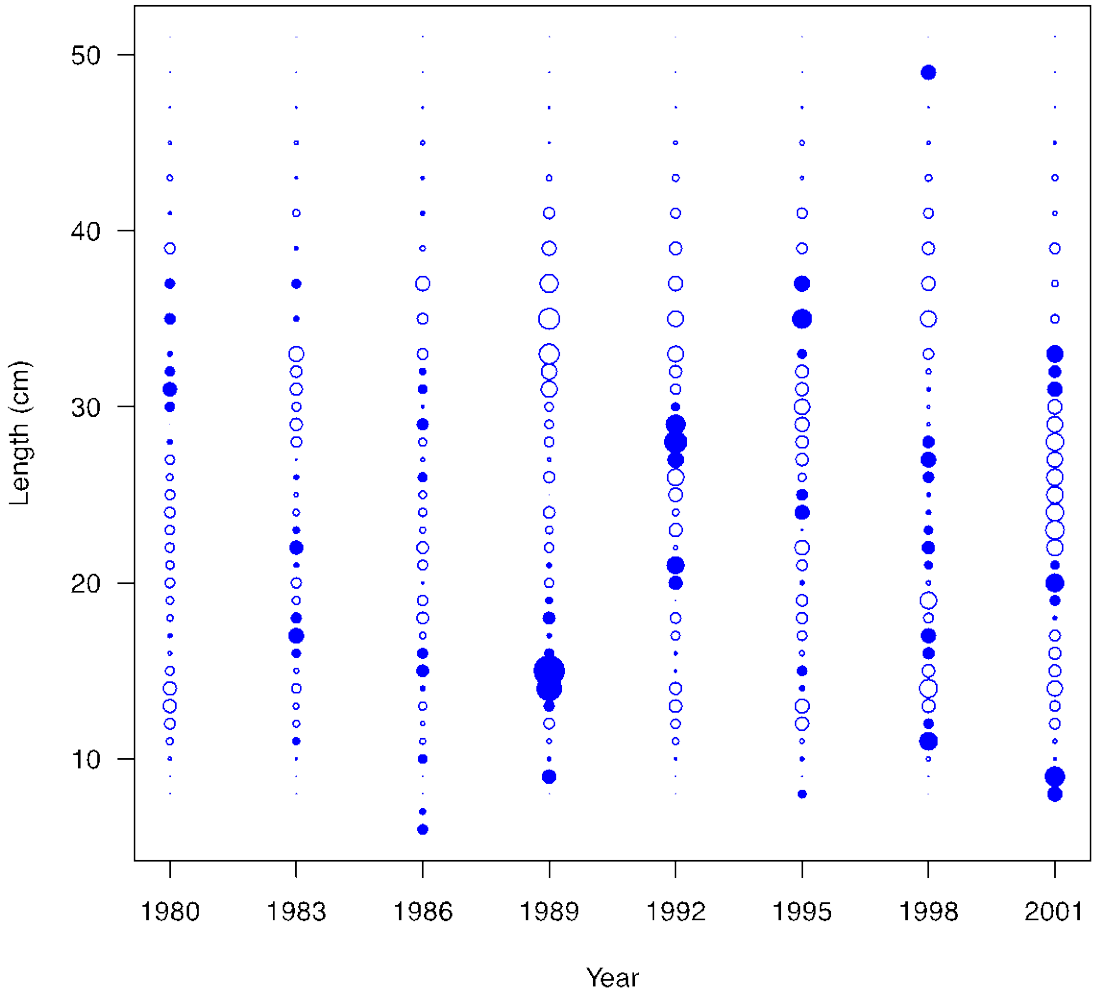


Figure 12. Pearson residuals for male length-composition fits to Triennial Survey data.

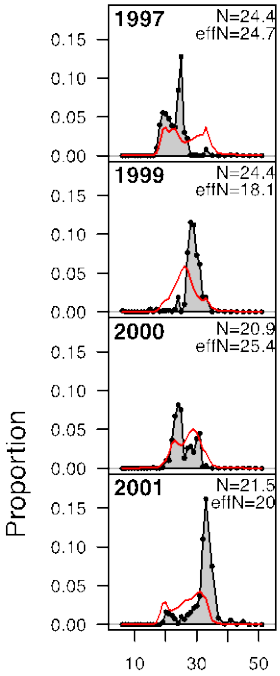


Figure 13. AFSC Slope Survey female length compositions and model fits

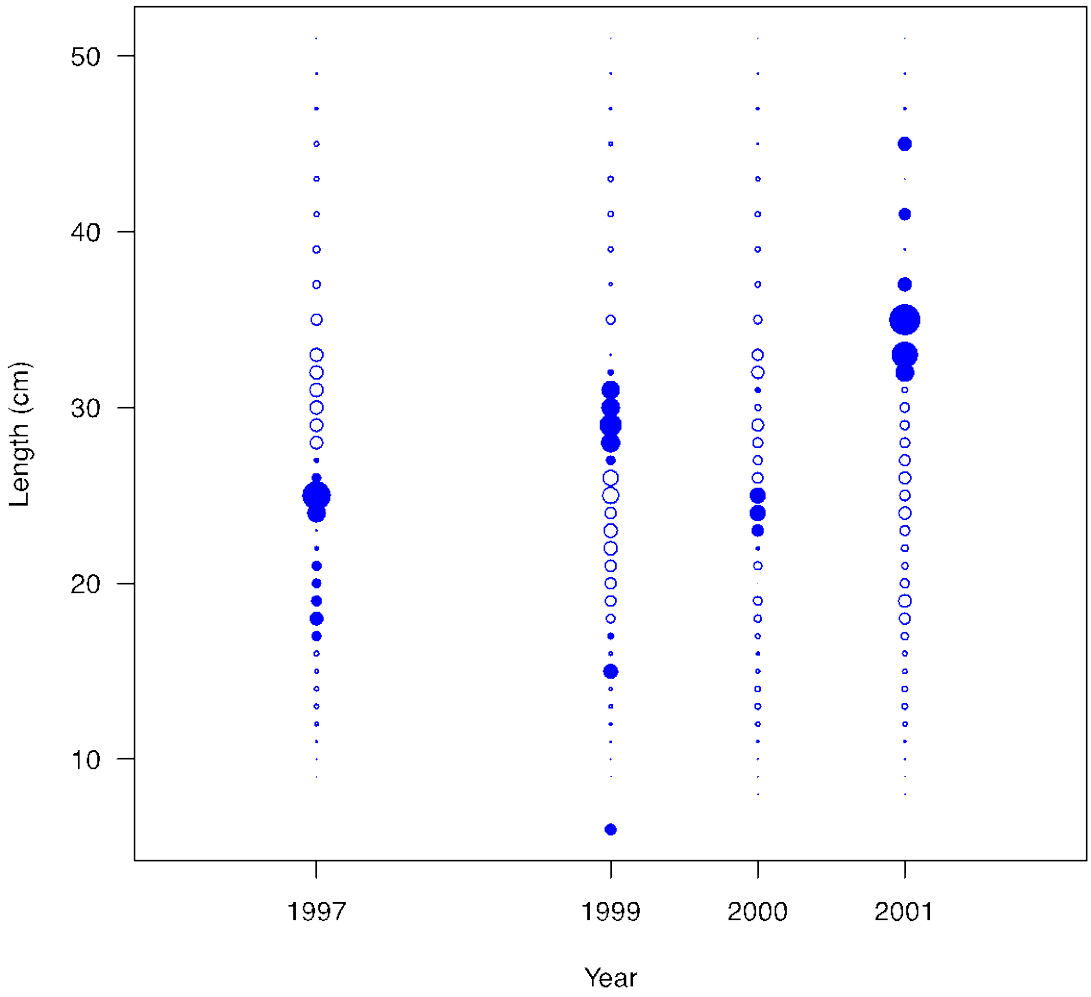


Figure 14. Pearson residuals for female length-composition fits to AFSC Slope Survey data.

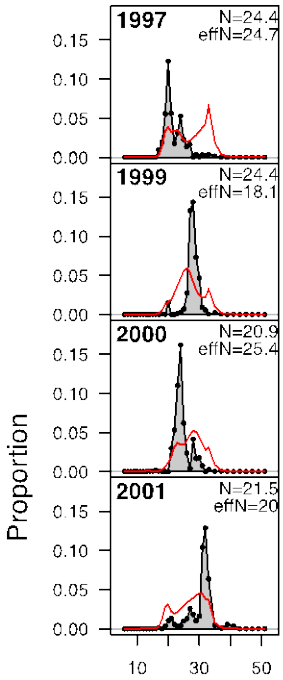


Figure 15. AFSC Slope Survey male length compositions and model fits

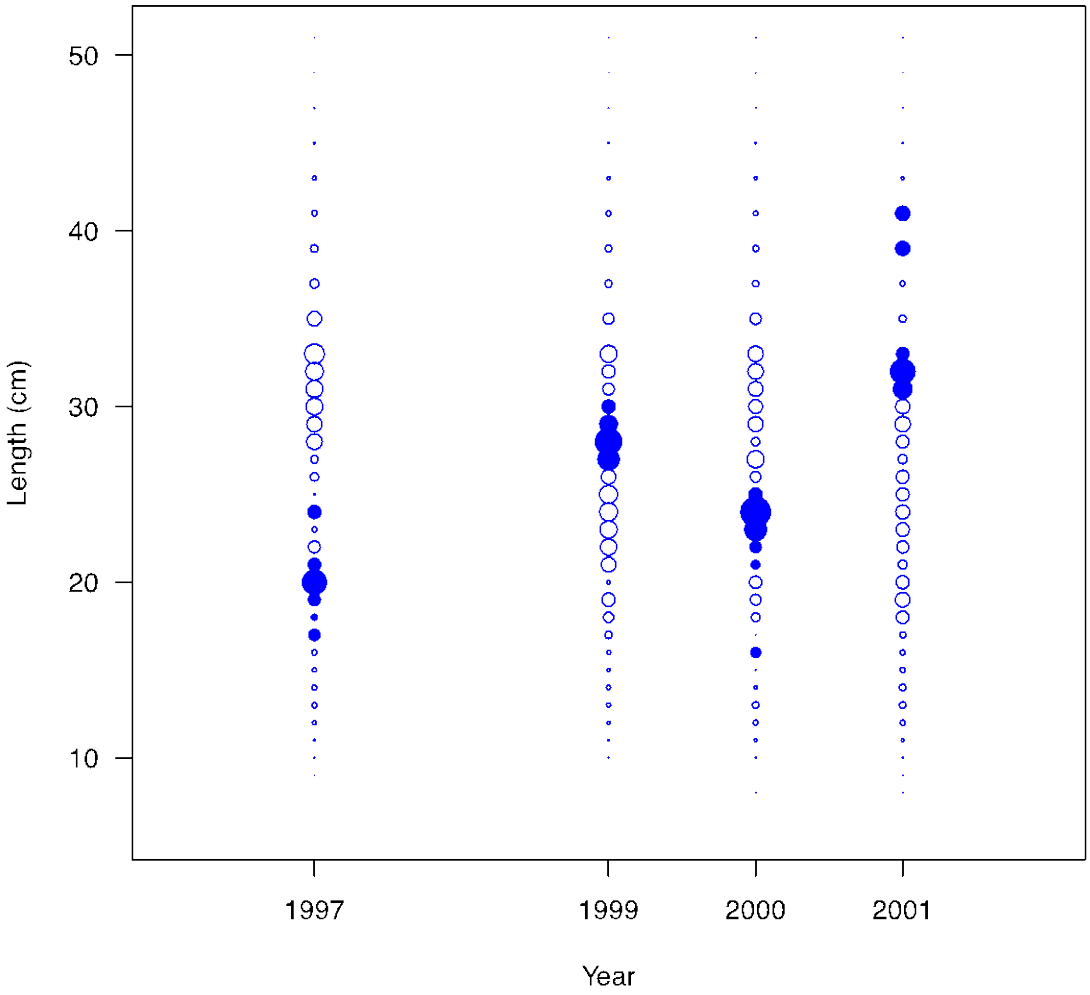


Figure 16. Pearson residuals for male length-composition fits to AFSC Slope Survey data.

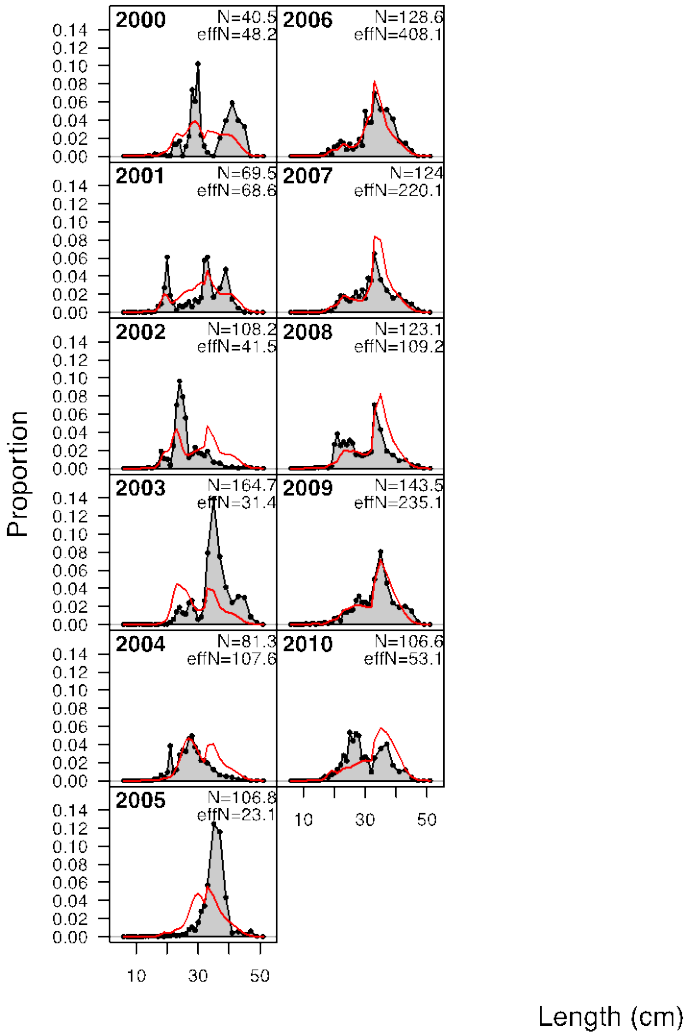


Figure 17. NWFSC Slope Survey female length compositions and model fits

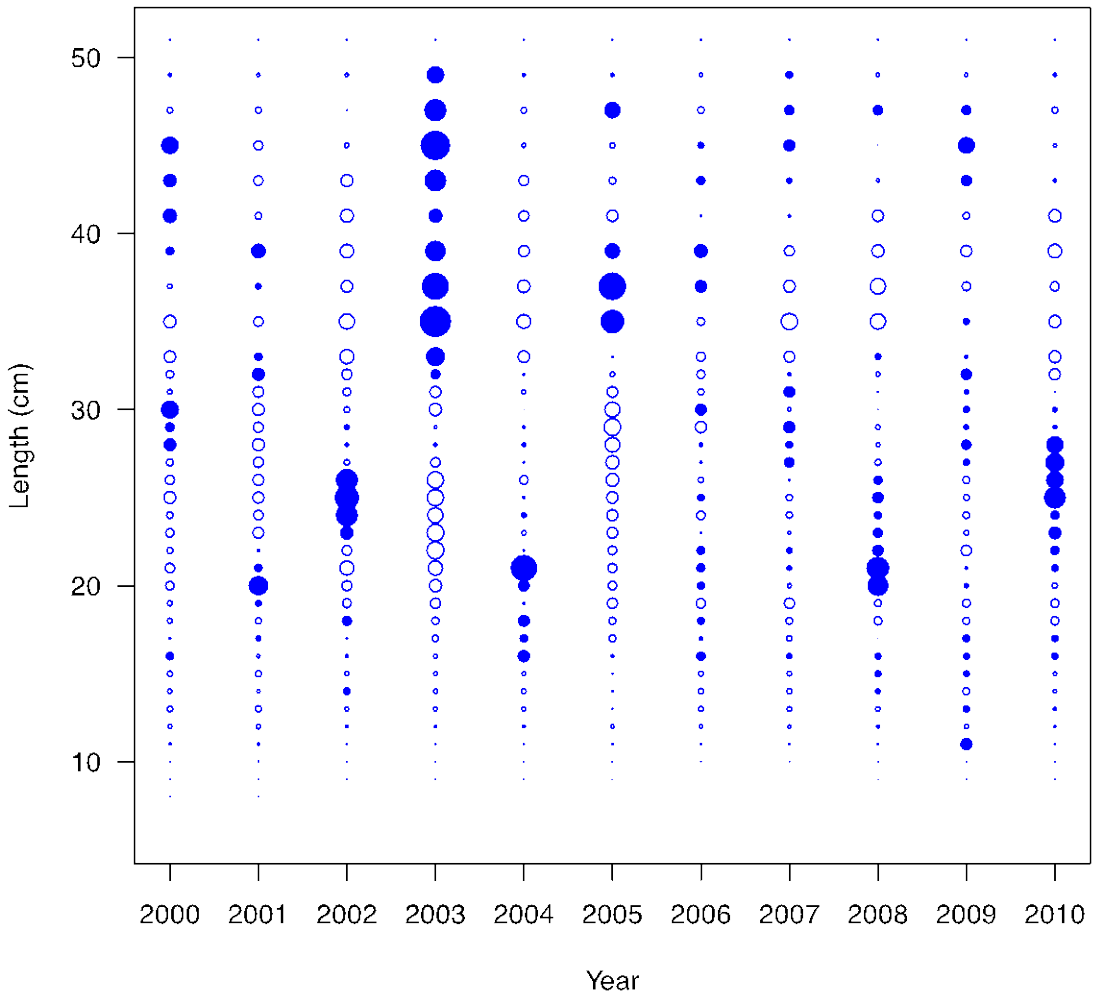


Figure 18. Pearson residuals for female length-composition fits to NWFSC Slope Survey data.

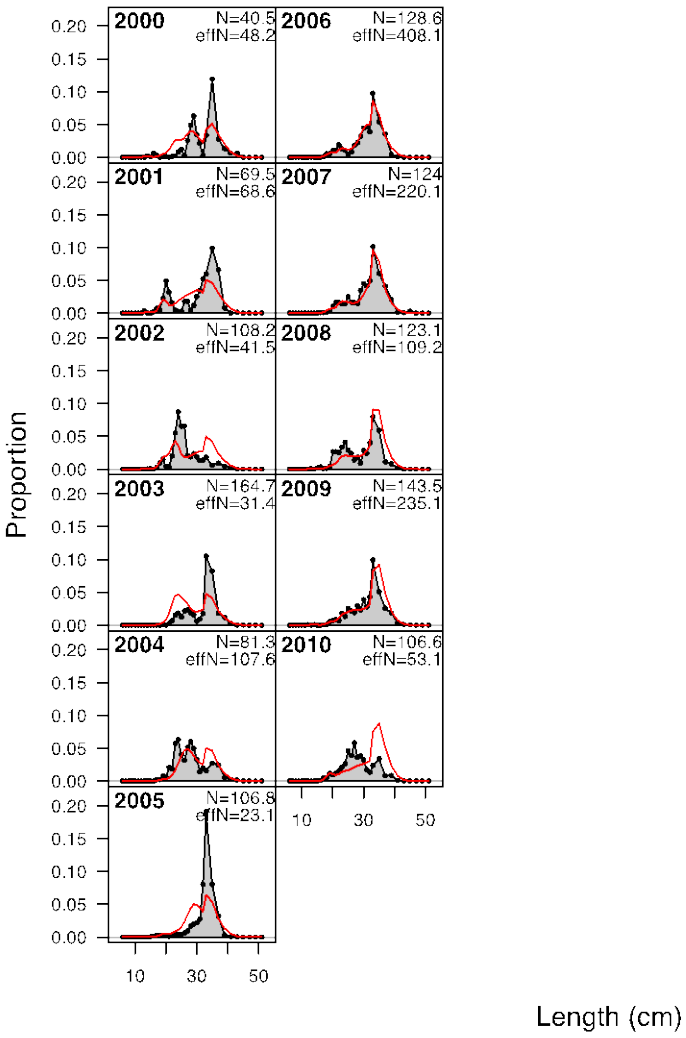


Figure 19. NWFSC Slope Survey male length compositions and model fits

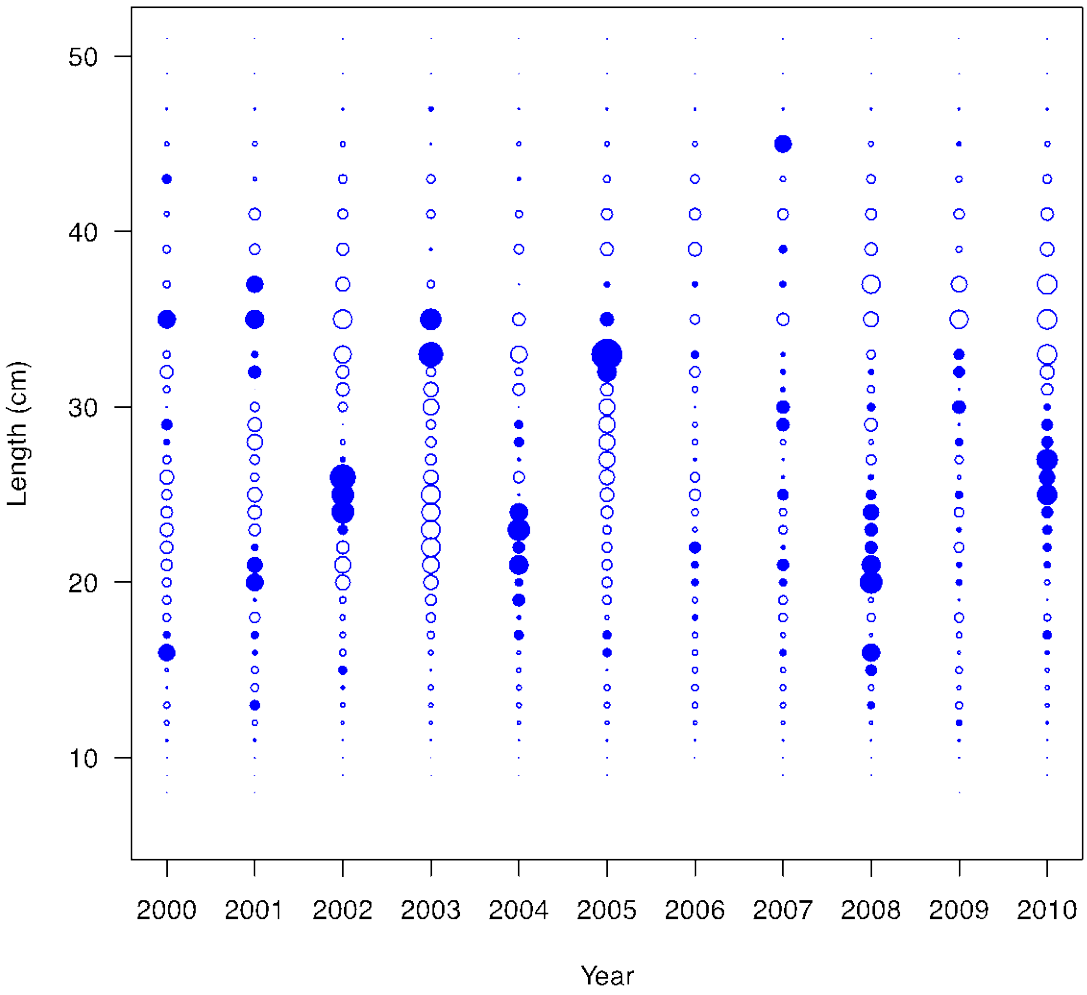


Figure 20. Pearson residuals for male length-composition fits to NWFSC Slope Survey data.

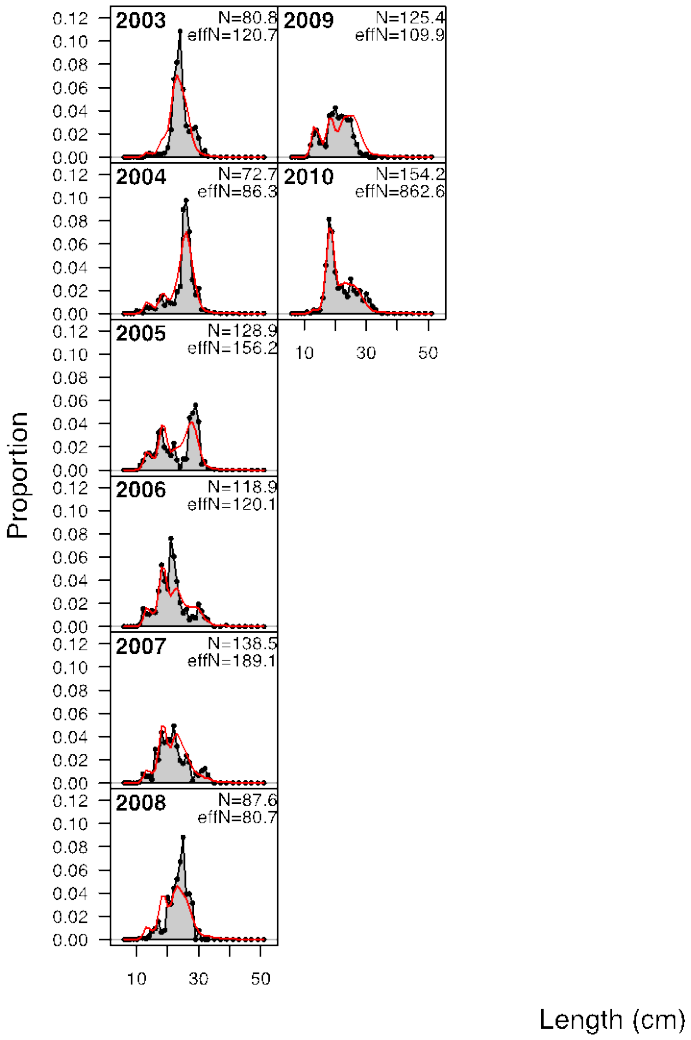


Figure 21. NWFSC Shelf Survey female length compositions and model fits

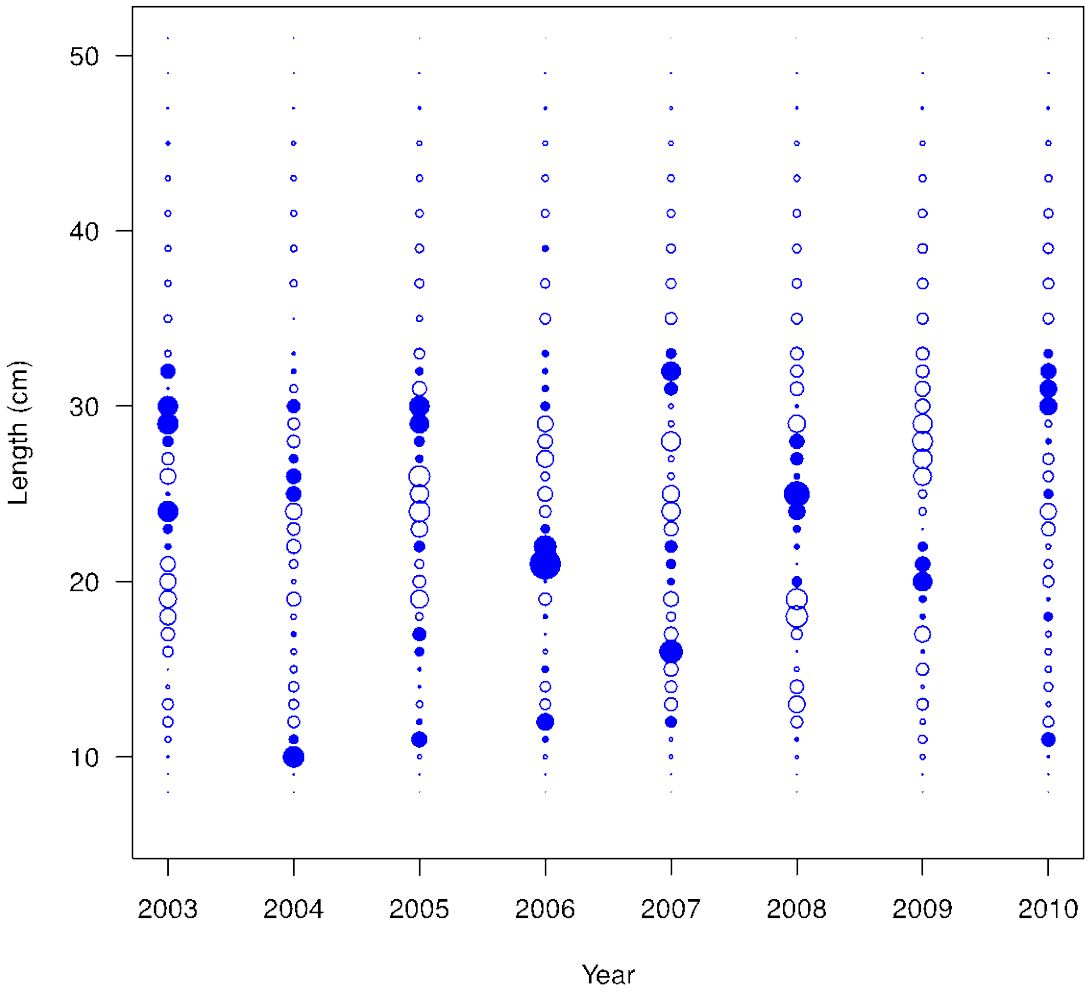


Figure 22. Pearson residuals for female length-composition fits to NWFSC Shelf Survey data.

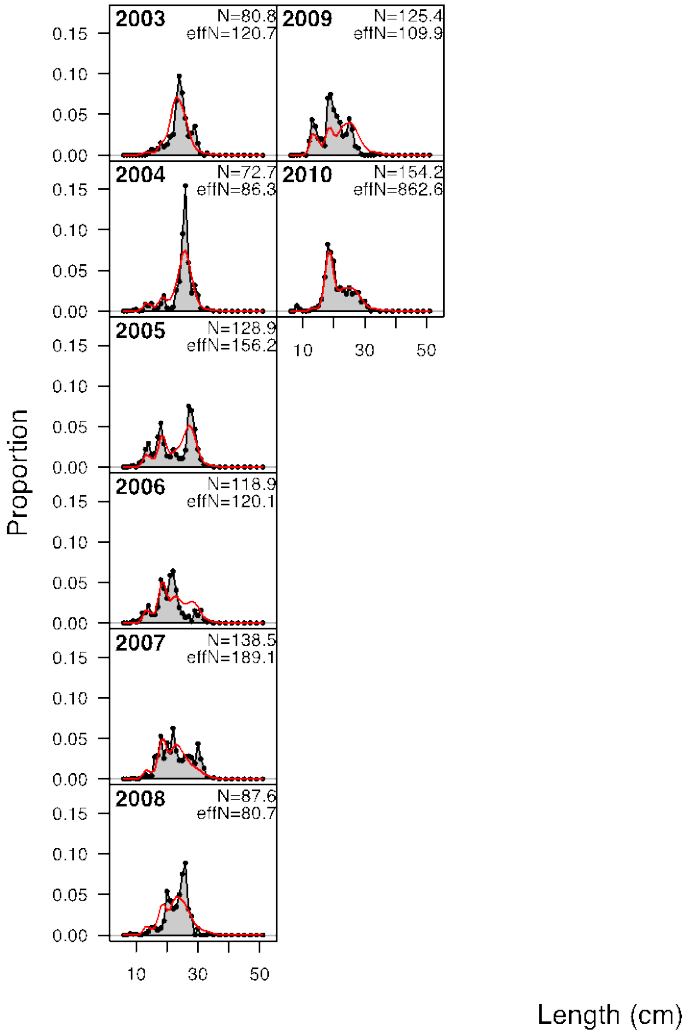


Figure 23. NWFSC Shelf Survey male length compositions and model fits

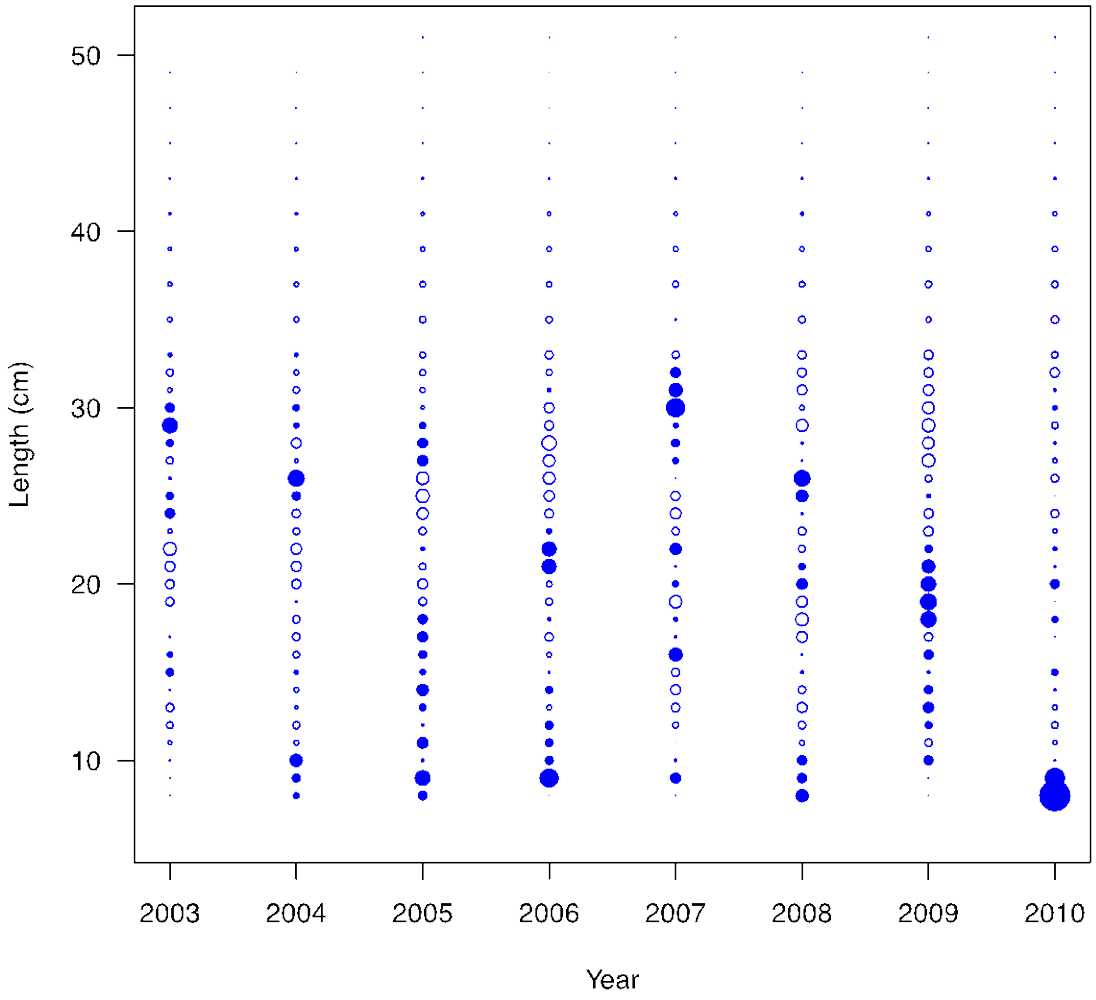


Figure 24. Pearson residuals for male length-composition fits to NWFSC Shelf Survey data.

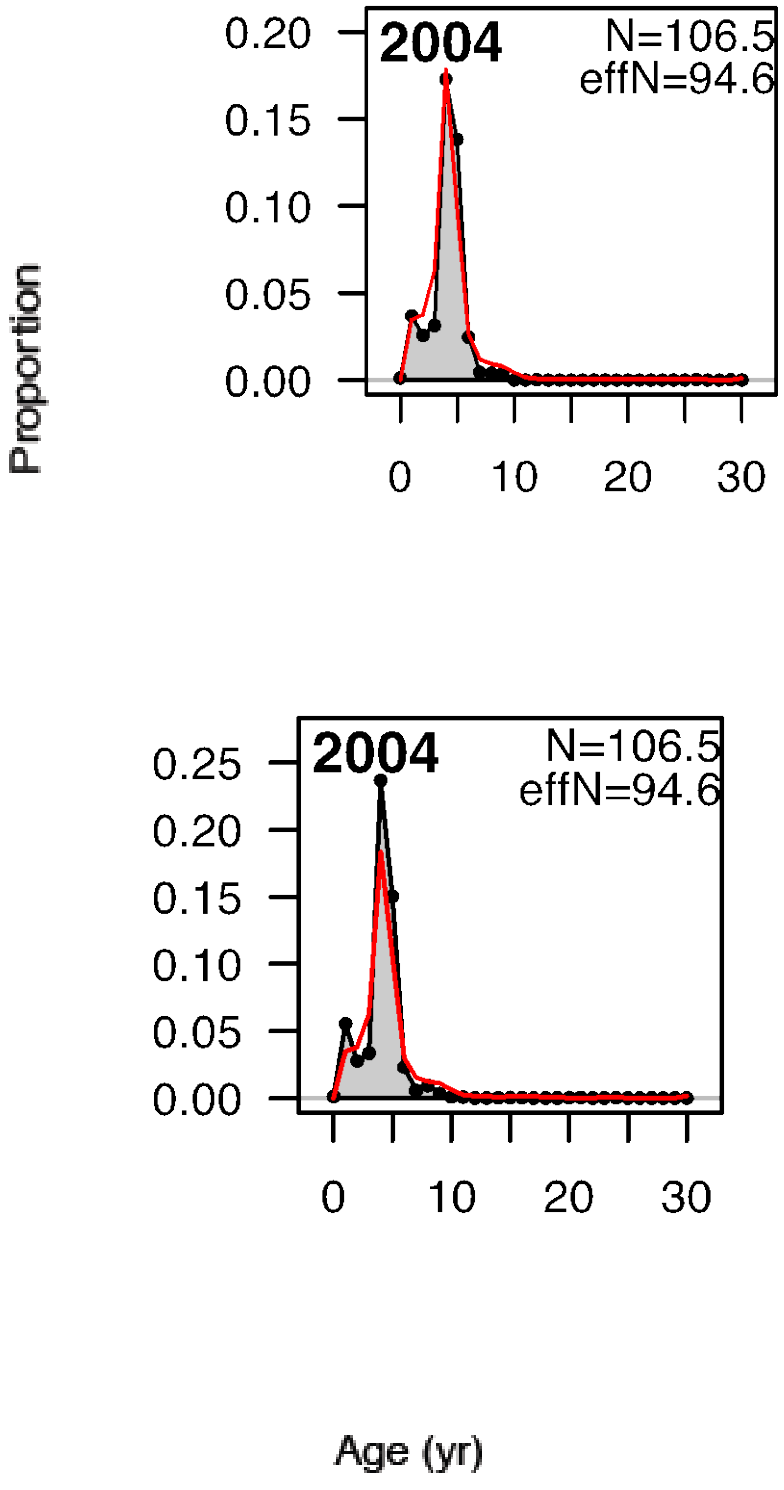


Figure 25. Triennial female (top) and male 2004 age composition and model fit.

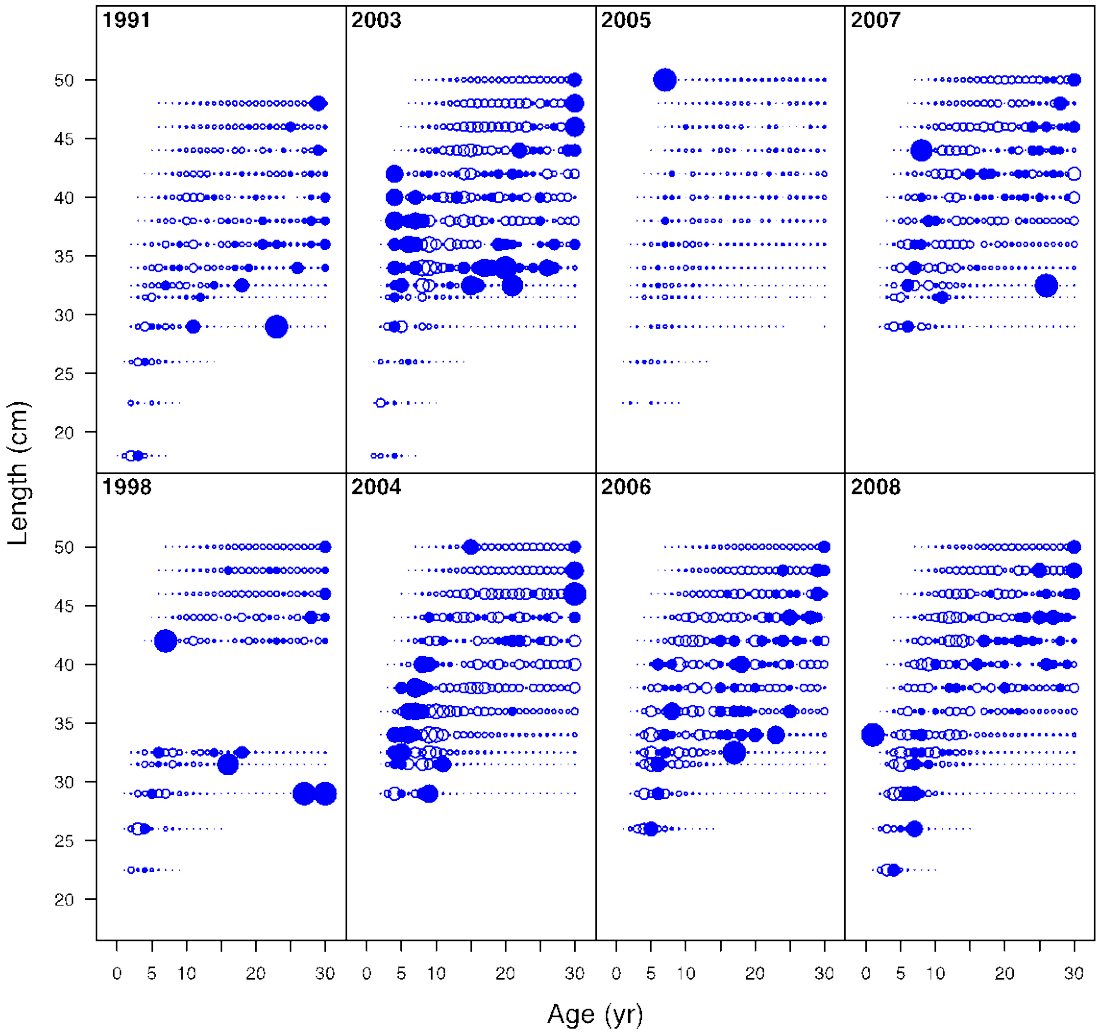


Figure 26. Pearson residuals for the conditional Age-at-Length fits for females in the fishery (whole catch).

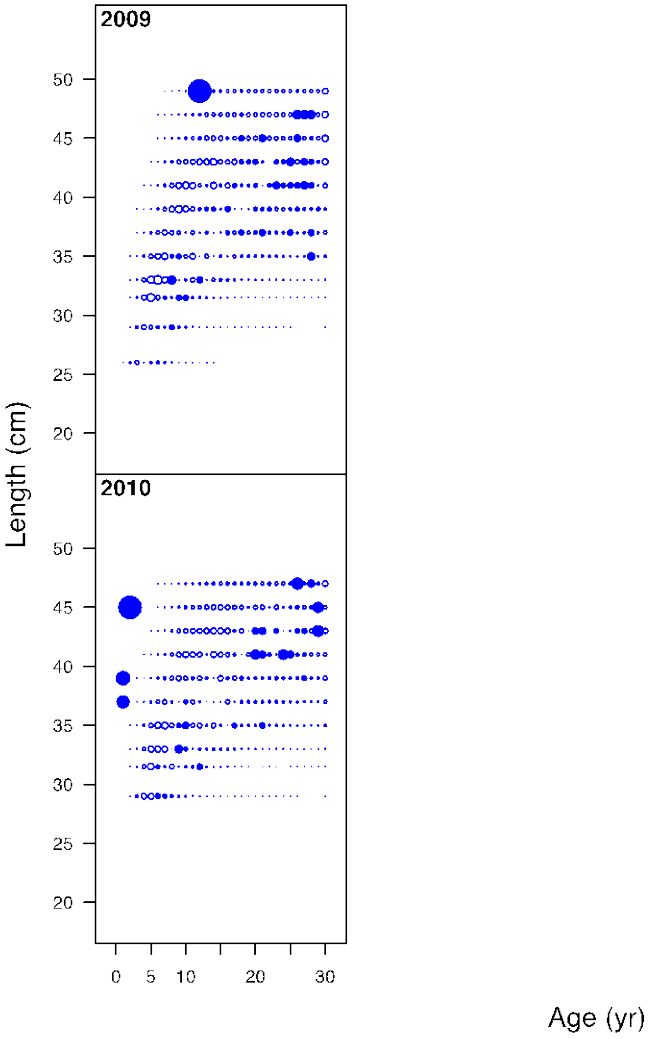


Figure 26. Pearson residuals for the conditional Age-at-Length fits for females in the fishery (cont'd).

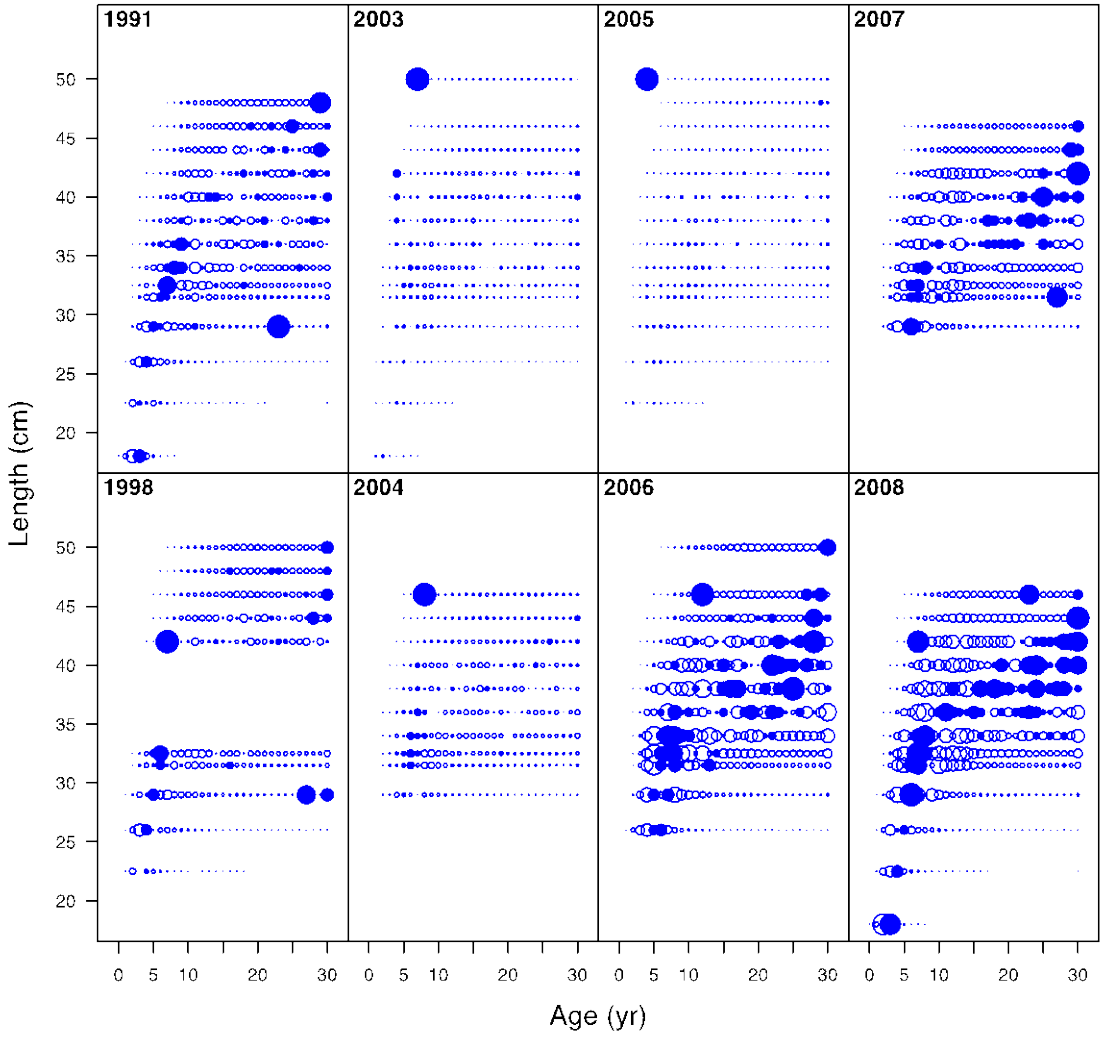


Figure 27. Pearson residuals for the conditional Age-at-Length fits for males in the fishery (whole catch).

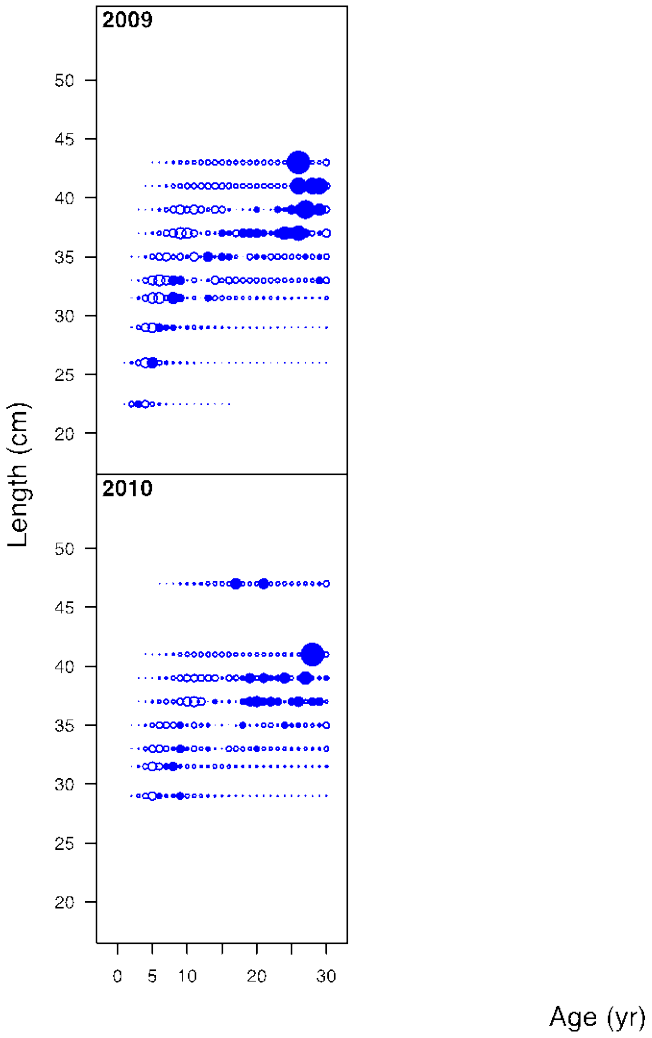


Figure 27. Pearson residuals for the conditional Age-at-Length fits for males in the fishery (cont'd).

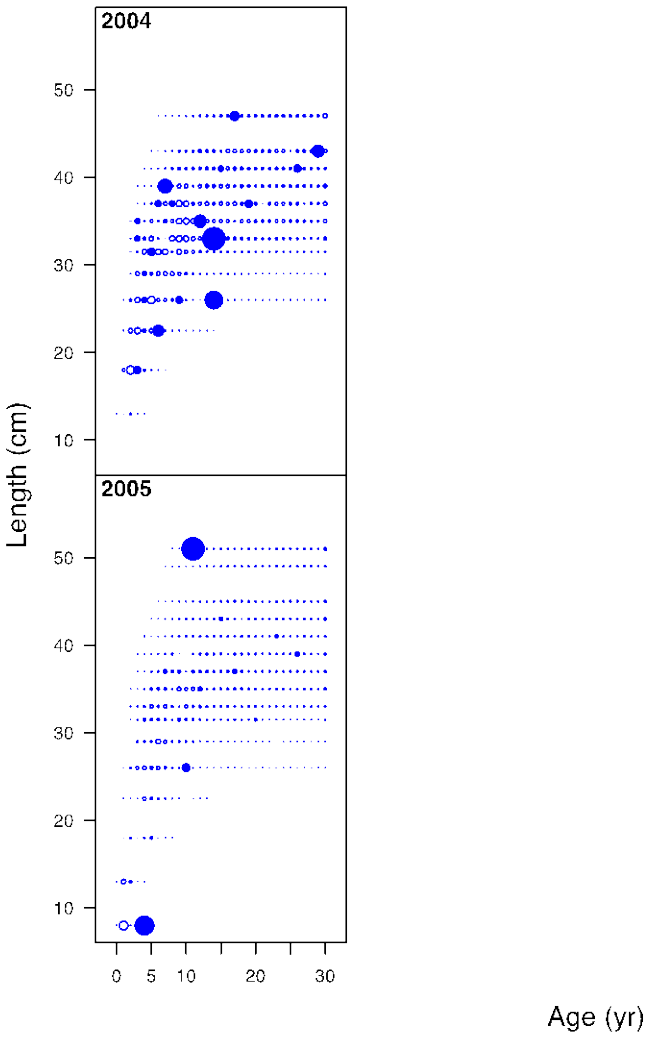


Figure 30. Pearson residuals, sexes combined, for fishery discards.

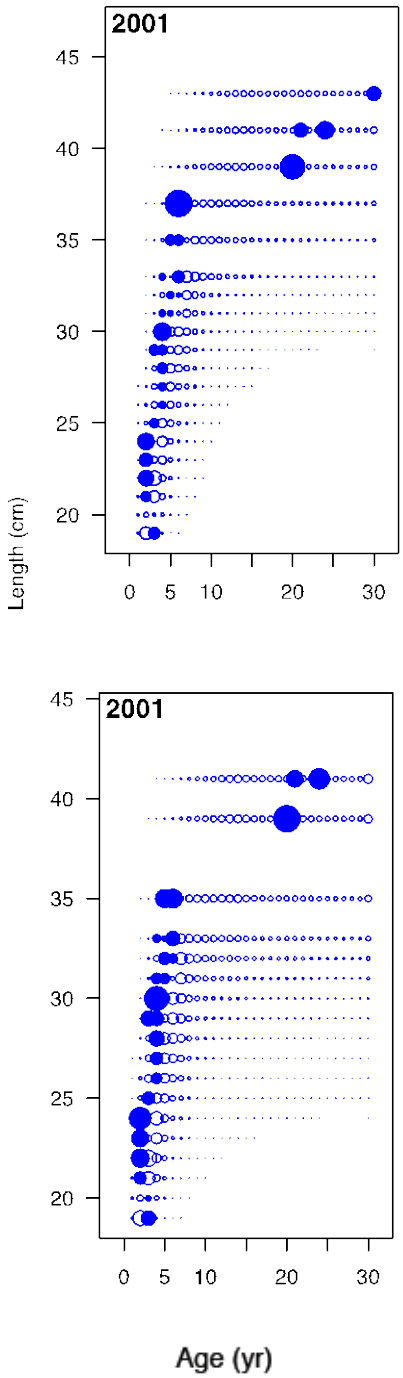


Figure 31. Pearson residuals for the conditional Age-at-Length fits for females (top) and males in the AFSC Slope survey.

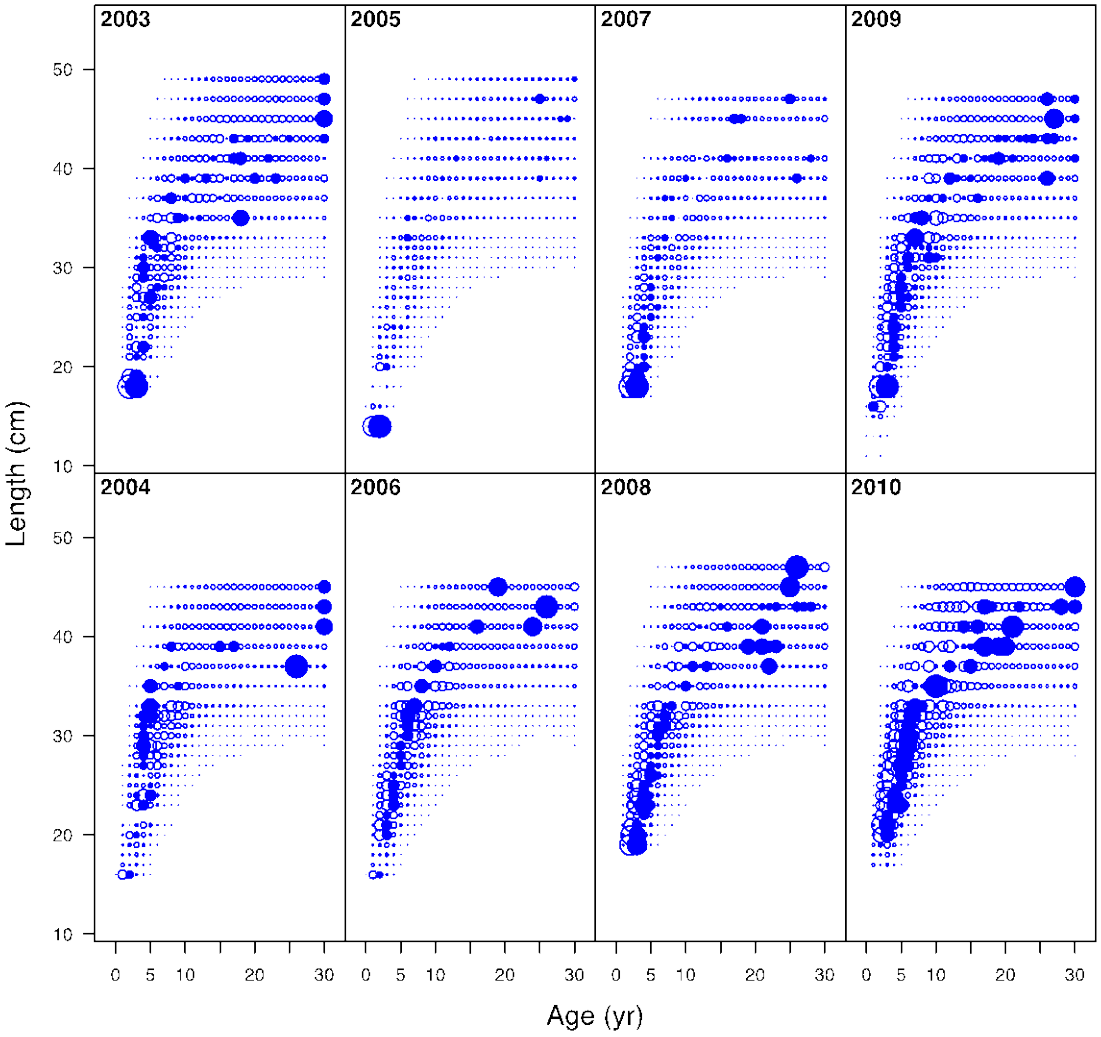


Figure 32. Pearson residuals for the conditional Age-at-Length fits for females in the NWFSC Slope survey.

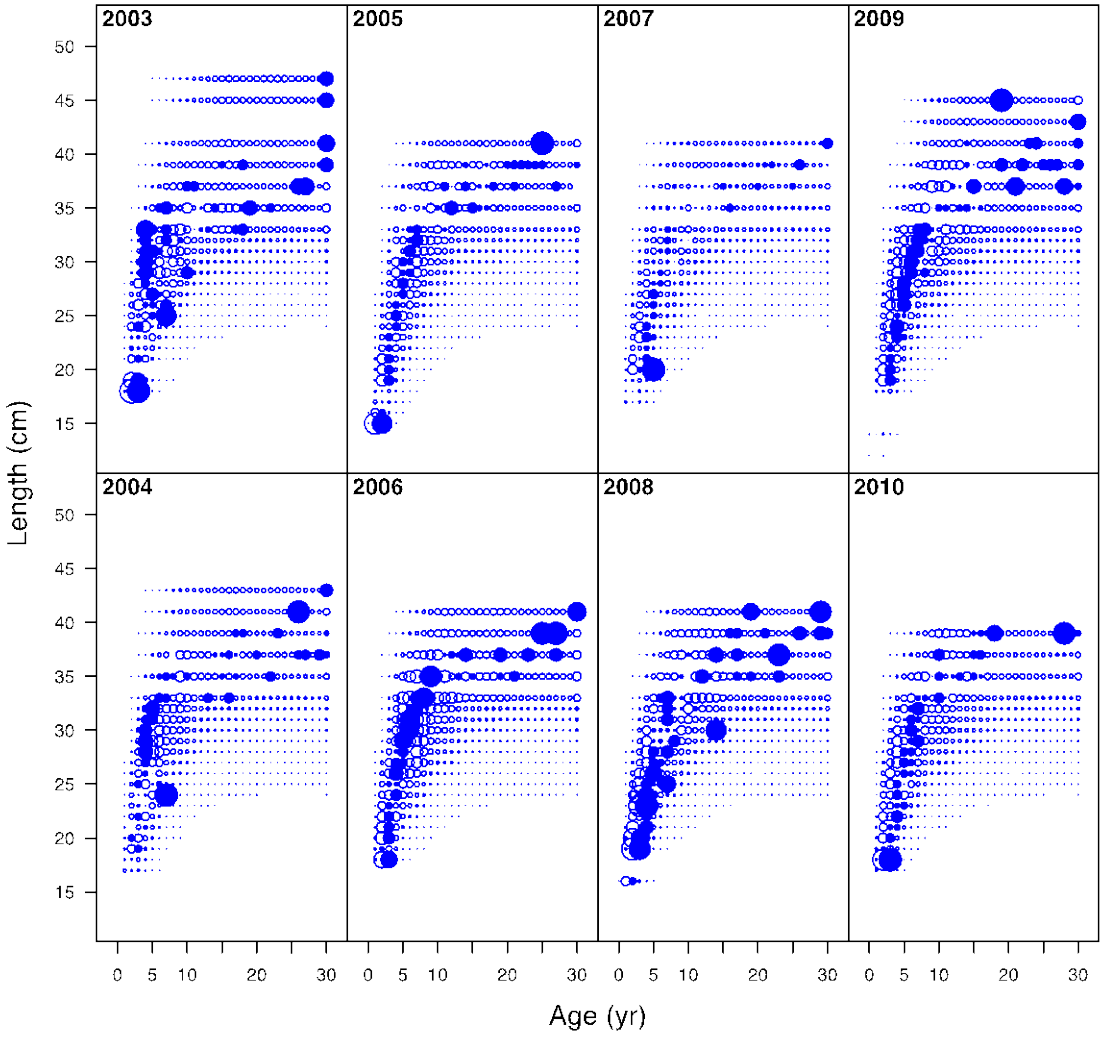


Figure 33. Pearson residuals for the conditional Age-at-Length fits for males in the NWFSC Slope survey.

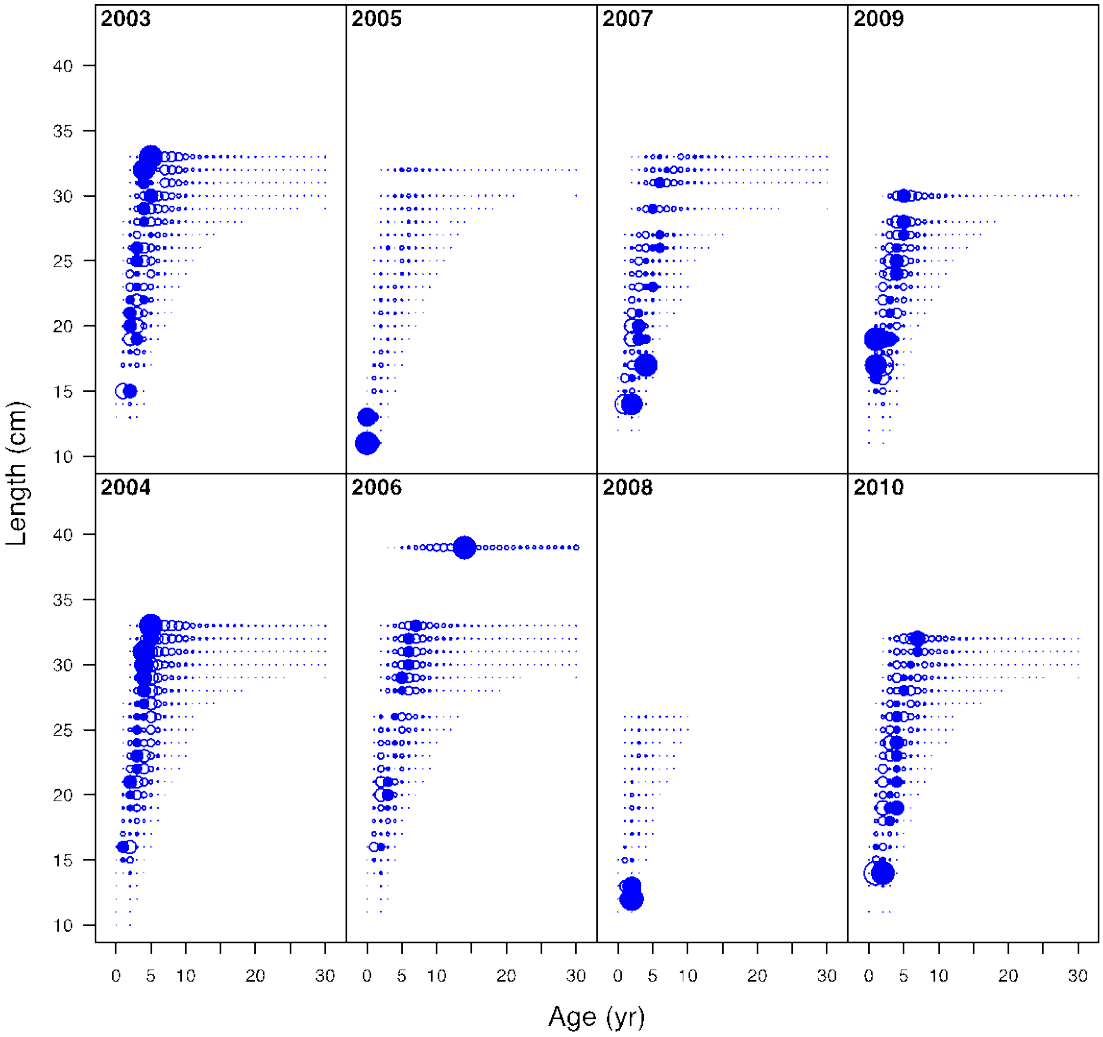


Figure 34. Pearson residuals for the conditional Age-at-Length fits for females in the NWFSC Shelf survey.

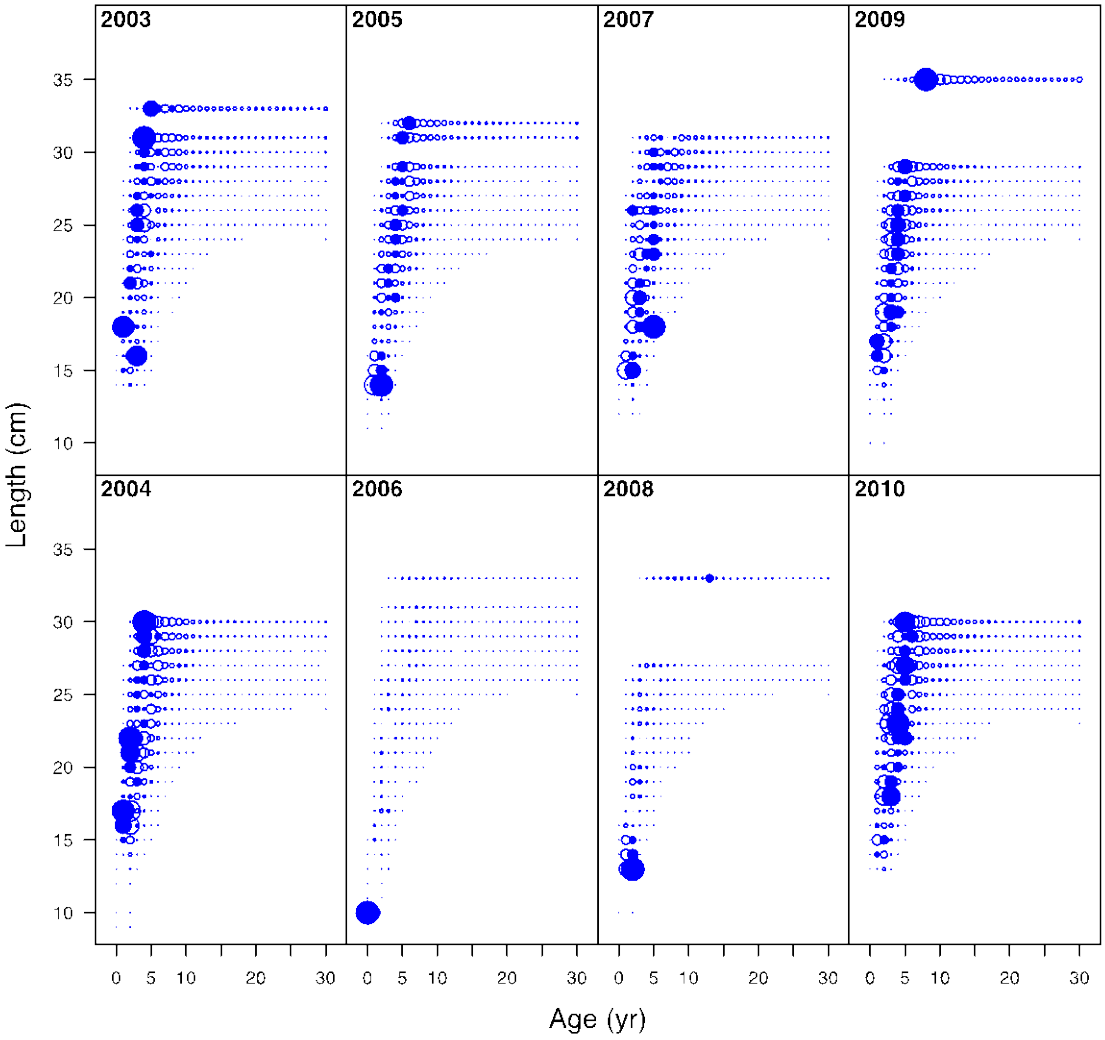


Figure 35. Pearson residuals for the conditional Age-at-Length fits for males in the NWFSC Shelf survey.

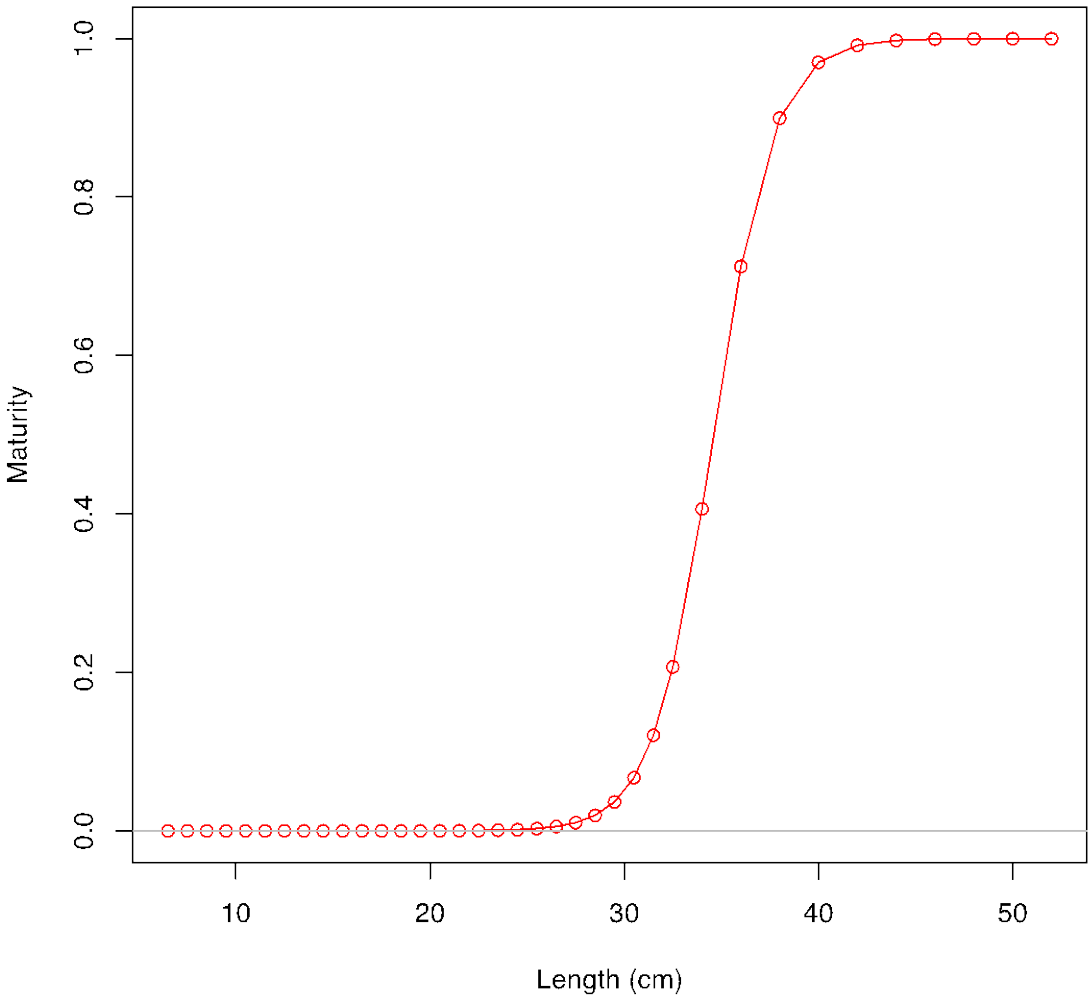


Figure 36. Maturity ogive for female darkblotched rockfish.

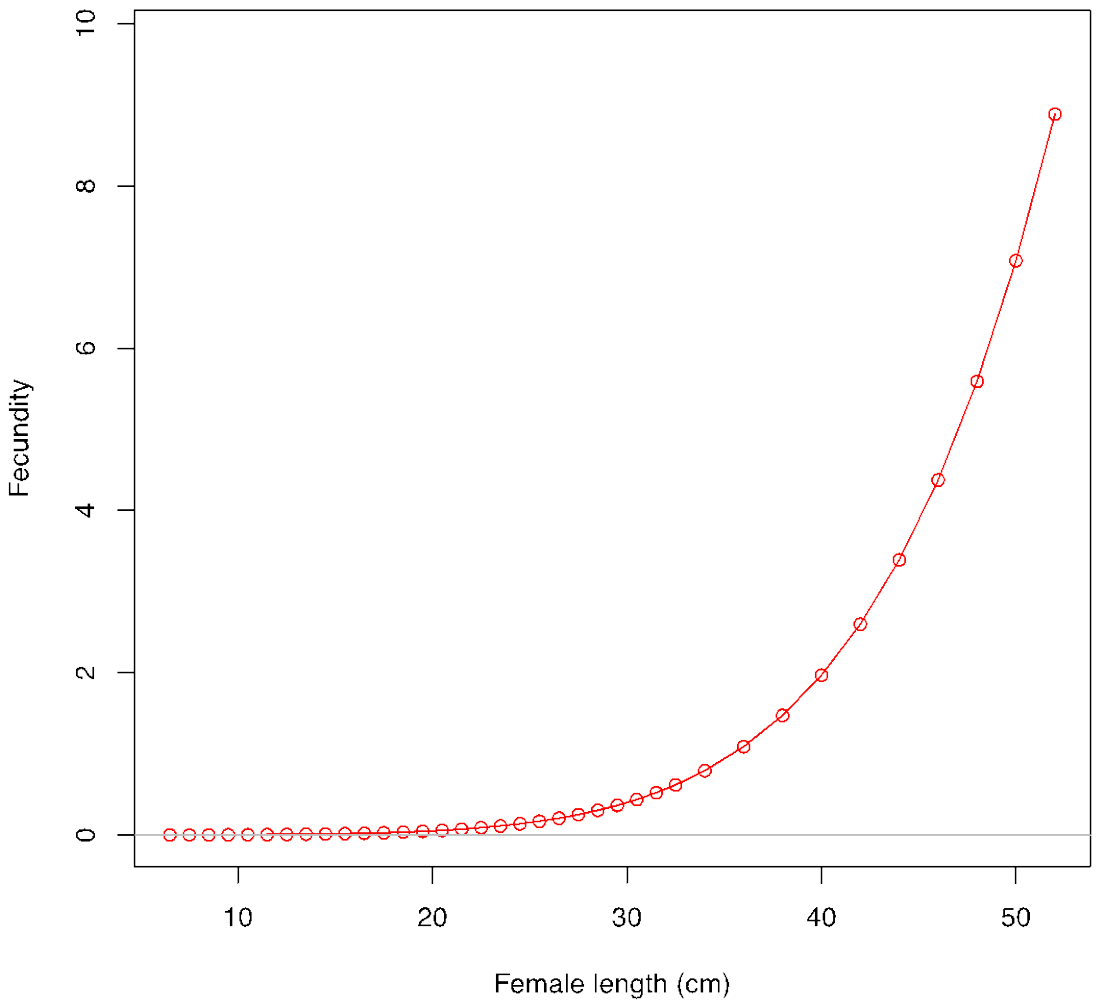


Figure 37. Length-to-spawning output relationship.

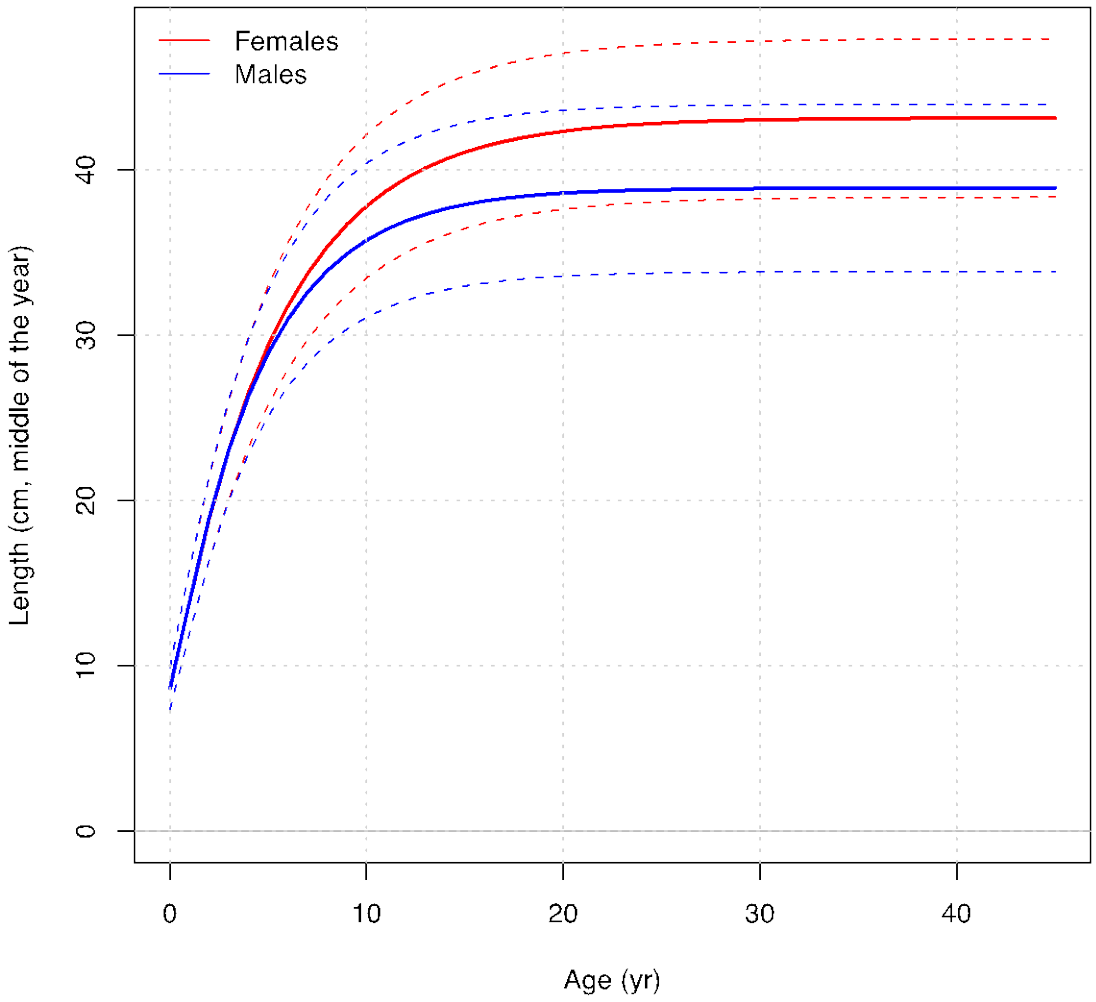


Figure 38. Growth curve for female (upper) and male darkblotched rockfish estimated in the model (ending year).

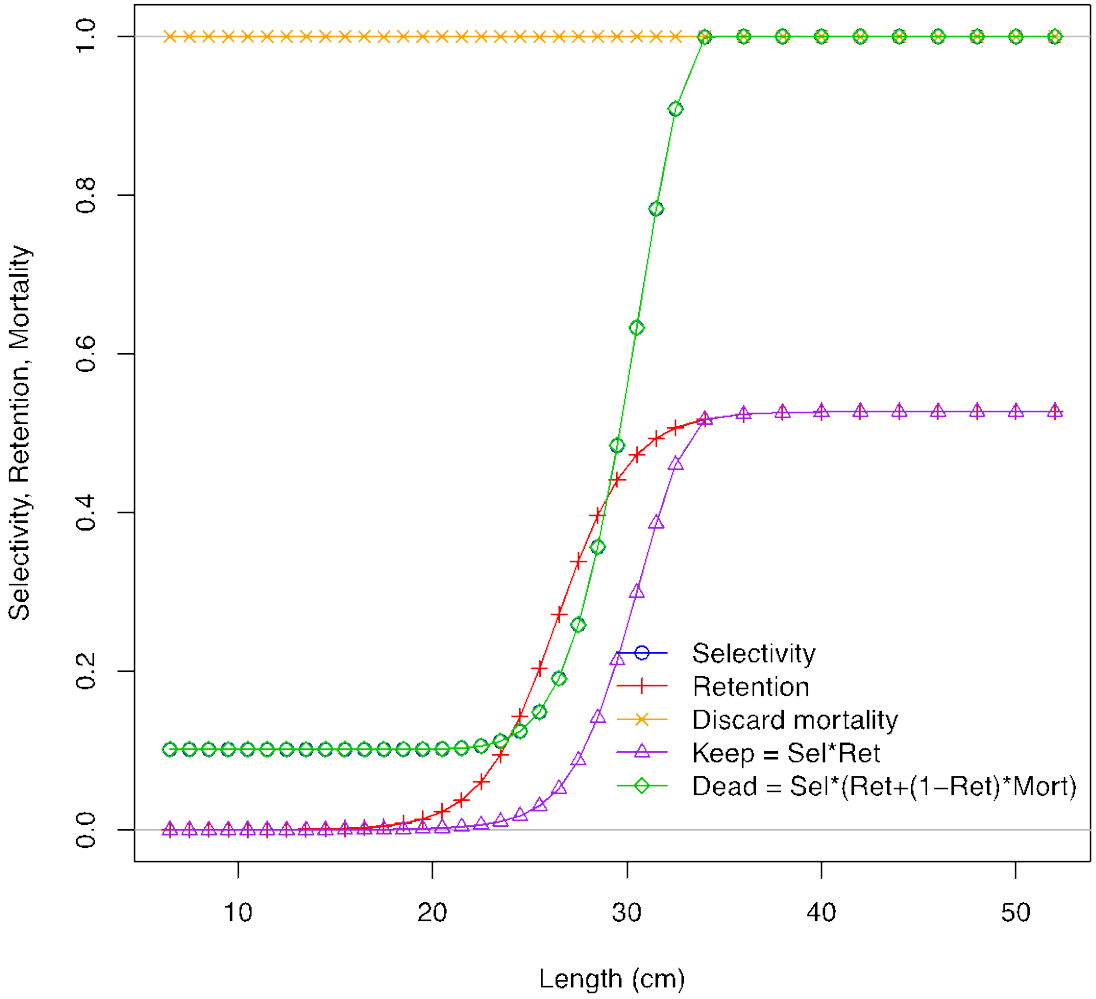


Figure 39. Female ending year fishery mortality, selectivity and 2003-2008 retention (as the proportion retained at length).

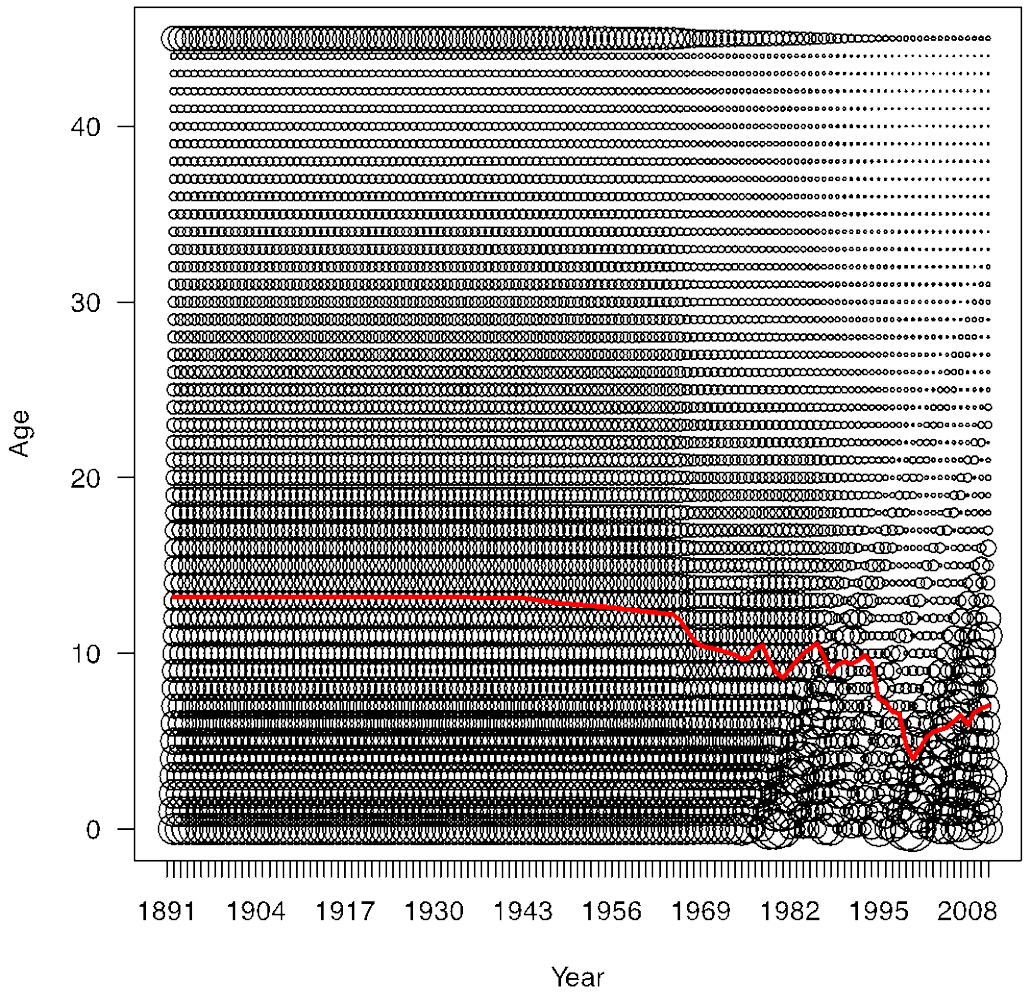


Figure 40. Proportion at age, by year, using the mean age of females in the population.

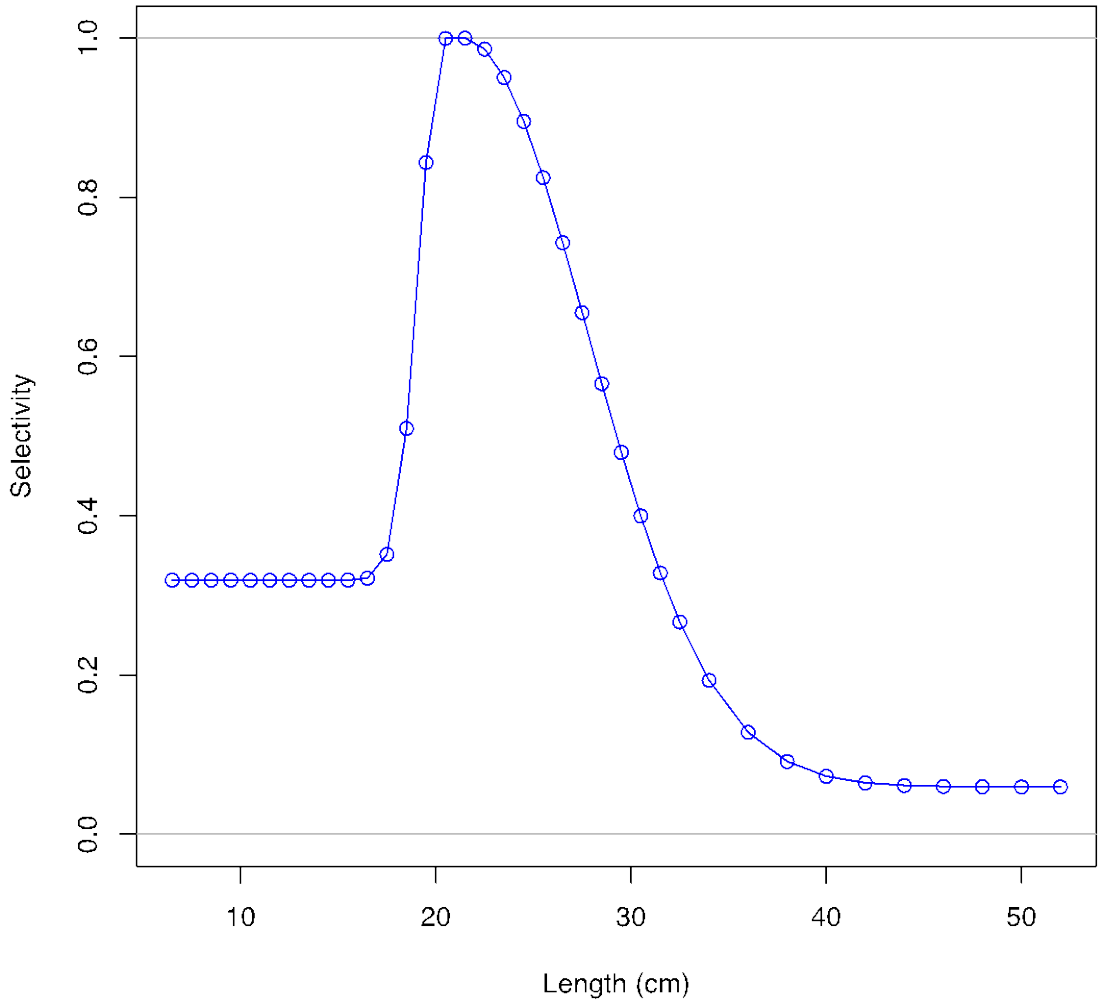


Figure 41. Female ending year selectivity for the Triennial Shelf Survey.

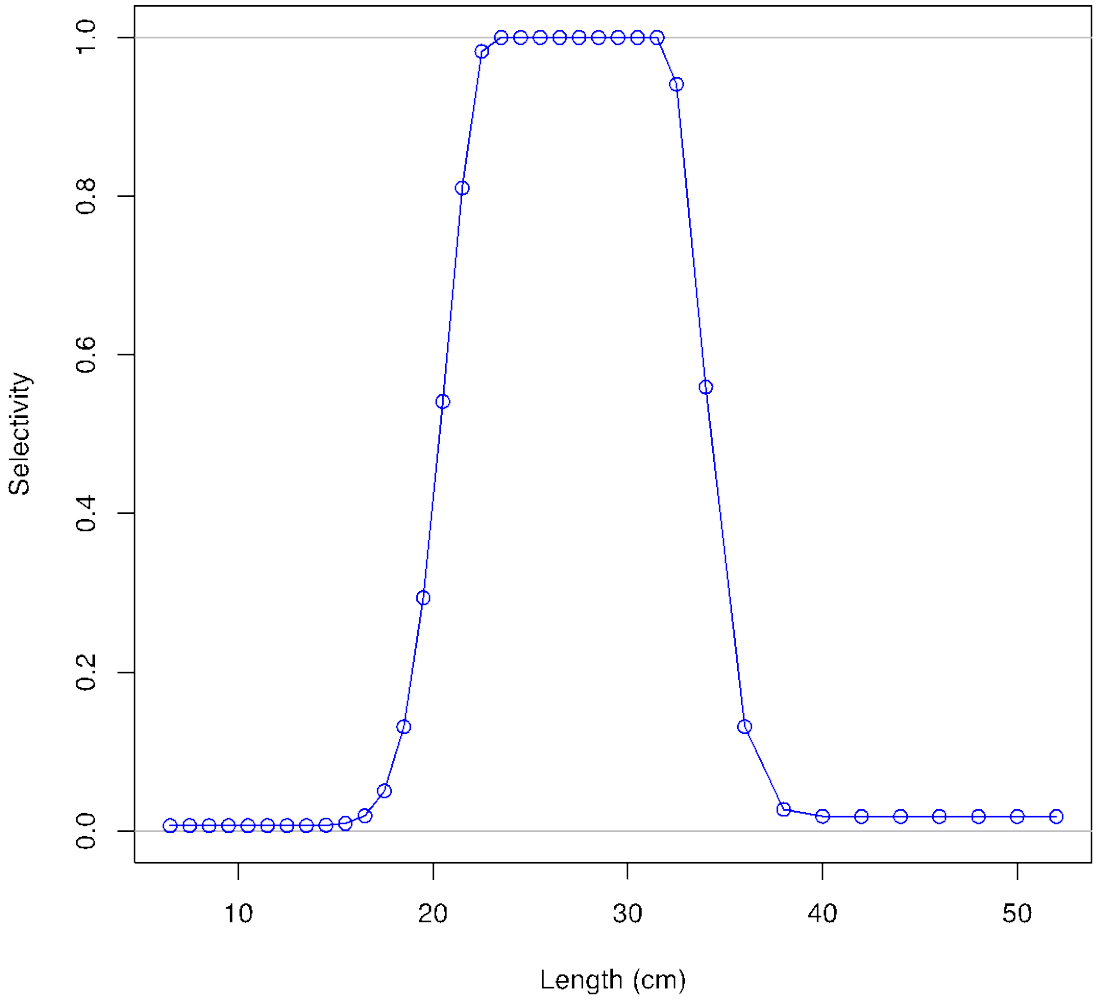


Figure 42. Female ending year selectivity for the AFSC Slope Survey.

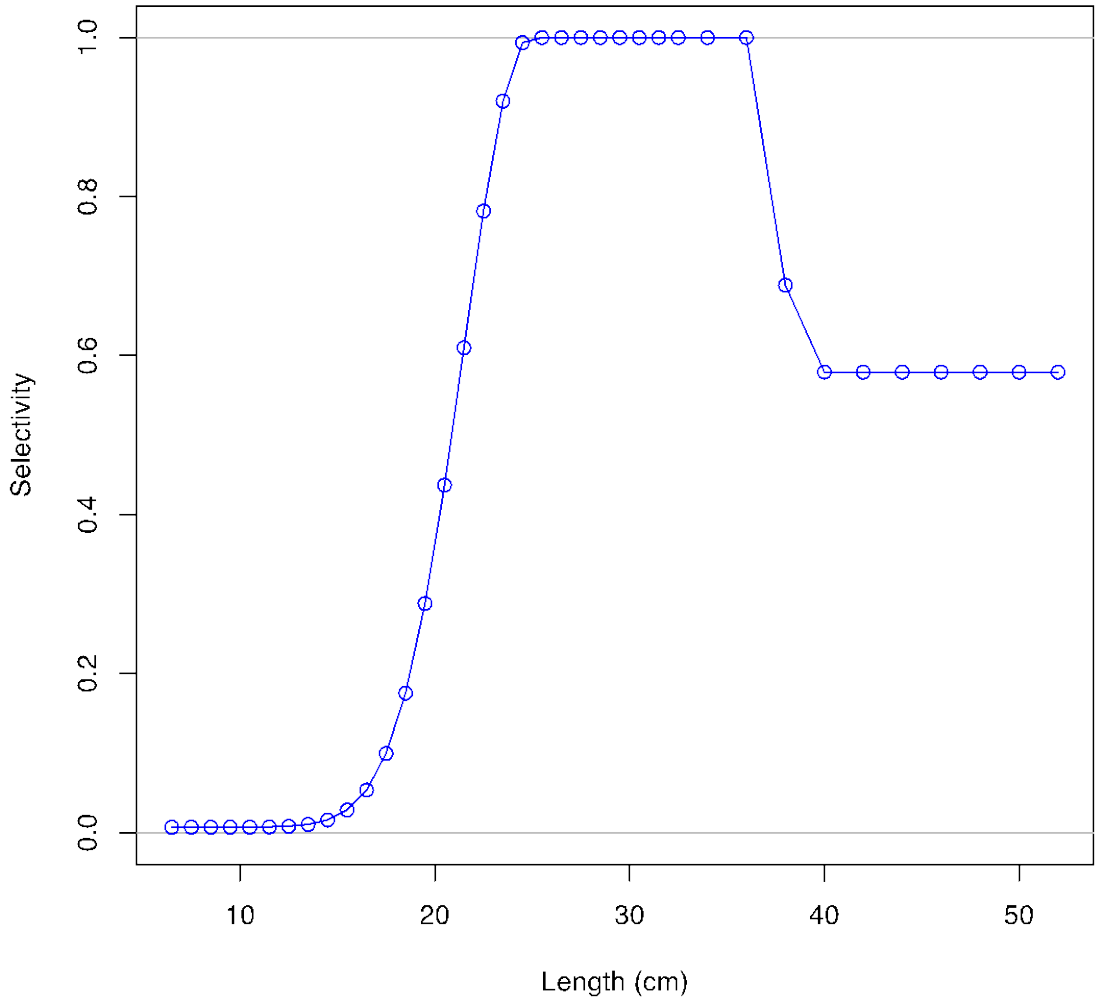


Figure 43. Female ending year selectivity for the NWFSC Slope Survey.

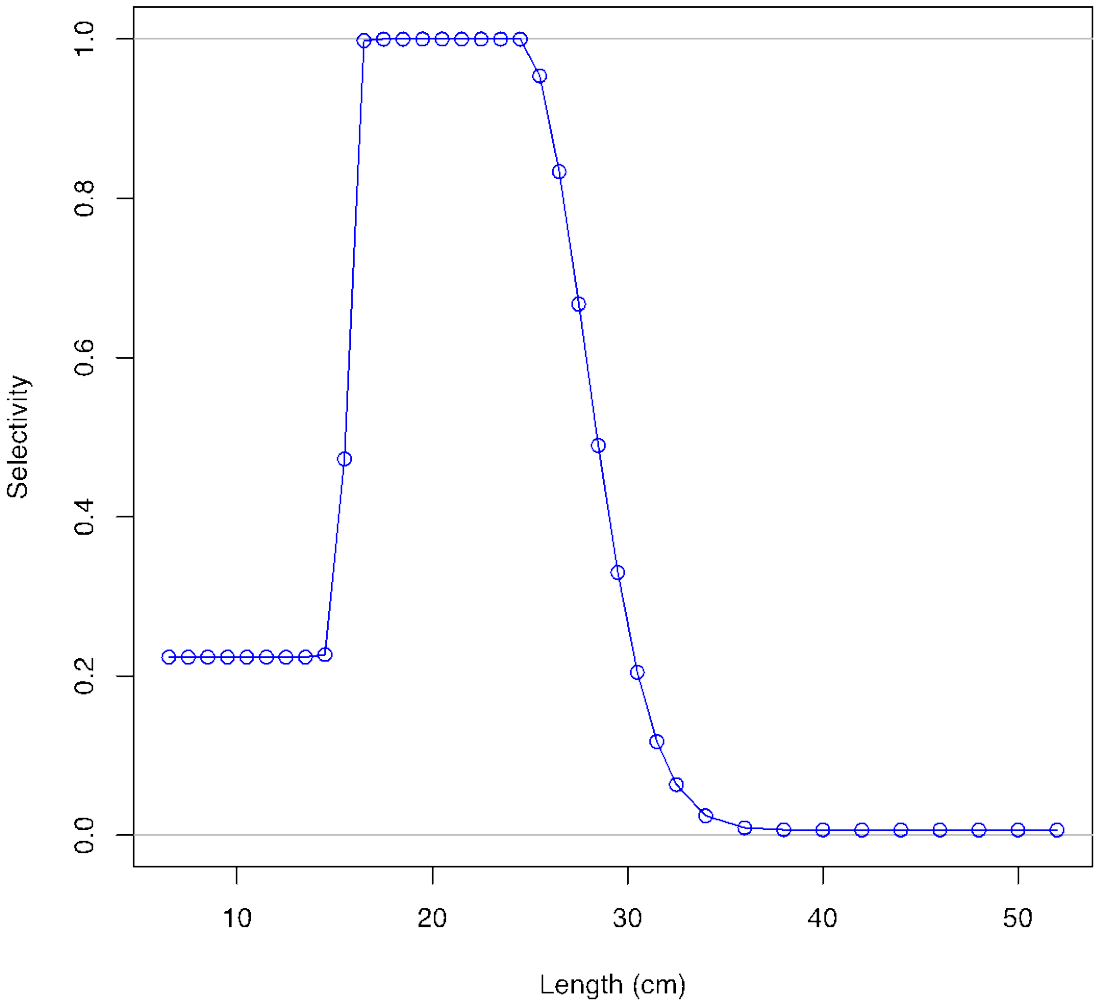


Figure 44. Female ending year selectivity for the NWFSC Shelf Survey.

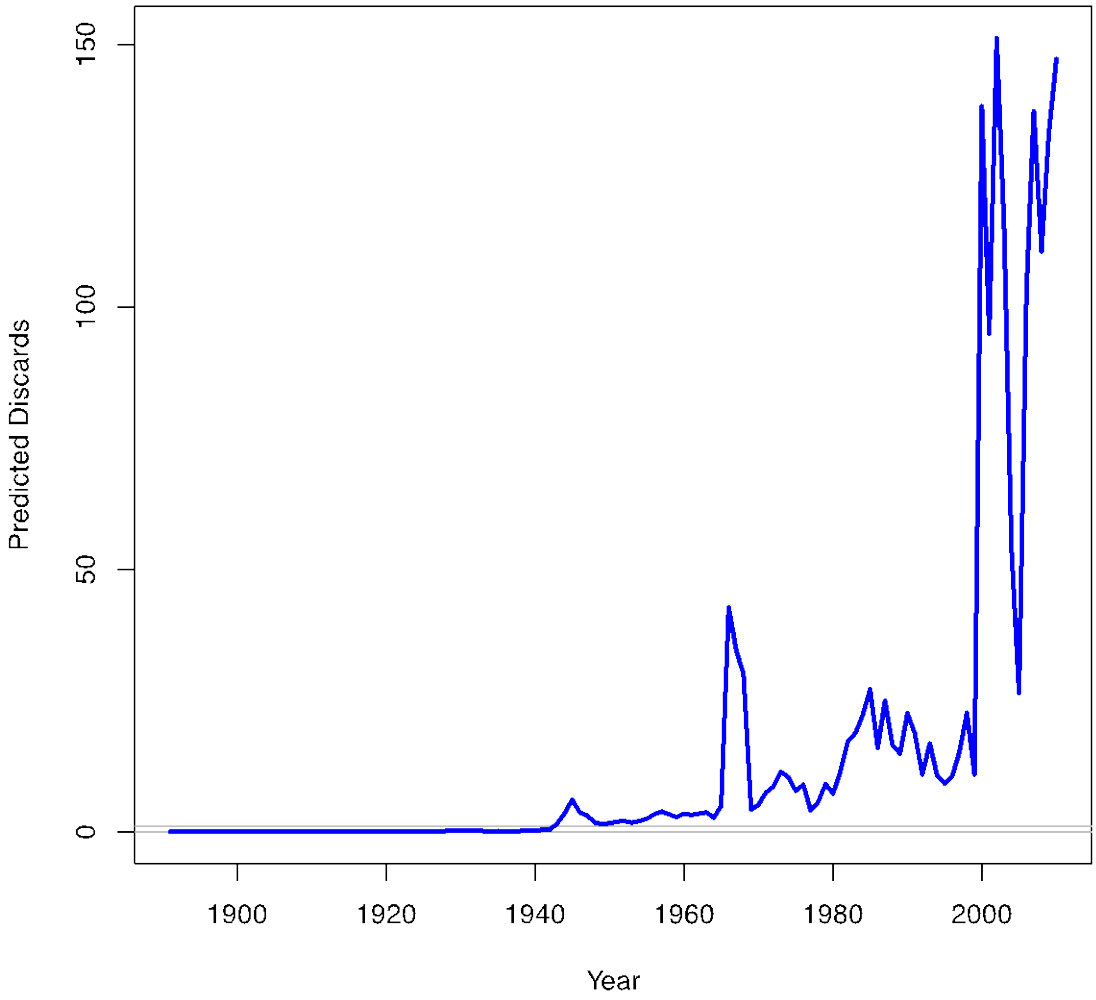


Figure 45. Time series of estimated discards (mt).

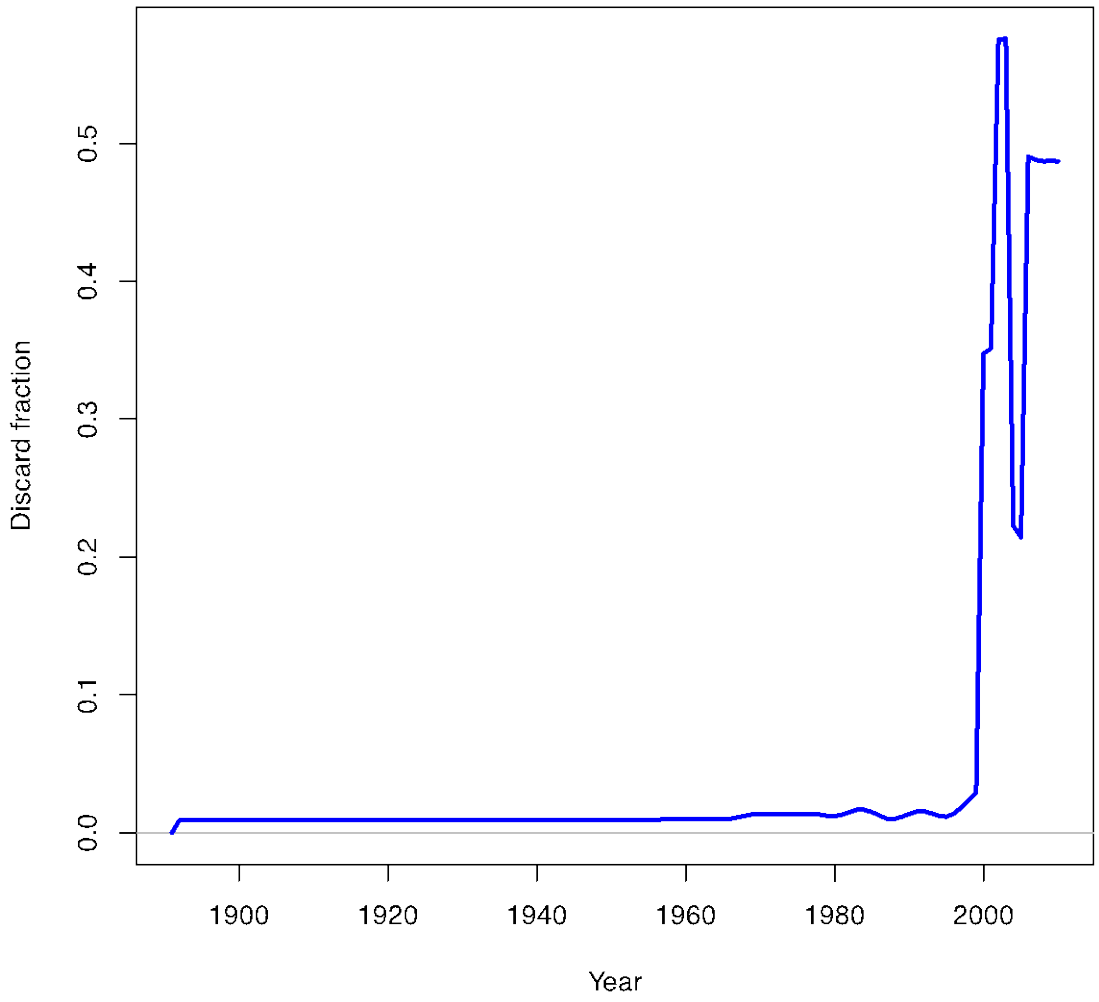


Figure 46. Time series of estimated discard fraction by weight.

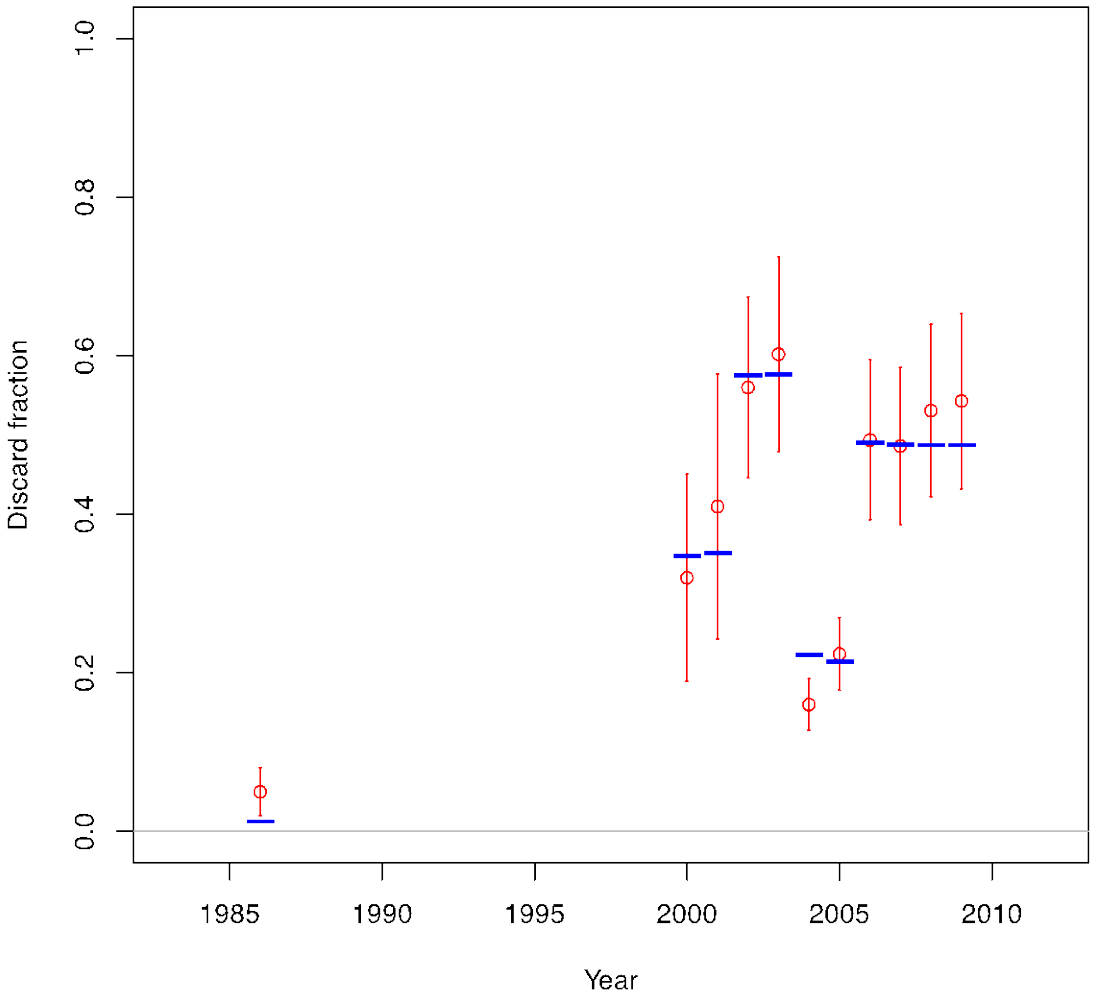


Figure 47. Fit to discard fraction data.

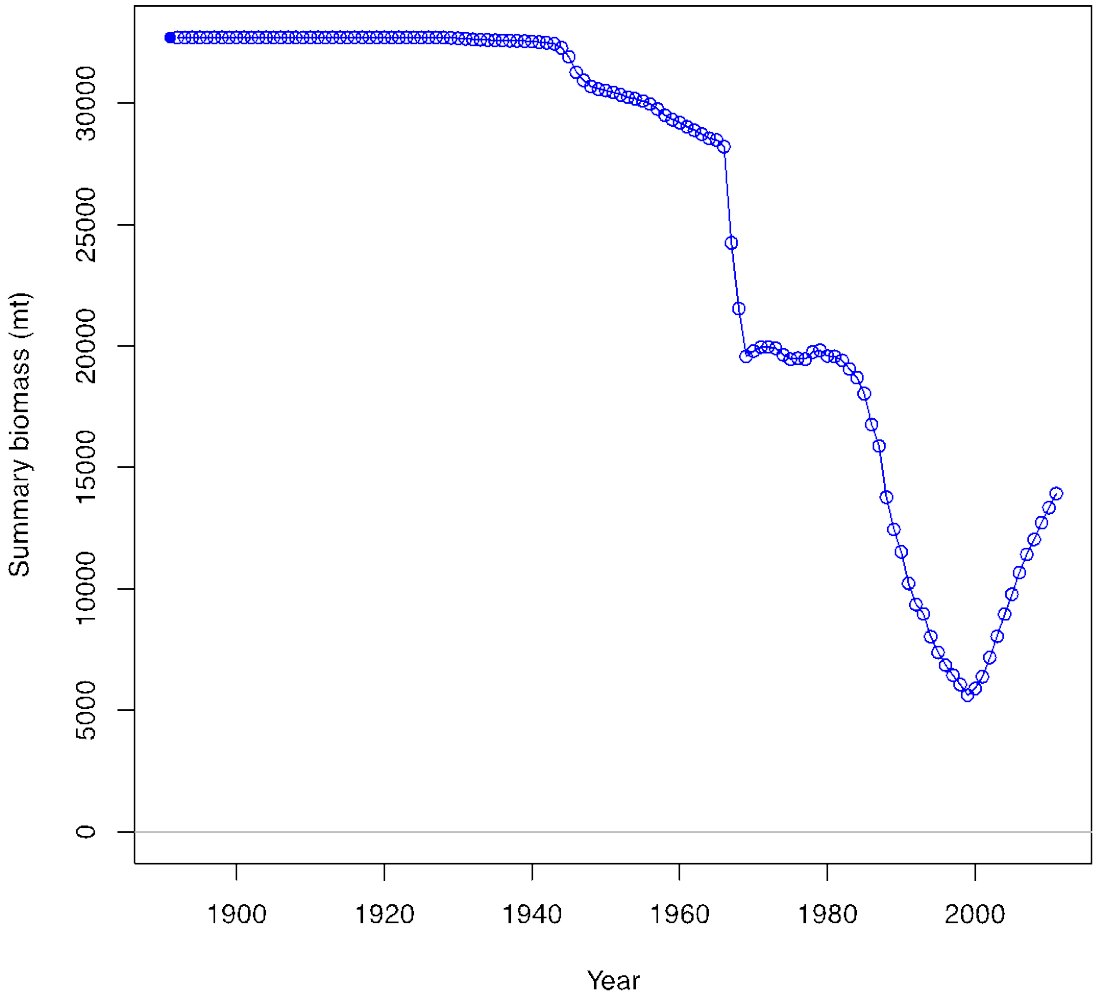


Figure 48. Time series of summary biomass.

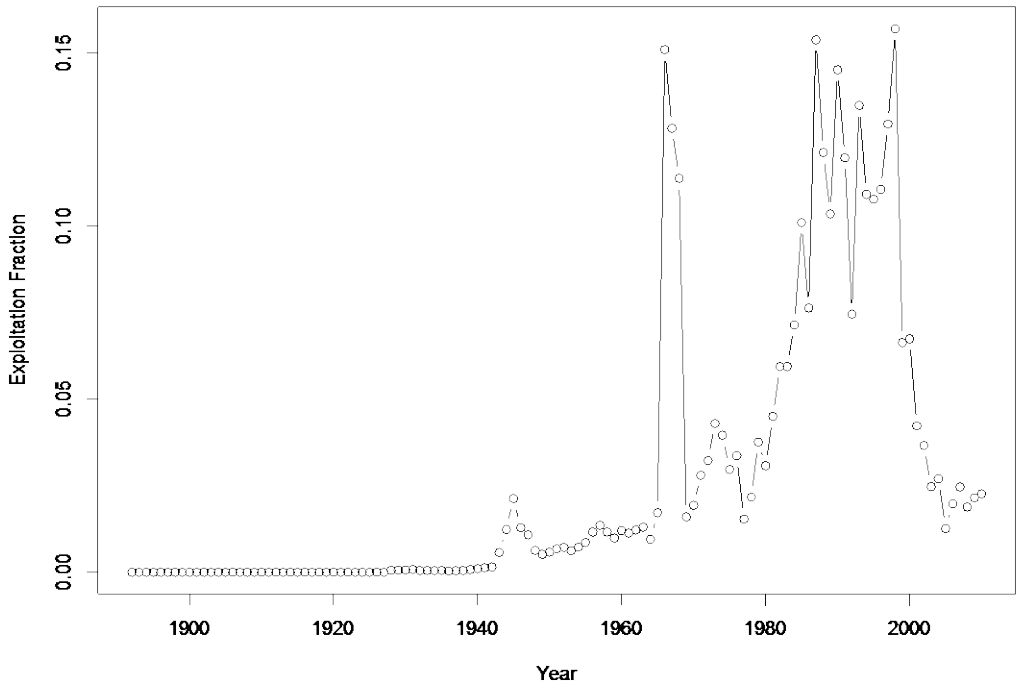


Figure 49. Time series of exploitation fraction (catch/summary biomass).

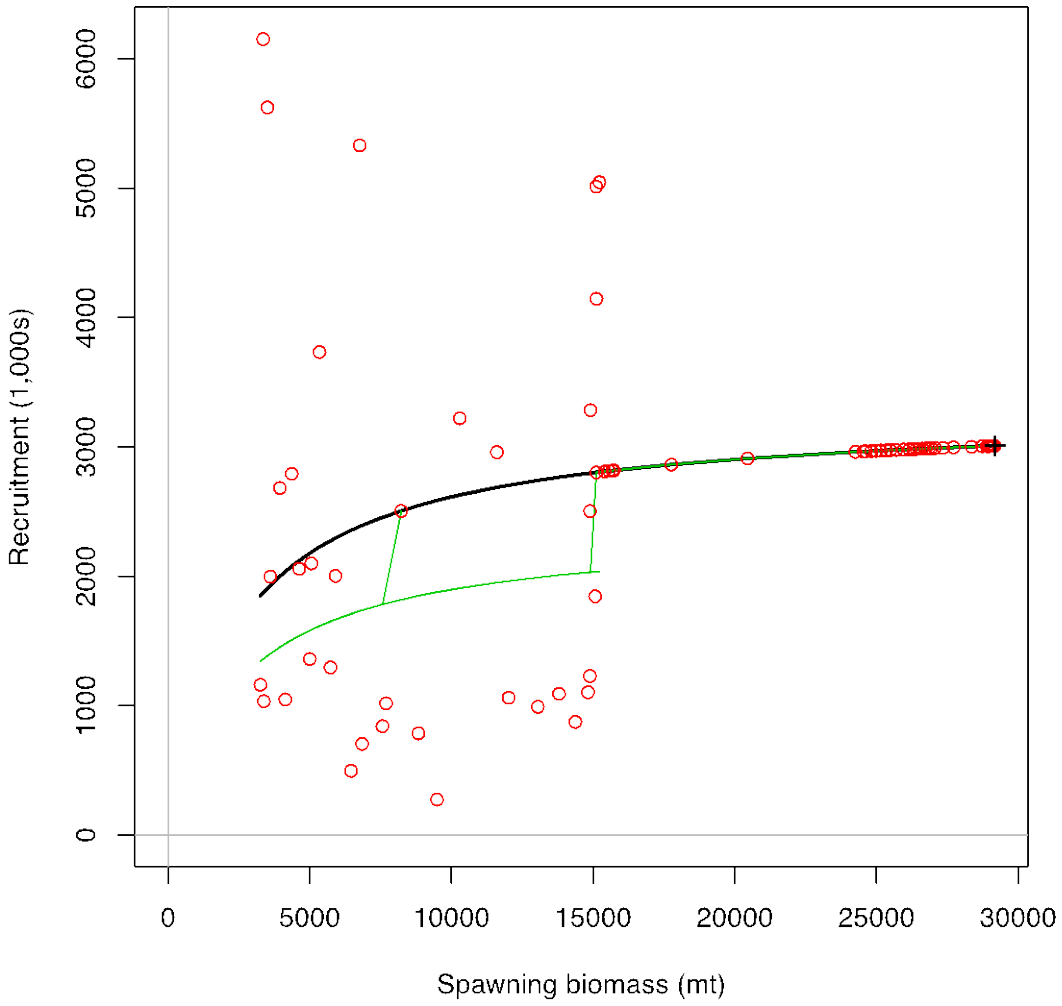


Figure 50. Time series of recruitment and spawner-recruit curve. The top line is the expected-mean recruitment curve and the bottom line is bias-adjusted.

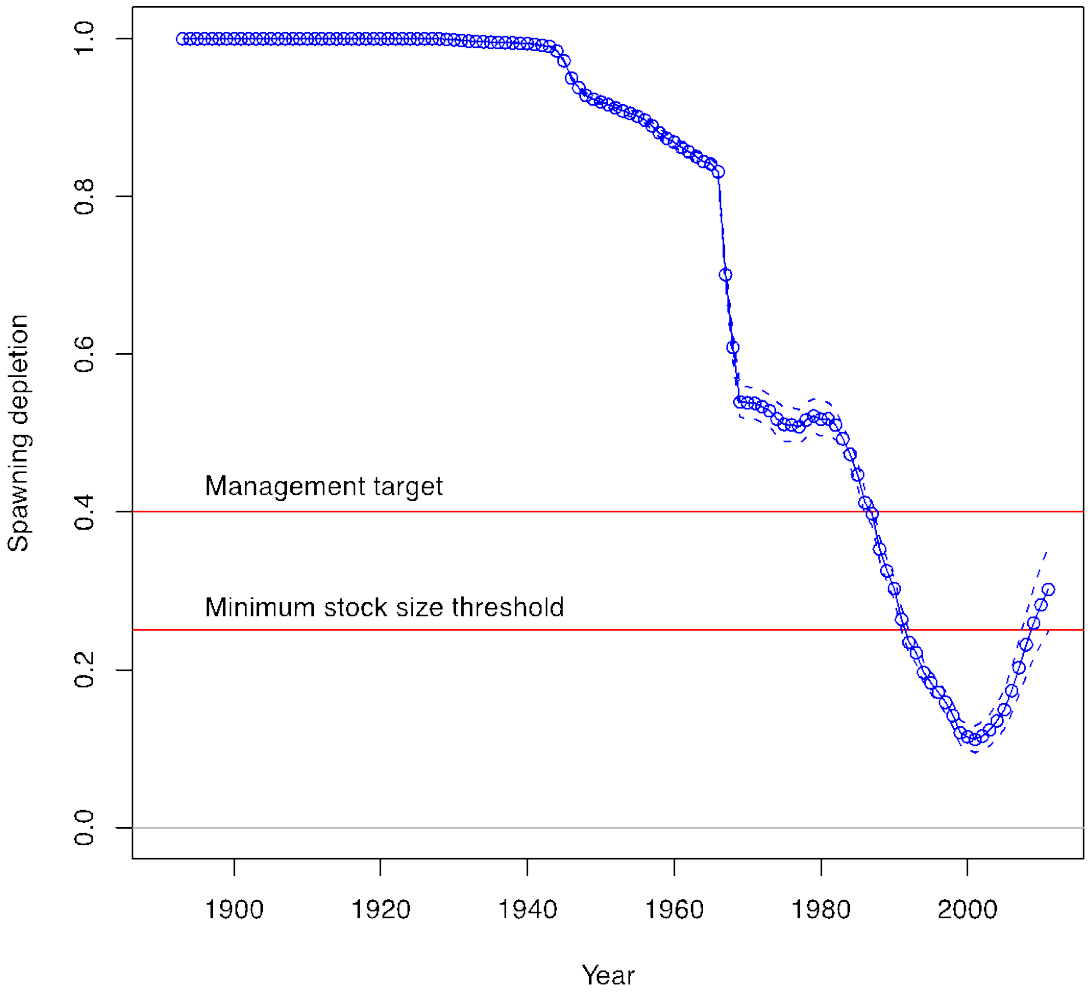
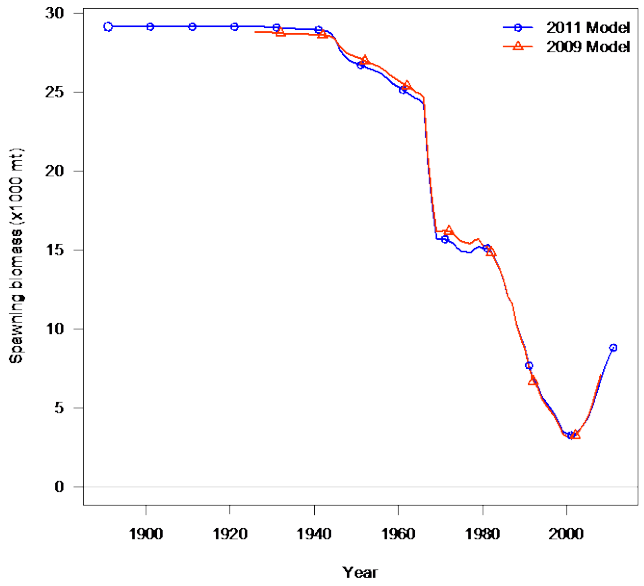


Figure 51. Time series of spawning output depletion level with 95% confidence intervals.

(A)



(B)

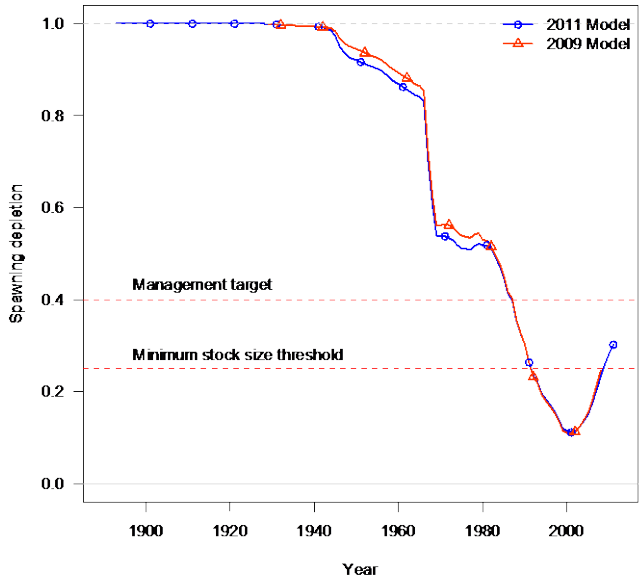


Figure 52. Comparison of histories of spawning output (A) and depletion (B) between the 2009 (triangles) and 2011 (open circles) assessments.

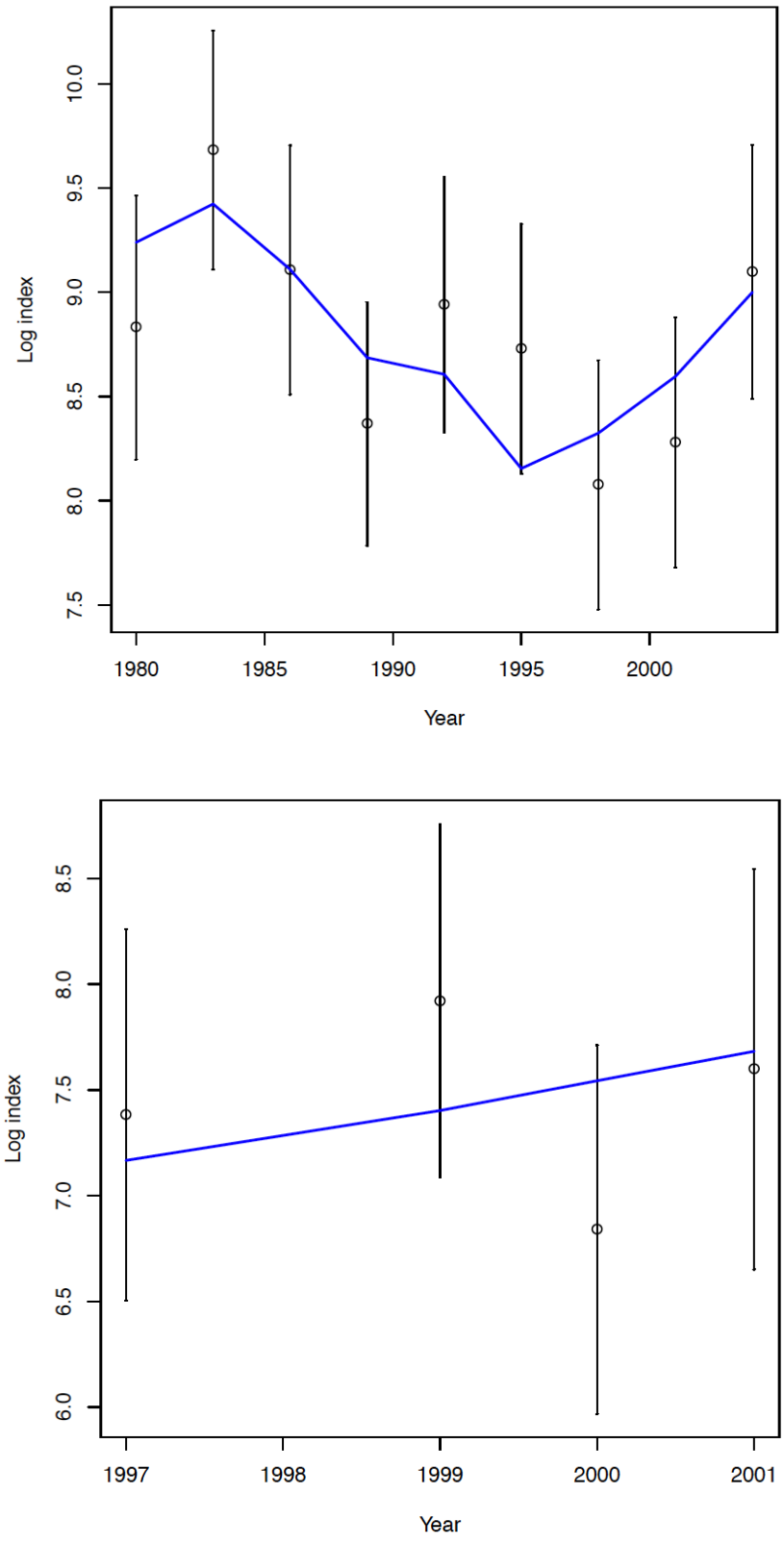
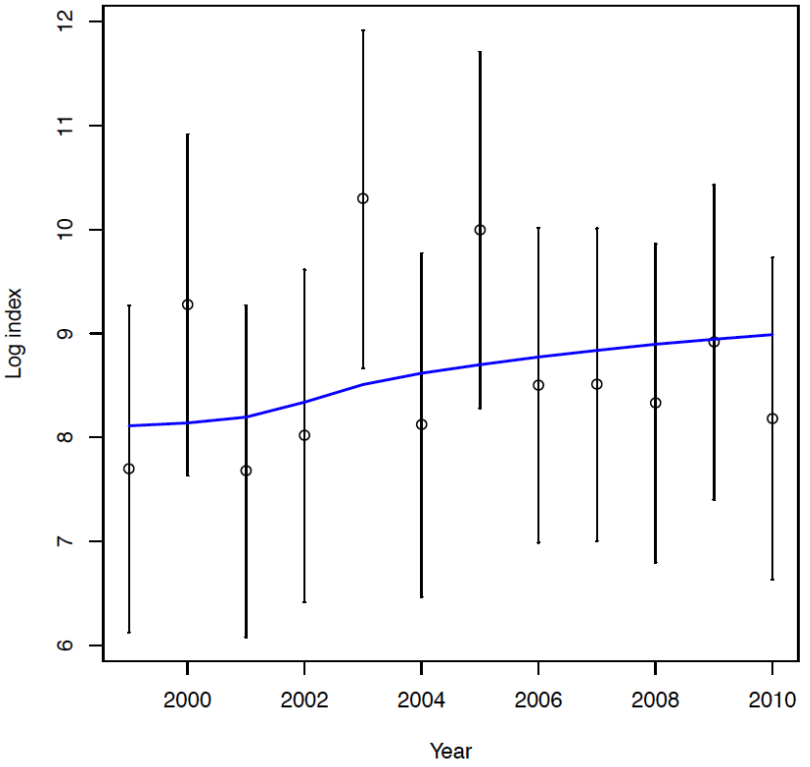


Figure 53. Model fits to Triennial shelf (top) and AFSC Slope Survey indices.



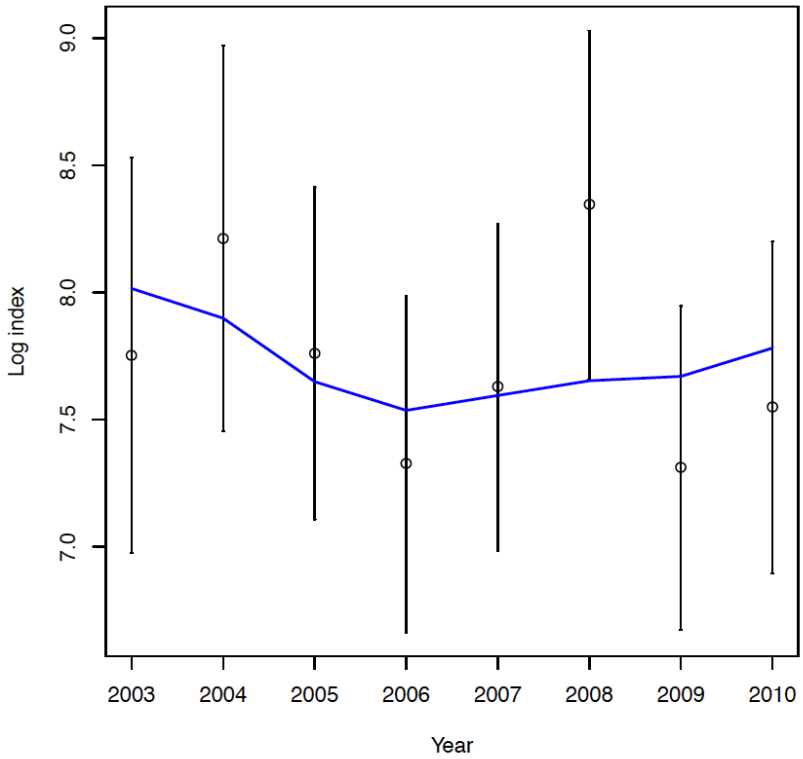
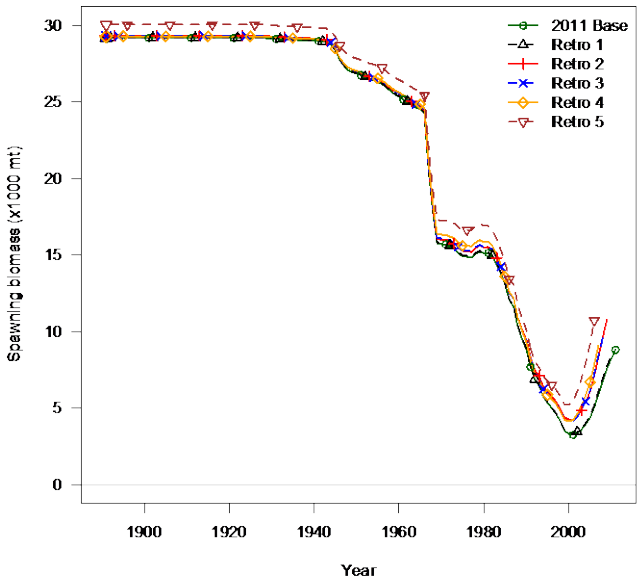


Figure 54. Model fits to NWFSC slope (top) and NMFSC shelf survey indices.



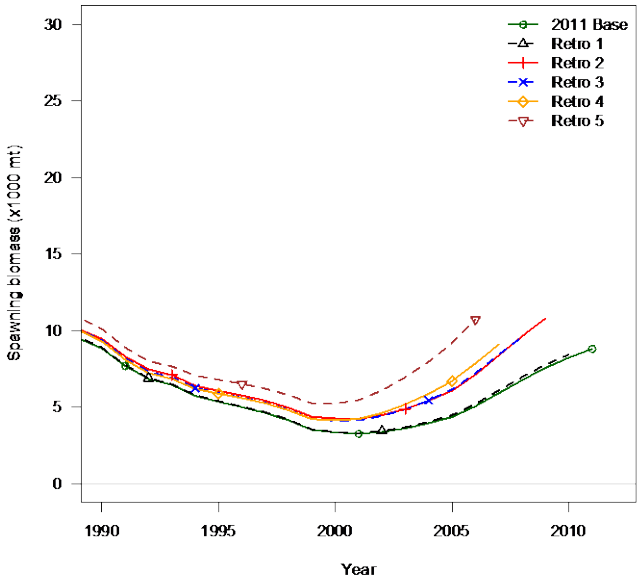


Figure 55. Retrospective pattern showing spawning output estimates from current assessment ("2011") and retrospective assessments as if conducted in 2006-2010. Top panel shows the timeseries 1920-2011, bottom panel covers the last 2 decades.

Appendix A. Stock Synthesis Data file for Darkblotched Rockfish

```
# data file for darkblothced rockfish in SS v3.x 2008
# Annotated by Ian Stewart, NWFSC
# updated to run in SSv3.20

### Global model specifications ###
1892  # Start year
2010  # End year
1     # N seasons per year
12    # Months per season
1     # Spawning Season
1     # N fishing fleets
4     # N surveys
1     # Number of areas
FISHERY%TRIENNIAL%SLOPE%NWSLOPE%NWSHELF #Names divided by "%"
0.5  0.7  0.92  0.6  0.6 #Timing of each fishery/survey (.42 POP)
1 1 1 1 1  # Area of each fleet
1     # Units for catch by fishing fleet:
1=Biomass(mt),2=Numbers(1000s)
0.01  # SE of log(catch) by fleet for equilibrium and continuous
options
2     # Number of Genders
45    # Accumulator age

### Catch section ###
# Initial equilibrium catch (landings + discard) by fishing fleet
0     # Fleet 1

119 # Number of lines catch data
# Landed catch (only) time series by fleet
# Catch(by fleet) Year Season
0.103   1892   1
0.103   1893   1
0.103   1894   1
0.027   1895   1
0.006   1896   1
0.007   1897   1
0.004   1898   1
0.006   1899   1
0.009   1900   1
0.011   1901   1
0.014   1902   1
0.016   1903   1
0.019   1904   1
0.021   1905   1
0.024   1906   1
0.027   1907   1
0.029   1908   1
0.032   1909   1
0.034   1910   1
0.037   1911   1
0.039   1912   1
```

```
0.042   1913   1
0.044   1914   1
0.047   1915   1
0.049   1916   1
0.052   1917   1
0.055   1918   1
0.057   1919   1
0.06   1920   1
0.062   1921   1
0.065   1922   1
0.067   1923   1
0.07   1924   1
0.072   1925   1
0.075   1926   1
0.078   1927   1
18.13   1928   1
19.205   1929   1
21.172   1930   1
26.14   1931   1
16.161   1932   1
16.143   1933   1
15.09   1934   1
17.136   1935   1
11.373   1936   1
13.555   1937   1
16.166   1938   1
23.588   1939   1
32.52   1940   1
41.298   1941   1
48.025   1942   1
182.23   1943   1
394.78   1944   1
673.248   1945   1
398.577   1946   1
330.246   1947   1
190.923   1948   1
157.017   1949   1
175.594   1950   1
204.303   1951   1
215.539   1952   1
185.185   1953   1
216.832   1954   1
256.433   1955   1
344.554   1956   1
398.876   1957   1
339.386   1958   1
286.141   1959   1
347.326   1960   1
325.201   1961   1
349.46   1962   1
369.317   1963   1
267.8   1964   1
484.686   1965   1
4219.407   1966   1
```

```
3077.582   1967   1
2423.12   1968   1
308.846   1969   1
376.998   1970   1
551.678   1971   1
635.514   1972   1
844.921   1973   1
766.883   1974   1
570.162   1975   1
647.629   1976   1
295.275   1977   1
423.066   1978   1
736.711   1979   1
595.541   1980   1
870.186   1981   1
1137.168   1982   1
1114.261   1983   1
1313.935   1984   1
1796.87   1985   1
1264.466   1986   1
2420.255   1987   1
1654.791   1988   1
1274.667   1989   1
1650.953   1990   1
1206.03   1991   1
686.875   1992   1
1193.669   1993   1
866.285   1994   1
786.537   1995   1
748.065   1996   1
819.843   1997   1
929.04   1998   1
361.984   1999   1
259.455   2000   1
175.149   2001   1
111.604   2002   1
84.322   2003   1
187.919   2004   1
96.728   2005   1
107.482   2006   1
143.911   2007   1
116.296   2008   1
140.069   2009   1
154.928   2010   1  # Total from Scorecard

33   # number of Survey data points    (#_N_cpue)
#_Units:  0=numbers; 1=biomass; 2=F
#_Errtype:  -1=normal; 0=lognormal; >0=T
#_Fleet Units Errtype
1 1 0 # fleet (fishery or survey) # 1
2 1 0 # fleet (fishery or survey) # 2
3 1 0 # fleet (fishery or survey) # 3
4 1 0 # fleet (fishery or survey) # 4
5 1 0 # fleet (fishery or survey) # 4
```

```
#
1980  1  2  6842.61  0.113  # Triennial
1983  1  2  16026.402  0.083
1986  1  2  9014.588  0.095
1989  1  2  4306.441  0.088
1992  1  2  7622.88  0.103
1995  1  2  6173.616  0.096
1998  1  2  3216.884  0.095
2001  1  2  3942.592  0.096
2004  1  2  8932.481  0.101
1997  1  3  1606.293  0.248  #AFSC
1999  1  3  2756.346  0.227
2000  1  3  934.142  0.245
2001  1  3  1992.919  0.283
1999  1  4  2205.061  0.193  #NW Slope
2000  1  4  10663.288  0.228
2001  1  4  2153.85  0.205
2002  1  4  3025.156  0.206
2003  1  4  29534.603  0.22
2004  1  4  3359.529  0.233
2005  1  4  21951.282  0.265
2006  1  4  4921.375  0.163
2007  1  4  4954.338  0.157
2008  1  4  4144.408  0.172
2009  1  4  7452.022  0.162
2010  1  4  3570.572  0.18
2003  1  5  2329.28  0.227  # NW Shelf
2004  1  5  3684.936  0.217
2005  1  5  2346.148  0.164
2006  1  5  1518.052  0.168
2007  1  5  2053.659  0.158
2008  1  5  4203.075  0.18
2009  1  5  1494.096  0.155
2010  1  5  1894.938  0.163


1 #_N_fleets_with_discard
#_discard_units (1=same_as_catchunits(bio/num); 2=fraction;
3=numbers)
#_discard_errtype:  >0 for DF of T-dist(read CV below); 0 for normal
with CV; -1 for normal with se; -2 for lognormal
#_Fleet units errtype
1     2     30 # FISHERY1
# fill in this table
11   # Discards N observations #_N_discard_obs
1986  1  1  0.05  0.3
2000  1  1  0.32  0.2
2001  1  1  0.41  0.2
2002  1  1  0.56  0.1
2003  1  1  0.602  0.1
2004  1  1  0.16  0.1
2005  1  1  0.224  0.1
2006  1  1  0.494  0.1
2007  1  1  0.486  0.1
```

```
2008  1  1  0.531  0.1
2009  1  1  0.543  0.1
0   # Mean Body Weight #N_meanbodywt_obs
30 #_DF_meanwt

## Population size structure
3  # Length bin method: 1=Use data bins,
  # 2=generate from min/max/width read below
  # 3=Read count and vector below
37 # Count of population bins
# Lower edge of bins
6  7  8  9  10  11  12  13  14  15  16  17  18  19  20  21  22  23
24  25  26  27  28  29  30  31  32  33  35  37  39  41  43  45  47
49  51

-1    # Minimum proportion for compressing tails of observed
compositional data
0.0001     # Constant added to expected frequencies

0     # Combine males and females at and below this bin number

37 # Number of Length Bins
6  7  8  9  10  11  12  13  14  15  16  17  18  19  20  21  22  23
24  25  26  27  28  29  30  31  32  33  35  37  39  41  43  45  47
49  51

72   # Length Composition Observations - 1983-2008 Updated
11.May.2009 -JRW
#Year Seas  Fleet Gender      Part  effn  6     7     8     9     10
      11    12    13    14    15    16    17    18    19    20    21
      22    23    24    25    26    27    28    29    30    31    32
      33    35    37    39    41    43    45    47    49    51    6
      7     8     9     10    11    12    13    14    15    16    17
      18    19    20    21    22    23    24    25    26    27    28
      29    30    31    32    33    35    37    39    41    43    45
      47    49    51
1977  1     1     3     2     22    0.00  0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0
      0.006578947 0     0.023026316 0.016447368 0.029605263 0.078947368
      0.065789474 0.072368421 0.082236842 0.046052632 0.046052632
      0.075657895 0.016447368 0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0.003289474 0.003289474
      0.013157895 0.016447368 0.032894737 0.0625      0.078947368
      0.085526316 0.049342105 0.036184211 0.032894737 0.019736842 0
      0     0.003289474 0     0     0     0.003289474 0     0
1978  1     1     3     2     9     0.00  0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0.01  0.015 0.025 0.04  0.045 0.06  0.065 0.09  0.12
      0.015 0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0.02  0.04  0.055 0.08
      0.145 0.065 0.05  0.055 0.005 0     0     0     0     0     0
      0     0
```

```
1981  1     1     3     2     44    0.00  0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0.009352168 0     0.000923447 0.009658981 0
      0.017071936 0.009914631 0.002308139 0.004315309 0.029660242
      0.079223767 0.163936007 0.201138023 0.07768508  0.045483208
      0.007295434 0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0.001580486 0     0.001576187 0
      0.004283547 0.007270873 0.046535231 0.184208021 0.087405632
      0.009173651 0     0     0     0     0
1982  1     1     3     2     89    0.00  0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0
      0.000209381 0     0.000276902 0.001000681 0.00038614  0.005672158
      0.006879098 0.010054919 0.006879155 0.01852027  0.035607596
      0.035969079 0.09680007  0.106453931 0.150588258 0.107370175
      0.050012385 0.016759029 0.003351308 0.018290696 0.003854013 0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0.002052348 0.000400223 0.00490636
      0.003430074 0.001632034 0.005899893 0.004138135 0.010646879
      0.008556366 0.01623941  0.049246598 0.12613895  0.064697219
      0.015629436 0.004155975 0.005121676 0.000582645 0.000582645
      0.000582645 0.000425247
1983  1     1     3     2     165   0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0.001436253 0.000640144 0.001623491 0.001550364 0.002568905
      0.001631408 0.005490415 0.006200823 0.004880457 0.02629336
      0.043581878 0.11995565  0.105118332 0.161450797 0.069672418
      0.036127869 0.006750827 0.004831328 0.002521959 0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     2.894e-05   0.000508026 0.000200907 0.000619296
      0.00087674  0.001105158 0.004593141 0.004854462 0.010252466
      0.013841374 0.046059499 0.107873795 0.116588641 0.065169305
      0.018075785 0.000642701 0.002397549 0     0.001992768 0.001992768
1984  1     1     3     2     332   0     0     0     0     0     0
      0     0     0     0     0.000123029 0     0     0     0     0
      0     0     0.000229561 0.000387029 0.000594001 0.000822722
      0.006404647 0.011997875 0.011162728 0.007756905 0.018850844
      0.031464026 0.06305443  0.118815542 0.10033663  0.108346922
      0.082382059 0.036430253 0.008618094 0.002385729 0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0.002142319 0.002291479 0.000710311
      0.000651822 0.002990391 0.009200048 0.007620995 0.007943567
      0.016599816 0.063568776 0.123856417 0.087160378 0.056576816
      0.005849984 0.001224734 0.001247875 0     0     0.000201245
1985  1     1     3     2     485   0     0     0     0     0     0
      5.3584e-05  0     0     0     0     0     0     0     0
      0.000357638 4.3009e-05  0.000319699 0.001269967 0.000735044
      0.001171229 0.004361312 0.003897284 0.006913197 0.017094358
      0.023591055 0.034986178 0.056976028 0.071982767 0.081785821
      0.088103246 0.069949645 0.041359911 0.023224914 0.002611598
      0.001255309 0.000363115 0     0     0     0     0     0     0
      0     0     0     0     0     0     0     3.1286e-05  0
      0.000411222 0.00010021  0.000356477 0.002282826 0.001589442
      0.005602972 0.004021602 0.01323916  0.016109365 0.024100215
```

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      0.041991327 0.085148054 0.122832404 0.082271629 0.041210365
      0.014892136 0.00637586  0.002400775 0.001131825 0.001131825
      0.000363115
1986  1     1     3     2     267   0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0.002336091 0     0.000126758 0.000621894 0.001640218 0.00208535
      0.00672149  0.011036079 0.015074762 0.045183599 0.126151576
      0.084583946 0.100371265 0.085564688 0.076254721 0.028088509
      0.011719856 0.001699998 5.0139e-05  0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0.002336091 0     0.000126758 5.0139e-05  0.000296866 0.001435623
      0.003141301 0.004869212 0.007668502 0.015612004 0.025412968
      0.034391943 0.088043782 0.115193453 0.073064835 0.024754509
      0.004291074 0     0     0     0     0
1987  1     1     3     2     410   0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0
      4.1431e-05  4.1431e-05  0.000330214 0.000820605 0.000308121
      0.000313303 0.000196718 0.001589481 0.003966118 0.006879617
      0.017025068 0.070754205 0.120441187 0.131445907 0.083398876
      0.037759342 0.013432351 0.001293588 0.000611052 9.8283e-05  0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     6.1606e-05  0.000155231 0.000147465
      0.000224129 0.000296763 0.000230189 0.002043342 0.003611713
      0.012226573 0.017828825 0.043823948 0.138174013 0.170389614
      0.093054994 0.019980372 0.003507247 0.00228702  0     0.001033204
      0     0.00017685
1988  1     1     3     2     185   0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0.000637007 0.000165217 0.000165217 0.002345454 0.001640025
      0.000700713 0.004456563 0.002270845 0.002821435 0.010988893
      0.090579565 0.131666501 0.109219912 0.115514134 0.049461409
      0.011305879 0.003530126 0.002174828 0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0.000582841 0.00079032  0.001916613
      0.001222563 0.002439905 0.007123079 0.007670696 0.032937274
      0.114279354 0.160855833 0.094558388 0.03031777  0.005411952 0
      0.000249688 0     0     0
1989  1     1     3     2     135   0     0     0     0     0     0
      0     0     0     0     0     0     0     0.000880136 0     0
      0     0     0.000322198 0.000644397 0.003991556 0.007215661
      0.009078429 0.01231198  0.006565148 0.0215359   0.022136969
      0.069202458 0.145445632 0.069490923 0.070972882 0.042012125
      0.026856672 0.011252273 0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0.000880136
      0     0     0     0.000322198 0     0.000811716 0.006312287
      0.00933858  0.004528414 0.006255233 0.014922144 0.015230329
      0.037842581 0.14781916  0.148776411 0.057694405 0.025100248
      0.004153434 0     0     9.7385e-05  0     0
1990  1     1     3     2     179   0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0.00259181  0.003859105 0.011520278 0.006322889
      0.013098289 0.018055826 0.026792846 0.087766574 0.097510064
      0.090205401 0.066591828 0.033612053 0.032885332 0.013565733
      0.004619517 0.003377364 0     0     0     0     0     0     0
```

```
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0.00259181  0.003859105 0.005332824 0.012510343
      0.019285743 0.019602689 0.025245983 0.092407164 0.094416337
      0.084017947 0.061951237 0.030518326 0.022057287 0.008925143
      0.003072653 0.001830501 0
1991  1     1     3     2     143   0     0     0     0     0     0
      0     0     0     0     0     6.1898e-05  6.1898e-05  0
      0.000452421 0     0.00221914  0.000660687 0.004588875 0.007958897
      0.00966071  0.007431082 0.007223661 0.011229918 0.008498161
      0.013591667 0.011570672 0.045651443 0.087068102 0.090413418
      0.080171553 0.047294787 0.061924478 0.02851248  0.010901837
      0.000923142 0     0     0     0     0     0     0     0     0
      0     0     0     6.1898e-05  6.1898e-05  0     0.000452421 0
      0.00221914  0.000660687 0.004588875 0.007958897 0.00966071
      0.007431082 0.007223661 0.011229918 0.009421304 0.013591667
      0.017569165 0.064340245 0.096295661 0.060420953 0.062865532
      0.034604477 0.037007363 0.010976639 0.003286879 0     0
1992  1     1     3     2     57    0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0.001593168 0     0.002622574 0.001100646 0.007628311
      0.010303436 0.015781925 0.015141792 0.024788256 0.049146609
      0.099610034 0.10300208  0.08527745  0.044195291 0.030892303
      0.007023758 0.001892367 0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0.001593168 0     0.002622574 0.001100646 0.007628311
      0.010303436 0.015781925 0.015141792 0.024788256 0.049146609
      0.099610034 0.10300208  0.08527745  0.044195291 0.030892303
      0.007023758 0.001892367 0     0
1993  1     1     3     2     66    0     0     0     0     0     0
      0     0     0     0     0     0     0     0.000631702 0.000631702
      0.0017728   0.000593859 0.000291456 0.002888005 0.001140241
      0.00094086  0.001973107 0.017324776 0.011251648 0.024815141
      0.032329211 0.029534349 0.08474358  0.127818176 0.082980239
      0.04186255  0.024871842 0.006435325 0.003274328 0.001263403
      0.000631702 0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0.000631702 0.000631702 0.0017728
      0.000593859 0.000291456 0.002888005 0.001140241 0.00094086
      0.001973107 0.017324776 0.011251648 0.024815141 0.032329211
      0.029534349 0.08474358  0.127818176 0.082980239 0.04186255
      0.024871842 0.006435325 0.003274328 0.001263403 0.000631702 0
1994  1     1     3     2     118   0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0
      0.00020866  0.000231057 0.000907239 0.001182532 0.000584972
      0.000108868 0.003049058 0.003939803 0.01353596  0.016554972
      0.031306079 0.079808668 0.093285611 0.089740561 0.089687212
      0.045390788 0.034948283 0.014104074 0.004227847 0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0.00020866  0.000231057 0.000907239
      0.001182532 0.000584972 0.000108868 0.003049058 0.003939803
      0.01977914  0.016554972 0.041874976 0.1076652   0.108180226
      0.078933885 0.054874164 0.022573309 0.01094191  0.003059619
      0.002548163 0     0
1995  1     1     3     2     182   0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
```

```
      9.5118e-05  0.000425522 0.00060939  0.004239351 0.00074805
      0.000292776 0.002965204 0.004331131 0.023143704 0.039500619
      0.07812888  0.113716017 0.092757198 0.06313496  0.061395171
      0.036907142 0.010958689 0.001263698 0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0.000133531 9.5118e-05  0.000425522 0.00060939
      0.00410582  0.000881581 0.003236496 0.003098735 0.005374058
      0.028974464 0.047846212 0.090431485 0.110694086 0.083150362
      0.044604438 0.030286025 0.007920012 0.003232916 0.000287128 0
      0
1996  1     1     3     2     426   0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0
      1.588e-05   0.000213695 0.001157808 0.001700513 0.002849475
      0.004016581 0.007134804 0.00537882  0.011702558 0.018303034
      0.025977223 0.08642447  0.106513086 0.070356406 0.055109452
      0.042956227 0.021736995 0.015486979 0.006042648 0.000926796 0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     1.588e-05   0.000491638 0.001554118
      0.001671954 0.002719564 0.002582506 0.005850281 0.006783373
      0.015902117 0.029125931 0.049481104 0.126285613 0.120209417
      0.061039891 0.043174299 0.024189687 0.013383917 0.00755857
      0.003049893 0.000926796 0
1997  1     1     3     2     405   0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0
      4.7134e-05  0.000867301 0.001943861 0.003248878 0.007014217
      0.003024128 0.009128099 0.012666853 0.021107281 0.016318144
      0.032969464 0.074486885 0.088829466 0.068553337 0.063565645
      0.051016508 0.027464778 0.019917234 0.003239272 0.002383729 0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0.000213475 4.7134e-05  0.001119278
      0.002157336 0.003808635 0.008169718 0.004293645 0.009093009
      0.017643086 0.029962476 0.028604997 0.052009173 0.093828083
      0.092304855 0.057852098 0.043065035 0.022371714 0.013003364
      0.011384431 0.001276246 0     0
1998  1     1     3     2     413   0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0.000797371
      0.001876738 0.001309351 0.003698056 0.005963145 0.01184596
      0.013243921 0.014736572 0.014193339 0.013773672 0.020740638
      0.018831027 0.06262017  0.074695358 0.081250383 0.058642014
      0.05486104  0.03417459  0.013779083 0.002991611 0.000394304 0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0.000640209 0.001719577 0.001309351
      0.003540895 0.005963145 0.011531637 0.012154347 0.014617594
      0.015607313 0.014071748 0.019034049 0.031727772 0.106950262
      0.087953807 0.073038072 0.040548562 0.029504485 0.018095727
      0.004628395 0.002550408 0.000394304 0
1999  1     1     3     2     250   0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0.000638363
      0.002248491 0.003909166 0.008567244 0.018163122 0.038543696
      0.03622928  0.040175258 0.029613328 0.040003522 0.017833741
      0.01599999  0.042250902 0.082916498 0.074289    0.039215736
      0.023356861 0.015750712 0.010739085 0.002810879 0.000748465
      0.000146076 0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0.000320783 0.002248491
```

```
      0.004201319 0.00915155  0.017753149 0.042251447 0.036080494
      0.038717133 0.036801613 0.035755503 0.024794674 0.024538463
      0.063058955 0.055063425 0.031671335 0.022093618 0.007405969
      0.002756546 0.00054081  0.000207078 0.000292153 0.000146076
2000  1     1     3     2     275   0     0     0     0     0     0
      0     0     2.4194e-05  0     4.8388e-05  0     0     0     0
      0     0.001007258 0.000926306 0.004148516 0.004090782 0.016485625
      0.019899879 0.046642127 0.046218475 0.044040289 0.028294553
      0.042023218 0.046766705 0.046045875 0.059220171 0.066197094
      0.055022987 0.025003032 0.01163735  0.001779498 0.000461644 0
      0     0     0     0     0     0     0     0     2.4194e-05  0
      4.8388e-05  0     0     0     0     0     0.001407317 0.000926306
      0.003948486 0.004320173 0.015885535 0.017104655 0.046047675
      0.050440962 0.039982529 0.023798923 0.033773881 0.049319235
      0.056268047 0.04287132  0.026253559 0.012722841 0.004625115
      0.003823301 0.00017926  0.000244331 0
2001  1     1     3     2     471   0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0.001822252
      0.000265276 0.000746193 0.000370923 0.000772511 0.003180596
      0.006934874 0.008559135 0.022109286 0.023688143 0.055037687
      0.060861913 0.072840025 0.093798775 0.052626359 0.029321933
      0.030344565 0.016275055 0.01109205  0.008689432 0.003622286
      5.0593e-05  0.000296739 0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0.001822252 0.000265276
      0.000597823 0.0003288   0.00092088  0.004035226 0.005569569
      0.01264606  0.028099141 0.027200349 0.059280771 0.085456704
      0.068846828 0.078611092 0.056240855 0.025735964 0.022209656
      0.009988192 0.004308912 0.003343174 0.001185875 0     0
2002  1     1     3     2     440   0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0.000735667
      0.002030145 0.002486726 0.004124887 0.003036015 0.004197409
      0.006239814 0.008457617 0.010169893 0.016982577 0.02789801
      0.042336035 0.11728523  0.084674237 0.041647623 0.037148416
      0.040971525 0.039136811 0.010906269 0.004851177 0.000438473 0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0.001050441 0.002030145 0.002801501
      0.004124887 0.003665565 0.006068289 0.008456286 0.013227342
      0.014514378 0.020329007 0.041794402 0.060263364 0.106973845
      0.091905537 0.032273957 0.023523879 0.026040429 0.025566311
      0.006839737 0.002200282 0.000595861 0
2003  1     1     3     2     456   0     0     0     0     0     0
      0     0     0     0     5.9307e-05  8.5996e-05  0.00072094
      5.3377e-05  0.000593608 0.000391167 0.001721796 0.001382777
      0.005072991 0.00280281  0.001959858 0.004803839 0.007812889
      0.00631773  0.010347258 0.012853647 0.014979635 0.085495582
      0.125912668 0.087502828 0.065772195 0.048588664 0.051962513
      0.022515293 0.005705496 0.001857224 0.000261071 0     0     0
      0     0     0     0     0     0     0     5.9307e-05  0.000139372
      0.000393584 0.000349103 0.000577674 0.001333008 0.001569857
      0.003298966 0.005126584 0.002454585 0.002042078 0.004172502
      0.008015649 0.007336594 0.00675156  0.013592299 0.03607883
      0.128467137 0.107311594 0.06325779  0.022249008 0.010608784
      0.003216542 0.003326932 0     0.000324227 0.000413273
```

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2004  1     1     3     2     430   0     0     0     0     0     0
      0     1.0212e-05  0     0     0     0     0     0     0     0
      0     6.3314e-05  6.5358e-05  0.003311848 0.00437655  0.005341742
      0.006193434 0.013228205 0.009556716 0.013503421 0.010763691
      0.041366328 0.090878746 0.08578879  0.090882711 0.071946447
      0.035671553 0.016762704 0.00661227  0.000788894 0.00075066  0
      0     0     0     0     0     0     1.0212e-05  0     0     0
      0     0     0     0     0     0     2.0424e-05  6.5358e-05
      0.003769013 0.004375148 0.008571534 0.010391343 0.019032098
      0.015669576 0.025874675 0.035906514 0.119714202 0.142393596
      0.064246359 0.027347028 0.009405462 0.002982051 0.002361814 0
      0     0
2005  1     1     3     2     360   0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0
      0.000134112 3.7885e-05  0.001350752 0.00191949  0.005319015
      0.009661229 0.011657174 0.018751979 0.029831504 0.040164833
      0.037804737 0.063658879 0.069373578 0.08304808  0.066464513
      0.030687786 0.018471032 0.005984545 0.005826327 0.001304693
      0.000668552 0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0.000520108 0.000153767
      0.001350752 0.001786406 0.005181985 0.010746105 0.013606973
      0.015346904 0.041196376 0.053956701 0.047167212 0.106098735
      0.107433571 0.052581164 0.024679277 0.012717445 0.002062593
      0.000847783 0.000137449 0     0.000307999
2006  1     1     3     2     500   0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0.000149666 0.000665147 0.00039911  0.000641807 0.00265252
      0.006994549 0.006734521 0.020236915 0.031373256 0.071320441
      0.083663425 0.064626266 0.079011365 0.052615338 0.03828512
      0.022316193 0.008813746 0.001122067 0.000225883 0.000552475 0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0.000149666 0.000365815 0.000299332
      0.000774755 0.001580278 0.009132527 0.013038615 0.032207533
      0.056530838 0.064473846 0.114356447 0.0813114   0.061520167
      0.038168702 0.022696643 0.007830448 0.002980889 0.000155959
      2.6328e-05  0
2007  1     1     3     2     500   0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0.000110748 0.000103064 0.000444043 0.000571913 0.001320021
      0.004646295 0.011874818 0.01783044  0.042889971 0.142415177
      0.087756652 0.079047158 0.064864578 0.047789974 0.034209035
      0.020919026 0.007116702 0.002514457 0.000662877 0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     2.9237e-05  0     0     0     0     0.000132301 0.001525587
      0.003624163 0.007764166 0.017138902 0.033463368 0.058378047
      0.121350723 0.078230425 0.059434081 0.02848038  0.016026962
      0.004492846 0.002478623 0.000363241 0     0
2008  1     1     3     2     500   0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0.00014154
      5.1044e-05  0.000520408 0.000310173 0.000664839 0.001017032
      0.001524311 0.001654559 0.003897288 0.007448754 0.01037049
      0.018365575 0.04476795  0.138069608 0.100277558 0.060251414
      0.046134947 0.036271929 0.030863331 0.012237088 0.00420151
      0.000800815 0.000639582 0     0     0     0     0     0     0
```

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      0     0     0     0     0     0     3.1859e-05  0     4.5964e-05
      4.5964e-05  0.000305452 0.000788478 0.000804498 0.001062131
      0.001909855 0.003938387 0.018523387 0.021955691 0.028409813
      0.076763026 0.142091285 0.1147318   0.041662195 0.016188562
      0.003686465 0.002892181 0.002242789 0.000987472 0.000309306
      0.000141696
2009  1     1     3     2     482   0     0     0     0     0     0
      0     0     0.000371652 0     0     0     0     0     0.000129068
      0     0     0     0     0.000437844 0.001136122 0.001840645
      0.005423222 0.006390016 0.005084748 0.014829899 0.023870322
      0.050872247 0.152954607 0.103261874 0.047188512 0.04373399
      0.042793084 0.024917094 0.011320703 0.001252033 0.000732242 0
      0     0     0     0     0     0     0     0.000371652 0     0
      0     0     0     0     0     0.000329512 0.000180756 0
      0.0003812   0.001519417 0.002894099 0.002923002 0.003797808
      0.009290591 0.025682764 0.054631747 0.11974403  0.129280791
      0.072037806 0.028157977 0.00742735  0.001853998 0.000223333 0
      0     0.000732242
2010  1     1     3     2     466   0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     9.01E-05    0.007887184 0.009040126
      0.012501908 0.027292607 0.039631607 0.139877237 0.130303199
      0.063424753 0.048943609 0.034340013 0.020916103 0.010249135
      0.001465377 0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0
      9.83E-05    0.000104093 0     9.83E-05    0.005006614 0.007131646
      0.009980167 0.02980445  0.04692023  0.071180238 0.158777545
      0.084261454 0.028049743 0.011714869 0.000357131 0     0.000552359
      0     0
# 2006-2008 above, capped at 500. Original values were 2006:560,
2007:798, 2008:927 .
#
# Discard: effective N cut by half for proper re-weighting
1986  1     1     0     1     50    0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0.006756757
      0.006756757 0.040540541 0.040540541 0.081081081 0.101351351
      0.074324324 0.108108108 0.195945946 0.195945946 0.074324324
      0.067567568 0.006756757 0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0
2002  1     1     0     1     64    0     0     0     0     0
      0.00041424  0.00041424  0.00041424  0     0.00041424  0.006253056
      0.0108097   0.015760858 0.019903261 0.020060936 0.050030254
      0.052840082 0.044758088 0.106417853 0.078939885 0.047944158
      0.018276196 0.02329974  0.018635895 0.02497316  0.022490632
      0.047450852 0.147400774 0.140001816 0.068056168 0.015385119
      0.011358431 0.005472095 0.001824032 0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0
```

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2003  1     1     0     1     80    0     0     0     0     0     0
      0     0.000159518 0     0.000159518 0.000239277 0.000239277
      7.98e-05    0.004341226 0.014743057 0.019828823 0.02629995
      0.024196474 0.018065404 0.008267206 0.003283008 0.025905685
      0.025627316 0.037638259 0.026243917 0.032938354 0.086507537
      0.251770105 0.18890752  0.102759684 0.054014741 0.030278445
      0.004763829 0.008754163 0.003987948 0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0
2004  1     1     0     1     89    0     0     0     0     0     0
      0.000276003 0.000276003 0.00185588  0.000138001 0.000414004
      0.000414004 0.000552005 0.001551674 0.000751266 0.000414004
      0.003730114 0.003538167 0.012179536 0.017373038 0.013803292
      0.013706765 0.021865287 0.009471137 0.021798839 0.035470092
      0.093270332 0.191551429 0.23113931  0.111632928 0.113682272
      0.033110814 0.055456389 0.010439413 0.000138001 0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0
2005  1     1     0     1     160   0     0     0.000272538 0
      0.000272538 0.000817614 0.002316572 0.004921714 0.005714552
      0.006745522 0.003732086 0.008784993 0.016621945 0.016408976
      0.006897648 0.004148586 0.00698651  0.003582724 0.005470468
      0.005090898 0.041261323 0.05589004  0.044983846 0.051031259
      0.057880738 0.07685997  0.060261066 0.191349634 0.188997867
      0.092902313 0.024045815 0.011390572 0.001372423 0.002169634 0
      0.000545076 0.000272538 0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0
2006  1     1     0     1     138   0     0     0.000200323 0.000924567
      0.00221896  0.004807747 0.008045894 0.013035963 0.015937219
      0.012973469 0.009842171 0.01277015  0.023765952 0.025781913
      0.024328604 0.040716146 0.017457473 0.019727798 0.011803636
      0.004669062 0.003713676 0.006333282 0.005034445 0.013050924
      0.046932145 0.065521584 0.068953686 0.180782107 0.127503982
      0.119578898 0.02923694  0.046906327 0.026658341 0.006302463
      0.002080275 0     0.002403874 0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0
2007  1     1     0     1     94    0     0     0     0     0.000124014
      0.00062007  0.001279462 0.028796534 0.010066219 0.003458168
      0.003820077 0.007375606 0.014055948 0.01232497  0.006820771
      0.006305378 0.007267222 0.00511489  0.003186612 0.004979368
      0.004967861 0.013572875 0.003017675 0.013655258 0.013101592
      0.045856035 0.050625537 0.175849797 0.291182956 0.117633473
      0.08570034  0.025932864 0.038112241 0.005196188 0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
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      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0
2008  1     1     0     1     38    0     0     0     0     0     0
      0     0     0     0     0.000283681 0.00014184  0.000340417 0
      0.000538994 0.000765938 0.000482258 0.000283681 0.00014184
      0.000936147 0.011035187 0.010382721 0.033706169 0.011035187
      0.031351618 0.03467999  0.07105276  0.301971187 0.226593083
      0.058381701 0.136223569 0.030438961 0.012964217 0.026127011 0
      0.00014184  0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0
2009  1     1     0     1     184   0     0.00075317  0.001506341
      0.001552689 0.000428728 0.004557084 0.005053602 0.01423956
      0.006026428 0.009607638 0.005070182 0.004826237 0.004557113
      0.006687281 0.031852782 0.033500535 0.045810134 0.013862431
      0.015203414 0.033726876 0.038868807 0.018538749 0.011877807
      0.022798977 0.016248423 0.024954556 0.045570018 0.211786159
      0.21243818  0.070312746 0.034936237 0.018138178 0.013087157
      0.0213321   5.79e-05    0.000231745 0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
#Triennial
1980  1     2     3     0     54    0     0     0     0     0
      0.0006      0.0016      0.0044      0     0.0014      0.0016
      0.004 0.0059      0.0141      0.0011      0.0071      0.0084
      0.0103      0.0305      0.0339      0.0402      0.044 0.0434
      0.0171      0.0151      0.0348      0.0378      0.0692
      0.0327      0.0365      0.0226      0.0096      0.0094
      0.0058      0     0     0     0     0     0     0     0     0
      0.001 0.003 0.0016      0.0028      0.0023      0.0078      0.009
      0.0147      0.0066      0.0059      0.0056      0.0079
      0.0074      0.0132      0.0227      0.0171      0.0368
      0.0272      0.042 0.0541      0.0356      0.0414      0.0513
      0.0366      0     0.0036      0     0     0     0     0
1983  1     2     3     0     210   0     0     0     0     0
      0.0006      0.0011      0.0019      0.001 0.0019      0.0043
      0.0205      0.038 0.0223      0.0293      0.031 0.0442
      0.0396      0.0352      0.034 0.0398      0.0232      0.0151
      0.005 0.0062      0.0061      0.004 0.0072      0.0075      0.009
      0.0205      0.0212      0.011 0.0044      0.0013      0.0001
      0     0     0     0     0     0.0001      0.0012      0.0013
      0.0043      0.002 0.0017      0.0055      0.0207      0.0315
      0.0316      0.026 0.0377      0.0656      0.0553      0.0402
      0.0369      0.0365      0.0256      0.0112      0.0053
      0.0074      0.0036      0.0043      0.0063      0.0216
      0.0197      0.0085      0.0015      0.0006      0     0     0
      0
1986  1     2     3     0     168   0     0     0     0     0.0005
      0.0003      0.0004      0.0044      0.0125      0.009 0.0057
      0.0029      0.0082      0.0173      0.0148      0.0073
      0.0063      0.0105      0.0169      0.0201      0.0325
      0.0332      0.0256      0.0458      0.0418      0.0375
```

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      0.0304      0.0492      0.0233      0.0116      0.0092
      0.0096      0.007 0.0036      0.002 0.0008      0     0.0007
      0.0003      0     0     0.0007      0.0001      0.003 0.0052
      0.0097      0.0082      0.0047      0.0026      0.0032
      0.0106      0.0163      0.0069      0.0061      0.0153
      0.0148      0.0197      0.0424      0.0378      0.0378      0.064
      0.0412      0.0459      0.0343      0.0282      0.0184
      0.0048      0.0096      0.0056      0.0016      0     0     0
      0
1989  1     2     3     0     416   0     0     0     0.0002
      0.0002      0.0005      0.0061      0.0384      0.0657
      0.0285      0.0049      0.015 0.0332      0.0615      0.0318
      0.0374      0.0136      0.0204      0.0206      0.0175
      0.0168      0.0141      0.0097      0.0087      0.0086
      0.0101      0.0033      0.0097      0.0088      0.0071
      0.0055      0.0047      0.0004      0.0008      0.0002      0
      0     0     0     0     0.0008      0.0003      0.0018
      0.0083      0.0378      0.0647      0.0453      0.0079
      0.0139      0.0419      0.0571      0.0333      0.0246
      0.0157      0.0177      0.0125      0.0172      0.011 0.0151
      0.0111      0.0114      0.012 0.0053      0.0069      0.0105
      0.0039      0.0033      0.0028      0.0009      0.0005
      0.0002      0     0     0
1992  1     2     3     0     135   0     0     0     0     0.0002
      0.0016      0     0.0015      0.0022      0.0035      0.0014
      0.0004      0.0021      0.019 0.0399      0.0247      0.0061
      0.0108      0.0161      0.0287      0.025 0.0466      0.0958
      0.0707      0.0447      0.0256      0.0084      0.0078
      0.0005      0.0007      0.0004      0.0002      0.0006
      0.0007      0     0     0     0     0     0     0     0.0002
      0     0.0013      0.0015      0.0016      0.0048      0.0025
      0.0011      0.0038      0.0179      0.0288      0.0287
      0.0109      0.007 0.0312      0.0263      0.0188      0.0929
      0.111 0.0769      0.0313      0.0085      0.0031      0.0016
      0.0009      0.0013      0.0002      0     0     0     0     0
      0
1995  1     2     3     0     275   0     0     0.0004      0
      0.0003      0.0006      0.0007      0.0082      0.023 0.0121
      0.002 0.0006      0.0056      0.0132      0.0085      0.0089
      0.0096      0.0264      0.0454      0.0386      0.0243
      0.0237      0.0172      0.0134      0.0164      0.0086
      0.0083      0.0215      0.0327      0.0337      0.03  0.037
      0.0262      0.0101      0.0043      0     0     0     0
      0.0004      0     0.0003      0.0013      0.0027      0.0107
      0.0239      0.0122      0.0017      0.0016      0.005 0.0108
      0.0195      0.0121      0.0111      0.0287      0.047 0.0403
      0.024 0.0162      0.0141      0.0108      0.0093      0.0147
      0.0147      0.0529      0.0599      0.0354      0.0055
      0.0011      0.0008      0     0     0     0
1998  1     2     3     0     318   0     0     0     0     0.0003
      0.0022      0.0093      0.0078      0.0032      0.0009
      0.0067      0.0116      0.0079      0.0155      0.0246
      0.0465      0.0765      0.0818      0.0362      0.0321
      0.0294      0.0271      0.0189      0.0111      0.0055
```

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      0.0036      0.0034      0.0064      0.0047      0.0013
      0.0003      0.0029      0.0004      0.0003      0.0003      0
      0     0     0     0     0     0     0.007 0.0129      0.0106
      0.0012      0.0016      0.0061      0.0139      0.0107
      0.0105      0.0327      0.0535      0.0817      0.0745
      0.0525      0.0337      0.0293      0.0277      0.0181
      0.0084      0.0075      0.0084      0.0064      0.0087
      0.0008      0.0016      0.0003      0     0     0     0     0.001
      0
2001  1     2     3     0     395   0     0     0.0009      0.0016
      0.0005      0.0023      0.0143      0.0359      0.0226
      0.0063      0.003 0.0117      0.0386      0.0867      0.0836
      0.0232      0.0022      0.0044      0.0039      0.0076      0.009
      0.0093      0.0049      0.0111      0.0045      0.0246
      0.0304      0.1062      0.0068      0.0043      0.0064
      0.0017      0.0016      0.0002      0.0006      0     0     0
      0     0.0009      0.0016      0.0003      0.0024      0.0113
      0.0307      0.0198      0.0076      0.0025      0.011 0.0422
      0.0774      0.0761      0.0275      0.0043      0.0015
      0.0045      0.0064      0.0071      0.0083      0.0042
      0.0059      0.0066      0.0224      0.0149      0.0225
      0.0044      0.0033      0.0004      0.0007      0     0     0
      0     0
#AFSC
1997  1     3     3     0     42    0     0     0     0     0     0
      0     0     0     0     0     0.0099      0.0396      0.0556
      0.0545      0.0484      0.039 0.0366      0.085 0.1285      0.03
      0.0226      0.0009      0.0009      0.0004      0     0.0009
      0.0084      0.0003      0     0     0.0008      0.0005      0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0.0099      0.0198      0.0561      0.1236
      0.0567      0.0178      0.0315      0.0533      0.0232
      0.0138      0.0164      0     0.0033      0.0009      0.0032
      0.0021      0.0038      0.0013      0.0004      0     0.0001
      0     0     0     0     0
1999  1     3     3     0     42    0.0014      0     0     0     0
      0     0     0     0     0.0034      0     0.0034      0.0005
      0.0014      0.0014      0.0018      0.0005      0.0034
      0.0189      0     0.0098      0.0772      0.116 0.113 0.0734
      0.0615      0.0199      0.0194      0.0001      0.0011
      0.0004      0.0001      0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0
      0.0005      0     0.0152      0     0     0.0015      0.0028
      0.0074      0.0277      0.1335      0.1448      0.0736
      0.0469      0.0092      0.0058      0.0005      0.0024
      0.0005      0     0     0     0     0     0     0
2000  1     3     3     0     36    0     0     0     0     0     0
      0     0     0     0.0001      0.0006      0     0     0.0007
      0.0101      0.01  0.0366      0.0676      0.0821      0.0756
      0.0131      0.026 0.0282      0.021 0.0385      0.0448
      0.0022      0.0034      0     0.0002      0.0002      0
      0.0002      0.0002      0.0003      0     0     0     0     0
      0     0     0     0     0     0.0007      0.0006      0.0019
      0.0007      0     0     0     0.0299      0.0533      0.1108
```

```
      0.1628      0.0624      0.0239      0.0041      0.0416
      0.0169      0.0173      0.0078      0     0.0027      0.0002
      0.0005      0     0     0     0.0001      0     0     0
2001  1     3     3     0     37    0     0     0     0     0     0
      0     0     0     0     0     0     0     0.003 0.0162
      0.0138      0.0121      0.0074      0.0013      0.0101
      0.0068      0.0126      0.0159      0.0213      0.0238
      0.0368      0.1106      0.1632      0.0754      0.0084
      0.0008      0.0058      0.0006      0.0039      0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0.0014      0     0.0037      0.0106      0.0135      0.0053
      0.0034      0.0042      0.0101      0.0129      0.0261
      0.0185      0.0104      0.0163      0.1051      0.1296      0.064
      0.0046      0.0008      0.0058      0.0039      0     0     0
      0     0
#NWFSC Slope and Shelf
2000  1     4     3     0     46    0     0     0     0     0     0
      0     0     0.000719347 0     0.002472138 0.001406115 0.001406115
      0.002819034 0     0.00071448  0.013552271 0.013446374 0.016939868
      0     0.010745129 0.022304662 0.073931755 0.061157049 0.1028647
      0.023696561 0.0115264   0.004181701 0     0.020293282 0.039464483
      0.059196724 0.039909532 0.032887032 0     0     0     0     0
      0     0     0     0     0     0     0.002125462 0.00070917
      0.006690594 0.002812286 0     0.000698439 0.001406115 0
      0.001373314 0.002095344 0.008094524 0.012508235 0.002230945
      0.025701386 0.049054231 0.062974307 0.035100691 0.021124224
      0.002457977 0.033610445 0.119811842 0.027476135 0.013154791
      0.006577395 0.006577395 0     0     0     0
2001  1     4     3     0     79    0     0     0     0     0     0
      0     0     0.001230496 0     0.000717904 0.006849279 0.00949804
      0.027383138 0.061277025 0.018617255 0.010225538 0.002640537
      0.007275526 0.006000075 0.008308387 0.011524563 0.005988288
      0.013767361 0.011677244 0.01628674  0.057666125 0.061119135
      0.016837983 0.026615893 0.047780213 0.014559002 0.004852909 0
      0     0     0     0     0     0     0     0     0     0
      0.004068122 0     0     0.001973619 0.007672991 0.005199115
      0.02290083  0.049420236 0.032377764 0.016325665 0.004542887
      0.002786092 0.002769371 0.018230207 0.01827242  0.004205179
      0.011811012 0.025400473 0.034766939 0.052916008 0.060207707
      0.099753544 0.066273569 0.007931206 0     0.001496387 0     0
      0     0
2002  1     4     3     0     123   0     0     0     0     0     0
      0     0     0.001044436 0     0.001068986 0.004077679 0.019285241
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      0.097064281 0.079620477 0.056097769 0.012345736 0.01589208
      0.023109528 0.017606678 0.016315885 0.014008219 0.019262343
      0.006875332 0.005770886 0.001066832 0.001565721 0.000478359
      0.002972802 0.000997777 0     0     0     0     0     0     0
      0     0     0     0.000497453 0.001044436 0     0.00256436
      0.009344938 0.015279632 0.00461289  0.003429626 0.020434336
      0.055651928 0.087920621 0.065948487 0.066459435 0.020870487
      0.019036012 0.023715372 0.01889618  0.013316523 0.013919496
      0.01829055  0.006051125 0.009022778 0.004658974 0.00183189  0
      0     0     0     0
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      1.2793242   1.125596761 2.410771378 2.64783796  1.705223728
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      0.020724358 0.235942773 0.703077674 1.541829729 1.832758007
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      0.018906432 0     0
2004  1     4     3     0     92.3799     0     0     0     0     0
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      0     0     0     0     0     0.214326928 0.225233404 0.81505123
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      0
2005  1     4     3     0     121.3261    0     0     0     0     0
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      0.115098931 0     0.129009791 0.075067997 0.212235035 0.129574045
      0.119253084 0.22791863  0.322340096 0.796606692 1.058438321
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      0     0     0     0     0     0.040484114 0.121447899 0.264875046
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      0.030043193 0     0     0     0
2006  1     4     3     0     146.1031    0     0     0     0     0
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2007  1     4     3     0     140.9318    0     0     0     0     0
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0 0
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2006  1     5     3     0     118.9237    0     0     0     0     0
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2007  1     5     3     0     138.5484    0     0     0     0     0
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2008  1     5     3     0     87.5519     0     0     0     0     0
      0.114538916 0.110108257 0.043886066 0.317349708 0.698404603
      0.959411209 1.554502856 0.608316583 0.791381388 3.666604361
      3.074962167 4.438958906 5.244954763 6.756187091 8.878649145
      3.927306244 3.988628505 3.151173146 0     0.776133098 0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0.171960734 0.11133324  0.133638892 0     0.105543521
      0.151416375 0.467077924 0.964067361 0.992906254 0.621785297
      0.88243233  1.764943888 5.442993609 4.27763297  3.270453537
      3.535683589 5.027645296 7.57316513  8.957261334 3.202134858
      2.375040048 0     0.822779946 0     0     0.046646848 0     0
      0     0     0     0     0     0     0
2009  1     5     3     0     125.4179    0     0     0     0     0
      0.093313797 1.038601275 1.974954951 2.364312033 1.231543338
      1.236431203 0.933418618 3.579765172 3.727909596 4.284798855
      3.421903485 3.553712147 3.457942723 3.214555081 3.239473841
      1.777464133 1.118315581 0.422905614 0.128721589 0.269651149 0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0.134427997 0     1.737788229 4.381608996
      3.551396842 2.046741092 1.999990645 1.181413482 7.039812718
      7.526728322 5.619431721 4.808256517 4.077333517 2.385500579
      2.605653319 4.489960581 3.203504763 1.107253569 0.854288985
      0.089887614 0     0     0     0     0.089326328 0     0     0
      0     0     0     0     0
2010  1     5     3     0     154.1629    0     0     0     0     0
      0.141392361 0.028646942 0.317278195 0.206854351 0.297725859
      1.374297112 4.201739647 8.195432208 7.125314504 3.617054494
      2.197720981 2.37444812  1.871997795 1.480557033 3.000591469
      2.013922627 1.722085898 1.963817102 1.150137452 1.719327698
      1.141223887 0.652074688 0.326032019 0     0     0     0     0
      0     0     0     0     0     0     0.677931482 0.297140141 0
      0     0.030073964 0.267928779 0.396414042 0.642607353 1.455573492
      4.21105789  8.243109665 7.29401198  6.221806989 2.697029727
      2.926801632 2.601632215 2.131875612 2.884523431 2.150618593
      2.339219836 2.291063155 1.150637975 1.23568425  0.570564021 0
      0.163021334 0     0     0     0     0     0     0     0     0
#
#
31 # Number of Age Bins
0  1  2  3  4  5  6  7  8  9  10  11  12  13  14  15  16  17  18  19
20  21  22  23  24  25  26  27  28  29  30

1 # Number of Aging Error Matrices
0.5  1.5  2.5  3.5  4.5  5.5  6.5  7.5  8.5  9.5  10.5  11.5  12.5
13.5  14.5  15.5  16.5  17.5  18.5  19.5  20.5  21.5  22.5  23.5
24.5  25.5  26.5  27.5  28.5  29.5  30.5  31.5  32.5  33.5  34.5
35.5  36.5  37.5  38.5  39.5  40.5  41.5  42.5  43.5  44.5  45.5
0.05  0.1   0.158113883  0.324442842  0.376192055  0.484366512
0.719693812  0.737838276  0.758854932  0.781541625  0.83763068
```

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0.907620383  0.977610085  1.047599788  1.117589491  1.187579194
1.257568896  1.327558599  1.397548302  1.467538004  1.537527707
1.60751741  1.677507113  1.747496815  1.817486518  1.887476221
1.957465924  2.027455626  2.097445329  2.167435032  2.237424735
2.307414437  2.37740414  2.447393843  2.517383546  2.587373248
2.657362951  2.727352654  2.797342356  2.867332059  2.937321762
3.007311465  3.077301167  3.14729087  3.217280573  3.5

1003   # Number of age comp observations using restricted length
ranges ***
2   # Length bin refers to: 1=population length bin indices; 2=data
length bin indices; 3= actual pop? data? lengths match bins?
0 #_combine males into females at or below this bin number
#Year Seas  Fleet Gender      Part
1991  1     1     1     0     1     11    15    0.1   0     0     0
      1     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0
1991  1     1     1     0     1     16    19    0.3   0     0     0
      0.8   0.2   0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0
1991  1     1     1     0     1     20    22    1.4   0     0     0
      0     0.95  0.05  0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0
1991  1     1     1     0     1     23    25    1.4   0     0     0
      0     0.047619048 0.571428571 0.285714286 0     0     0     0
      0.047619048 0     0     0     0     0     0     0     0     0
      0     0     0.047619048 0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0
1991  1     1     1     0     1     26    27    1     0     0     0
      0     0     0     0.357142857 0.285714286 0.142857143 0.071428571
      0.071428571 0     0.071428571 0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0
1991  1     1     1     0     1     27    28    1.7   0     0     0
      0     0     0.041666667 0.125 0.583333333 0.083333333 0     0
      0.083333333 0     0     0.041666667 0     0     0     0.041666667
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
```

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      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0
1991  1     1     1     0     1     28    29    2.8   0     0     0
      0     0     0     0     0.125 0.25  0.275 0.15  0     0.1   0
      0     0     0     0.025 0     0.025 0     0     0     0     0
      0     0.025 0     0     0     0.025 0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0
1991  1     1     1     0     1     29    30    4.1   0     0     0
      0     0     0     0.016949153 0     0.06779661  0.220338983
      0.152542373 0.050847458 0.118644068 0.050847458 0.033898305 0
      0     0.050847458 0     0     0.016949153 0.050847458 0.016949153
      0.033898305 0.016949153 0     0     0     0.016949153 0
      0.084745763 0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
1991  1     1     1     0     1     30    31    2.6   0     0     0
      0     0     0     0     0     0     0.078947368 0.026315789
      0.105263158 0.131578947 0.052631579 0.052631579 0     0.078947368
      0     0.052631579 0     0.026315789 0.078947368 0.026315789
      0.026315789 0     0.026315789 0     0.026315789 0.052631579 0
      0.157894737 0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
1991  1     1     1     0     1     31    32    3.9   0     0     0
      0     0     0     0     0     0     0.01754386  0     0.01754386
      0.01754386  0.122807018 0.105263158 0.035087719 0.035087719
      0.052631579 0.035087719 0.052631579 0.070175439 0.01754386
      0.01754386  0.01754386  0.01754386  0.01754386  0.01754386
      0.01754386  0.035087719 0.01754386  0.263157895 0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0
1991  1     1     1     0     1     32    33    1.7   0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0.04  0.04  0.04  0.08  0.12  0.04  0.08  0.08  0     0     0
      0.08  0.04  0     0.08  0     0.28  0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0
1991  1     1     1     0     1     33    34    1.4   0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0.05  0     0     0.05  0.05  0     0.1   0.05  0.1
      0.05  0.05  0     0     0.2   0.3   0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0
1991  1     1     1     0     1     34    35    0.5   0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0.142857143 0     0     0.142857143
      0     0     0.285714286 0     0     0     0     0.428571429 0
      0     0     0     0     0     0     0     0     0     0     0
```

```
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0
1991  1     1     1     0     1     35    36    0.1   0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0.5   0.5   0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0
1991  1     1     2     0     1     11    15    0.1   0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     1     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0
1991  1     1     2     0     1     16    19    0.3   0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0.8   0.2
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0
1991  1     1     2     0     1     20    22    1.4   0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0.95
      0.05  0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0
1991  1     1     2     0     1     23    25    1.4   0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0
      0.047619048 0.571428571 0.285714286 0     0     0     0
      0.047619048 0     0     0     0     0     0     0     0     0
      0     0     0.047619048 0     0     0     0     0     0     0
1991  1     1     2     0     1     26    27    1     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0.357142857 0.285714286 0.142857143 0.071428571 0.071428571
      0     0.071428571 0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0
1991  1     1     2     0     1     27    28    1.7   0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0.041666667 0.125 0.583333333 0.083333333 0     0     0.083333333
      0     0     0.041666667 0     0     0     0.041666667 0     0
      0     0     0     0     0     0     0     0     0     0
1991  1     1     2     0     1     28    29    2.8   0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
```

```
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0.125 0.25  0.275 0.15  0     0.1   0     0     0
      0     0.025 0     0.025 0     0     0     0     0     0     0.025
      0     0     0     0.025
1991  1     1     2     0     1     29    30    4.1   0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0.016949153 0     0.06779661  0.220338983 0.152542373
      0.050847458 0.118644068 0.050847458 0.033898305 0     0
      0.050847458 0     0     0.016949153 0.050847458 0.016949153
      0.033898305 0.016949153 0     0     0     0.016949153 0
      0.084745763
1991  1     1     2     0     1     30    31    2.6   0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0.078947368 0.026315789 0.105263158
      0.131578947 0.052631579 0.052631579 0     0.078947368 0
      0.052631579 0     0.026315789 0.078947368 0.026315789 0.026315789
      0     0.026315789 0     0.026315789 0.052631579 0     0.157894737
1991  1     1     2     0     1     31    32    3.9   0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0.01754386  0     0.01754386  0.01754386
      0.122807018 0.105263158 0.035087719 0.035087719 0.052631579
      0.035087719 0.052631579 0.070175439 0.01754386  0.01754386
      0.01754386  0.01754386  0.01754386  0.01754386  0.01754386
      0.035087719 0.01754386  0.263157895
1991  1     1     2     0     1     32    33    1.7   0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0.04  0.04
      0.04  0.08  0.12  0.04  0.08  0.08  0     0     0     0.08  0.04
      0     0.08  0     0.28
1991  1     1     2     0     1     33    34    1.4   0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0.05  0     0     0.05  0.05  0     0.1   0.05  0.1   0.05  0.05
      0     0     0.2   0.3
1991  1     1     2     0     1     34    35    0.5   0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0.142857143 0     0     0.142857143 0     0
      0.285714286 0     0     0     0     0.428571429
1991  1     1     2     0     1     35    36    0.1   0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
```

```
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0.5   0.5
1998  1     1     1     0     1     16    19    1     0     0     0
      0.785714286 0.214285714 0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0
1998  1     1     1     0     1     20    22    3.3   0     0     0
      0.020833333 0.8125      0.145833333 0.020833333 0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0
1998  1     1     1     0     1     23    25    2.6   0     0     0
      0     0.243243243 0.594594595 0.081081081 0     0.027027027 0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0.027027027 0     0
      0.027027027 0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
1998  1     1     1     0     1     26    27    1.9   0     0     0
      0     0     0.142857143 0.428571429 0.25  0.035714286 0.071428571
      0.035714286 0     0     0     0     0     0.035714286 0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0
1998  1     1     1     0     1     27    28    3.7   0     0     0
      0     0     0.092592593 0.444444444 0.185185185 0.074074074
      0.055555556 0.074074074 0.037037037 0     0     0.018518519 0
      0     0     0.018518519 0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0
1998  1     1     1     0     1     28    29    0     0     0     0
      0     0     0.076923077 0.05982906  0.196581197 0.153846154
      0.213675214 0.076923077 0.034188034 0.034188034 0     0.025641026
      0.025641026 0.025641026 0.017094017 0.008547009 0.008547009 0
      0.008547009 0.025641026 0     0     0     0     0.008547009 0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
1998  1     1     1     0     1     29    30    0     0     0     0
      0     0     0.032520325 0.016260163 0.040650407 0.130081301
      0.162601626 0.048780488 0.073170732 0.073170732 0.016260163
      0.06504065  0.032520325 0.073170732 0.024390244 0.016260163
      0.040650407 0.032520325 0.024390244 0.024390244 0.016260163 0
      0.008130081 0     0.008130081 0.016260163 0     0.024390244 0
```

```
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0
1998  1     1     1     0     1     30    31    0     0     0     0
      0     0     0.0078125   0.015625    0.0234375   0.03125
      0.1015625   0.1328125   0.0859375   0.046875    0.046875
      0.03125     0.046875    0.0703125   0.09375     0.0234375
      0.0390625   0.0234375   0.0234375   0.0078125   0.0234375   0
      0.015625    0.015625    0     0.015625    0.0234375   0.0546875
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0
1998  1     1     1     0     1     31    32    0     0     0     0
      0     0     0     0     0     0.010416667 0     0.020833333
      0.083333333 0.052083333 0.03125     0.0625      0.114583333
      0.083333333 0.072916667 0.052083333 0.03125     0.03125
      0.020833333 0.020833333 0.041666667 0.020833333 0.020833333 0
      0.041666667 0     0.041666667 0.145833333 0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0
1998  1     1     1     0     1     32    33    5.3   0     0     0
      0     0     0     0     0.038961039 0.012987013 0.012987013
      0.025974026 0     0.025974026 0.025974026 0.051948052 0.051948052
      0.064935065 0.064935065 0.103896104 0.025974026 0.038961039
      0.025974026 0.051948052 0.064935065 0.051948052 0.012987013
      0.012987013 0     0.025974026 0     0.207792208 0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0
1998  1     1     1     0     1     33    34    3     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0.045454545 0.022727273 0.090909091 0     0.068181818
      0.022727273 0     0.068181818 0.022727273 0.045454545 0.022727273
      0     0.045454545 0.159090909 0     0.386363636 0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0
1998  1     1     1     0     1     34    35    0.8   0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0
      0.090909091 0     0     0.090909091 0     0     0.818181818 0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0
1998  1     1     1     0     1     35    36    0.5   0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0.142857143 0     0     0     0     0     0.142857143
      0.142857143 0     0     0     0     0     0     0.571428571 0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0
1998  1     1     1     0     1     36    37    0.1   0     0     0
      0     0     0     0     0     0     0     0     0     0     0
```

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      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     1     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0
1998  1     1     2     0     1     16    19    1     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0.785714286
      0.214285714 0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0
1998  1     1     2     0     1     20    22    3.3   0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0.020833333
      0.8125      0.145833333 0.020833333 0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0
1998  1     1     2     0     1     23    25    2.6   0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0
      0.243243243 0.594594595 0.081081081 0     0.027027027 0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0.027027027 0     0     0.027027027
1998  1     1     2     0     1     26    27    1.9   0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0.142857143 0.428571429 0.25  0.035714286 0.071428571 0.035714286
      0     0     0     0     0     0.035714286 0     0     0     0
      0     0     0     0     0     0     0     0     0     0
1998  1     1     2     0     1     27    28    3.7   0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0.092592593 0.444444444 0.185185185 0.074074074 0.055555556
      0.074074074 0.037037037 0     0     0.018518519 0     0     0
      0.018518519 0     0     0     0     0     0     0     0     0
      0     0     0
1998  1     1     2     0     1     28    29    0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0.076923077 0.05982906  0.196581197 0.153846154 0.213675214
      0.076923077 0.034188034 0.034188034 0     0.025641026 0.025641026
      0.025641026 0.017094017 0.008547009 0.008547009 0     0.008547009
      0.025641026 0     0     0     0     0.008547009 0     0     0
1998  1     1     2     0     1     29    30    0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0.032520325 0.016260163 0.040650407 0.130081301 0.162601626
```

```
      0.048780488 0.073170732 0.073170732 0.016260163 0.06504065
      0.032520325 0.073170732 0.024390244 0.016260163 0.040650407
      0.032520325 0.024390244 0.024390244 0.016260163 0     0.008130081
      0     0.008130081 0.016260163 0     0.024390244
1998  1     1     2     0     1     30    31    0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0.0078125   0.015625    0.0234375   0.03125     0.1015625
      0.1328125   0.0859375   0.046875    0.046875    0.03125
      0.046875    0.0703125   0.09375     0.0234375   0.0390625
      0.0234375   0.0234375   0.0078125   0.0234375   0     0.015625
      0.015625    0     0.015625    0.0234375   0.0546875
1998  1     1     2     0     1     31    32    0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0.010416667 0     0.020833333 0.083333333
      0.052083333 0.03125     0.0625      0.114583333 0.083333333
      0.072916667 0.052083333 0.03125     0.03125     0.020833333
      0.020833333 0.041666667 0.020833333 0.020833333 0     0.041666667
      0     0.041666667 0.145833333
1998  1     1     2     0     1     32    33    5.3   0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0.038961039 0.012987013 0.012987013 0.025974026 0
      0.025974026 0.025974026 0.051948052 0.051948052 0.064935065
      0.064935065 0.103896104 0.025974026 0.038961039 0.025974026
      0.051948052 0.064935065 0.051948052 0.012987013 0.012987013 0
      0.025974026 0     0.207792208
1998  1     1     2     0     1     33    34    3     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0
      0.045454545 0.022727273 0.090909091 0     0.068181818 0.022727273
      0     0.068181818 0.022727273 0.045454545 0.022727273 0
      0.045454545 0.159090909 0     0.386363636
1998  1     1     2     0     1     34    35    0.8   0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0.090909091 0
      0     0.090909091 0     0     0.818181818
1998  1     1     2     0     1     35    36    0.5   0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0.142857143 0     0     0     0     0     0.142857143 0.142857143
      0     0     0     0     0     0     0.571428571
```

```
1998  1     1     2     0     1     36    37    0.1   0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     1
2003  1     1     1     0     1     11    15    2.6   0     0
      0.647058824 0.294117647 0.058823529 0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0
2003  1     1     1     0     1     16    19    7.8   0     0     0
      0.762711864 0.220338983 0.016949153 0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0
2003  1     1     1     0     1     20    22    3.9   0     0     0
      0.173913043 0.695652174 0.086956522 0.043478261 0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0
2003  1     1     1     0     1     23    25    6.4   0     0     0
      0     0.648648649 0.054054054 0.189189189 0.108108108 0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0
2003  1     1     1     0     1     26    27    13.5  0     0     0
      0     0.096153846 0.211538462 0.269230769 0.25  0.096153846
      0.057692308 0.019230769 0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
2003  1     1     1     0     1     27    28    18.4  0     0     0
      0     0.037037037 0.234567901 0.222222222 0.296296296 0.074074074
      0.024691358 0.037037037 0.012345679 0.012345679 0     0
      0.024691358 0.012345679 0     0     0     0     0.012345679 0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0
2003  1     1     1     0     1     28    29    42.4  0     0     0
      0     0.025089606 0.078853047 0.150537634 0.365591398 0.150537634
      0.05734767  0.010752688 0.003584229 0.025089606 0.003584229
      0.021505376 0.003584229 0.017921147 0.025089606 0.014336918
```

```
      0.007168459 0.017921147 0.003584229 0.003584229 0     0.003584229
      0     0.007168459 0.003584229 0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0
2003  1     1     1     0     1     29    30    46.6  0     0     0
      0     0.007672634 0.025575448 0.145780051 0.301790281 0.217391304
      0.076726343 0.043478261 0.046035806 0.002557545 0.007672634
      0.007672634 0.007672634 0.007672634 0.010230179 0.00511509
      0.017902813 0.012787724 0.010230179 0.00511509  0.002557545
      0.002557545 0.00511509  0.002557545 0.007672634 0     0
      0.020460358 0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
2003  1     1     1     0     1     30    31    43.8  0     0     0
      0     0.006896552 0.006896552 0.044827586 0.186206897 0.275862069
      0.075862069 0.089655172 0.062068966 0.031034483 0.037931034
      0.006896552 0.04137931  0.020689655 0.020689655 0.027586207
      0.013793103 0     0     0     0.003448276 0.003448276 0.020689655
      0.006896552 0.003448276 0     0     0.013793103 0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0
2003  1     1     1     0     1     31    32    36.2  0     0     0
      0     0.005102041 0     0     0.06122449  0.030612245 0.06122449
      0.081632653 0.020408163 0.035714286 0.12755102  0.020408163
      0.06122449  0.076530612 0.081632653 0.066326531 0     0.015306122
      0.045918367 0.040816327 0.010204082 0.025510204 0.045918367 0
      0.005102041 0     0     0.081632653 0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0
2003  1     1     1     0     1     32    33    29.4  0     0     0
      0     0.005882353 0     0     0     0.011764706 0.023529412
      0.023529412 0.023529412 0.035294118 0.070588235 0.011764706
      0.035294118 0.082352941 0.094117647 0.058823529 0.064705882
      0.035294118 0.082352941 0.070588235 0.058823529 0.052941176
      0.035294118 0     0.011764706 0.017647059 0     0.094117647 0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0
2003  1     1     1     0     1     33    34    23.1  0     0     0
      0     0     0     0     0     0     0     0.013422819 0     0
      0     0     0     0.026845638 0.040268456 0.013422819 0.026845638
      0.013422819 0.053691275 0.174496644 0.026845638 0.080536913
      0.067114094 0.013422819 0.026845638 0.013422819 0.067114094
      0.342281879 0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
2003  1     1     1     0     1     34    35    15    0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0.03125     0
      0.09375     0.03125     0.03125     0.0625      0     0.03125
      0.71875     0     0     0     0     0     0     0     0     0
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      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
2003  1     1     1     0     1     35    36    10    0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0
      0.076923077 0     0.076923077 0     0     0     0.846153846 0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0
2003  1     1     1     0     1     36    37    2.8   0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     1     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0
2003  1     1     2     0     1     11    15    2.3   0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0.473684211
      0.473684211 0.052631579 0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0
2003  1     1     2     0     1     16    19    9.9   0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0.070588235
      0.788235294 0.129411765 0.011764706 0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0
2003  1     1     2     0     1     20    22    2.3   0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0.105263158
      0.842105263 0     0.052631579 0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0
2003  1     1     2     0     1     23    25    12.1  0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0.033898305
      0.576271186 0.13559322  0.220338983 0.033898305 0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0
2003  1     1     2     0     1     26    27    18.7  0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0
      0.014705882 0.25  0.441176471 0.161764706 0.102941176 0.014705882
      0.014705882 0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
2003  1     1     2     0     1     27    28    39    0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
```

```
      0     0     0     0     0     0     0     0     0     0
      0.018867925 0.194968553 0.364779874 0.176100629 0.150943396
      0.025157233 0.018867925 0.006289308 0.006289308 0.012578616 0
      0     0.018867925 0     0     0     0     0.006289308 0     0
      0     0     0     0     0     0     0
2003  1     1     2     0     1     28    29    76.9  0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0
      0.013435701 0.042226488 0.211132438 0.307101727 0.184261036
      0.076775432 0.013435701 0.013435701 0.009596929 0.013435701
      0.011516315 0.009596929 0.032629559 0.021113244 0.011516315 0
      0.013435701 0.001919386 0.005758157 0     0.001919386 0
      0.003838772 0.001919386 0     0     0
2003  1     1     2     0     1     29    30    71.8  0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0
      0.006711409 0.004474273 0.082774049 0.161073826 0.149888143
      0.067114094 0.060402685 0.058165548 0.024608501 0.03803132
      0.03803132  0.020134228 0.042505593 0.035794183 0.017897092
      0.020134228 0.024608501 0.031319911 0.026845638 0.020134228
      0.006711409 0.008948546 0.002237136 0.011185682 0.008948546 0
      0.031319911
2003  1     1     2     0     1     30    31    57    0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0
      0.007246377 0     0.010869565 0.028985507 0.028985507 0.036231884
      0.014492754 0.036231884 0.018115942 0.047101449 0.050724638
      0.014492754 0.072463768 0.043478261 0.057971014 0.028985507
      0.043478261 0.065217391 0.065217391 0.06884058  0.061594203
      0.043478261 0.028985507 0.018115942 0.028985507 0     0.079710145
2003  1     1     2     0     1     31    32    25.9  0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0
      0.011627907 0     0     0     0.023255814 0     0     0
      0.011627907 0.011627907 0.023255814 0     0.034883721 0
      0.034883721 0     0.011627907 0.058139535 0.023255814 0
      0.034883721 0.058139535 0.069767442 0.034883721 0.046511628 0
      0.511627907
2003  1     1     2     0     1     32    33    11.5  0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0
      0.027777778 0     0     0     0     0     0     0     0     0
      0     0     0     0.055555556 0     0.027777778 0     0
      0.055555556 0     0.138888889 0     0     0.055555556 0.027777778
      0     0.611111111
2003  1     1     2     0     1     33    34    3.6   0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
```

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      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0.222222222 0     0     0     0     0
      0     0     0     0     0.777777778
2003  1     1     2     0     1     34    35    0.3   0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     1
2003  1     1     2     0     1     36    37    0.2   0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0.666666667 0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0.333333333
2004  1     1     1     0     1     23    25    7.1   0     0     0
      0     0.064516129 0.64516129  0.161290323 0     0.064516129
      0.064516129 0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0
2004  1     1     1     0     1     26    27    13    0     0     0
      0     0.148148148 0.518518519 0.111111111 0.185185185 0     0
      0     0.037037037 0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0
2004  1     1     1     0     1     27    28    15    0     0     0
      0     0.111111111 0.444444444 0.148148148 0.148148148 0.148148148
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0
2004  1     1     1     0     1     28    29    26    0     0     0
      0     0.044444444 0.133333333 0.277777778 0.311111111 0.155555556
      0.055555556 0.011111111 0     0.011111111 0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0
2004  1     1     1     0     1     29    30    29    0     0     0
      0     0     0     0.131147541 0.270491803 0.360655738 0.163934426
      0.049180328 0.008196721 0     0     0     0.008196721 0     0
      0     0     0     0.008196721 0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0
```

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2004  1     1     1     0     1     30    31    27    0     0     0
      0     0     0.01010101  0.01010101  0.171717172 0.242424242
      0.272727273 0.151515152 0.050505051 0.03030303  0.03030303
      0.01010101  0     0     0     0.01010101  0     0     0     0
      0.01010101  0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0
2004  1     1     1     0     1     31    32    24    0     0     0
      0     0     0     0     0.014705882 0.161764706 0.220588235
      0.117647059 0.073529412 0.073529412 0.058823529 0.044117647
      0.044117647 0.029411765 0.058823529 0.029411765 0     0.014705882
      0.014705882 0     0.014705882 0.014705882 0     0     0     0
      0     0.014705882 0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0
2004  1     1     1     0     1     32    33    16    0     0     0
      0     0     0     0     0     0.022727273 0     0     0.068181818
      0.045454545 0.045454545 0.068181818 0.068181818 0.045454545
      0.068181818 0.045454545 0.068181818 0.068181818 0.090909091
      0.090909091 0     0.045454545 0.068181818 0     0     0.022727273
      0.022727273 0.045454545 0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0
2004  1     1     1     0     1     33    34    19    0     0     0
      0     0     0     0     0     0     0.021276596 0     0
      0.042553191 0     0     0.021276596 0.106382979 0.106382979
      0.021276596 0     0.042553191 0.063829787 0     0.021276596
      0.063829787 0.063829787 0.063829787 0     0.021276596 0.021276596
      0.319148936 0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
2004  1     1     1     0     1     34    35    15    0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0.05  0     0     0     0     0     0     0     0.1
      0     0     0     0     0.05  0.8   0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0
2004  1     1     1     0     1     35    36    4     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     1     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0
2004  1     1     1     0     1     36    37    2.7   0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0.2   0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0.8   0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
```

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      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0
2004  1     1     2     0     1     23    25    13.9  0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0.035087719
      0.140350877 0.631578947 0.122807018 0.070175439 0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0
2004  1     1     2     0     1     26    27    24.9  0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0
      0.046511628 0.348837209 0.418604651 0.139534884 0.023255814 0
      0     0     0.023255814 0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
2004  1     1     2     0     1     27    28    31.3  0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0
      0.037735849 0.169811321 0.320754717 0.301886792 0.056603774
      0.037735849 0.037735849 0     0     0     0.018867925 0     0
      0     0     0.018867925 0     0     0     0     0     0     0
      0     0     0     0
2004  1     1     2     0     1     28    29    57.8  0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0.037433155 0.165775401 0.219251337 0.278074866 0.181818182
      0.064171123 0.016042781 0.021390374 0.005347594 0     0
      0.005347594 0     0     0     0.005347594 0     0     0     0
      0     0     0     0     0     0
2004  1     1     2     0     1     29    30    53    0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0.013157895 0.039473684 0.164473684 0.197368421 0.184210526
      0.131578947 0.039473684 0.026315789 0.026315789 0.006578947
      0.013157895 0.013157895 0.026315789 0.026315789 0.006578947
      0.019736842 0.013157895 0.019736842 0.006578947 0     0
      0.006578947 0     0.006578947 0     0.013157895
2004  1     1     2     0     1     30    31    35.5  0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0.057971014 0.086956522 0.072463768 0.072463768
      0.057971014 0.086956522 0.057971014 0.014492754 0.043478261 0
      0.130434783 0.072463768 0.014492754 0.014492754 0     0
      0.028985507 0.028985507 0.028985507 0.028985507 0     0.014492754
      0.014492754 0.072463768
2004  1     1     2     0     1     31    32    14.2  0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
```

```
      0     0     0.043478261 0     0     0     0     0.043478261 0
      0.086956522 0     0     0     0.086956522 0.086956522 0.043478261
      0.086956522 0     0.043478261 0.130434783 0     0.043478261 0
      0.043478261 0.043478261 0.217391304
2004  1     1     2     0     1     32    33    2.6   0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0.25  0     0.25
      0     0     0     0.5
2004  1     1     2     0     1     33    34    0.1   0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     1
2004  1     1     2     0     1     34    35    1.3   0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0.5   0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0.5
2005  1     1     1     0     1     16    19    0.1   0     0     0
      0.8   0.2   0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0
2005  1     1     1     0     1     20    22    2.9   0     0     0
      0     0.818181818 0.181818182 0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0
2005  1     1     1     0     1     23    25    13.8  0     0     0
      0     0.135416667 0.6875    0.15625   0.020833333 0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0
2005  1     1     1     0     1     26    27    11.7  0     0     0
      0     0     0.459459459 0.486486486 0.027027027 0.027027027 0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0
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2005  1     1     1     0     1     27    28    12    0     0     0
      0     0     0.164179104 0.671641791 0.074626866 0.029850746
      0.029850746 0.029850746 0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
2005  1     1     1     0     1     28    29    25.4  0     0     0
      0     0     0.125 0.383928571 0.214285714 0.116071429 0.116071429
      0.017857143 0.017857143 0     0     0     0     0.008928571 0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
2005  1     1     1     0     1     29    30    29.3  0     0     0
      0     0     0     0.115853659 0.280487805 0.323170732 0.158536585
      0.06097561  0     0.012195122 0     0.012195122 0.024390244 0
      0     0     0     0     0     0     0     0.012195122 0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0
2005  1     1     1     0     1     30    31    22.5  0     0     0
      0     0     0     0.012738854 0.21656051  0.152866242 0.25477707
      0.21656051  0.031847134 0.025477707 0.012738854 0     0.012738854
      0.025477707 0.012738854 0     0     0.012738854 0     0
      0.006369427 0     0     0     0     0     0     0.006369427 0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0
2005  1     1     1     0     1     31    32    24.3  0     0     0
      0     0     0     0     0.043478261 0.108695652 0.065217391
      0.152173913 0.02173913  0.130434783 0.02173913  0.054347826
      0.086956522 0.152173913 0.032608696 0.043478261 0.02173913
      0.02173913  0     0     0     0.02173913  0     0     0     0
      0     0.02173913  0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0
2005  1     1     1     0     1     32    33    17.1  0     0     0
      0     0     0     0     0     0.071428571 0.035714286 0.071428571
      0     0.035714286 0.035714286 0.035714286 0.071428571 0.035714286
      0.142857143 0.071428571 0.017857143 0     0.035714286 0.107142857
      0.035714286 0.107142857 0     0     0.035714286 0.035714286 0
      0.017857143 0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
2005  1     1     1     0     1     33    34    17    0     0     0
      0     0     0     0     0     0     0     0     0     0.057142857
      0.028571429 0.028571429 0     0     0.057142857 0.085714286
      0.057142857 0.085714286 0.028571429 0     0.142857143 0.028571429
      0     0     0.085714286 0.057142857 0     0.257142857 0     0
      0     0     0     0     0     0     0     0     0     0     0
```

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      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0
2005  1     1     1     0     1     34    35    9     0     0     0
      0     0     0     0     0     0     0     0.055555556 0     0
      0     0     0     0     0.055555556 0     0.055555556 0.055555556
      0.055555556 0     0     0.055555556 0.055555556 0.055555556
      0.055555556 0     0.055555556 0.444444444 0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0
2005  1     1     1     0     1     35    36    5     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0.076923077 0.076923077 0
      0.076923077 0.076923077 0     0     0.153846154 0     0
      0.538461538 0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
2005  1     1     1     0     1     36    37    4.8   0     0     0
      0     0     0     0     0.166666667 0     0     0     0     0
      0     0     0     0     0     0     0     0     0.166666667 0
      0     0     0     0     0     0     0     0.666666667 0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0
2005  1     1     2     0     1     16    19    1.3   0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0.8   0.2
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0
2005  1     1     2     0     1     20    22    4.3   0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0.060606061
      0.757575758 0.181818182 0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0
2005  1     1     2     0     1     23    25    22.3  0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0
      0.066037736 0.754716981 0.160377358 0.018867925 0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0
2005  1     1     2     0     1     26    27    18.1  0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0.318181818 0.545454545 0.090909091 0.045454545 0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0
2005  1     1     2     0     1     27    28    20.3  0     0     0
      0     0     0     0     0     0     0     0     0     0     0
```

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      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0.194805195 0.480519481 0.142857143 0.103896104 0.077922078 0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0
2005  1     1     2     0     1     28    29    44.3  0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0.036036036 0.220720721 0.252252252 0.112612613 0.121621622
      0.108108108 0.018018018 0.009009009 0     0.027027027 0
      0.022522523 0.009009009 0.027027027 0.009009009 0     0.009009009
      0.009009009 0.009009009 0     0     0     0     0     0     0
2005  1     1     2     0     1     29    30    47.4  0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0.015873016 0.05952381  0.111111111 0.234126984 0.103174603
      0.079365079 0.047619048 0.015873016 0.055555556 0.015873016
      0.031746032 0.031746032 0.007936508 0.031746032 0.03968254
      0.03968254  0.007936508 0.015873016 0.023809524 0.015873016
      0.007936508 0     0     0.007936508 0     0
2005  1     1     2     0     1     30    31    32.5  0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0.016260163 0.016260163 0.113821138 0.048780488
      0.024390244 0.048780488 0.016260163 0     0.06504065  0.016260163
      0.048780488 0.032520325 0.032520325 0.048780488 0.032520325
      0.048780488 0.056910569 0.06504065  0.097560976 0.06504065
      0.016260163 0.048780488 0.016260163 0.024390244
2005  1     1     2     0     1     31    32    20.4  0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0.0625      0.03125     0     0.09375     0.03125
      0     0.03125     0.046875    0     0     0.015625    0.0625
      0.0625      0     0.0625      0     0.0625      0     0.0625
      0.03125     0     0.03125     0     0.3125
2005  1     1     2     0     1     32    33    8.1   0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0.066666667
      0     0     0.066666667 0     0.1   0     0     0.066666667 0
      0.066666667 0.066666667 0     0     0     0     0.566666667
2005  1     1     2     0     1     33    34    1.7   0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0.2   0
      0     0     0.2   0     0.2   0     0     0     0     0     0
      0     0     0     0.4
```

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2005  1     1     2     0     1     34    35    0.4   0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0.333333333 0.333333333 0     0     0     0     0
      0     0.333333333 0     0     0     0
2005  1     1     2     0     1     35    36    0.1   0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     1     0
2005  1     1     2     0     1     36    37    0.1   0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     1
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0
2006  1     1     1     0     1     20    22    0.1   0     0     0
      0     0     1     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0
2006  1     1     1     0     1     23    25    8.6   0     0     0
      0     0     0.228571429 0.6   0.114285714 0.057142857 0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0
2006  1     1     1     0     1     26    27    19.4  0     0     0
      0     0     0.048780488 0.597560976 0.280487805 0.073170732 0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0
2006  1     1     1     0     1     27    28    23.8  0     0     0
      0     0     0.037974684 0.35443038  0.443037975 0.126582278
      0.012658228 0.012658228 0     0     0     0     0     0
      0.012658228 0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0
2006  1     1     1     0     1     28    29    40.6  0     0     0
      0     0     0.006329114 0.186708861 0.386075949 0.208860759
      0.088607595 0.047468354 0.041139241 0.003164557 0     0
      0.006329114 0.006329114 0     0.006329114 0     0.006329114 0
```

```
      0     0.006329114 0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0
2006  1     1     1     0     1     29    30    40.1  0     0     0
      0     0     0     0.083333333 0.148148148 0.296296296 0.115740741
      0.12037037  0.074074074 0.046296296 0.027777778 0     0.023148148
      0     0.018518519 0.018518519 0.013888889 0.00462963  0     0
      0     0     0.009259259 0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0
2006  1     1     1     0     1     30    31    40.7  0     0     0
      0     0     0     0.008547009 0.064102564 0.094017094 0.158119658
      0.162393162 0.141025641 0.132478632 0.025641026 0.02991453
      0.047008547 0.021367521 0.034188034 0.008547009 0.008547009
      0.025641026 0.004273504 0     0     0     0.008547009 0.004273504
      0     0     0     0.021367521 0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0
2006  1     1     1     0     1     31    32    31.3  0     0     0
      0     0     0     0.013422819 0.013422819 0.053691275 0
      0.10738255  0.127516779 0.093959732 0.060402685 0.020134228
      0.053691275 0.040268456 0.073825503 0.127516779 0.053691275
      0.006711409 0.033557047 0.020134228 0.020134228 0     0.026845638
      0.013422819 0     0     0     0.040268456 0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0
2006  1     1     1     0     1     32    33    22.5  0     0     0
      0     0     0     0     0     0     0     0.018348624 0.036697248
      0.027522936 0.036697248 0.064220183 0.100917431 0.036697248
      0.110091743 0.064220183 0.055045872 0     0.073394495 0.027522936
      0.036697248 0.064220183 0.027522936 0.055045872 0.036697248
      0.018348624 0.036697248 0.073394495 0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0
2006  1     1     1     0     1     33    34    14.5  0     0     0
      0     0     0     0     0     0     0     0     0     0.028985507
      0     0     0.028985507 0.014492754 0.028985507 0.028985507
      0.057971014 0.072463768 0     0.072463768 0     0.057971014
      0.144927536 0.057971014 0.057971014 0.101449275 0.057971014
      0.188405797 0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
2006  1     1     1     0     1     34    35    6.2   0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0.095238095 0     0     0.095238095 0     0     0
      0.095238095 0     0.095238095 0.095238095 0.095238095 0.047619048 0
      0.142857143 0.333333333 0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
```

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      0     0     0     0     0     0     0     0     0     0     0
      0     0
2006  1     1     1     0     1     35    36    3     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0.2
      0     0     0     0     0.2   0.6   0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0
2006  1     1     1     0     1     36    37    0.2   0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     1     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0
2006  1     1     2     0     1     20    22    0.3   0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0.5   0.5   0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0
2006  1     1     2     0     1     23    25    14.5  0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0.31372549  0.333333333 0.352941176 0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0
2006  1     1     2     0     1     26    27    34.2  0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0.027027027 0.371621622 0.304054054 0.189189189 0.054054054
      0.013513514 0.013513514 0.013513514 0.013513514 0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0
2006  1     1     2     0     1     27    28    40.9  0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0.00990099  0.297029703 0.356435644 0.227722772 0.02970297
      0.00990099  0.04950495  0     0.00990099  0.00990099  0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0
2006  1     1     2     0     1     28    29    65.3  0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0.122159091 0.306818182 0.215909091 0.079545455 0.133522727
      0.059659091 0.042613636 0     0.005681818 0.011363636 0
      0.005681818 0.005681818 0     0     0.005681818 0.005681818 0
      0     0     0     0     0     0     0
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2006  1     1     2     0     1     29    30    55.6  0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0.007042254 0.056338028 0.035211268 0.133802817 0.116197183
      0.154929577 0.126760563 0.077464789 0.042253521 0.028169014
      0.031690141 0.021126761 0.007042254 0.035211268 0.045774648
      0.01056338  0     0.021126761 0.014084507 0.007042254 0.007042254
      0.014084507 0     0.007042254 0     0
2006  1     1     2     0     1     30    31    35.1  0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0.022727273 0.015151515 0.037878788 0.060606061
      0.159090909 0.022727273 0.060606061 0.007575758 0.068181818
      0.083333333 0.090909091 0.045454545 0.03030303  0.015151515
      0.037878788 0     0.03030303  0.015151515 0.075757576 0.022727273
      0.015151515 0     0     0.083333333
2006  1     1     2     0     1     31    32    18.8  0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0.028985507 0     0.028985507 0.043478261
      0.028985507 0.072463768 0.014492754 0.086956522 0.028985507
      0.014492754 0.072463768 0.057971014 0.043478261 0.043478261
      0.101449275 0.072463768 0     0.057971014 0.028985507 0.057971014
      0     0.028985507 0.086956522
2006  1     1     2     0     1     32    33    6.4   0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0.095238095 0.047619048 0
      0.047619048 0.047619048 0     0     0.047619048 0.095238095 0
      0     0.047619048 0.095238095 0.047619048 0.047619048 0.095238095
      0     0.19047619  0     0.095238095
2006  1     1     2     0     1     33    34    0.6   0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0.111111111 0     0     0     0.111111111 0     0.111111111 0
      0     0     0     0     0.333333333 0     0.333333333
2006  1     1     2     0     1     34    35    0.3   0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0.4   0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0.2   0     0.2   0.2
2006  1     1     2     0     1     36    37    0.1   0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
```

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      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     1
2007  1     1     1     0     1     20    22    0     0     0     0
      0     0     1     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0
2007  1     1     1     0     1     23    25    5     0     0     0
      0     0     0.2   0.6   0.2   0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0
2007  1     1     1     0     1     26    27    23    0     0     0
      0     0     0.03030303  0.242424242 0.363636364 0.242424242
      0.060606061 0.03030303  0.03030303  0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0
2007  1     1     1     0     1     27    28    33    0     0     0
      0     0     0.04109589  0.328767123 0.246575342 0.287671233
      0.04109589  0.04109589  0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0.01369863  0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0
2007  1     1     1     0     1     28    29    64    0     0     0
      0     0     0     0.116666667 0.46  0.27  0.093333333 0.04  0
      0.013333333 0     0.003333333 0     0.003333333 0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0
2007  1     1     1     0     1     29    30    62    0     0     0
      0     0     0     0.026315789 0.271929825 0.337719298 0.171052632
      0.070175439 0.057017544 0.035087719 0.01754386  0     0
      0.004385965 0     0.004385965 0     0     0.004385965 0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0
2007  1     1     1     0     1     30    31    46    0     0     0
      0     0     0     0.008403361 0.067226891 0.12605042  0.218487395
      0.201680672 0.12605042  0.12605042  0.042016807 0.025210084
      0.008403361 0.025210084 0.008403361 0     0     0     0.008403361
      0     0.008403361 0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
```

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      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0
2007  1     1     1     0     1     31    32    50    0     0     0
      0     0     0     0     0.008130081 0.073170732 0.048780488
      0.105691057 0.138211382 0.105691057 0.06504065  0.048780488
      0.040650407 0.048780488 0.040650407 0.040650407 0.032520325
      0.048780488 0.032520325 0.024390244 0.024390244 0.008130081
      0.024390244 0.008130081 0.008130081 0.008130081 0.016260163 0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0
2007  1     1     1     0     1     32    33    38    0     0     0
      0     0     0     0     0     0.011363636 0.011363636 0.011363636
      0.034090909 0.079545455 0.034090909 0.068181818 0.102272727
      0.045454545 0.102272727 0.102272727 0.068181818 0.056818182
      0.034090909 0.056818182 0.045454545 0     0.011363636 0.034090909
      0.045454545 0.034090909 0.011363636 0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0
2007  1     1     1     0     1     33    34    35    0     0     0
      0     0     0     0     0     0.041666667 0     0.013888889 0
      0.013888889 0.013888889 0.013888889 0     0.027777778 0.055555556
      0.055555556 0.083333333 0.069444444 0.083333333 0.013888889
      0.027777778 0.069444444 0.069444444 0.027777778 0.069444444
      0.055555556 0.027777778 0.166666667 0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0
2007  1     1     1     0     1     34    35    26    0     0     0
      0     0     0     0     0     0     0     0     0     0.01754386
      0     0     0     0.01754386  0     0.035087719 0     0.035087719
      0.01754386  0.035087719 0     0.105263158 0.035087719 0.105263158
      0.035087719 0.070175439 0.070175439 0.421052632 0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0
2007  1     1     1     0     1     35    36    6     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0.071428571 0     0     0
      0.071428571 0.071428571 0.071428571 0     0.285714286 0.071428571
      0.357142857 0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
2007  1     1     1     0     1     36    37    9.2   0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0.111111111 0.111111111 0     0     0.777777778 0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0
2007  1     1     2     0     1     23    25    15    0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
```

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      0     0     0     0     0     0     0     0     0     0     0
      0.181818182 0.590909091 0.136363636 0.045454545 0.045454545 0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0
2007  1     1     2     0     1     26    27    49.8  0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0.042253521 0.23943662  0.422535211 0.197183099 0.028169014
      0.056338028 0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0.014084507 0     0
      0
2007  1     1     2     0     1     27    28    64.3  0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0.189189189 0.405405405 0.261261261 0.081081081 0.036036036
      0.027027027 0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0
2007  1     1     2     0     1     28    29    95.9  0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0.064935065 0.277056277 0.333333333 0.125541126 0.086580087
      0.038961039 0.038961039 0.008658009 0.008658009 0.004329004
      0.004329004 0.004329004 0.004329004 0     0     0     0     0
      0     0     0     0     0     0     0
2007  1     1     2     0     1     29    30    85.3  0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0.023668639 0.071005917 0.112426036 0.124260355 0.136094675
      0.106508876 0.088757396 0.023668639 0.041420118 0.023668639
      0.023668639 0.029585799 0.029585799 0.035502959 0.029585799
      0.029585799 0.01183432  0.00591716  0.00591716  0.017751479
      0.01183432  0     0     0.00591716  0.01183432
2007  1     1     2     0     1     30    31    57.7  0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0.024793388 0.033057851 0.05785124  0.090909091
      0.05785124  0.090909091 0.082644628 0.049586777 0.024793388
      0.033057851 0.066115702 0.05785124  0.024793388 0.049586777
      0.024793388 0.049586777 0.05785124  0.008264463 0.041322314
      0.008264463 0.016528926 0.016528926 0.016528926 0.016528926
2007  1     1     2     0     1     31    32    29.9  0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0.01754386  0     0.01754386  0     0.070175439
      0.01754386  0.01754386  0     0.035087719 0.01754386  0.052631579
      0.052631579 0.035087719 0.052631579 0     0.070175439 0.01754386
      0.052631579 0.140350877 0.01754386  0.035087719 0.052631579
      0.01754386  0.210526316
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2007  1     1     2     0     1     32    33    19.4  0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0.04  0.04  0.04  0.04  0     0     0     0.08  0.04
      0.04  0     0     0.68
2007  1     1     2     0     1     33    34    2.4   0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0.333333333 0.666666667
2007  1     1     2     0     1     34    35    0.1   0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     1
2008  1     1     1     0     1     16    19    1     0     0     0
      0.125 0.875 0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0
2008  1     1     1     0     1     20    22    2     0     0     0
      0     0.5   0.375 0     0.125 0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0
2008  1     1     1     0     1     23    25    7     0     0     0
      0     0     0.1   0.5   0.3   0.1   0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0
2008  1     1     1     0     1     26    27    16    0     0     0
      0     0     0     0.125 0.375 0.25  0.208333333 0.041666667 0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0
2008  1     1     1     0     1     27    28    28    0     0     0
      0     0     0     0.066666667 0.3   0.416666667 0.15  0.016666667
      0.033333333 0.016666667 0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
```

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      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0
2008  1     1     1     0     1     28    29    53    0     0.007874016
      0     0     0     0     0.019685039 0.216535433 0.42519685
      0.216535433 0.086614173 0.023622047 0     0     0     0.003937008
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0
2008  1     1     1     0     1     29    30    53    0     0     0
      0     0     0     0.00456621  0.118721461 0.296803653 0.264840183
      0.159817352 0.063926941 0.03196347  0.02283105  0.01826484  0
      0.00456621  0     0.00456621  0     0     0.00456621  0.00456621
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0
2008  1     1     1     0     1     30    31    47    0     0     0
      0     0     0     0     0.035714286 0.125 0.151785714 0.142857143
      0.098214286 0.142857143 0.133928571 0.071428571 0.035714286 0
      0.008928571 0     0.008928571 0.026785714 0     0     0.008928571
      0     0     0     0     0.008928571 0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0
2008  1     1     1     0     1     31    32    32    0     0     0
      0     0     0     0     0     0.011111111 0.011111111 0.155555556
      0.066666667 0.088888889 0.177777778 0.044444444 0.044444444
      0.077777778 0.033333333 0.033333333 0.011111111 0.044444444
      0.022222222 0.022222222 0.011111111 0.011111111 0.011111111
      0.033333333 0.022222222 0.011111111 0.022222222 0.033333333 0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0
2008  1     1     1     0     1     32    33    28    0     0     0
      0     0     0     0     0     0     0.013888889 0.055555556
      0.041666667 0.027777778 0.041666667 0.013888889 0.027777778
      0.041666667 0.097222222 0.041666667 0.069444444 0.069444444
      0.055555556 0.083333333 0.041666667 0.041666667 0.027777778
      0.013888889 0.013888889 0.041666667 0.013888889 0.125 0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0
2008  1     1     1     0     1     33    34    28    0     0     0
      0     0     0     0     0     0     0     0     0     0
      0.02739726  0.02739726  0.068493151 0.02739726  0     0.02739726
      0.04109589  0.02739726  0.04109589  0.082191781 0.082191781
      0.02739726  0.082191781 0.054794521 0.095890411 0.054794521
      0.054794521 0.178082192 0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0
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2008  1     1     1     0     1     34    35    17    0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0.027027027 0.027027027 0.081081081 0     0.027027027
      0.027027027 0.027027027 0.027027027 0.054054054 0.027027027 0.054054054
      0.081081081 0.027027027 0.054054054 0.081081081 0.405405405 0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0
2008  1     1     1     0     1     35    36    12    0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0.055555556 0.055555556 0
      0     0.055555556 0.166666667 0     0     0     0     0.666666667
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0
2008  1     1     1     0     1     36    37    2.4   0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     1     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0
2008  1     1     2     0     1     11    15    0.1   0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     1     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0
2008  1     1     2     0     1     16    19    0.4   0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0.333333333
      0.666666667 0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0
2008  1     1     2     0     1     20    22    2.4   0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0.6
      0.4   0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0
2008  1     1     2     0     1     23    25    9.9   0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0.285714286 0.571428571 0     0.142857143 0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0
2008  1     1     2     0     1     26    27    33.2  0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
```

```
      0.019230769 0.173076923 0.326923077 0.288461538 0.192307692 0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0
2008  1     1     2     0     1     27    28    51.4  0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0.048076923 0.326923077 0.375 0.182692308 0.048076923
      0.019230769 0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0
2008  1     1     2     0     1     28    29    89.2  0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0.024193548 0.161290323 0.370967742 0.189516129 0.112903226
      0.032258065 0.048387097 0.016129032 0.008064516 0.004032258
      0.012096774 0     0     0     0.004032258 0.004032258 0     0
      0.004032258 0     0.004032258 0     0.004032258 0     0
2008  1     1     2     0     1     29    30    71.2  0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0.00621118  0.01863354  0.080745342 0.167701863 0.093167702
      0.155279503 0.111801242 0.093167702 0.062111801 0.049689441
      0.02484472  0.01242236  0.00621118  0.01863354  0.00621118
      0.01863354  0.01863354  0.01863354  0.01242236  0.00621118
      0.00621118  0     0.00621118  0     0.00621118
2008  1     1     2     0     1     30    31    54.2  0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0.009708738 0.029126214 0.077669903 0.038834951
      0.048543689 0.155339806 0.058252427 0.019417476 0.048543689
      0.067961165 0.009708738 0.067961165 0.048543689 0.048543689
      0.019417476 0.029126214 0.019417476 0.038834951 0.009708738
      0.019417476 0.029126214 0.029126214 0.009708738 0.067961165
2008  1     1     2     0     1     31    32    22.6  0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0.041666667 0.020833333 0.041666667
      0.020833333 0.041666667 0.020833333 0.020833333 0.020833333
      0.020833333 0.041666667 0.083333333 0.041666667 0     0.041666667
      0.083333333 0.083333333 0     0.020833333 0.020833333 0.0625
      0.041666667 0.229166667
2008  1     1     2     0     1     32    33    12.9  0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0.047619048 0     0     0     0     0     0.095238095
      0     0     0     0     0     0     0     0.047619048 0.047619048
      0     0.047619048 0.047619048 0.047619048 0.047619048 0.095238095
      0.095238095 0.380952381
```

```
2008  1     1     2     0     1     33    34    2.6   0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     1
2008  1     1     2     0     1     34    35    1.3   0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0.5   0     0     0
      0     0     0     0.5
2004  1     1     0     1     1     6     10    0.3   0     1     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0
2004  1     1     0     1     1     11    15    2.0   0     0
      0.360267704 0.639732296 0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0
2004  1     1     0     1     1     16    19    6.9   0     0     0
      0.18687718  0.633465624 0.015283836 0.16437336  0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0
2004  1     1     0     1     1     20    22    23.5  0     0     0
      0.028177033 0.815321692 0.079759691 0.031086902 0     0.006389873
      0.012065037 0     0     0     0     0.027199771 0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
2004  1     1     0     1     1     23    25    11.9  0     0     0
      0     0.459105107 0.433720654 0.094300618 0.012873622 0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0
2004  1     1     0     1     1     26    27    6.6   0     0     0
      0     0     0.855328304 0.019638039 0.007517975 0.109997706 0
      0.007517975 0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
```

```
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0
2004  1     1     0     1     1     28    28    9.6   0     0     0
      0.008361935 0     0.008361935 0.111673272 0.206642815 0.082251627
      0.025085806 0     0     0     0     0.55762261  0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
2004  1     1     0     1     1     29    29    9.3   0     0     0
      0.006191144 0     0     0.071905774 0.241350402 0.153387248
      0.089539286 0     0     0.412861571 0     0.006191144 0
      0.006191144 0.012382288 0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0
2004  1     1     0     1     1     30    30    5.6   0     0     0
      0     0     0     0.112206577 0     0.416327063 0     0
      0.15298569  0.014413174 0     0.014413174 0     0.014413174 0
      0.079015935 0.167398864 0     0.014413174 0     0     0     0
      0     0.014413174 0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0
2004  1     1     0     1     1     31    31    2.0   0     0     0
      0     0     0     0     0.683483227 0.129163295 0     0
      0.129163295 0     0     0     0     0     0.037691579 0     0
      0.010249302 0     0     0.010249302 0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
2004  1     1     0     1     1     32    32    1.3   0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0.499759277 0     0     0     0     0     0     0     0
      0     0     0.420927421 0     0     0     0.079313303 0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0
2004  1     1     0     1     1     33    33    1.7   0     0     0
      0     0     0     0     0     0     0     0     0     0.135301967
      0     0     0.039482925 0     0     0     0     0     0     0
      0     0     0.039482925 0     0     0     0.715966752 0.06976543
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0
2004  1     1     0     1     1     35    35    0.3   0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     1     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0
```

```
2005 1    1    0    1    1    1    5    0.6  0    0.5  0
     0    0.5  0    0    0    0    0    0    0    0    0
     0    0    0    0    0    0    0    0    0    0    0
     0    0    0    0    0    0    0    0    0    0    0
     0    0    0    0    0    0    0    0    0    0    0
     0    0    0    0    0    0    0    0    0    0    0
     0    0    0    0
2005 1    1    0    1    1    6    10   6.5  0    0.902615215
     0.097384785 0    0    0    0    0    0    0    0    0
     0    0    0    0    0    0    0    0    0    0    0
     0    0    0    0    0    0    0    0    0    0    0
     0    0    0    0    0    0    0    0    0    0    0
     0    0    0    0    0    0    0    0    0    0    0
     0    0    0    0    0    0
2005 1    1    0    1    1    11   15   28.0 0    0.027508021
     0.925548717 0.041075355 0    0.005867908 0    0    0    0
     0    0    0    0    0    0    0    0    0    0    0
     0    0    0    0    0    0    0    0    0    0    0
     0    0    0    0    0    0    0    0    0    0    0
     0    0    0    0    0    0    0    0    0    0    0
     0    0    0    0    0    0    0    0
2005 1    1    0    1    1    16   19   12.5 0    0
     0.181179359 0.694366592 0.058753328 0.015530433 0.050170288 0
     0    0    0    0    0    0    0    0    0    0    0
     0    0    0    0    0    0    0    0    0    0    0
     0    0    0    0    0    0    0    0    0    0    0
     0    0    0    0    0    0    0    0    0    0    0
     0    0    0    0    0    0    0    0    0    0
2005 1    1    0    1    1    20   22   14.6 0    0    0
     0    0.108146403 0.837391598 0.003658727 0    0    0
     0.050803272 0    0    0    0    0    0    0    0    0
     0    0    0    0    0    0    0    0    0    0    0
     0    0    0    0    0    0    0    0    0    0    0
     0    0    0    0    0    0    0    0    0    0    0
     0    0    0    0    0    0    0    0    0
2005 1    1    0    1    1    23   25   28.3 0    0    0
     0    0.235490856 0.656550272 0.064892281 0.022111163 0.014317768
     0.00319436  0    0    0    0.0034433   0    0    0    0
     0    0    0    0    0    0    0    0    0    0    0
     0    0    0    0    0    0    0    0    0    0    0
     0    0    0    0    0    0    0    0    0    0    0
     0    0    0    0    0    0    0    0    0    0    0
2005 1    1    0    1    1    26   27   17.0 0    0    0
     0    0    0.525418748 0.251239335 0.136687013 0.062880344 0
     0.003728904 0    0    0    0    0    0    0.010022829 0
     0    0.010022829 0    0    0    0    0    0    0    0
     0    0    0    0    0    0    0    0    0    0    0
     0    0    0    0    0    0    0    0    0    0    0
     0    0    0    0    0    0    0    0    0    0    0
2005 1    1    0    1    1    28   28   14.6 0    0    0
     0    0    0.008942898 0.425634874 0.042357471 0.315330958
     0.178824073 0.006614778 0.022294948 0    0    0    0    0
     0    0    0    0    0    0    0    0    0    0    0
     0    0    0    0    0    0    0    0    0    0    0
```

```
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0
2005  1     1     0     1     1     29    29    15.8  0     0     0
      0     0     0     0.021200933 0.28160237  0.27102761  0.015048084
      0.077760663 0.003762021 0.263111014 0.057176617 0.003762021 0
      0.003667656 0     0     0     0     0     0     0     0
      0.001881011 0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0
2005  1     1     0     1     1     30    30    8.0   0     0     0
      0     0     0     0.004005645 0.295551827 0     0.028039518
      0.324406324 0.017602319 0     0     0.004005645 0.008011291 0
      0.299557472 0     0.010808667 0.004005645 0     0     0
      0.004005645 0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0
2005  1     1     0     1     1     31    31    1.8   0     0     0
      0     0     0     0     0     0     0.138378637 0.16724949
      0.083624745 0     0     0     0     0.145475333 0     0     0
      0     0     0     0     0     0     0.465271795 0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0
2005  1     1     0     1     1     32    32    0.6   0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0.5   0     0     0     0     0.5   0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0
2005  1     1     0     1     1     33    33    1.2   0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0.776895387 0     0     0.223104613 0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0
2005  1     1     0     1     1     34    34    0.3   0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     1     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0
2005  1     1     0     1     1     36    36    0.3   0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     1     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0
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2005  1     1     0     1     1     37    37    0.3   0     0     0
      0     0     0     0     0     0     0     0     1     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0
2009  1     1     1     0     1     20    22    1.062 0     0     0
      0     4     1     1     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0
2009  1     1     1     0     1     23    25    1.24  0     0     0
      0     0     2     3     1     1     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0
2009  1     1     1     0     1     26    27    6.198 0     0     0
      0     0     0     7     10    5     7     5     1     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0
2009  1     1     1     0     1     28    28    20.542      0     0
      0     0     0     0     0     10    47    28    21    3     6
      1     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0
2009  1     1     1     0     1     29    29    30.989      0     0
      0     0     0     0     1     4     39    68    38    10    7
      2     3     1     1     0     0     0     0     0     0     0
      0     0     0     0     1     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0
2009  1     1     1     0     1     30    30    15.406      0     0
      0     0     0     0     0     0     7     19    21    9     7
      7     4     3     3     0     2     0     1     2     0     0
      0     1     0     0     1     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0
2009  1     1     1     0     1     31    31    11.156      0     0
      0     0     0     0     0     0     0     1     5     5     9
      10    10    5     6     1     1     1     2     2     2     0
      0     0     1     0     0     1     1     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
```

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      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0
2009  1     1     1     0     1     32    32    12.573      0     0
      0     0     0     0     0     0     0     0     0     1     5
      7     2     5     1     5     3     3     4     2     4     6
      3     3     3     4     3     1     2     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0
2009  1     1     1     0     1     33    33    10.094      0     0
      0     0     0     0     0     0     0     0     0     0     0
      1     0     2     1     0     4     4     5     3     2     4
      3     5     0     4     3     2     2     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0
2009  1     1     1     0     1     34    34    3.01  0     0     0
      0     0     0     0     0     0     0     0     0     1     0
      0     0     1     0     2     0     0     3     0     0     0
      0     2     0     1     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0
2009  1     1     1     0     1     35    35    2.479 0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     1     1     1     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0
2009  1     1     1     0     1     36    36    0.354 0     0     0
      0     0     0     0     0     0     0     0     0     1     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0
2009  1     1     2     0     1     16    19    0.177 0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     1     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0
2009  1     1     2     0     1     20    22    0.885 0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      5     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0
2009  1     1     2     0     1     23    25    2.656 0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
```

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      0     0     0     0     0     0     0     0     0     0     0
      1     7     3     2     1     1     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0
2009  1     1     2     0     1     26    27    8.854 0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     5     18    15    7     2     1     2     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0
2009  1     1     2     0     1     28    28    31.344      0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     6     42    59    37    14    8     7     1
      2     0     0     0     0     0     0     0     0     0     0
      0     0     0     1     0
2009  1     1     2     0     1     29    29    24.26 0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     1     13    25    32    8     10    17    8     9
      5     1     1     0     2     2     0     0     0     0     0
      1     0     1     1
2009  1     1     2     0     1     30    30    14.521      0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     1     2     4     5     7     5     7
      8     4     0     4     4     4     3     2     3     5     3
      5     2     0     1     0
2009  1     1     2     0     1     31    31    7.969 0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     2     0     1     3     1     1
      2     1     1     1     2     1     1     2     1     2     2
      6     2     3     1
2009  1     1     2     0     1     32    32    1.948 0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     1
      0     1     1     0
2009  1     1     2     0     1     33    33    0.708 0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     1
      0     0     0     0
```

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2010  1     1     1     0     1     23    25    2.801 0     0     0
      0     0     3     9     4     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0
2010  1     1     1     0     1     26    27    3.326 0     0     0
      0     0     0     10    6     0     1     1     0     1     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0
2010  1     1     1     0     1     28    28    10.152      0     0
      0     0     0     0     5     7     9     19    11    5     1
      1     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0
2010  1     1     1     0     1     29    29    21.179      0     0
      0     0     0     0     1     3     9     30    48    17    5
      3     0     1     1     2     0     0     0     1     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0
2010  1     1     1     0     1     30    30    11.552      0     1
      0     0     0     0     0     0     3     10    24    11    7
      4     3     2     0     1     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0
2010  1     1     1     0     1     31    31    8.227 0     1     0
      0     0     0     0     0     0     1     6     14    3     6
      4     0     4     0     2     1     1     1     1     0     0
      0     0     1     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0
2010  1     1     1     0     1     32    32    7.177 0     0     0
      0     0     0     0     0     0     0     0     1     1     3
      0     1     1     1     1     0     6     4     2     1     6
      3     1     1     0     0     1     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0
2010  1     1     1     0     1     33    33    6.651 0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     1     0     1     4     5     1     3     1
      1     2     2     0     6     1     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
```

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      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0
2010  1     1     1     0     1     34    34    4.201 0     0     1
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     1     0     0     1     0     1
      1     1     0     1     4     2     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0
2010  1     1     1     0     1     35    35    1.4   0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     2     0     1     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0
#2010 1     1     1     0     1     36    36    0.7   0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0
2010  1     1     2     0     1     23    25    3.326 0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     1
      2     8     4     2     2     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0
2010  1     1     2     0     1     26    27    6.826 0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     4     12    11    5     3     2     1     1     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0
2010  1     1     2     0     1     28    28    14.353      0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     2     6     11    20    19    9     5     5     2
      2     0     0     0     0     1     0     0     0     0     0
      0     0     0     0     0
2010  1     1     2     0     1     29    29    18.029      0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     1     3     20    24    15    9     5     5
      5     3     2     3     1     1     0     0     1     2     1
      1     0     0     0     0
2010  1     1     2     0     1     30    30    12.253      0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
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      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     1     2     3     1     2     5     7
      4     4     2     3     4     5     3     4     3     1     2
      3     0     2     2     2
2010  1     1     2     0     1     31    31    4.026 0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     1
      0     0     1     2     0     2     1     1     2     0     0
      2     0     0     2
2010  1     1     2     0     1     32    32    0.525 0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     1     0     0
2010  1     1     2     0     1     35    35    0.35  0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     1     0     0     0     1     0     0     0     0     0
      0     0     0     0
2004  1     2     3     0     1     1     -1    213   0.00110392
      0.037170243 0.02591038  0.031416999 0.173777906 0.13906161
      0.024789484 0.004510081 0.003999326 0.003803302 0     0
      0.000139717 0     0     0     0     0.00E+00    0.00E+00    0
      0     0     0     0.00E+00    0     0     0.000275636 0     0
      0.000132646 0     0.00110392  0.055804462 0.027995229 0.033750929
      0.238206031 0.151271425 0.023363925 0.005680731 0.009593011
      0.003336342 0.000902929 0.000810247 0     0     0.000255318
      0.000252794 0.000252794 9.31E-05    9.31E-05    0     0.000255318
      0.000524036 0     9.31E-05    0.000269875 0     0     0     0
      0     0
2001  1     3     1     0     1     14    14    1.0   0     0
      0.833333333 0.166666667 0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0
2001  1     3     1     0     1     15    15    1.5   0     0
      0.888888889 0.111111111 0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0
2001  1     3     1     0     1     16    16    2.6   0     0     1
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
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      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0
2001  1     3     1     0     1     17    17    1.4   0     0     1
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0
2001  1     3     1     0     1     18    18    0.7   0     0     0.5
      0.5   0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0
2001  1     3     1     0     1     19    19    0.3   0     0     0.5
      0.5   0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0
2001  1     3     1     0     1     20    20    0.5   0     0     0
      0.666666667 0.333333333 0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0
2001  1     3     1     0     1     21    21    0.2   0     0     0
      0     1     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0
2001  1     3     1     0     1     22    22    0.3   0     0     0
      0     1     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0
2001  1     3     1     0     1     23    23    0.3   0     0     0
      0     1     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0
2001  1     3     1     0     1     24    24    1.0   0     0     0
      0.166666667 0.666666667 0.166666667 0     0     0     0     0
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      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0
2001  1     3     1     0     1     25    25    0.2   0     0     0
      0     1     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0
2001  1     3     1     0     1     26    26    1.0   0     0     0
      0     0.166666667 0.5   0.333333333 0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0
2001  1     3     1     0     1     27    27    1.5   0     0     0
      0     0     0.444444444 0.555555556 0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0
2001  1     3     1     0     1     28    28    3.1   0     0     0
      0     0.055555556 0.166666667 0.777777778 0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0
2001  1     3     1     0     1     29    29    1.2   0     0     0
      0     0     0.285714286 0.571428571 0.142857143 0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0
2001  1     3     1     0     1     30    30    0.2   0     0     0
      0     0     0     1     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0
2001  1     3     1     0     1     31    31    0.2   0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     1     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0
```

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2001  1     3     1     0     1     32    32    0.3   0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0.5   0     0     0.5
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0
2001  1     3     1     0     1     33    33    0.2   0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     1     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0
2001  1     3     2     0     1     14    14    0.3   0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0.833333333
      0.166666667 0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0
2001  1     3     2     0     1     15    15    1.9   0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0.888888889
      0.111111111 0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0
2001  1     3     2     0     1     16    16    2.2   0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     1     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0
2001  1     3     2     0     1     17    17    1.2   0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     1     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0
2001  1     3     2     0     1     18    18    0.2   0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0.5   0.5   0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0
2001  1     3     2     0     1     19    19    0.3   0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0.5   0.5   0
      0     0     0     0     0     0     0     0     0     0     0
```

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      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0
2001  1     3     2     0     1     20    20    0.2   0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0.666666667
      0.333333333 0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0
2001  1     3     2     0     1     21    21    0.2   0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     1
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0
2001  1     3     2     0     1     22    22    0.9   0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     1
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0
2001  1     3     2     0     1     23    23    0.9   0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     1
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0
2001  1     3     2     0     1     24    24    0.3   0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0.166666667
      0.666666667 0.166666667 0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0
2001  1     3     2     0     1     25    25    0.5   0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     1
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0
2001  1     3     2     0     1     26    26    1.5   0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0
      0.166666667 0.5   0.333333333 0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0
2001  1     3     2     0     1     27    27    2.0   0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
```

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      0     0     0     0     0     0     0     0     0     0     0
      0.444444444 0.555555556 0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0
2001  1     3     2     0     1     28    28    1.0   0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0
      0.055555556 0.166666667 0.777777778 0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0
2001  1     3     2     0     1     29    29    0.3   0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0.285714286 0.571428571 0.142857143 0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0
2001  1     3     2     0     1     31    31    0.2   0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     1     0     0     0     0     0     0
      0     0     0     0
2001  1     3     2     0     1     32    32    0.2   0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0.5   0     0     0.5   0     0
      0     0     0     0
2003  1     4     1     0     1     13    13    1     0     0     0
      100   0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0
2003  1     4     1     0     1     14    14    1     0     0     0
      100   0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0
2003  1     4     1     0     1     16    16    2     0     0     0
      100   0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0
```

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2003 1     4     1     0     1     17    17    2     0     0     0
     50    50    0     0     0     0     0     0     0     0     0
     0     0     0     0     0     0     0     0     0     0     0
     0     0     0     0     0     0     0     0     0     0     0
     0     0     0     0     0     0     0     0     0     0     0
     0     0     0     0     0     0     0     0     0     0     0
     0     0     0     0
2003 1     4     1     0     1     18    18    5     0     0     0
     80    20    0     0     0     0     0     0     0     0     0
     0     0     0     0     0     0     0     0     0     0     0
     0     0     0     0     0     0     0     0     0     0     0
     0     0     0     0     0     0     0     0     0     0     0
     0     0     0     0     0     0     0     0     0     0     0
     0     0     0     0
2003 1     4     1     0     1     19    19    8     0     0     0
     62.5  37.5  0     0     0     0     0     0     0     0     0
     0     0     0     0     0     0     0     0     0     0     0
     0     0     0     0     0     0     0     0     0     0     0
     0     0     0     0     0     0     0     0     0     0     0
     0     0     0     0     0     0     0     0     0     0     0
     0     0     0     0
2003 1     4     1     0     1     20    20    6     0     0     0
     16.66666667 83.33333333 0     0     0     0     0     0     0     0
     0     0     0     0     0     0     0     0     0     0     0
     0     0     0     0     0     0     0     0     0     0     0
     0     0     0     0     0     0     0     0     0     0     0
     0     0     0     0     0     0     0     0     0     0     0
     0     0     0     0     0     0
2003 1     4     1     0     1     21    21    11    0     0     0
     18.18181818 63.63636364 18.18181818 0     0     0     0     0     0     0
     0     0     0     0     0     0     0     0     0     0     0
     0     0     0     0     0     0     0     0     0     0     0
     0     0     0     0     0     0     0     0     0     0     0
     0     0     0     0     0     0     0     0     0     0     0
     0     0     0     0     0     0     0
2003 1     4     1     0     1     22    22    12    0     0     0
     0     50    50    0     0     0     0     0     0     0     0
     0     0     0     0     0     0     0     0     0     0     0
     0     0     0     0     0     0     0     0     0     0     0
     0     0     0     0     0     0     0     0     0     0     0
     0     0     0     0     0     0     0     0     0     0     0
     0     0     0     0
2003 1     4     1     0     1     23    23    18    0     0     0
     0     61.11111111 16.66666667 16.66666667 5.555555556 0     0
     0     0     0     0     0     0     0     0     0     0     0
     0     0     0     0     0     0     0     0     0     0     0
     0     0     0     0     0     0     0     0     0     0     0
     0     0     0     0     0     0     0     0     0     0     0
     0     0     0     0     0     0     0     0
2003 1     4     1     0     1     24    24    16    0     0     0
     0     62.5  25    12.5  0     0     0     0     0     0     0
     0     0     0     0     0     0     0     0     0     0     0
     0     0     0     0     0     0     0     0     0     0     0
     0     0     0     0     0     0     0     0     0     0     0
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      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0
2003  1     4     1     0     1     25    25    10    0     0     0
      0     50    20    20    10    0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0
2003  1     4     1     0     1     26    26    5     0     0     0
      0     20    20    20    40    0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0
2003  1     4     1     0     1     27    27    7     0     0     0
      0     0     14.28571429 57.14285714 14.28571429 0     14.28571429
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0
2003  1     4     1     0     1     28    28    19    0     0     0
      0     0     31.57894737 10.52631579 31.57894737 10.52631579
      10.52631579 5.263157895 0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
2003  1     4     1     0     1     29    29    23    0     0     0
      0     0     0     0     17.39130435 17.39130435 39.13043478
      13.04347826 4.347826087 4.347826087 0     0     0     0     0
      4.347826087 0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0
2003  1     4     1     0     1     30    30    19    0     0     0
      0     0     0     0     15.78947368 47.36842105 15.78947368
      15.78947368 0     0     0     0     5.263157895 0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0
2003  1     4     1     0     1     31    31    9     0     0     0
      0     0     0     0     0     0     11.11111111 22.22222222
      11.11111111 0     22.22222222 0     0     11.11111111 0     0
      0     11.11111111 0     0     11.11111111 0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0
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2003  1     4     1     0     1     32    32    7     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      14.28571429 0     0     28.57142857 28.57142857 0     0     0
      14.28571429 0     0     0     0     0     0     0     14.28571429
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0
2003  1     4     1     0     1     33    33    10    0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     10    20    0     10    0     0     0     10    0
      10    0     0     0     0     40    0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0
2003  1     4     1     0     1     34    34    9     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     100   0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0
2003  1     4     1     0     1     35    35    2     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     100   0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0
2003  1     4     1     0     1     36    36    1     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     100   0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0
2004  1     4     1     0     1     11    11    1     0     0     100
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0
2004  1     4     1     0     1     12    12    1     0     0     100
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0
2004  1     4     1     0     1     13    13    3     0     0     100
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
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      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0
2004  1     4     1     0     1     14    14    2     0     0     100
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0
2004  1     4     1     0     1     15    15    4     0     0     50
      50    0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0
2004  1     4     1     0     1     16    16    4     0     0     25
      75    0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0
2004  1     4     1     0     1     18    18    2     0     0     0
      0     100   0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0
2004  1     4     1     0     1     19    19    2     0     0     0
      50    0     50    0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0
2004  1     4     1     0     1     20    20    9     0     0     0
      11.11111111 66.66666667 22.22222222 0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0
2004  1     4     1     0     1     21    21    7     0     0     0
      14.28571429 71.42857143 14.28571429 0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0
2004  1     4     1     0     1     22    22    23    0     0     0
      4.347826087 73.91304348 21.73913043 0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
```

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      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0
2004  1     4     1     0     1     23    23    13    0     0     0
      0     69.23076923 30.76923077 0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0
2004  1     4     1     0     1     24    24    12    0     0     0
      0     83.33333333 16.66666667 0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0
2004  1     4     1     0     1     25    25    17    0     0     0
      0     41.17647059 47.05882353 11.76470588 0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0
2004  1     4     1     0     1     26    26    11    0     0     0
      0     27.27272727 54.54545455 9.090909091 9.090909091 0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0
2004  1     4     1     0     1     27    27    14    0     0     0
      0     21.42857143 78.57142857 0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0
2004  1     4     1     0     1     28    28    13    0     0     0
      0     0     46.15384615 23.07692308 30.76923077 0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0
2004  1     4     1     0     1     29    29    5     0     0     0
      0     0     20    0     0     20    60    0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0
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2004  1     4     1     0     1     30    30    4     0     0     0
      0     0     0     0     25    25    25    0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     25    0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0
2004  1     4     1     0     1     31    31    3     0     0     0
      0     0     0     0     0     33.33333333 0     0     0     0
      0     0     33.33333333 0     33.33333333 0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0
2004  1     4     1     0     1     32    32    2     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     100   0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0
2004  1     4     1     0     1     33    33    1     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     100   0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0
2004  1     4     1     0     1     34    34    1     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     100   0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0
2005  1     4     1     0     1     9     9     1     0     0     100
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0
2005  1     4     1     0     1     11    11    1     0     0     100
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0
2005  1     4     1     0     1     13    13    3     0     0     100
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
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      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0
2005  1     4     1     0     1     15    15    1     0     0     0
      100   0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0
2005  1     4     1     0     1     16    16    2     0     0     0
      100   0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0
2005  1     4     1     0     1     17    17    4     0     0     0
      100   0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0
2005  1     4     1     0     1     18    18    3     0     0     0
      100   0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0
2005  1     4     1     0     1     19    19    1     0     0     0
      0     100   0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0
2005  1     4     1     0     1     20    20    3     0     0     0
      33.33333333 33.33333333 33.33333333 0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0
2005  1     4     1     0     1     21    21    7     0     0     0
      0     57.14285714 42.85714286 0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0
2005  1     4     1     0     1     22    22    12    0     0     0
      8.333333333 16.66666667 66.66666667 8.333333333 0     0     0
      0     0     0     0     0     0     0     0     0     0     0
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      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0
2005  1     4     1     0     1     23    23    14    0     0     0
      0     7.142857143 64.28571429 28.57142857 0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0
2005  1     4     1     0     1     24    24    8     0     0     0
      0     12.5  87.5  0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0
2005  1     4     1     0     1     25    25    18    0     0     0
      0     5.555555556 66.66666667 27.77777778 0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0
2005  1     4     1     0     1     26    26    13    0     0     0
      0     0     46.15384615 53.84615385 0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0
2005  1     4     1     0     1     27    27    13    0     0     0
      0     7.692307692 23.07692308 61.53846154 7.692307692 0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0
2005  1     4     1     0     1     28    28    18    0     0     0
      0     0     5.555555556 83.33333333 11.11111111 0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0
2005  1     4     1     0     1     29    29    25    0     0     0
      0     0     4     28    28    28    0     12    0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0
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2005  1     4     1     0     1     30    30    10    0     0     0
      0     0     0     0     0     30    40    10    20    0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0
2005  1     4     1     0     1     31    31    7     0     0     0
      0     0     0     0     0     14.28571429 0     0     42.85714286
      0     0     14.28571429 0     0     0     0     14.28571429 0
      0     0     0     0     14.28571429 0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0
2005  1     4     1     0     1     32    32    6     0     0     0
      0     0     0     0     0     0     0     0     0     16.66666667
      33.33333333 0     0     0     0     0     0     0     0     0
      0     0     16.66666667 16.66666667 0     0     0     16.66666667
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0
2005  1     4     1     0     1     33    33    8     0     0     0
      0     0     0     0     0     0     0     12.5  0     0     12.5
      12.5  0     0     12.5  0     0     0     12.5  12.5  0     12.5
      0     0     0     0     0     12.5  0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0
2005  1     4     1     0     1     34    34    3     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     33.33333333 33.33333333 33.33333333 0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0
2005  1     4     1     0     1     35    35    1     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      100   0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0
2005  1     4     1     0     1     36    36    1     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     100   0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0
2006  1     4     1     0     1     11    11    2     0     0     100
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
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      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0
2006  1     4     1     0     1     12    12    1     0     0     100
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0
2006  1     4     1     0     1     13    13    6     0     0     100
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0
2006  1     4     1     0     1     14    14    2     0     0     100
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0
2006  1     4     1     0     1     15    15    5     0     0     40
      60    0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0
2006  1     4     1     0     1     16    16    9     0     0     0
      100   0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0
2006  1     4     1     0     1     17    17    10    0     0     0
      100   0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0
2006  1     4     1     0     1     18    18    9     0     0     0
      55.55555556 44.44444444 0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0
2006  1     4     1     0     1     19    19    8     0     0     0
      37.5  62.5  0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
```

```
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0
2006  1     4     1     0     1     20    20    13    0     0     0
      15.38461538 84.61538462 0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0
2006  1     4     1     0     1     21    21    8     0     0     0
      0     75    25    0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0
2006  1     4     1     0     1     22    22    4     0     0     0
      0     25    75    0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0
2006  1     4     1     0     1     23    23    9     0     0     0
      0     11.11111111 66.66666667 11.11111111 11.11111111 0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0
2006  1     4     1     0     1     24    24    4     0     0     0
      0     0     75    25    0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0
2006  1     4     1     0     1     25    25    24    0     0     0
      0     0     29.16666667 66.66666667 4.166666667 0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0
2006  1     4     1     0     1     26    26    16    0     0     0
      0     0     18.75 75    6.25  0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0
```

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2006  1     4     1     0     1     27    27    18    0     0     0
      0     0     0     88.88888889 11.11111111 0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0
2006  1     4     1     0     1     28    28    43    0     0     0
      0     0     0     13.95348837 69.76744186 16.27906977 0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0
2006  1     4     1     0     1     29    29    24    0     0     0
      0     0     0     4.166666667 25    50    20.83333333 0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0
2006  1     4     1     0     1     30    30    14    0     0     0
      0     0     0     0     7.142857143 0     21.42857143 57.14285714
      14.28571429 0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0
2006  1     4     1     0     1     31    31    8     0     0     0
      0     0     0     0     0     0     0     25    37.5  37.5  0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0
2006  1     4     1     0     1     32    32    2     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     50    0     0     0     0     0     0     0     50
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0
2006  1     4     1     0     1     33    33    1     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     100   0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0
2006  1     4     1     0     1     34    34    1     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     100   0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
```

```
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0
2007  1     4     1     0     1     12    12    1     0     0     100
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0
2007  1     4     1     0     1     13    13    2     0     0     0
      100   0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0
2007  1     4     1     0     1     14    14    1     0     0     0
      100   0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0
2007  1     4     1     0     1     15    15    3     0     0     0
      66.66666667 33.33333333 0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0
2007  1     4     1     0     1     16    16    8     0     0     0
      75    25    0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0
2007  1     4     1     0     1     17    17    14    0     0     0
      78.57142857 21.42857143 0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0
2007  1     4     1     0     1     18    18    11    0     0     0
      18.18181818 81.81818182 0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0
2007  1     4     1     0     1     19    19    7     0     0     0
      14.28571429 85.71428571 0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
```

	0	0	0	0	0	0	0	0	0	0	0
	0	0	0	0	0	0	0	0	0	0	0
	0	0	0	0	0	0	0	0	0	0	0
	0	0	0	0	0	0					
2007	1	4	1	0	1	20	20	9	0	0	0
	0	66.66666667	33.33333333	0	0	0	0	0	0	0	0
	0	0	0	0	0	0	0	0	0	0	0
	0	0	0	0	0	0	0	0	0	0	0
	0	0	0	0	0	0	0	0	0	0	0
	0	0	0	0	0	0	0	0	0	0	0
	0	0	0	0	0	0					
2007	1	4	1	0	1	21	21	9	0	0	0
	0	88.88888889	0	11.11111111	0	0	0	0	0	0	0
	0	0	0	0	0	0	0	0	0	0	0
	0	0	0	0	0	0	0	0	0	0	0
	0	0	0	0	0	0	0	0	0	0	0
	0	0	0	0	0	0	0	0	0	0	0
	0	0	0	0	0	0					
2007	1	4	1	0	1	22	22	12	0	0	0
	0	41.66666667	50	8.333333333	0	0	0	0	0	0	0
	0	0	0	0	0	0	0	0	0	0	0
	0	0	0	0	0	0	0	0	0	0	0
	0	0	0	0	0	0	0	0	0	0	0
	0	0	0	0	0	0	0	0	0	0	0
	0	0	0	0	0	0					
2007	1	4	1	0	1	23	23	6	0	0	0
	0	0	83.33333333	16.66666667	0	0	0	0	0	0	0
	0	0	0	0	0	0	0	0	0	0	0
	0	0	0	0	0	0	0	0	0	0	0
	0	0	0	0	0	0	0	0	0	0	0
	0	0	0	0	0	0	0	0	0	0	0
	0	0	0	0	0	0					
2007	1	4	1	0	1	24	24	12	0	0	0
	0	0	50	33.33333333	8.333333333	8.333333333	0	0	0	0	0
	0	0	0	0	0	0	0	0	0	0	0
	0	0	0	0	0	0	0	0	0	0	0
	0	0	0	0	0	0	0	0	0	0	0
	0	0	0	0	0	0	0	0	0	0	0
	0	0	0	0	0	0					
2007	1	4	1	0	1	25	25	12	0	0	0
	0	0	33.33333333	33.33333333	25	8.333333333	0	0	0	0	0
	0	0	0	0	0	0	0	0	0	0	0
	0	0	0	0	0	0	0	0	0	0	0
	0	0	0	0	0	0	0	0	0	0	0
	0	0	0	0	0	0	0	0	0	0	0
	0	0	0	0	0	0	0				
2007	1	4	1	0	1	26	26	19	0	0	0
	0	0	10.52631579	47.36842105	26.31578947	15.78947368	0	0	0	0	0
	0	0	0	0	0	0	0	0	0	0	0
	0	0	0	0	0	0	0	0	0	0	0
	0	0	0	0	0	0	0	0	0	0	0
	0	0	0	0	0	0	0	0	0	0	0
	0	0	0	0	0	0	0	0			

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2007  1     4     1     0     1     27    27    18    0     0     0
      0     0     0     33.33333333 44.44444444 11.11111111 11.11111111
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0
2007  1     4     1     0     1     28    28    40    0     0     0
      0     0     0     12.5  52.5  30    5     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0
2007  1     4     1     0     1     29    29    24    0     0     0
      0     0     0     12.5  20.83333333 45.83333333 16.66666667
      4.166666667 0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0
2007  1     4     1     0     1     30    30    15    0     0     0
      0     0     0     6.666666667 26.66666667 33.33333333 13.33333333
      6.666666667 13.33333333 0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0
2007  1     4     1     0     1     31    31    9     0     0     0
      0     0     0     0     0     0     0     33.33333333 22.22222222
      22.22222222 11.11111111 0     0     0     0     0     0     0     0
      0     0     0     0     0     11.11111111 0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0
2007  1     4     1     0     1     32    32    8     0     0     0
      0     0     0     0     0     0     0     0     0     12.5  0
      12.5  0     25    12.5  0     12.5  12.5  0     0     0     0
      0     0     0     12.5  0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0
2007  1     4     1     0     1     34    34    2     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     50    50    0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0
2007  1     4     1     0     1     35    35    2     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      50    0     0     0     0     50    0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
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      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0
2008  1     4     1     0     1     14    14    1     0     0     0
      100   0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0
2008  1     4     1     0     1     15    15    16    0     0     0
      93.75 6.25  0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0
2008  1     4     1     0     1     16    16    18    0     0     0
      94.44444444 5.555555556 0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0
2008  1     4     1     0     1     17    17    11    0     0     0
      72.72727273 27.27272727 0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0
2008  1     4     1     0     1     18    18    14    0     0     0
      7.142857143 85.71428571 7.142857143 0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0
2008  1     4     1     0     1     19    19    10    0     0     0
      0     90    10    0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0
2008  1     4     1     0     1     20    20    15    0     0     0
      0     86.66666667 13.33333333 0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0
2008  1     4     1     0     1     21    21    12    0     0     0
      0     33.33333333 58.33333333 8.333333333 0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
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      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0
2008  1     4     1     0     1     22    22    8     0     0     0
      0     37.5  50    12.5  0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0
2008  1     4     1     0     1     23    23    9     0     0     0
      0     22.22222222 55.55555556 22.22222222 0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0
2008  1     4     1     0     1     24    24    5     0     0     0
      0     0     60    40    0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0
2008  1     4     1     0     1     25    25    4     0     0     0
      0     0     25    75    0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0
2008  1     4     1     0     1     26    26    9     0     0     0
      0     0     0     44.44444444 55.55555556 0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0
2008  1     4     1     0     1     27    27    8     0     0     0
      0     0     0     25    62.5  12.5  0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0
2008  1     4     1     0     1     28    28    38    0     0     0
      0     0     0     0     26.31578947 47.36842105 23.68421053
      2.631578947 0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0
```

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2008 1     4     1     0     1     29    29    16    0     0     0
     0     0     0     0     12.5  18.75 31.25 31.25 6.25  0     0
     0     0     0     0     0     0     0     0     0     0     0
     0     0     0     0     0     0     0     0     0     0     0
     0     0     0     0     0     0     0     0     0     0     0
     0     0     0     0     0     0     0     0     0     0     0
     0     0     0     0
2008 1     4     1     0     1     30    30    15    0     0     0
     0     0     0     0     6.666666667 6.666666667 13.33333333
     13.33333333 26.66666667 6.666666667 20    0     0     0     0
     0     0     0     0     6.666666667 0     0     0     0     0
     0     0     0     0     0     0     0     0     0     0     0
     0     0     0     0     0     0     0     0     0     0     0
     0     0     0     0     0     0     0     0     0     0     0
     0
2008 1     4     1     0     1     31    31    11    0     0     0
     0     0     0     0     0     9.090909091 0     18.18181818 0
     18.18181818 0     0     0     0     0     0     18.18181818 0
     18.18181818 9.090909091 9.090909091 0     0     0     0     0
     0     0     0     0     0     0     0     0     0     0     0
     0     0     0     0     0     0     0     0     0     0     0
     0     0     0     0     0     0     0     0     0     0     0
2008 1     4     1     0     1     32    32    5     0     0     0
     0     0     0     0     0     0     0     0     0     20    20
     0     0     20    0     0     0     0     40    0     0     0
     0     0     0     0     0     0     0     0     0     0     0
     0     0     0     0     0     0     0     0     0     0     0
     0     0     0     0     0     0     0     0     0     0     0
     0     0     0     0
2008 1     4     1     0     1     33    33    8     0     0     0
     0     0     0     0     0     0     0     0     0     0     0
     0     12.5  0     0     0     0     0     12.5  12.5  12.5  0
     0     12.5  12.5  12.5  0     12.5  0     0     0     0     0
     0     0     0     0     0     0     0     0     0     0     0
     0     0     0     0     0     0     0     0     0     0     0
     0     0     0     0
2008 1     4     1     0     1     34    34    3     0     0     0
     0     0     0     0     0     0     0     0     0     0     0
     0     0     0     0     0     0     0     0     0     0     0
     66.66666667 0     0     0     0     33.33333333 0     0     0
     0     0     0     0     0     0     0     0     0     0     0
     0     0     0     0     0     0     0     0     0     0     0
     0     0     0     0     0     0
2008 1     4     1     0     1     35    35    1     0     0     0
     0     0     0     0     0     0     0     0     0     0     0
     0     0     0     0     0     0     0     0     0     0     0
     0     100   0     0     0     0     0     0     0     0     0
     0     0     0     0     0     0     0     0     0     0     0
     0     0     0     0     0     0     0     0     0     0     0
     0     0     0     0
2009 1     4     1     0     1     6     6     1     0     100   0
     0     0     0     0     0     0     0     0     0     0     0
     0     0     0     0     0     0     0     0     0     0     0
     0     0     0     0     0     0     0     0     0     0     0
```

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      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0
2009  1     4     1     0     1     8     8     3     0     100   0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0
2009  1     4     1     0     1     10    10    2     0     100   0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0
2009  1     4     1     0     1     11    11    1     0     100   0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0
2009  1     4     1     0     1     12    12    4     0     0     100
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0
2009  1     4     1     0     1     13    13    2     0     0     50
      50    0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0
2009  1     4     1     0     1     14    14    3     0     0     100
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0
2009  1     4     1     0     1     15    15    7     0     0
      42.85714286 57.14285714 0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0
2009  1     4     1     0     1     16    16    9     0     0
      22.22222222 55.55555556 22.22222222 0     0     0     0     0
```

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      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0
2009  1     4     1     0     1     17    17    7     0     0     0
      57.14285714 42.85714286 0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0
2009  1     4     1     0     1     18    18    11    0     0     0
      54.54545455 45.45454545 0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0
2009  1     4     1     0     1     19    19    9     0     0     0
      0     100   0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0
2009  1     4     1     0     1     20    20    12    0     0     0
      8.333333333 83.33333333 8.333333333 0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0
2009  1     4     1     0     1     21    21    20    0     0     0
      0     60    40    0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0
2009  1     4     1     0     1     22    22    18    0     0     0
      0     27.77777778 55.55555556 16.66666667 0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0
2009  1     4     1     0     1     23    23    19    0     0     0
      0     10.52631579 78.94736842 5.263157895 5.263157895 0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0
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2009  1     4     1     0     1     24    24    10    0     0     0
      0     0     80    20    0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0
2009  1     4     1     0     1     25    25    12    0     0     0
      0     0     33.33333333 50    16.66666667 0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0
2009  1     4     1     0     1     26    26    10    0     0     0
      0     0     0     70    0     0     20    10    0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0
2009  1     4     1     0     1     27    27    11    0     0     0
      0     0     0     36.36363636 18.18181818 18.18181818 18.18181818
      9.090909091 0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0
2009  1     4     1     0     1     28    28    24    0     0     0
      0     0     0     8.333333333 62.5  16.66666667 4.166666667
      4.166666667 4.166666667 0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0
2009  1     4     1     0     1     29    29    44    0     0     0
      0     0     0     0     15.90909091 40.90909091 36.36363636
      2.272727273 2.272727273 2.272727273 0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
2009  1     4     1     0     1     30    30    16    0     0     0
      0     0     0     0     0     6.25  37.5  12.5  25    6.25  0
      6.25  0     6.25  0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0
2009  1     4     1     0     1     31    31    16    0     0     0
      0     0     0     0     0     6.25  0     6.25  12.5  31.25 18.75
      6.25  12.5  0     0     0     0     0     0     0     0     0
      0     6.25  0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
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      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0
2009  1     4     1     0     1     32    32    12    0     0     0
      0     0     0     0     0     0     0     0     0     8.333333333
      0     25    8.333333333 0     8.333333333 8.333333333 16.66666667
      0     8.333333333 0     0     0     0     0     0     0     0
      16.66666667 0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
2009  1     4     1     0     1     33    33    8     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     12.5  12.5  0     12.5  12.5  12.5
      0     12.5  12.5  0     0     12.5  0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0
2009  1     4     1     0     1     34    34    6     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     50    0     0     50    0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0
2009  1     4     1     0     1     35    35    3     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     33.33333333 0     0     0     66.66666667 0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0
2010  1     4     1     0     1     12    12    3     0     0     100
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0
2010  1     4     1     0     1     13    13    4     0     0     100
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0
2010  1     4     1     0     1     14    14    5     0     0     100
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0
2010  1     4     1     0     1     15    15    5     0     0     60
      40    0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
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      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0
2010  1     4     1     0     1     16    16    7     0     0     0
      100   0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0
2010  1     4     1     0     1     17    17    5     0     0     0
      100   0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0
2010  1     4     1     0     1     18    18    8     0     0     0
      37.5  50    12.5  0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0
2010  1     4     1     0     1     19    19    14    0     0     0
      28.57142857 64.28571429 7.142857143 0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0
2010  1     4     1     0     1     20    20    12    0     0     0
      16.66666667 58.33333333 25    0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0
2010  1     4     1     0     1     21    21    15    0     0     0
      0     60    40    0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0
2010  1     4     1     0     1     22    22    9     0     0     0
      0     0     77.77777778 22.22222222 0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0
```

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2010  1     4     1     0     1     23    23    13    0     0     0
      0     7.692307692 61.53846154 30.76923077 0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0
2010  1     4     1     0     1     24    24    7     0     0     0
      0     0     28.57142857 71.42857143 0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0
2010  1     4     1     0     1     25    25    13    0     0     0
      0     0     23.07692308 69.23076923 7.692307692 0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0
2010  1     4     1     0     1     26    26    8     0     0     0
      0     0     12.5  62.5  25    0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0
2010  1     4     1     0     1     27    27    6     0     0     0
      0     0     0     50    50    0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0
2010  1     4     1     0     1     28    28    15    0     0     0
      0     0     0     13.33333333 46.66666667 26.66666667 0
      13.33333333 0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0
2010  1     4     1     0     1     29    29    24    0     0     0
      0     0     0     0     12.5  12.5  8.333333333 66.66666667 0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0
2010  1     4     1     0     1     30    30    18    0     0     0
      0     0     0     0     0     5.555555556 5.555555556 27.77777778
      22.22222222 22.22222222 5.555555556 0     11.11111111 0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
```

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      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
2010  1     4     1     0     1     31    31    10    0     0     0
      0     0     0     0     0     0     0     20    10    0     10
      10    10    0     20    0     10    10    0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0
2010  1     4     1     0     1     32    32    3     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      33.33333333 0     33.33333333 0     0     0     0     33.33333333
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0
2010  1     4     1     0     1     33    33    9     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     11.11111111 0     22.22222222 11.11111111 0     0     0
      11.11111111 0     0     0     0     0     11.11111111 0
      33.33333333 0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
2010  1     4     1     0     1     34    34    3     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     100   0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0
2003  1     4     2     0     1     13    13    1     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     100   0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0
2003  1     4     2     0     1     14    14    2     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     100   0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0
2003  1     4     2     0     1     16    16    2     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     100   0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0
2003  1     4     2     0     1     17    17    10    0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
```

```
      0     0     0     0     0     0     0     0     10    80    10
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0
2003  1     4     2     0     1     18    18    21    0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     4.761904762
      76.19047619 19.04761905 0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0
2003  1     4     2     0     1     19    19    20    0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     75    20
      5     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0
2003  1     4     2     0     1     20    20    13    0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     30.76923077
      46.15384615 15.38461538 0     7.692307692 0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0
2003  1     4     2     0     1     21    21    23    0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     4.347826087
      73.91304348 17.39130435 0     4.347826087 0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0
2003  1     4     2     0     1     22    22    24    0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     8.333333333
      50    37.5  4.166666667 0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0
2003  1     4     2     0     1     23    23    23    0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0
      65.2173913  21.73913043 8.695652174 4.347826087 0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0
2003  1     4     2     0     1     24    24    23    0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     4.347826087
      60.86956522 17.39130435 4.347826087 4.347826087 4.347826087 0
      4.347826087 0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
```

```
2003  1     4     2     0     1     25    25    10    0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     50
      20    10    20    0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0
2003  1     4     2     0     1     26    26    11    0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0
      18.18181818 45.45454545 36.36363636 0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0
2003  1     4     2     0     1     27    27    10    0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     10
      10    10    50    0     20    0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0
2003  1     4     2     0     1     28    28    33    0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0
      6.060606061 9.090909091 9.090909091 33.33333333 18.18181818
      6.060606061 3.03030303  3.03030303  3.03030303  3.03030303  0
      0     0     3.03030303  3.03030303  0     0     0     0     0
      0     0     0     0     0     0     0
2003  1     4     2     0     1     29    29    24    0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     8.333333333 29.16666667 16.66666667 12.5  0     4.166666667
      4.166666667 0     8.333333333 0     0     0     4.166666667
      8.333333333 0     0     4.166666667 0     0     0     0     0
      0     0     0
2003  1     4     2     0     1     30    30    4     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     25    25    0     0     0     0
      0     0     0     0     0     0     0     0     0     0     25
      25    0     0     0
2003  1     4     2     0     1     31    31    5     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     20
      0     0     20    0     0     0     0     0     0     0     0
      0     0     0     60
2003  1     4     2     0     1     32    32    1     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
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      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0   100
2003  1     4     2     0     1    34    34     1     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0   100
2003  1     4     2     0     1    35    35     1     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0   100
2004  1     4     2     0     1    12    12     1     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0   100     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0
2004  1     4     2     0     1    13    13     1     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0   100     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0
2004  1     4     2     0     1    14    14     4     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0    75    25     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0
2004  1     4     2     0     1    15    15     3     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0   100     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0
2004  1     4     2     0     1    16    16     4     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0    25    50    25
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0
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2004  1     4     2     0     1     17    17    2     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     100   0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0
2004  1     4     2     0     1     18    18    6     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     50    50
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0
2004  1     4     2     0     1     19    19    12    0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     25
      66.66666667 0     0     8.333333333 0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0
2004  1     4     2     0     1     20    20    15    0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     26.66666667
      46.66666667 20    6.666666667 0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0
2004  1     4     2     0     1     21    21    12    0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     75
      25    0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0
2004  1     4     2     0     1     22    22    15    0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     80
      20    0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0
2004  1     4     2     0     1     23    23    25    0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     88
      12    0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0
2004  1     4     2     0     1     24    24    21    0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0
      76.19047619 23.80952381 0     0     0     0     0     0     0
```

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      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0
2004  1     4     2     0     1     25    25    15    0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0
      53.33333333 46.66666667 0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0
2004  1     4     2     0     1     26    26    8     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     25
      75    0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0
2004  1     4     2     0     1     27    27    8     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     12.5
      87.5  0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0
2004  1     4     2     0     1     28    28    10    0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     30    40    10    0     0     0     0     10    0     0
      10    0     0     0     0     0     0     0     0     0     0
      0     0     0     0
2004  1     4     2     0     1     29    29    15    0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     6.666666667 20    26.66666667 0     26.66666667 0     0
      0     0     6.666666667 0     6.666666667 0     0     0     0
      6.666666667 0     0     0     0     0     0     0     0
2004  1     4     2     0     1     30    30    12    0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     8.333333333 0     0     0     0     0
      8.333333333 8.333333333 16.66666667 8.333333333 0     0
      8.333333333 0     0     0     0     0     8.333333333 8.333333333
      0     8.333333333 16.66666667
2004  1     4     2     0     1     31    31    4     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     25    25    0     0     0     0     25    0     0     0
      0     0     0     25
2004  1     4     2     0     1     32    32    1     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
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      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0   100
      0     0     0     0
2004  1     4     2     0     1    33    33     1     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0   100
2005  1     4     2     0     1    10    10     1     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0   100     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0
2005  1     4     2     0     1    11    11     2     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0   100     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0
2005  1     4     2     0     1    12    12     5     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0   100     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0
2005  1     4     2     0     1    13    13     3     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0   100     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0
2005  1     4     2     0     1    14    14     4     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0    75    25     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0
2005  1     4     2     0     1    15    15     2     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0    50    50     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0
```

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2005  1     4     2     0     1     16    16    2     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     100   0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0
2005  1     4     2     0     1     17    17    3     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     100   0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0
2005  1     4     2     0     1     18    18    4     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     100   0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0
2005  1     4     2     0     1     19    19    4     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     25    75
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0
2005  1     4     2     0     1     20    20    3     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     100
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0
2005  1     4     2     0     1     21    21    5     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     60
      40    0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0
2005  1     4     2     0     1     22    22    15    0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     20
      73.33333333 6.666666667 0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0
2005  1     4     2     0     1     23    23    17    0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0
      5.882352941 82.35294118 11.76470588 0     0     0     0     0
```

```
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0
2005  1     4     2     0     1     24    24    21    0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      57.14285714 42.85714286 0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0
2005  1     4     2     0     1     25    25    24    0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      58.33333333 41.66666667 0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0
2005  1     4     2     0     1     26    26    19    0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0
      5.263157895 26.31578947 63.15789474 5.263157895 0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0
2005  1     4     2     0     1     27    27    16    0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      12.5  37.5  50    0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0
2005  1     4     2     0     1     28    28    20    0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      10    25    30    10    10    5     10    0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0
2005  1     4     2     0     1     29    29    21    0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     4.761904762 4.761904762 14.28571429 4.761904762 23.80952381
      4.761904762 23.80952381 0     0     9.523809524 4.761904762
      4.761904762 0     0     0     0     0     0     0     0     0
      0     0     0     0
2005  1     4     2     0     1     30    30    16    0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     12.5  25    6.25  0     12.5  0
      6.25  6.25  12.5  0     0     6.25  0     0     0     0     0
      6.25  0     0     6.25
2005  1     4     2     0     1     31    31    10    0     0     0
      0     0     0     0     0     0     0     0     0     0     0
```

```
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     10    0
      0     10    0     0     10    10    10    10    10    10    0
      0     0     0     20
2005  1     4     2     0     1     32    32    1     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     100   0
      0     0     0     0
2006  1     4     2     0     1     13    13    6     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     83.33333333
      16.66666667 0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0
2006  1     4     2     0     1     14    14    4     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     100   0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0
2006  1     4     2     0     1     15    15    5     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     40    60    0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0
2006  1     4     2     0     1     16    16    4     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     100   0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0
2006  1     4     2     0     1     17    17    10    0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     100   0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0
2006  1     4     2     0     1     18    18    9     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     88.88888889
      11.11111111 0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0
```

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2006  1     4     2     0     1     19    19    7     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     42.85714286
      57.14285714 0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0
2006  1     4     2     0     1     20    20    4     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     50    50
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0
2006  1     4     2     0     1     21    21    6     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     100
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0
2006  1     4     2     0     1     22    22    14    0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0
      42.85714286 42.85714286 14.28571429 0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0
2006  1     4     2     0     1     23    23    12    0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0
      16.66666667 50    33.33333333 0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0
2006  1     4     2     0     1     24    24    16    0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      68.75 18.75 12.5  0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0
2006  1     4     2     0     1     25    25    18    0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      5.555555556 88.88888889 5.555555556 0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0
2006  1     4     2     0     1     26    26    20    0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     90    10    0     0     0     0     0     0     0     0
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      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0
2006  1     4     2     0     1     27    27    15    0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     40    53.33333333 6.666666667 0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0
2006  1     4     2     0     1     28    28    54    0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     7.407407407 40.74074074 42.59259259 5.555555556 1.851851852
      1.851851852 0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0
2006  1     4     2     0     1     29    29    32    0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     6.25  46.875      21.875      3.125 6.25  6.25
      0     3.125 0     0     0     3.125 0     3.125 0     0     0
      0     0     0     0     0     0
2006  1     4     2     0     1     30    30    11    0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     18.18181818 18.18181818
      9.090909091 18.18181818 0     0     0     0     18.18181818 0
      0     0     9.090909091 0     0     0     9.090909091 0     0
      0
2006  1     4     2     0     1     31    31    2     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     50    0
      50    0     0     0
2006  1     4     2     0     1     32    32    1     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     100
2007  1     4     2     0     1     12    12    1     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     100   0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0
2007  1     4     2     0     1     13    13    1     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
```

```
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     100   0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0
2007  1     4     2     0     1     14    14    2     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     100   0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0
2007  1     4     2     0     1     15    15    5     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     60    20
      20    0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0
2007  1     4     2     0     1     16    16    13    0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     69.23076923
      30.76923077 0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0
2007  1     4     2     0     1     17    17    7     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     71.42857143
      28.57142857 0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0
2007  1     4     2     0     1     18    18    10    0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     20    70
      10    0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0
2007  1     4     2     0     1     19    19    11    0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     9.090909091
      81.81818182 9.090909091 0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0
2007  1     4     2     0     1     20    20    13    0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     7.692307692
      61.53846154 30.76923077 0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0
```

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2007  1     4     2     0     1     21    21    13    0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0
      46.15384615 46.15384615 7.692307692 0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0
2007  1     4     2     0     1     22    22    6     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      100   0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0
2007  1     4     2     0     1     23    23    7     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      42.85714286 42.85714286 0     14.28571429 0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0
2007  1     4     2     0     1     24    24    15    0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      26.66666667 40    13.33333333 20    0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0
2007  1     4     2     0     1     25    25    14    0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      21.42857143 14.28571429 42.85714286 21.42857143 0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0
2007  1     4     2     0     1     26    26    21    0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     28.57142857 52.38095238 19.04761905 0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0
2007  1     4     2     0     1     27    27    23    0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     4.347826087 56.52173913 21.73913043 13.04347826 4.347826087
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0
2007  1     4     2     0     1     28    28    55    0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     12.72727273 38.18181818 32.72727273 7.272727273 1.818181818
```

```
      3.636363636 1.818181818 1.818181818 0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0
2007  1     4     2     0     1     29    29    27    0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     3.703703704 22.22222222 22.22222222 11.11111111 3.703703704
      11.11111111 11.11111111 3.703703704 3.703703704 0     7.407407407
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0
2007  1     4     2     0     1     30    30    18    0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     16.66666667 5.555555556 5.555555556 11.11111111
      11.11111111 11.11111111 0     11.11111111 5.555555556 5.555555556
      0     0     11.11111111 0     0     0     0     5.555555556 0
      0     0     0     0
2007  1     4     2     0     1     31    31    8     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      12.5  0     12.5  0     12.5  12.5  12.5  0     0     0     25
      0     0     0     12.5
2007  1     4     2     0     1     32    32    1     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     100
2008  1     4     2     0     1     11    11    1     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     100   0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0
2008  1     4     2     0     1     14    14    1     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     100   0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0
2008  1     4     2     0     1     15    15    11    0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     100   0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0
```

```
2008 1     4     2     0     1     16    16    14    0     0     0
     0     0     0     0     0     0     0     0     0     0     0
     0     0     0     0     0     0     0     0     0     0     0
     0     0     0     0     0     0     0     0     0     71.42857143
     28.57142857 0     0     0     0     0     0     0     0     0
     0     0     0     0     0     0     0     0     0     0     0
     0     0     0     0     0     0
2008 1     4     2     0     1     17    17    10    0     0     0
     0     0     0     0     0     0     0     0     0     0     0
     0     0     0     0     0     0     0     0     0     0     0
     0     0     0     0     0     0     0     0     0     70    30
     0     0     0     0     0     0     0     0     0     0     0
     0     0     0     0     0     0     0     0     0     0     0
     0     0     0     0
2008 1     4     2     0     1     18    18    19    0     0     0
     0     0     0     0     0     0     0     0     0     0     0
     0     0     0     0     0     0     0     0     0     0     0
     0     0     0     0     0     0     0     0     0     5.263157895
     94.73684211 0     0     0     0     0     0     0     0     0
     0     0     0     0     0     0     0     0     0     0     0
     0     0     0     0     0     0
2008 1     4     2     0     1     19    19    23    0     0     0
     0     0     0     0     0     0     0     0     0     0     0
     0     0     0     0     0     0     0     0     0     0     0
     0     0     0     0     0     0     0     0     0     4.347826087
     82.60869565 13.04347826 0     0     0     0     0     0     0
     0     0     0     0     0     0     0     0     0     0     0
     0     0     0     0     0     0     0
2008 1     4     2     0     1     20    20    19    0     0     0
     0     0     0     0     0     0     0     0     0     0     0
     0     0     0     0     0     0     0     0     0     0     0
     0     0     0     0     0     0     0     0     0     0
     78.94736842 15.78947368 0     5.263157895 0     0     0     0
     0     0     0     0     0     0     0     0     0     0     0
     0     0     0     0     0     0     0     0
2008 1     4     2     0     1     21    21    14    0     0     0
     0     0     0     0     0     0     0     0     0     0     0
     0     0     0     0     0     0     0     0     0     0     0
     0     0     0     0     0     0     0     0     0     0
     28.57142857 71.42857143 0     0     0     0     0     0     0
     0     0     0     0     0     0     0     0     0     0     0
     0     0     0     0     0     0     0
2008 1     4     2     0     1     22    22    5     0     0     0
     0     0     0     0     0     0     0     0     0     0     0
     0     0     0     0     0     0     0     0     0     0     0
     0     0     0     0     0     0     0     0     0     0     20
     60    20    0     0     0     0     0     0     0     0     0
     0     0     0     0     0     0     0     0     0     0     0
     0     0     0     0
2008 1     4     2     0     1     23    23    7     0     0     0
     0     0     0     0     0     0     0     0     0     0     0
     0     0     0     0     0     0     0     0     0     0     0
     0     0     0     0     0     0     0     0     0     0     0
     71.42857143 0     28.57142857 0     0     0     0     0     0
```

```
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0
2008  1     4     2     0     1     24    24    9     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      33.33333333 22.22222222 11.11111111 33.33333333 0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0
2008  1     4     2     0     1     25    25    10    0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      30    20    20    20    0     0     0     0     0     10    0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0
2008  1     4     2     0     1     26    26    10    0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      10    10    50    20    10    0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0
2008  1     4     2     0     1     27    27    19    0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     5.263157895 36.84210526 31.57894737 21.05263158 0
      5.263157895 0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0
2008  1     4     2     0     1     28    28    34    0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     8.823529412 32.35294118 26.47058824 26.47058824 5.882352941
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0
2008  1     4     2     0     1     29    29    33    0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     6.060606061 15.15151515 24.24242424 12.12121212
      3.03030303  21.21212121 9.090909091 0     0     0     3.03030303
      0     3.03030303  0     0     0     3.03030303  0     0     0
      0     0     0     0
2008  1     4     2     0     1     30    30    7     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     14.28571429 0     0     0
      42.85714286 0     0     14.28571429 0     0     0     0     0
      28.57142857 0     0     0     0     0     0     0
2008  1     4     2     0     1     31    31    7     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
```

```
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      14.28571429 14.28571429 0     0     0     14.28571429 0     0
      0     0     14.28571429 0     0     14.28571429 28.57142857
2008  1     4     2     0     1     32    32    2     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     50    0     0     0     0     0     0     0
      0     0     50    0
2009  1     4     2     0     1     7     7     1     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     100   0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0
2009  1     4     2     0     1     9     9     1     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     100   0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0
2009  1     4     2     0     1     13    13    1     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     100   0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0
2009  1     4     2     0     1     14    14    8     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     75    25    0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0
2009  1     4     2     0     1     15    15    8     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     37.5  62.5  0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0
2009  1     4     2     0     1     16    16    9     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     11.11111111
      88.88888889 0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0
```

```
2009 1    4    2    0    1    17   17   3    0    0    0
     0    0    0    0    0    0    0    0    0    0    0
     0    0    0    0    0    0    0    0    0    0    0
     0    0    0    0    0    0    0    0    0    100  0
     0    0    0    0    0    0    0    0    0    0    0
     0    0    0    0    0    0    0    0    0    0    0
     0    0    0    0
2009 1    4    2    0    1    18   18   13   0    0    0
     0    0    0    0    0    0    0    0    0    0    0
     0    0    0    0    0    0    0    0    0    0    0
     0    0    0    0    0    0    0    0    0    38.46153846
     53.84615385 7.692307692 0    0    0    0    0    0    0
     0    0    0    0    0    0    0    0    0    0    0
     0    0    0    0    0    0    0
2009 1    4    2    0    1    19   19   11   0    0    0
     0    0    0    0    0    0    0    0    0    0    0
     0    0    0    0    0    0    0    0    0    0    0
     0    0    0    0    0    0    0    0    0    0    100
     0    0    0    0    0    0    0    0    0    0    0
     0    0    0    0    0    0    0    0    0    0    0
     0    0    0    0
2009 1    4    2    0    1    20   20   15   0    0    0
     0    0    0    0    0    0    0    0    0    0    0
     0    0    0    0    0    0    0    0    0    0    0
     0    0    0    0    0    0    0    0    0    13.33333333
     66.66666667 20   0    0    0    0    0    0    0    0
     0    0    0    0    0    0    0    0    0    0    0
     0    0    0    0    0    0
2009 1    4    2    0    1    21   21   18   0    0    0
     0    0    0    0    0    0    0    0    0    0    0
     0    0    0    0    0    0    0    0    0    0    0
     0    0    0    0    0    0    0    0    0    0
     33.33333333 61.11111111 5.555555556 0    0    0    0    0
     0    0    0    0    0    0    0    0    0    0    0
     0    0    0    0    0    0    0    0
2009 1    4    2    0    1    22   22   15   0    0    0
     0    0    0    0    0    0    0    0    0    0    0
     0    0    0    0    0    0    0    0    0    0    0
     0    0    0    0    0    0    0    0    0    0
     13.33333333 80   6.666666667 0    0    0    0    0    0
     0    0    0    0    0    0    0    0    0    0    0
     0    0    0    0    0    0    0
2009 1    4    2    0    1    23   23   17   0    0    0
     0    0    0    0    0    0    0    0    0    0    0
     0    0    0    0    0    0    0    0    0    0    0
     0    0    0    0    0    0    0    0    0    0    0
     82.35294118 17.64705882 0    0    0    0    0    0    0
     0    0    0    0    0    0    0    0    0    0    0
     0    0    0    0    0    0
2009 1    4    2    0    1    24   24   17   0    0    0
     0    0    0    0    0    0    0    0    0    0    0
     0    0    0    0    0    0    0    0    0    0    0
     0    0    0    0    0    0    0    0    0    0    0
     29.41176471 52.94117647 5.882352941 11.76470588 0    0    0
```

```
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0
2009  1     4     2     0     1     25    25    20    0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      15    60    15    5     5     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0
2009  1     4     2     0     1     26    26    17    0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      5.882352941 41.17647059 41.17647059 11.76470588 0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0
2009  1     4     2     0     1     27    27    16    0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     43.75 25    25    6.25  0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0
2009  1     4     2     0     1     28    28    43    0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     2.325581395 18.60465116 32.55813953 23.25581395 18.60465116
      2.325581395 2.325581395 0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
2009  1     4     2     0     1     29    29    31    0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     3.225806452 22.58064516 29.03225806 16.12903226
      3.225806452 9.677419355 9.677419355 3.225806452 3.225806452 0
      0     0     0     0     0     0     0     0     0     0     0
      0     0
2009  1     4     2     0     1     30    30    26    0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     3.846153846 0     7.692307692 0     11.53846154
      7.692307692 7.692307692 23.07692308 3.846153846 0     0     0
      3.846153846 15.38461538 0     0     0     0     0     0
      7.692307692 0     7.692307692
2009  1     4     2     0     1     31    31    13    0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     15.38461538
      7.692307692 0     0     0     15.38461538 0     0     15.38461538
      0     0     7.692307692 7.692307692 7.692307692 0     0
      23.07692308
```

```
2009  1     4     2     0     1     32    32    5     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     20    0
      0     0     0     0     0     0     0     20    20    0     0
      0     0     0     40
2009  1     4     2     0     1     33    33    1     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     100
2009  1     4     2     0     1     34    34    1     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     100   0     0     0     0     0     0     0
      0     0     0     0
2010  1     4     2     0     1     12    12    3     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     100   0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0
2010  1     4     2     0     1     13    13    3     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     66.66666667
      33.33333333 0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0
2010  1     4     2     0     1     14    14    15    0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     100   0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0
2010  1     4     2     0     1     15    15    6     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     66.66666667
      33.33333333 0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0
2010  1     4     2     0     1     16    16    9     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     33.33333333
      55.55555556 11.11111111 0     0     0     0     0     0     0
```

```
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0
2010  1     4     2     0     1     17    17    10    0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     60    40
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0
2010  1     4     2     0     1     18    18    10    0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     60    30
      10    0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0
2010  1     4     2     0     1     19    19    11    0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     36.36363636
      63.63636364 0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0
2010  1     4     2     0     1     20    20    11    0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     9.090909091
      72.72727273 18.18181818 0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0
2010  1     4     2     0     1     21    21    17    0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0
      47.05882353 41.17647059 11.76470588 0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0
2010  1     4     2     0     1     22    22    13    0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0
      15.38461538 61.53846154 23.07692308 0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0
2010  1     4     2     0     1     23    23    11    0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      63.63636364 36.36363636 0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0
2010  1     4     2     0     1     24    24    14    0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
```

```
      0     0     0     0     0     0     0     0     0     0     0
      28.57142857 35.71428571 35.71428571 0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0
2010  1     4     2     0     1     25    25    15    0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      20    60    20    0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0
2010  1     4     2     0     1     26    26    10    0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      20    50    30    0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0
2010  1     4     2     0     1     27    27    6     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     33.33333333 66.66666667 0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0
2010  1     4     2     0     1     28    28    12    0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     16.66666667 16.66666667 8.333333333 41.66666667
      16.66666667 0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0
2010  1     4     2     0     1     29    29    24    0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     12.5  33.33333333 16.66666667 12.5  12.5
      0     8.333333333 4.166666667 0     0     0     0     0     0
      0     0     0     0     0     0     0     0
2010  1     4     2     0     1     30    30    5     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     60    0     0     0     0     20
      20    0     0     0     0     0     0     0     0     0     0
      0     0     0     0
2010  1     4     2     0     1     31    31    7     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0
      14.28571429 14.28571429 0     28.57142857 0     0     0     0
      0     0     0     0     0     28.57142857 0     14.28571429
```

```
2003  1     5     1     0     1     8     8     1     0     100   0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0
2003  1     5     1     0     1     9     9     2     0     100   0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0
2003  1     5     1     0     1     10    10    2     0     50    50
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0
2003  1     5     1     0     1     12    12    3     0     0     100
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0
2003  1     5     1     0     1     13    13    2     0     0     100
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0
2003  1     5     1     0     1     14    14    3     0     0
      33.33333333 66.66666667 0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0
2003  1     5     1     0     1     15    15    4     0     0     100
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0
2003  1     5     1     0     1     16    16    4     0     0     50
      50    0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
```

```
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0
2003  1     5     1     0     1     17    17    20    0     0     15
      65    20    0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0
2003  1     5     1     0     1     18    18    21    0     0     0
      90.47619048 9.523809524 0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0
2003  1     5     1     0     1     19    19    24    0     0     0
      66.66666667 33.33333333 0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0
2003  1     5     1     0     1     20    20    14    0     0     0
      71.42857143 28.57142857 0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0
2003  1     5     1     0     1     21    21    5     0     0     0
      60    40    0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0
2003  1     5     1     0     1     22    22    4     0     0     0
      0     75    25    0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0
2003  1     5     1     0     1     23    23    5     0     0     0
      0     100   0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0
2003  1     5     1     0     1     24    24    3     0     0     0
      0     100   0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
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```
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0
2003  1     5     1     0     1     25    25    2     0     0     0
      0     0     100   0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0
2003  1     5     1     0     1     26    26    3     0     0     0
      0     33.33333333 33.33333333 33.33333333 0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0
2003  1     5     1     0     1     27    27    4     0     0     0
      0     50    25    25    0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0
2003  1     5     1     0     1     28    28    1     0     0     0
      0     0     100   0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0
2004  1     5     1     0     1     5     5     2     0     100   0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0
2004  1     5     1     0     1     6     6     1     0     100   0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0
2004  1     5     1     0     1     7     7     1     0     100   0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0
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2004  1     5     1     0     1     8     8     5     0     100   0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0
2004  1     5     1     0     1     9     9     6     0     100   0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0
2004  1     5     1     0     1     10    10    7     0     100   0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0
2004  1     5     1     0     1     11    11    5     0     80    20
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0
2004  1     5     1     0     1     12    12    3     0     0     100
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0
2004  1     5     1     0     1     13    13    10    0     0     100
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0
2004  1     5     1     0     1     14    14    9     0     0     100
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0
2004  1     5     1     0     1     15    15    10    0     0     90
      10    0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
```

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      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0
2004  1     5     1     0     1     16    16    4     0     0     75
      25    0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0
2004  1     5     1     0     1     17    17    3     0     0     0
      100   0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0
2004  1     5     1     0     1     18    18    1     0     0     0
      100   0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0
2004  1     5     1     0     1     19    19    4     0     0     0
      50    50    0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0
2004  1     5     1     0     1     20    20    6     0     0     0
      33.33333333 66.66666667 0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0
2004  1     5     1     0     1     21    21    12    0     0     0
      16.66666667 83.33333333 0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0
2004  1     5     1     0     1     22    22    9     0     0     0
      11.11111111 88.88888889 0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0
2004  1     5     1     0     1     23    23    3     0     0     0
      0     100   0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
```

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      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0
2004  1     5     1     0     1     24    24    1     0     0     0
      0     100   0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0
2004  1     5     1     0     1     25    25    5     0     0     0
      0     100   0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0
2004  1     5     1     0     1     26    26    1     0     0     0
      0     100   0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0
2004  1     5     1     0     1     27    27    1     0     0     0
      0     0     100   0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0
2004  1     5     1     0     1     28    28    1     0     0     0
      0     0     100   0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0
2005  1     5     1     0     1     6     6     3     33.33333333
      66.66666667 0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0
2005  1     5     1     0     1     7     7     5     0     100   0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0
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2005  1     5     1     0     1     8     8     12    16.66666667
      83.33333333 0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0
2005  1     5     1     0     1     9     9     15    0     100   0
      0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0
      0     0     0     0
2005  1     5     1     0     1     10    10    8     0     75    25
      0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0
      0     0     0     0
2005  1     5     1     0     1     11    11    5     0     0     100
      0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0
      0     0     0     0
2005  1     5     1     0     1     12    12    14    0     7.142857143
      92.85714286 0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0
2005  1     5     1     0     1     13    13    24    0     0
      95.83333333 4.166666667 0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0
2005  1     5     1     0     1     14    14    14    0     0     100
      0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0
      0     0     0     0
2005  1     5     1     0     1     15    15    7     0     0
      71.42857143 28.57142857 0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0
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      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0
2005  1     5     1     0     1     16    16    9     0     0
      11.11111111 88.88888889 0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0
2005  1     5     1     0     1     17    17    12    0     0     0
      100   0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0
2005  1     5     1     0     1     18    18    4     0     0     0
      100   0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0
2005  1     5     1     0     1     19    19    3     0     0     0
      66.66666667 33.33333333 0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0
2005  1     5     1     0     1     20    20    5     0     0     0
      40    60    0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0
2005  1     5     1     0     1     21    21    2     0     0     0
      50    50    0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0
2005  1     5     1     0     1     22    22    8     0     0     0
      0     50    50    0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0
2005  1     5     1     0     1     23    23    4     0     0     0
      0     25    75    0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
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      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0
2005  1     5     1     0     1     24    24    10    0     0     0
      0     10    90    0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0
2005  1     5     1     0     1     25    25    8     0     0     0
      0     0     100   0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0
2005  1     5     1     0     1     27    27    2     0     0     0
      0     0     100   0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0
2006  1     5     1     0     1     6     6     1     0     100   0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0
2006  1     5     1     0     1     7     7     11    0     100   0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0
2006  1     5     1     0     1     8     8     10    0     100   0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0
2006  1     5     1     0     1     9     9     9     0     100   0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0
```

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2006  1     5     1     0     1     10    10    11    0     90.90909091
      9.090909091 0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0
2006  1     5     1     0     1     11    11    10    0     0     100
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0
2006  1     5     1     0     1     12    12    23    0     0     100
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0
2006  1     5     1     0     1     13    13    34    0     0     100
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0
2006  1     5     1     0     1     14    14    30    0     0
      93.33333333 6.666666667 0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0
2006  1     5     1     0     1     15    15    11    0     0
      36.36363636 63.63636364 0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0
2006  1     5     1     0     1     16    16    11    0     0     0
      100   0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0
2006  1     5     1     0     1     17    17    24    0     0
      4.166666667 87.5  8.333333333 0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
```

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      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0
2006  1     5     1     0     1     18    18    10    0     0     0
      80    20    0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0
2006  1     5     1     0     1     19    19    5     0     0     0
      60    40    0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0
2006  1     5     1     0     1     20    20    2     0     0     0
      50    50    0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0
2006  1     5     1     0     1     21    21    6     0     0     0
      16.66666667 83.33333333 0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0
2006  1     5     1     0     1     23    23    3     0     0     0
      0     33.33333333 66.66666667 0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0
2006  1     5     1     0     1     24    24    1     0     0     0
      0     0     100   0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0
2006  1     5     1     0     1     25    25    3     0     0     0
      0     0     0     100   0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0
2006  1     5     1     0     1     26    26    3     0     0     0
      0     0     0     100   0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
```

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      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0
2006  1     5     1     0     1     27    27    3     0     0     0
      0     0     0     100   0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0
2006  1     5     1     0     1     28    28    2     0     0     0
      0     0     0     0     100   0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0
2006  1     5     1     0     1     31    31    1     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      100   0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0
2007  1     5     1     0     1     7     7     3     0     100   0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0
2007  1     5     1     0     1     8     8     2     0     100   0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0
2007  1     5     1     0     1     9     9     5     0     60    40
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0
2007  1     5     1     0     1     10    10    1     0     100   0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0
```

```
2007 1    5    1    0    1    11   11   25   0    0    100
     0    0    0    0    0    0    0    0    0    0    0
     0    0    0    0    0    0    0    0    0    0    0
     0    0    0    0    0    0    0    0    0    0    0
     0    0    0    0    0    0    0    0    0    0    0
     0    0    0    0    0    0    0    0    0    0    0
     0    0    0    0
2007 1    5    1    0    1    12   12   13   0    0
     92.30769231 0    7.692307692 0    0    0    0    0    0
     0    0    0    0    0    0    0    0    0    0    0
     0    0    0    0    0    0    0    0    0    0    0
     0    0    0    0    0    0    0    0    0    0    0
     0    0    0    0    0    0    0    0    0    0    0
     0    0    0    0    0    0    0
2007 1    5    1    0    1    13   13   43   0    0
     97.6744186  2.325581395 0    0    0    0    0    0    0
     0    0    0    0    0    0    0    0    0    0    0
     0    0    0    0    0    0    0    0    0    0    0
     0    0    0    0    0    0    0    0    0    0    0
     0    0    0    0    0    0    0    0    0    0    0
     0    0    0    0    0    0    0
2007 1    5    1    0    1    14   14   21   0    0
     61.9047619  33.33333333 4.761904762 0    0    0    0    0
     0    0    0    0    0    0    0    0    0    0    0
     0    0    0    0    0    0    0    0    0    0    0
     0    0    0    0    0    0    0    0    0    0    0
     0    0    0    0    0    0    0    0    0    0    0
     0    0    0    0    0    0    0    0
2007 1    5    1    0    1    15   15   16   0    0    0
     100  0    0    0    0    0    0    0    0    0    0
     0    0    0    0    0    0    0    0    0    0    0
     0    0    0    0    0    0    0    0    0    0    0
     0    0    0    0    0    0    0    0    0    0    0
     0    0    0    0    0    0    0    0    0    0    0
     0    0    0    0
2007 1    5    1    0    1    16   16   22   0    0    0
     95.45454545 4.545454545 0    0    0    0    0    0    0
     0    0    0    0    0    0    0    0    0    0    0
     0    0    0    0    0    0    0    0    0    0    0
     0    0    0    0    0    0    0    0    0    0    0
     0    0    0    0    0    0    0    0    0    0    0
     0    0    0    0    0    0
2007 1    5    1    0    1    17   17   18   0    0    0
     88.88888889 11.11111111 0    0    0    0    0    0    0
     0    0    0    0    0    0    0    0    0    0    0
     0    0    0    0    0    0    0    0    0    0    0
     0    0    0    0    0    0    0    0    0    0    0
     0    0    0    0    0    0    0    0    0    0    0
     0    0    0    0    0    0
2007 1    5    1    0    1    18   18   16   0    0    0
     56.25 31.25 12.5 0    0    0    0    0    0    0    0
     0    0    0    0    0    0    0    0    0    0    0
     0    0    0    0    0    0    0    0    0    0    0
     0    0    0    0    0    0    0    0    0    0    0
```

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      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0
2007  1     5     1     0     1     19    19    11    0     0     0
      45.45454545 45.45454545 9.090909091 0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0
2007  1     5     1     0     1     20    20    7     0     0     0
      0     85.71428571 14.28571429 0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0
2007  1     5     1     0     1     21    21    10    0     0     0
      0     40    40    20    0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0
2007  1     5     1     0     1     22    22    3     0     0     0
      0     33.33333333 33.33333333 33.33333333 0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0
2007  1     5     1     0     1     24    24    1     0     0     0
      0     0     100   0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0
2007  1     5     1     0     1     26    26    1     0     0     0
      0     0     0     100   0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0
2007  1     5     1     0     1     27    27    3     0     0     0
      0     0     0     33.33333333 66.66666667 0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0
2007  1     5     1     0     1     28    28    3     0     0     0
      0     0     0     33.33333333 33.33333333 33.33333333 0     0
      0     0     0     0     0     0     0     0     0     0     0
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      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0
2008  1     5     1     0     1     6     6     2     0     100   0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0
2008  1     5     1     0     1     7     7     1     0     0     100
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0
2008  1     5     1     0     1     8     8     1     0     0     100
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0
2008  1     5     1     0     1     9     9     6     0     100   0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0
2008  1     5     1     0     1     10    10    10    0     0     100
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0
2008  1     5     1     0     1     11    11    11    0     0     100
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0
2008  1     5     1     0     1     12    12    9     0     0
      88.88888889 11.11111111 0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0
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2008  1     5     1     0     1     13    13    11    0     0
      90.90909091 9.090909091 0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0
2008  1     5     1     0     1     14    14    7     0     0
      28.57142857 71.42857143 0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0
2008  1     5     1     0     1     15    15    14    0     0
      7.142857143 92.85714286 0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0
2008  1     5     1     0     1     16    16    11    0     0     0
      90.90909091 9.090909091 0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0
2008  1     5     1     0     1     17    17    11    0     0     0
      63.63636364 36.36363636 0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0
2008  1     5     1     0     1     18    18    7     0     0     0
      0     100   0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0
2008  1     5     1     0     1     19    19    7     0     0     0
      0     85.71428571 14.28571429 0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0
2008  1     5     1     0     1     20    20    3     0     0     0
      0     100   0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
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      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0
2008  1     5     1     0     1     21    21    2     0     0     0
      0     50    50    0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0
2009  1     5     1     0     1     6     6     1     0     100   0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0
2009  1     5     1     0     1     7     7     5     0     100   0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0
2009  1     5     1     0     1     8     8     11    0     100   0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0
2009  1     5     1     0     1     9     9     18    0     100   0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0
2009  1     5     1     0     1     10    10    10    0     100   0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0
2009  1     5     1     0     1     11    11    12    0     75    25
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0
2009  1     5     1     0     1     12    12    6     0     33.33333333
      66.66666667 0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
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      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0
2009  1     5     1     0     1     13    13    14    0     0     100
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0
2009  1     5     1     0     1     14    14    19    0     5.263157895
      73.68421053 21.05263158 0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0
2009  1     5     1     0     1     15    15    22    0     0
      68.18181818 31.81818182 0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0
2009  1     5     1     0     1     16    16    25    0     0     20
      80    0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0
2009  1     5     1     0     1     17    17    20    0     0     0
      90    10    0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0
2009  1     5     1     0     1     18    18    16    0     0     0
      75    25    0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0
2009  1     5     1     0     1     19    19    11    0     0     0
      18.18181818 81.81818182 0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0
```

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2009  1     5     1     0     1     20    20    13    0     0     0
      0     100   0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0
2009  1     5     1     0     1     21    21    9     0     0     0
      0     88.88888889 11.11111111 0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0
2009  1     5     1     0     1     22    22    3     0     0     0
      0     33.33333333 66.66666667 0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0
2009  1     5     1     0     1     23    23    3     0     0     0
      0     0     100   0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0
2009  1     5     1     0     1     25    25    1     0     0     0
      0     0     100   0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0
2010  1     5     1     0     1     6     6     1     0     100   0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0
2010  1     5     1     0     1     8     8     3     0     100   0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0
2010  1     5     1     0     1     9     9     2     0     50    50
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
```

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      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0
2010  1     5     1     0     1     10    10    2     0     50    50
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0
2010  1     5     1     0     1     11    11    10    0     10    90
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0
2010  1     5     1     0     1     12    12    29    0     0     100
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0
2010  1     5     1     0     1     13    13    47    0     0
      97.87234043 2.127659574 0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0
2010  1     5     1     0     1     14    14    41    0     0
      90.24390244 7.317073171 2.43902439 0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0
2010  1     5     1     0     1     15    15    15    0     0     80
      20    0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0
2010  1     5     1     0     1     16    16    10    0     0     20
      60    20    0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0
2010  1     5     1     0     1     17    17    10    0     0     0
      80    20    0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
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      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0
2010  1     5     1     0     1     18    18    8     0     0     0
      50    50    0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0
2010  1     5     1     0     1     19    19    4     0     0     0
      0     100   0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0
2010  1     5     1     0     1     20    20    8     0     0     0
      12.5  75    12.5  0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0
2010  1     5     1     0     1     21    21    7     0     0     0
      0     100   0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0
2010  1     5     1     0     1     22    22    3     0     0     0
      0     66.66666667 33.33333333 0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0
2010  1     5     1     0     1     23    23    9     0     0     0
      0     22.22222222 77.77777778 0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0
2010  1     5     1     0     1     24    24    3     0     0     0
      0     0     66.66666667 33.33333333 0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0
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2010  1     5     1     0     1     25    25    6     0     0     0
      0     0     33.33333333 50    16.66666667 0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0
2010  1     5     1     0     1     26    26    4     0     0     0
      0     0     25    25    50    0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0
2010  1     5     1     0     1     27    27    1     0     0     0
      0     0     0     0     100   0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0
2003  1     5     2     0     1     9     9     1     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     100   0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0
2003  1     5     2     0     1     10    10    3     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     100   0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0
2003  1     5     2     0     1     11    11    4     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     25    50    25    0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0
2003  1     5     2     0     1     12    12    3     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     100   0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0
2003  1     5     2     0     1     13    13    9     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     11.11111111 77.77777778
      11.11111111 0     0     0     0     0     0     0     0     0
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```
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0
2003  1     5     2     0     1     14    14    7     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     71.42857143
      28.57142857 0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0
2003  1     5     2     0     1     15    15    6     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     50    50    0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0
2003  1     5     2     0     1     16    16    12    0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     50    50    0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0
2003  1     5     2     0     1     17    17    12    0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     16.66666667
      66.66666667 16.66666667 0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0
2003  1     5     2     0     1     18    18    19    0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     78.94736842
      15.78947368 5.263157895 0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0
2003  1     5     2     0     1     19    19    23    0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     69.56521739
      26.08695652 4.347826087 0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0
2003  1     5     2     0     1     20    20    12    0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     100   0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0
2003  1     5     2     0     1     21    21    8     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
```

```
      0     0     0     0     0     0     0     0     0     75    12.5
      12.5  0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0
2003  1     5     2     0     1     22    22    7     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     28.57142857
      42.85714286 28.57142857 0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0
2003  1     5     2     0     1     23    23    8     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     75
      0     25    0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0
2003  1     5     2     0     1     24    24    14    0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     7.142857143
      57.14285714 14.28571429 21.42857143 0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0
2003  1     5     2     0     1     25    25    2     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     50
      0     50    0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0
2003  1     5     2     0     1     26    26    1     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     100
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0
2003  1     5     2     0     1     28    28    2     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      50    0     0     50    0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0
2004  1     5     2     0     1     5     5     2     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     100   0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0
```

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2004  1     5     2     0     1     7     7     1     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     100   0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0
2004  1     5     2     0     1     8     8     7     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     100   0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0
2004  1     5     2     0     1     9     9     8     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     100   0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0
2004  1     5     2     0     1     10    10    9     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     100   0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0
2004  1     5     2     0     1     11    11    2     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     100   0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0
2004  1     5     2     0     1     12    12    4     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     25    75    0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0
2004  1     5     2     0     1     13    13    9     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     100   0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0
2004  1     5     2     0     1     14    14    16    0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     87.5  12.5  0
      0     0     0     0     0     0     0     0     0     0     0
```

```
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0
2004  1     5     2     0     1     15    15    5     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     100   0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0
2004  1     5     2     0     1     16    16    3     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     100   0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0
2004  1     5     2     0     1     17    17    6     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     66.66666667
      33.33333333 0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0
2004  1     5     2     0     1     18    18    3     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     33.33333333
      66.66666667 0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0
2004  1     5     2     0     1     19    19    3     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     33.33333333
      66.66666667 0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0
2004  1     5     2     0     1     20    20    9     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     22.22222222
      55.55555556 22.22222222 0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0
2004  1     5     2     0     1     21    21    15    0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     13.33333333
      73.33333333 13.33333333 0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0
2004  1     5     2     0     1     22    22    13    0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
```

```
      0     0     0     0     0     0     0     0     0     0
      69.23076923 30.76923077 0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0
2004  1     5     2     0     1     23    23    6     0     0     0
      0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0
      83.33333333 16.66666667 0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0
2004  1     5     2     0     1     24    24    4     0     0     0
      0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     75
      0     25    0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0
      0     0     0     0
2004  1     5     2     0     1     25    25    2     0     0     0
      0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     100
      0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0
      0     0     0     0
2004  1     5     2     0     1     4     4     1     0     0     0
      0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     100   0     0     0
      0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0
      0     0     0     0
2005  1     5     2     0     1     6     6     3     0     0     0
      0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     100   0     0     0
      0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0
      0     0     0     0
2005  1     5     2     0     1     7     7     10    0     0     0
      0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     100   0     0     0
      0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0
      0     0     0     0
2005  1     5     2     0     1     8     8     22    0     0     0
      0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     100   0     0     0
      0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0
      0     0     0     0
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2005  1     5     2     0     1     9     9     27    0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     88.88888889 11.11111111
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0
2005  1     5     2     0     1     10    10    12    0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     75    25    0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0
2005  1     5     2     0     1     11    11    7     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     100   0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0
2005  1     5     2     0     1     12    12    16    0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     100   0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0
2005  1     5     2     0     1     13    13    25    0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     100   0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0
2005  1     5     2     0     1     14    14    21    0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     100   0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0
2005  1     5     2     0     1     15    15    12    0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     66.66666667 25
      8.333333333 0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0
2005  1     5     2     0     1     16    16    7     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     14.28571429
      85.71428571 0     0     0     0     0     0     0     0     0
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```
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0
2005  1     5     2     0     1     17    17    14    0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     100   0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0
2005  1     5     2     0     1     18    18    7     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     57.14285714
      42.85714286 0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0
2005  1     5     2     0     1     19    19    5     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     20    80
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0
2005  1     5     2     0     1     20    20    1     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     100
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0
2005  1     5     2     0     1     21    21    2     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      100   0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0
2005  1     5     2     0     1     22    22    10    0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     40
      60    0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0
2005  1     5     2     0     1     23    23    12    0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0
      33.33333333 66.66666667 0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0
2005  1     5     2     0     1     24    24    5     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
```

```
      0     0     0     0     0     0     0     0     0     0     0
      100   0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0
2005  1     5     2     0     1     26    26    1     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      100   0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0
2005  1     5     2     0     1     27    27    1     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     100   0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0
2006  1     5     2     0     1     5     5     1     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     100   0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0
2006  1     5     2     0     1     6     6     3     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     100   0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0
2006  1     5     2     0     1     7     7     10    0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     100   0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0
2006  1     5     2     0     1     8     8     9     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     100   0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0
2006  1     5     2     0     1     9     9     18    0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     100   0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0
```

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2006  1     5     2     0     1     10    10    11    0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     72.72727273 27.27272727
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0
2006  1     5     2     0     1     11    11    7     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     100   0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0
2006  1     5     2     0     1     12    12    12    0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     83.33333333
      16.66666667 0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0
2006  1     5     2     0     1     13    13    34    0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     97.05882353
      2.941176471 0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0
2006  1     5     2     0     1     14    14    28    0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     89.28571429
      10.71428571 0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0
2006  1     5     2     0     1     15    15    13    0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     69.23076923
      30.76923077 0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0
2006  1     5     2     0     1     16    16    16    0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     6.25  93.75 0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0
2006  1     5     2     0     1     17    17    17    0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     5.882352941
      94.11764706 0     0     0     0     0     0     0     0     0
```

```
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0
2006  1     5     2     0     1     18    18    15    0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     6.666666667 80
      13.33333333 0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0
2006  1     5     2     0     1     19    19    6     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     16.66666667
      83.33333333 0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0
2006  1     5     2     0     1     20    20    5     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     100
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0
2006  1     5     2     0     1     21    21    2     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     100
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0
2006  1     5     2     0     1     22    22    2     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     50
      50    0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0
2006  1     5     2     0     1     23    23    1     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      100   0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0
2006  1     5     2     0     1     24    24    1     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      100   0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0
2006  1     5     2     0     1     25    25    2     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
```

```
      0     0     0     0     0     0     0     0     0     0     0
      50    50    0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0
2006  1     5     2     0     1     26    26    4     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     100   0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0
2006  1     5     2     0     1     28    28    1     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     100   0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0
2007  1     5     2     0     1     7     7     1     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     100   0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0
2007  1     5     2     0     1     8     8     2     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     100   0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0
2007  1     5     2     0     1     9     9     2     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     100   0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0
2007  1     5     2     0     1     10    10    2     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     100   0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0
2007  1     5     2     0     1     11    11    23    0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     100   0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0
```

```
2007  1     5     2     0     1     12    12    24    0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     100   0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0
2007  1     5     2     0     1     13    13    40    0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     90    7.5   0
      2.5   0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0
2007  1     5     2     0     1     14    14    12    0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     75    25    0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0
2007  1     5     2     0     1     15    15    24    0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     20.83333333
      79.16666667 0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0
2007  1     5     2     0     1     16    16    20    0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     5     95    0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0
2007  1     5     2     0     1     17    17    21    0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     80.95238095
      19.04761905 0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0
2007  1     5     2     0     1     18    18    16    0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     31.25 50
      18.75 0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0
2007  1     5     2     0     1     19    19    10    0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     40    30
      30    0     0     0     0     0     0     0     0     0     0
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```
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0
2007  1     5     2     0     1     20    20    6     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0
      66.66666667 33.33333333 0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0
2007  1     5     2     0     1     21    21    9     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     11.11111111 0
      33.33333333 55.55555556 0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0
2007  1     5     2     0     1     22    22    6     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0
      33.33333333 50    16.66666667 0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0
2007  1     5     2     0     1     23    23    3     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0
      33.33333333 33.33333333 33.33333333 0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0
2007  1     5     2     0     1     24    24    2     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      50    50    0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0
2007  1     5     2     0     1     25    25    2     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      50    0     50    0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0
2007  1     5     2     0     1     26    26    3     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     33.33333333 33.33333333 33.33333333 0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0
2008  1     5     2     0     1     5     5     1     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
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```
      0     0     0     0     0     0     0     100   0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0
2008  1     5     2     0     1     8     8     3     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     33.33333333 66.66666667
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0
2008  1     5     2     0     1     9     9     8     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     50    50    0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0
2008  1     5     2     0     1     10    10    16    0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     6.25  93.75 0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0
2008  1     5     2     0     1     11    11    17    0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     100   0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0
2008  1     5     2     0     1     12    12    10    0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     100   0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0
2008  1     5     2     0     1     13    13    11    0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     81.81818182
      18.18181818 0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0
2008  1     5     2     0     1     14    14    13    0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     46.15384615
      53.84615385 0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0
```

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2008  1     5     2     0     1     15    15    15    0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     13.33333333
      86.66666667 0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0
2008  1     5     2     0     1     16    16    14    0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     7.142857143
      78.57142857 14.28571429 0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0
2008  1     5     2     0     1     17    17    7     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     85.71428571
      14.28571429 0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0
2008  1     5     2     0     1     18    18    6     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     33.33333333
      66.66666667 0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0
2008  1     5     2     0     1     19    19    5     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     100
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0
2008  1     5     2     0     1     20    20    9     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0
      88.88888889 11.11111111 0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0
2008  1     5     2     0     1     21    21    6     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0
      66.66666667 33.33333333 0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0
2008  1     5     2     0     1     22    22    1     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      100   0     0     0     0     0     0     0     0     0     0
```

```
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0
2008  1     5     2     0     1     28    28    1     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     100   0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0
2009  1     5     2     0     1     5     5     1     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     100   0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0
2009  1     5     2     0     1     7     7     7     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     100   0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0
2009  1     5     2     0     1     8     8     34    0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     100   0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0
2009  1     5     2     0     1     9     9     27    0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     100   0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0
2009  1     5     2     0     1     10    10    14    0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     92.85714286 7.142857143
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0
2009  1     5     2     0     1     11    11    15    0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     73.33333333 26.66666667
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0
2009  1     5     2     0     1     12    12    6     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
```

```
      0     0     0     0     0     0     0     16.66666667 83.33333333
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0
2009  1     5     2     0     1     13    13    21    0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     95.23809524
      4.761904762 0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0
2009  1     5     2     0     1     14    14    29    0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     75.86206897
      20.68965517 3.448275862 0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0
2009  1     5     2     0     1     15    15    27    0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     62.96296296
      37.03703704 0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0
2009  1     5     2     0     1     16    16    29    0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     24.13793103
      72.4137931  3.448275862 0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0
2009  1     5     2     0     1     17    17    30    0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     6.666666667 90
      3.333333333 0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0
2009  1     5     2     0     1     18    18    17    0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     47.05882353
      52.94117647 0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0
2009  1     5     2     0     1     19    19    9     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     11.11111111
      88.88888889 0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0
```

```
2009  1     5     2     0     1     20    20    16    0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     100
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0
2009  1     5     2     0     1     21    21    12    0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0
      91.66666667 8.333333333 0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0
2009  1     5     2     0     1     22    22    4     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     25
      75    0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0
2009  1     5     2     0     1     23    23    2     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     50
      50    0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0
2009  1     5     2     0     1     24    24    1     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      100   0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0
2009  1     5     2     0     1     29    29    1     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     100   0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0
2010  1     5     2     0     1     8     8     4     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     100   0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0
2010  1     5     2     0     1     9     9     4     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     100   0     0     0
      0     0     0     0     0     0     0     0     0     0     0
```

```
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0
2010  1     5     2     0     1     10    10    6     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     50    50    0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0
2010  1     5     2     0     1     11    11    16    0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     6.25  93.75 0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0
2010  1     5     2     0     1     12    12    31    0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     100   0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0
2010  1     5     2     0     1     13    13    47    0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     95.74468085
      4.255319149 0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0
2010  1     5     2     0     1     14    14    29    0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     93.10344828
      6.896551724 0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0
2010  1     5     2     0     1     15    15    38    0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     89.47368421
      7.894736842 2.631578947 0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0
2010  1     5     2     0     1     16    16    13    0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     53.84615385
      38.46153846 7.692307692 0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0
2010  1     5     2     0     1     17    17    17    0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
```

```
      0     0     0     0     0     0     0     0     11.76470588
      58.82352941 23.52941176 5.882352941 0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0
2010  1     5     2     0     1     18    18    6     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     100
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0
2010  1     5     2     0     1     19    19    11    0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     27.27272727
      63.63636364 9.090909091 0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0
2010  1     5     2     0     1     20    20    6     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0
      83.33333333 16.66666667 0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0
2010  1     5     2     0     1     21    21    4     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     50
      50    0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0
2010  1     5     2     0     1     22    22    2     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      100   0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0
2010  1     5     2     0     1     23    23    6     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0
      16.66666667 66.66666667 16.66666667 0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0
2010  1     5     2     0     1     24    24    4     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      50    50    0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0
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2010  1     5     2     0     1     25    25    2     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      100   0     0     0     0     0     0     0     0     0     0
      0     0     0     0     0     0     0     0     0     0     0
      0     0     0     0
#
#
0       # Mean Size at Age Observations
0       # Total number of environmental variables
0       # Total number of environmental observations
0       # No Weight frequency data
0       # No tagging data
0       # No morph composition data

999 # End data file
```

Appendix B. Stock Synthesis control file for darkblotched rockfish

```
# darkblotched control file
# updated to run in SSv3.20

# Morph setup
1     # Number of growth patterns
1     # N sub morphs within growth patterns

# Note:  these control the retention function.
# First block is ascending part of the curve.
# Second block controls asymptote.
# Block for 2009-10 added for 2011 update.

2 # Blocks
1 4  # blocks in each design
2000 2010
2000 2001 2002 2003 2004 2005 2006 2010

# Mortality and growth specifications
0.5   # Fraction female at birth
1     # M setup: 0=single
Par,1=N_breakpoints,2=Lorenzen,3=agespecific;_4=agespec_withseasinte
rpolate
2     # Number of M breakpoints
4 15  # Ages at M breakpoints
1       # Growth model: 1=VB with L1 and L2, 2=VB with A0 and Linf,
3=Richards, 4=Read vector of L@A
1.7   # Age for growth Lmin
29    # Age for growth Lmax or 999 = Linf
0.1   # SD constant added to LAA (0.1 mimics v1.xx for compatibility
only)
0     # Variability about growth: 0=CV~f(LAA) [mimic v1.xx],
1=CV~f(A), 2=SD~f(LAA), 3=SD~f(A)
1     # Maturity option: 1=length logistic, 2=age logistic, 3=read
age-maturity matrix by growth_pattern
2     # First age allowed to mature
1       # fecundity option
0       # hermaphro
3     # mg parm offset option:
#old key: 1=direct assignment, 2=each pat. x gender offset from pat.
1 gender 1, 3=offsets as SS2 V1.xx with M old and CV old offset from
young values
#new key: 1=none, 2= M, G, CV_G as offset from female-GP1, 3=like
SS2 V1.x)

1     # mg parm adjust method 1=do V1.23 approach, 2=use logistic
transform between bounds approach

# Maturity & Growth Parameters
# min       max   init       prior pr_type    sd    phase       env
      UseDev      Minyr Maxyr DevSD use_bl bl_type
0.01  0.15  0.07  0.08  0     0.8   -3    0     0     0     0     0
      0     0     # natM Young
```

```
-3    3     0     0     0     0.8   -3    0     0     0     0     0
      0     0     # natM old exp offset
12    16    14.5  14.6  0     5     2     0     0     0     0     0
      0     0     # Lmin
40    60    42.44 42.5  0     10    2     0     0     0     0     0
      0     0     # Lmax
0.05  0.25  0.215 0.2   0     0.8   3     0     0     0     0     0
      0     0     # VBK
0.05  0.25  0.065 0.07  0     0.8   3     0     0     0     0     0
      0     0     # CV Young
-3    3     0     0     0     0.8   4     0     0     0     0     0
      0     0     # CV old offset
-3    3     0     0     0     0.8   -3    0     0     0     0     0
      0     0     # Male natmort offset
-3    3     0     0     0     0.8   -3    0     0     0     0     0
      0     0     # male natmore offset
-3    3     0     0     0     0.8   -5    0     0     0     0     0
      0     0     # Male Lmin offset
-3    3     -0.12 0     0     0.8   3     0     0     0     0     0
      0     0     # Male Lmax offset *
-3    3     0.233 0     0     0.8   3     0     0     0     0     0
      0     0     # Male VBK offset *
-3    3     0     0     0     0.8   -6    0     0     0     0     0
      0     0     # Male cv Y offset
-3    3     0     0     0     0.8   -6    0     0     0     0     0
      0     0     # Male cv old offset

-3    3     2.10E-05 0   0    0.8   -3    0     0     0     0     0
      0     0     # F L to wt coeff
-3    3     2.96142     2.64694     0     0.8   -3    0     0     0
      0     0     0     0     # F L to Wt exp
0     60    34.59 55    0     0.8   -3    0     0     0     0     0
      0     0     # Mat infl
-3    3     -0.6429     -0.25 0     0.8   -3    0     0     0     0
      0     0     0     # Mat logistic slope (negative)
-3    3     0.1458      1     0     0.8   -3    0     0     0     0
      0     0     0     # fecund intercept
0     2     1.325 1     0     0.8   -3    0     0     0     0     0
      0     0     # fecund multiplier
-3    3     2.10E-05 0  0     0.8   -3    0     0     0     0     0
      0     0     # Male L to wt coeff
-3    3     2.96142     2.64694     0     0.8   -3    0     0     0
      0     0     0     0     # Male L to wt exp

0     1     1     1     0     50    -50   0     0     0     0     0
      0     0     # Recruitment apportionment by growth pattern
0     1     1     1     0     50    -50   0     0     0     0     0
      0     0     # Rec app by Area
0     1     1     1     0     50    -50   0     0     0     0     0
      0     0     # Rec app by Season
0     1     1     1     0     50    -50   0     0     0     0     0
      0     0     # Cohort growth deviation

# Seasonal effects on biology parameters (0=none)
```

```
 0 0 0 0 0 0 0 0 0 0

3 #Recruitment Function 1 BH w/flat top, 2 Ricker, 3 BH, 4 none
# Recruitment Parms
# Low High  Init  Prior PrType     SD    phase
3     31    8.2   8     0     10    1     # R0
0.2   0.95  0.76  0.753 2     0.15  -2    # h
0     2     0.8   0.8   0     0.8   -1    # sigma R
-5    5     0     0     0     1     -3    # Env link coeff
-5    5     0     0     0     1     -3    # Init Equilb offset to
virgin
-1    1     0     0     0     100   -1    # placeholder for
Autocorrelation

0 # index of environmental variable to be used
0 # env target parameter: 0=none, 1=rec devs, 2=R0, 3=steepness

# Recruitment residuals
1       # rec dev type: 0=none, 1=devvector (zero-sum), 2=simple
deviations (no sum constraint)
1975  # Start year recruitment residuals
2009  # End year recruitment residuals
3     # Phase

1 # Read 11 advanced recruitment options: 0=no, 1=yes
0     # first year for early rec devs
-4    # phase for early rec devs
5     # Phase for forecast recruit deviations
1     # Lambda for forecast recr devs before endyr+1
1974  #_last_yr_nobias_adj_in_MPD
1975  # first year of full bias correction (linear ramp up from this
year minus the plus-age to this year)
2009  # last year for full bias correction in_MPD
2010  #_first_recent_yr_nobias_adj_in_MPD
1.0     # Max bias correction
0     # placeholder
-15   # Lower bound rec devs
15    # Upper bound rec devs
0       # read intitial values for rec devs

# Fishing mortality setup
0.06  # F ballpark for tuning early phases
1999  # F ballpark year
1     # F method:  1=Pope's; 2=Instan. F; 3=Hybrid (recommended)
0.9   # max F or harvest rate, depends on F_Method

# Initial Fishing Mortality Parameters
0  1  0  0.01  0  99  -1

# Catchability Specification (Q_setup)
#_Den-dep  env-var  extra_se  Q_type
0          0        0         0 # 1 FISHERY
0          0        0         0 # 2 TRIENNIAL
0          0        0         0 # 3 SLOPE
```

```
0          0        0         0 # 4 NWSLOPE
0          0        0         0 # 5 NWSHELF

# Selectivity Specification
#Type Retent      Moffset    Special
#Length
24    1     0     0 #Fishery
24    0     0     0 #Triennial
24    0     0     0 #AFSC slope
24    0     0     0 #NW slope
24    0     0     0 #NW shelf

10    0     0     0 #Age selects 10 = flat
10    0     0     0
10    0     0     0
10    0     0     0
10    0     0     0

# Selectivity Parameter

#Low  High  Init  Prior PrType      SD    Phase env   usedev      minyr
      maxyear     sd    block blswitch
20    45    36    32    0     50    2     0     0     0     0     0.5
      0     0     # 1 = baseparm*exp(blockparm)
-6    4     1     0     0     50    2     0     0     0     0     0
      0     0
-1    9     4     4     0     50    3     0     0     0     0     0
      0     0

-1    9     0.6   5.5   0     50    -3    0     0     0     0     0
      0     0

-5    9     -2    -2    0     50    2     0     0     0     0     0
      0     0

-5    9     9     5     0     50    -3    0     0     0     0     0
      0     0


15    70    27    35    0     99    2     0     0     0     0     0.5
      1     2
0.1   10    2     1     0     99    2     0     0     0     0     0.5
      0     0     # 1 means that parmí = baseparm + blockparm
0.001 1     1     1     0     99    -3    0     0     0     0     0.5
      2     2     # 2 means that parmí = blockparm
0     0     0     0     0     99    -3    0     0     0     0     0.5
      0     0


10    45    21    23    0     50    2     0     0     0     0     0
      0     0
-6    4     -6    -1    0     50    -2    0     0     0     0     0
      0     0
```

```
-1    90    4     4     0     50    3     0     0     0     0     0
      0     0

-1    90    4     6     0     50    4     0     0     0     0     0
      0     0

-5    90    -2    -4    0     50    2     0     0     0     0     0
      0     0

-5    90    -3    -1    0     50    3     0     0     0     0     0
      0     0

10    450   230   28    0     50    2     0     0     0     0     0
      0     0
-6    40    -1    -1    0     50    2     0     0     0     0     0
      0     0
-1    90    2     4     0     50    3     0     0     0     0     0
      0     0

-1    90    2     4     0     50    3     0     0     0     0     0
      0     0

-5    90    -5    -4    0     50    -4    0     0     0     0     0
      0     0

-5    90    -4    -2    0     50    3     0     0     0     0     0
      0     0



10    450   250   28    0     50    2     0     0     0     0     0
      0     0
-6    40    -.3   1     0     50    -5    0     0     0     0     0
      0     0
-1    90    3     4     0     50    4     0     0     0     0     0
      0     0

-1    90    .1    4     0     50    -4    0     0     0     0     0
      0     0

-5    90    -5    -4    0     50    -5    0     0     0     0     0
      0     0

-5    90    .2    1     0     50    4     0     0     0     0     0
      0     0

8     450   180   20    0     50    2     0     0     0     0     0
      0     0
-6    40    -1    -1    0     50    3     0     0     0     0     0
      0     0
#-1   90    0     2     0     50    3     0     0     0     0     0
      0     0
```

```
-1    9     -0.5  2     0     50    -3    0     0     0     0     0
      0     0

-1    9     3     4     0     50    4     0     0     0     0     0
      0     0

-5    9     -1    -3    0     50    4     0     0     0     0     0
      0     0

-5    9     -5    -4    0     50    -3    0     0     0     0     0
      0     0

1     # Selex block setup: 0=Read one line apply all, 1=read one
line each parameter
# Lo  Hi    Init  Prior P_type      SD    Phase
15  70      25  30      0  99  4
0.3  1  .7  .7  0  99  3
0.3  1  .8  .8  0  99  3
0.3  1  .6  .6  0  99  3
0.3  1  .6  .6  0  99  3

1 #_env/block/dev_adjust_method (1=standard; 2=logistic trans to
keep in base parm bounds)
0 # Tagging flag: 0=none,1=read parameters for tagging

### Likelihood related quantities ###
# variance/sample size adjustment by fleet
1 # Do variance adjustments
0  .21  .20  .61  .17   # const added to survey cv
0  0  0  0  0   # const added to discard sd
0  0  0  0  0   # const added to body weight sd
.63  .71  .58  .88  1   # mult scalar for length comps
1 .50  1  .25  .15   # mult scalar for age comps
1  1  1  1  1   # mult scalar for length at age obs

# removed for SSv3.20: 30    # DF discard fraction data t-
distribution (discard_like)
# removed for SSv3.20: 30    # DF mean body weight data t-
distribution (DF_for_meanbodywt_like)

1     # Max N lambda phases: read this N values for each item below
0     # SD offset (CPUE, discard, mean body weight, recruitment
devs): 0=omit log(s) term, 1=include

0 # N changes to default Lambdas = 1.0
# Component codes:
#  1=survey
#  2=discard
#  3=mean body weight
#  4=length frequency
#  5=age frequency
#  6=Weight frequency
#  7=size at age
#  8=catch
```

```
#  9=initial equilibrium catch
#  10=rec devs
#  11=parameter priors
#  12=parameter deviations
#  13=Crash penalty
#  14=Morph composition
#  15=Tag composition
#  16=Tag return
# Component fleet/survey  phase  value  wtfreq_method

0 # extra SD pointer

999 # end of control file
```

Appendix C. Stock Synthesis Starter file for darkblotched rockfish

```
# darkblotched starter file for SS v3.x

darkblotched_data.SS   # Data file
darkblotched_control.SS # Control file

0     # Read initial values from .par file: 0=no,1=yes
1     # DOS display detail: 0,1,2
2     # Report file detail: 0,1,2
0     # Detailed checkup.sso file (0,1)
0     # Write parameter iteration trace file during minimization
2     # Write cumulative report: 0=skip,1=short,2=full
0     # Include prior likelihood for non-estimated parameters
0     # Use Soft Boundaries to aid convergence (0,1) (recommended)
0     # N bootstrap datafiles to create
25    # Last phase for estimation
1     # MCMC burn-in
1     # MCMC thinning interval
0     # Jitter initial parameter values by this fraction
-1    # Min year for spbio sd_report (neg val = styr-2, virgin
state)
-2    # Max year for spbio sd_report (-1=endyr+1, -2=entire
forecast)
0     # N individual SD years
0.0001      # Ending convergence criteria
0     # Retrospective year relative to end year (i.e. -4)
1     # Min age for summary biomass
1     # Depletion basis: denom is: 0=skip; 1=rel X*B0; 2=rel X*Bmsy;
3=rel X*B_styr
1     # Fraction (X) for Depletion denominator (e.g. 0.4)
1     # (1-SPR)_reporting:  0=skip; 1=rel(1-SPR); 2=rel(1-SPR_MSY);
3=rel(1-SPR_Btarget); 4=notrel
1     # F_std reporting: 0=skip; 1=exploit(Bio); 2=exploit(Num);
3=sum(frates)
#0 45    #_min and max age over which average F will be calculated
0     # F_report_basis: 0=raw; 1=rel Fspr; 2=rel Fmsy ; 3=rel Fbtgt

999 # end of file marker
```

Appendix D. Stock Synthesis forecast file for darkblotched rockfish

```
#V3.21d
#C  generic forecast file
# for all year entries except rebuilder; enter either: actual year,
-999 for styr, 0 for endyr, neg number for rel. endyr
1 # Benchmarks: 0=skip; 1=calc F_spr,F_btgt,F_msy
2 # MSY: 1= set to F(SPR); 2=calc F(MSY); 3=set to F(Btgt); 4=set to
F(endyr)
#0.4 # SPR target (e.g. 0.40)
#0.342 # Biomass target (e.g. 0.40)
0.5 # SPR target (e.g. 0.40)
0.4 # Biomass target (e.g. 0.40)
#_Bmark_years: beg_bio, end_bio, beg_selex, end_selex, beg_relF,
end_relF (enter actual year, or values of 0 or -integer to be rel.
endyr)
 0 0 0 0 0 0
#  2010 2010 2010 2010 2010 2010 # after processing
1 #Bmark_relF_Basis: 1 = use year range; 2 = set relF same as
forecast below
#
1 # Forecast: 0=none; 1=F(SPR); 2=F(MSY) 3=F(Btgt); 4=Ave F (uses
first-last relF yrs); 5=input annual F scalar
12 # N forecast years
0.20 # F scalar (only used for Do_Forecast==5)
#_Fcast_years:  beg_selex, end_selex, beg_relF, end_relF  (enter
actual year, or values of 0 or -integer to be rel. endyr)
 0 0 0 0
#  1180659524 1667592815 7631713 0 # after processing
1 # Control rule method (1=catch=f(SSB) west coast; 2=F=f(SSB) )
0.40 # Control rule Biomass level for constant F (as frac of Bzero,
e.g. 0.40); (Must be > the no F level below)
0.10 # Control rule Biomass level for no F (as frac of Bzero, e.g.
0.10)
1 # Control rule target as fraction of Flimit (e.g. 0.75)
3 #_N forecast loops (1=OFL only; 2=ABC; 3=get F from forecast ABC
catch with allocations applied)
3 #_First forecast loop with stochastic recruitment
0 #_Forecast loop control #3 (reserved for future bells&whistles)
0 #_Forecast loop control #4 (reserved for future bells&whistles)
#-65534 #_Forecast loop control #5 (reserved for future
bells&whistles)
0 #_Forecast loop control #5 (reserved for future bells&whistles)
2013  #FirstYear for caps and allocations (should be after years
with fixed inputs)
0 # stddev of log(realized catch/target catch) in forecast (set
value>0.0 to cause active impl_error)
1 # Do West Coast gfish rebuilder output (0/1)
2001 # Rebuilder:  first year catch could have been set to zero
(Ydecl)(-1 to set to 1999)
2011 # Rebuilder:  year for current age structure (Yinit) (-1 to set
to endyear+1)
```

```
1 # fleet relative F:  1=use first-last alloc year; 2=read seas(row)
x fleet(col) below
# Note that fleet allocation is used directly as average F if
Do_Forecast=4
2 # basis for fcast catch tuning and for fcast catch caps and
allocation  (2=deadbio; 3=retainbio; 5=deadnum; 6=retainnum)
# Conditional input if relative F choice = 2
# Fleet relative F:  rows are seasons, columns are fleets
#_Fleet:  FISHERY
#  0
# max totalcatch by fleet (-1 to have no max) must enter value for
each fleet
-1
# max totalcatch by area (-1 to have no max); must enter value for
each fleet
-1
# fleet assignment to allocation group (enter group ID# for each
fleet, 0 for not included in an alloc group)
0
#_Conditional on >1 allocation group
# allocation fraction for each of: 0 allocation groups
# no allocation groups
2 # Number of forecast catch levels to input (else calc catch from
forecast F)
2 # basis for input Fcast catch:  2=dead catch; 3=retained catch;
99=input Hrate(F) (units are from fleetunits; note new codes in
SSV3.20)
# Input fixed catch values
# Proportion caught each fleet 2009/2010 or total limit council has
ACL for 2011 and 2012.
# ACLs:  298 296
#Year Seas Fleet Catch(or_F)
2011 1 1 298
2112 1 1 296
#
999 # verify end of input
```