

Data summary for the Southern and Eastern Scalefish and Shark Fishery: Logbook, Landings and Observer Data to 2018 FINAL

**Robin Thomson, Paul Burch, Mike Fuller, Roy Deng, and Franzis
Althaus**

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CSIRO Oceans and Atmosphere
3 Castray Esplanade, Hobart, Tasmania, Australia
GPO BOX 1538, Hobart, Tasmania, Australia

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Abstract

This report presents summarised fisheries data collected from the SESSF up to and including 2018. This is the latest in a series of such reports and includes several improvements compared with earlier reports in this series. A small number of plots are presented showing fishery-wide data, but most plots show data by species group. A species group can be a biological species (e.g. eastern redfish) or a group of species that have been aggregated under a single quota (e.g. flathead) and could be split by region or depth (e.g. eastern and western deepwater sharks, eastern and western pink ling, inshore and offshore ocean perch). The definitions used to identify species, and regions, and depth classes, are detailed in the report. Discard rates that whose calculation is described in a separate report, are also shown. Note that the catch rates shown in this report are geometric means calculated from the catch and effort (always expressed in numbers of shots) data and are not standardized CPUE time series.

1 Introduction

This report is the latest in a series of reports that present summarised data collected from the Southern and Eastern Scalefish and Shark Fishery. The bulk of the data is collected and stored by the Australian Fisheries Management Authority (AFMA). A copy of the relevant AFMA databases is held at CSIRO where corrections are made to the data, and data from tables that can have quite different formats are merged. That process is currently being documented.

1.1 Changes from Oct 2019

This report differs from the August 2019 version, which was presented to the SESSFRAG 'Data meeting', as specified below.

1. GABIA for 2017-2018 and 2018-2019 have now been added, and a mistake has been corrected where 2016-2017 data were accidentally doubled (only in the August 2019, not in earlier, reports). The October version of this report claimed to have solved this problem but the solution was not properly implemented and has now been corrected.

1.2 Changes from Aug 2019

This report differs from the August 2019 version, which was presented to the SESSFRAG 'Data meeting', as specified below.

1. It contains a note regarding a deepwater shark CAAB code (under "Changes from 2018" below) that was mistakenly omitted previously.
2. It contains a note (under "Data issues" below) about large John Dory, noted and investigated during SESSFRAG Aug 2019.
3. It includes discard plots for the oreo basket, ribaldo, smooth oreos (Cascade and other) and deepwater shark, that were mistakenly omitted (although some of these contain no discard rates, e.g. deepwater shark, because the data have not provided estimates in the past)
4. The SET FIS length frequency plot has been labelled "SET FIS winter" because only the winter lengths were included in the data processing.
5. An attempt was made to add GABIA data that were missing from the August report but that was unsuccessful and was correct in this (November) version of the report (see the section above).
6. An error was corrected in the new code for the multi-coloured block plots, that sets cell colour to white when less than 10% of the total catch for the year was taken from that

cell. The plots presented in August 2019 evaluated percentage catch by row, instead of by column (i.e. year).

7. Tables have been added that show quota species for which the difference between the logbook total catch, and the CDR total catch, differs by more than 25% in the any of the most recent five years.
8. Information regarding sub-zones has been added to the captions of the maps that show zonation schemes, and a list of changes to the zone schemes as well as possible variations from other authors or earlier work, has been added.
9. A table showing the CAAB codes used for each species or species groups has been added.

1.3 Changes from 2018

This report differs from the 2018 report (Thomson et al. 2018) in that:

1. Data for 2018 have been added (along with a small amount of additional 2017 data that had not yet been entered into the AFMA database prior to the 2017 summary);
2. AFMA have made numerous changes to their observer database, affecting data for all years, and correcting entries in most of the important fields. This included correction of the royal red prawn length measurements in the observer dataset, many of which were erroneously recorded in mm instead of cm.
3. State catches for 2018 for all states have been added, the data from Victoria for 2017 is also new because it was unavailable for the 2017 data summary report.
4. CSIRO have reviewed their zone definitions and found that there was an overlap between the ECDW zone (SET zone 70) and NSW (SET zone 10). We therefore separated ECDW from the SET schema. Malcolm Haddon has used an alternative zone schema for blue-eye trevalla that aligns with the SET zones. We have used that system, and this has introduced a new zone named "North" that loosely corresponds to ECDW. The old ECDW zone is still used for alfonsino.
5. We also examined the data selection process used in this report and chose to stop eliminating records that had missing data (such as depth, or position) wherever possible.
6. Port data, and age data, do not include a lat-long position where the samples were caught, instead, a zone of capture is 'provided'. That zone field can have difficult to interpret entries (such as 'east' or '10-20'); or shark samples might be given a SET zone that spans two shark zones. We revised the algorithm that interprets this data, in some cases making small corrections that change the zones to which some data were allocated.
7. We have revised the process that scales port as well as onboard collected length frequencies using the ratio of the weight of fish sampled to the weight of the whole catch. It was found that this ratio was sometimes larger than 1, either because the sample weight was larger than the catch weight (perhaps the entries were switched) or the value was expressed as a percentage. The sample weight entry in the Port data was sometimes '9999' which presumably was meant to indicate 'no data'. All such entries, as well as those for which data were missing, were changed to having a ratio of 1 so that the length measurements are used, but no scaling up is performed. This change has altered the appearance of some length frequencies in this report.
8. A gear code 'OTM' (midwater trawl) used in the Observer database has been added to the records that we recognise as trawl records.
9. Some species, that are assessed separately in the east and the west despite having an aggregated quota (e.g. jackass morwong), were previously aggregated in this report. We have separated all such datasets into east versus west, but this has resulted in

some early state catches no longer appearing because those were not available in disaggregated form.

10. Port and age data for ocean perch do not contain depth information and therefore cannot be attributed to either inshore or offshore ocean perch. Previous versions of this report plotted the same, aggregated, port and age data on both the inshore and offshore plots, but this report shows it on neither. In future, an additional, aggregated set of plots for inshore plus offshore ocean perch might be informative.
11. Data summaries have been added for two non-quota species: king dory and frostfish. Interest in those species was expressed during SESSFRAG meetings in February 2019.
12. The coloured square plots that illustrate the level of sampling effort in relation to catches have been altered so that cells that have a small amount of catch (less than 10% of the total for the year) are not given a colour because sampling in those cells is unimportant.
13. GAB industry sampling for 2009-June 2012 was reported twice in previous versions of this report. The data were in both the AFMA Observer database and included as external GAB industry files that were obtained from Fishwell. The external file is no longer being used and the samples appear as ISMP observer data only (it is not yet clear whether these data were industry collected, or AFMA collected - AFMA are looking into the question).
14. The CAAB codes "37 044902" and "37 0449000" (spookfishes) have been added to the "elephant fish" quota basket, after consultation with AFMA. However, neither appear in the logbook dataset or the Observer dataset (neither port nor onboard). The age, and CDR datasets do not use CAAB codes. This change therefore has no effect on data processing.
15. The "other sharks" CAAB code, 37990003, has been removed from the deepwater shark basket given advice from Dan Corrie and John Garvey (AFMA) that the code would include many species that are not deepwater sharks. For 1974 to 1984 the "Other shark" category included 100% of the catch previously attributed to deepwater shark. Between 1985 and 2004 the percentage dropped steadily to 7%, remaining between 2% and 12% until 2012, after which it remained below 2.5% (the final year examined was 2018).
16. The Fish Ageing Service have made numerous corrections to their database, including changes to the 'year of capture' for some records. They have added a text field for sex (previously numeric, 1=male, 2=female) to avoid misinterpretation. They have standardised the gear codes used in their 'gear of capture' field.
17. There is more industry (GABIA) collected data for Bight redfish and deepwater flathead for 2017 because the raw data file was re-analysed by CSIRO and fewer records were discarded because of missing data fields.

2 Data

2.1 Data sources

The data sources included in this report are:

1. Catch Disposal Record (CDR) measurements of the weight of landed catches;
2. AFMA logbook data (including e-logs);
3. AFMA Observer (formerly the ISMP) length measurements made in ports of landing;
4. AFMA Observer length measurements taken onboard fishing vessels;
5. AFMA Observer weight measurements of retained and discarded components of the catch, taken onboard fishing vessels;

6. Length measurements collected by members of the fishing industry (GABIA) onboard trawl vessels fishing in the Great Australian Bight (GAB);
7. Length measurements of blue warehou collected by members of the fishing industry onboard trawl vessels;
8. Estimates of abundance derived from catch and effort data collected by vessels participating on the South East Trawl Fishing Industry Survey (SET FIS);
9. SET FIS length measurements made onboard survey vessels;
10. Estimates of abundance derived from catch rate data collected by vessels participating on the Great Australian Bight Fishing Industry Survey (GAB FIS);
11. GAB Fishing Industry Survey (GAB FIS) length measurements made onboard survey vessels;
12. Length measurements of blue grenadier taken during the spawning fishery are available but not used - source unclear but likely to have been part of work for a PhD;
13. Additional length measurements of western gemfish are available but not used - source unknown;
14. Discard estimates, calculated by CSIRO using Observer data (Deng, Burch, and Thomson 2019);
15. State catches provided by NSW, Vic, SA and Tasmanian state agencies (for more details see Burch, Althaus, and Thomson 2019); note that State catches of flathead other than tiger flathead are not considered, and
16. TACs (which are available on AFMA's Catch Watch' website).

2.2 Timetable

A timetable of dates by which data must be received by CSIRO in order to incorporate it into reports and stock assessments in the same year, is shown in Table 2.1. In 2019, State catch data from Victoria and South Australia were received after the cut-off but that for Victoria has been incorporated in to the data processing. Observer data for NSW has been requested, and it is intended to include those in this report, but those data have not been received. Data from the new Industry sampling initiative, SIDAC, have been received but this is a new data source and new software needs to be developed to incorporate it into the data processing system.

Table 2.1: Schedule of dates by which CSIRO needs to receive data for inclusion in data processing

Source	Date
AFMA database (logbook, CDR, Observer)	30 April
Age data from FAS	30 June
State catches	30 June
GAB industry data	30 June
FIS data	30 June

2.3 Data issues

Anomalies noted in the data include:

1. Last year's report showed anomalously deep fishing for some species, especially red-fish, that resulted from a single vessel reporting a credible minimum depth of capture along with a erroneously deep maximum depth. The average depth (which we display in this report), was therefore unusually deep. Those records were corrected by

removing the maximum depth and only using the shallower depth, which seems to have resulted in a 'spike' at relatively shallow depth for redfish and to a lesser extent some other species. At the same time, anomalously deep records persist in the 2018 dataset.

2. There is an anomalous spike in the depth profile for royal red prawn at approximately 300m.
3. There are a surprisingly large number of very large jackass morwong. These are predominantly caught offshore (not shown).
4. The 2018 onboard, and to some extent Port, length frequency is skewed towards larger fish. This does not seem to be an artefact of skewed sampling by zone or by depth nor was an error introduced through conversion between length types (the samples are all total lengths, as they have been in the past).

A comparison of logbook catch totals, by quota species and by year, revealed species that had CDR totals that were more than 25% greater than their logbook totals, during the most recent five years (Table 2.2). Similarly, some species had CDR totals that were more than 25% lower than their logbook totals, during the most recent five years (Table 2.3). Note, however, that the CDR records only those catches that were subject to quota whereas the logbook can include additional catches. For example (choosing the most bizarre example), jackass morwong are not under quota in the GAB trawl fishery so that a catch of morwong made by a trawl vessel in the GAB could be entered into the logbook but not the CDR, whereas a catch of morwong made alongside by a line or gillnet vessel would be entered into both the logbook and CDR records.

Interestingly, blue warehou appears in both tables, having a much higher logbook total in 2015 and 2016, but much lower in 2017 and 2018. Further investigation showed some large shots containing blue warehou that were recorded in logbook as 'black trevally' a non-quota species, and several small shots where blue warehou were recorded in the CDR but not the logbook. When blue warehou was reported in the logbook, it typically had a similar catch tonnage in the CDR and the logbook.

Table 2.2: Quota species whose CDR total catch exceeded their logbook total catch by more than 25% during the most recent five years. Catches are in tonnes.

Year	SpName	Logbook	CDR	Diff	Ratio
2014	John Dory	45.2	60.8	0.26	1.34
2016	Orange Roughy South	32.9	48.4	0.32	1.47
2017	Orange Roughy West	17.4	24.0	0.28	1.38
2014	Deepwater Shark East	13.1	23.2	0.44	1.77
2016	Deepwater Shark East	16.7	26.2	0.36	1.57
2017	Deepwater Shark East	15.4	21.5	0.29	1.40
2018	Deepwater Shark East	14.7	22.5	0.35	1.53
2017	Blue Warehou	12.5	26.3	0.52	2.10
2018	Blue Warehou	32.6	47.3	0.31	1.45

Table 2.3: Quota species whose CDR total catch was more than 25% lower than their logbook total catch during the most recent five years. Catches are in tonnes.

Year	SpName	Logbook	CDR	Diff	Ratio
2014	Smooth Oreo Non-Cascade	1.0	0.6	-0.68	0.60
2015	Orange Roughy South	52.8	34.0	-0.55	0.64
2017	Bight Redfish	447.8	329.2	-0.36	0.74
2015	Blue Warehou	5.3	3.6	-0.44	0.69
2016	Blue Warehou	18.0	9.1	-0.97	0.51

3 Methods

The plots in this report do not have captions, instead, we described the plots below.

3.1 Explanatory notes regarding the plots

1. *FIS and Industry length* measurements are often made before the catch is sorted into retained and discarded components. All of these measurements, both sorted and unsorted, are combined in this report.
2. *CPUE* series are plotted as a combination of solid and dashed lines. Any data point that is based on fewer than 20 records is joined by dashed lines to adjacent points. Points based on larger numbers of records are joined using solid lines. Lines are not drawn to a year for which there is no data point. The CPUE time series are divided by their mean before plotting, these mean values are shown in the plot legend.
3. *SET FIS abundance* estimates are plotted as points, not lines, because they are available biennially. Points whose CV is greater than 0.3 are plotted as open circles, those with lower CVs are solid circles.
4. *Discards* expressed as discard weight divided by total weight (i.e. discard plus retained weight) are shown as a red bar chart, these data were calculated from ISMP onboard observer data as reported in Thomson, Deng, and Castillo-Jordán 2018. This work represents a recalculation of values previously calculated by Judy Upston (CSIRO) and reported in a series of 'discard reports'. See Thomson, Deng, and Castillo-Jordán 2018 for a full explanation.
5. *ISMP Port and GAB Industry length frequencies*: this plot shows ISMP lengths measured in port (blue bars, and black and blue alternating sample size shown below the plot the colours alternate because large values in adjacent years tend to merge). This plot also shows lengths collected onboard GAB vessels by industry members (black line, and upper, black, row of sample sizes).
6. *Length frequencies: ISMP onboard etc*: ISMP length measurements made onboard are shown as *green bars*, overlaid by SET FIS (*orange line*), GAB FIS (*purple line*), and Industry onboard measurements of blue warehou (*black line*). Sample sizes are shown below the plot in corresponding colours, except for the ISMP samples sizes, which are shown in alternating black and blue in the lowest row.
7. *Length frequencies for discarded fish* measured onboard by ISMP observers are shown in grey both as part of a stacked histogram along with the green retained catch, and separately below that plot (for clarity, because the discarded catch can be very small and therefore hard to see in the stacked plot). Open bars indicate sample size below 50 fish.
8. The plots consisting of *coloured squares* indicate the ratio of sample number to catch

weight - *red* indicates low sampling relative to catch whereas *green* indicates high sampling relative to catch and intermediate values are shown on a green-yellow-orange-red scale. Note that the sum of the catches on these plots will not match annual totals on other plots if there are records for which zone, or gear entries are missing. *Black numbers* indicate numbers of fish sampled, and *blue numbers* give logbook catch in tonnes.

3.2 Species

Quota species (or groups) are identified using the CAAB code field in the logbook and observer datasets or by providing a list of CAAB codes to State agencies when asking them for landed catch information. In the CDR database the UnitCode field was used, and CSIRO worked closely with AFMA to ensure that the same lists of CAAB code are used by both agencies. The CAAB codes used are shown in Table 3.1. Note that in the pages that follow, some quota species (or groups) have been divided either spatially (into east and west components) or, in the case of ocean perch, into deep and shallow components. On those cases, the proportional split from the logbook catch totals was applied to the CDR data to produce an estimate of CDR catch for each component.

Table 3.1: CAAB codes used for each of the quota species

Species	CAAB
Alfonsino	37258002
Flathead	37296000, 37296001, 37296003, 37296007, 37296035, 37296037
Jackass Morwong	37377003
John Dory	37264004
Redfish	37258003
Royal Red Prawn	28714005
School Whiting	37330014
Silver Trevally	37337062
Ocean Jackets	37465000, 37465006
Frostfish	37440002, 37440000
King dory	37264001
Blue eye Trevalla	37445001, 37445014
Blue Grenadier	37227001
Blue Warehou	37445005
Gemfish	37439002
Pink Ling	37228002
Mirror Dory	37264003
Ocean Perch	37287001, 37287901, 37287093
Silver Warehou	37445006
Ribaldo	37224002
Orange Roughy	37255009
Oreos	37266001, 37266004, 37266005, 37266006, 37266902
Smooth Oreo	37266003
Deepwater Shark	37020000, 37020002, 37020003, 37020004, 37020005, 37020012, 37020013, 37020015, 37020019, 37020021, 37020024, 37020025, 37020027, 37020028, 37020029, 37020030, 37020031, 37020032, 37020033, 37020905, 37020906, 37020907
Bight Redfish	37258004
Deepwater Flathead	37296002
School Shark	37017008
Gummy Shark	37017001
Saw Shark	37023000, 37023001, 37023002, 37023900
Elephantfish	37043000, 37043001, 37044000, 37043901, 37044902

3.3 Zones

Logbook and onboard observer records contain precise position information (latitude and longitude). We assigned each position to a fishing zone, each species or quota basket is assigned to one of a set of *zone schemes* (Table 3.2).

Table 3.2: The zonation scheme to which each species or quota group is assigned

	Species	Scheme
1	Alfonsino	ECDW
2	Flathead	SEF
3	Jackass Morwong	SEF
5	John Dory	SEF
6	Redfish	SEF
7	Royal Red Prawn	SEF
8	School Whiting	SEF
9	Silver Trevally	SEF
10	Ocean Jackets	SEF
11	Frostfish	SEF
12	King dory	SEF
13	Blue eye Trevalla	SEF
14	Blue Grenadier	SEF
15	Blue Warehou	SEF
17	Gemfish	GEM
19	Pink Ling	SEF
21	Mirror Dory	SEF
23	Ocean Perch	SEF
25	Silver Warehou	SEF
26	Ribaldo	SEF
27	Orange Roughy	ORO
32	Oreos	ORO
33	Smooth Oreo	ORO
35	Deepwater Shark	SEF
37	Bight Redfish	SEF
38	Deepwater Flathead	SEF
39	School Shark	SHS
40	Gummy Shark	SHS
41	Saw Shark	SHS
42	Elephantfish	SHS

The zone schemes are shown in Figures 3.1 to 3.5, and their definitions are shown in Table A.1 in the Appendix. These are, for the most part, the same zone definitions that have been used for previous reports and by most authors of SESSF reports (as far as we have been able to ascertain). Differences that might have occurred in the past, or that have been implemented by us are:

1. the *zone 10-20 boundary* was shifted from the NSW-VIC border northwards to 36 degrees 45'S during the early 2000s (a decision made during a SEFAG meeting);
2. there was a slightly different definition of *western boundary for the GAB* in the 'orange roughy scheme' (115.133) and the 'SET scheme' (115); we now apply the orange roughy scheme's definition of the GAB to orange rough from that region whereas previous version of this report used the SET definition;

3. AFMA requested that we add a sub-zone to the orange roughy scheme to identify catches taken at *Pedra Branca* (see map and caption below);
4. the ISMP divides the *GAB* into 4 sub-zones whereas CSIRO divides it into 5; we retained the CSIRO sub-zones (but note that this creates ambiguity when interpreting Port length sampled and age data, where zone is sometimes given as 81, 82, 83, 84);
5. we have added a zone called '*north*' to the 'SET scheme' that lies north of zone 10 and consists of three sub-zones that were used by Malcolm Haddon for blue-eye trevalla analyses;

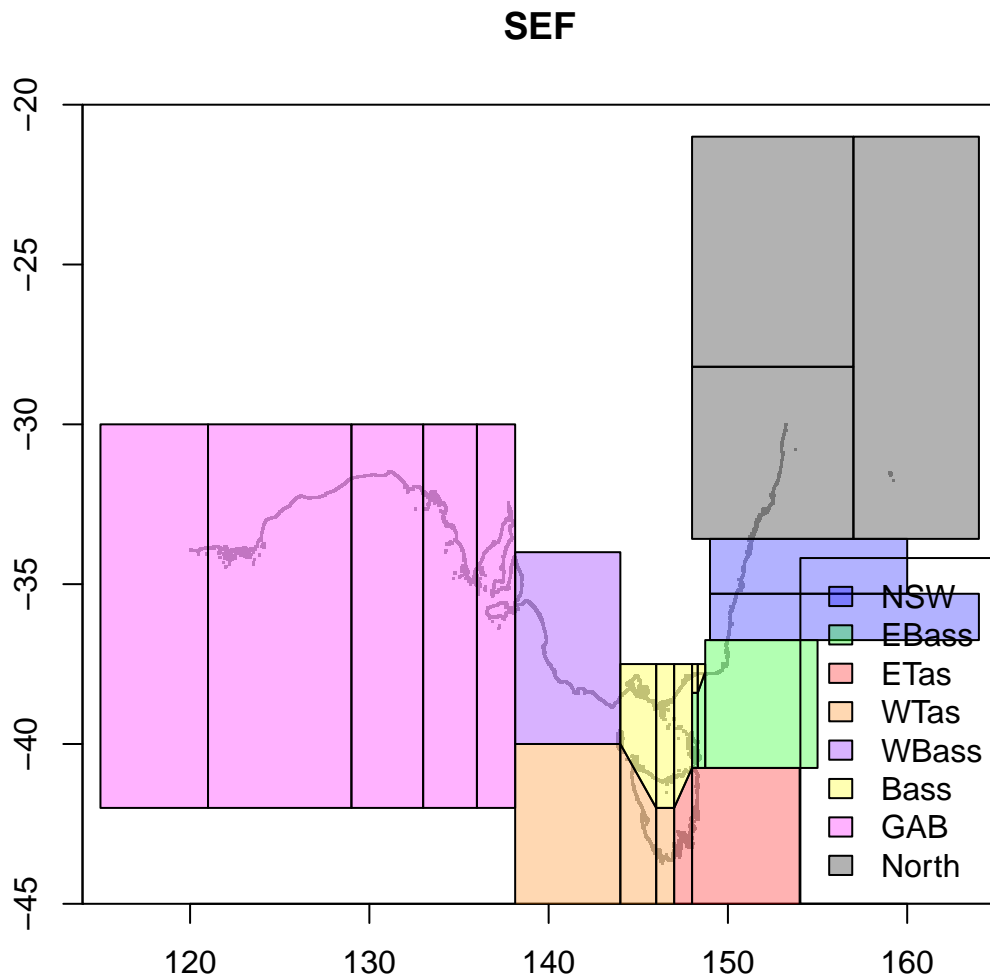


Figure 3.1: The zones making up the south east fishery zone scheme, SEF. The GAB zone is divided into sub-zones 81-85, and Bass Strait can be divided at 147E longitude onto an eastern and western component.

ECDW

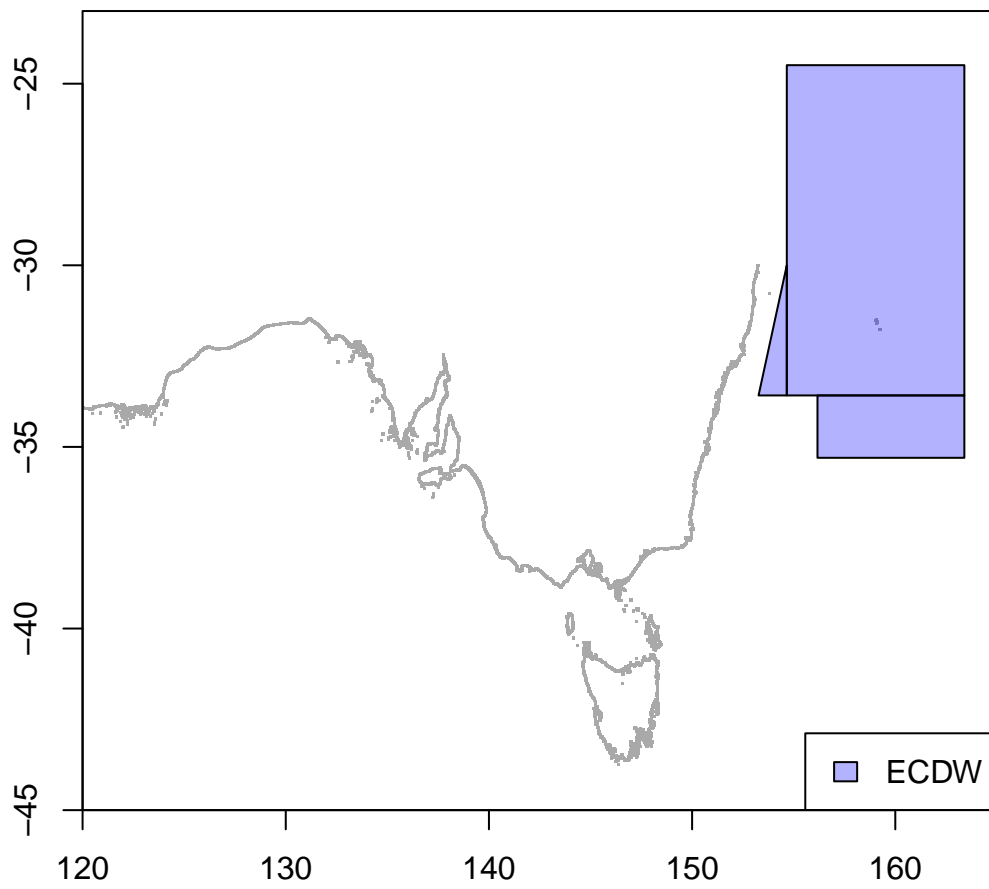


Figure 3.2: The zones making up the east coast deepwater scheme, ECDW.

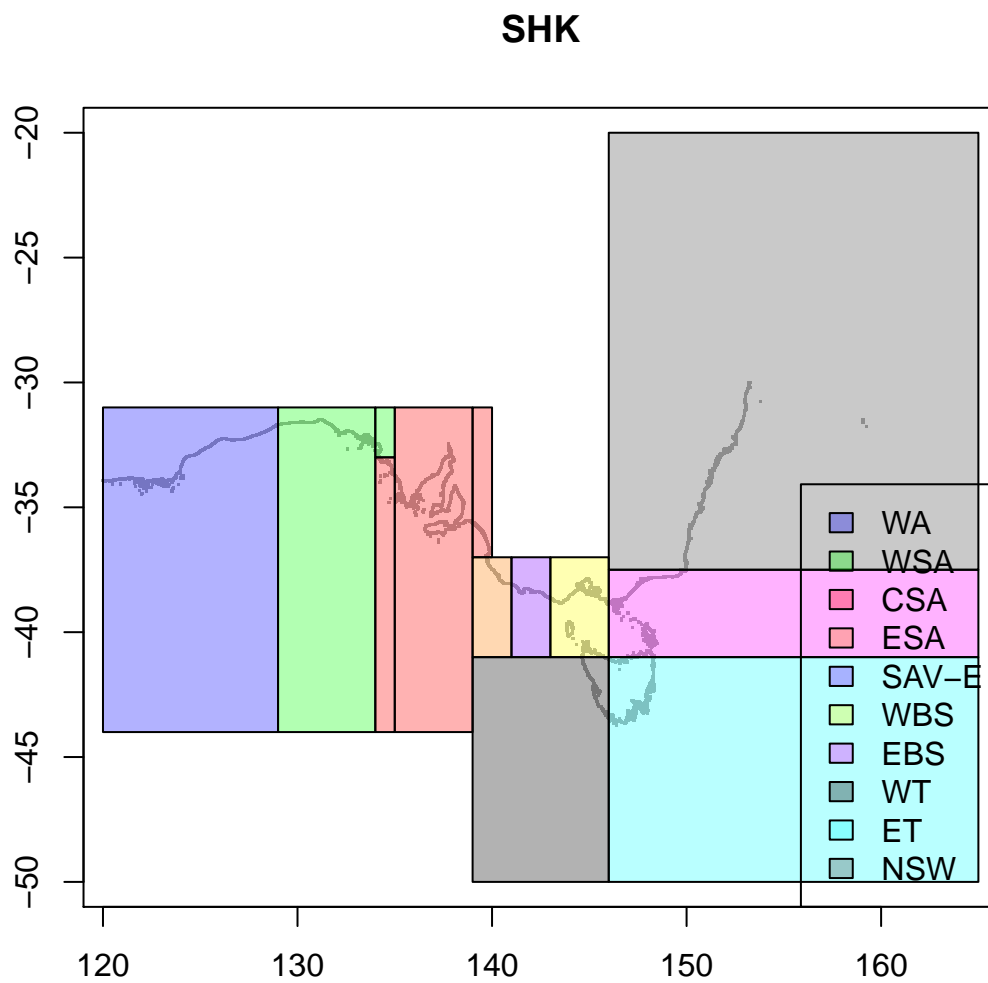


Figure 3.3: The zones making up the shark zone scheme, SHS. The ESA zone (also known as SAV-W) and the SAV-E zone are sometimes combined into a single SAV zone.

GEM

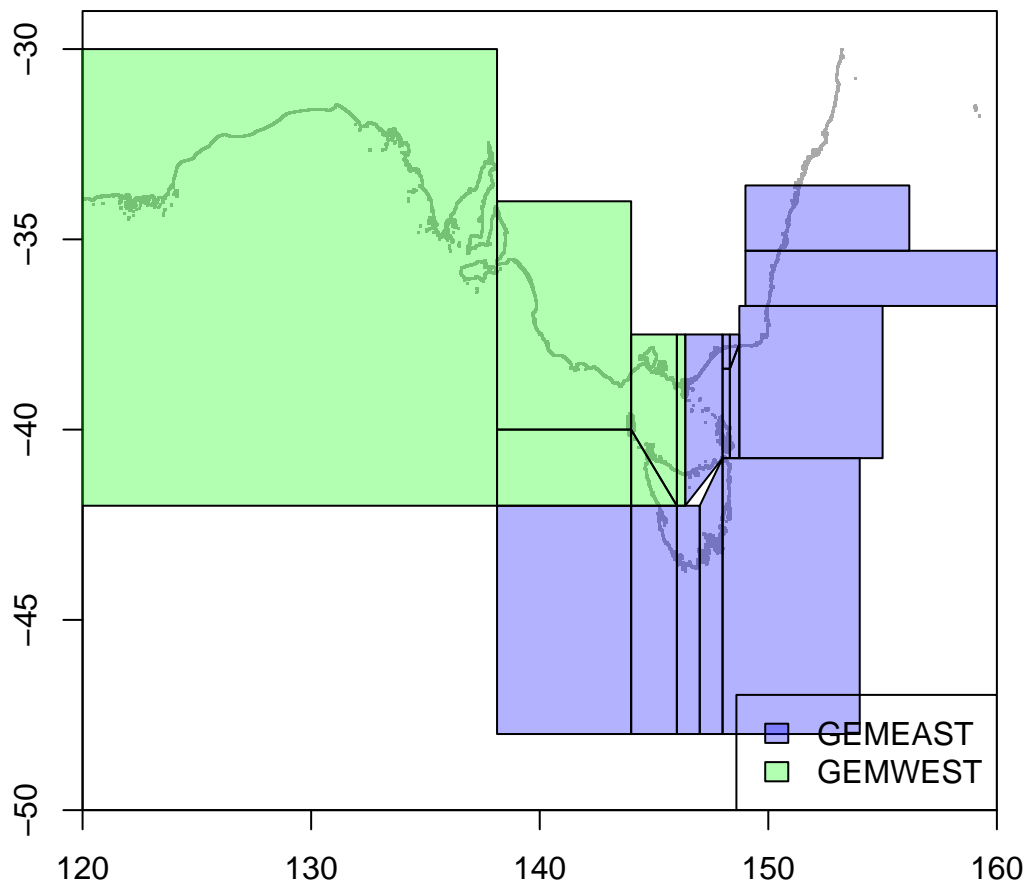


Figure 3.4: The zones making up the gemfish zone scheme, GEM.

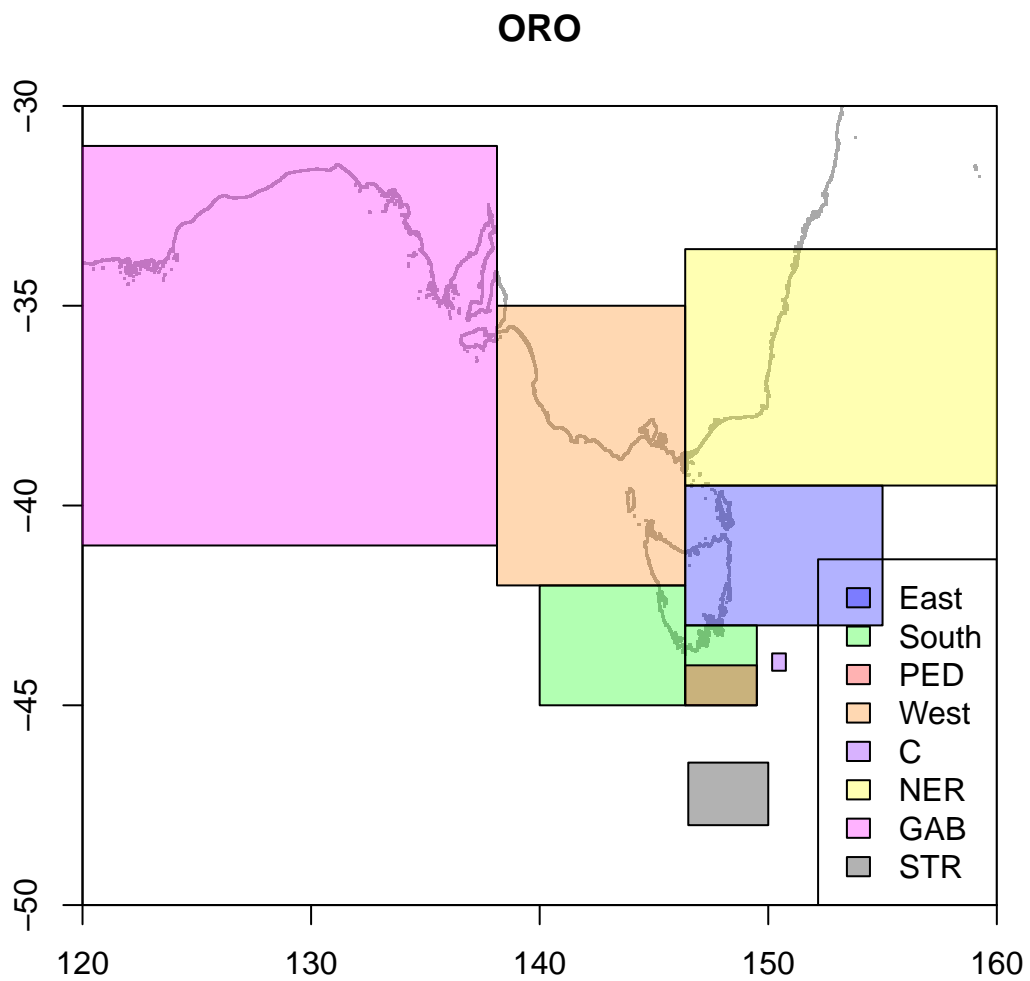
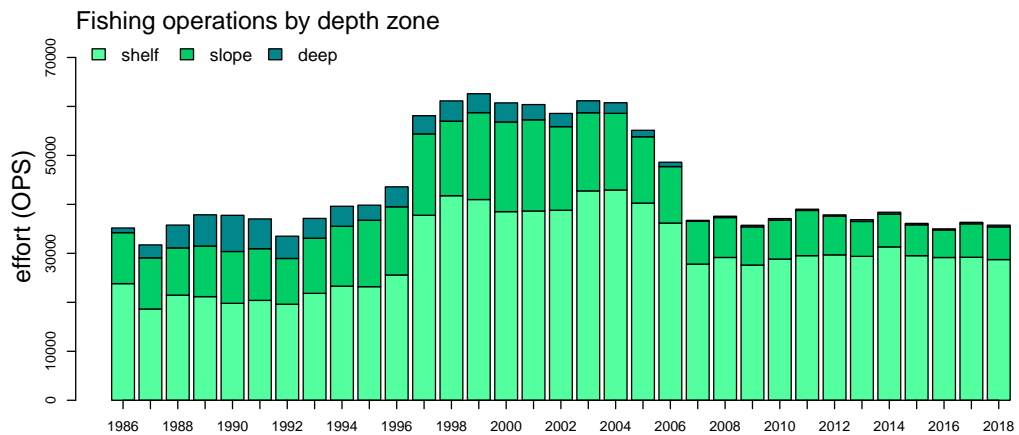
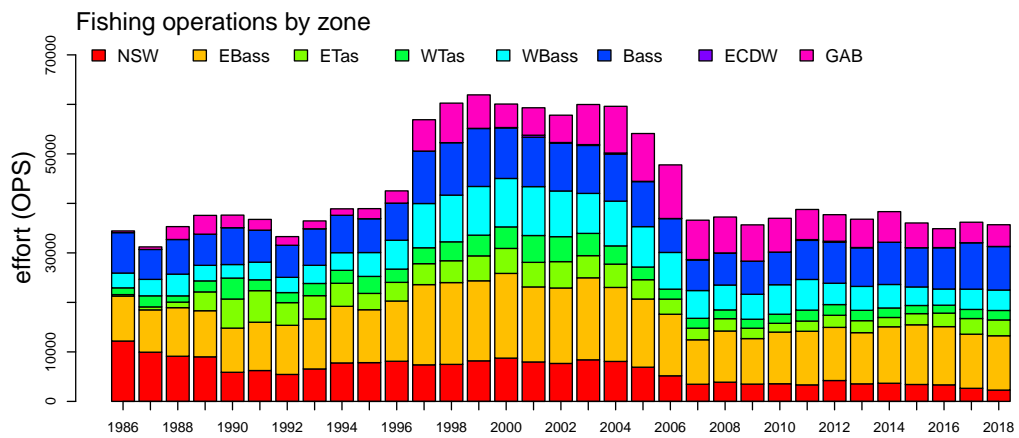
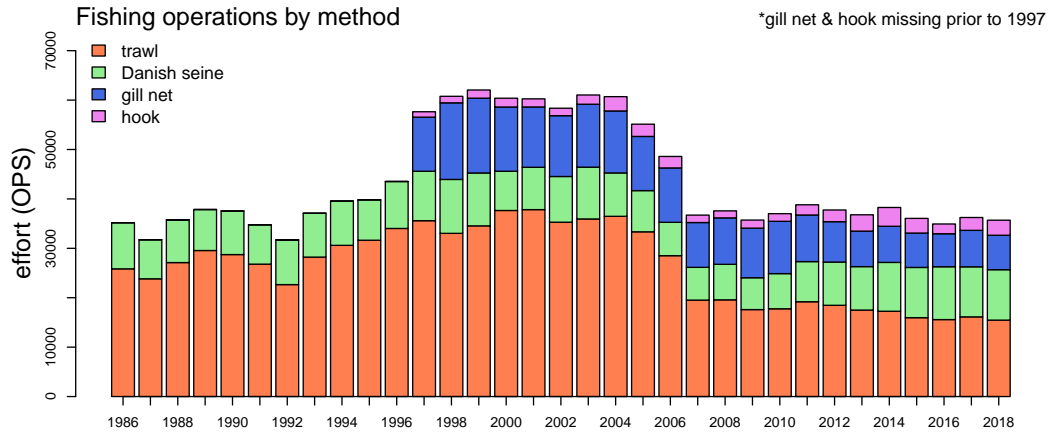


Figure 3.5: The zones making up the orange roughy zone scheme, ORO. The zone PED (Pedra Branca) is a new zone, added at the request of AFMA.

3.4 Suggested changes

Suggested changes to future versions of this report are:

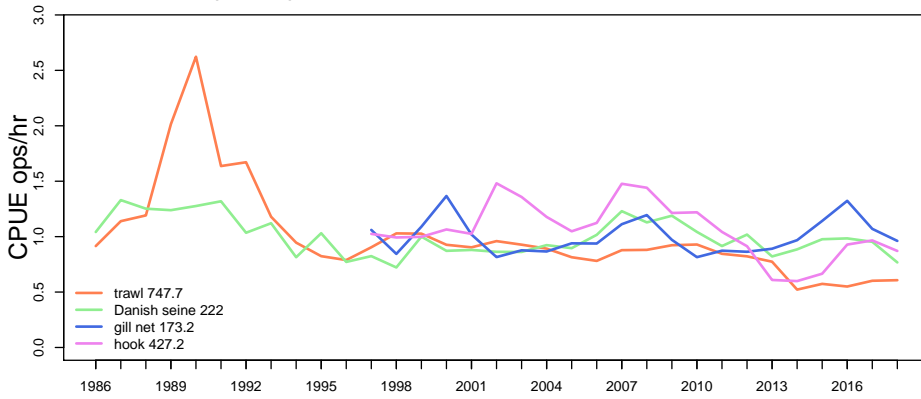
1. Anomalously short or long length measurements are not plotted but are instead excluded from the plots. It would be preferable to treat the smallest and largest length bins displayed in the report as 'plus' or 'minus' bins that aggregate samples that would otherwise not appear on the plots. This would serve as an indicator of mis-recorded lengths.
2. It might be useful to include an indication of how closely the collected sample sizes match the target sizes.
3. Ageing data collected during the SET FIS are plotted, however, other scientific collections are not displayed. This includes one year of silver trevally sampling and recent blue-eye trevalla samples.
4. The SET FIS used to be conducted during both summer and winter but the winter component was dropped. We plot lengths collected during both seasons, but it would be better to plot the summer and winter length frequencies separately.
5. It would be useful to plot the onboard and port length frequencies together on the same plot, to highlight any differences.
6. It might be better to display the logbook catches (on the plot that shows CDR totals, and TACs) as a stacked barplot.
7. CVs are calculated along with the discard estimates, and in future it would be useful to add error bars to the discard rates.
8. GAB FIS abundance estimates have been obtained and loaded into CSIRO's data system, but have not yet been plotted in this report.
9. CPUE data are influenced by the level of discarding that occurs, so a line showing discard rate on the CPUE/Abundance plot might be informative.
10. An attempt is being made by the fishing industry to improve the discard reporting in the logbook, so perhaps a logbook-derived discard rate time series could be added to the discard plot.
11. A line that shows the sum of all TACs could be added to the plot that shows the sum of all quota species caught.
12. Coloured cell plots could be added for SET FIS and GAB FIS length sampling.
13. There might be other non-quota species that could be usefully added to this report; latched fish and squid were discussed at SESSFRAG.
14. An aggregated set of plots for inshore plus offshore ocean perch would be useful.



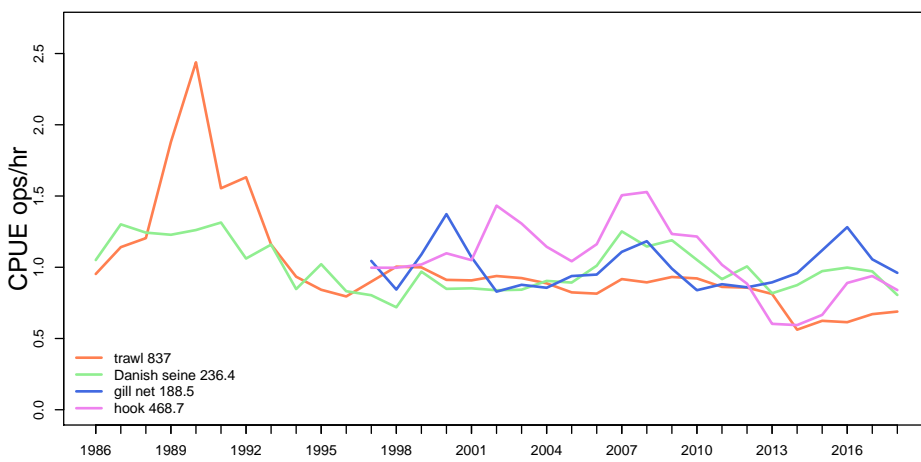
Southern and Eastern Scalegfish and Shark Fishery

Wed Nov 06 17:08:14 2019

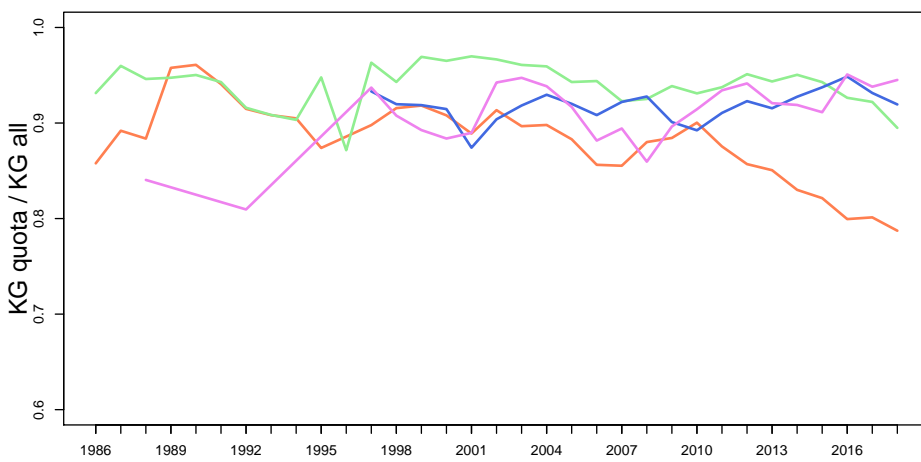
CPUE for all quota species



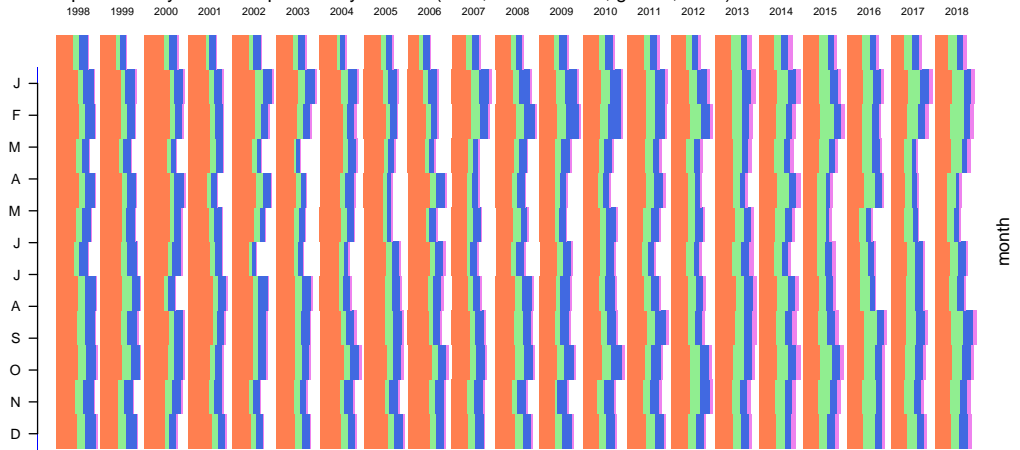
CPUE for all reported KG



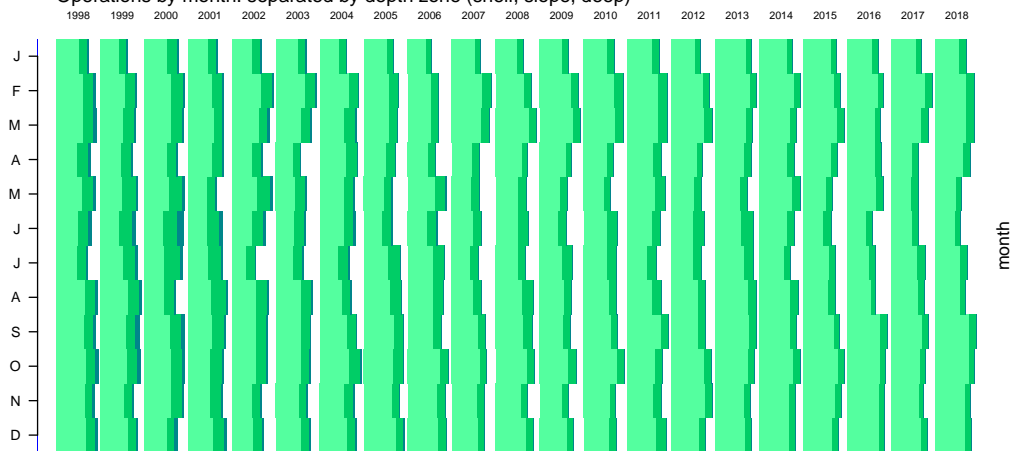
Proportion of total reported catch that are quota species



Operations by month: separated by method (trawl, Danish seine, gill net, hook)



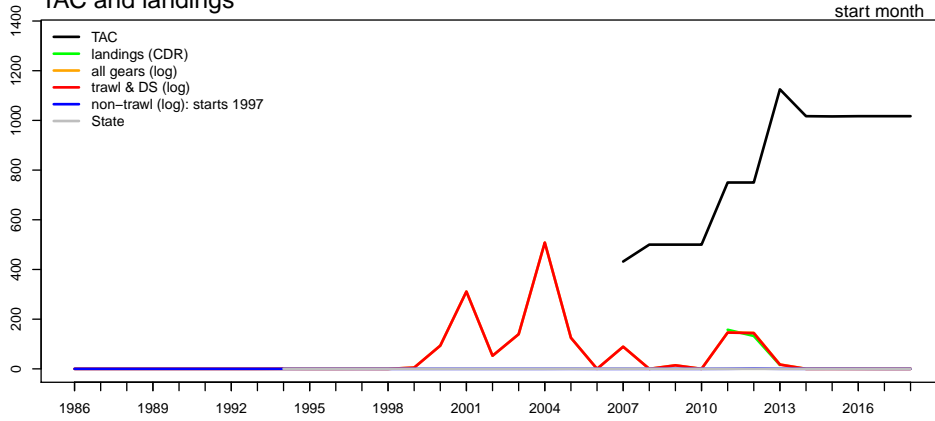
Operations by month: separated by depth zone (shelf, slope, deep)



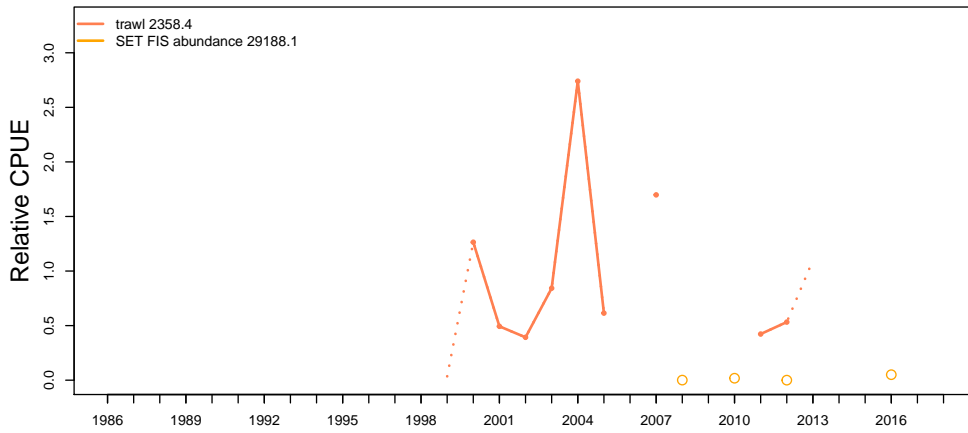
Alfonso

Wed Nov 06 17:08:16 2019
region ALL unit code ALF sa code ALF
37258002
start month 1

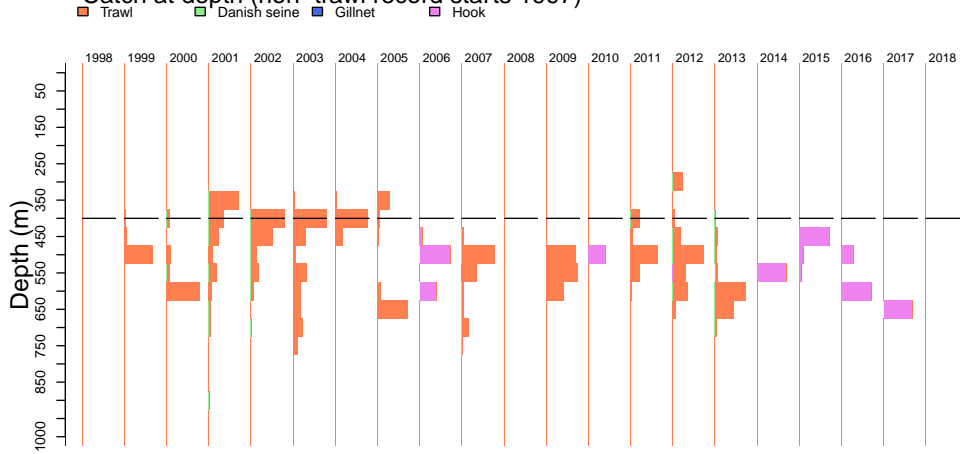
TAC and landings



Geometric mean CPUE & SET FIS abundance

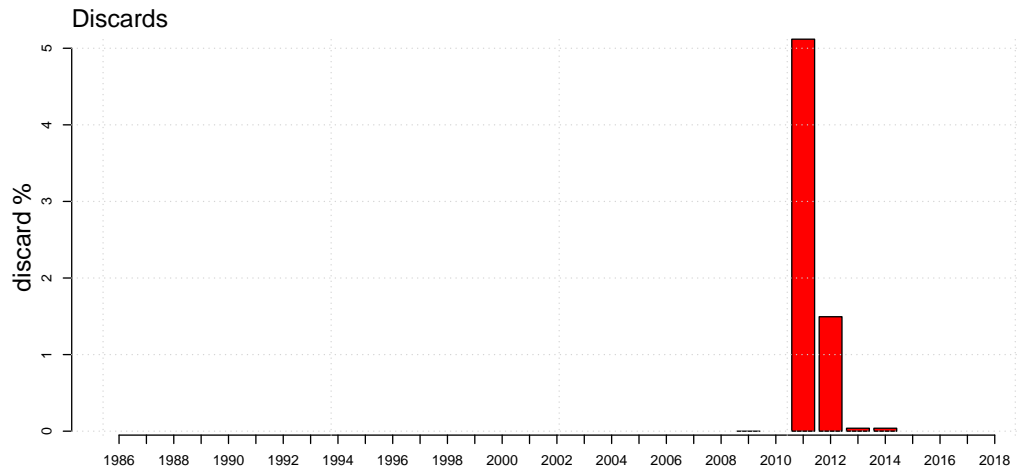
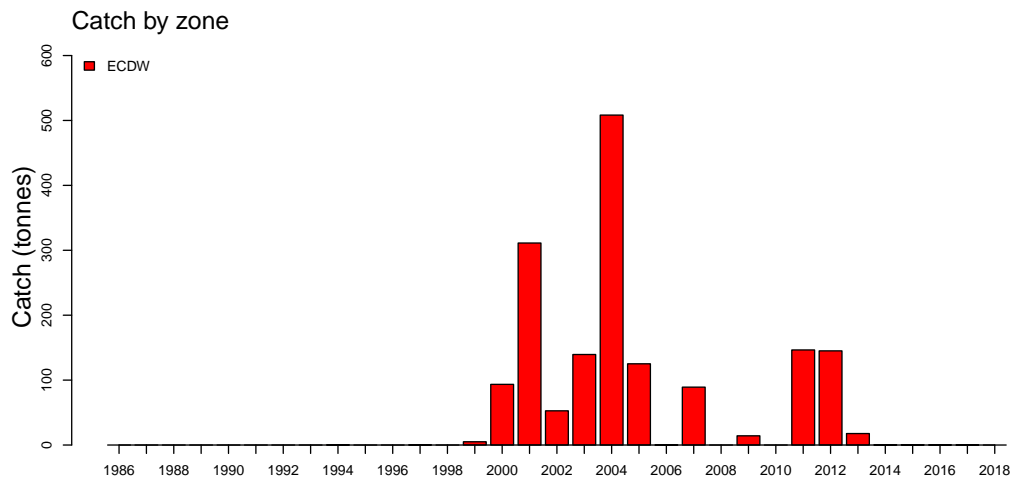
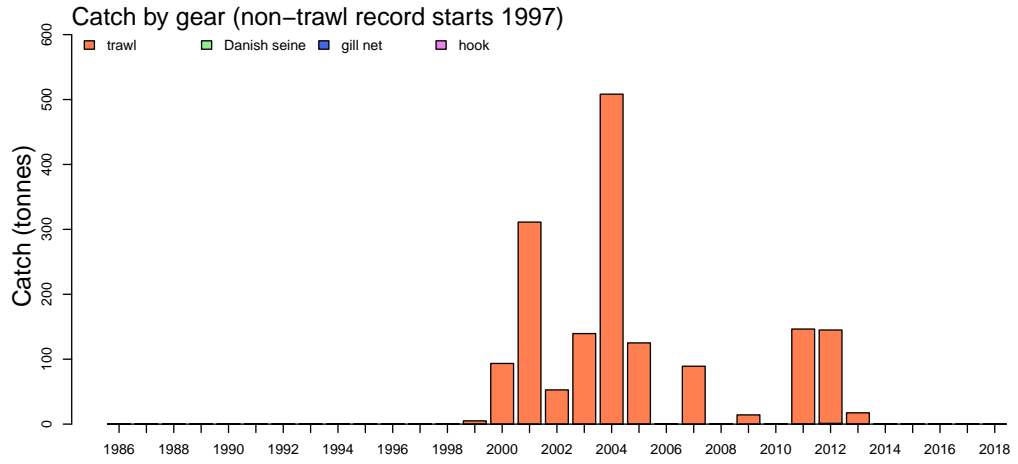


Catch at depth (non-trawl record starts 1997)



Alfonsino

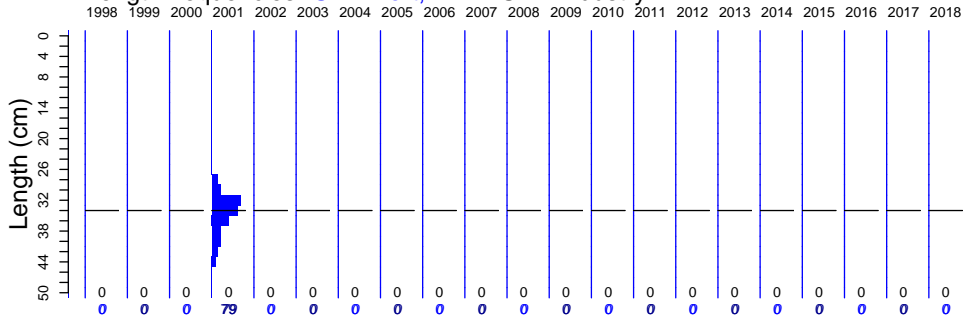
Wed Nov 06 17:08:17 2019



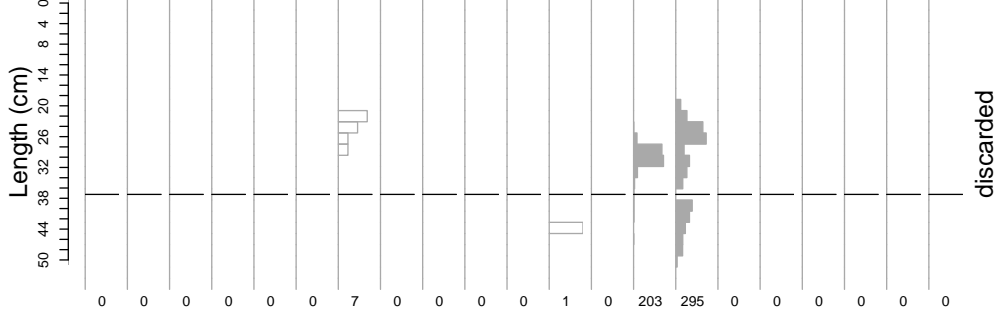
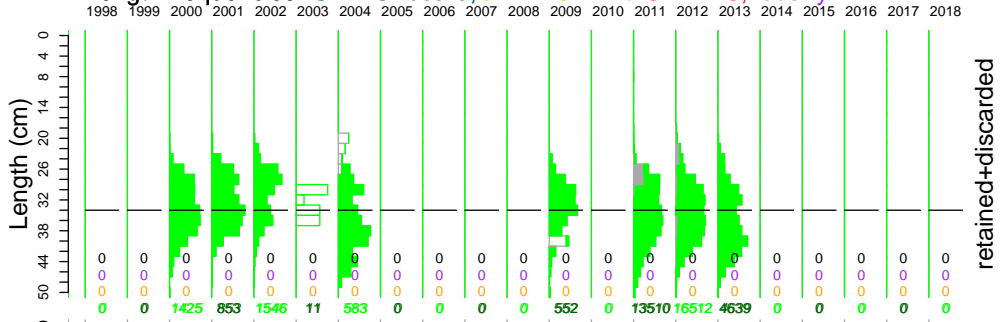
Alfonso

Wed Nov 06 17:08:17 2019

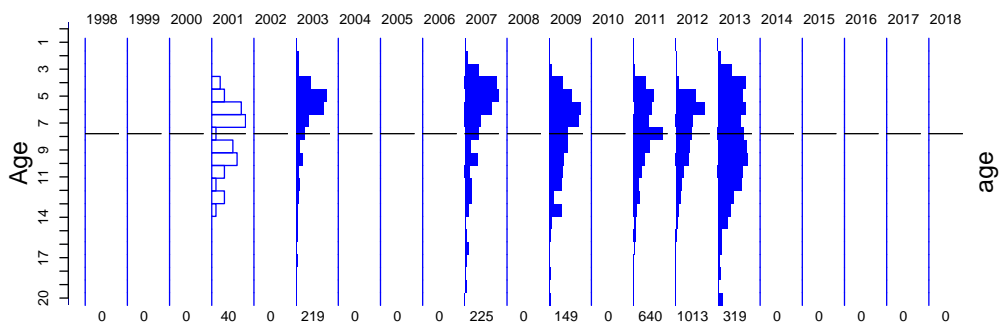
Length frequencies: ISMP Port, GAB Industry



Length frequencies: ISMP Onboard, SET FIS winter, GAB FIS Industry



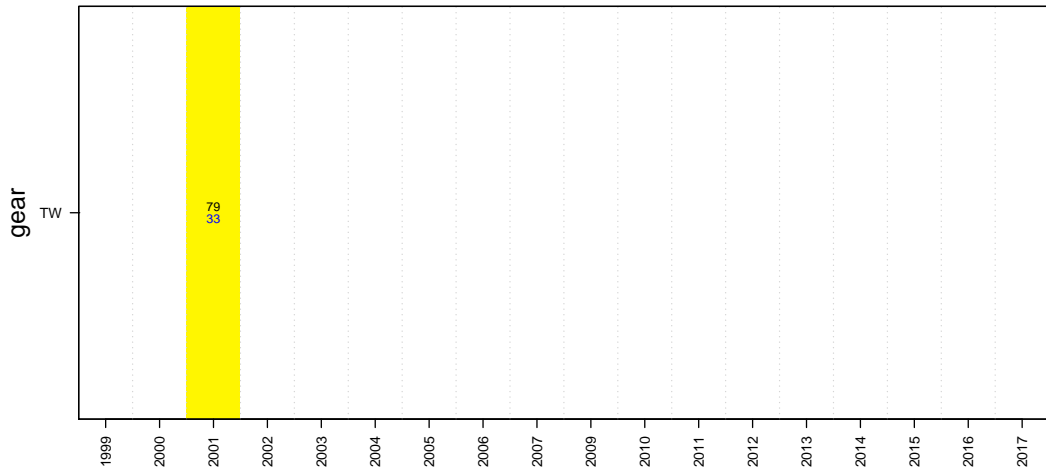
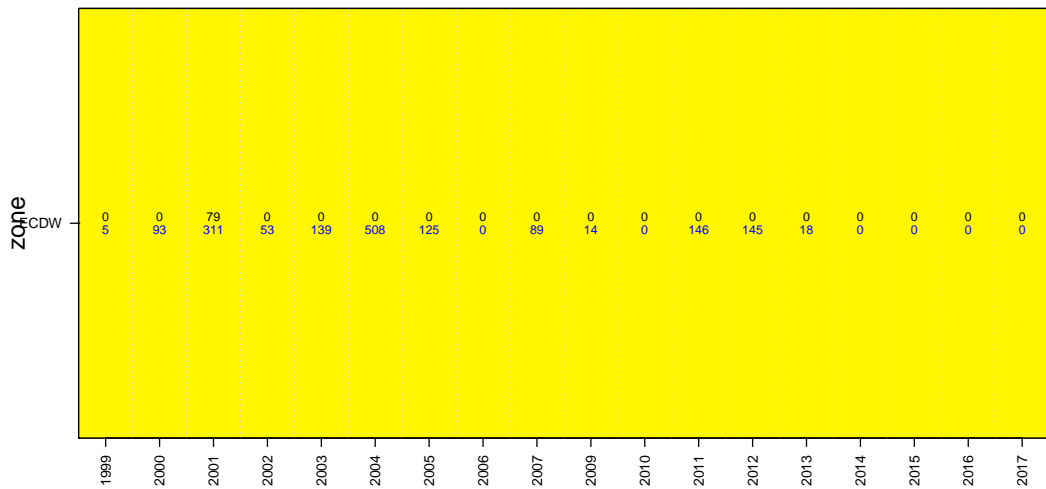
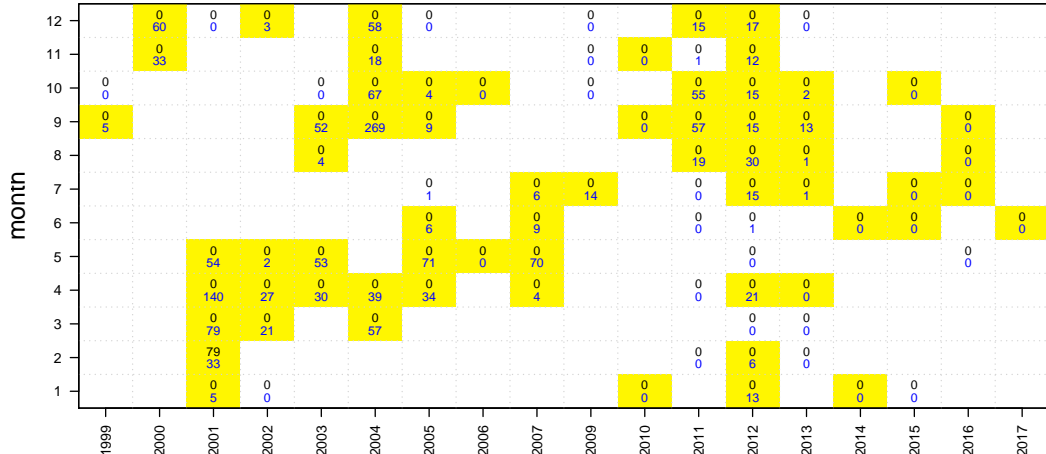
Age frequency



Alfonsino

Port length data

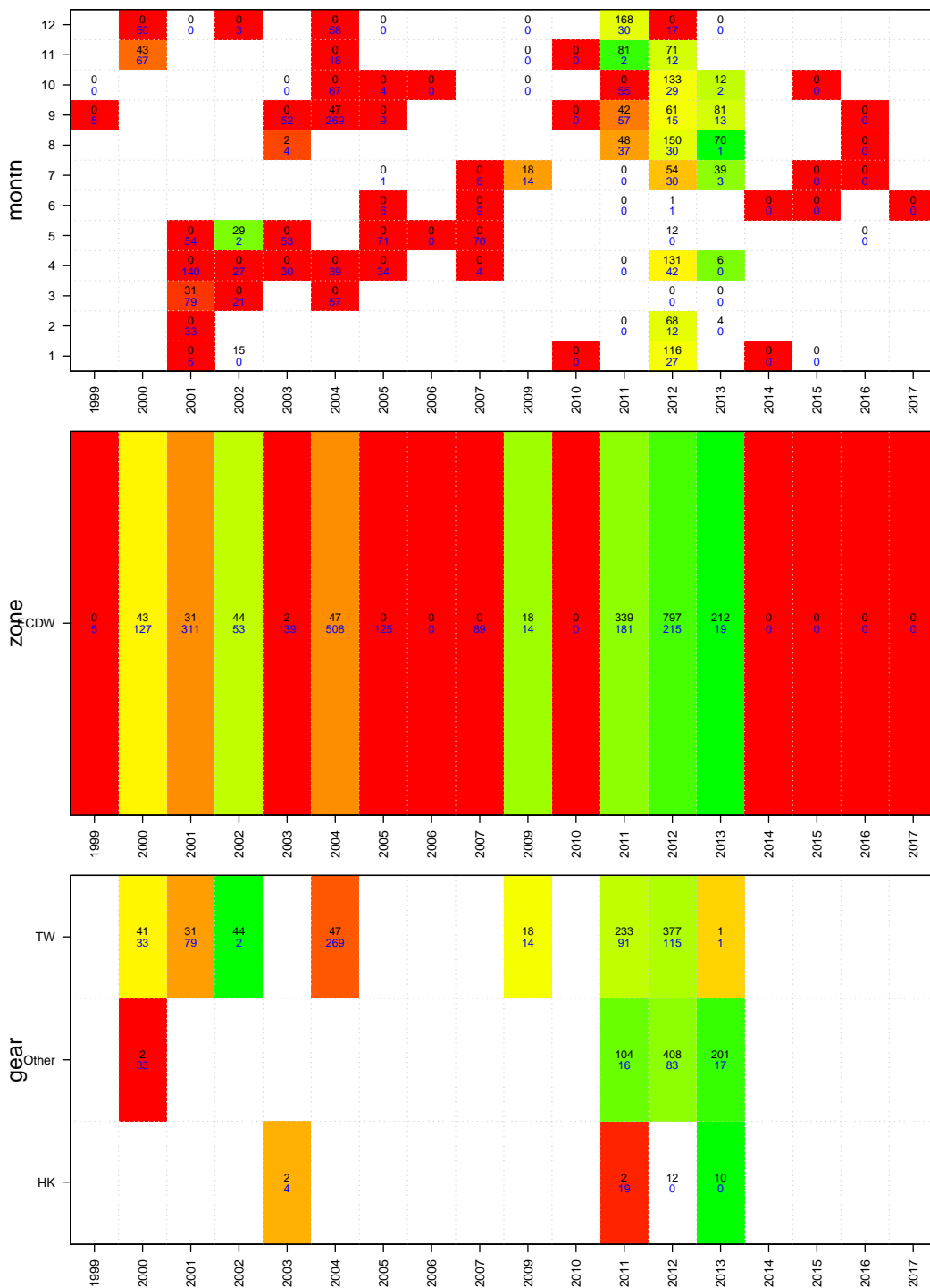
Wed Nov 06 17:08:18 2019



Alfonso

Onboard discard weight data

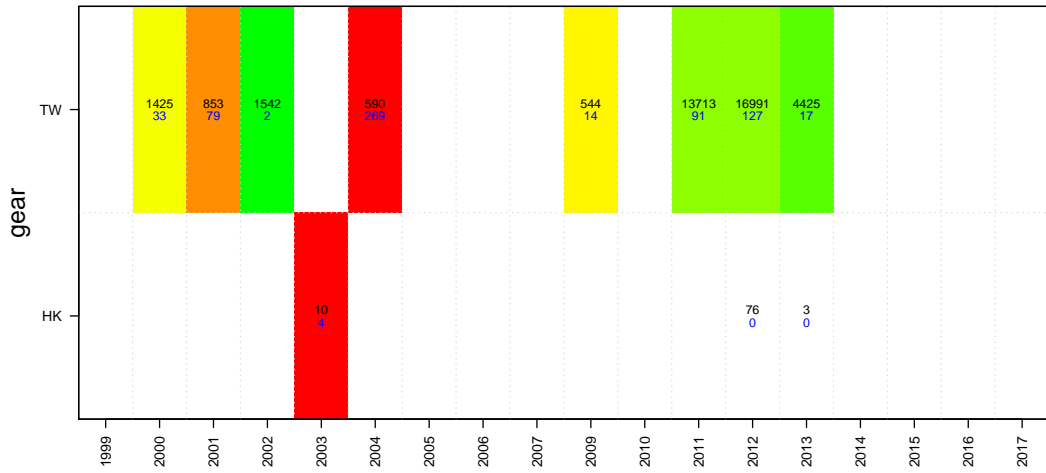
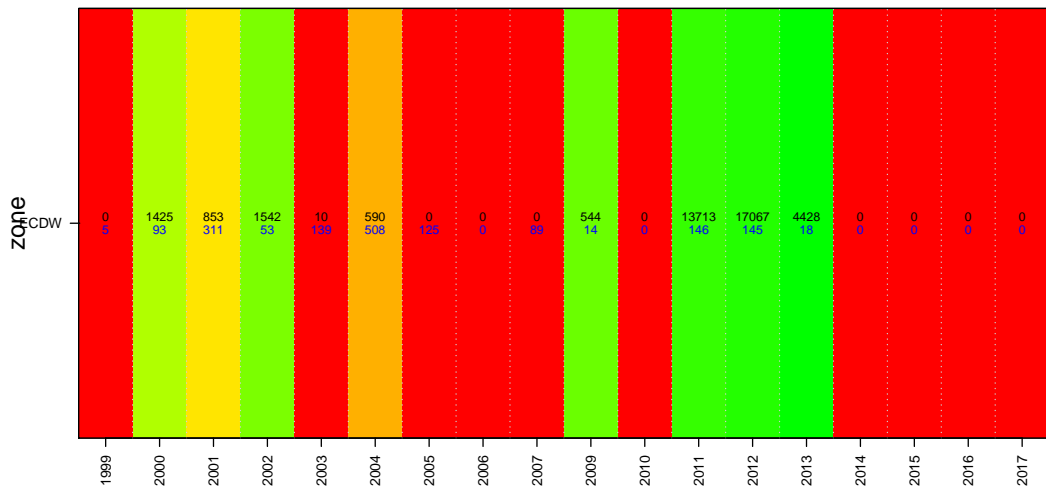
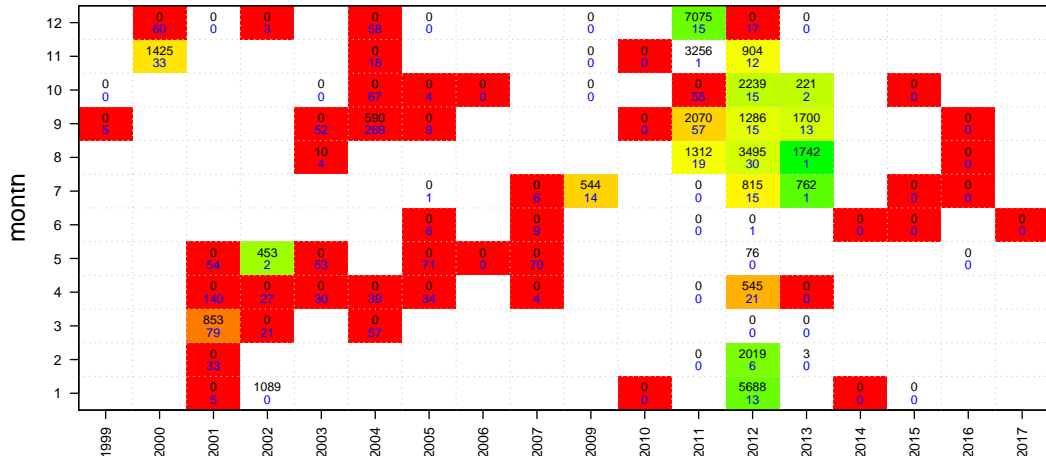
Wed Nov 06 17:08:18 2019



Alfonso

Onboard length data

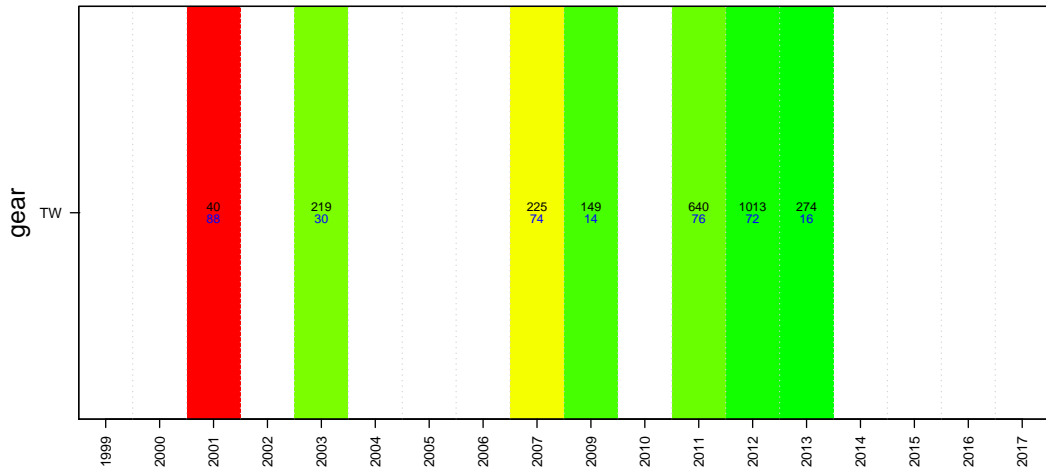
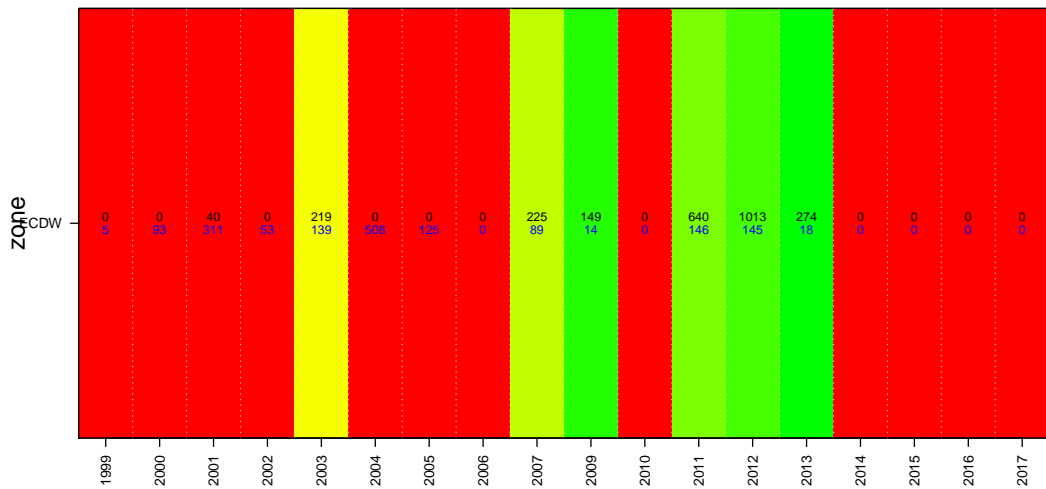
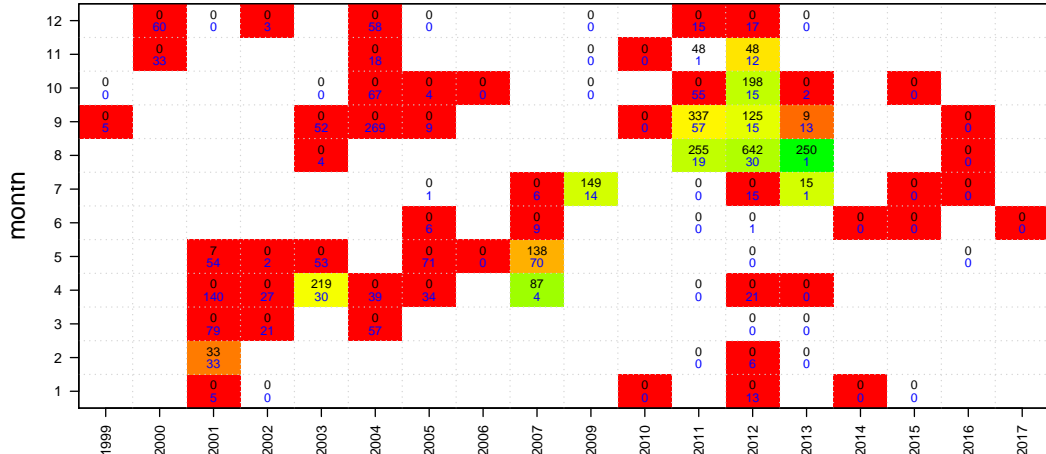
Wed Nov 06 17:08:18 2019



Alfonsino

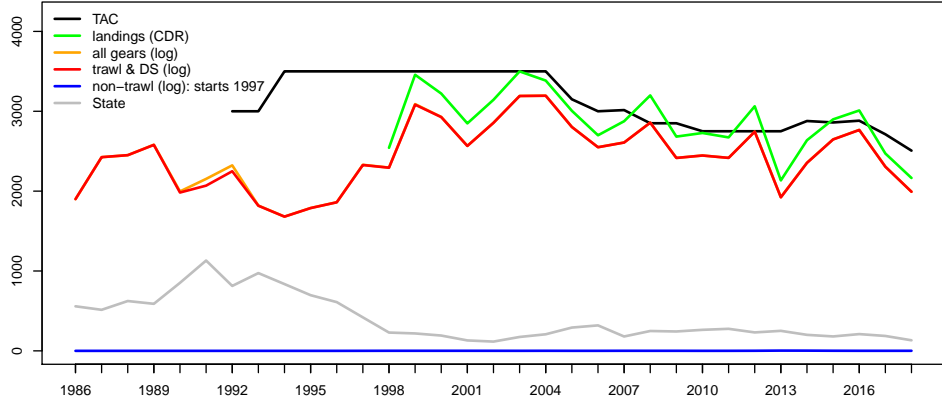
Age data

Wed Nov 06 17:08:18 2019

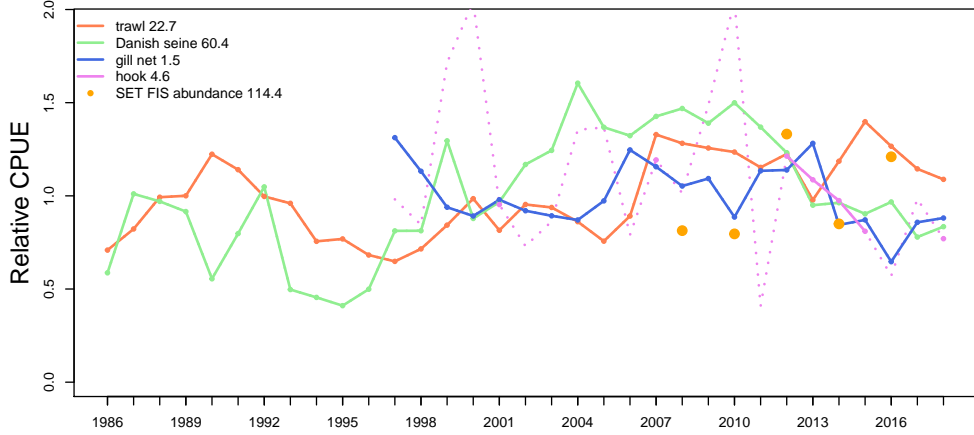


Flathead
TAC and landings

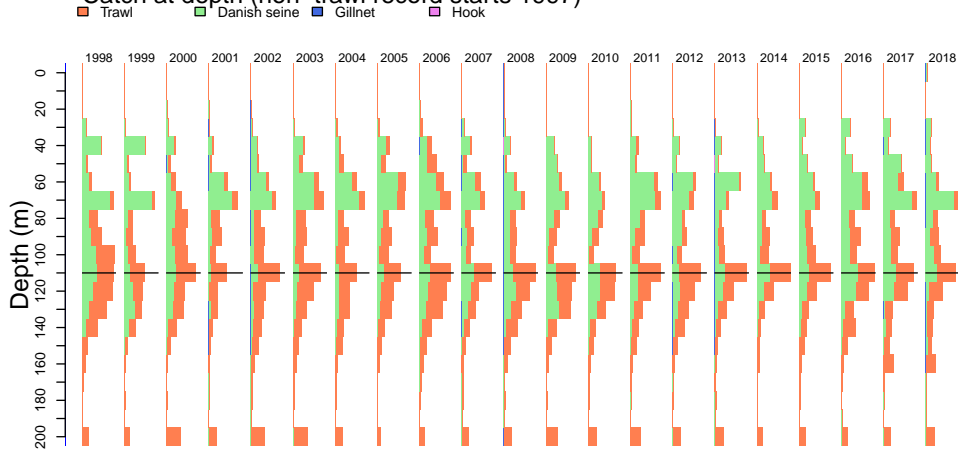
Wed Nov 06 17:08:34 2019
region SET unit code FLT sa code FLT
37296000 37296001 37296003 37296007 37296035 37296037
start month 1



Geometric mean CPUE & SET FIS abundance

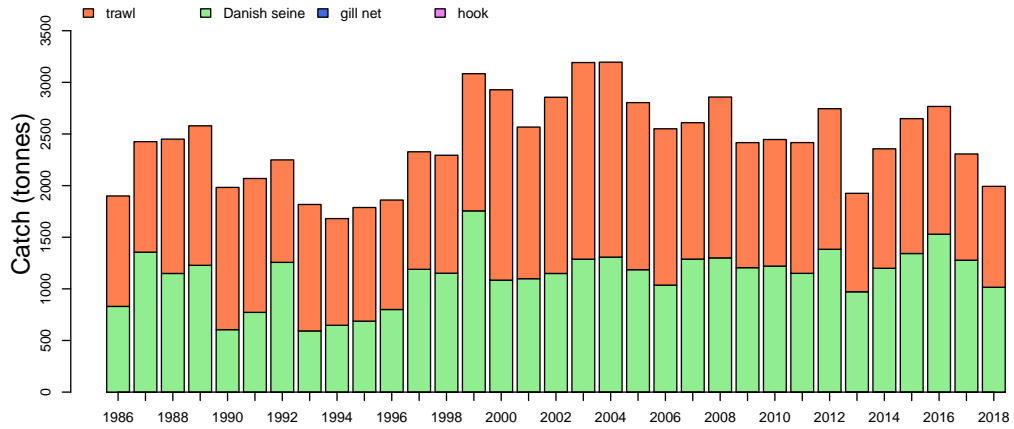


Catch at depth (non-trawl record starts 1997)

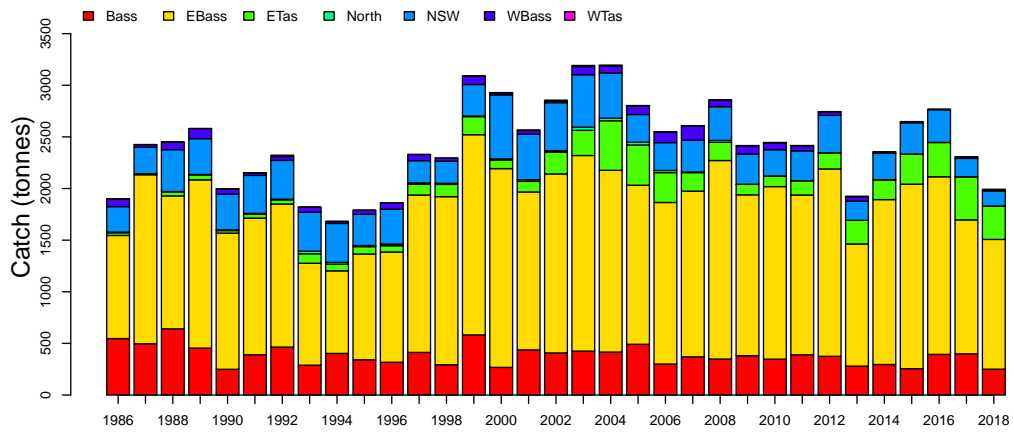


Flathead

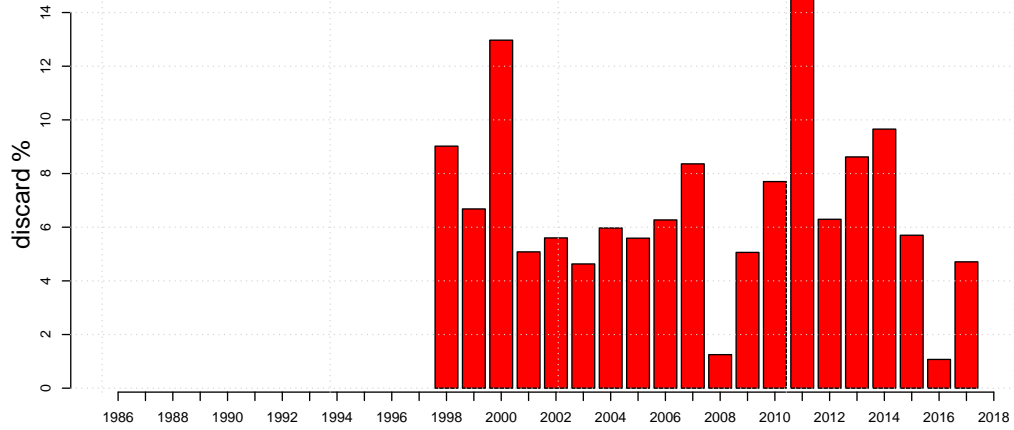
Catch by gear (non-trawl record starts 1997)



Catch by zone

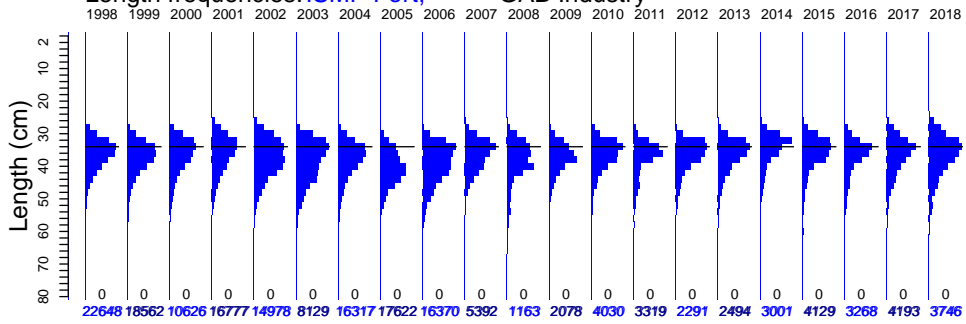


Discards



Flathead

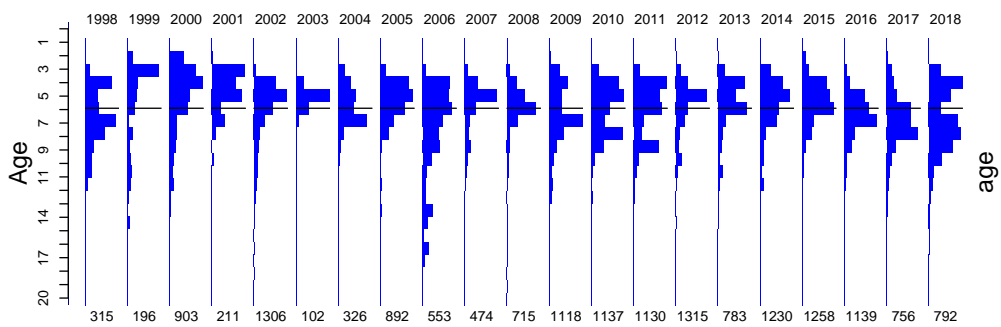
Length frequencies: ISMP Port, GAB Industry



Length frequencies: ISMP Onboard, SET FIS winter, GAB FIS, Industry



Age frequency



Flathead

Port length data

Wed Nov 06 17:09:35 2019

month	12	605 252	1506 355	1036 193	593 226	1626 249	136 268	2169 202	806 249	0 244	235 181	0 336	196 304	439 267	204 270	216 267	0 267	404 272	267 252	191 237	409 171	230 140
	11	1339 147	1174 316	404 162	876 223	1901 476	136 270	2001 357	1922 159	1136 342	174 197	0 213	299 376	357 353	278 331	183 296	350 420	386 420	155 248	316 441	296 341	364 275
	10	674 170	1440 176	1764 273	1421 187	516 249	1558 329	1616 253	2884 324	1775 299	986 421	0 240	254 319	355 340	133 389	252 460	250 251	442 455	412 466	490 350	385 298	398 218
	9	788 110	1156 381	1222 289	1517 341	1435 224	1115 237	1695 364	990 158	1850 130	1414 281	0 210	195 177	379 293	239 388	210 378	216 210	321 489	265 298	436 374	499 290	266
	8	521 226	712 232	416 301	2023 214	1374 302	272 336	781 205	1165 140	1367 215	518 199	0 210	0 204	654 298	259 359	190 472	275 224	286 283	283 309	335 476	349 270	255 213
	7	2595 371	648 236	634 169	1030 390	1223 258	248 239	799 274	551 178	461 168	605 237	0 384	272 392	331 405	141 319	214 375	181 245	269 271	508 293	320 307	357 250	313 210
	6	3708 344	630 248	0 267	1834 263	439 168	369 183	698 223	1881 564	824 243	740 179	0 217	16 229	267 331	351 328	0 231	254 248	211 230	320 297	255 323	356 270	202 217
	5	3603 345	1609 571	303 222	1340 393	1303 305	1594 468	208 271	575 248	1368 192	0 251	146 255	260 201	557 378	351 374	149 410	185 316	233 281	498 365	310 373	256 274	403 242
	4	2898 749	2048 443	250 314	1184 208	1007 237	411 229	414 337	1302 304	1282 232	0 232	370 294	154 486	80 252	292 414	223 414	125 280	0 187	191 234	165 246	340 246	272 301
	3	3217 439	1191 453	2172 688	1039 131	1376 432	139 290	3847 478	1253 275	3072 238	0 238	0 238	41 208	33 279	283 255	0 268	207 265	0 265	171 445	261 249	363 368	249 322
	2	2700 749	3646 473	1019 655	1143 202	1420 278	1702 409	624 287	2017 251	2322 237	705 212	455 169	217 126	156 250	494 298	301 247	286 136	185 259	423 323	287 346	322 285	266 392
	1	0 248	2802 374	1406 289	1358 498	449 257	1465 348	2276 392	913 446	255 433	192 233	144 269	287	422 254	294 386	353 248	165 268	264 349	412 504	73 272	340 371	319 383
		1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018

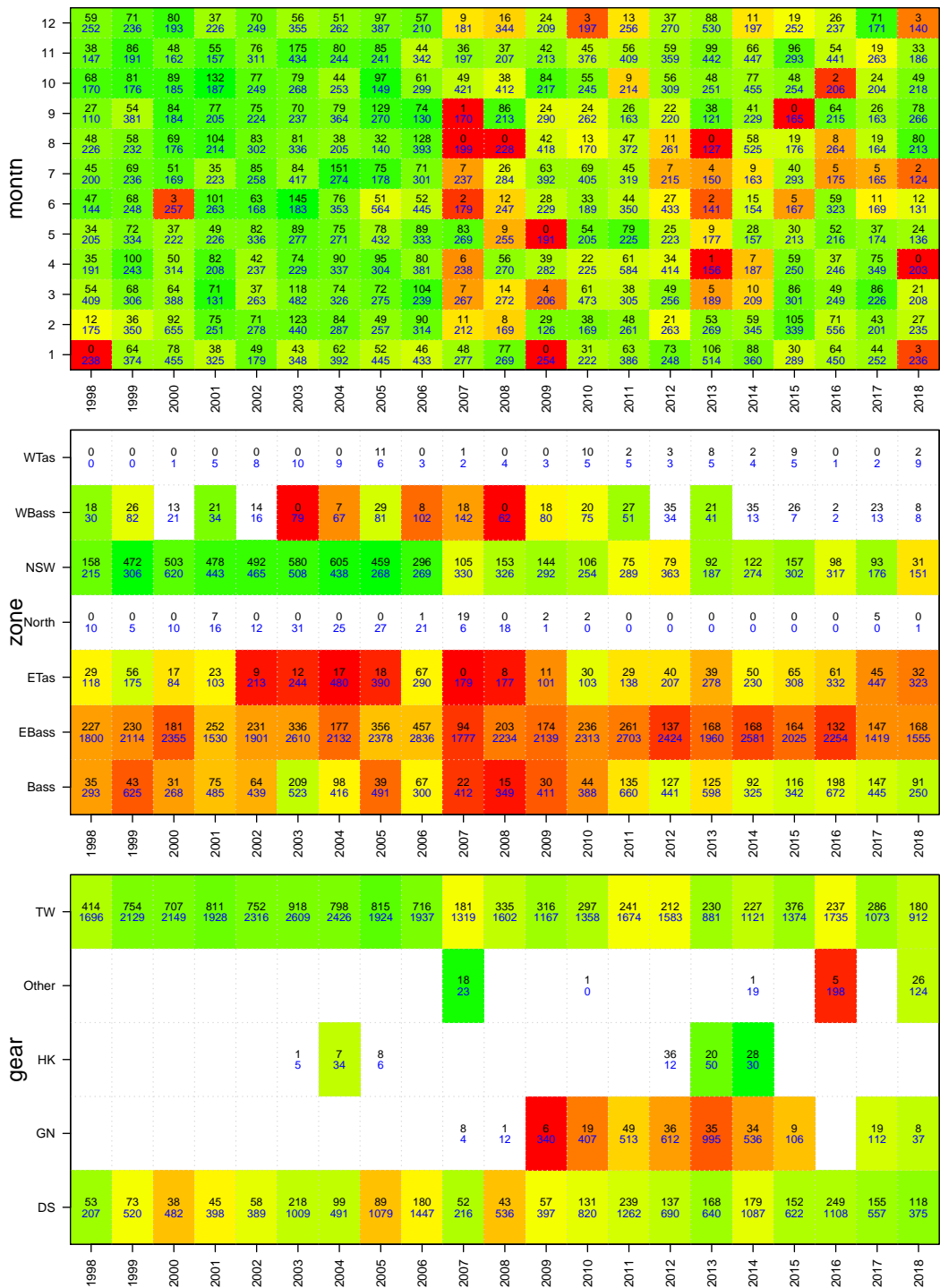
zone	WTas	0 0	0 0	0 1	0 5	0 8	0 10	0 9	0 6	0 3	0 2	0 4	75 3	0 5	0 5	0 3	0 5	120 4	0 5	0 1	0 2	0 9
	WBass	0 30	0 82	0 21	0 34	0 16	0 75	0 67	64 81	0 138	0 146	0 62	0 80	0 86	63 48	0 34	0 45	0 11	0 7	0 2	0 13	0 8
	NSW	3991 215	6112 386	2699 620	5480 443	911 465	2310 568	6462 438	5851 358	9787 358	2148 307	0 328	0 338	94 254	0 389	94 363	0 187	0 255	0 382	0 511	216 176	0 148
	North	0 10	0 5	0 10	0 16	0 12	0 31	0 25	0 27	0 21	0 6	0 18	0 1	0 0	0 0	0 0	0 0	0 0	0 0	0 0	0 0	0 1
	ETas	80 118	519 175	362 84	0 103	5201 213	649 244	1564 480	3130 390	1323 290	255 179	496 177	87 101	116 103	283 138	253 156	203 229	0 182	232 292	324 332	109 419	97 323
	EBass	18577 2439	11931 3107	7565 2807	11297 2238	8866 2312	4752 2236	7301 2267	8577 1937	5260 1956	2724 1889	567 2139	1475 2061	3145 3044	2304 3095	1620 3171	2056 2195	2881 2758	3880 3170	2856 2948	3539 2528	3473 2443
	Bass	0 203	0 382	0 288	0 437	0 498	418 425	990 416	0 491	0 309	505 370	100 349	411 391	675 347	669 389	324 375	235 280	0 298	17 208	88 394	345 399	200 250
		1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018

gear	TW	11302 1536	13483 1993	7060 1797	11087 1478	11409 1730	6057 1524	11811 1499	14080 1513	14995 1247	3721 715	132 216	1421 1274	2549 1573	1755 1641	1150 1488	1237 1130	1288 1162	1491 1489	1140 1408	1550 1290	1388 1209
	Other										1406 406	596 128		25 0								
	DS	11346 453	5079 1547	3566 1082	5690 1203	3569 635	2072 666	4506 881	3542 635	1375 391	505 45	435 498	627 716	1456 1779	1564 1817	1141 1488	1257 1174	1713 1318	2638 1812	2128 1669	2659 1352	2382 1317
		1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018

Flathead

Onboard discard weight data

Wed Nov 06 17:09:35 2019



Flathead

Onboard length data

Wed Nov 06 17:09:36 2019

month	Year																					
	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	
12	1745 232	3052 236	2008 193	1430 226	1189 249	1871 355	1638 262	3572 246	1401 210	264 181	686 344	64 209	81 197	120 256	591 270	1230 503	83 197	698 252	65 237	609 171	0 0	
11	1020 147	3325 191	3567 162	2952 167	1336 311	3713 434	1955 244	2905 159	2194 342	670 197	1118 207	84 213	709 376	894 409	663 359	1021 322	598 420	1595 293	765 441	30 217	492 181	
10	1990 170	2511 176	3225 188	4292 187	2261 249	2033 268	663 160	2007 149	1984 299	597 421	451 217	510 217	384 204	56 214	476 271	926 117	1460 220	1636 117	79 254	176 206	303 218	
9	1010 110	1493 381	2731 194	2907 206	2000 224	2984 237	2473 364	4643 270	1850 130	0 116	1173 243	3 177	587 262	227 163	855 220	511 117	745 229	0 195	726 215	95 163	598 266	
8	910 226	2004 334	2006 222	3539 226	2778 336	1286 277	433 271	723 432	3523 333	0 109	2242 228	466 418	3361 194	203 372	2441 472	0 127	3565 1717	91 176	3449 476	326 164	1121 131	
7	1094 200	2402 236	1642 169	831 223	2231 258	1353 417	3016 274	2676 178	2717 301	76 237	867 284	28 216	1772 584	605 319	1197 215	6 150	758 294	203 203	117 205	61 109	124	
6	1293 144	1680 248	0 207	2171 263	2560 168	2892 183	2687 353	1019 564	2371 445	159 179	0 237	309 229	121 189	719 328	238 433	7 141	299 135	68 167	697 186	48 169	153 131	
5	720 205	1200 334	1314 222	527 226	1099 336	1613 277	708 271	2444 432	2636 333	162 247	128 255	0 131	725 205	688 225	182 223	4 177	200 157	619 213	236 216	121 174	27 136	
4	1547 191	1747 343	1501 314	2375 298	1635 237	1456 337	2605 304	2624 381	1804 304	41 238	1772 270	798 282	137 225	261 384	628 227	0 166	1 167	794 250	641 246	1075 349	0 203	
3	2828 440	2776 366	1979 388	934 131	1050 263	3322 482	1217 326	1950 275	5166 288	67 267	576 272	147 206	165 473	242 255	998 256	0 168	3 209	947 358	1396 356	1167 201	220 208	
2	240 175	2372 350	2874 391	2048 202	1709 278	2392 409	1312 287	1173 251	3291 337	76 212	213 169	793 126	149 169	85 229	238 211	267 161	661 259	1434 323	884 356	512 201	387 235	
1	0 0	3193 374	3131 455	963 325	1374 179	1584 348	1038 392	2069 366	3366 433	2561 275	677 269	0 0	20 213	526 396	898 248	1544 317	935 360	1205 289	450	0 0	0 0	
zone	WTas	0 0	0 0	0 1	0 5	0 8	0 10	0 9	218 6	0 3	0 2	33 4	0 3	322 5	0 5	54 3	0 5	118 4	165 5	42 1	0 2	0 9
	WBass	27 30	194 82	90 21	77 34	0 16	0 75	0 67	385 81	0 138	177 140	269 62	192 80	98 66	8 48	157 34	20 41	277 11	63 7	56 2	64 13	10 8
	NSW	3687 215	12848 366	17728 620	13899 443	13313 465	12005 508	12960 438	15109 388	6963 268	1728 307	4561 356	1642 292	2524 278	632 289	3825 363	1369 187	4076 274	3316 302	2988 347	808 176	269 146
	North	0 10	0 5	0 10	0 16	0 12	0 31	0 25	0 27	0 21	42 6	0 18	30 1	0 0	0 0	0 0	0 0	0 0	0 0	0 0	15 0	0 1
	ETas	959 118	3066 175	492 84	383 103	477 213	399 244	562 480	1692 390	4588 290	0 119	1107 177	89 101	1520 103	349 138	671 156	451 278	1581 219	745 292	2194 332	700 447	608 323
	EBass	9235 1800	10874 2114	6967 2091	10286 1530	7008 1901	11137 2610	3963 2039	9081 2079	19859 2759	972 1777	3801 2062	788 1849	3723 2492	3170 2479	3192 2447	2398 1770	3315 2763	3926 2025	3338 2236	1945 1419	1946 1555
	Bass	489 293	773 625	701 268	324 437	424 439	2958 493	2260 416	1320 491	893 300	1751 412	132 349	461 411	24 307	467 582	1506 402	1278 349	240 325	806 317	1642 567	627 399	529 250
gear	TW	12562 1685	25873 2326	25160 2138	24645 1813	20654 2141	21916 2311	15870 2167	22421 1518	18976 1334	2656 1222	5417 1406	2176 966	2579 1299	3127 1307	2968 1299	2855 654	2844 894	6877 1358	4262 1578	3108 661	2424 527
	STset										3408 247		4884 393		4084 452		4154 314		3483 278			
	HK							28 6							123 12	24 50	239 30					
	GN									8 4		16 65	17 302	32 508	57 520	74 559	24 619	43 489	7 90		34 65	11 36
	DS	1835 207	1882 444	818 195	324 169	568 389	4583 1009	3875 469	5356 873	13327 1437	2006 216	1062 536	1009 147	716 727	1442 1196	2156 690	2613 636	2327 1087	2137 562	2515 902	1017 451	927 335

Flathead

Age data

Wed Nov 06 17:09:36 2019

month	Age data																					
	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	
12	45 252	0 194	160 193	0 254	126 167	0 259	34 262	0 244	0 233	141 209	0 209	109 213	25 277	55 267	92 270	150 350	95 273	88 252	16 237	108 171	34 211	
11	63 147	12 191	166 258	57 157	132 311	0 270	62 244	0 159	194 209	0 197	201 421	65 207	86 213	276 376	94 353	82 331	95 175	83 420	69 248	123 441	48 217	18 275
10	85 292	49 176	71 185	0 197	110 249	0 269	65 160	107 224	50 183	124 421	49 240	252 217	131 204	78 389	127 460	104 275	275 455	204 254	61 206	45 298	142 218	
9	63 110	13 206	72 184	32 205	98 224	0 237	99 215	91 158	0 170	20 176	0 203	20 117	0 213	77 262	48 163	87 388	62 117	53 378	47 298	97 215	101 176	204 266
8	28 226	42 232	64 176	113 214	168 302	0 230	66 205	0 205	140 210	0 169	0 220	10 224	27 170	213 369	52 472	0 127	155 202	16 176	26 164	74 206	69 213	
7	31 200	0 234	46 169	0 223	101 258	0 239	0 174	105 292	60 168	0 207	0 284	0 392	189 405	53 319	71 375	43 150	0 150	66 271	118 293	17 175	25 165	40 210
6	0 144	0 234	100 257	9 263	0 163	0 163	0 223	0 121	0 243	0 179	0 217	0 229	108 331	45 328	102 231	82 141	0 141	52 135	30 167	104 186	16 169	43 217
5	0 208	0 234	0 252	0 258	0 203	0 227	0 271	81 248	0 159	0 207	0 226	47 191	199 378	104 374	36 410	0 177	64 281	132 365	94 373	17 174	35 242	
4	0 191	0 233	93 314	0 268	0 237	0 239	0 237	0 238	0 234	8 238	153 486	141 155	88 414	84 229	138 414	0 148	10 188	145 373	136 405	86 349	1 203	
3	0 133	0 238	58 306	0 291	0 263	0 268	0 248	25 275	127 238	0 207	219 272	41 206	25 275	79 255	206 455	0 158	0 209	114 275	126 369	102 369	95 322	
2	0 177	0 237	23 291	0 269	472 163	0 259	0 257	86 257	223 237	0 214	74 169	79 126	101 169	86 258	105 211	19 136	160 175	188 323	58 346	97 201	89 392	
1	0 208	80 374	0 289	50 269	0 269	99 348	102 269	0 266	203 296	93 234	90 269	116 254	116 213	265 396	353 333	353 268	217 349	107 504	291 340	37 371	22 383	

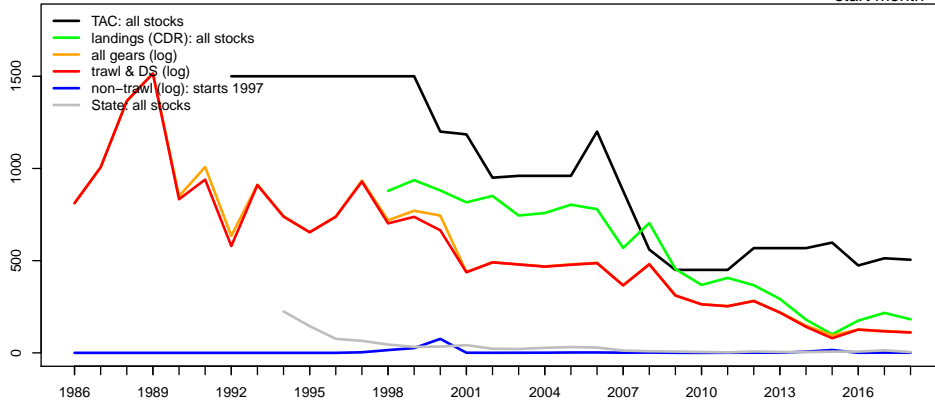
zone	Age data																				
	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018
WTas	0 0	0 0	0 1	0 5	146 8	0 10	0 9	0 6	0 3	0 2	0 4	35 3	0 5	0 3	0 5	17 4	48 5	0 1	0 2	15 9	
WBass	0 30	0 82	0 21	0 34	0 16	0 79	0 67	0 81	0 108	0 146	0 42	22 80	0 86	31 48	0 34	0 45	0 11	1 7	0 2	0 13	0 8
NSW	59 215	146 306	517 630	68 443	452 863	0 388	152 438	105 268	64 268	166 307	178 326	217 292	113 254	0 359	244 363	189 187	206 255	326 303	154 317	91 168	76 146
North	0 10	0 5	0 10	0 16	0 12	0 31	0 25	0 27	0 21	0 6	0 18	0 1	0 0	0 0	0 0	0 0	0 0	0 0	0 0	0 0	0 1
ETas	0 114	50 175	60 84	0 103	150 213	0 244	0 480	19 381	177 290	52 179	74 177	0 131	90 103	0 138	147 156	65 229	167 192	25 282	190 332	88 419	134 323
EBass	256 1750	0 1320	326 2021	143 1530	558 1734	102 1804	174 1760	714 1729	312 1565	256 1829	463 2139	533 1735	867 2620	961 2811	762 3392	343 1404	787 2576	742 2663	570 2323	385 1907	523 2415
Bass	0 203	0 282	0 268	0 437	0 498	0 428	0 478	54 491	0 329	0 376	0 348	281 381	67 347	138 389	162 403	186 315	53 296	116 255	225 462	192 399	44 250

gear	Age data																				
	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018
TW	213 440	196 236	711 759	181 250	748 236		152 97	288 582	241 119	315 282	304 345	716 901	516 1132	414 1333	846 1887	343 376	636 1278	757 1678	649 1400	367 1029	489 1373
STset											48 31										
DS	102 225		192 200	30 67	558 332	102 200	174 437	604 770	312 461	159 353	363 603	372 610	621 1463	716 1629	469 2828	440 530	594 1216	501 1247	490 1282	389 1131	303 1161

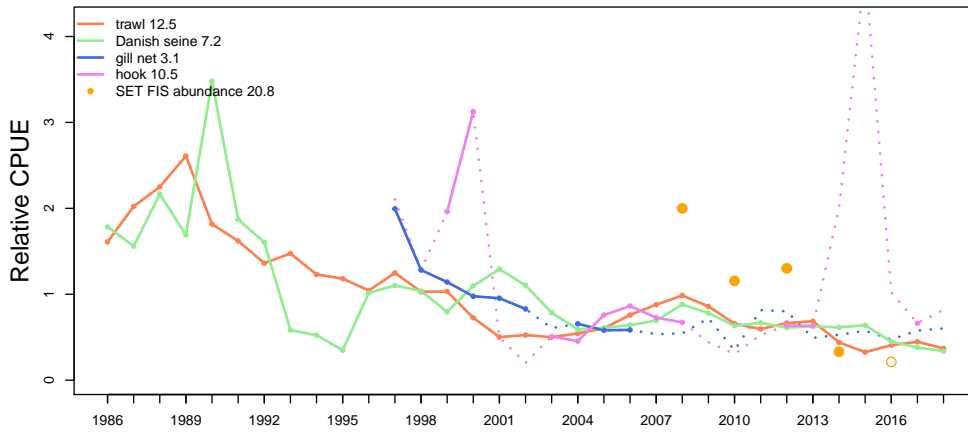
Jackass Morwong East

Wed Nov 06 17:09:42 2019
region SEFEAST unit code MOW sa code MOWE
37377003
start month 1

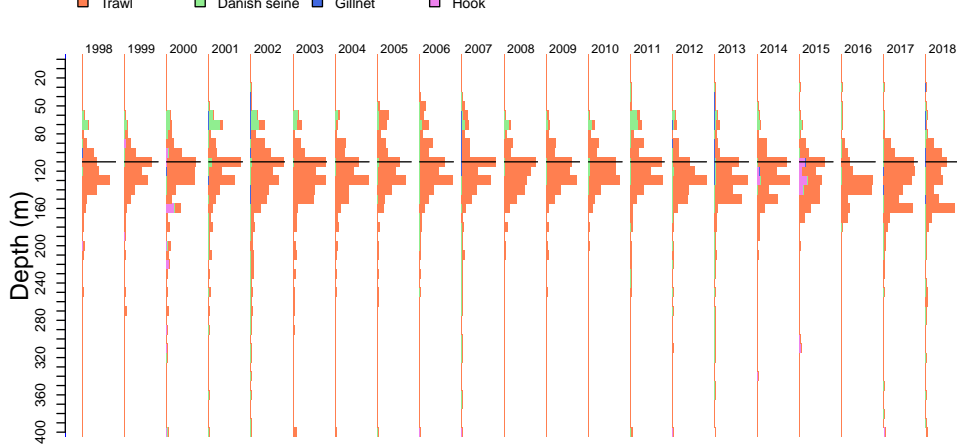
TAC and landings



Geometric mean CPUE & SET FIS abundance



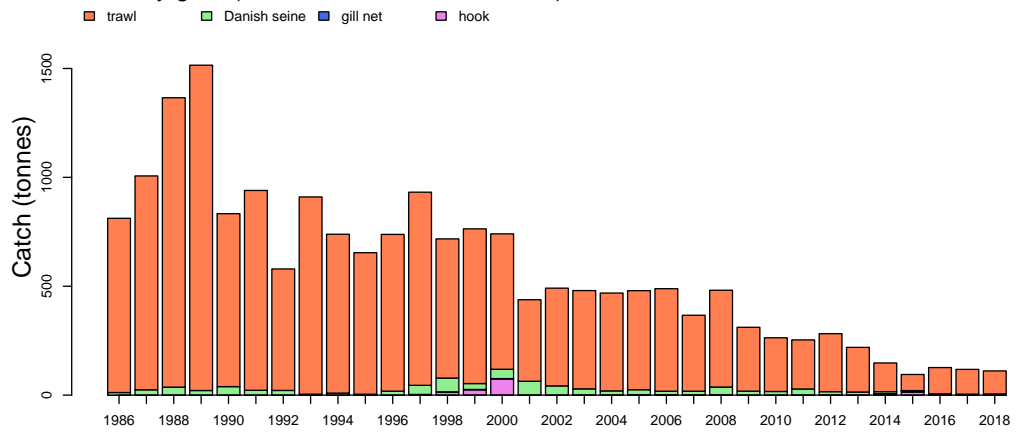
Catch at depth (non-trawl record starts 1997)



Jackass Morwong East

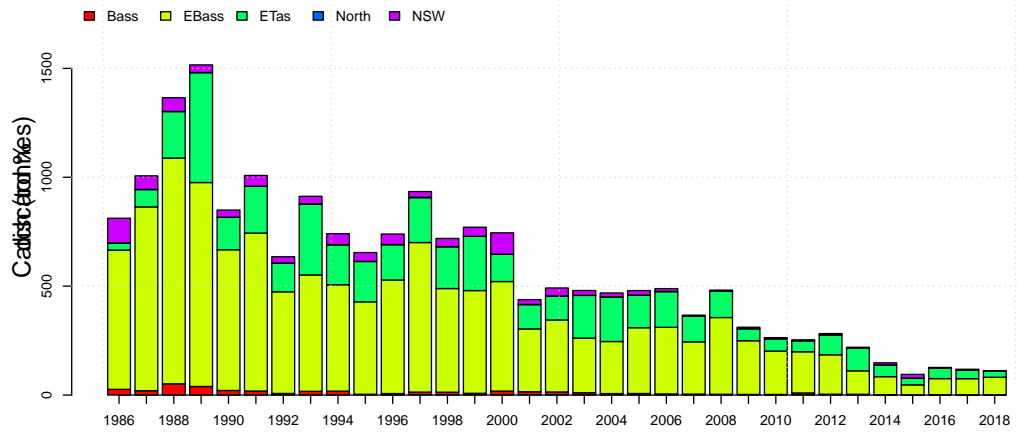
Catch by gear (non-trawl record starts 1997)

Wed Nov 06 17:10:00 2019



Discards

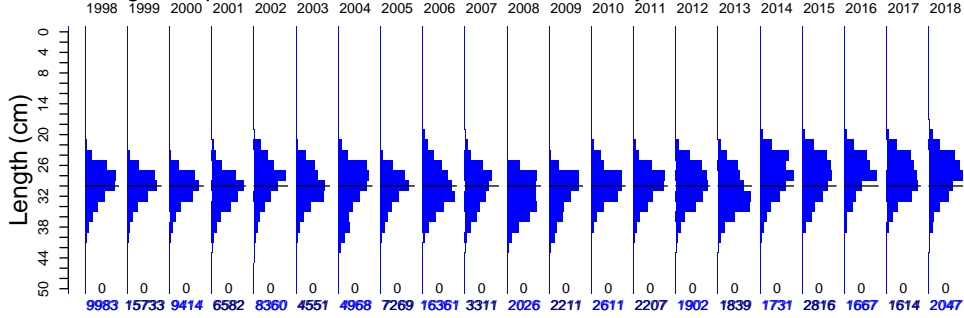
Catch by zone



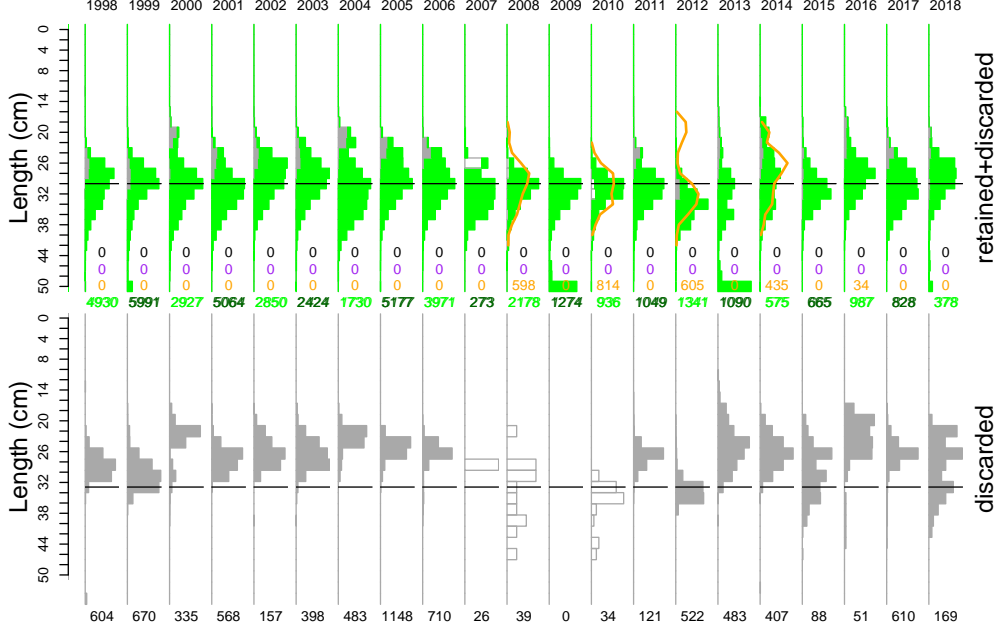
Jackass Morwong East

Wed Nov 06 17:10:01 2019

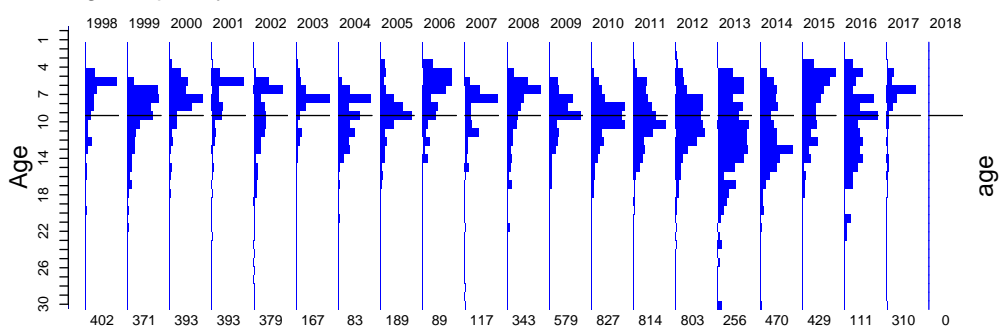
Length frequencies: ISMP Port, GAB Industry



Length frequencies: ISMP Onboard, SET FIS winter, GAB FIS Industry



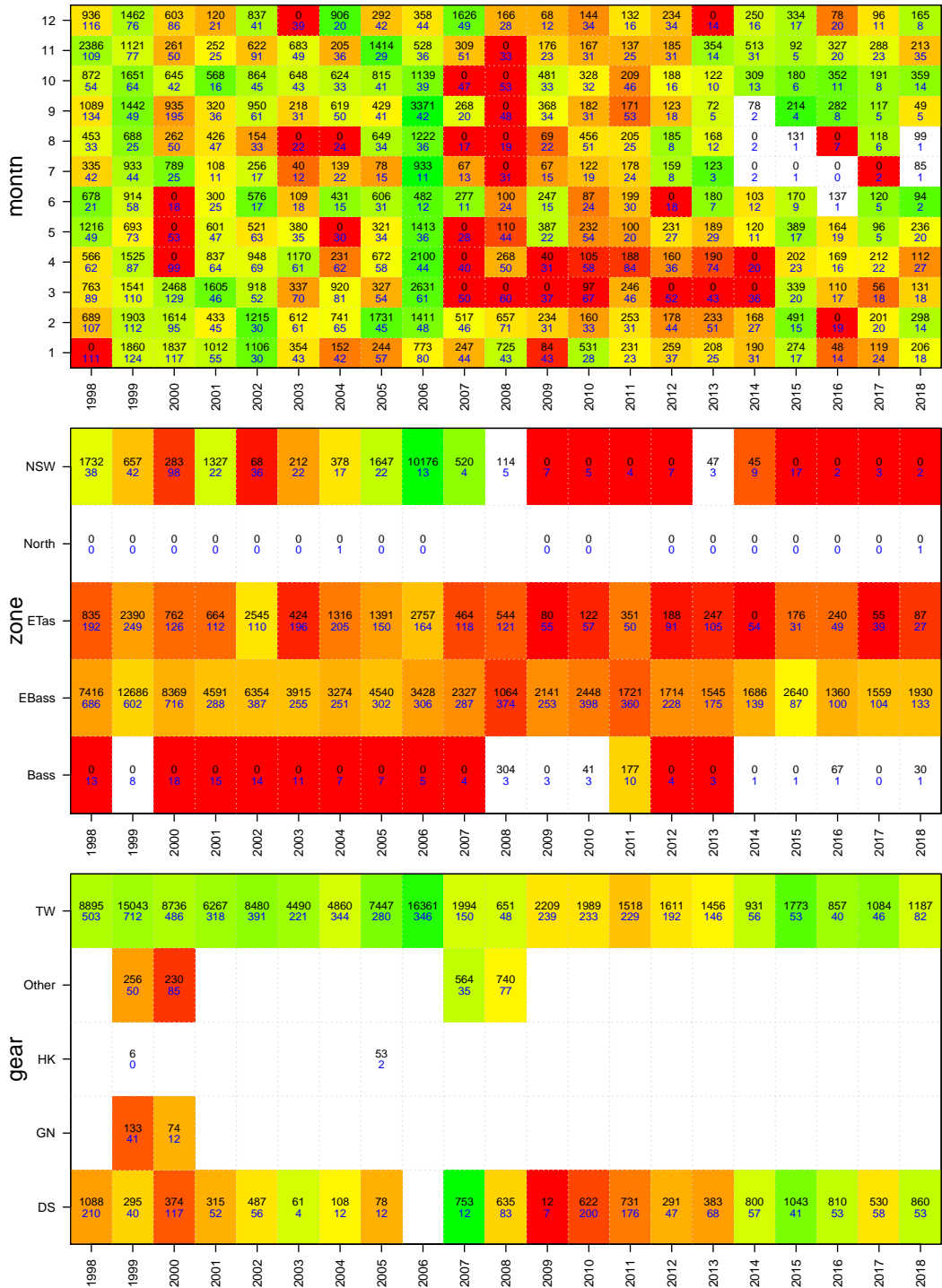
Age frequency



Jackass Morwong East

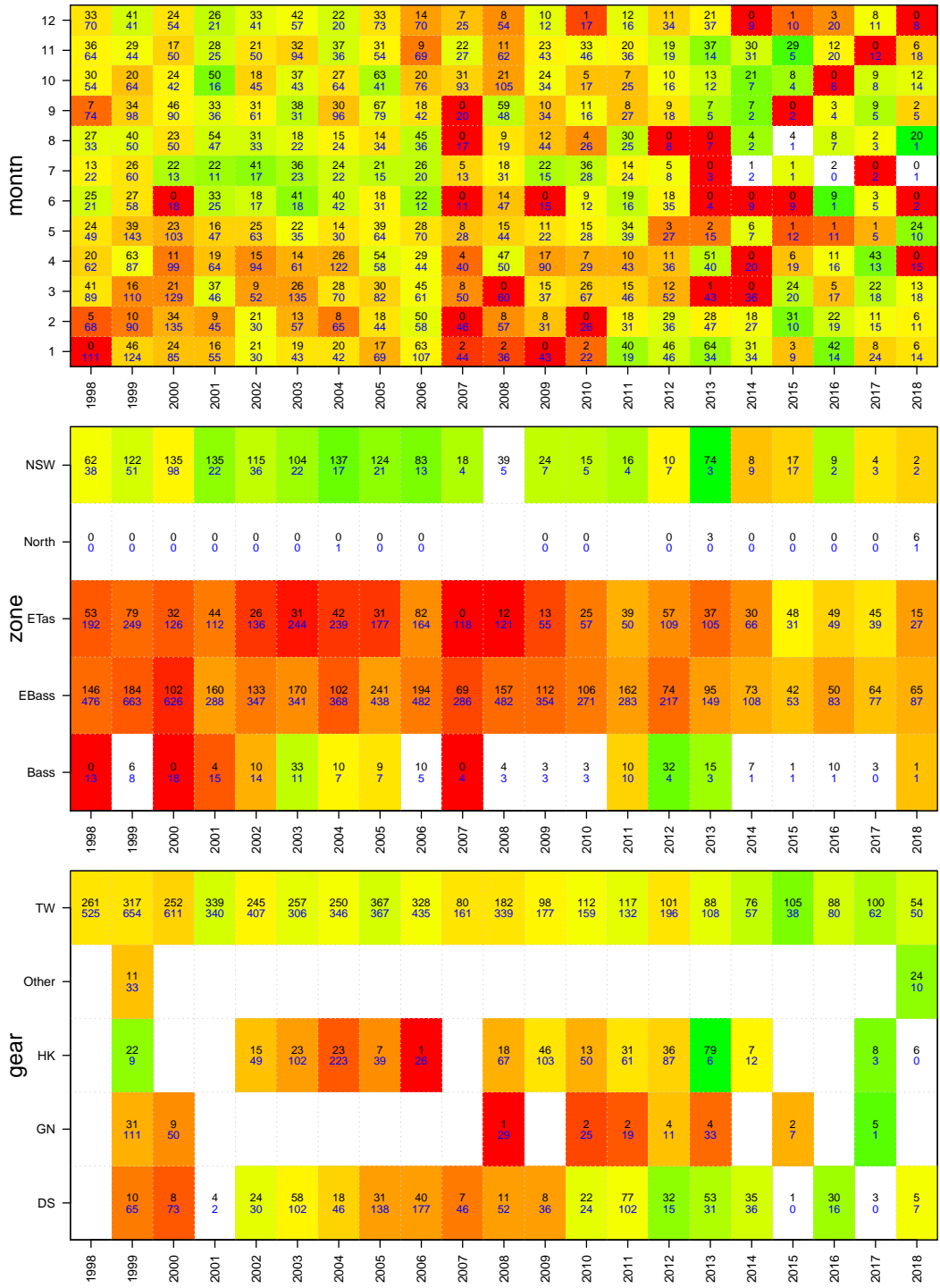
Port length data

Wed Nov 06 17:10:02 2019



Jackass Morwong East Onboard discard weight data

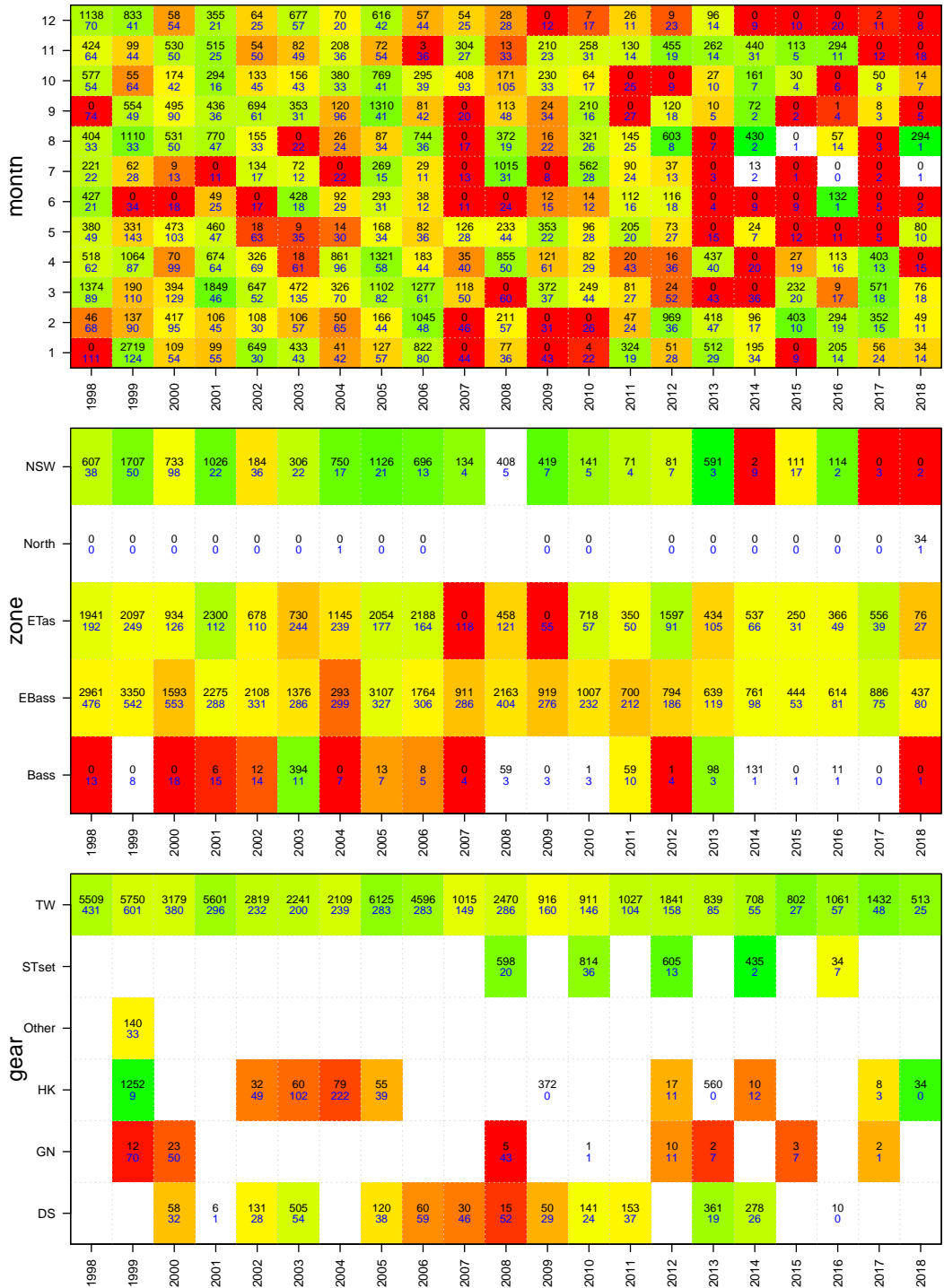
Wed Nov 06 17:10:02 2019



Jackass Morwong East

Onboard length data

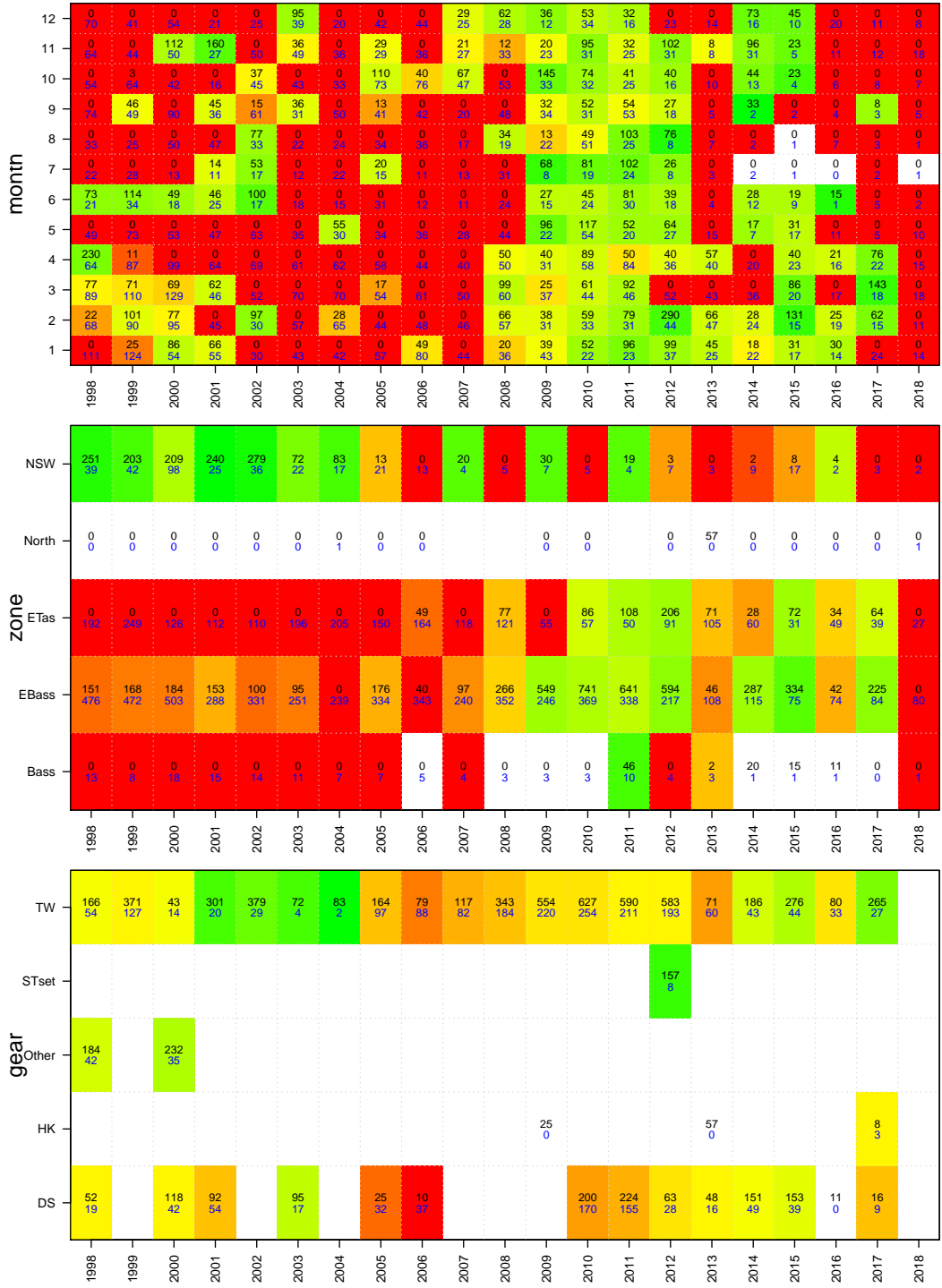
Wed Nov 06 17:10:02 2019



Jackass Morwong East

Age data

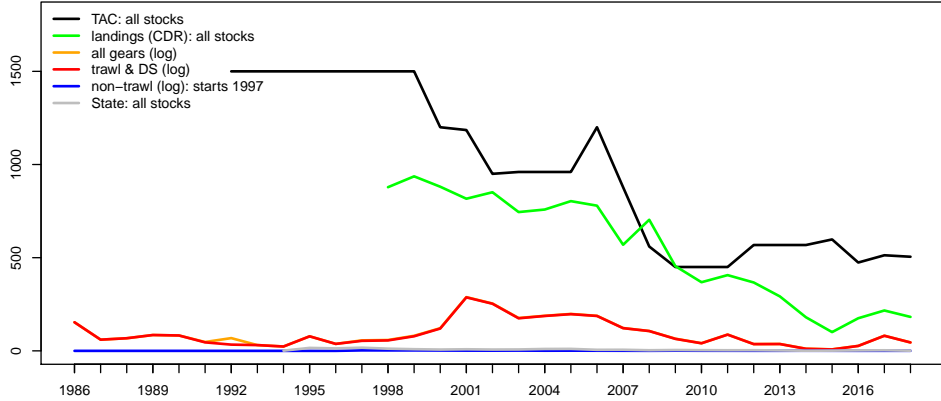
Wed Nov 06 17:10:02 2019



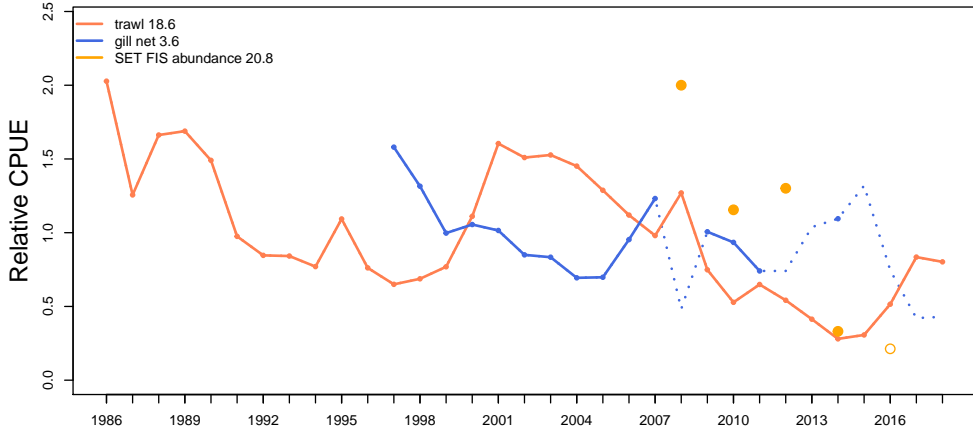
Jackass Morwong West

Wed Nov 06 17:10:03 2019
 region SEFWEST unit code MOW sa code MOWW
 37377003
 start month 1

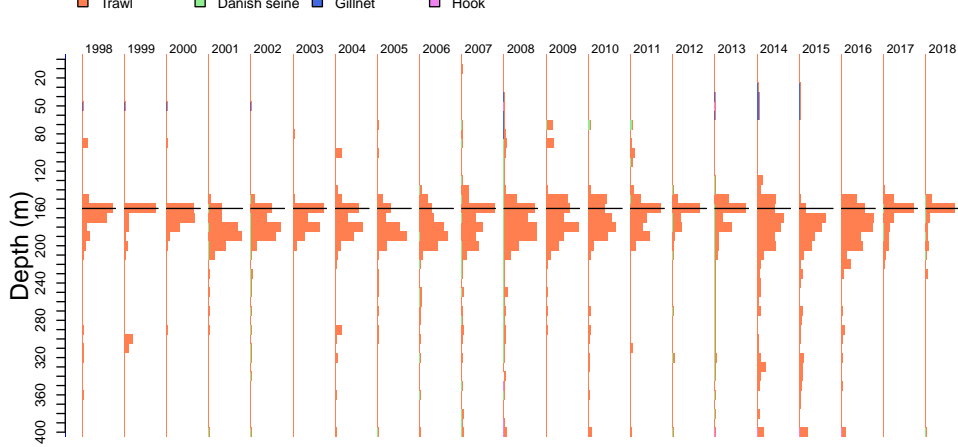
TAC and landings



Geometric mean CPUE & SET FIS abundance



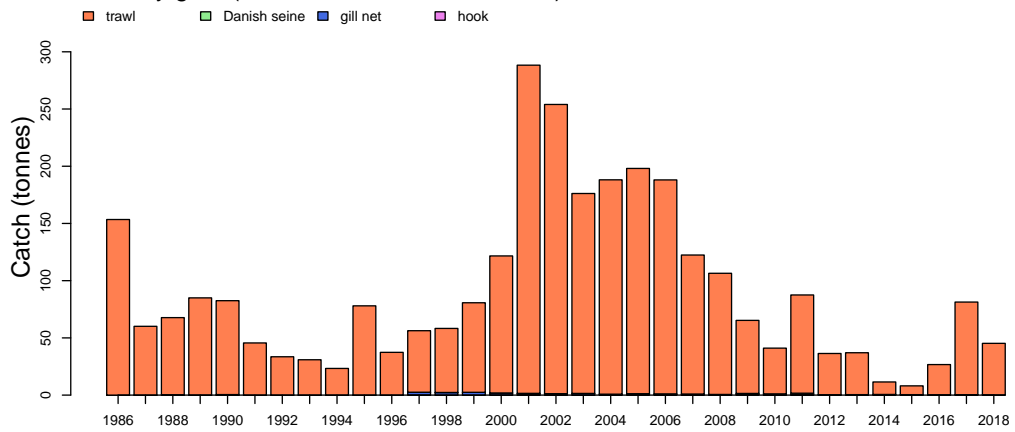
Catch at depth (non-trawl record starts 1997)



Jackass Morwong West

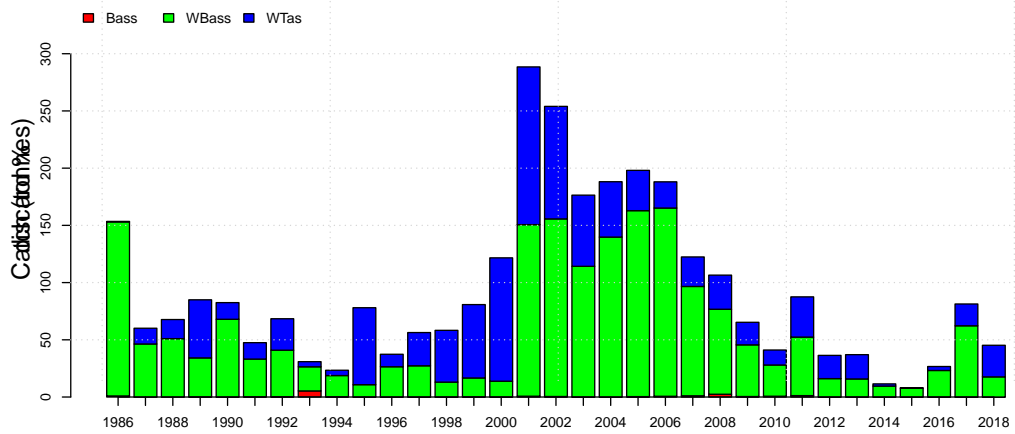
Catch by gear (non-trawl record starts 1997)

Wed Nov 06 17:10:06 2019



Discards

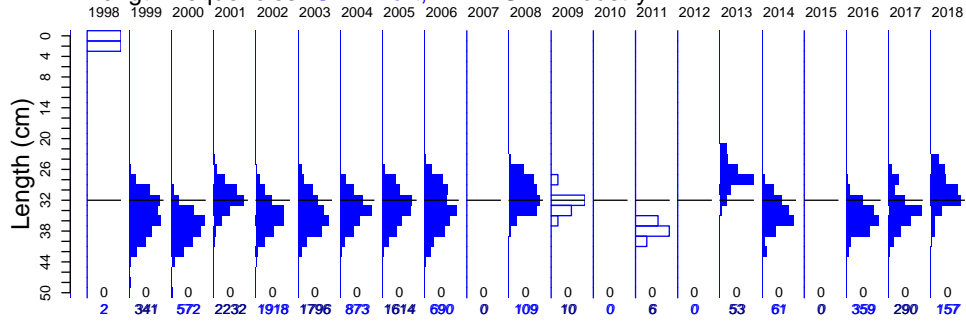
Catch by zone



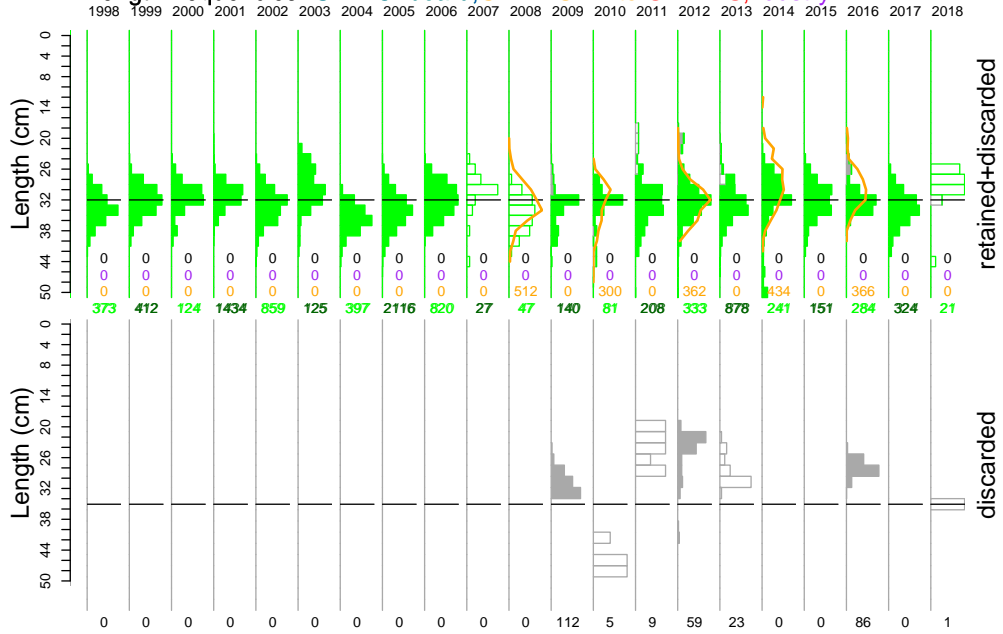
Jackass Morwong West

Wed Nov 06 17:10:06 2019

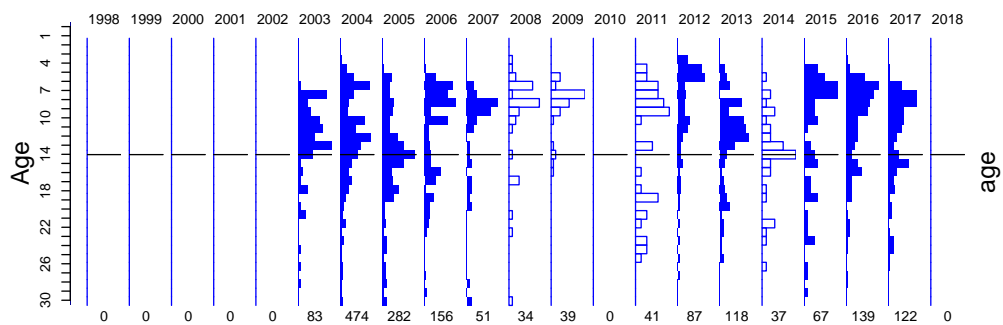
Length frequencies: ISMP Port, GAB Industry



Length frequencies: ISMP Onboard, SET FIS winter, GAB FIS, Industry



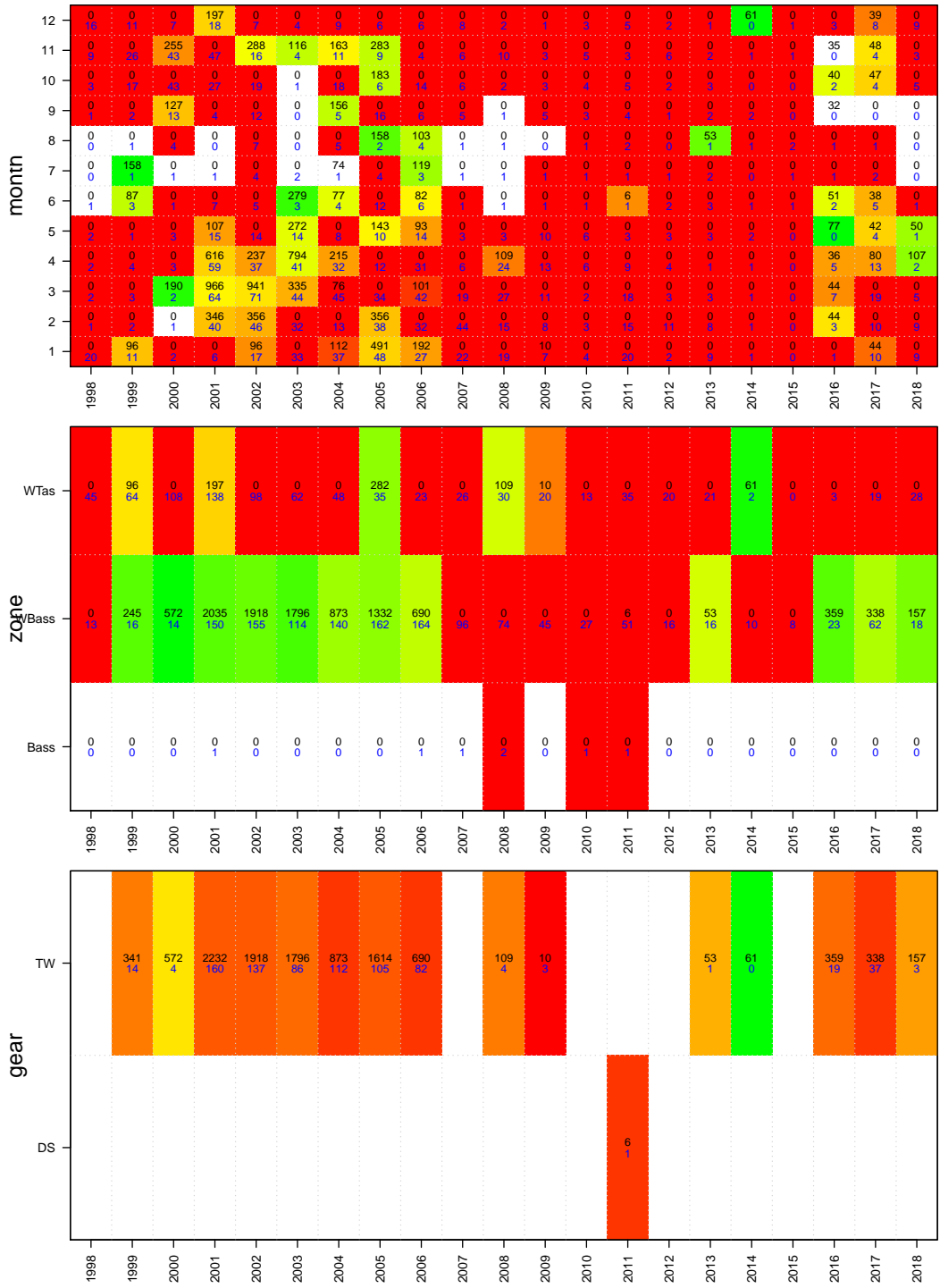
Age frequency



Jackass Morwong West

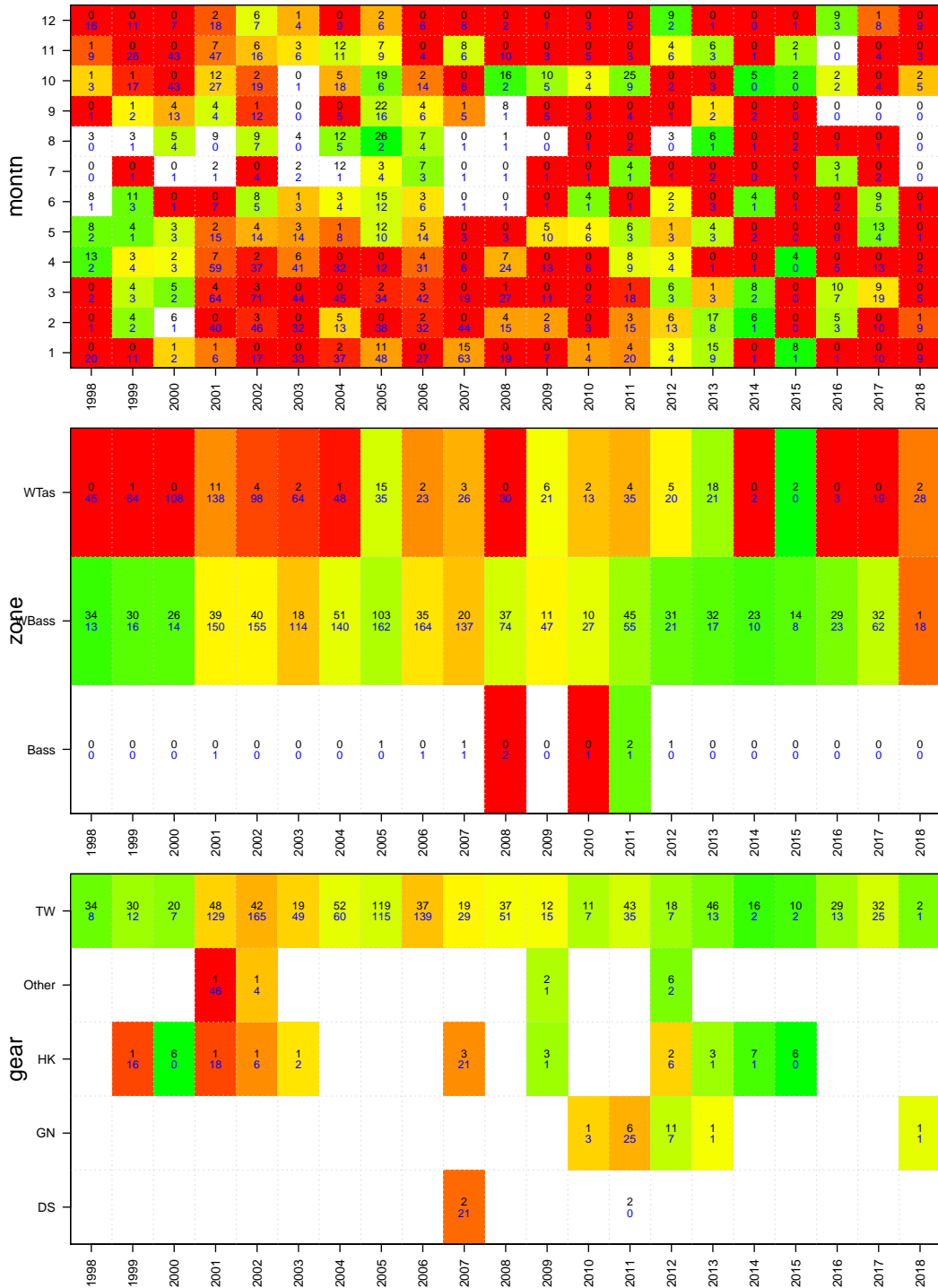
Port length data

Wed Nov 06 17:10:07 2019



Jackass Morwong West Onboard discard weight data

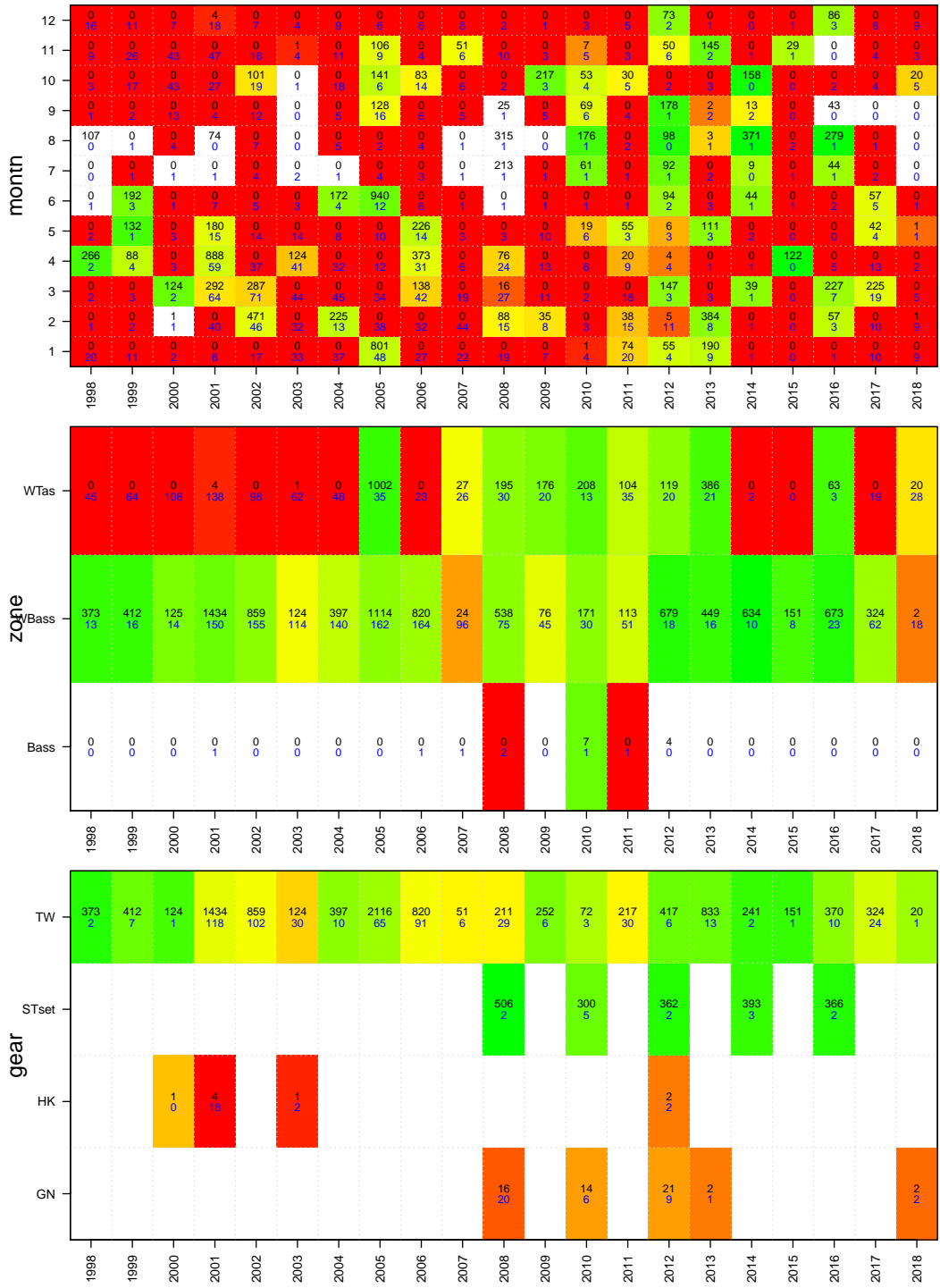
Wed Nov 06 17:10:07 2019



Jackass Morwong West

Onboard length data

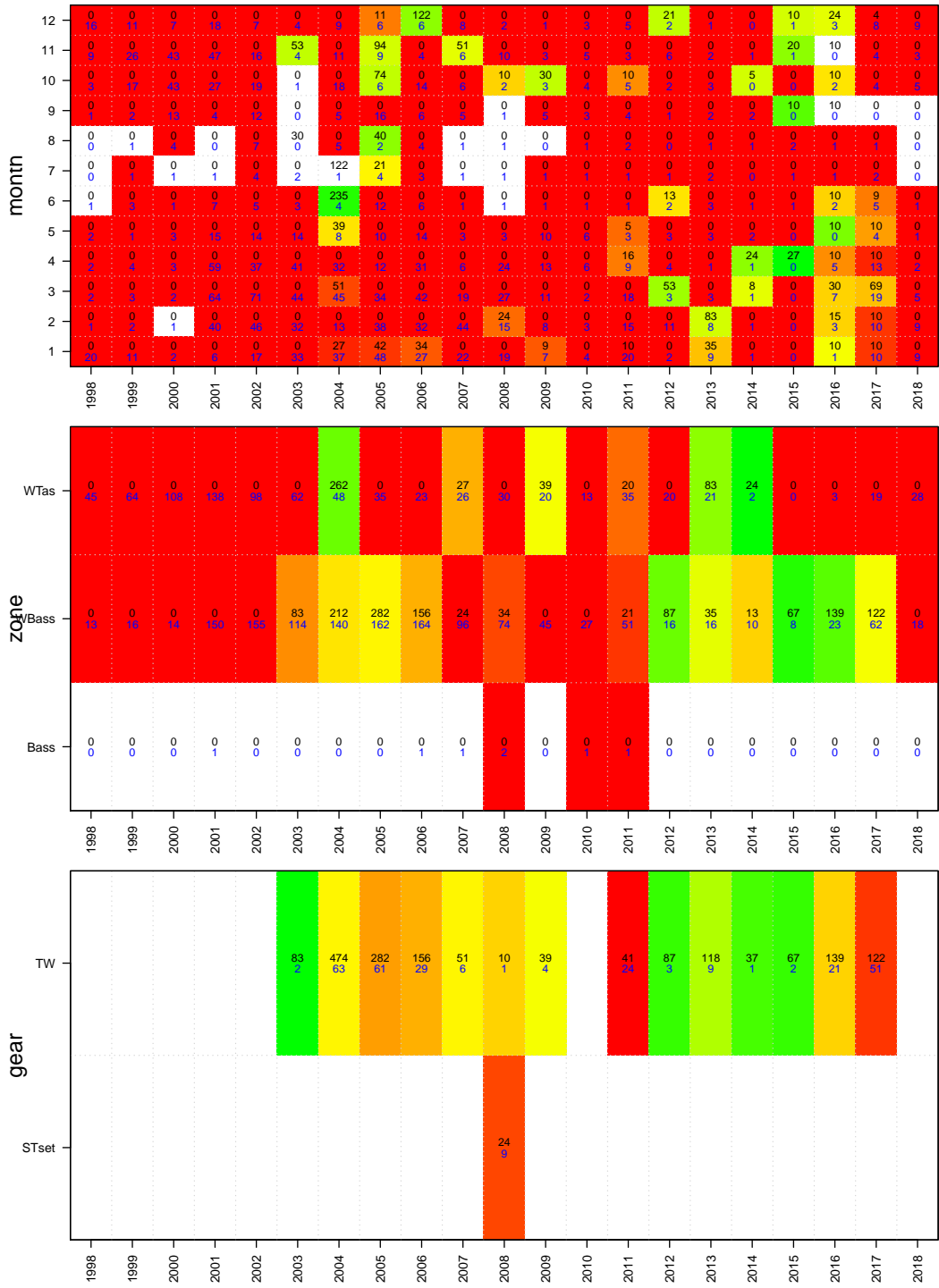
Wed Nov 06 17:10:07 2019



Jackass Morwong West

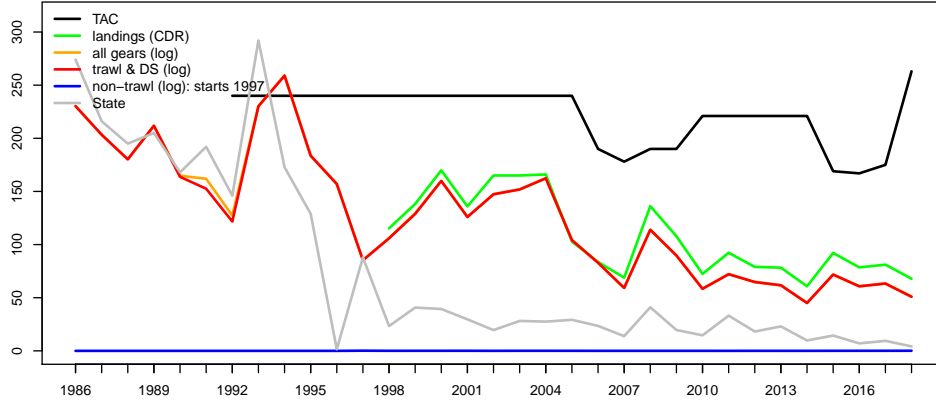
Age data

Wed Nov 06 17:10:07 2019

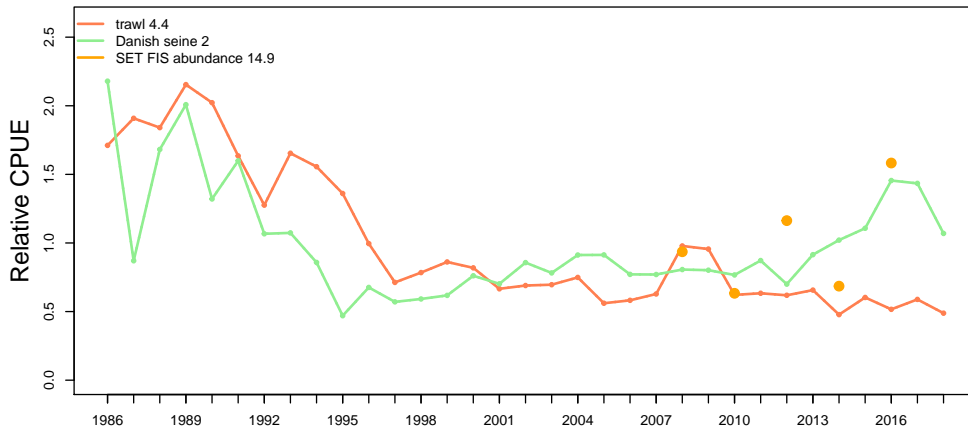


John Dory
TAC and landings

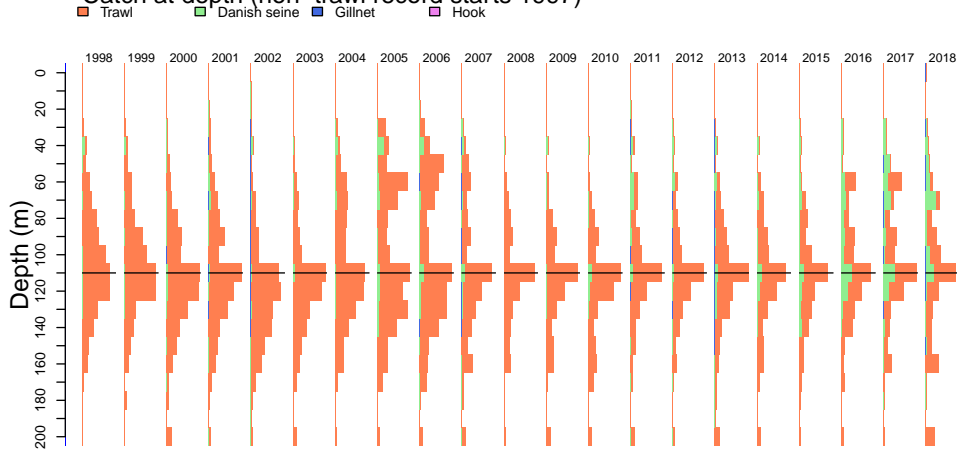
Wed Nov 06 17:10:13 2019
region SET unit code DOJ sa code DOJ
37264004
start month 1



Geometric mean CPUE & SET FIS abundance



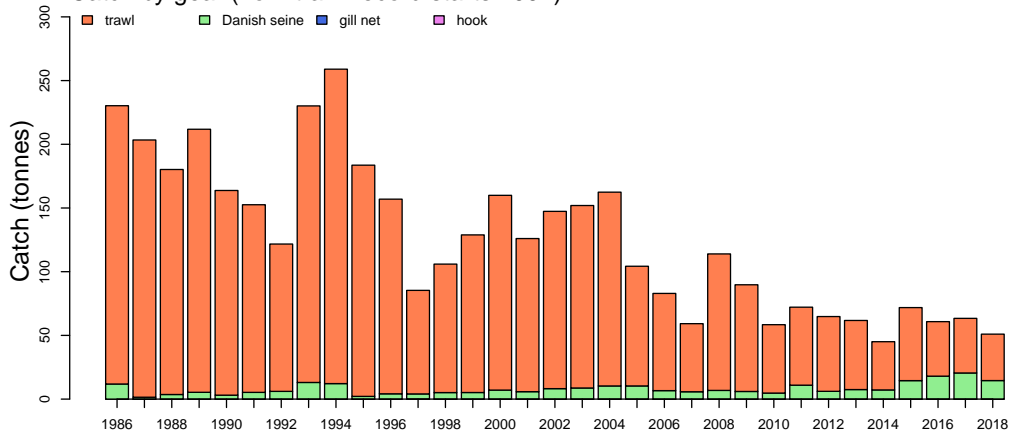
Catch at depth (non-trawl record starts 1997)



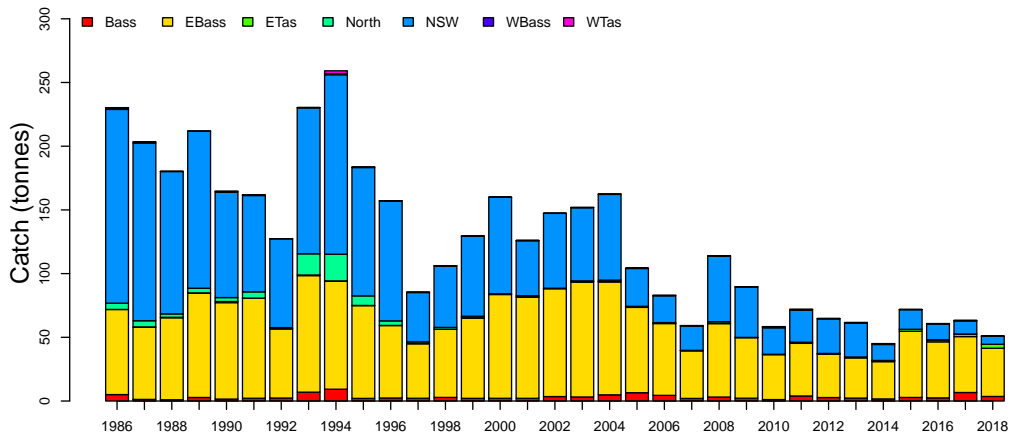
John Dory

Wed Nov 06 17:10:35 2019

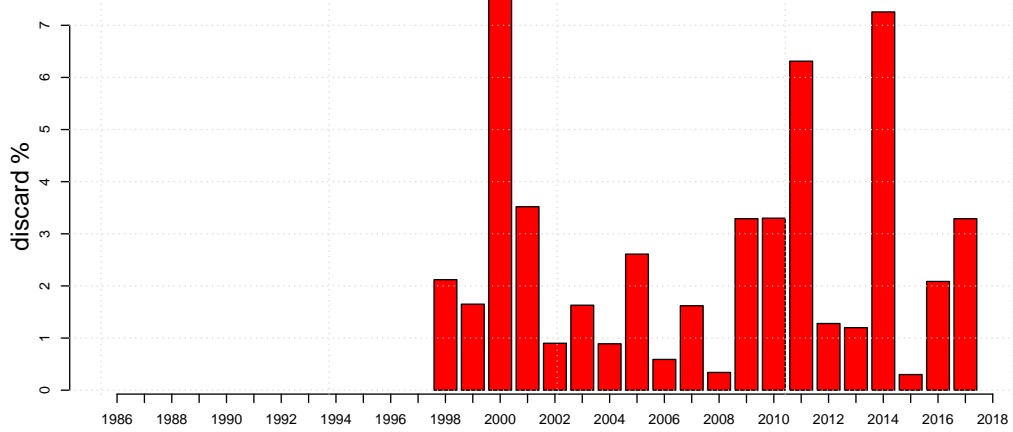
Catch by gear (non-trawl record starts 1997)



Catch by zone

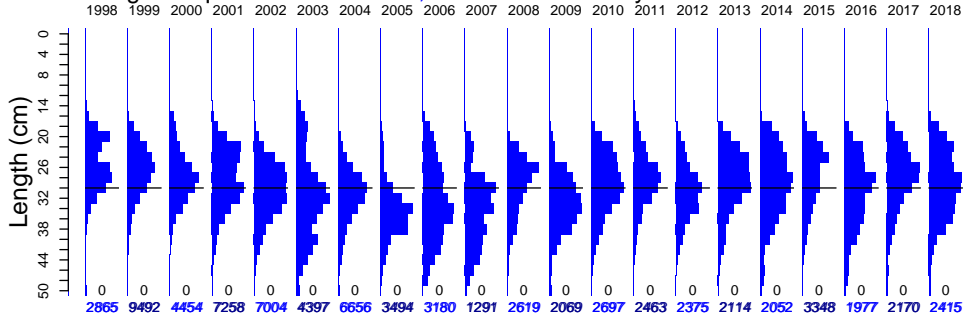


Discards

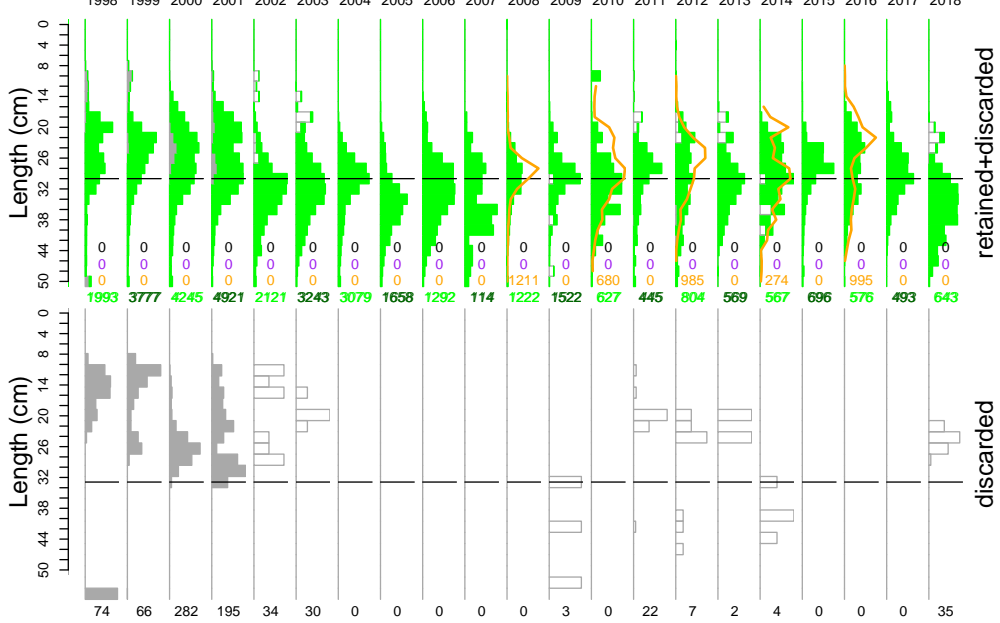


John Dory

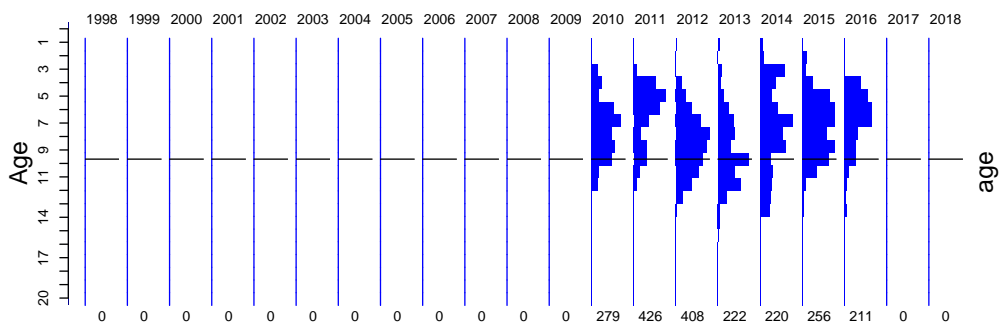
Length frequencies: ISMP Port, GAB Industry



Length frequencies: ISMP Onboard, SET FIS winter, GAB FIS Industry



Age frequency



John Dory

Port length data

Wed Nov 06 17:10:37 2019

month	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018
12	173 6	712 11	0	282 8	607 16	163 9	570 10	139 10	80 5	633 5	105 5	79 5	201 7	147 4	184 5	0	0	131 3	86 4	0	90 2
11	436 11	806 11	0	462 18	506 25	330 13	490 19	14 8	810 4	123 4	0	93 6	336 9	133 6	162 7	243 5	187 9	124 6	165 6	204 9	109 3
10	585 18	705 11	832 17	1053 14	757 21	794 19	1095 16	31 8	382 7	114 10	0	146 8	469 10	172 12	215 6	153 6	104 8	264 12	271 13	314 14	207 6
9	417 6	1712 13	835 21	641 16	497 12	406 20	835 23	104 10	391 7	317 10	0	356 9	241 8	141 10	148 10	129 6	322 9	430 16	307 13	273 16	350 10
8	394 12	154 10	155 13	956 17	436 13	912 24	316 12	1402 12	0	0	0	72 10	275 9	329 12	251 13	355 12	130 12	218 15	294 16	167 15	108 7
7	197 8	521 10	109 13	0	310 17	50 14	873 24	18 10	0	0	0	130 9	144 12	111 12	221 5	102 6	218 7	208 13	274 13	220 13	95 4
6	0	799 14	111 15	927 25	301 16	452 19	21 27	88 9	85 8	32 5	0	453 9	226 8	159 13	138 8	156 6	322 7	416 14	65 4	168 6	266 7
5	453 13	1150 26	0	699 11	914 9	317 15	591 15	395 7	538 12	0	280 8	416 7	272 6	292 7	303 5	178 11	184 7	623 20	300 9	167 4	215 11
4	172 9	476 13	523 16	692 15	591 9	737 4	212 6	82 7	25 6	0	1314 13	156 5	21 5	171 11	119 5	294 7	0	174 3	98 3	60 4	206 6
3	38 5	989 15	1063 15	293 9	524 5	0	913 6	326 6	332 5	0	0	0	119 10	198 9	201 5	155 3	0	374 5	0	183 10	168 4
2	0	924 12	529 9	406 5	656 5	86 4	692 9	392 6	274 5	72 2	847 13	240 5	361 9	294 5	248 3	98 4	287 4	311 5	139 4	218 5	364 6
1	0	455 12	339 12	847 9	905 12	150 7	48 6	503 11	263 6	0	73 6	0	32 4	296 4	185 3	261 4	298 4	75 4	0	196 5	237 5

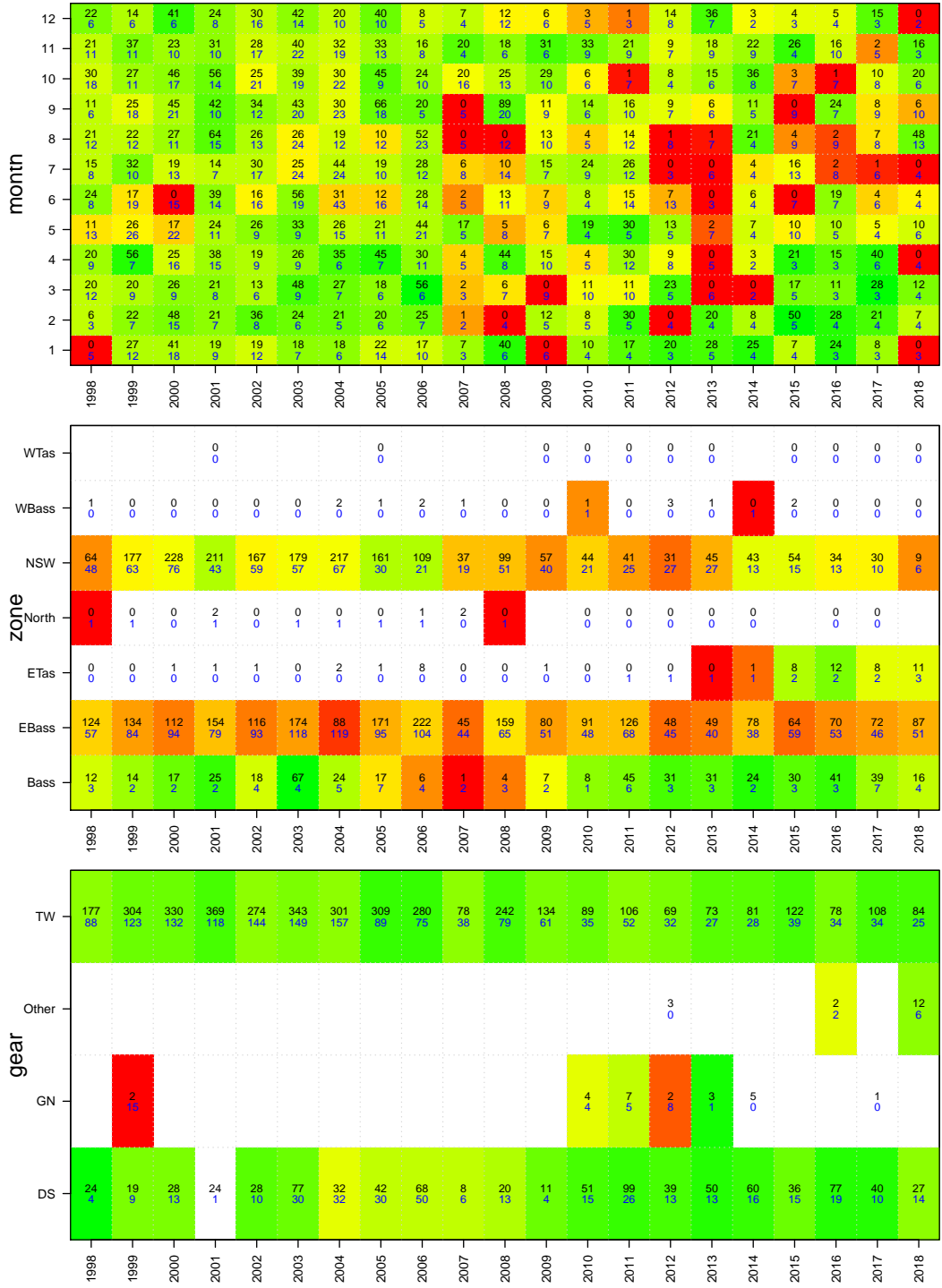
zone	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018
WTas				0				0				0	0	0	0	0		0	0	0	0
WBass	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
NSW	1838 48	3622 63	1839 76	3586 43	1563 59	1179 57	3311 67	1267 30	513 21	72 19	73 11	0	130 21	68 27	141 27	121 13	0	0	62 10	0	
North	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
ETas	0	0	0	0	0	0	38	0	0	0	386	0	0	239	117	66	0	164	116	0	0
EBass	1027 53	5715 93	2657 87	3672 104	5441 100	3218 96	3307 100	2227 67	2667 56	1219 42	1376 63	2084 50	2475 65	1959 74	2101 47	1708 46	1873 51	2986 98	1883 73	1956 73	2266 60
Bass	0	66	0	0	0	0	0	0	0	0	784	57	92	245	89	209	58	198	0	152	149

gear	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018
TW	2865 59	8613 120	4373 105	6945 113	6934 117	4351 135	6557 133	3494 66	3180 47	968 16	1199 18	2079 39	2118 35	1731 42	2080 41	1631 36	1418 27	1818 48	760 32	1101 45	1258 33
Other										323 5	616 0										
DS		790 31	123 6	313 25	70 10	46 6	99 11				804 7	62 2	579 30	712 35	295 14	493 16	634 21	1530 81	1239 38	1069 32	1157 24

John Dory

Onboard discard weight data

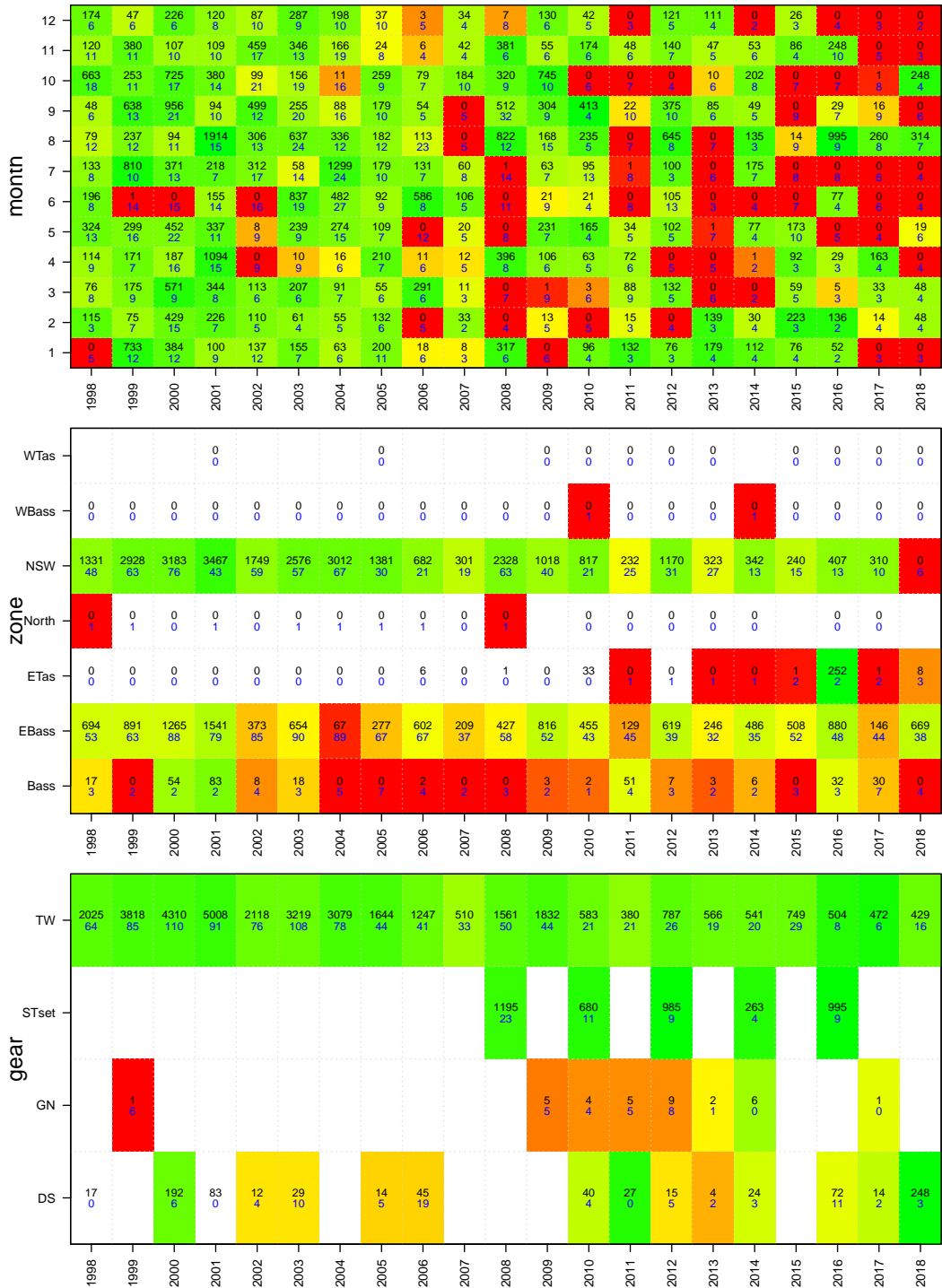
Wed Nov 06 17:10:37 2019



John Dory

Onboard length data

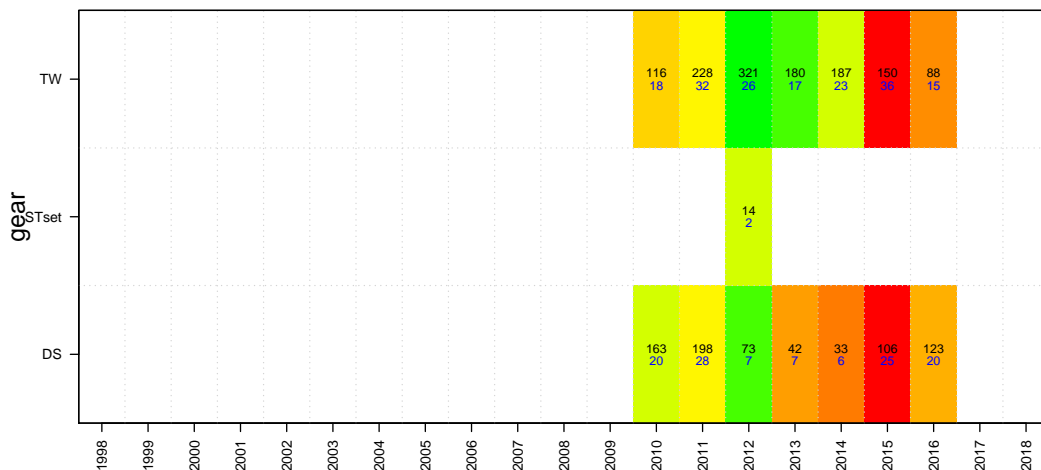
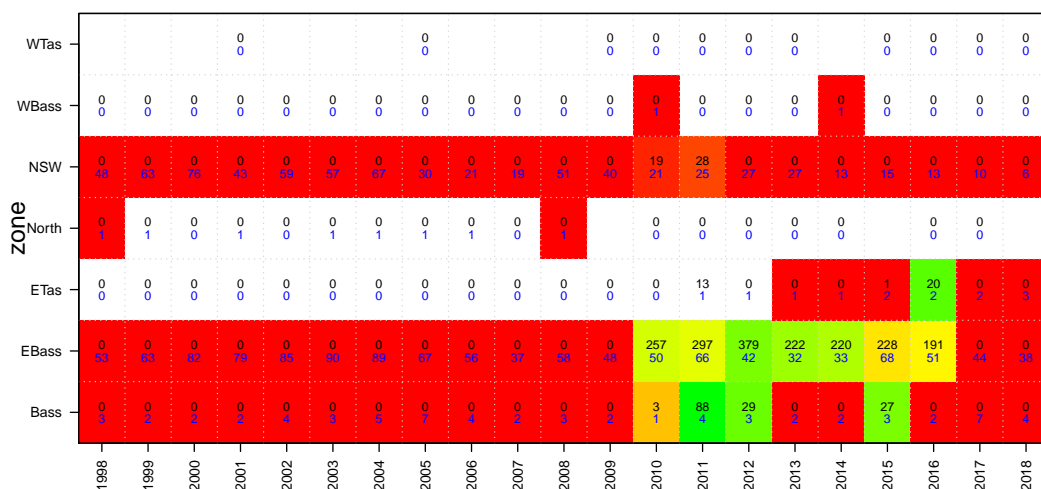
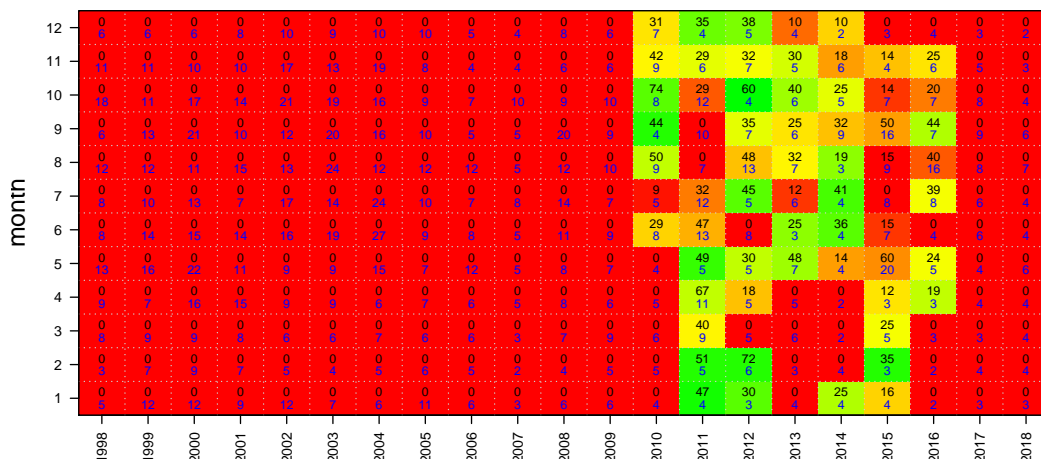
Wed Nov 06 17:10:37 2019



John Dory

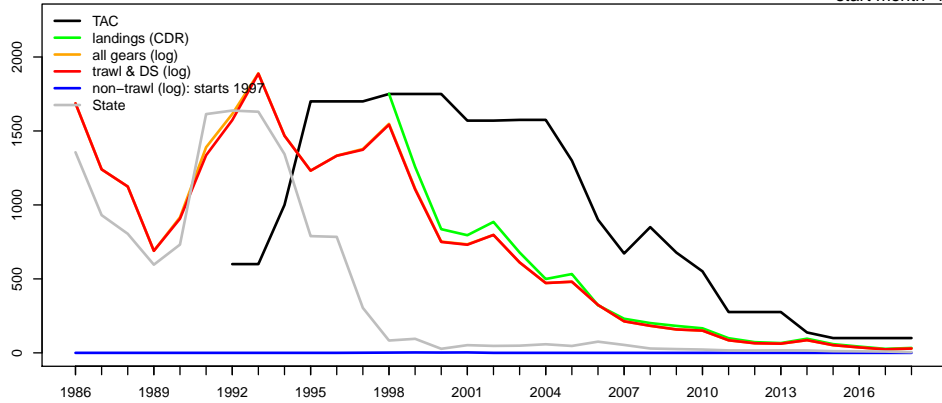
Age data

Wed Nov 06 17:10:37 2019

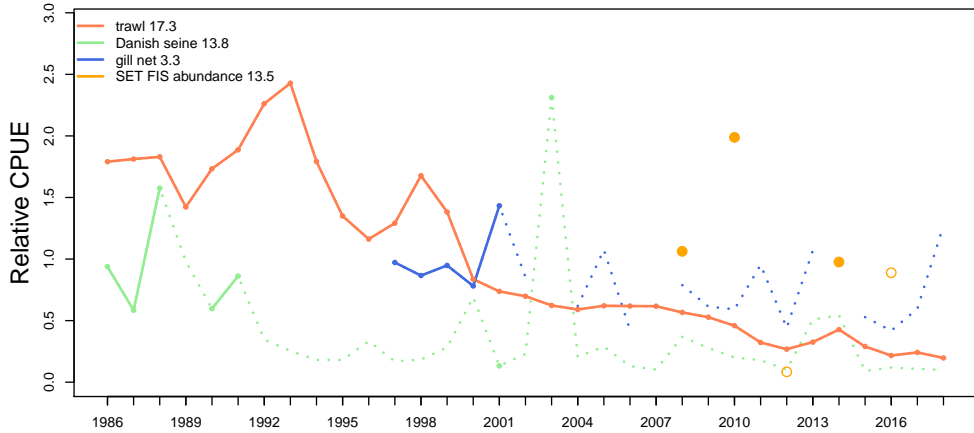


Redfish
TAC and landings

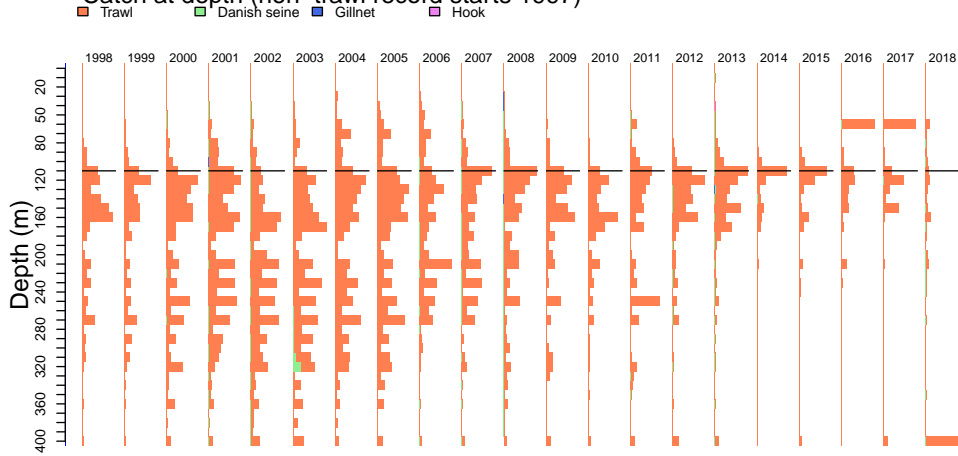
Wed Nov 06 17:10:41 2019
region SET unit code RED sa code RED
37258003
start month 1



Geometric mean CPUE & SET FIS abundance

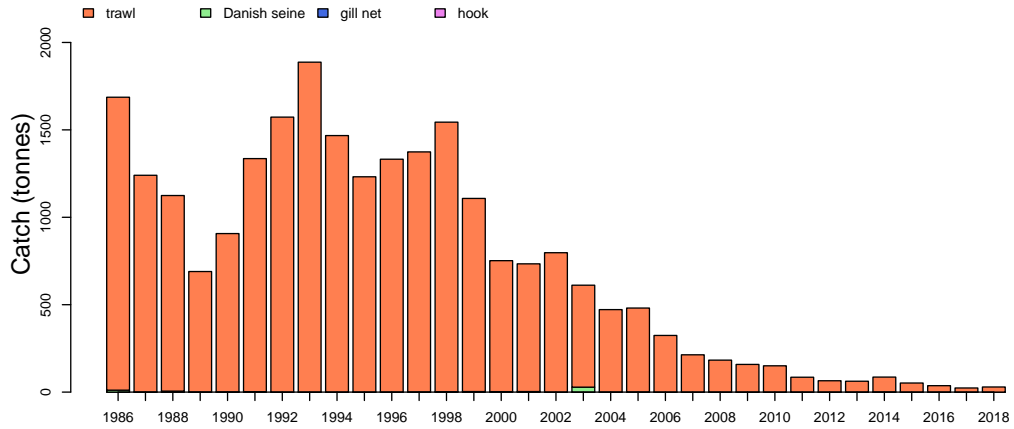


Catch at depth (non-trawl record starts 1997)

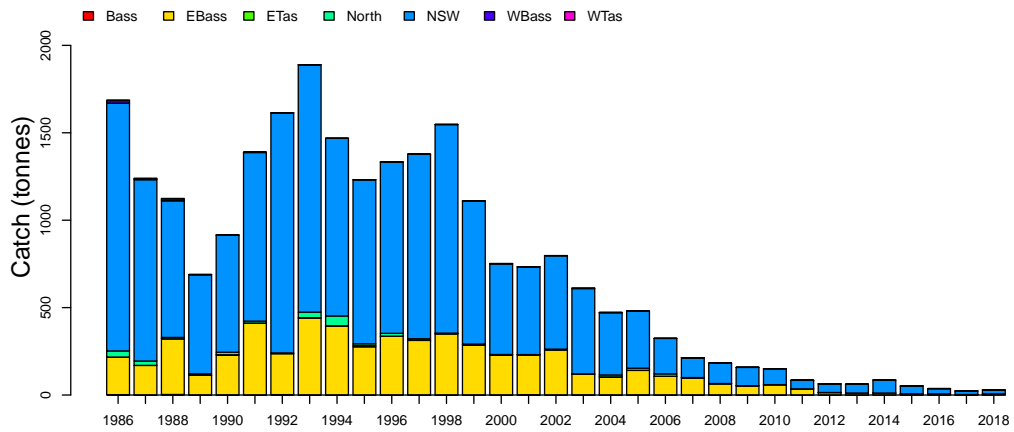


Redfish

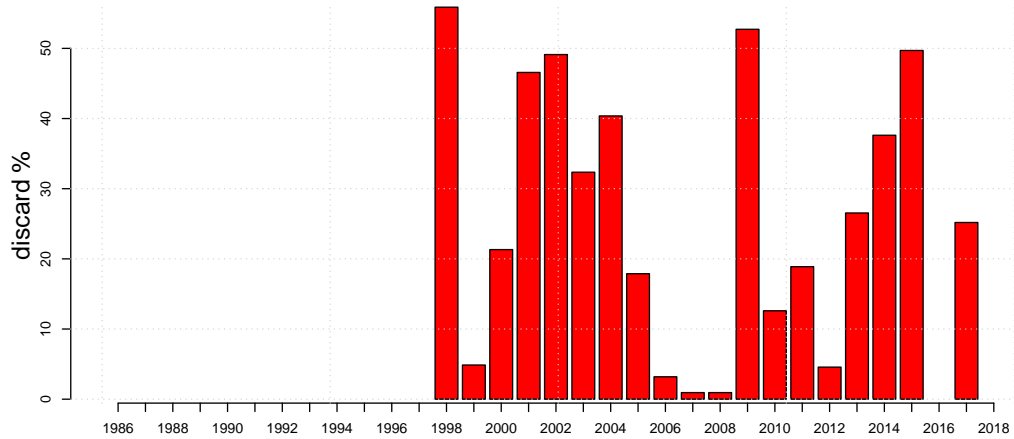
Catch by gear (non-trawl record starts 1997)



Catch by zone

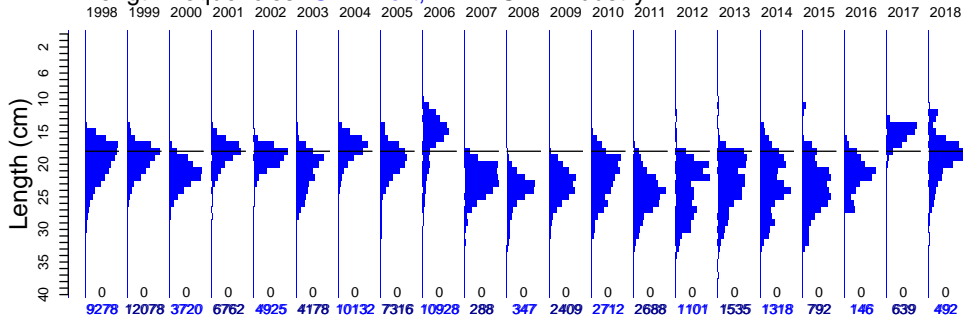


Discards

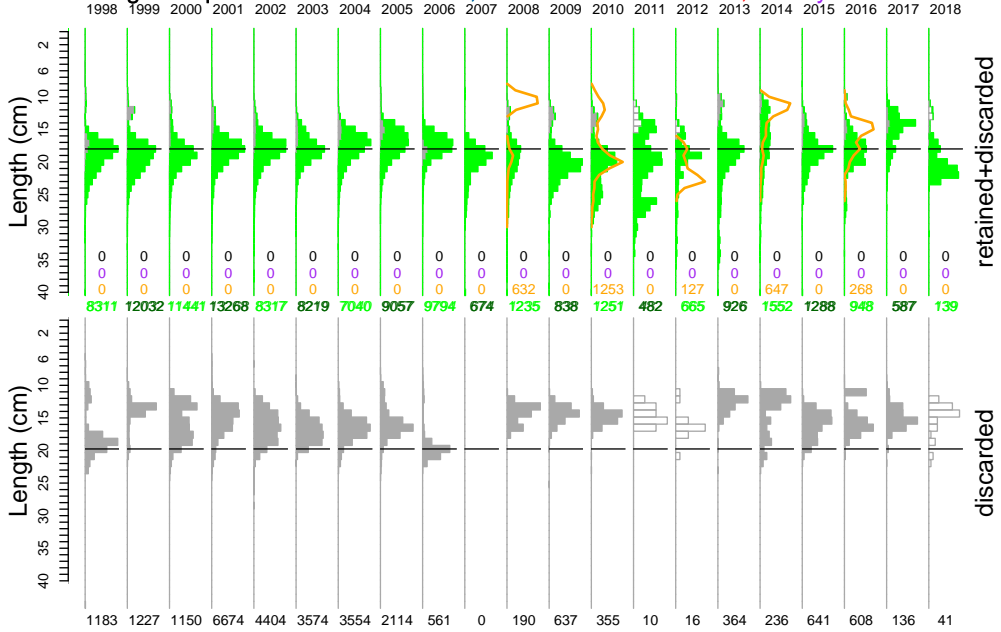


Redfish

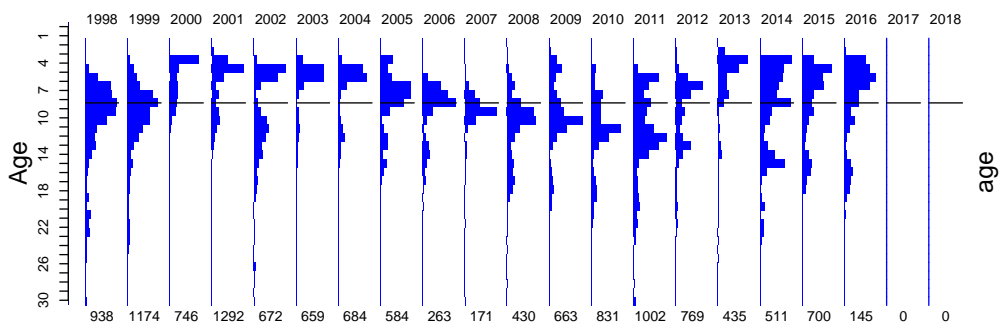
Length frequencies: ISMP Port, GAB Industry



Length frequencies: ISMP Onboard, SET FIS winter, GAB FIS, Industry



Age frequency



Redfish

Port length data

Wed Nov 06 17:10:55 2019

month	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018
12	243 70	691 23	0 0	773 51	49 45	326 20	1140 17	0 0	86 9	84 2	56 10	169 2	205 4	90 3	0 0	0 0	48 4	0 0	13 2	146 1	382 4
11	1553 77	1923 68	146 24	977 51	727 69	326 44	1312 39	146 15	756 7	0 0	0 0	22 4	159 10	157 5	352 3	91 5	224 8	0 0	50 4	0 0	0 0
10	1041 196	589 58	474 81	792 79	277 49	306 62	1167 33	244 44	944 21	0 0	0 0	365 21	142 10	242 5	92 3	209 4	106 7	23 3	66 2	0 0	0 0
9	794 148	919 99	864 78	247 53	425 68	911 63	426 35	576 44	1889 18	0 0	0 0	382 20	427 14	399 9	92 7	154 5	62 3	123 4	0 0	0 0	17 2
8	702 177	899 171	158 89	1094 112	532 87	690 93	1122 60	458 47	1095 34	0 0	0 0	242 14	553 19	551 9	160 7	289 4	0 0	0 0	0 0	354 1	0 0
7	286 132	1215 132	313 108	0 0	528 133	0 0	612 71	747 83	715 32	736 53	0 0	215 43	250 27	81 9	0 0	30 7	53 10	0 0	0 0	0 0	0 0
6	1104 134	689 130	512 108	472 81	433 81	778 85	227 72	1791 74	859 37	0 0	0 0	442 15	409 29	325 40	0 0	28 3	149 8	134 7	0 0	9 0	0 0
5	1102 183	1722 202	59 43	422 43	51 72	244 55	1183 57	583 50	1654 62	204 45	0 0	295 25	279 16	553 15	217 11	290 18	242 15	328 7	0 0	105 0	0 0
4	1674 177	966 113	386 88	482 56	178 44	271 44	1627 32	1040 39	1079 55	0 0	55 21	182 10	200 25	67 18	139 6	301 3	0 0	0 0	0 0	0 0	0 0
3	559 129	1506 53	260 30	901 75	960 76	0 0	1316 18	1049 16	1287 24	0 0	0 0	6 0	66 9	8 3	41 3	143 3	0 0	66 0	0 0	0 0	15 2
2	0 0	481 10	357 6	602 25	421 24	0 0	0 0	458 13	374 13	314 5	0 0	0 0	0 0	202 3	0 0	0 0	313 11	84 6	0 0	25 1	0 0
1	220 60	478 52	191 20	0 0	344 48	326 15	0 0	224 22	190 12	0 0	236 4	89 2	0 0	0 0	8 0	0 0	121 9	0 0	0 0	0 0	55 1

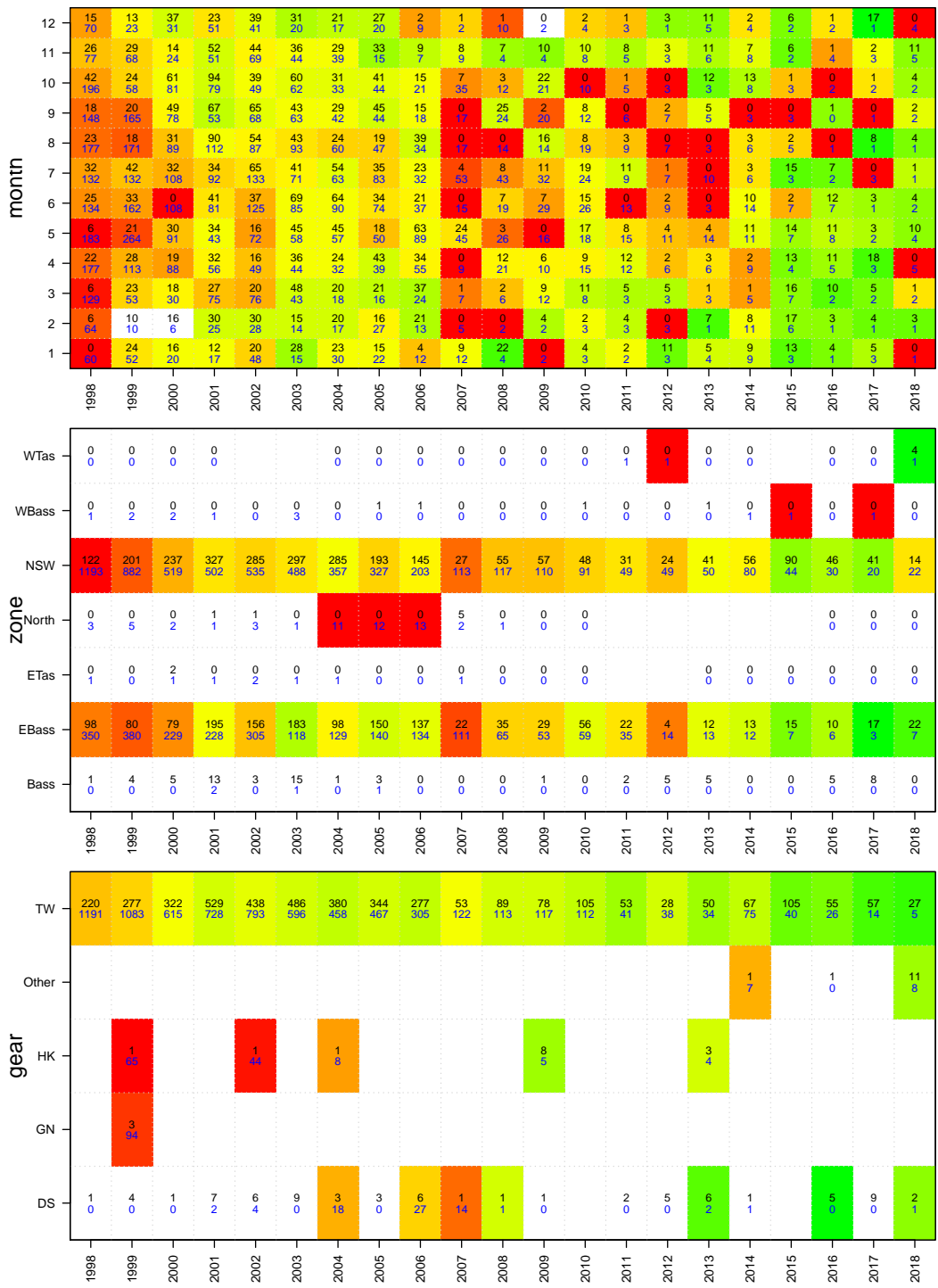
zone	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018
WTas	0 0	0 0	0 0	0 0			0 0	0 0	0 0	0 0	0 0	0 0	0 0	0 0	0 1	0 0	0 0		0 0	0 0	0 0
WBass	0 1	0 2	76 2	0 1	0 0	0 3	0 0	0 0	0 0	0 0	0 0	0 0	0 0	0 0	0 0	0 0	0 1	0 0	0 0	0 0	0 0
NSW	6524 1193	8307 817	1156 519	4877 502	2364 535	800 488	7278 357	5025 327	8450 203	1134 113	47 117	0 133	342 91	0 49	0 89	94 50	222 74	0 44	0 38	418 20	382 22
North	0 3	0 5	0 2	0 1	0 3	0 1	0 11	0 12	0 13	0 2	0 1	0 0	0 0						0 0	0 0	0 0
ETas	0 1	0 0	0 1	0 1	0 2	0 1	0 1	0 0	0 0	0 1	0 0	0 0				0 0	0 0	0 0	0 0	82 0	0 0
EBass	2754 350	3771 286	2488 229	1885 228	2561 258	3378 118	2854 103	2291 140	2478 107	204 97	173 65	2212 53	2237 98	2659 53	1063 14	1424 18	1096 16	758 7	79 6	139 3	87 7
Bass	0 0	0 0	0 0	0 2	0 0	0 1	0 0	0 1	0 0	0 0	127 0	197 0	111 0	16 0	38 0	17 0	0 0	0 0	50 0	0 0	0 0

gear	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	
TW	9278 1224	12078 1026	3720 508	6762 543	4925 478	4178 256	10132 351	7316 395	10928 266	1338 41	220 18	2301 52	2401 74	2542 35	1059 11	1072 24	1052 19	747 5	66 0	575 2	469 5	
Other													32 0	22 0						64 1		
DS											127 0	108 0	257 35	111 9	42 1	463 6	266 5	11 0	63 5			

Redfish

Onboard discard weight data

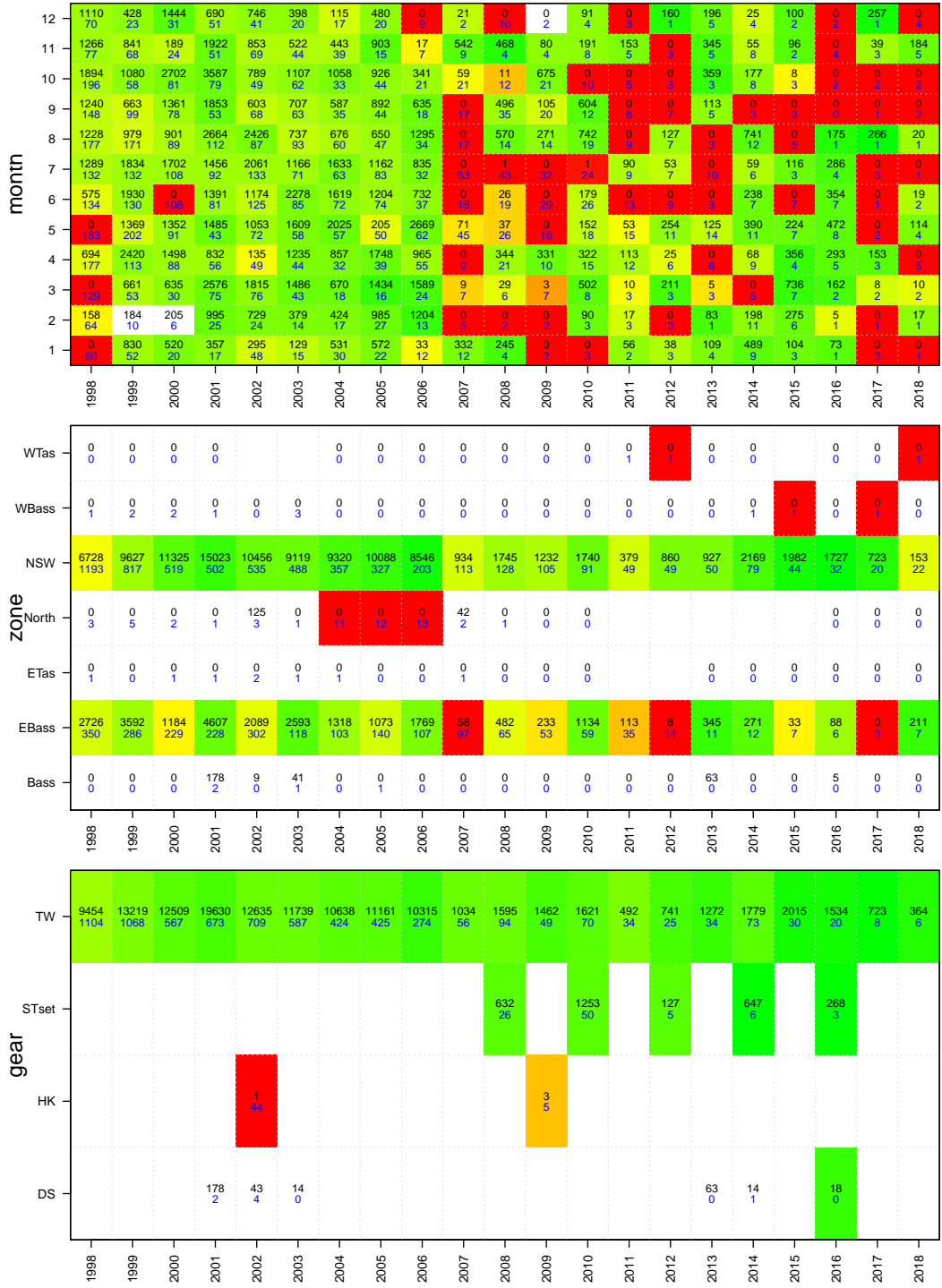
Wed Nov 06 17:10:55 2019



Redfish

Onboard length data

Wed Nov 06 17:10:56 2019



Redfish

Age data

Wed Nov 06 17:10:56 2019

month	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018
12	0	0	38	0	0	87	0	0	0	0	0	33	74	20	120	15	33	40	0	0	0
11	0	79	0	24	302	133	0	0	0	151	15	101	63	70	149	205	29	74	25	0	0
10	102	40	28	50	7	99	0	91	0	20	12	259	52	83	28	66	63	8	24	0	0
9	122	90	0	212	48	0	0	53	0	58	69	72	178	10	35	32	37	0	0	0	0
8	95	302	212	272	315	0	0	112	0	12	57	67	169	43	0	25	0	0	0	0	0
7	186	167	45	53	0	0	0	50	0	0	131	81	65	0	0	78	0	0	0	0	0
6	51	0	0	277	0	168	0	115	0	76	0	84	178	18	0	45	0	0	0	0	0
5	55	45	158	65	0	123	0	0	0	0	0	105	25	202	0	118	144	0	0	0	0
4	327	163	0	58	0	231	211	70	0	77	13	142	31	81	0	12	157	31	0	0	0
3	0	105	132	88	0	93	0	86	0	27	0	66	64	84	0	0	78	14	0	0	0
2	0	110	133	78	0	16	89	62	0	0	0	14	96	0	52	52	112	26	0	0	0
1	0	73	0	115	0	0	93	65	0	0	153	0	0	23	34	62	24	50	25	0	0

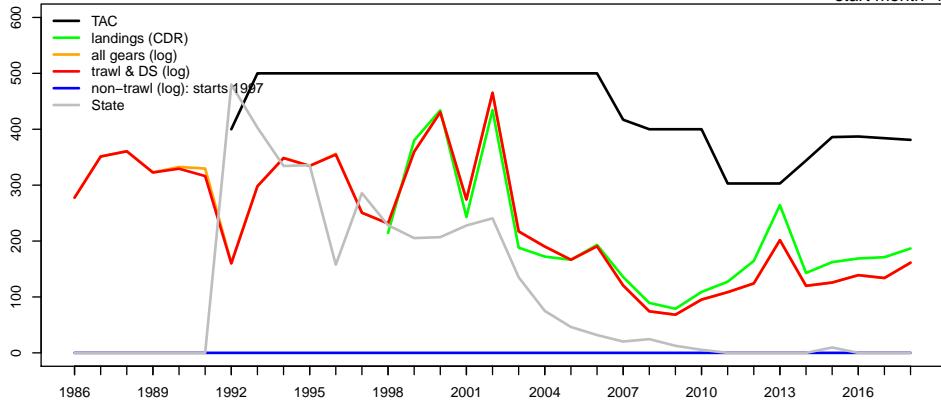
zone	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018
WTas	0	0	0	0			0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
WBass	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
NSW	938	1174	746	1262	672	659	684	584	263	128	418	114	177	136	393	322	214	430	87	0	0
North	0	0	0	0	0	0	0	0	0	0	0	0	0	0					0	0	0
ETas	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
EBass	0	0	0	30	0	0	0	0	0	43	12	538	611	858	359	113	297	270	33	0	0
Bass	0	0	0	0	0	0	0	0	0	0	0	11	32	8	17	0	0	0	25	0	0

gear	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018
TW	938	1174	746	1292	672	659	684	584	263	171	430	652	714	950	748	435	499	700	136		
DS												11	106	52	21		12		9		

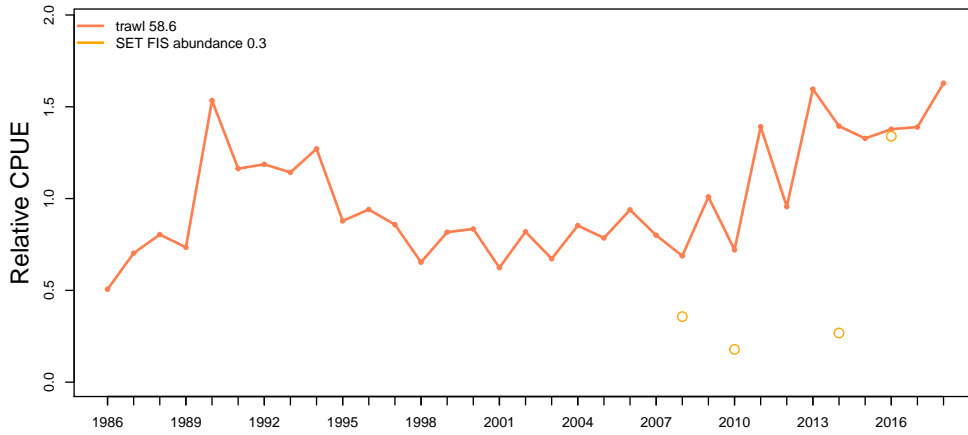
Royal Red Prawn

TAC and landings

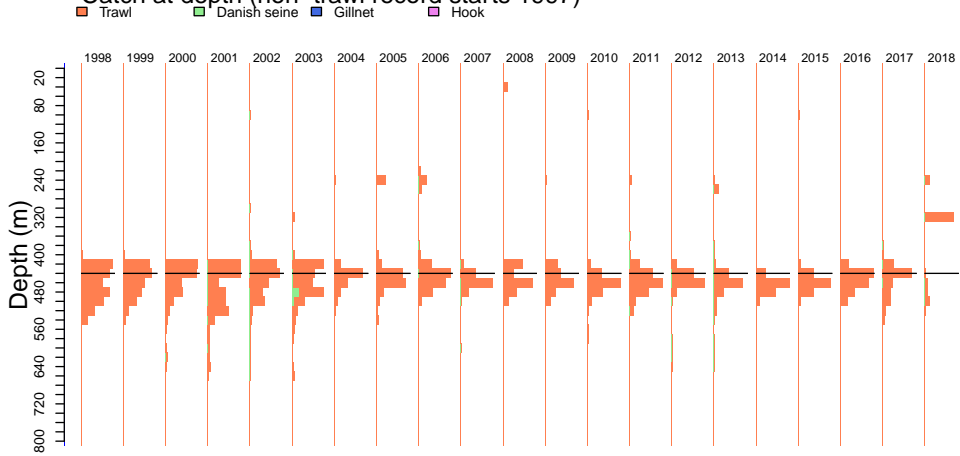
Wed Nov 06 17:10:56 2019
 region SET unit code PRR sa code PRR
 28714005
 start month 1



Geometric mean CPUE & SET FIS abundance



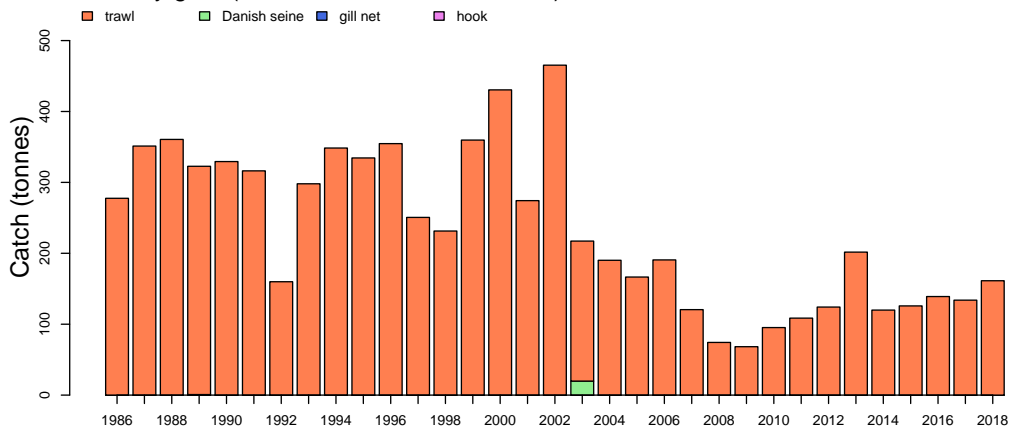
Catch at depth (non-trawl record starts 1997)



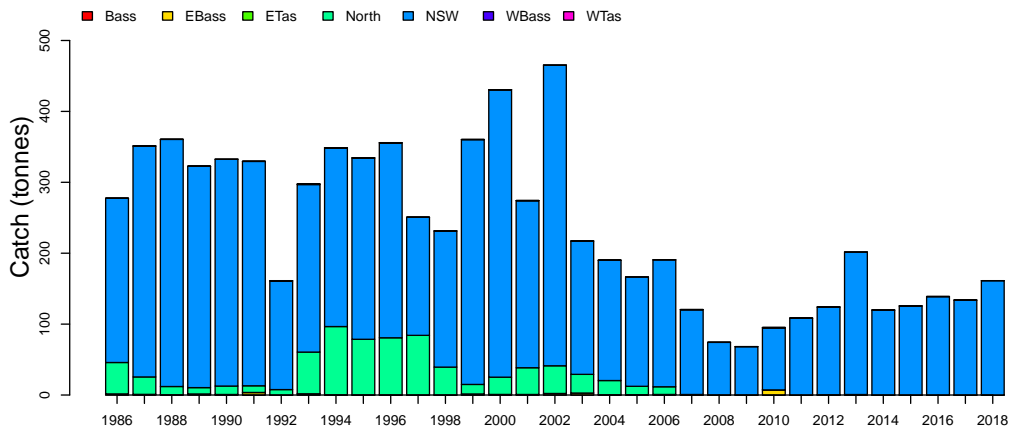
Royal Red Prawn

Wed Nov 06 17:11:00 2019

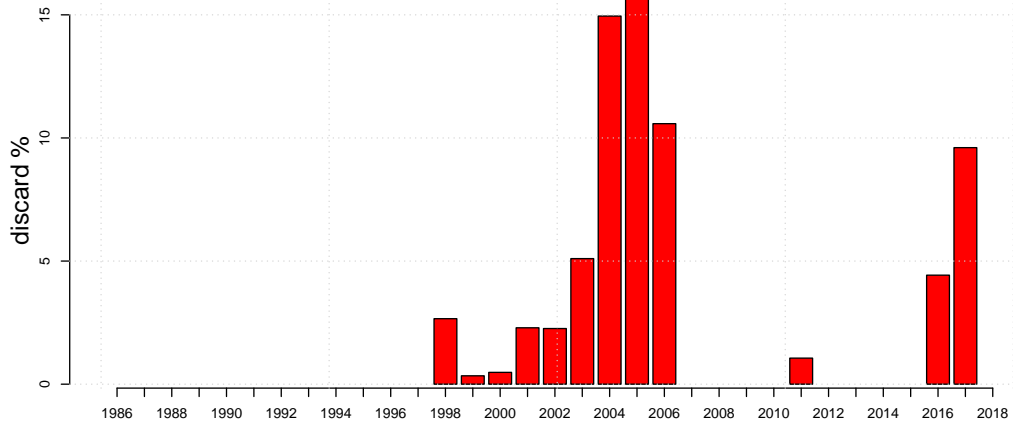
Catch by gear (non-trawl record starts 1997)



Catch by zone



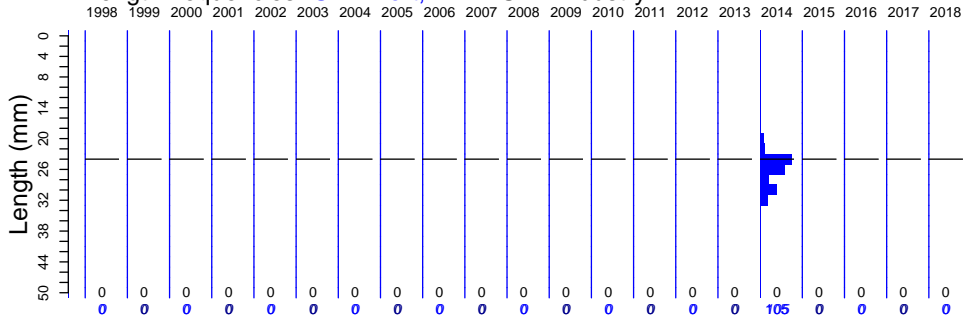
Discards



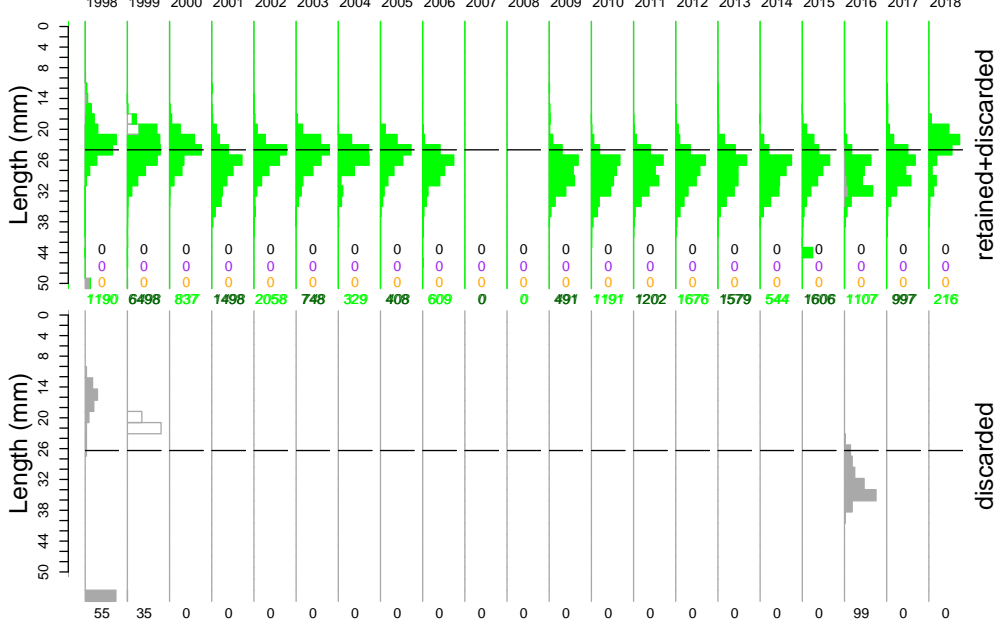
Royal Red Prawn

Wed Nov 06 17:11:00 2019

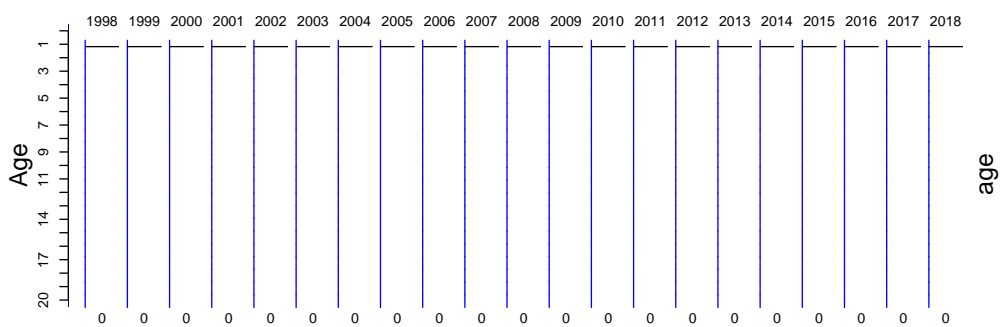
Length frequencies: ISMP Port, GAB Industry



Length frequencies: ISMP Onboard, SET FIS winter, GAB FIS, Industry



Age frequency



Royal Red Prawn

Port length data

Wed Nov 06 17:11:00 2019

month	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018
12	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0
11	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
10	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
9	0	0	0	0	0	0	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	0	0	0	0	0
7	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
6	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
4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
3	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	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

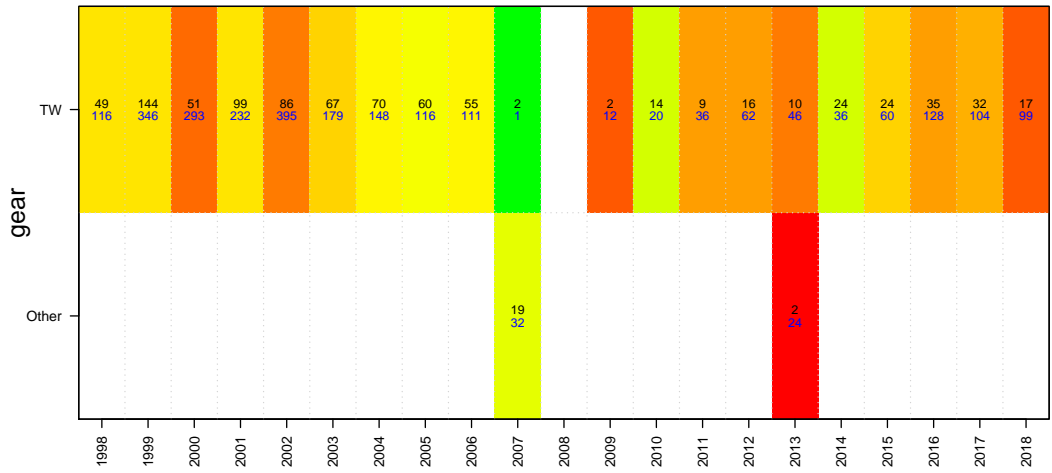
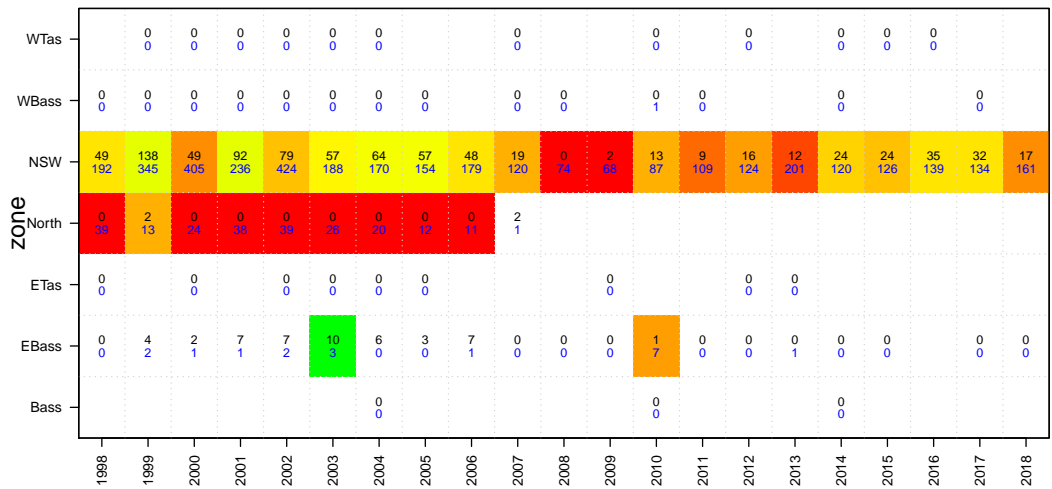
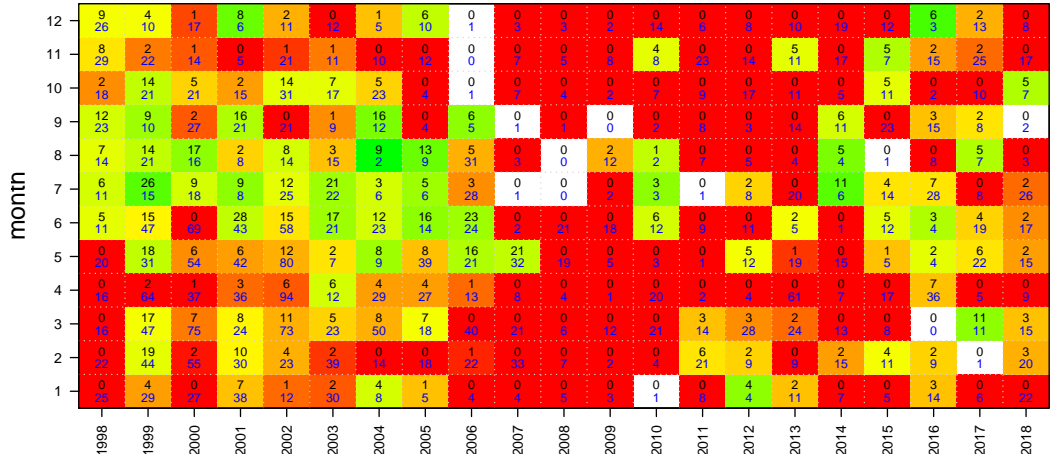
zone	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018
WTas	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
WBass	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0
NSW	192	345	405	236	424	188	170	154	179	120	74	68	87	109	124	201	105	126	139	134	161
North	39	13	24	38	39	26	20	12	11	1	0	0	0	0	0	0	0	0	0	0	0
ETas	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
EBass	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Bass	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

gear	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018
TW	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	105	15	0	0	0

Royal Red Prawn

Onboard discard weight data

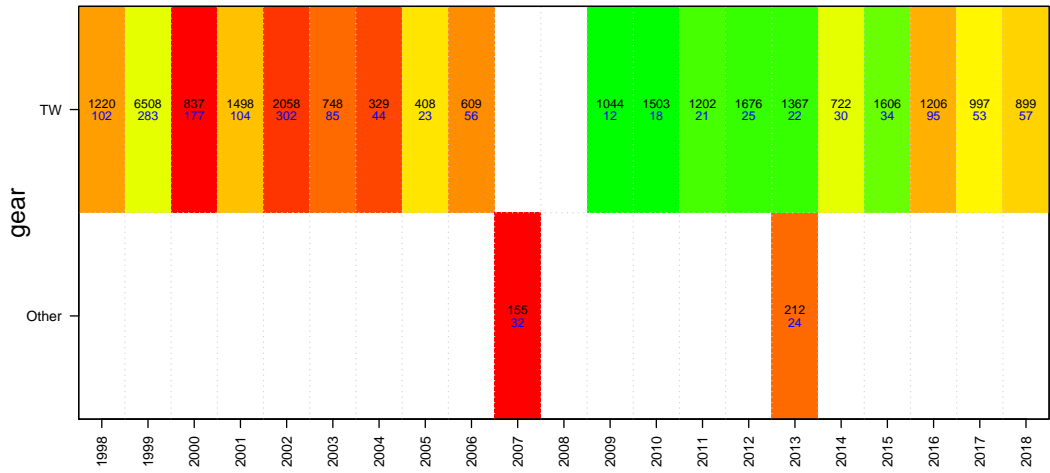
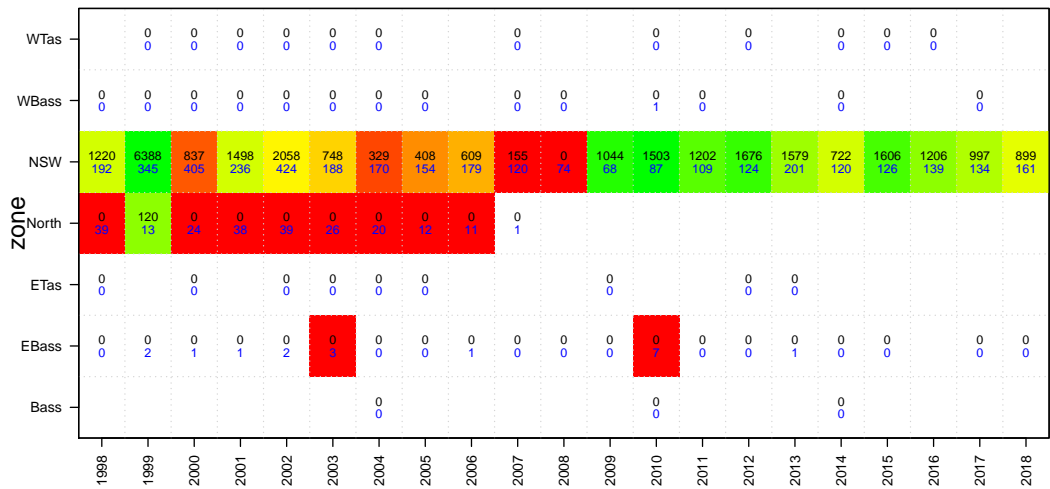
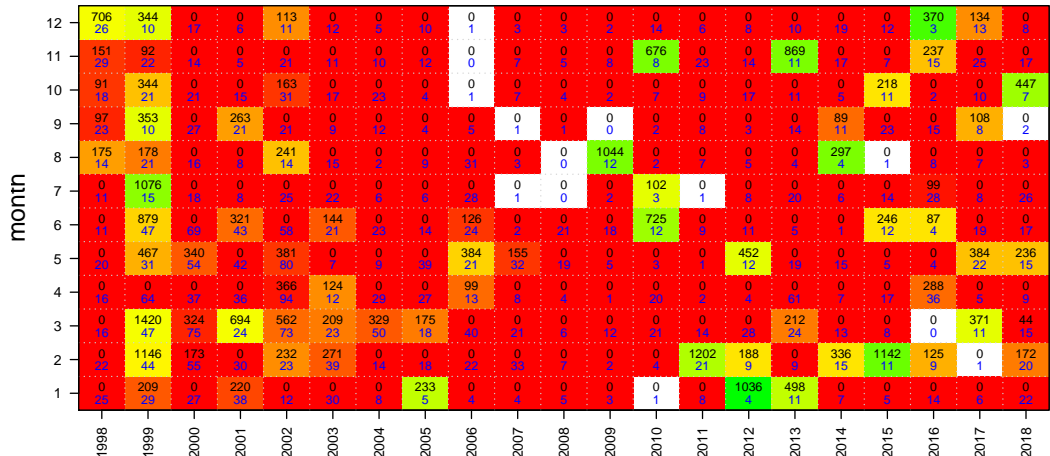
Wed Nov 06 17:11:00 2019



Royal Red Prawn

Onboard length data

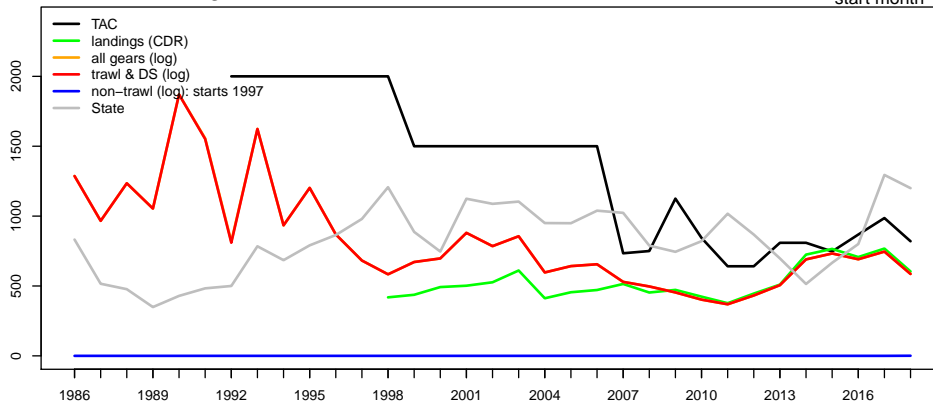
Wed Nov 06 17:11:00 2019



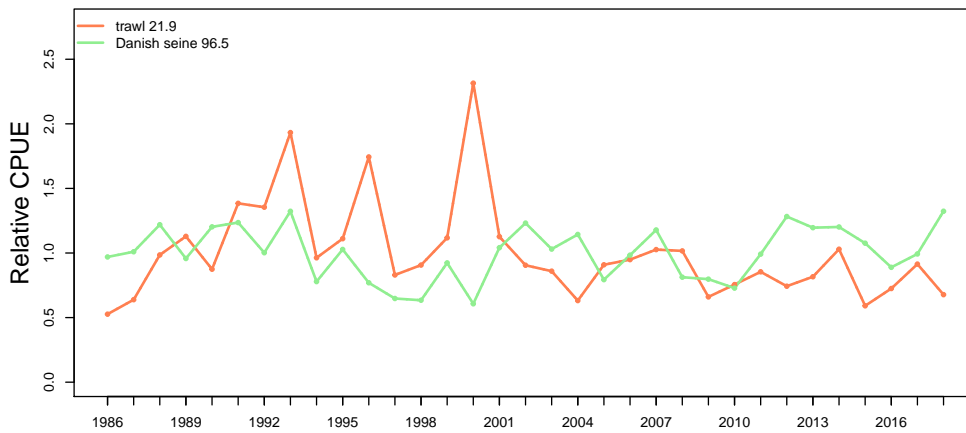
School Whiting

Wed Nov 06 17:11:03 2019
region SET unit code WHS sa code WHS
37330014
start month 1

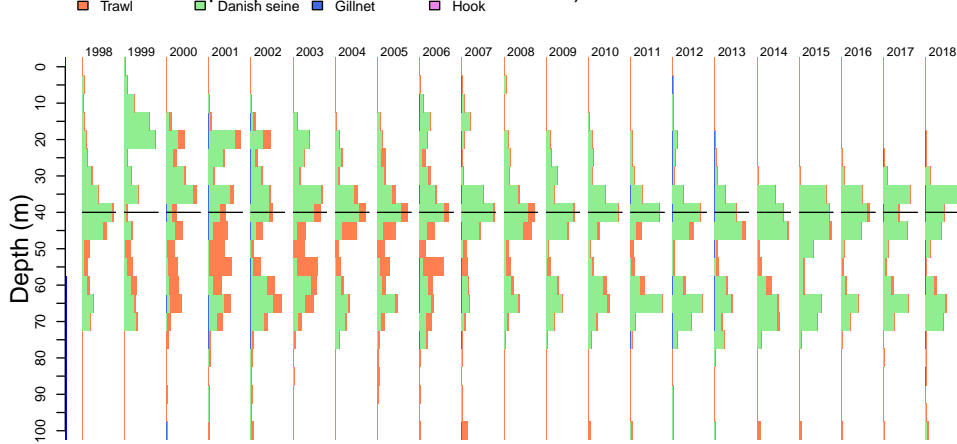
TAC and landings



Geometric mean CPUE & SET FIS abundance



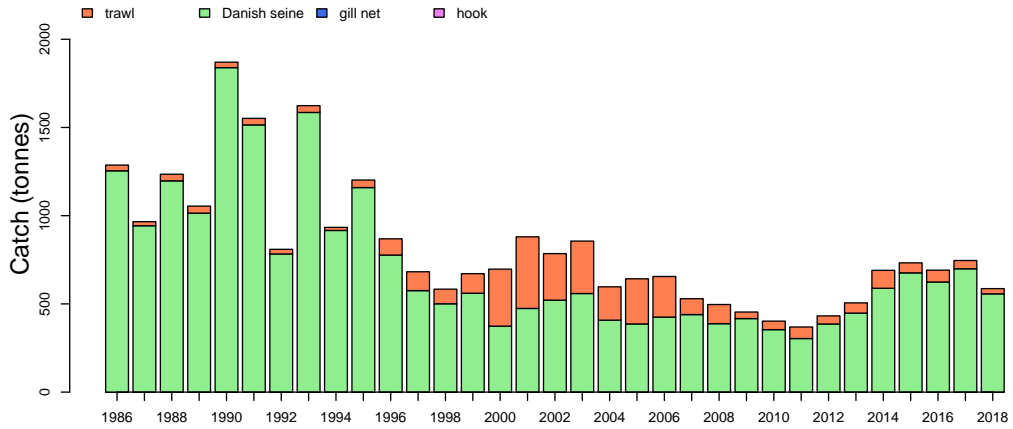
Catch at depth (non-trawl record starts 1997)



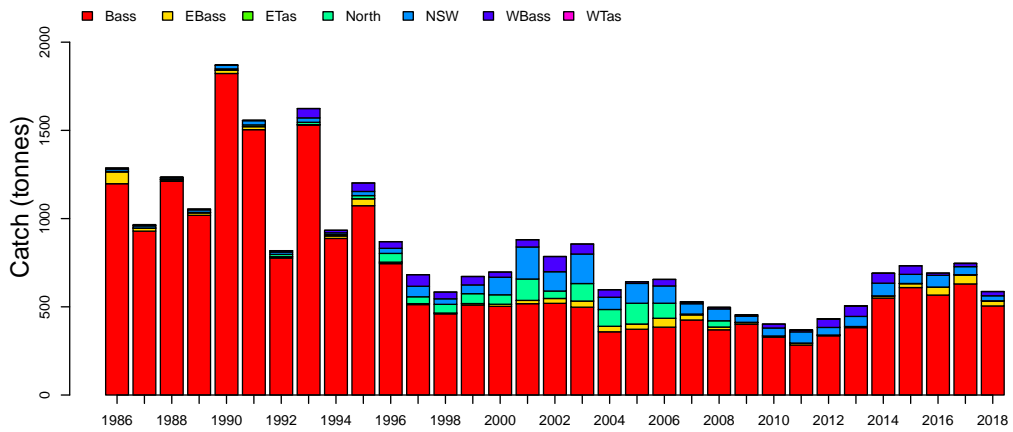
School Whiting

Wed Nov 06 17:11:13 2019

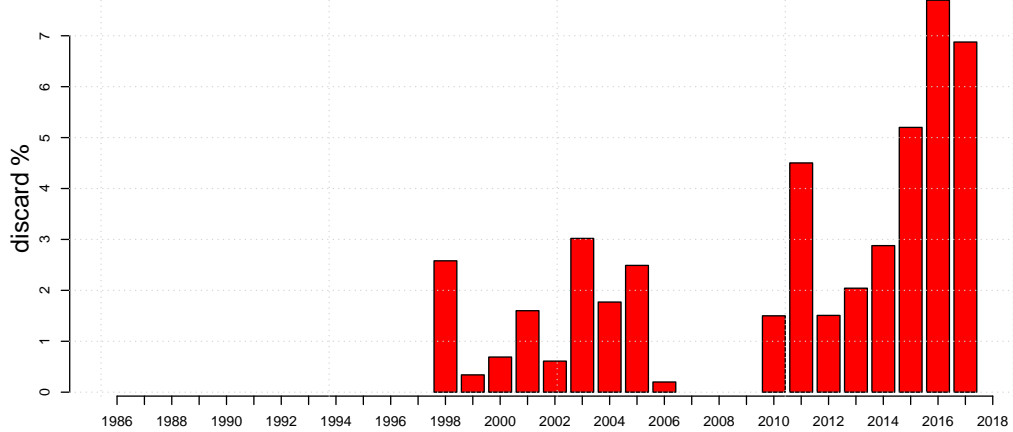
Catch by gear (non-trawl record starts 1997)



Catch by zone



Discards

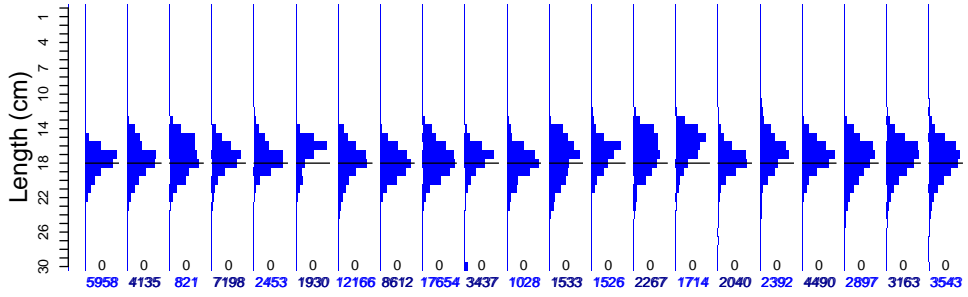


School Whiting

Wed Nov 06 17:11:14 2019

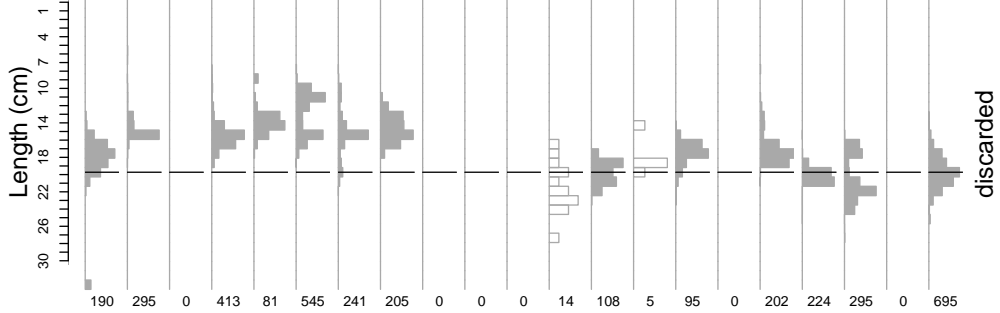
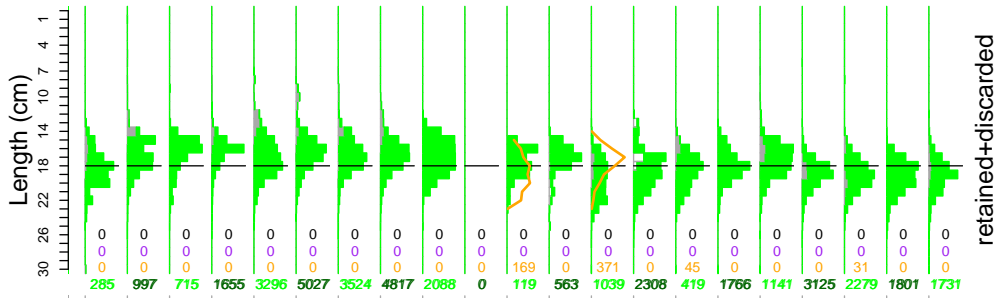
Length frequencies: ISMP Port, GAB Industry

1998 1999 2000 2001 2002 2003 2004 2005 2006 2007 2008 2009 2010 2011 2012 2013 2014 2015 2016 2017 2018

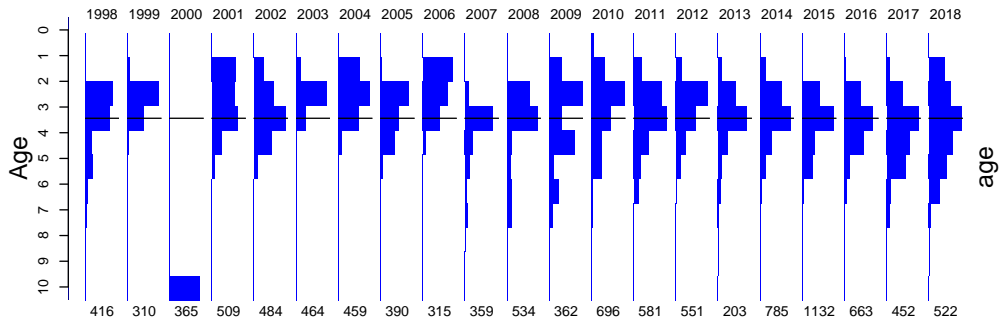


Length frequencies: ISMP Onboard, SET FIS winter, GAB FIS, Industry

1998 1999 2000 2001 2002 2003 2004 2005 2006 2007 2008 2009 2010 2011 2012 2013 2014 2015 2016 2017 2018



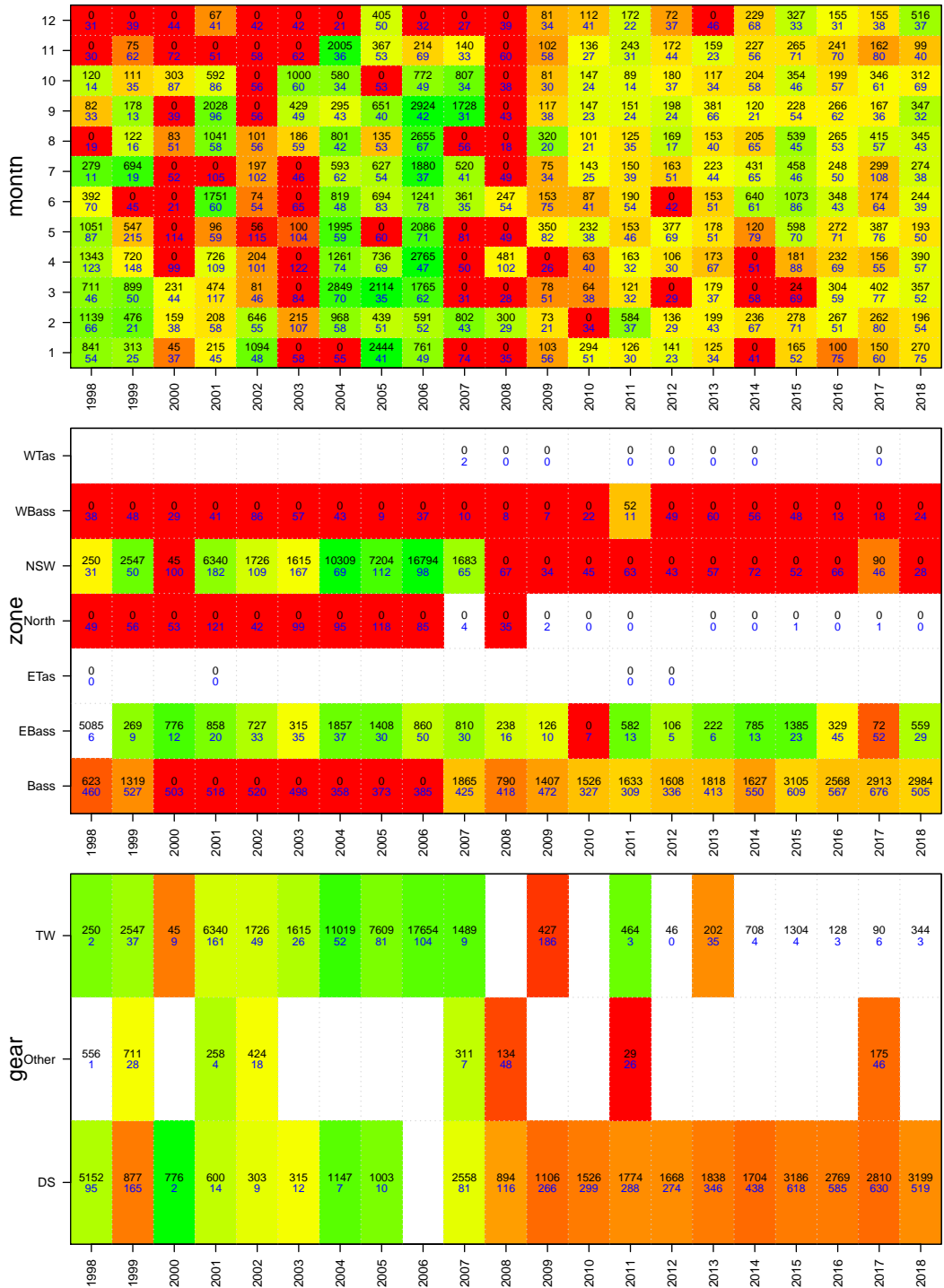
Age frequency



School Whiting

Port length data

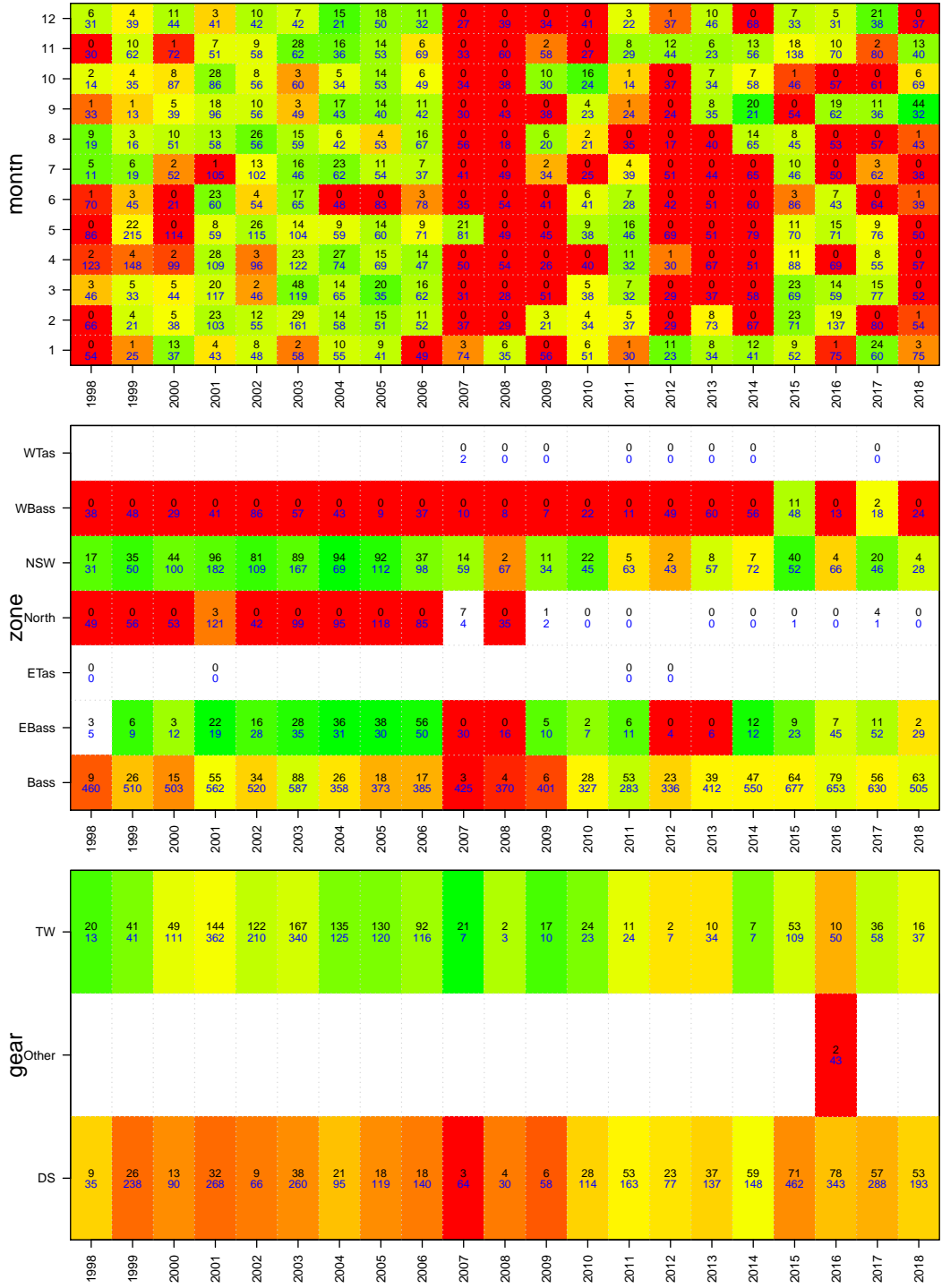
Wed Nov 06 17:11:15 2019



School Whiting

Onboard discard weight data

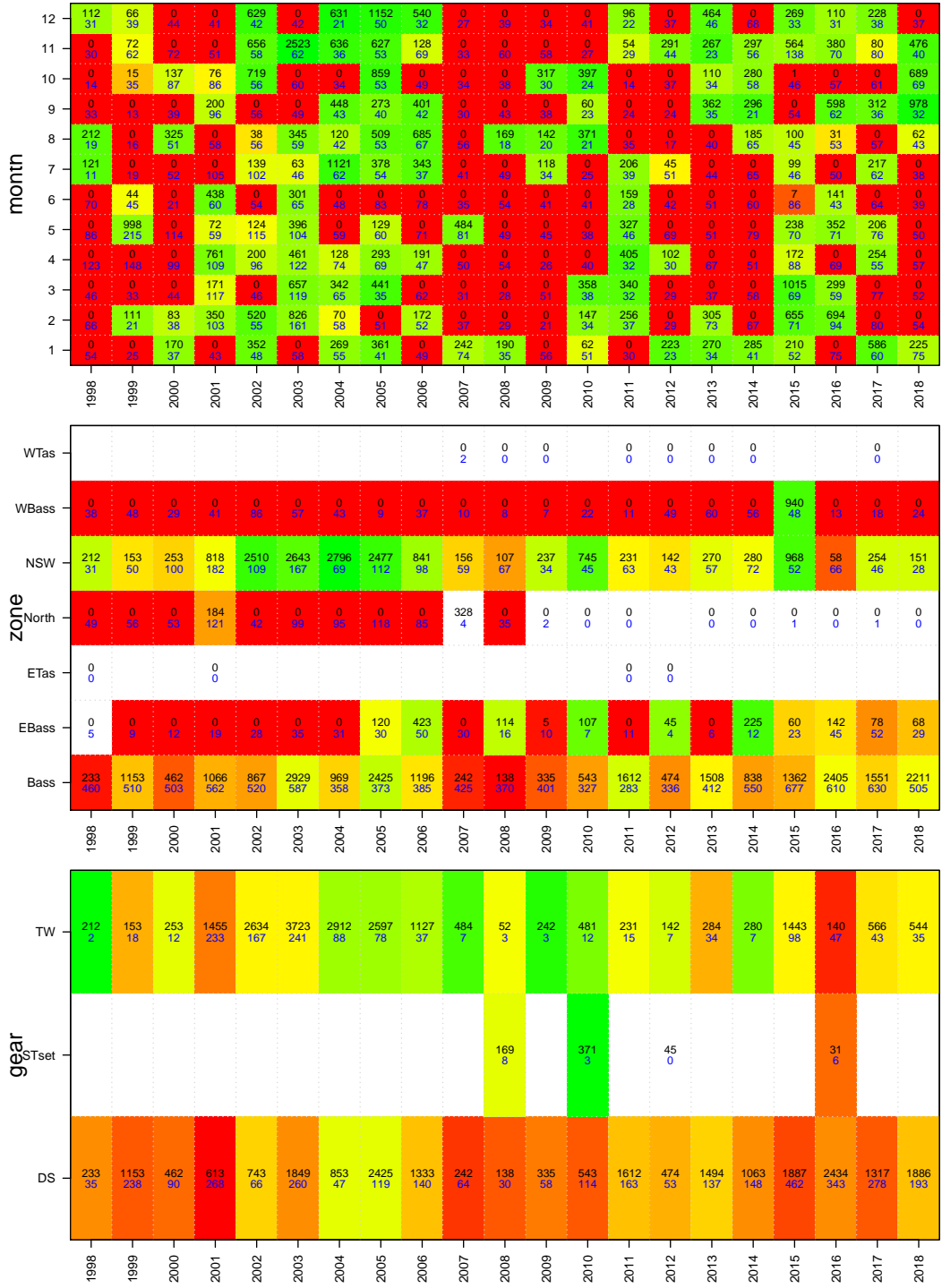
Wed Nov 06 17:11:15 2019



School Whiting

Onboard length data

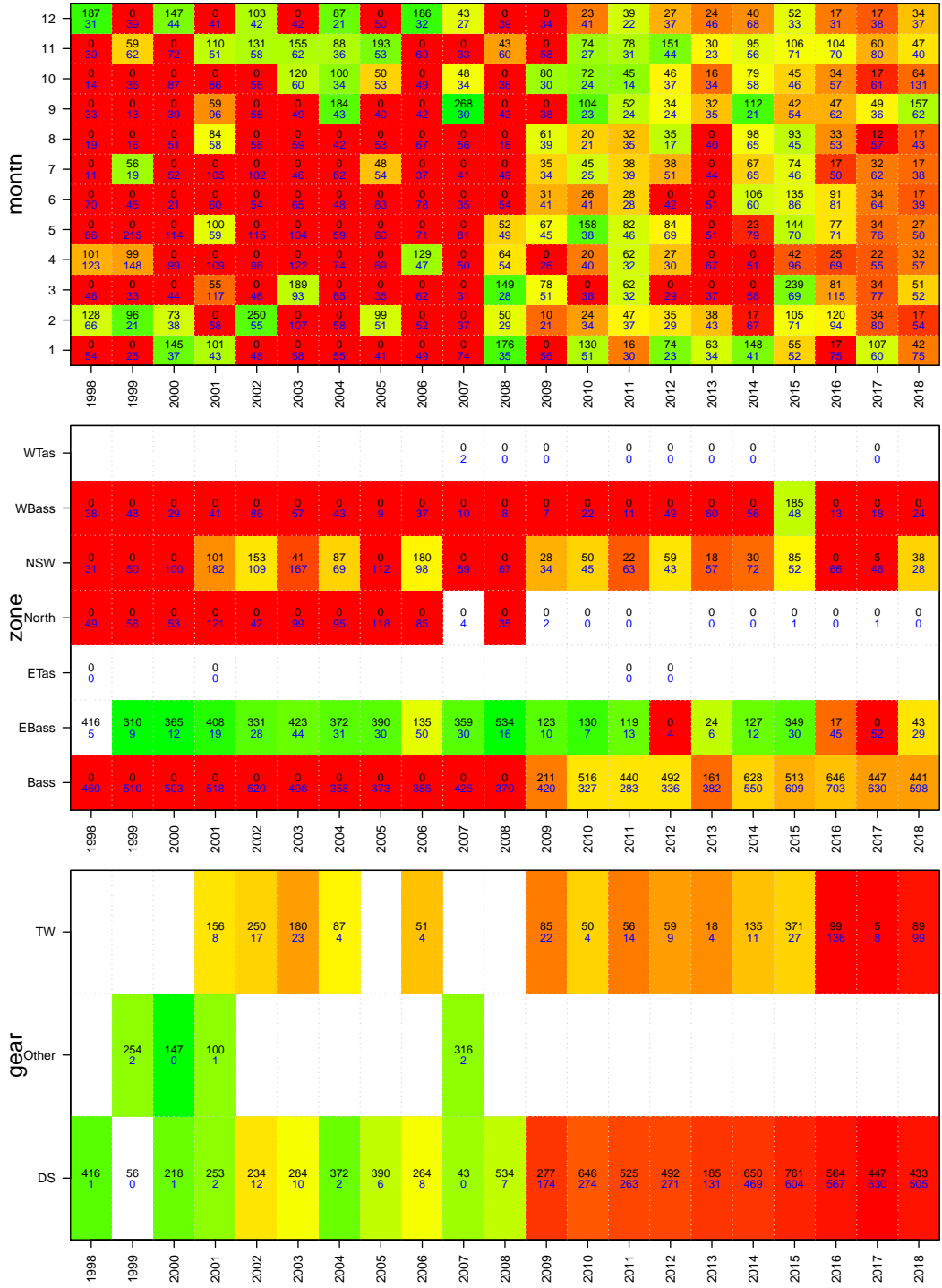
Wed Nov 06 17:11:15 2019



School Whiting

Age data

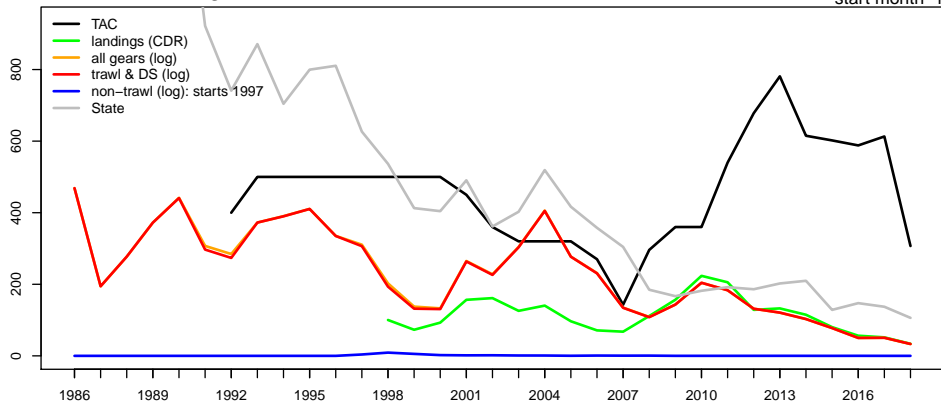
Wed Nov 06 17:11:15 2019



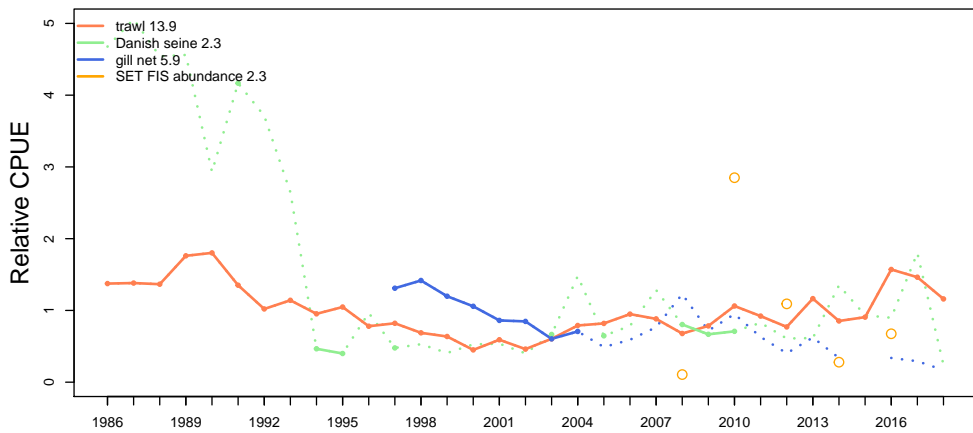
Silver Trevally

TAC and landings

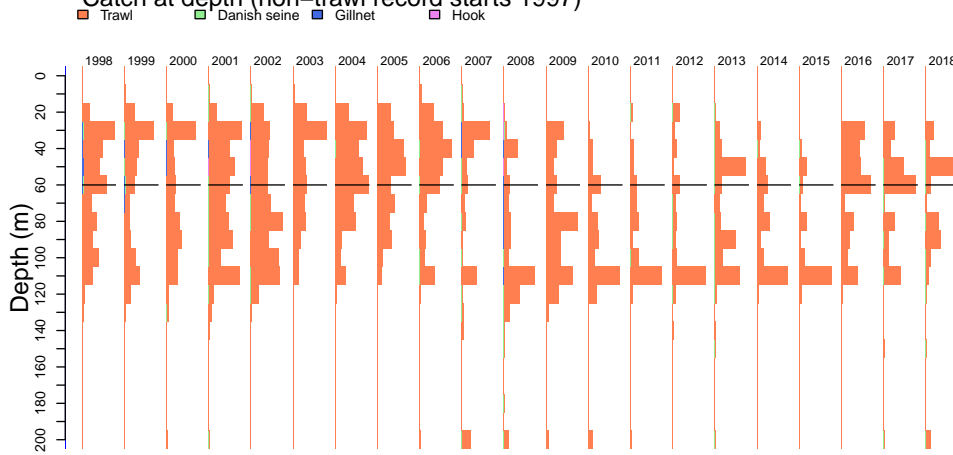
Wed Nov 06 17:11:17 2019
 region SET unit code TRE sa code TRE
 37337062
 start month 1



Geometric mean CPUE & SET FIS abundance



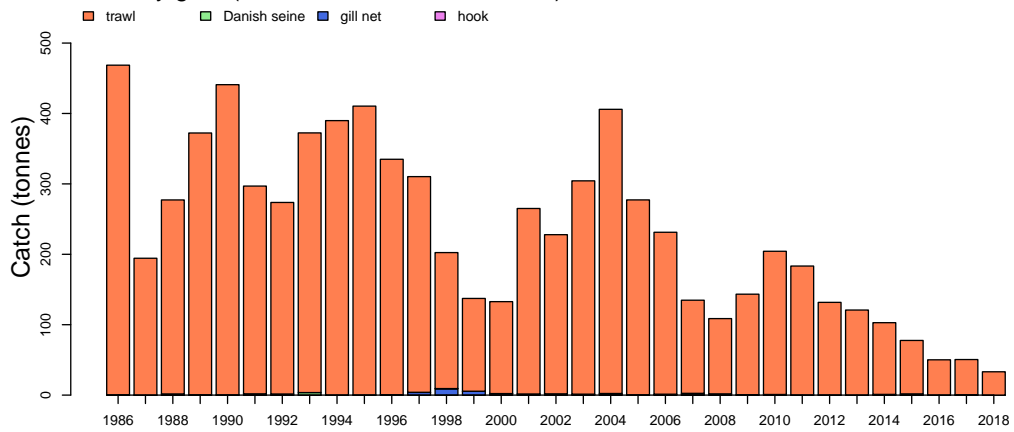
Catch at depth (non-trawl record starts 1997)



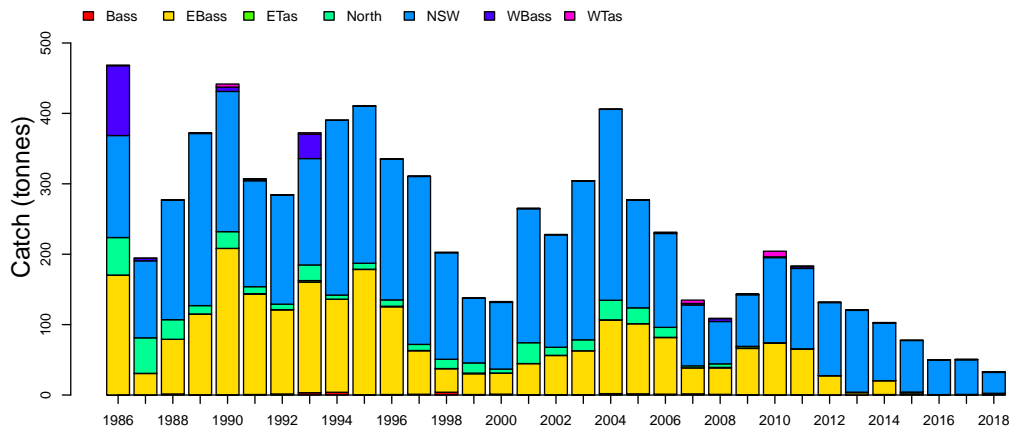
Silver Trevally

Wed Nov 06 17:11:23 2019

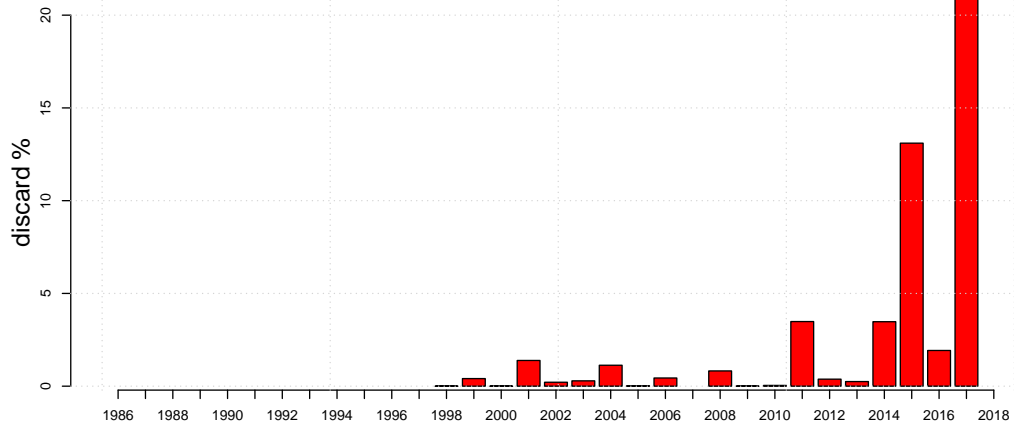
Catch by gear (non-trawl record starts 1997)



Catch by zone



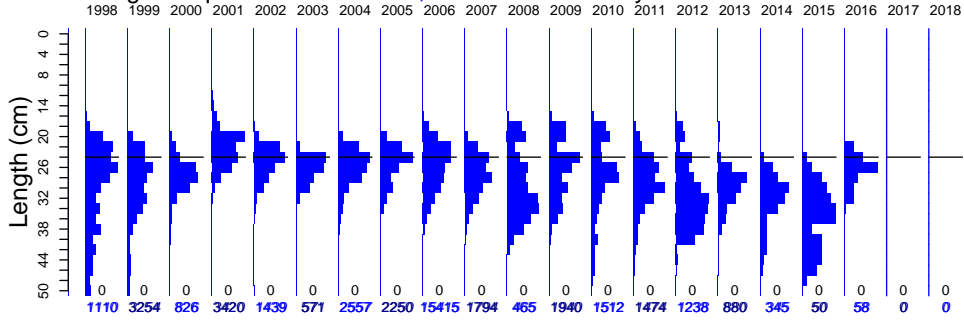
Discards



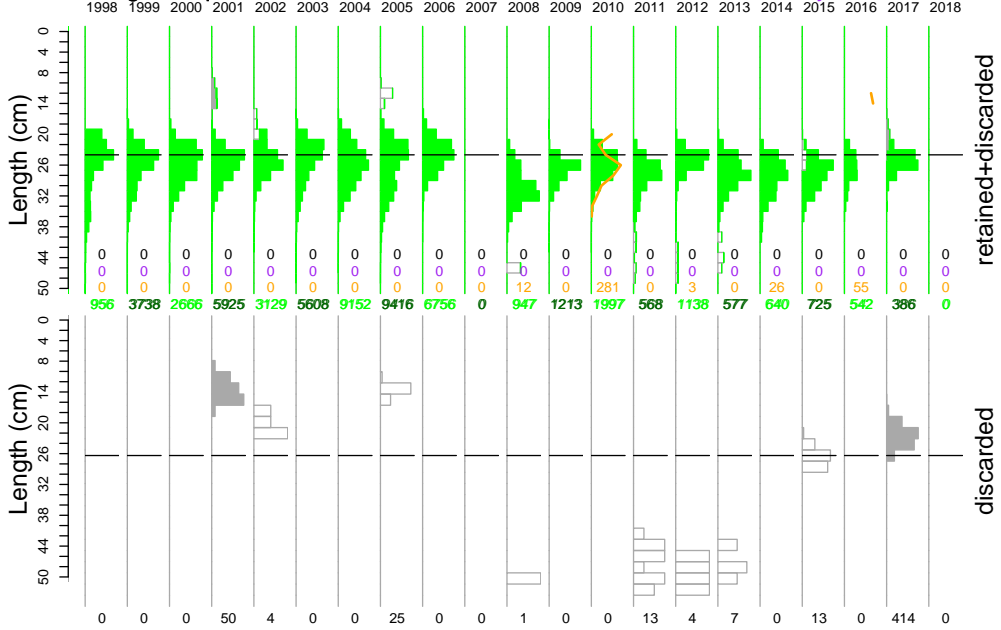
Silver Trevally

Wed Nov 06 17:11:24 2019

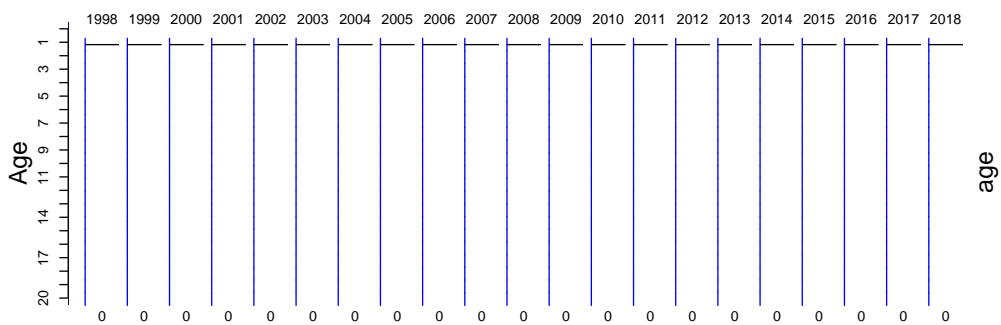
Length frequencies: ISMP Port, GAB Industry



Length frequencies: ISMP Onboard, SET FIS winter, GAB FIS Industry



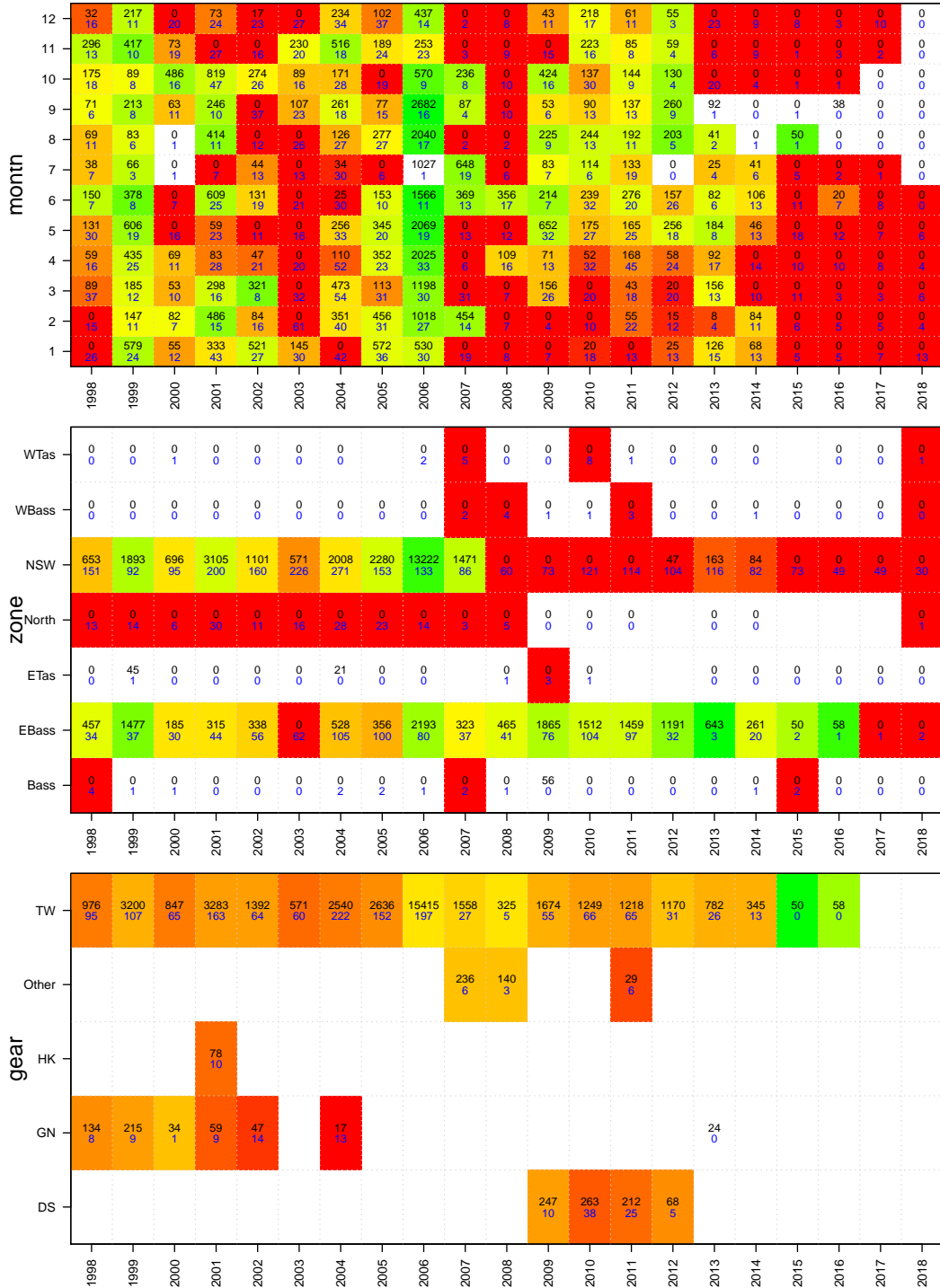
Age frequency



Silver Trevally

Port length data

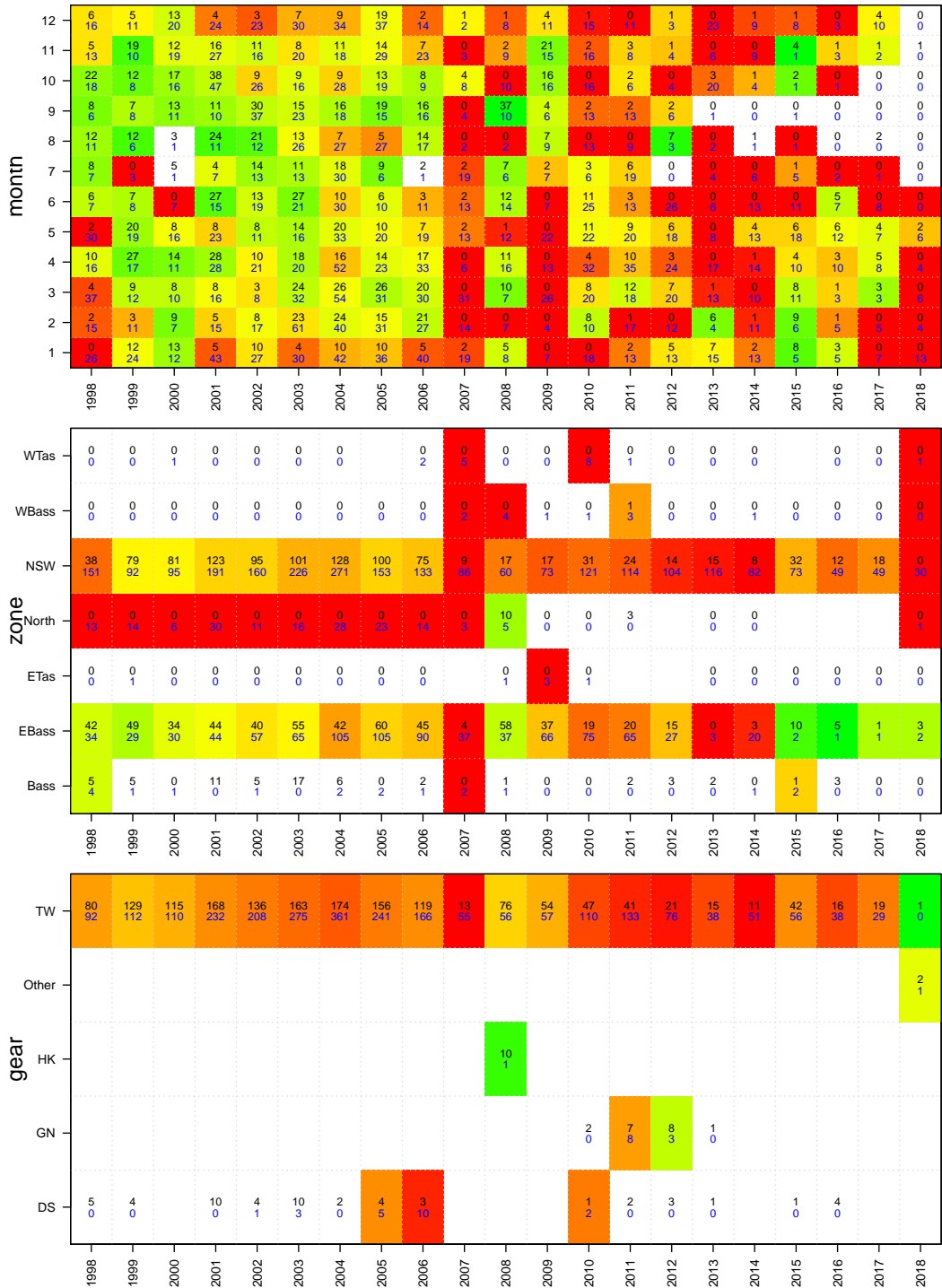
Wed Nov 06 17:11:24 2019



Silver Trevally

Onboard discard weight data

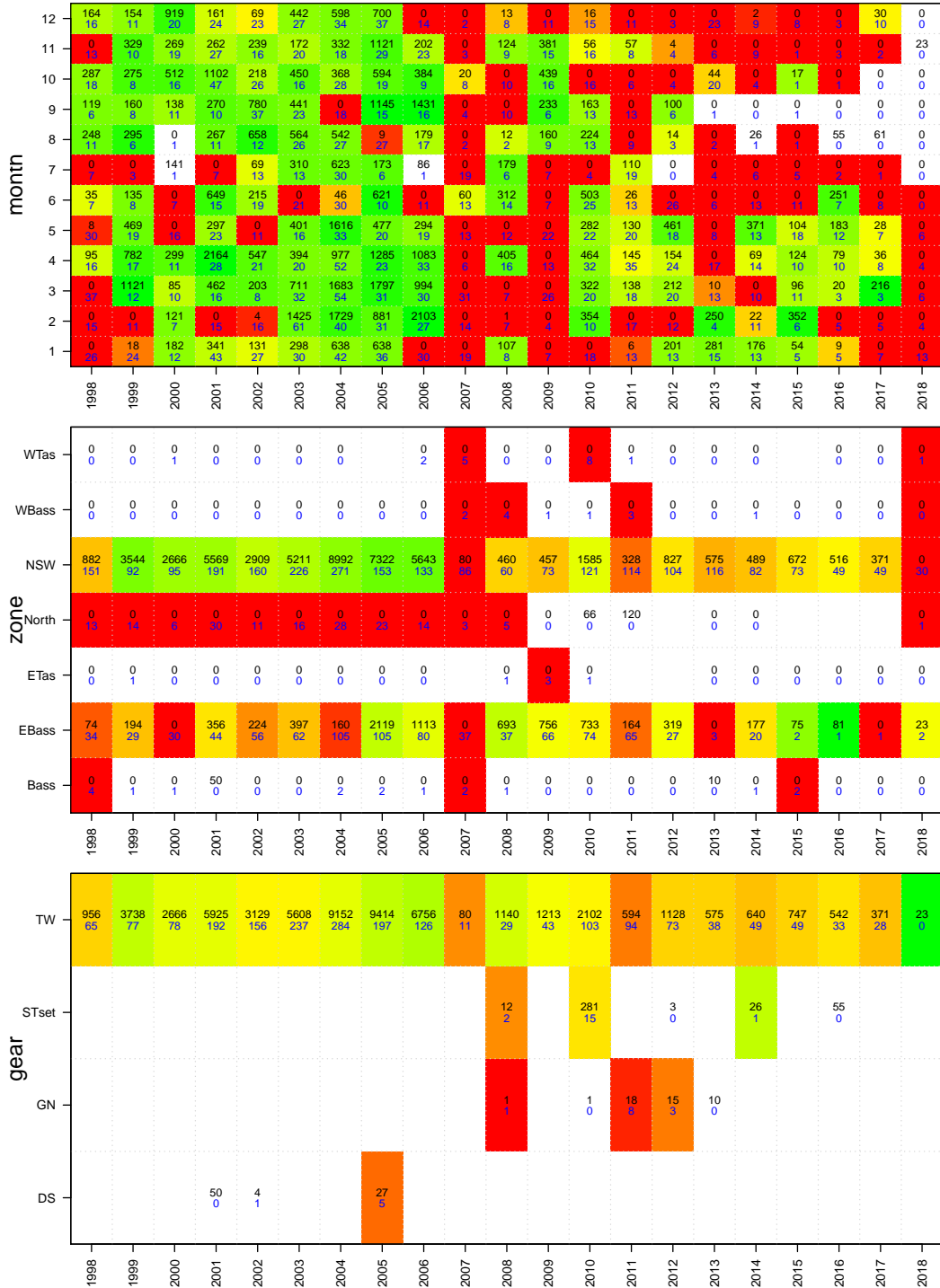
Wed Nov 06 17:11:24 2019



Silver Trevally

Onboard length data

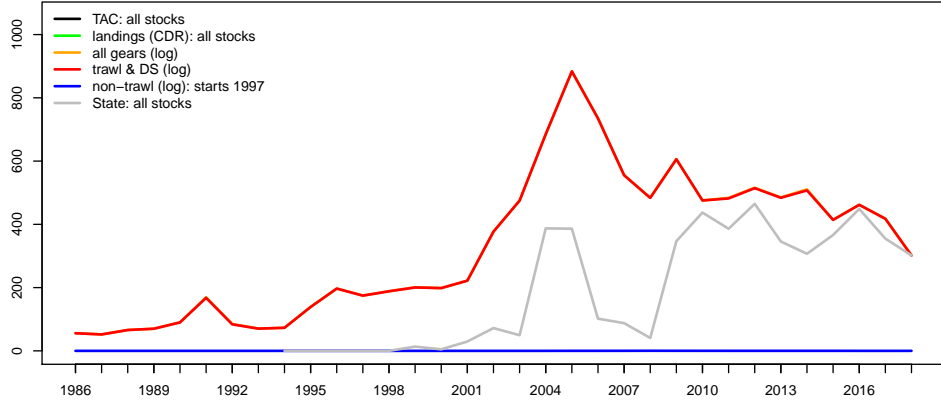
Wed Nov 06 17:11:24 2019



Ocean Jackets

Wed Nov 06 17:11:27 2019
 region ALL unit code sa code JAC
 37465000 37465006
 start month 1

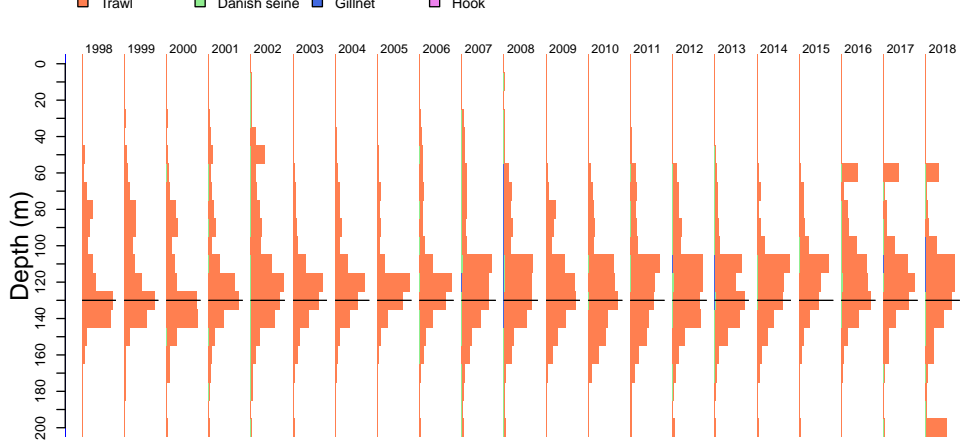
TAC and landings



Geometric mean CPUE & SET FIS abundance



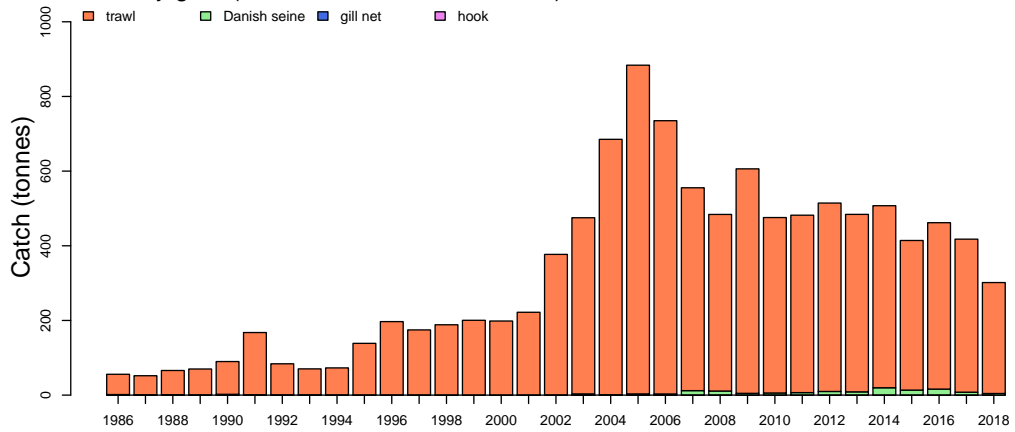
Catch at depth (non-trawl record starts 1997)



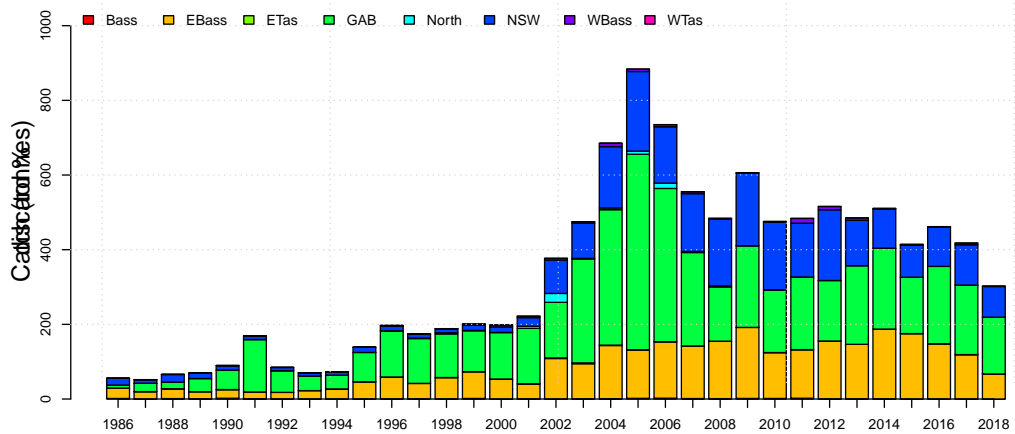
Ocean Jackets

Wed Nov 06 17:11:43 2019

Catch by gear (non-trawl record starts 1997)



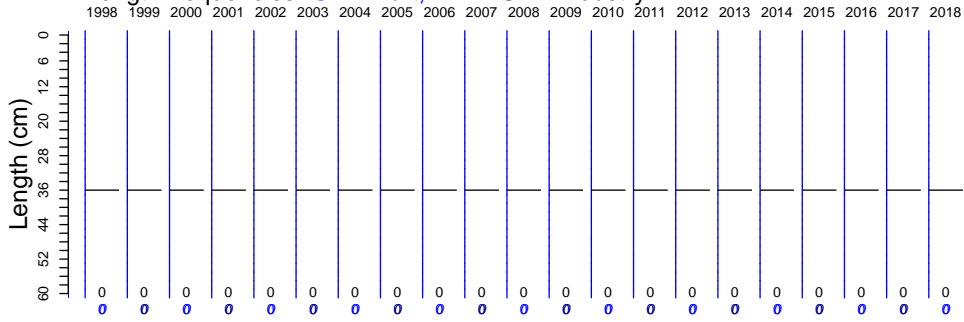
Discards by zone



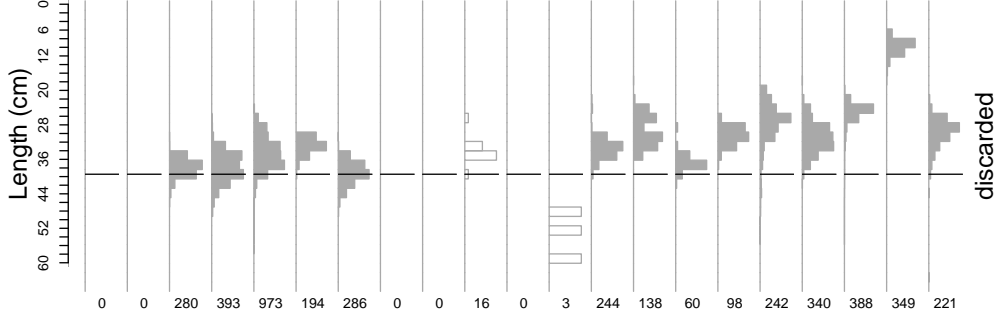
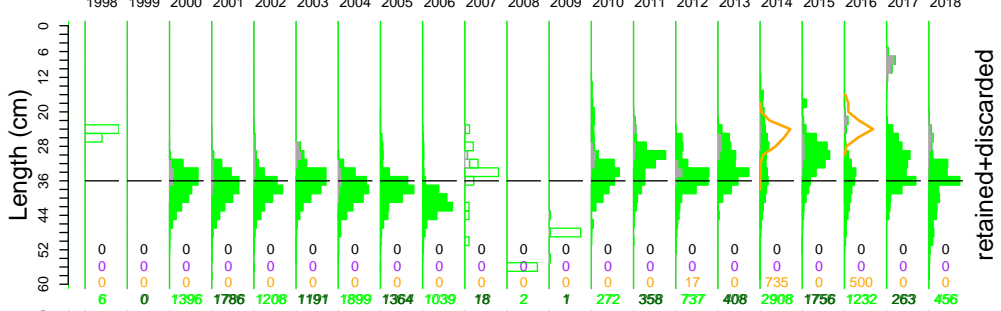
Ocean Jackets

Wed Nov 06 17:11:43 2019

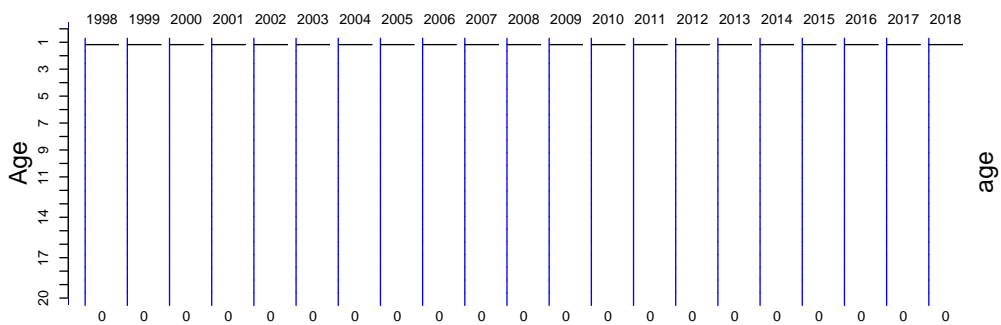
Length frequencies: ISMP Port, GAB Industry



Length frequencies: ISMP Onboard, SET FIS winter, GAB FIS Industry



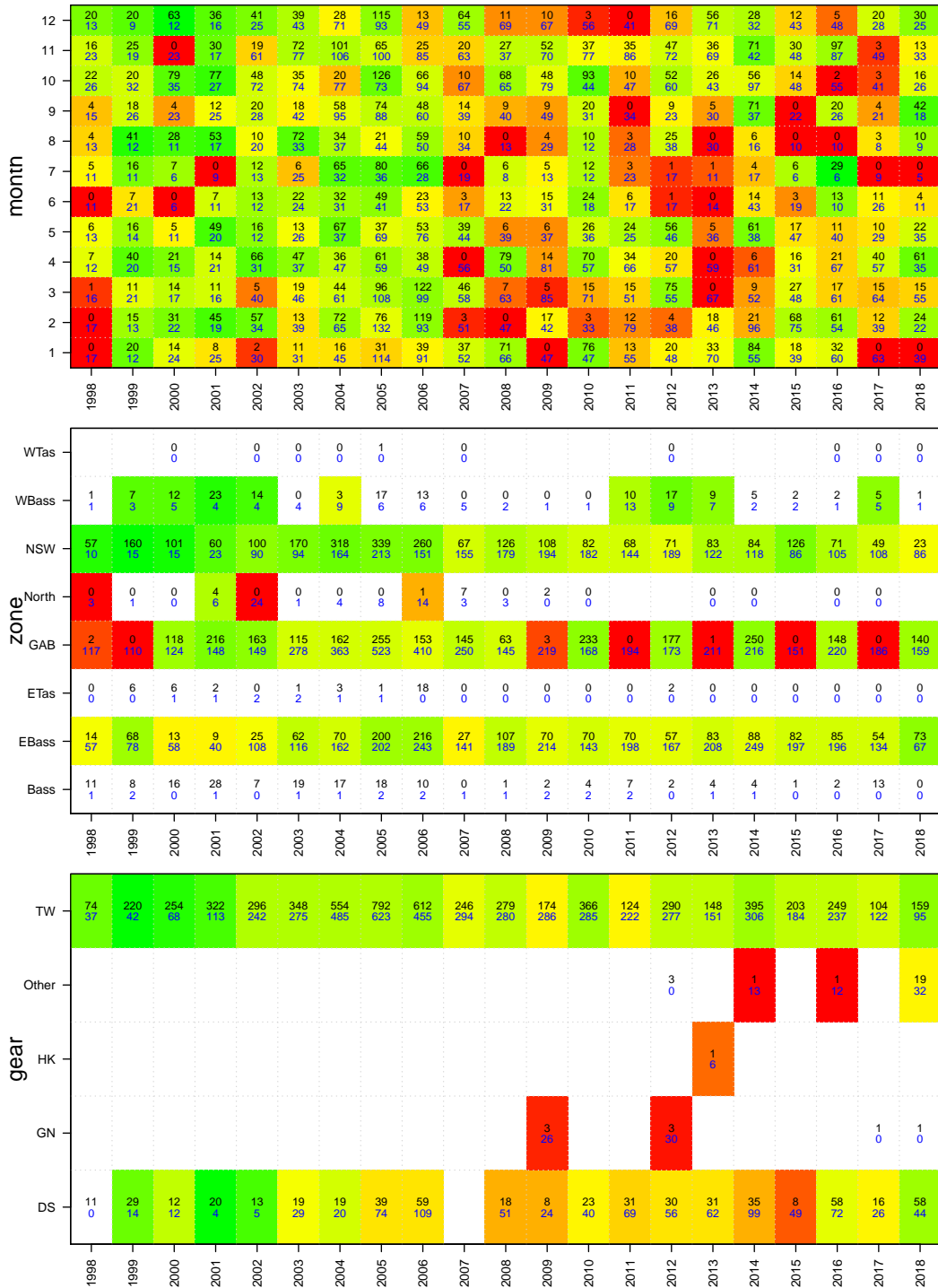
Age frequency



Ocean Jackets

Onboard discard weight data

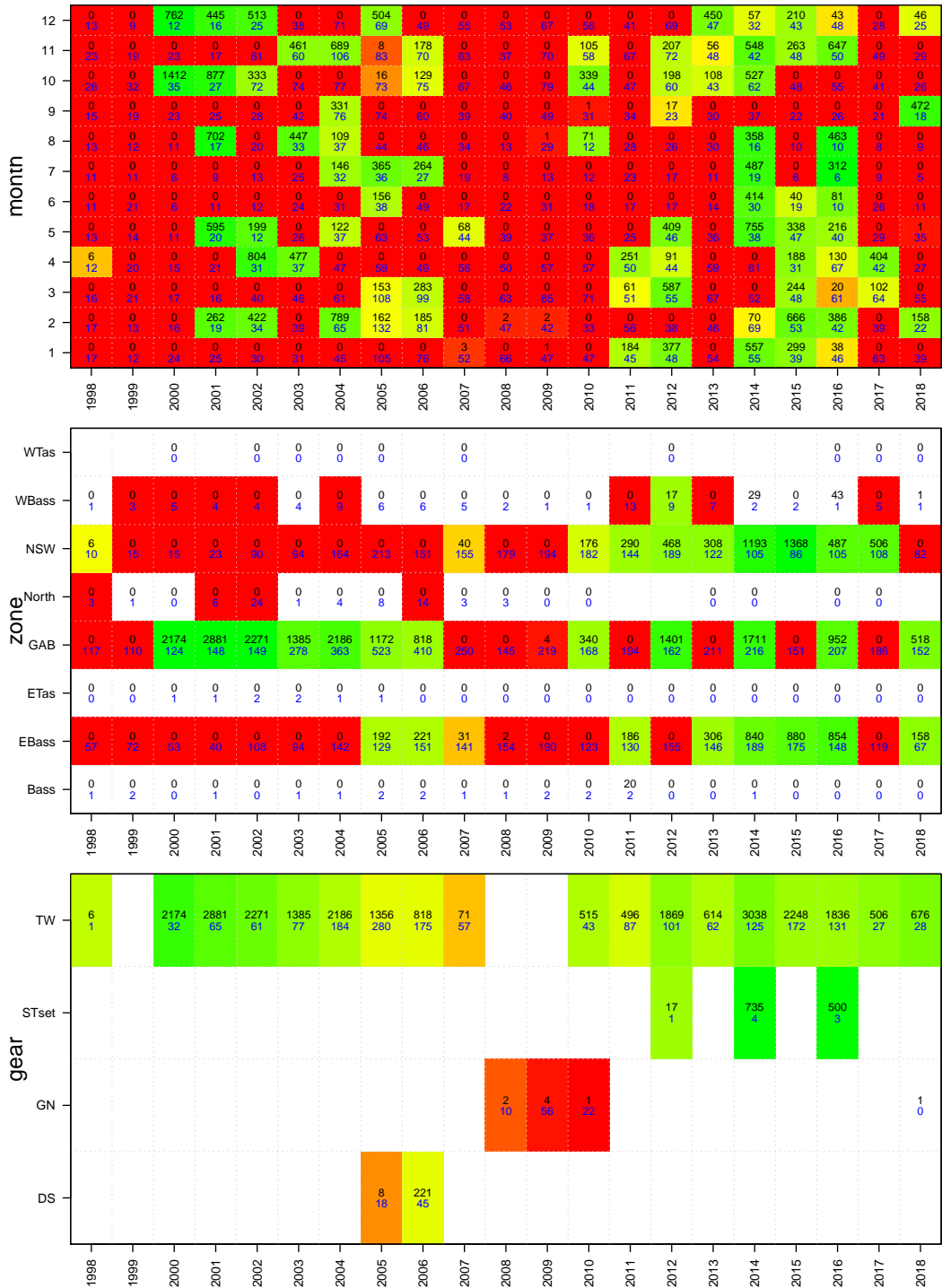
Wed Nov 06 17:11:44 2019



Ocean Jackets

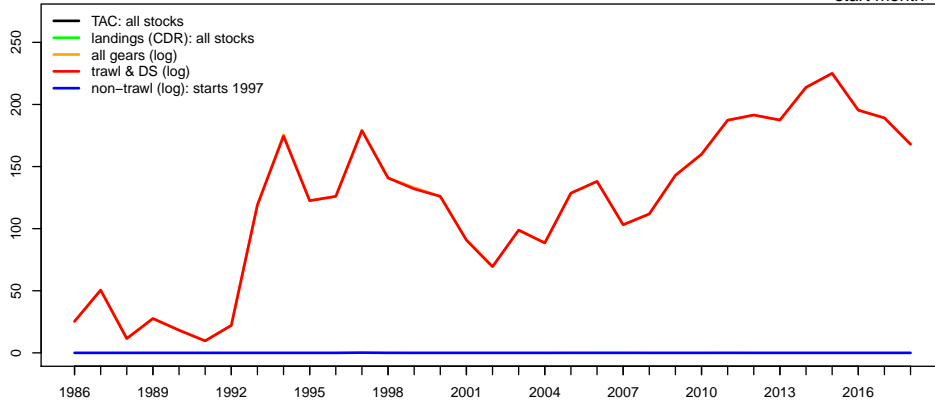
Onboard length data

Wed Nov 06 17:11:44 2019

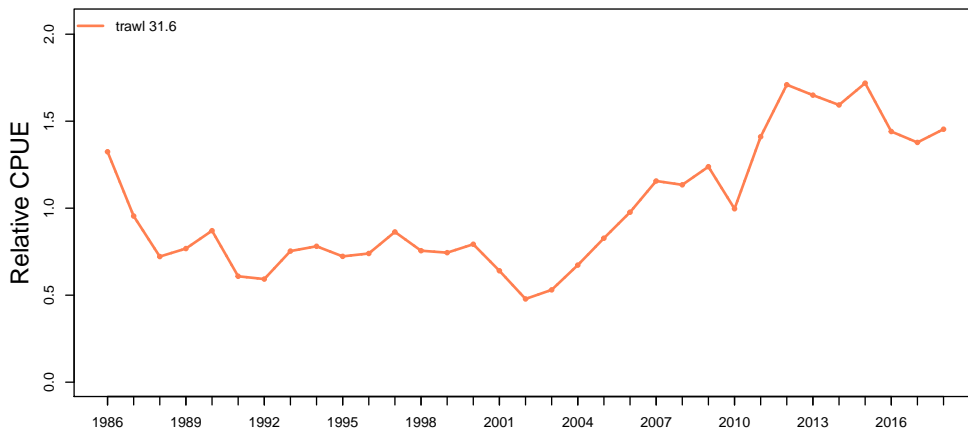


Frostfish
TAC and landings

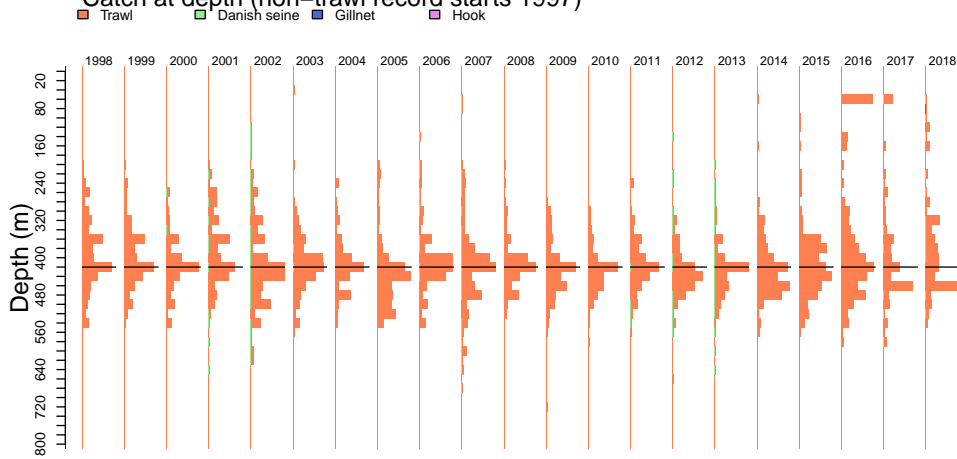
Wed Nov 06 17:11:44 2019
region ALL unit code sa code FRO
37440002 37440000
start month 1



Geometric mean CPUE & SET FIS abundance



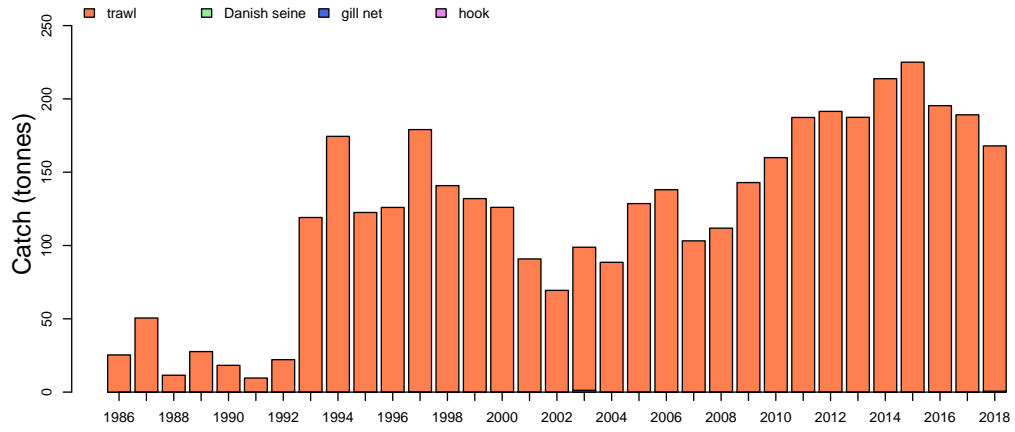
Catch at depth (non-trawl record starts 1997)



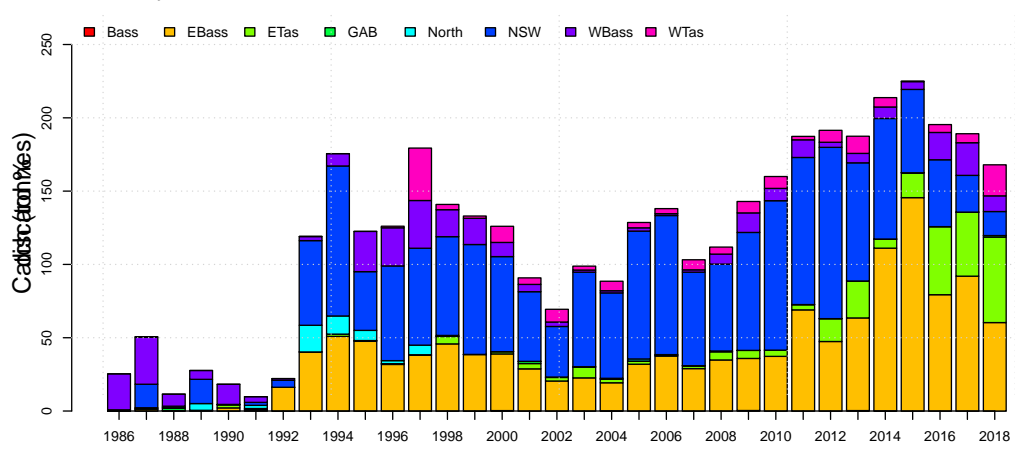
Frostfish

Wed Nov 06 17:11:46 2019

Catch by gear (non-trawl record starts 1997)



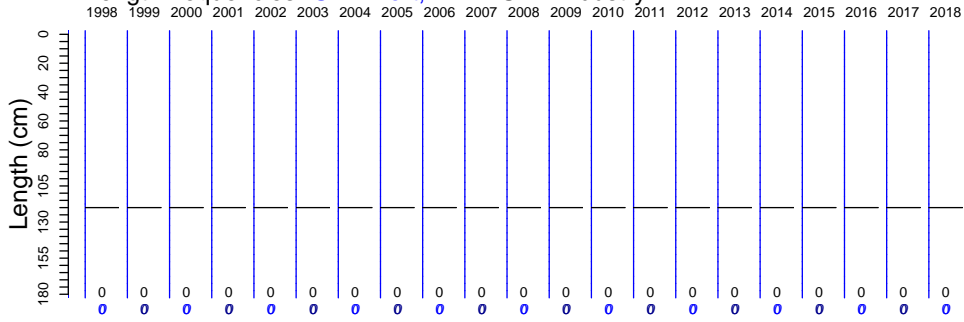
Discards



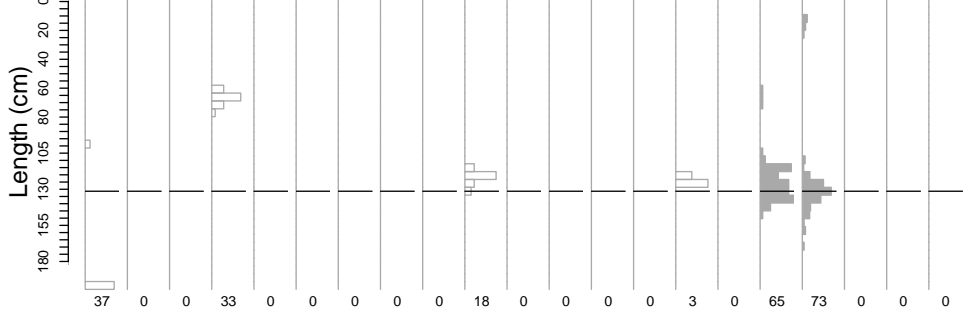
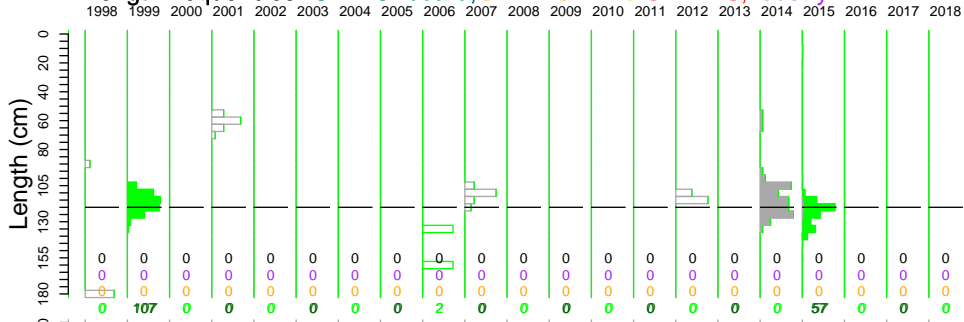
Frostfish

Wed Nov 06 17:11:46 2019

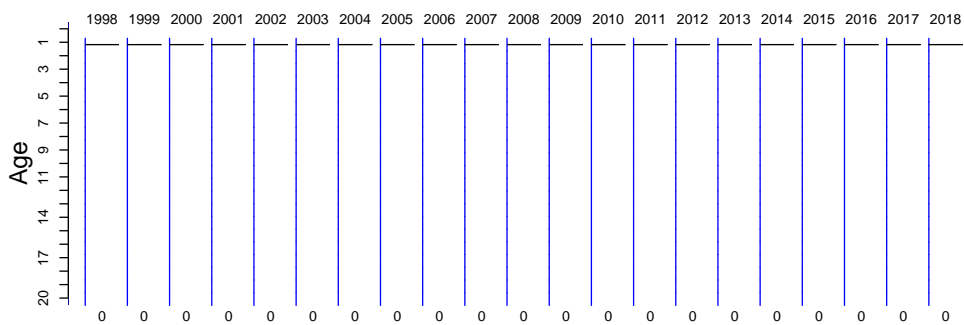
Length frequencies: ISMP Port, GAB Industry



Length frequencies: ISMP Onboard, SET FIS winter, GAB FIS, Industry



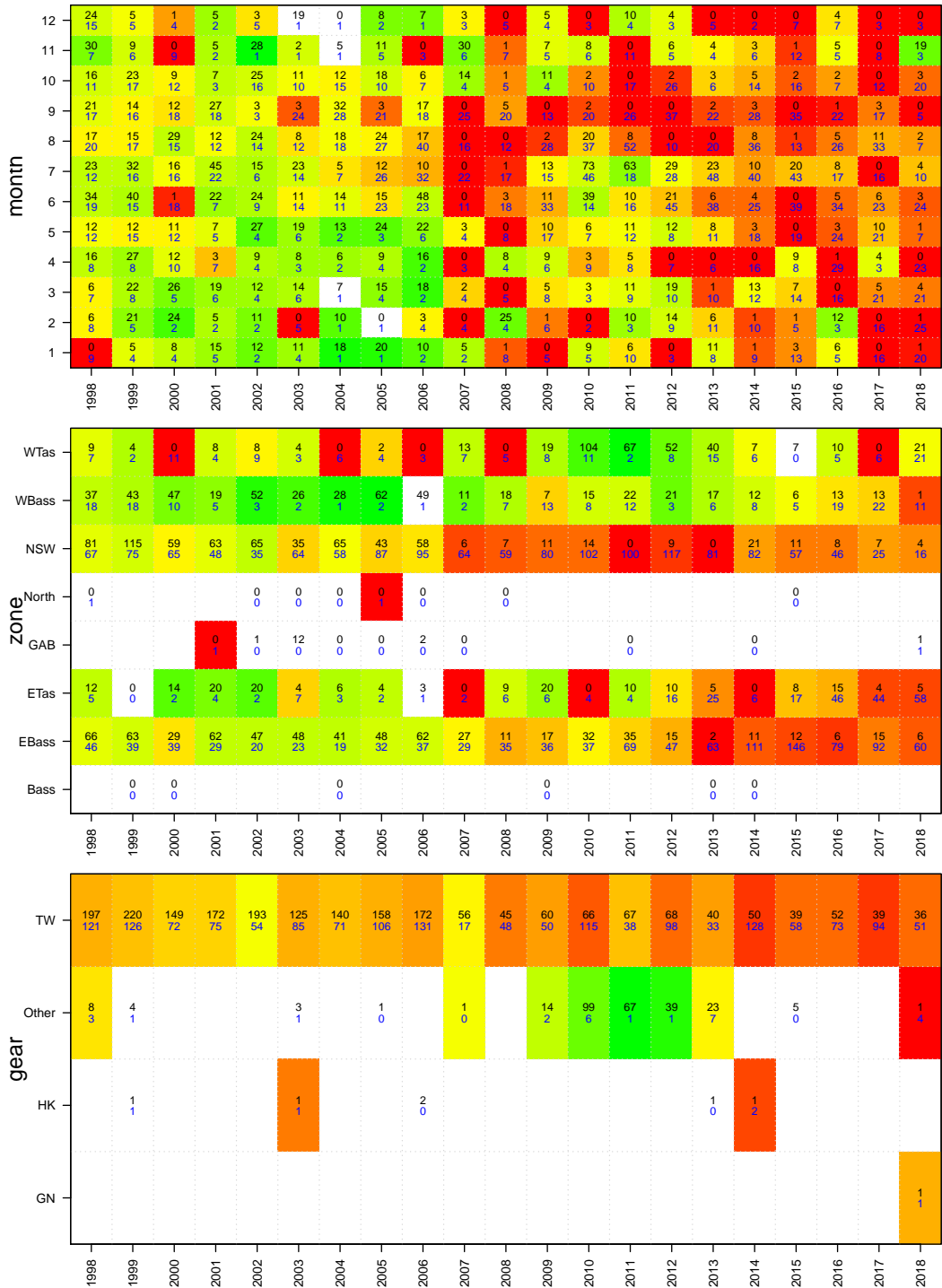
Age frequency



Frostfish

Onboard discard weight data

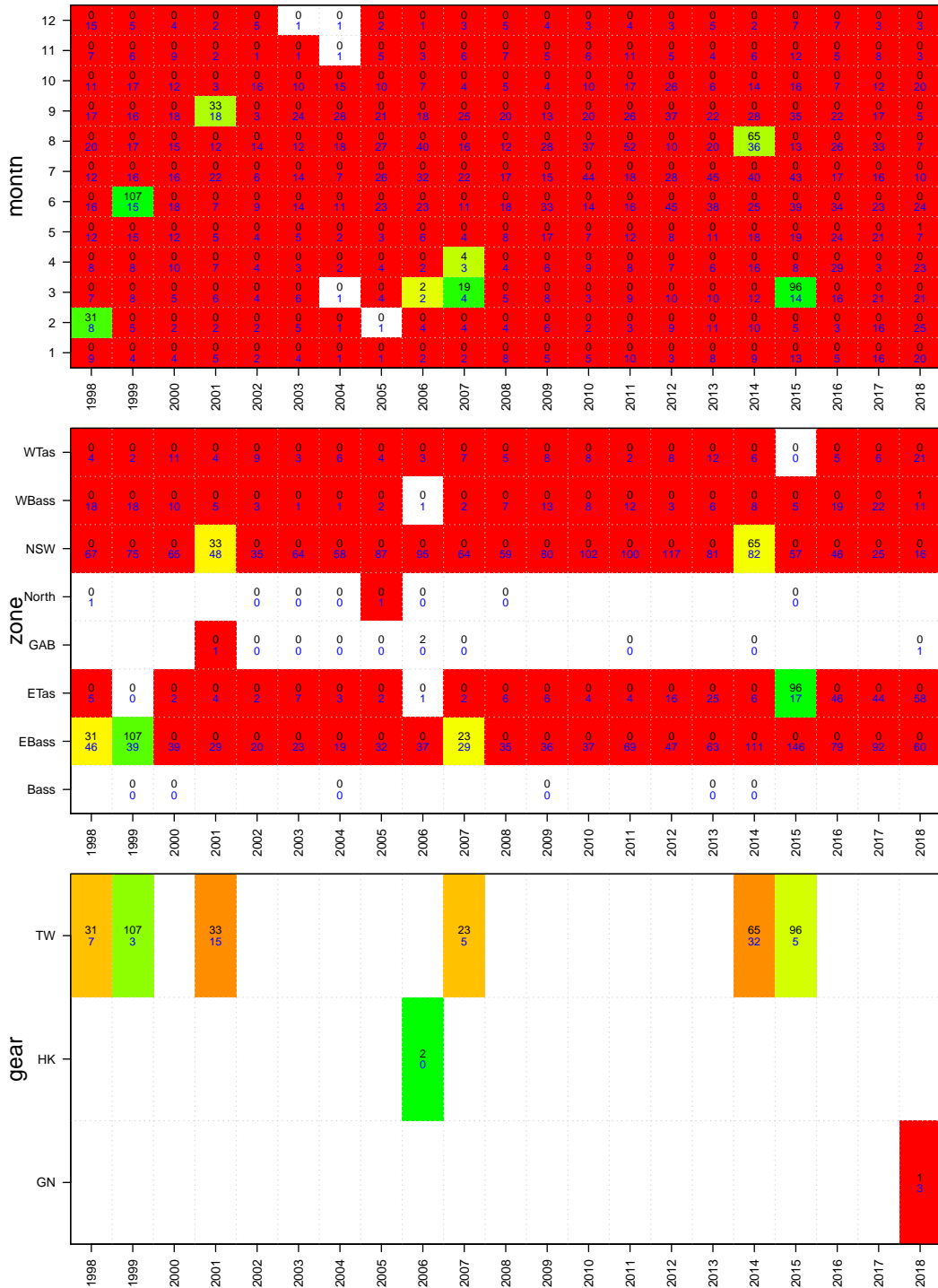
Wed Nov 06 17:11:47 2019



Frostfish

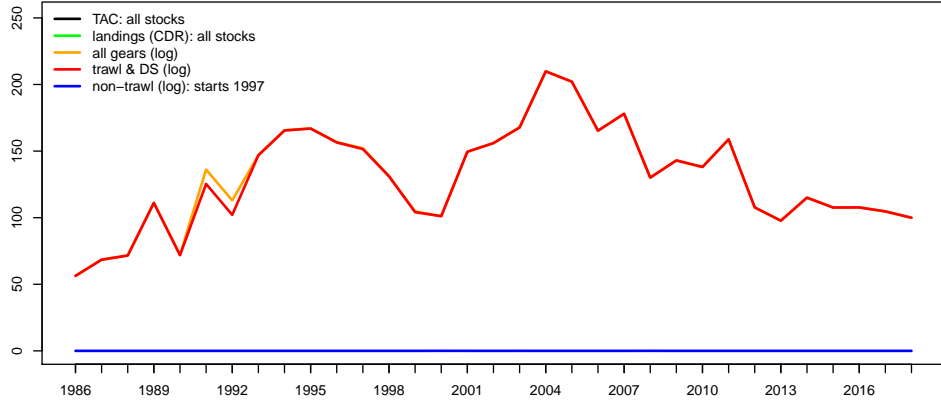
Onboard length data

Wed Nov 06 17:11:47 2019

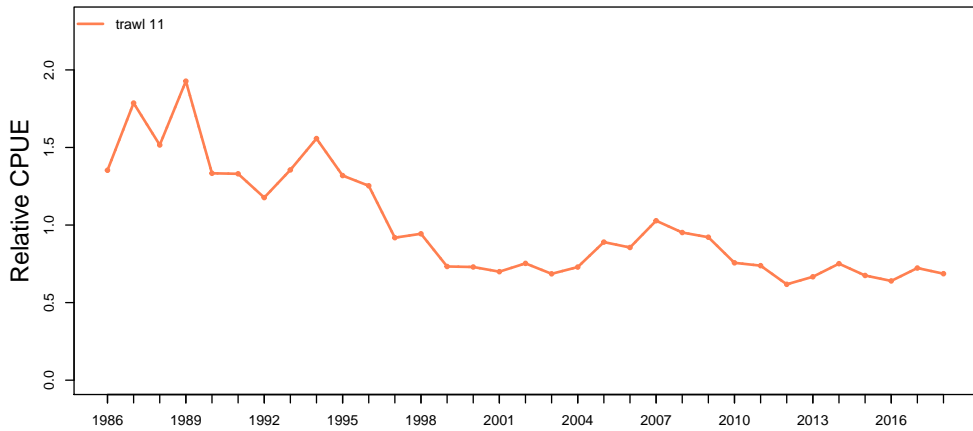


King dory
TAC and landings

Wed Nov 06 17:11:48 2019
region ALL unit code sa code DOK
37264001
start month 1



Geometric mean CPUE & SET FIS abundance

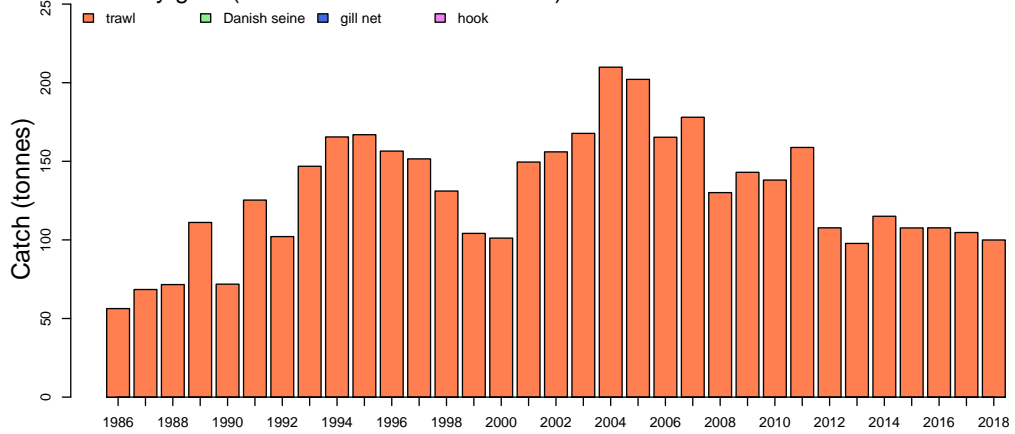


Catch at depth (non-trawl record starts 1997)



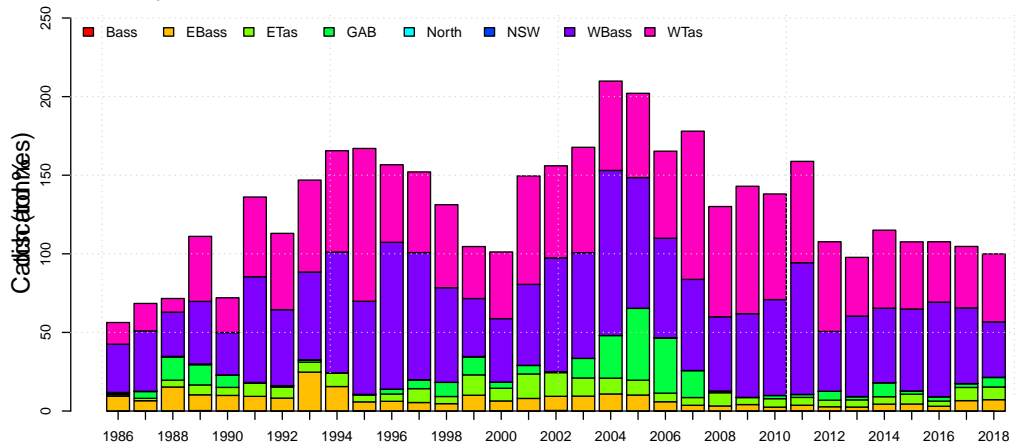
King dory

Catch by gear (non-trawl record starts 1997)



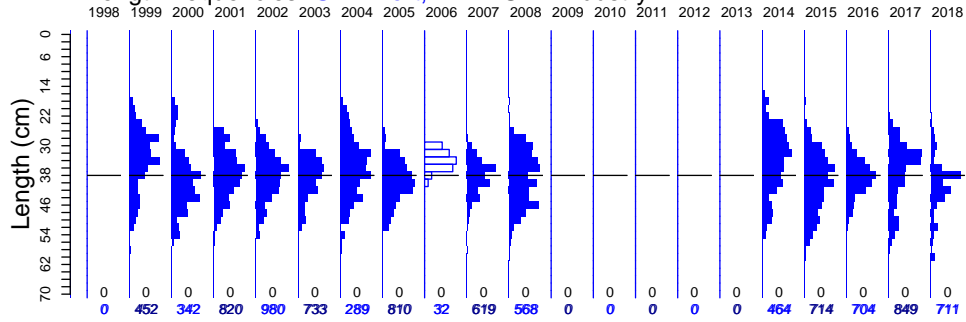
Discards

Catch by zone

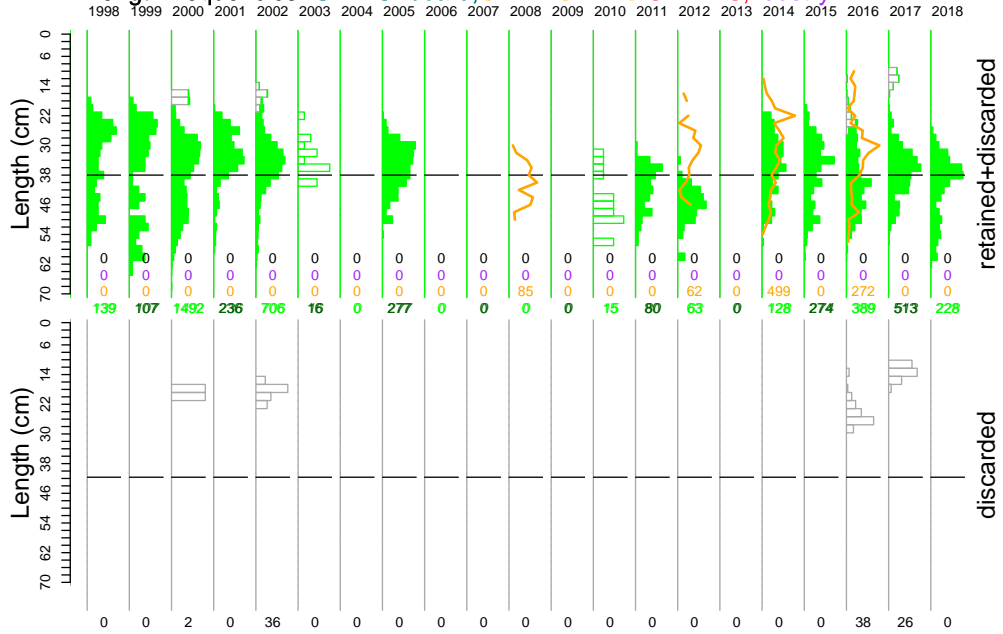


King dory

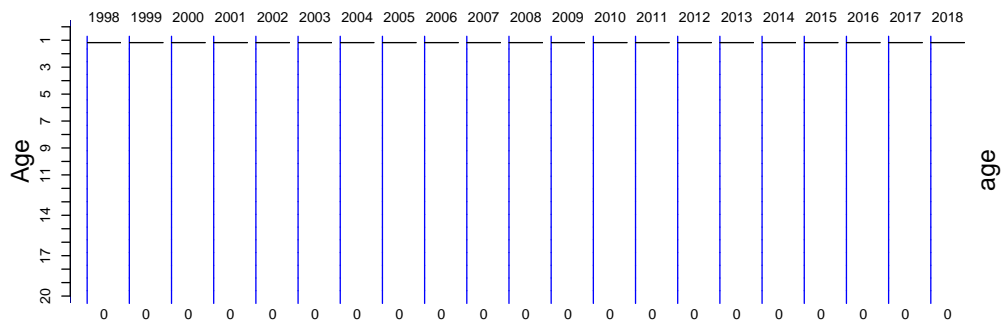
Length frequencies: ISMP Port, GAB Industry



Length frequencies: ISMP Onboard, SET FIS winter, GAB FIS, Industry



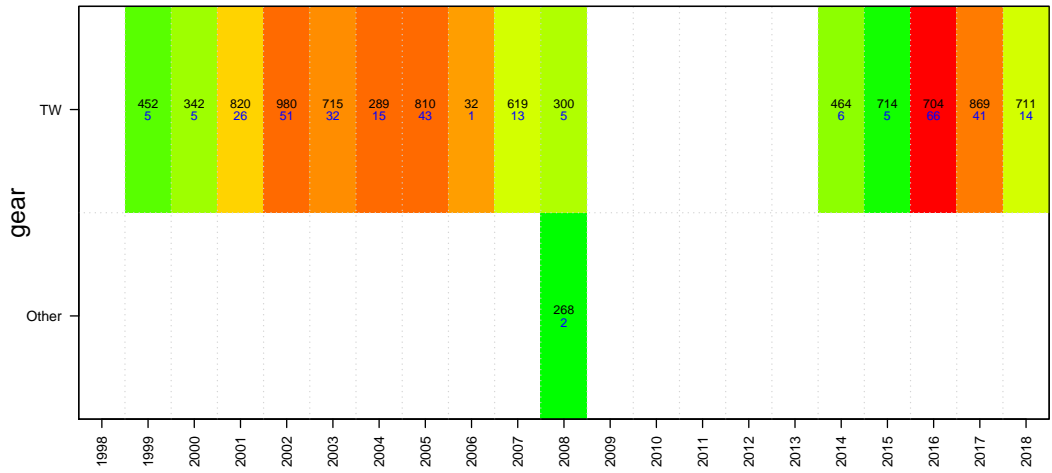
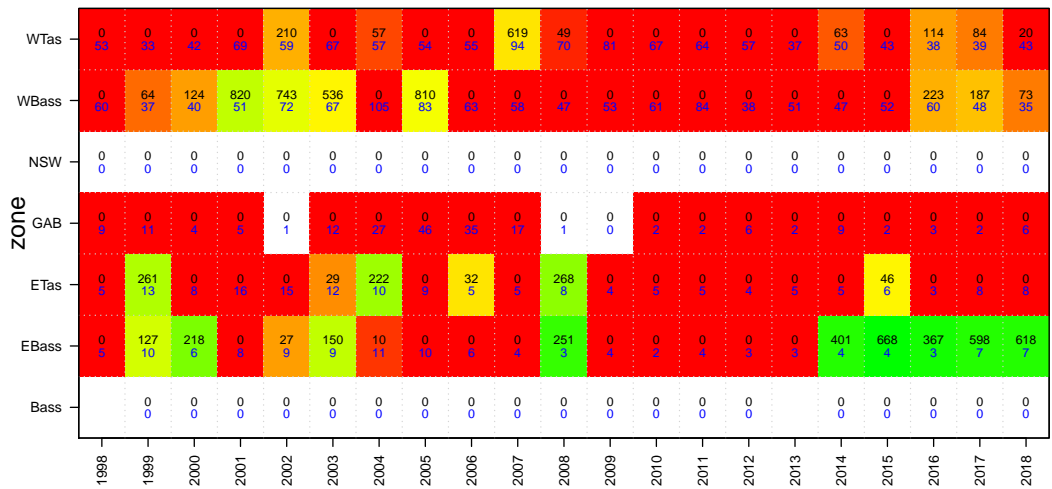
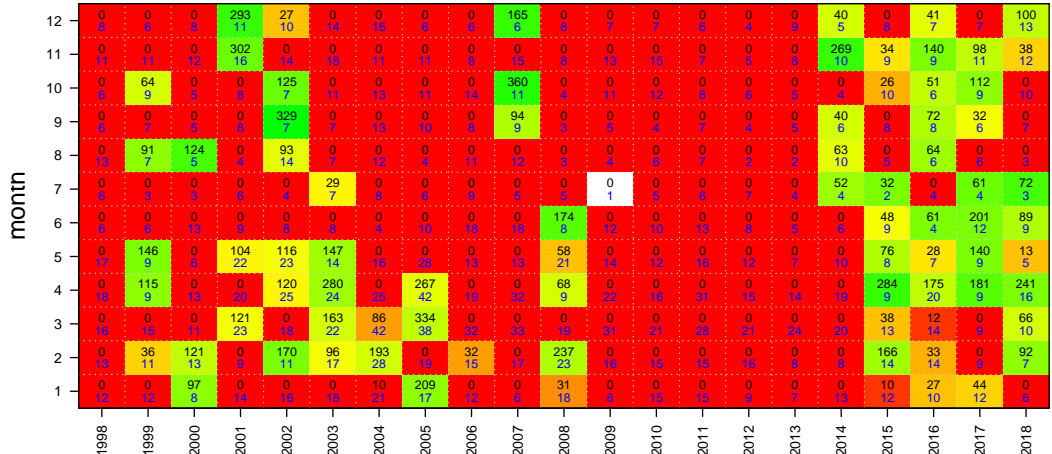
Age frequency



King dory

Port length data

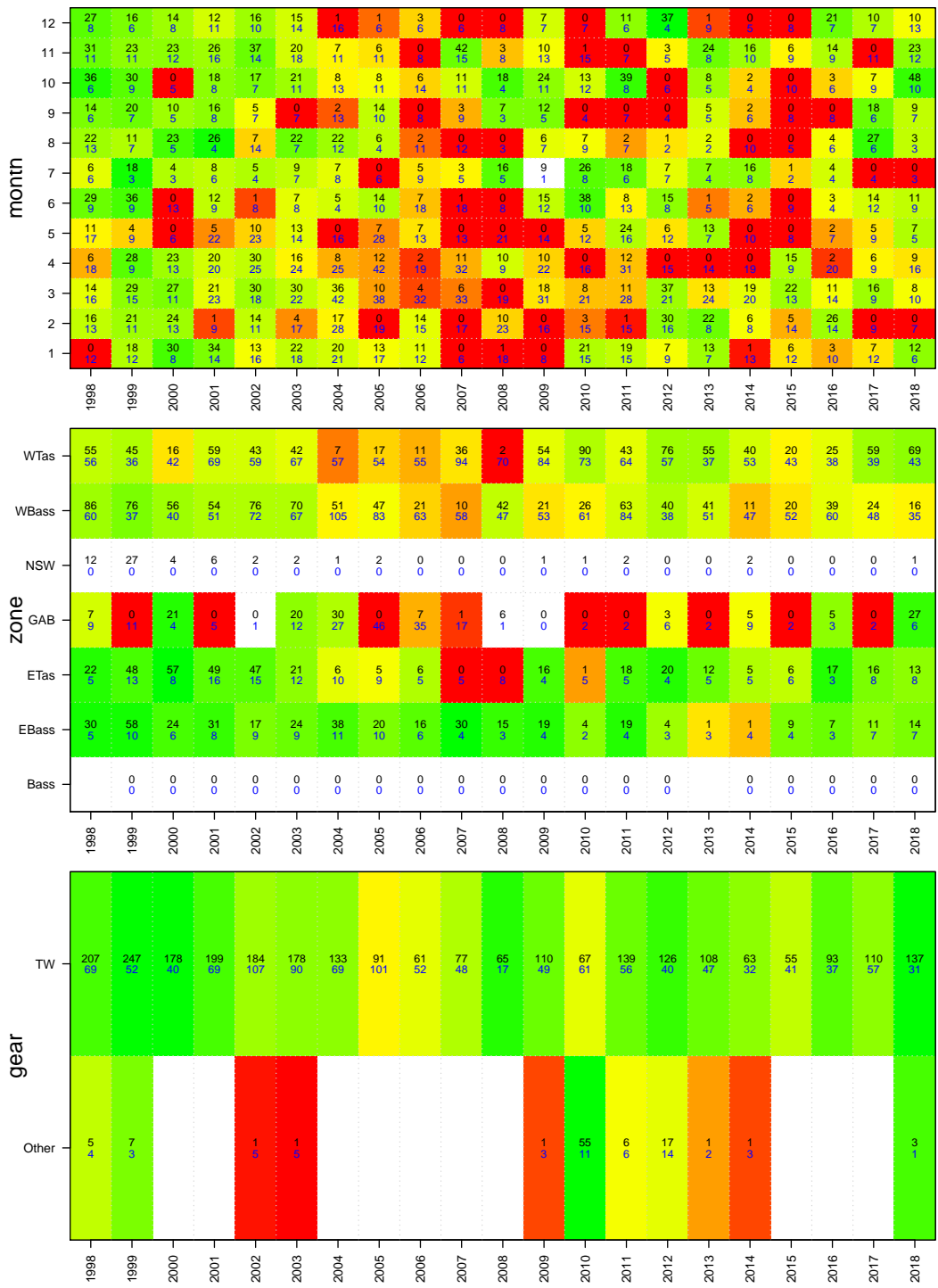
Wed Nov 06 17:11:55 2019



King dory

Onboard discard weight data

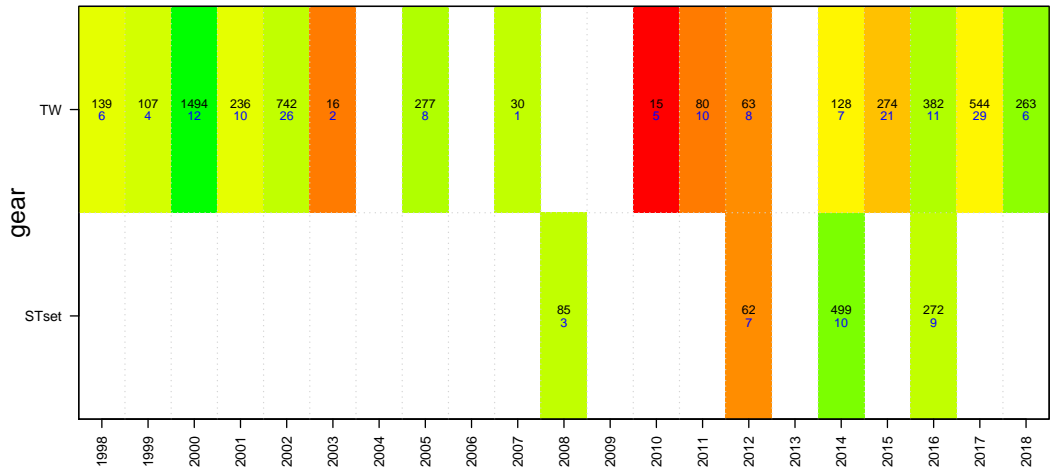
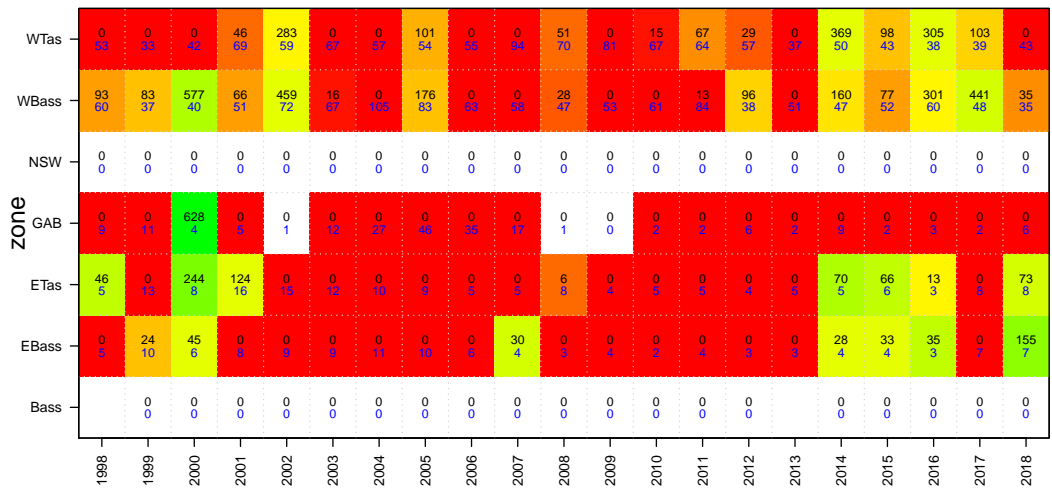
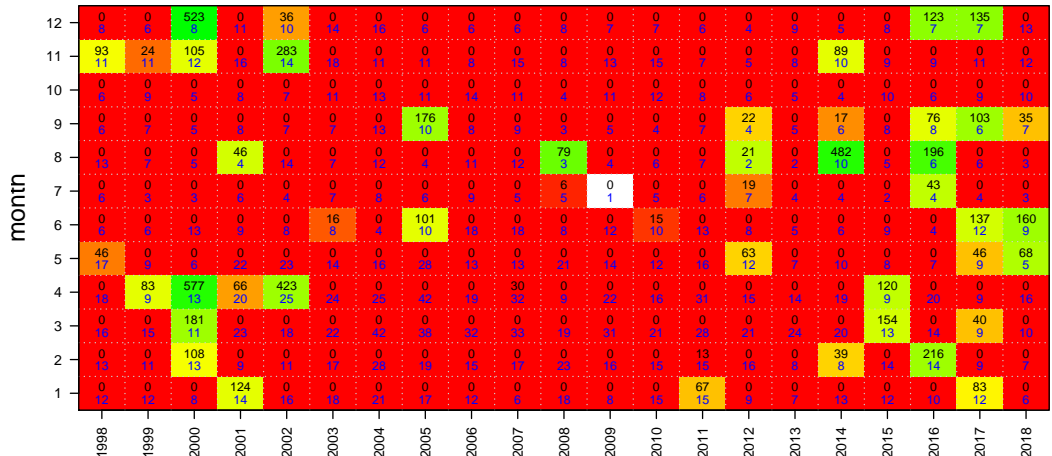
Wed Nov 06 17:11:55 2019



King dory

Onboard length data

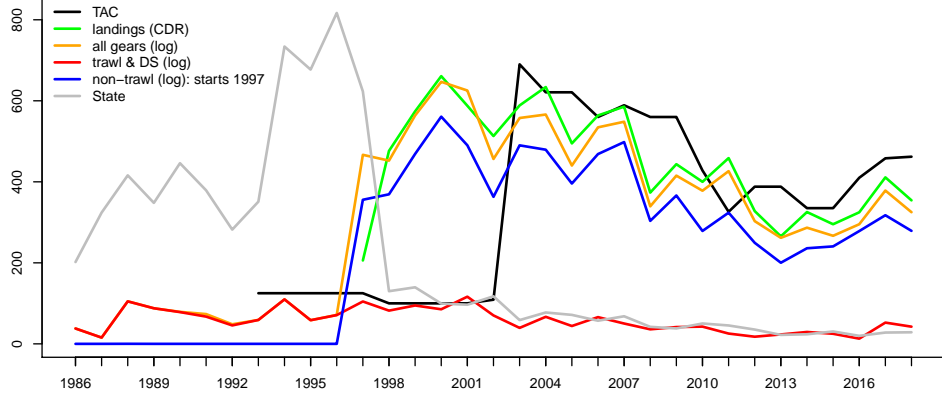
Wed Nov 06 17:11:55 2019



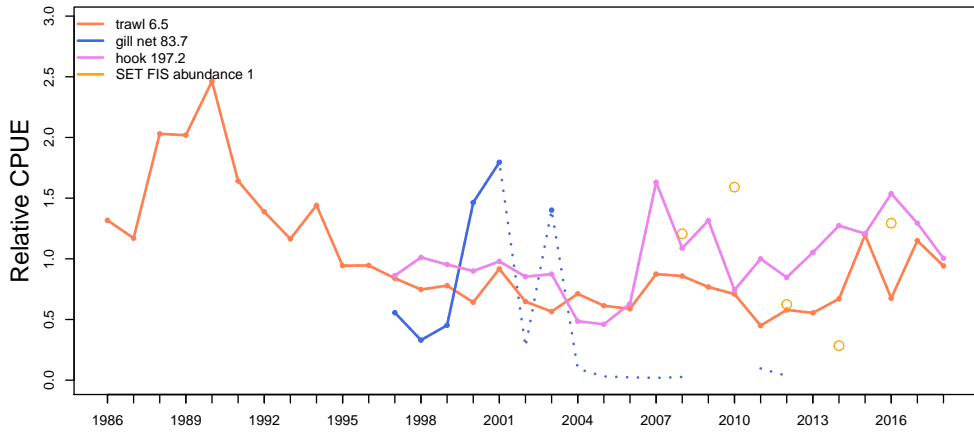
Blue eye Trevalla

TAC and landings

Wed Nov 06 17:11:57 2019
 region ALL unit code TBE sa code TBE
 37445001 37445014
 start month 1



Geometric mean CPUE & SET FIS abundance



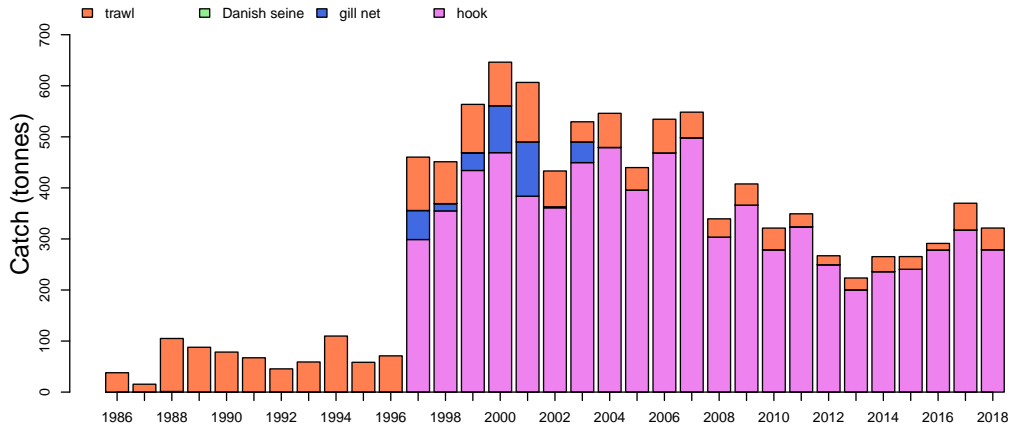
Catch at depth (non-trawl record starts 1997)



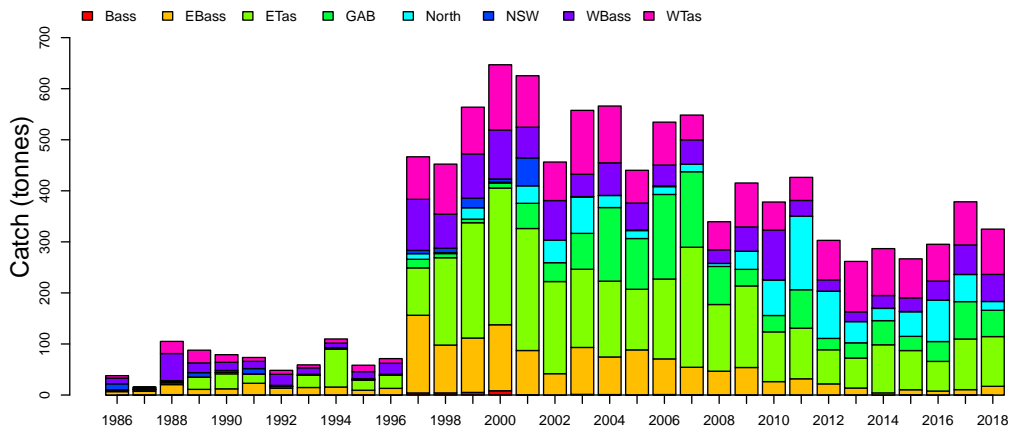
Blue eye Trevalla

Wed Nov 06 17:12:01 2019

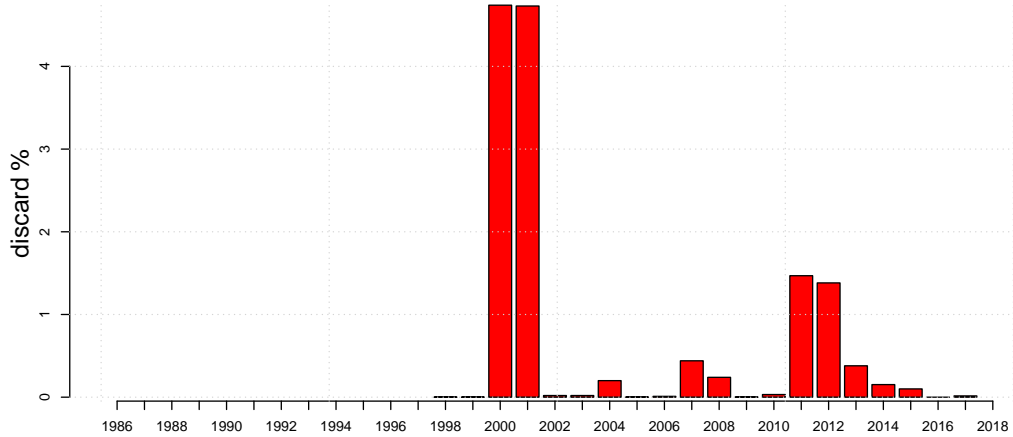
Catch by gear (non-trawl record starts 1997)



Catch by zone



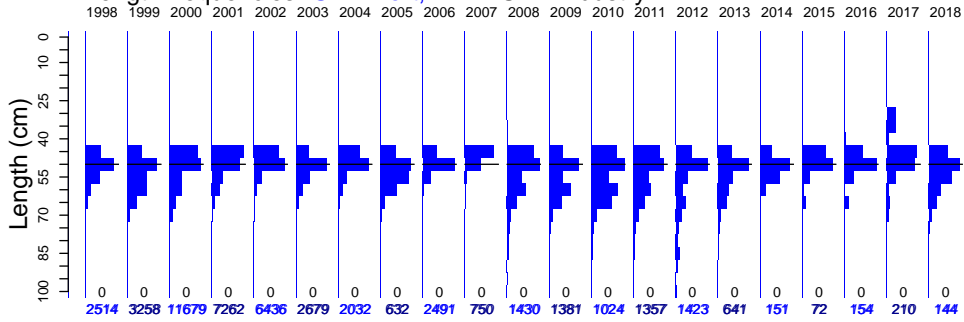
Discards



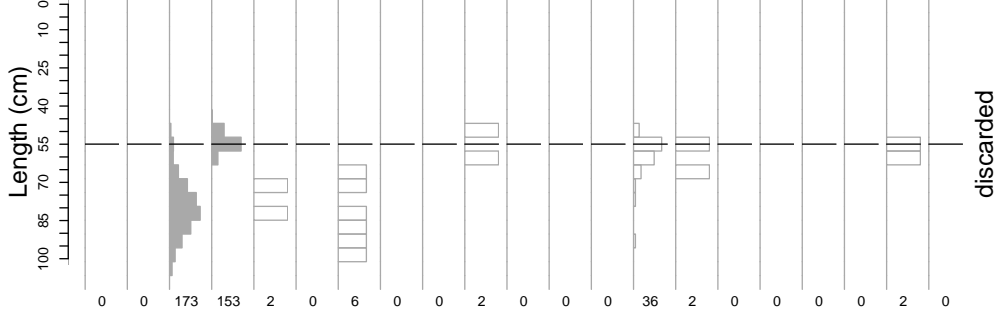
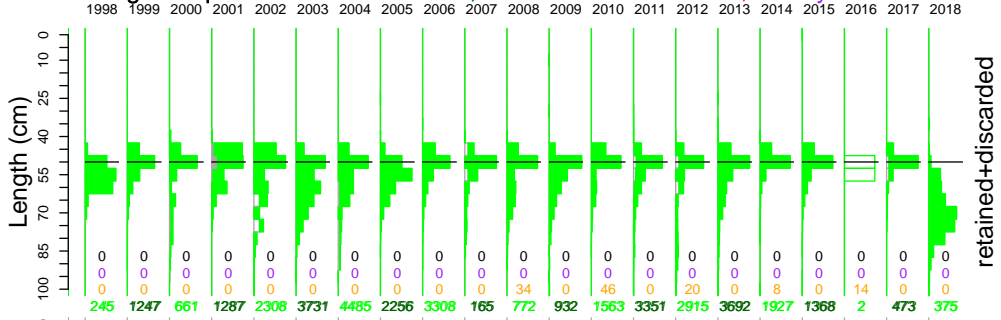
Blue eye Trevalla

Wed Nov 06 17:12:02 2019

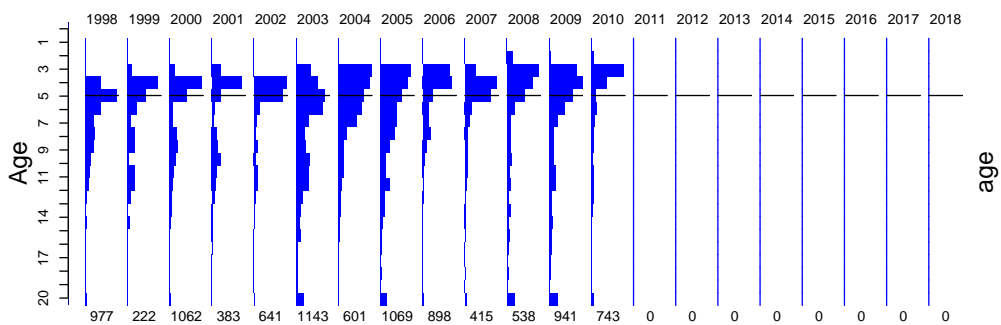
Length frequencies: ISMP Port, GAB Industry



Length frequencies: ISMP Onboard, SET FIS winter, GAB FIS, Industry



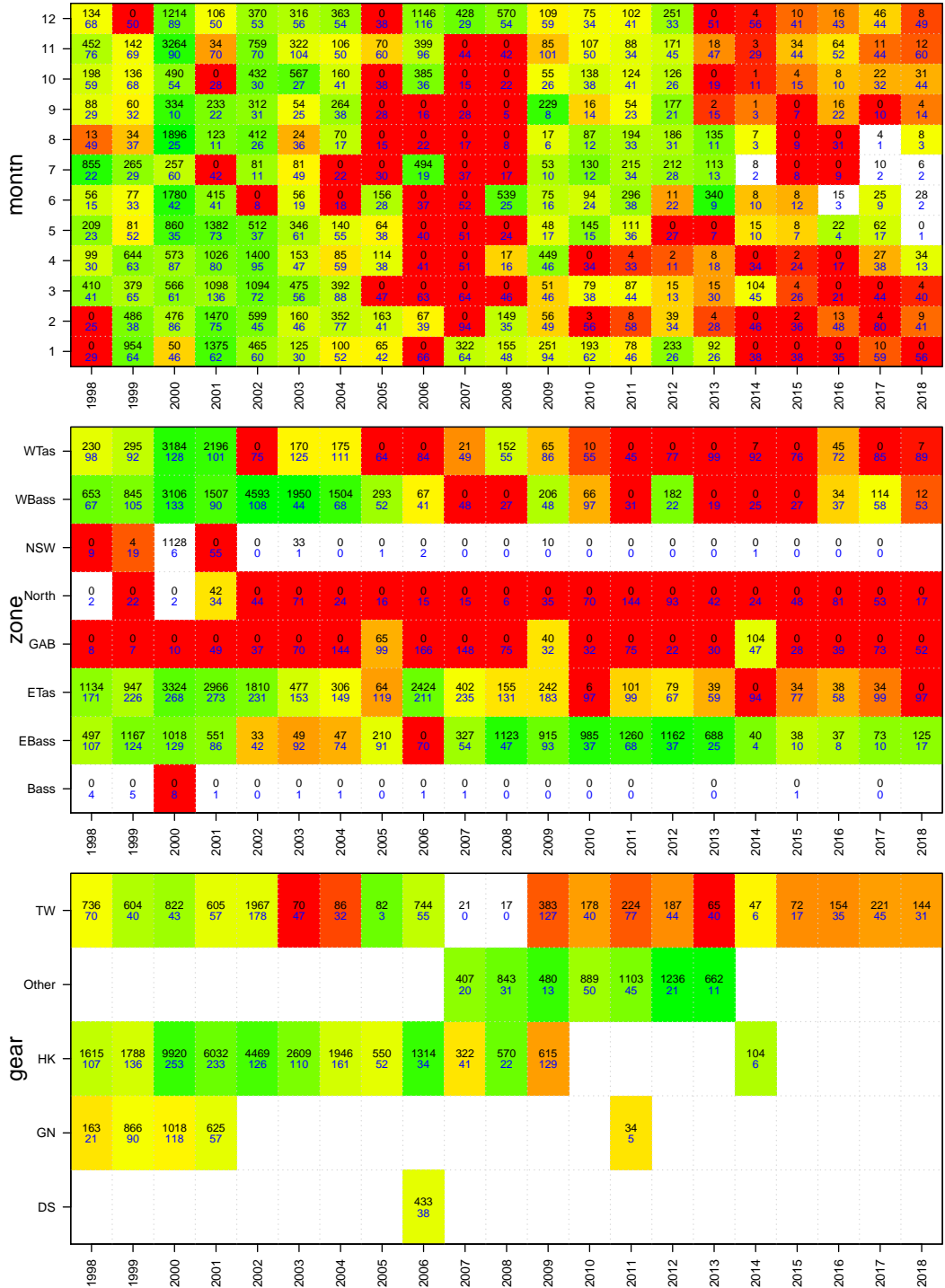
Age frequency



Blue eye Trevalla

Port length data

Wed Nov 06 17:12:02 2019



Blue eye Trevalla

Onboard discard weight data

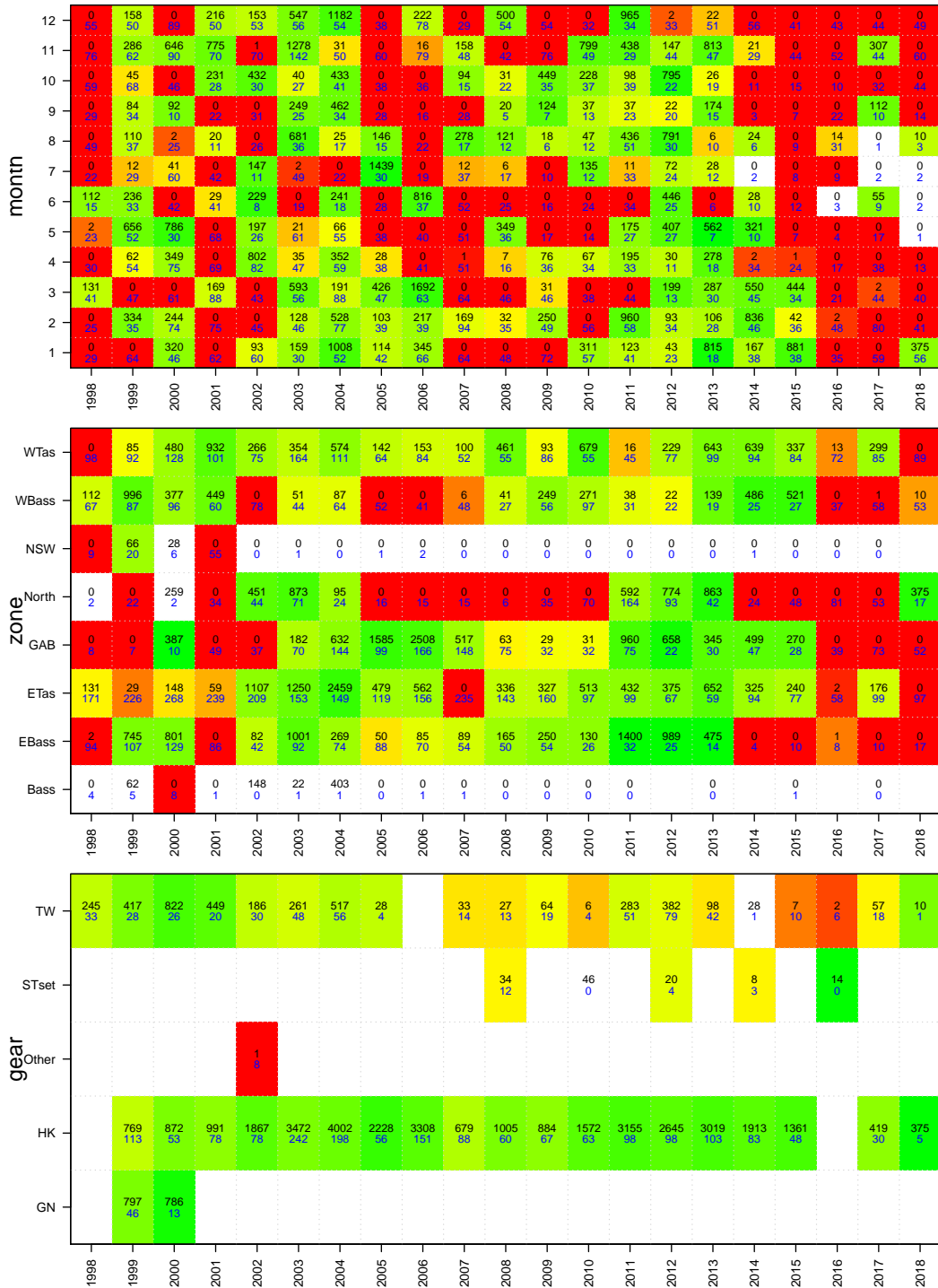
Wed Nov 06 17:12:02 2019

month	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018
12	7/55	24/58	15/89	14/50	8/53	14/63	23/54	3/38	19/78	0/29	18/54	4/54	0/28	62/36	8/33	3/51	0/24	0/34	1/29	1/44	0/49
11	10/76	35/70	48/90	72/112	10/70	70/142	16/50	6/60	14/79	75/69	1/48	22/78	27/50	32/44	52/61	61/29	0/44	0/52	3/44	36/44	7/60
10	18/59	23/80	0/28	8/28	58/30	8/27	18/41	8/38	4/36	57/15	50/22	42/39	23/48	36/39	49/27	15/19	2/11	0/19	2/10	0/20	40/52
9	5/29	31/34	9/10	10/22	5/31	14/37	61/28	12/26	2/16	0/20	4/7	22/13	20/23	36/20	7/15	26/3	3/0	0/7	0/14	8/23	
8	13/49	37/47	19/25	14/11	8/26	62/19	19/11	7/22	13/17	34/6	16/6	5/12	93/53	94/30	24/10	6/3	3/9	3/31	0/1	4/3	
7	4/22	29/60	9/42	10/11	18/11	10/49	7/22	63/30	19/16	2/37	11/22	27/11	21/18	40/33	31/21	10/2	3/3	0/8	0/2	2/2	
6	11/15	20/37	2/42	4/41	35/11	3/21	20/28	7/37	40/37	1/22	5/17	4/24	3/34	1/25	45/5	0/10	2/12	1/3	7/9	8/2	
5	6/23	30/52	42/30	2/28	42/26	10/61	15/55	11/38	0/40	2/51	56/38	2/17	1/14	19/31	51/27	74/23	10/0	0/7	0/11	0/1	
4	2/41	13/47	70/61	10/85	56/43	17/105	37/91	9/59	4/63	6/64	7/46	19/38	26/44	14/33	12/13	41/50	1/24	6/34	0/21	1/44	0/40
3	7/41	8/47	12/61	18/85	13/43	58/105	33/91	16/59	38/63	7/64	0/46	11/38	4/44	6/13	31/30	24/7	47/53	20/36	1/48	1/44	4/40
2	1/23	10/35	54/86	2/78	5/45	22/46	61/77	15/39	13/48	33/94	59/35	22/49	7/56	59/58	10/34	28/28	53/53	13/36	4/48	0/44	0/40
1	0/29	10/64	44/70	6/62	9/80	33/38	14/52	31/42	25/101	0/68	0/48	0/27	38/68	14/41	35/32	53/26	20/38	54/38	2/35	2/49	15/56
WTas	17/98	20/104	72/128	81/101	26/97	54/180	49/111	20/64	34/84	68/52	18/55	20/87	52/68	61/45	44/77	62/123	57/92	30/84	5/73	29/85	14/89
WBass	23/67	106/104	83/107	34/60	37/78	21/44	53/64	49/52	27/41	18/52	50/27	39/56	35/108	13/31	11/22	22/19	40/37	30/27	5/37	4/48	27/71
NSW	5/9	29/24	9/6	8/55	3/0	2/4	4/1	1/5	1/2	1/1	1/0	2/0	1/0	0/0	3/0	0/0	0/1	0/0	0/0	0/0	
North	0/2	0/32	33/2	0/34	74/44	75/71	31/24	0/18	0/15	0/15	0/8	14/35	0/79	114/170	199/109	145/42	0/24	0/46	0/81	0/43	15/17
GAB	5/8	0/7	22/10	0/49	0/37	6/74	67/144	66/99	104/166	100/148	28/75	16/32	91/32	35/22	37/30	67/47	13/28	0/30	0/73	0/52	
ETas	12/171	34/226	52/292	34/251	81/209	70/192	86/163	24/131	35/201	0/235	24/143	33/183	35/97	48/99	36/76	35/66	27/94	24/77	7/59	24/99	12/87
EBass	22/94	52/114	53/129	13/86	29/45	63/99	37/83	14/70	11/88	30/74	52/50	62/56	23/32	84/38	97/39	37/14	1/4	3/10	1/8	5/10	1/17
Bass	0/4	1/5	0/8	0/1	17/0	6/1	9/1	0/0	0/1	0/1	0/0	0/0	1/0	0/0	0/0	0/0	0/1	0/0	0/0	0/0	
TW	82/149	96/225	153/248	92/263	107/175	54/187	129/151	76/116	54/131	36/78	66/55	58/118	38/115	88/72	109/95	29/54	16/36	17/18	18/38	12/44	33/67
Other	2/2		2/0		3/15	10/12						3/1	5/5	54/7	75/21	40/26		1/0			
HK		115/113	133/53	78/78	156/78	232/242	214/212	99/56	124/151	185/127	179/75	137/103	119/65	269/130	241/98	269/103	176/85	82/48		50/31	53/34
GN		31/46	36/13																		
DS					1/1	1/0															

Blue eye Trevalla

Onboard length data

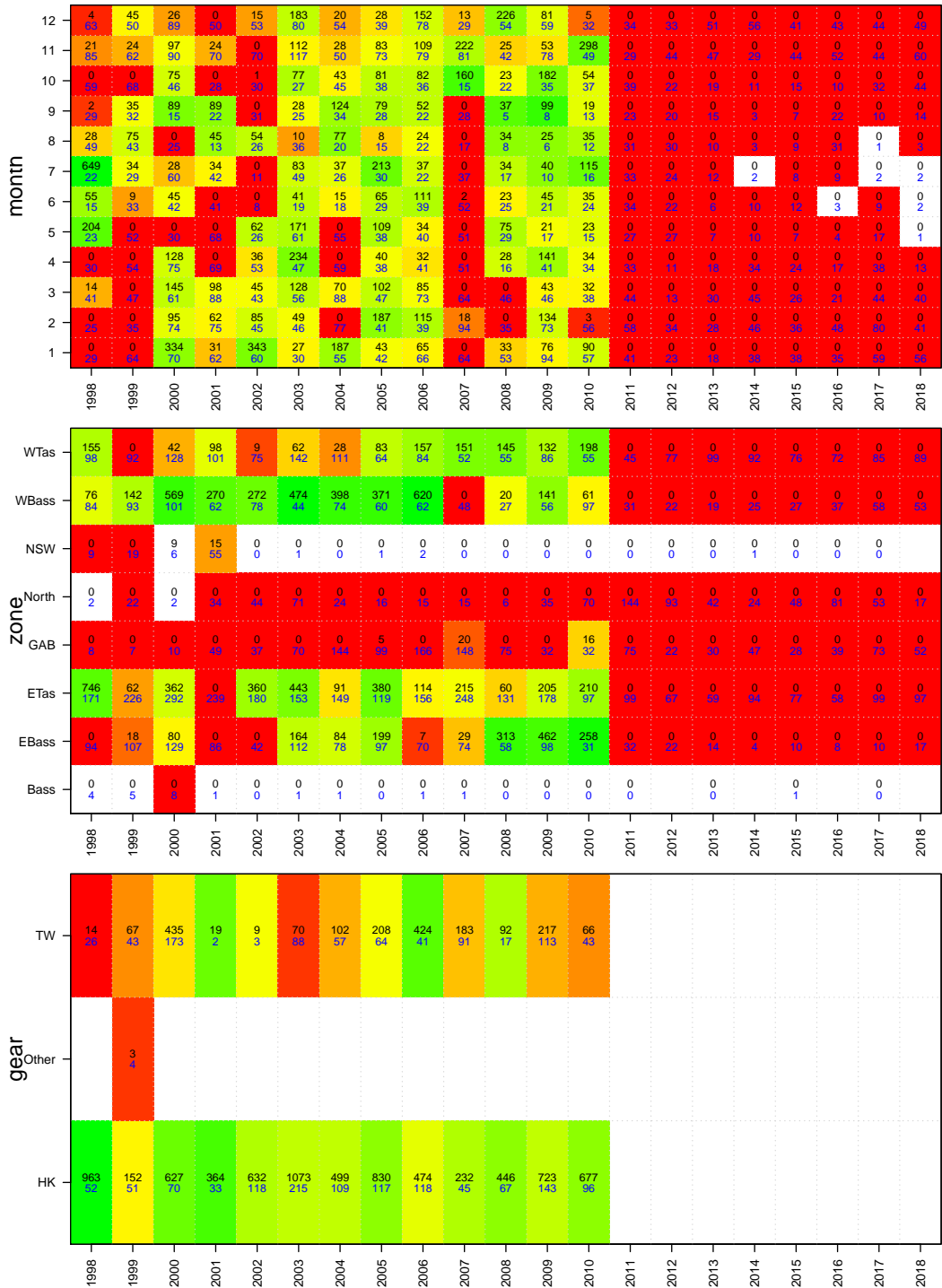
Wed Nov 06 17:12:03 2019



Blue eye Trevalla

Age data

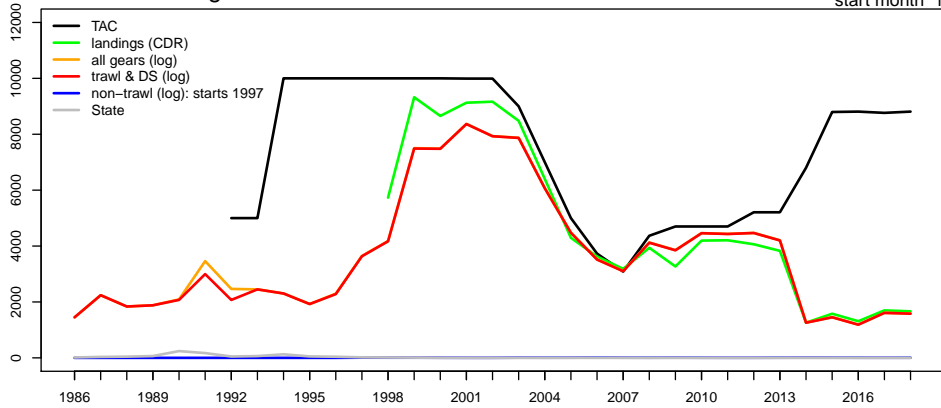
Wed Nov 06 17:12:03 2019



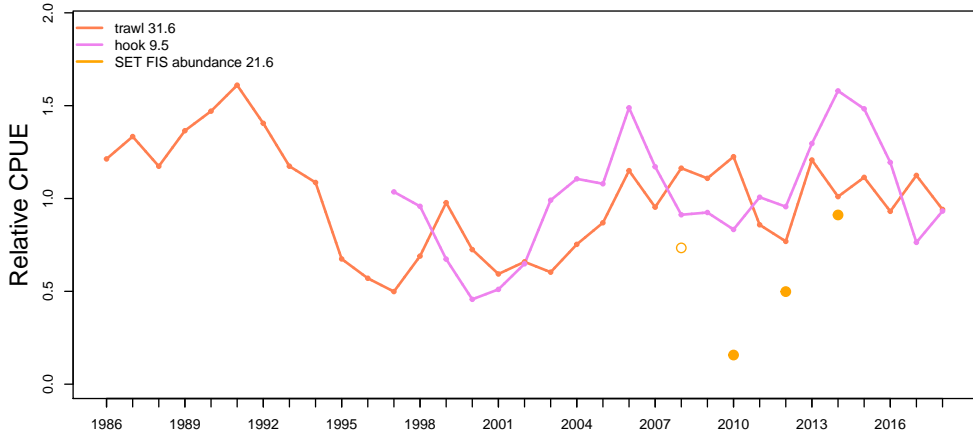
Blue Grenadier

TAC and landings

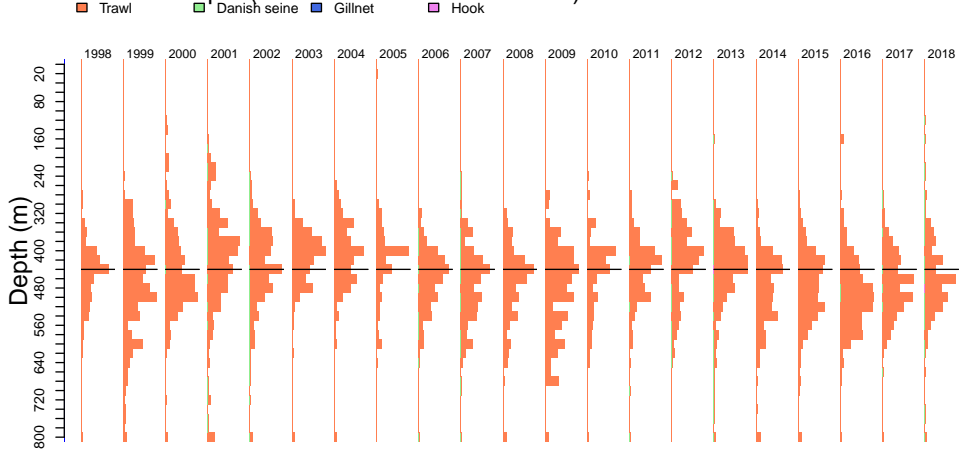
Wed Nov 06 17:12:08 2019
 region ALL unit code GRE sa code GRE
 37227001
 start month 1



Geometric mean CPUE & SET FIS abundance

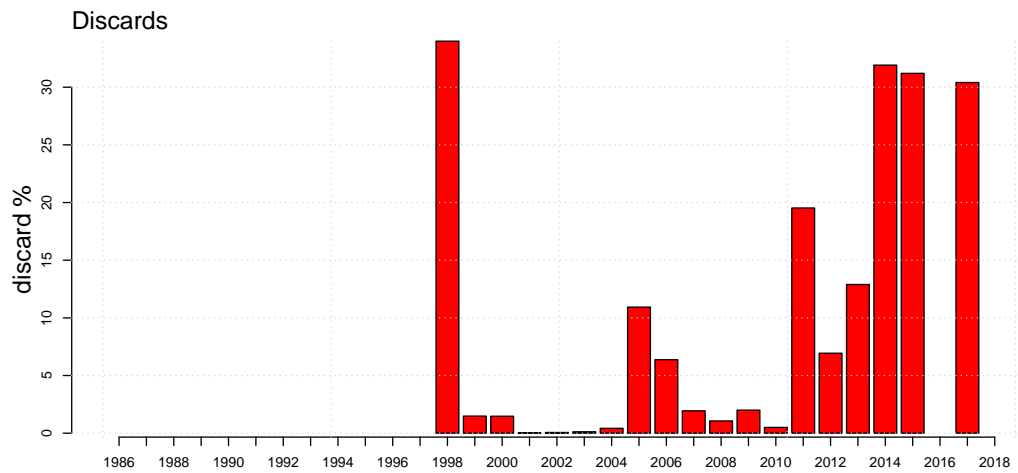
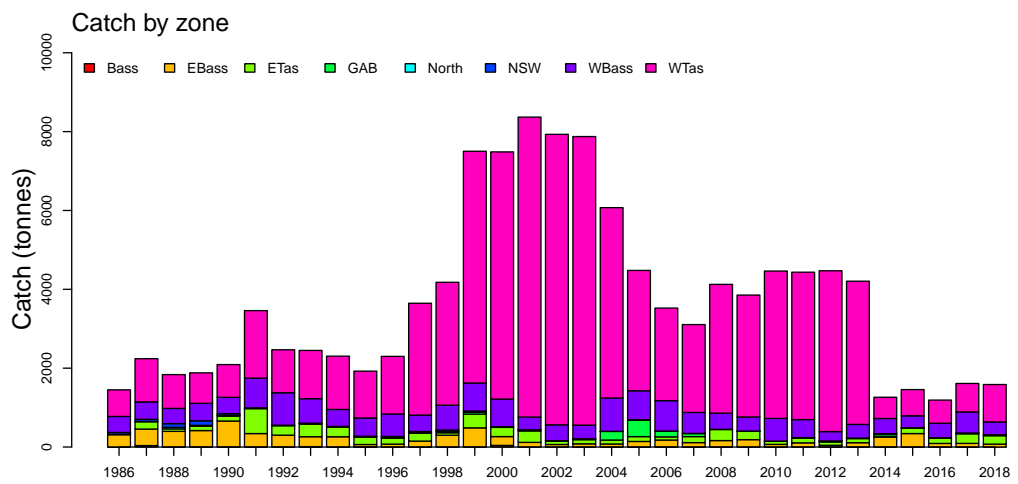
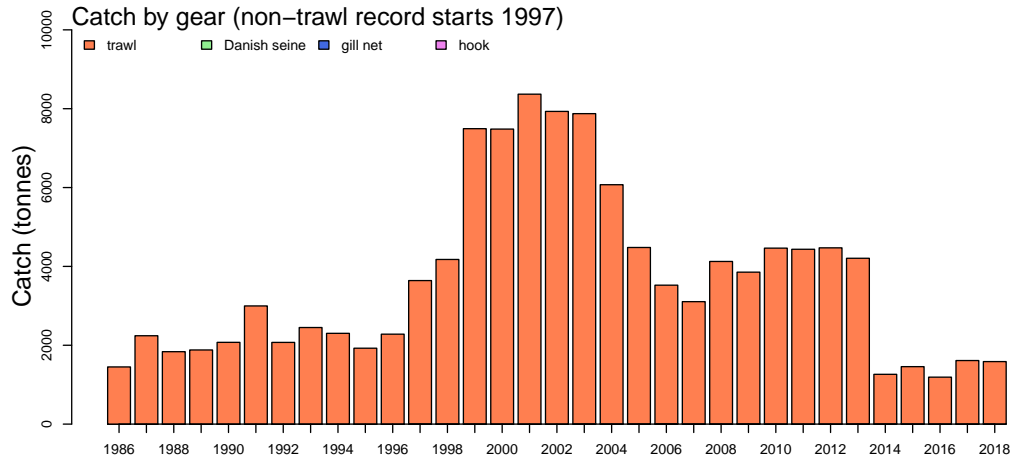


Catch at depth (non-trawl record starts 1997)



Blue Grenadier

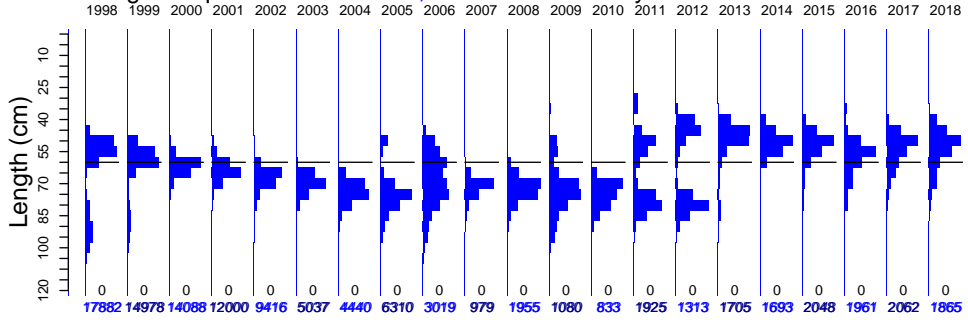
Wed Nov 06 17:12:25 2019



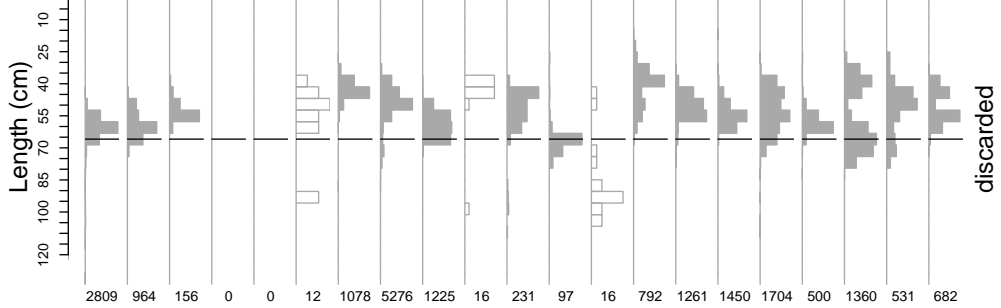
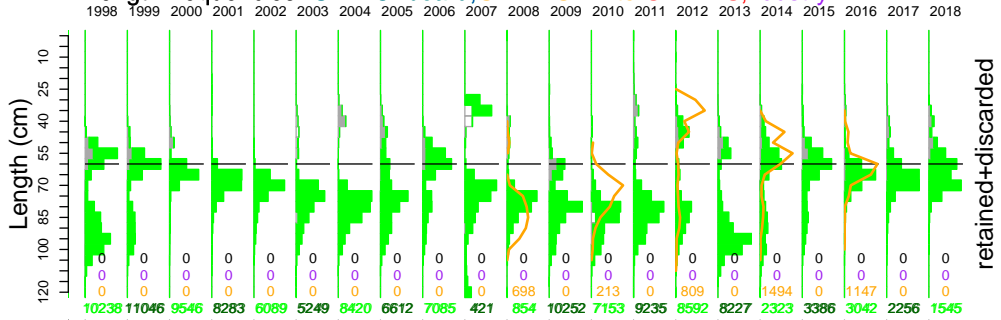
Blue Grenadier

Wed Nov 06 17:12:26 2019

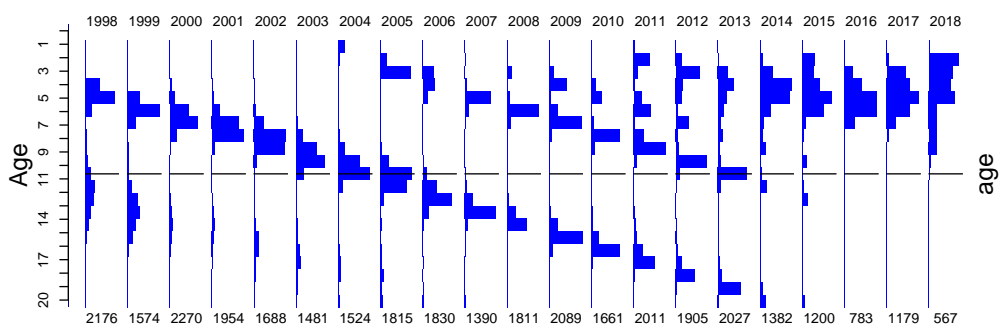
Length frequencies: ISMP Port, GAB Industry



Length frequencies: ISMP Onboard, SET FIS winter, GAB FIS Industry



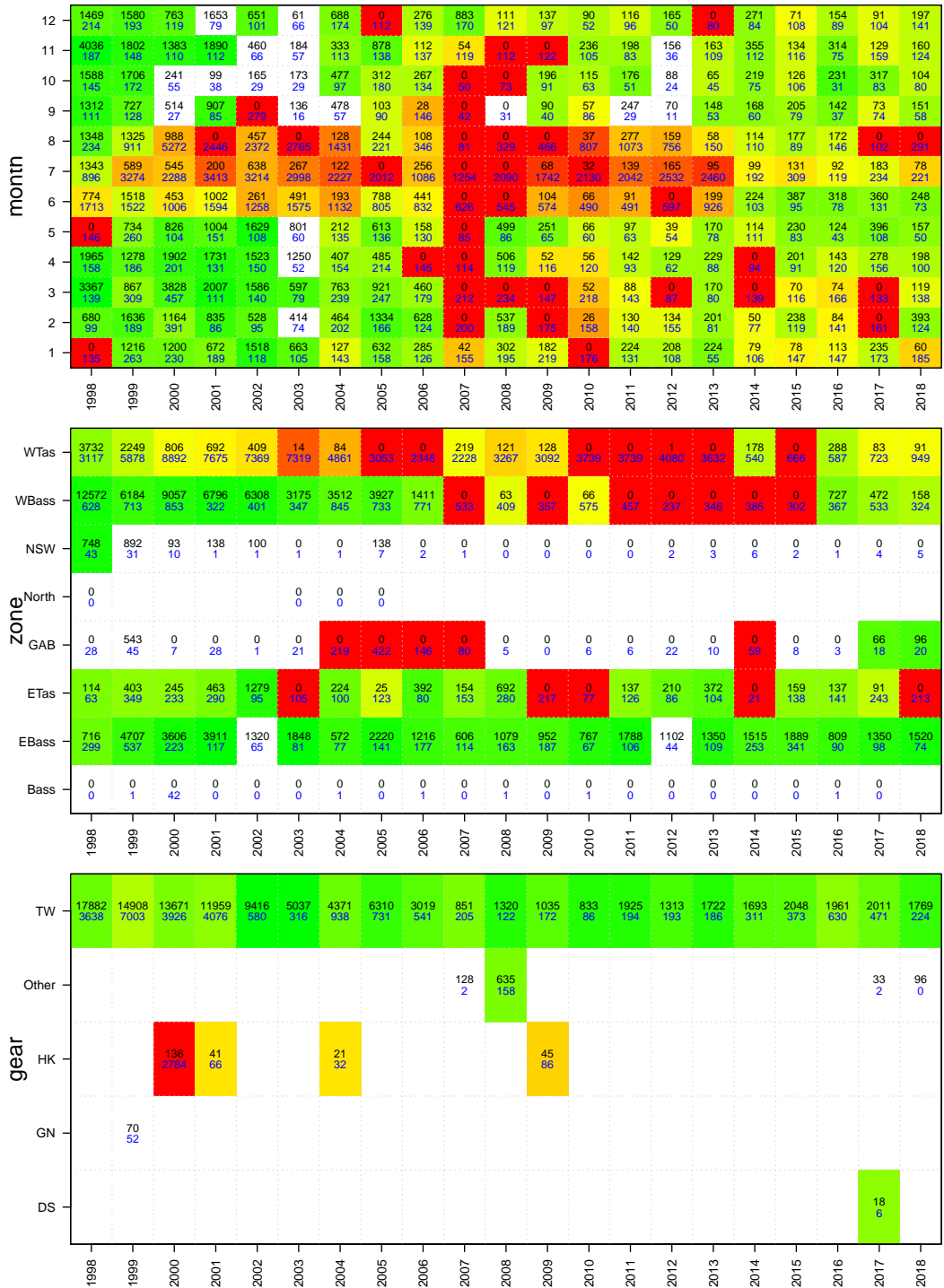
Age frequency



Blue Grenadier

Port length data

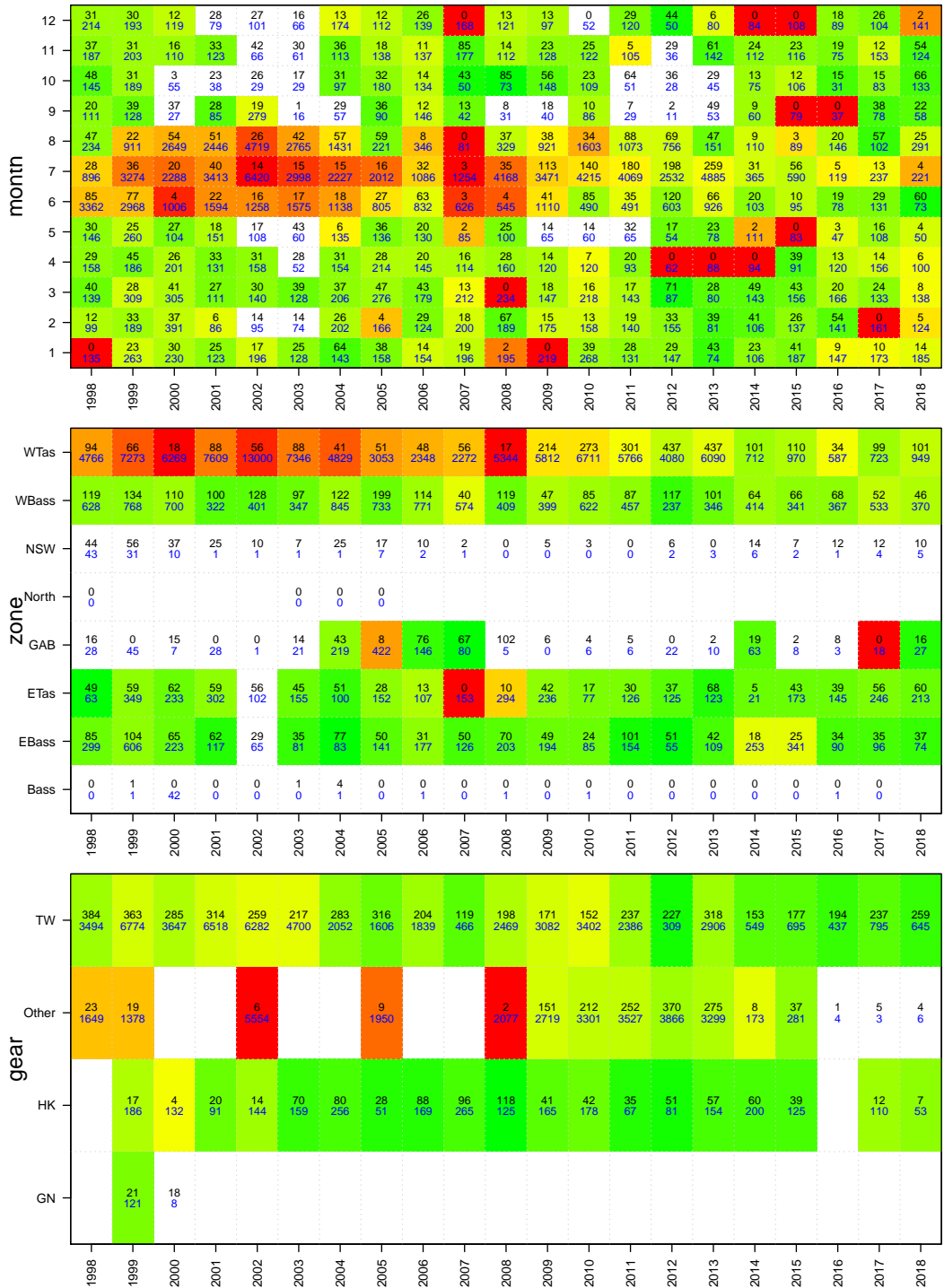
Wed Nov 06 17:12:28 2019



Blue Grenadier

Onboard discard weight data

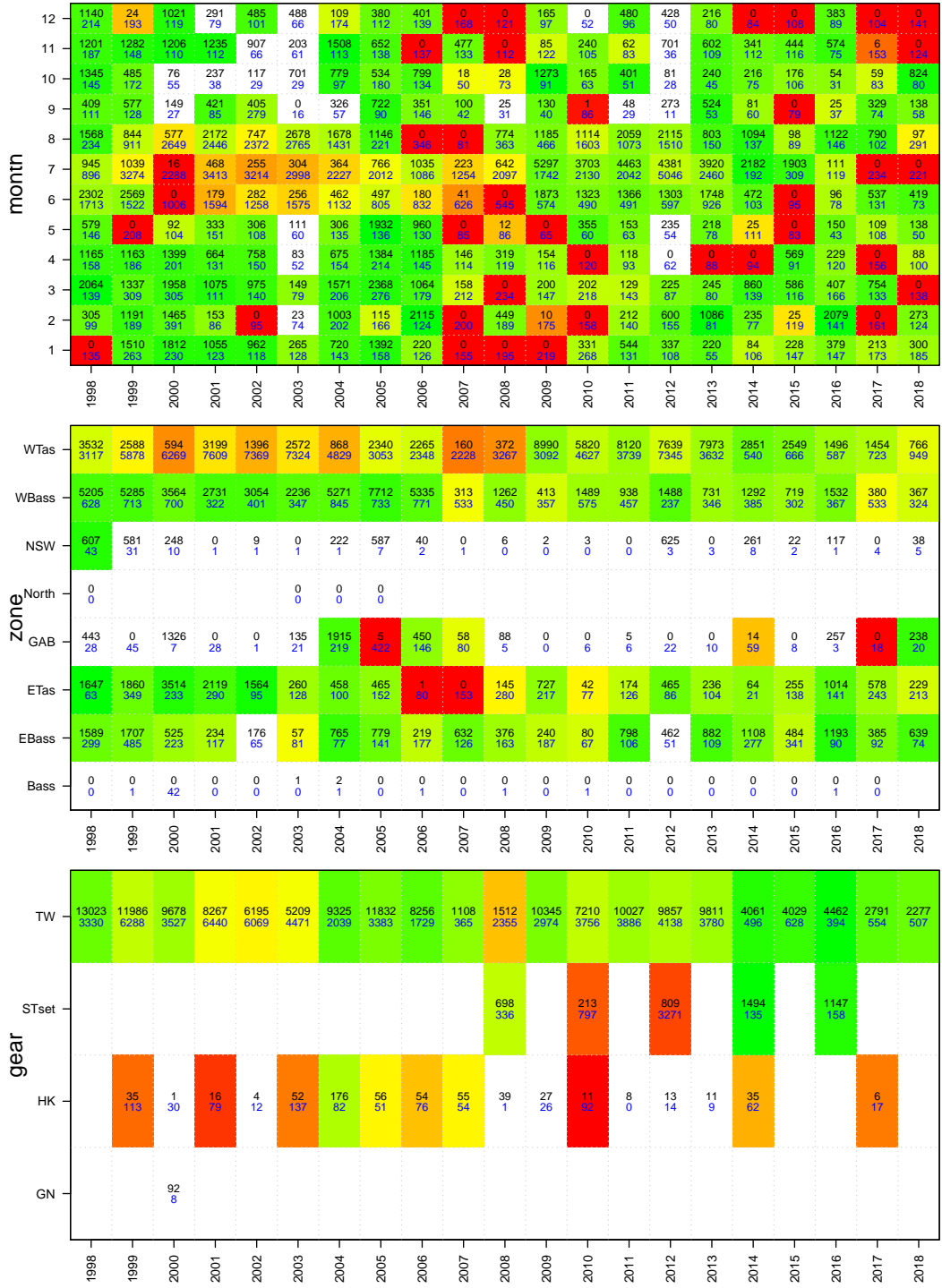
Wed Nov 06 17:12:28 2019



Blue Grenadier

Onboard length data

Wed Nov 06 17:12:28 2019



Blue Grenadier

Age data

Wed Nov 06 17:12:29 2019

month	Age data																				
	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018
12	245 214	15 193	55 119	112 79	0 0	149 86	0 0	0 0	147 138	0 0	0 0	0 0	0 0	60 96	75 50	0 0	0 0	50 108	125 89	0 0	17 141
11	0 0	25 148	72 110	165 112	194 66	74 57	49 113	197 138	0 0	200 119	0 0	0 0	0 0	34 83	38 36	194 109	286 112	107 116	111 75	17 153	17 124
10	260 145	79 172	137 55	167 38	157 29	50 29	98 97	108 180	100 134	13 50	0 0	499 91	77 63	70 51	90 24	32 45	33 75	56 106	74 31	77 83	190 80
9	16 111	0 0	134 27	106 85	114 279	0 16	0 57	75 90	100 146	0 0	20 31	59 40	0 0	54 29	24 11	66 53	42 60	10 79	4 37	67 101	84 95
8	124 234	106 911	660 2649	195 2446	414 2372	221 2765	227 1431	129 221	0 0	55 329	4 40	227 40	525 1073	429 756	86 150	38 110	23 89	35 146	102 101	95 291	0
7	597 896	292 3274	336 2288	512 3413	372 3214	587 2998	962 2227	711 2012	1014 1086	1097 2090	684 1742	675 2130	835 2042	506 2532	500 2460	882 2460	512 192	518 309	20 119	34 34	0 0
6	457 1713	594 1522	187 1006	355 1594	151 1258	165 1575	38 1132	76 805	186 832	47 626	705 545	586 574	316 490	354 491	334 597	444 926	110 103	93 35	27 78	292 131	66 73
5	117 146	0 0	178 104	0 0	186 60	0 0	0 0	298 136	99 130	0 0	32 86	0 0	81 60	49 63	21 54	65 78	42 111	35 83	25 43	59 109	37 50
4	125 158	92 186	99 201	164 131	94 150	0 52	0 0	0 0	184 124	0 0	0 0	164 120	92 93	6 62	55 80	80 0	63 94	130 91	10 120	43 156	27 100
3	148 139	100 309	196 305	0 0	0 0	0 0	150 205	100 247	0 0	17 212	0 0	164 180	43 143	99 218	46 87	28 63	63 139	148 116	74 166	120 133	17 138
2	0 0	138 189	156 391	0 0	97 95	0 74	0 0	0 0	184 124	0 0	120 189	10 175	0 0	55 158	160 158	165 81	61 77	58 119	207 141	190 161	17 124
1	87 135	133 263	238 230	0 0	95 118	49 105	0 0	100 158	0 0	16 155	0 0	76 158	150 176	102 131	65 108	132 55	108 108	147 147	71 147	179 173	0 0

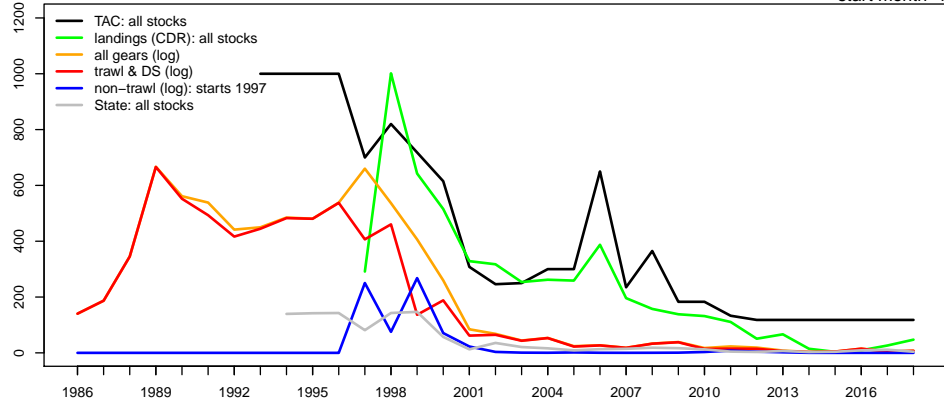
Zone	Age data																				
	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018
WTas	1297 3117	772 5878	1113 6269	1062 7609	1078 7369	997 7319	1089 4829	730 3053	1164 2348	1057 2228	1097 3267	1460 3092	1362 3739	1378 3739	1300 4080	1654 3632	719 540	597 666	148 587	361 723	10 848
WBass	613 628	500 713	603 700	197 322	358 401	404 347	412 845	776 733	446 771	115 533	288 409	491 357	200 575	186 457	107 237	207 346	70 385	123 302	351 367	156 533	135 324
NSW	73 43	23 31	27 10	31 1	12 1	31 1	23 1	180 7	0 2	0 1	0 0	4 0	0 0	0 0	1 2	0 3	13 6	17 2	0 1	0 4	2 5
North	0 0					0 0	0 0														
GAB	0 28	0 45	0 7	0 28	0 1	0 21	0 119	0 427	186 146	64 80	0 5	0 0	0 6	5 6	0 22	39 10	260 59	50 8	69 3	279 18	152 20
ETas	99 63	249 349	434 233	97 290	240 95	49 105	0 0	100 123	34 80	25 153	261 280	92 217	29 77	26 126	103 86	67 104	0 0	42 138	106 141	114 243	25 213
EBass	94 299	30 485	93 223	567 117	0 65	0 0	0 0	8 141	0 171	129 112	134 203	42 187	70 67	416 106	388 46	60 109	320 253	371 341	109 92	269 92	243 74
Bass	0 0	0 1	0 42	0 0	0 0	0 0	0 1	0 0	0 1	0 0	0 1	0 0	0 1	0 0	0 0	0 0	0 0	0 0	0 1	0 0	

gear	Age data																				
	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018
TW	2176 3219	1574 5163	2270 6361	1954 7494	1688 8534	1481 7337	1524 4952	1794 2357	1830 1308	1360 1404	1771 3053	2089 2533	1661 3577	2008 3897	1867 4158	2016 3741	1347 578	1200 602	783 756	1179 875	567 356
STset															32 3						
HK									30 32		9 11			3 0		11 6	85 82				

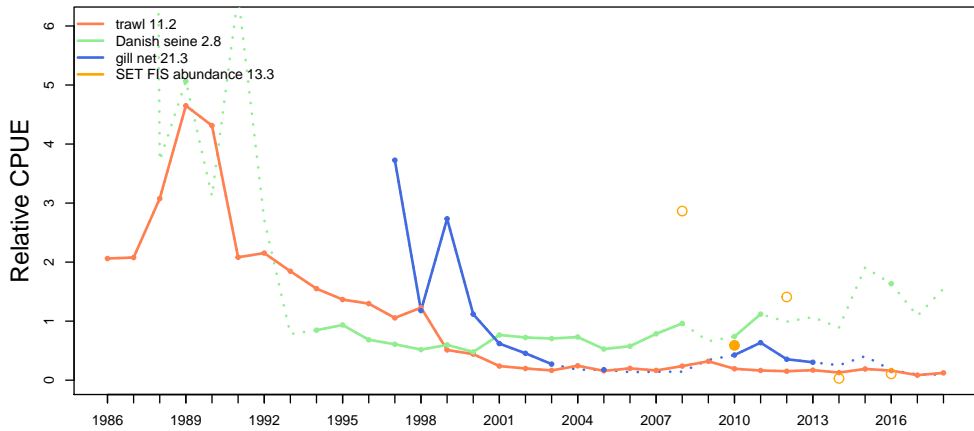
Blue Warehouse East

Wed Nov 06 17:12:30 2019
 region SEFEAST unit code TRT sa code TRTE
 37445005
 start month 1

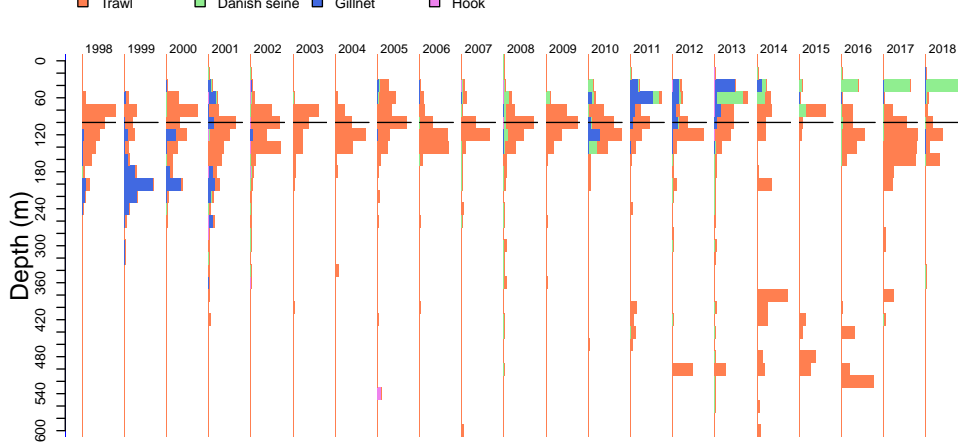
TAC and landings



Geometric mean CPUE & SET FIS abundance



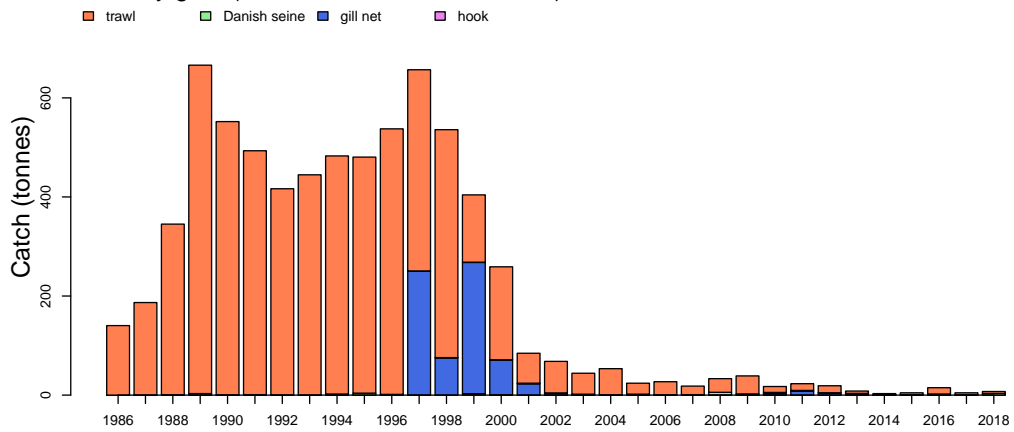
Catch at depth (non-trawl record starts 1997)



Blue Warehouse East

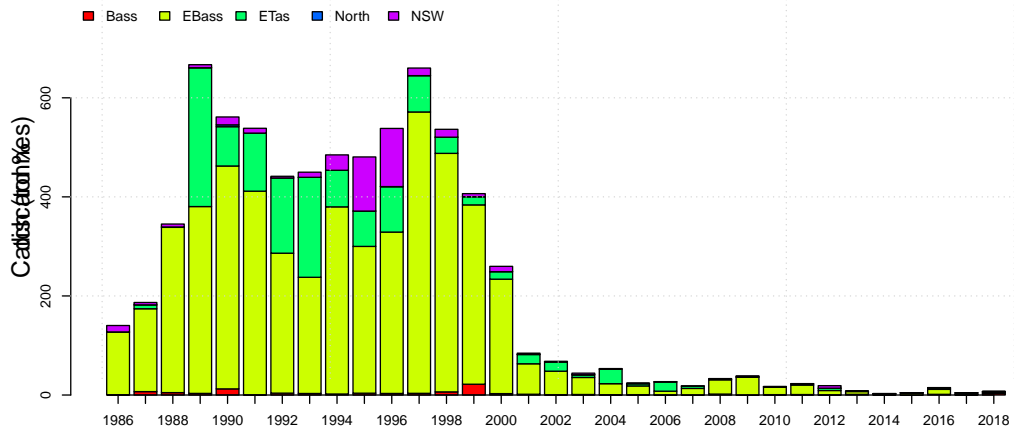
Catch by gear (non-trawl record starts 1997)

Wed Nov 06 17:12:34 2019



Discards

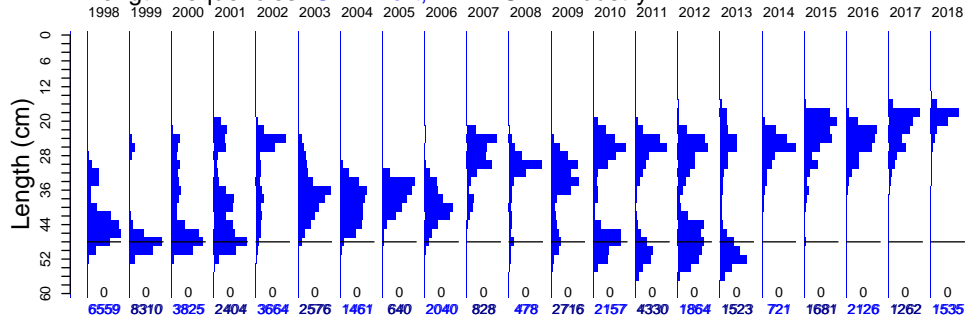
Catch by zone



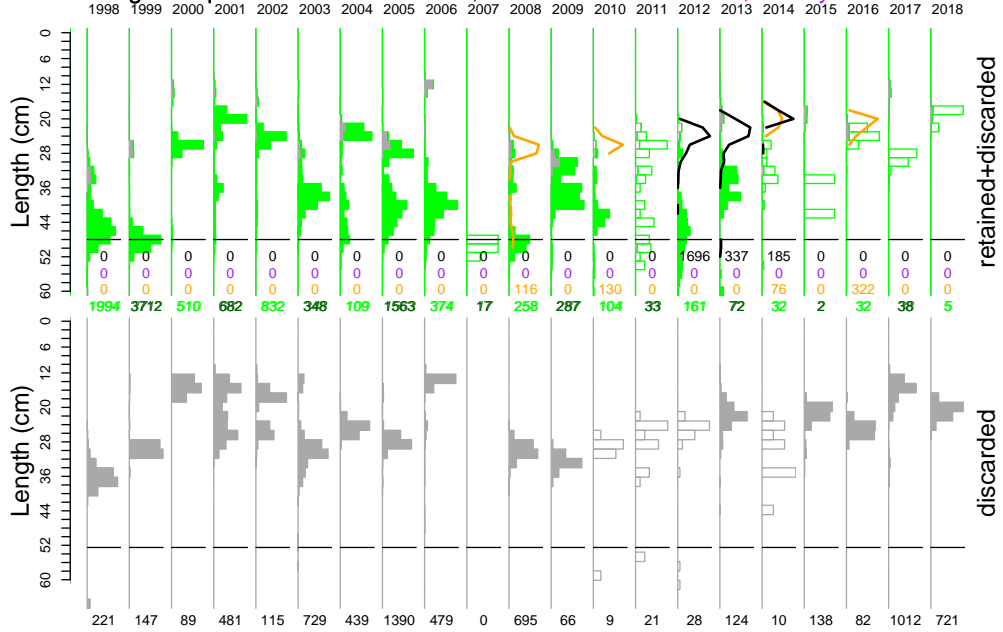
Blue Warehou East

Wed Nov 06 17:12:34 2019

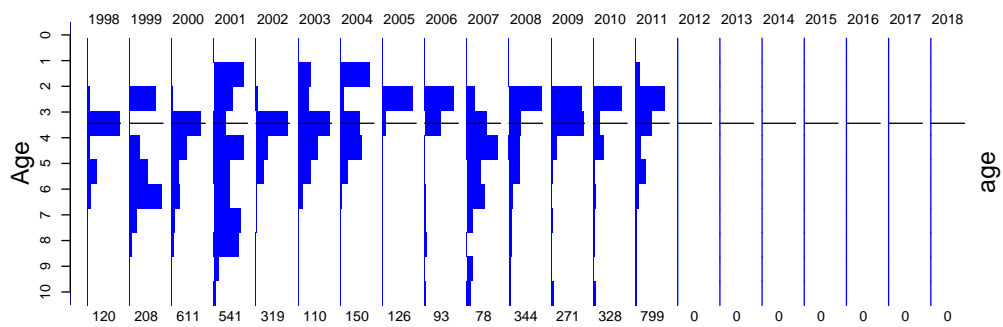
Length frequencies: ISMP Port, GAB Industry



Length frequencies: ISMP Onboard, SET FIS winter, GAB FIS Industry



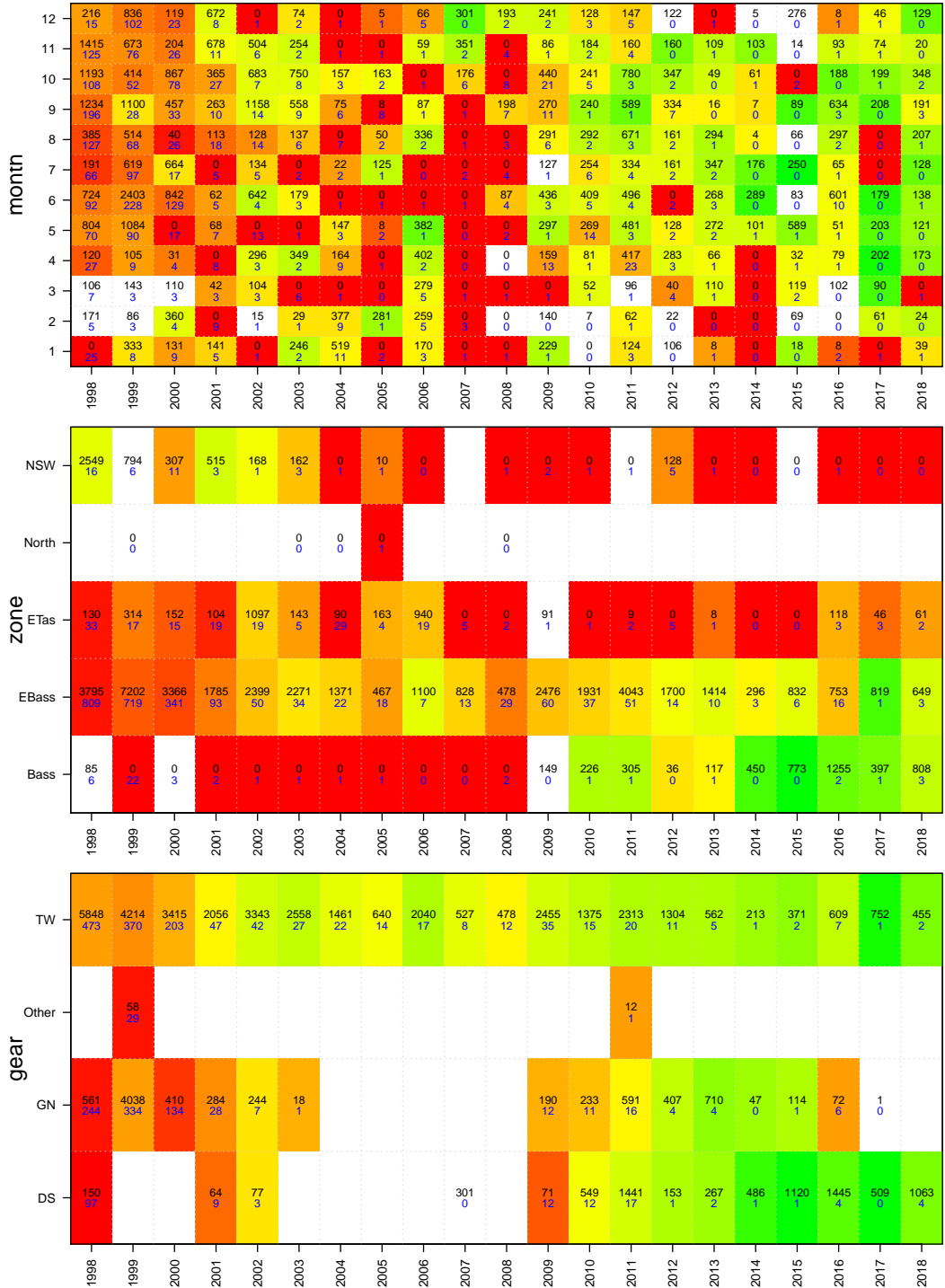
Age frequency



Blue Warehouse East

Port length data

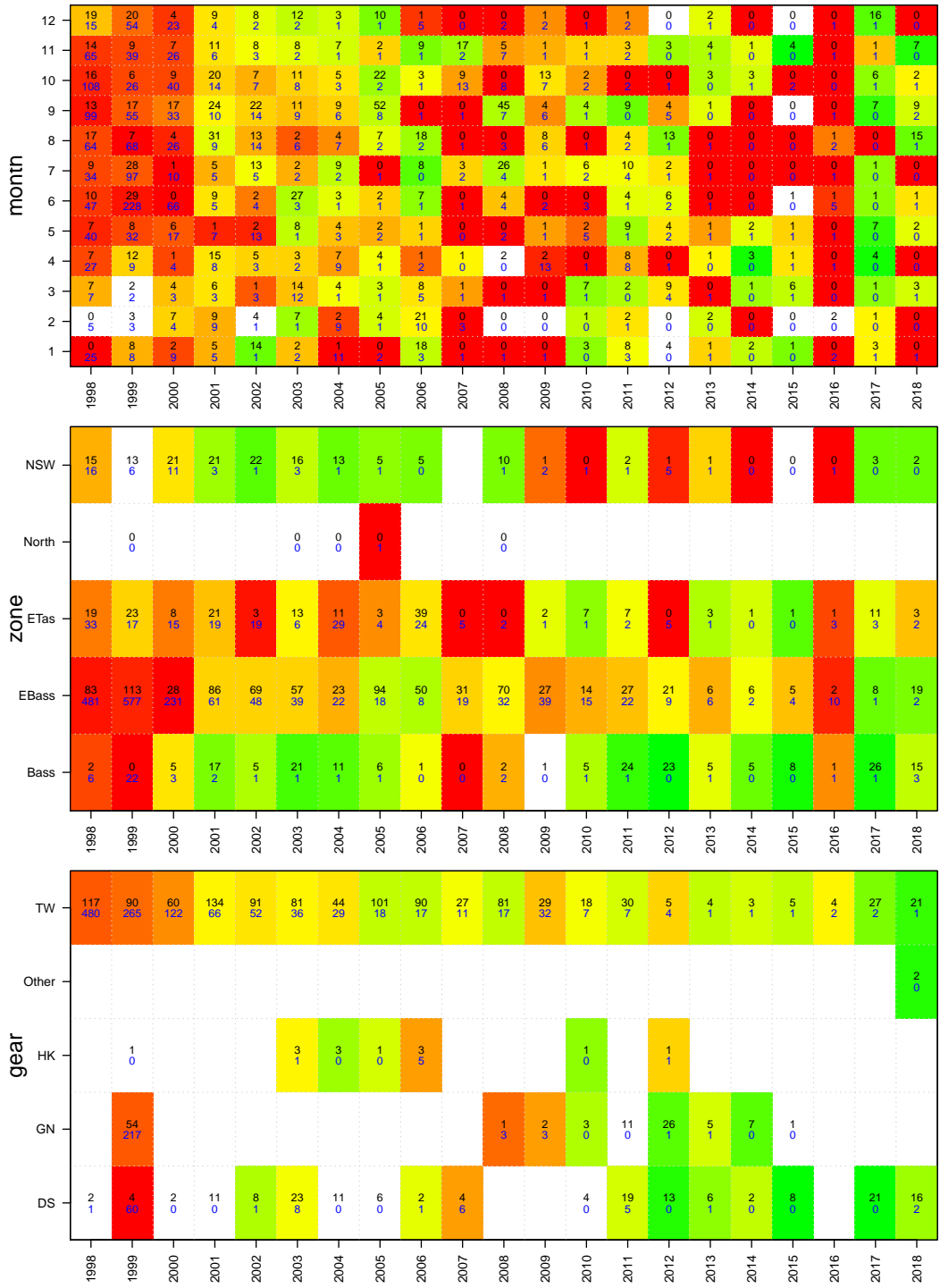
Wed Nov 06 17:12:35 2019



Blue Warehouse East

Onboard discard weight data

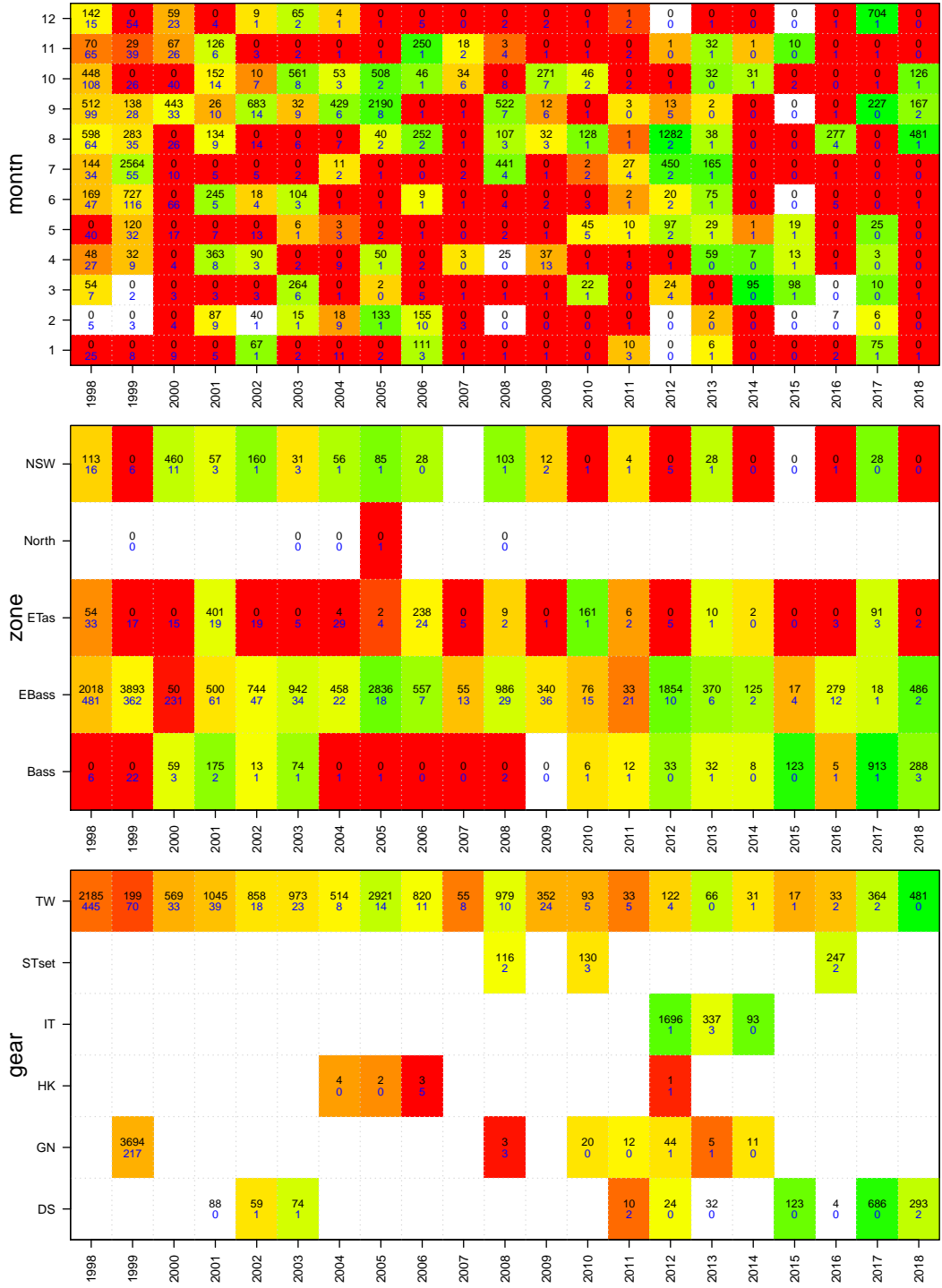
Wed Nov 06 17:12:35 2019



Blue Warehouse East

Onboard length data

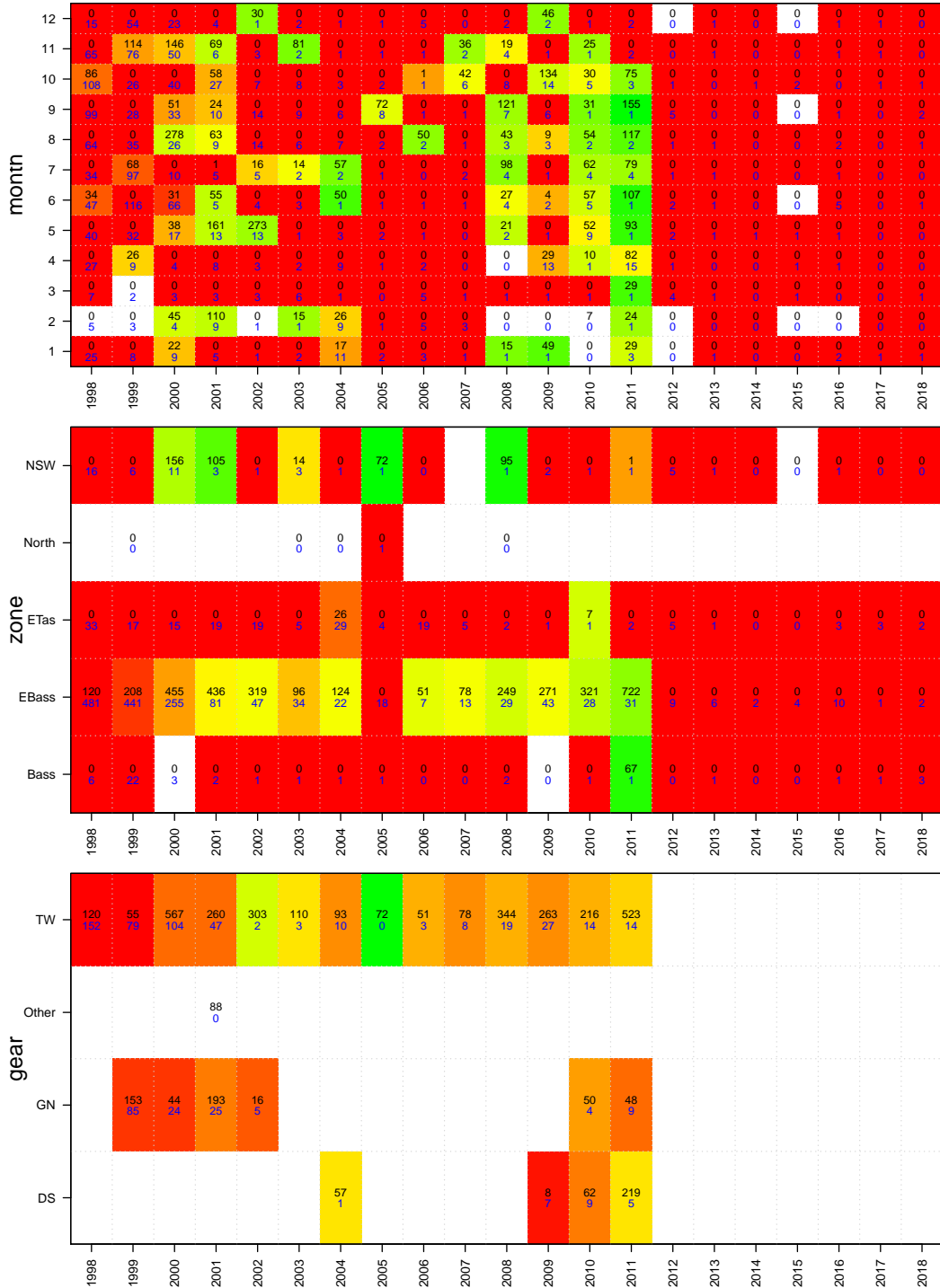
Wed Nov 06 17:12:35 2019



Blue Warehouse East

Age data

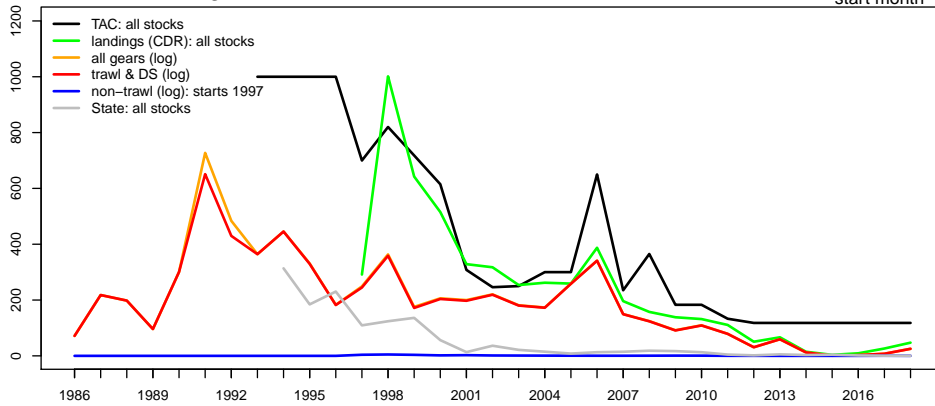
Wed Nov 06 17:12:35 2019



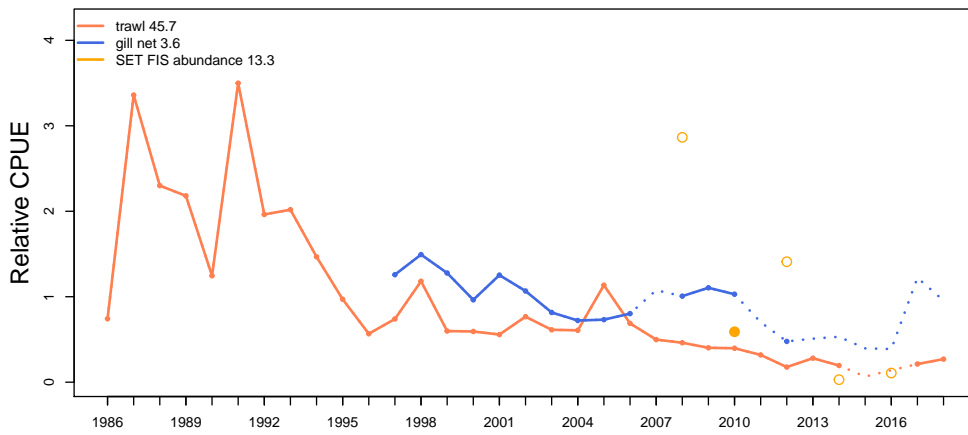
Blue Warehouse West

TAC and landings

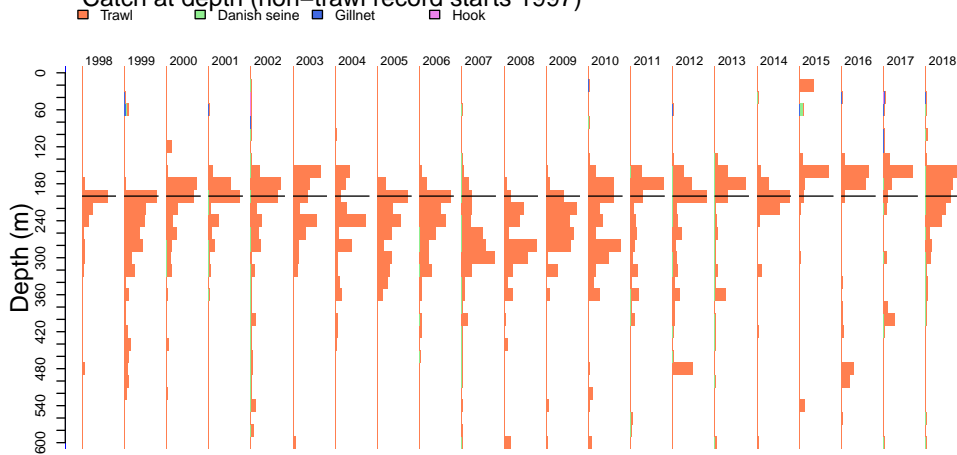
Wed Nov 06 17:12:36 2019
 region SEFWEST unit code TRT sa code TRTW
 37445005
 start month 1



Geometric mean CPUE & SET FIS abundance



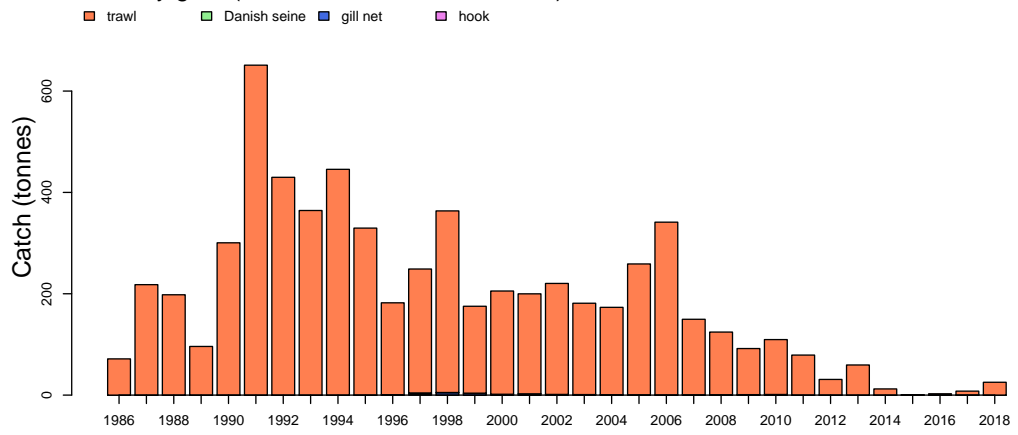
Catch at depth (non-trawl record starts 1997)



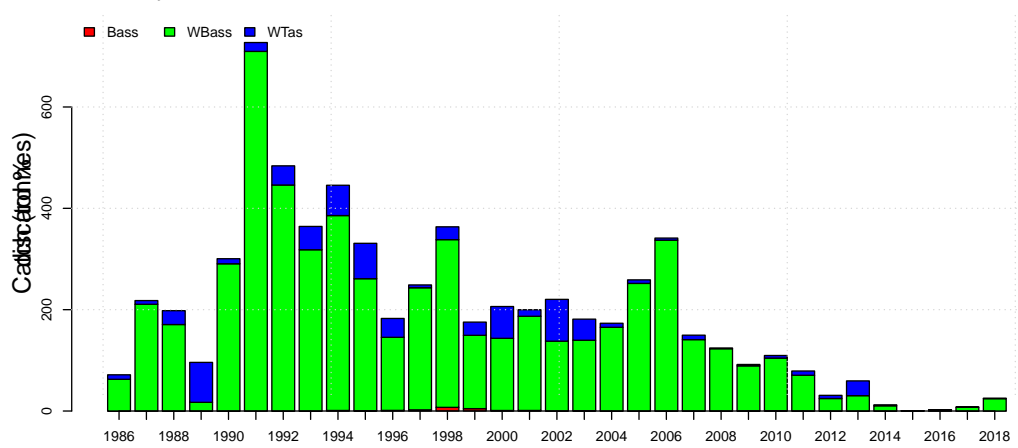
Blue Warehou West

Wed Nov 06 17:12:38 2019

Catch by gear (non-trawl record starts 1997)



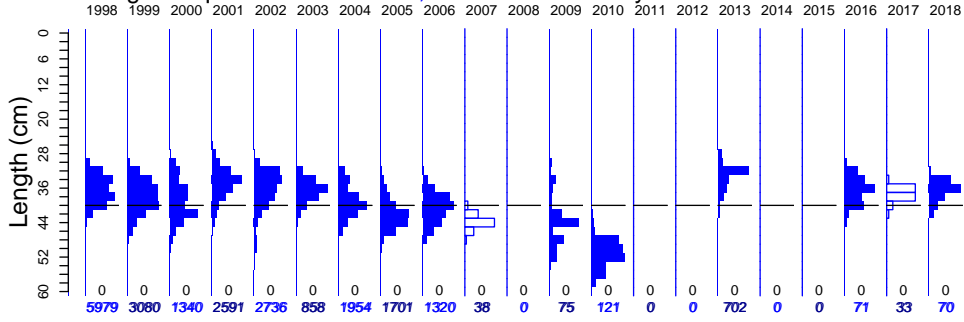
Discards



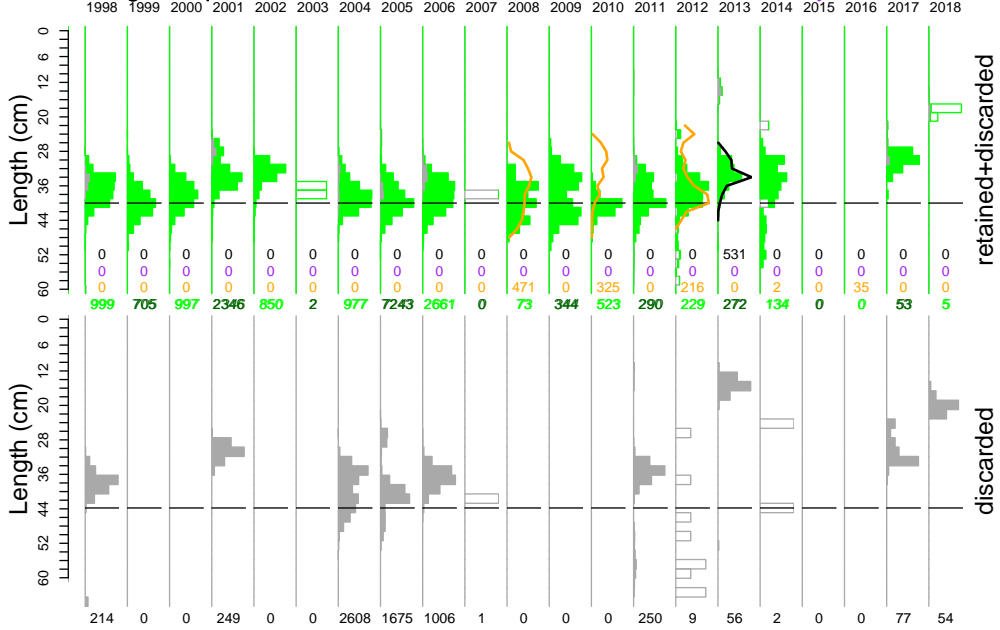
Blue Warehouse West

Wed Nov 06 17:12:38 2019

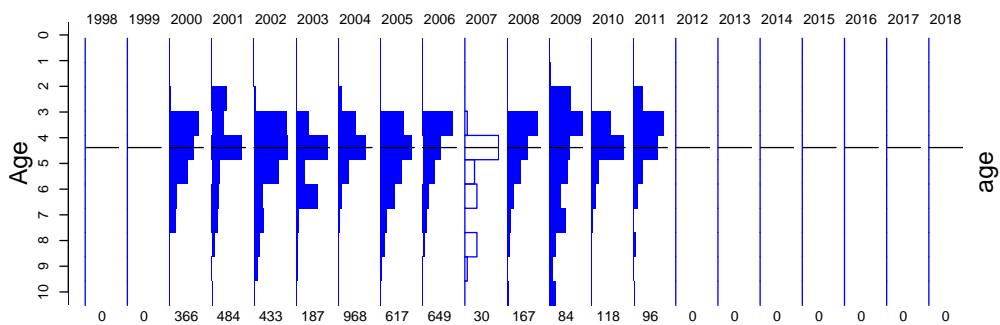
Length frequencies: ISMP Port, GAB Industry



Length frequencies: ISMP Onboard, SET FIS winter, GAB FIS Industry



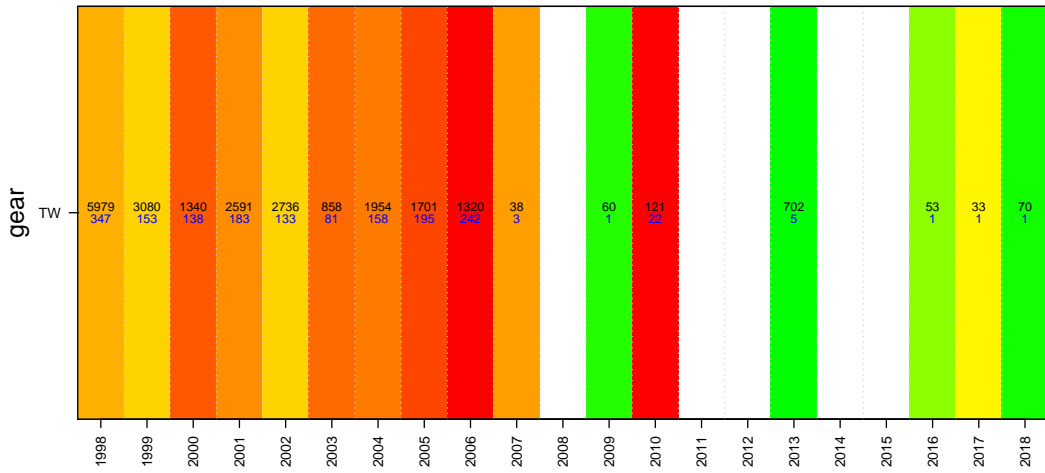
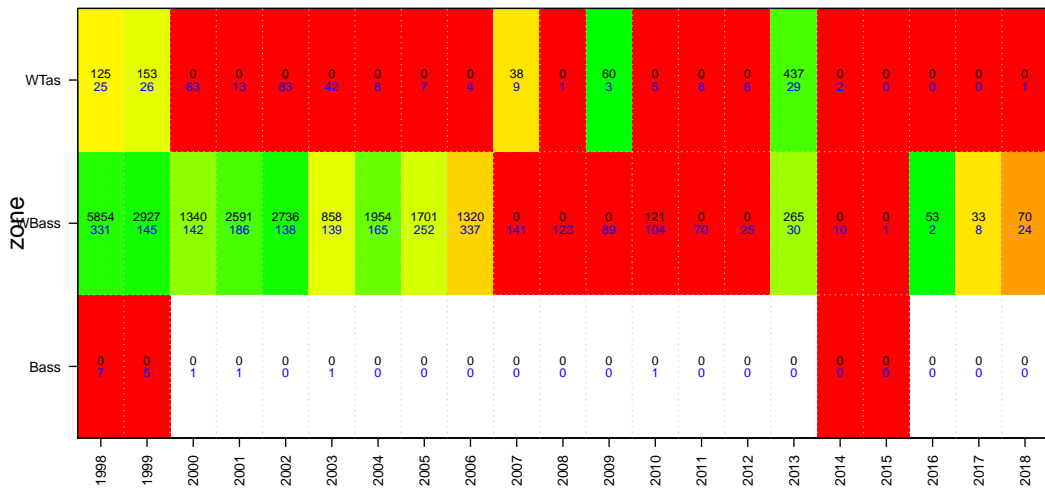
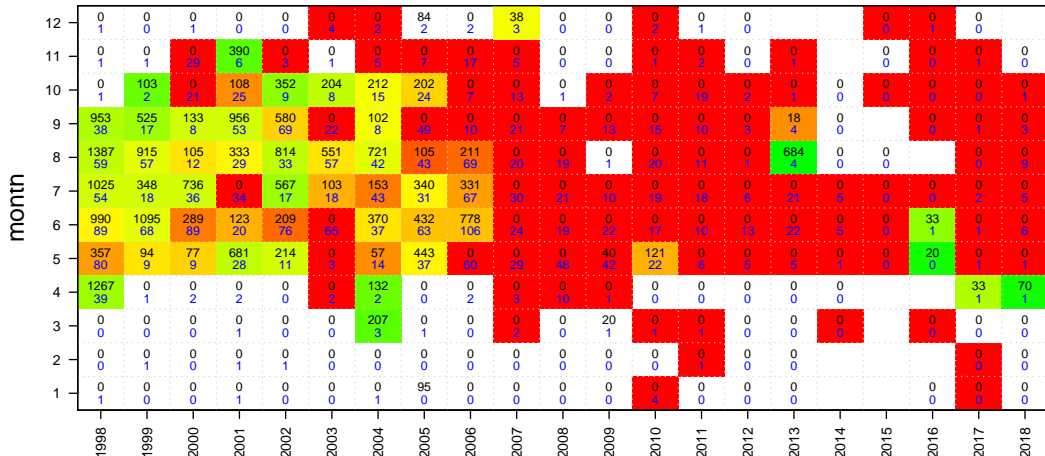
Age frequency



Blue Warehouse West

Port length data

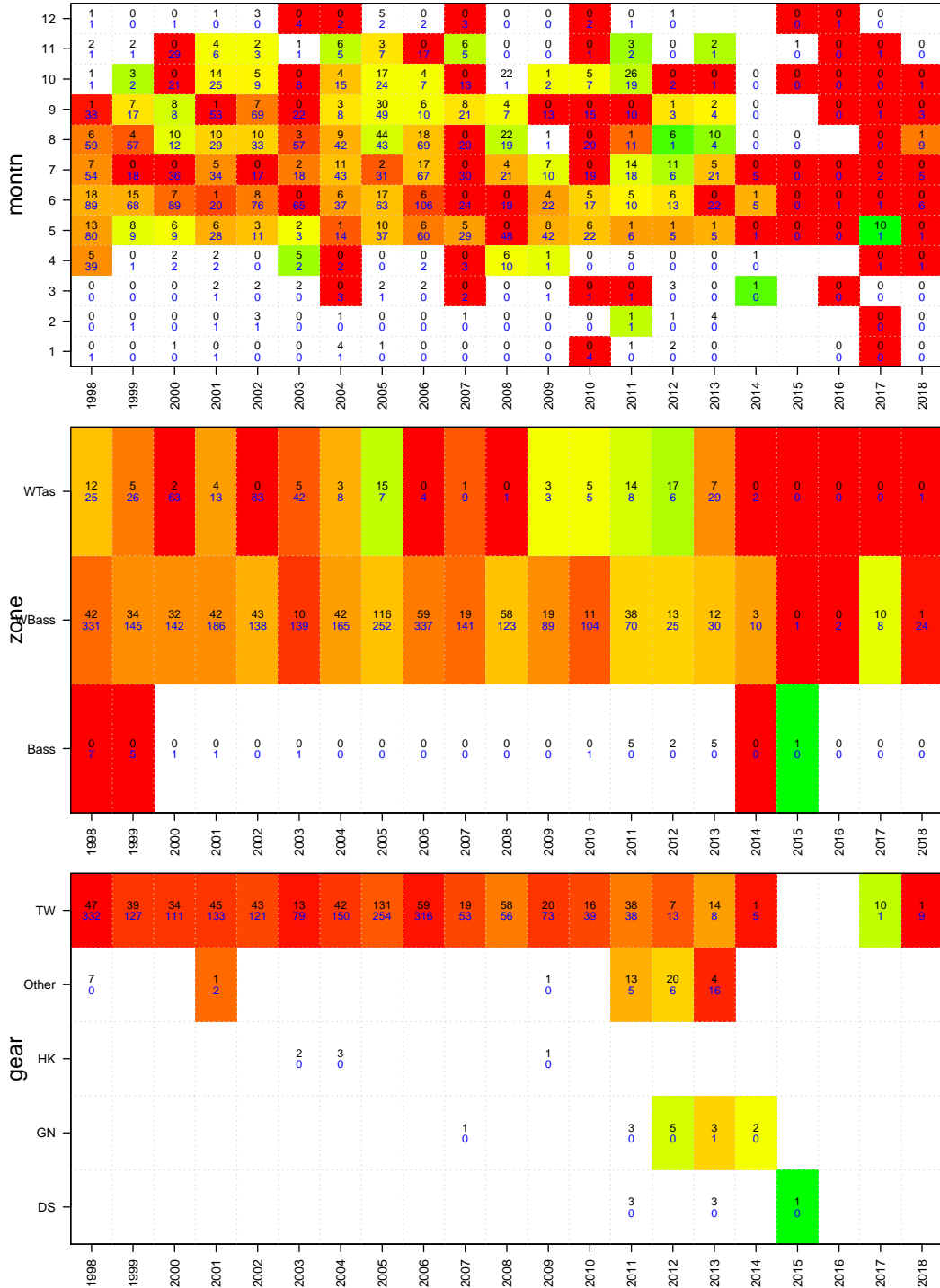
Wed Nov 06 17:12:39 2019



Blue Warehouse West

Onboard discard weight data

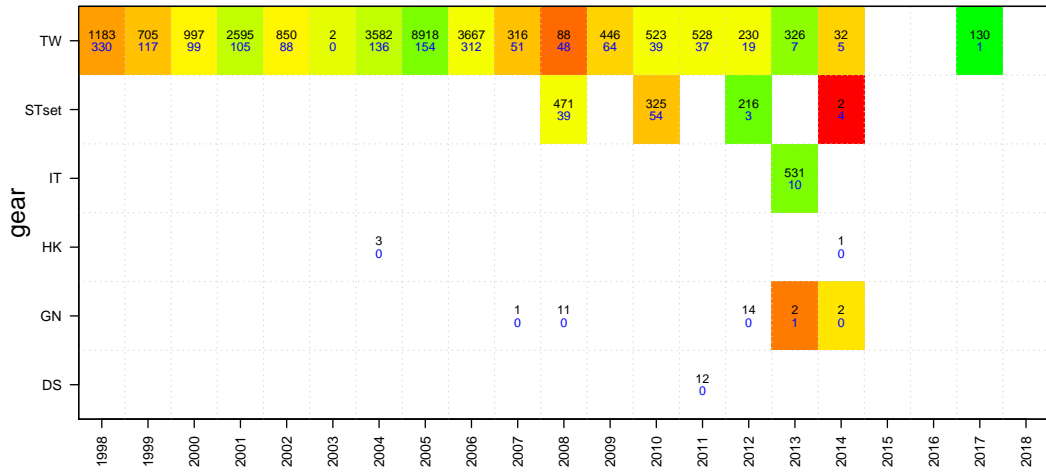
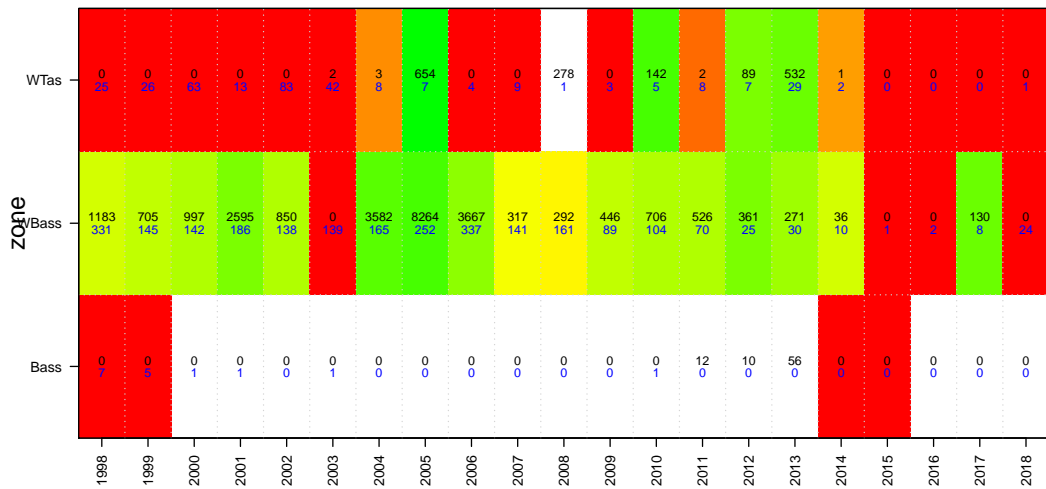
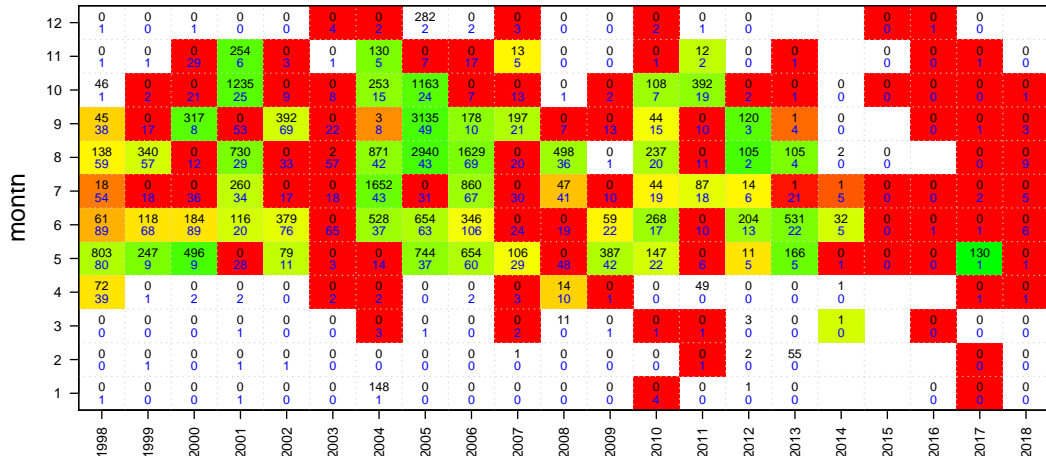
Wed Nov 06 17:12:39 2019



Blue Warehouse West

Onboard length data

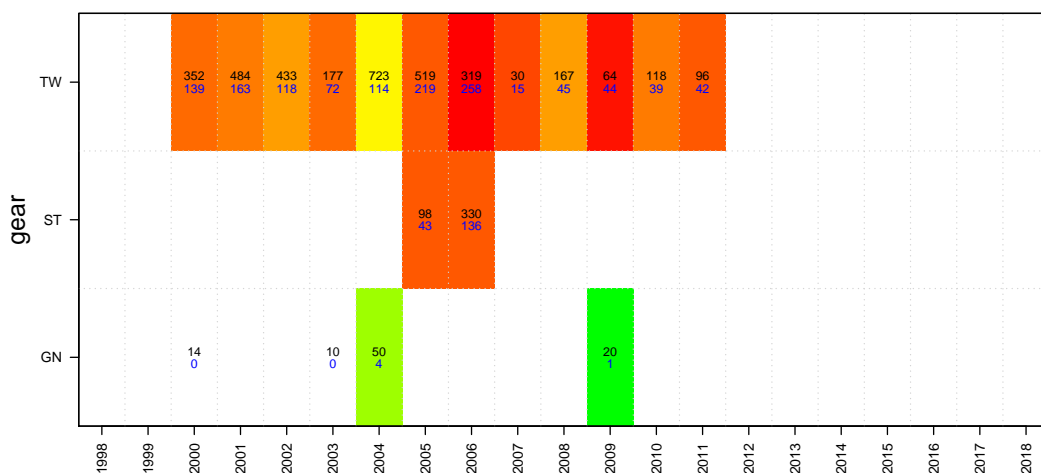
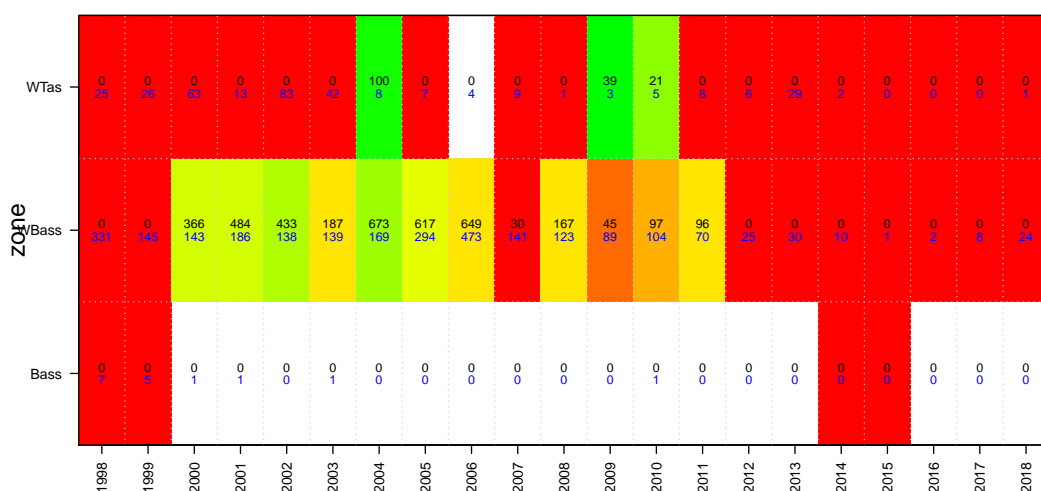
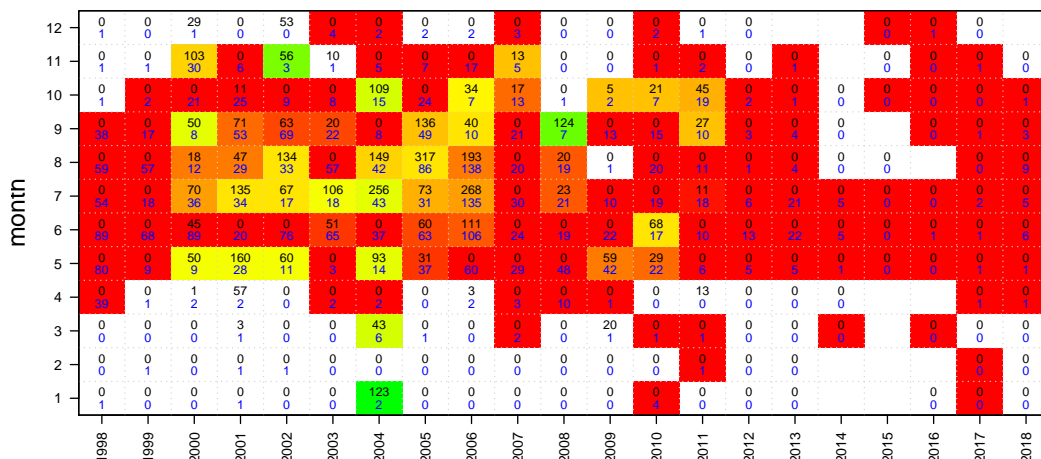
Wed Nov 06 17:12:39 2019



Blue Warehouse West

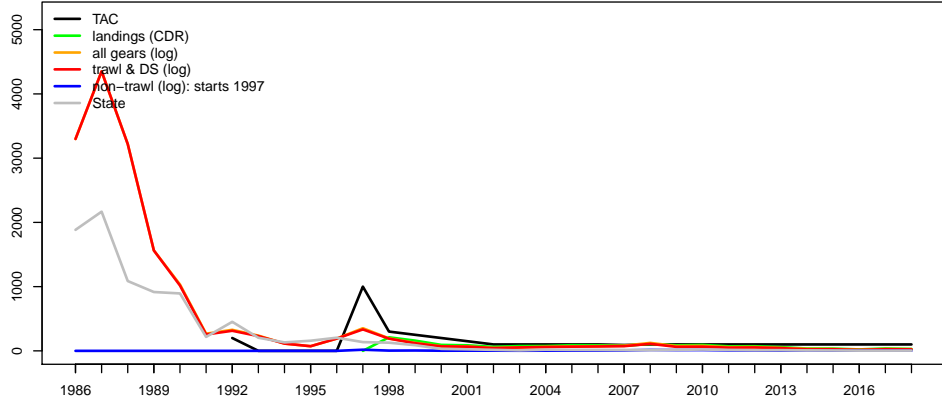
Age data

Wed Nov 06 17:12:39 2019

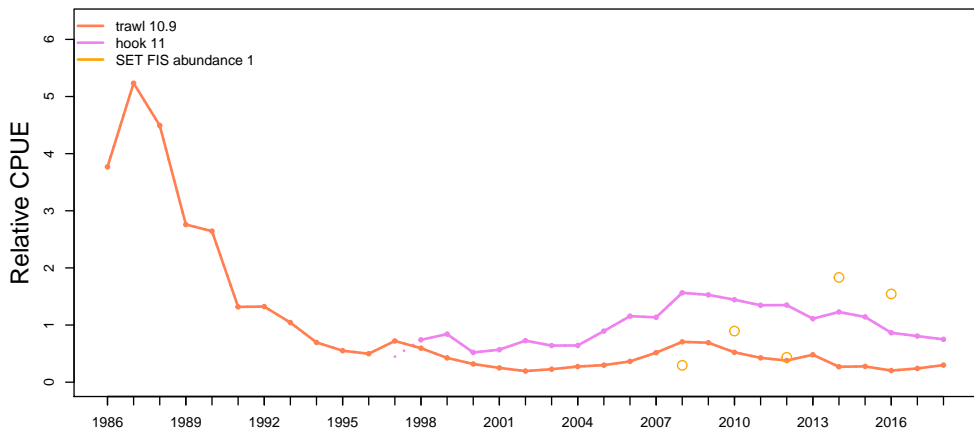


Gemfish East
TAC and landings

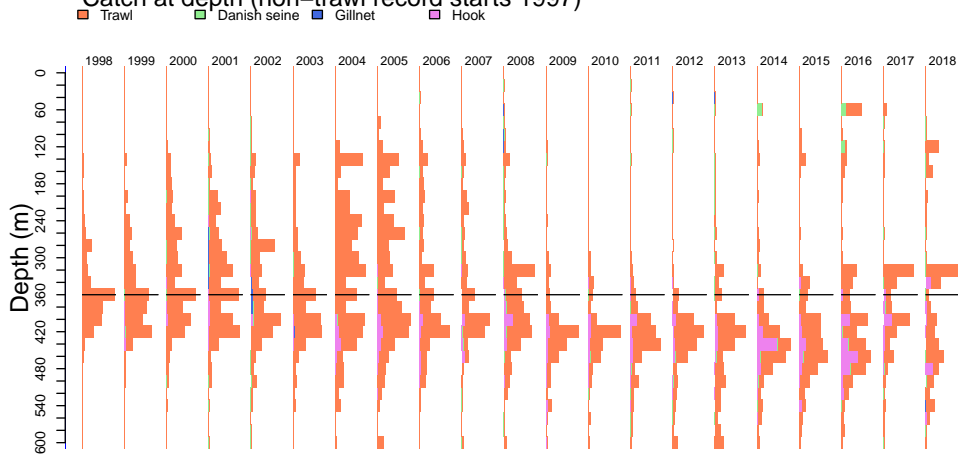
Wed Nov 06 17:12:41 2019
region GEMEAST unit code GEME sa code GEME
37439002
start month 1



Geometric mean CPUE & SET FIS abundance

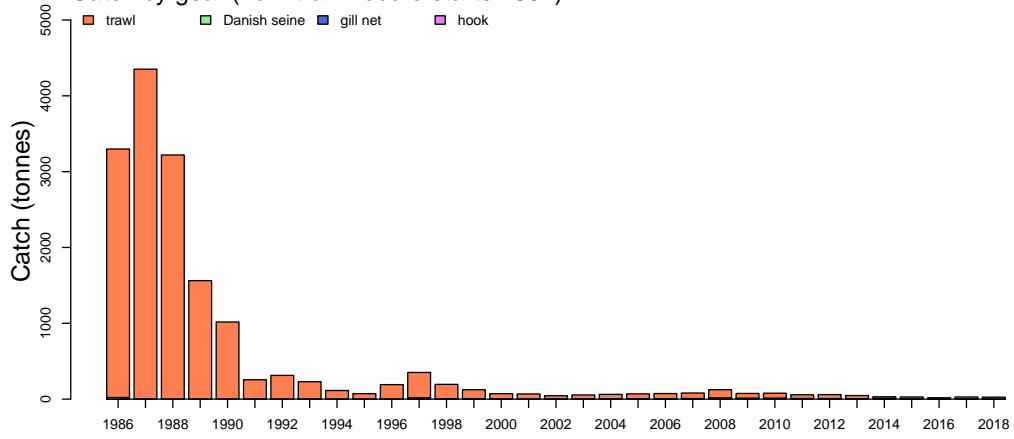


Catch at depth (non-trawl record starts 1997)

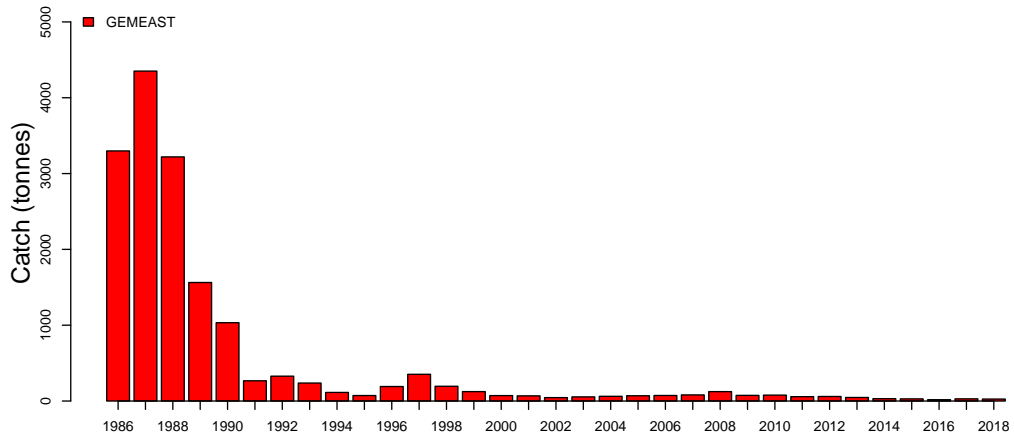


Gemfish East

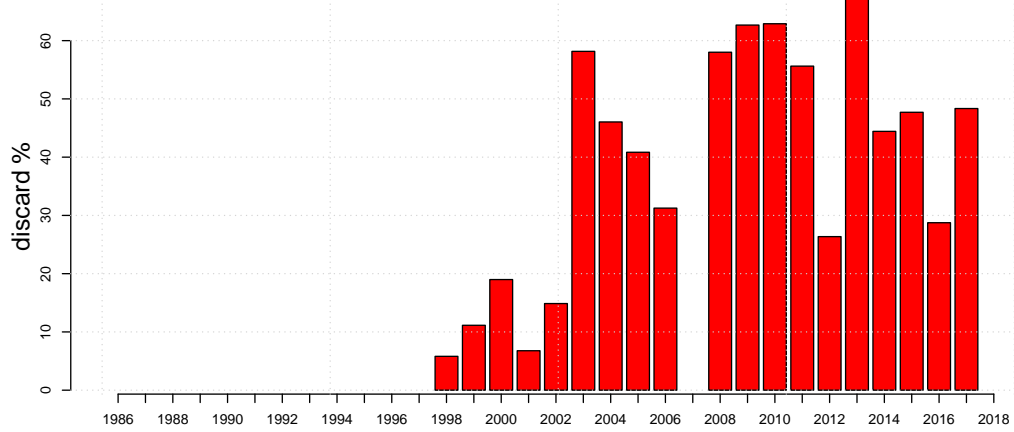
Catch by gear (non-trawl record starts 1997)



Catch by zone



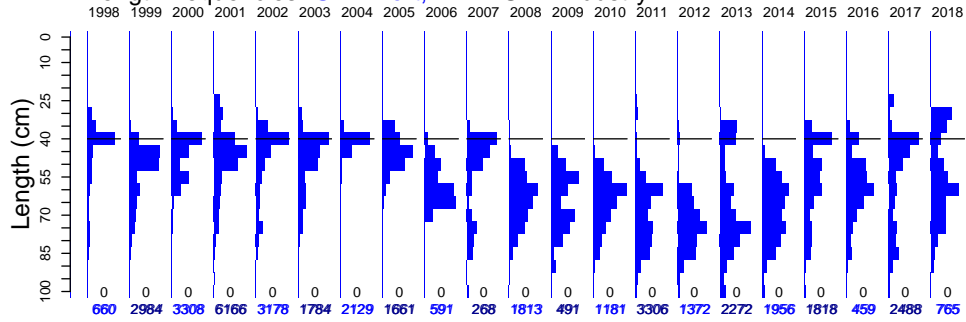
Discards



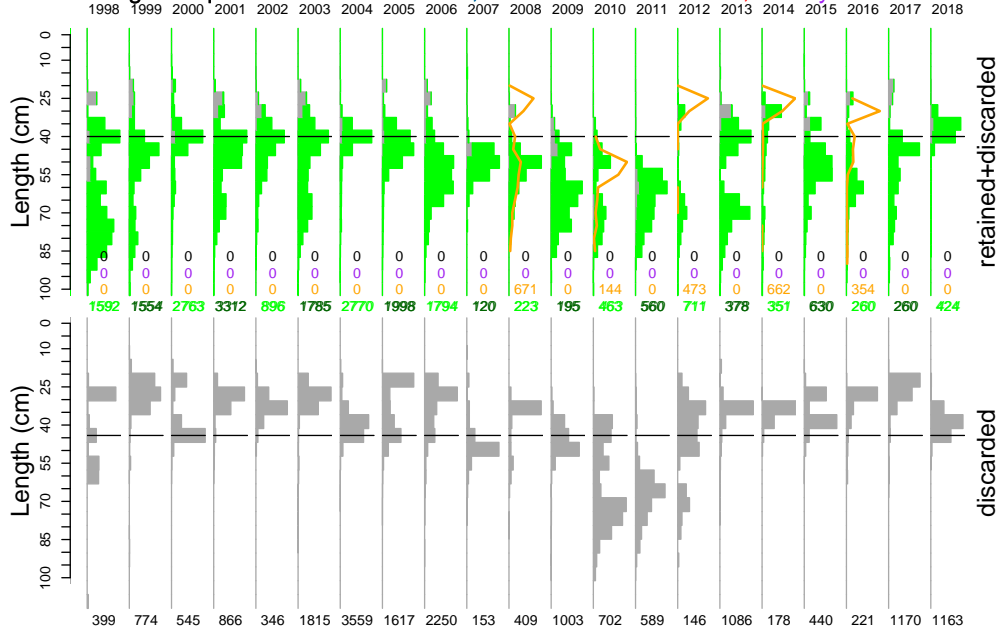
Gemfish East

Wed Nov 06 17:12:48 2019

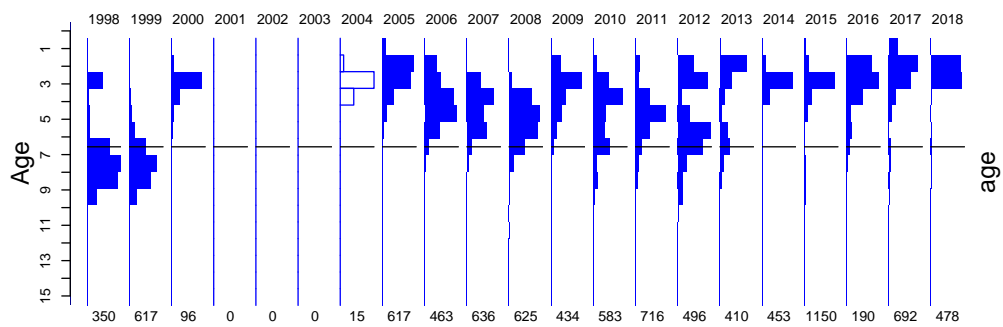
Length frequencies: **ISMP Port,** GAB Industry



Length frequencies: **ISMP Onboard,** SET FIS winter, GAB FIS, Industry



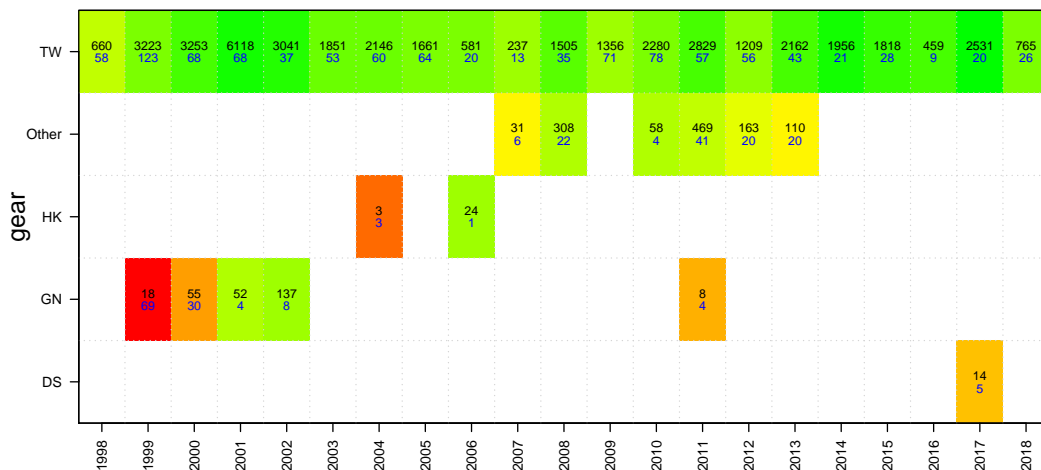
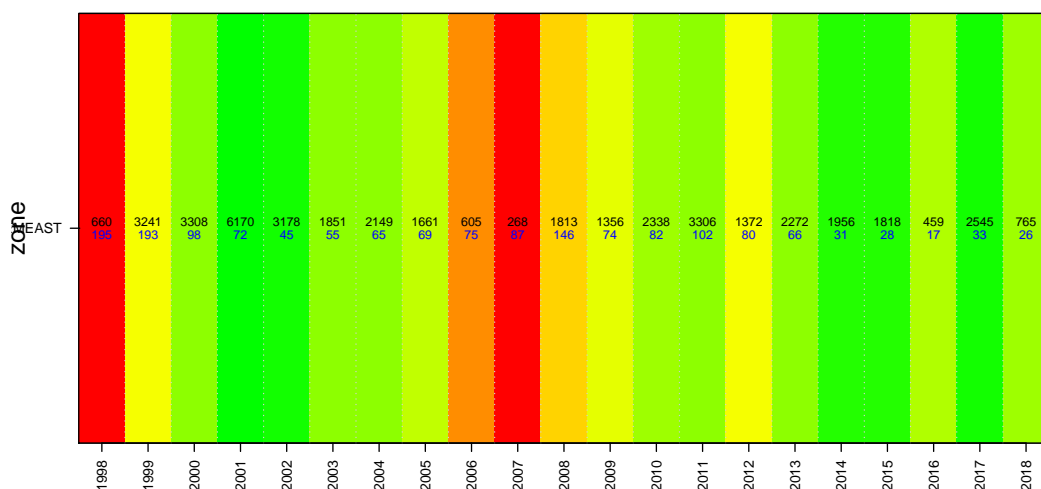
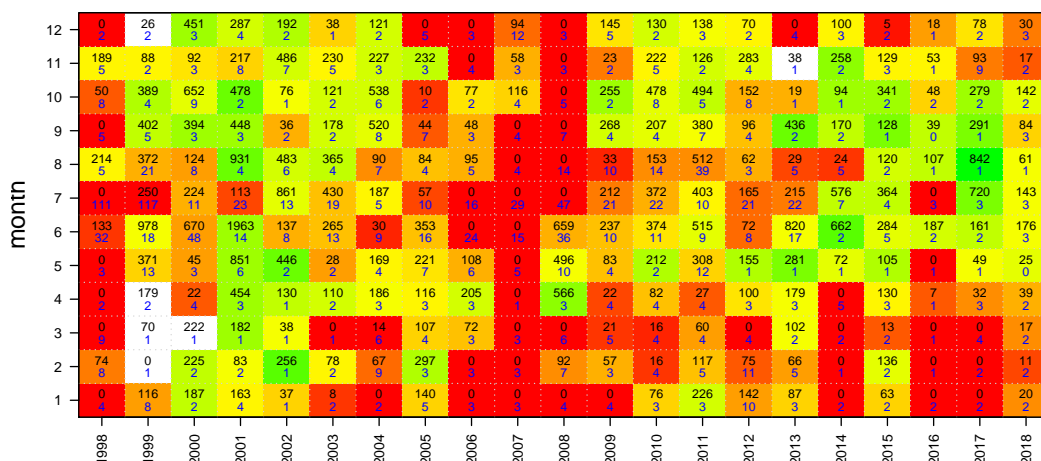
Age frequency



Gemfish East

Port length data

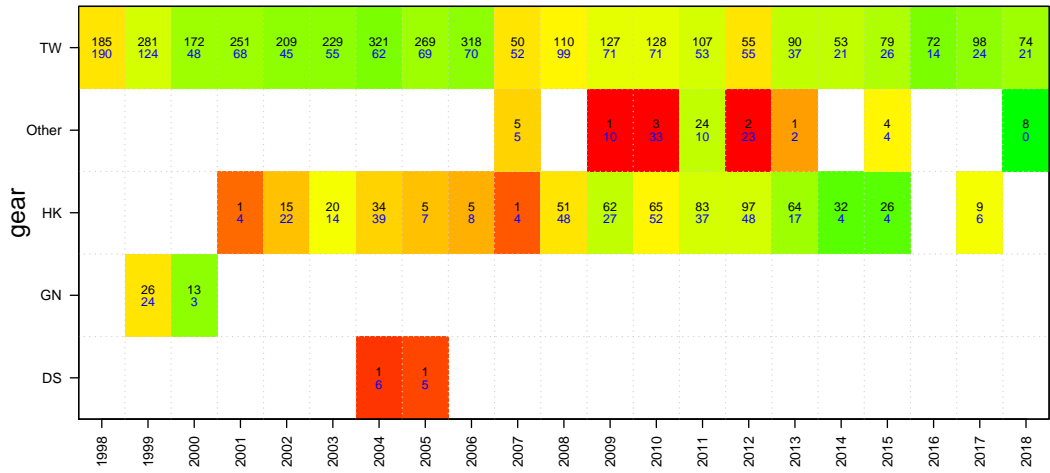
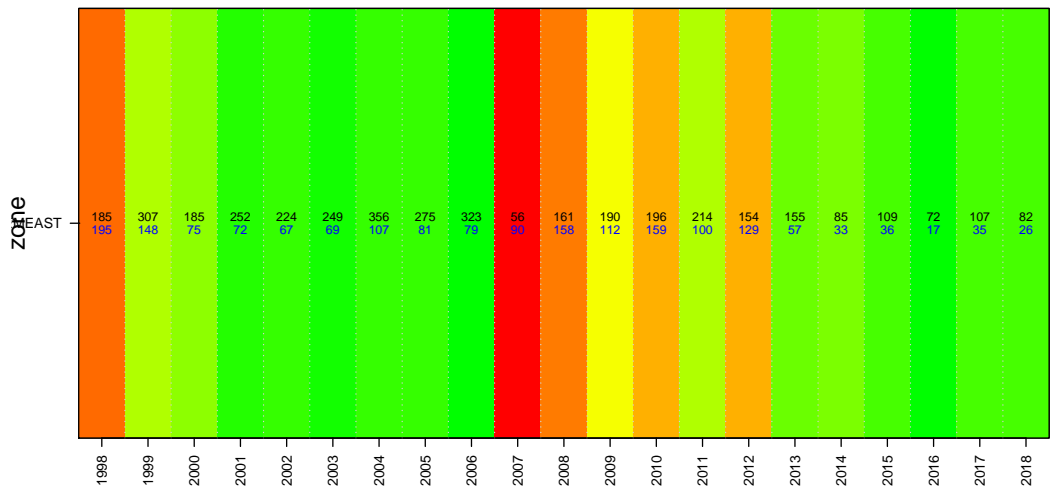
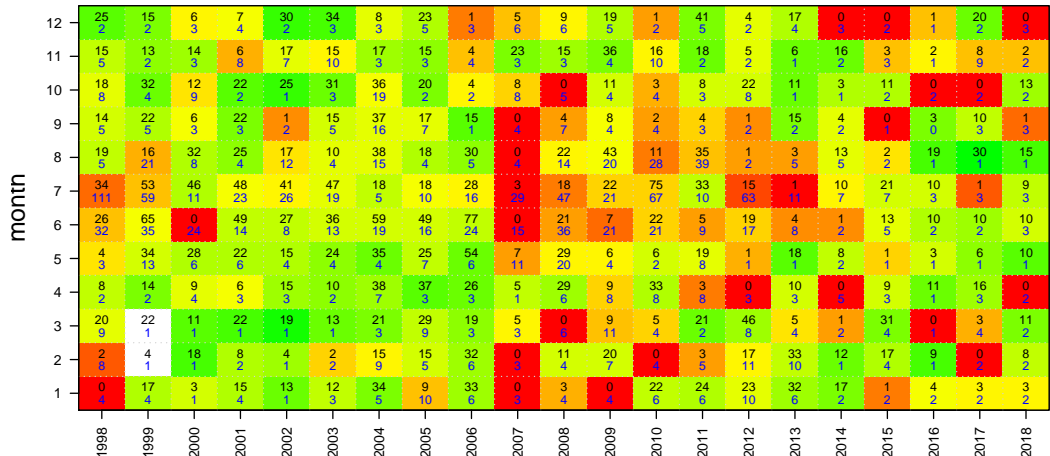
Wed Nov 06 17:12:49 2019



Gemfish East

Onboard discard weight data

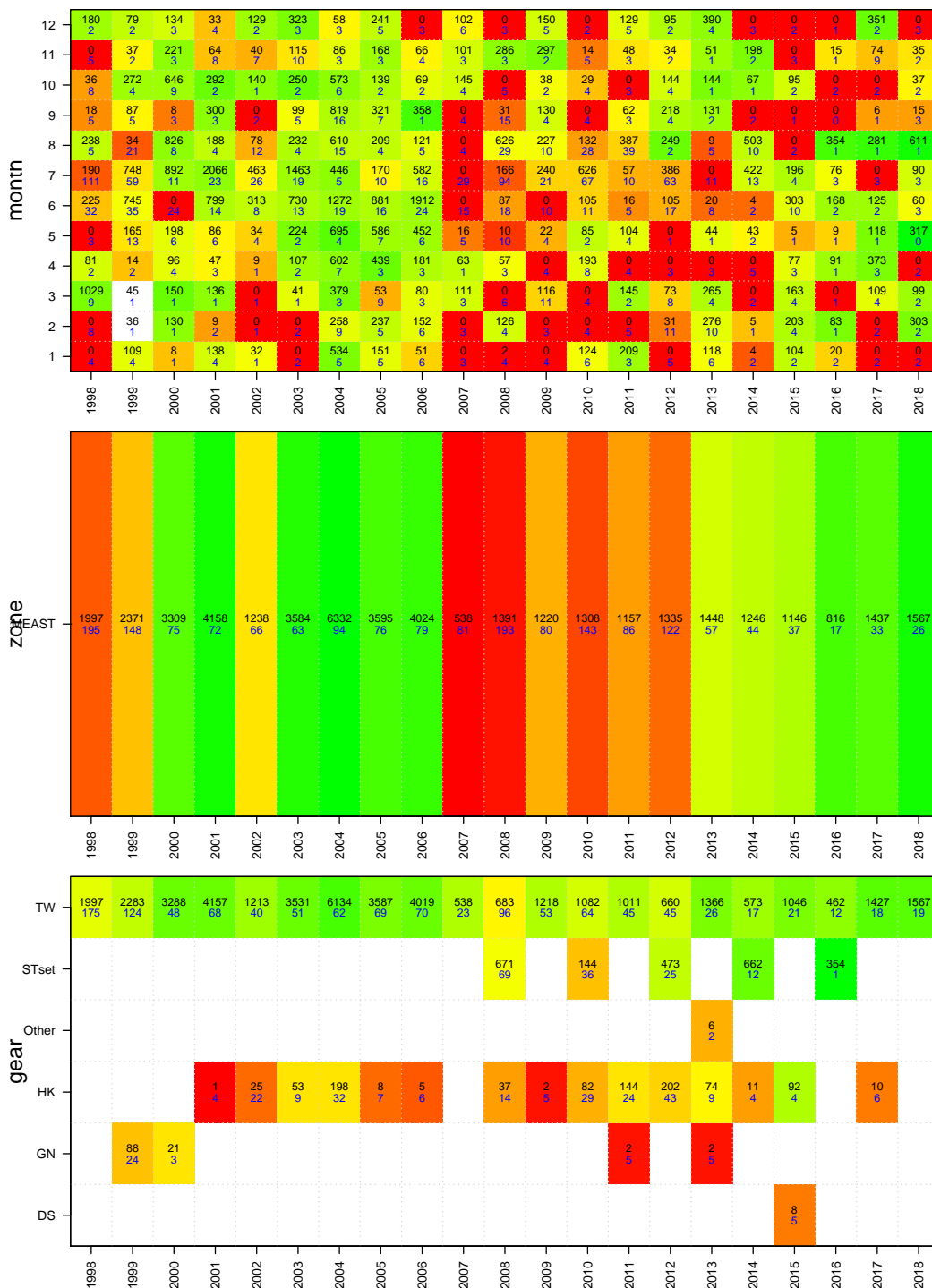
Wed Nov 06 17:12:49 2019



Gemfish East

Onboard length data

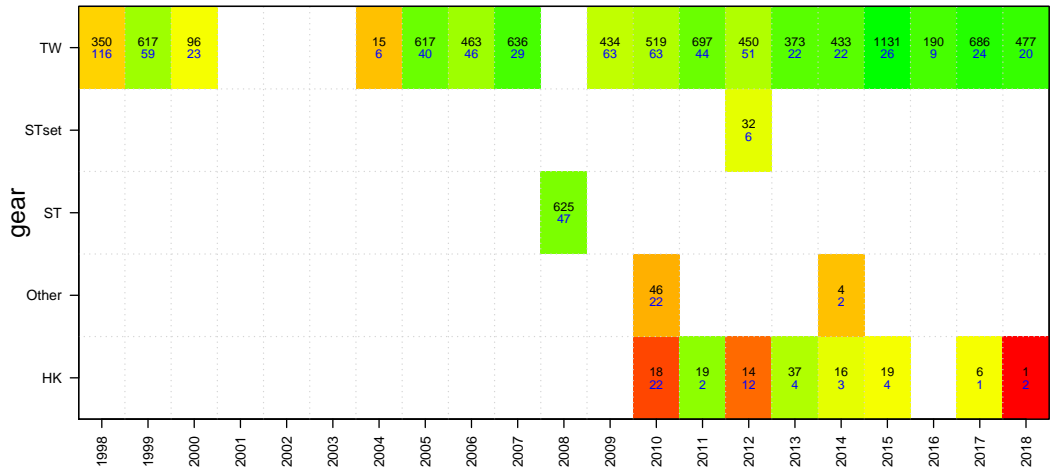
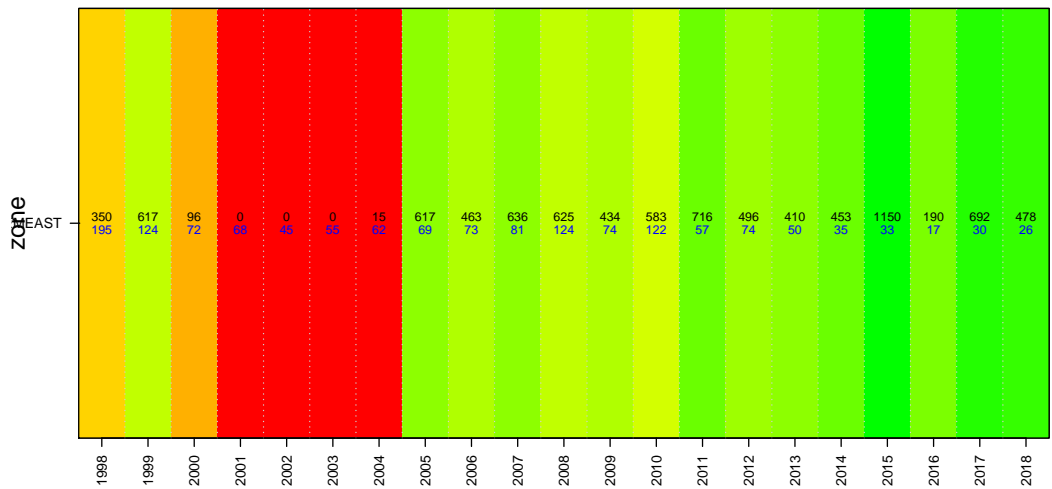
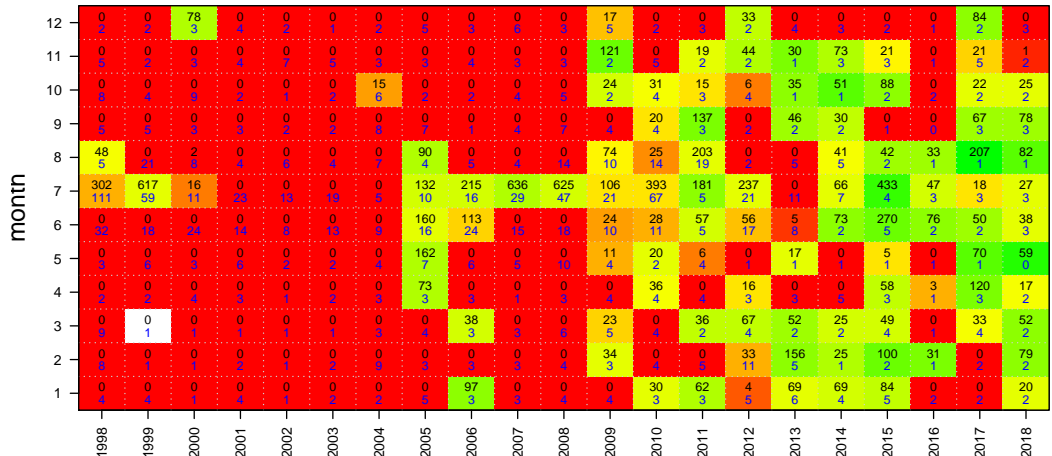
Wed Nov 06 17:12:49 2019



Gemfish East

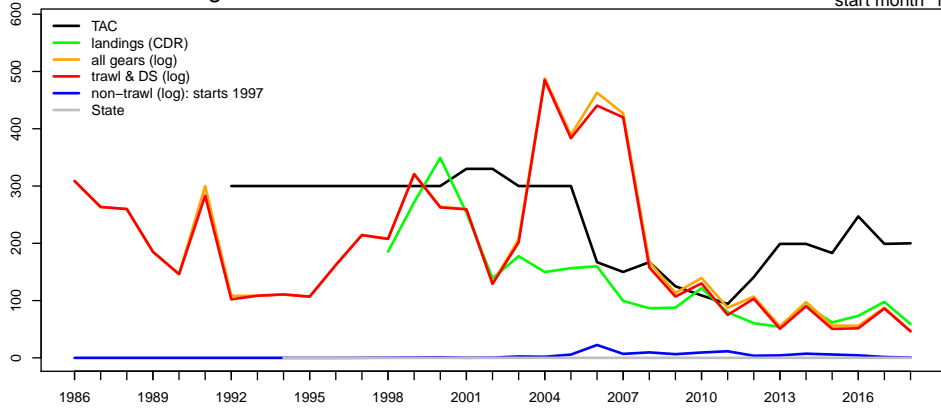
Age data

Wed Nov 06 17:12:49 2019

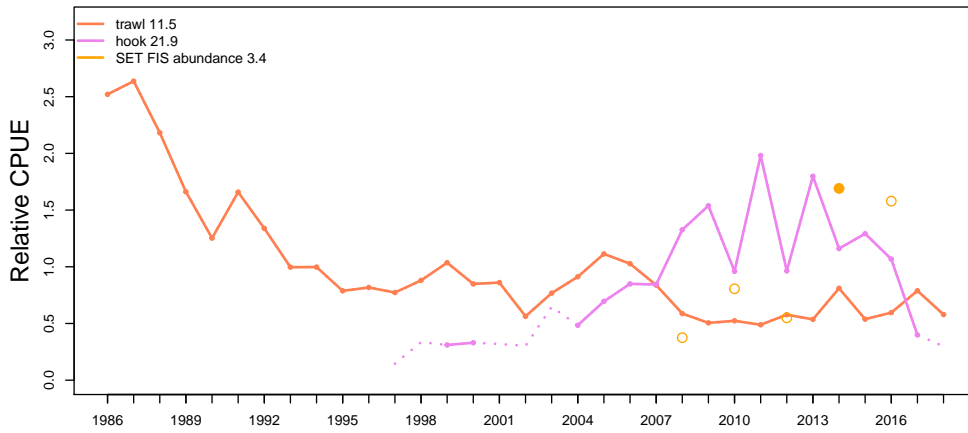


Gemfish West
TAC and landings

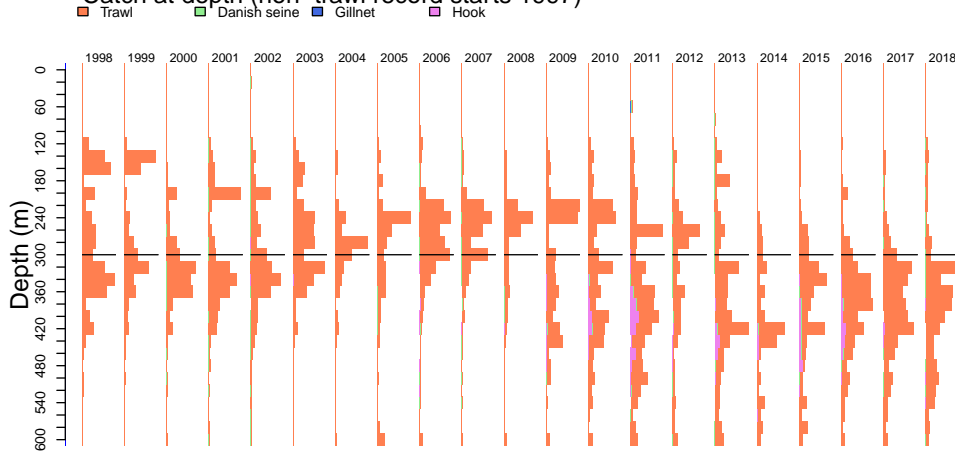
Wed Nov 06 17:12:51 2019
region GEMWEST unit code GEMW sa code GEMW
37439002
start month 1



Geometric mean CPUE & SET FIS abundance



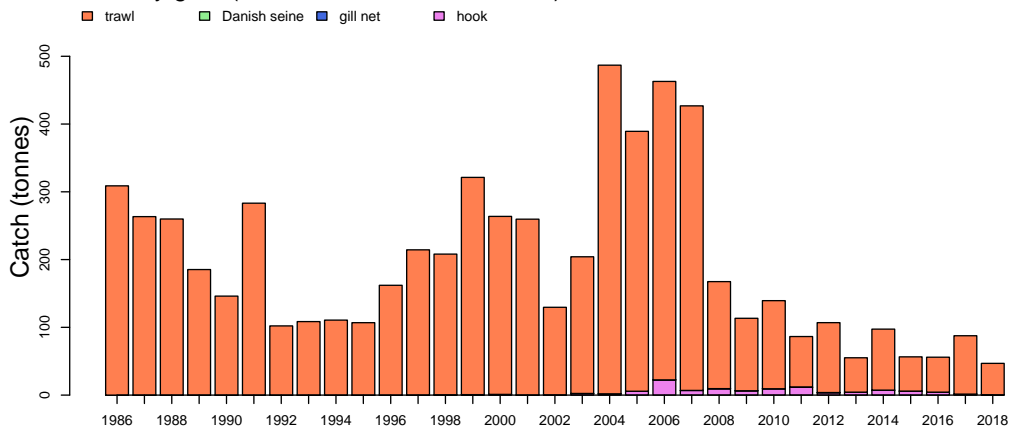
Catch at depth (non-trawl record starts 1997)



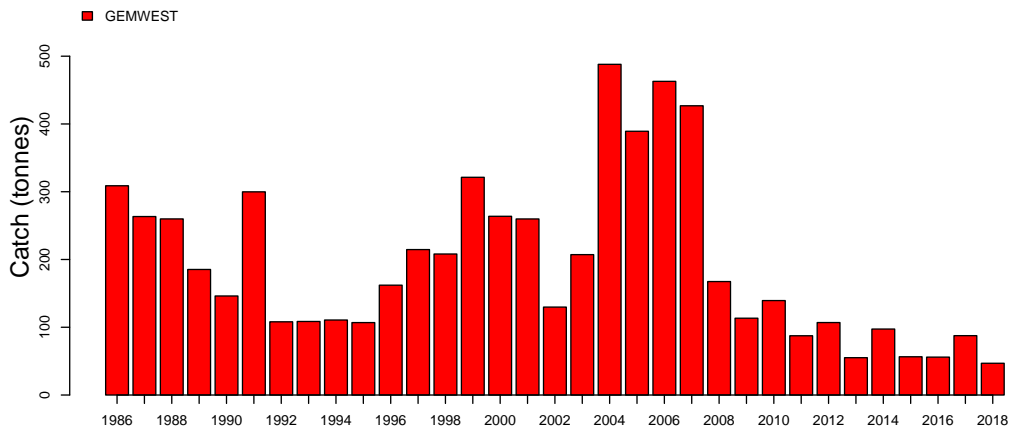
Gemfish West

Wed Nov 06 17:12:56 2019

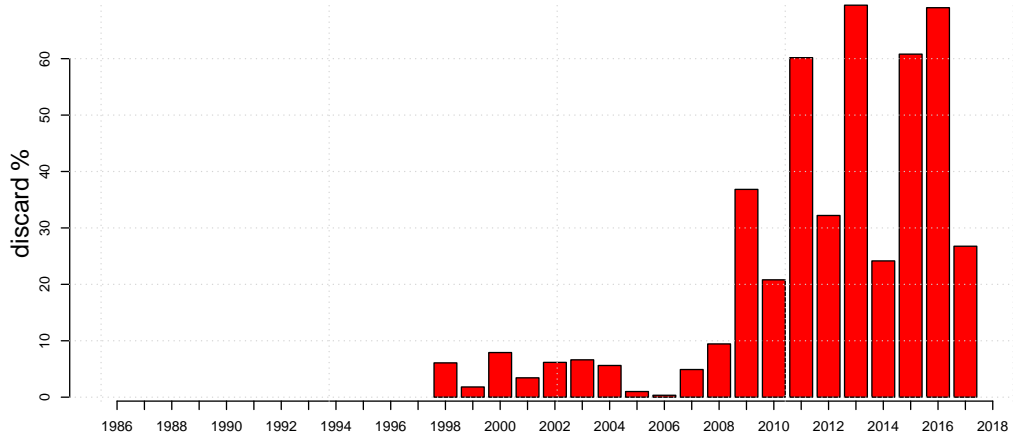
Catch by gear (non-trawl record starts 1997)



Catch by zone



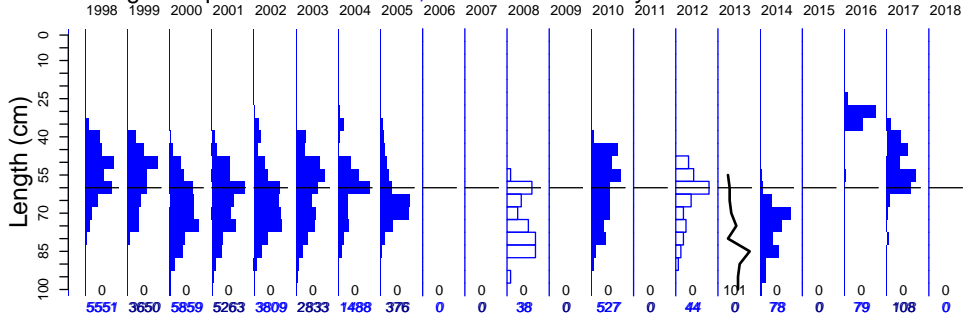
Discards



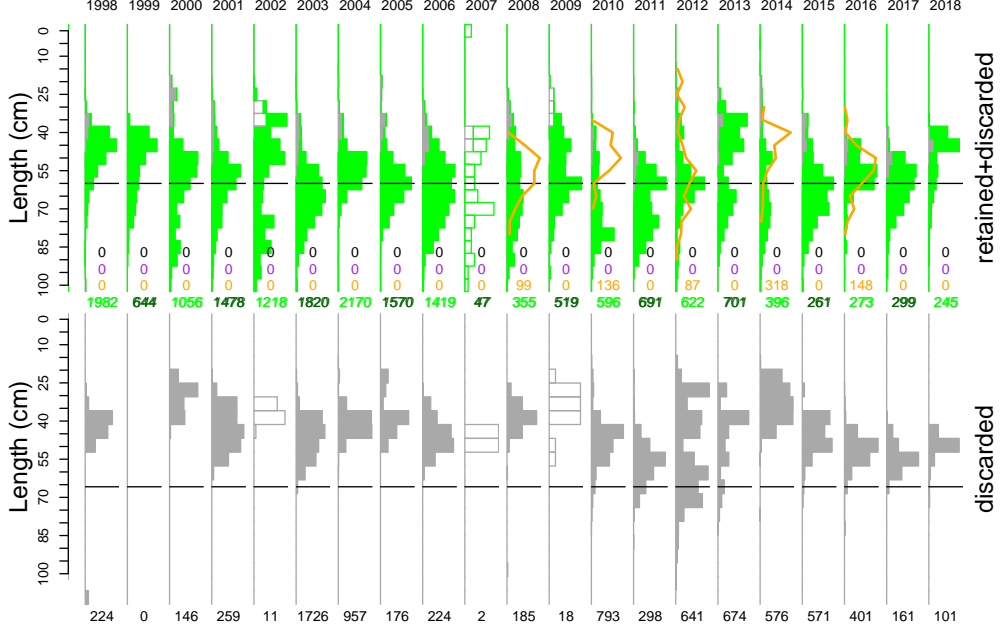
Gemfish West

Wed Nov 06 17:12:56 2019

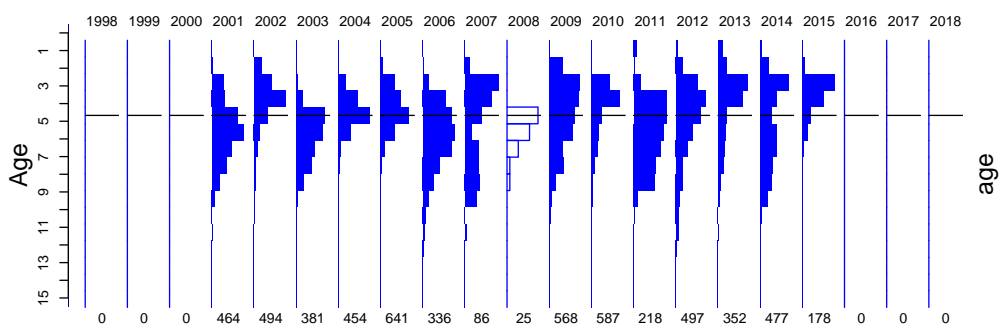
Length frequencies: ISMP Port, GAB Industry



Length frequencies: ISMP Onboard, SET FIS winter, GAB FIS Industry



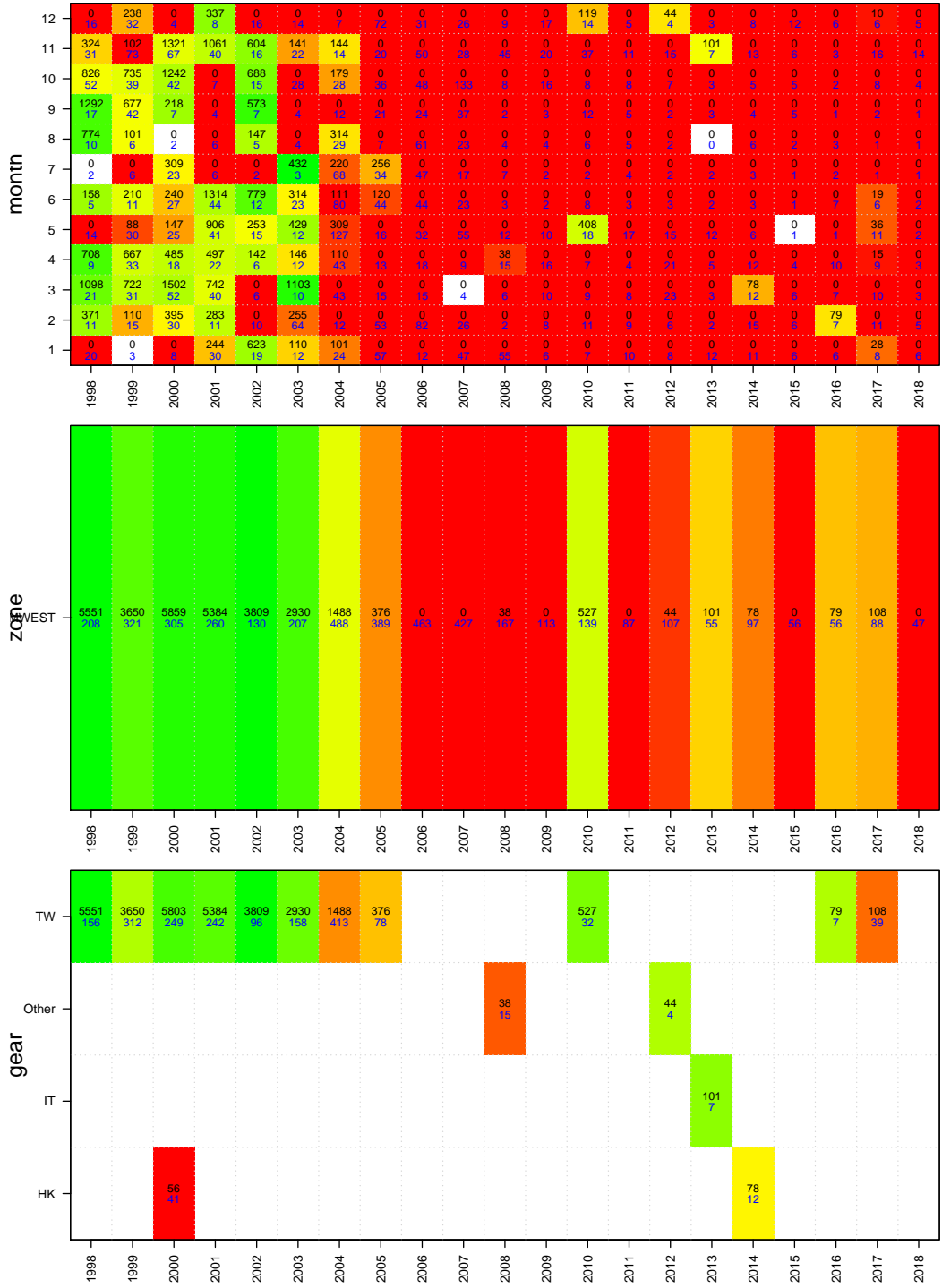
Age frequency



Gemfish West

Port length data

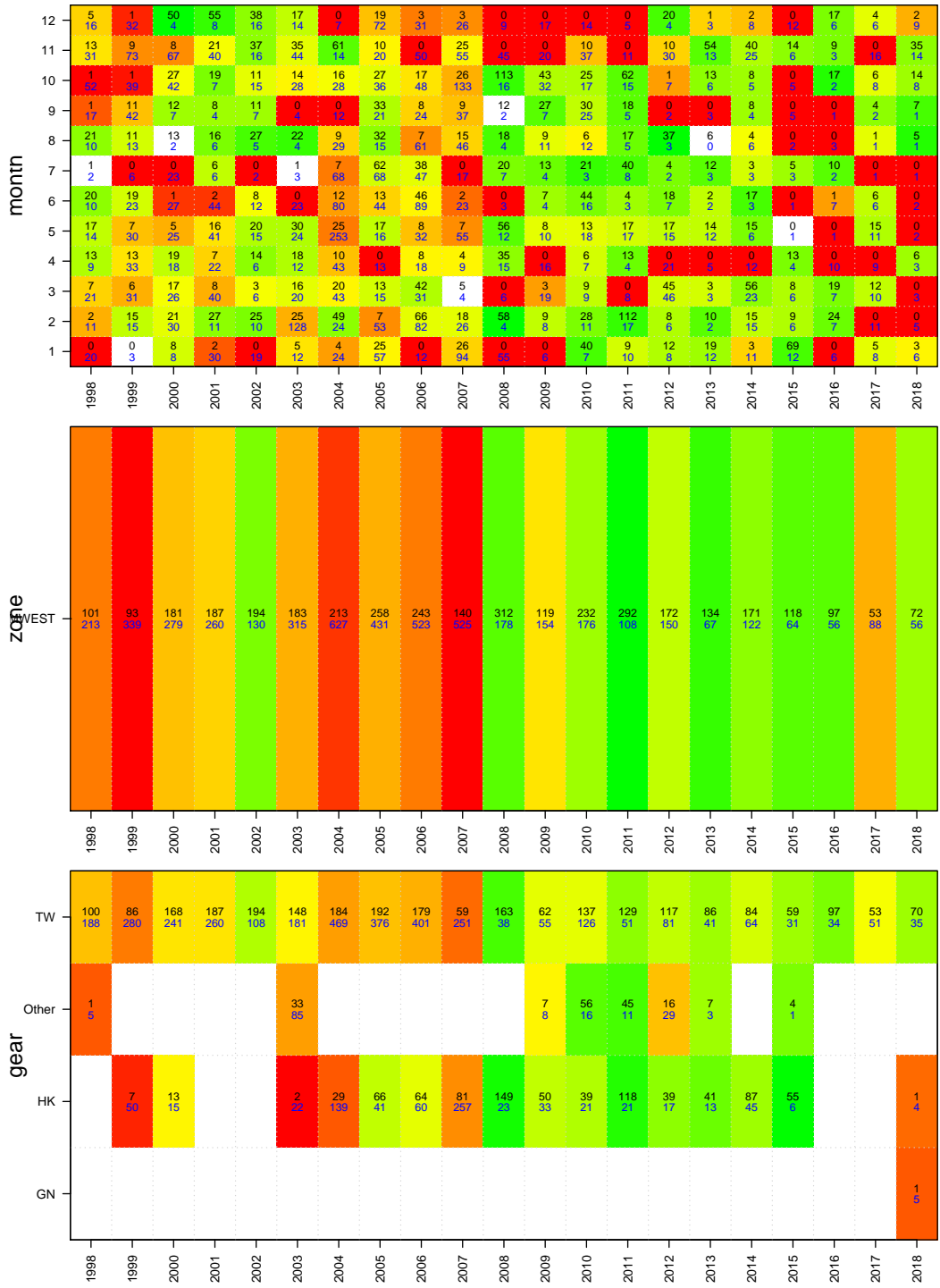
Wed Nov 06 17:12:56 2019



Gemfish West

Onboard discard weight data

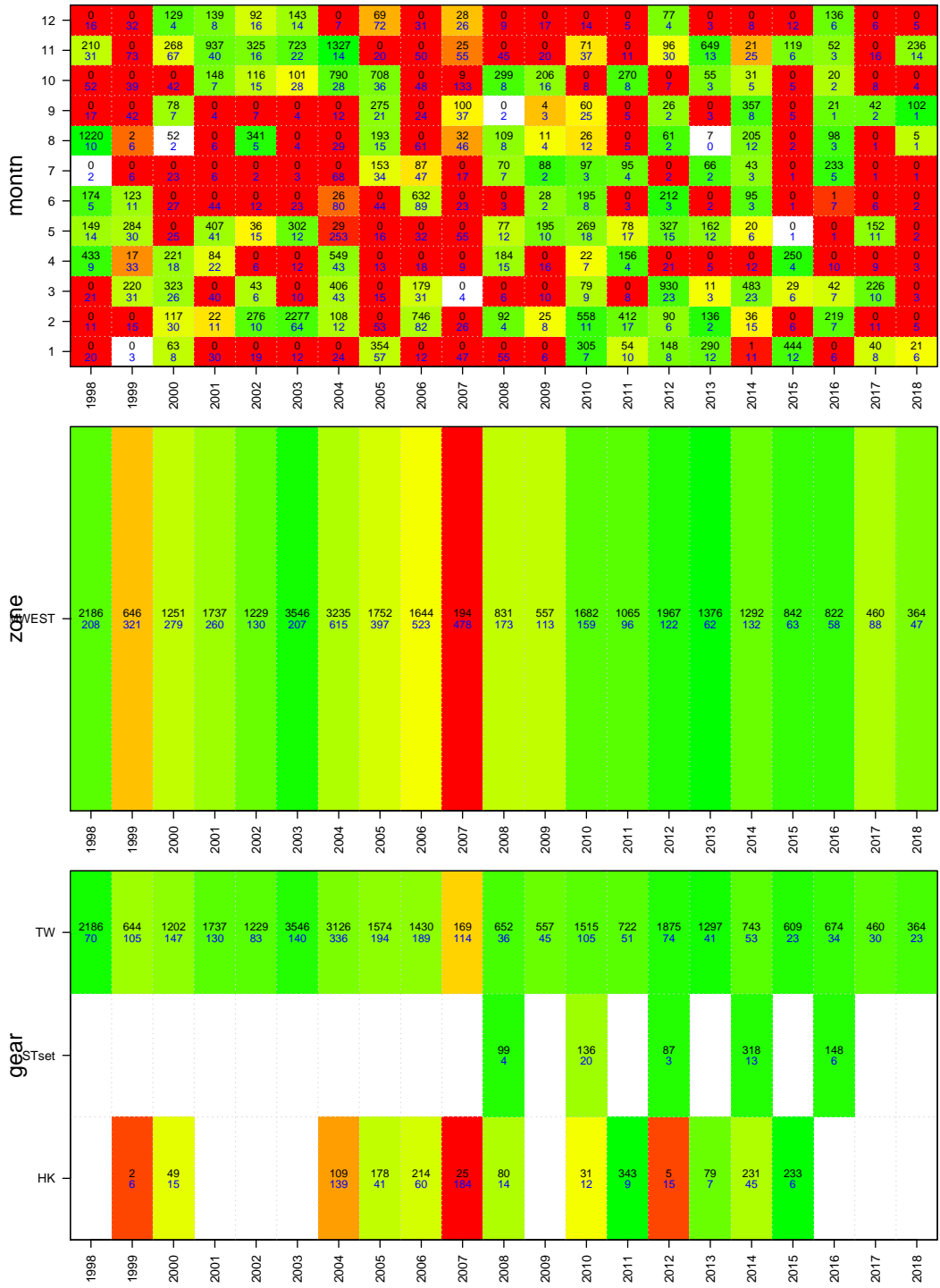
Wed Nov 06 17:12:57 2019



Gemfish West

Onboard length data

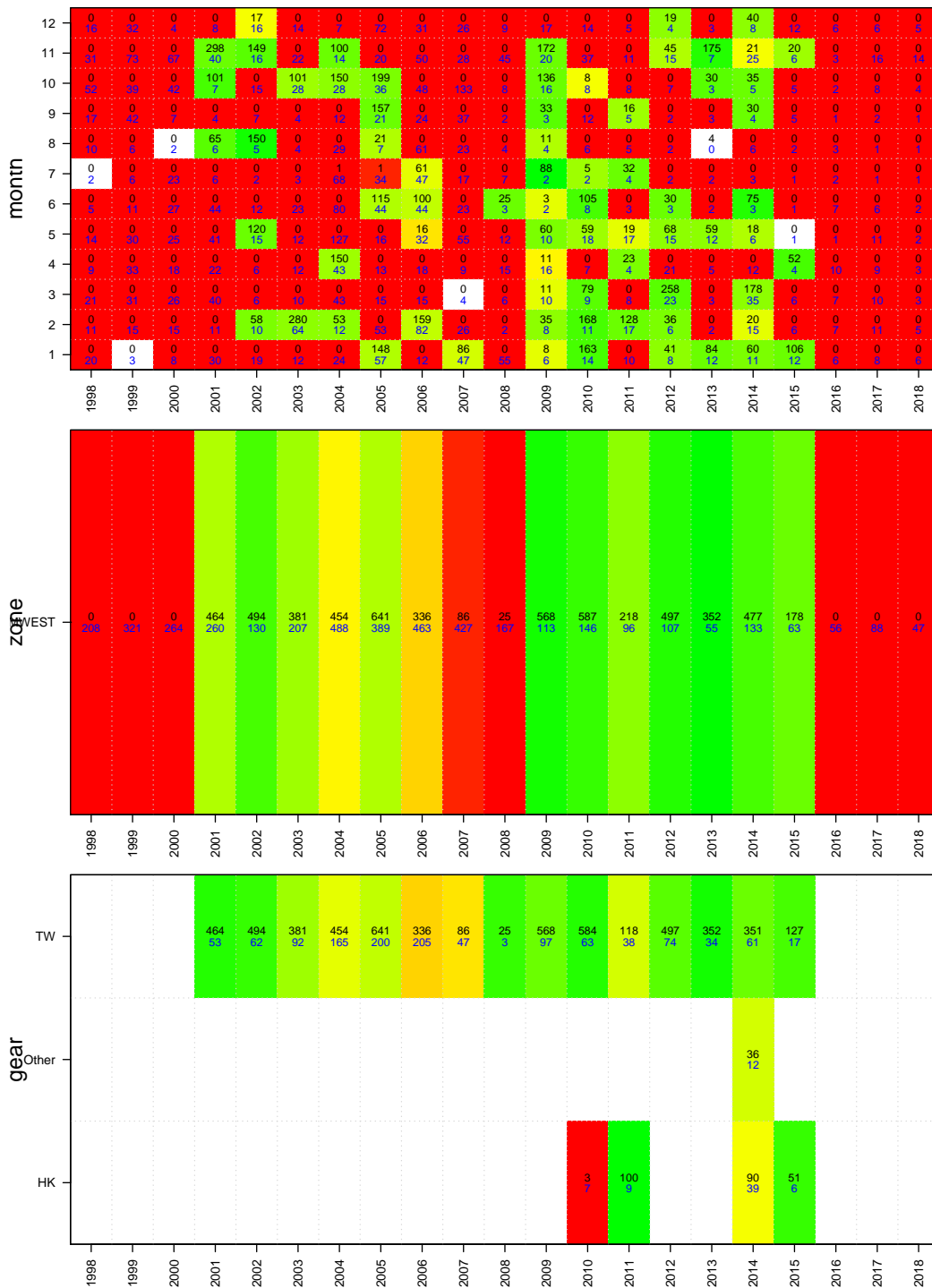
Wed Nov 06 17:12:57 2019



Gemfish West

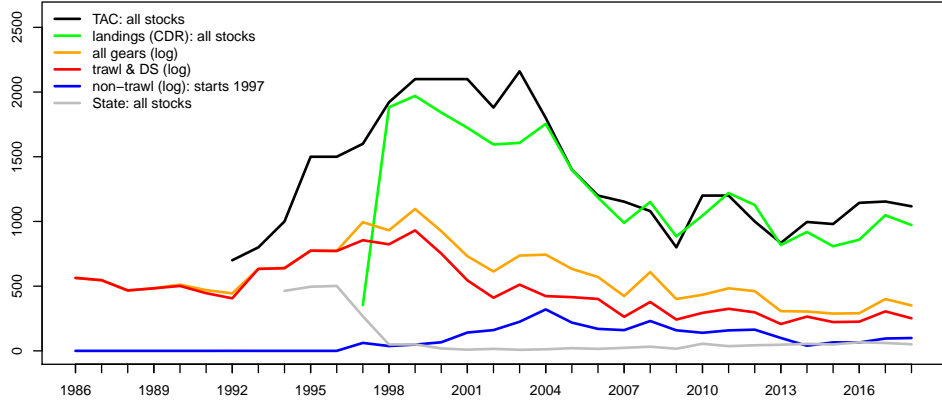
Age data

Wed Nov 06 17:12:57 2019

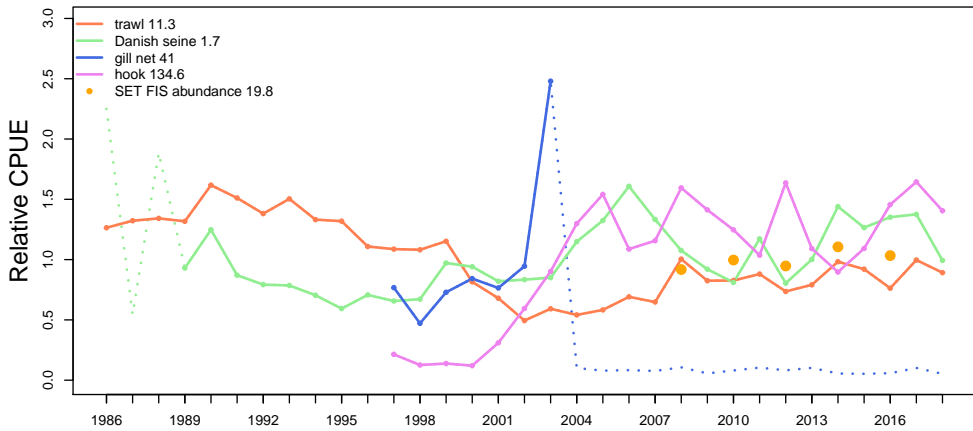


Pink Ling East
TAC and landings

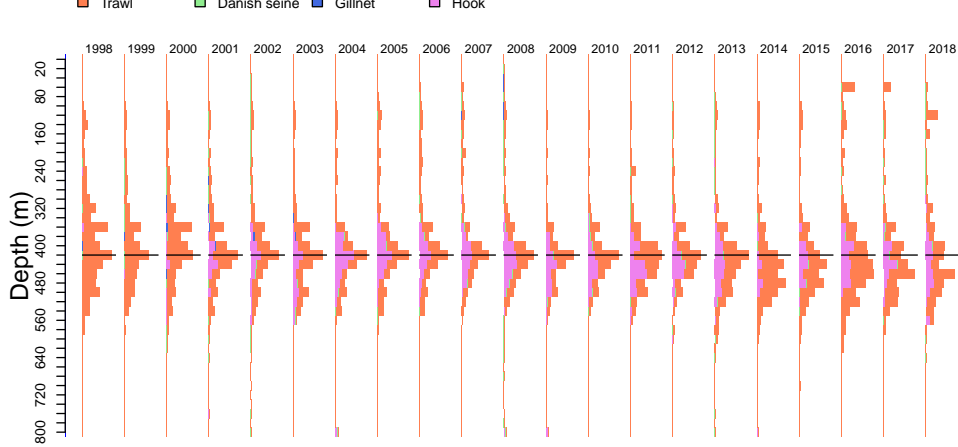
Wed Nov 06 17:13:03 2019
region SEFEAST unit code LIG sa code LIGE
37228002
start month 1



Geometric mean CPUE & SET FIS abundance



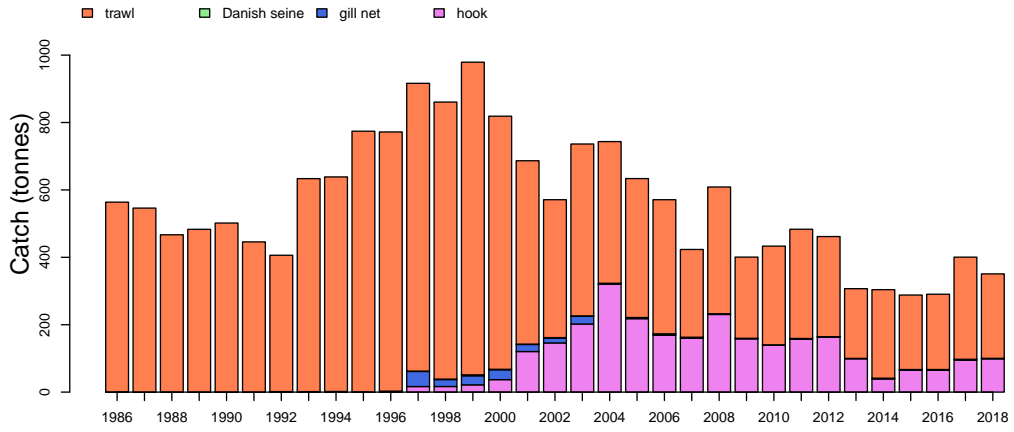
Catch at depth (non-trawl record starts 1997)



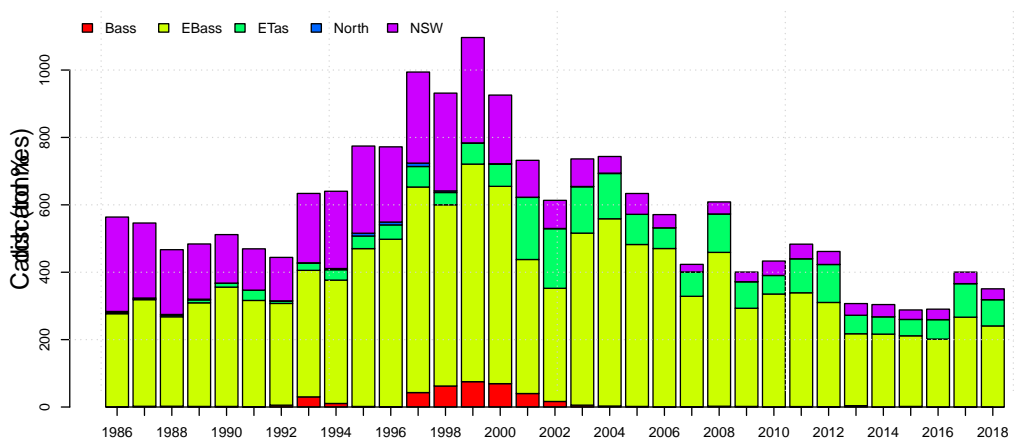
Pink Ling East

Wed Nov 06 17:13:21 2019

Catch by gear (non-trawl record starts 1997)



Discards

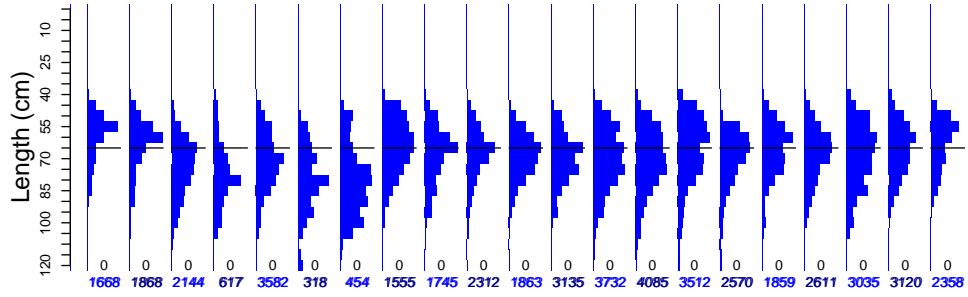


Pink Ling East

Wed Nov 06 17:13:22 2019

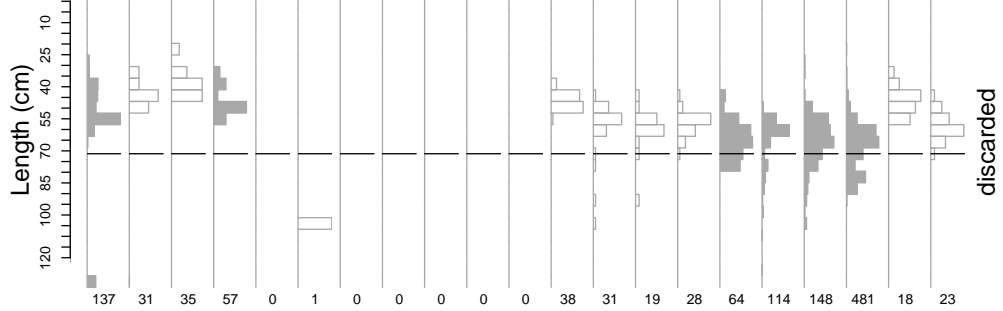
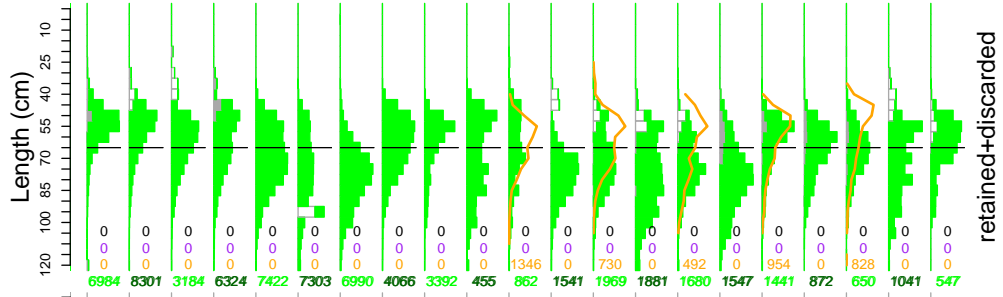
Length frequencies: ISMP Port, GAB Industry

1998 1999 2000 2001 2002 2003 2004 2005 2006 2007 2008 2009 2010 2011 2012 2013 2014 2015 2016 2017 2018

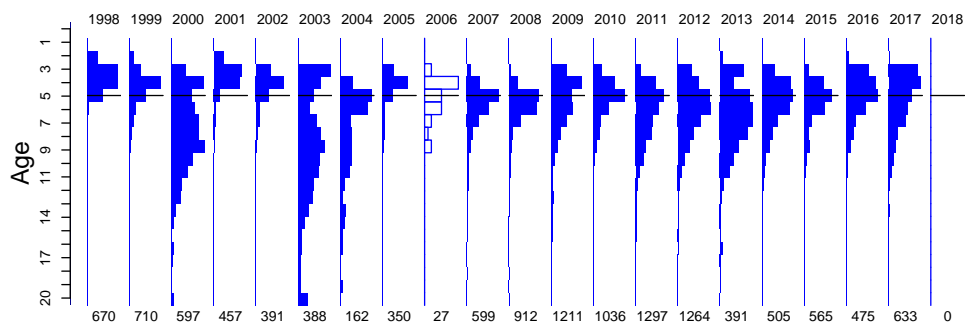


Length frequencies: ISMP Onboard, SET FIS winter, GAB FIS, Industry

1998 1999 2000 2001 2002 2003 2004 2005 2006 2007 2008 2009 2010 2011 2012 2013 2014 2015 2016 2017 2018



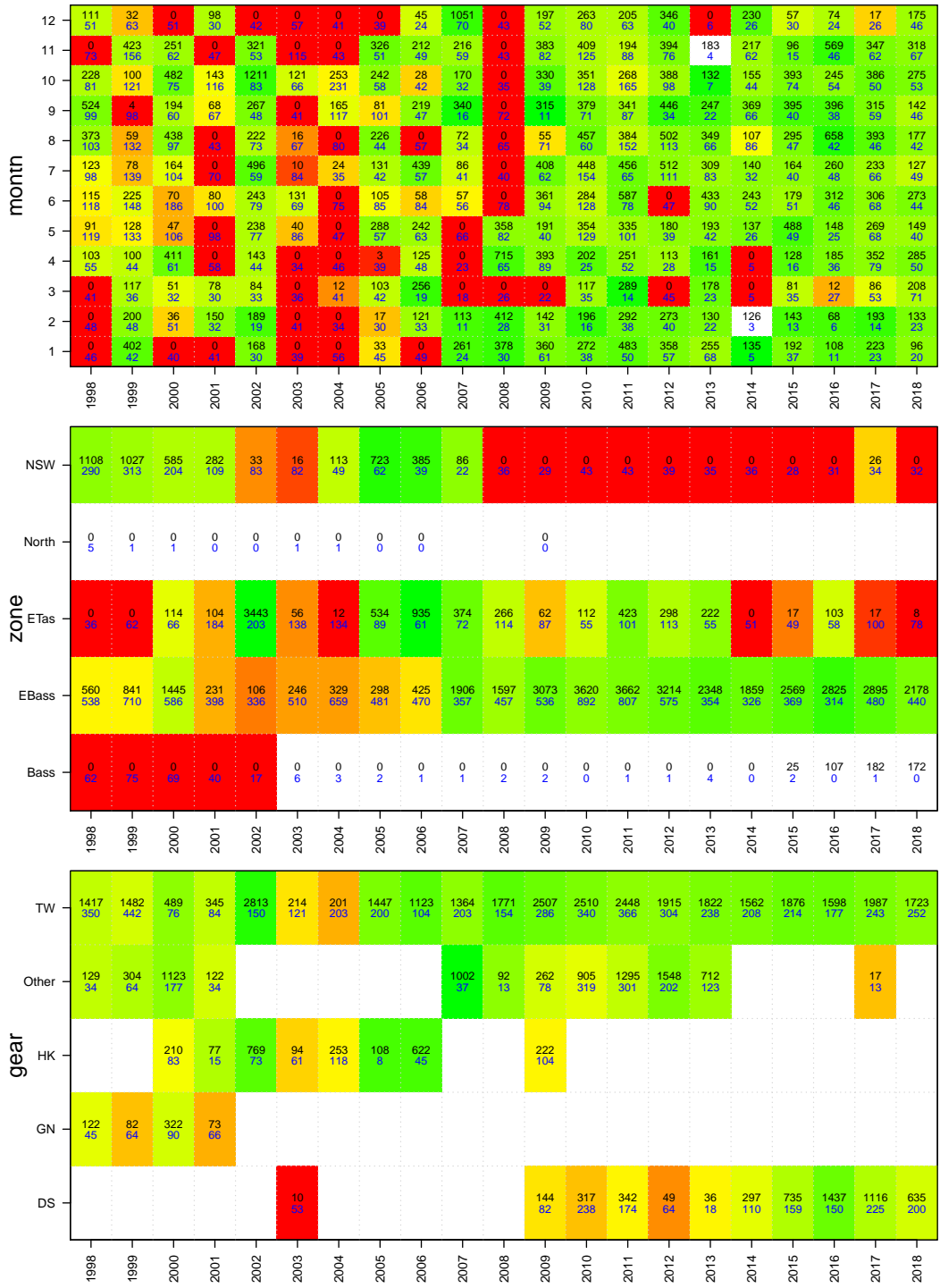
Age frequency



Pink Ling East

Port length data

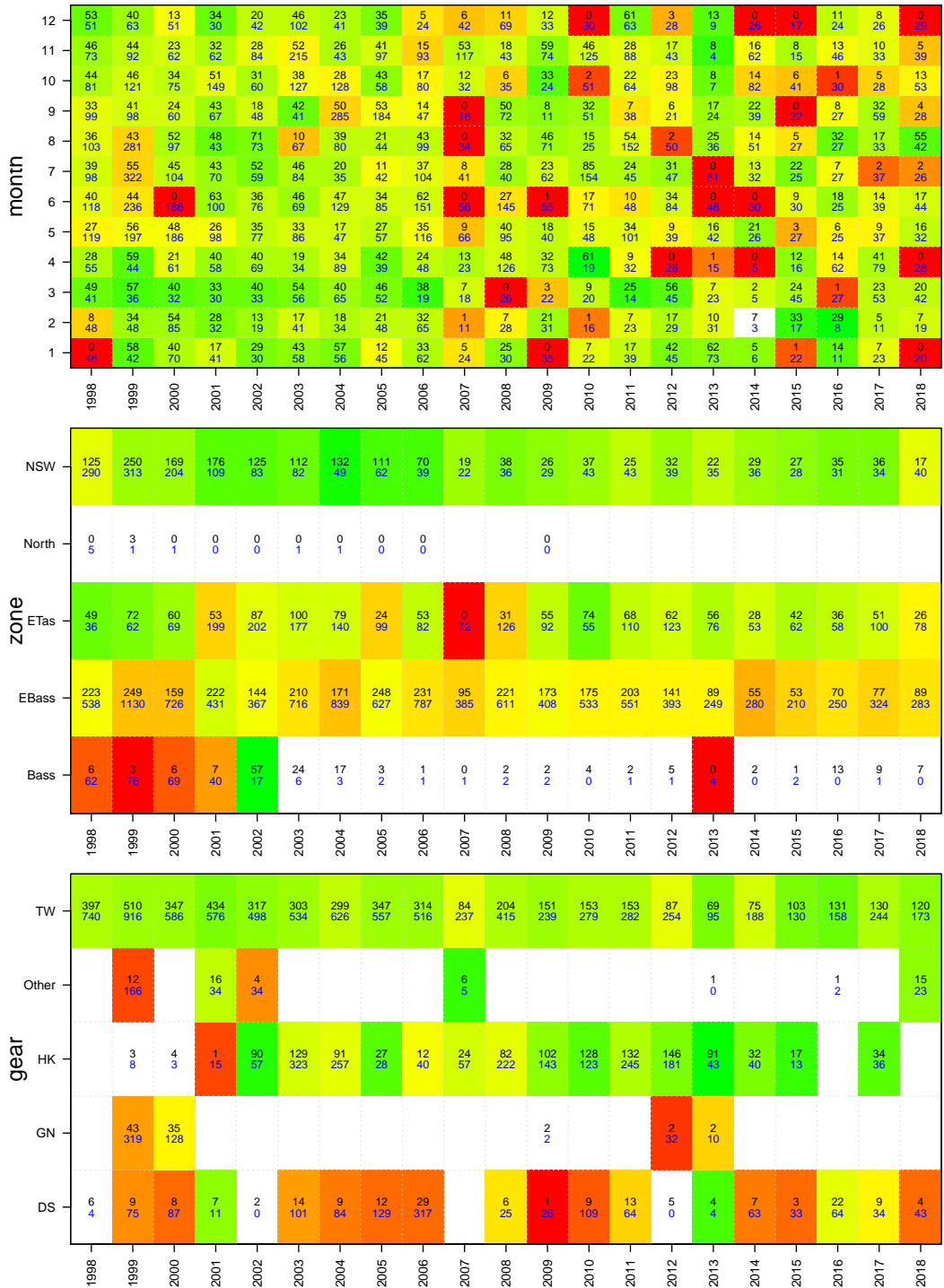
Wed Nov 06 17:13:23 2019



Pink Ling East

Onboard discard weight data

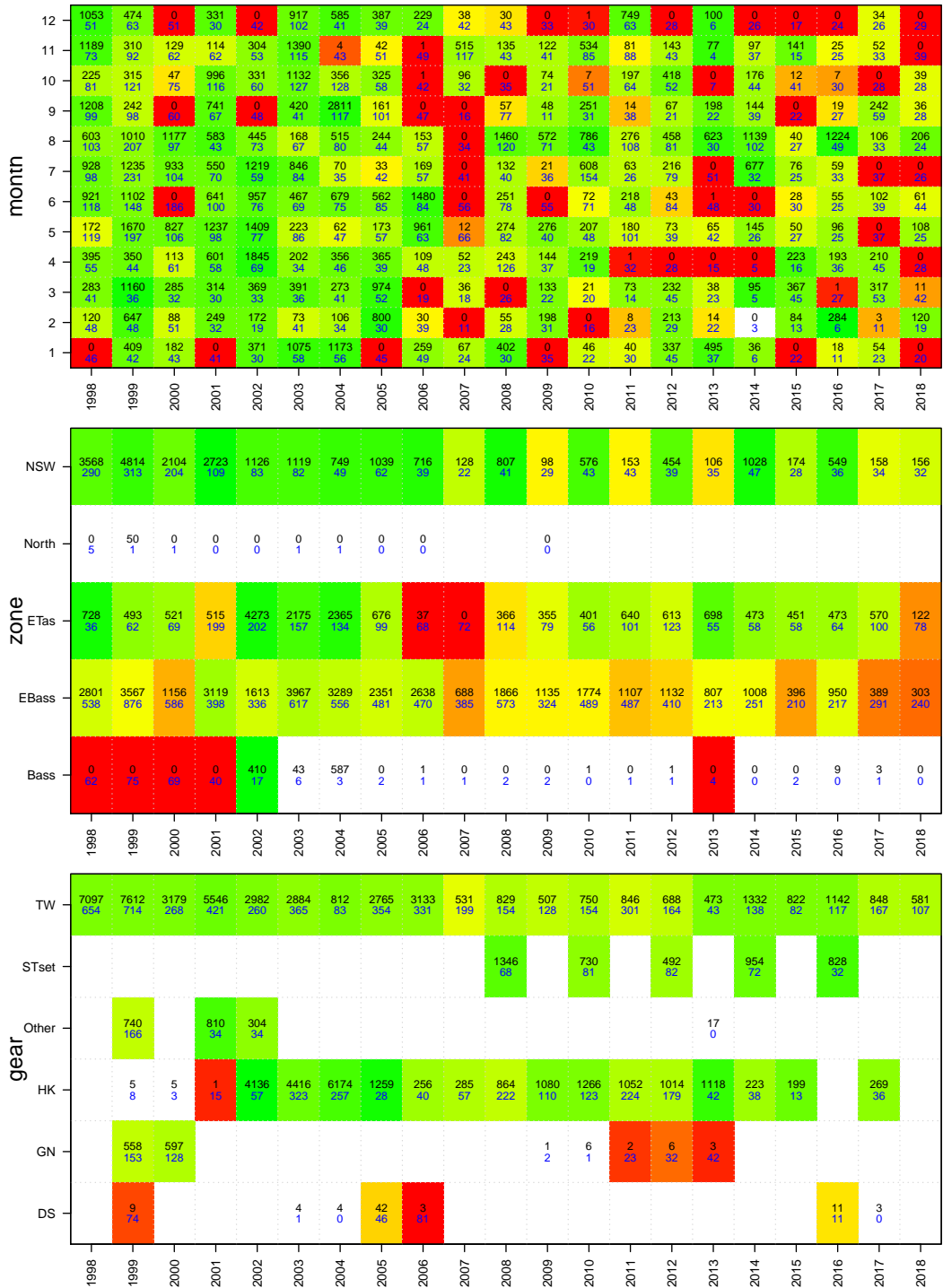
Wed Nov 06 17:13:23 2019



Pink Ling East

Onboard length data

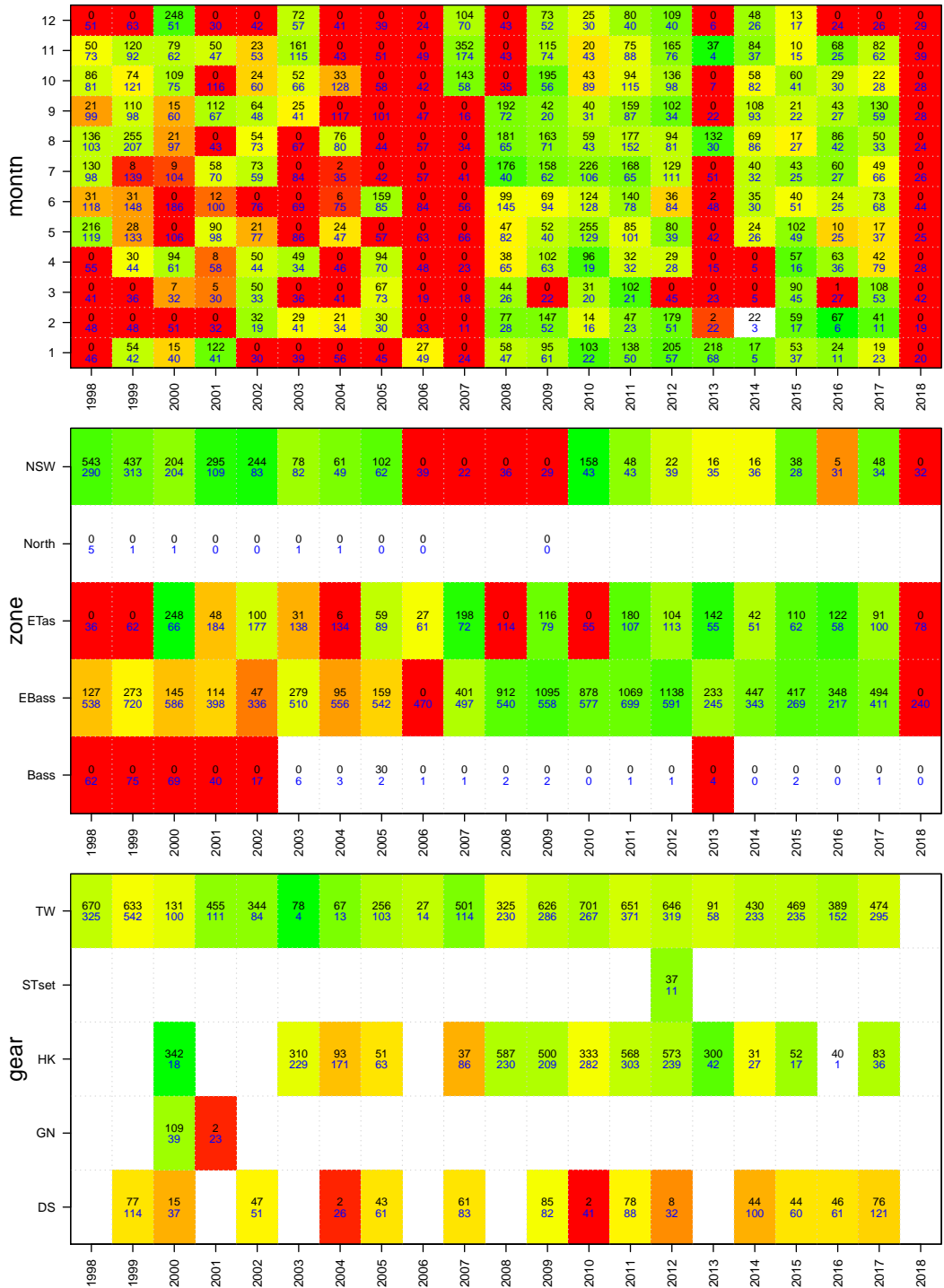
Wed Nov 06 17:13:23 2019



Pink Ling East

Age data

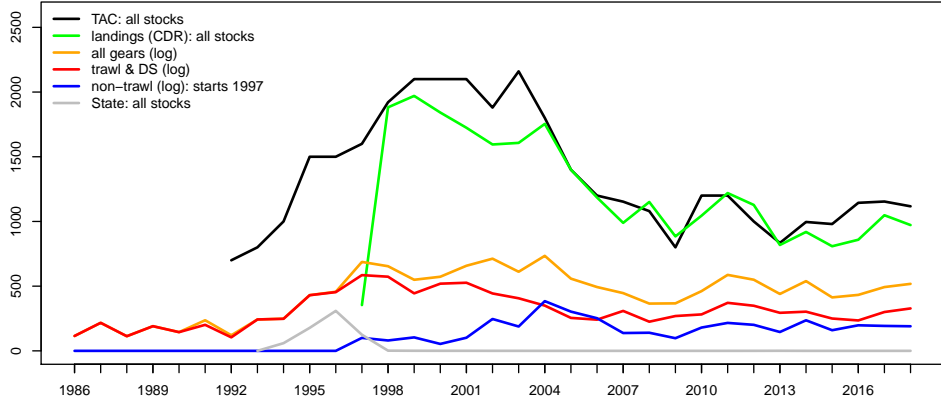
Wed Nov 06 17:13:23 2019



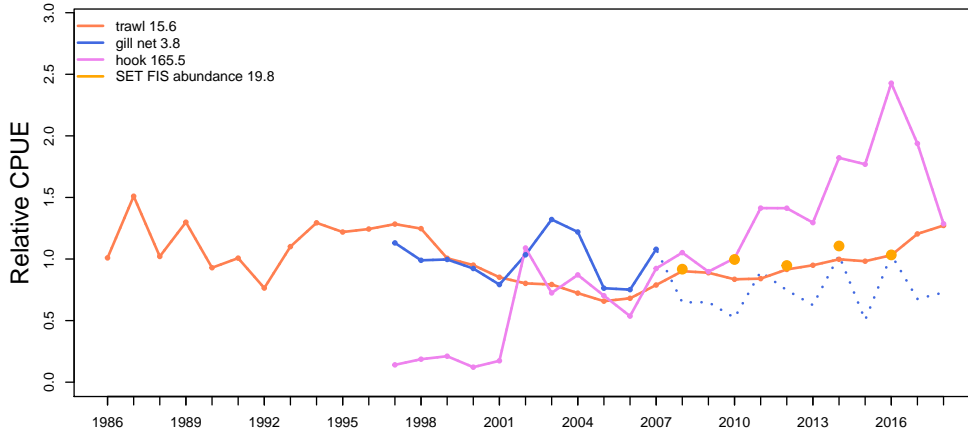
Pink Ling West

TAC and landings

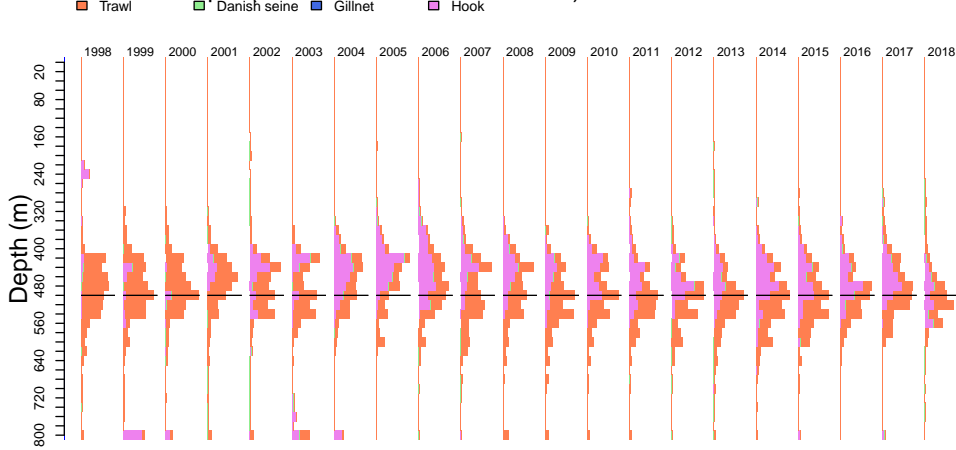
Wed Nov 06 17:13:26 2019
 region SEFGWEST unit code LIG sa code LIGW
 37228002
 start month 1



Geometric mean CPUE & SET FIS abundance



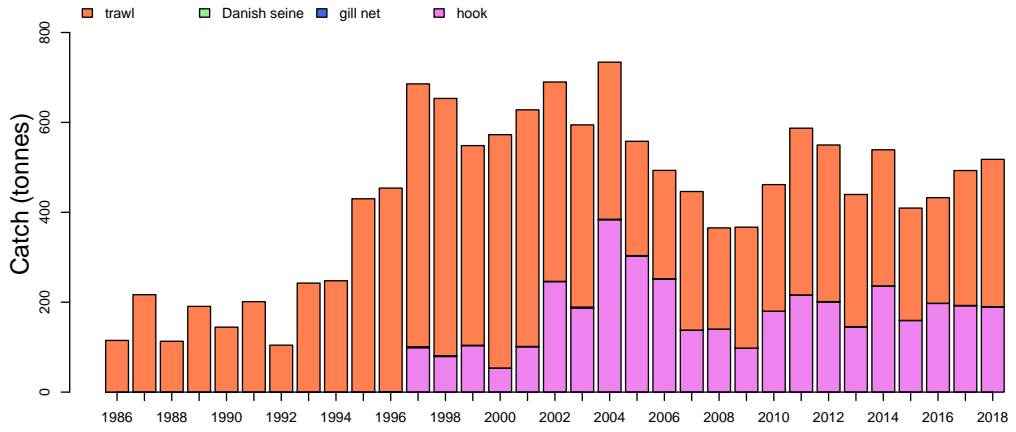
Catch at depth (non-trawl record starts 1997)



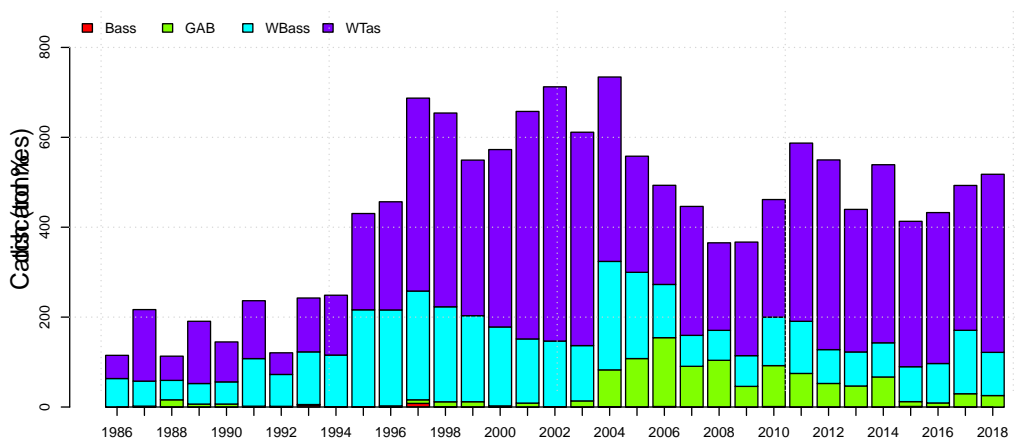
Pink Ling West

Wed Nov 06 17:13:33 2019

Catch by gear (non-trawl record starts 1997)



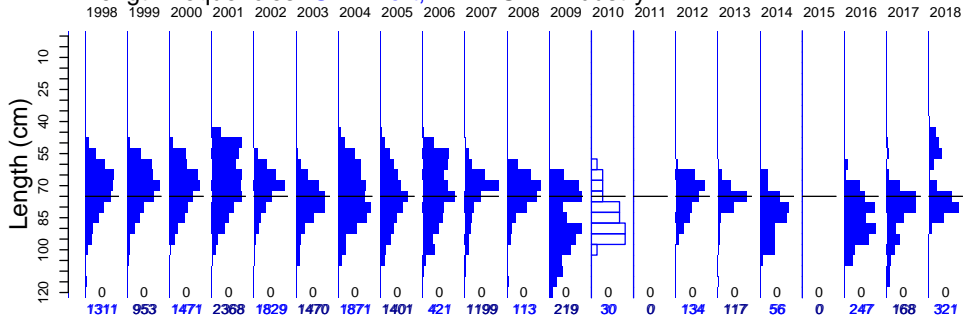
Discards



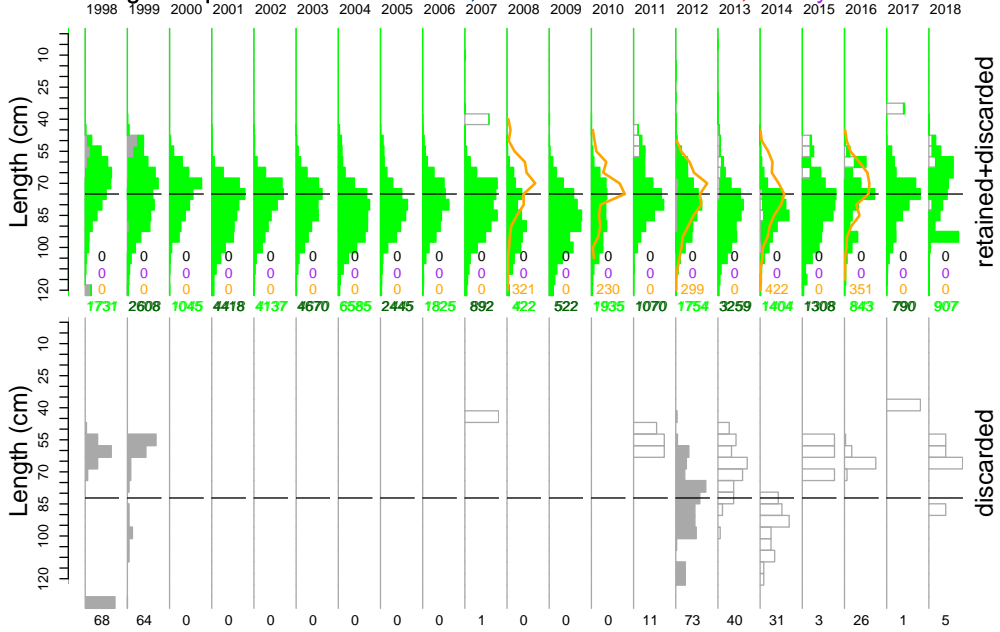
Pink Ling West

Wed Nov 06 17:13:33 2019

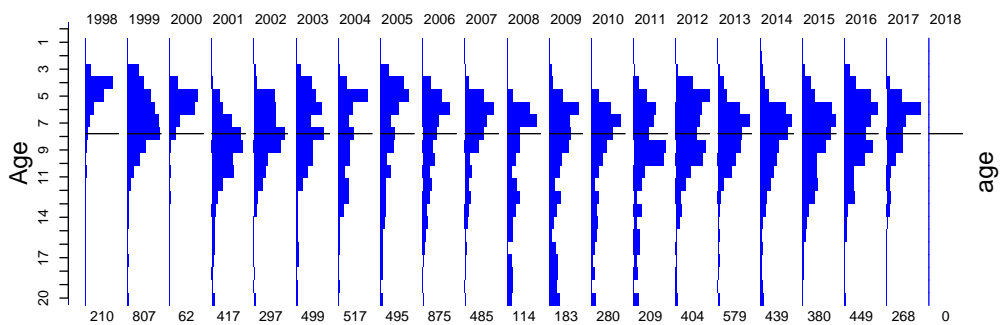
Length frequencies: ISMP Port, GAB Industry



Length frequencies: ISMP Onboard, SET FIS winter, GAB FIS Industry



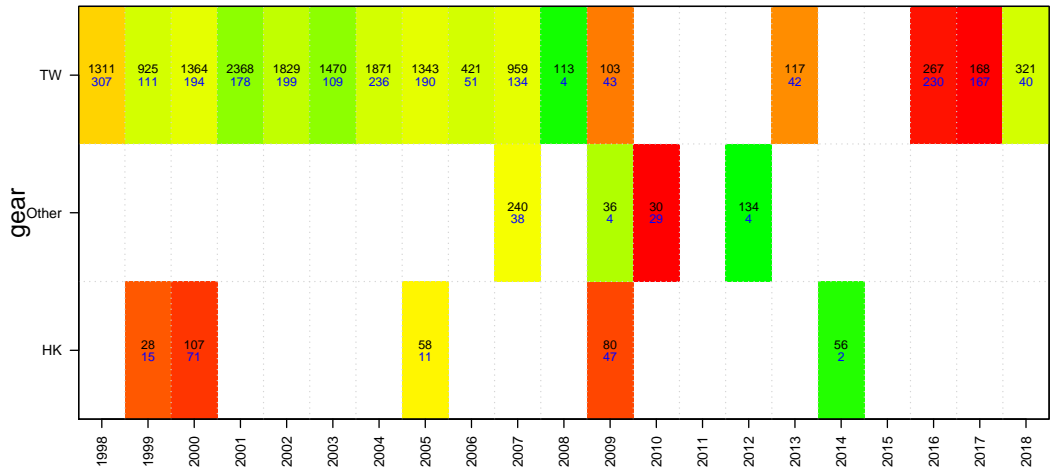
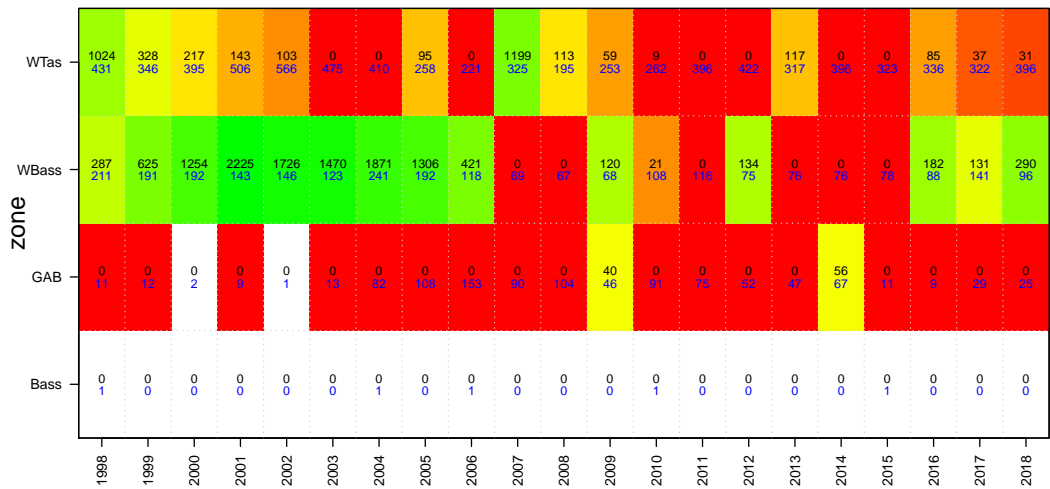
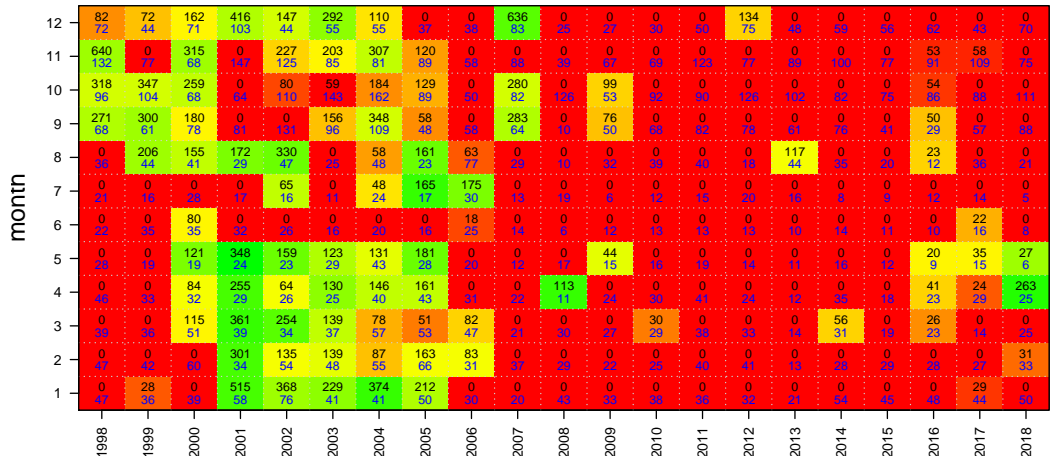
Age frequency



Pink Ling West

Port length data

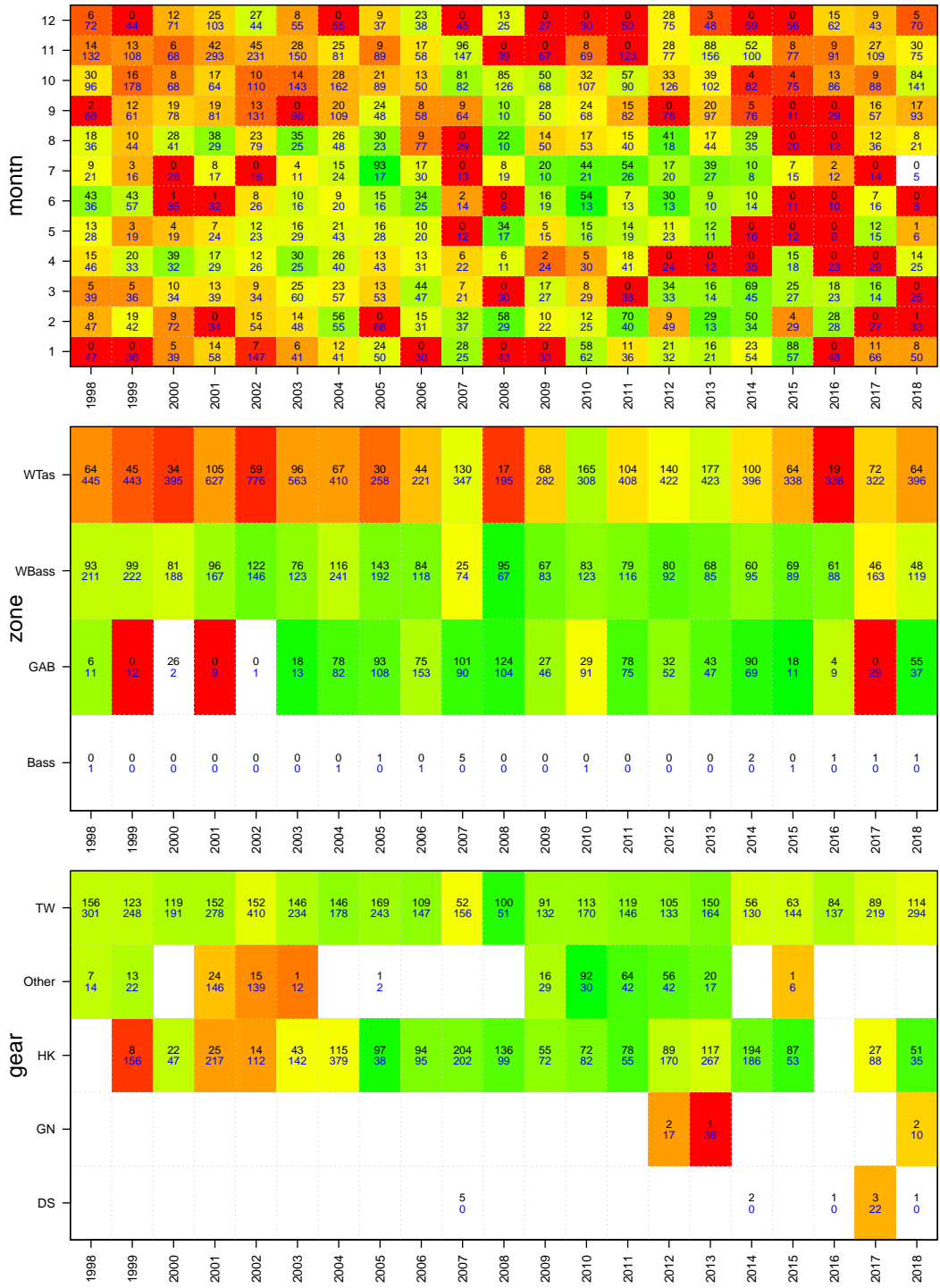
Wed Nov 06 17:13:35 2019



Pink Ling West

Onboard discard weight data

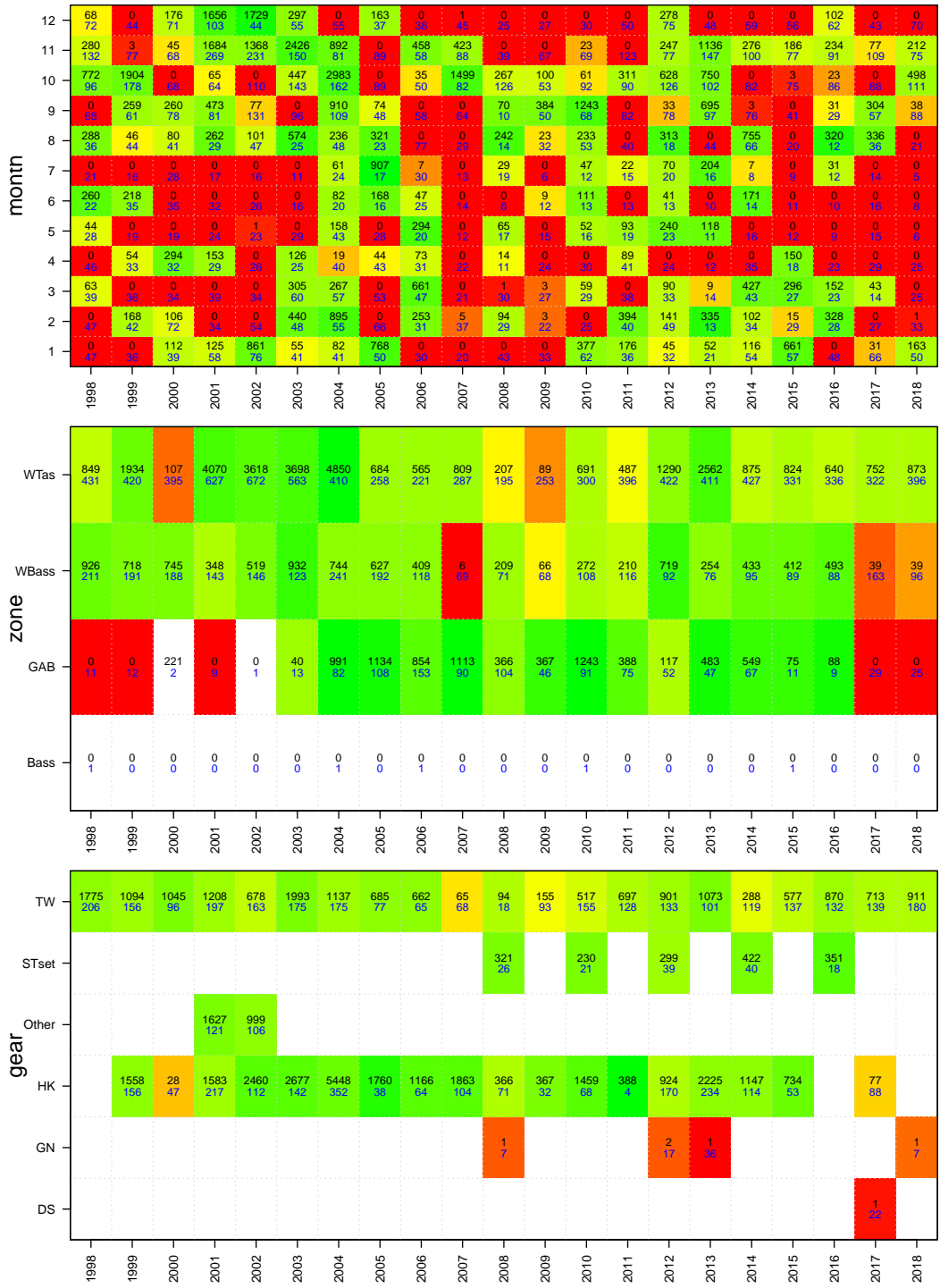
Wed Nov 06 17:13:35 2019



Pink Ling West

Onboard length data

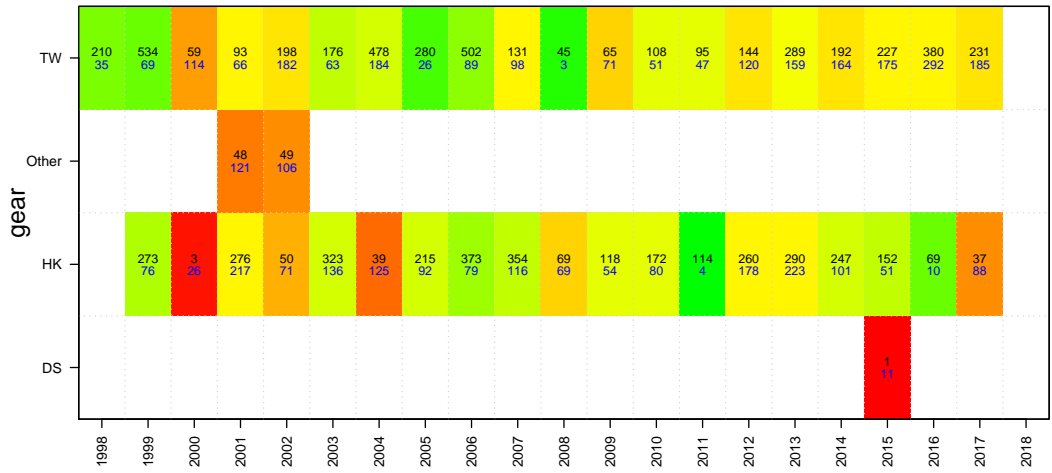
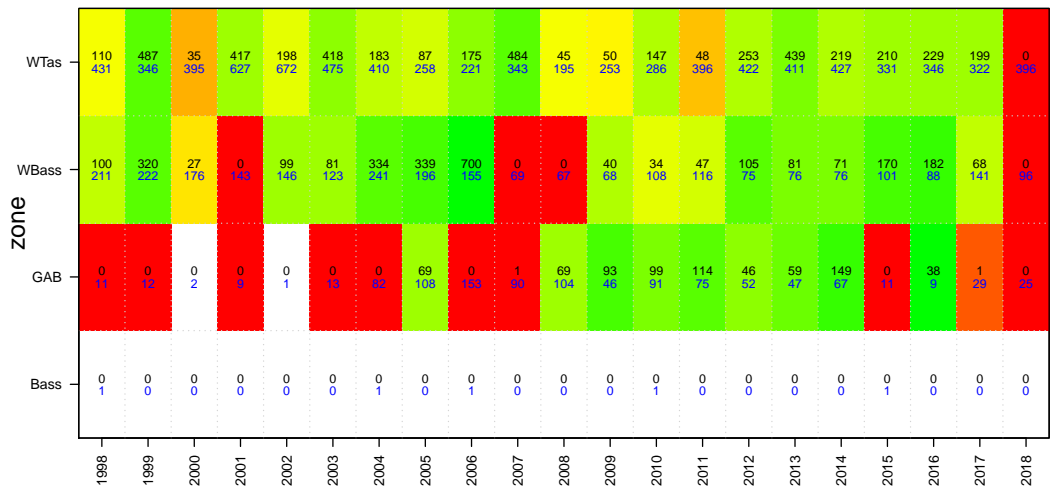
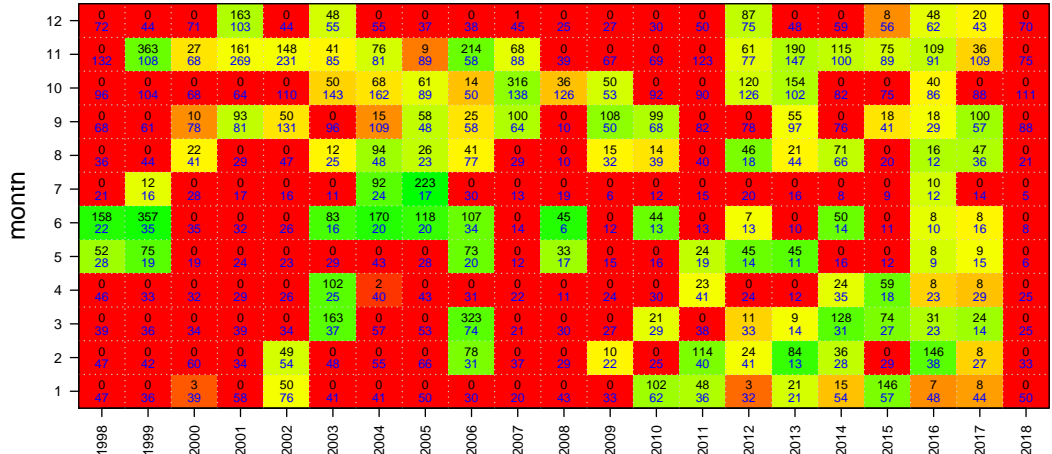
Wed Nov 06 17:13:35 2019



Pink Ling West

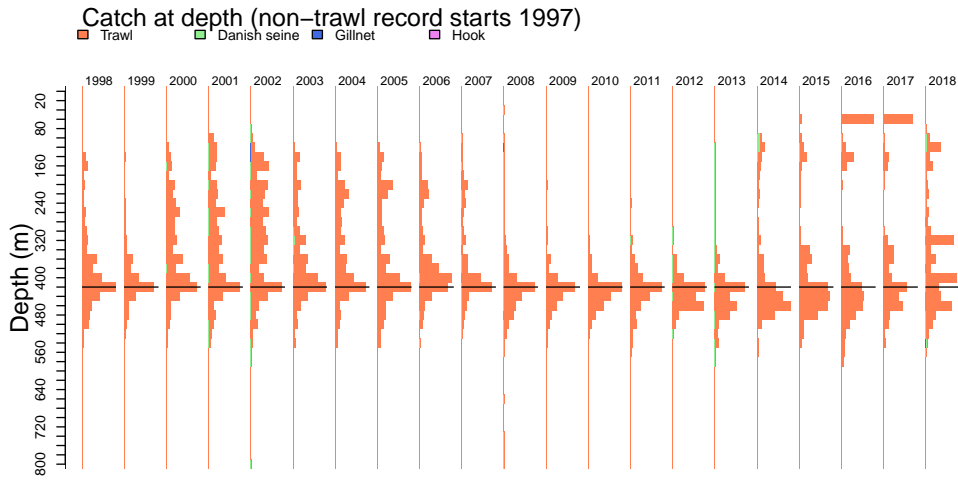
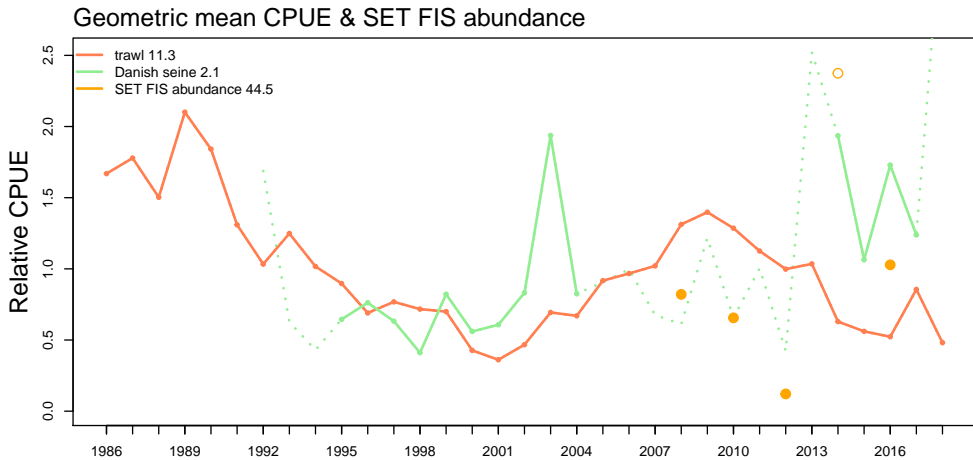
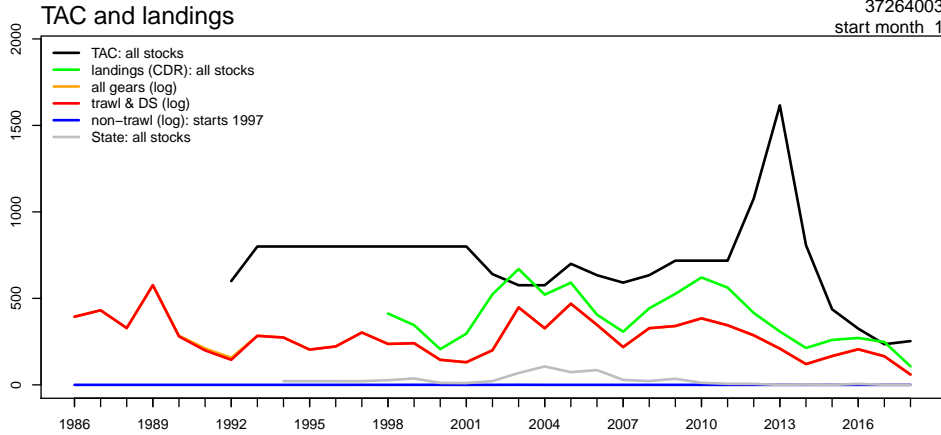
Age data

Wed Nov 06 17:13:35 2019



Mirror Dory East

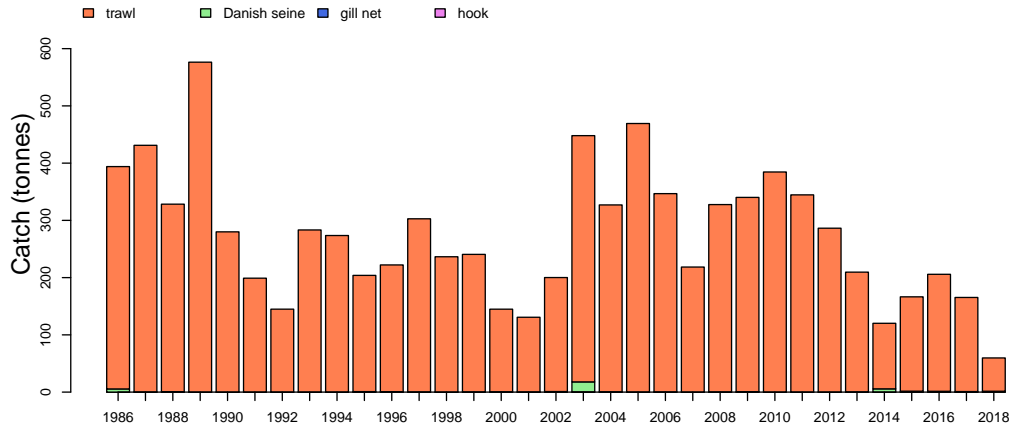
Wed Nov 06 17:13:38 2019
 region SEFEAST unit code DOM sa code DOME
 37264003
 start month 1



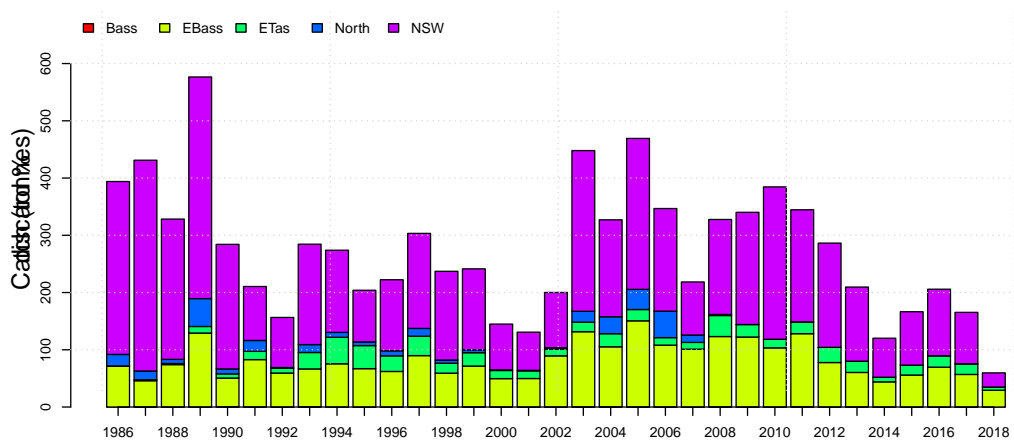
Mirror Dory East

Wed Nov 06 17:13:43 2019

Catch by gear (non-trawl record starts 1997)



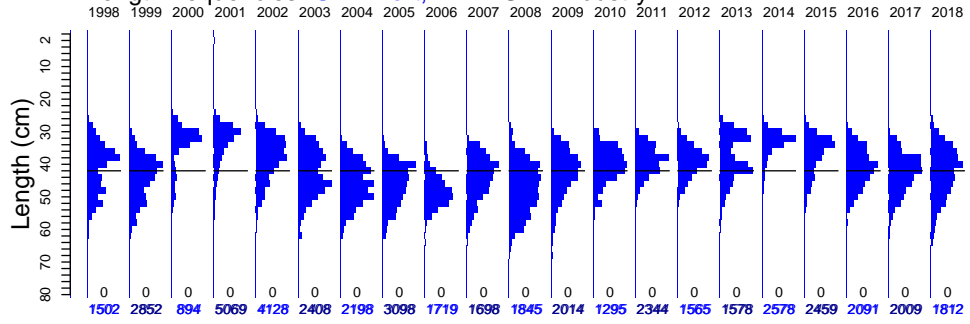
Discards



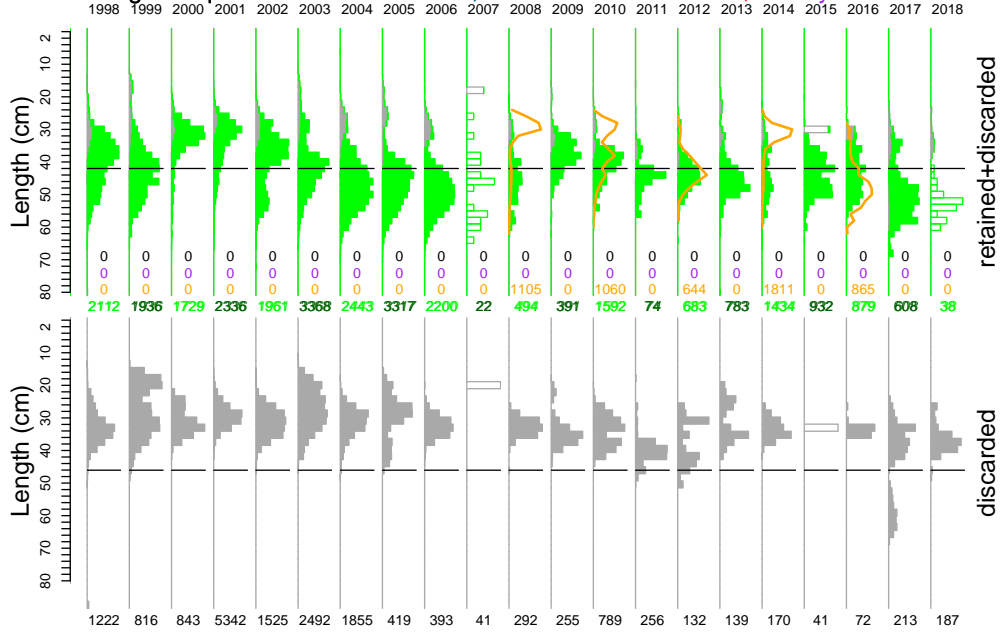
Mirror Dory East

Wed Nov 06 17:13:44 2019

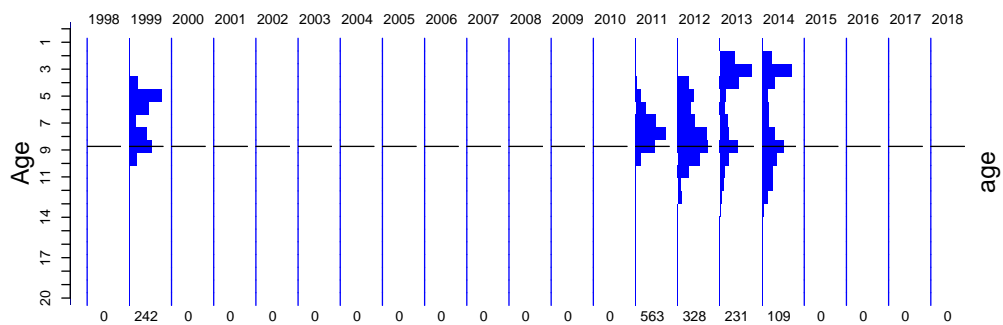
Length frequencies: ISMP Port, GAB Industry



Length frequencies: ISMP Onboard, SET FIS winter, GAB FIS, Industry



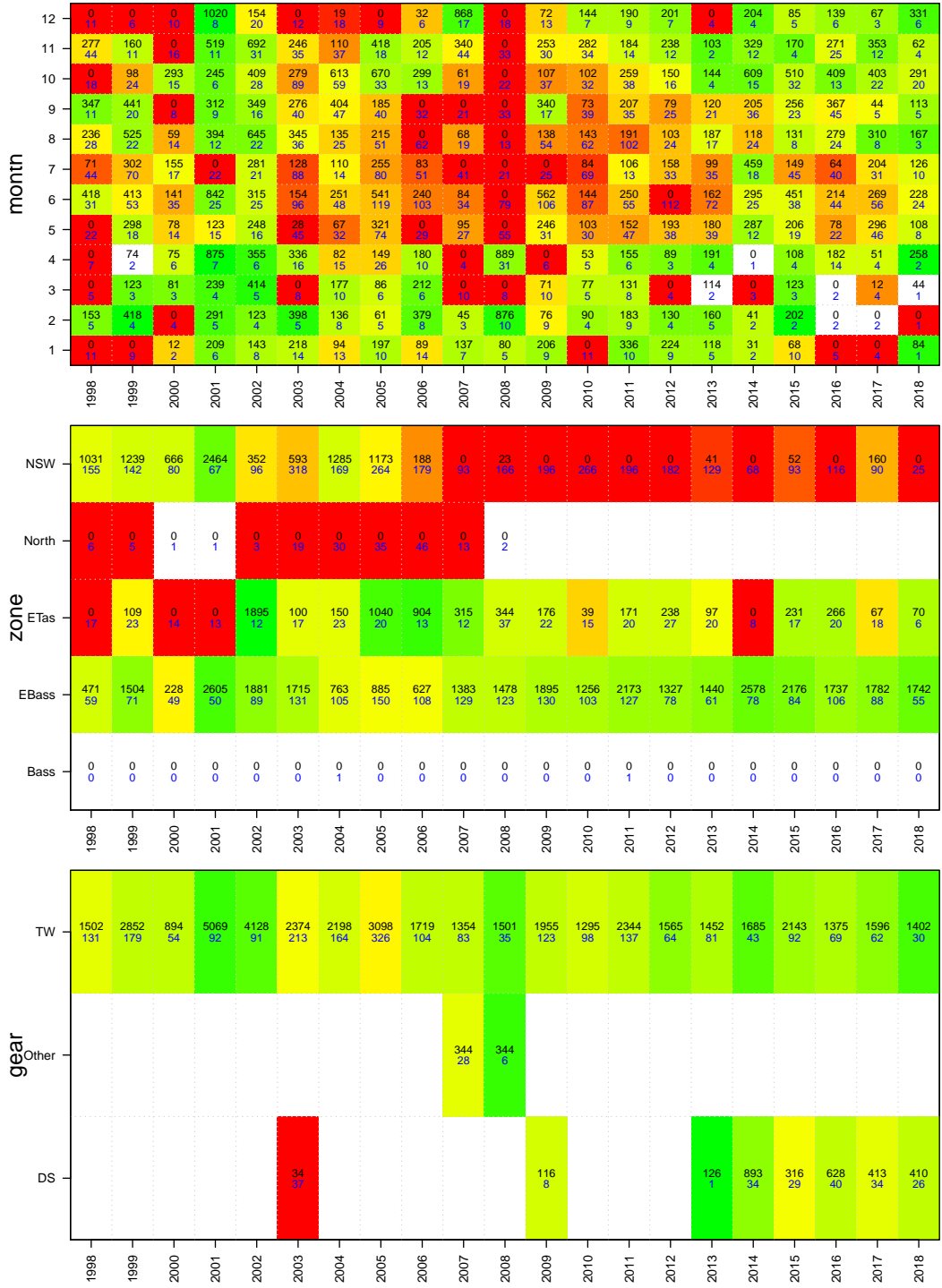
Age frequency



Mirror Dory East

Port length data

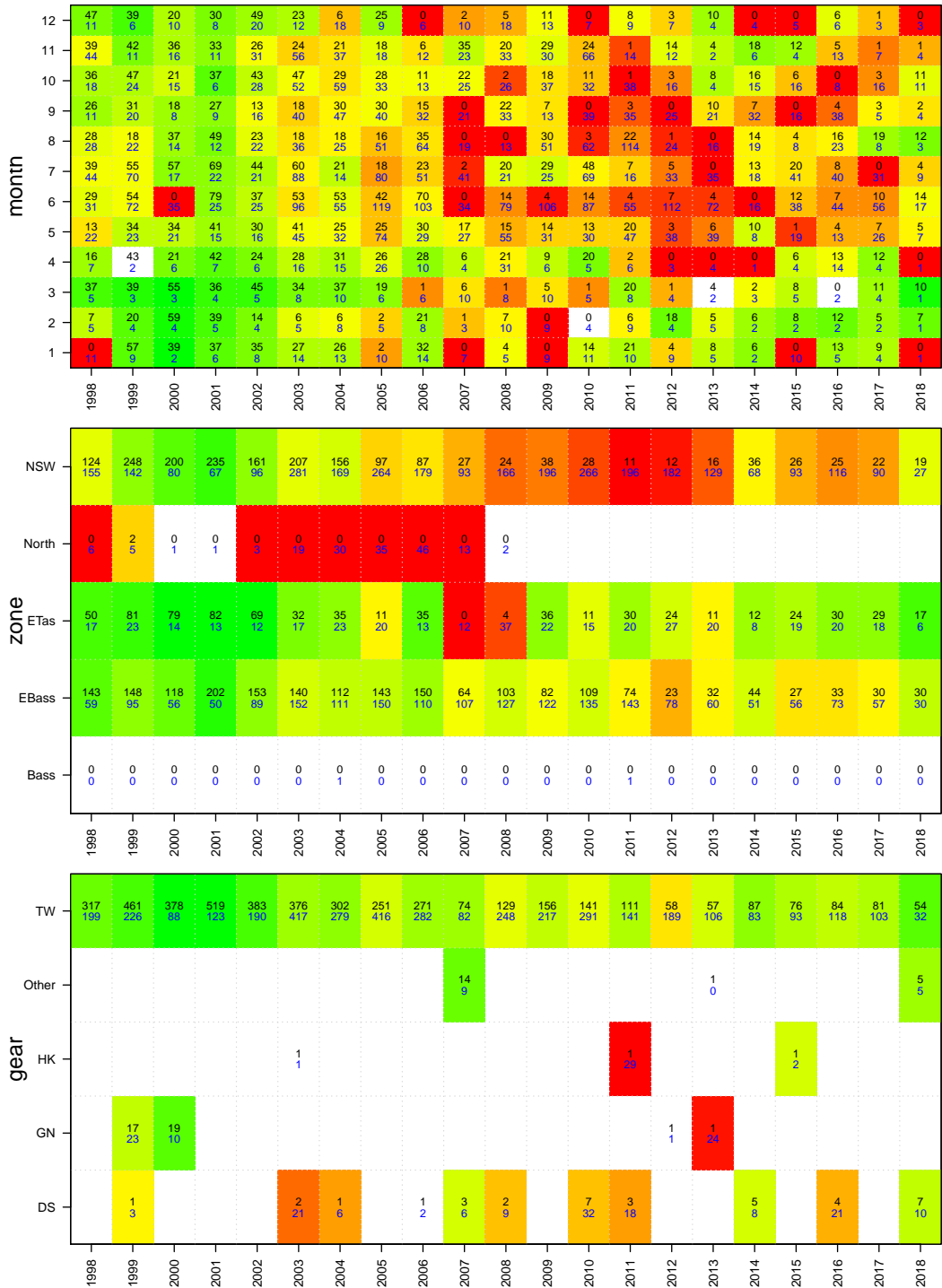
Wed Nov 06 17:13:44 2019



Mirror Dory East

Onboard discard weight data

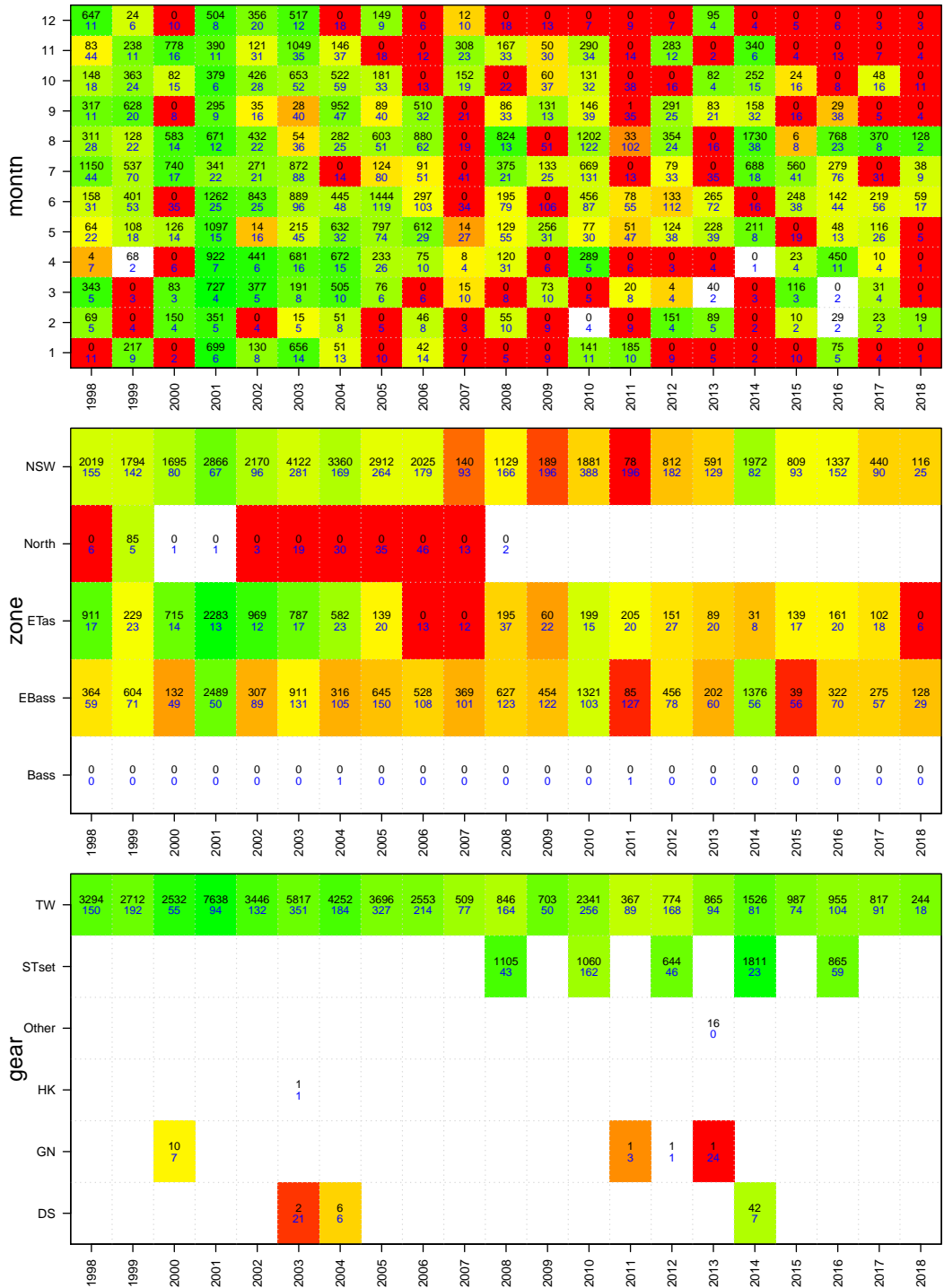
Wed Nov 06 17:13:44 2019



Mirror Dory East

Onboard length data

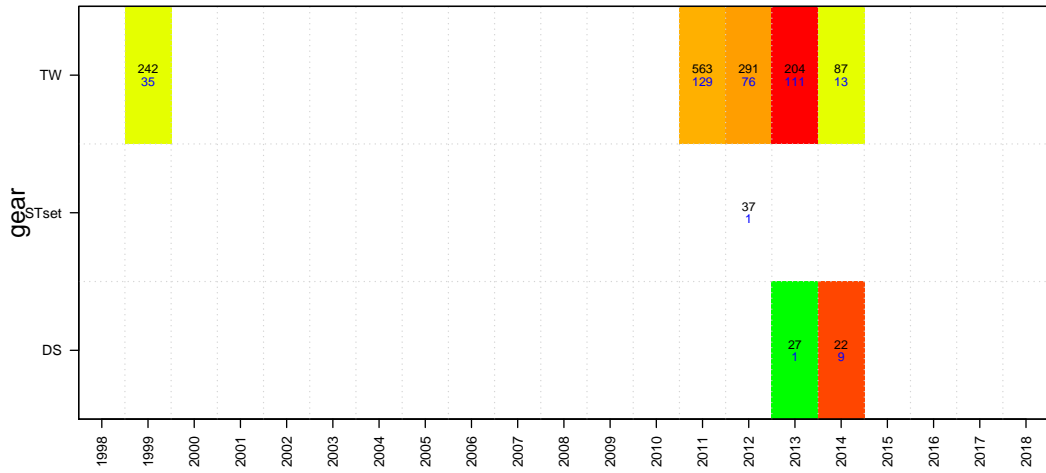
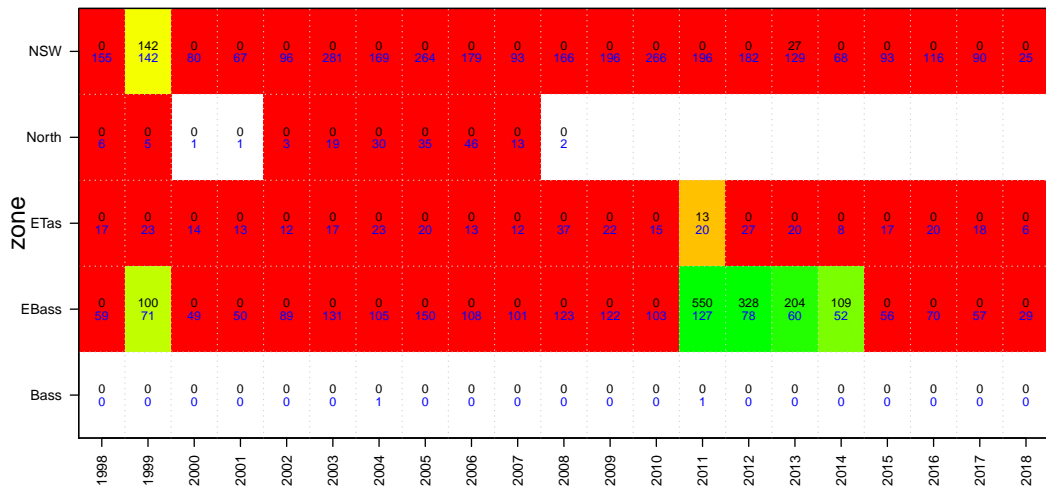
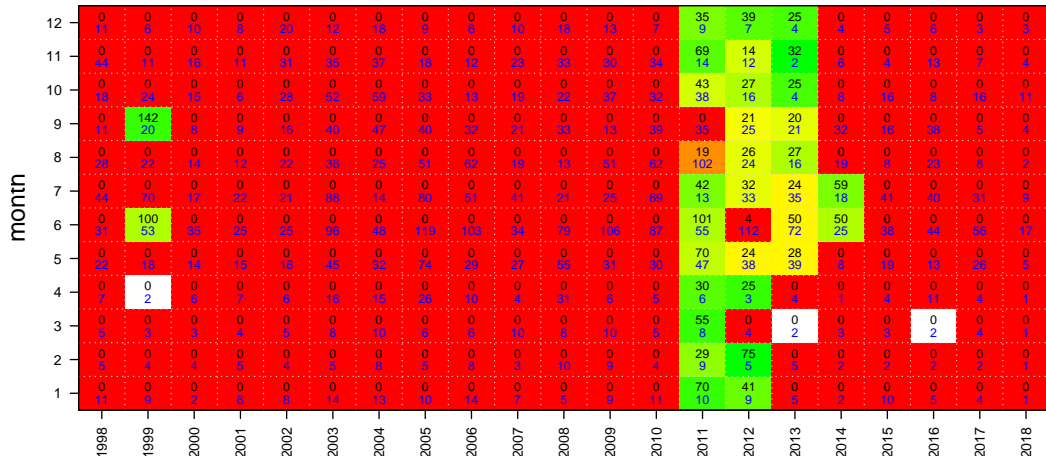
Wed Nov 06 17:13:44 2019



Mirror Dory East

Age data

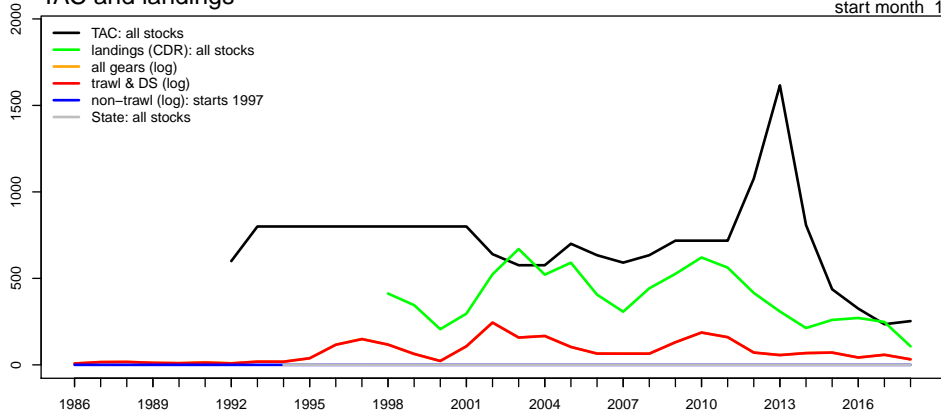
Wed Nov 06 17:13:44 2019



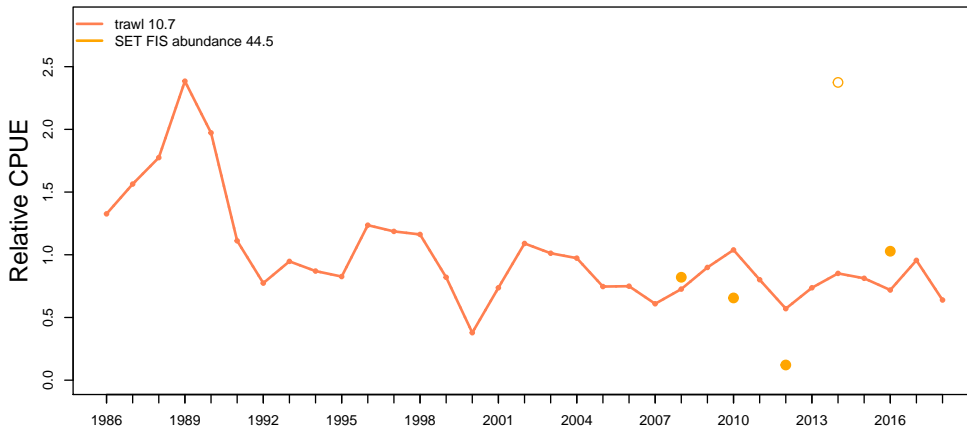
Mirror Dory West

TAC and landings

Wed Nov 06 17:13:45 2019
 region SEFWEST unit code DOM sa code DOMW
 37264003
 start month 1



Geometric mean CPUE & SET FIS abundance



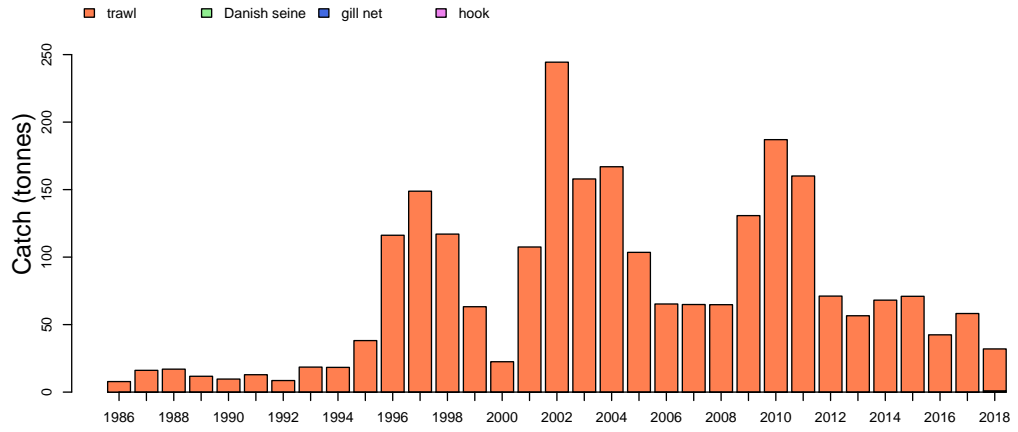
Catch at depth (non-trawl record starts 1997)



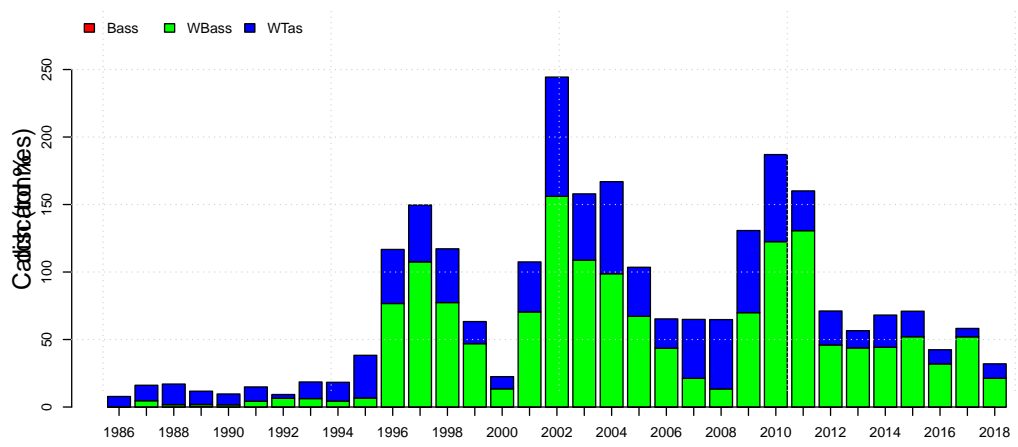
Mirror Dory West

Wed Nov 06 17:13:46 2019

Catch by gear (non-trawl record starts 1997)



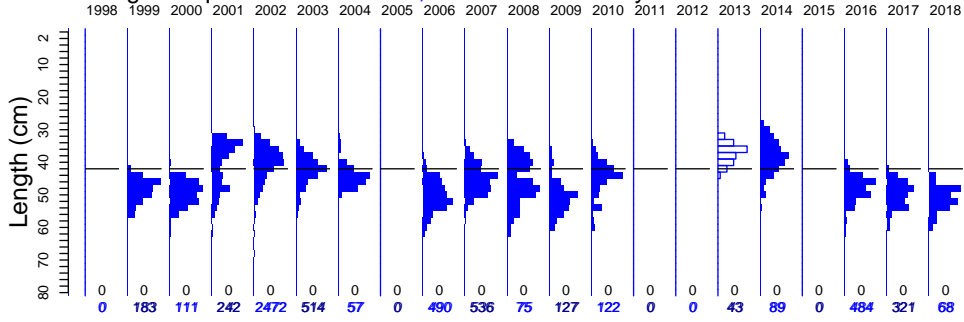
Discards



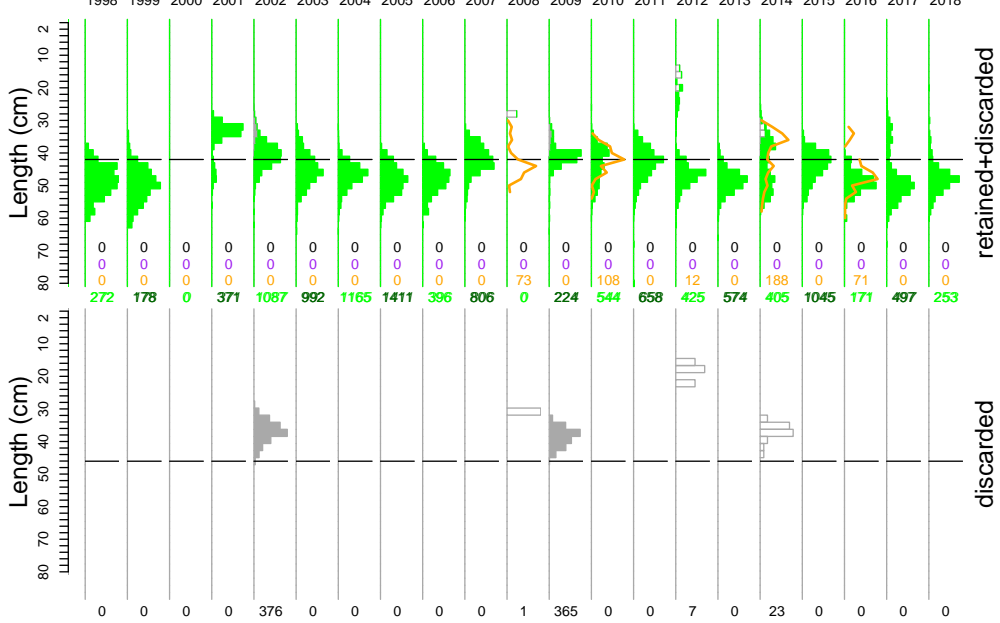
Mirror Dory West

Wed Nov 06 17:13:46 2019

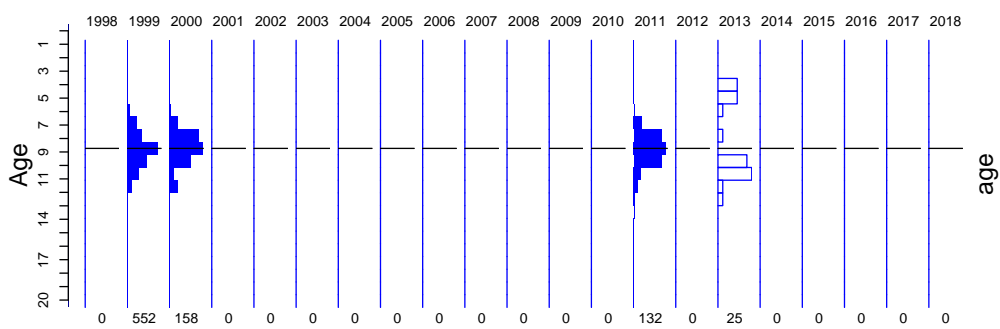
Length frequencies: ISMP Port, GAB Industry



Length frequencies: ISMP Onboard, SET FIS winter, GAB FIS Industry



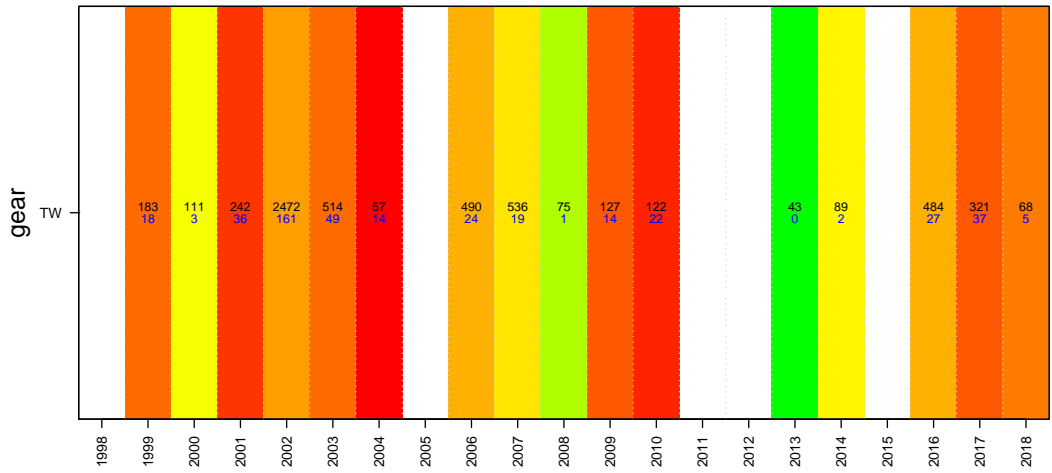
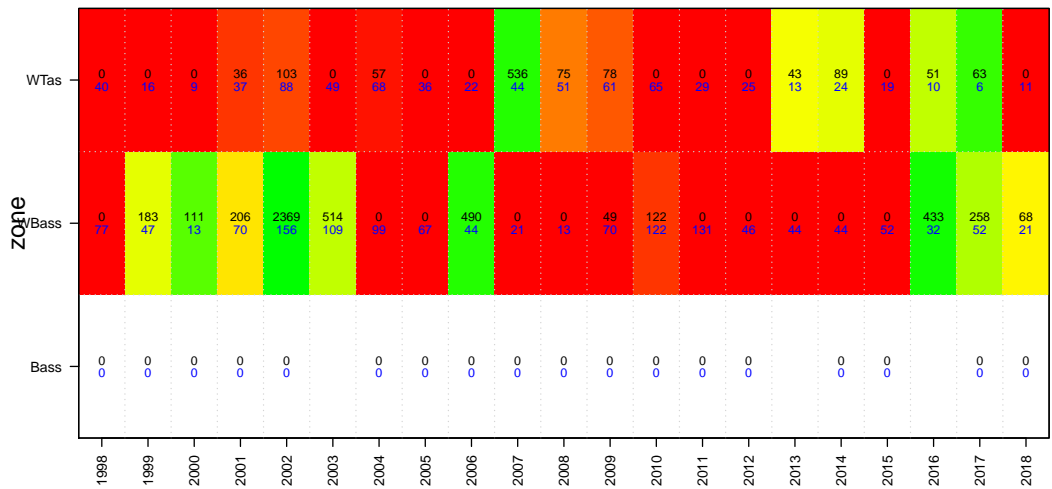
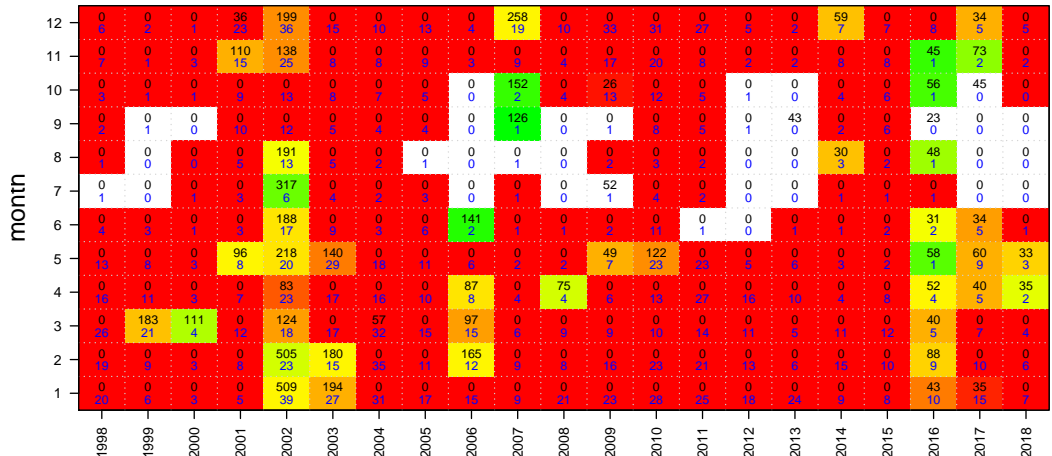
Age frequency



Mirror Dory West

Port length data

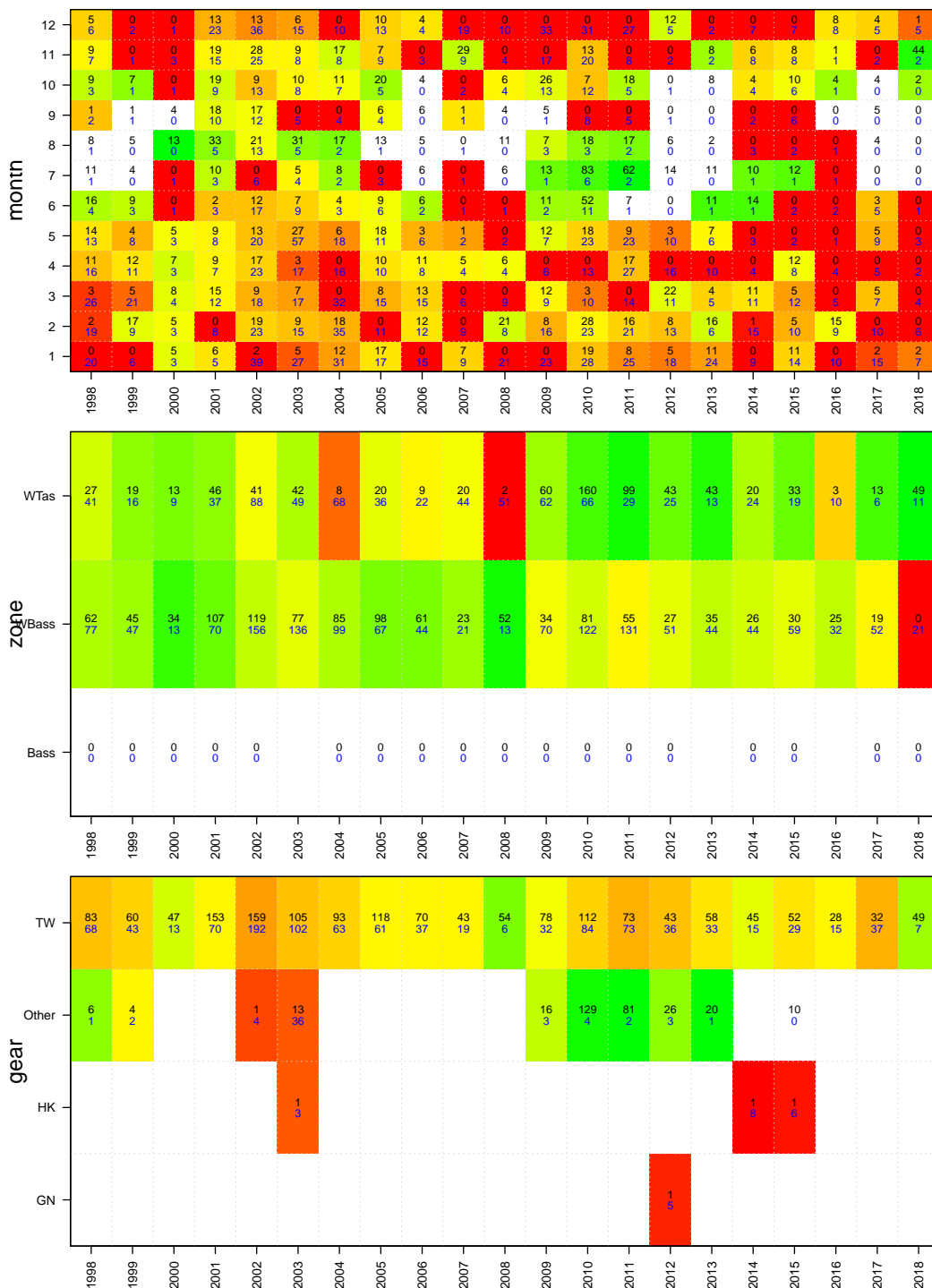
Wed Nov 06 17:13:46 2019



Mirror Dory West

Onboard discard weight data

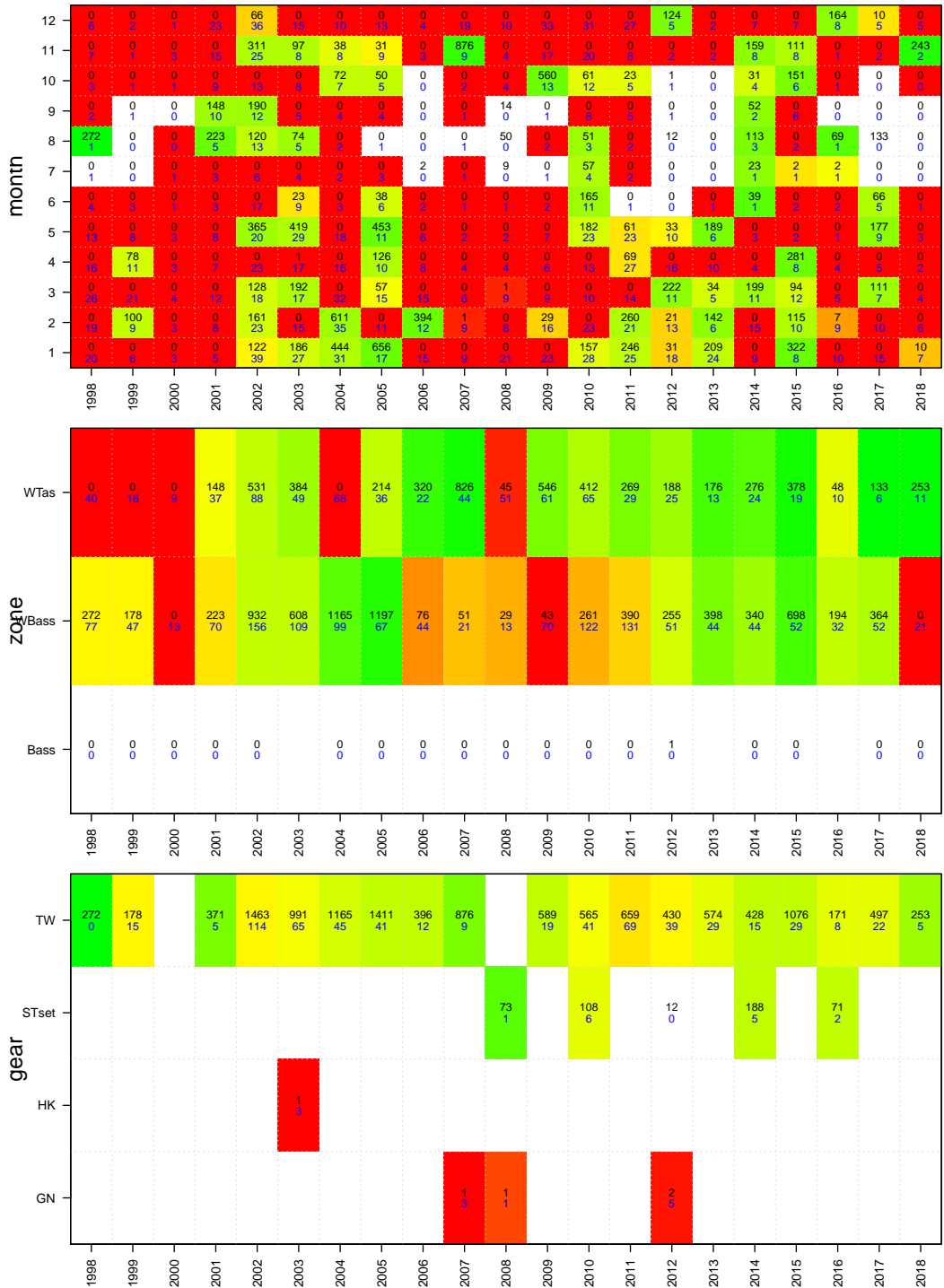
Wed Nov 06 17:13:46 2019



Mirror Dory West

Onboard length data

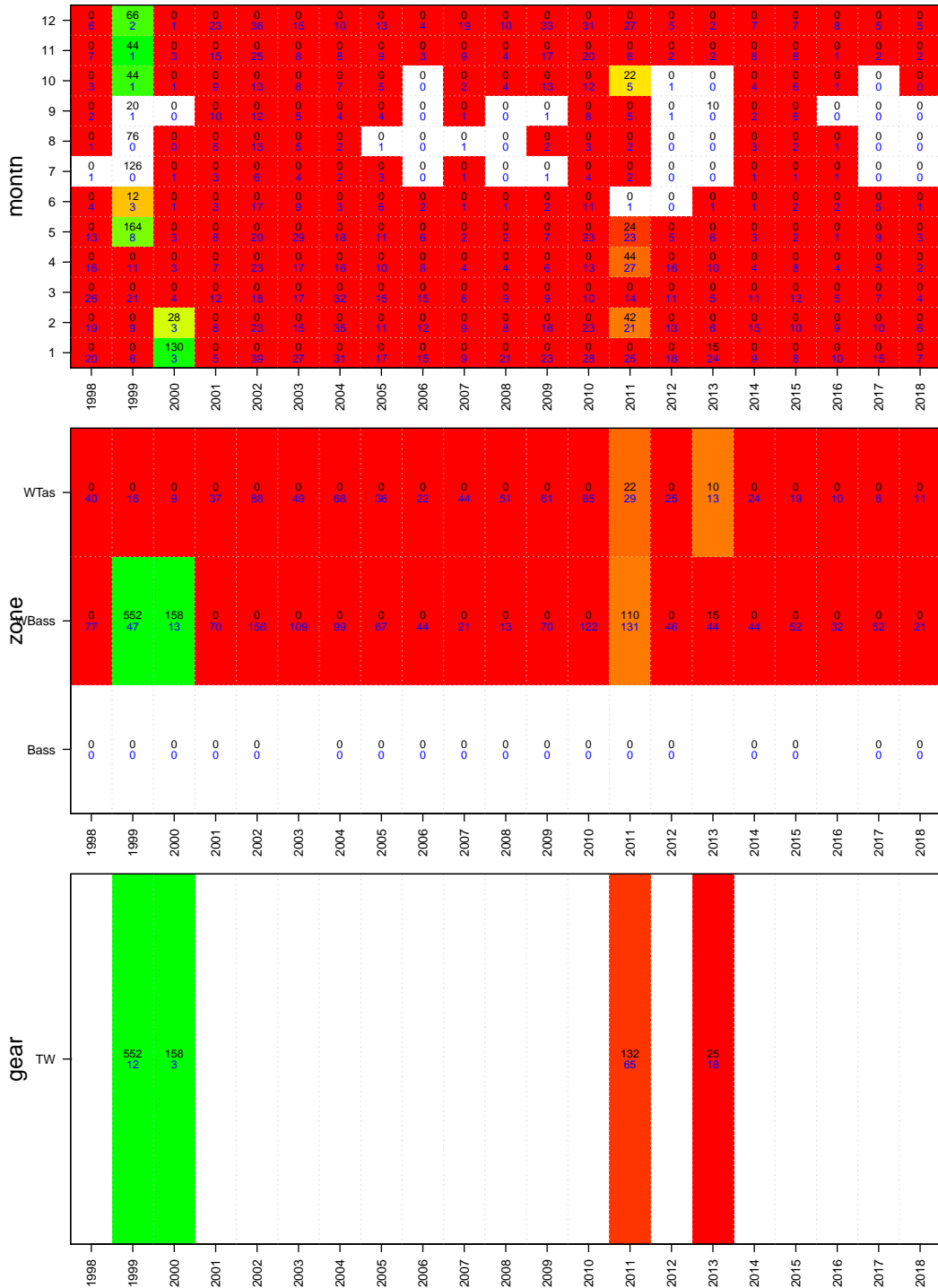
Wed Nov 06 17:13:46 2019



Mirror Dory West

Age data

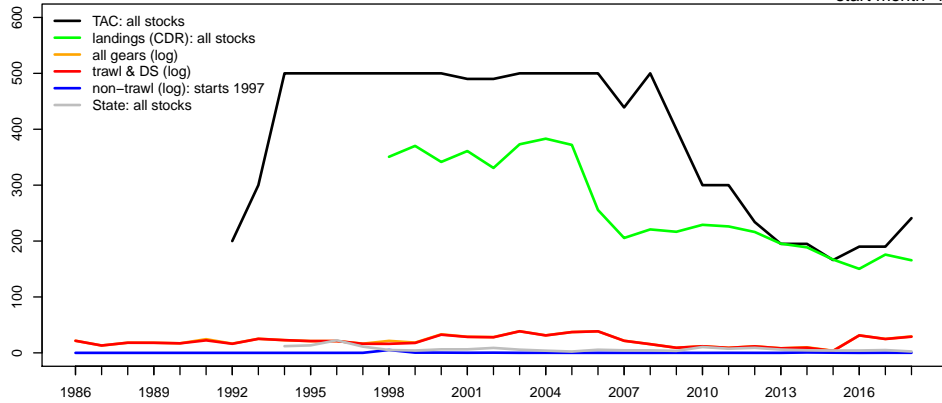
Wed Nov 06 17:13:46 2019



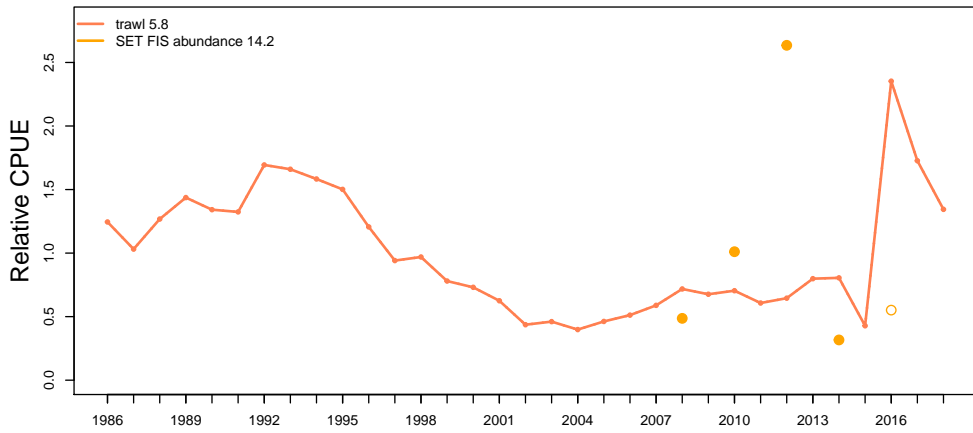
Ocean Perch Inshore

TAC and landings

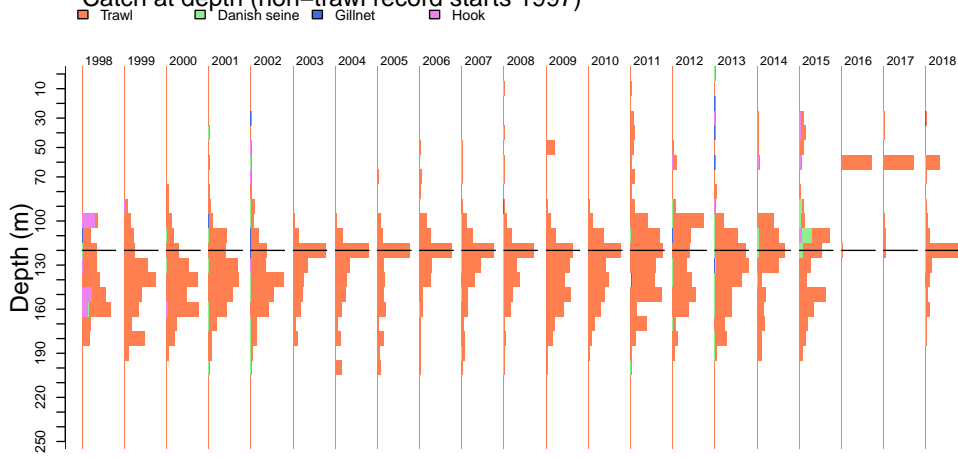
Wed Nov 06 17:13:48 2019
 region SET unit code REG sa code REI
 37287001 37287901 37287093
 start month 1



Geometric mean CPUE & SET FIS abundance



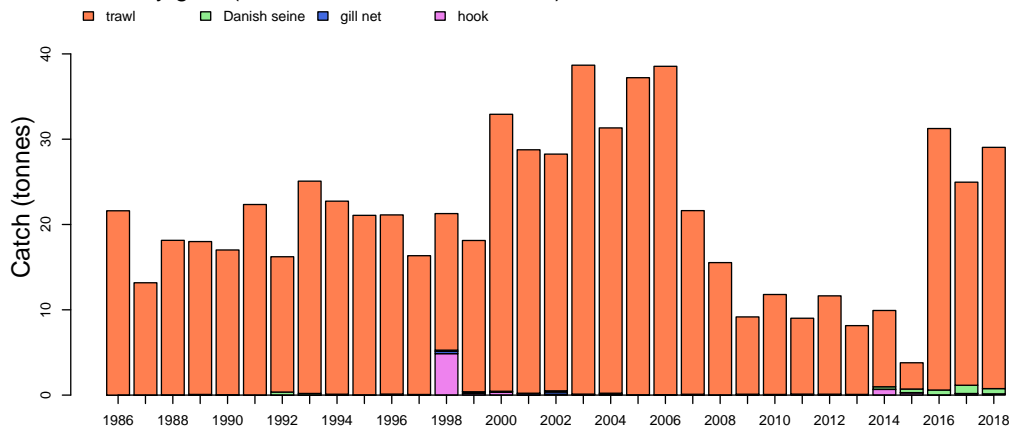
Catch at depth (non-trawl record starts 1997)



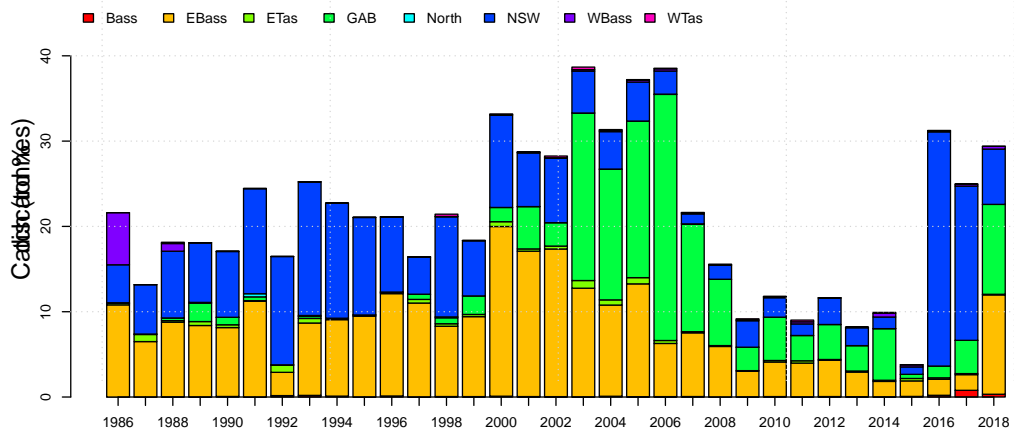
Ocean Perch Inshore

Wed Nov 06 17:13:51 2019

Catch by gear (non-trawl record starts 1997)



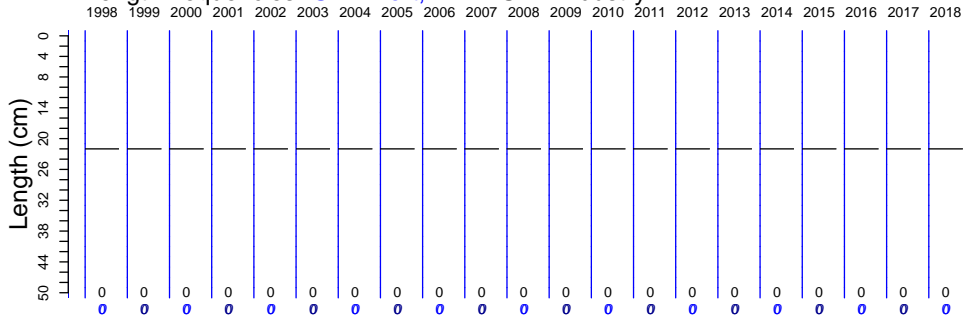
Discards



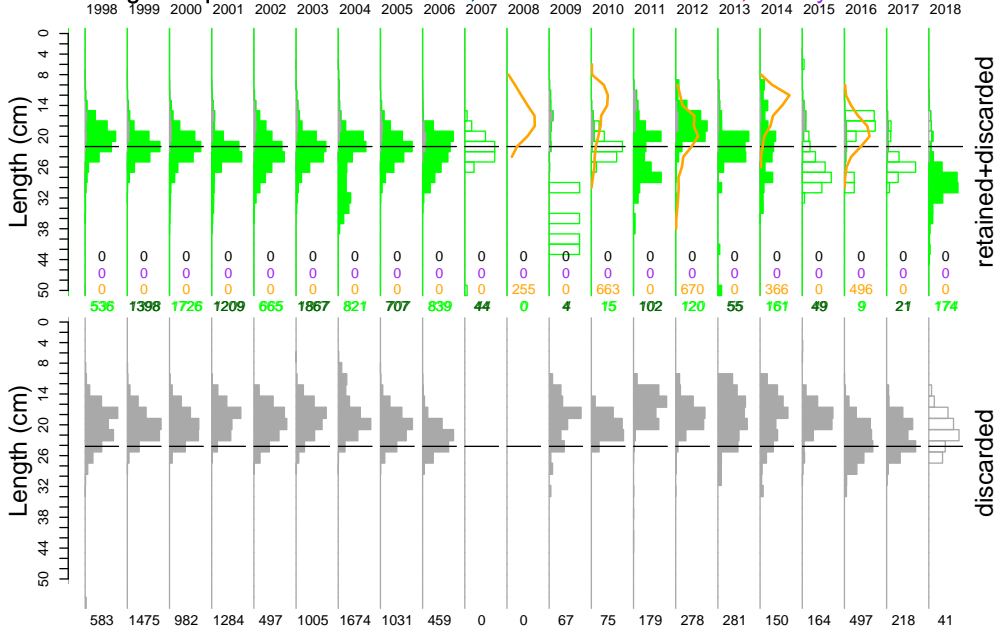
Ocean Perch Inshore

Wed Nov 06 17:13:51 2019

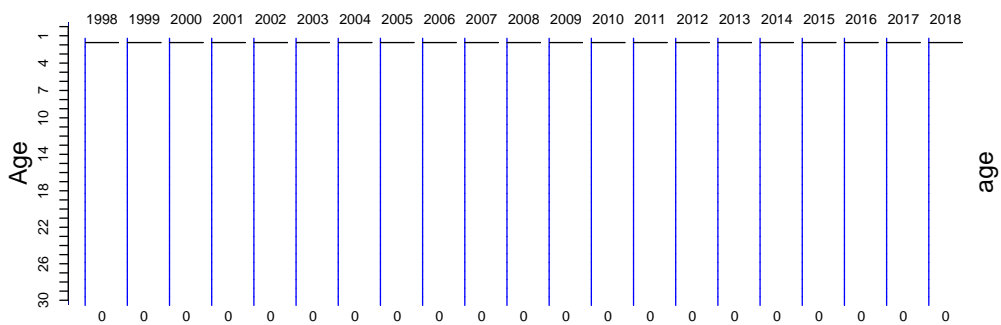
Length frequencies: ISMP Port, GAB Industry



Length frequencies: ISMP Onboard, SET FIS winter, GAB FIS, Industry

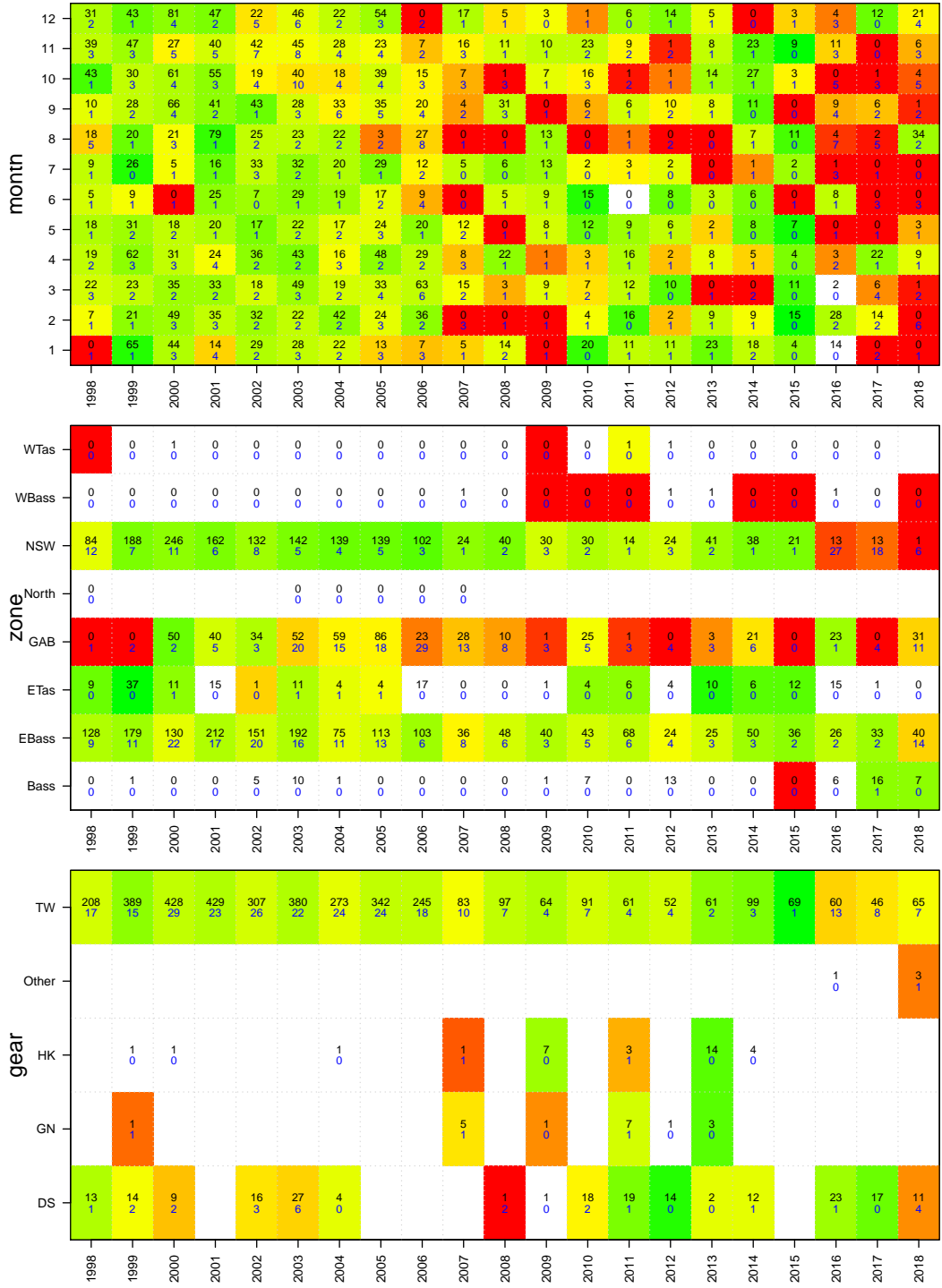


Age frequency



Ocean Perch Inshore Onboard discard weight data

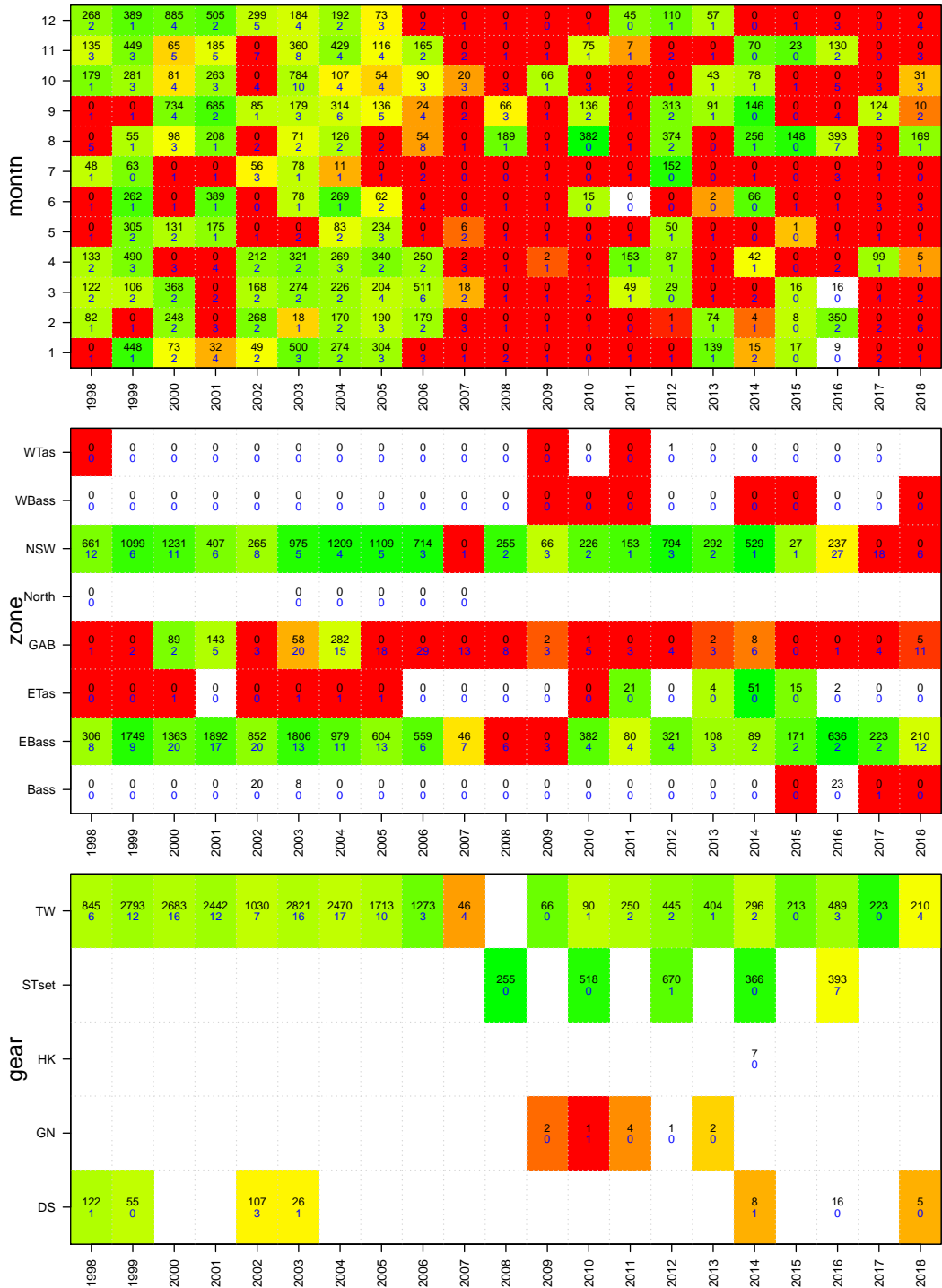
Wed Nov 06 17:13:51 2019



Ocean Perch Inshore

Onboard length data

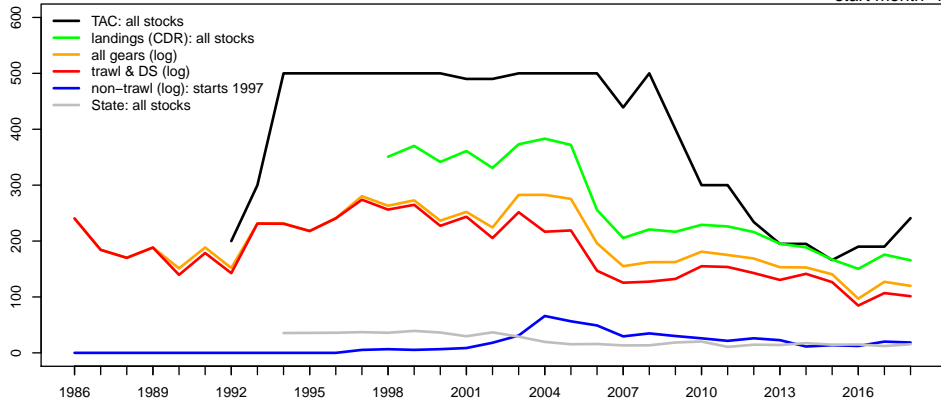
Wed Nov 06 17:13:51 2019



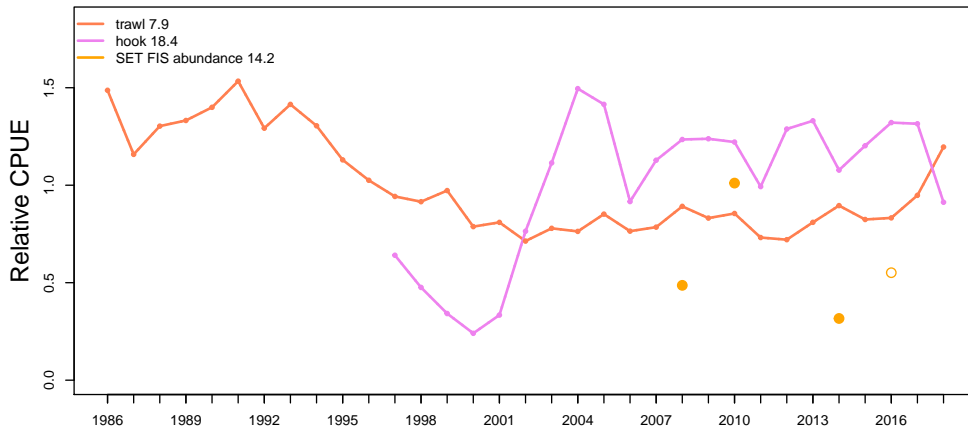
Ocean Perch Offshore

TAC and landings

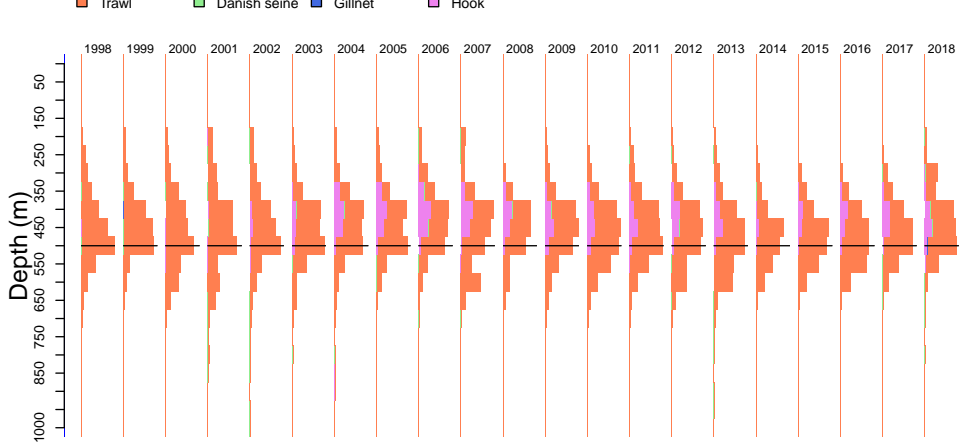
Wed Nov 06 17:13:55 2019
 region SET unit code REG sa code REO
 37287001 37287901 37287093
 start month 1



Geometric mean CPUE & SET FIS abundance



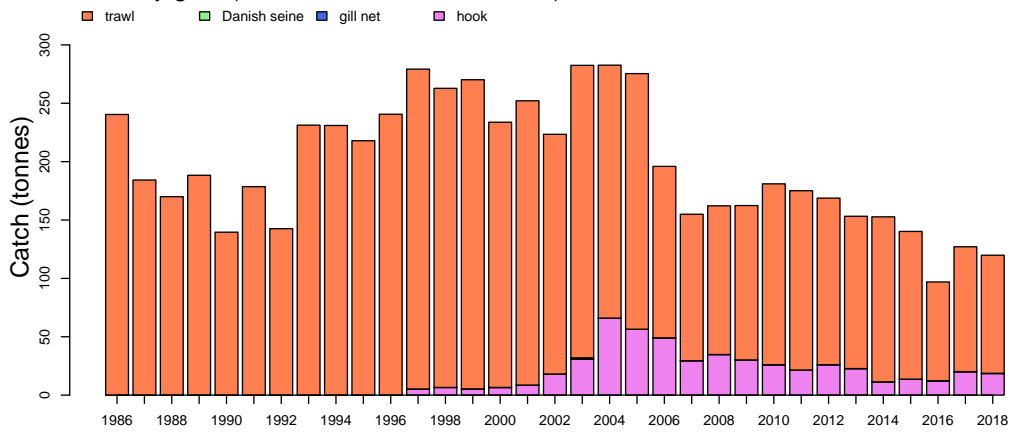
Catch at depth (non-trawl record starts 1997)



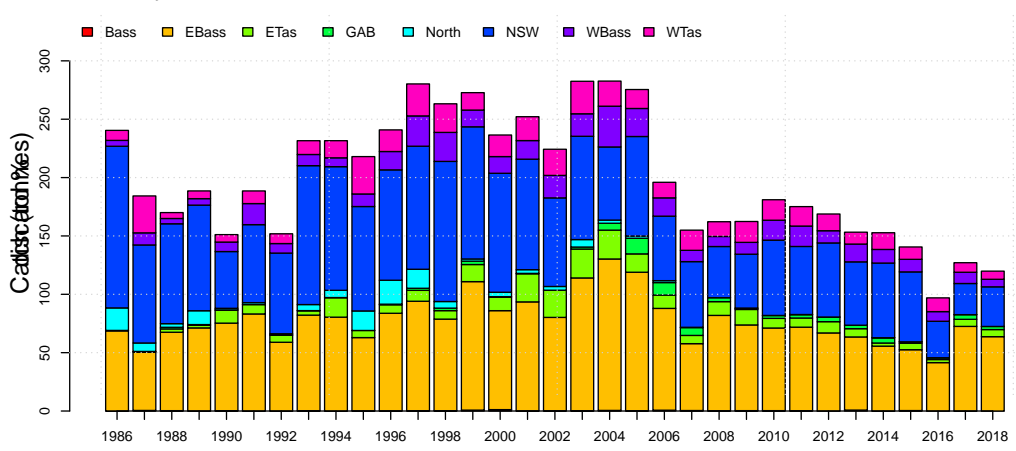
Ocean Perch Offshore

Wed Nov 06 17:14:02 2019

Catch by gear (non-trawl record starts 1997)



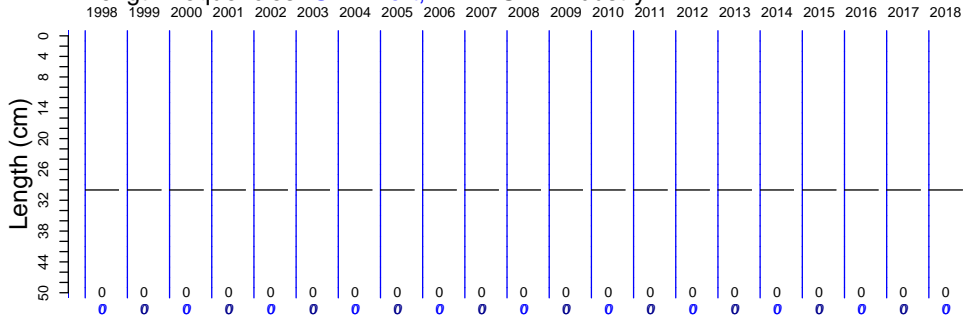
Discards



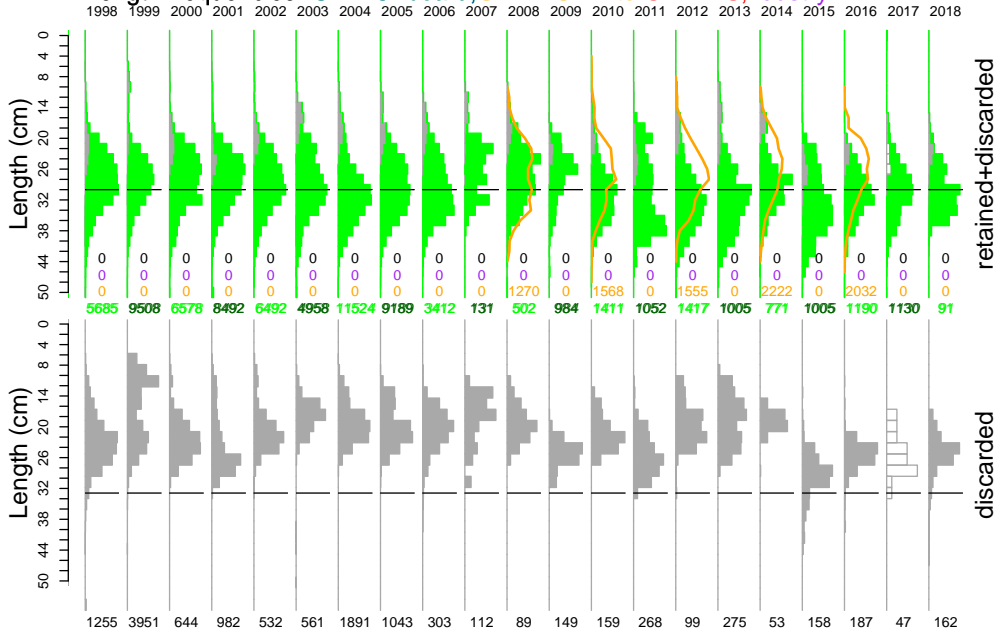
Ocean Perch Offshore

Wed Nov 06 17:14:03 2019

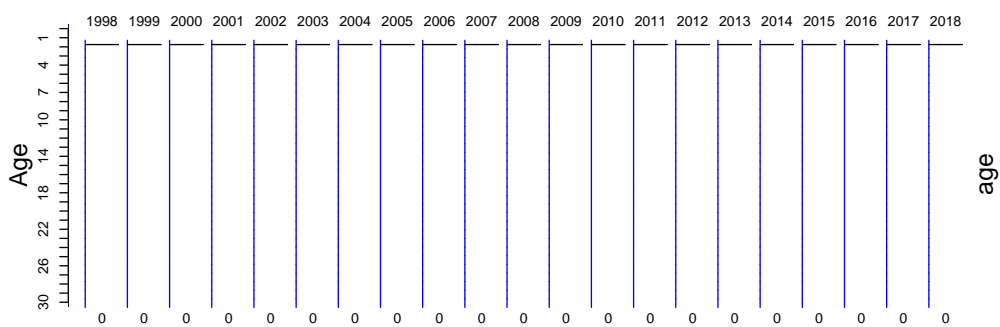
Length frequencies: ISMP Port, GAB Industry



Length frequencies: ISMP Onboard, SET FIS winter, GAB FIS, Industry

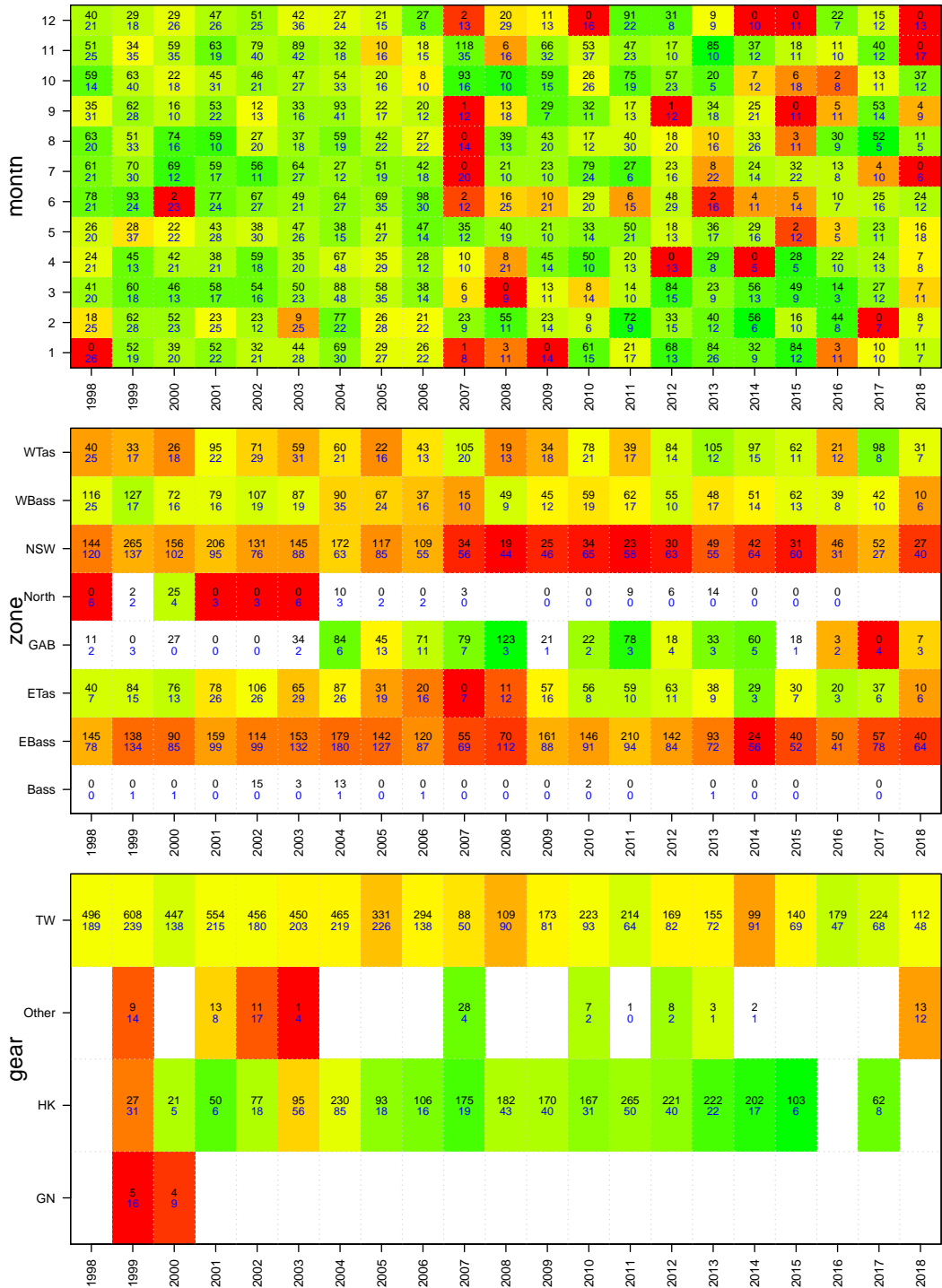


Age frequency



Ocean Perch Offshore Onboard discard weight data

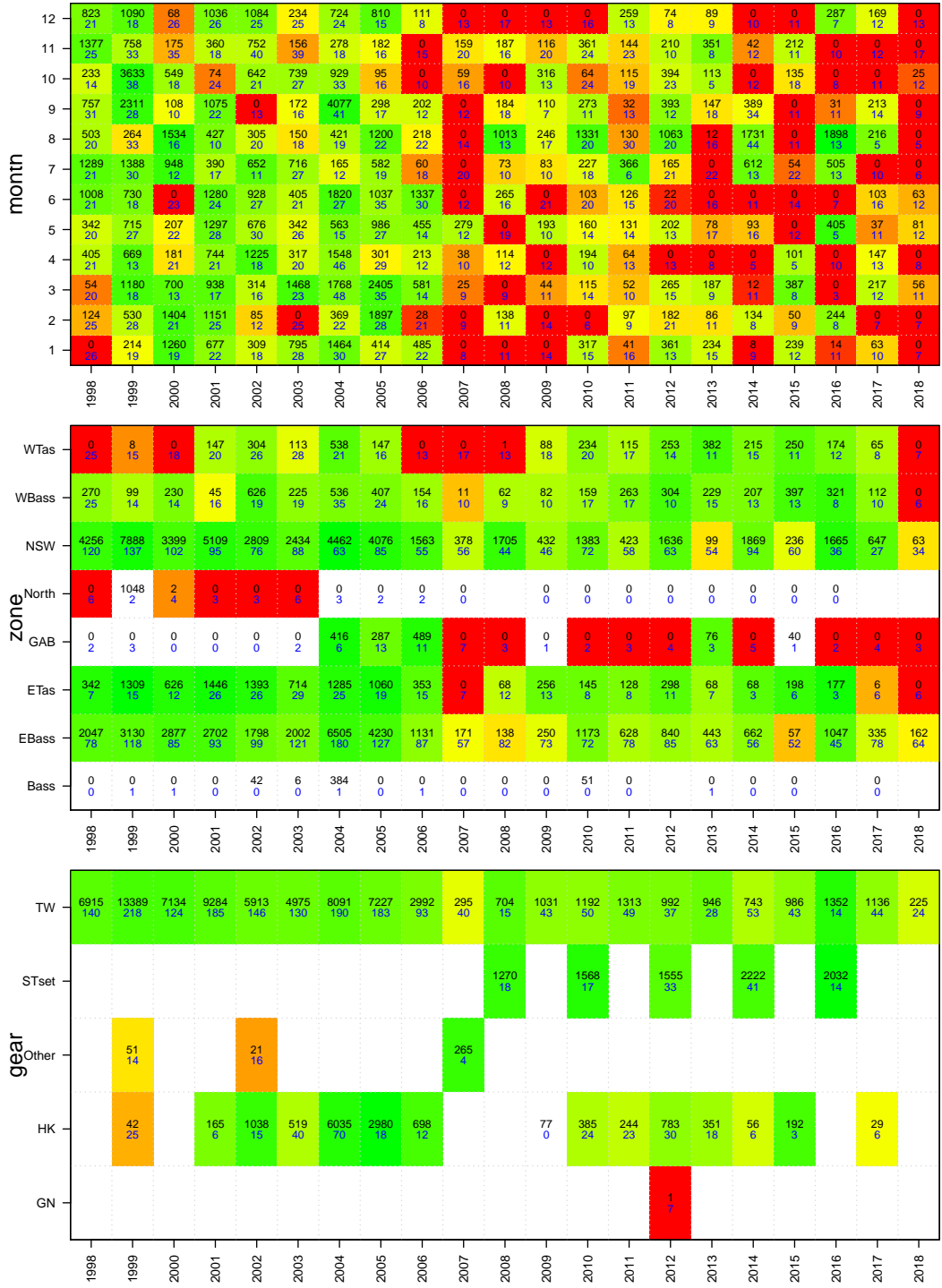
Wed Nov 06 17:14:03 2019



Ocean Perch Offshore

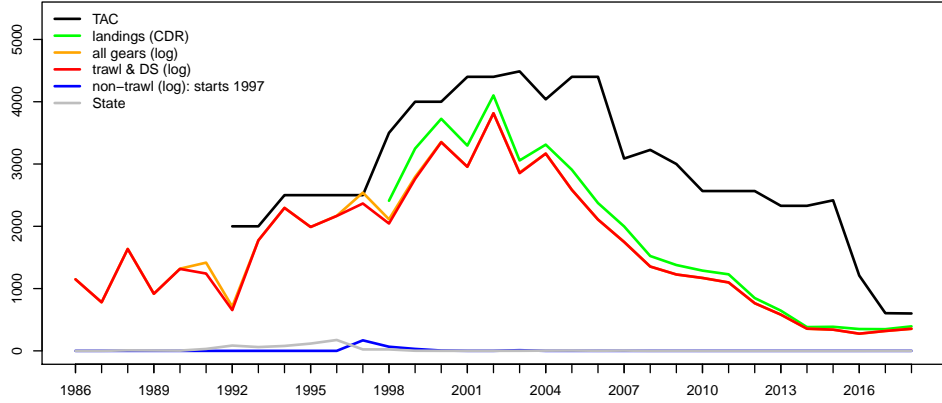
Onboard length data

Wed Nov 06 17:14:03 2019

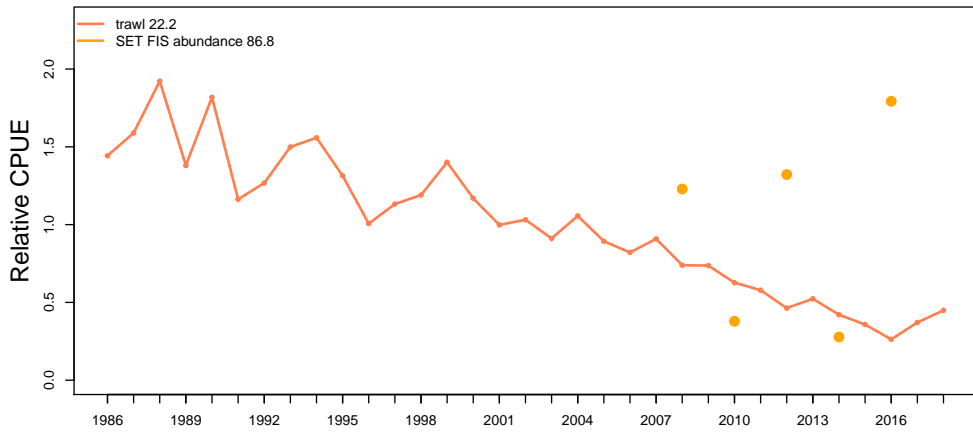


Silver Warehou
TAC and landings

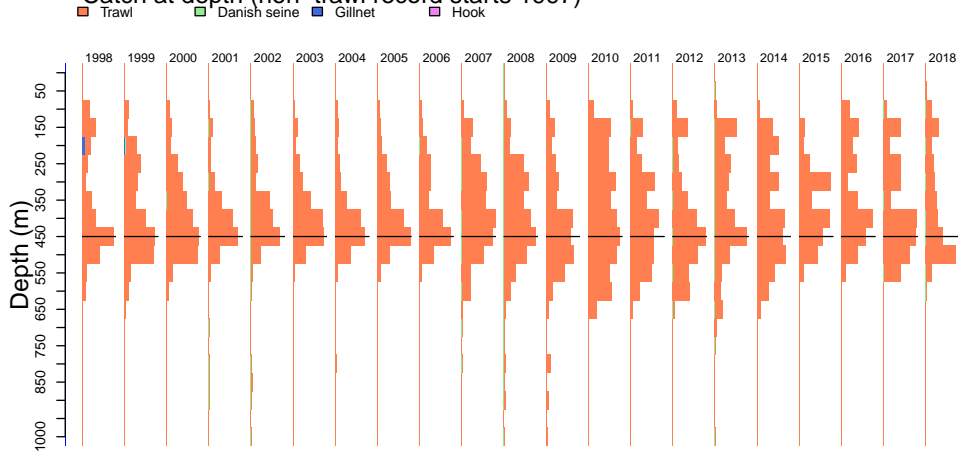
Wed Nov 06 17:14:07 2019
region SET unit code TRS sa code TRS
37445006
start month 1



Geometric mean CPUE & SET FIS abundance



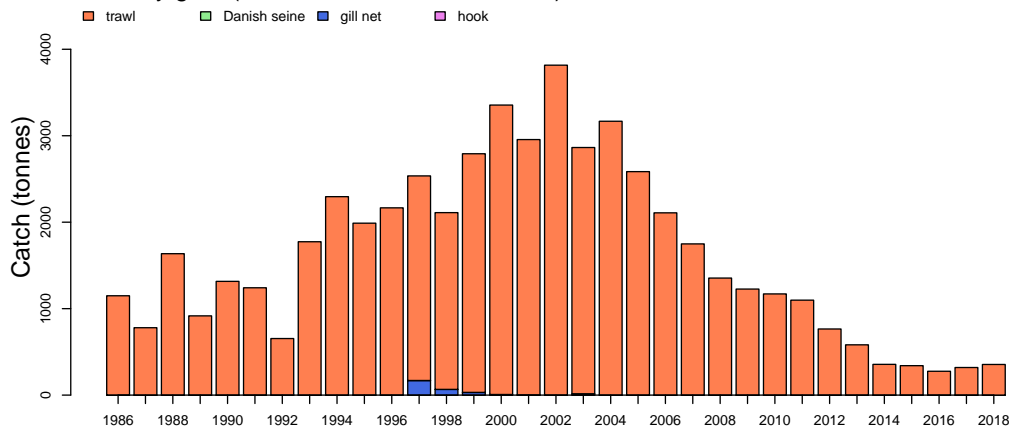
Catch at depth (non-trawl record starts 1997)



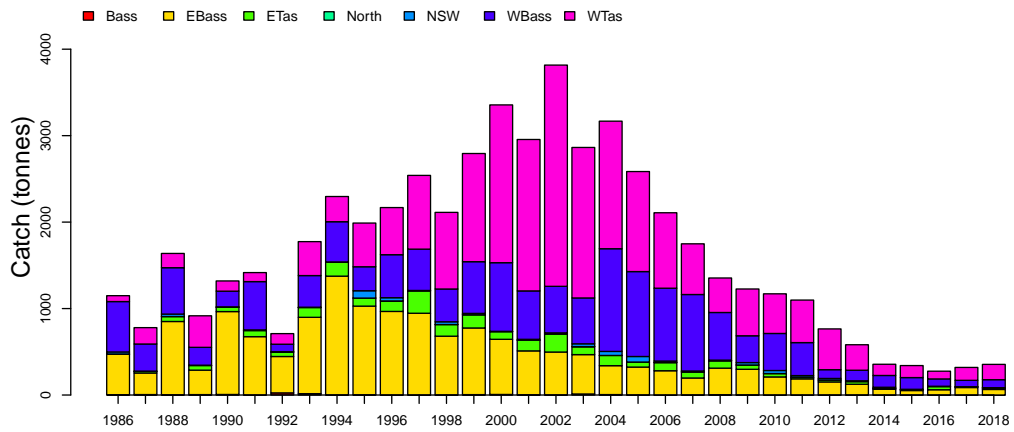
Silver Warehou

Wed Nov 06 17:14:18 2019

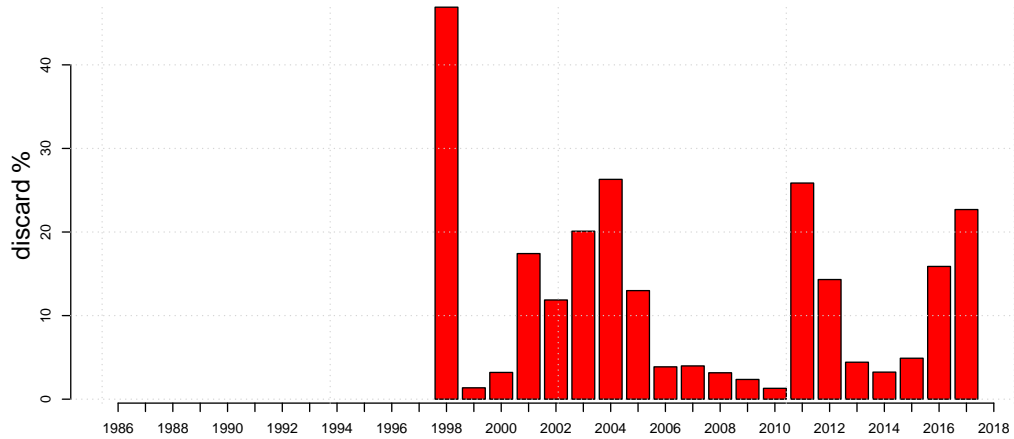
Catch by gear (non-trawl record starts 1997)



Catch by zone



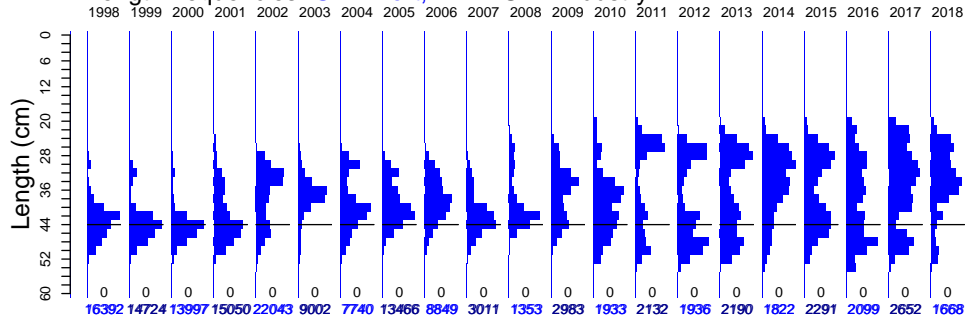
Discards



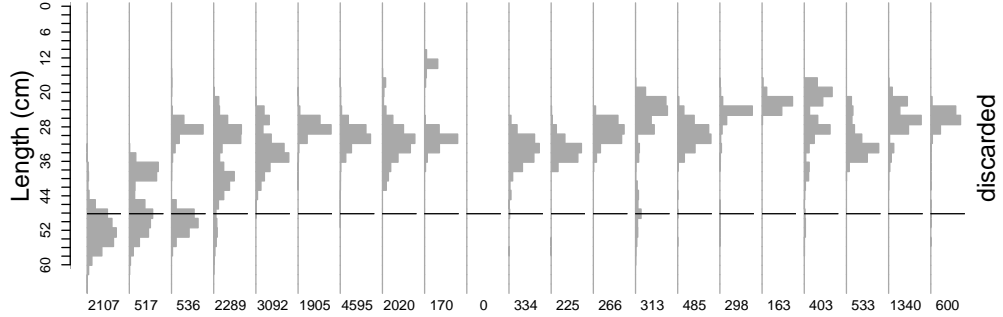
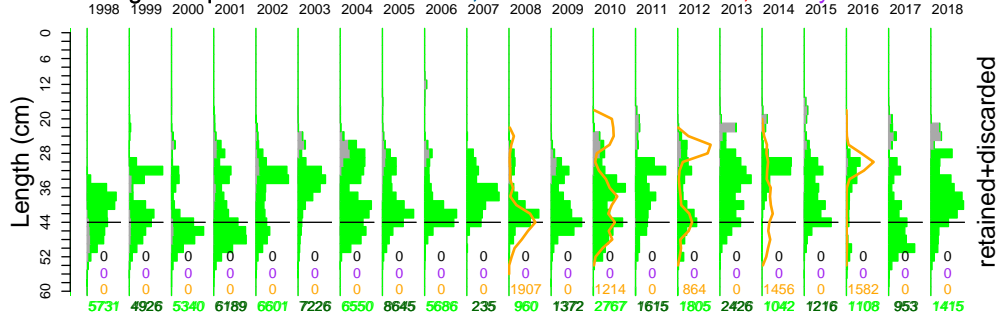
Silver Warehou

Wed Nov 06 17:14:19 2019

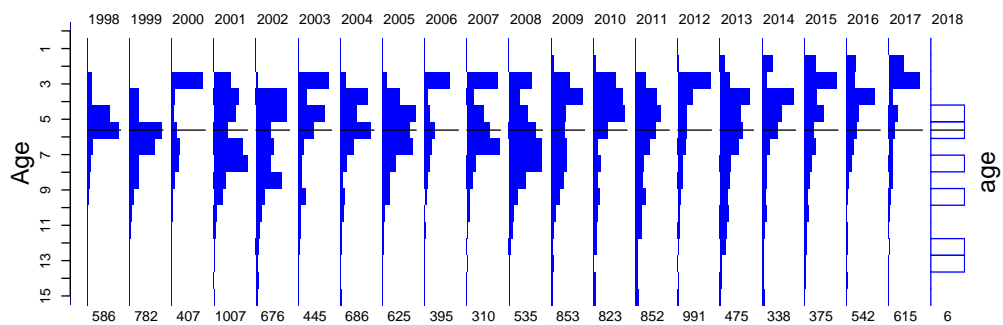
Length frequencies: ISMP Port, GAB Industry



Length frequencies: ISMP Onboard, SET FIS winter, GAB FIS Industry



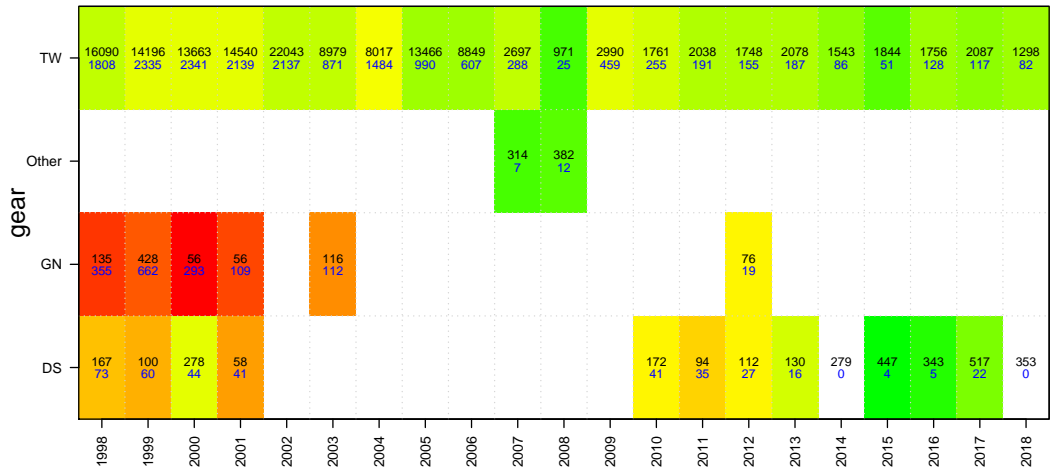
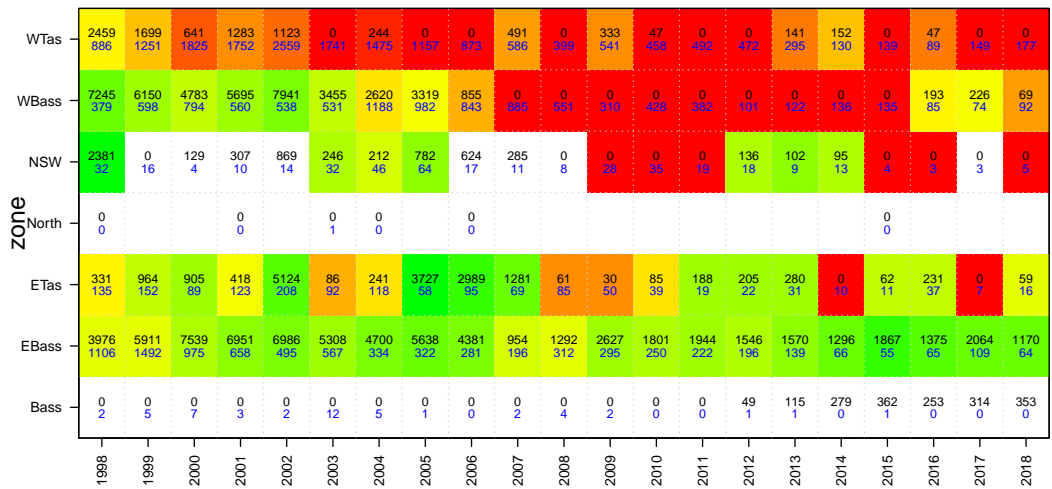
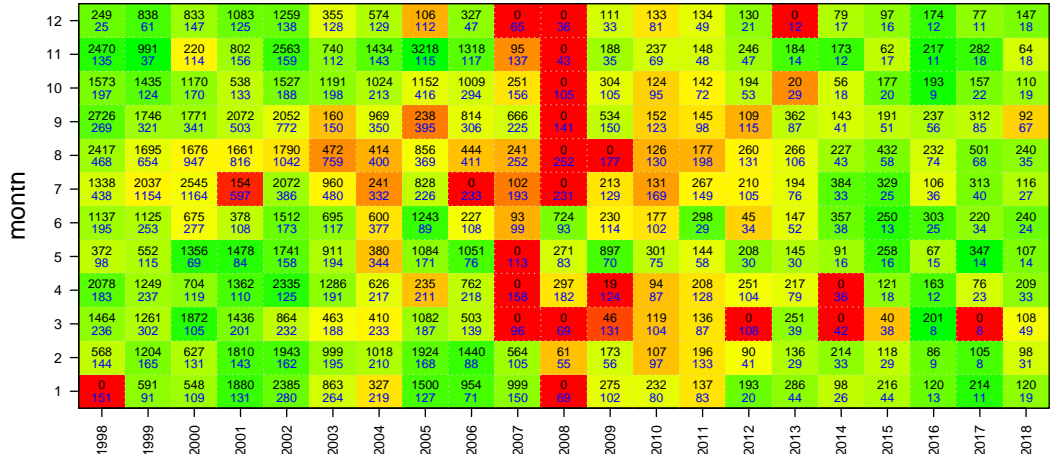
Age frequency



Silver Warehou

Port length data

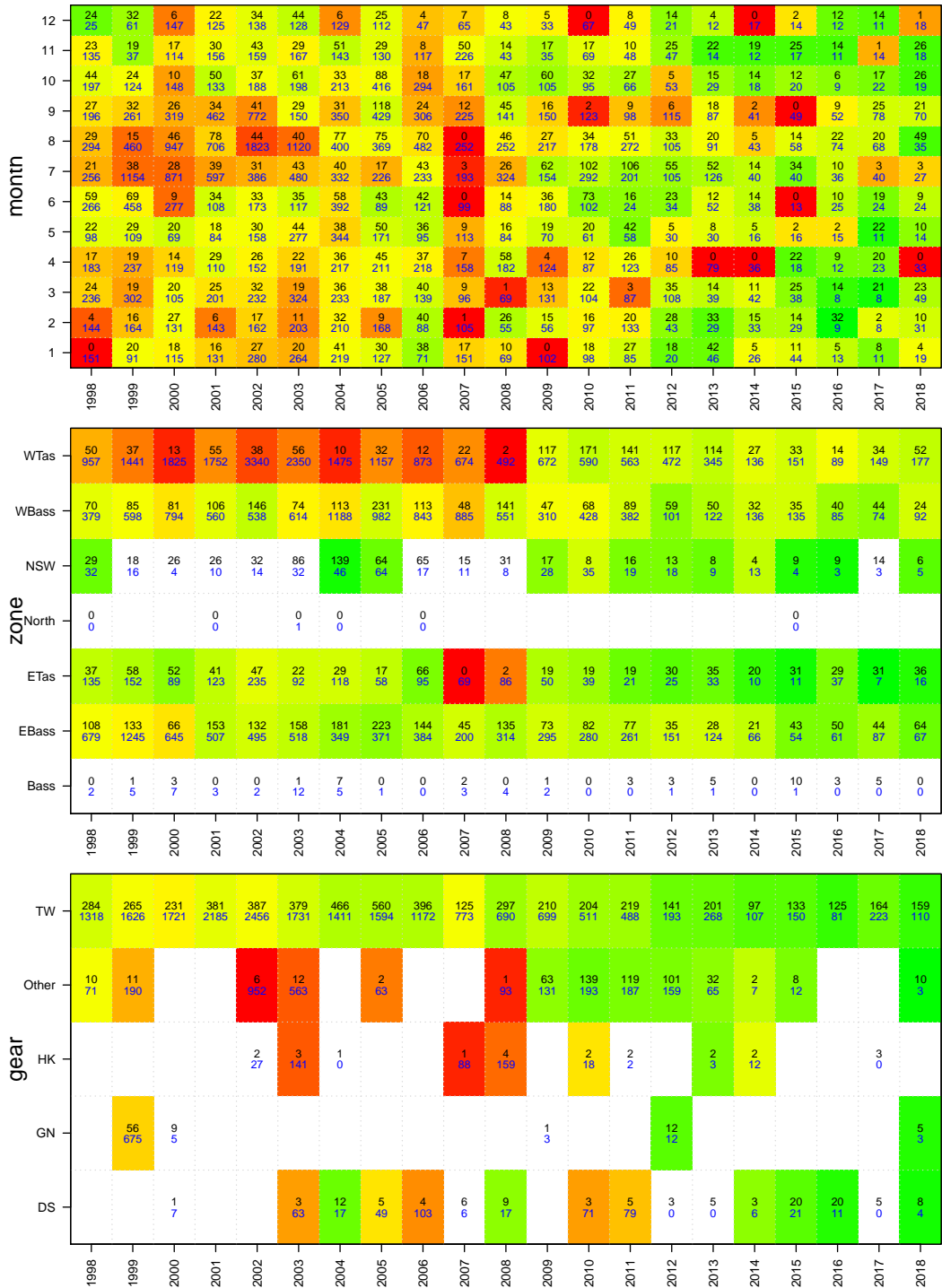
Wed Nov 06 17:14:20 2019



Silver Warehouse

Onboard discard weight data

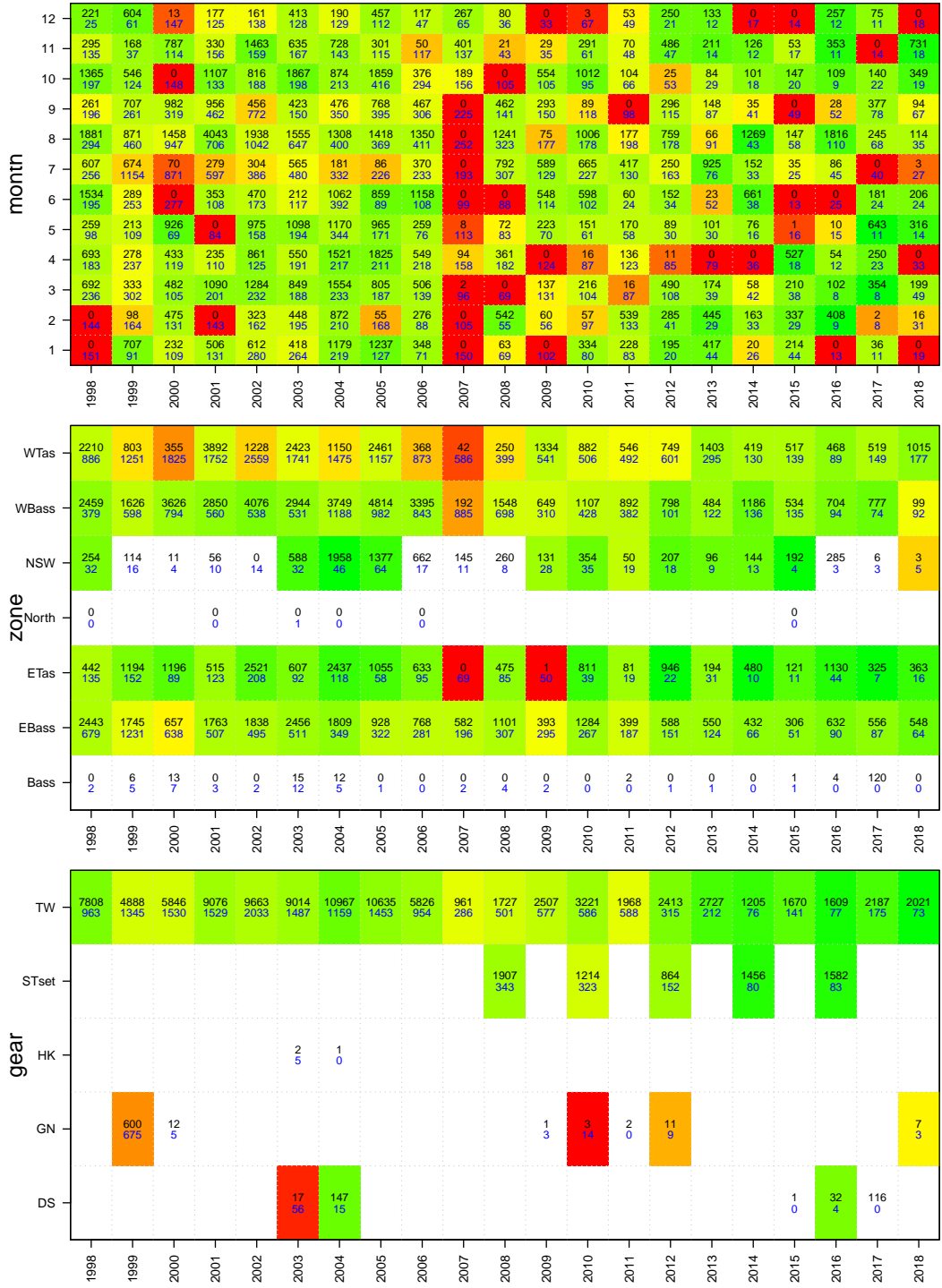
Wed Nov 06 17:14:21 2019



Silver Warehou

Onboard length data

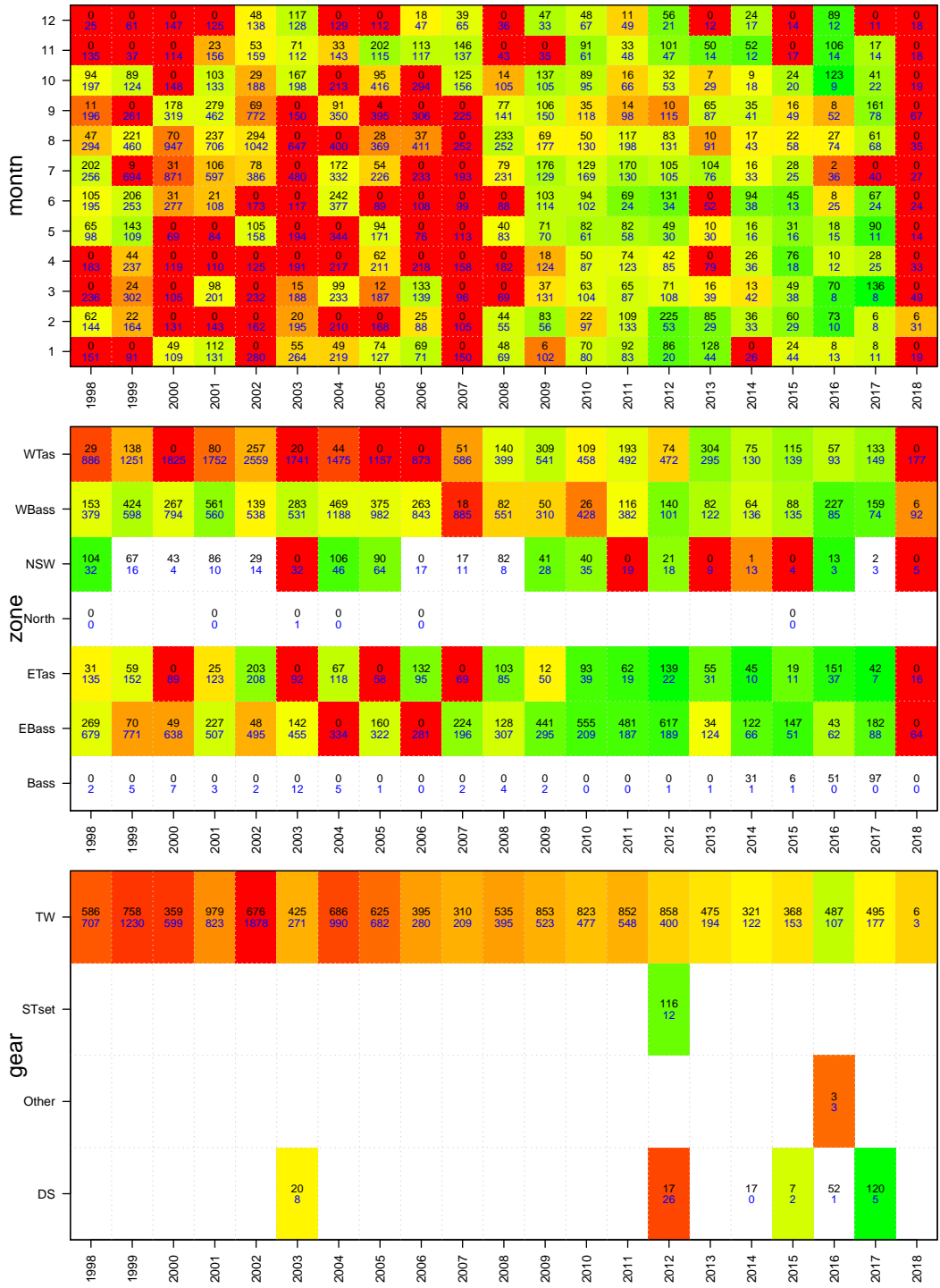
Wed Nov 06 17:14:21 2019



Silver Warehouse

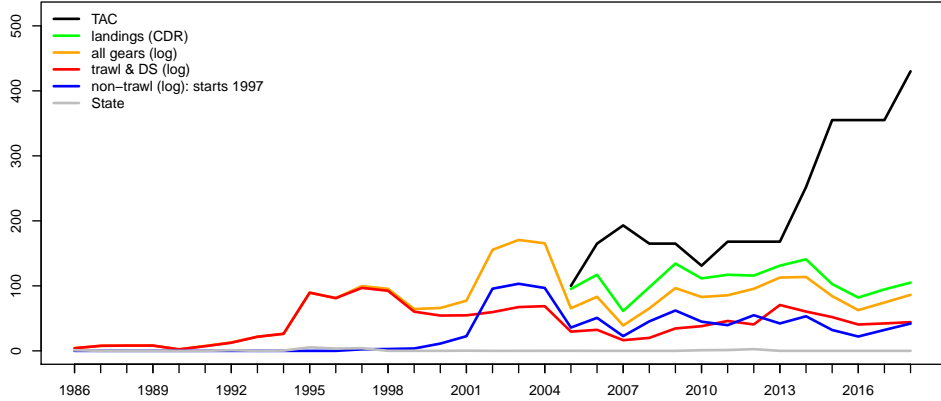
Age data

Wed Nov 06 17:14:21 2019

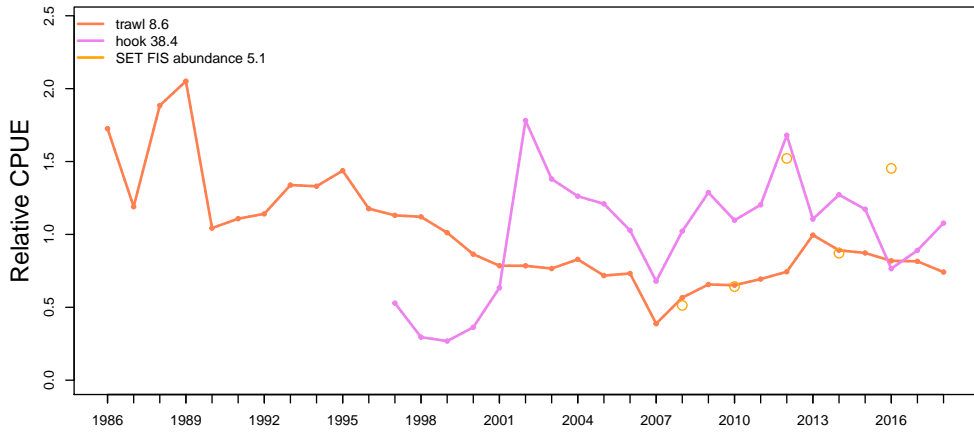


Ribaldo
TAC and landings

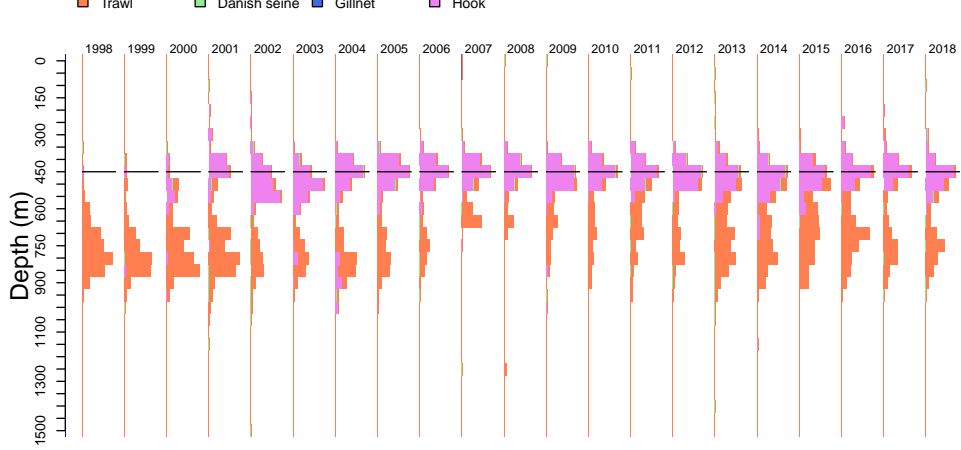
Wed Nov 06 17:14:22 2019
region SET unit code RBD sa code RBD
37224002
start month 1



Geometric mean CPUE & SET FIS abundance

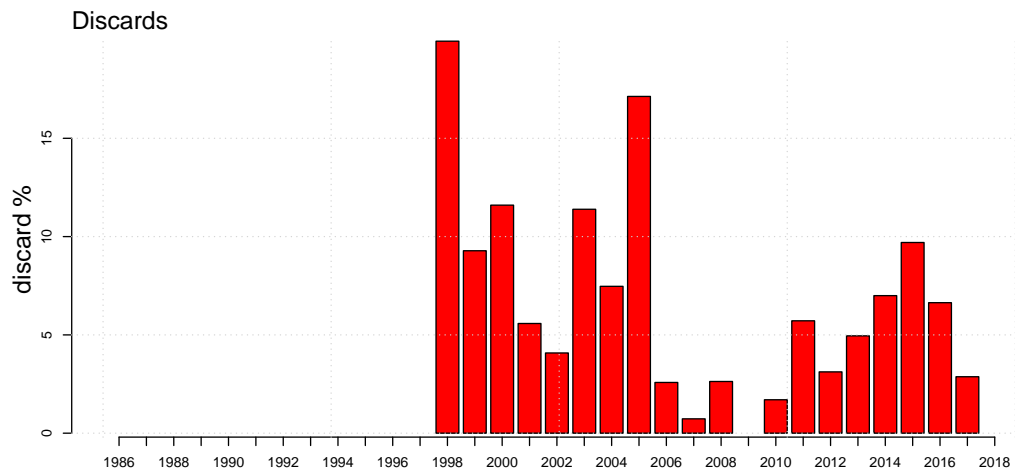
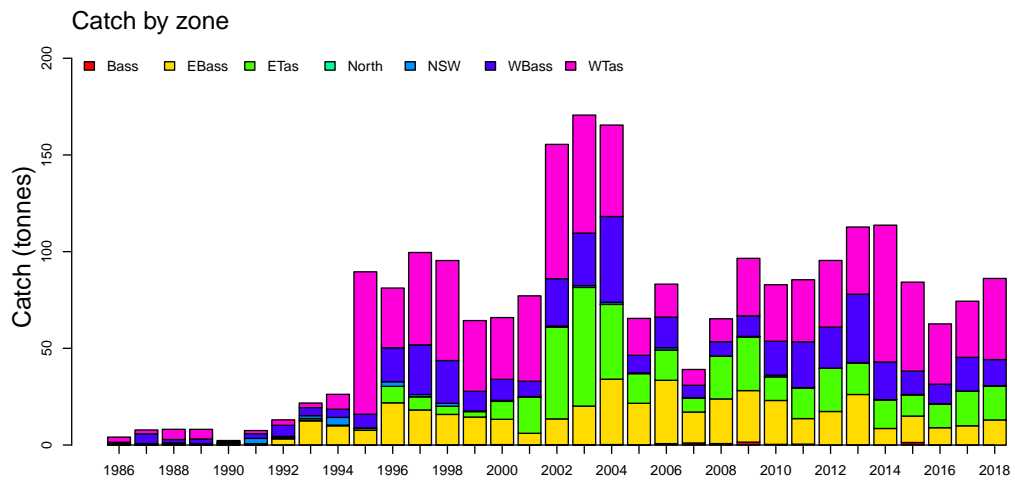
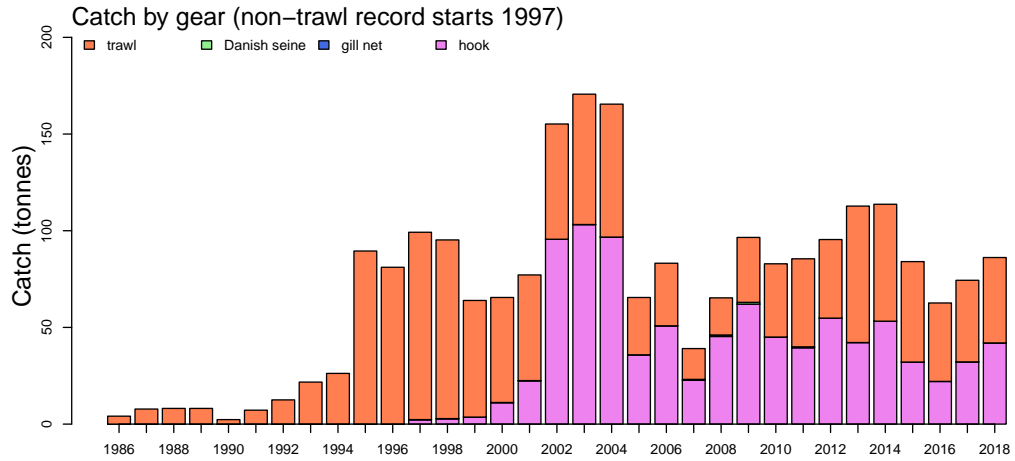


Catch at depth (non-trawl record starts 1997)



Ribaldo

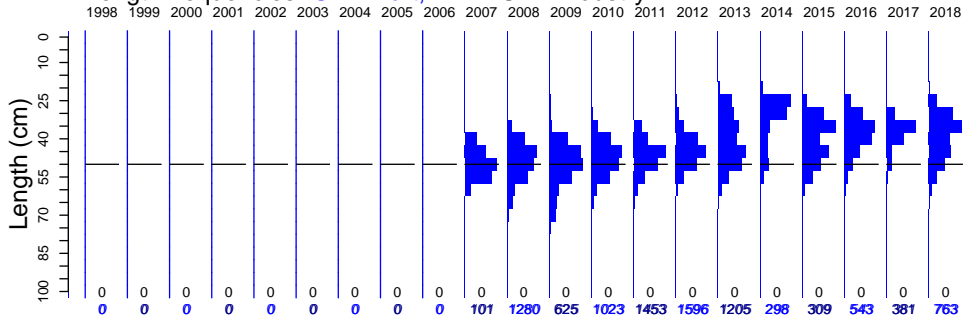
Wed Nov 06 17:14:24 2019



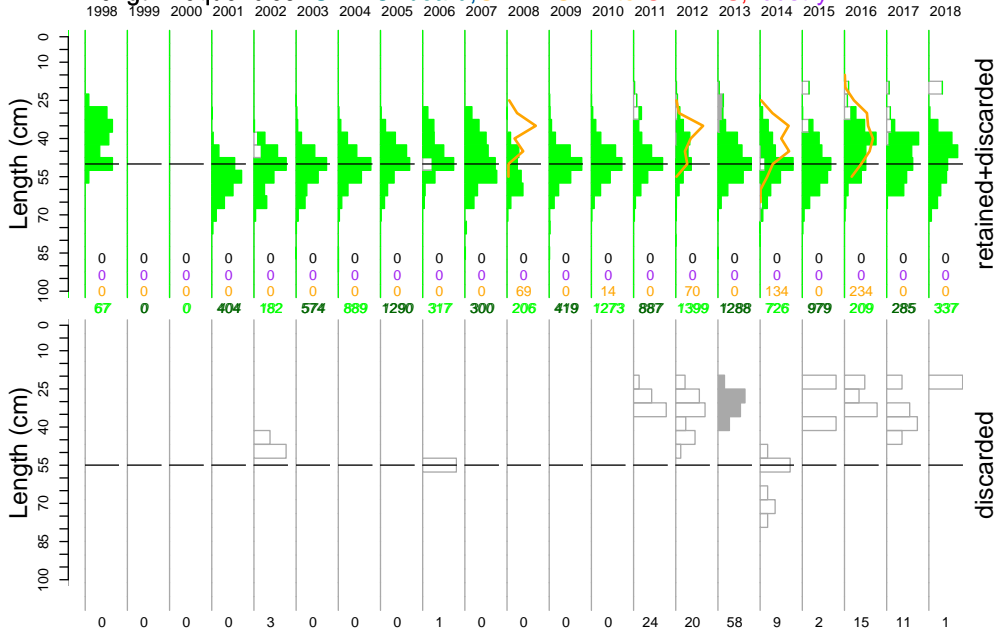
Ribaldo

Wed Nov 06 17:14:24 2019

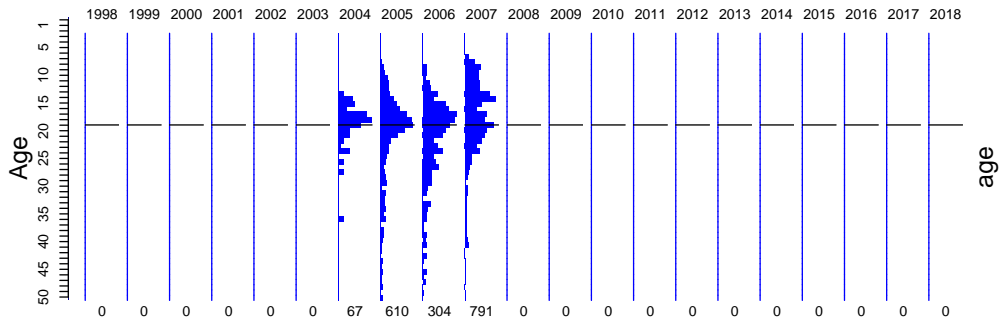
Length frequencies: ISMP Port, GAB Industry



Length frequencies: ISMP Onboard, SET FIS winter, GAB FIS Industry



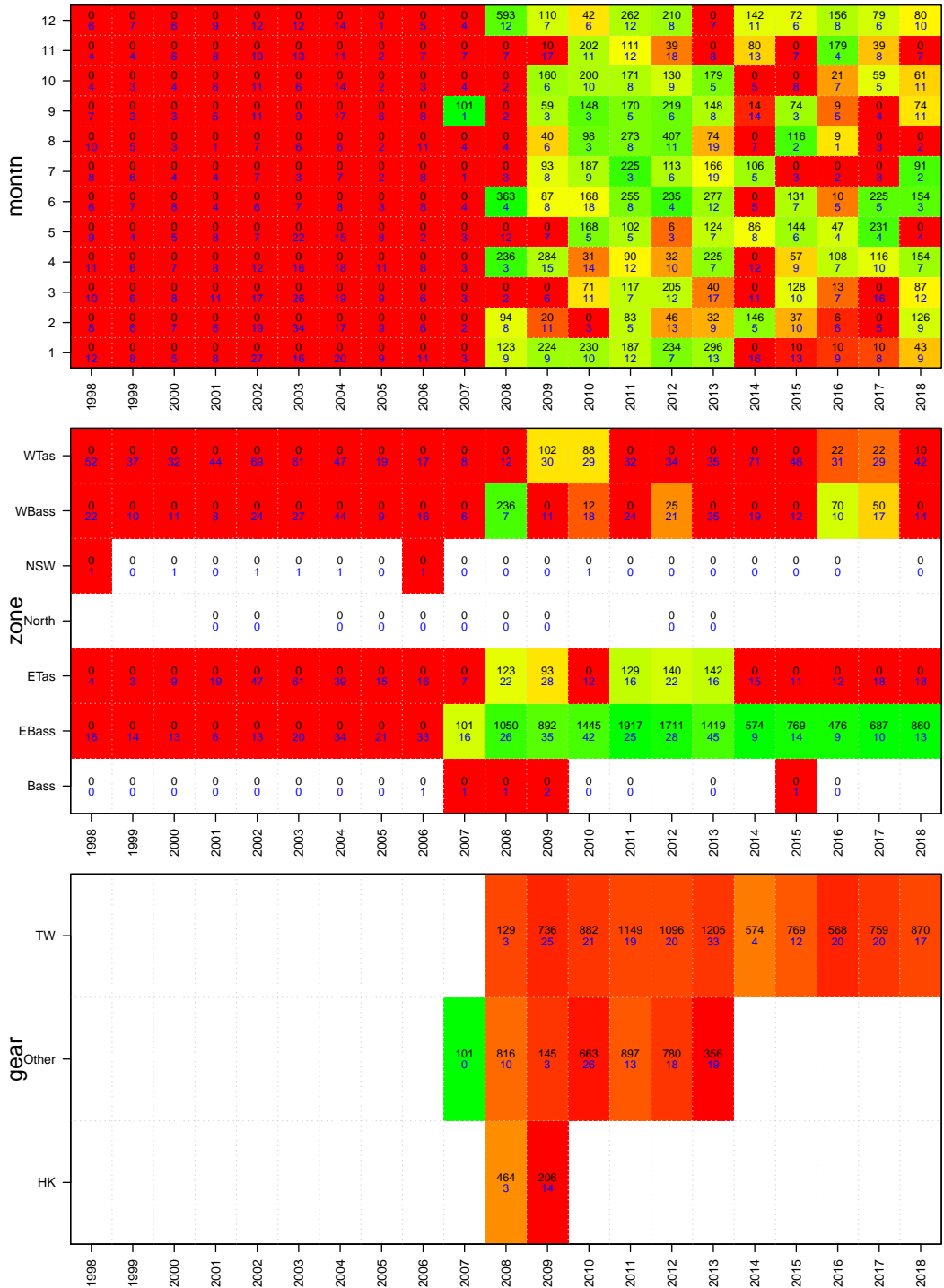
Age frequency



Ribaldo

Port length data

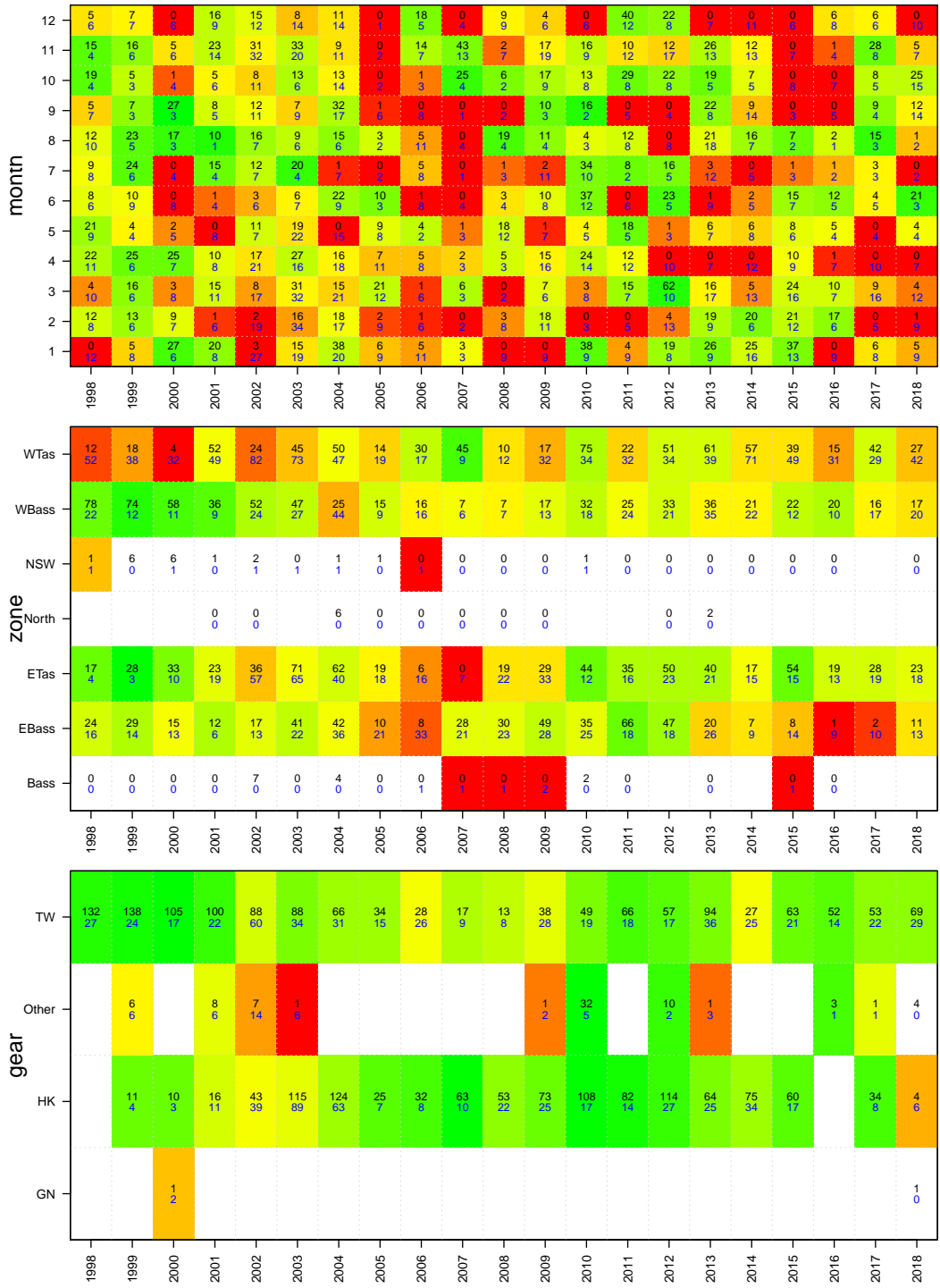
Wed Nov 06 17:14:25 2019



Ribaldo

Onboard discard weight data

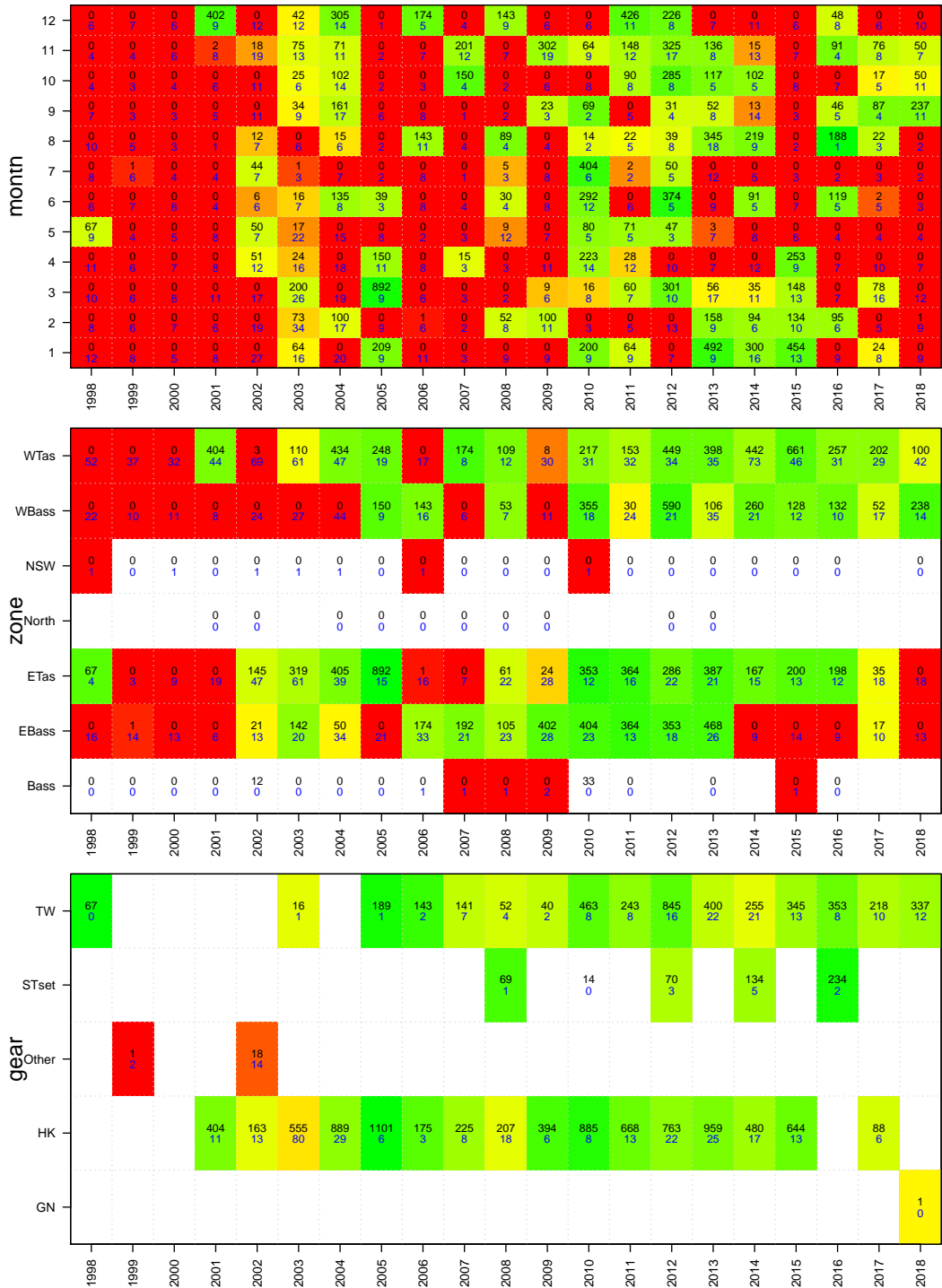
Wed Nov 06 17:14:25 2019



Ribaldo

Onboard length data

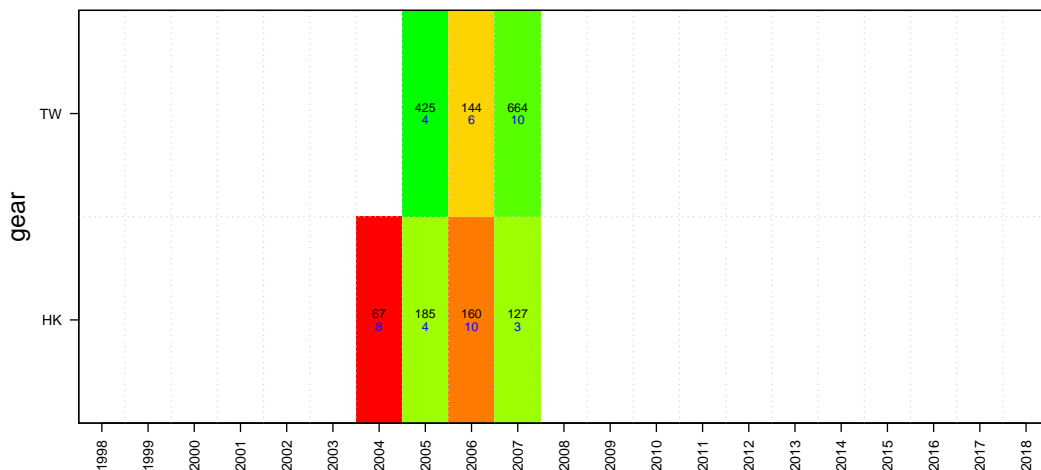
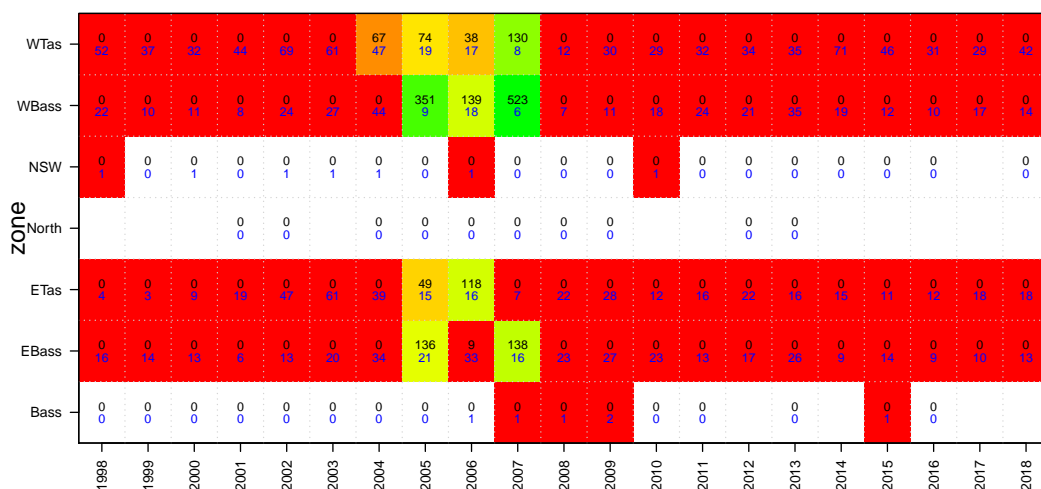
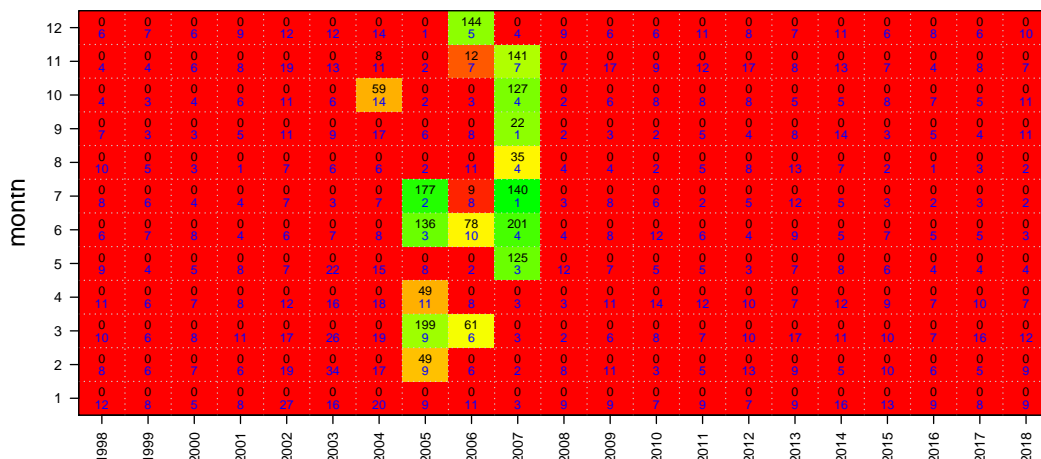
Wed Nov 06 17:14:25 2019



Ribaldo

Age data

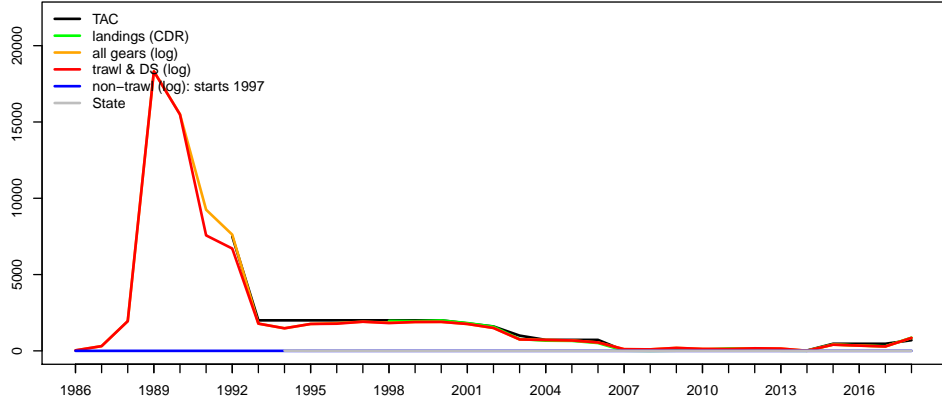
Wed Nov 06 17:14:25 2019



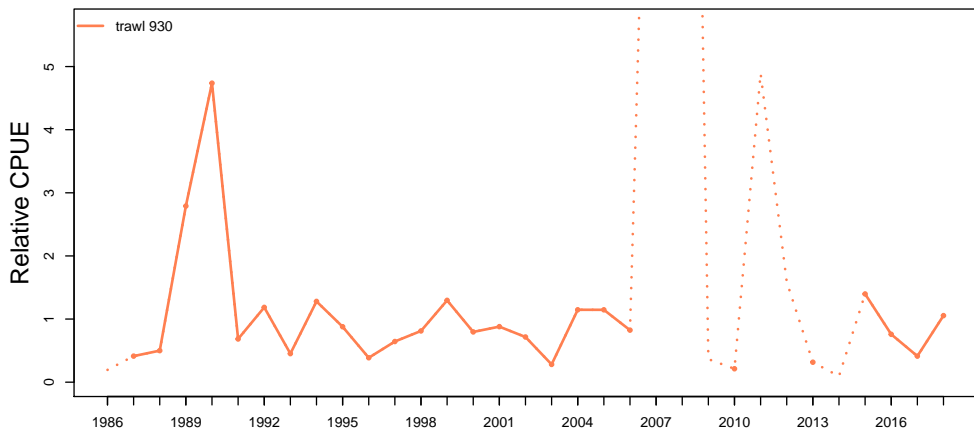
Orange Roughy East

TAC and landings

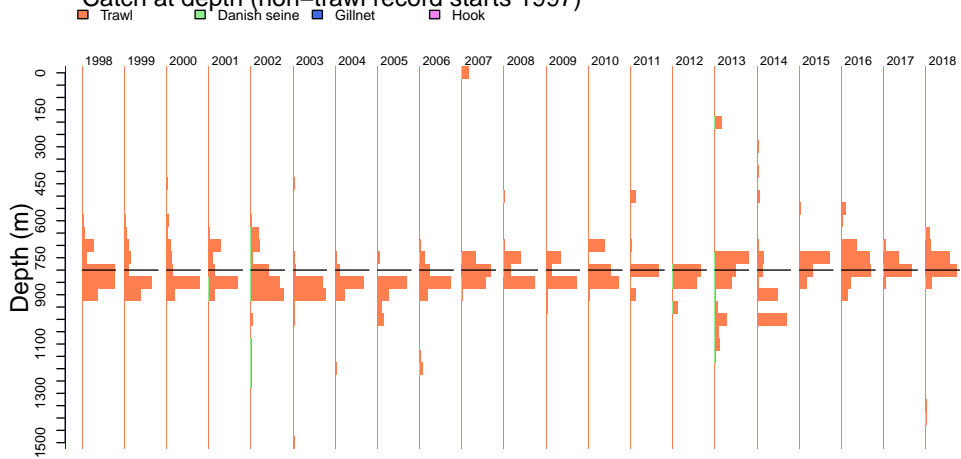
Wed Nov 06 17:14:25 2019
 region OR10 unit code ORE sa code ORE
 37255009
 start month 1



Geometric mean CPUE & SET FIS abundance

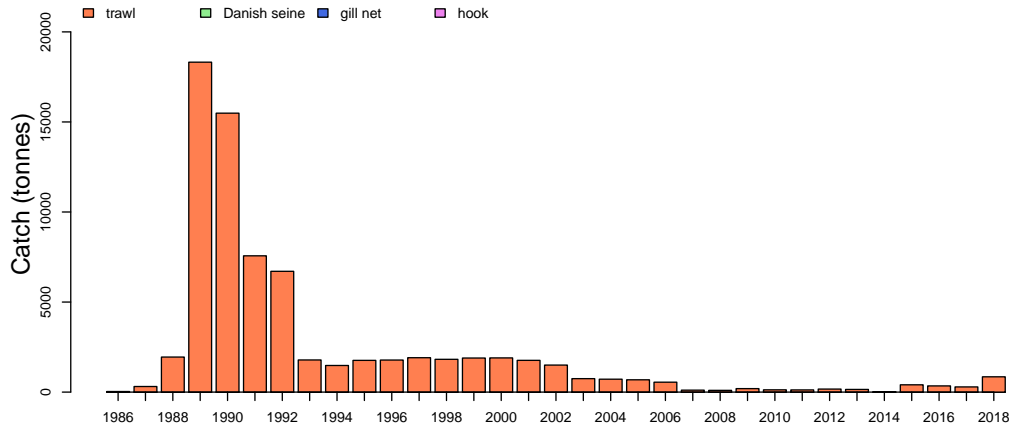


Catch at depth (non-trawl record starts 1997)

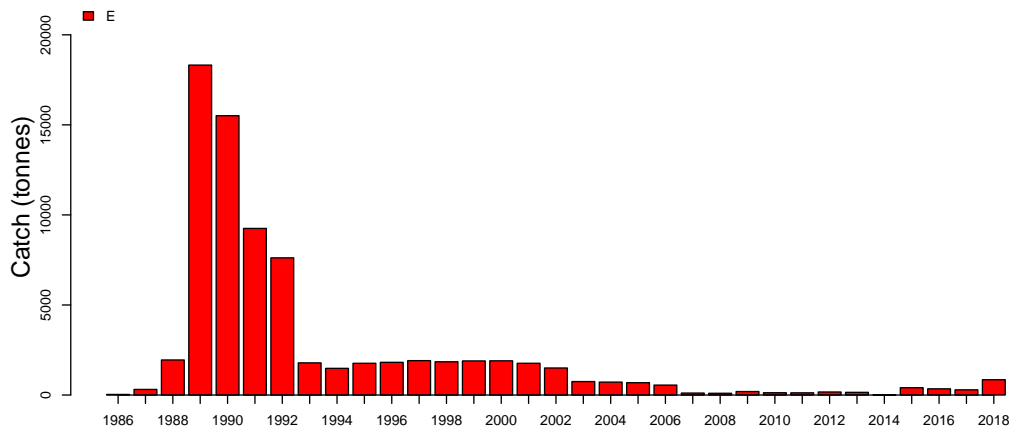


Orange Roughy East

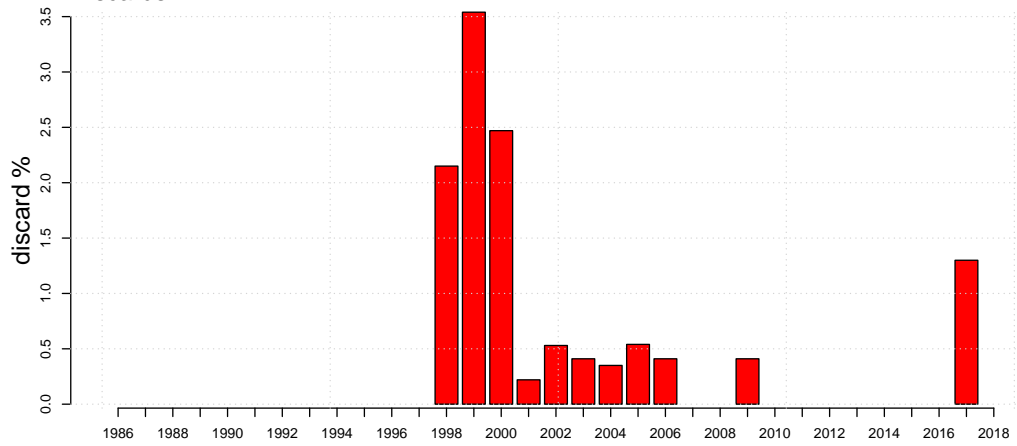
Catch by gear (non-trawl record starts 1997)



Catch by zone



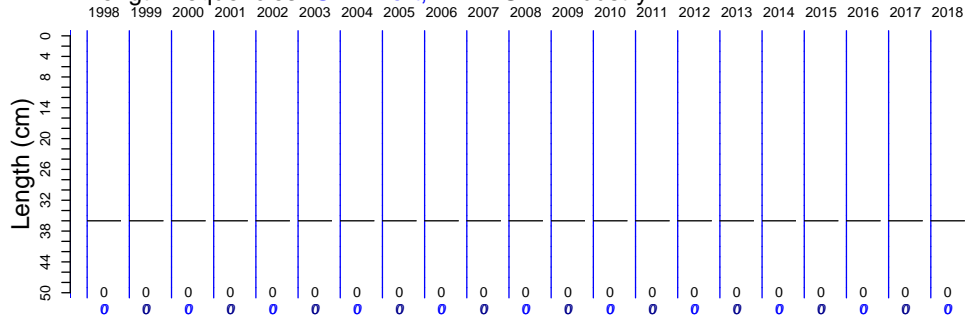
Discards



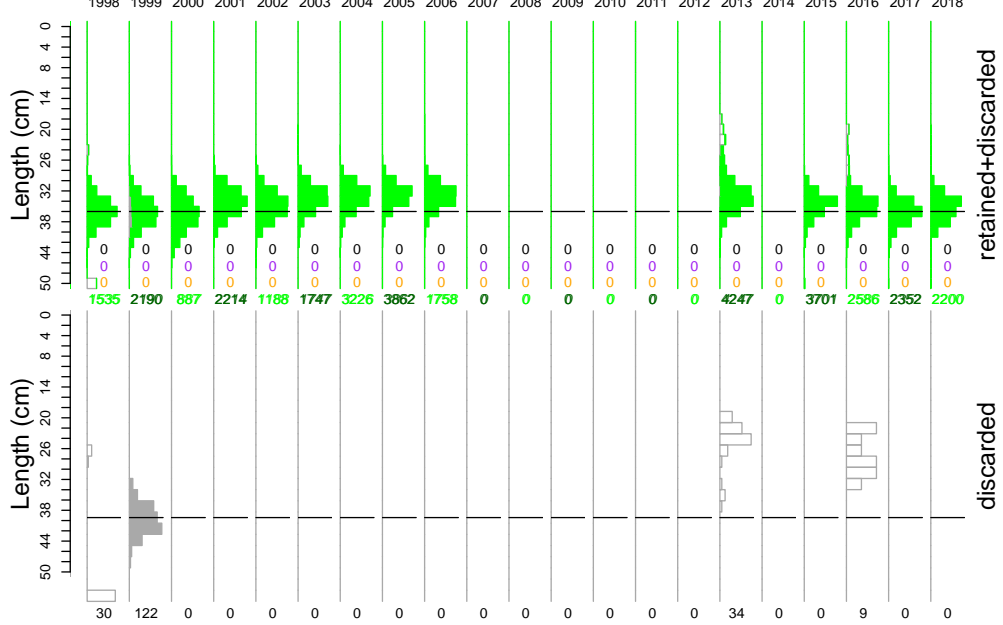
Orange Roughy East

Wed Nov 06 17:14:26 2019

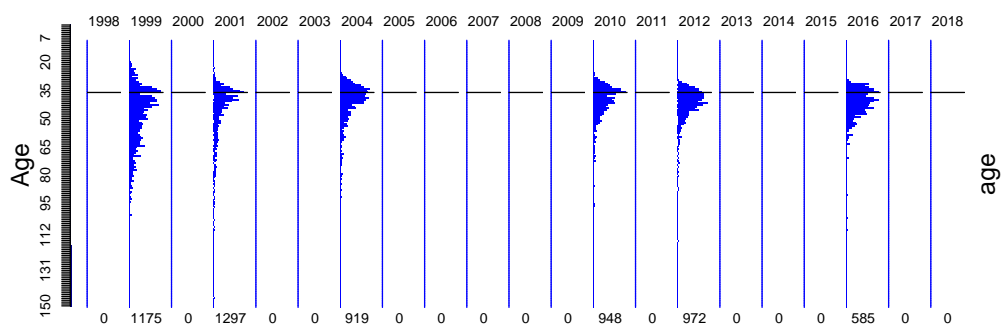
Length frequencies: ISMP Port, GAB Industry



Length frequencies: ISMP Onboard, SET FIS winter, GAB FIS Industry



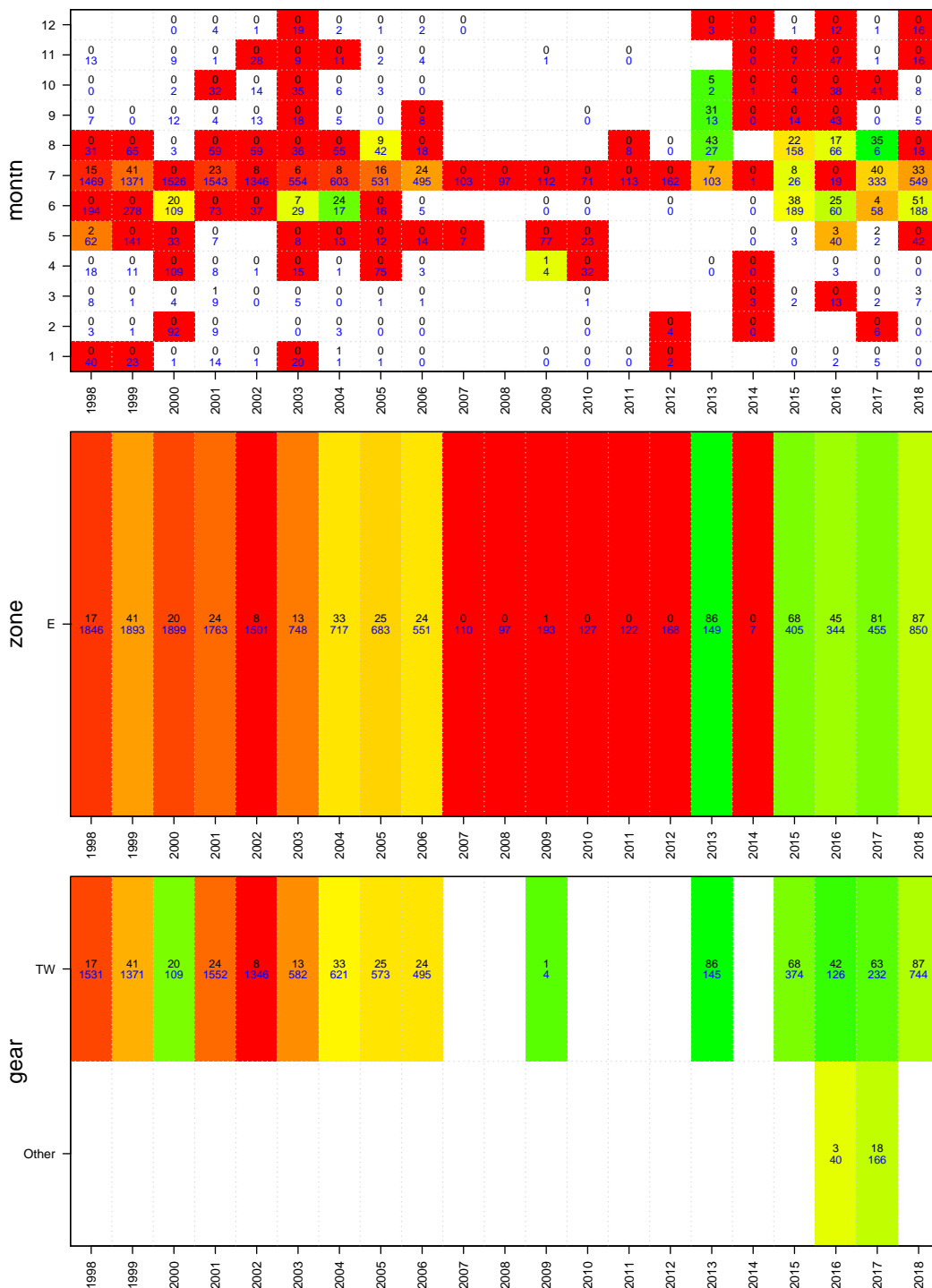
Age frequency



Orange Roughy East

Onboard discard weight data

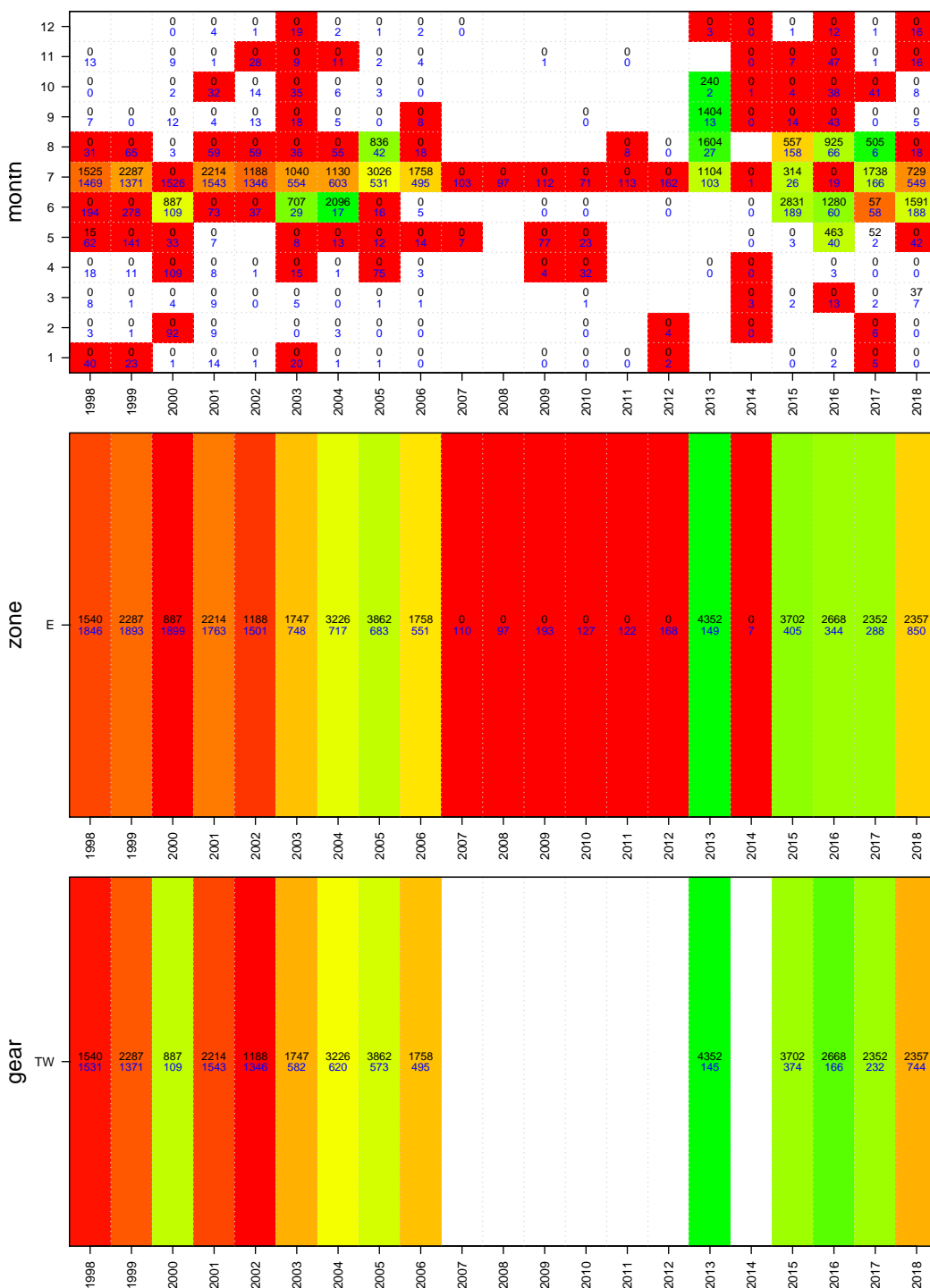
Wed Nov 06 17:14:26 2019



Orange Roughy East

Onboard length data

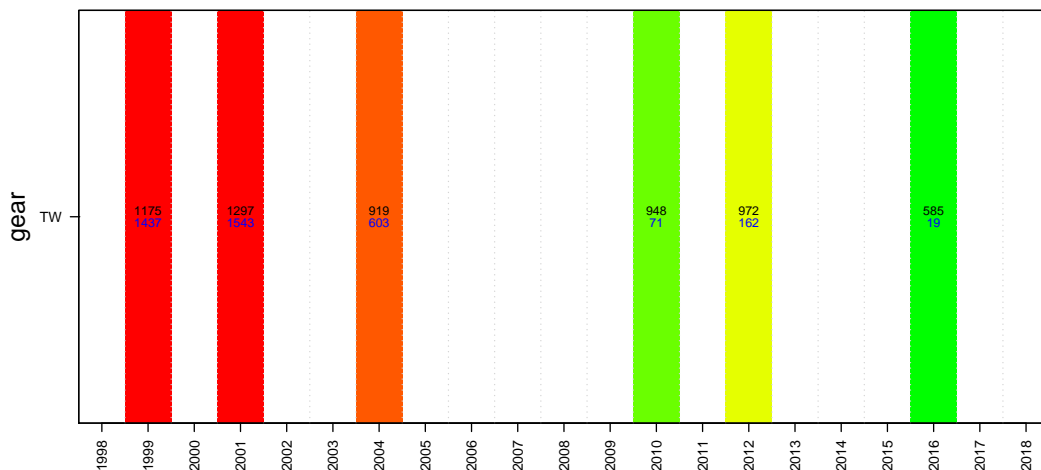
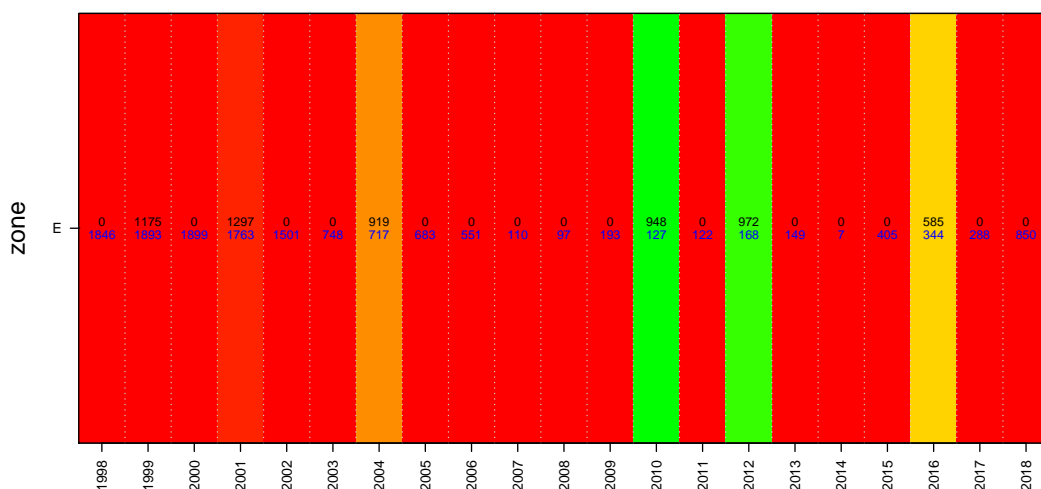
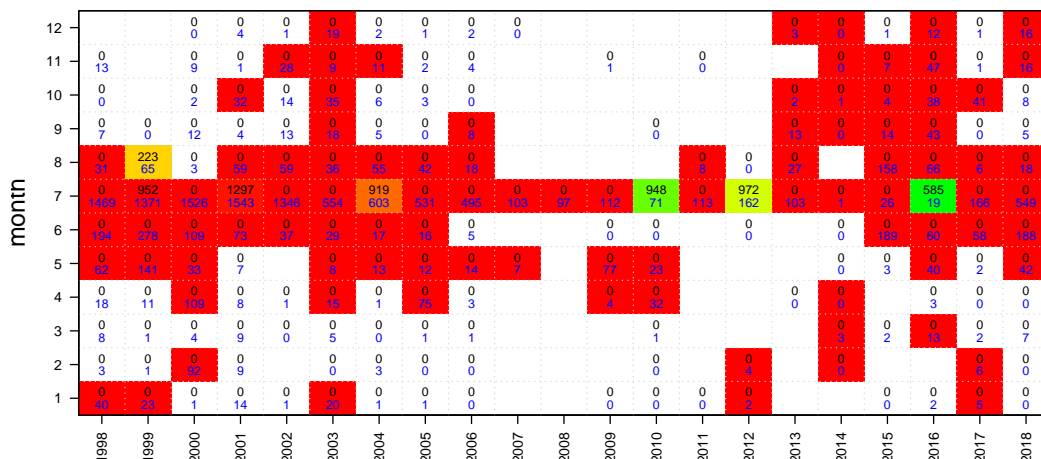
Wed Nov 06 17:14:26 2019



Orange Roughy East

Age data

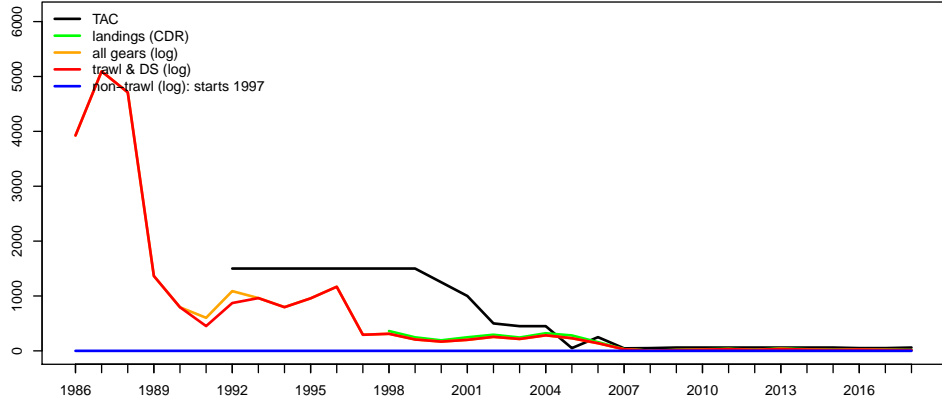
Wed Nov 06 17:14:26 2019



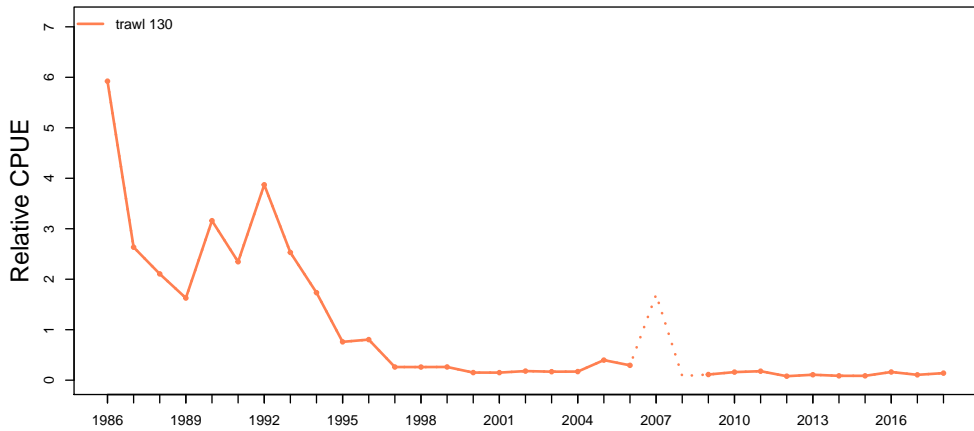
Orange Roughy West

TAC and landings

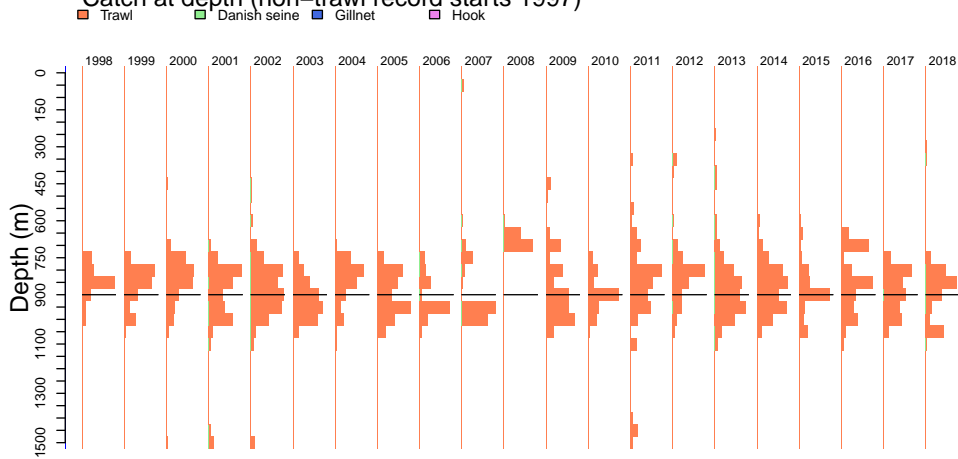
Wed Nov 06 17:14:27 2019
 region OR30 unit code ORW sa code ORW
 37255009
 start month 1



Geometric mean CPUE & SET FIS abundance

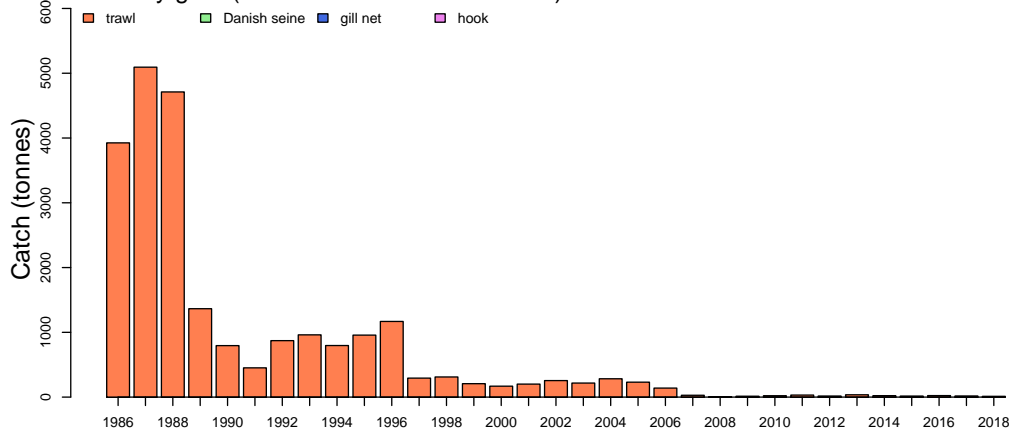


Catch at depth (non-trawl record starts 1997)

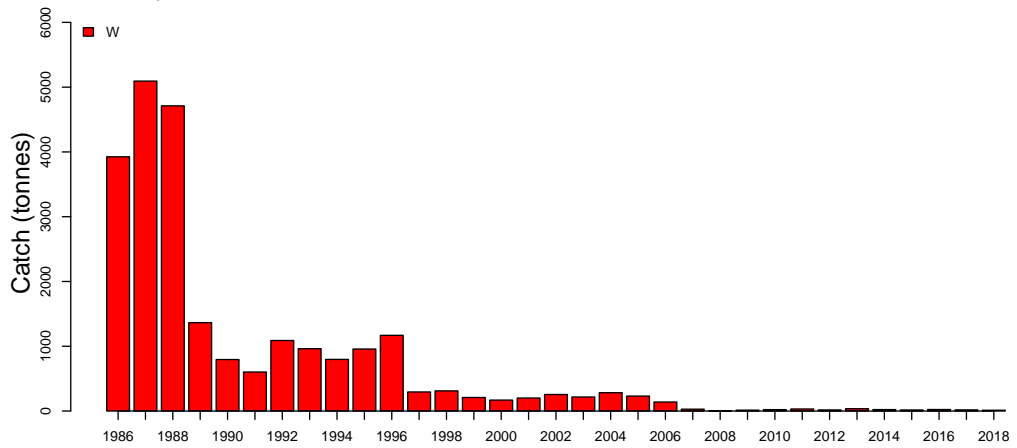


Orange Roughy West

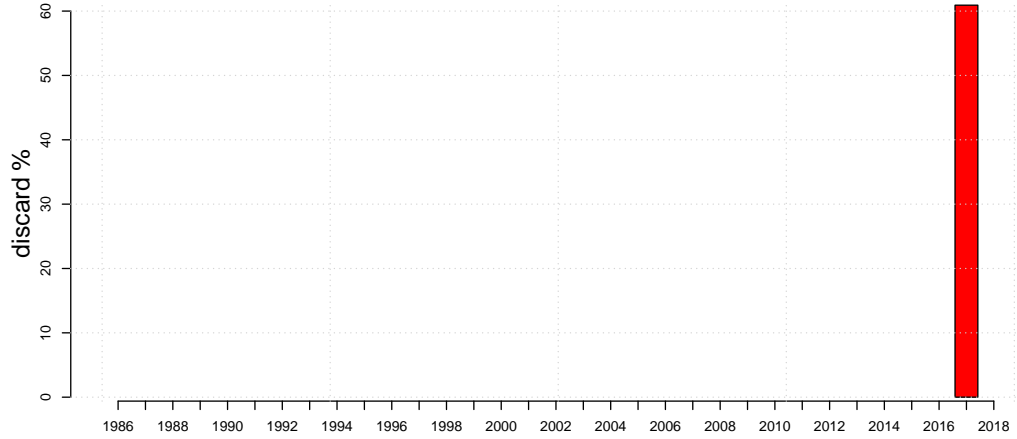
Catch by gear (non-trawl record starts 1997)



Catch by zone



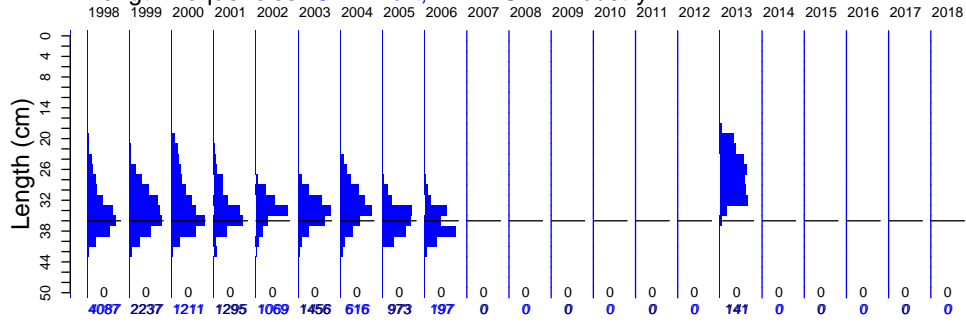
Discards



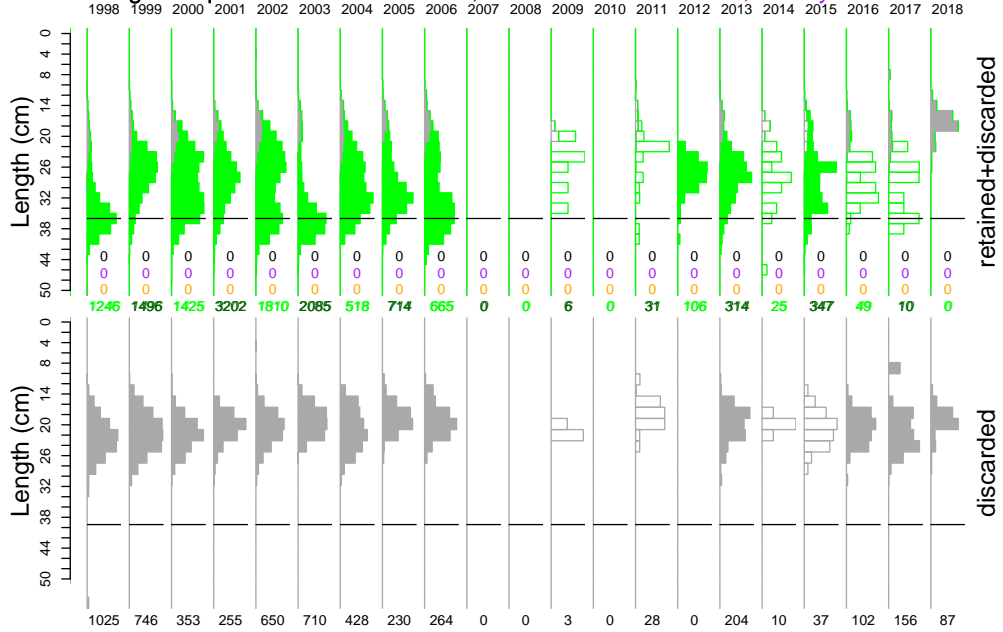
Orange Roughy West

Wed Nov 06 17:14:28 2019

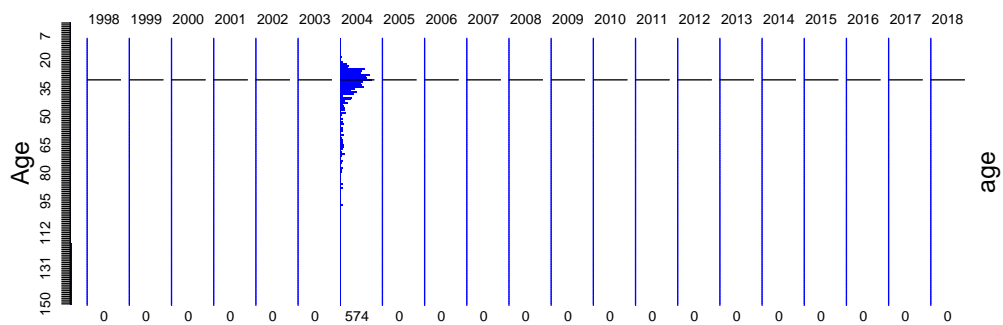
Length frequencies: ISMP Port, GAB Industry



Length frequencies: ISMP Onboard, SET FIS winter, GAB FIS Industry



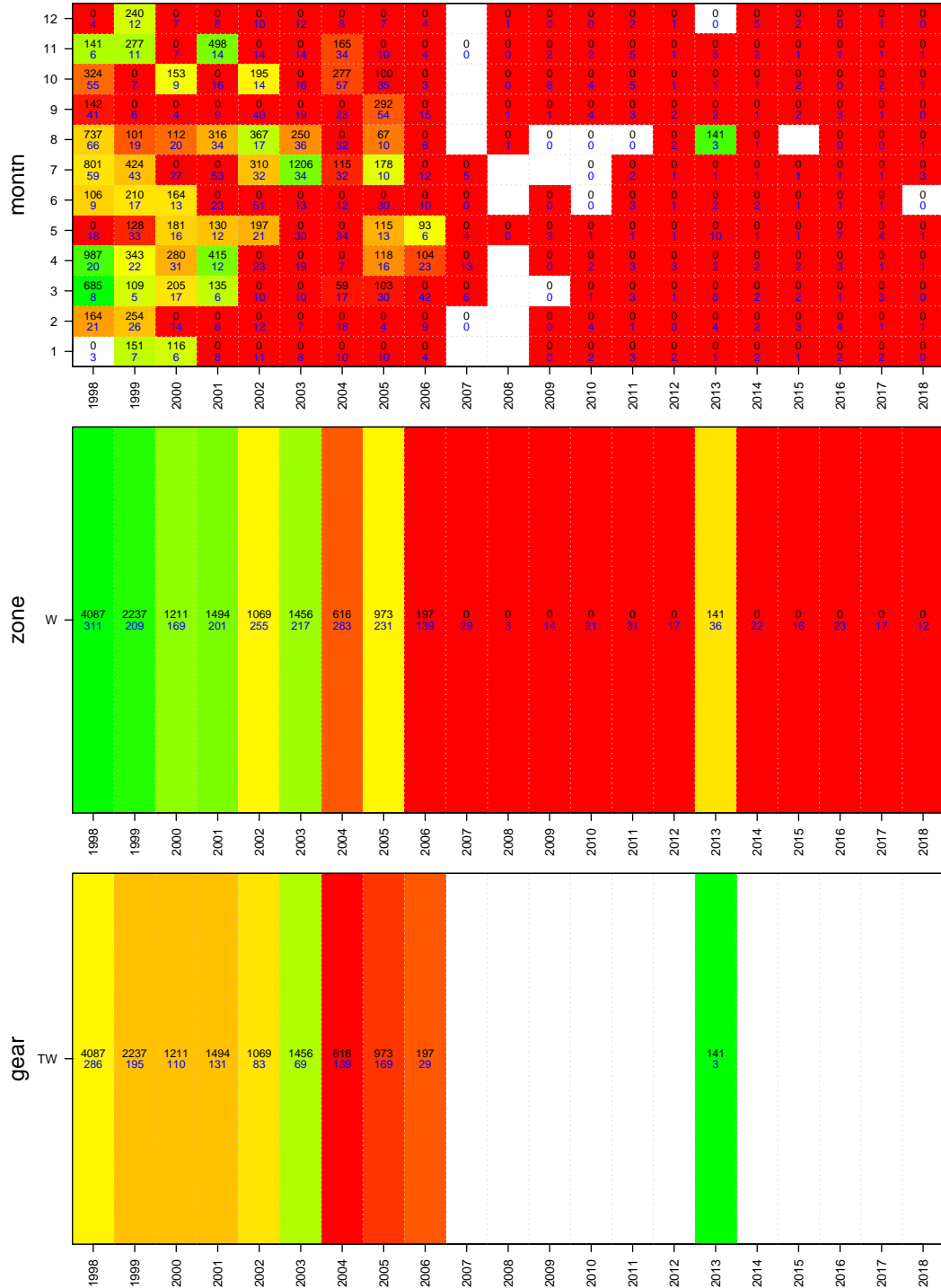
Age frequency



Orange Roughy West

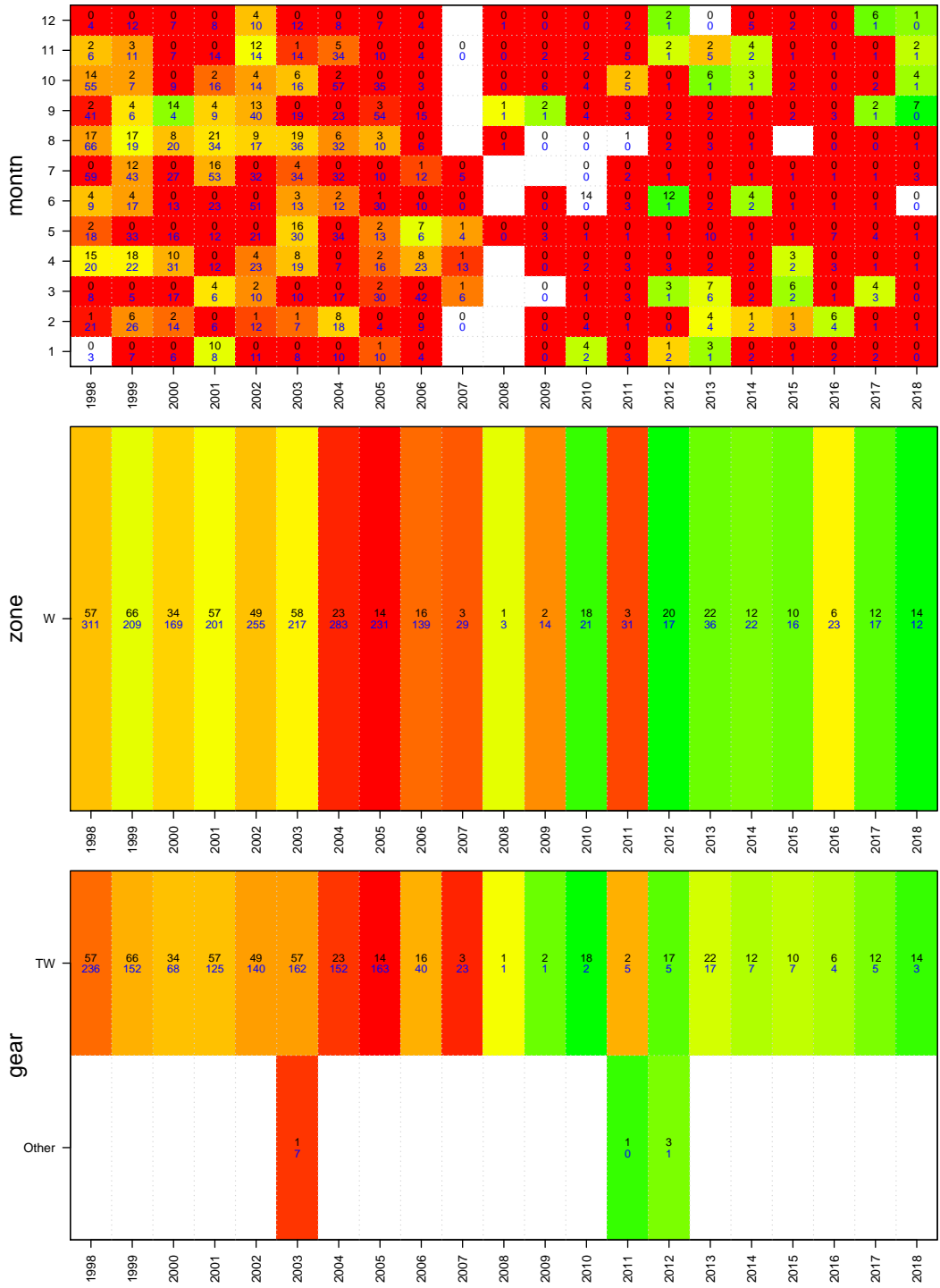
Port length data

Wed Nov 06 17:14:28 2019



Orange Roughy West Onboard discard weight data

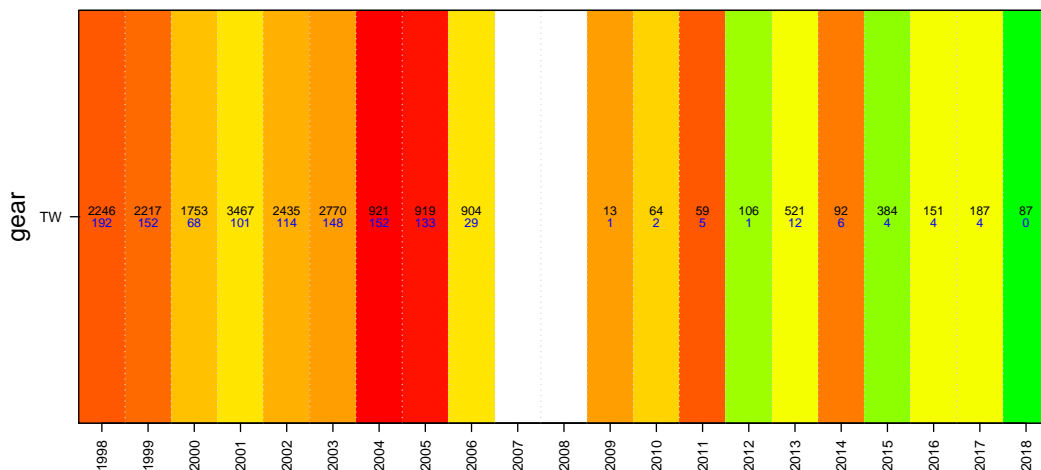
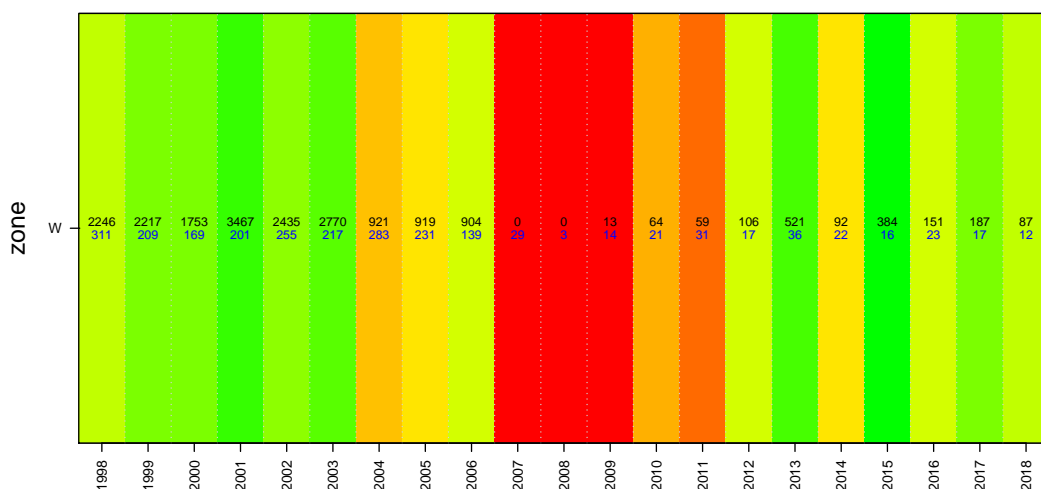
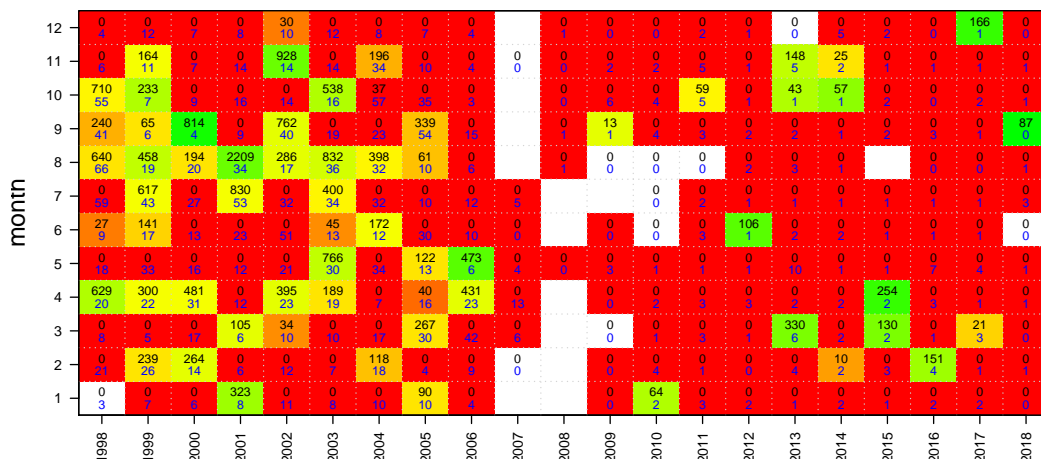
Wed Nov 06 17:14:28 2019



Orange Roughy West

Onboard length data

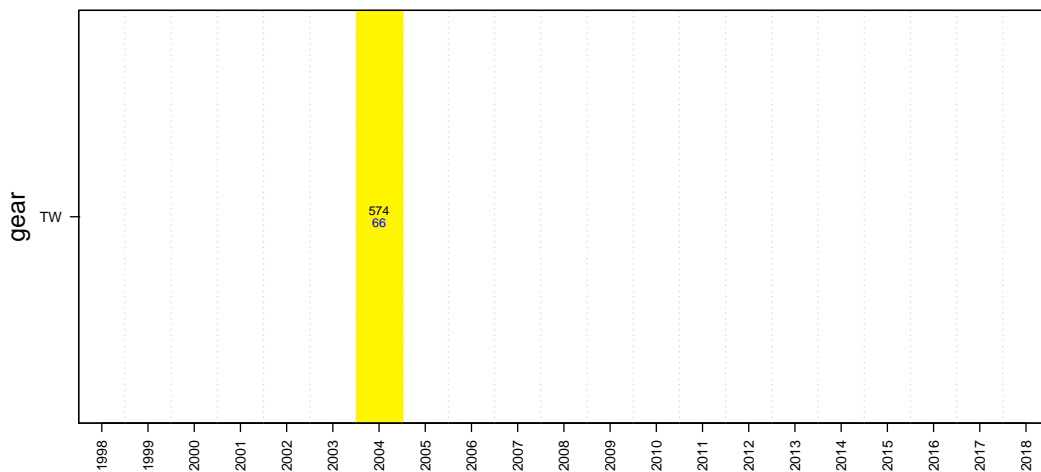
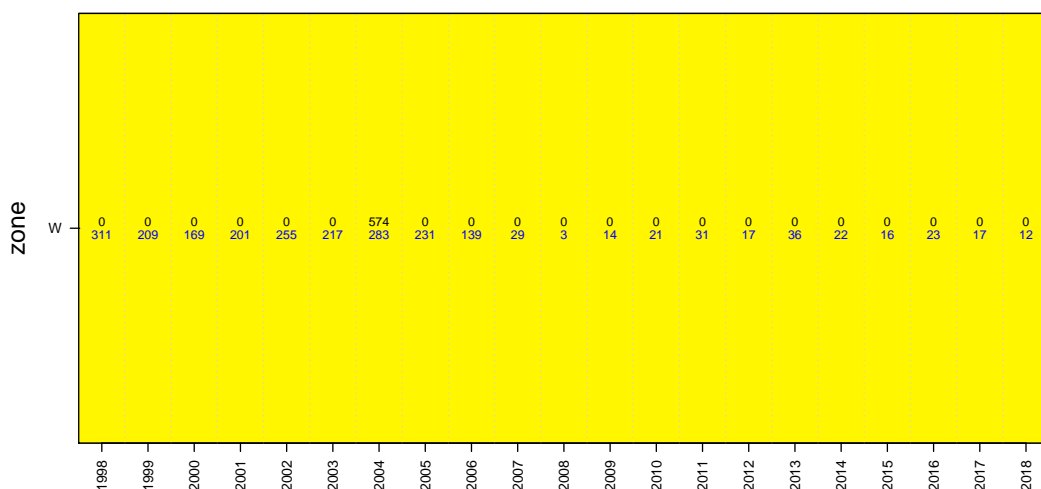
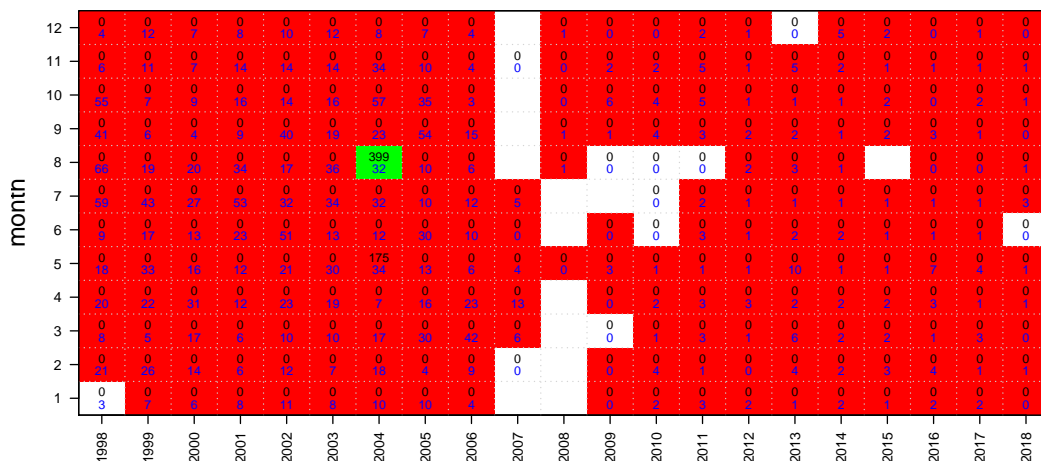
Wed Nov 06 17:14:28 2019



Orange Roughy West

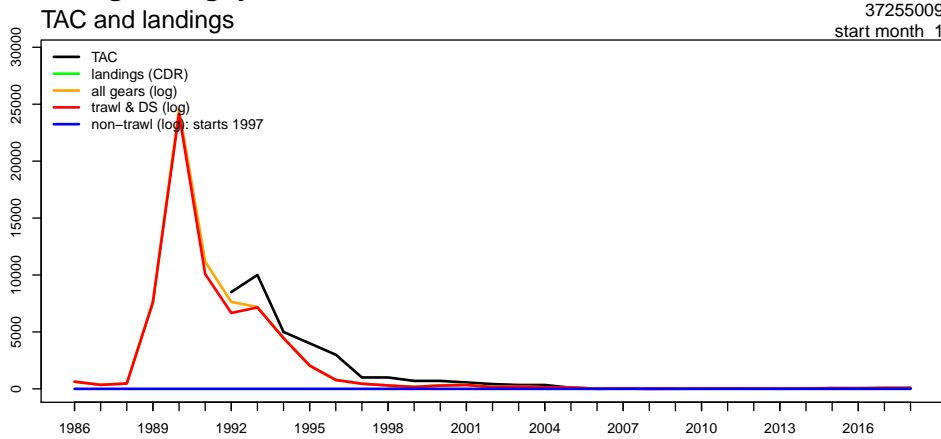
Age data

Wed Nov 06 17:14:28 2019

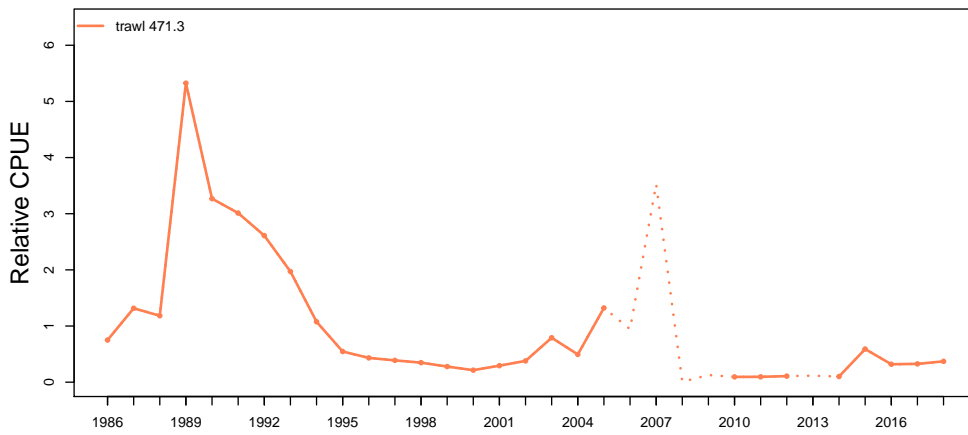


Orange Roughy South

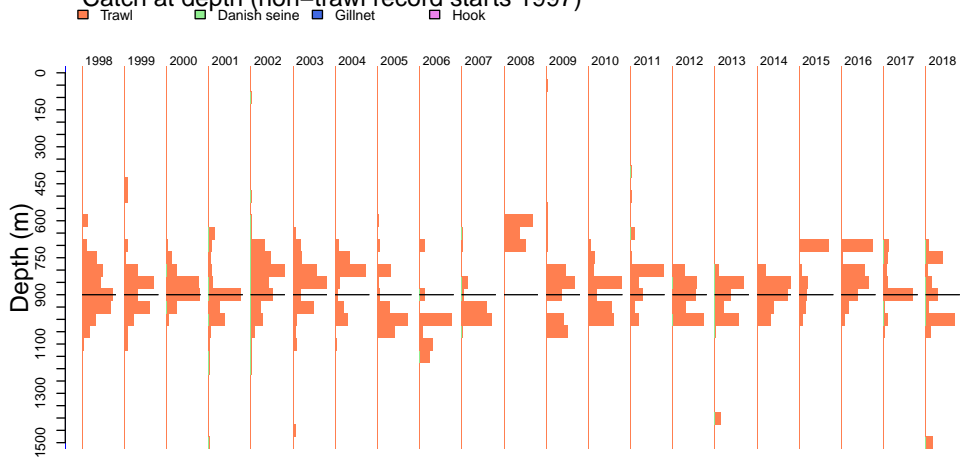
Wed Nov 06 17:14:28 2019
region OR20 unit code ORS sa code ORS
37255009
start month 1



Geometric mean CPUE & SET FIS abundance



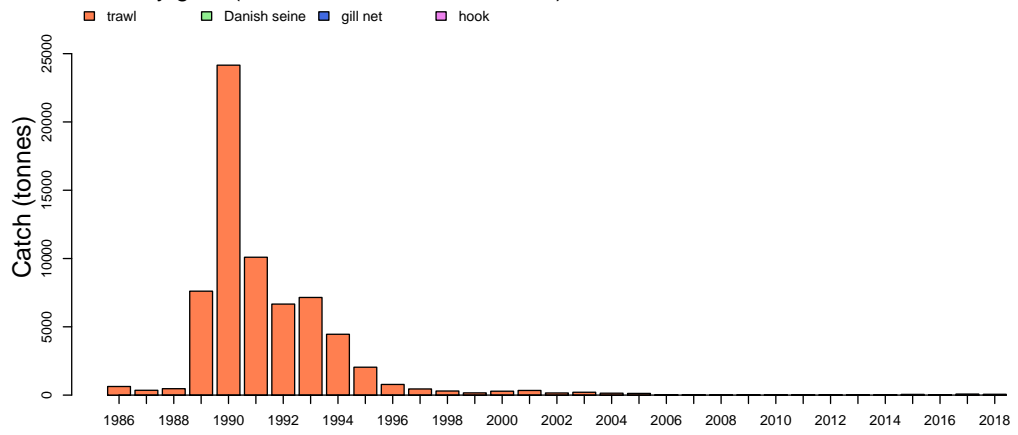
Catch at depth (non-trawl record starts 1997)



Orange Roughy South

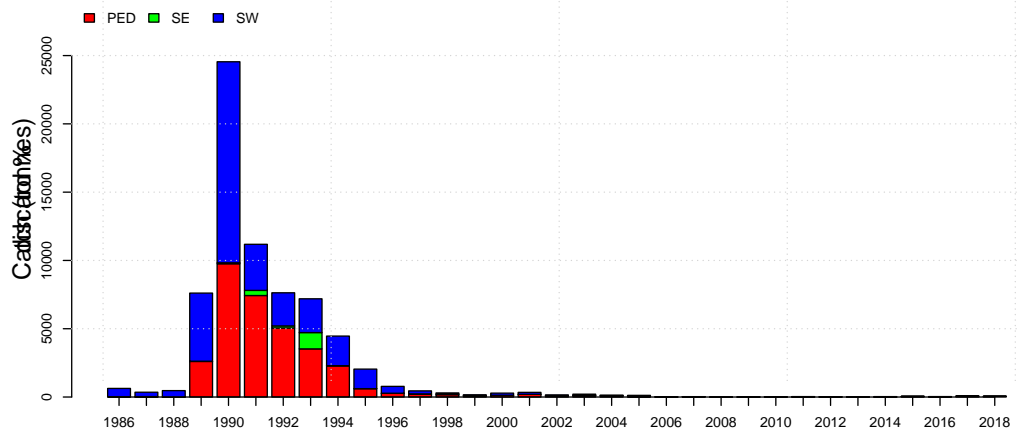
Catch by gear (non-trawl record starts 1997)

Wed Nov 06 17:14:30 2019



Discards

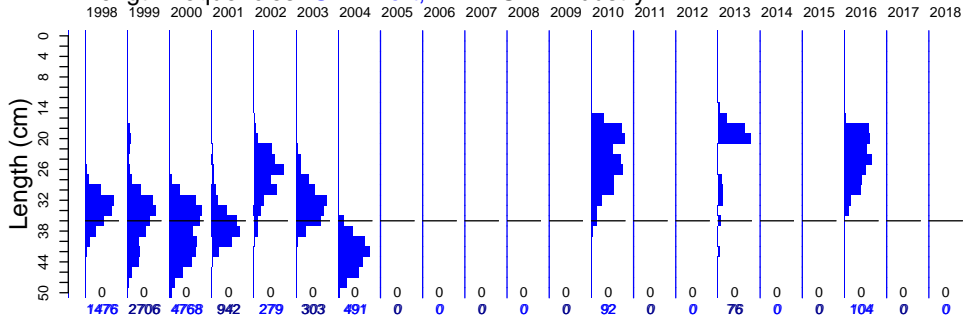
Catch by zone



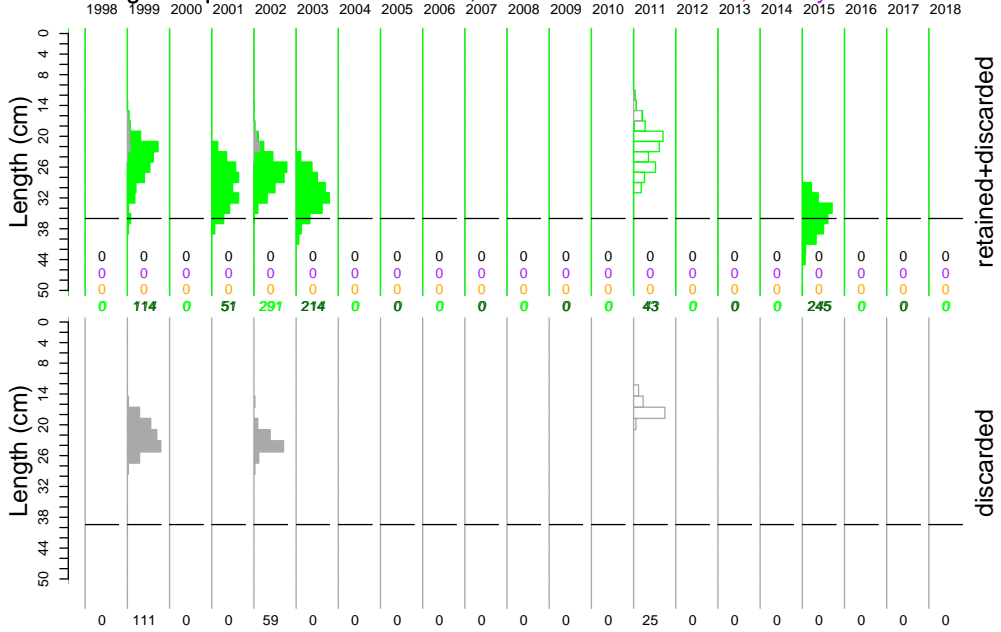
Orange Roughy South

Wed Nov 06 17:14:30 2019

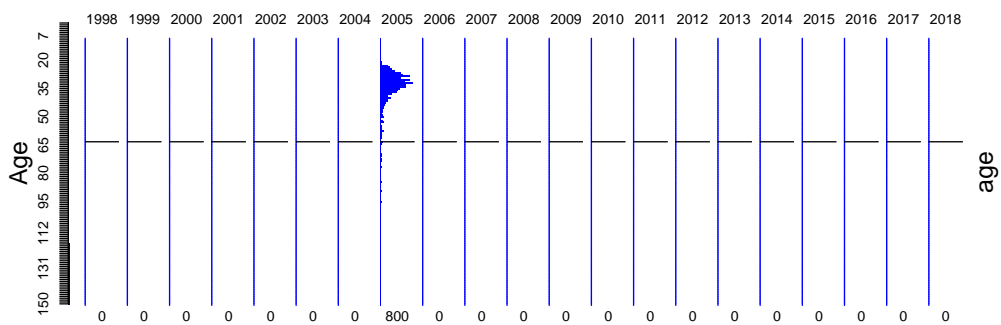
Length frequencies: ISMP Port, GAB Industry



Length frequencies: ISMP Onboard, SET FIS winter, GAB FIS Industry



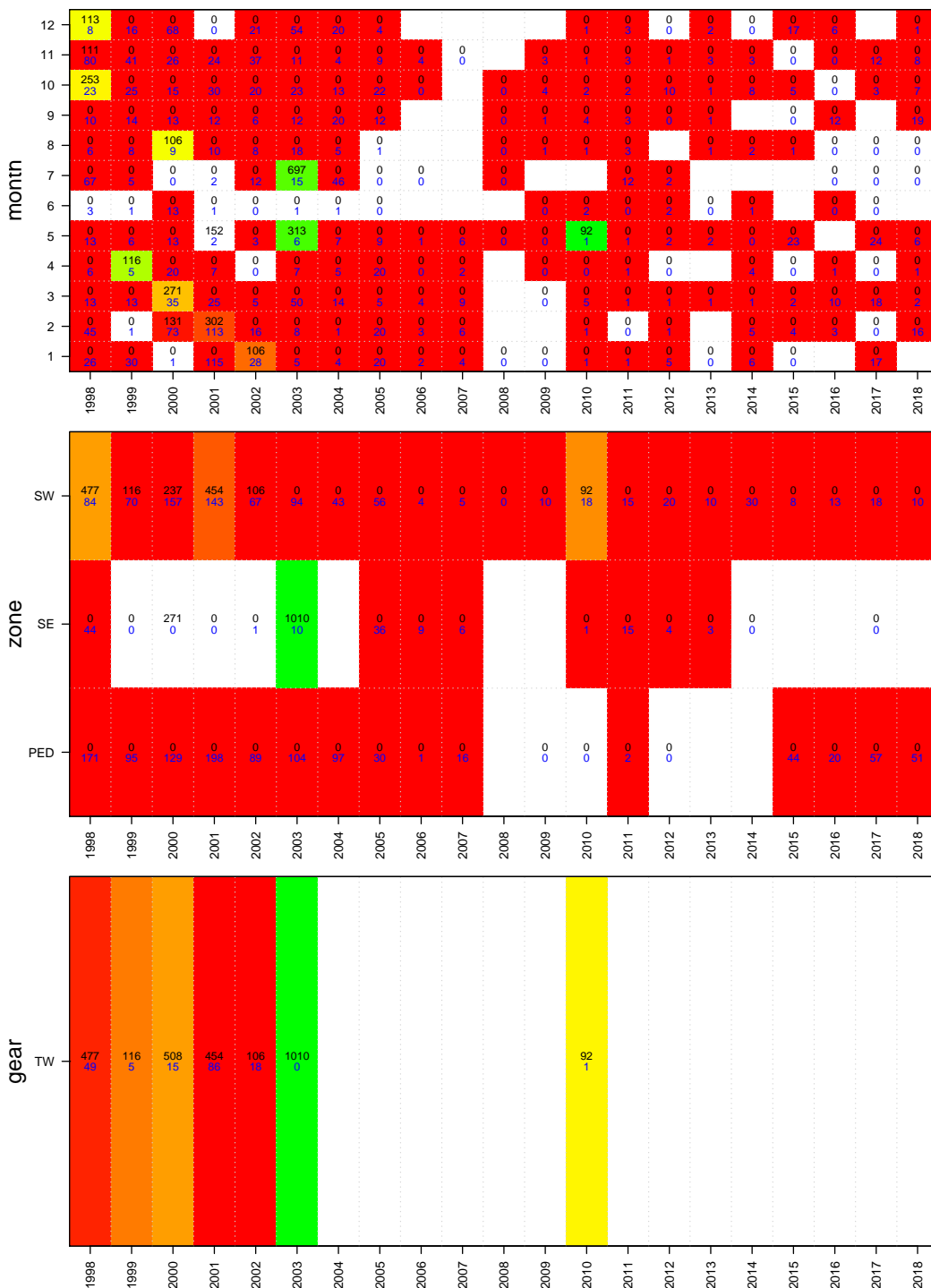
Age frequency



Orange Roughy South

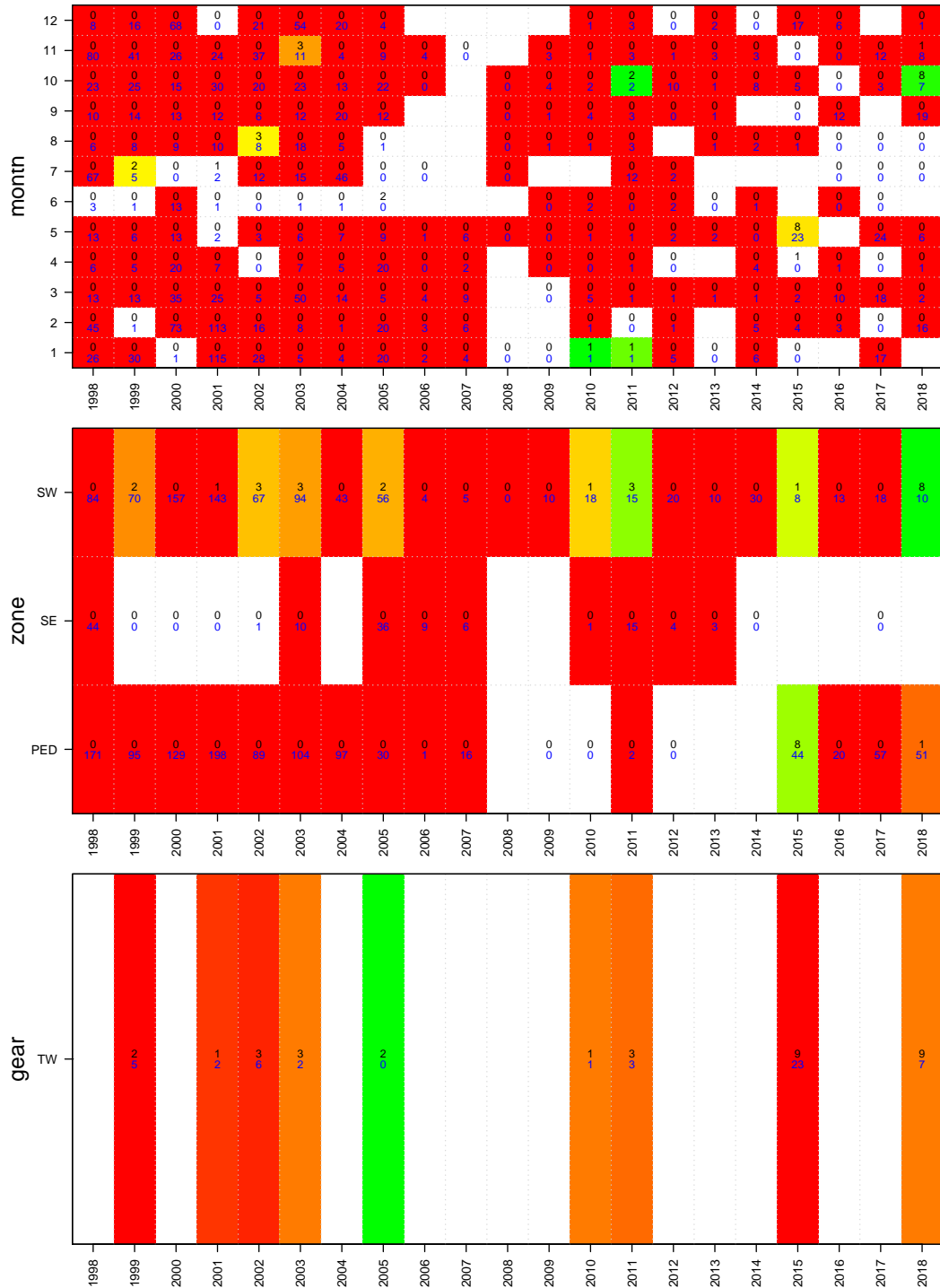
Port length data

Wed Nov 06 17:14:31 2019



Orange Roughy South Onboard discard weight data

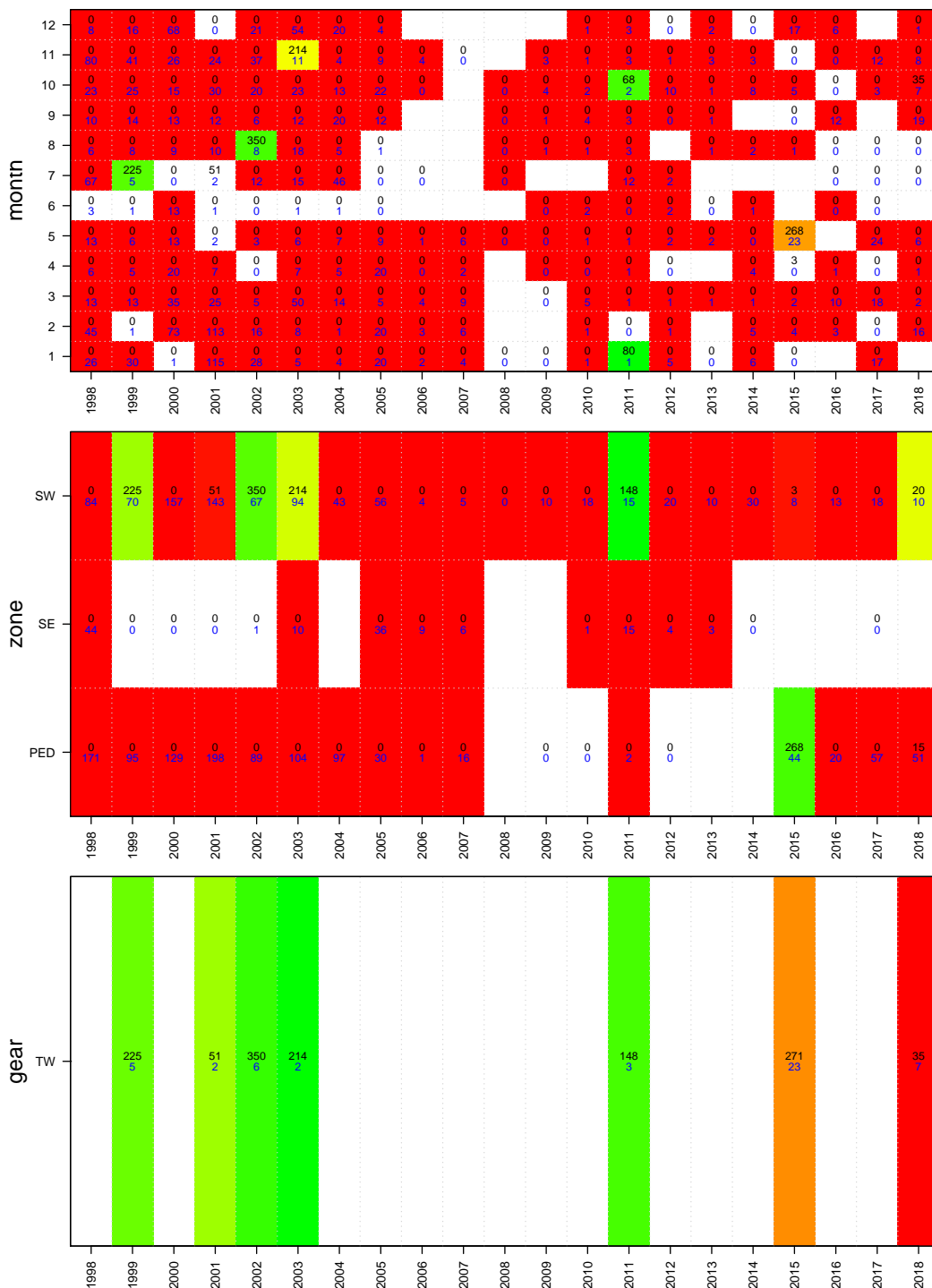
Wed Nov 06 17:14:31 2019



Orange Roughy South

Onboard length data

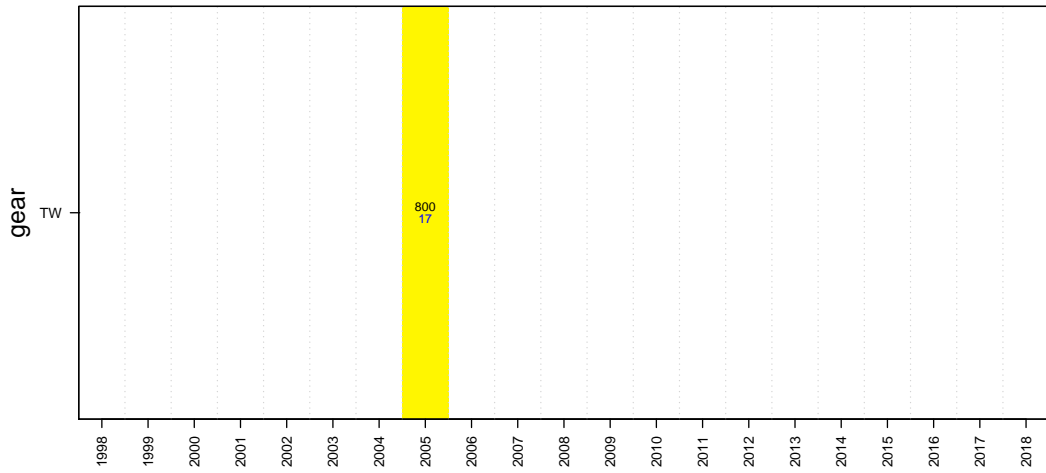
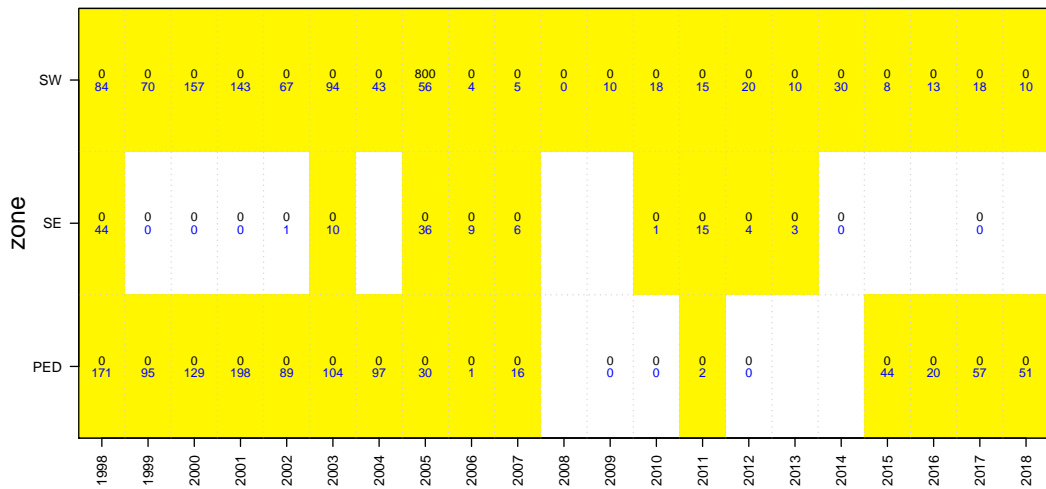
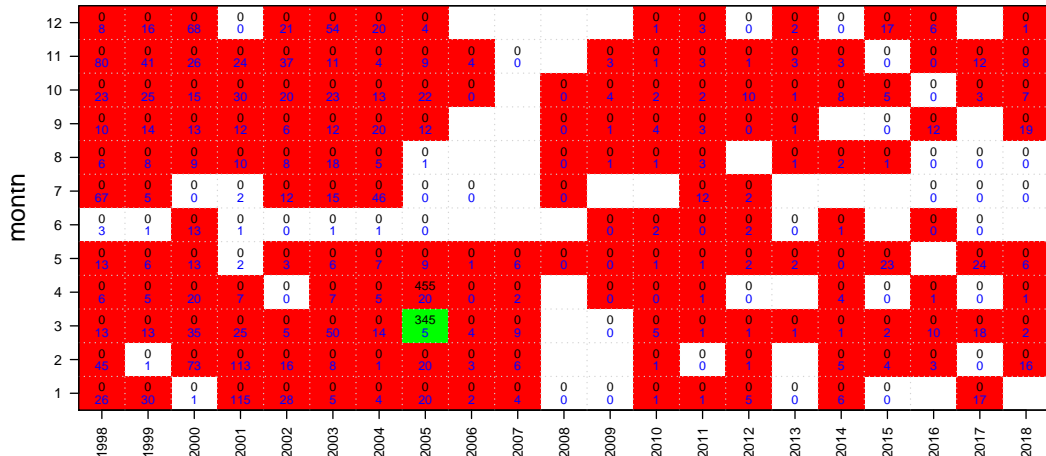
Wed Nov 06 17:14:31 2019



Orange Roughy South

Age data

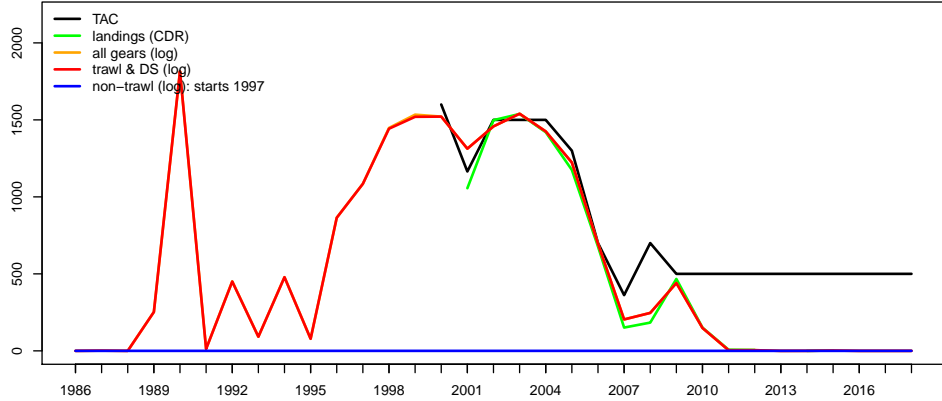
Wed Nov 06 17:14:31 2019



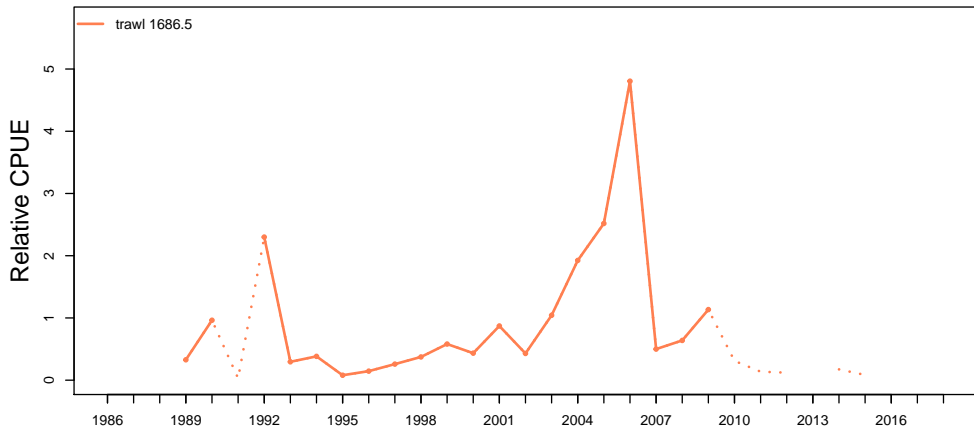
Orange Roughy Cascade

TAC and landings

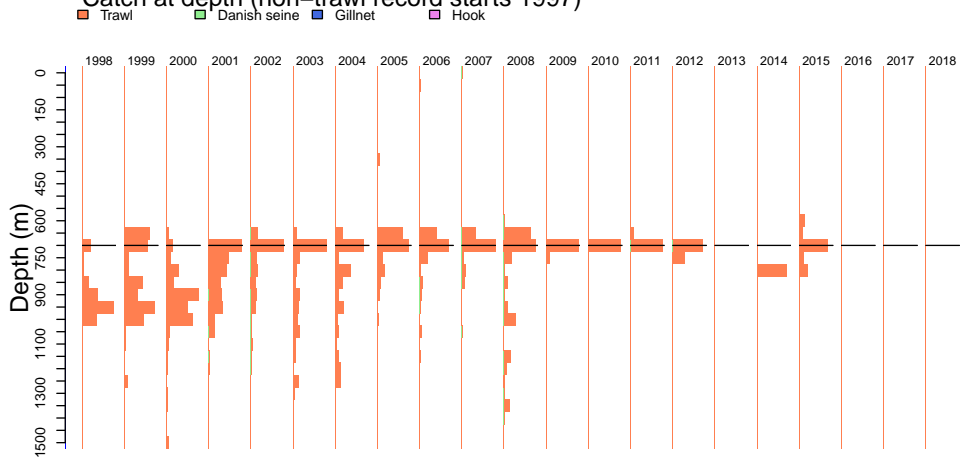
Wed Nov 06 17:14:31 2019
 region OR40 unit code ORC sa code ORC
 37255009
 start month 1



Geometric mean CPUE & SET FIS abundance

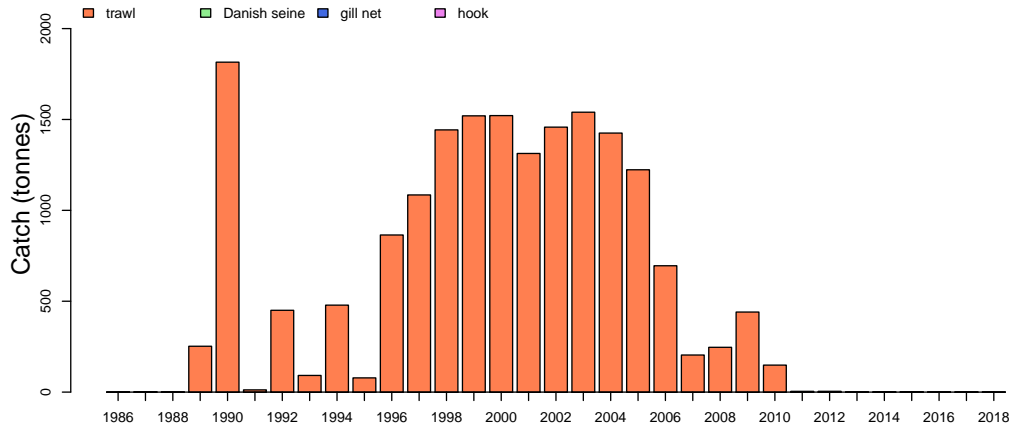


Catch at depth (non-trawl record starts 1997)



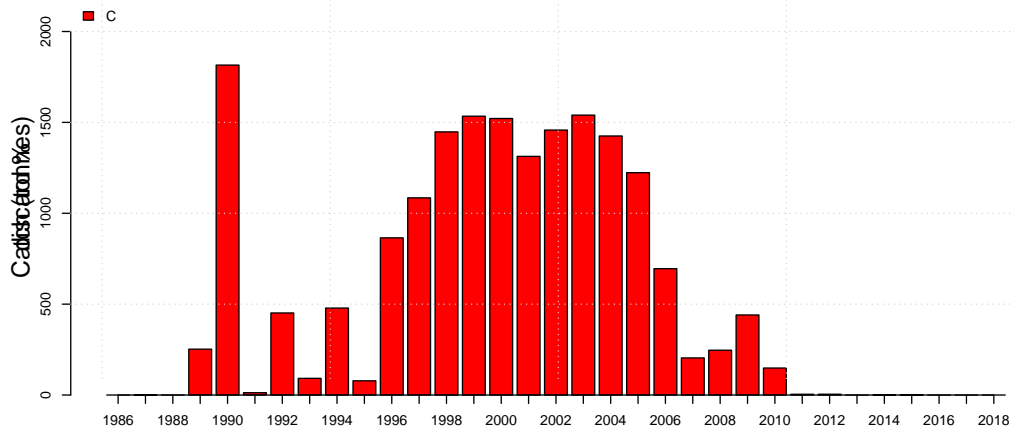
Orange Roughy Cascade

Catch by gear (non-trawl record starts 1997)



Discards

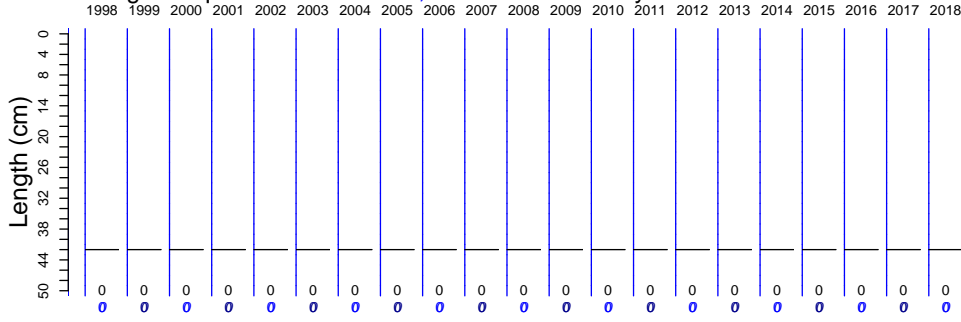
Catch by zone



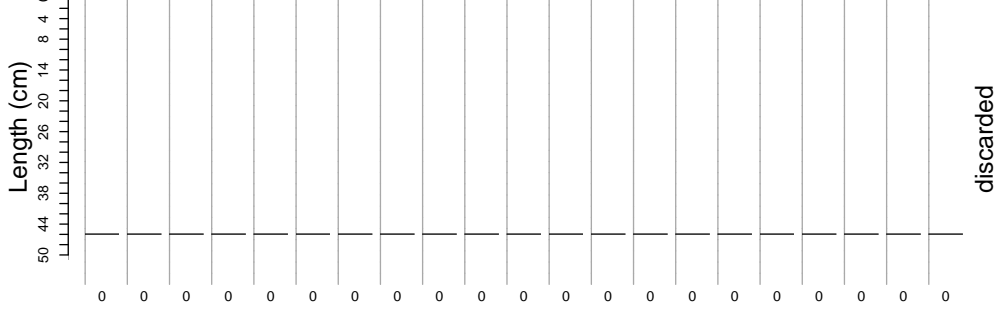
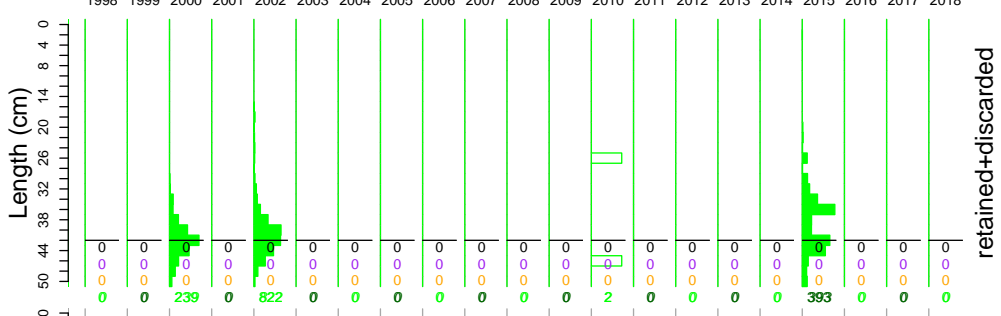
Orange Roughy Cascade

Wed Nov 06 17:14:32 2019

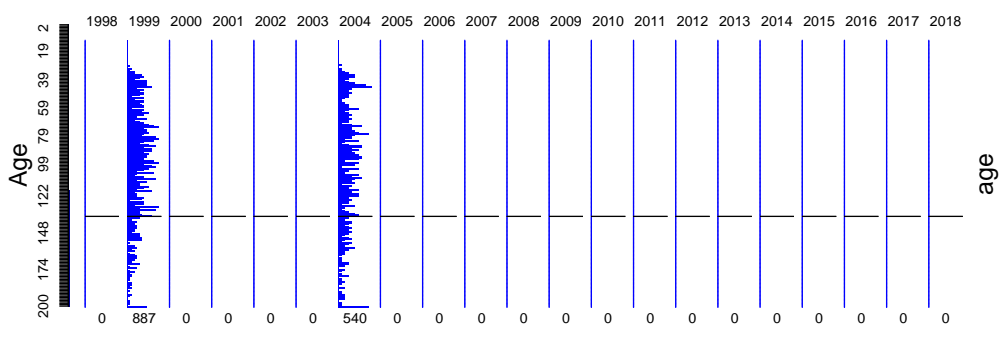
Length frequencies: ISMP Port, GAB Industry



Length frequencies: ISMP Onboard, SET FIS winter, GAB FIS, Industry

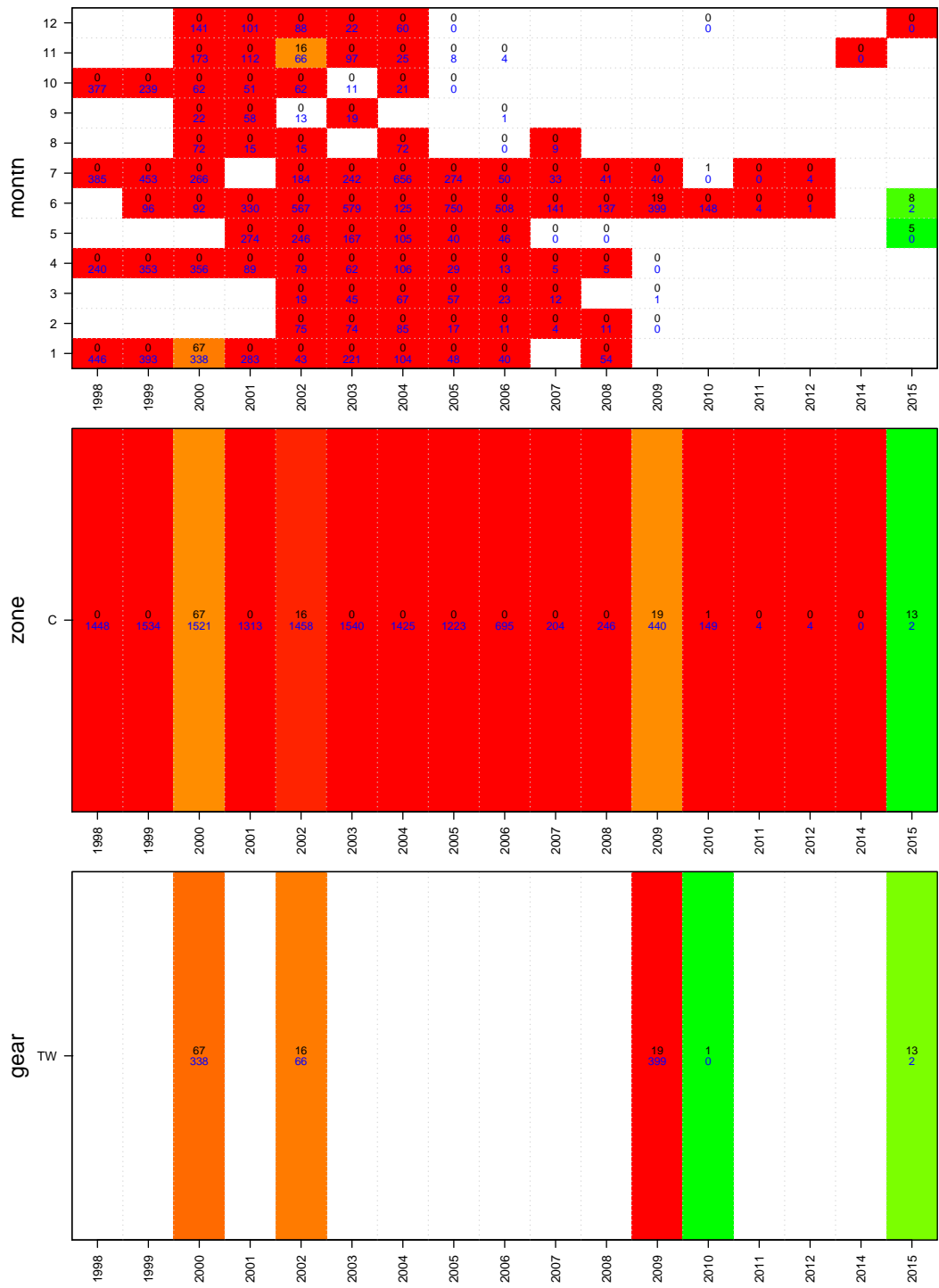


Age frequency



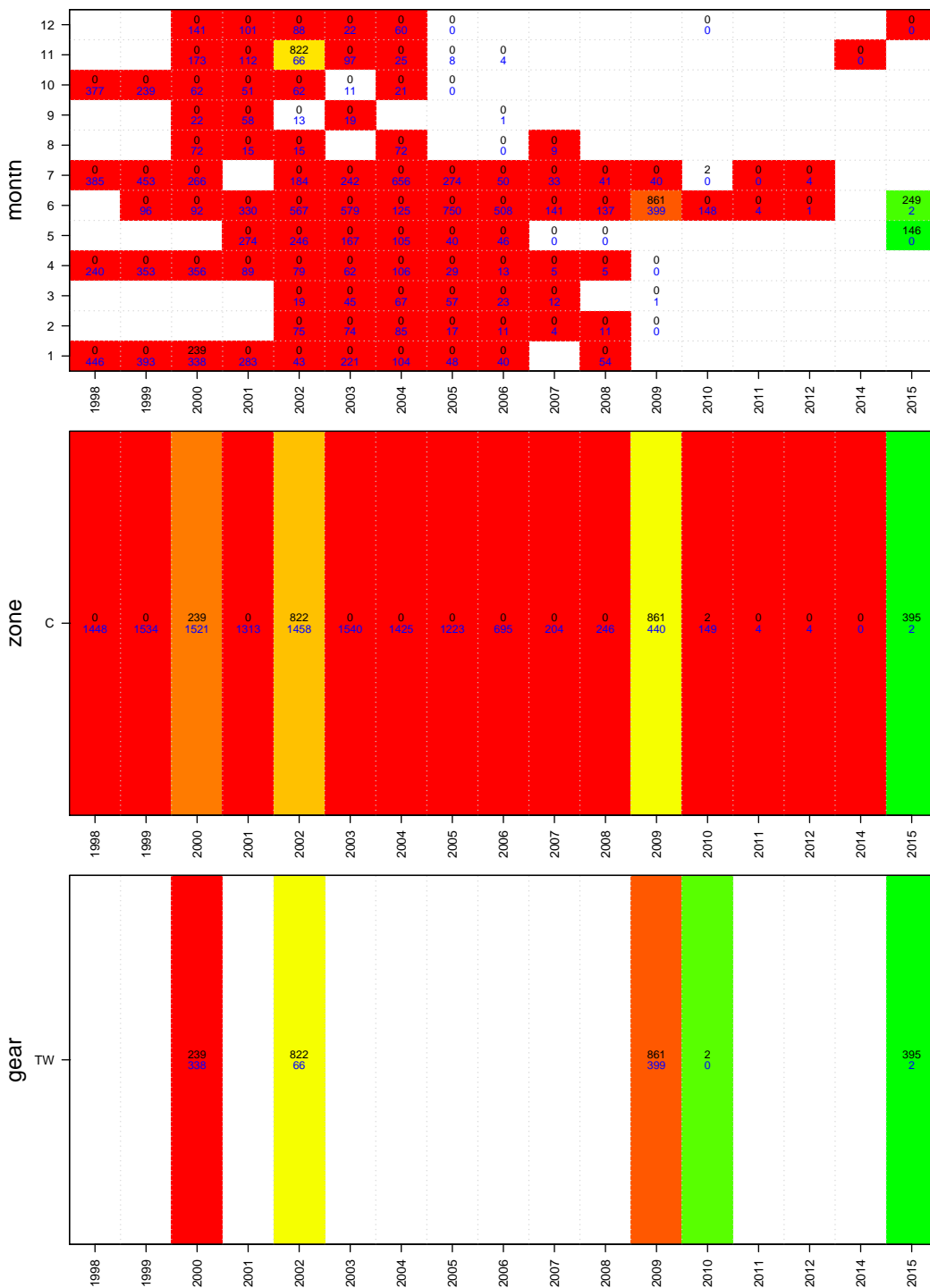
Orange Roughy Cascade Onboard discard weight data

Wed Nov 06 17:14:33 2019



Orange Roughy Cascade Onboard length data

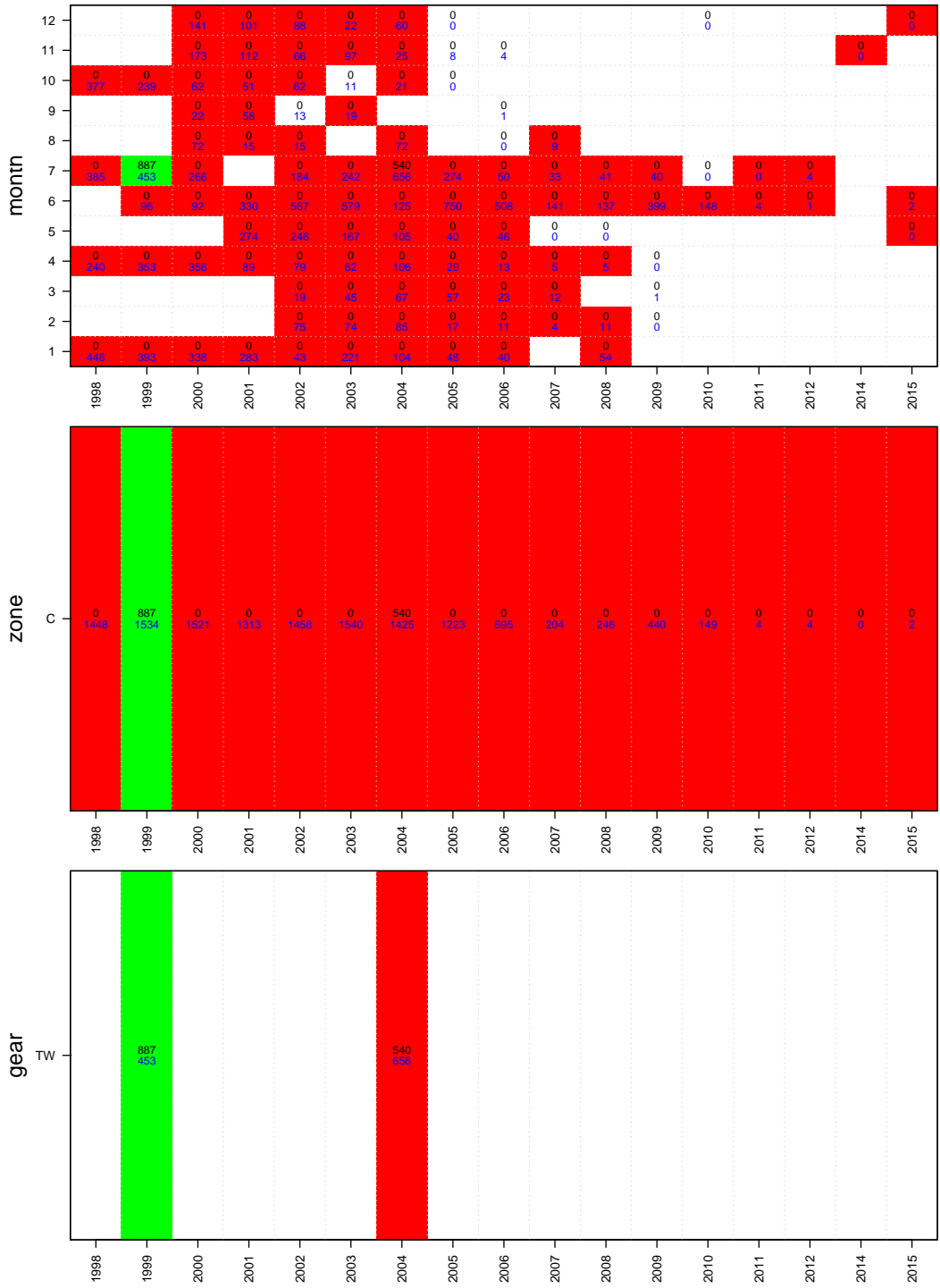
Wed Nov 06 17:14:33 2019



Orange Roughy Cascade

Age data

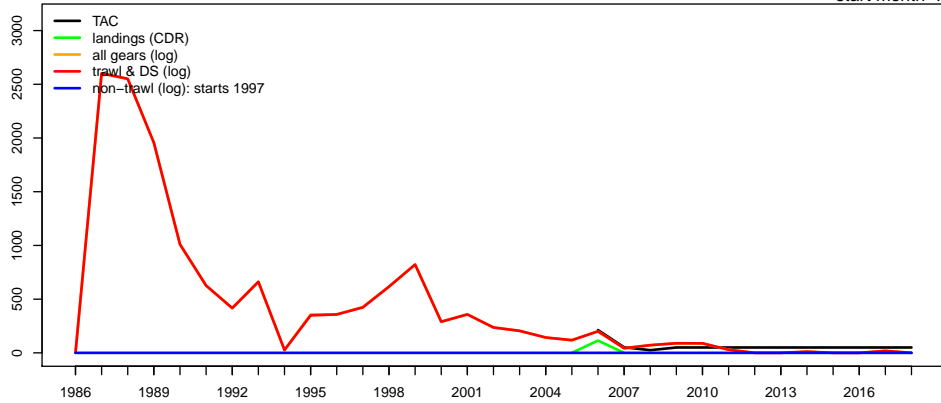
Wed Nov 06 17:14:33 2019



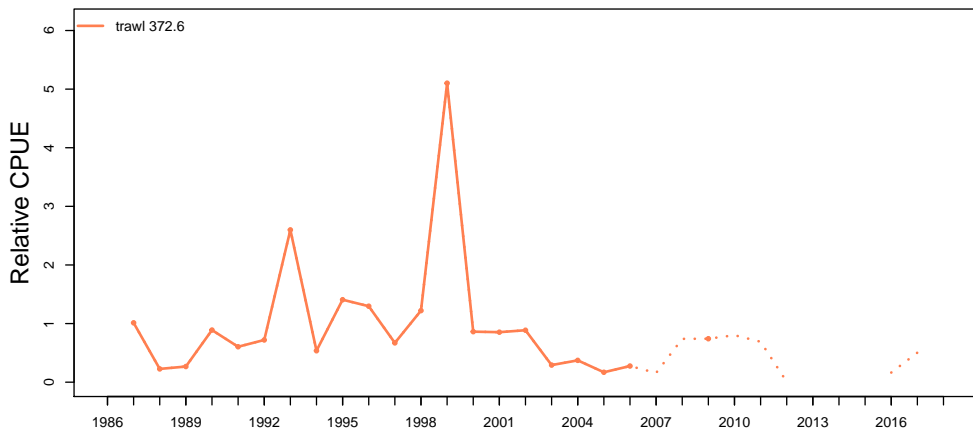
Orange Roughy GAB

Wed Nov 06 17:14:33 2019
 region GAB unit code ORG sa code ORG
 37255009
 start month 7

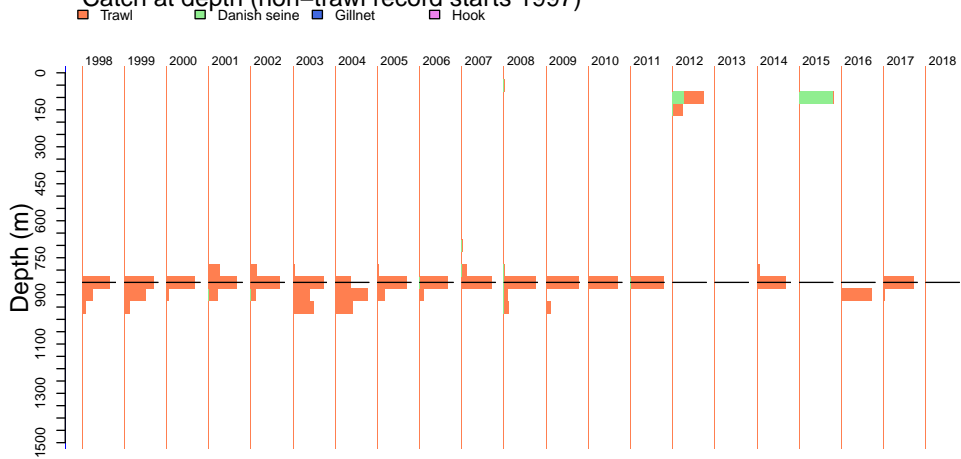
TAC and landings



Geometric mean CPUE & SET FIS abundance



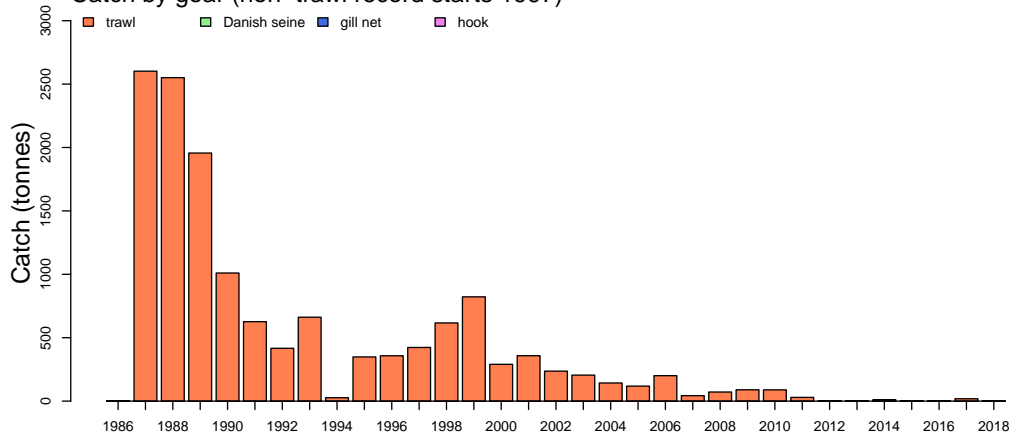
Catch at depth (non-trawl record starts 1997)



Financial year 2018 is incomplete

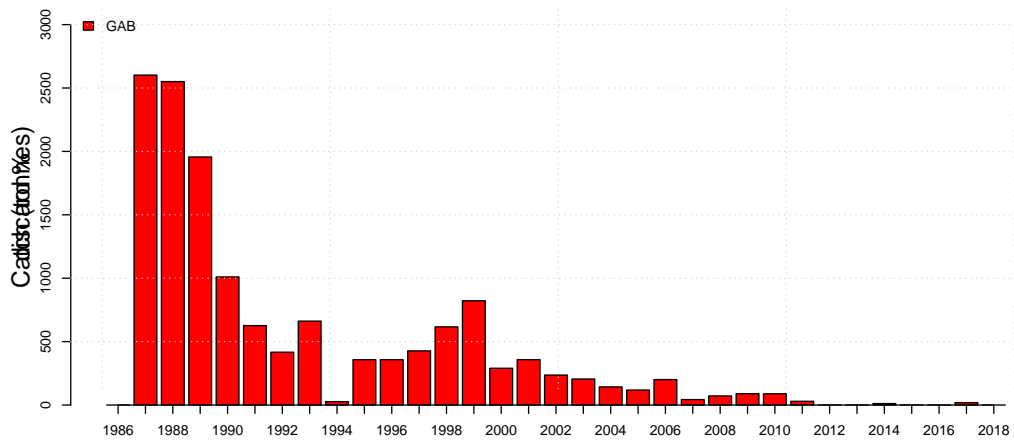
Orange Roughy GAB

Catch by gear (non-trawl record starts 1997)



Discards

Catch by zone

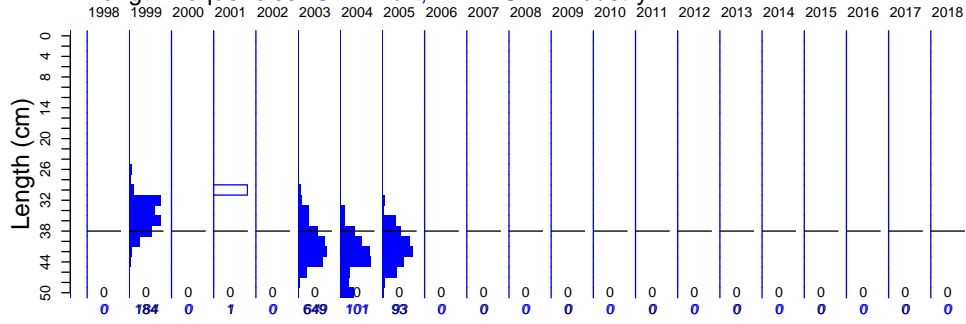


Financial year 2018 is incomplete

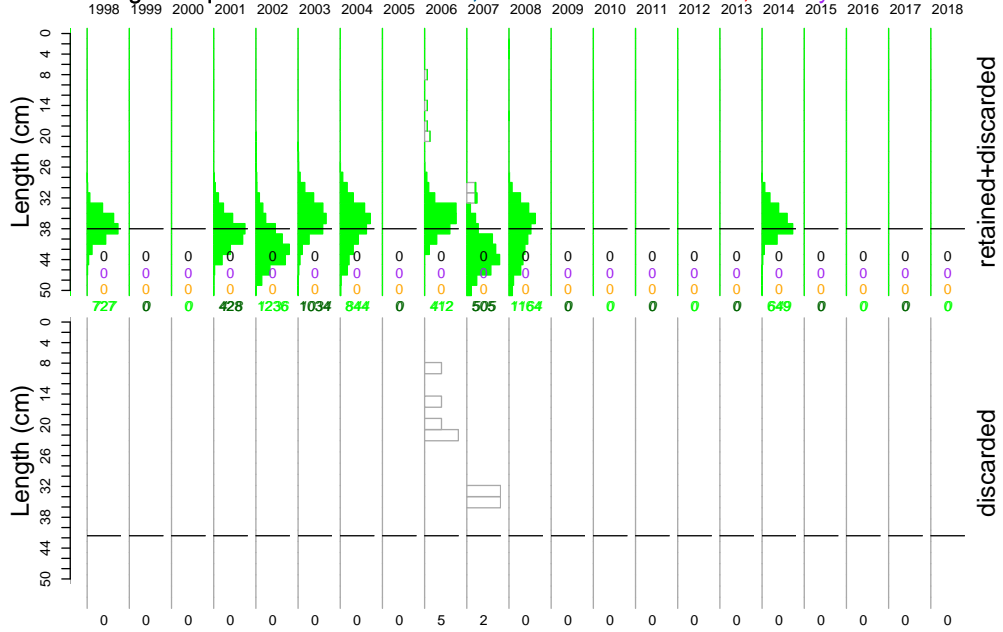
Orange Roughy GAB

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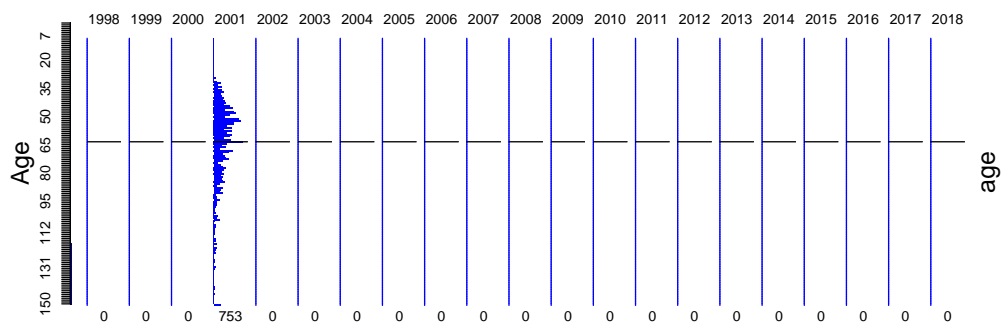
Length frequencies: ISMP Port, GAB Industry



Length frequencies: ISMP Onboard, SET FIS winter GAB FIS Industry



Age frequency

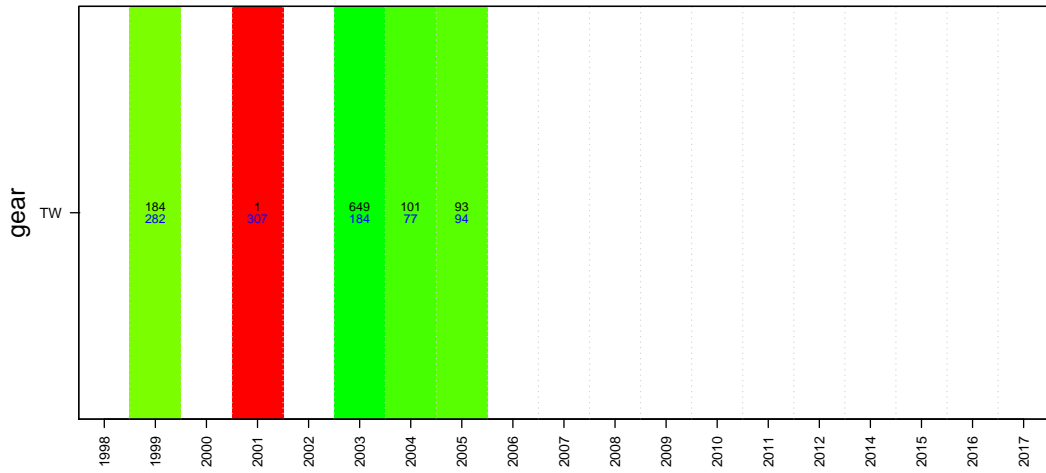
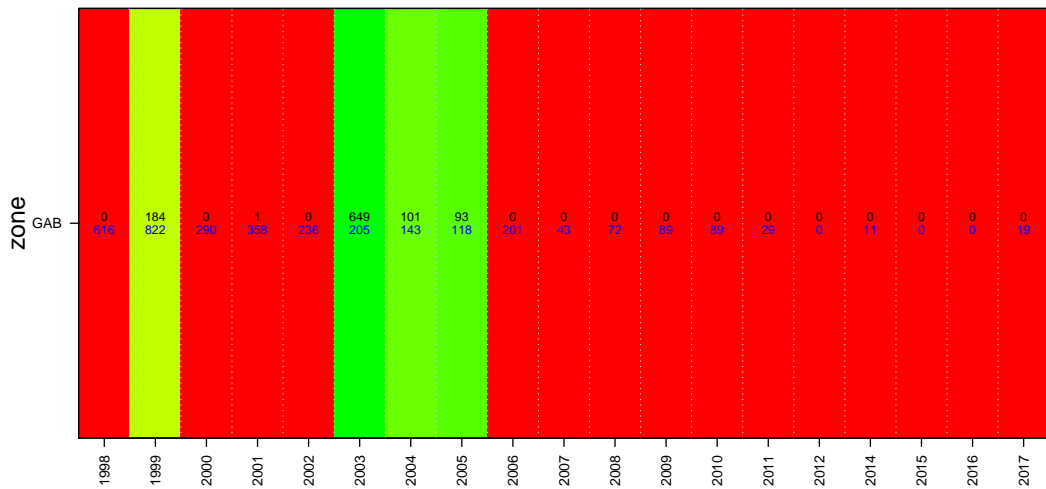
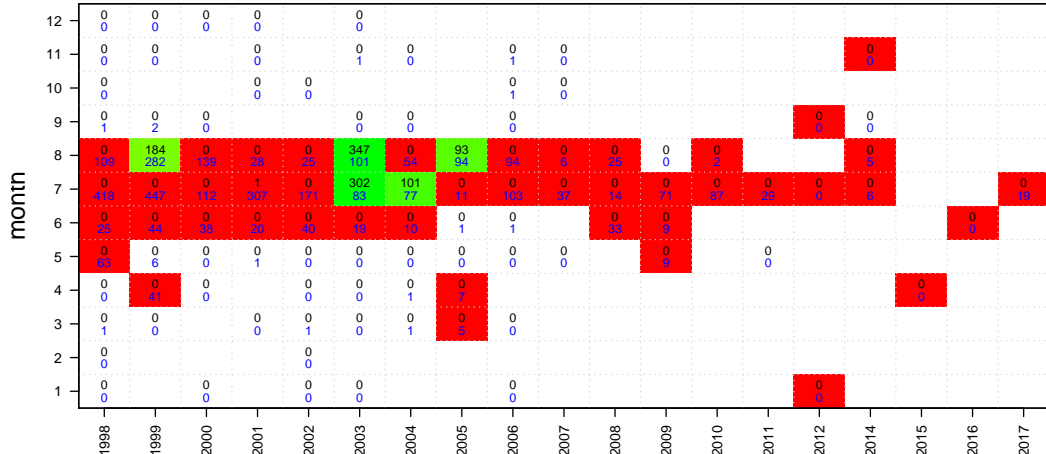


Financial year 2018 is incomplete

Orange Roughy GAB

Port length data

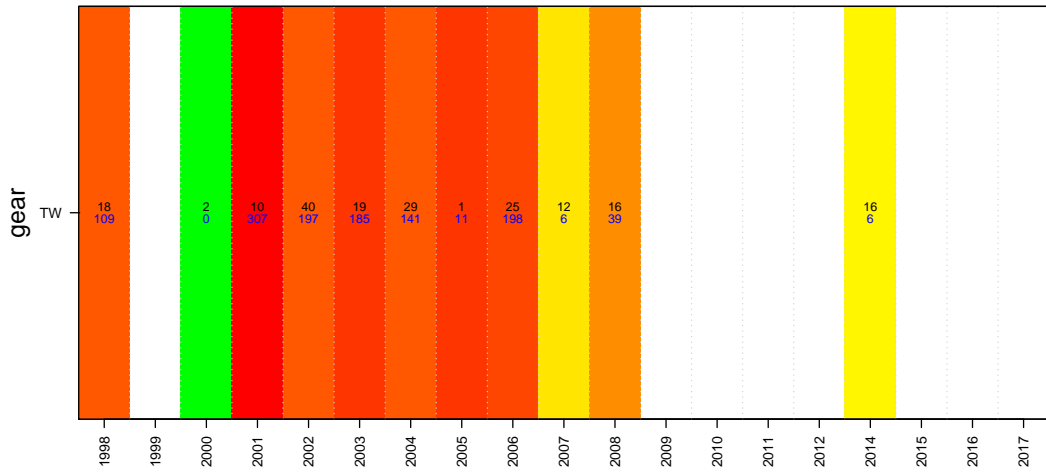
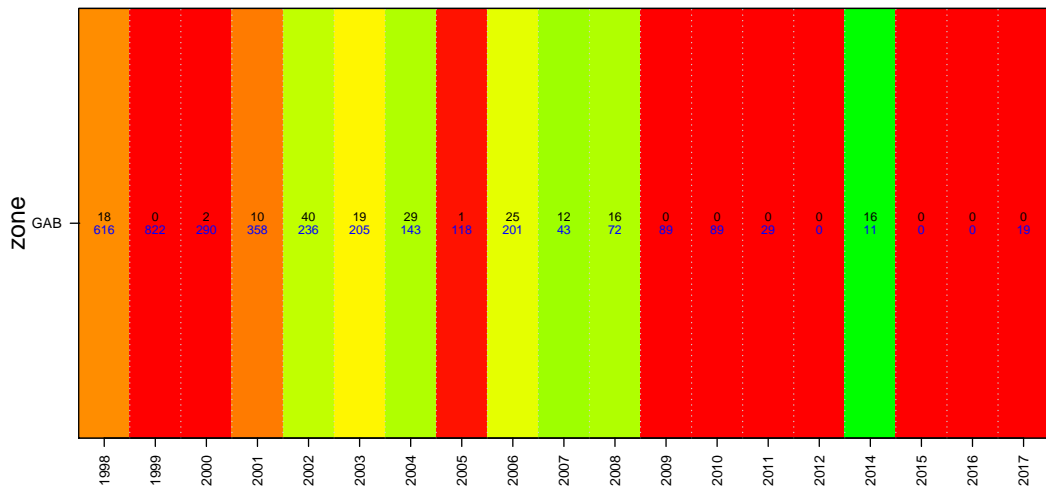
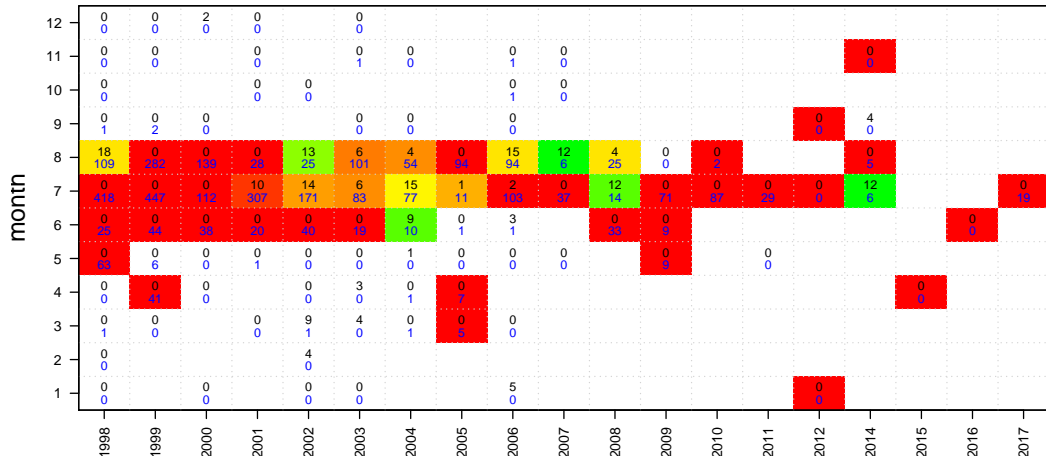
Wed Nov 06 17:14:34 2019



Orange Roughy GAB

Onboard discard weight data

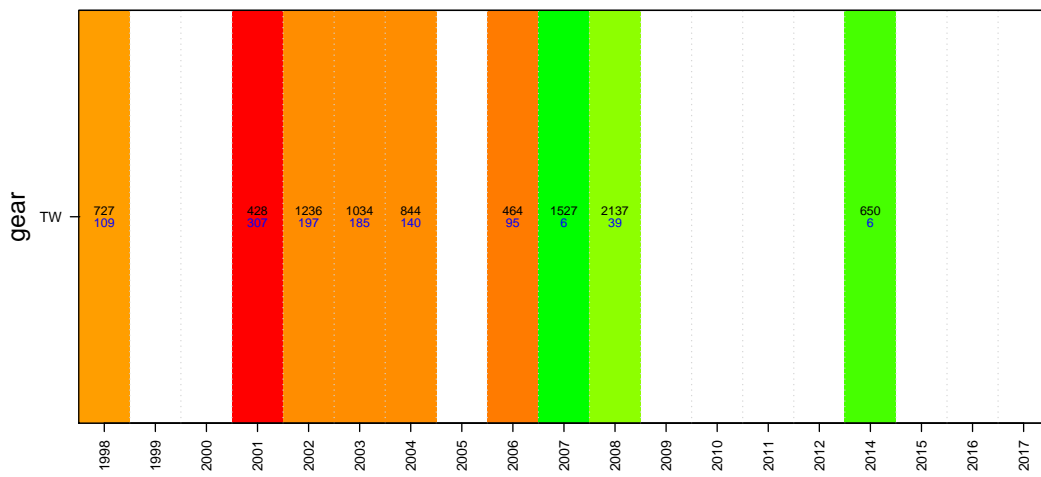
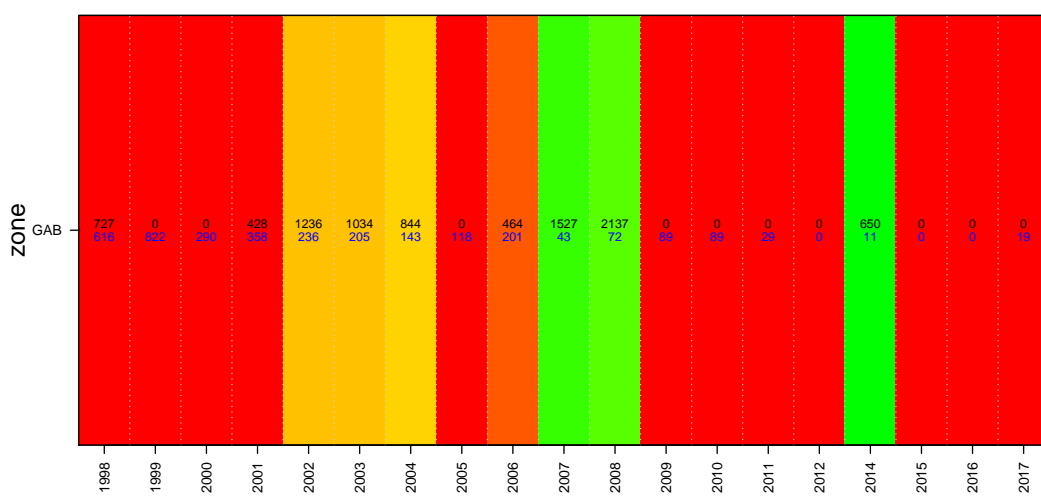
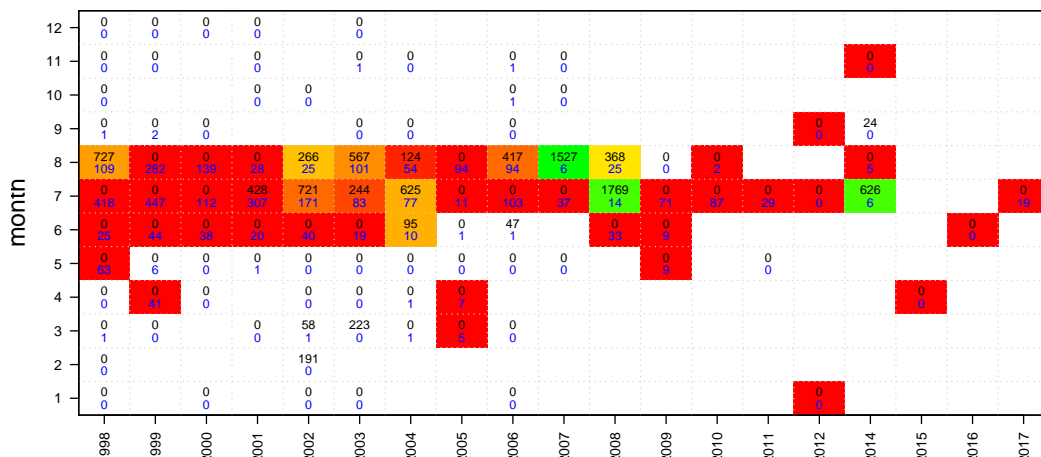
Wed Nov 06 17:14:34 2019



Orange Roughy GAB

Onboard length data

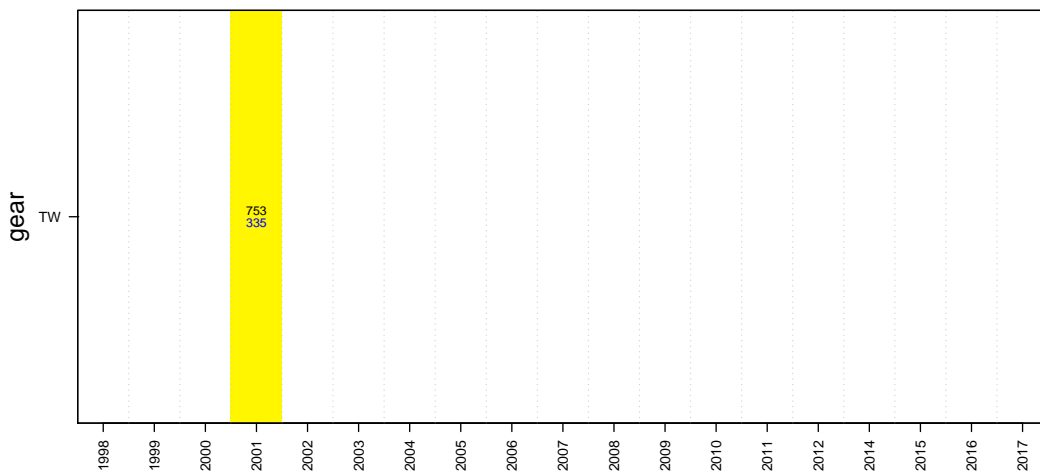
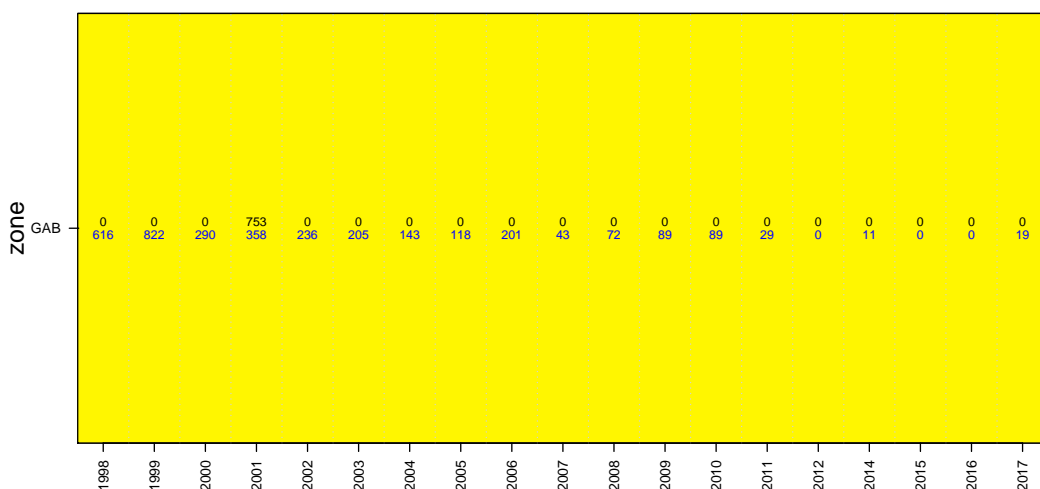
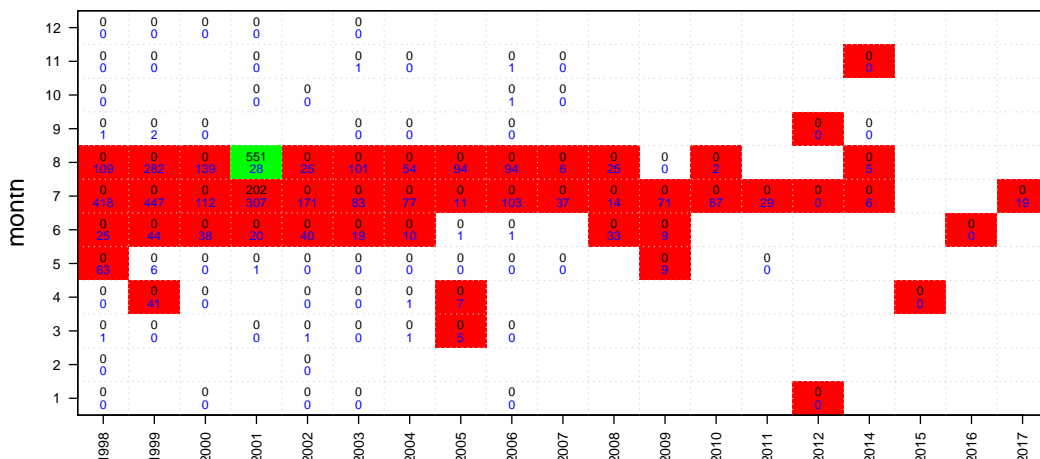
Wed Nov 06 17:14:34 2019



Orange Roughy GAB

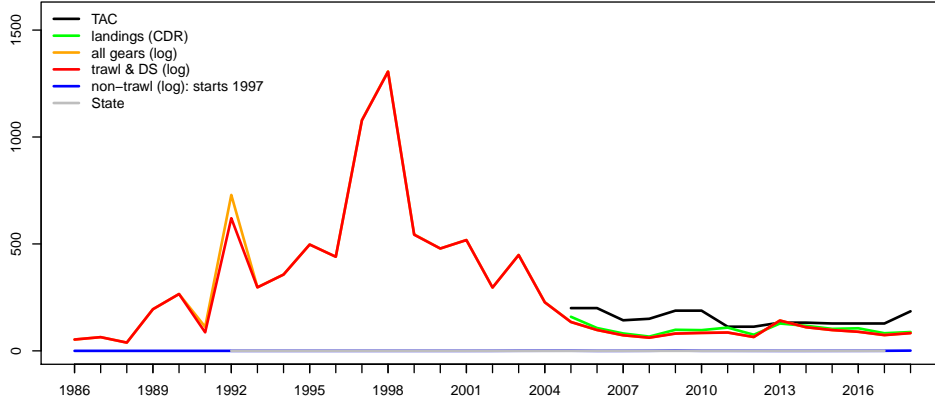
Age data

Wed Nov 06 17:14:34 2019

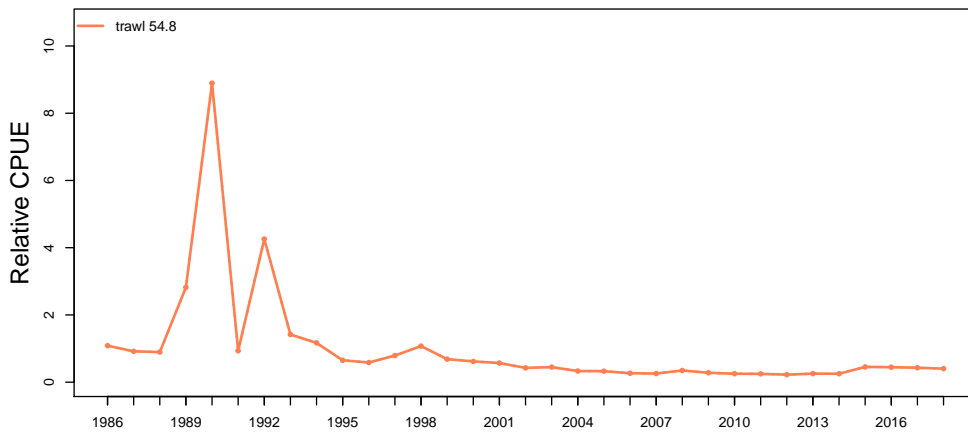


Oreos
TAC and landings

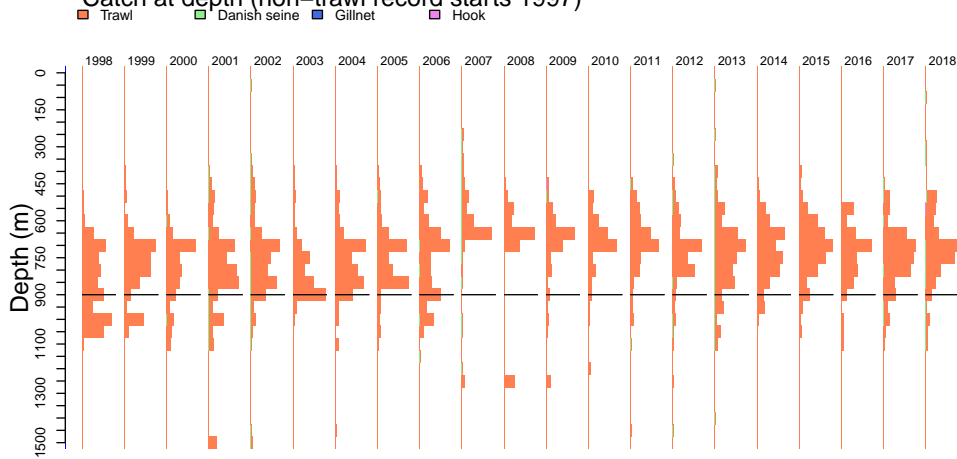
Wed Nov 06 17:14:35 2019
region OREO unit code OREO sa code OREO
37266001 37266004 37266005 37266006 37266902
start month 1



Geometric mean CPUE & SET FIS abundance

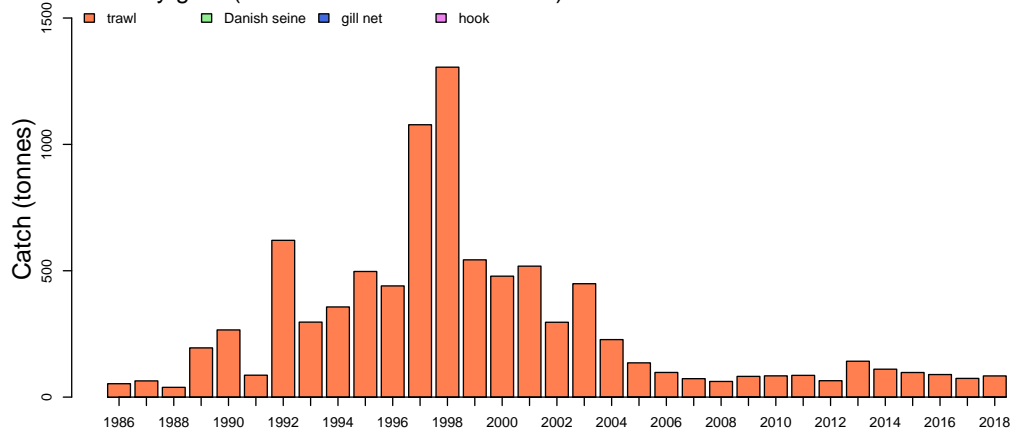


Catch at depth (non-trawl record starts 1997)

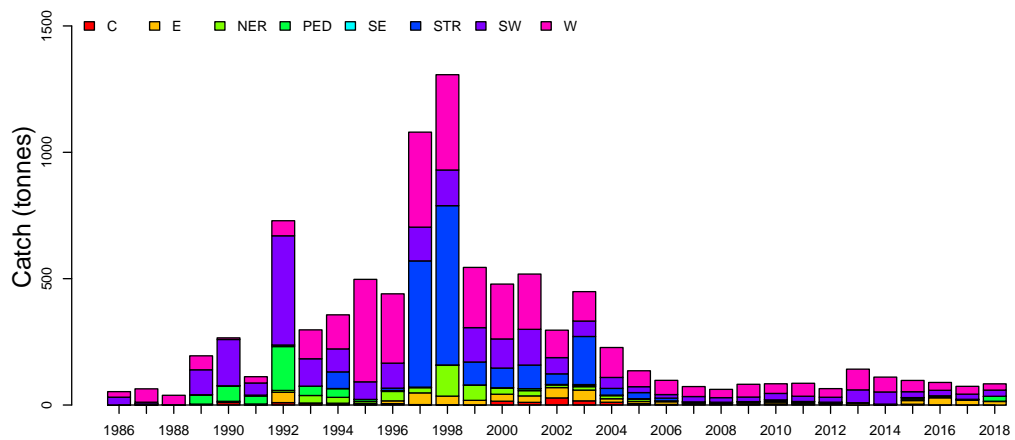


Oreos

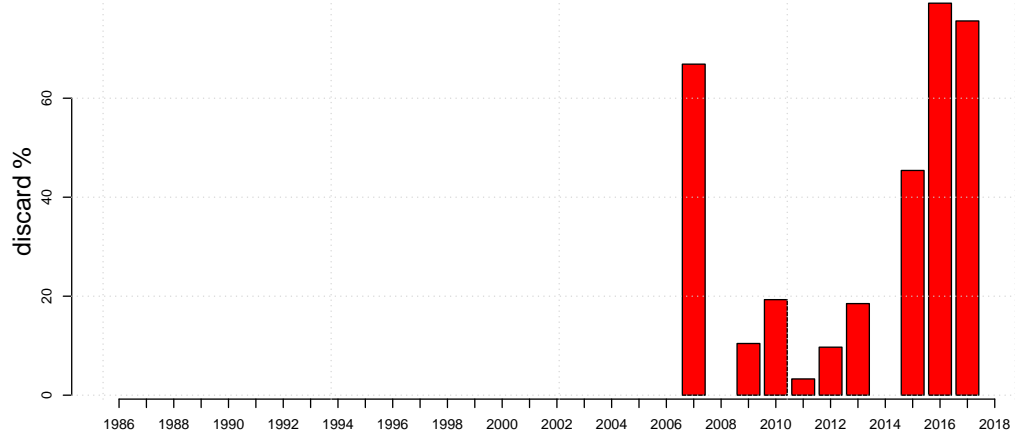
Catch by gear (non-trawl record starts 1997)



Catch by zone



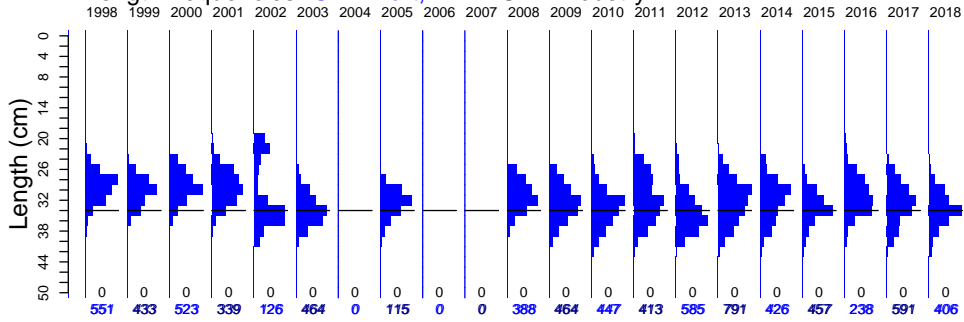
Discards



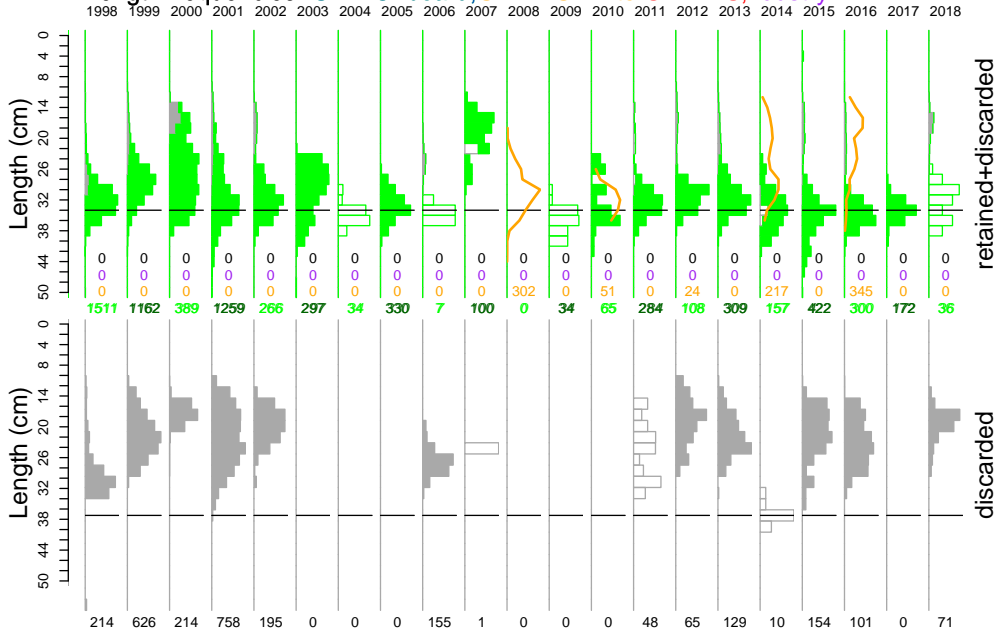
Oreos

Wed Nov 06 17:14:37 2019

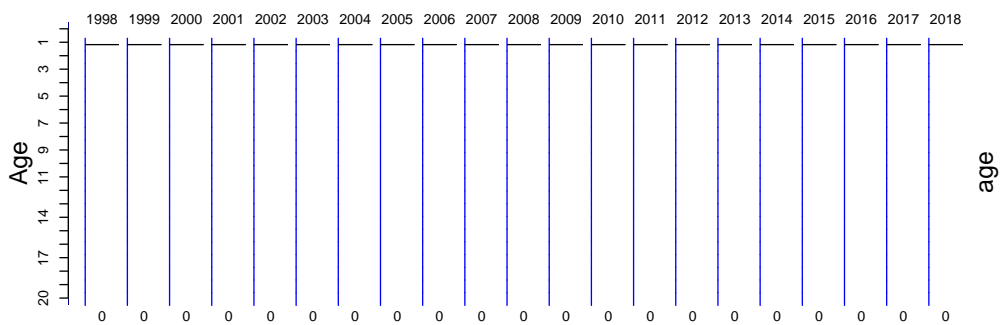
Length frequencies: ISMP Port, GAB Industry



Length frequencies: ISMP Onboard, SET FIS winter, GAB FIS Industry



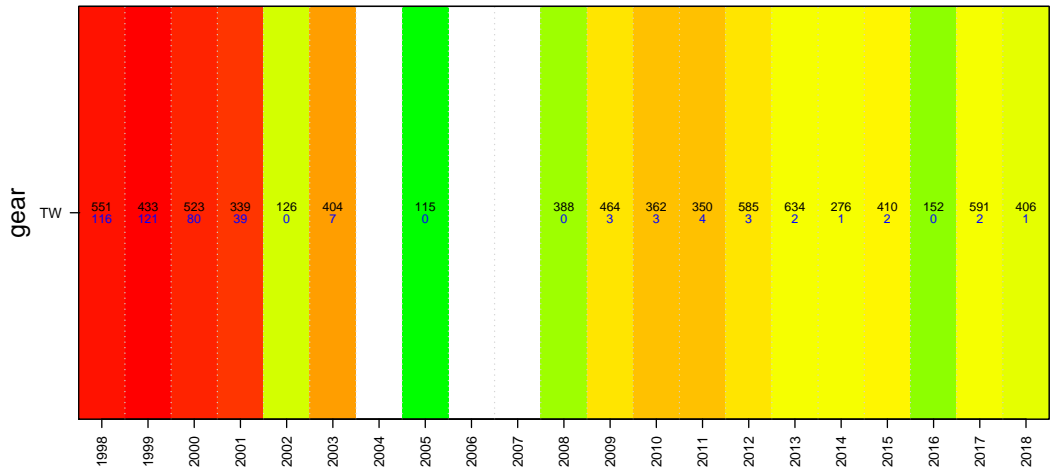
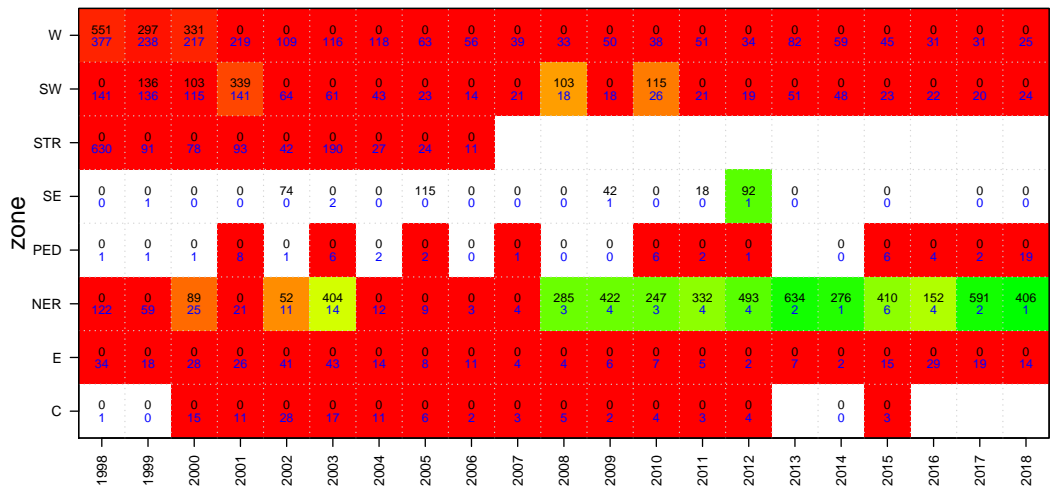
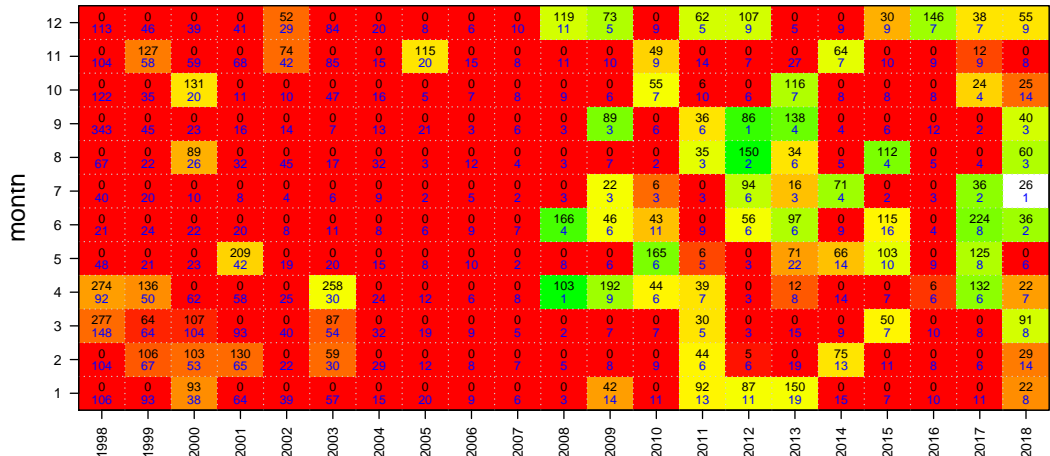
Age frequency



Oreos

Port length data

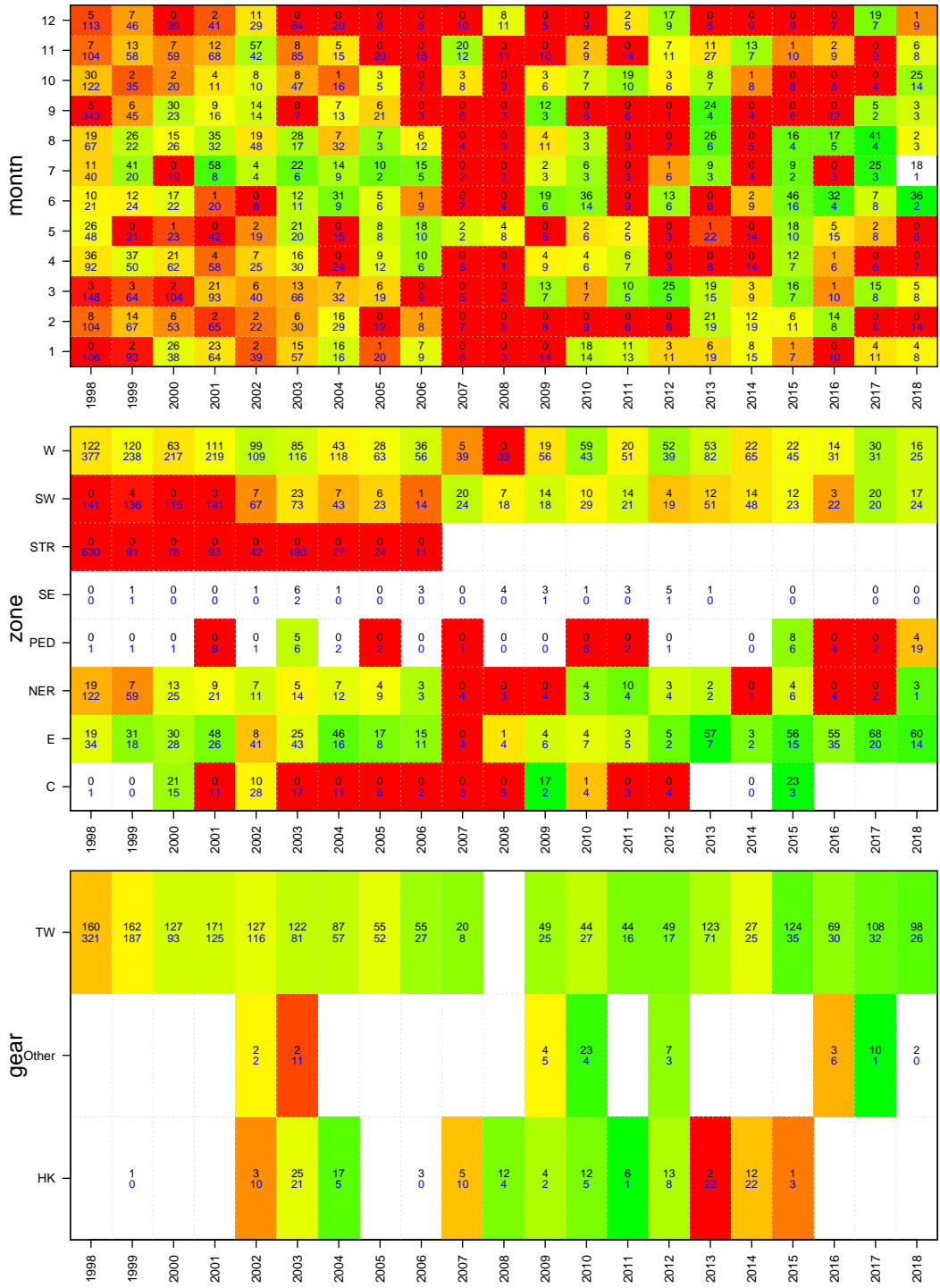
Wed Nov 06 17:14:38 2019



Oreos

Onboard discard weight data

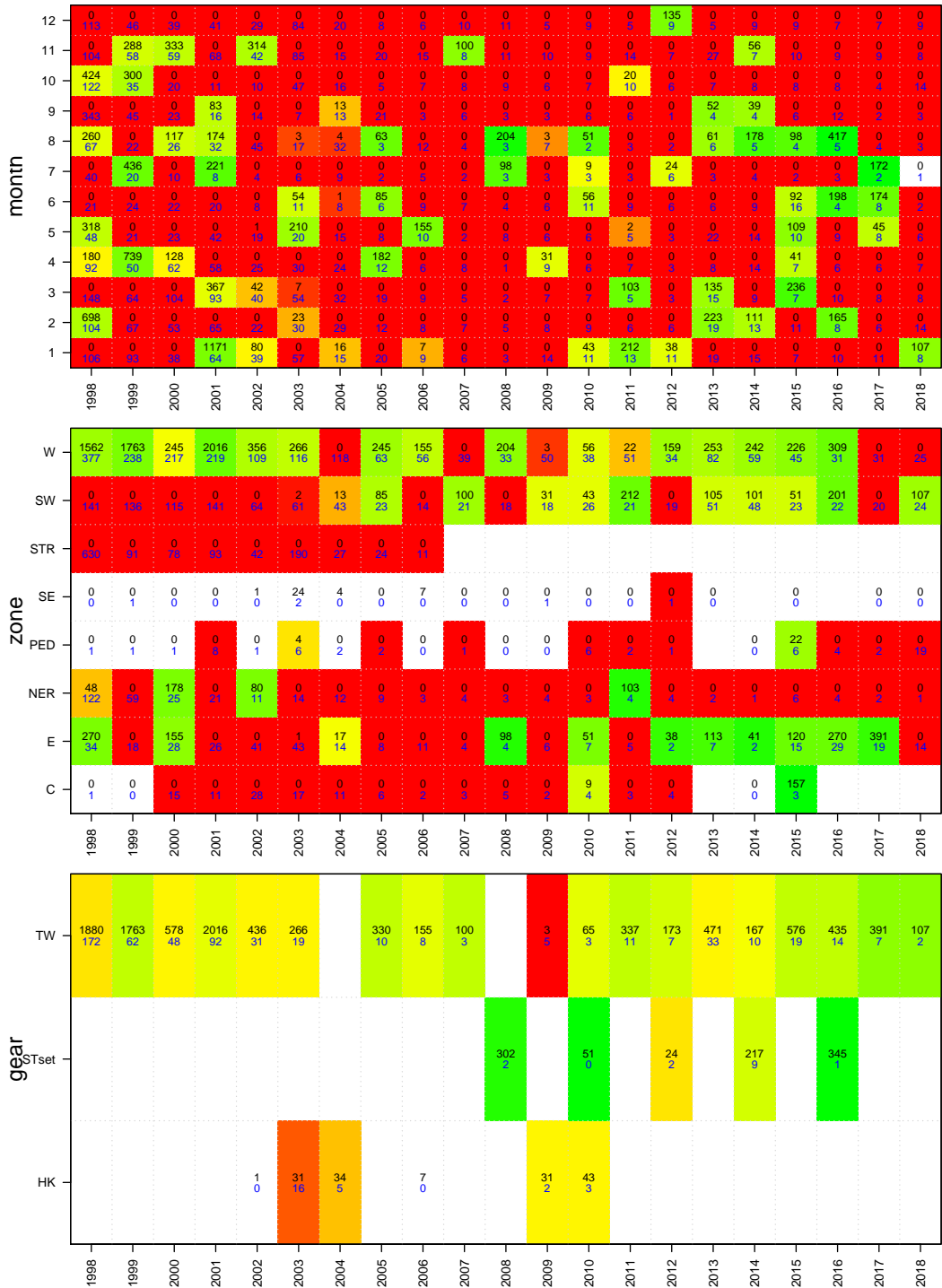
Wed Nov 06 17:14:38 2019



Oreos

Onboard length data

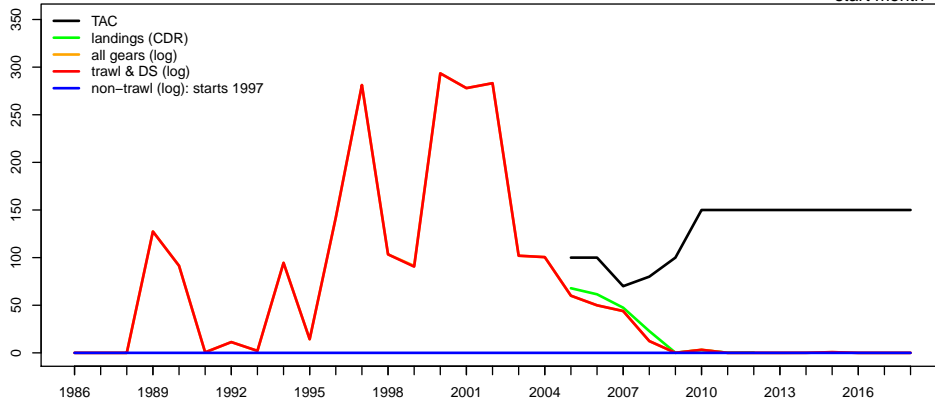
Wed Nov 06 17:14:38 2019



Smooth Ore Cascade

Wed Nov 06 17:14:38 2019
 region OR40 unit code DOOR sa code DOOR
 37266003
 start month 1

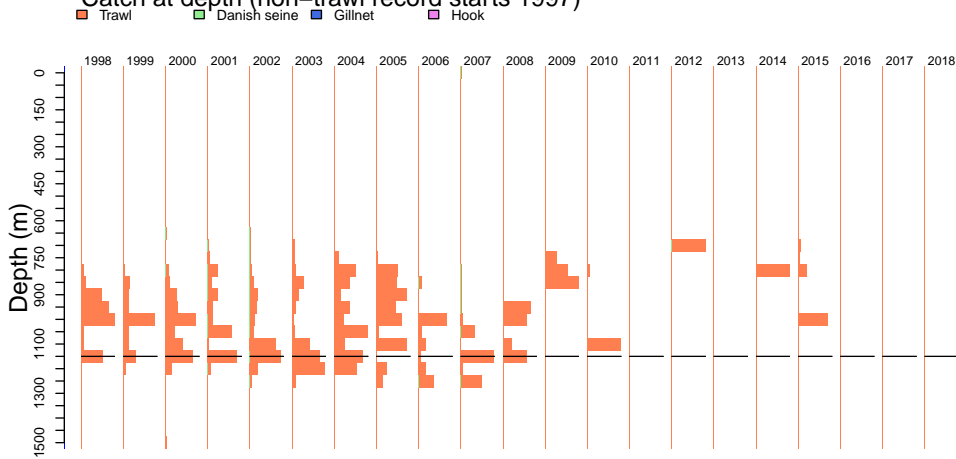
TAC and landings



Geometric mean CPUE & SET FIS abundance

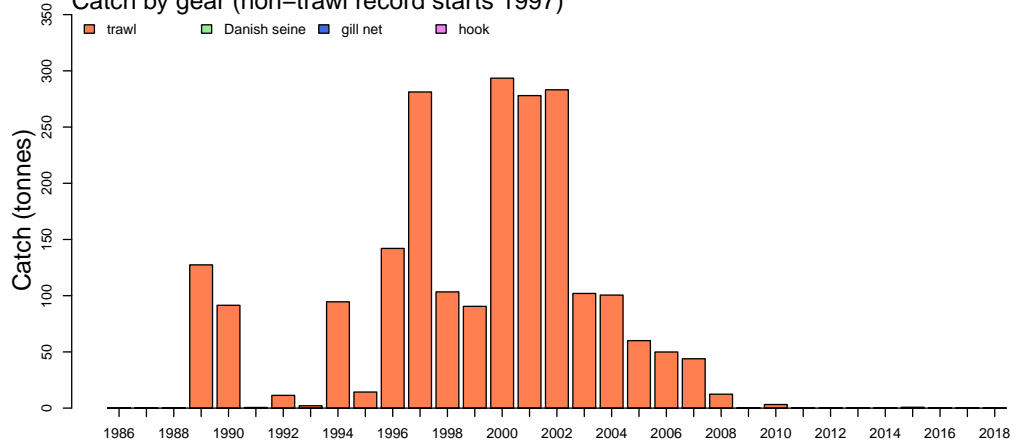


Catch at depth (non-trawl record starts 1997)



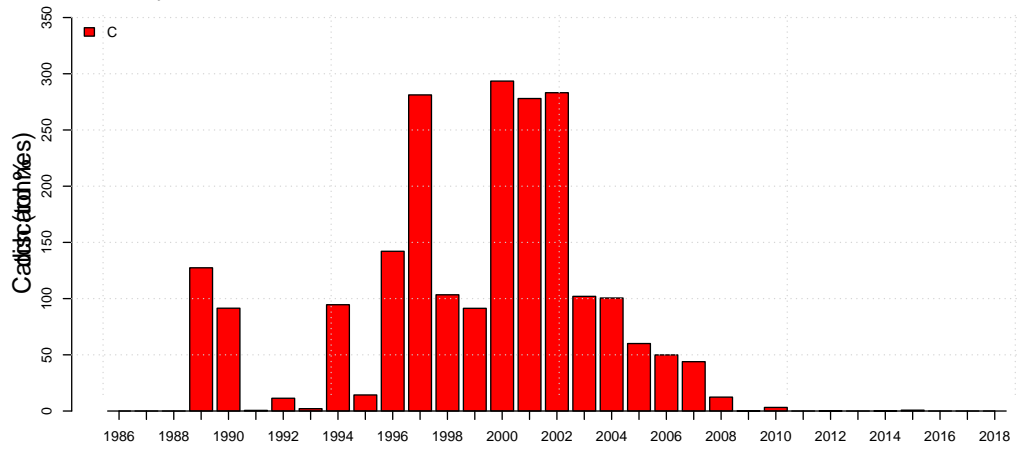
Smooth Ore Cascade

Catch by gear (non-trawl record starts 1997)



Discards

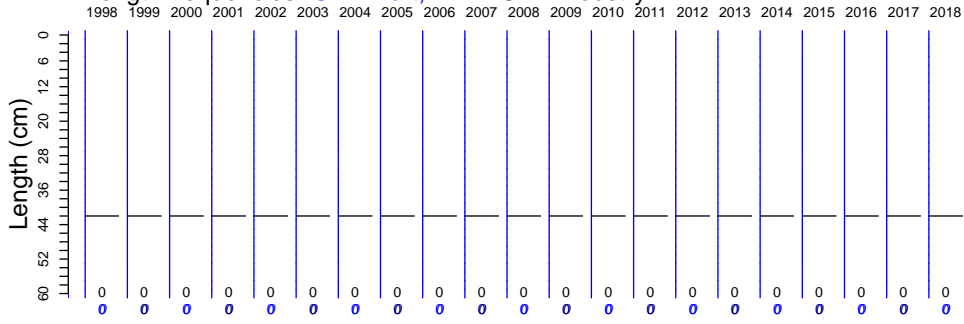
Catch by zone



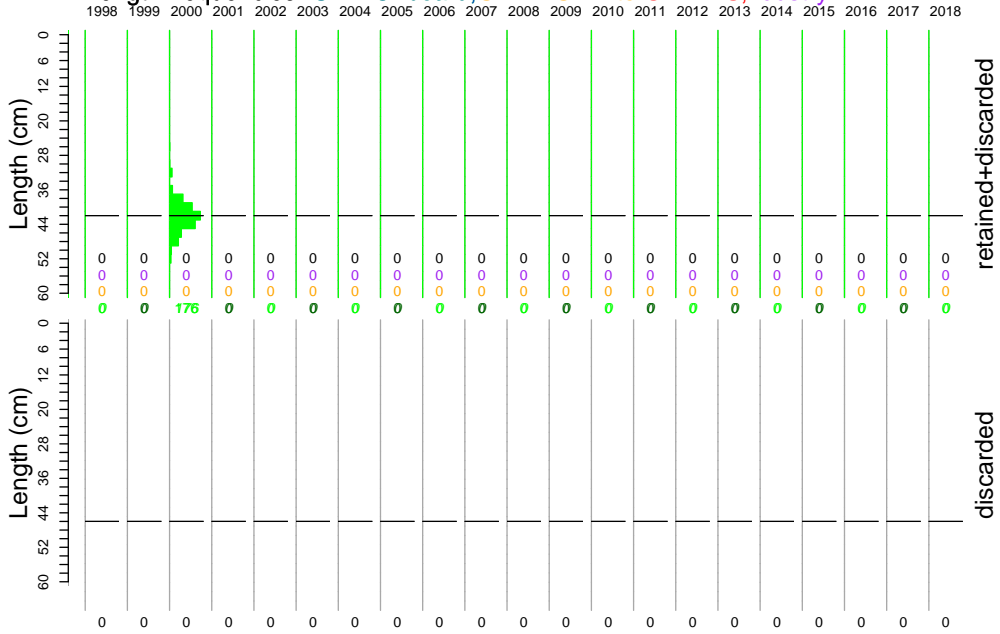
Smooth Ore Cascade

Wed Nov 06 17:14:39 2019

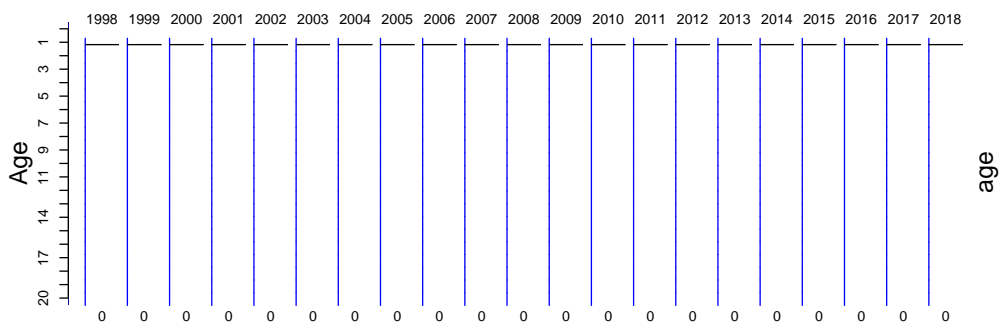
Length frequencies: ISMP Port, GAB Industry



Length frequencies: ISMP Onboard, SET FIS winter, GAB FIS, Industry

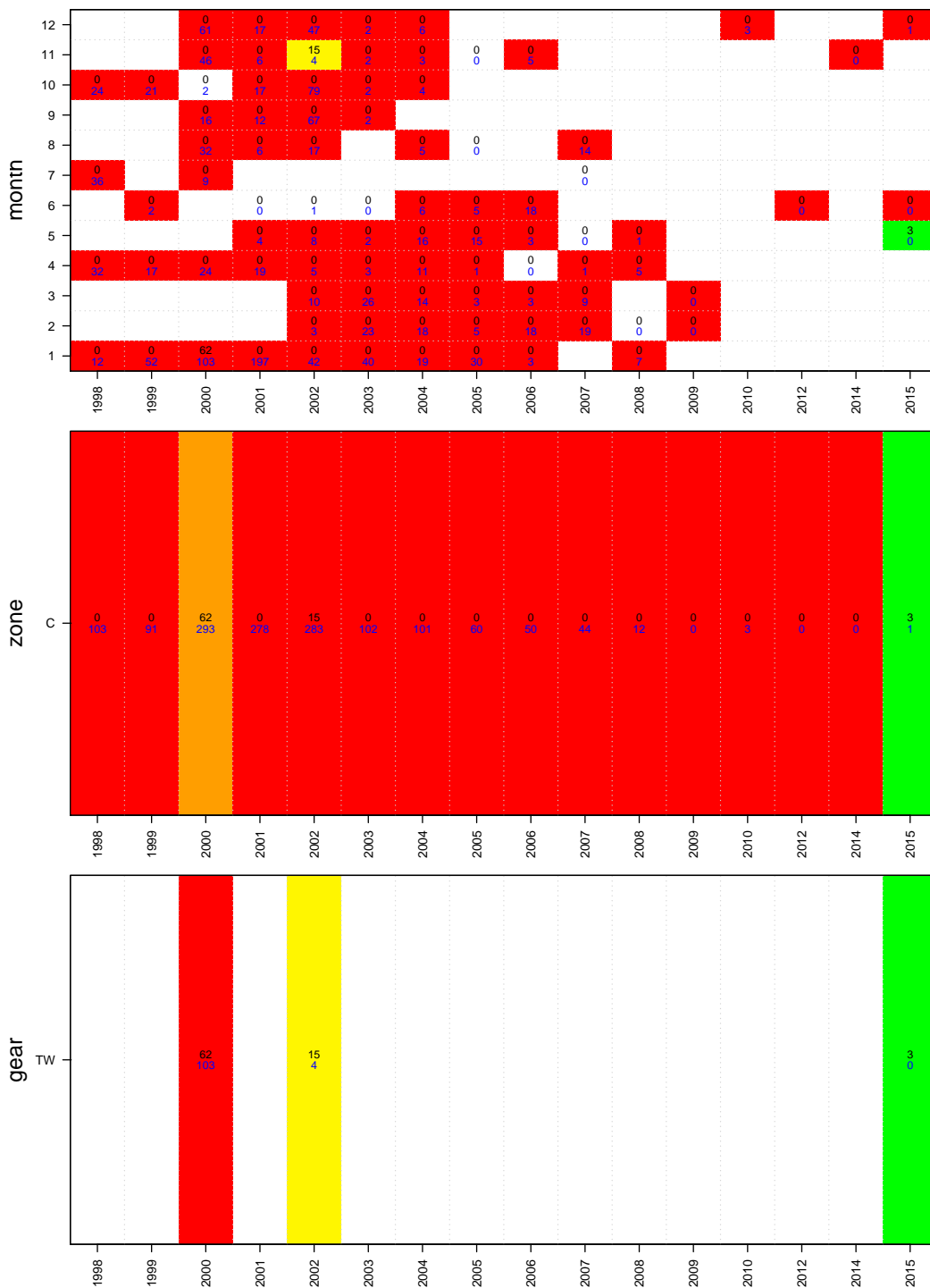


Age frequency



Smooth Oreo Cascade Onboard discard weight data

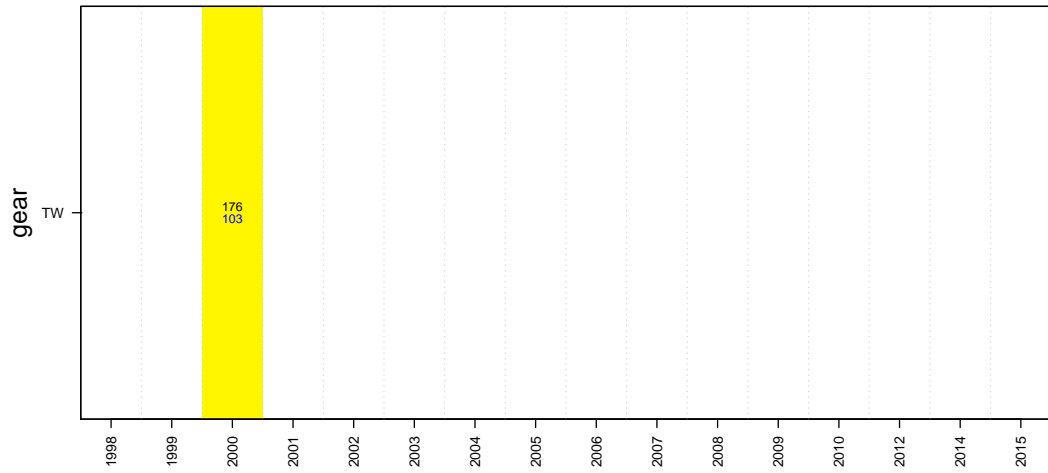
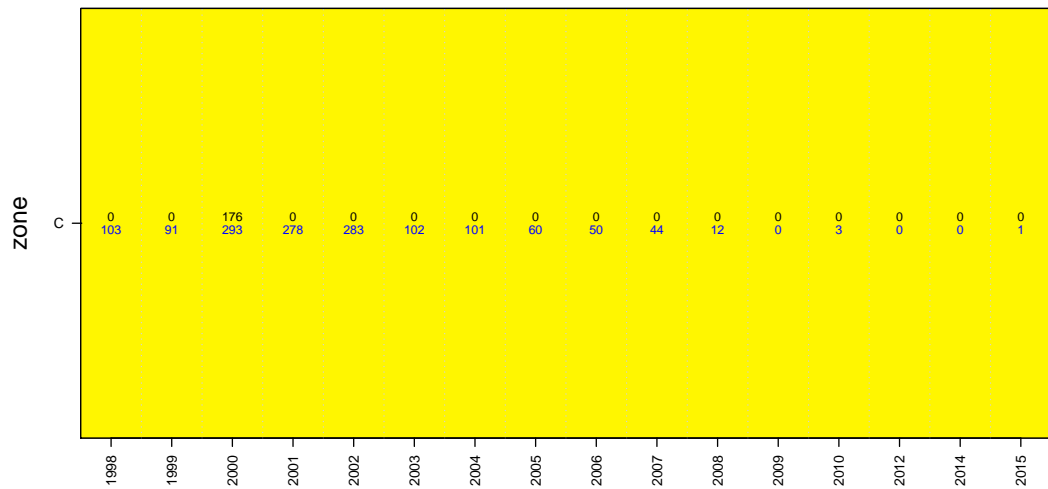
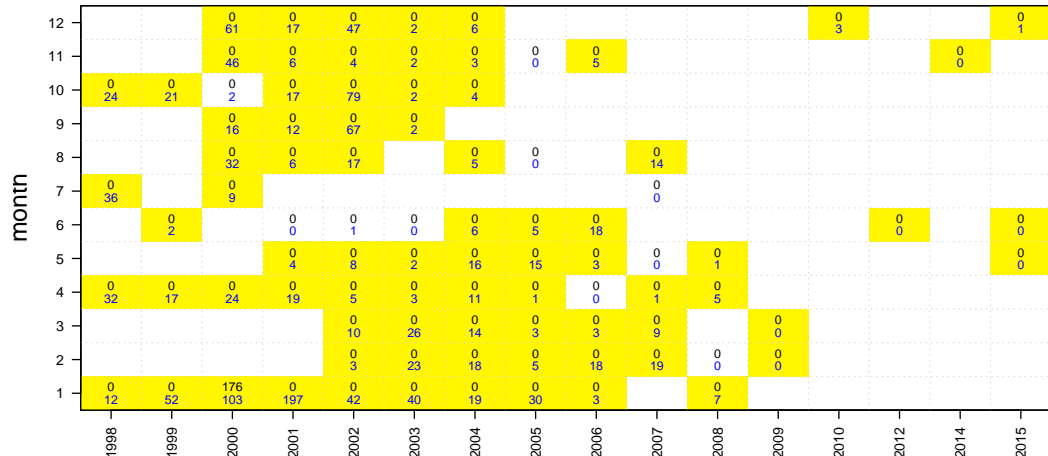
Wed Nov 06 17:14:39 2019



Smooth Ore Cascade

Onboard length data

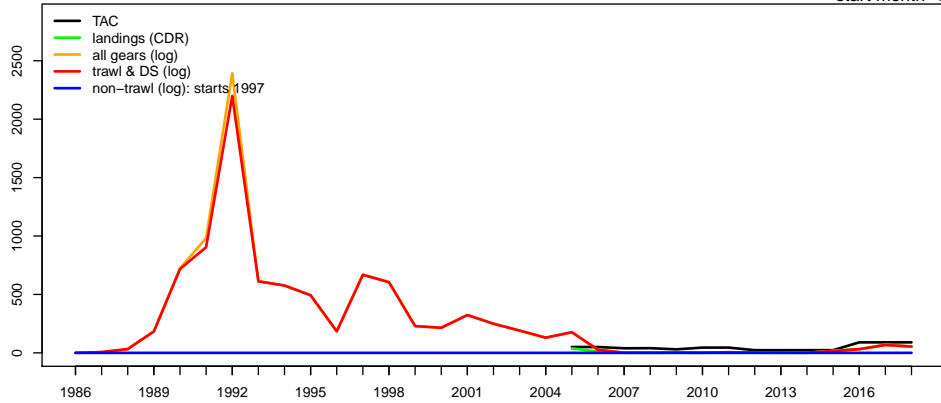
Wed Nov 06 17:14:39 2019



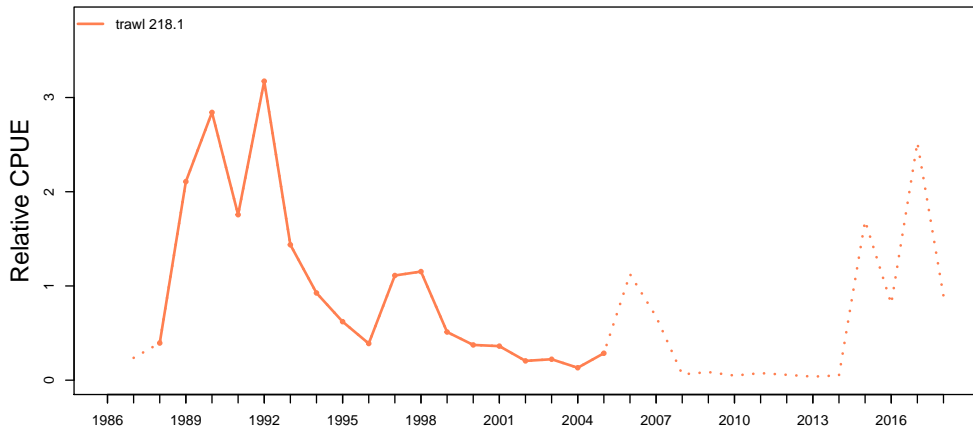
Smooth Oreo Non-Cascade

Wed Nov 06 17:14:39 2019
region NONC unit code DOO sa code DOO
37266003
start month 1

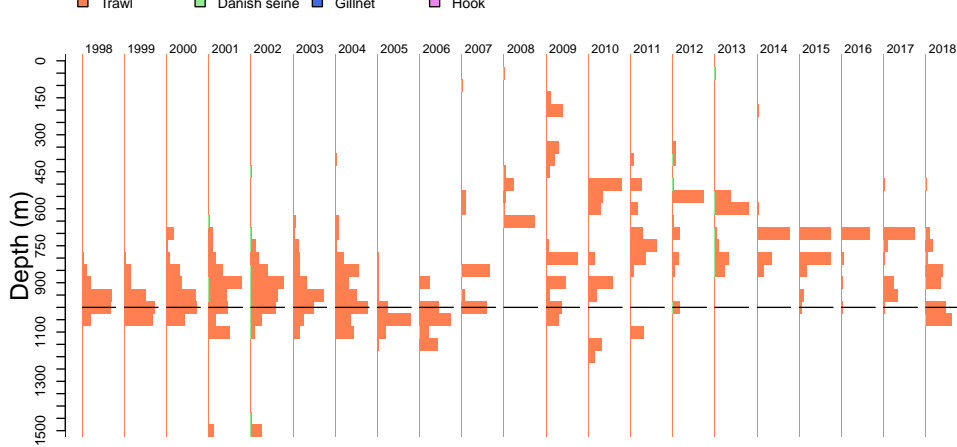
TAC and landings



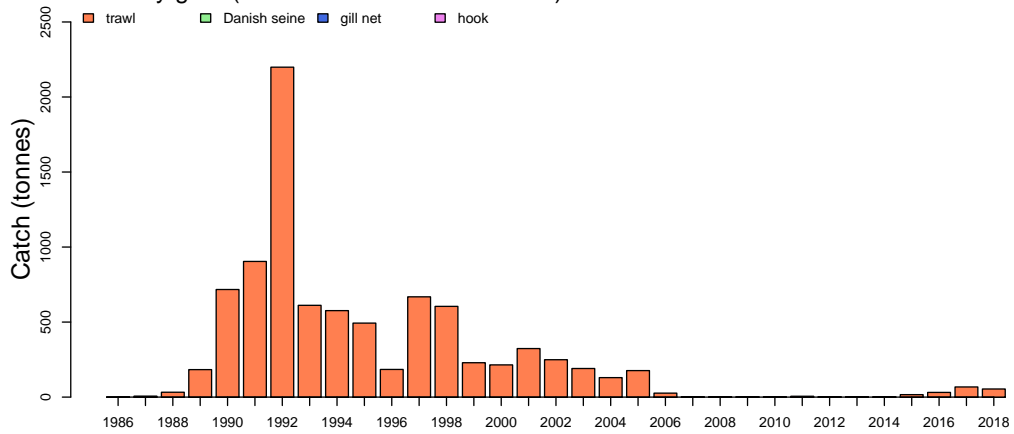
Geometric mean CPUE & SET FIS abundance



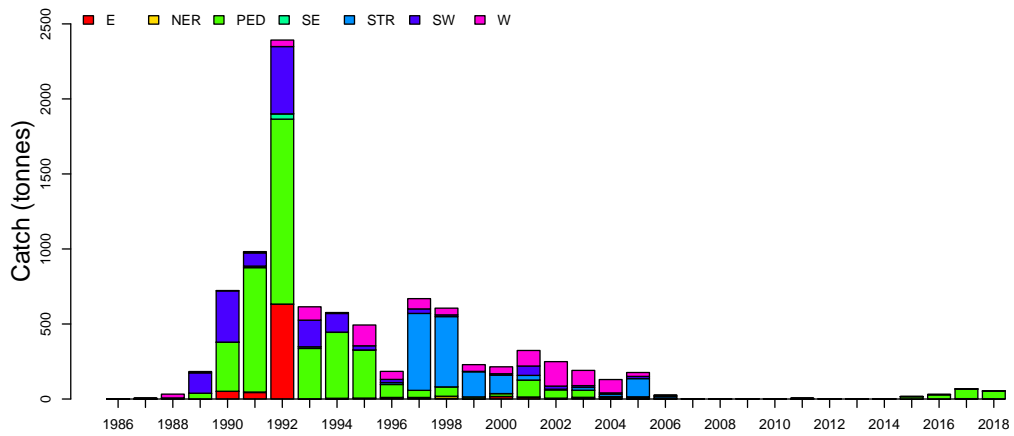
Catch at depth (non-trawl record starts 1997)



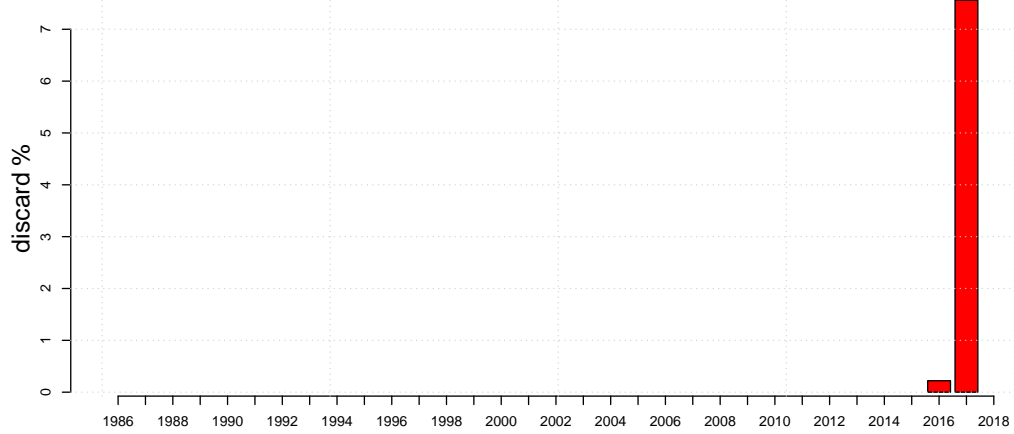
Smooth Oreo Non-Cascade Catch by gear (non-trawl record starts 1997)



Catch by zone



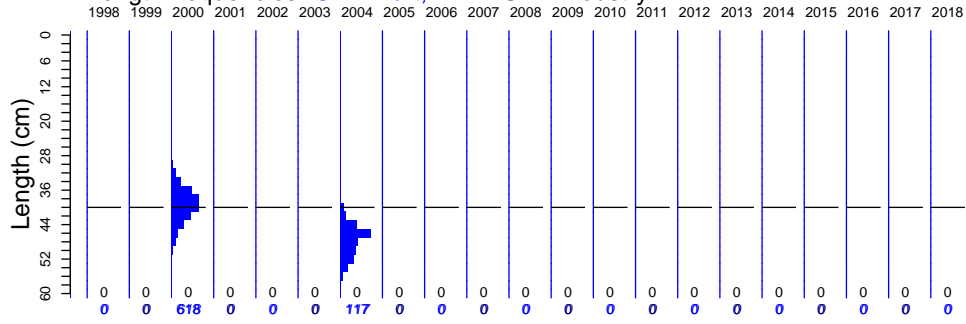
Discards



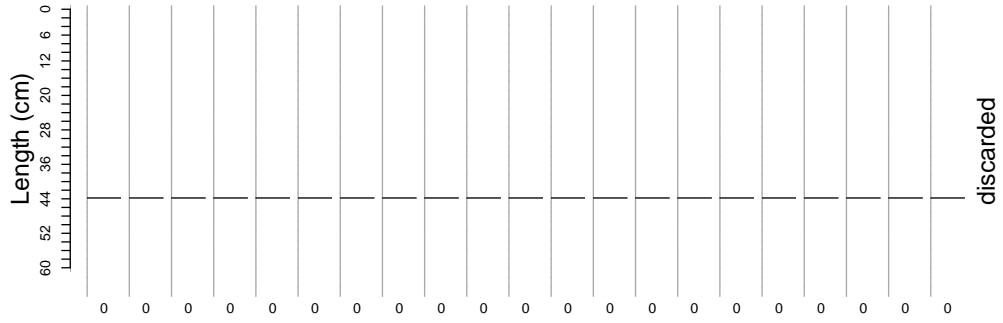
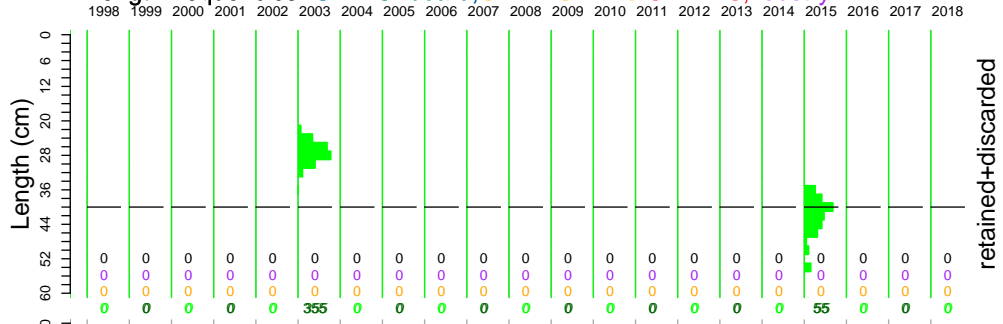
Smooth Oreo Non-Cascade

Wed Nov 06 17:14:41 2019

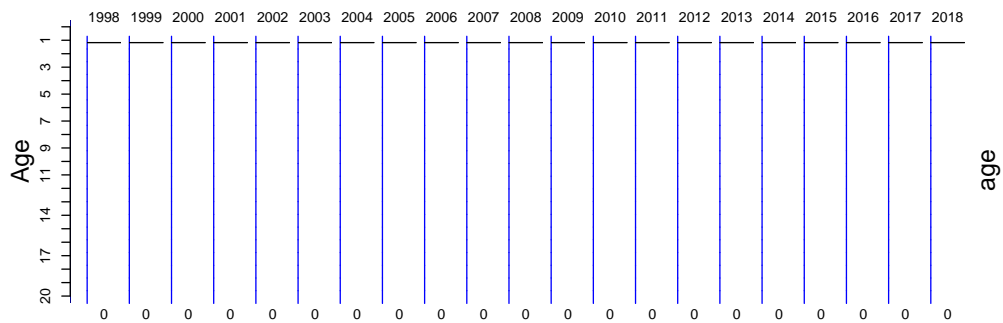
Length frequencies: ISMP Port, GAB Industry



Length frequencies: ISMP Onboard, SET FIS winter, GAB FIS, Industry

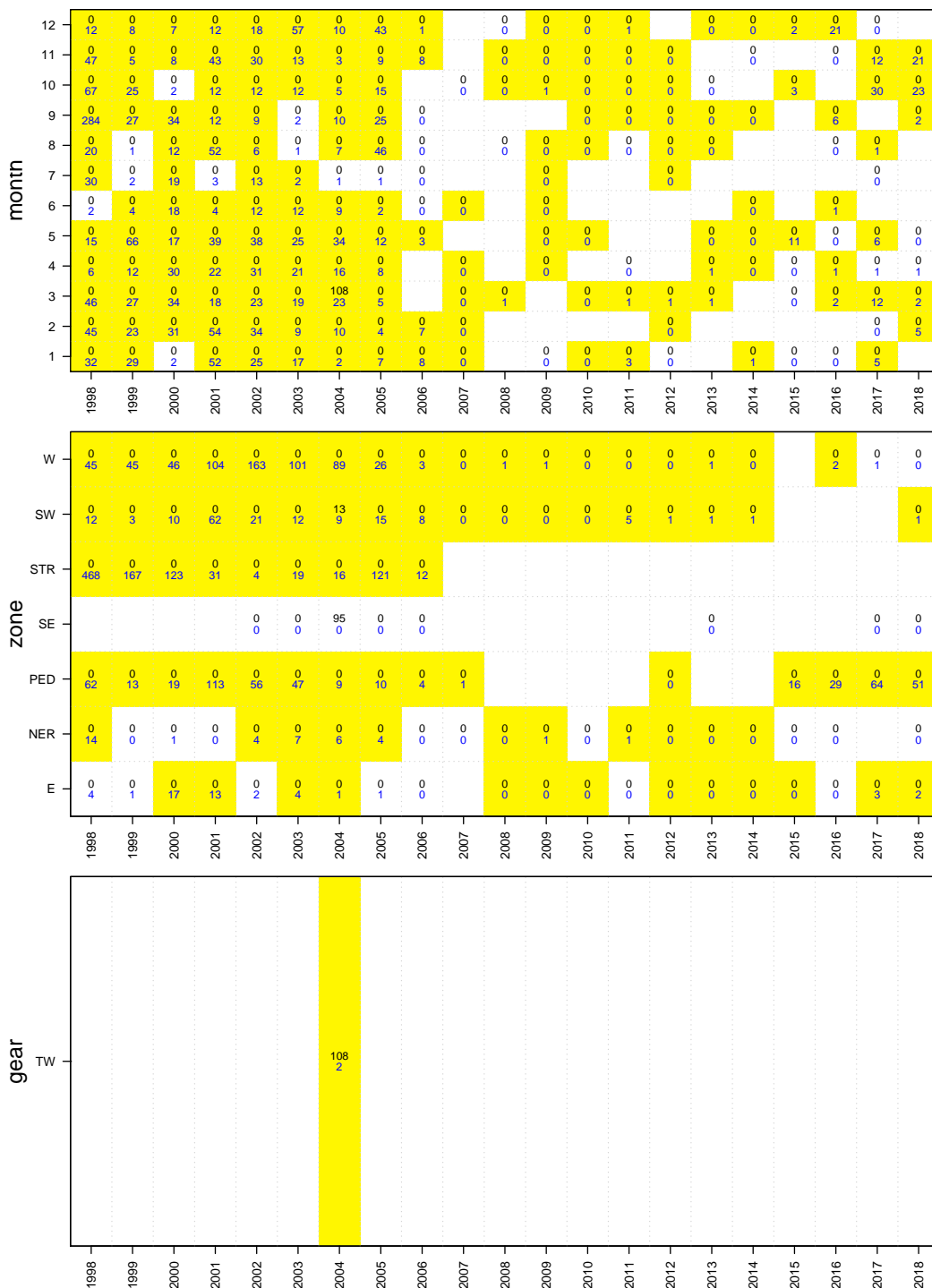


Age frequency



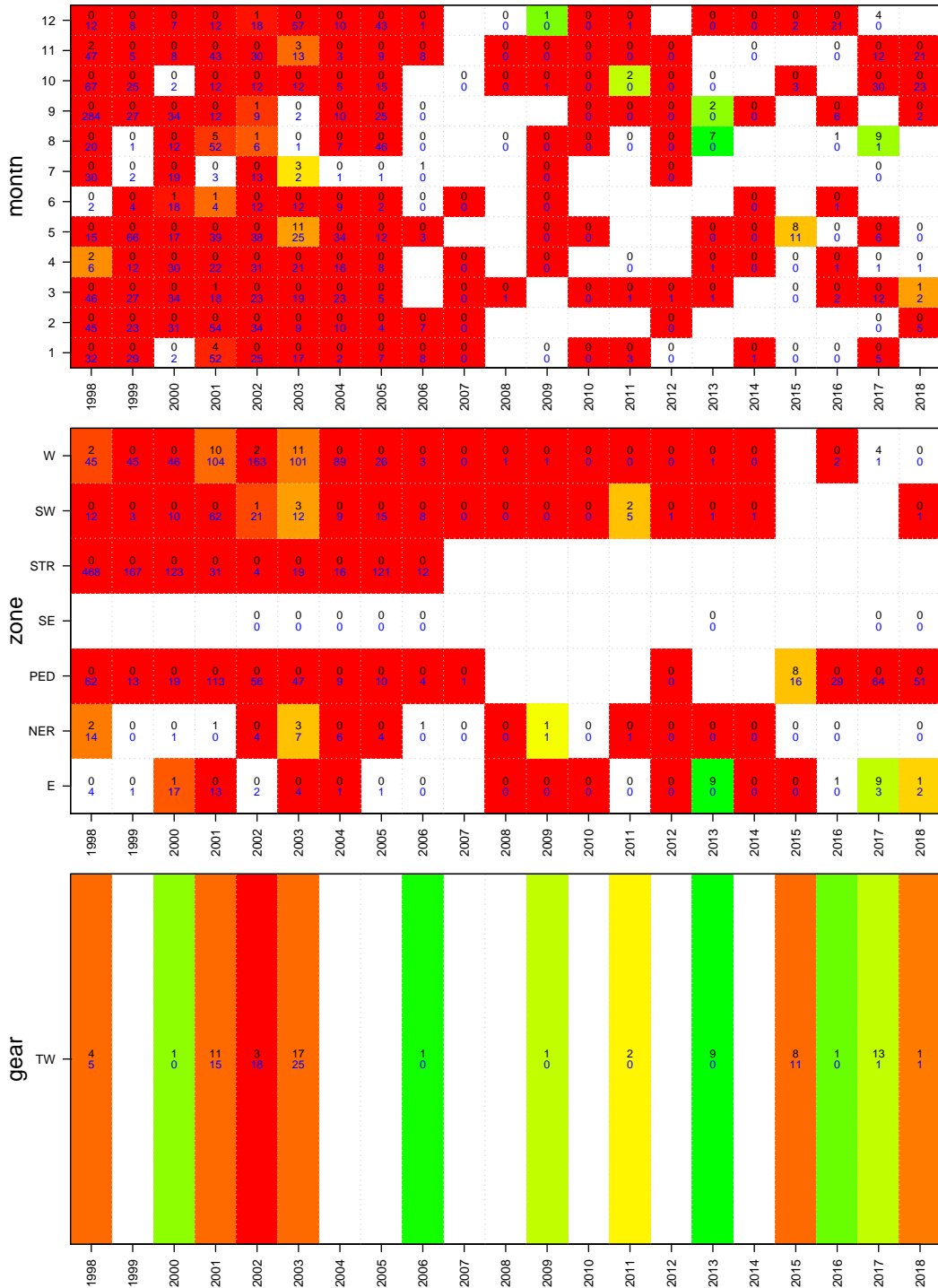
Smooth Oreo Non-Cascade Port length data

Wed Nov 06 17:14:41 2019



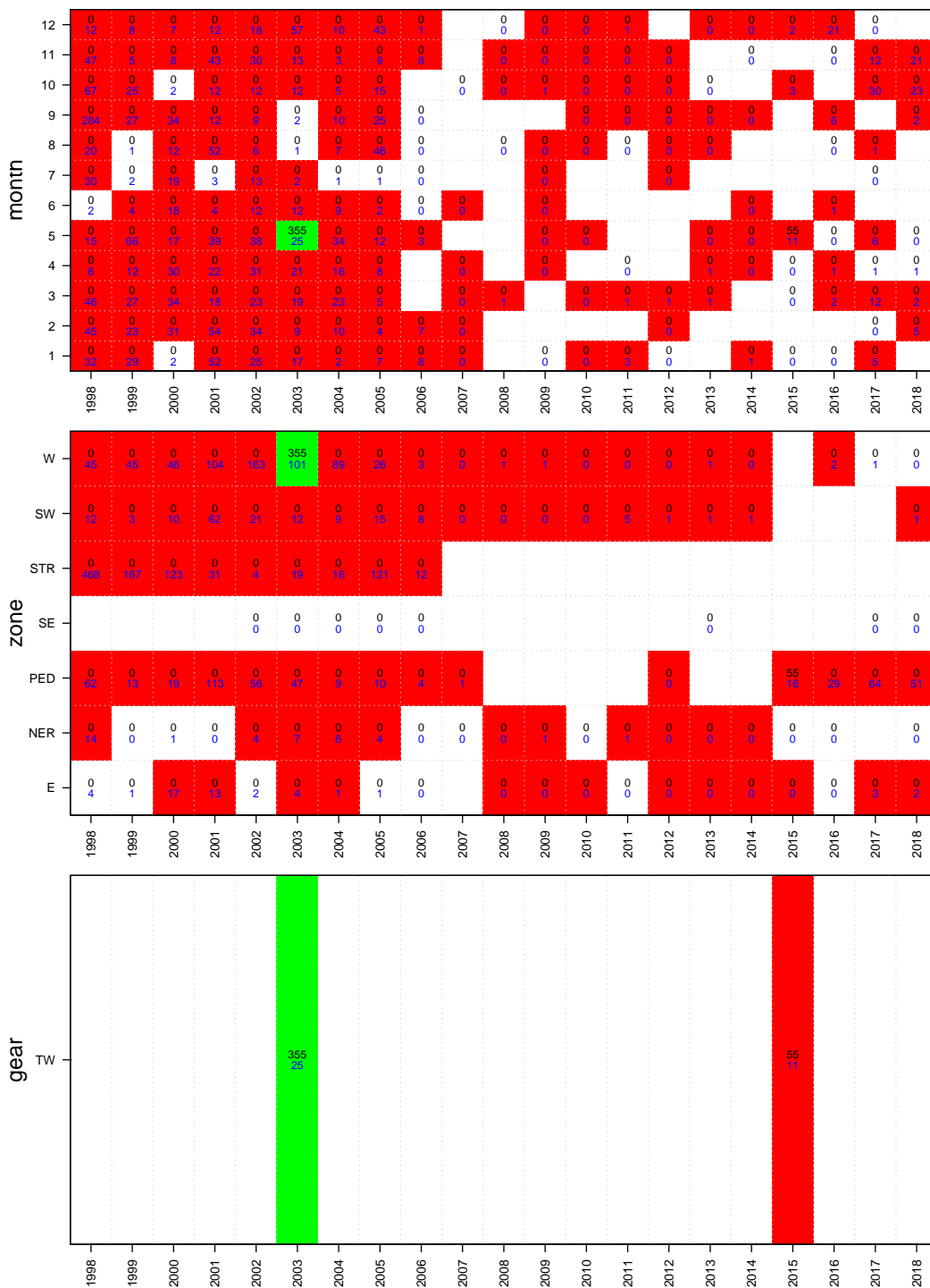
Smooth Ore Non-Cascade board discard weight data

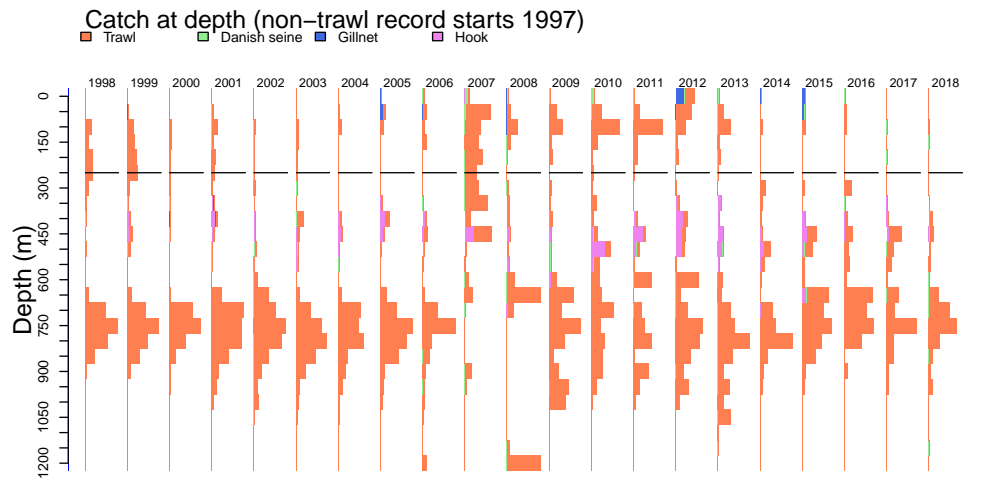
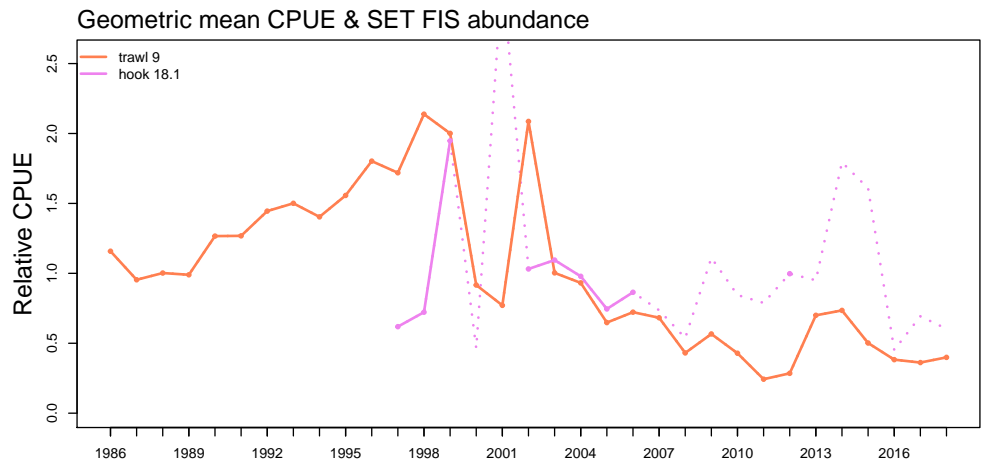
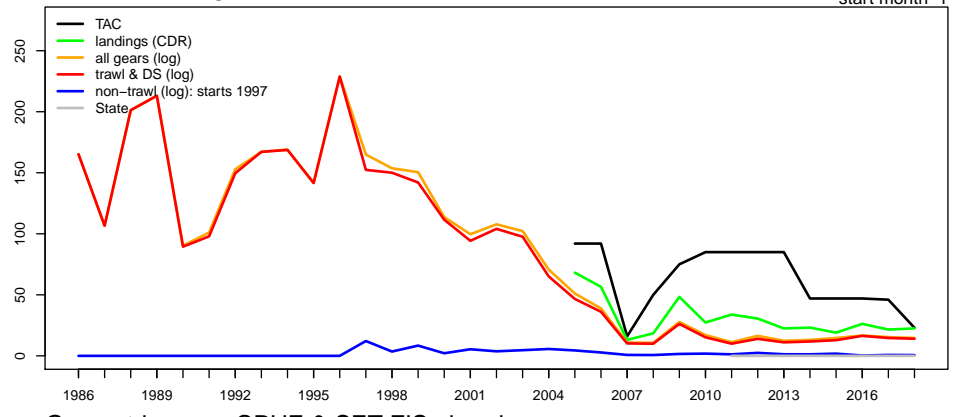
Wed Nov 06 17:14:41 2019



Smooth Ore Non-Cascade Onboard length data

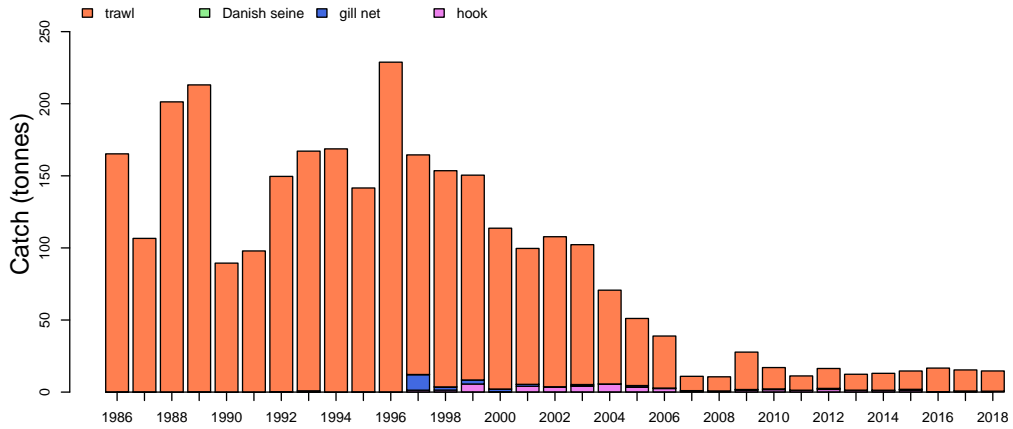
Wed Nov 06 17:14:41 2019



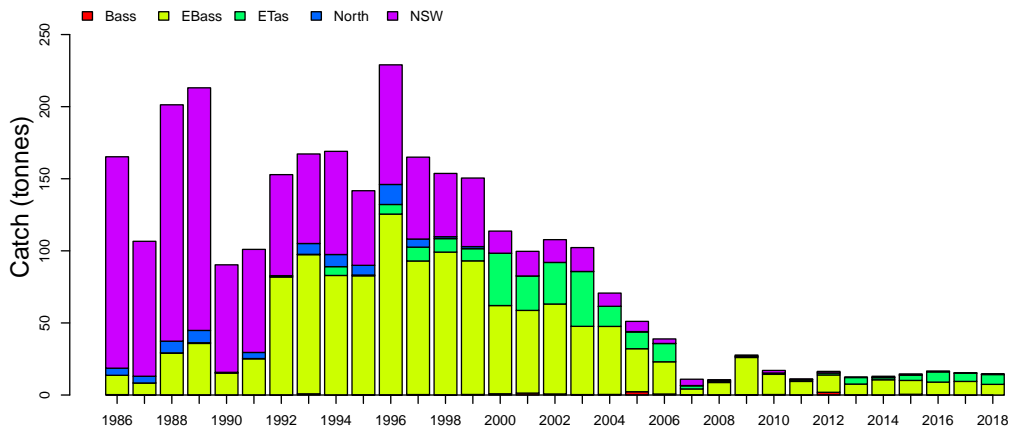


Deepwater Shark East

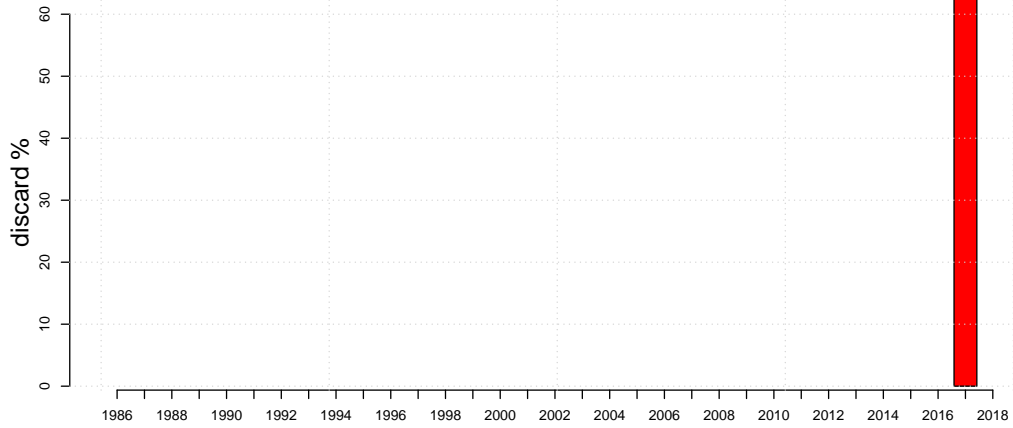
Catch by gear (non-trawl record starts 1997)



Catch by zone



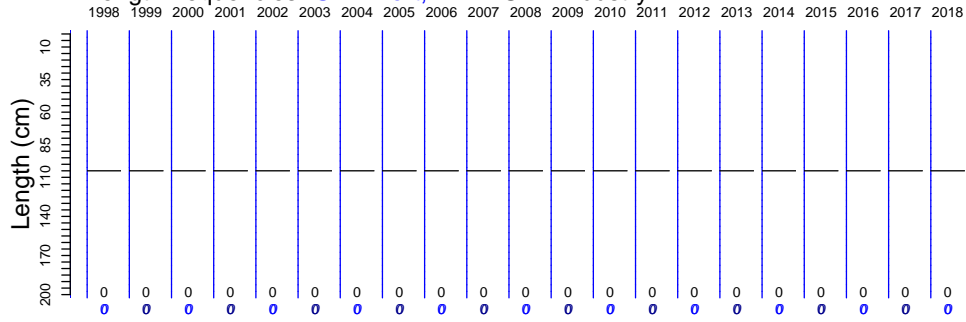
Discards



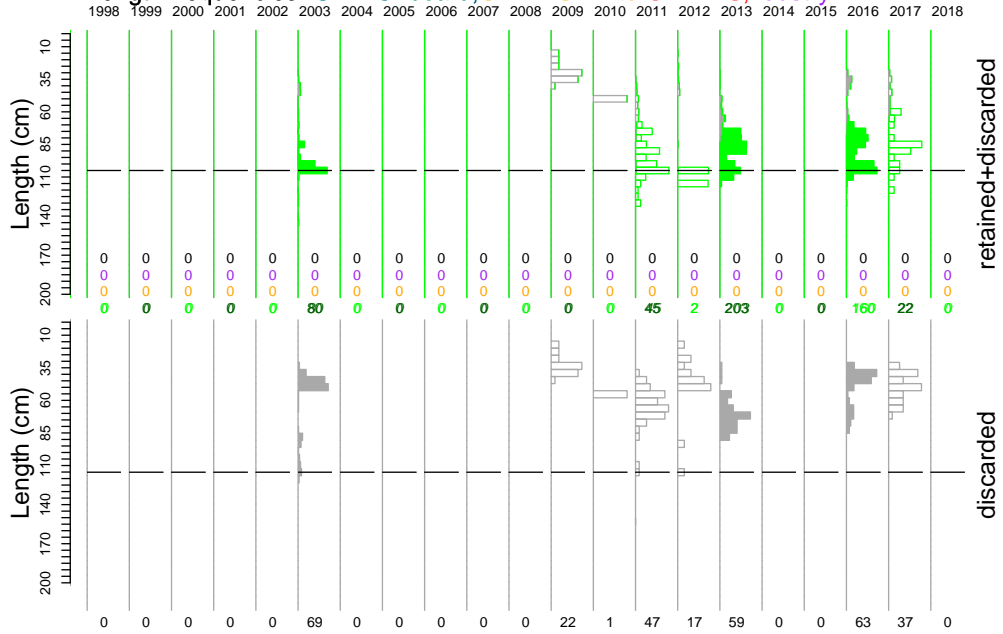
Deepwater Shark East

Wed Nov 06 17:14:45 2019

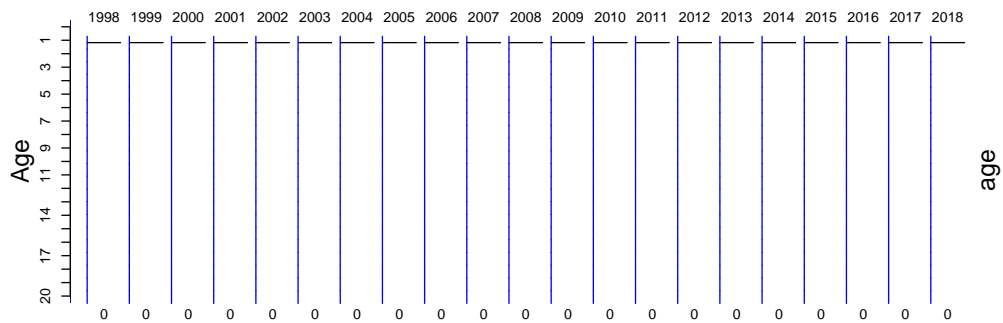
Length frequencies: ISMP Port, GAB Industry



Length frequencies: ISMP Onboard, SET FIS winter, GAB FIS, Industry



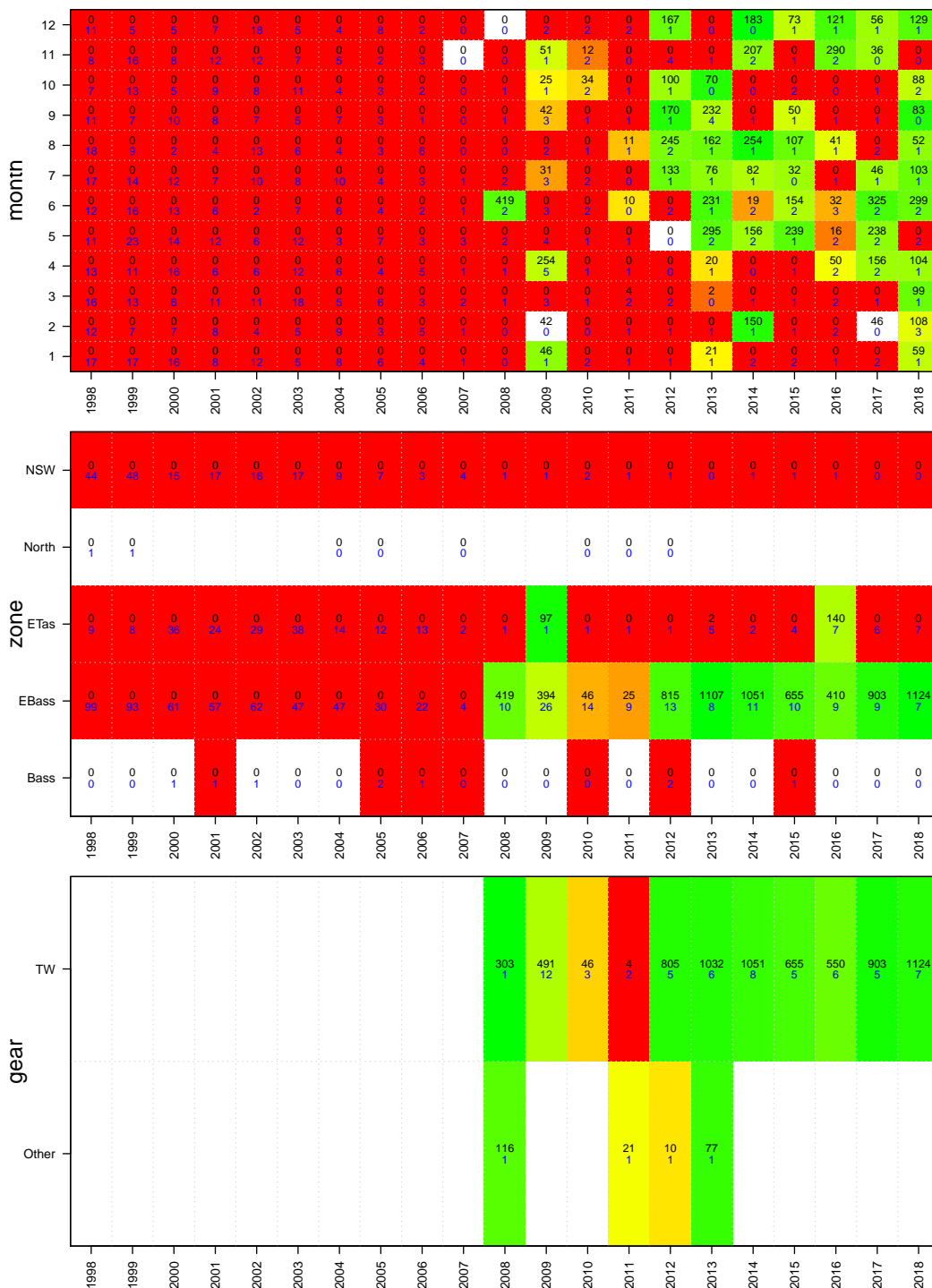
Age frequency



Deepwater Shark East

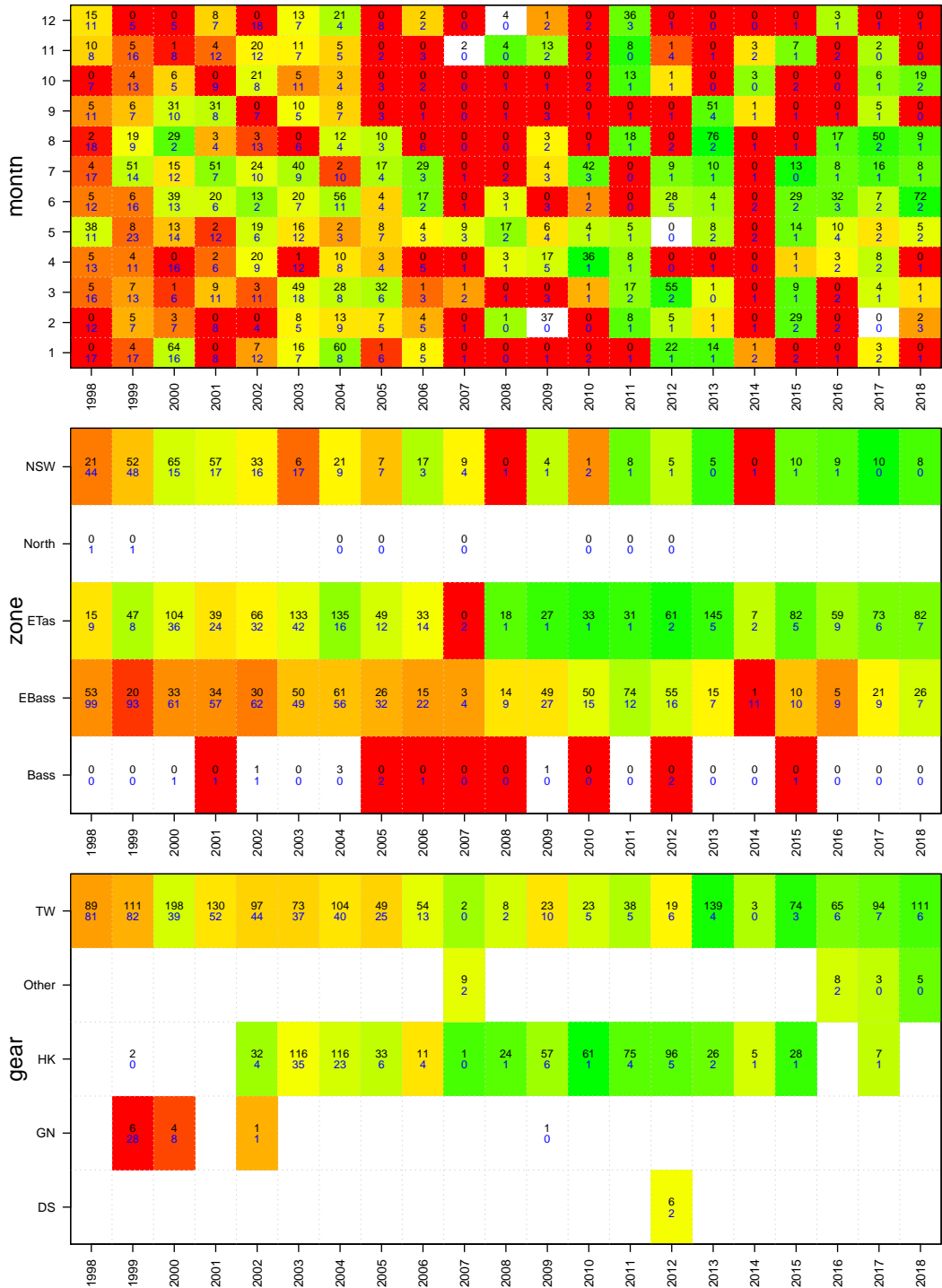
Port length data

Wed Nov 06 17:14:46 2019



Deepwater Shark East Onboard discard weight data

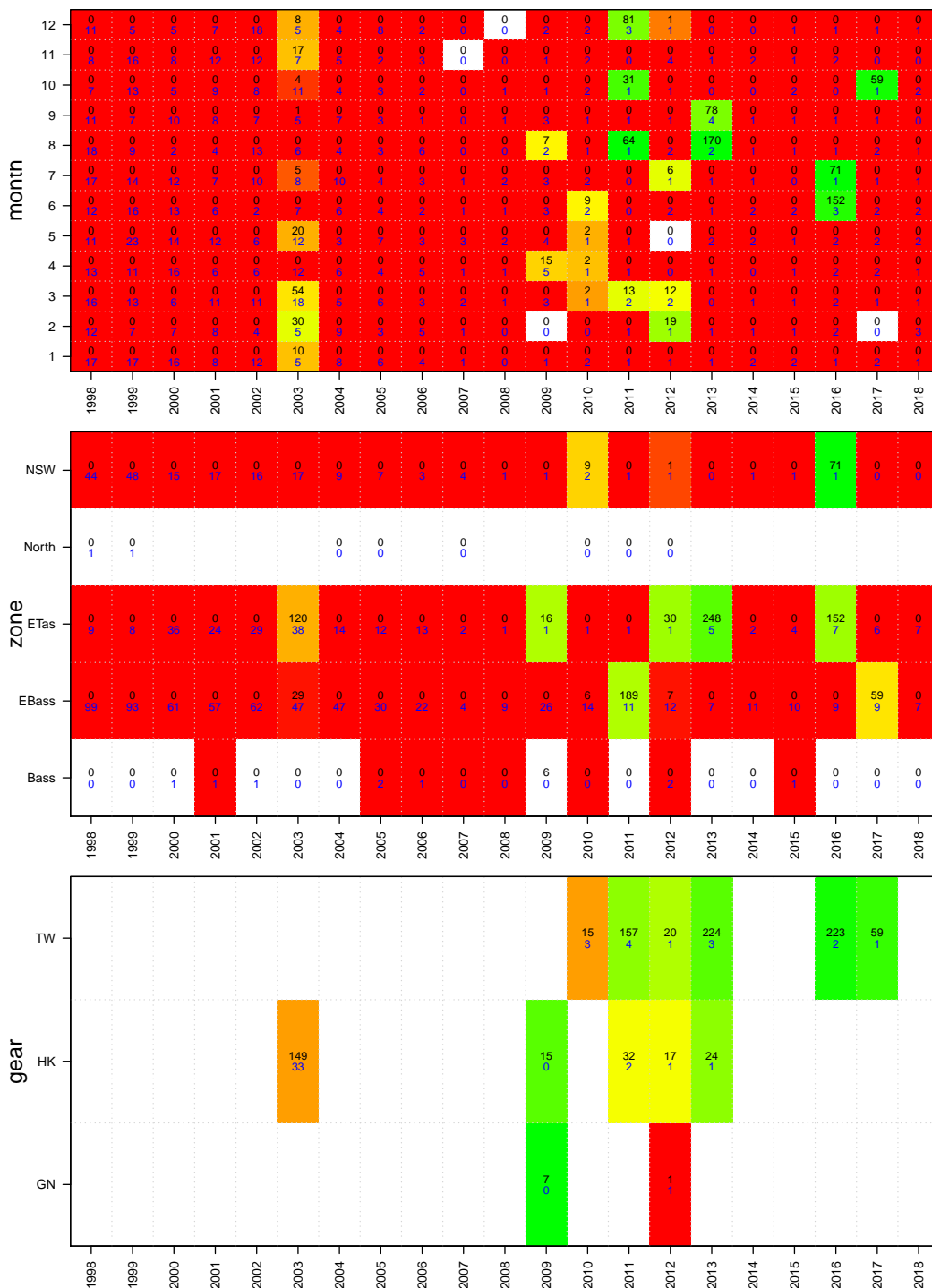
Wed Nov 06 17:14:46 2019

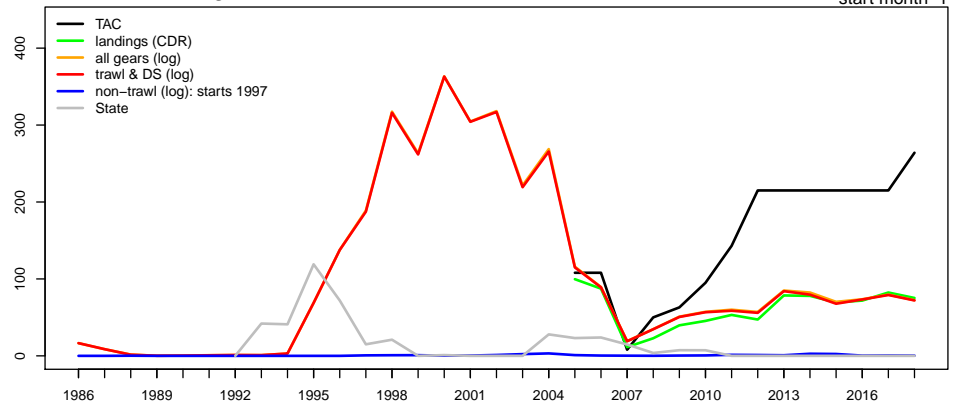


Deepwater Shark East

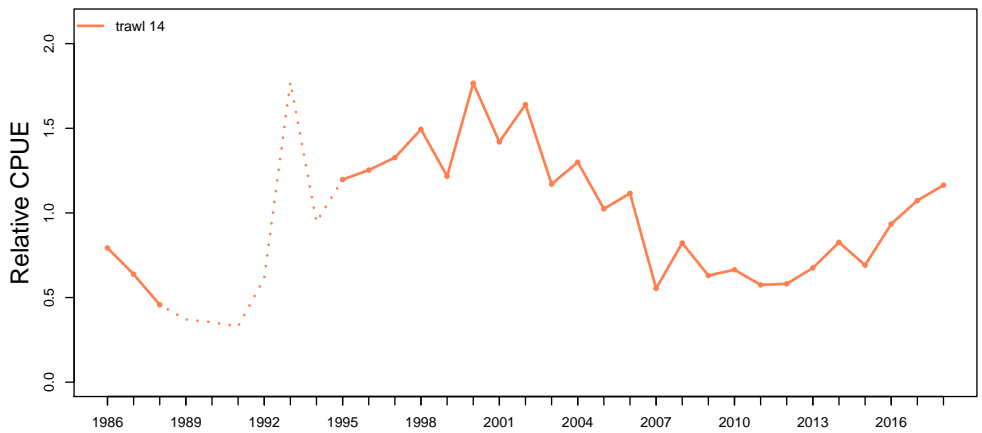
Onboard length data

Wed Nov 06 17:14:46 2019

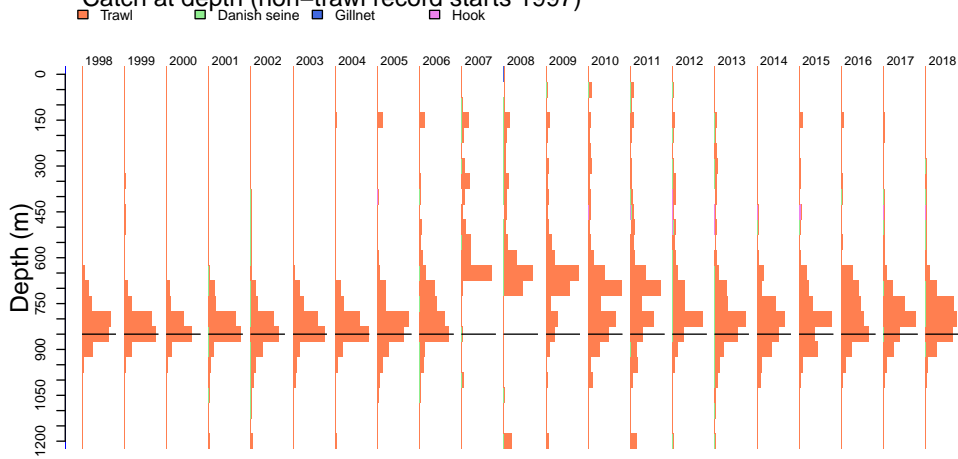




Geometric mean CPUE & SET FIS abundance



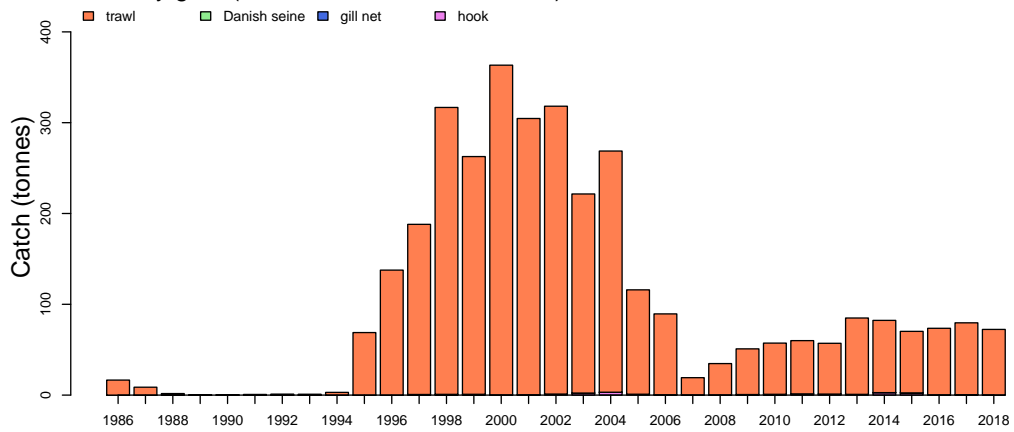
Catch at depth (non-trawl record starts 1997)



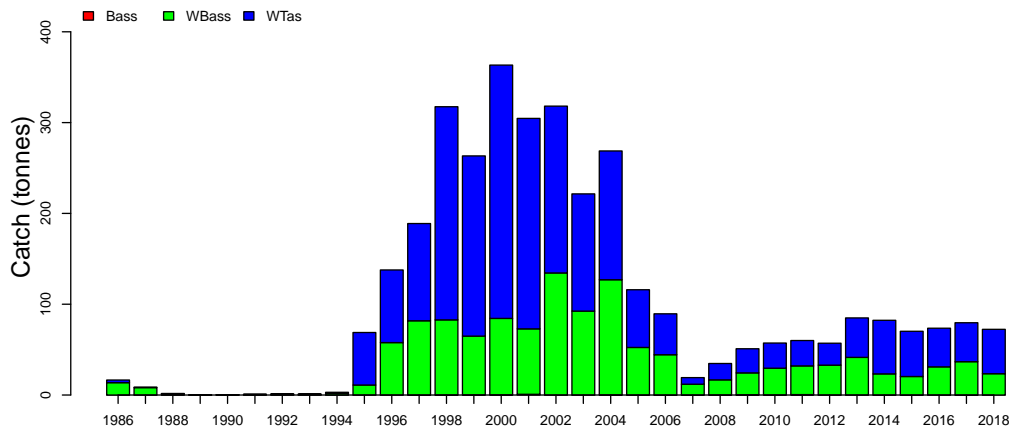
Deepwater Shark West

Catch by gear (non-trawl record starts 1997)

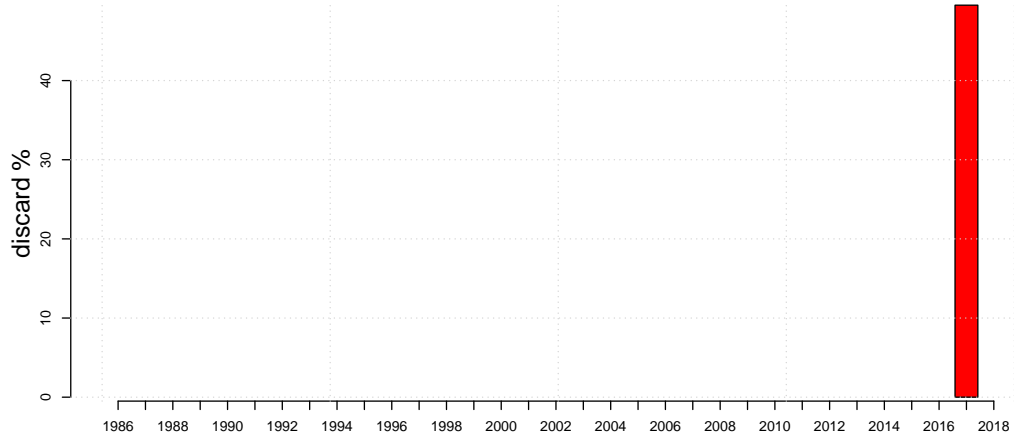
Wed Nov 06 17:14:48 2019



Catch by zone



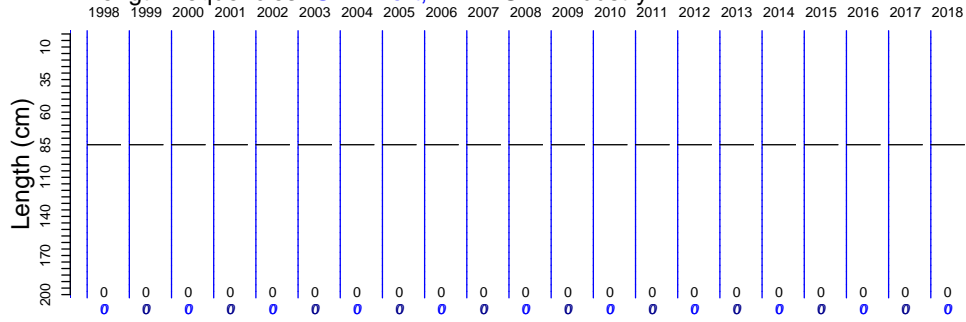
Discards



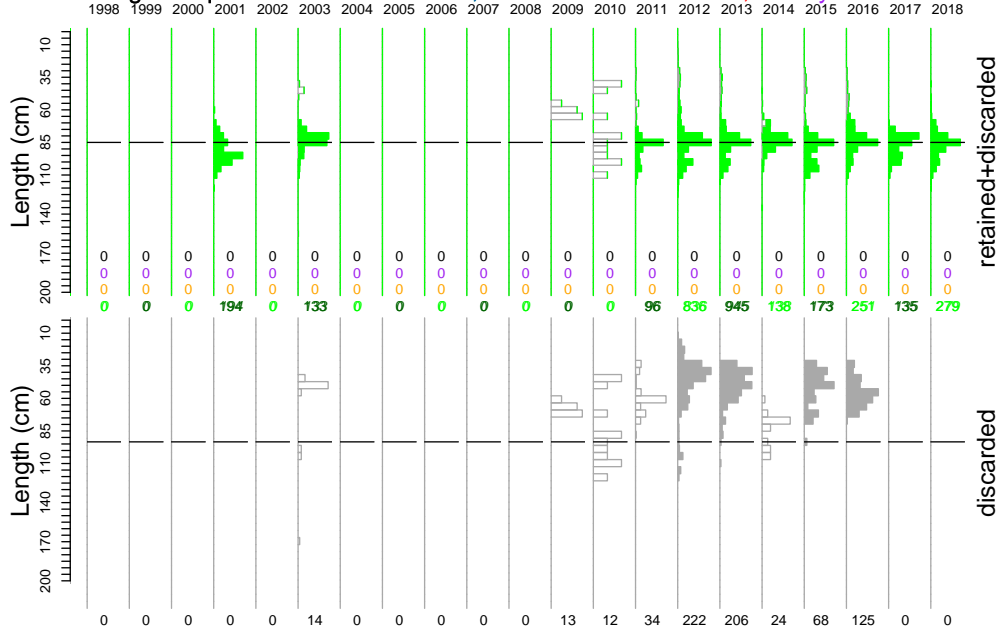
Deepwater Shark West

Wed Nov 06 17:14:48 2019

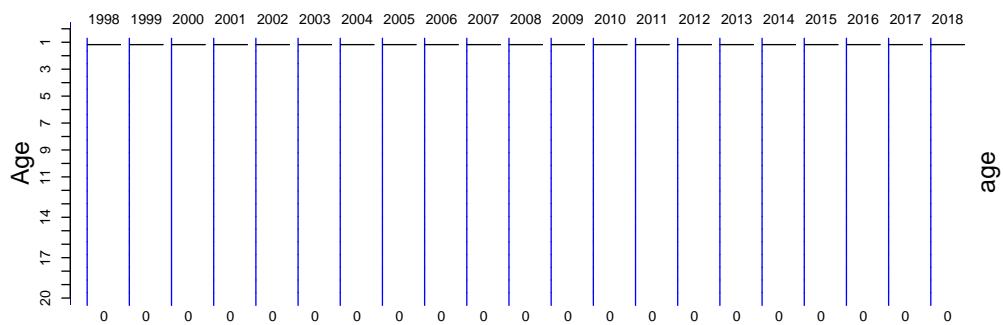
Length frequencies: ISMP Port, GAB Industry



Length frequencies: ISMP Onboard, SET FIS winter, GAB FIS, Industry



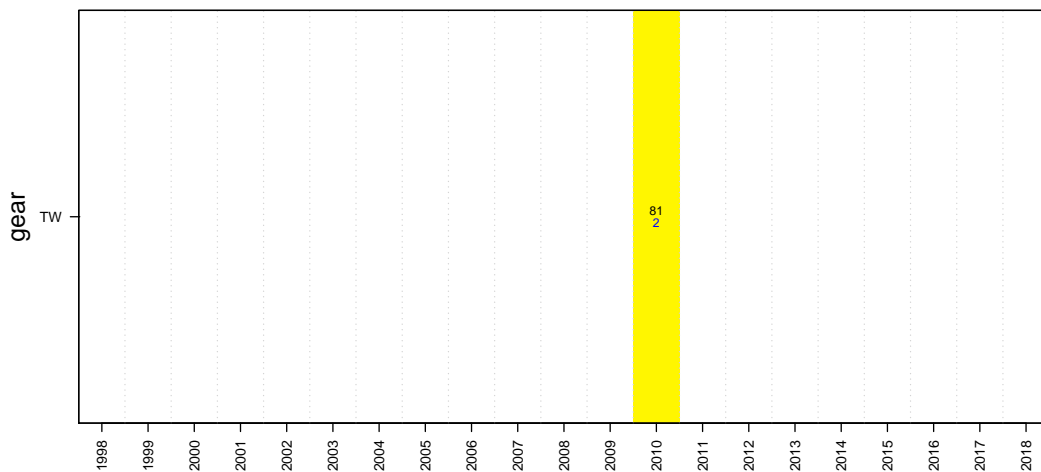
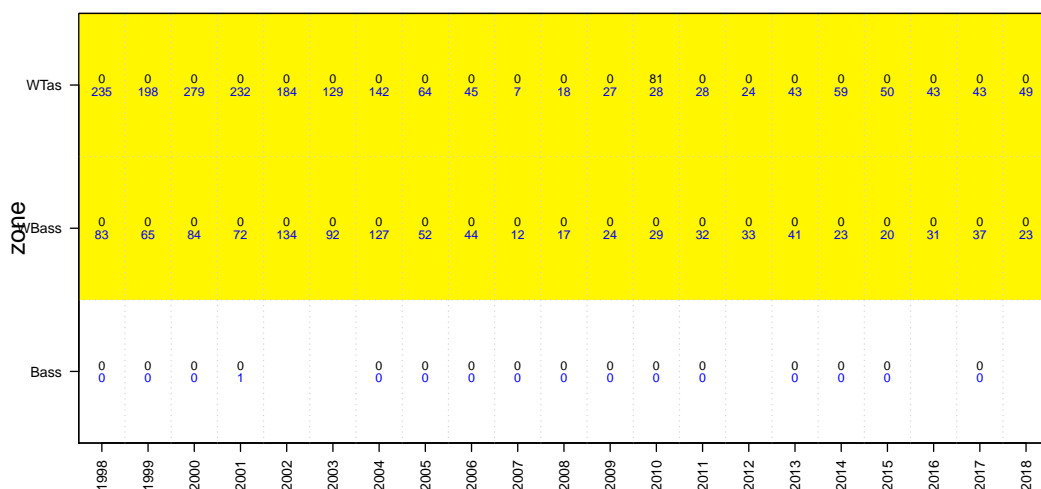
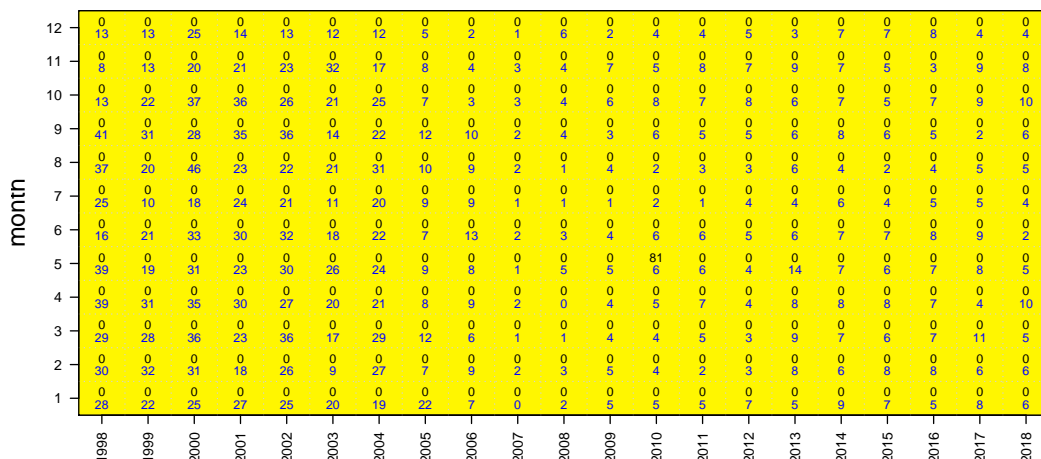
Age frequency



Deepwater Shark West

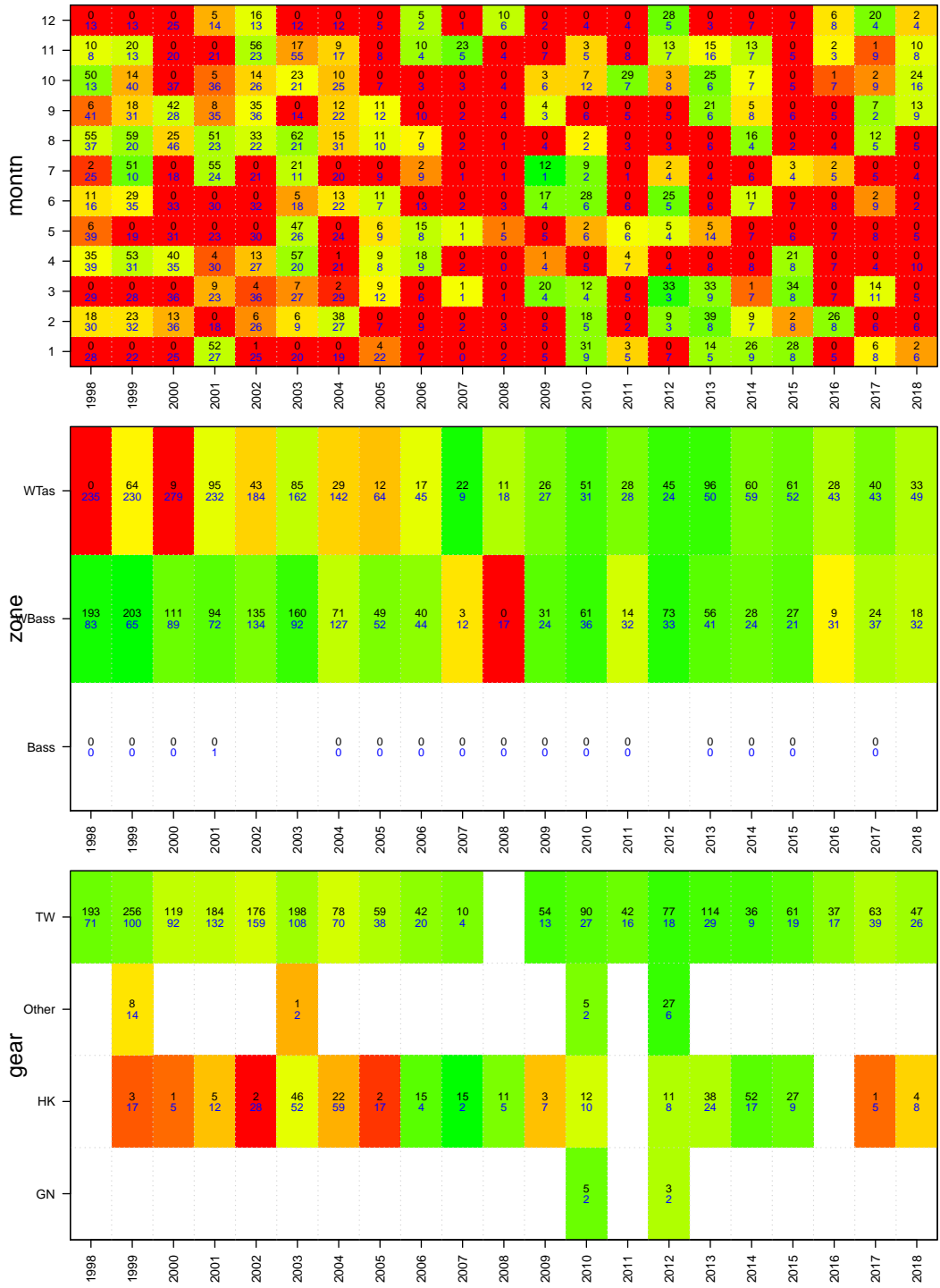
Port length data

Wed Nov 06 17:14:49 2019



Deepwater Shark West Onboard discard weight data

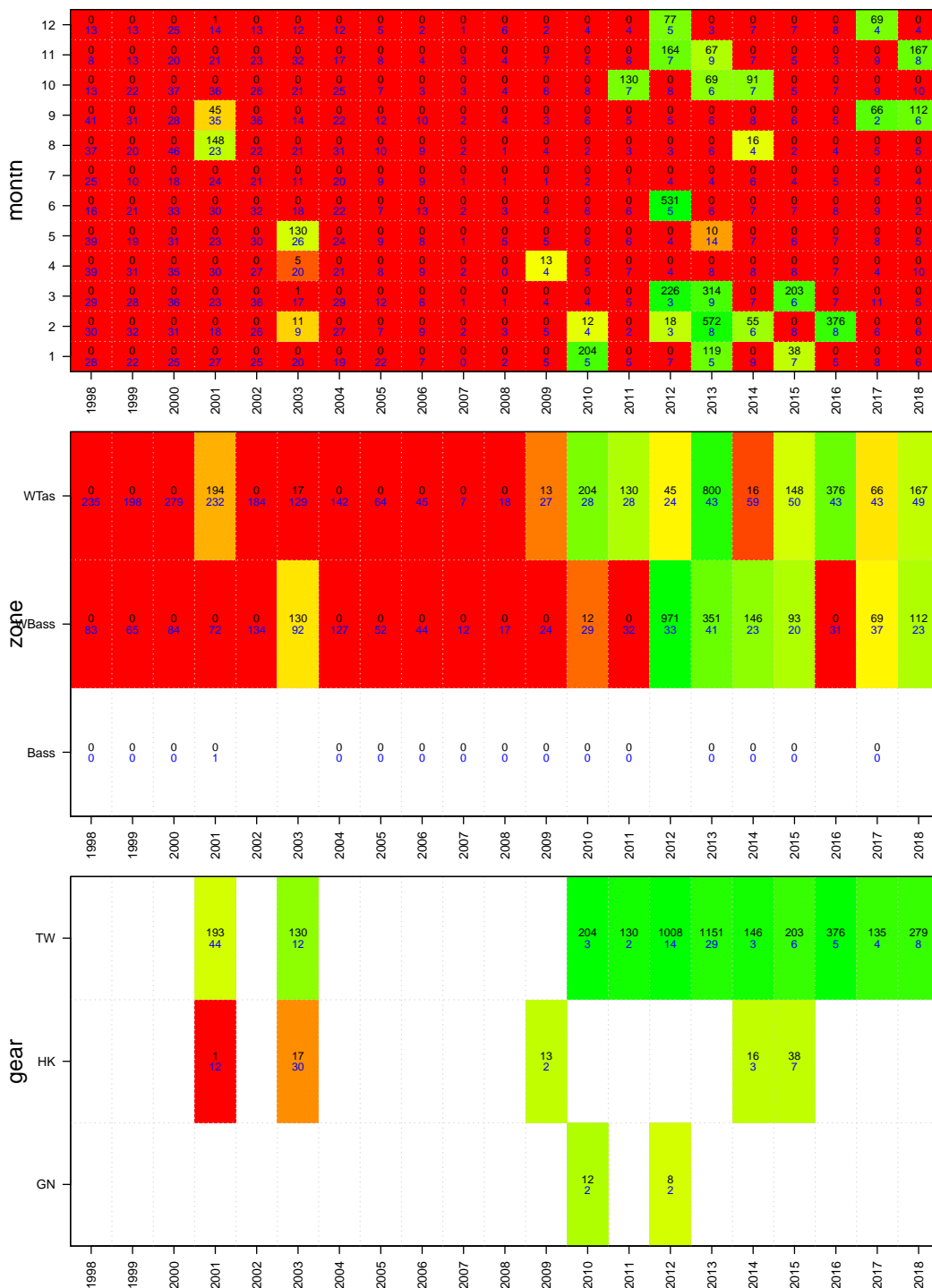
Wed Nov 06 17:14:49 2019



Deepwater Shark West

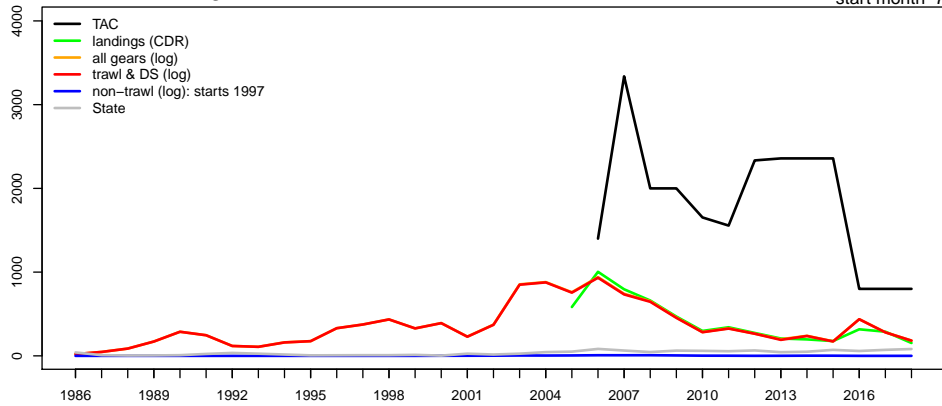
Onboard length data

Wed Nov 06 17:14:49 2019

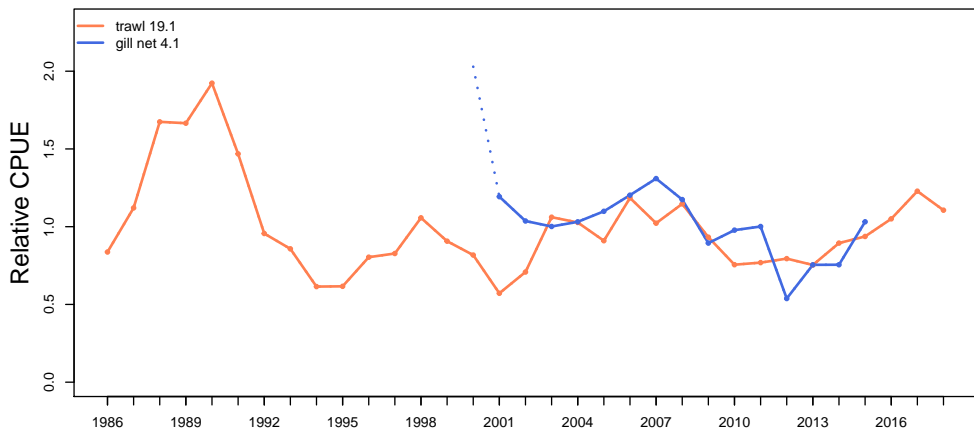


Bight Redfish
TAC and landings

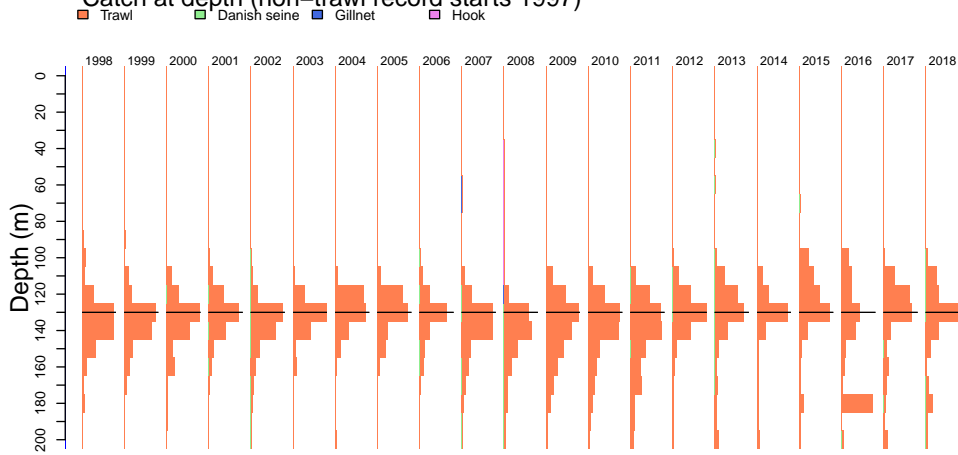
Wed Nov 06 17:14:50 2019
region GAB unit code REB sa code REB
37258004
start month 7



Geometric mean CPUE & SET FIS abundance



Catch at depth (non-trawl record starts 1997)

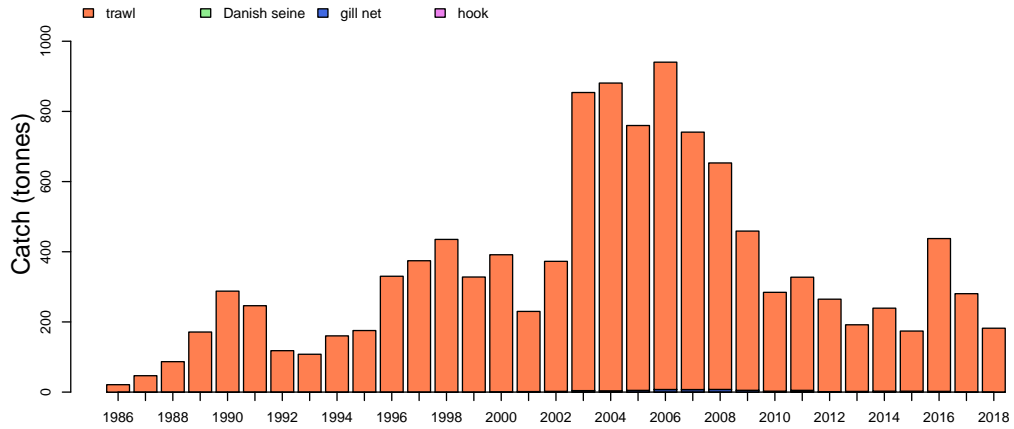


Financial year 2018 is incomplete

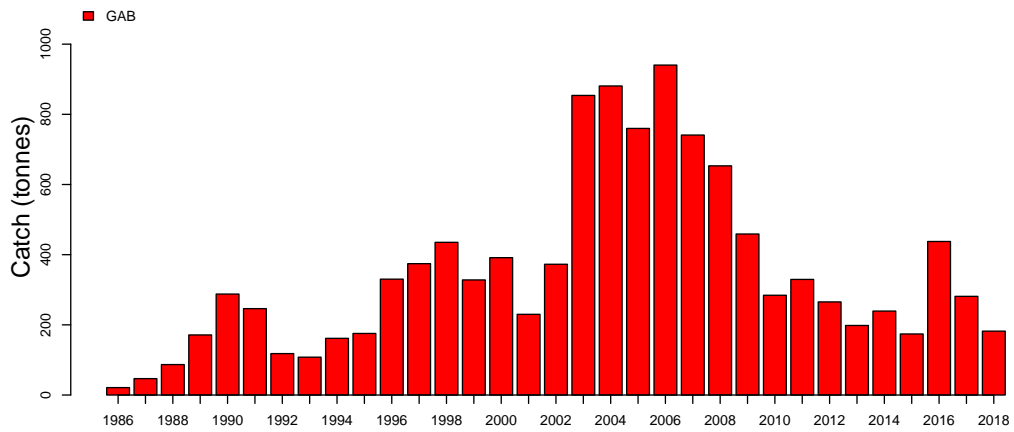
Bight Redfish

Wed Nov 06 17:14:55 2019

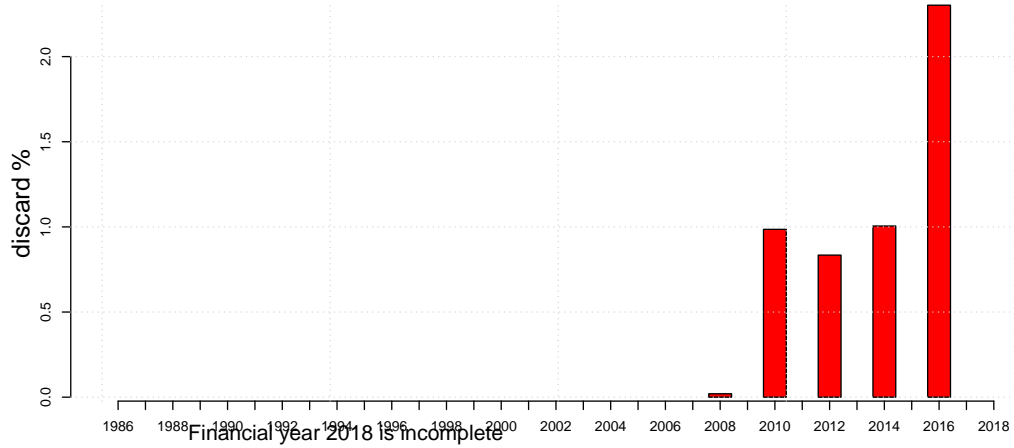
Catch by gear (non-trawl record starts 1997)



Catch by zone



Discards

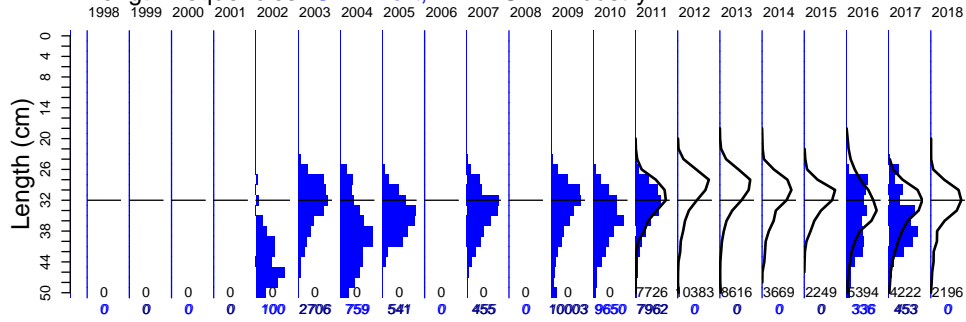


Financial year 2018 is incomplete

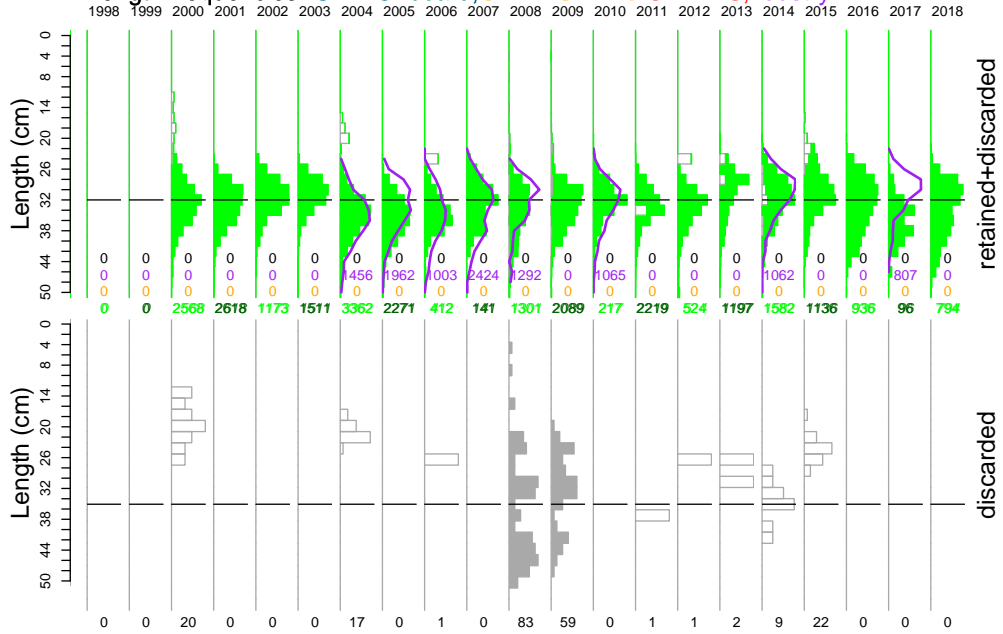
Bight Redfish

Wed Nov 06 17:14:56 2019

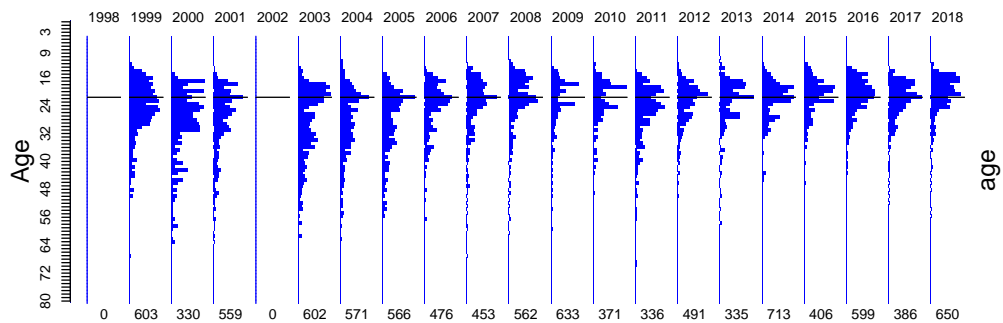
Length frequencies: ISMP Port, GAB Industry



Length frequencies: ISMP Onboard, SET FIS winter, GAB FIS Industry



Age frequency

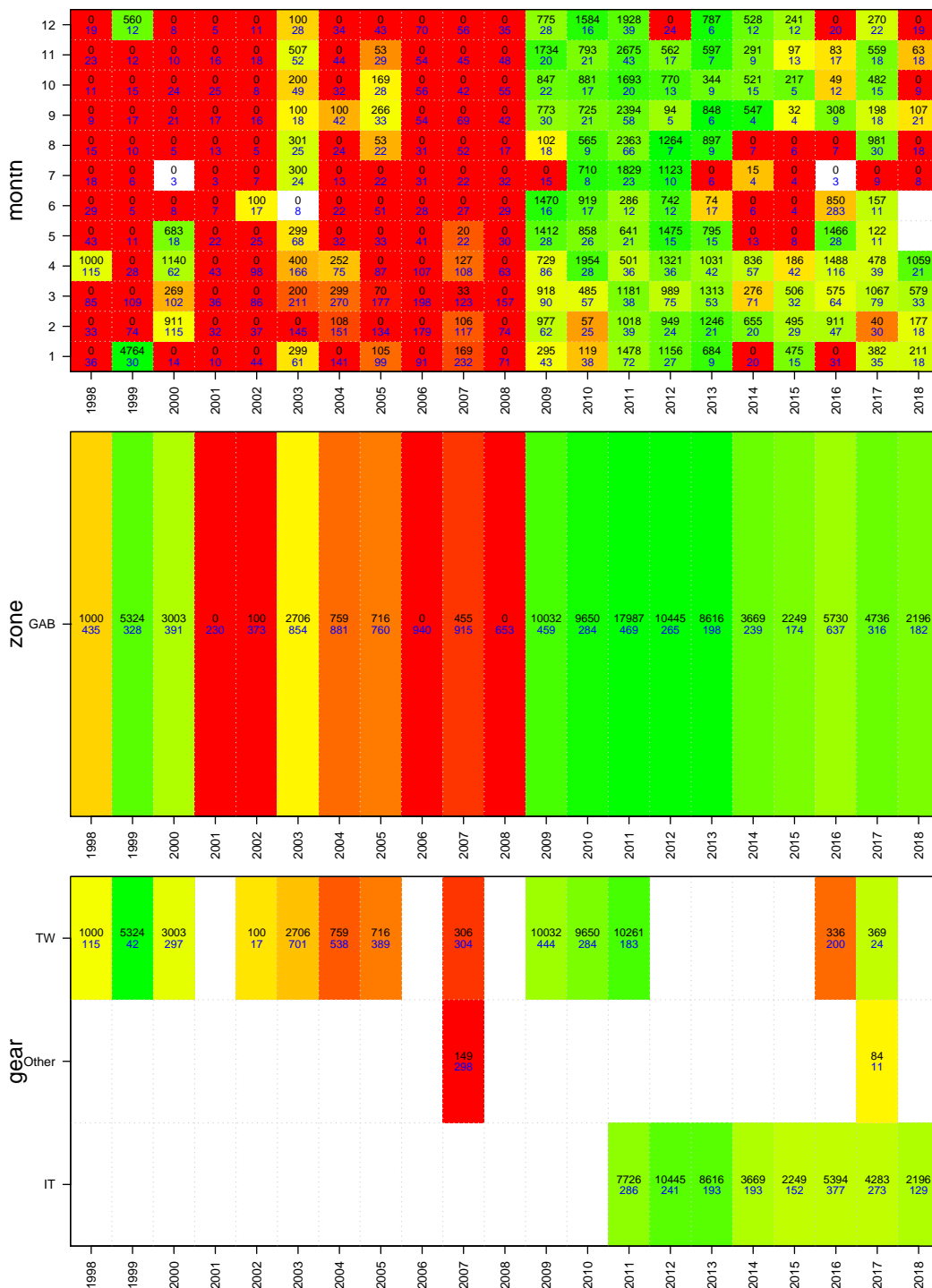


Financial year 2018 is incomplete

Bight Redfish

Port length data

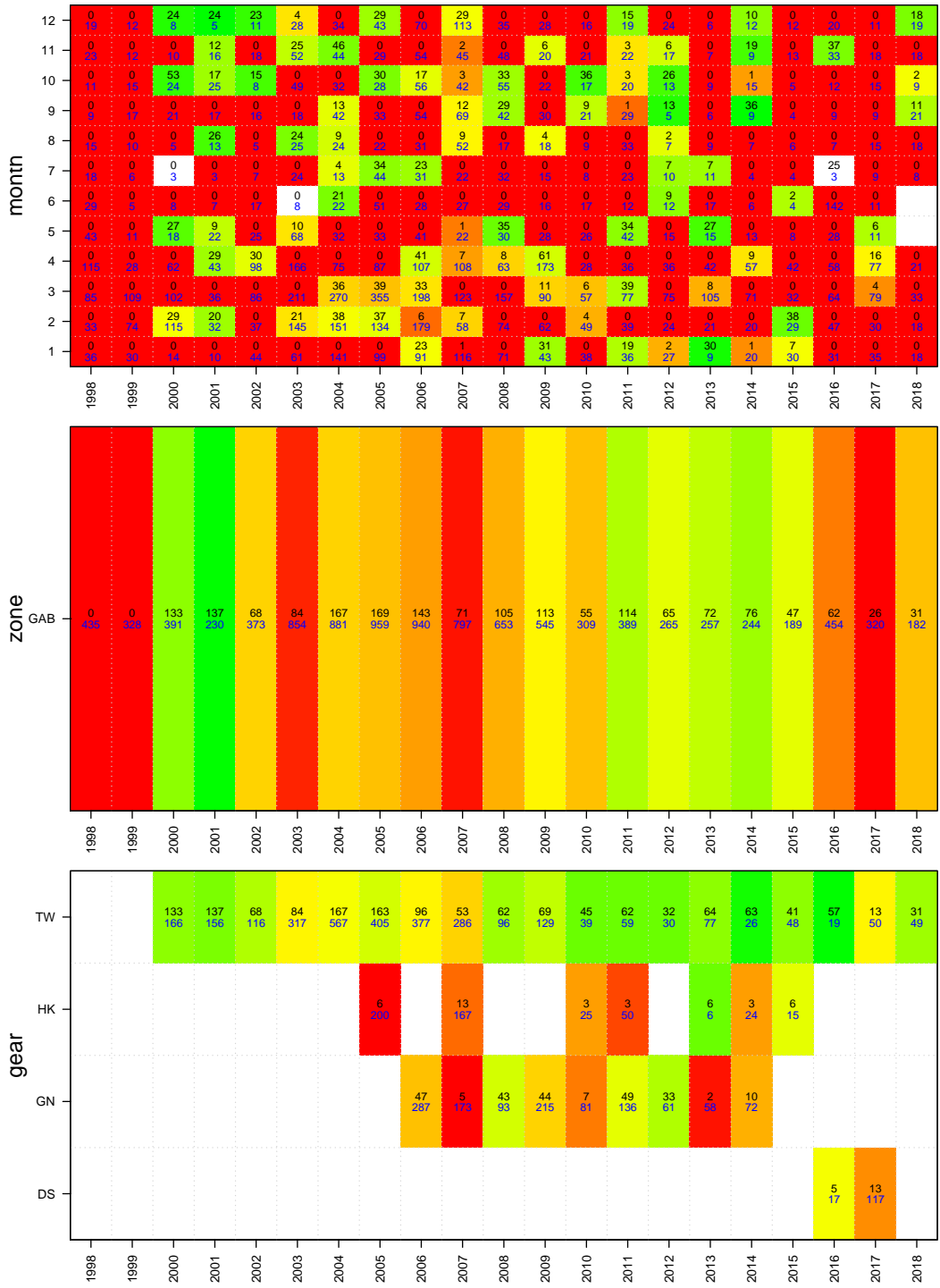
Wed Nov 06 17:14:56 2019



Bight Redfish

Onboard discard weight data

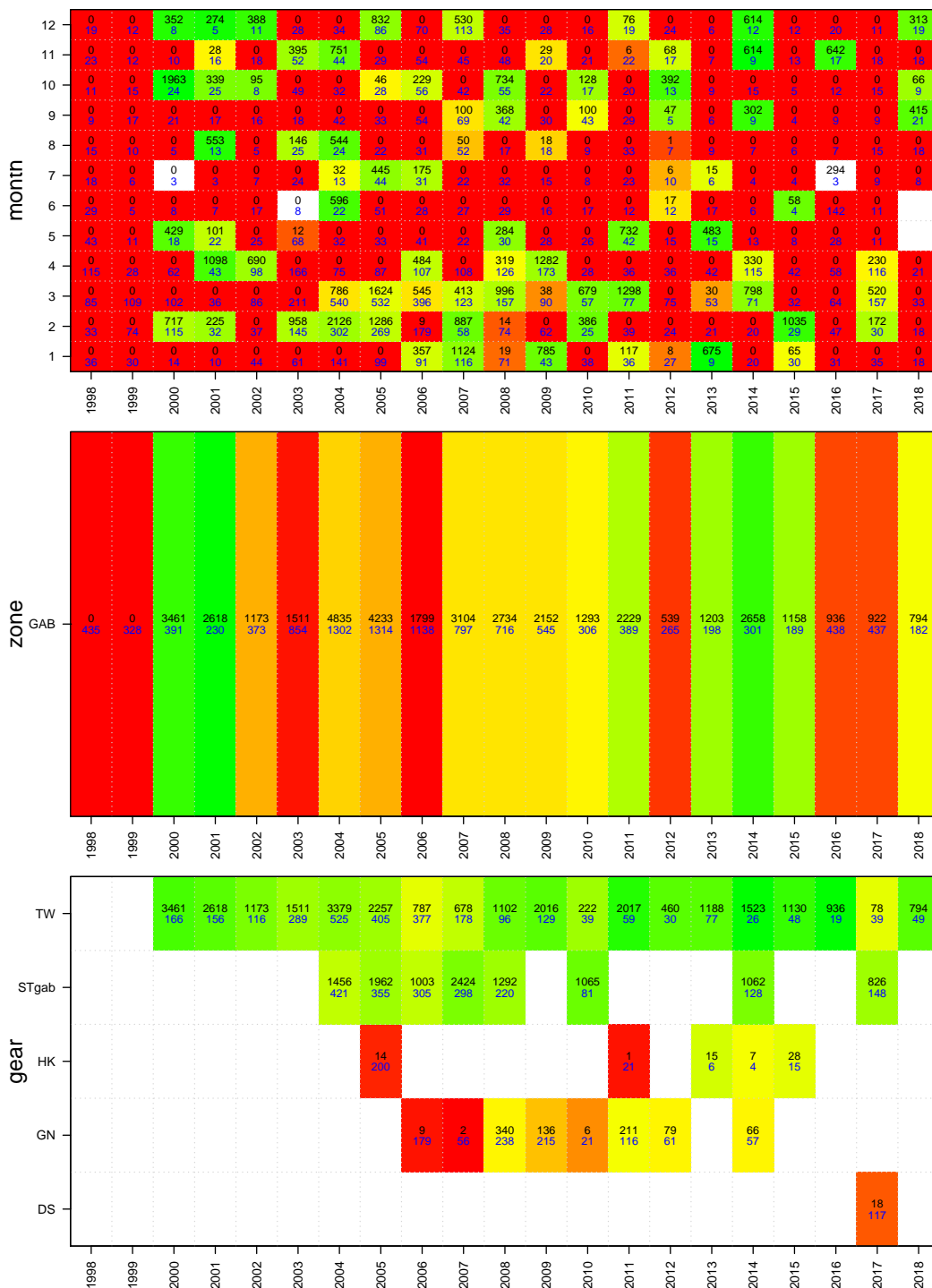
Wed Nov 06 17:14:56 2019



Bight Redfish

Onboard length data

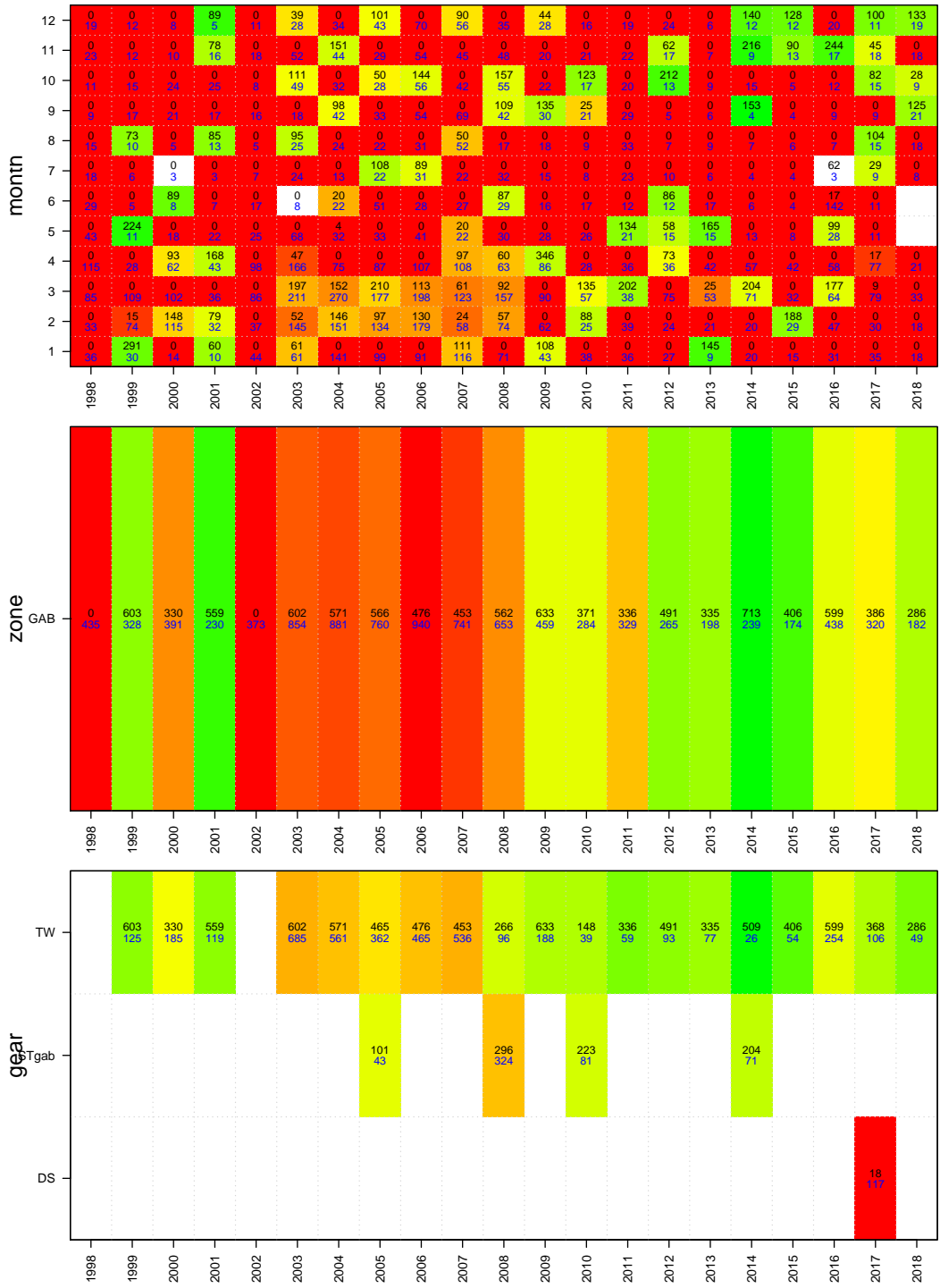
Wed Nov 06 17:14:57 2019



Bight Redfish

Age data

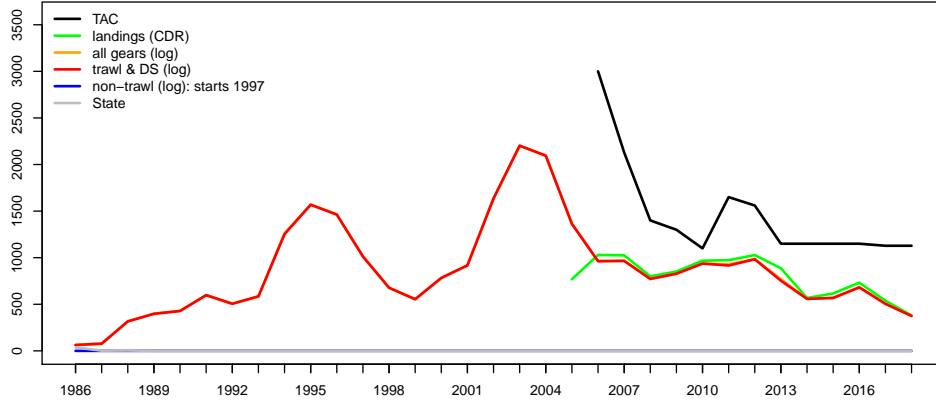
Wed Nov 06 17:14:57 2019



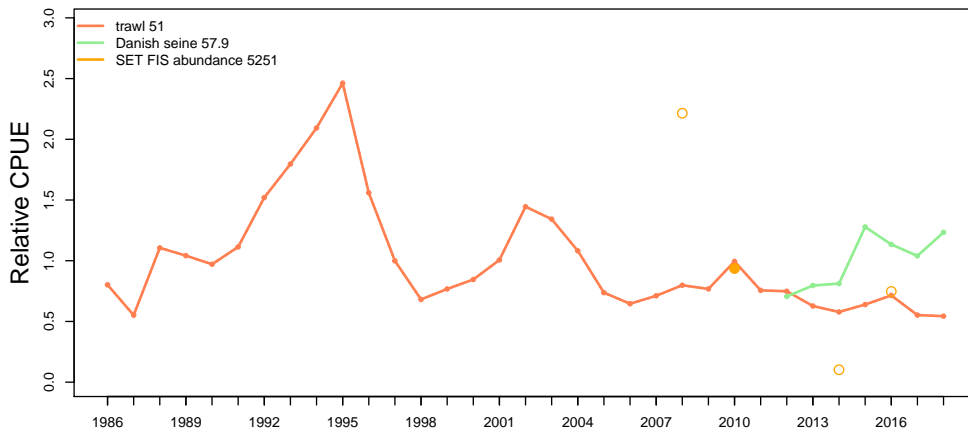
Deepwater Flathead

TAC and landings

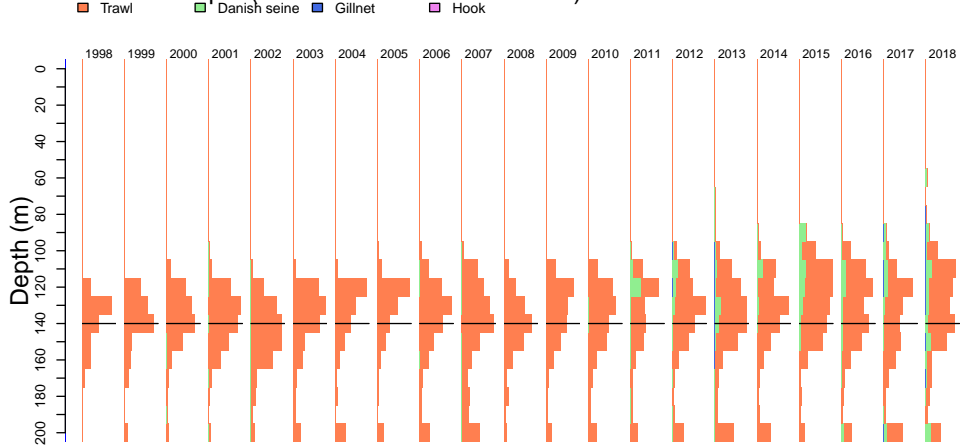
Wed Nov 06 17:14:59 2019
 region GAB unit code FLD sa code FLD
 37296002
 start month 7



Geometric mean CPUE & SET FIS abundance



Catch at depth (non-trawl record starts 1997)

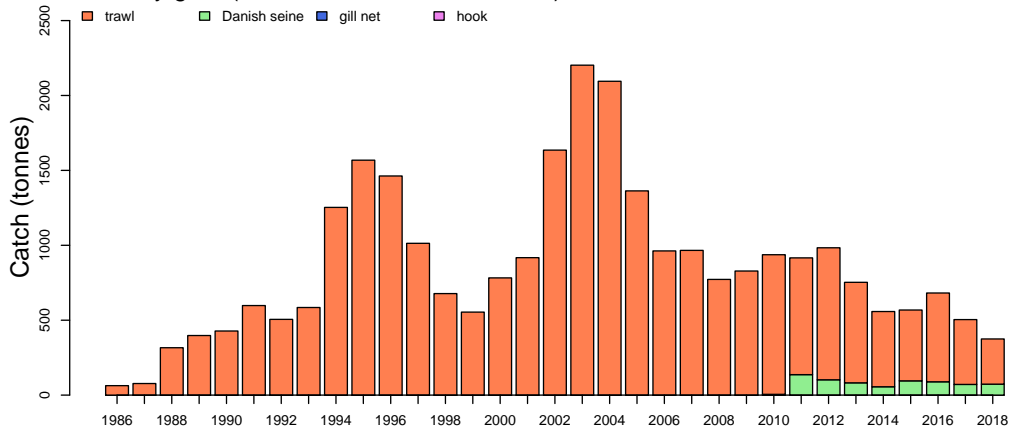


Financial year 2018 is incomplete

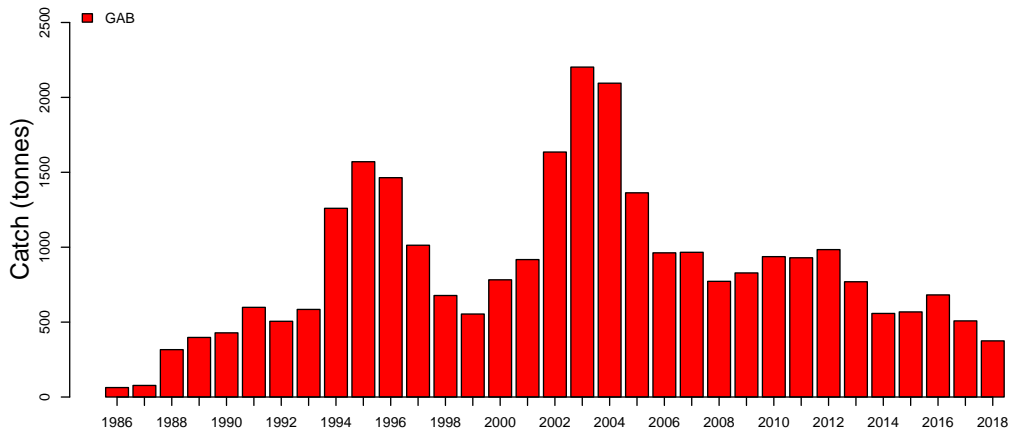
Deepwater Flathead

Wed Nov 06 17:15:07 2019

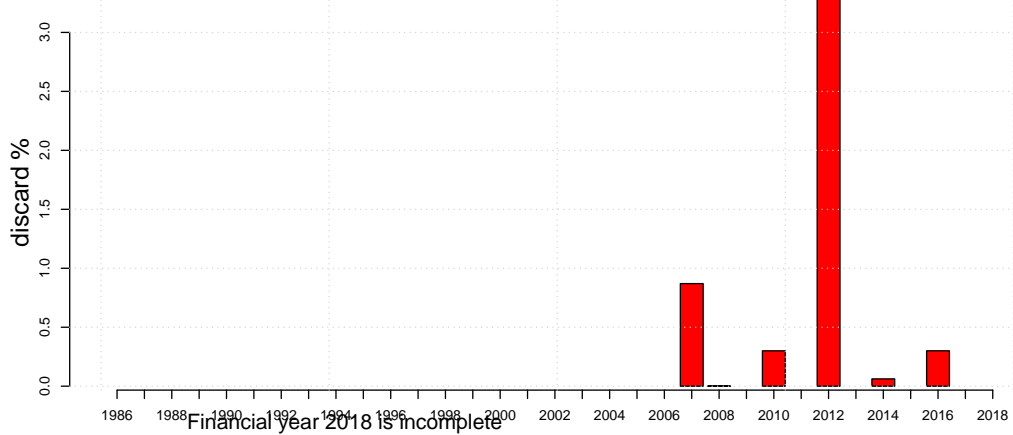
Catch by gear (non-trawl record starts 1997)



Catch by zone



Discards

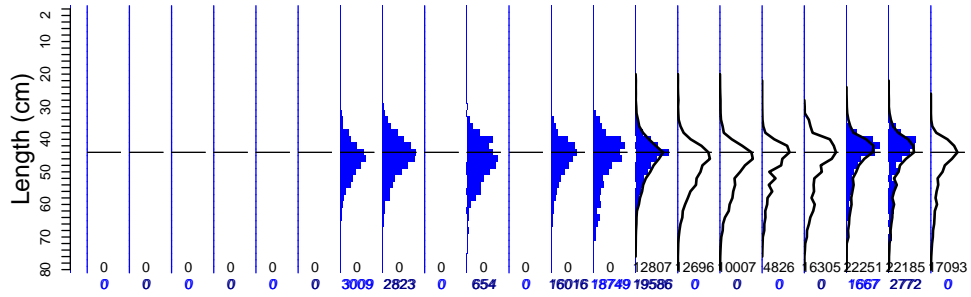


Deepwater Flathead

Wed Nov 06 17:15:08 2019

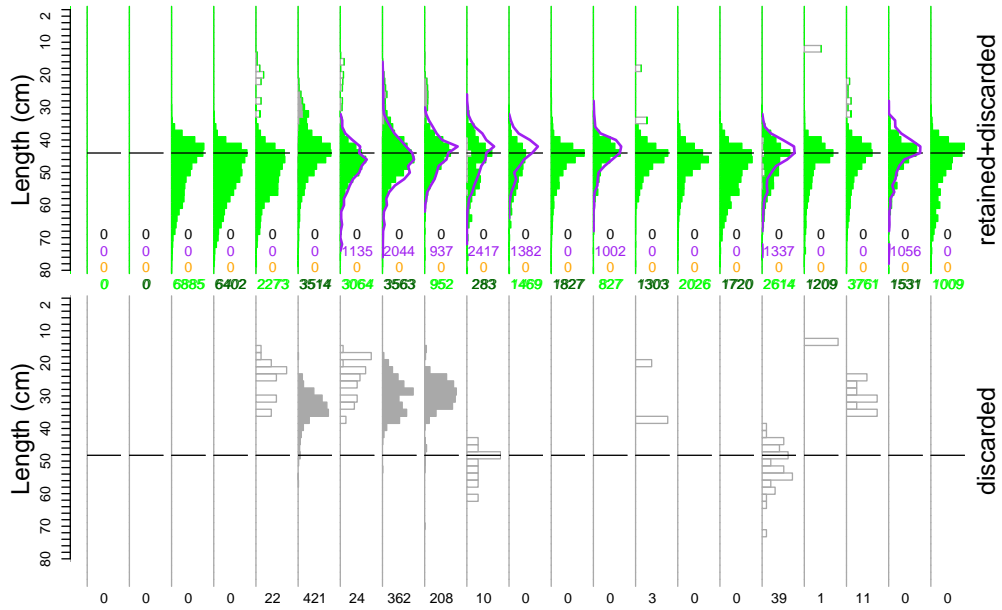
Length frequencies: ISMP Port, GAB Industry

1998 1999 2000 2001 2002 2003 2004 2005 2006 2007 2008 2009 2010 2011 2012 2013 2014 2015 2016 2017 2018

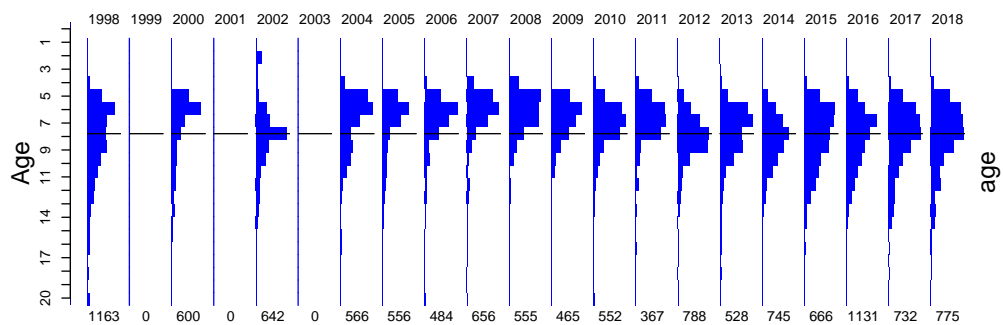


Length frequencies: ISMP Onboard, SET FIS winter, GAB FIS Industry

1998 1999 2000 2001 2002 2003 2004 2005 2006 2007 2008 2009 2010 2011 2012 2013 2014 2015 2016 2017 2018



Age frequency

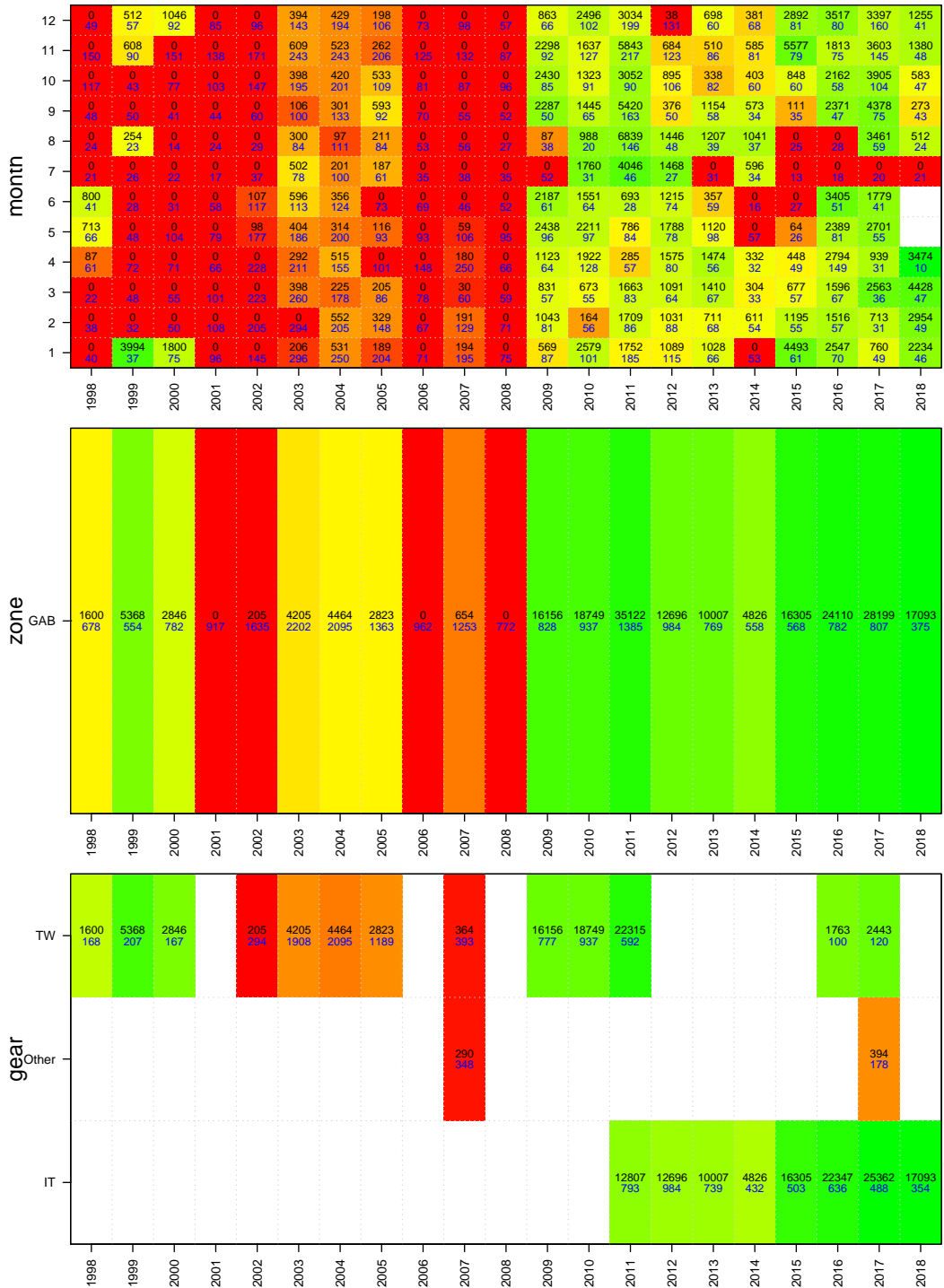


Financial year 2018 is incomplete

Deepwater Flathead

Port length data

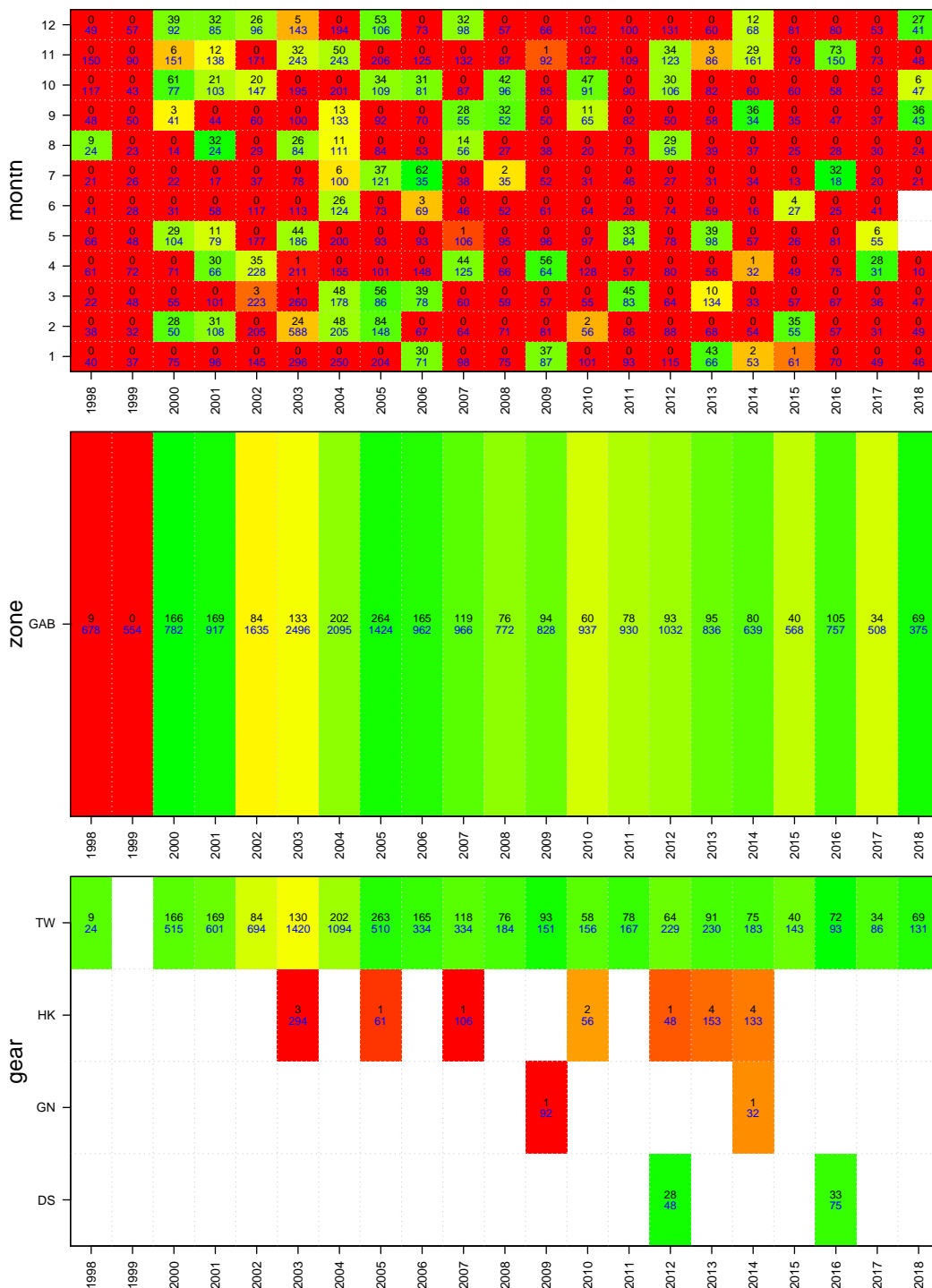
Wed Nov 06 17:15:09 2019



Deepwater Flathead

Onboard discard weight data

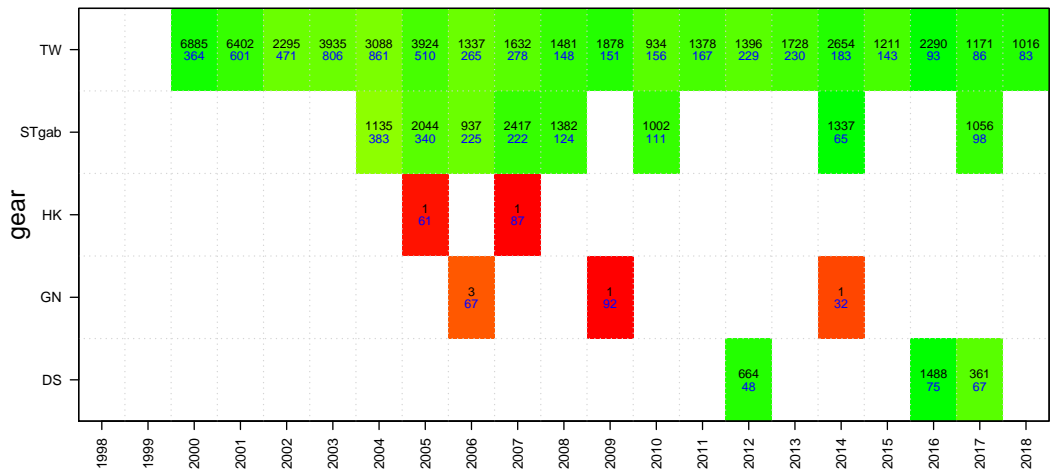
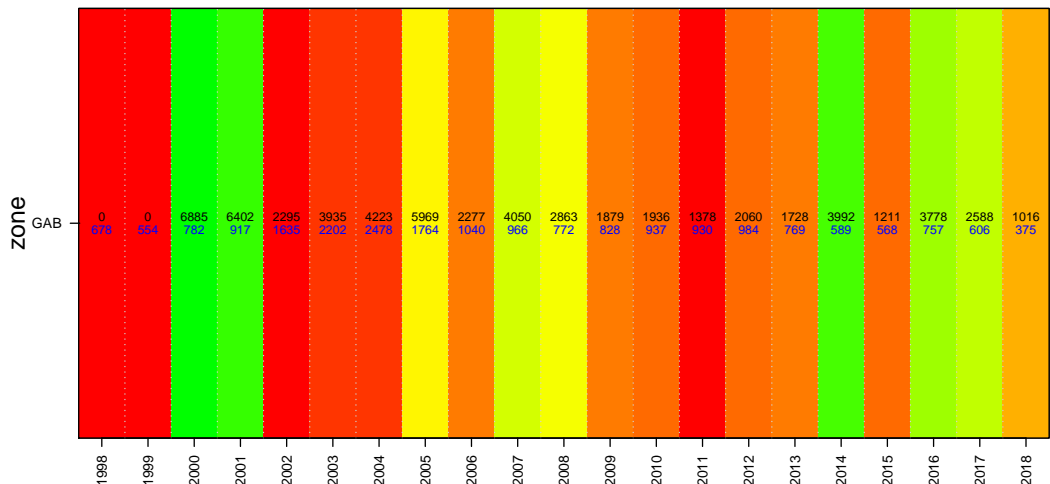
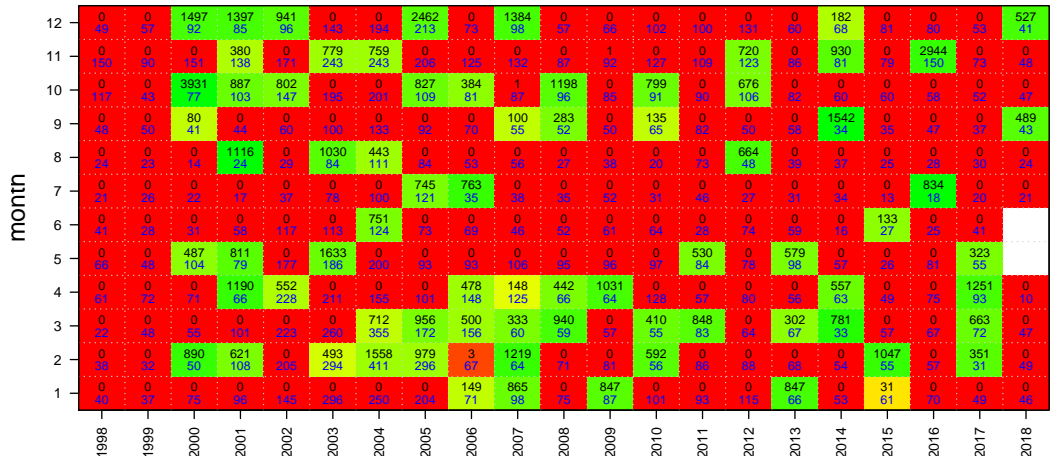
Wed Nov 06 17:15:10 2019



Deepwater Flathead

Onboard length data

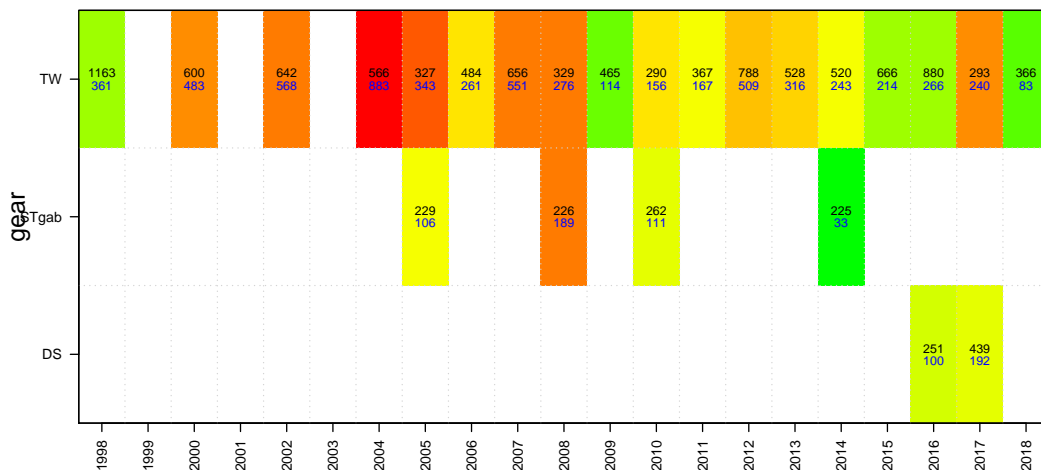
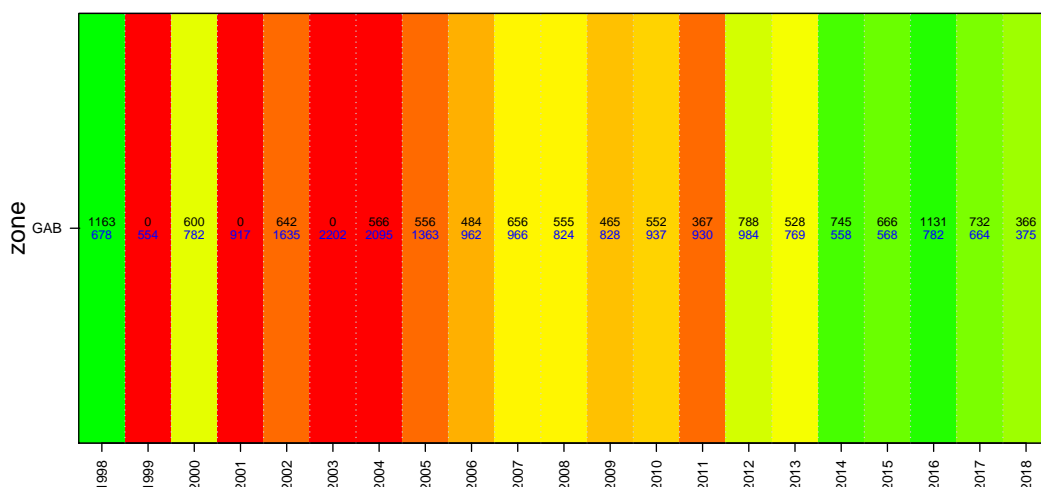
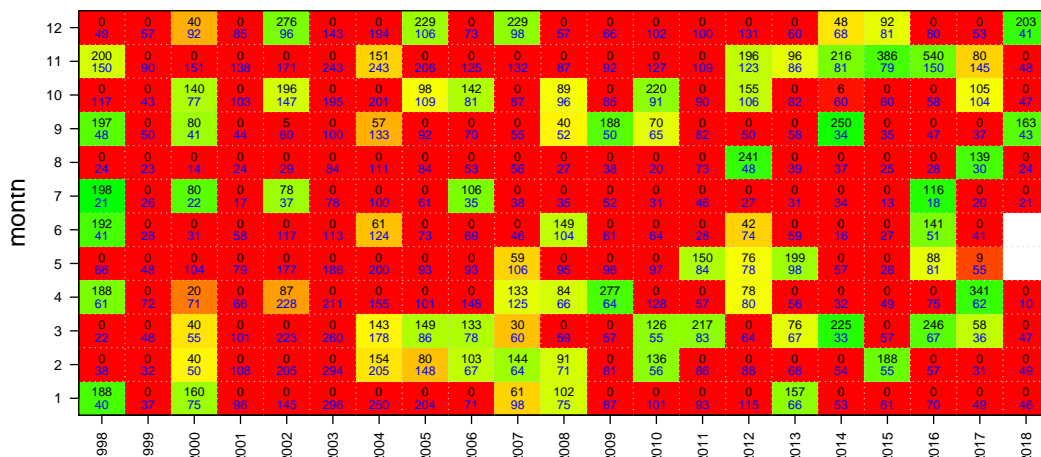
Wed Nov 06 17:15:10 2019



Deepwater Flathead

Age data

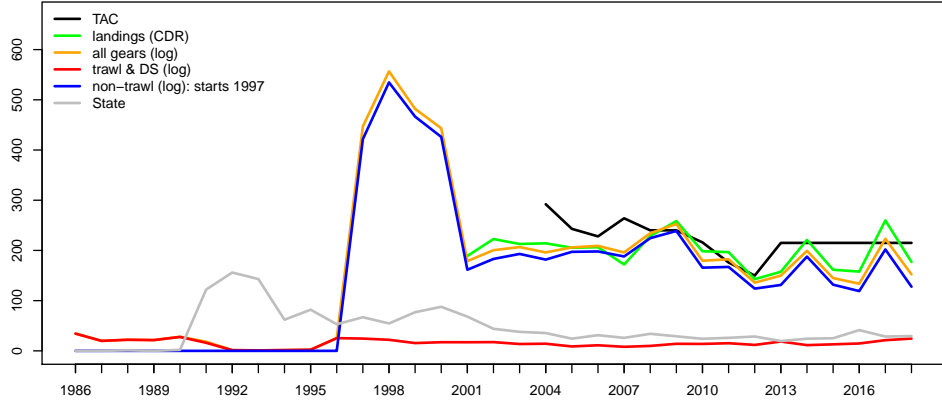
Wed Nov 06 17:15:10 2019



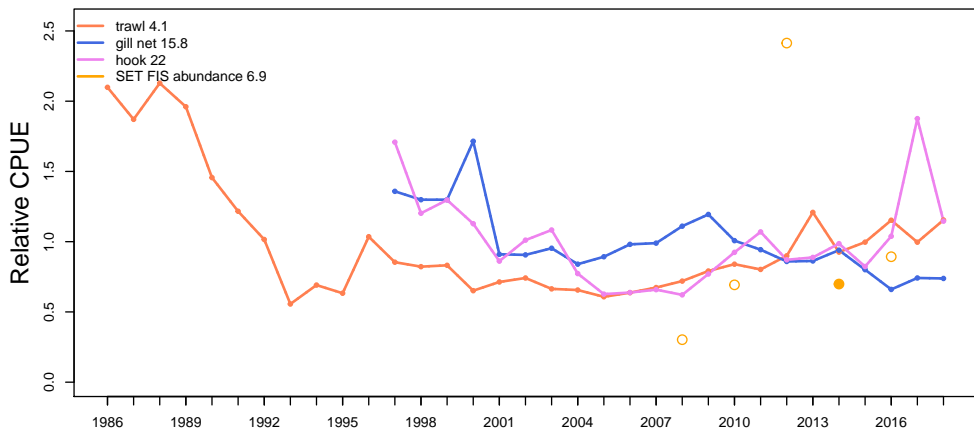
School Shark

TAC and landings

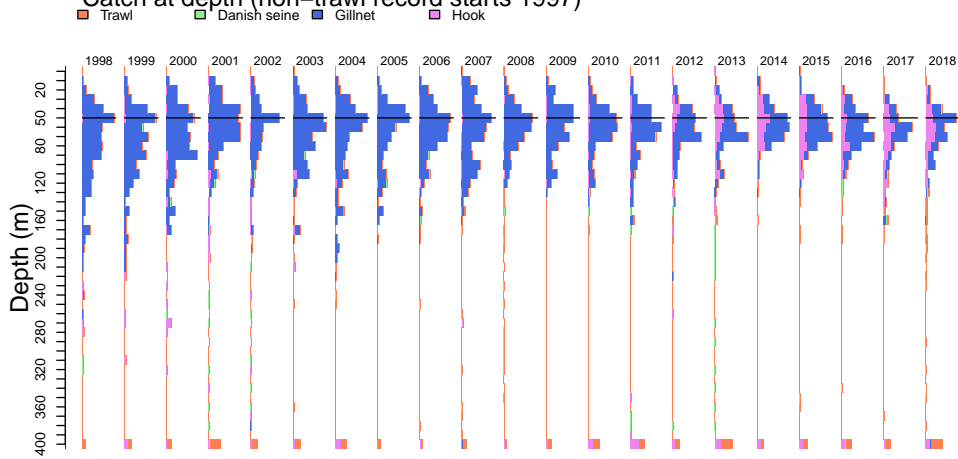
Wed Nov 06 17:15:12 2019
 region ALL unit code SHS sa code SHS
 37017008
 start month 1



Geometric mean CPUE & SET FIS abundance



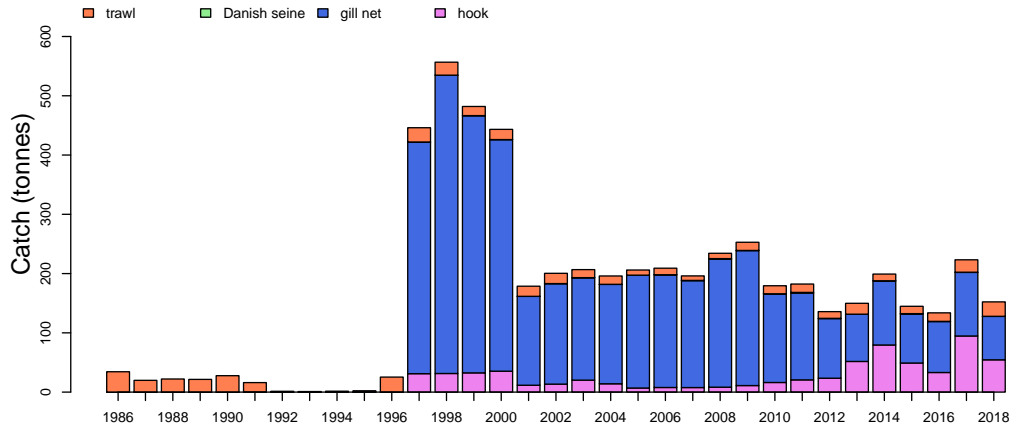
Catch at depth (non-trawl record starts 1997)



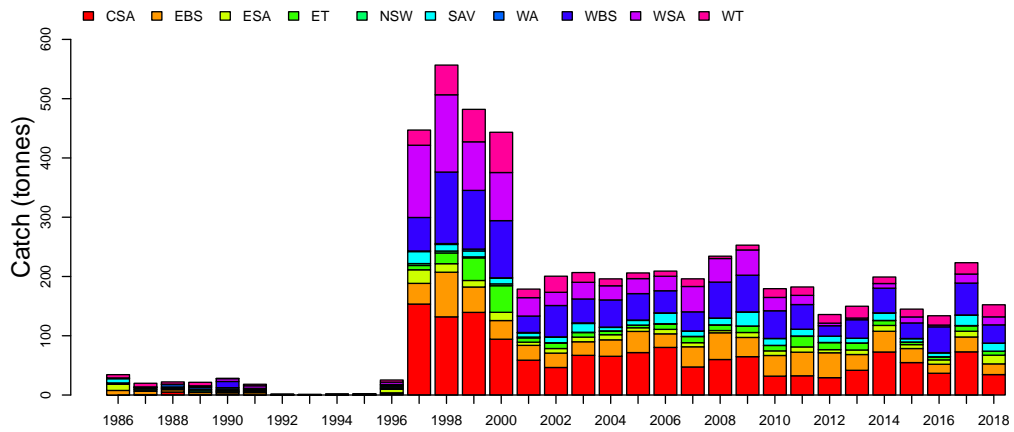
School Shark

Wed Nov 06 17:15:16 2019

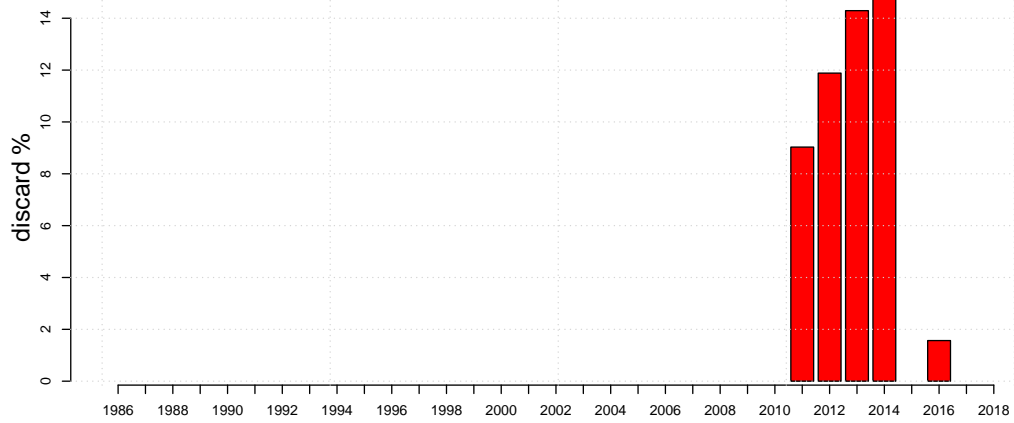
Catch by gear (non-trawl record starts 1997)



Catch by zone



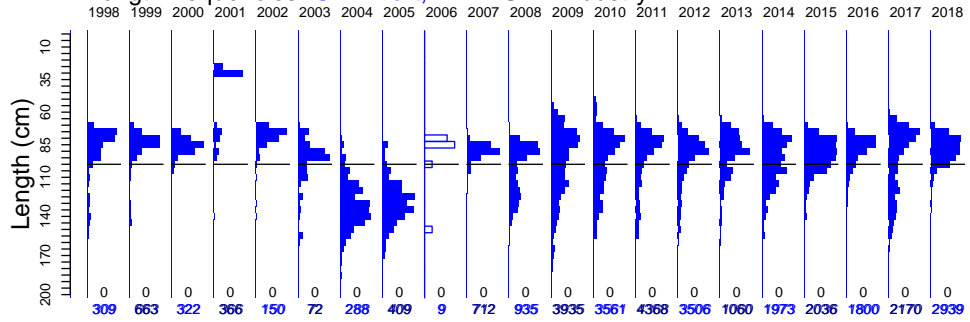
Discards



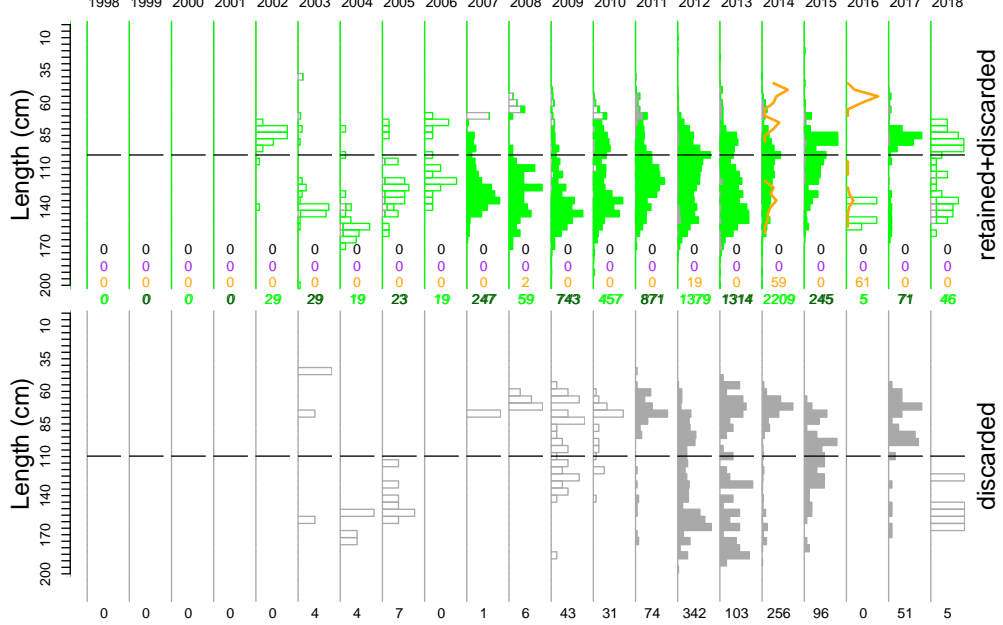
School Shark

Wed Nov 06 17:15:17 2019

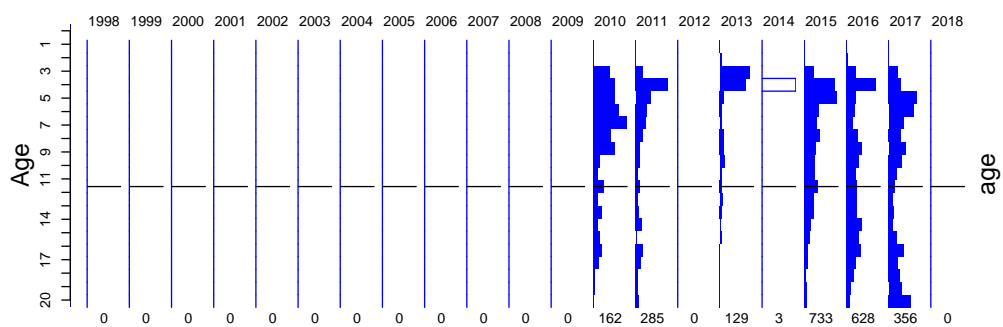
Length frequencies: ISMP Port, GAB Industry



Length frequencies: ISMP Onboard, SET FIS winter, GAB FIS, Industry



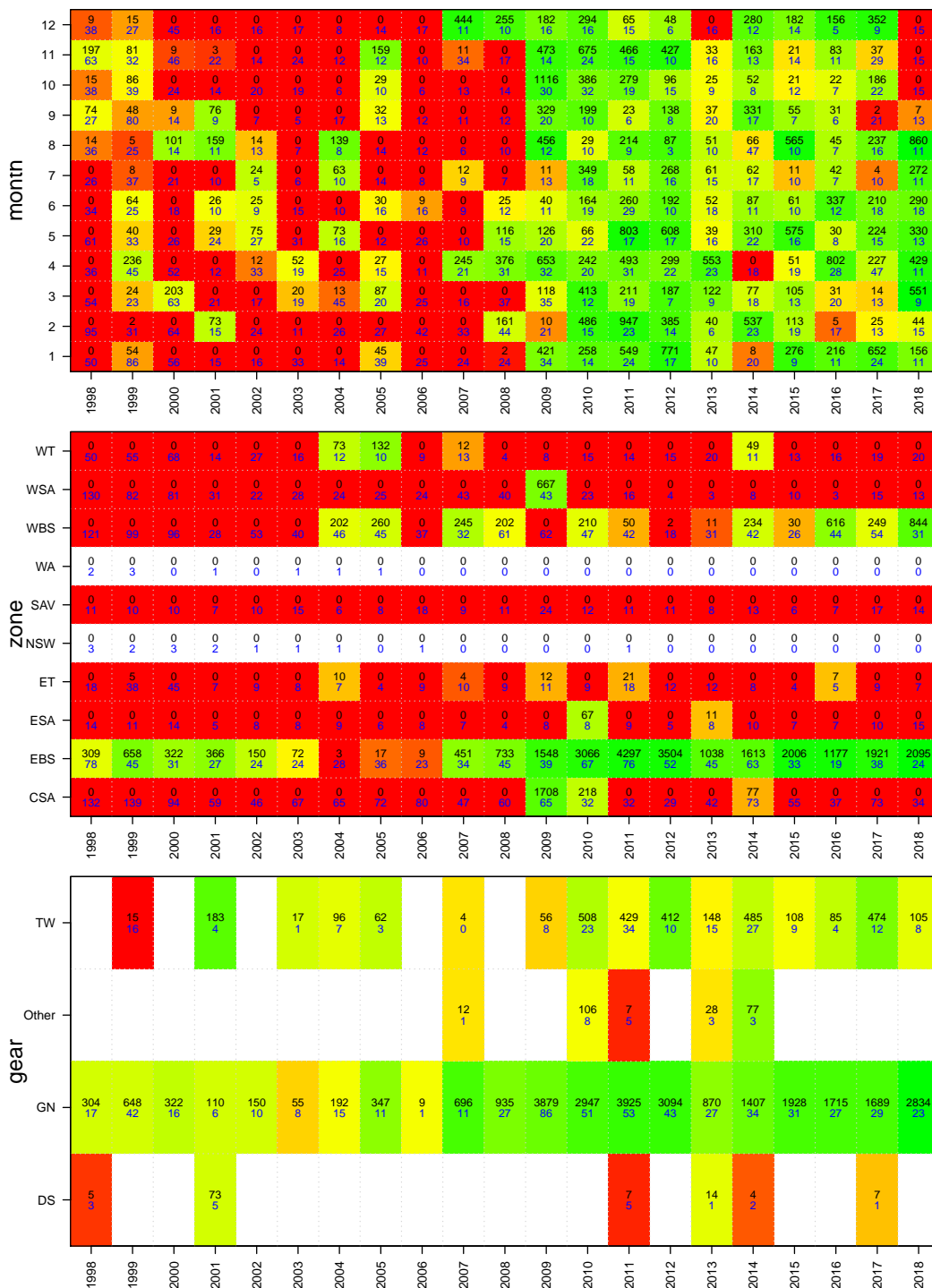
Age frequency



School Shark

Port length data

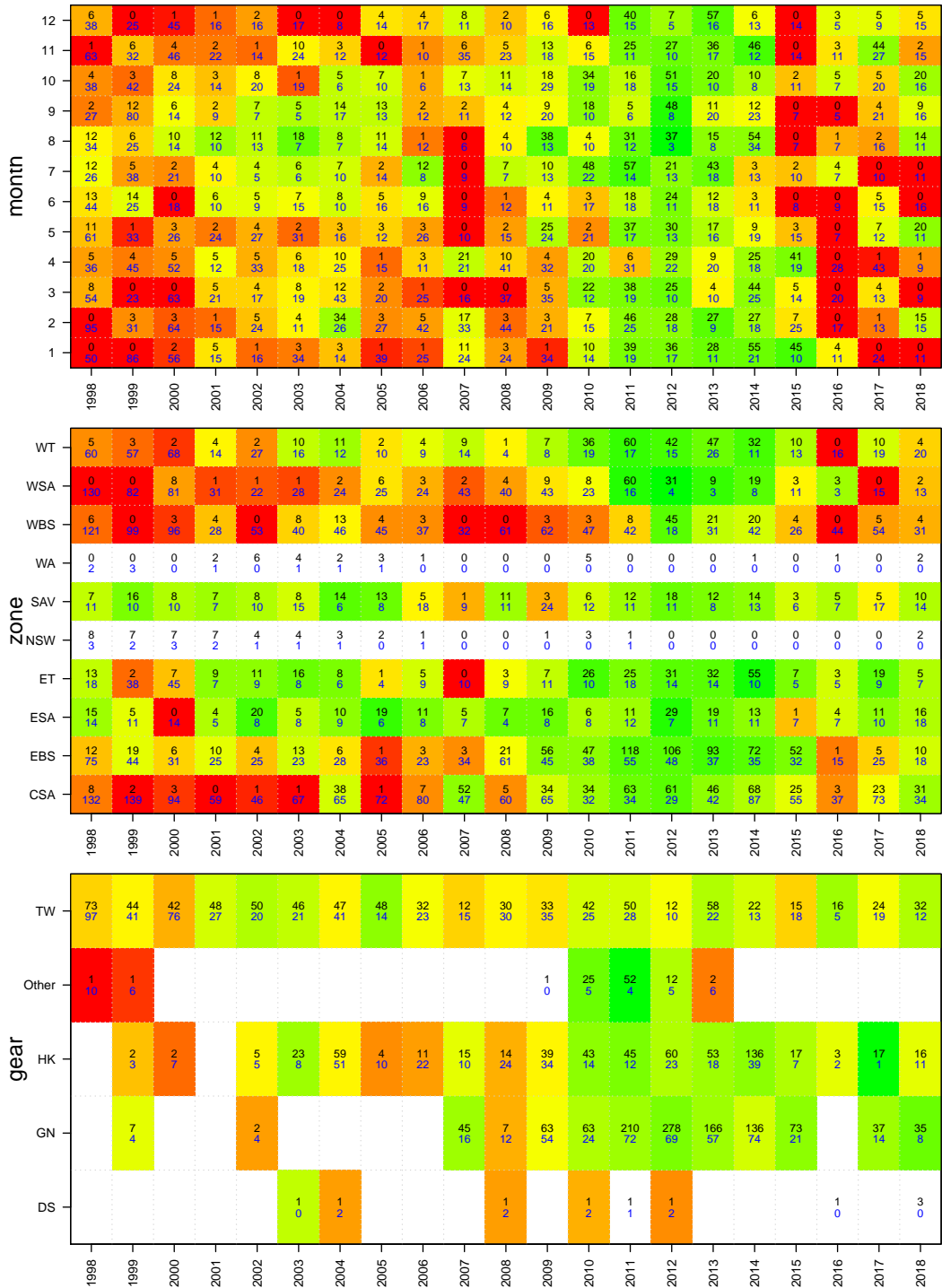
Wed Nov 06 17:15:17 2019



School Shark

Onboard discard weight data

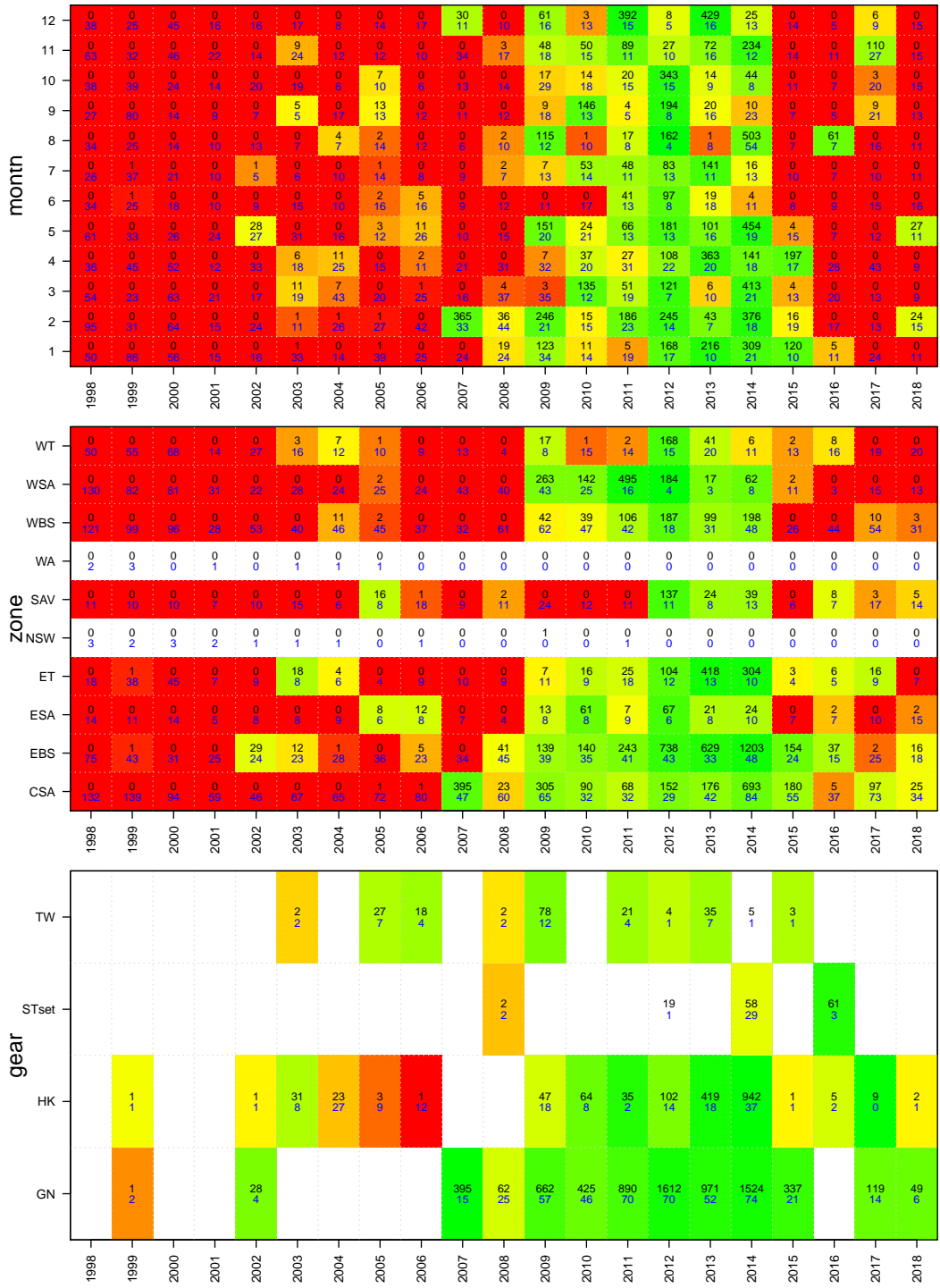
Wed Nov 06 17:15:18 2019



School Shark

Onboard length data

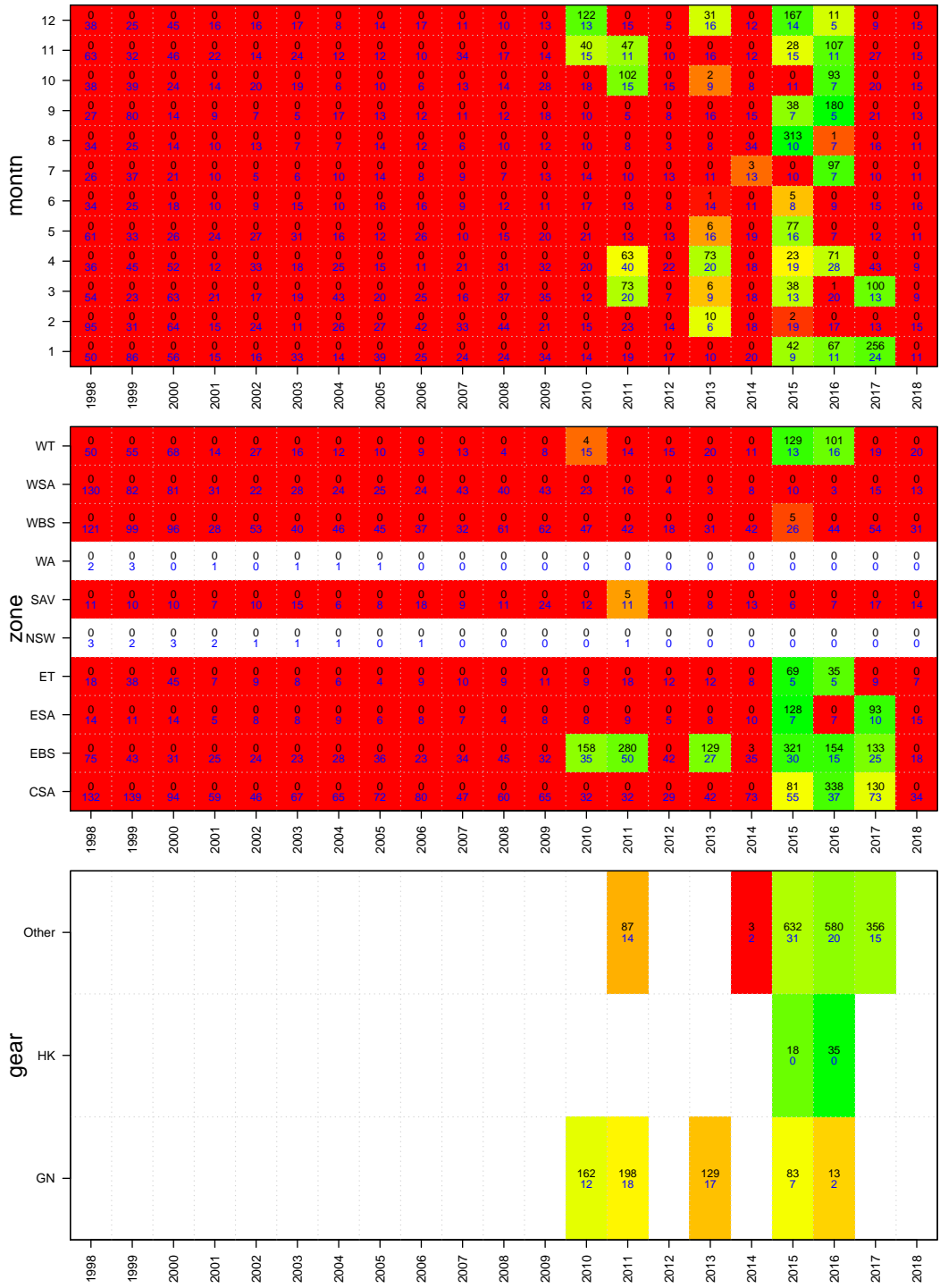
Wed Nov 06 17:15:18 2019



School Shark

Age data

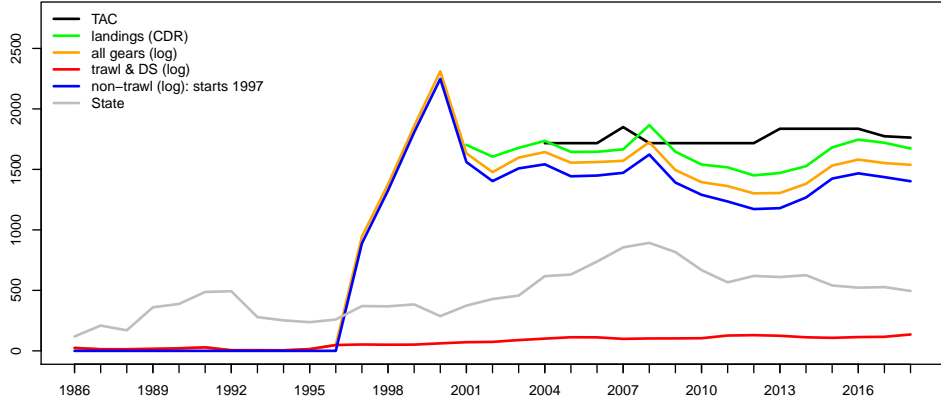
Wed Nov 06 17:15:18 2019



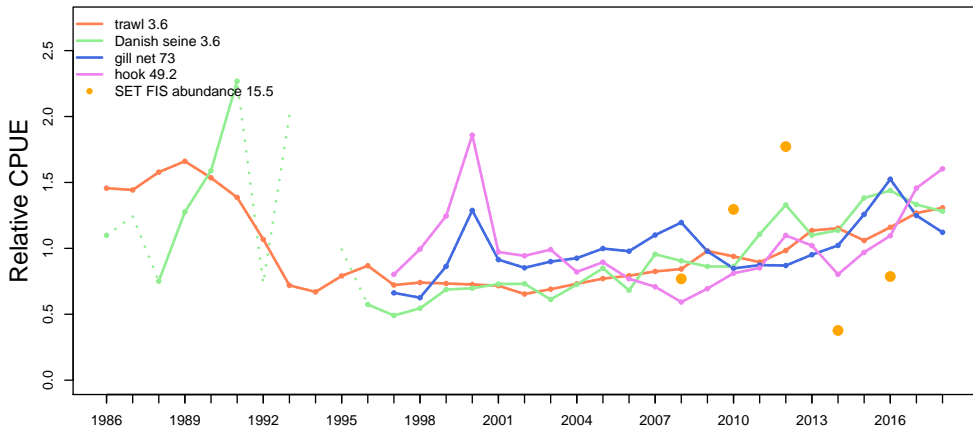
Gummy Shark

TAC and landings

Wed Nov 06 17:15:25 2019
 region ALL unit code SHG sa code SHG
 37017001
 start month 1



Geometric mean CPUE & SET FIS abundance



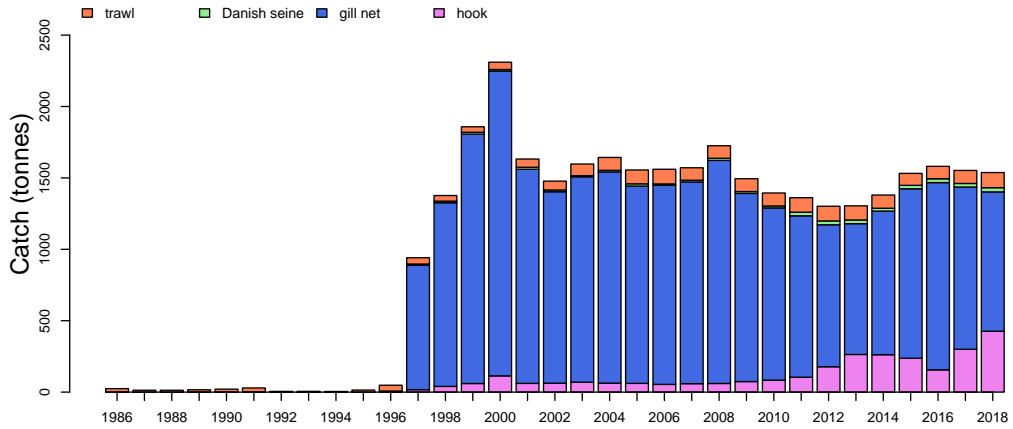
Catch at depth (non-trawl record starts 1997)



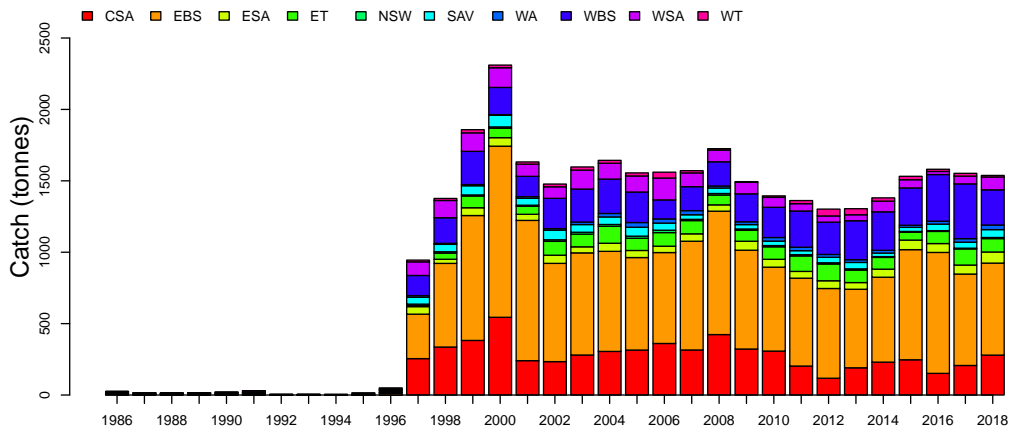
Gummy Shark

Wed Nov 06 17:15:46 2019

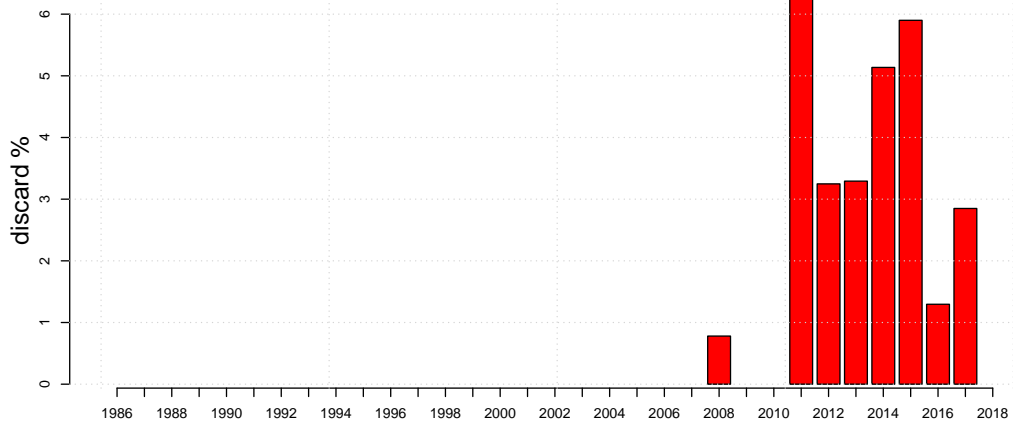
Catch by gear (non-trawl record starts 1997)



Catch by zone



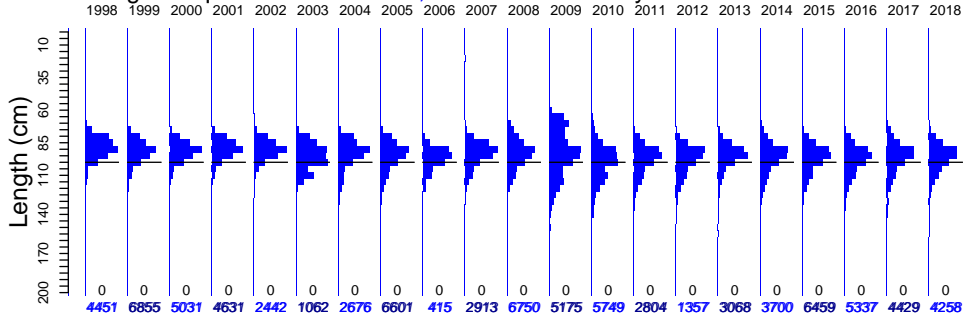
Discards



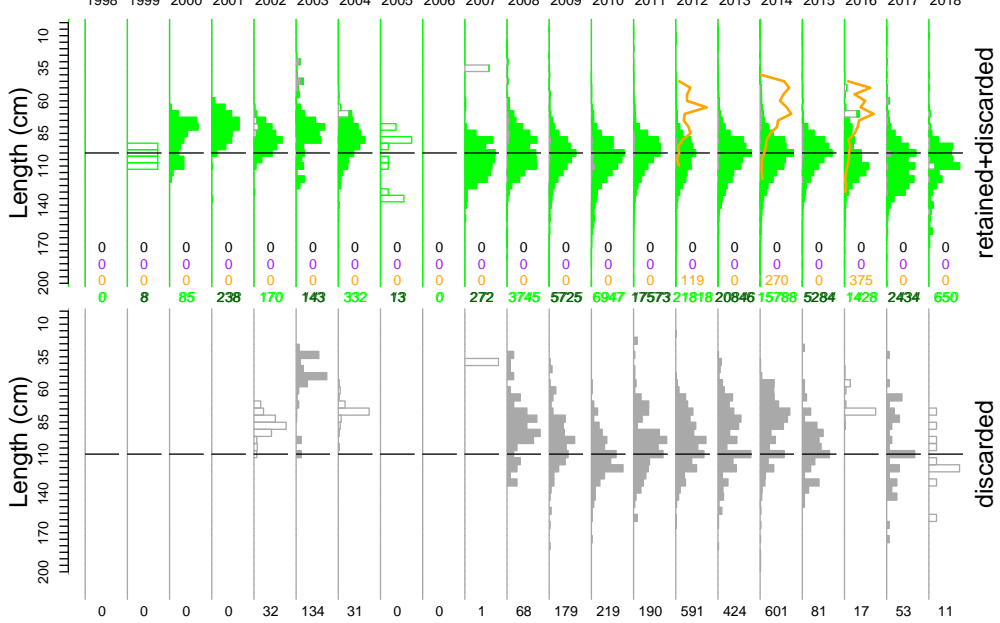
Gummy Shark

Wed Nov 06 17:15:46 2019

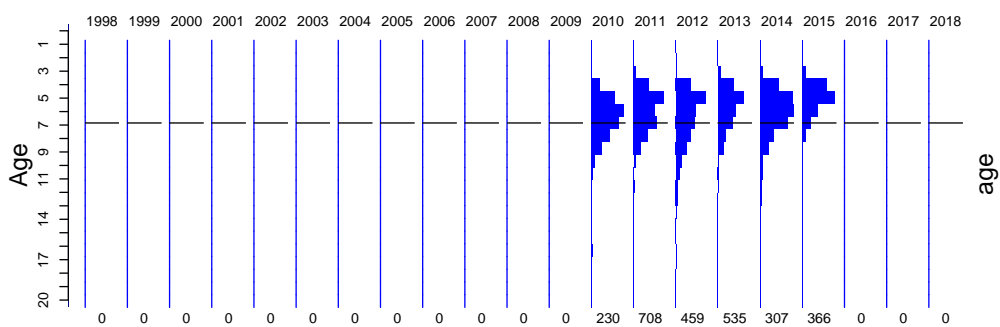
Length frequencies: ISMP Port, GAB Industry



Length frequencies: ISMP Onboard, SET FIS winter, GAB FIS Industry



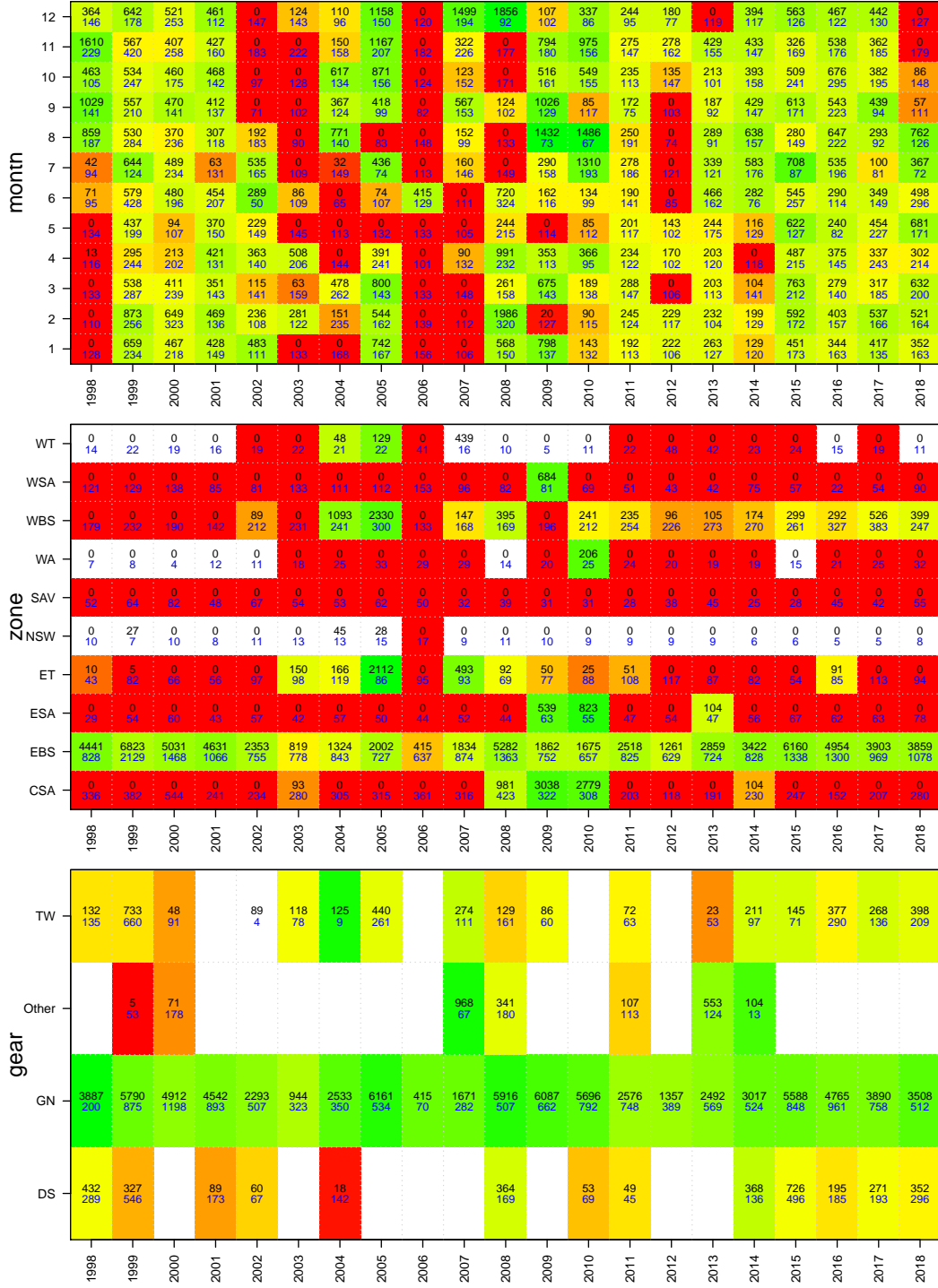
Age frequency



Gummy Shark

Port length data

Wed Nov 06 17:15:47 2019



Gummy Shark

Onboard discard weight data

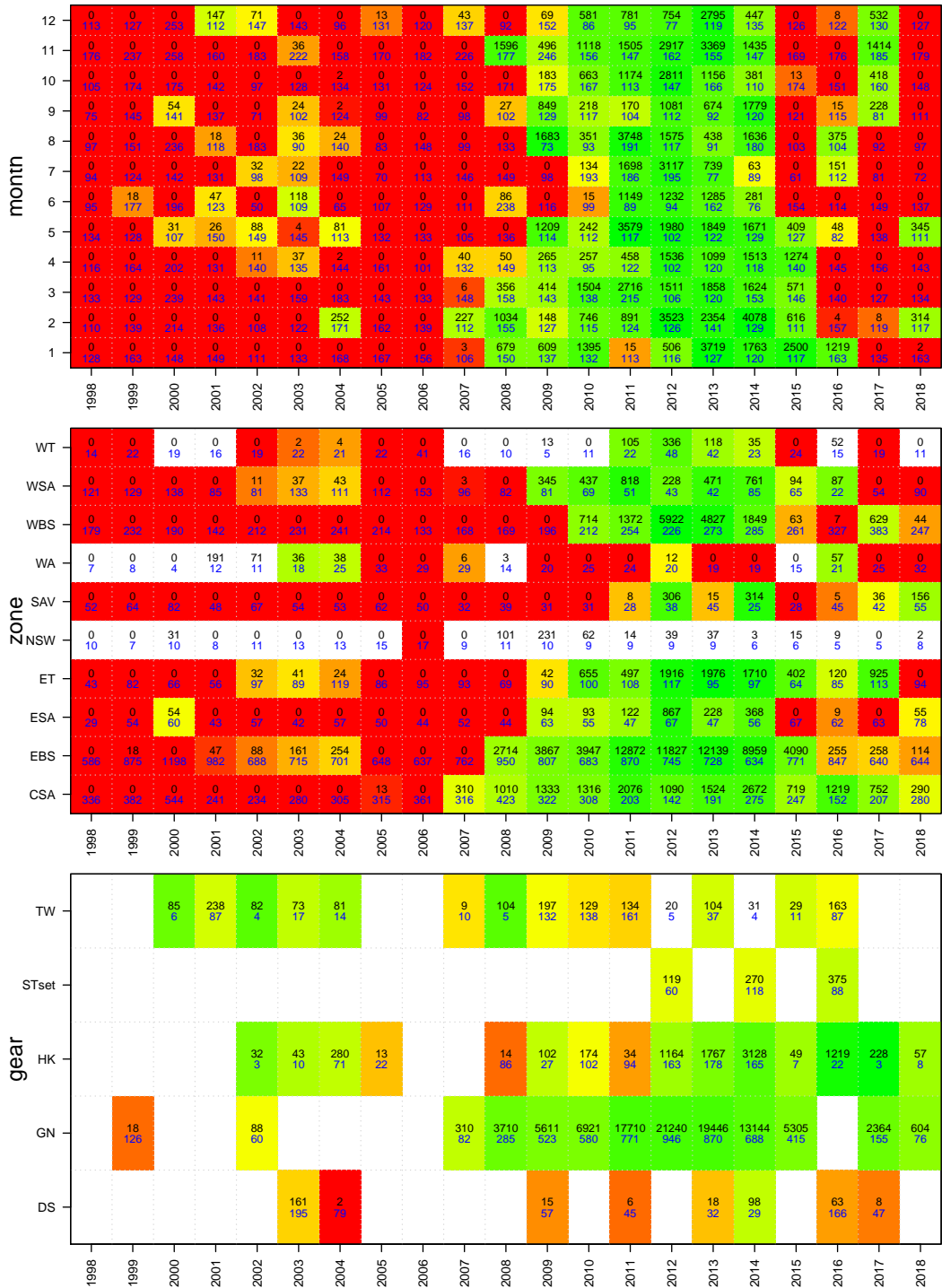
Wed Nov 06 17:15:47 2019

month	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	
12	11 113	11 127	19 253	22 112	27 200	8 143	4 96	35 174	11 120	29 137	2 92	7 152	0 0	56 132	27 101	111 216	51 144	0 0	9 122	53 130	23 127	
11	1 176	16 237	13 258	14 160	6 183	49 223	36 158	9 170	9 182	9 226	17 240	30 311	33 209	96 203	90 233	161 248	111 246	21 230	63 178	41 185	15 179	
10	7 105	15 174	40 258	53 216	31 97	7 128	12 134	53 185	31 179	225 171	6 175	40 171	48 175	90 227	59 169	136 297	71 173	40 158	13 174	7 151	21 166	21 188
9	11 75	26 210	23 141	20 231	23 102	12 102	41 135	47 135	19 82	14 98	58 102	36 192	28 117	19 104	82 112	48 123	111 123	0 0	11 115	19 94	26 111	
8	20 97	27 151	28 368	65 118	29 183	41 90	22 140	32 122	55 230	4 99	26 133	94 98	5 67	119 330	87 80	32 91	72 211	2 103	10 104	6 92	61 126	
7	24 94	14 192	17 142	19 131	45 165	26 172	33 149	41 70	61 167	6 146	20 149	24 184	59 186	64 195	83 195	65 77	0 89	18 87	27 112	3 124	0 12	
6	17 95	25 302	2 196	26 207	22 50	46 174	22 107	30 200	31 200	0 111	35 324	3 98	8 116	46 193	74 236	93 162	9 76	0 0	18 187	11 149	8 137	
5	9 134	12 199	9 157	29 150	20 269	14 145	22 113	17 192	22 189	9 105	9 136	78 173	5 112	98 252	100 128	57 129	61 211	8 21	8 82	14 139	23 111	
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3	13 111	5 129	11 239	12 143	9 141	20 159	12 183	33 143	44 133	10 148	0 138	14 143	54 215	108 179	146 120	49 161	87 181	58 222	2 149	10 127	15 134	
2	0 139	8 197	13 323	17 136	108 122	17 171	41 162	28 139	42 140	37 140	0 158	10 127	10 115	92 194	132 198	121 178	105 209	40 232	53 321	22 119	31 164	
1	0 138	5 163	11 218	4 149	4 111	6 133	6 168	11 243	9 156	35 118	21 150	13 137	65 204	101 173	86 150	145 250	125 178	81 159	53 163	10 135	1 89	
WT	0 14	0 22	0 19	3 16	3 19	2 23	6 21	3 22	0 41	4 16	0 10	3 5	7 11	5 22	35 48	30 42	10 25	8 24	0 15	1 19	8 11	
WSA	0 121	0 159	26 138	20 85	23 81	30 133	27 111	56 212	23 153	24 96	31 82	32 74	40 74	96 51	80 43	64 42	132 94	14 65	51 22	0 14	55 94	
WBS	0 179	0 239	0 190	1 142	0 219	0 239	0 245	6 214	5 133	23 180	0 168	4 196	3 212	37 254	147 243	133 273	70 285	14 261	0 191	18 383	10 247	
WA	0 7	0 8	15 4	15 12	39 11	32 15	38 25	81 33	62 25	21 29	37 14	0 20	52 25	0 14	55 39	0 19	38 19	0 15	60 23	0 25	31 31	
SAV	4 52	16 64	11 82	19 48	11 67	9 54	12 53	29 62	12 32	3 32	13 39	5 31	4 31	38 28	34 43	11 45	33 25	5 28	11 45	13 12	19 55	
NSW	44 10	64 7	71 10	57 8	95 11	80 13	84 13	70 15	92 17	16 9	42 11	50 10	38 9	12 9	15 9	9 6	12 6	21 7	14 5	15 5	5 8	
ET	14 43	12 82	10 66	10 56	20 97	19 89	13 119	5 86	29 95	0 93	5 69	12 90	40 100	44 113	109 139	115 110	69 118	43 64	35 85	46 119	18 94	
ESA	5 29	6 54	9 60	12 43	27 57	2 42	5 57	40 50	20 44	3 32	18 44	19 55	15 30	63 76	31 53	49 70	4 7	10 62	13 63	10 78		
EBS	46 586	90 1263	47 1643	84 1233	51 928	94 844	70 859	55 956	101 953	15 834	116 1099	179 1174	162 906	438 1489	431 1219	460 921	309 921	183 1287	52 1084	109 697	90 761	
CSA	2 138	0 163	3 204	0 141	0 134	7 181	4 105	3 115	3 101	87 344	10 423	90 348	184 308	177 308	134 229	132 148	275 191	237 247	34 152	21 207	24 280	
TW	101 381	147 596	165 887	270 898	233 814	196 619	187 517	323 934	300 821	84 404	188 542	122 531	191 350	104 474	129 201	84 193	173 199	96 323	172 328	95 358	154 361	
Other				2 1										6 19					1 68		4 60	
HK				2 1	15 70	12 10	53 179	4 22	3 34	8 60	27 156	31 216	41 202	57 165	150 301	190 186	185 204	16 27	34 22	9 16	8 37	
GN		16 265	3 176		3 60					82 82	42 173	213 520	167 300	617 748	806 942	670 907	456 688	156 415		68 155	50 106	
DS	14 15	25 316	24 479	16 423	16 168	60 292	22 199	22 308	40 408	22 84	15 156	19 164	52 333	106 432	55 289	43 225	40 267	47 467	60 489	64 284	54 107	

Gummy Shark

Onboard length data

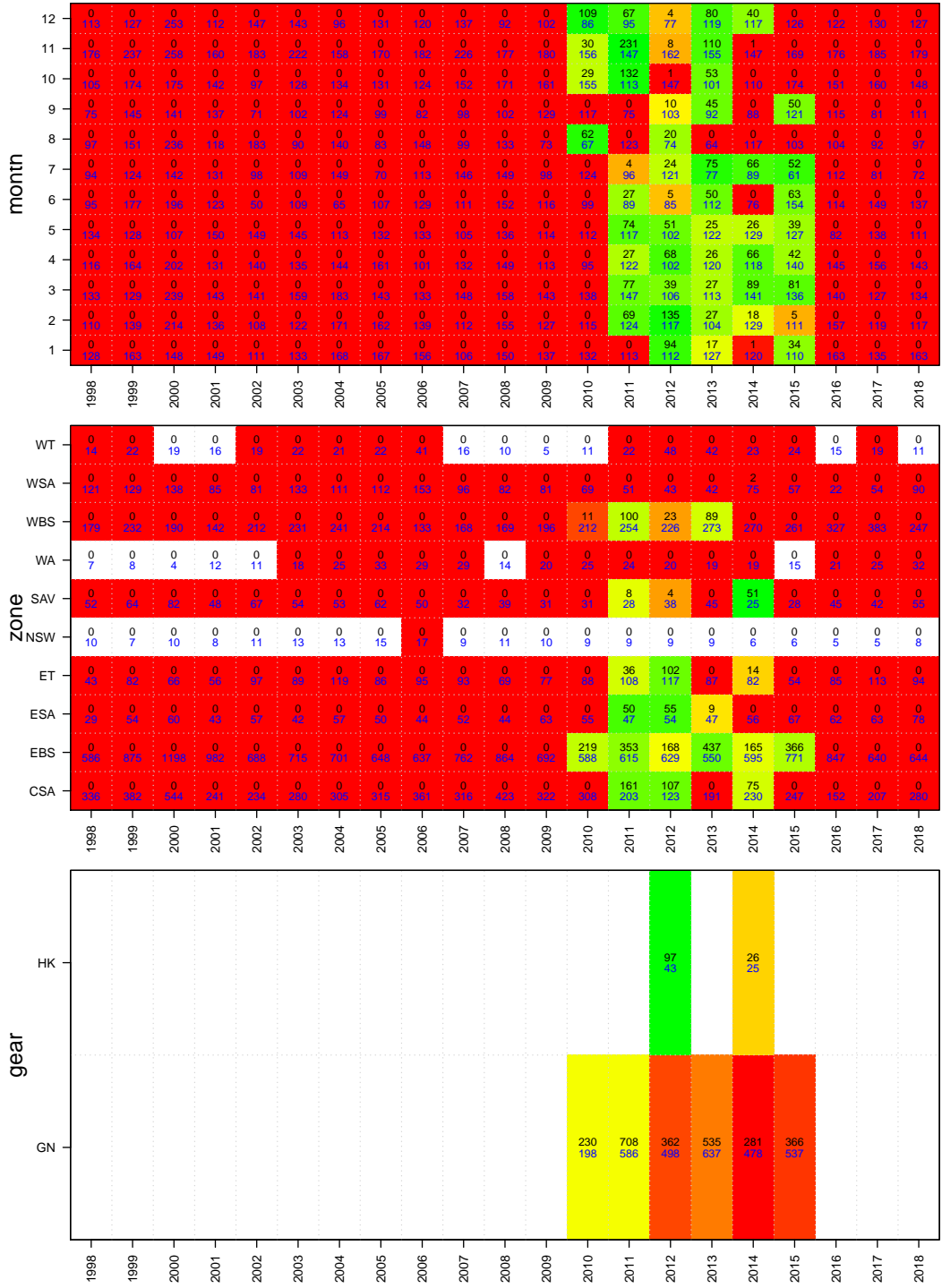
Wed Nov 06 17:15:47 2019



Gummy Shark

Age data

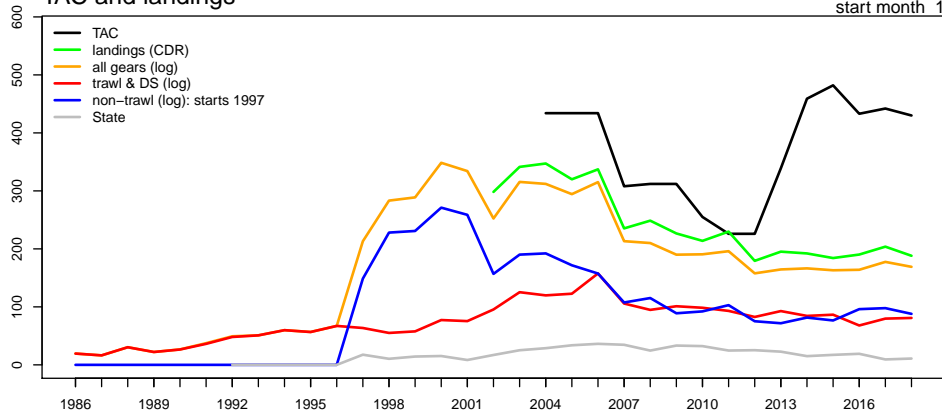
Wed Nov 06 17:15:47 2019



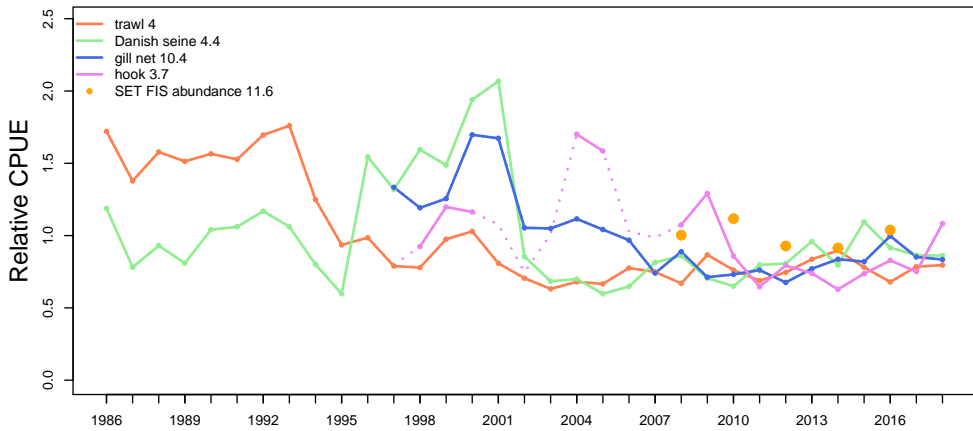
Saw Shark

TAC and landings

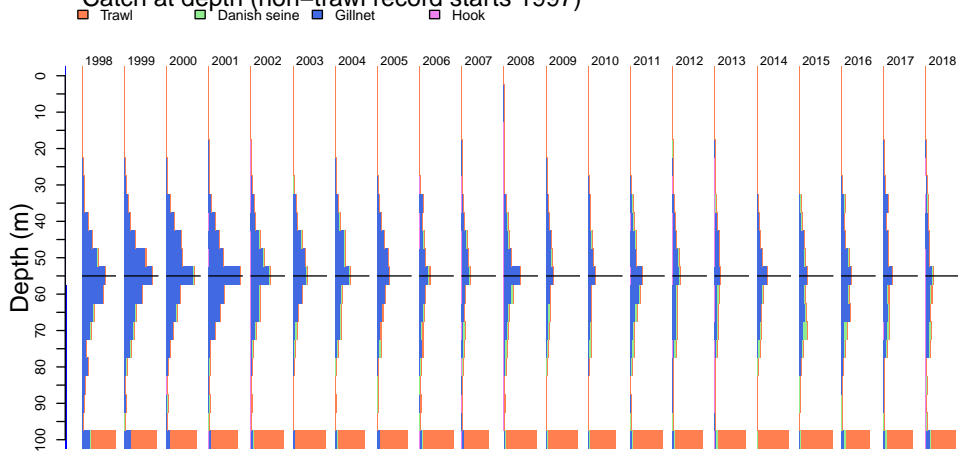
Wed Nov 06 17:15:52 2019
 region ALL unit code SHWF sa code SHWF
 37023000 37023001 37023002 37023900
 start month 1



Geometric mean CPUE & SET FIS abundance

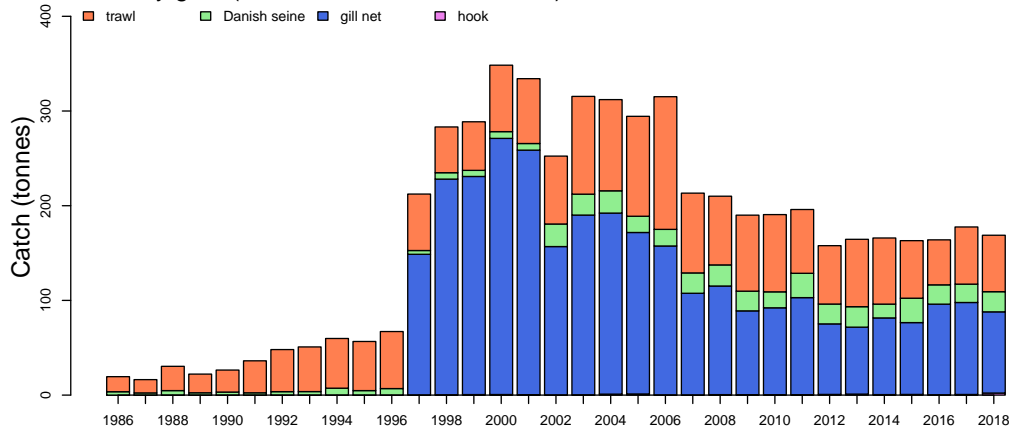


Catch at depth (non-trawl record starts 1997)

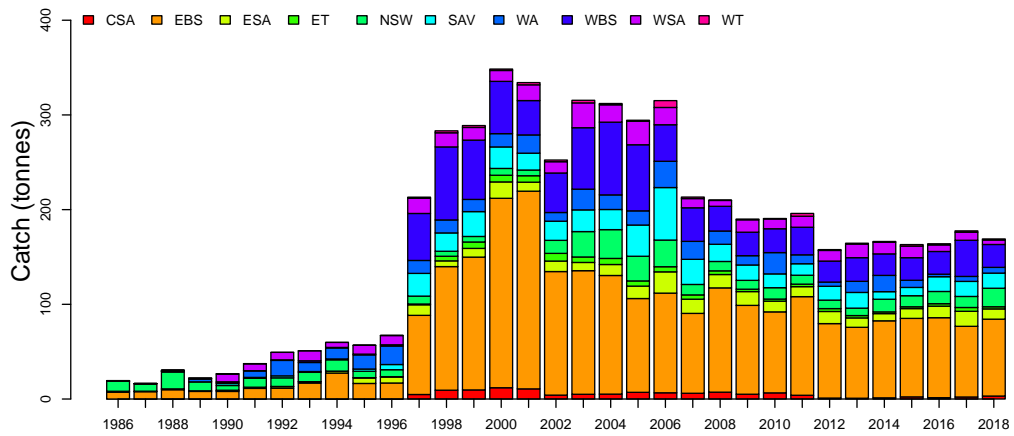


Saw Shark

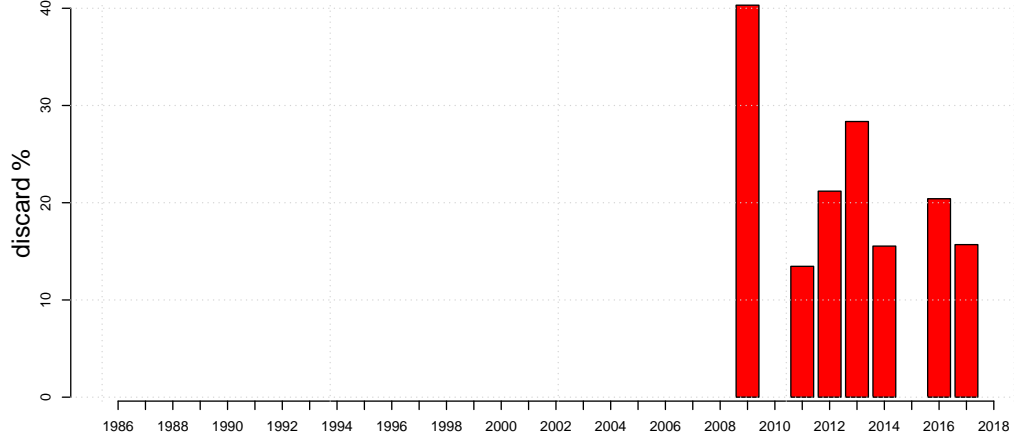
Catch by gear (non-trawl record starts 1997)



Catch by zone



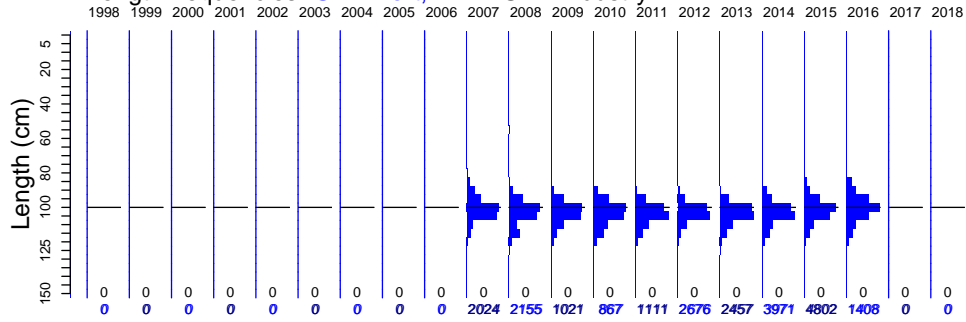
Discards



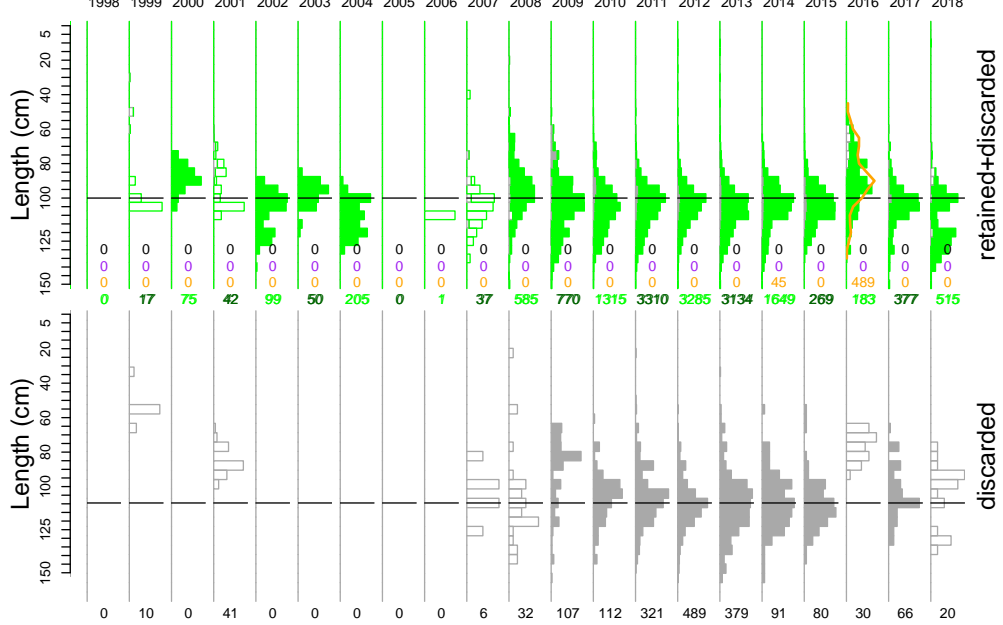
Saw Shark

Wed Nov 06 17:16:01 2019

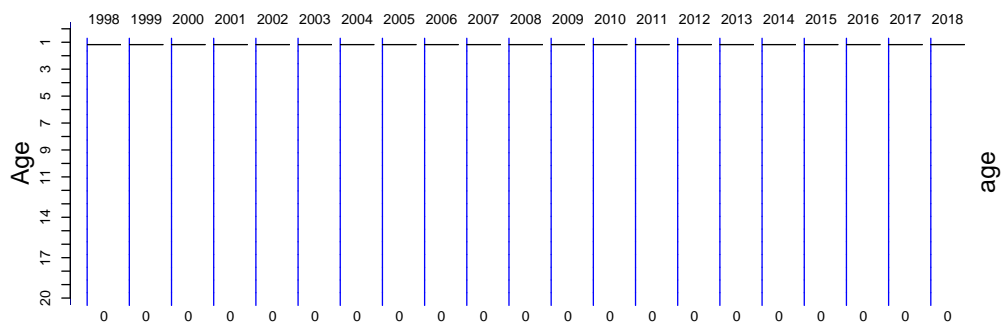
Length frequencies: ISMP Port, GAB Industry



Length frequencies: ISMP Onboard, SET FIS winter, GAB FIS, Industry



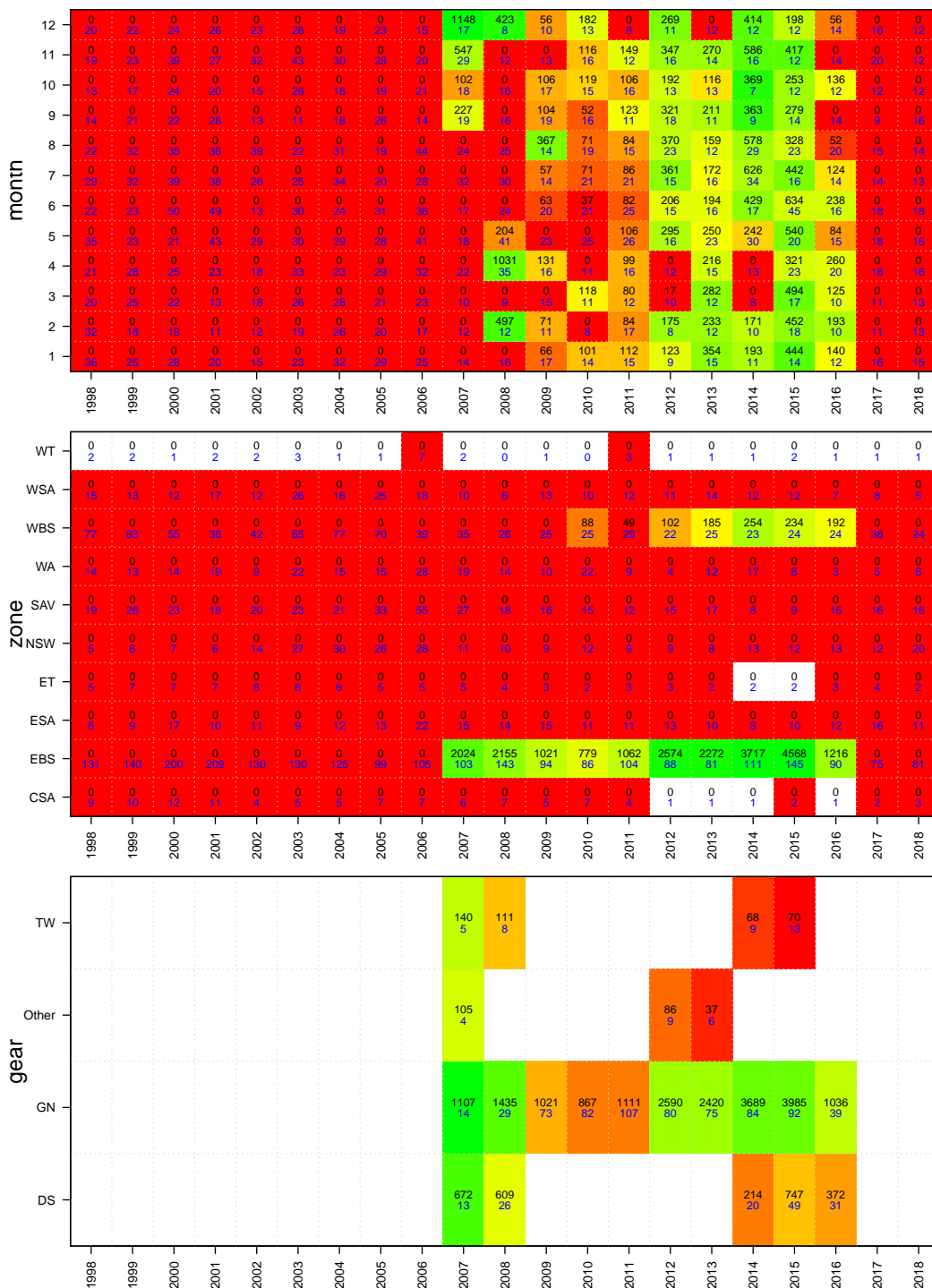
Age frequency



Saw Shark

Port length data

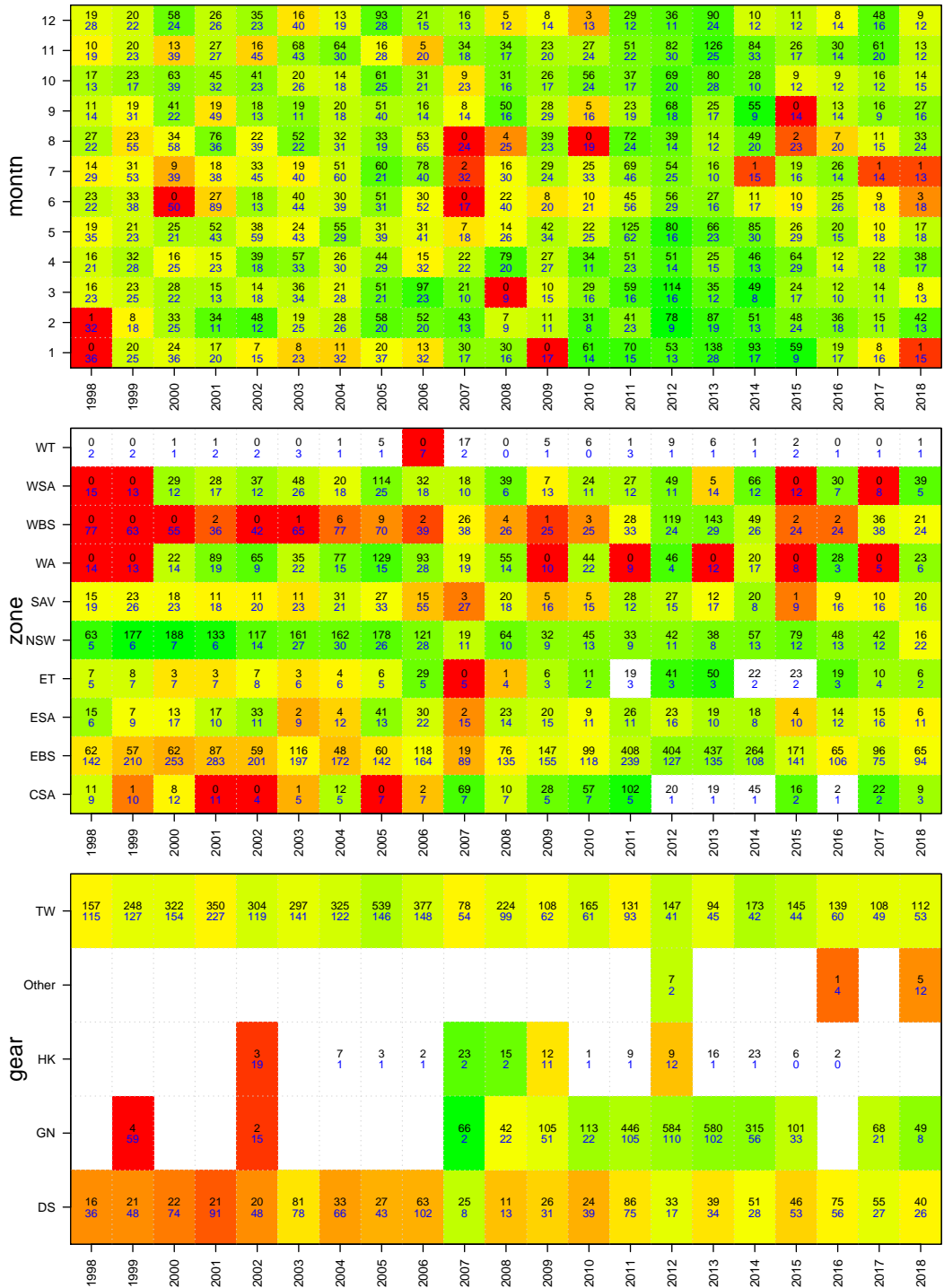
Wed Nov 06 17:16:02 2019



Saw Shark

Onboard discard weight data

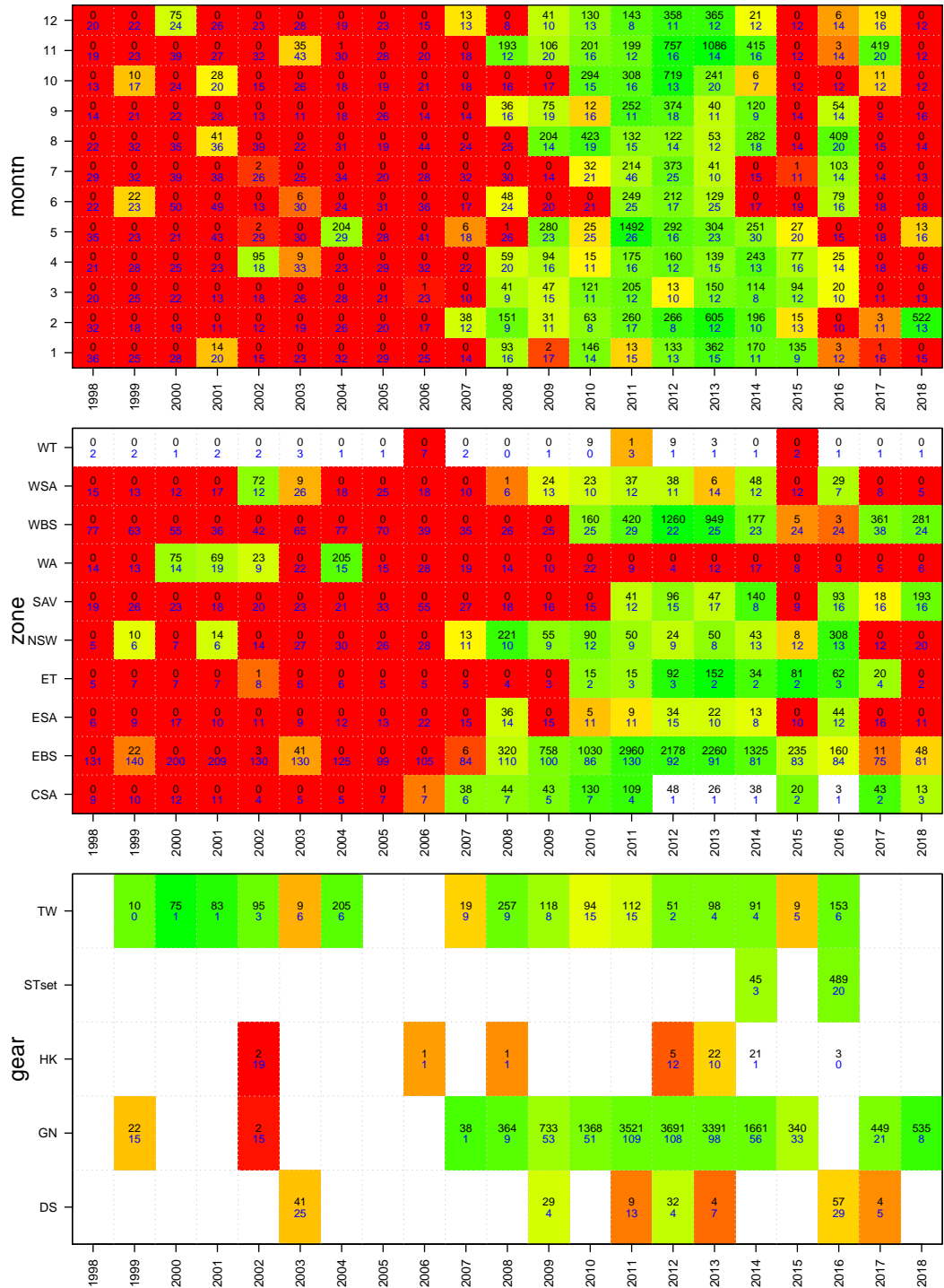
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Saw Shark

Onboard length data

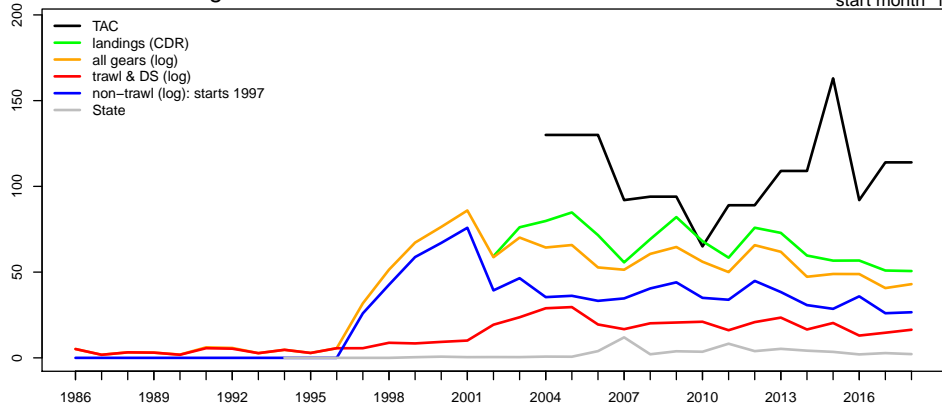
Wed Nov 06 17:16:02 2019



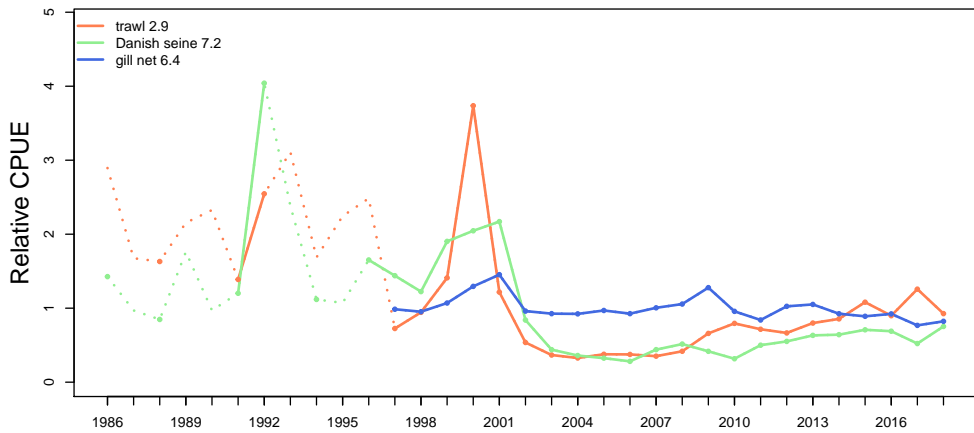
Elephantfish

TAC and landings

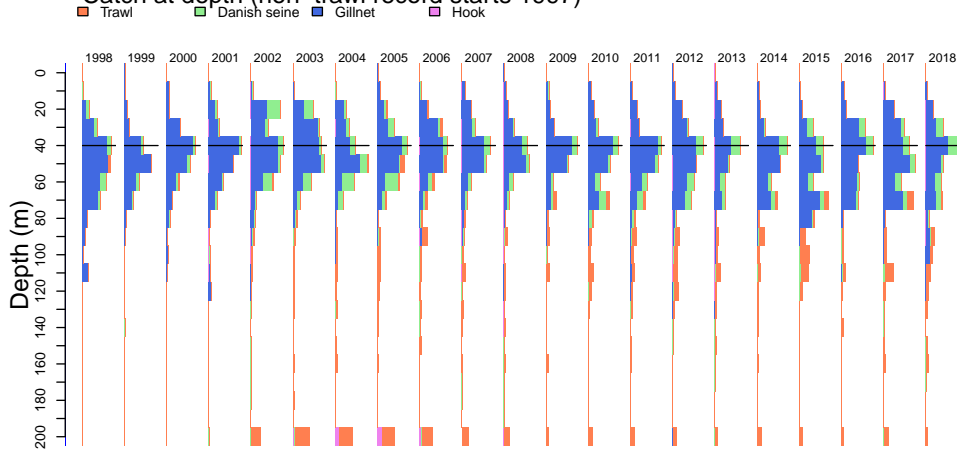
Wed Nov 06 17:16:04 2019
 region ALL unit code SHEF sa code SHEF
 37043000 37043001 37044000 37043901 37044902
 start month 1



Geometric mean CPUE & SET FIS abundance



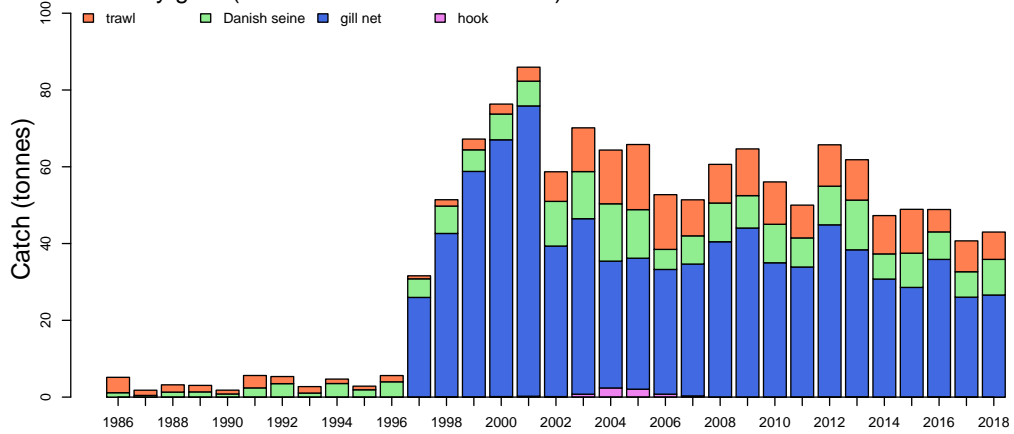
Catch at depth (non-trawl record starts 1997)



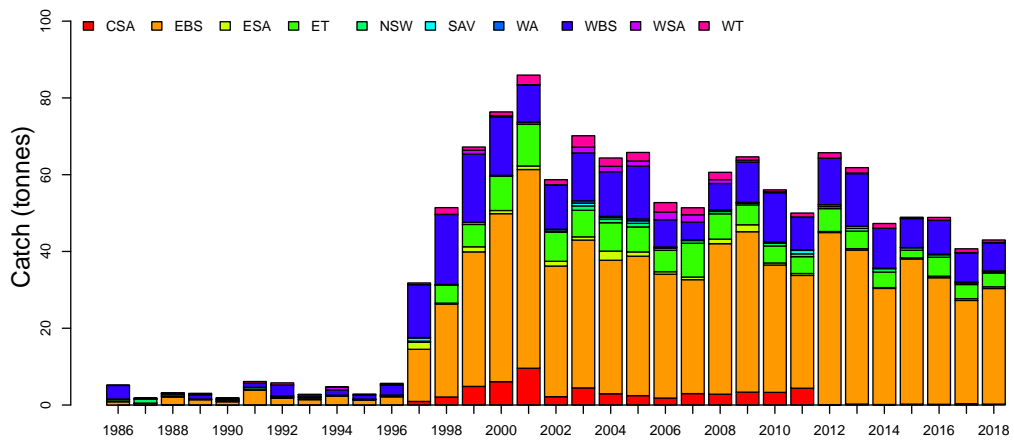
Elephantfish

Wed Nov 06 17:16:09 2019

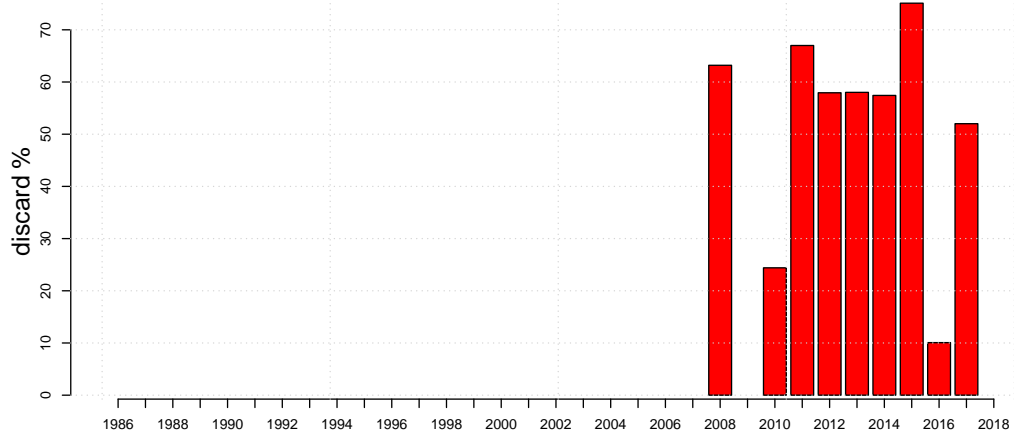
Catch by gear (non-trawl record starts 1997)



Catch by zone



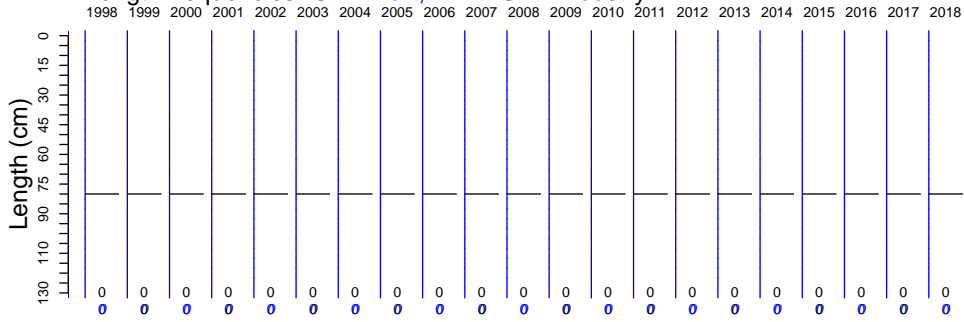
Discards



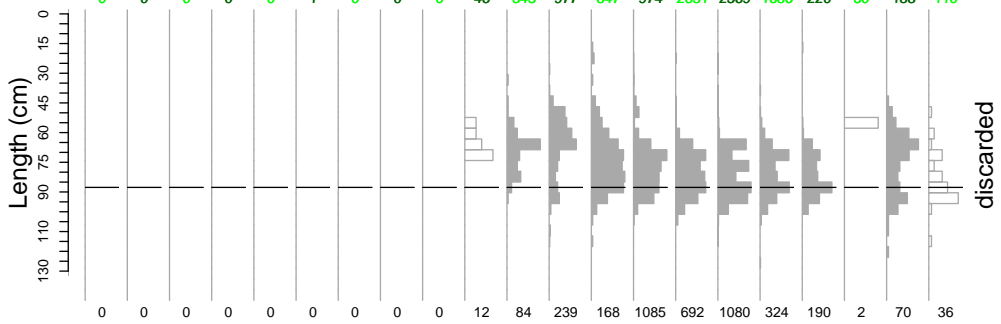
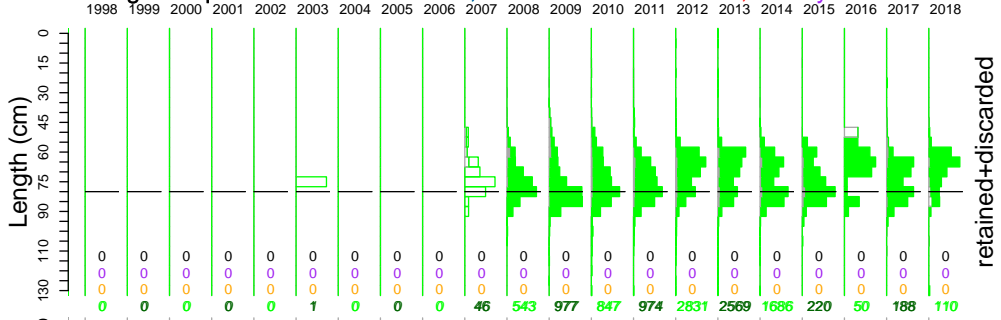
Elephantfish

Wed Nov 06 17:16:10 2019

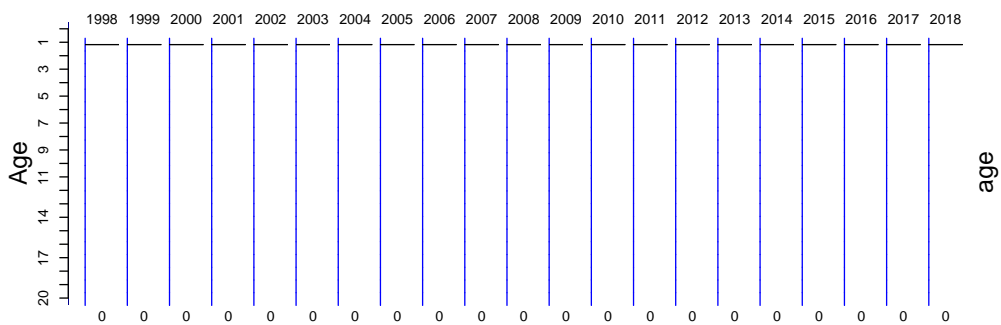
Length frequencies: ISMP Port, GAB Industry



Length frequencies: ISMP Onboard, SET FIS winter, GAB FIS, Industry



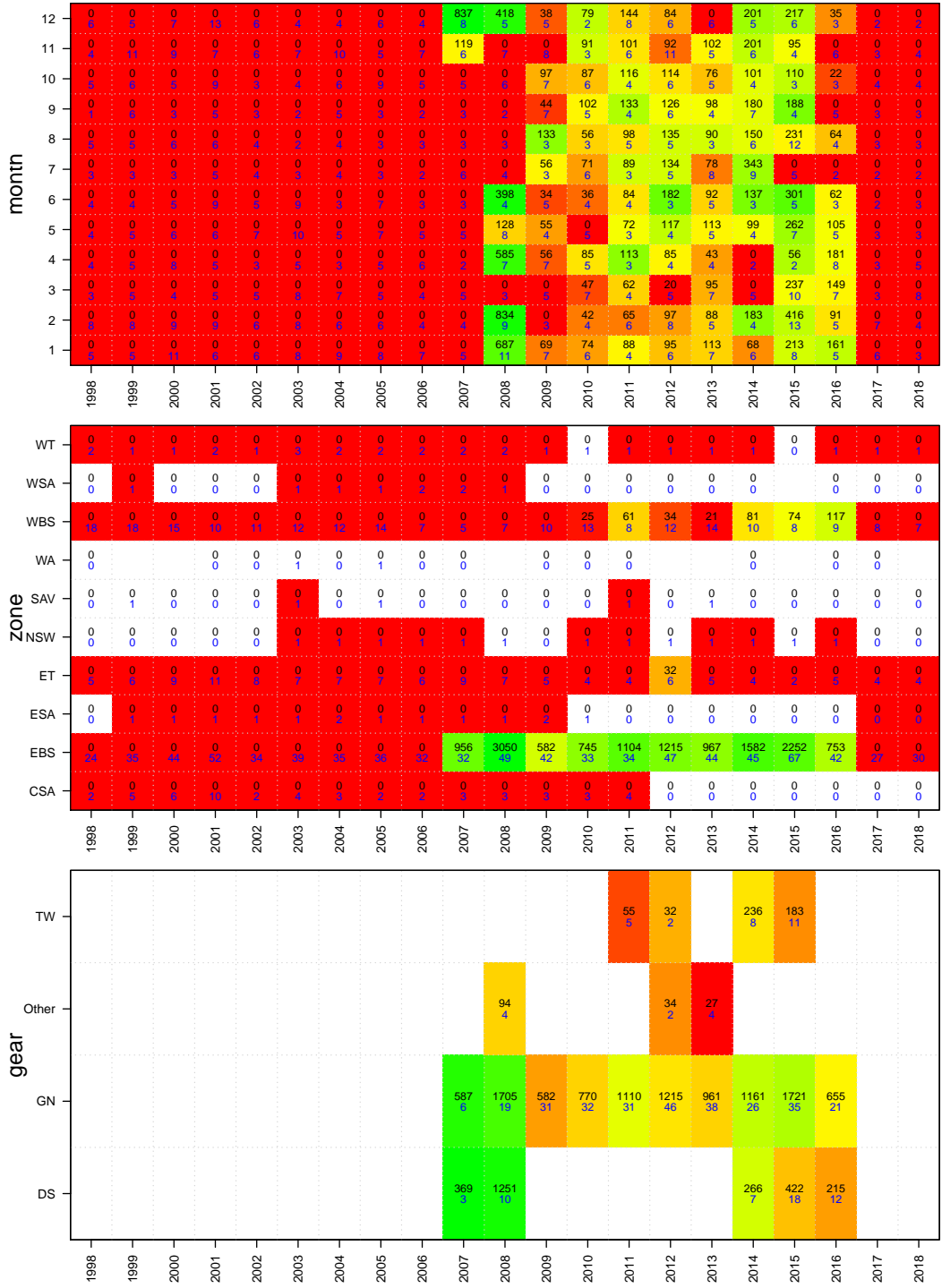
Age frequency



Elephantfish

Port length data

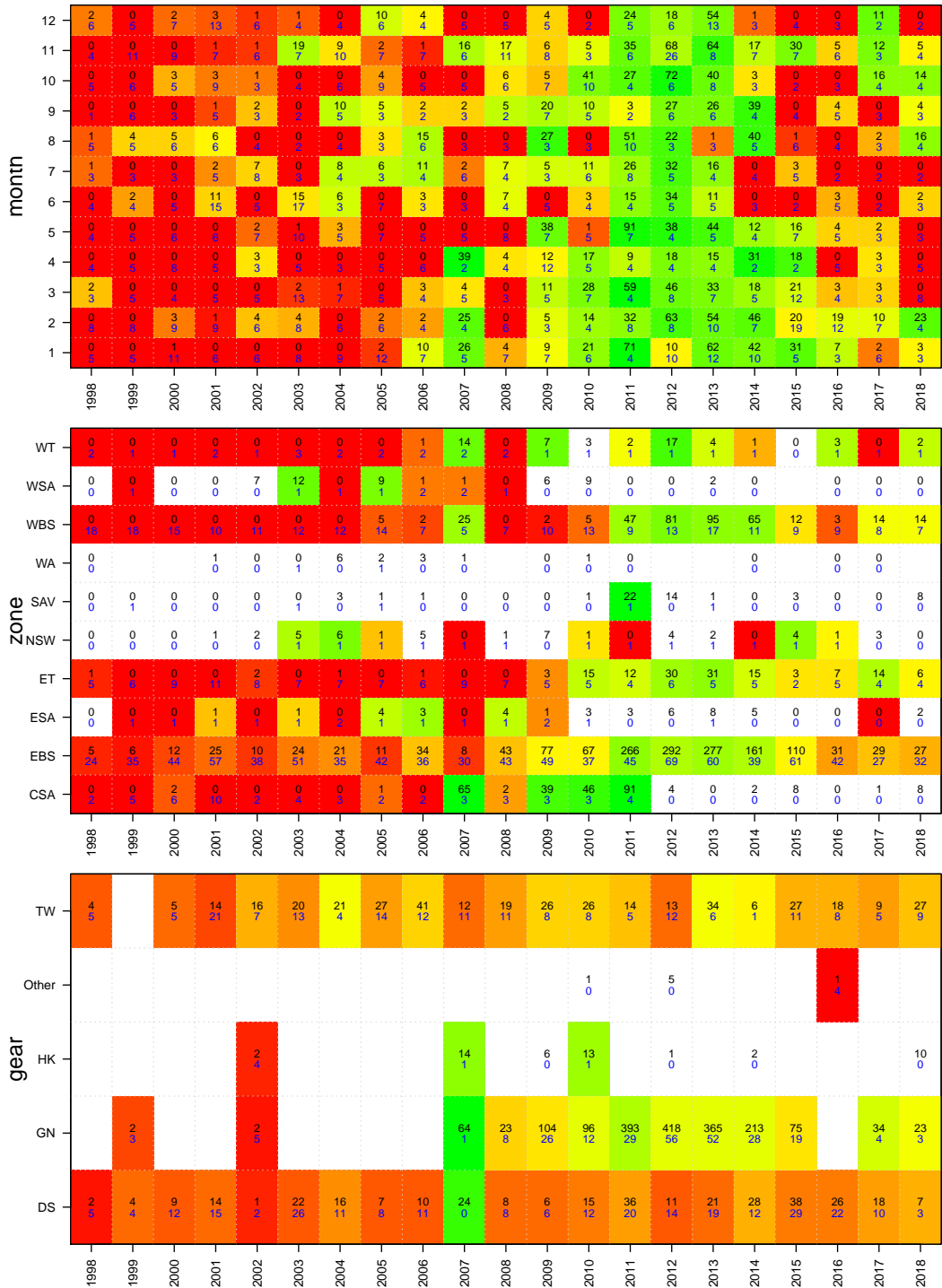
Wed Nov 06 17:16:10 2019



Elephantfish

Onboard discard weight data

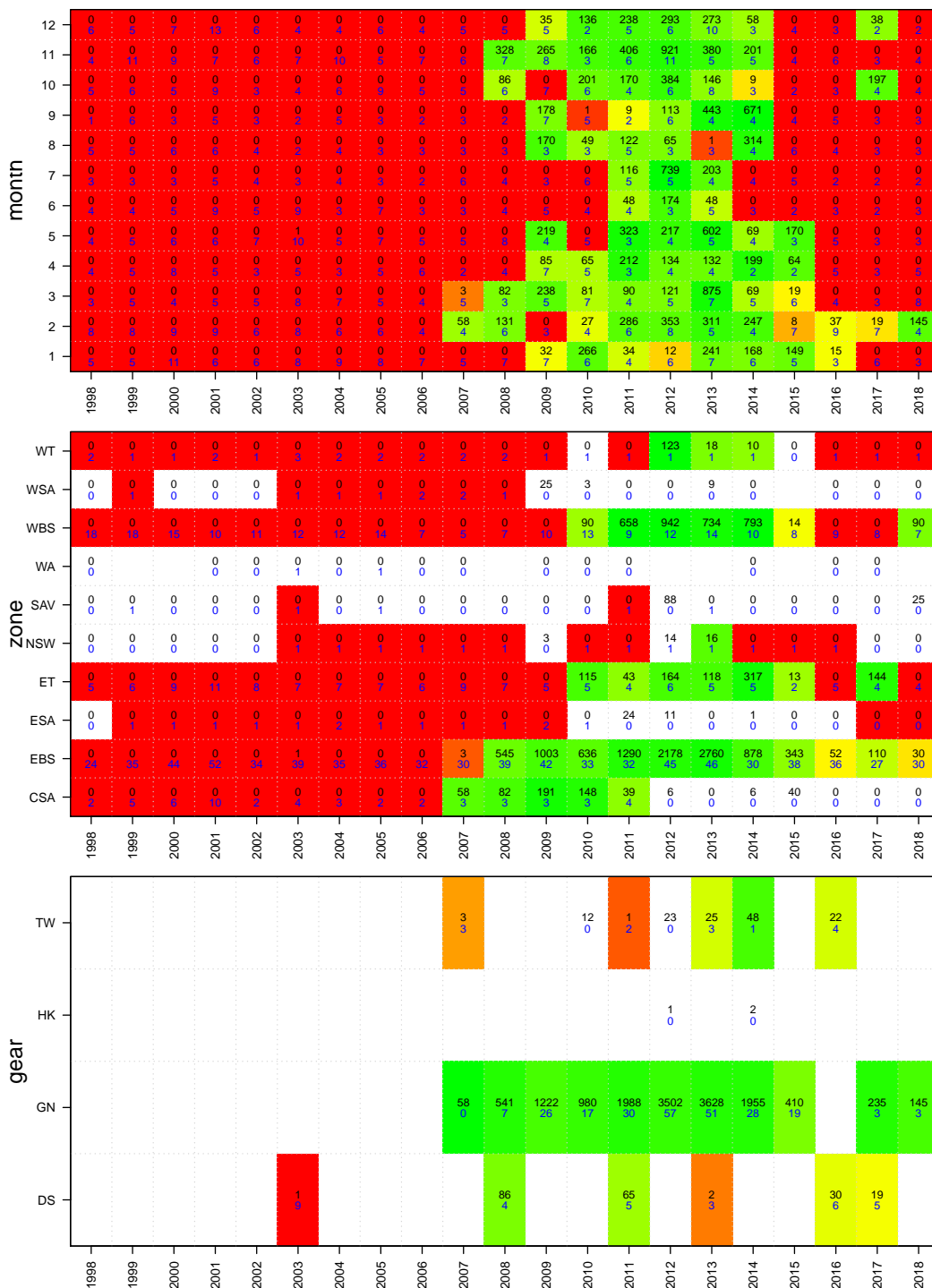
Wed Nov 06 17:16:10 2019



Elephantfish

Onboard length data

Wed Nov 06 17:16:10 2019



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A Zone definitions

The zones are defined by sets of polygons, which are in turn defined by four vertices given by two latitudes and four longitudes (Table A.1).

Table A.1: Zones names, zone numbers, and the vertices of the polygons that define the zones within each zone scheme. Some zones have been divided into sub-zones.

Scheme	Code	Num	SubZone	WLONG	ELONG	NWLAT	NELAT	SWLAT	SELAT
SEF	NSW	10	10	149.00	160.00	-33.583	-33.583	-35.300	-35.300
SEF	NSW	10	10	149.00	164.00	-35.300	-35.300	-36.750	-36.750
SEF	EBass	20	20	148.73	155.00	-36.750	-36.750	-40.750	-40.750
SEF	EBass	20	20	148.32	148.73	-38.400	-37.750	-40.750	-40.750
SEF	EBass	20	20	148.00	148.32	-38.400	-38.400	-40.750	-40.750
SEF	ETas	30	30	148.00	154.00	-40.750	-40.750	-48.000	-48.000
SEF	ETas	30	30	147.00	148.00	-42.000	-40.750	-48.000	-48.000
SEF	WTas	40	40	138.13	144.00	-40.000	-40.000	-48.000	-48.000
SEF	WTas	40	40	144.00	146.00	-40.000	-42.000	-48.000	-48.000
SEF	WTas	40	40	146.00	147.00	-42.000	-42.000	-48.000	-48.000
SEF	WBass	50	50	138.13	144.00	-34.000	-34.000	-40.000	-40.000
SEF	Bass	60	61	148.00	148.32	-37.500	-37.500	-38.400	-38.400
SEF	Bass	60	61	148.32	148.73	-37.500	-37.500	-38.400	-37.750
SEF	Bass	60	62	144.00	146.00	-37.500	-37.500	-40.000	-42.000
SEF	Bass	60	62	146.00	147.00	-37.500	-37.500	-42.000	-42.000
SEF	Bass	60	61	147.00	148.00	-37.500	-37.500	-42.000	-40.750
SEF	GAB	80	81	115.00	121.00	-30.000	-30.000	-42.000	-42.000
SEF	GAB	80	82	121.00	129.00	-30.000	-30.000	-42.000	-42.000
SEF	GAB	80	83	129.00	133.00	-30.000	-30.000	-42.000	-42.000
SEF	GAB	80	84	133.00	136.00	-30.000	-30.000	-42.000	-42.000
SEF	GAB	80	85	136.00	138.13	-30.000	-30.000	-42.000	-42.000
SEF	North	90	91	148.00	157.00	-28.200	-28.200	-33.583	-33.583
SEF	North	90	92	148.00	157.00	-21.000	-21.000	-28.200	-28.200
SEF	North	90	71	157.00	164.00	-21.000	-21.000	-33.583	-33.583
ECDW	ECDW	70	70	154.66	163.40	-24.490	-24.490	-33.583	-33.583
ECDW	ECDW	70	70	153.27	154.66	-33.583	-30.000	-33.583	-33.583
ECDW	ECDW	70	70	156.17	163.40	-33.583	-33.583	-35.300	-35.300
SHK	WA	0	0	120.00	129.00	-31.000	-31.000	-44.000	-44.000
SHK	WSA	10	10	129.00	134.00	-31.000	-31.000	-44.000	-44.000
SHK	WSA	10	10	134.00	135.00	-31.000	-31.000	-33.000	-33.000
SHK	CSA	20	20	134.00	135.00	-33.000	-33.000	-44.000	-44.000
SHK	CSA	20	20	135.00	139.00	-31.000	-31.000	-44.000	-44.000
SHK	CSA	20	20	139.00	140.00	-31.000	-31.000	-37.000	-37.000
SHK	ESA	30	31	139.00	141.00	-37.000	-37.000	-41.000	-41.000
SHK	SAV-E	30	32	141.00	143.00	-37.000	-37.000	-41.000	-41.000
SHK	WBS	40	40	143.00	146.00	-37.000	-37.000	-41.000	-41.000
SHK	EBS	50	50	146.00	165.00	-37.500	-37.500	-41.000	-41.000
SHK	WT	60	60	139.00	146.00	-41.000	-41.000	-50.000	-50.000

SHK	ET	70	70	146.00	165.00	-41.000	-41.000	-50.000	-50.000
SHK	NSW	80	80	146.00	165.00	-20.000	-20.000	-37.500	-37.500
GEM	GEMEAST	100	100	146.37	148.00	-37.500	-37.500	-42.000	-40.750
GEM	GEMEAST	100	100	148.00	148.32	-37.500	-37.500	-38.400	-38.400
GEM	GEMEAST	100	100	148.32	148.73	-37.500	-37.500	-38.400	-37.750
GEM	GEMEAST	100	100	147.00	148.00	-42.000	-40.750	-48.000	-48.000
GEM	GEMEAST	100	100	148.00	154.00	-40.750	-40.750	-48.000	-48.000
GEM	GEMEAST	100	100	148.00	148.32	-38.400	-38.400	-40.750	-40.750
GEM	GEMEAST	100	100	148.32	148.73	-38.400	-37.750	-40.750	-40.750
GEM	GEMEAST	100	100	148.73	155.00	-36.750	-36.750	-40.750	-40.750
GEM	GEMEAST	100	100	149.00	156.17	-33.583	-33.583	-35.300	-35.300
GEM	GEMEAST	100	100	149.00	164.00	-35.300	-35.300	-36.750	-36.750
GEM	GEMEAST	100	100	146.00	147.00	-42.000	-42.000	-48.000	-48.000
GEM	GEMEAST	100	100	138.13	144.00	-42.000	-42.000	-48.000	-48.000
GEM	GEMEAST	100	100	144.00	146.00	-42.000	-42.000	-48.000	-48.000
GEM	GEMWEST	150	150	138.13	144.00	-34.000	-34.000	-40.000	-40.000
GEM	GEMWEST	150	150	138.13	144.00	-40.000	-40.000	-42.000	-42.000
GEM	GEMWEST	150	150	144.00	146.00	-40.000	-42.000	-42.000	-42.000
GEM	GEMWEST	150	150	144.00	146.00	-37.500	-37.500	-40.000	-42.000
GEM	GEMWEST	150	150	146.00	146.37	-37.500	-37.500	-42.000	-42.000
GEM	GEMWEST	150	150	115.00	138.13	-30.000	-30.000	-42.000	-42.000
ORO	East	10	10	146.37	155.00	-39.500	-39.500	-43.000	-43.000
ORO	South	20	21	140.00	146.37	-42.000	-42.000	-45.000	-45.000
ORO	South	20	22	146.37	149.50	-43.000	-43.000	-45.000	-45.000
ORO	PED	20	23	146.37	149.50	-44.000	-44.000	-45.000	-45.000
ORO	West	30	30	138.13	146.37	-35.000	-35.000	-42.000	-42.000
ORO	C	40	40	150.17	150.77	-43.701	-43.701	-44.136	-44.136
ORO	NER	50	50	146.37	164.00	-33.583	-33.583	-39.500	-39.500
ORO	GAB	60	60	115.13	138.13	-31.000	-31.000	-41.000	-41.000
ORO	STR	70	70	146.50	150.00	-46.434	-46.434	-48.000	-48.000

CONTACT US

t 1300 363 400
+61 3 9545 2176
e csiroenquiries@csiro.au
w www.csiro.au

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Robin Thomson
t +61 3 6232 5130
e Robin.Thomson@csiro.au
w Oceans and Atmosphere