

SPECIES SUMMARIES

Ribbonfish (*Agrostichthys parkeri*)

AGR

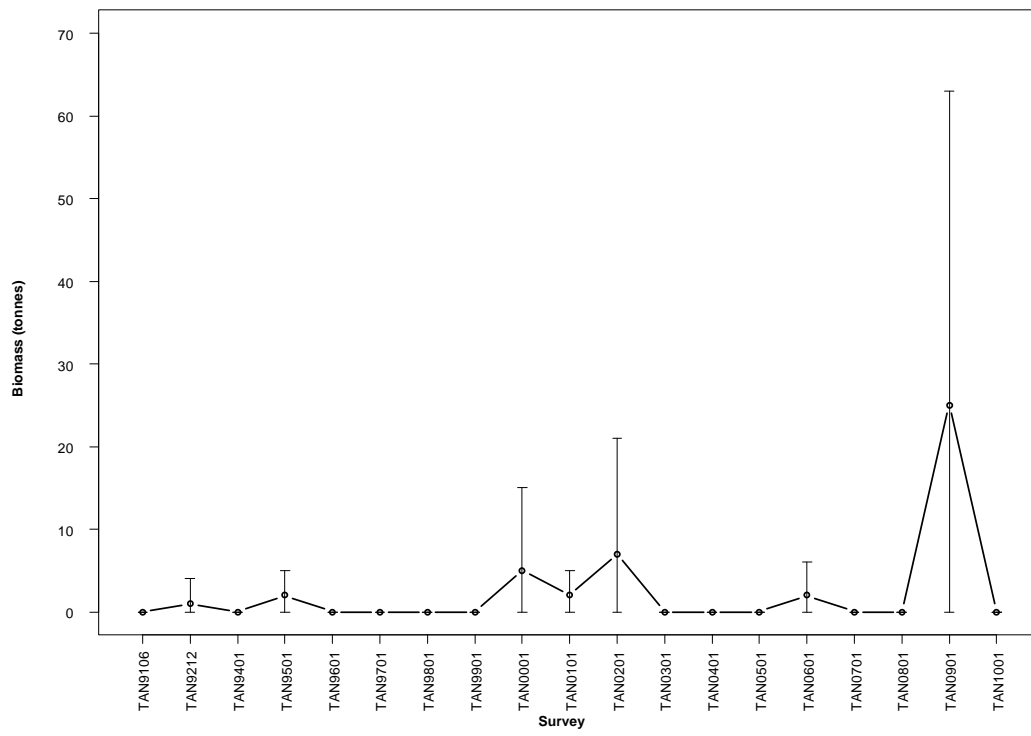


Number of surveys caught 1992–2010 (out of 19):	9
Total catch weight (kg):	33.3
Number measured	0
Length range (mean) (cm)	–
Number weighed	0
Length-weight parameters a, b (r^2)	–

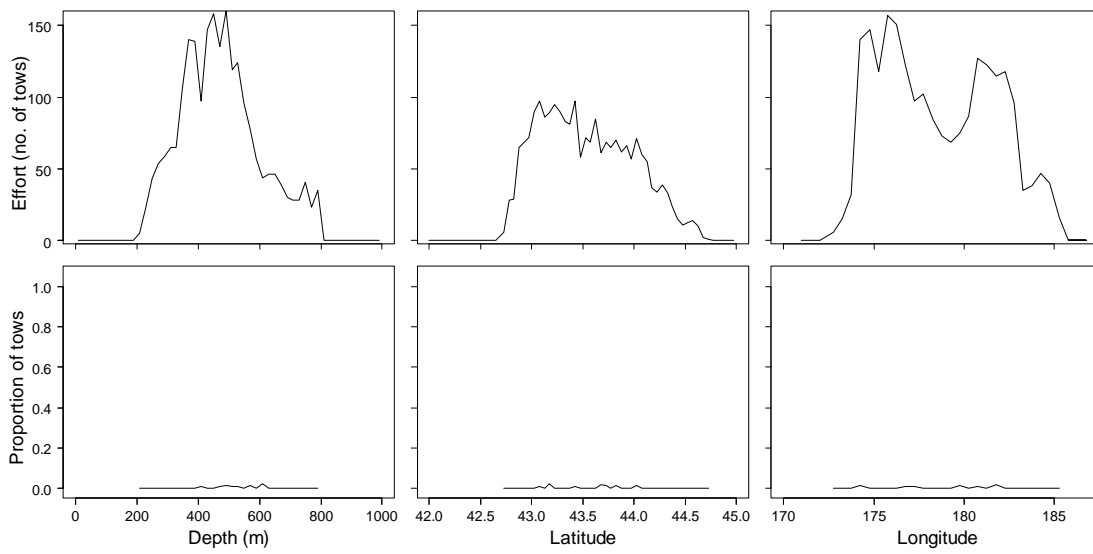
The core survey area and depth range **is not** appropriate for this species. It occurs in midwater. Biomass of this species is **poorly** estimated in the core survey area. Biomass **shows no clear trend** since the start of the time series.

Relative biomass estimates

Year	Biomass (t)	cv (%)
1992	0	0
1993	1	100
1994	0	0
1995	2	100
1996	0	0
1997	0	0
1998	0	0
1999	0	0
2000	5	100
2001	2	100
2002	7	100
2003	0	0
2004	0	0
2005	0	0
2006	2	100
2007	0	0
2008	0	0
2009	25	75
2010	0	0



Distribution



**Coded as ACS**

Number of surveys caught 1992–2010 (out of 19):	6
Total catch weight (kg):	81.9

Coded as ANT

Number of surveys caught 1992–2010 (out of 19):	18
Total catch weight (kg):	629.6

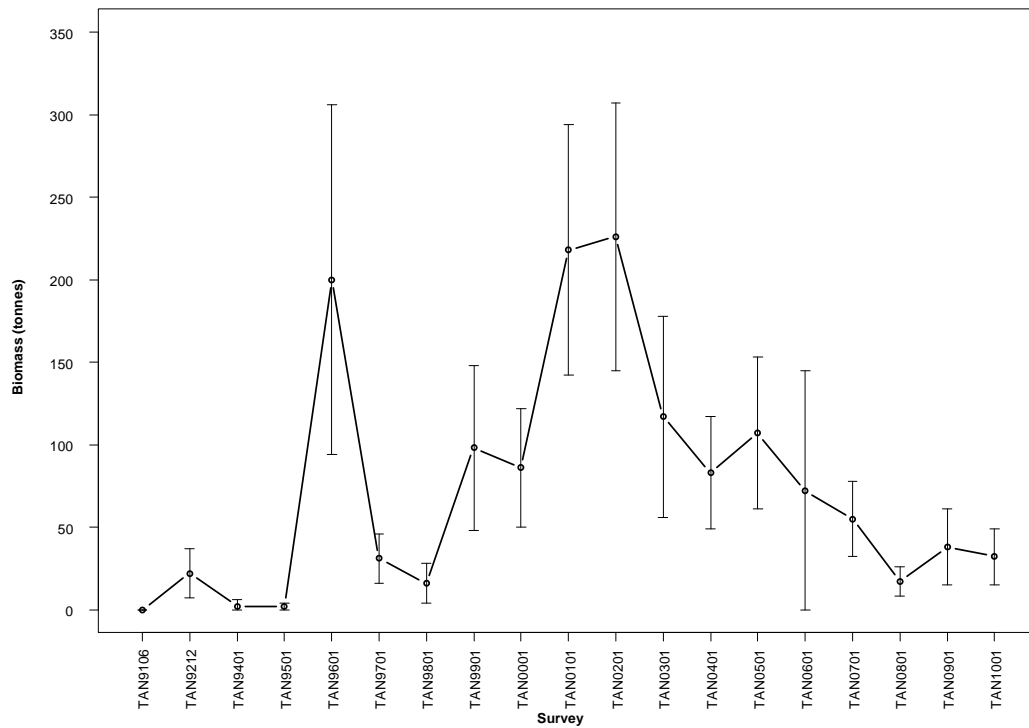
Coded as HMT

Number of surveys caught 1992–2010 (out of 19):	7
Total catch weight (kg):	41.8

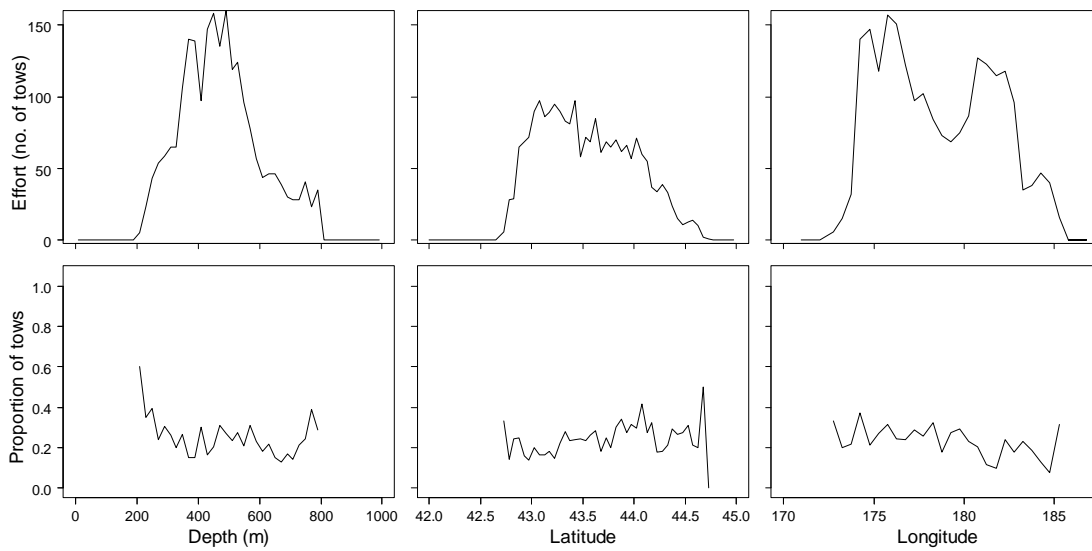
The core survey area and depth range is appropriate for this group. Biomass of this group is **moderately well** estimated in the core survey area. Biomass has **increased and then decreased** since the start of the time series.

Relative biomass estimates

Year	Biomass (t)	cv (%)
1992	0	-
1993	22	35
1994	2	100
1995	2	63
1996	200	27
1997	31	25
1998	16	38
1999	98	26
2000	86	21
2001	218	18
2002	226	18
2003	117	27
2004	83	21
2005	107	22
2006	72	52
2007	55	21
2008	17	27
2009	38	31
2010	32	27



Distribution



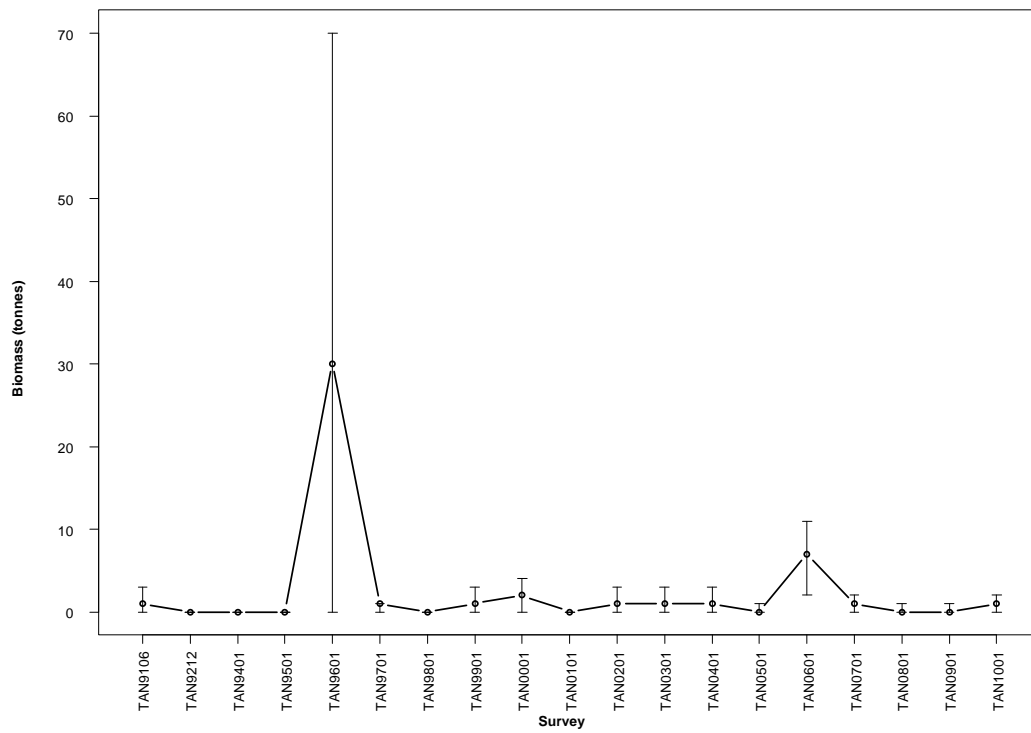


Number of surveys caught 1992–2010 (out of 19):	17
Total catch weight (kg):	27.3
Number measured	6
Length range (mean) (cm)	–
Number weighed	0
Length-weight parameters a, b (r^2)	–

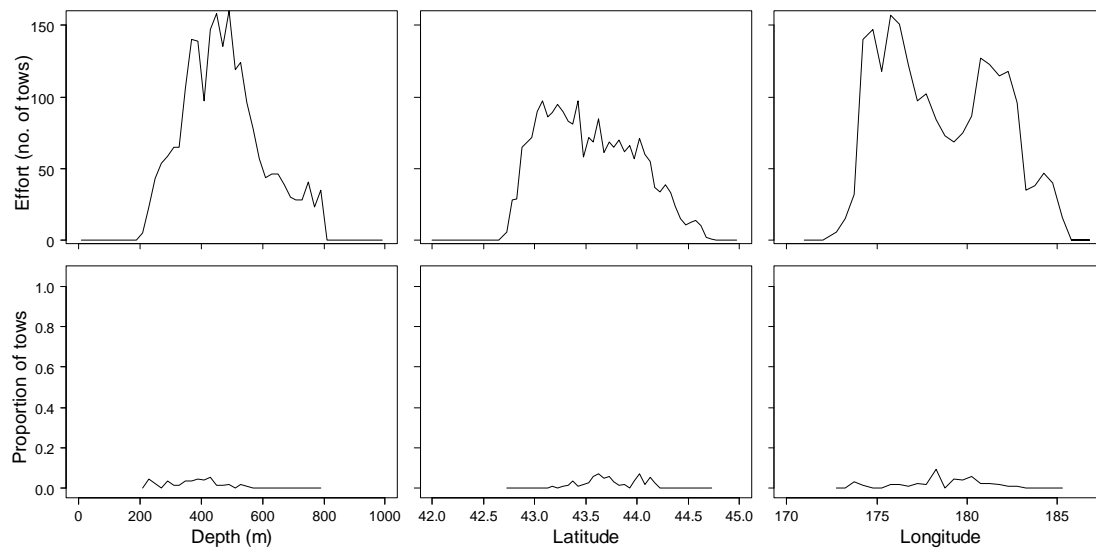
There were **too few fish caught to determine whether the core survey area is appropriate for this species**. Biomass of this species is **poorly** estimated in the core survey area. Biomass **shows no clear trend** since the start of the time series.

Relative biomass estimates

Year	Biomass (t)	cv (%)
1992	1	67
1993	0	100
1994	0	-
1995	0	-
1996	30	67
1997	1	73
1998	0	-
1999	1	76
2000	2	77
2001	0	73
2002	1	59
2003	1	48
2004	1	85
2005	0	78
2006	7	31
2007	1	66
2008	0	100
2009	0	100
2010	1	100



Distribution



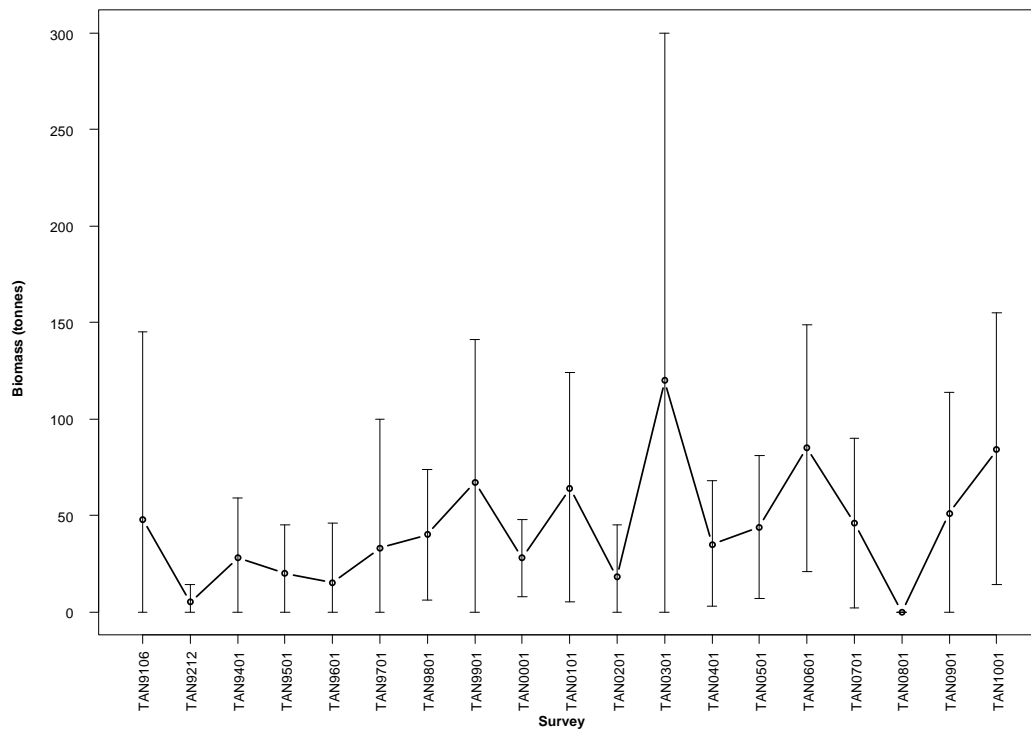


Number of surveys caught 1992–2010 (out of 19):	19
Total catch weight (kg):	323.2
Number measured	61
Length range (mean) (cm, TL)	60–87 (76.4)
Number weighed	59
Length-weight parameters a, b (r^2)	–

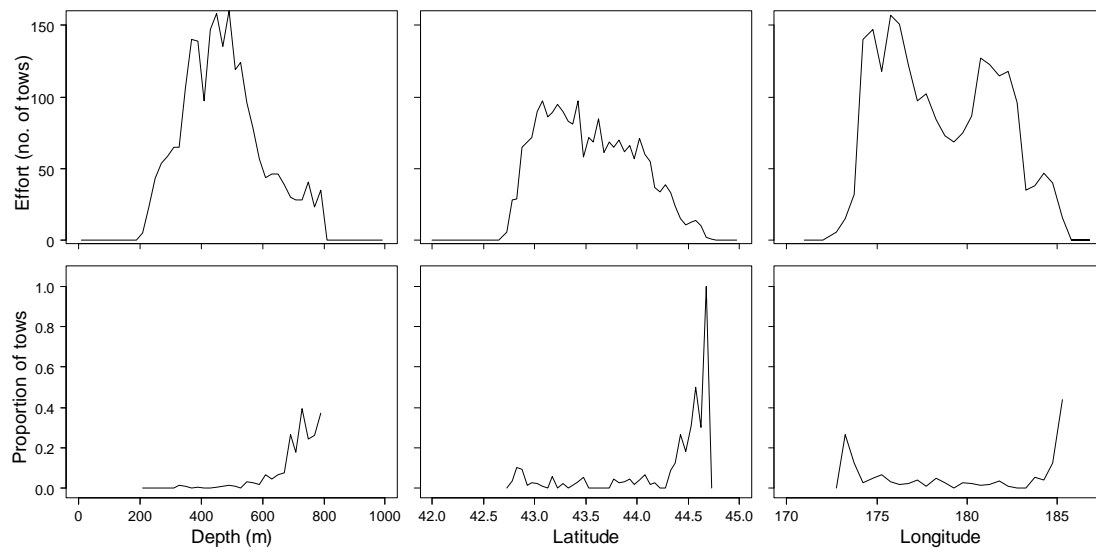
The core survey area and depth range **is not** appropriate for this species. It is found **deeper than 800 m**. Biomass of this species is **poorly** estimated in the core survey area. Biomass has **increased** since the start of the time series. Catch rates are highest in the **south**.

Relative biomass estimates

Year	Biomass (t)	cv (%)
1992	48	100
1993	5	84
1994	28	55
1995	20	64
1996	15	100
1997	33	100
1998	40	42
1999	67	55
2000	28	35
2001	64	46
2002	18	77
2003	120	75
2004	35	46
2005	44	42
2006	85	38
2007	46	48
2008	0	-
2009	51	61
2010	84	42



Distribution



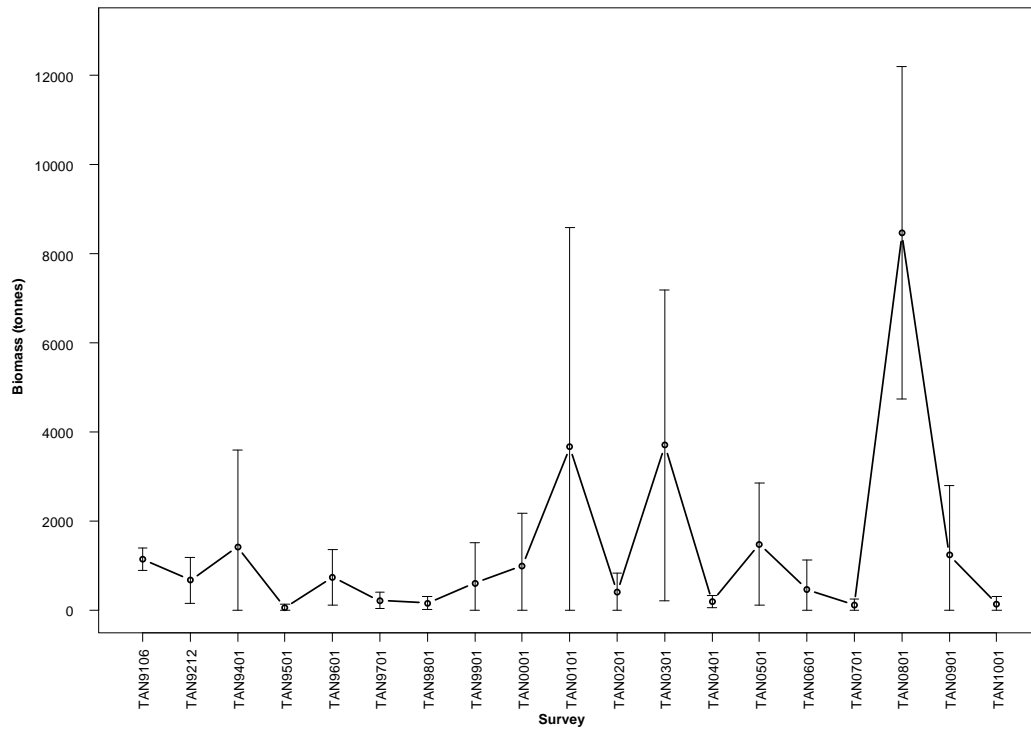


Number of surveys caught 1992–2010 (out of 19):	19
Total catch weight (kg):	15 091.5
Number measured	4 611
Length range (mean) (cm, FL)	4–112 (67.4)
Number weighed	820
Length-weight parameters a, b (r^2)	0.003629, 3.058401 (90.1)

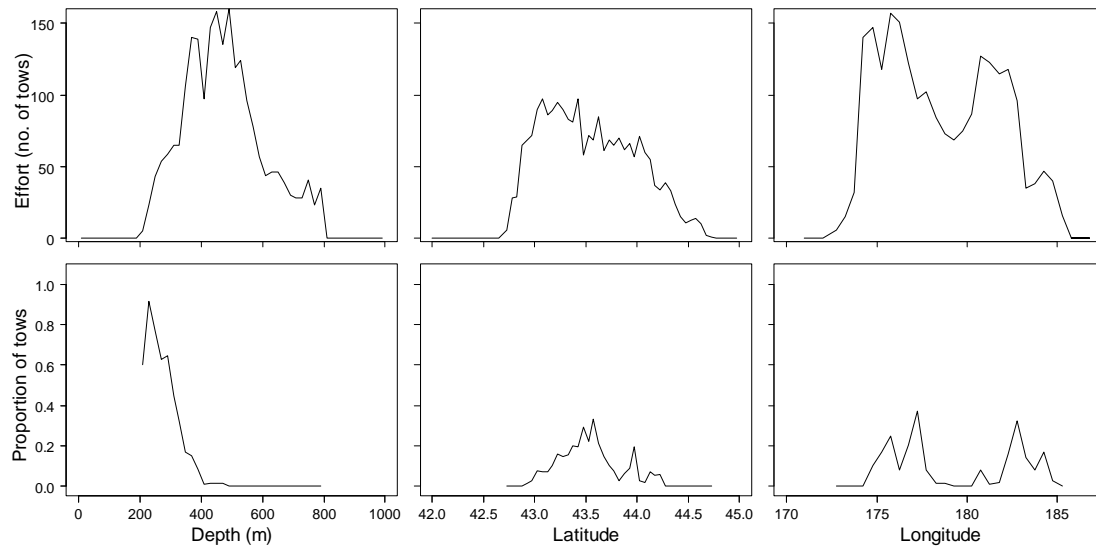
The core survey area and depth range **is not** appropriate for this species. It is found **shallower than 200 m**. Biomass of this species is **poorly** estimated in the core survey area. Biomass **shows no clear trend** since the start of the time series. Catch rates are highest in the **east**. Length frequencies are usually **unimodal**. Mean length has **decreased then increased** since the start of the time series. Gonad stage data indicate that most fish are **maturing or spawning**.

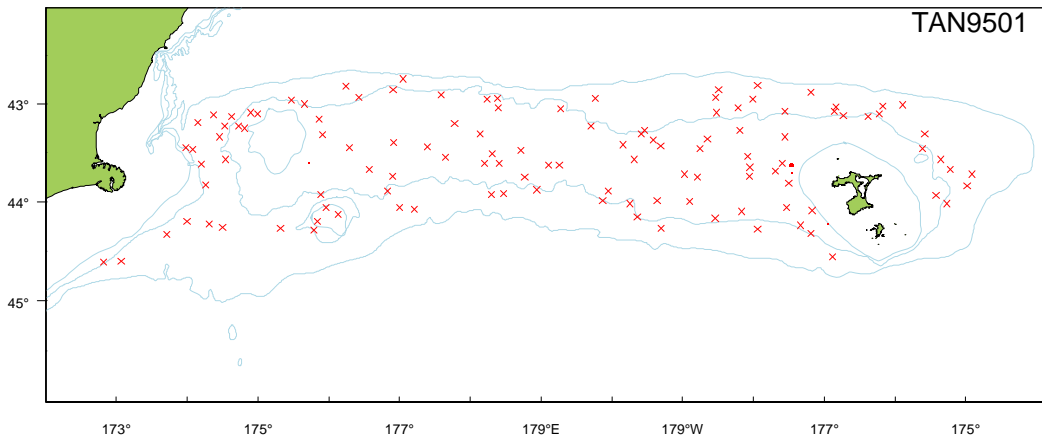
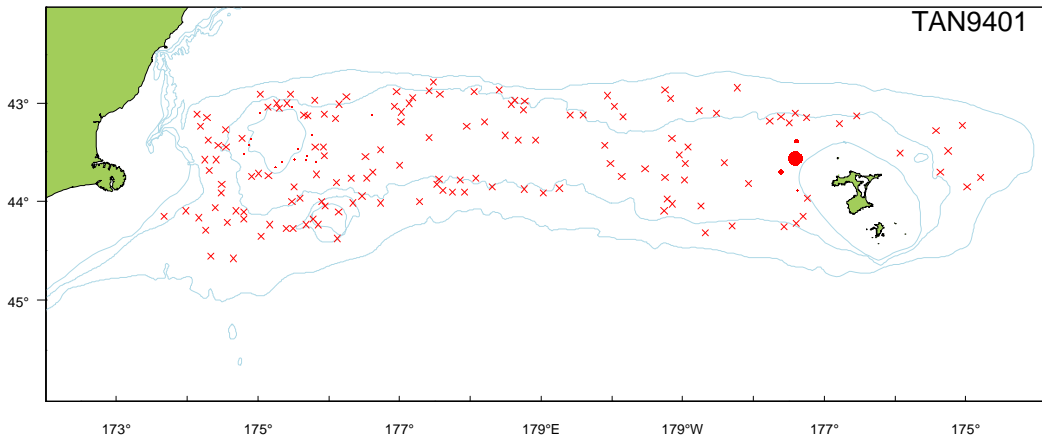
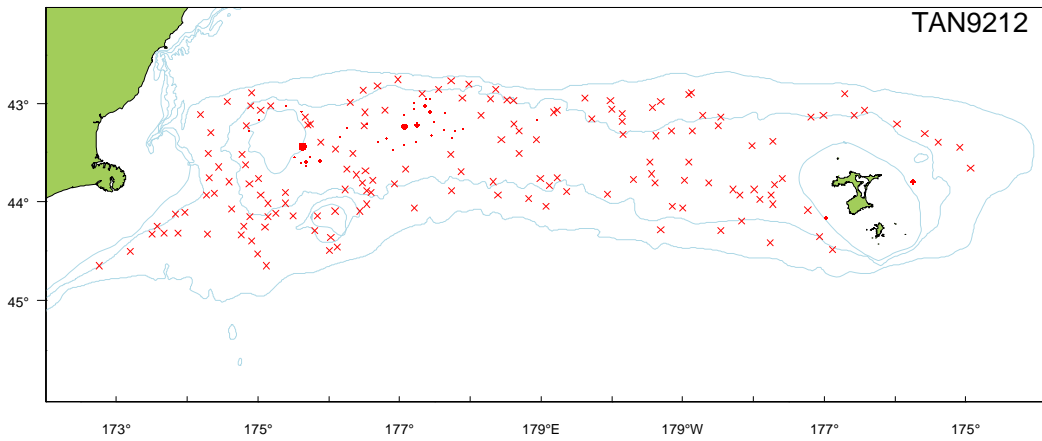
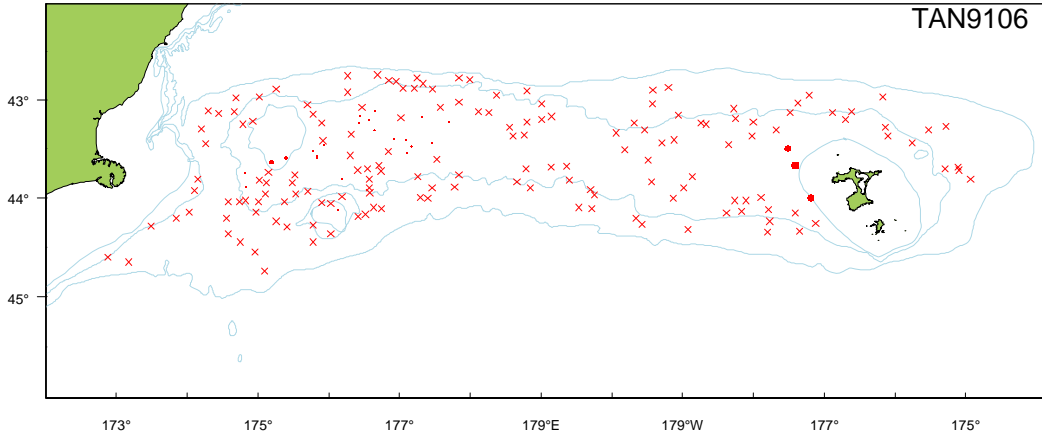
Relative biomass estimates and length summary

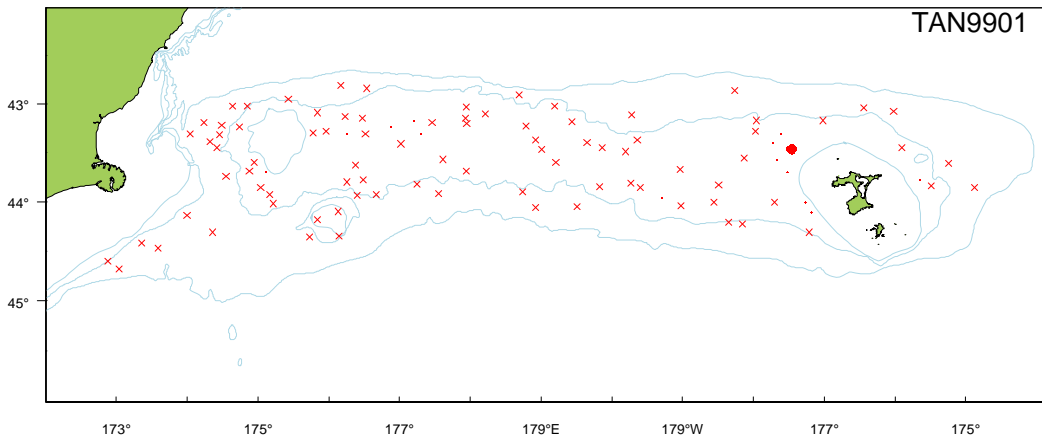
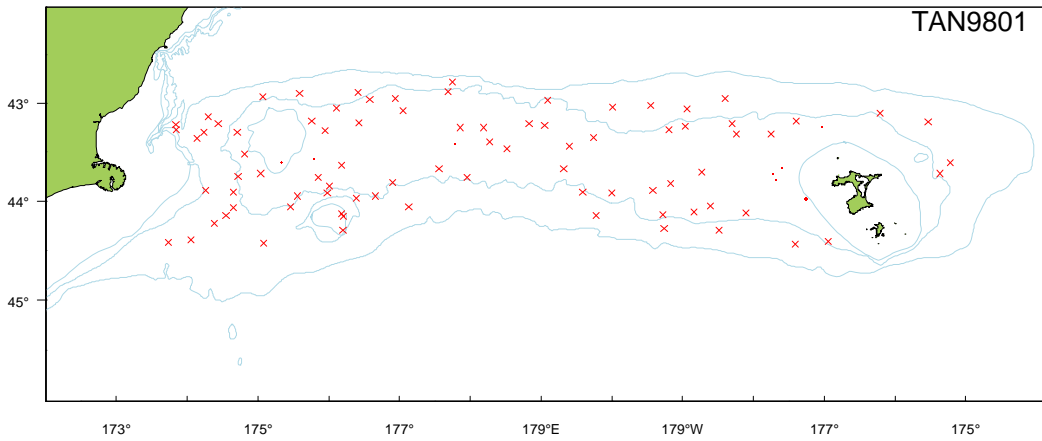
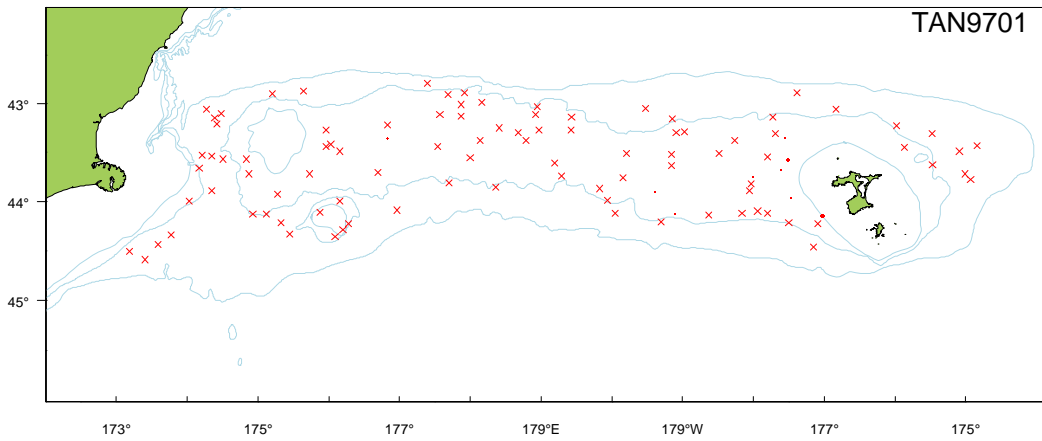
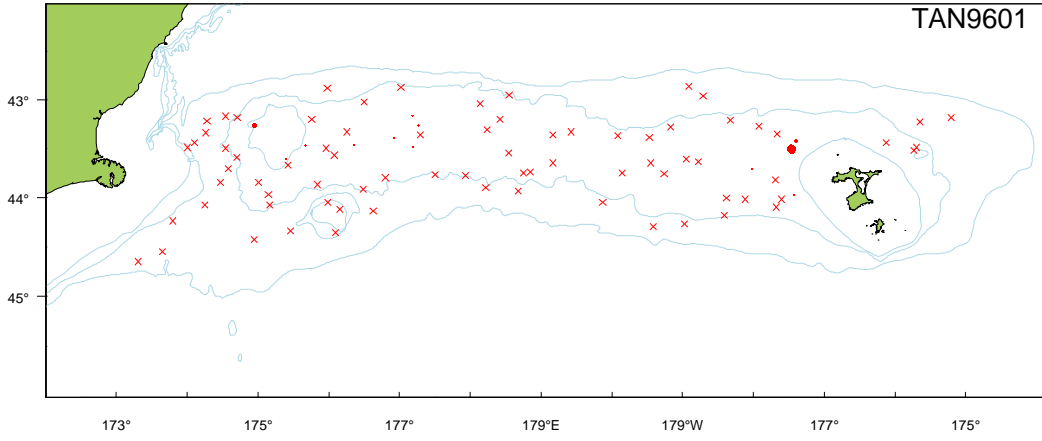
Year	Biomass (t)	cv (%)	Length (cm)			No. measure d
			Min.	Max.	Mean	
1992	1 145	11	4	93	69.2	370
1993	666	39	53	96	71.0	489
1994	1 416	77	52	86	69.2	366
1995	50	79	57	80	68.2	41
1996	732	43	61	107	70.9	251
1997	209	45	54	93	68.3	98
1998	154	47	51	100	66.4	65
1999	601	75	50	112	64.8	203
2000	991	60	45	84	63.7	441
2001	3 664	67	47	84	65.9	494
2002	402	54	56	78	68.5	75
2003	3 696	47	48	87	63.5	486
2004	188	37	60	92	72.3	39
2005	1 477	47	47	91	66.1	303
2006	462	72	54	90	72.1	99
2007	114	59	64	102	73.3	26
2008	8 470	22	47	85	67.3	374
2009	1 232	63	50	96	68.7	262
2010	133	65	61	84	72.4	31

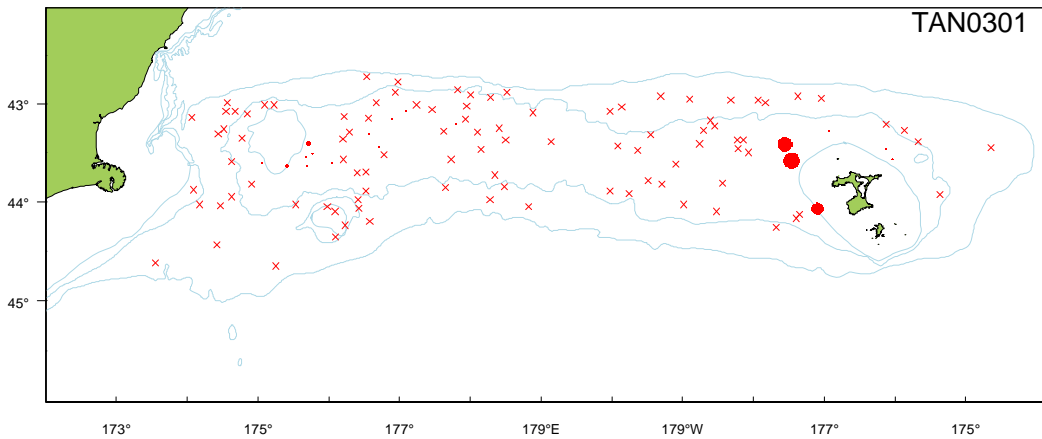
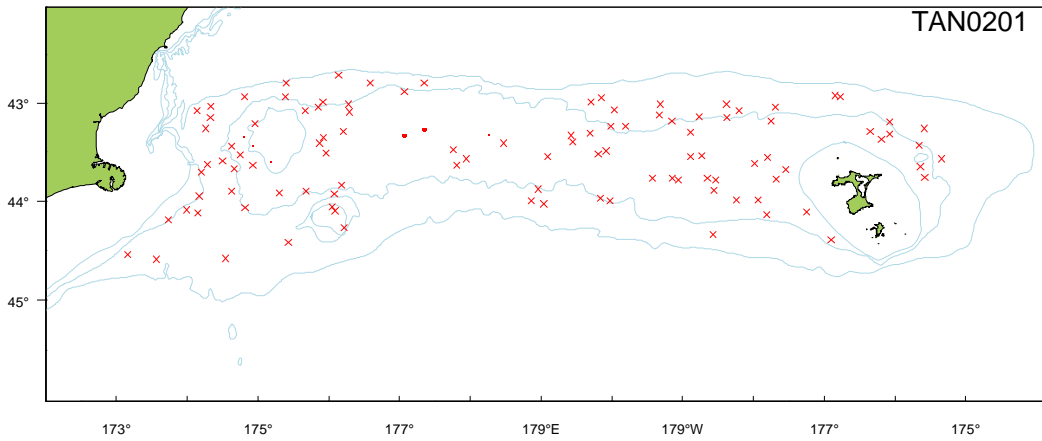
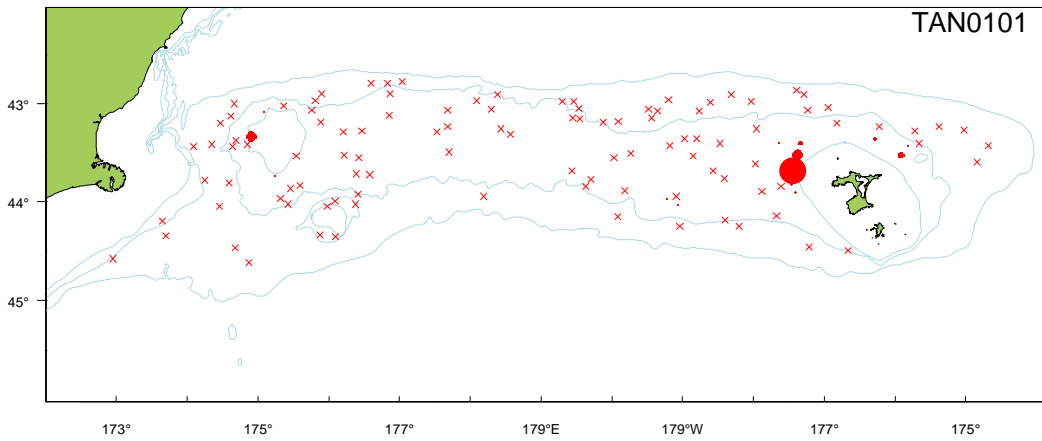
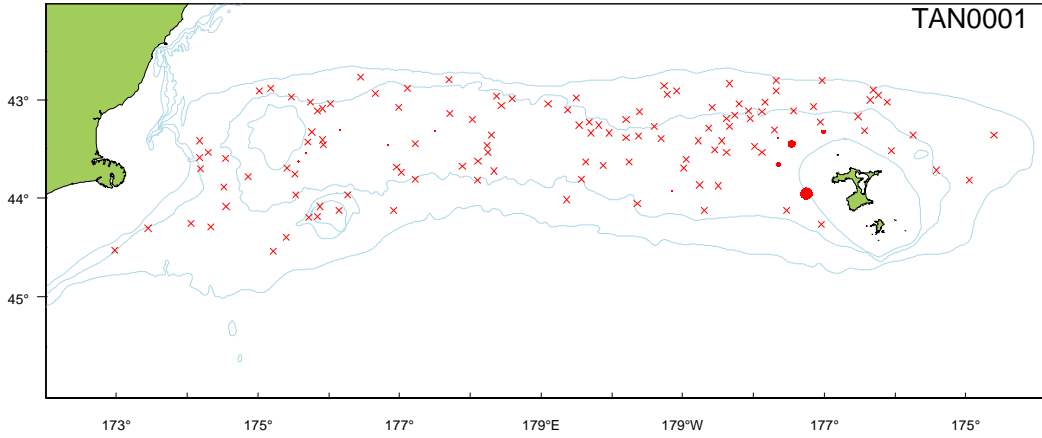


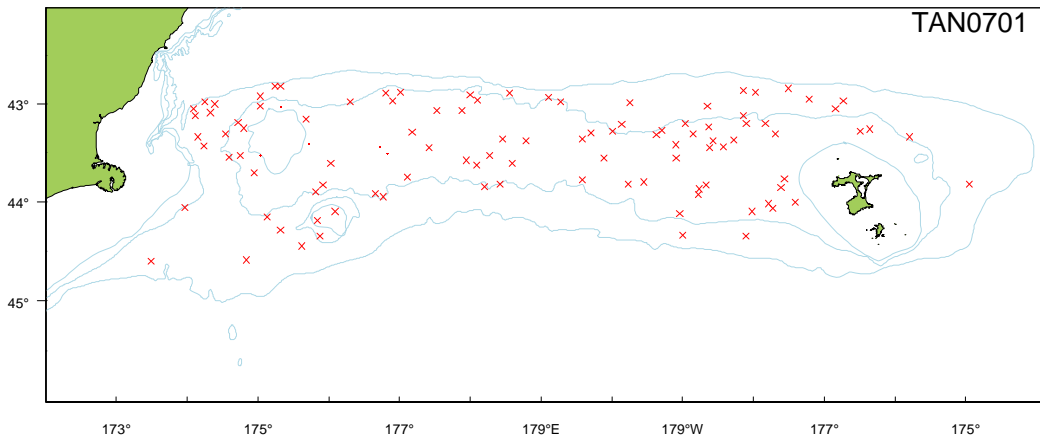
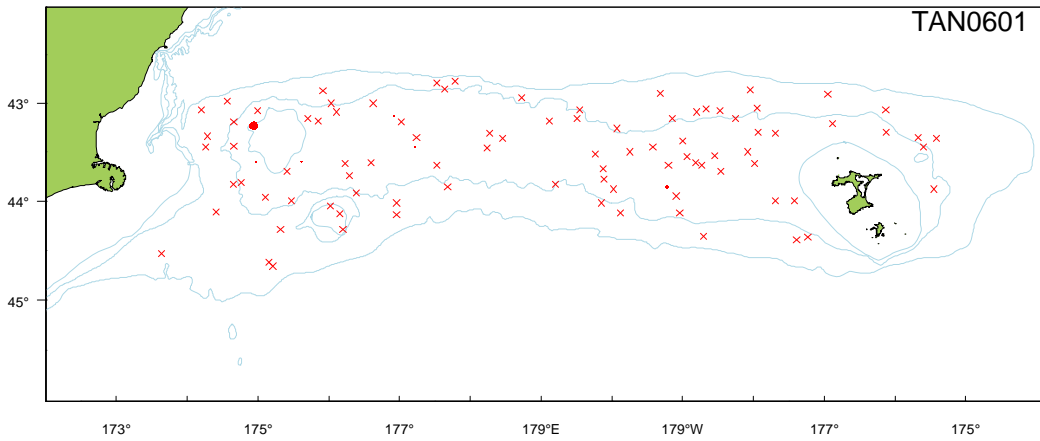
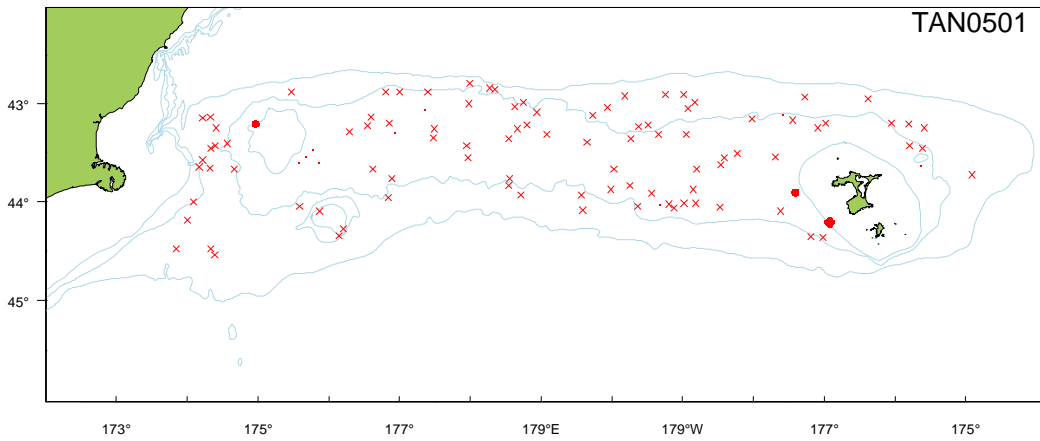
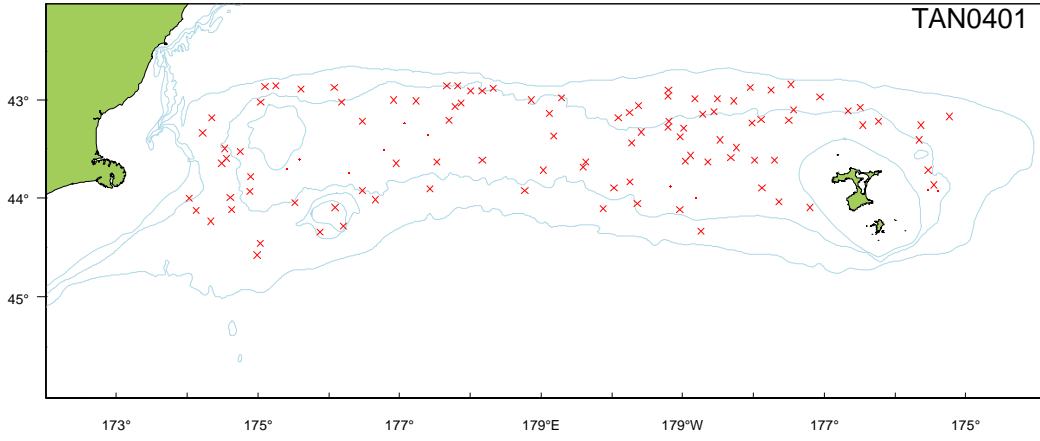
Distribution

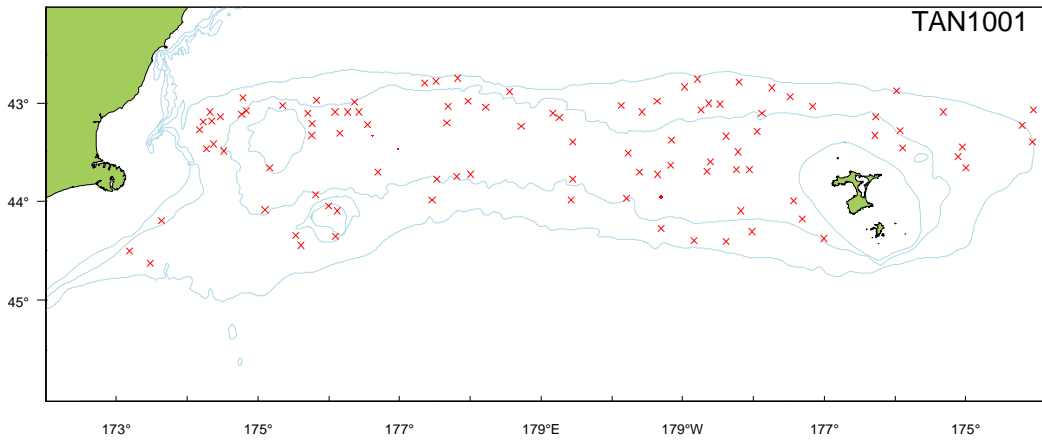
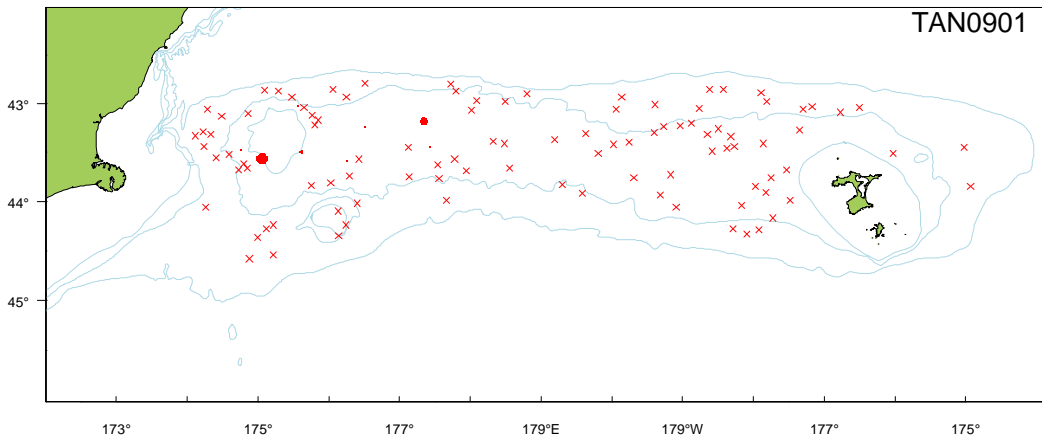
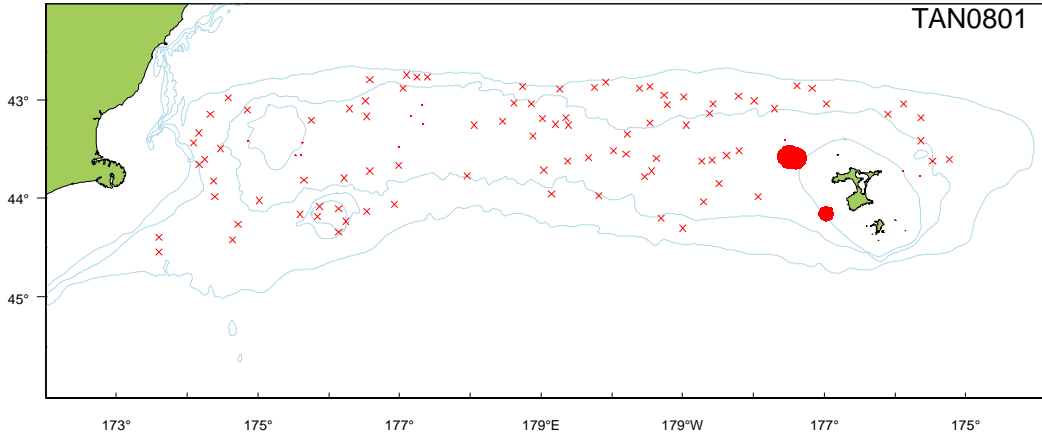




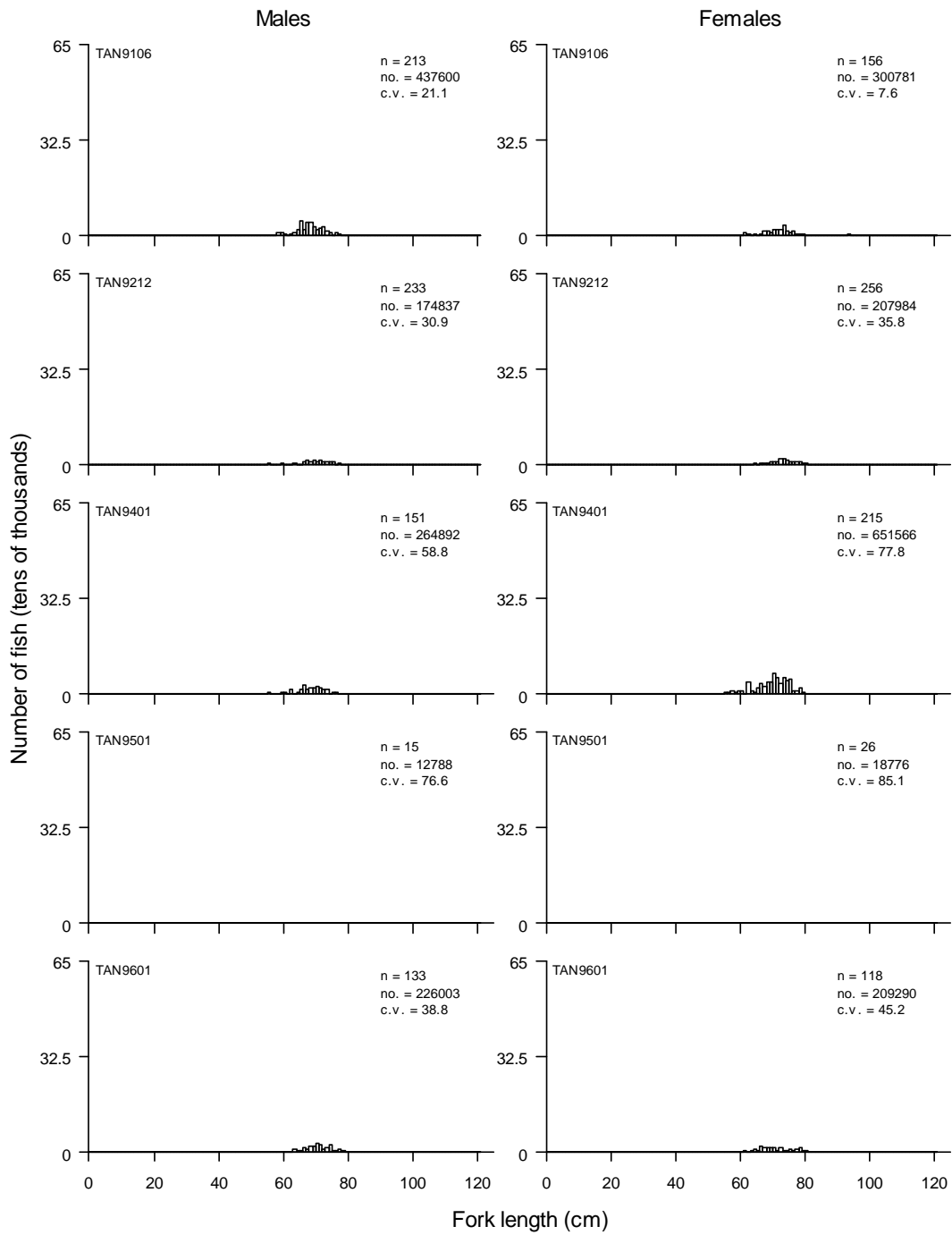


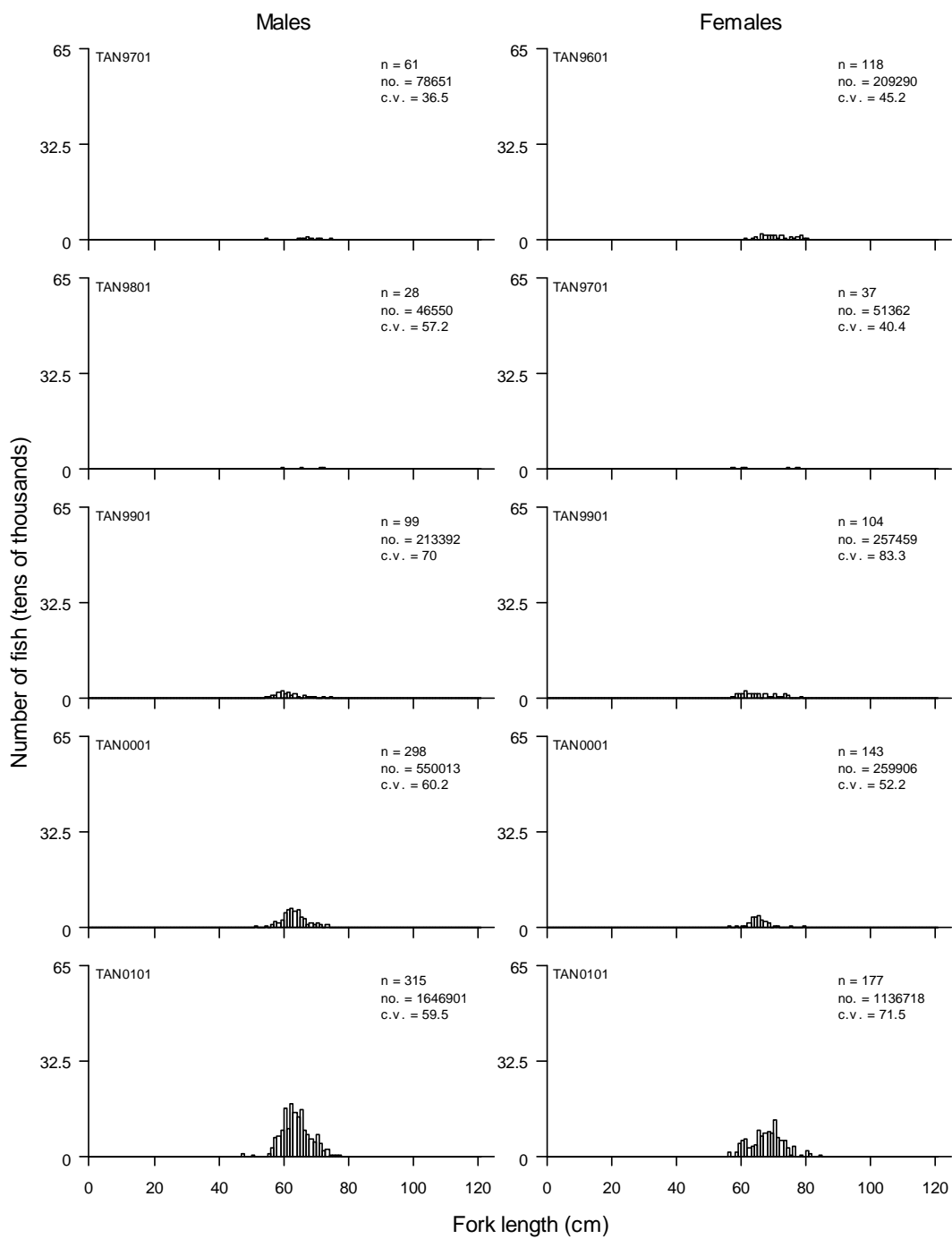


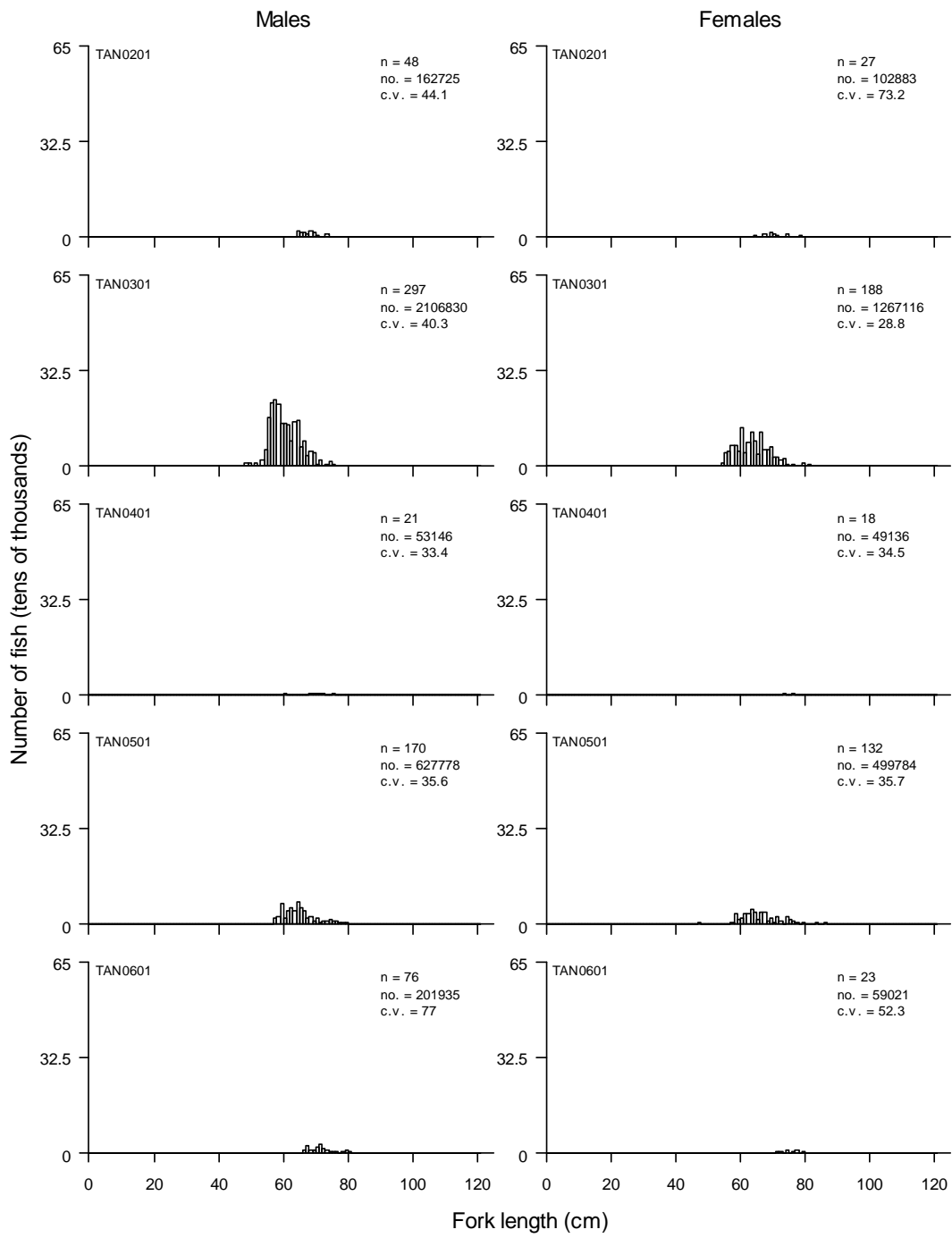


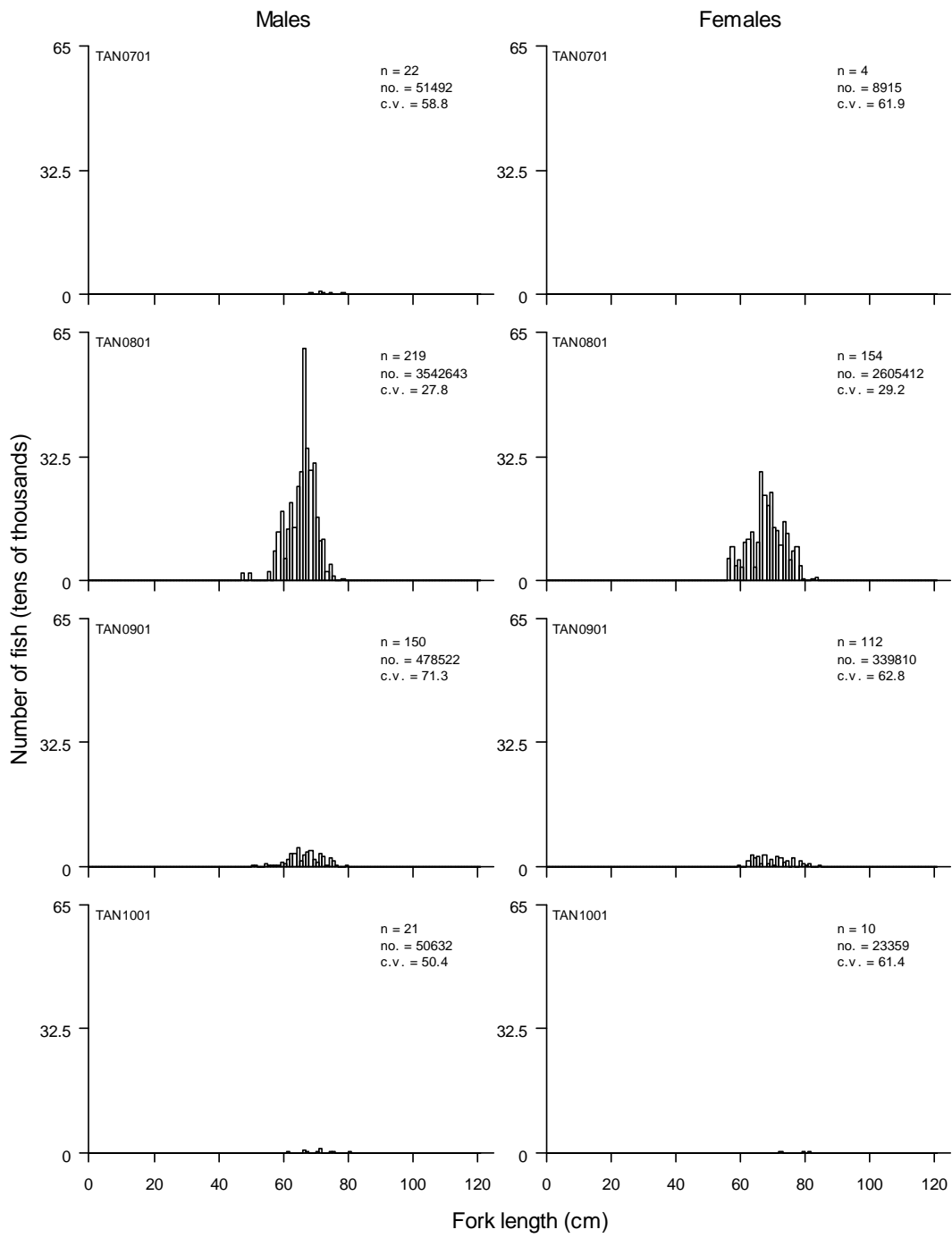


Length Frequencies









Gonad Stage Information

Males

Year	p_M1	p_M2	p_M3	p_M4	p_M5	p_M6	p_M7	n_allM
1992	NA	NA	NA	NA	NA	NA	NA	0
1993	0	0	0	0.56	0.33	0.07	0.04	27
1994	NA	NA	NA	NA	NA	NA	NA	0
1995	0	0	0.27	0.73	0	0	0	11
1996	0	0	0.11	0.64	0.25	0	0	55
1997	0	0	0.02	0.31	0.56	0.1	0	48
1998	0	0	0	0.17	0.83	0	0	18
1999	0	0	0	1	0	0	0	15
2000	NA	NA	NA	NA	NA	NA	NA	0
2001	0	0	0.1	0.62	0.24	0.05	0	21
2002	NA	NA	NA	NA	NA	NA	NA	0
2003	NA	NA	NA	NA	NA	NA	NA	0
2004	NA	NA	NA	NA	NA	NA	NA	0
2005	0	0	0	0	1	0	0	1
2006	NA	NA	NA	NA	NA	NA	NA	0
2007	NA	NA	NA	NA	NA	NA	NA	0
2008	0	0	0.2	0.73	0.07	0	0	15
2009	0	0.05	0.01	0.22	0.54	0.12	0.06	140
2010	0	0	0	0.57	0.43	0	0	7
ALL	0	0.02	0.05	0.42	0.42	0.07	0.03	358

Females

Year	p_F1	p_F2	p_F3	p_F4	p_F5	p_F6	p_F7	n_allF
1992	NA	NA	NA	NA	NA	NA	NA	0
1993	0	0	0.89	0.06	0	0	0.06	18
1994	NA	NA	NA	NA	NA	NA	NA	0
1995	0	0.11	0.89	0	0	0	0	9
1996	0	0	0.7	0.22	0	0	0.08	60
1997	0	0.03	0.21	0.52	0.17	0.07	0	29
1998	0	0	0.44	0.4	0.08	0.08	0	25
1999	0	0	0.29	0.71	0	0	0	7
2000	NA	NA	NA	NA	NA	NA	NA	0
2001	0	0	0.42	0.58	0	0	0	12
2002	NA	NA	NA	NA	NA	NA	NA	0
2003	NA	NA	NA	NA	NA	NA	NA	0
2004	NA	NA	NA	NA	NA	NA	NA	0
2005	0	1	0	0	0	0	0	3
2006	NA	NA	NA	NA	NA	NA	NA	0
2007	NA	NA	NA	NA	NA	NA	NA	0
2008	0	0	0.62	0.25	0	0.12	0	8
2009	0	0.31	0.23	0.16	0.06	0.17	0.07	100
2010	0	0	1	0	0	0	0	3
ALL	0	0.13	0.44	0.25	0.05	0.08	0.05	274

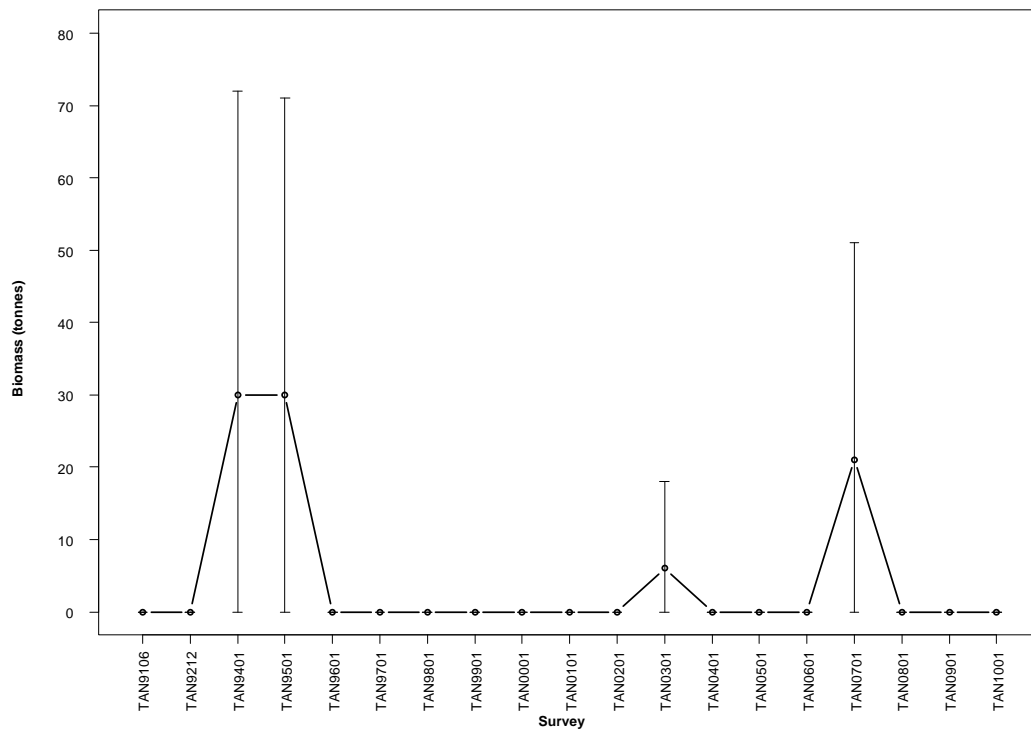


Number of surveys caught 1992–2010 (out of 19):	4
Total catch weight (kg):	85.4
Number measured	5
Length range (mean) (cm, TL)	68–100 (81.6)
Number weighed	3
Length-weight parameters a, b (r^2)	–

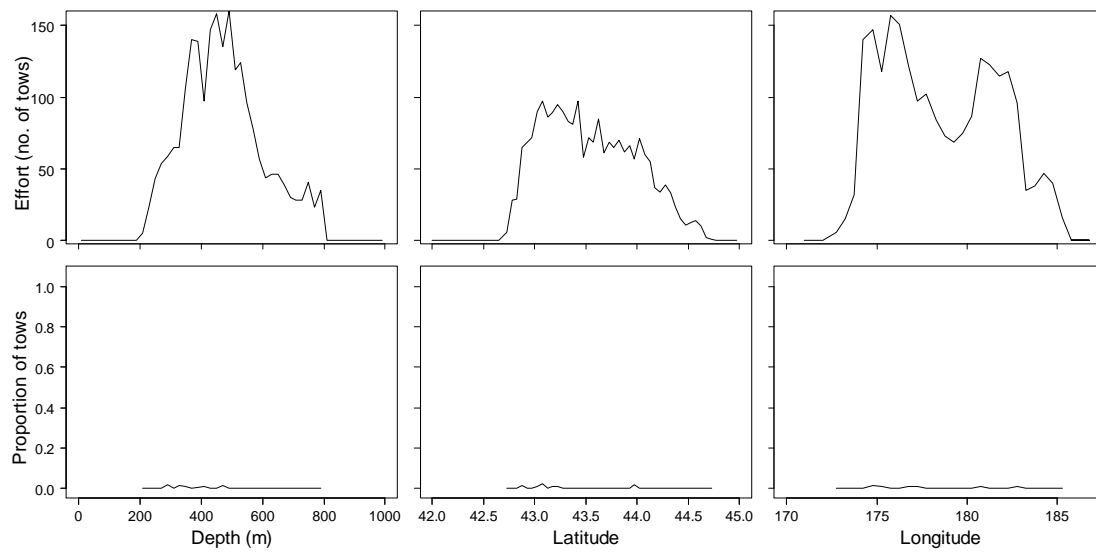
There were **too few fish caught to determine whether the core survey area is appropriate for this species**. Biomass of this species is **poorly** estimated in the core survey area. Biomass shows **no clear trend** since the start of the time series.

Relative biomass estimates

Year	Biomass (t)	cv (%)
1992	0	0
1993	0	0
1994	30	71
1995	30	67
1996	0	0
1997	0	0
1998	0	0
1999	0	0
2000	0	0
2001	0	0
2002	0	0
2003	6	100
2004	0	0
2005	0	0
2006	0	0
2007	21	72
2008	0	0
2009	0	0
2010	0	0



Distribution



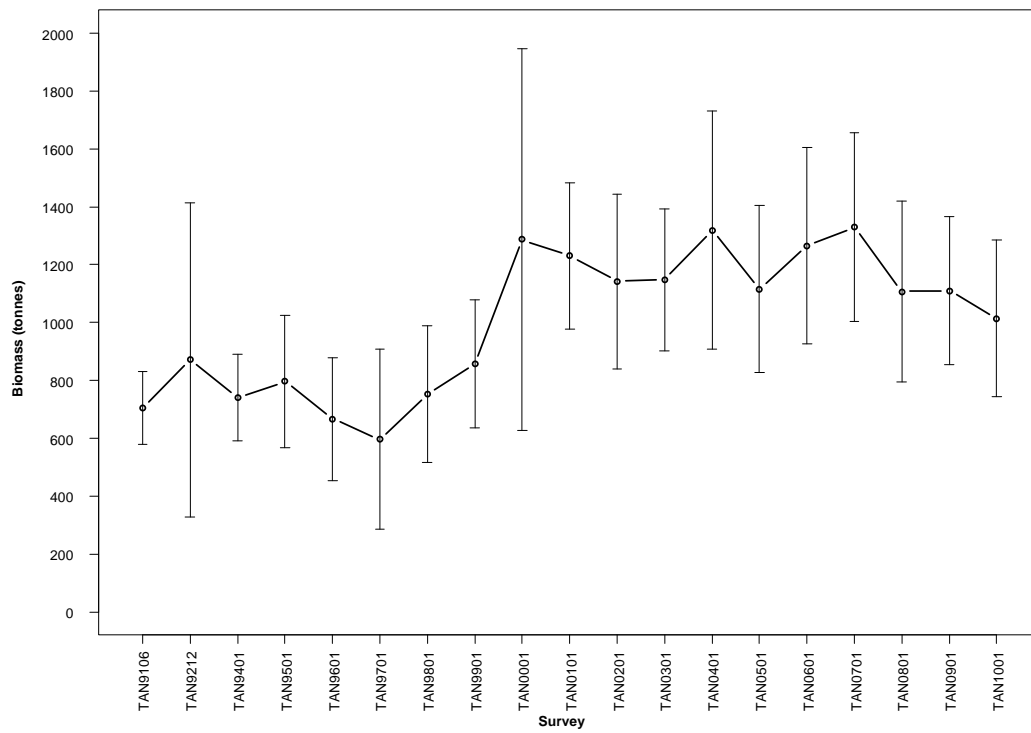


Number of surveys caught 1992–2010 (out of 19):	19
Total catch weight (kg):	11 314.1
Number measured	18 078
Length range (mean) (cm, TL)	7–29 (20.8)
Number weighed	2 858
Length-weight parameters a, b (r^2)	0.003551, 3.319298 (88.2)

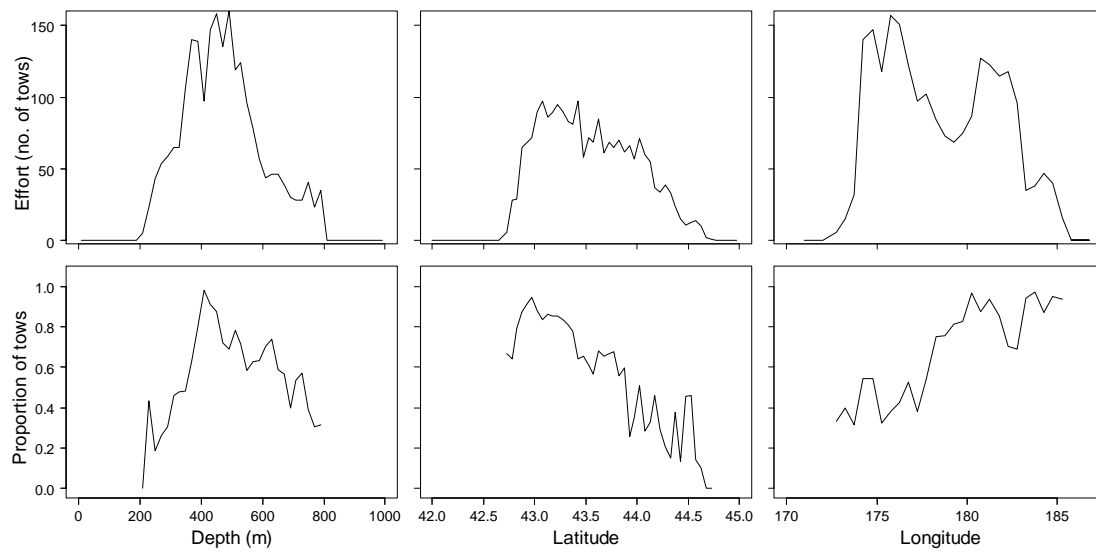
The core survey area and depth range **is** appropriate for this species. Biomass of this species is **very well** estimated in the core survey area. Biomass has **increased** since the start of the time series. Catch rates are highest in the **north** and **east**. Length frequencies are usually **unimodal**. Mean length has **increased** since the start of the time series.

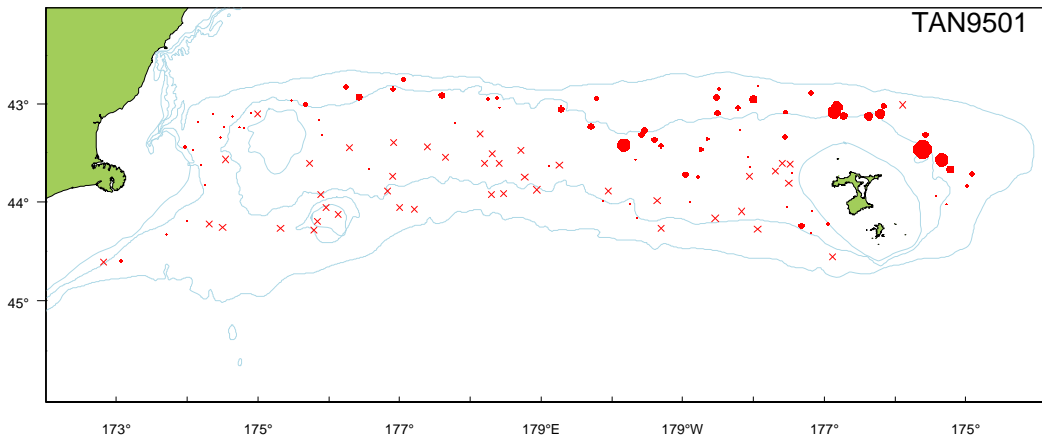
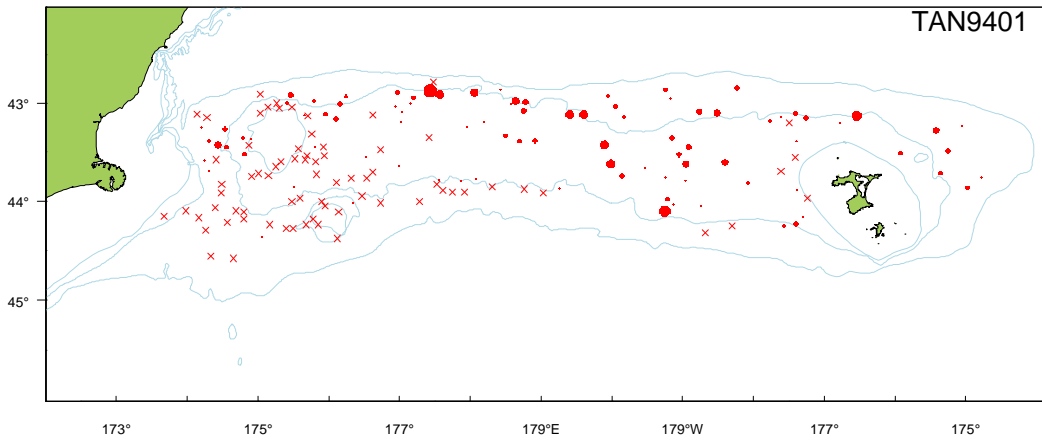
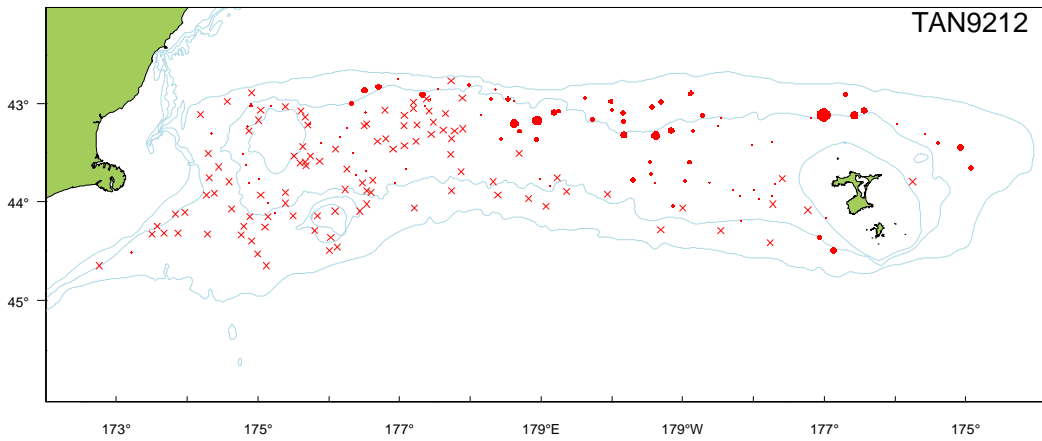
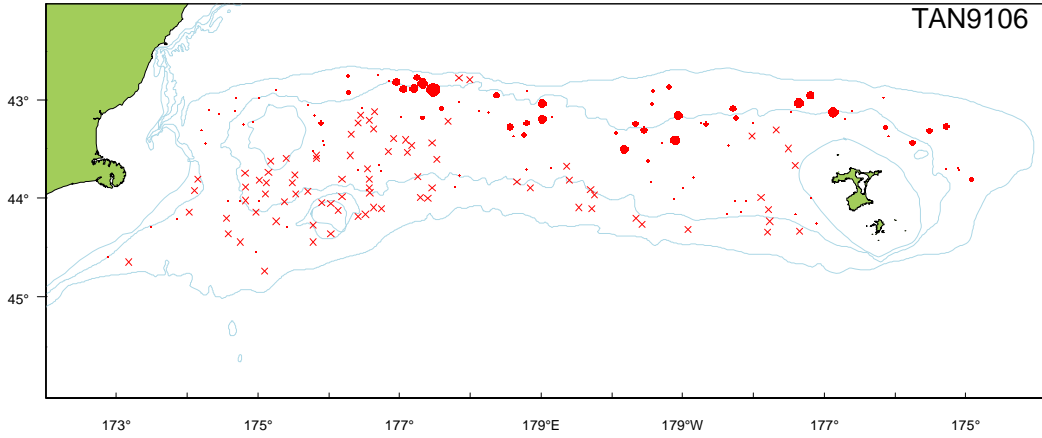
Relative biomass estimates and length summary

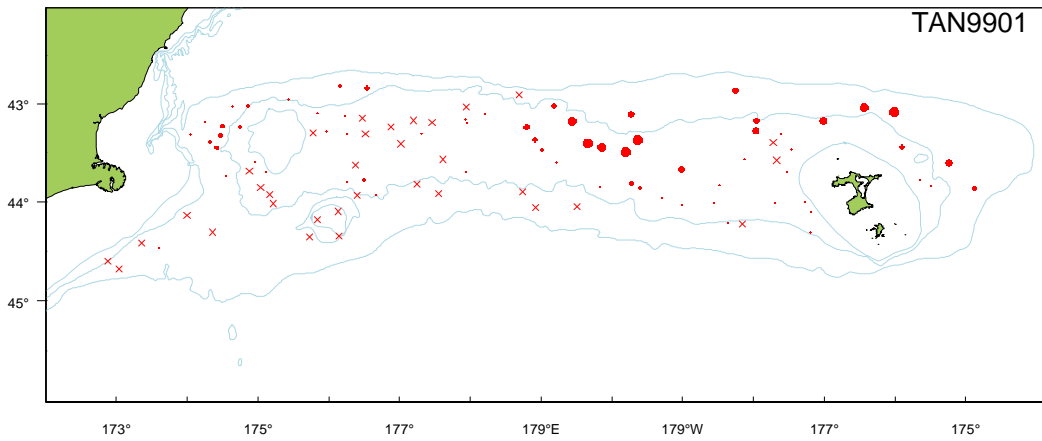
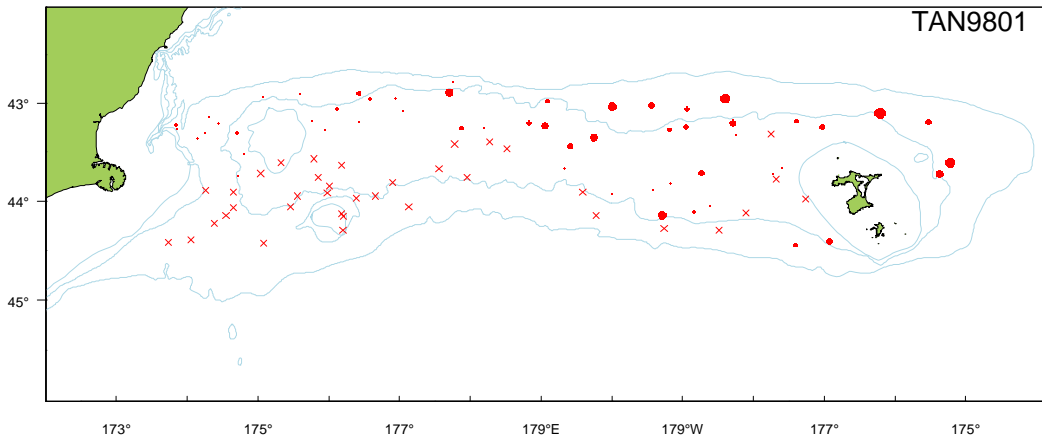
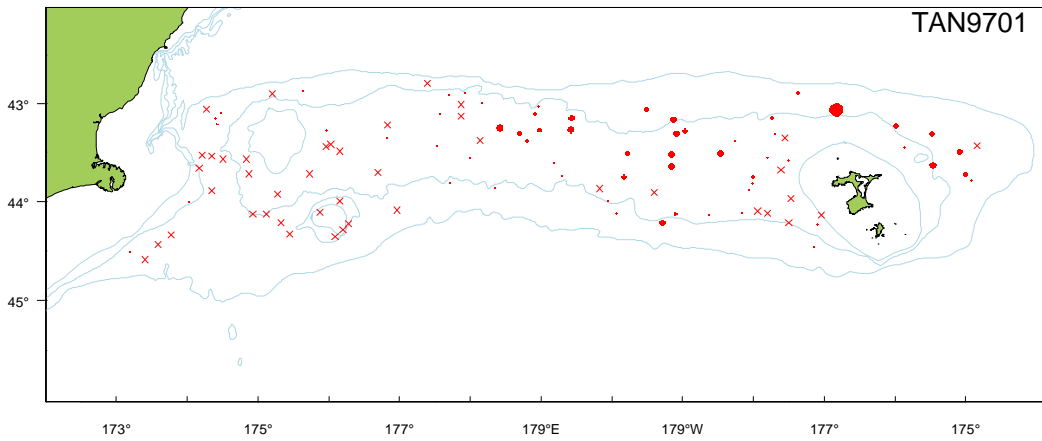
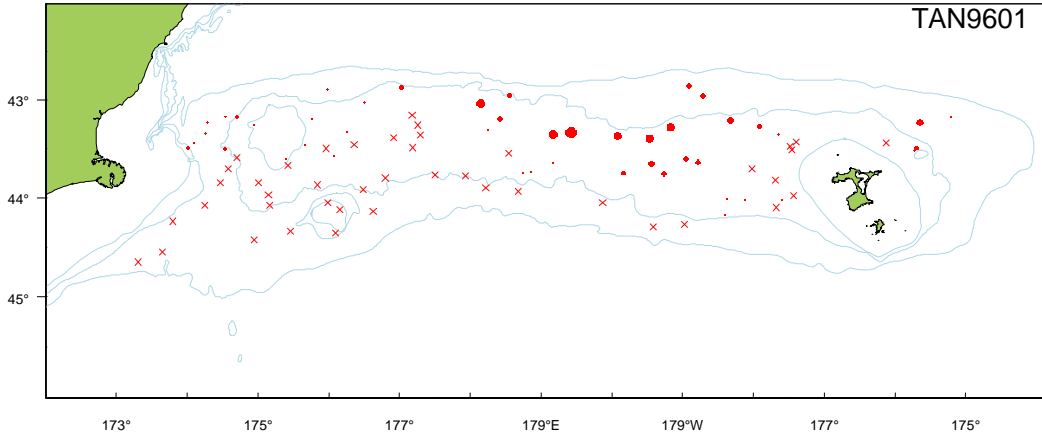
Year	Biomass (t)	cv (%)	Length (cm)			No. measure d
			Min.	Max.	Mean	
1992	704	9	-	-	-	0
1993	872	31	-	-	-	0
1994	740	10	-	-	-	0
1995	796	14	-	-	-	0
1996	667	16	-	-	-	0
1997	596	26	-	-	-	0
1998	753	16	14	25	19.9	71
1999	858	13	13	13	13.0	1
2000	1 287	26	-	-	-	0
2001	1 230	10	-	-	-	0
2002	1 143	13	14	26	20.0	426
2003	1 148	11	14	29	20.4	2 666
2004	1 319	16	14	28	20.6	2 159
2005	1 116	13	13	28	20.9	2 165
2006	1 264	13	7	28	21.0	1 890
2007	1 330	12	13	28	21.3	1 661
2008	1 107	14	13	28	21.0	1 868
2009	1 110	12	15	27	20.7	479
2010	1 014	13	14	27	21.1	2 556

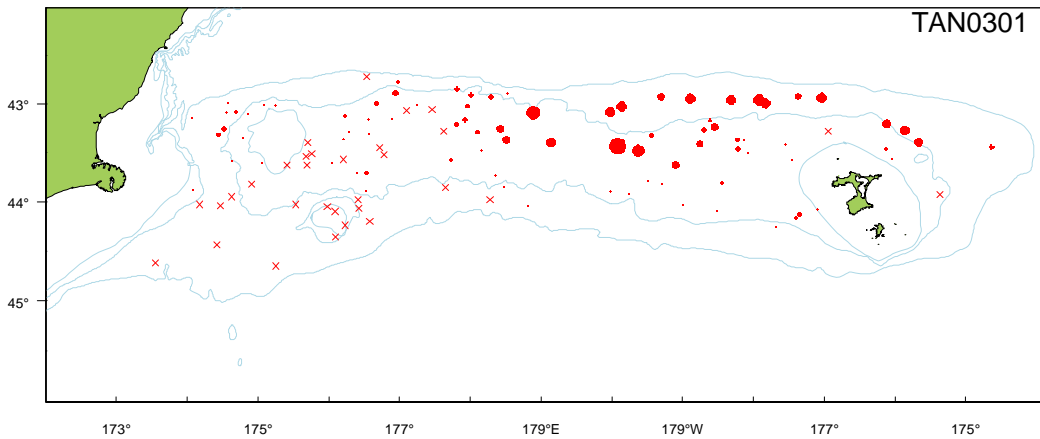
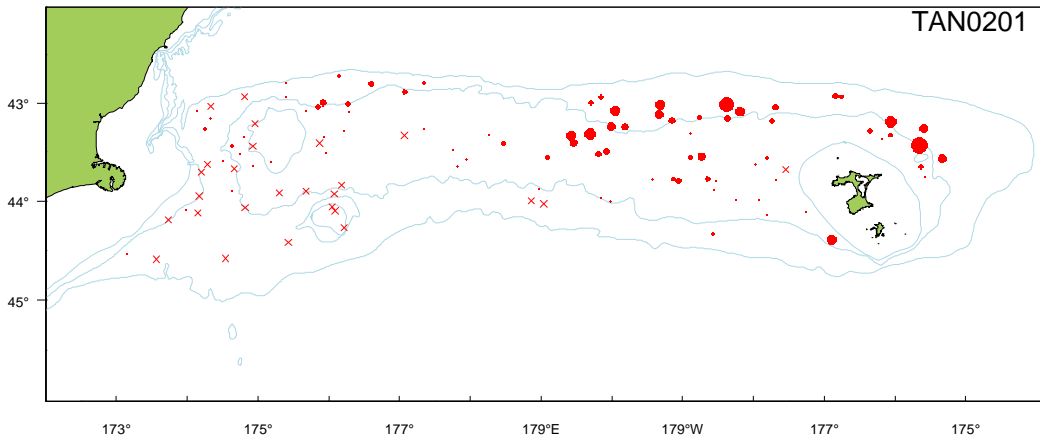
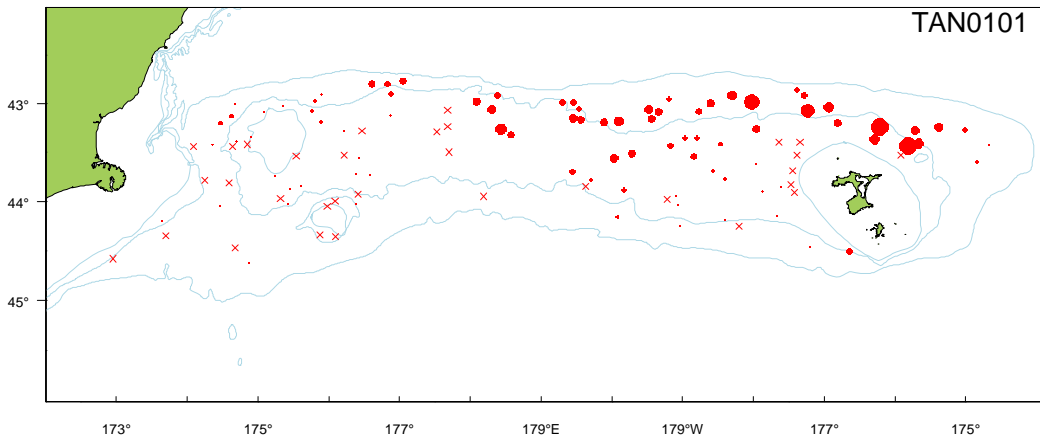
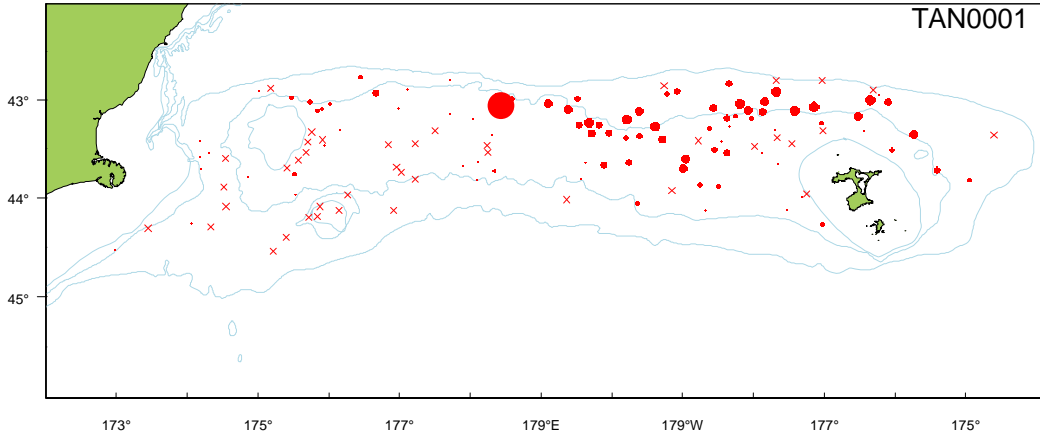


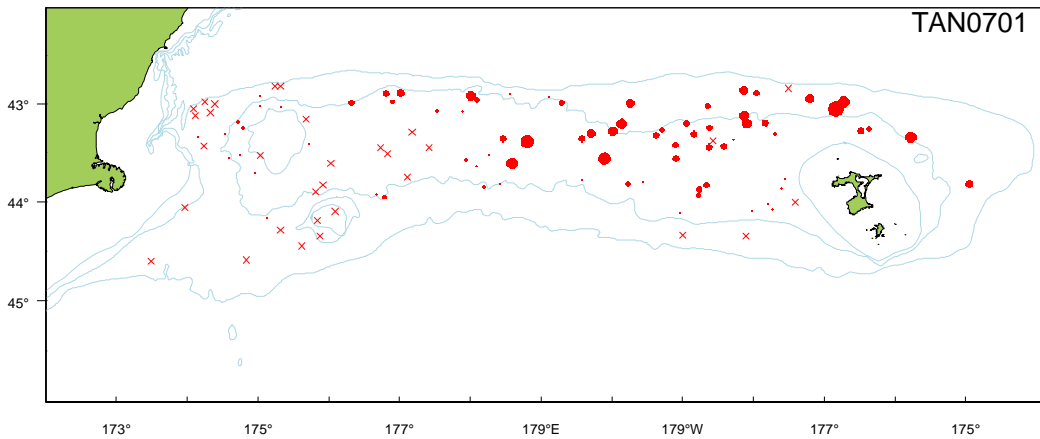
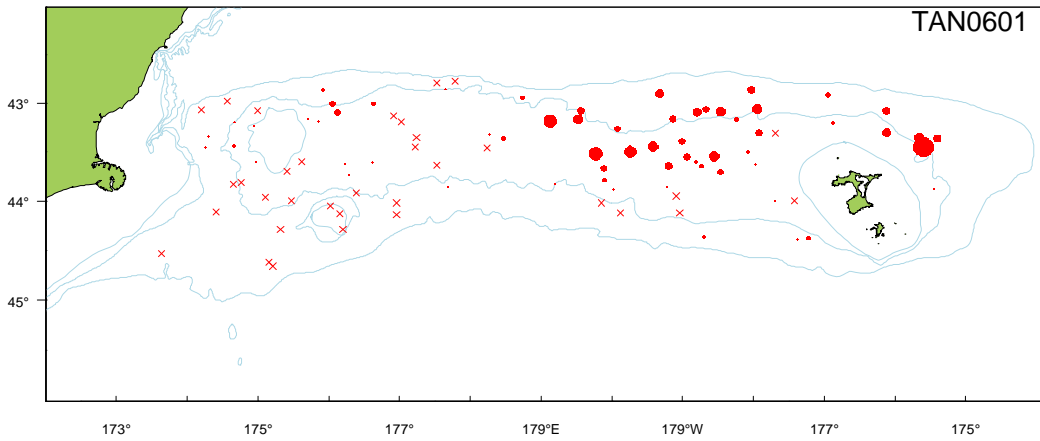
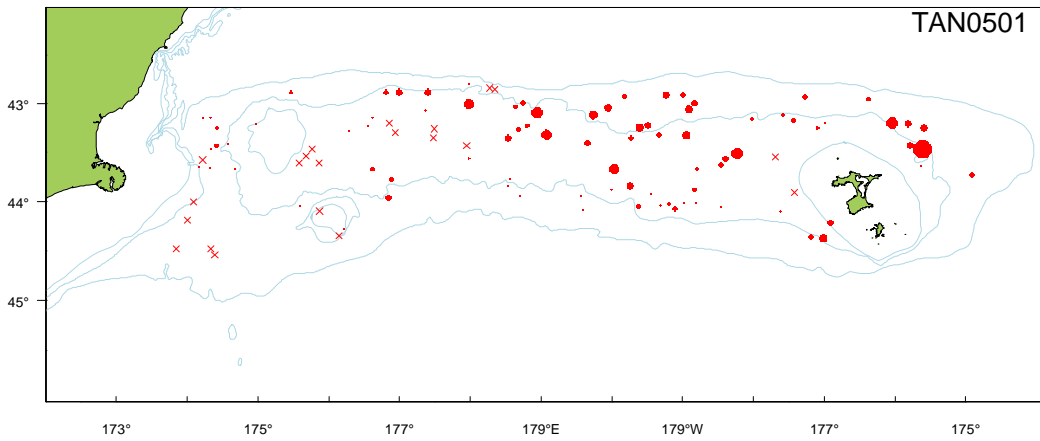
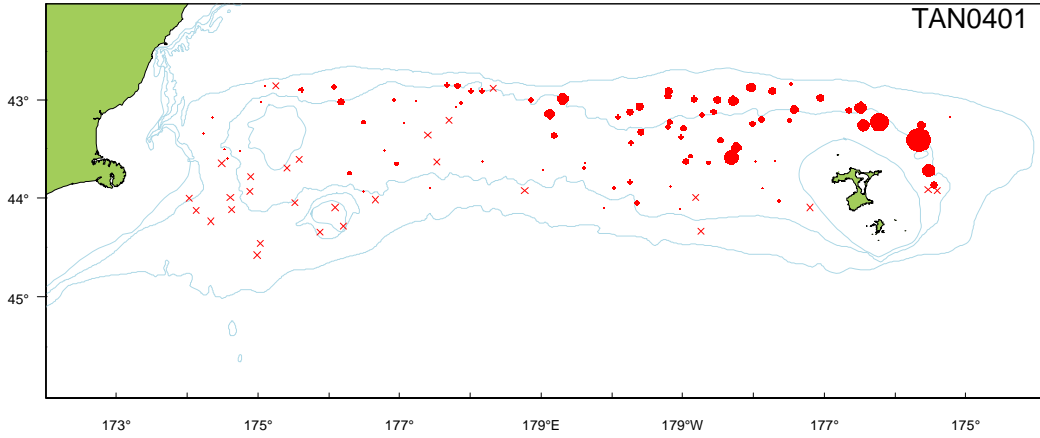
Distribution

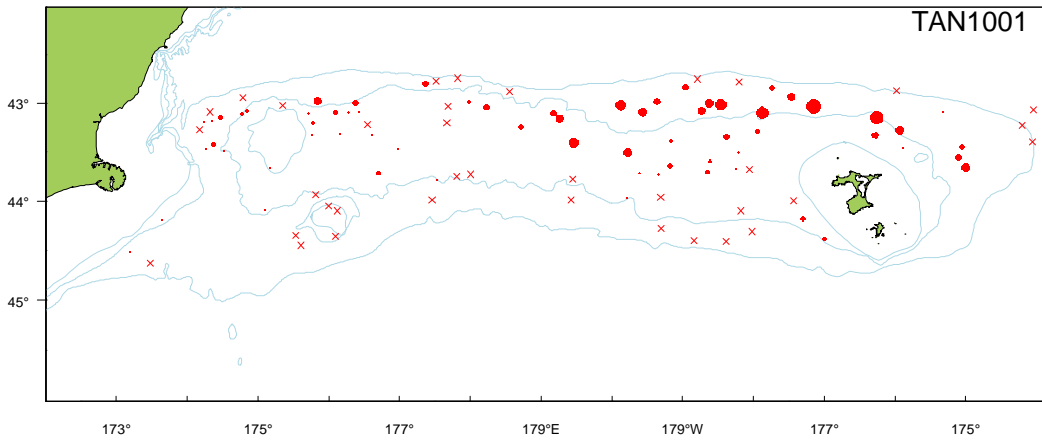
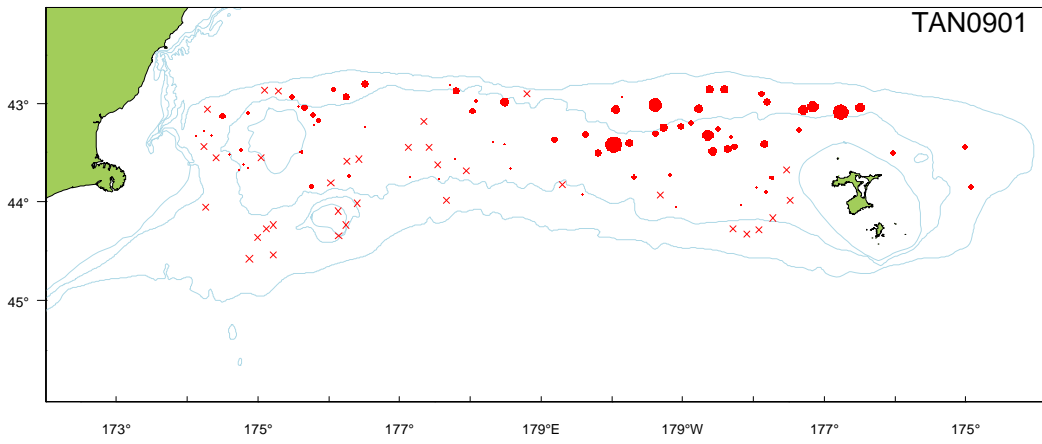
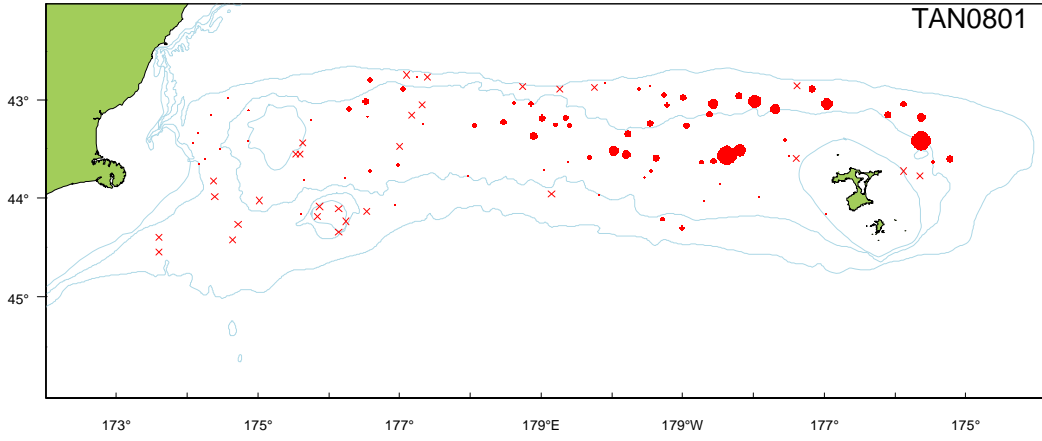




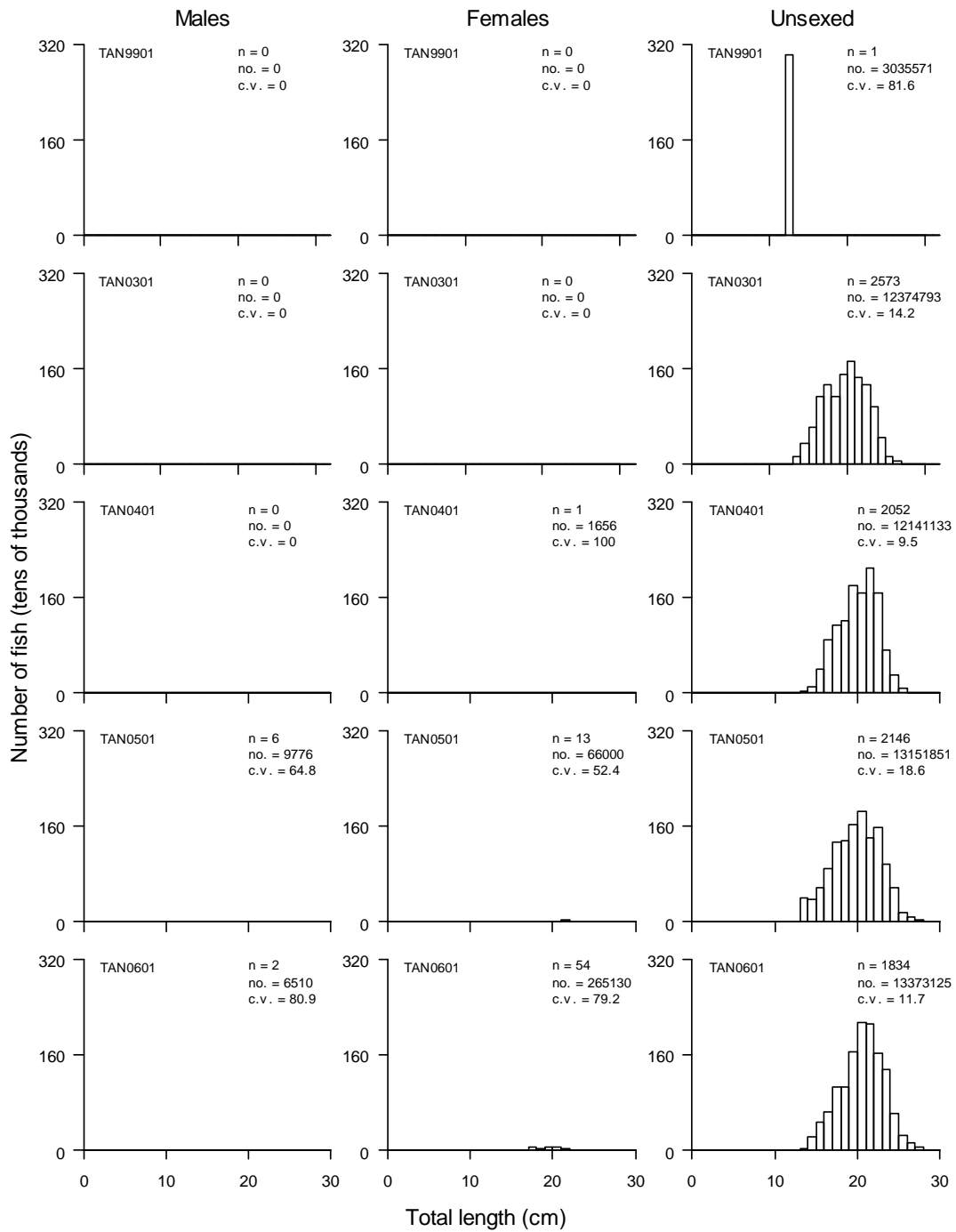


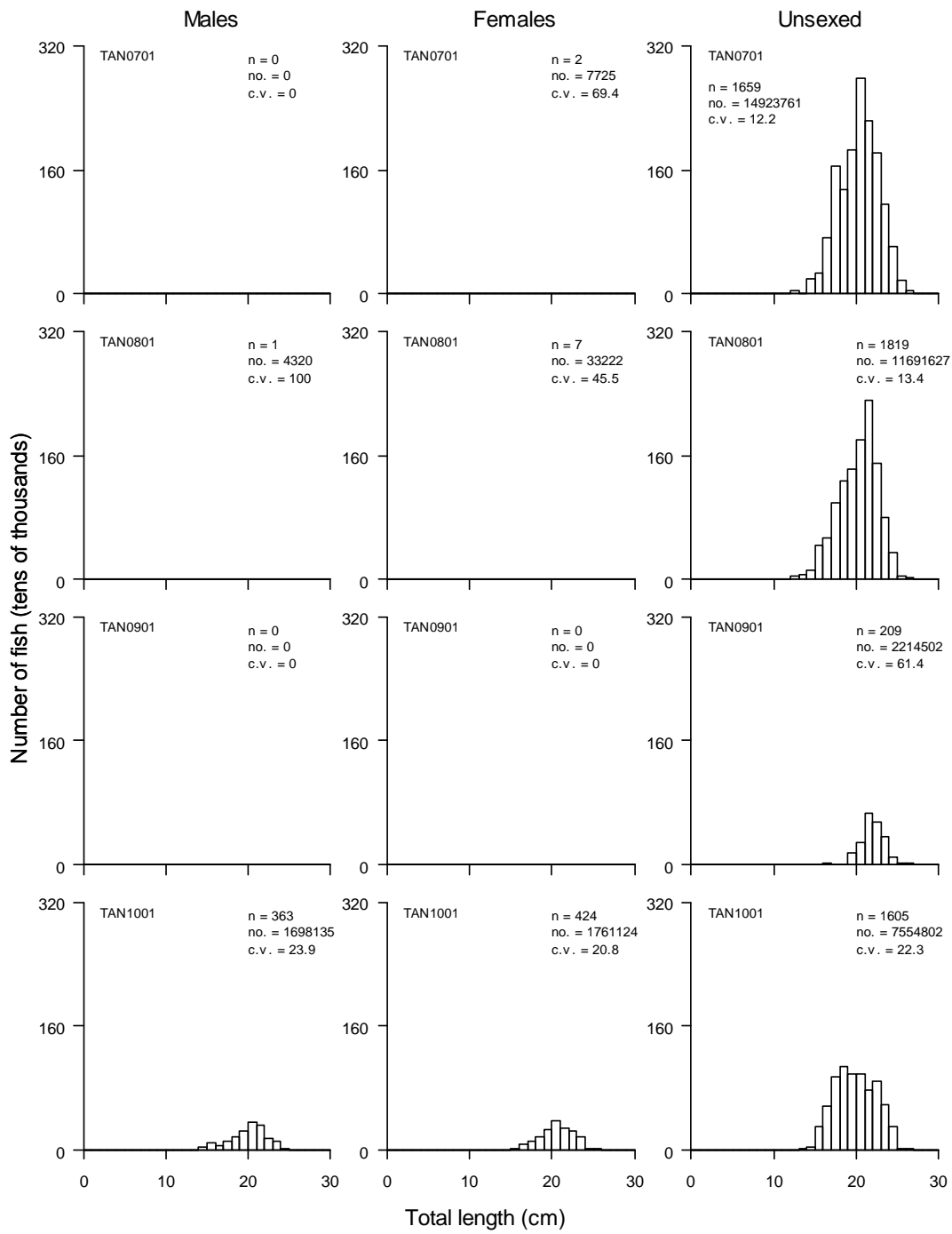






Length Frequencies





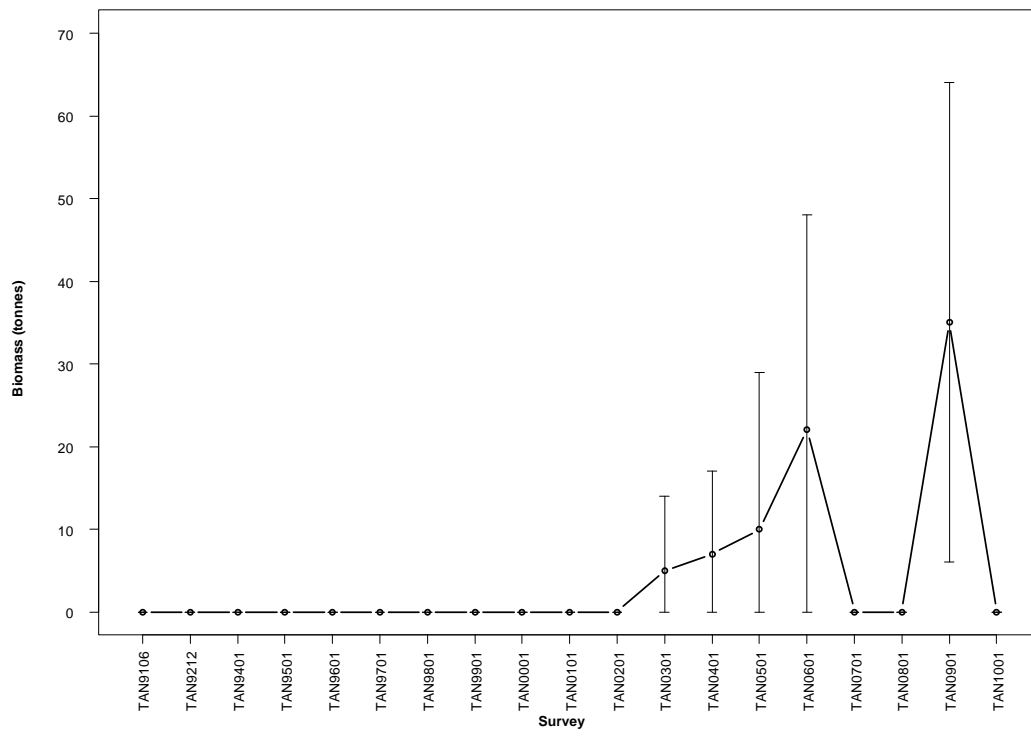


Number of surveys caught 1992–2010 (out of 19):	5
Total catch weight (kg):	43.1
Number measured	11
Length range (mean) (cm, FL)	45–60 (50.5)
Number weighed	10
Length-weight parameters a, b (r^2)	–

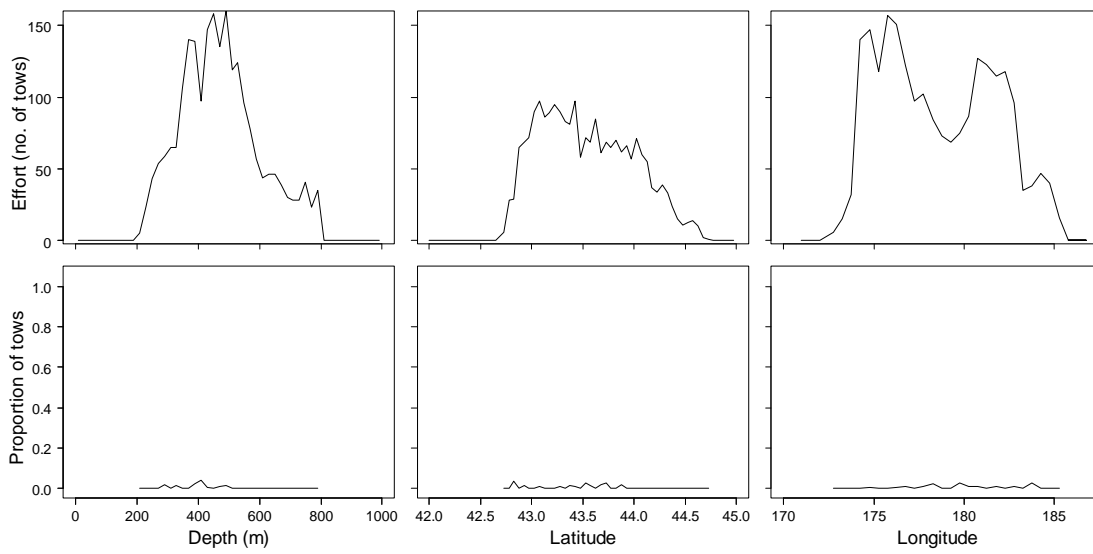
There were **too few fish caught to determine whether the core survey area is appropriate for this species**. Biomass of this species is **poorly** estimated in the core survey area. Biomass **shows no clear trend** since the start of the time series. This species may have been misidentified as Ray's bream in some early surveys.

Relative biomass estimates

Year	Biomass (t)	cv (%)
1992	0	-
1993	0	-
1994	0	-
1995	0	-
1996	0	-
1997	0	-
1998	0	-
1999	0	-
2000	0	-
2001	0	-
2002	0	-
2003	5	100
2004	7	71
2005	10	100
2006	22	57
2007	0	-
2008	0	-
2009	35	42
2010	0	-



Distribution



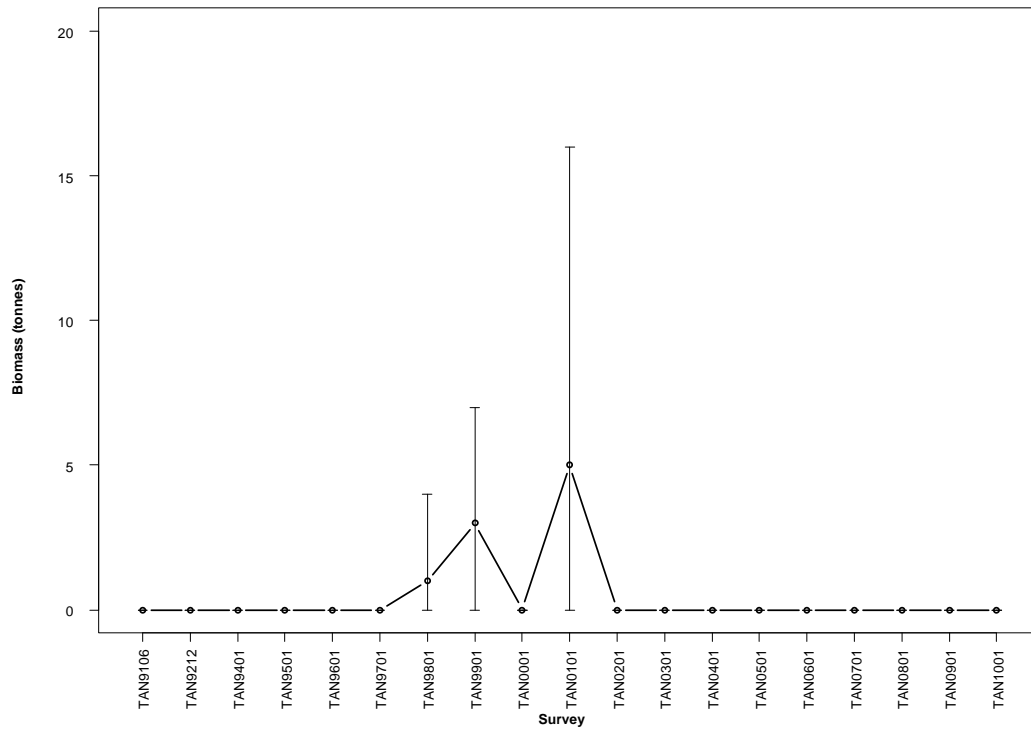


Number of surveys caught 1992–2010 (out of 19):	4
Total catch weight (kg):	10
Number measured	8
Length range (mean) (cm)	–
Number weighed	0
Length-weight parameters a, b (r^2)	–

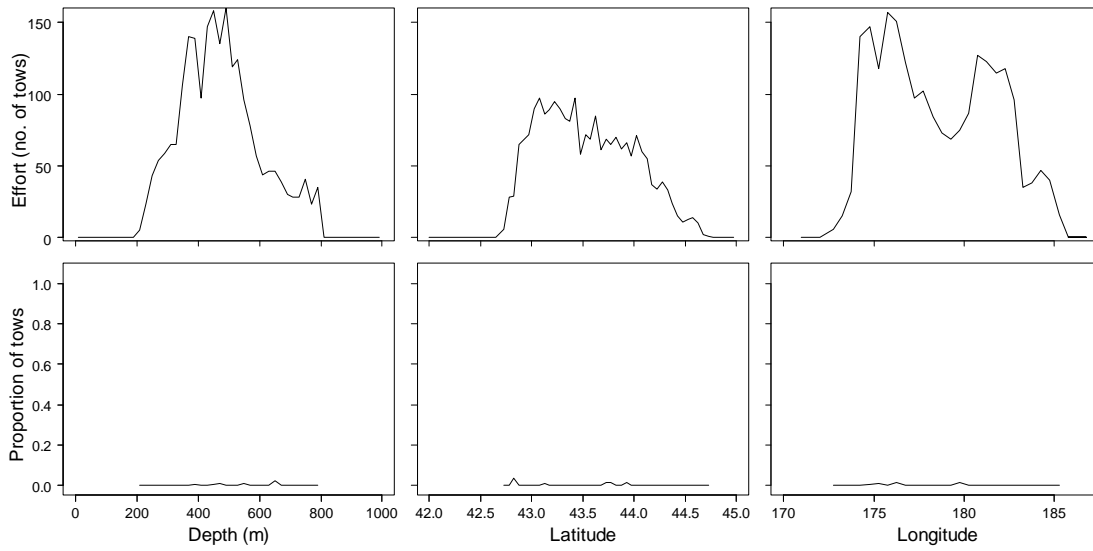
There were **too few fish caught to determine whether the core survey area is appropriate for this species**. Biomass of this species is **poorly** estimated in the core survey area. Biomass **shows no clear trend** since the start of the time series.

Relative biomass estimates

Year	Biomass (t)	cv (%)
1992	0	-
1993	0	-
1994	0	-
1995	0	-
1996	0	-
1997	0	-
1998	1	100
1999	3	71
2000	0	-
2001	5	96
2002	0	-
2003	0	-
2004	0	-
2005	0	-
2006	0	-
2007	0	-
2008	0	-
2009	0	-
2010	0	-



Distribution



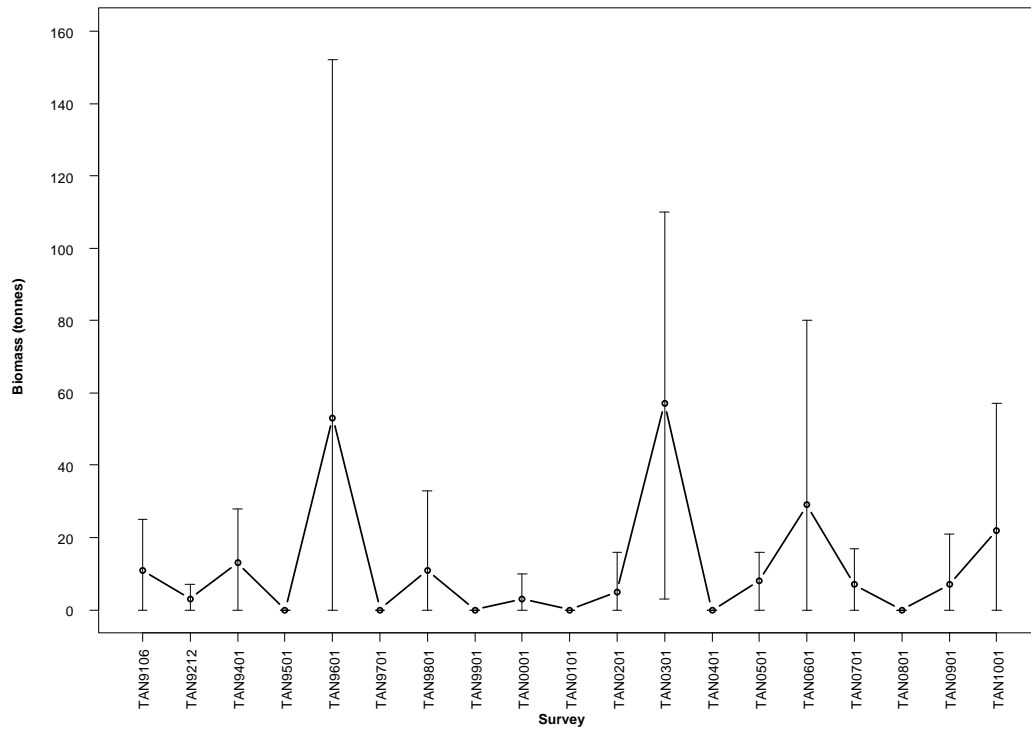


Number of surveys caught 1992–2010 (out of 19):	14
Total catch weight (kg):	635.9
Number measured	573
Length range (mean) (cm, TL)	81–104 (94)
Number weighed	281
Length-weight parameters a, b (r^2)	–

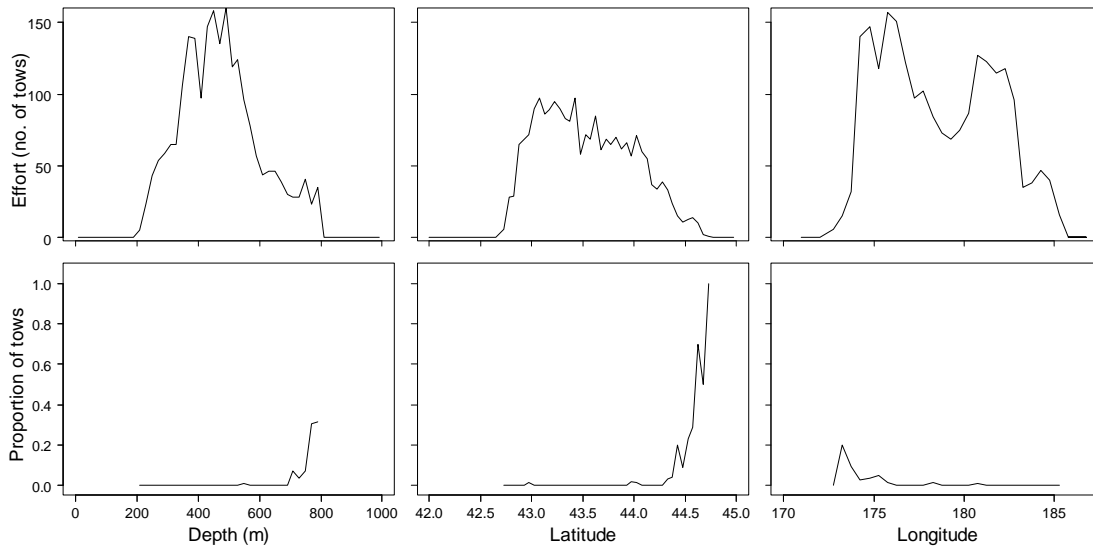
The core survey area and depth range **is not** appropriate for this species. It is found **deeper than 800 m**. Biomass of this species is **poorly** estimated in the core survey area. Biomass **shows no clear trend** since the start of the time series. Catch rates are highest in the **south**.

Relative biomass estimates

Year	Biomass (t)	cv (%)
1992	11	59
1993	3	71
1994	13	63
1995	0	-
1996	53	92
1997	0	-
1998	11	100
1999	0	-
2000	3	100
2001	0	-
2002	5	100
2003	57	47
2004	0	-
2005	8	53
2006	29	86
2007	7	72
2008	0	-
2009	7	100
2010	22	78



Distribution



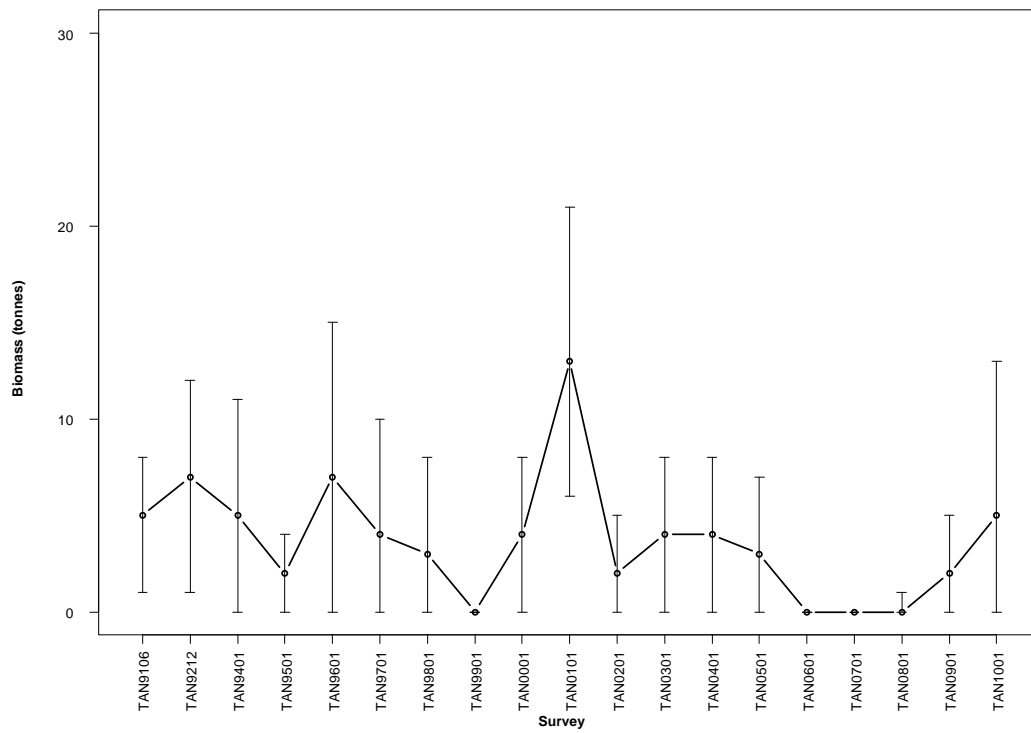


Number of surveys caught 1992–2010 (out of 19):	16
Total catch weight (kg):	59
Number measured	5
Length range (mean) (cm, PL)	13–20 (16.0)
Number weighed	5
Length-weight parameters a, b (r^2)	–

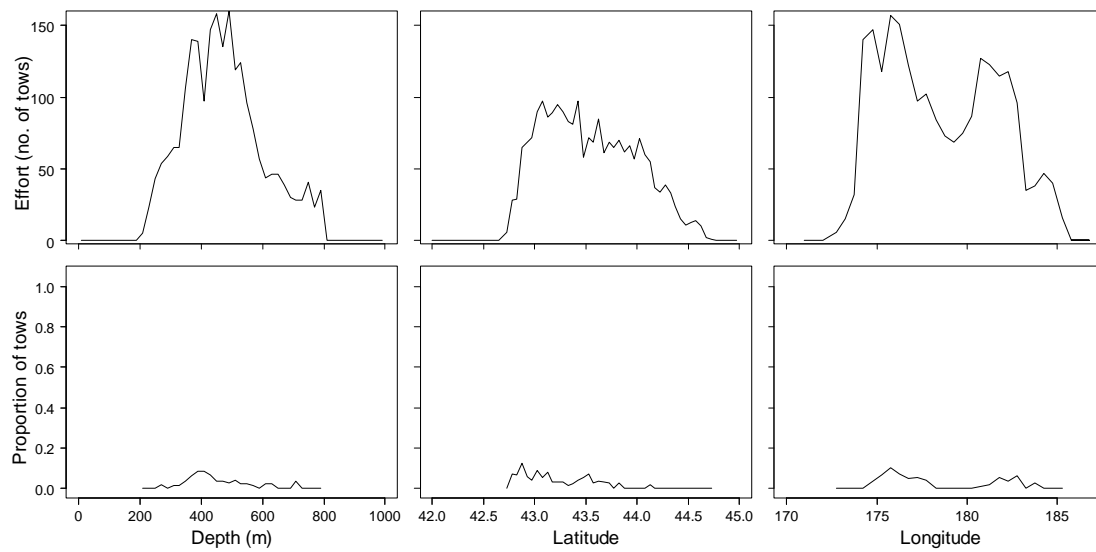
The core survey area and depth range **is** appropriate for this species. Biomass of this species is **poorly** estimated in the core survey area. Biomass has **decreased** since the start of the time series.

Relative biomass estimates

Year	Biomass (t)	cv (%)
1992	5	38
1993	7	43
1994	5	54
1995	2	46
1996	7	62
1997	4	81
1998	3	81
1999	0	-
2000	4	49
2001	13	29
2002	2	74
2003	4	51
2004	4	58
2005	3	67
2006	0	-
2007	0	-
2008	0	100
2009	2	56
2010	5	74



Distribution



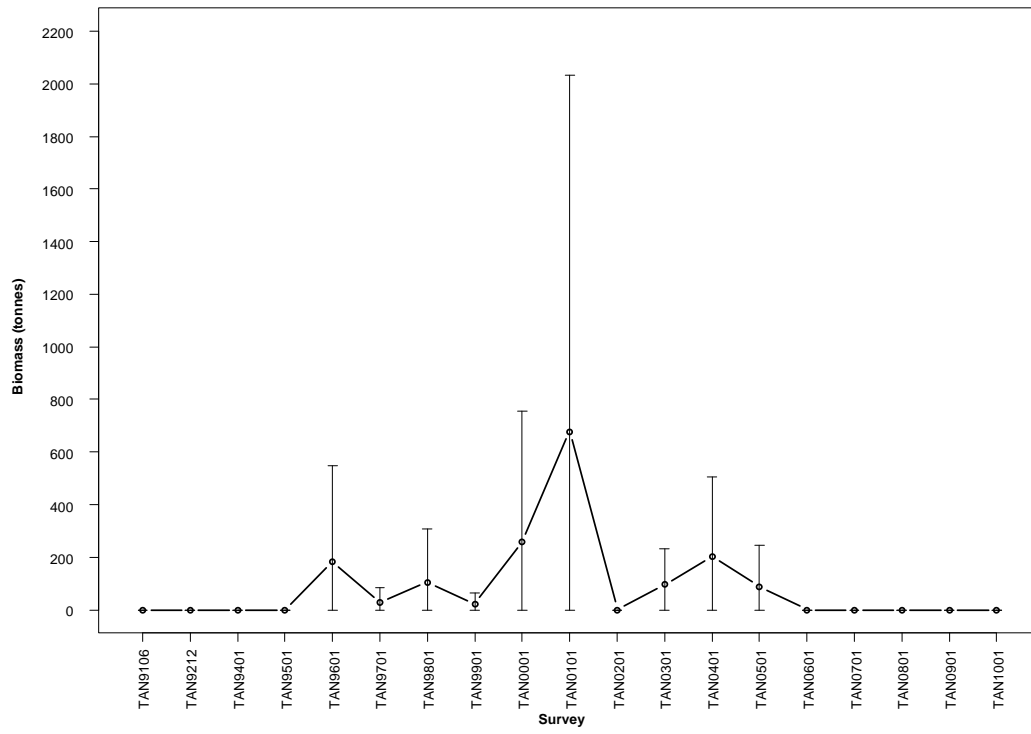


Number of surveys caught 1992–2010 (out of 19):	9
Total catch weight (kg):	863.3
Number measured	185
Length range (mean) (cm, TL)	15–78 (54.1)
Number weighed	145
Length-weight parameters a, b (r^2)	–

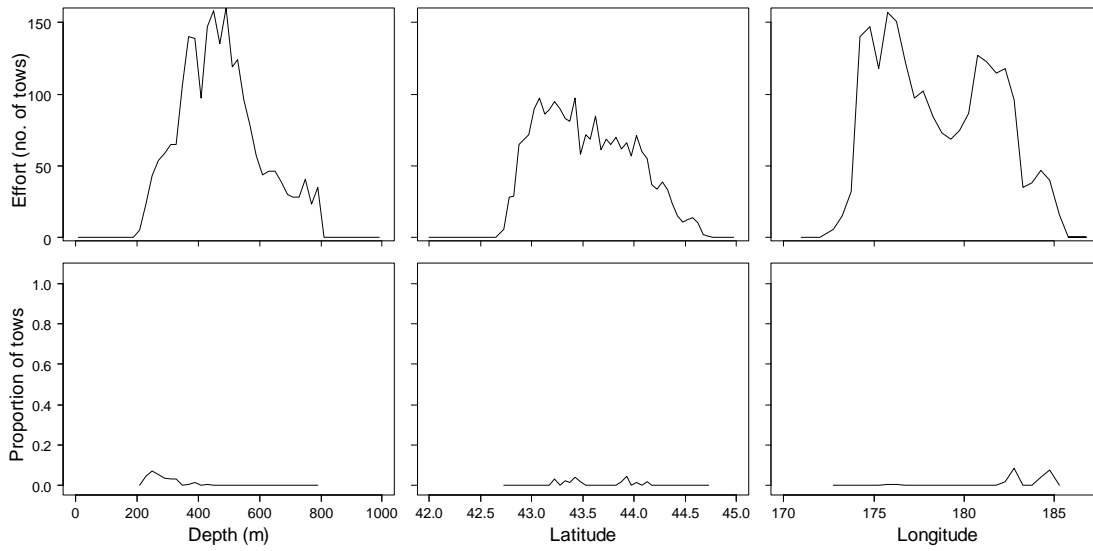
The core survey area and depth range **is not** appropriate for this species. It is found **shallower than 200 m**. Biomass of this species is **poorly** estimated in the core survey area. Biomass has **increased and then decreased** since the start of the time series. Catch rates are highest in **east**.

Relative biomass estimates

Year	Biomass (t)	cv (%)
1992	0	-
1993	0	-
1994	0	-
1995	0	-
1996	182	100
1997	28	100
1998	105	97
1999	22	100
2000	259	96
2001	678	100
2002	0	-
2003	96	70
2004	202	75
2005	89	88
2006	0	-
2007	0	-
2008	0	-
2009	0	-
2010	0	-



Distribution



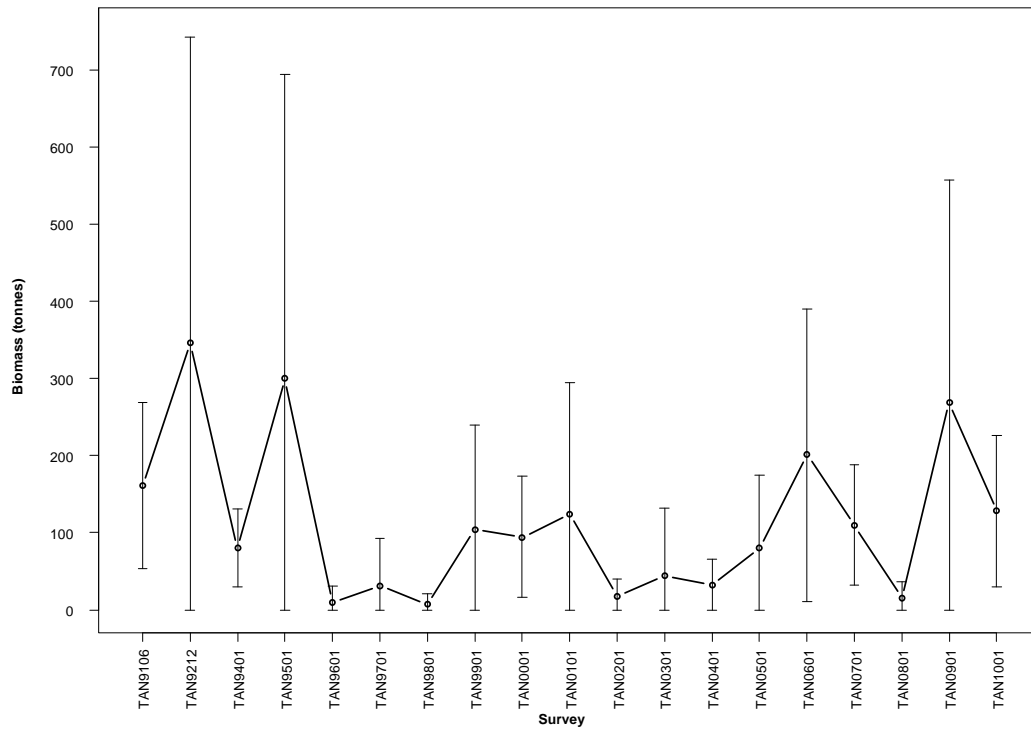


Number of surveys caught 1992–2010 (out of 19):	19
Total catch weight (kg):	1 400.3
Number measured	273
Length range (mean) (cm, FL)	46–93 (60.2)
Number weighed	160
Length-weight parameters a, b (r^2)	–

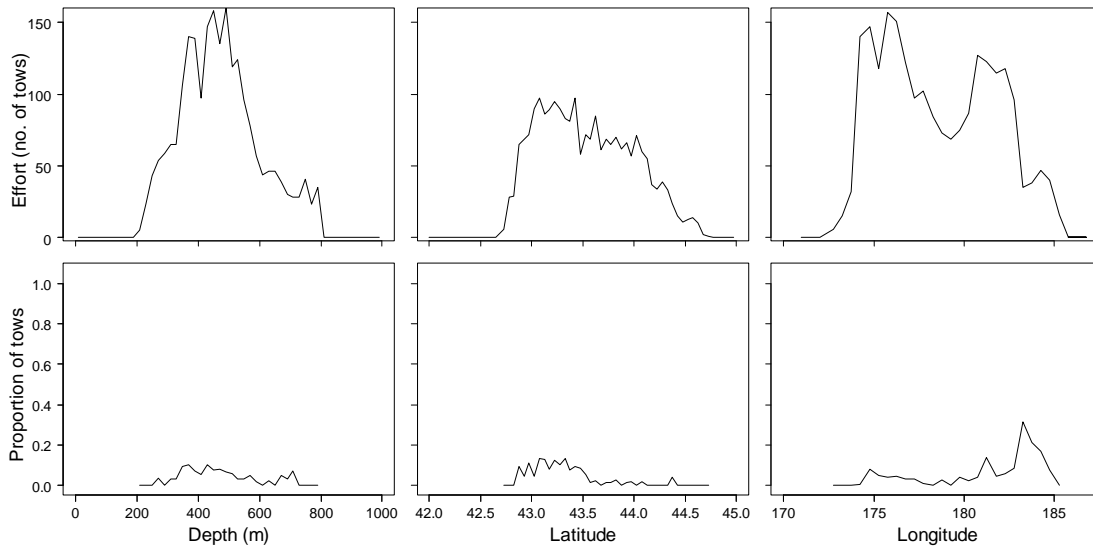
The core survey area and depth range **is** appropriate for this species. Biomass of this species is **poorly** estimated in the core survey area. Biomass **shows no clear trend** since the start of the time series. Catch rates are highest in the **north and east**.

Relative biomass estimates

Year	Biomass (t)	cv (%)
1992	161	34
1993	346	57
1994	80	31
1995	300	66
1996	10	100
1997	31	100
1998	7	100
1999	104	65
2000	94	41
2001	124	68
2002	18	63
2003	44	100
2004	32	54
2005	80	59
2006	201	47
2007	110	36
2008	15	71
2009	269	54
2010	128	38



Distribution



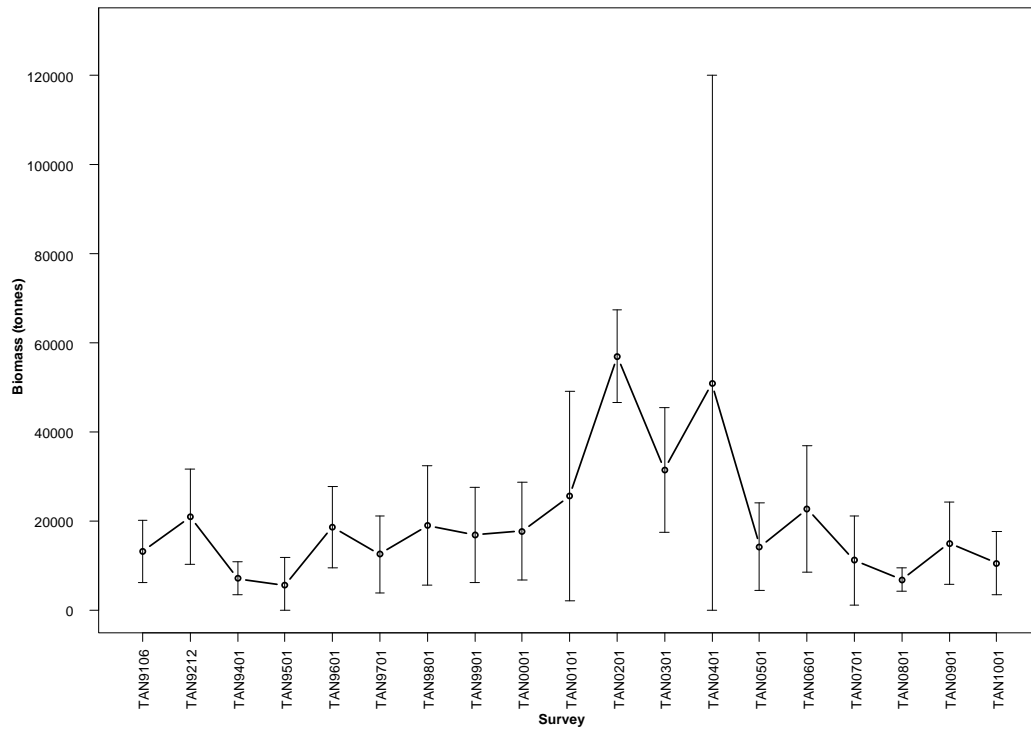


Number of surveys caught 1992–2010 (out of 19):	19
Total catch weight (kg):	104 016
Number measured	19 336
Length range (mean) (cm, TL)	18–40 (28.6)
Number weighed	2 000
Length-weight parameters a, b (r^2)	0.019908, 3.018799 (83.76)

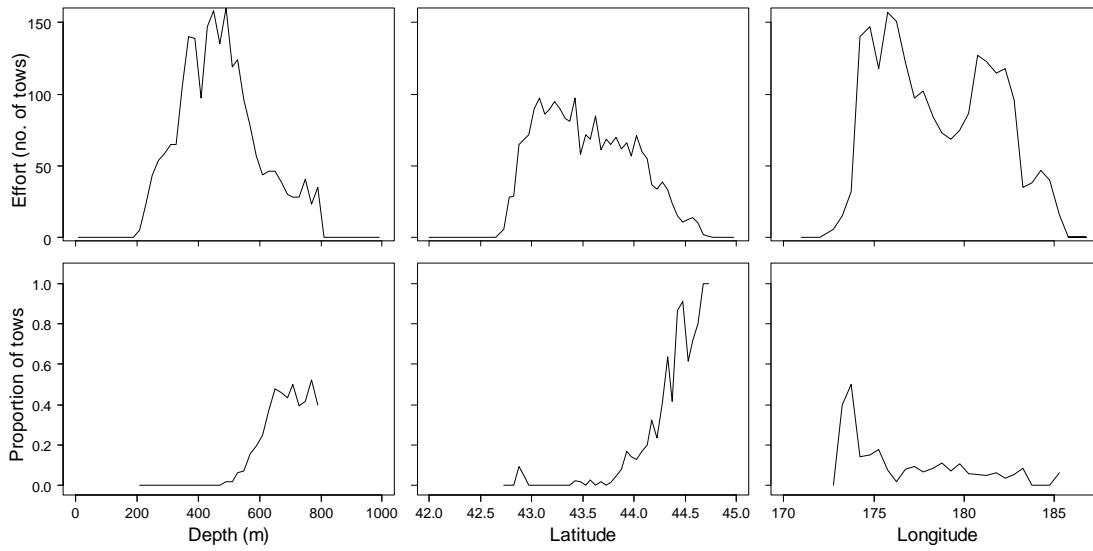
The core survey area and depth range **is not** appropriate for this species. It is found **deeper than 800 m**. Biomass of this species is **moderately well** estimated in the core survey area. Biomass has **increased and then decreased** since the start of the time series. Catch rates are highest in **south and west**. Length frequencies are usually **unimodal**. Mean length has **increased** since the start of the time series. Gonad stage data indicate that most fish are **immature or resting**.

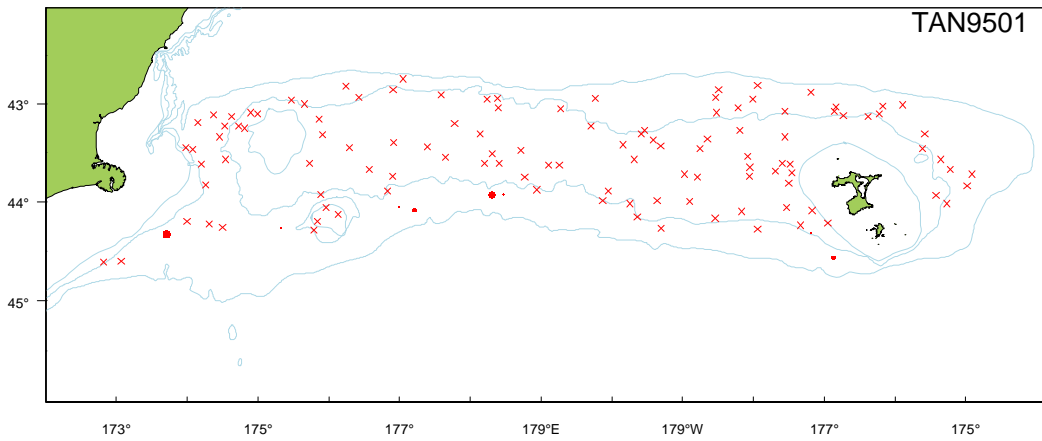
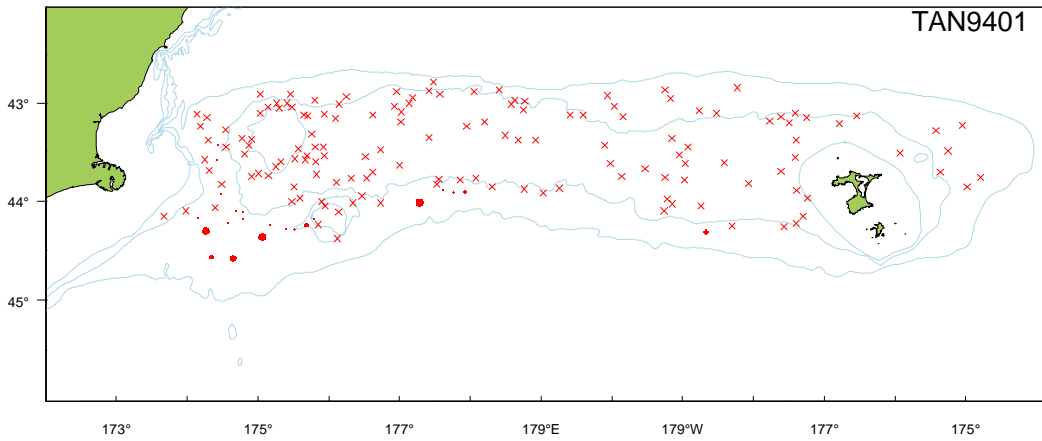
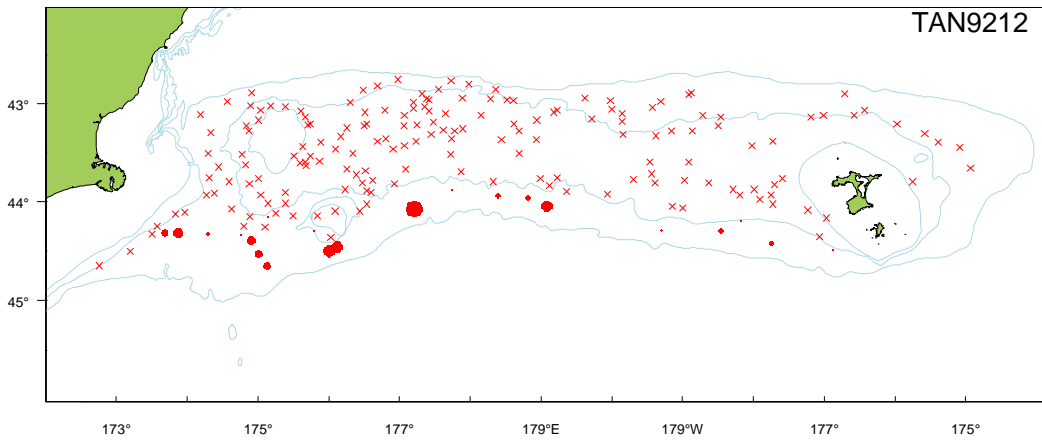
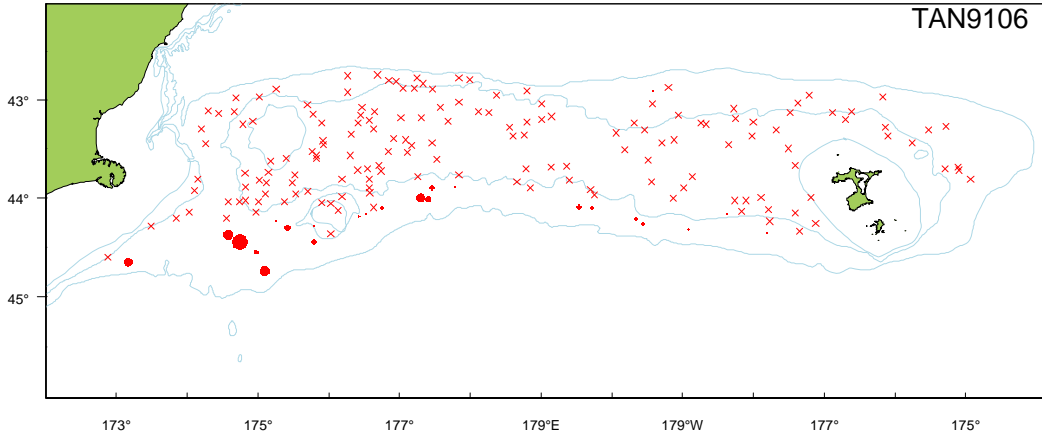
Relative biomass estimates and length summary

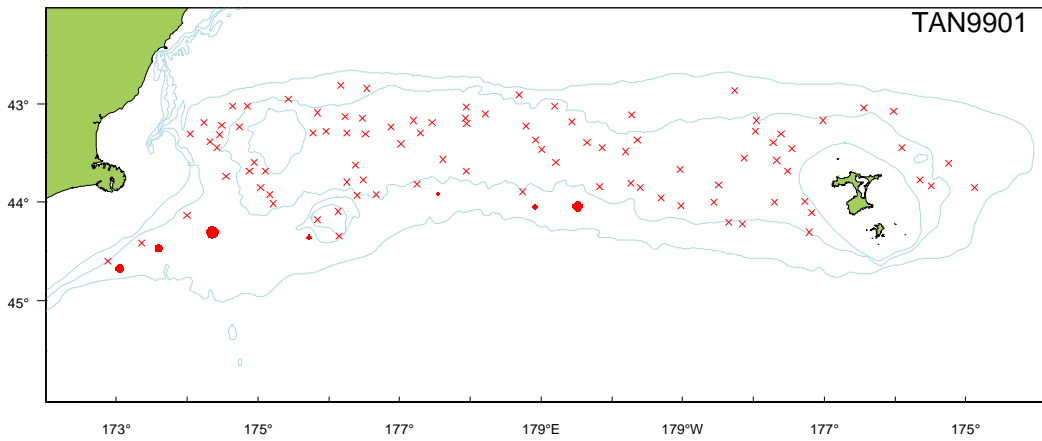
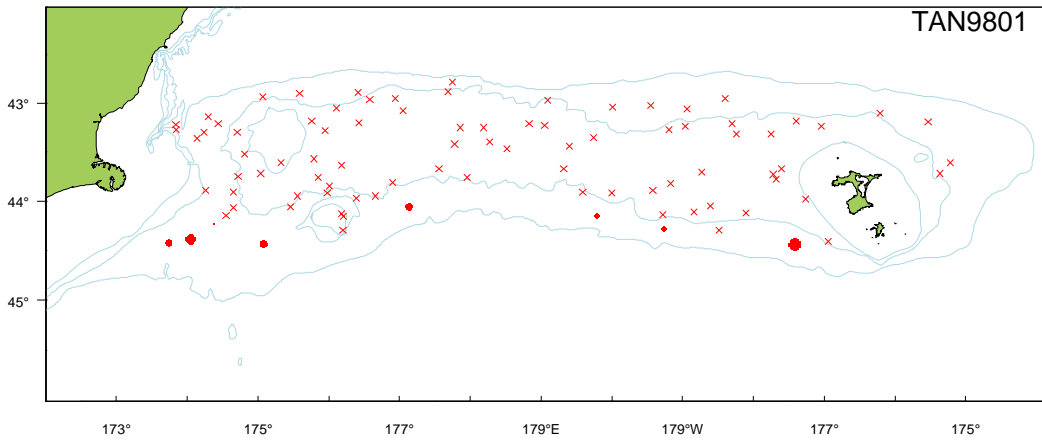
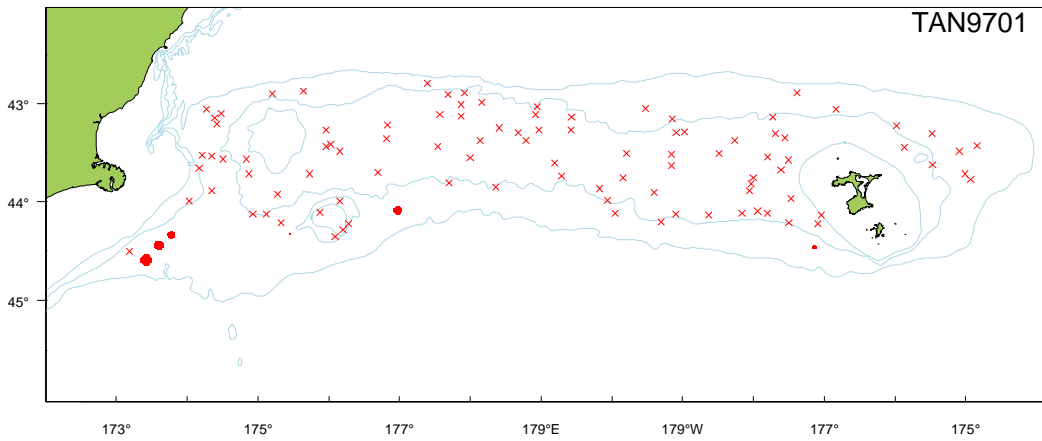
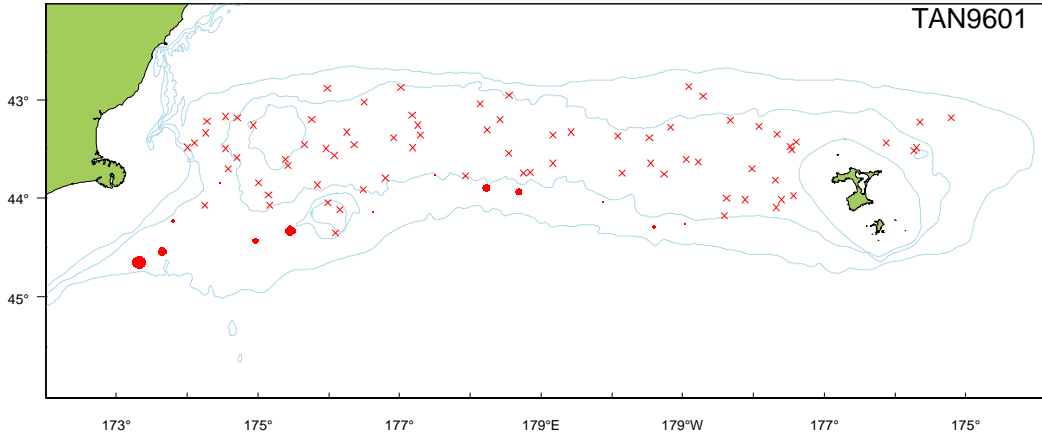
Year	Biomass (t)	cv (%)	Length (cm)			No. measure d
			Min.	Max.	Mean	
1992	13 146	26	22	38	28.0	2 024
1993	20 894	26	22	38	28.7	1 695
1994	7 019	26	21	37	27.9	1 205
1995	5 511	58	23	36	28.6	524
1996	18 597	25	23	37	28.4	1 039
1997	12 493	34	23	38	28.4	568
1998	18 980	36	23	39	28.7	803
1999	16 863	32	22	38	28.7	1 069
2000	17 693	31	22	38	28.4	782
2001	25 595	46	18	38	28.2	1 153
2002	56 944	9	22	36	28.0	1 294
2003	31 489	22	21	40	29.0	760
2004	50 888	68	22	38	28.5	618
2005	14 201	34	23	40	29.4	618
2006	22 625	31	24	39	29.4	741
2007	11 152	45	22	38	29.5	653
2008	6 787	19	22	37	28.9	865
2009	14 980	31	23	38	29.9	725
2010	10 510	34	21	37	28.9	1 075

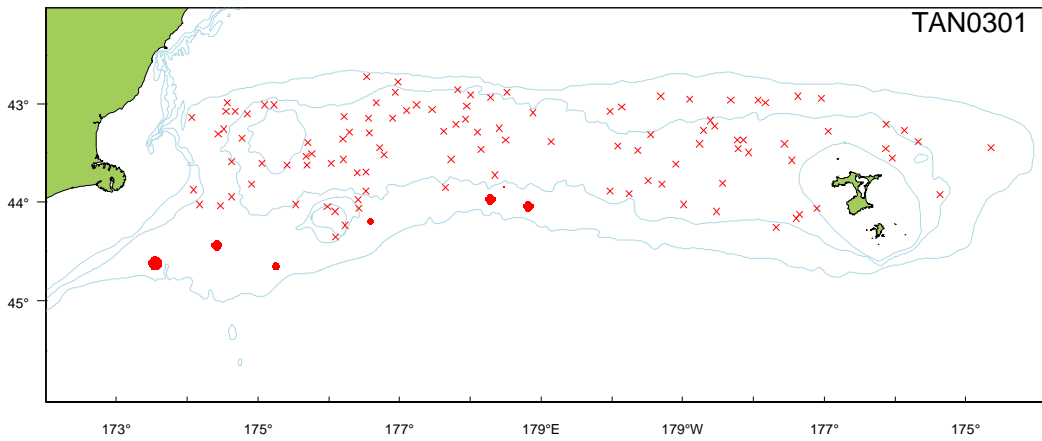
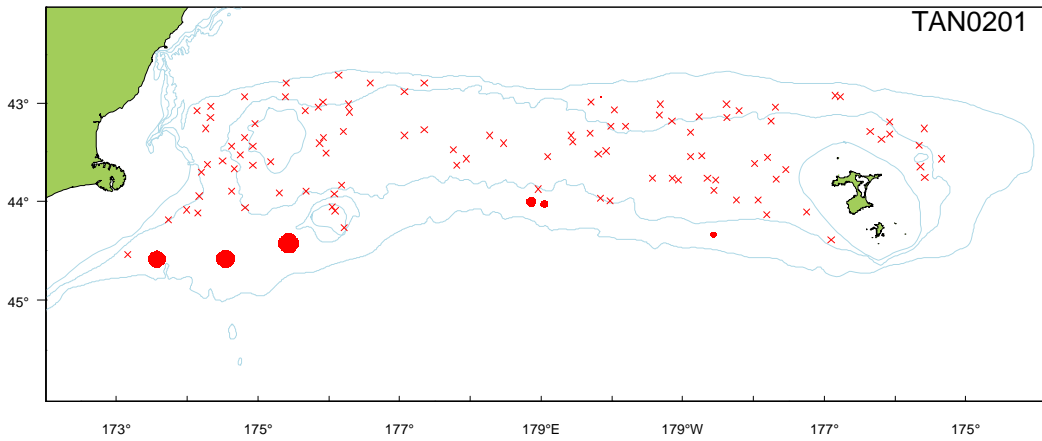
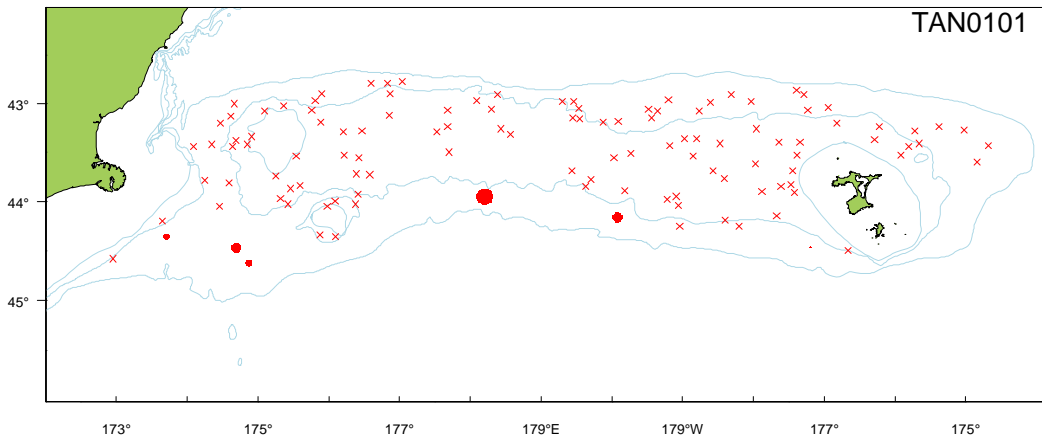
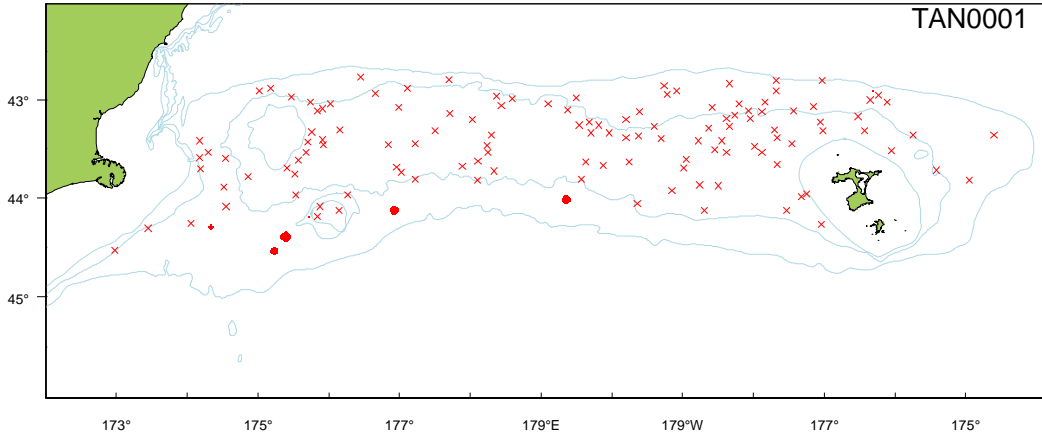


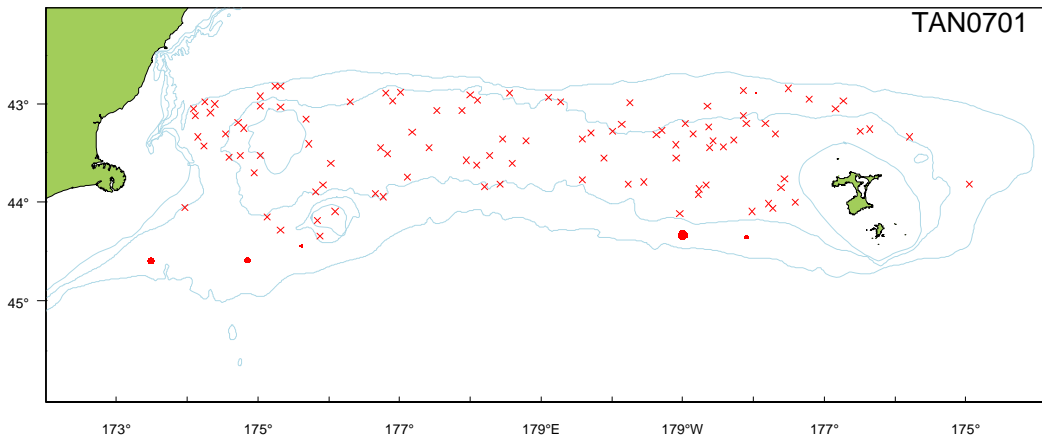
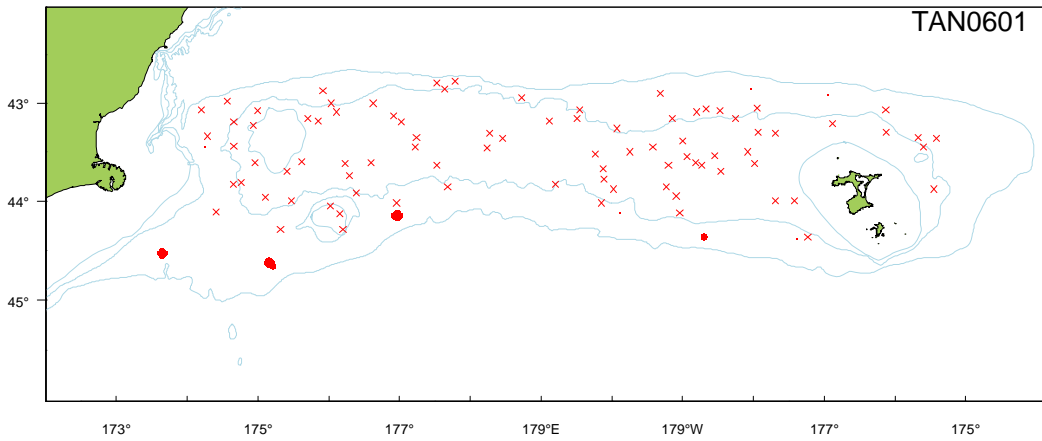
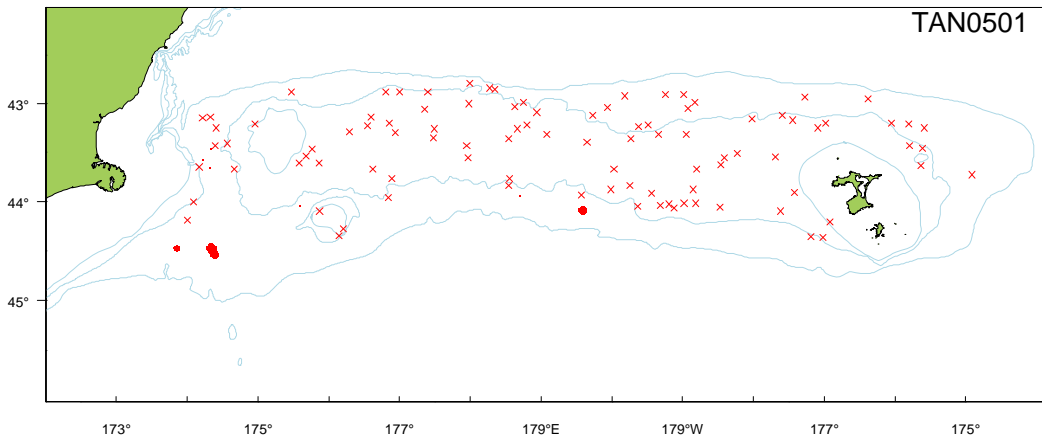
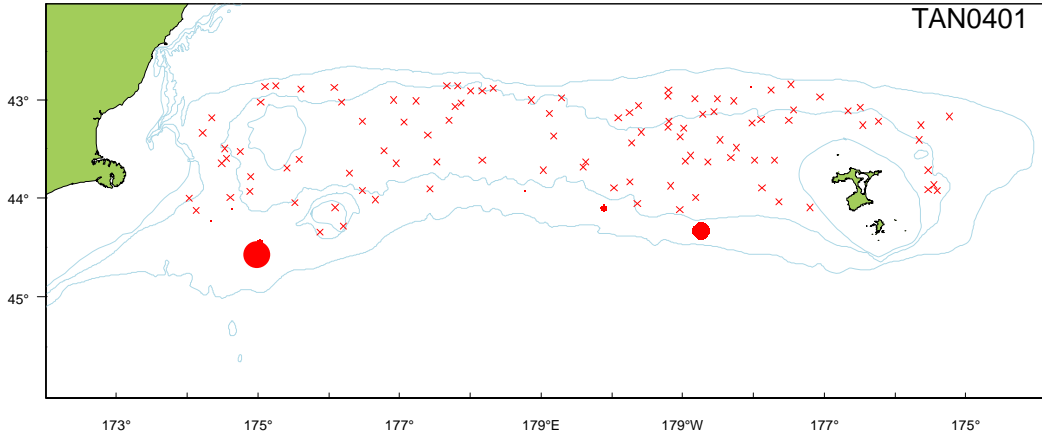
Distribution

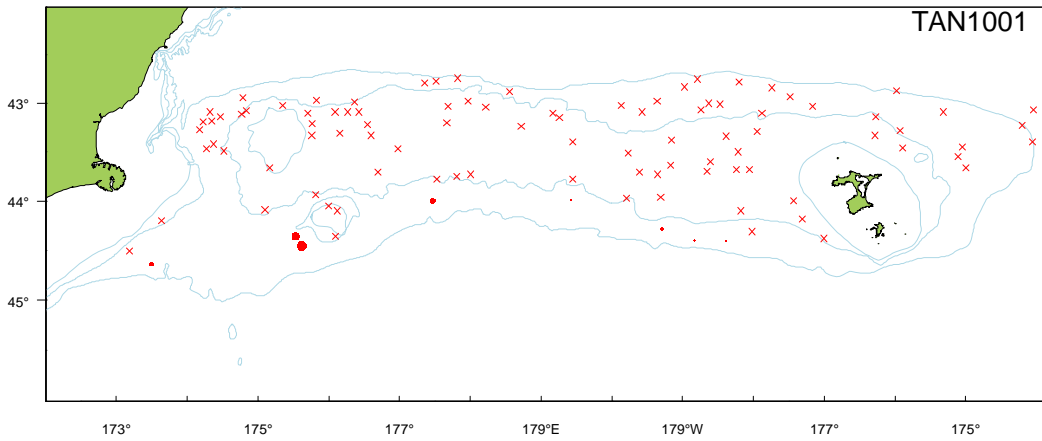
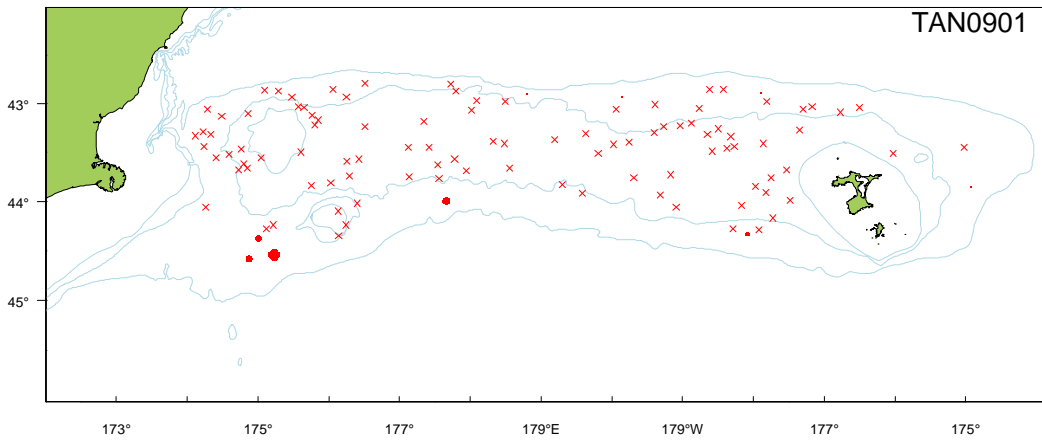
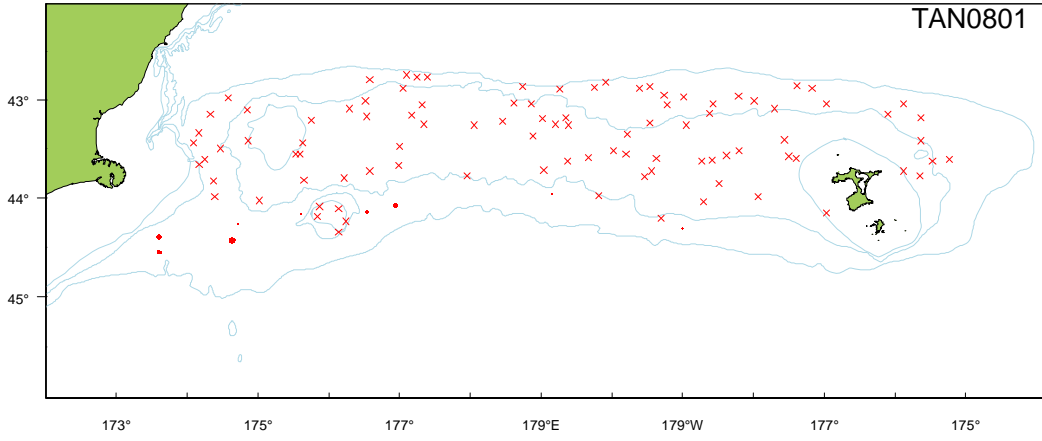




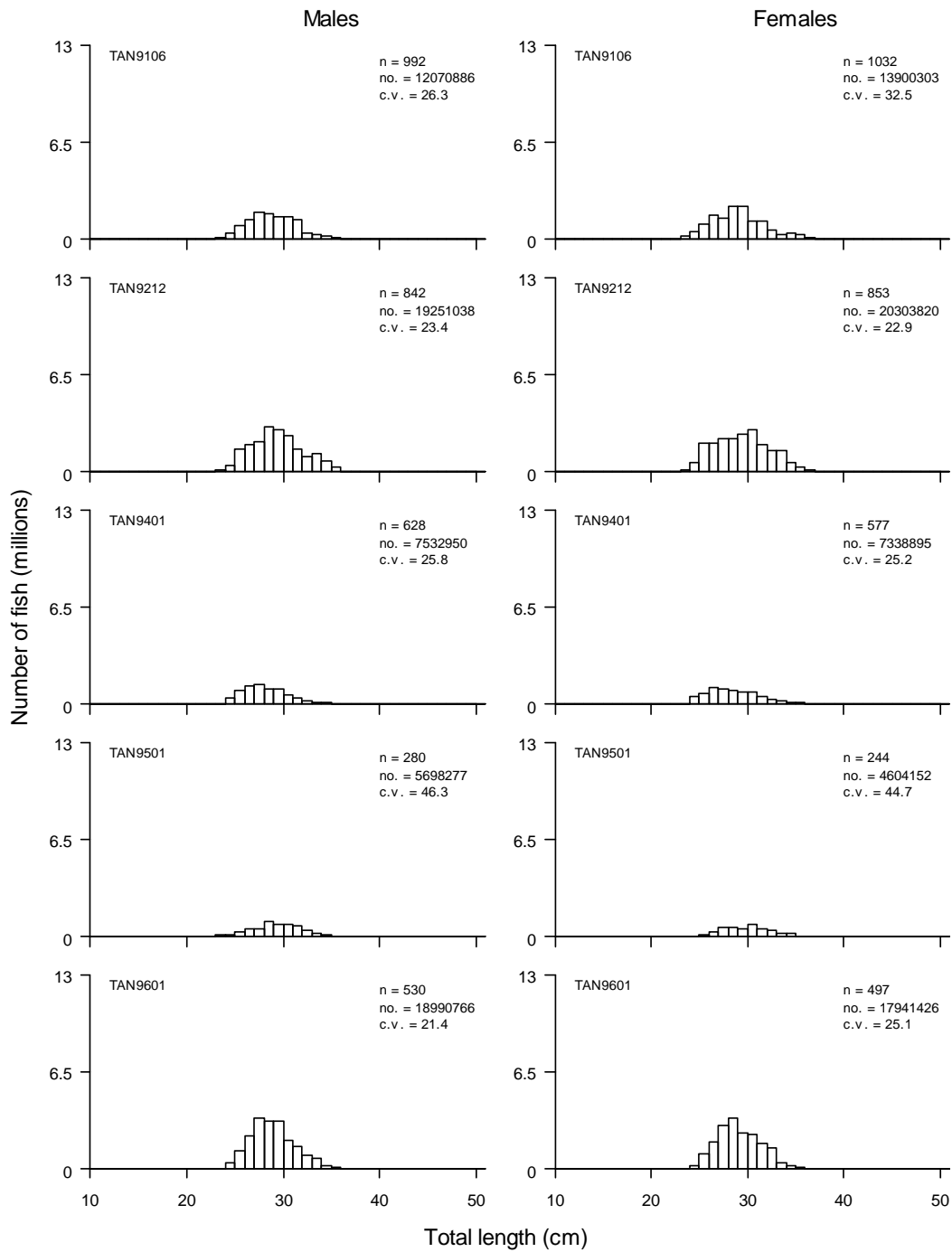


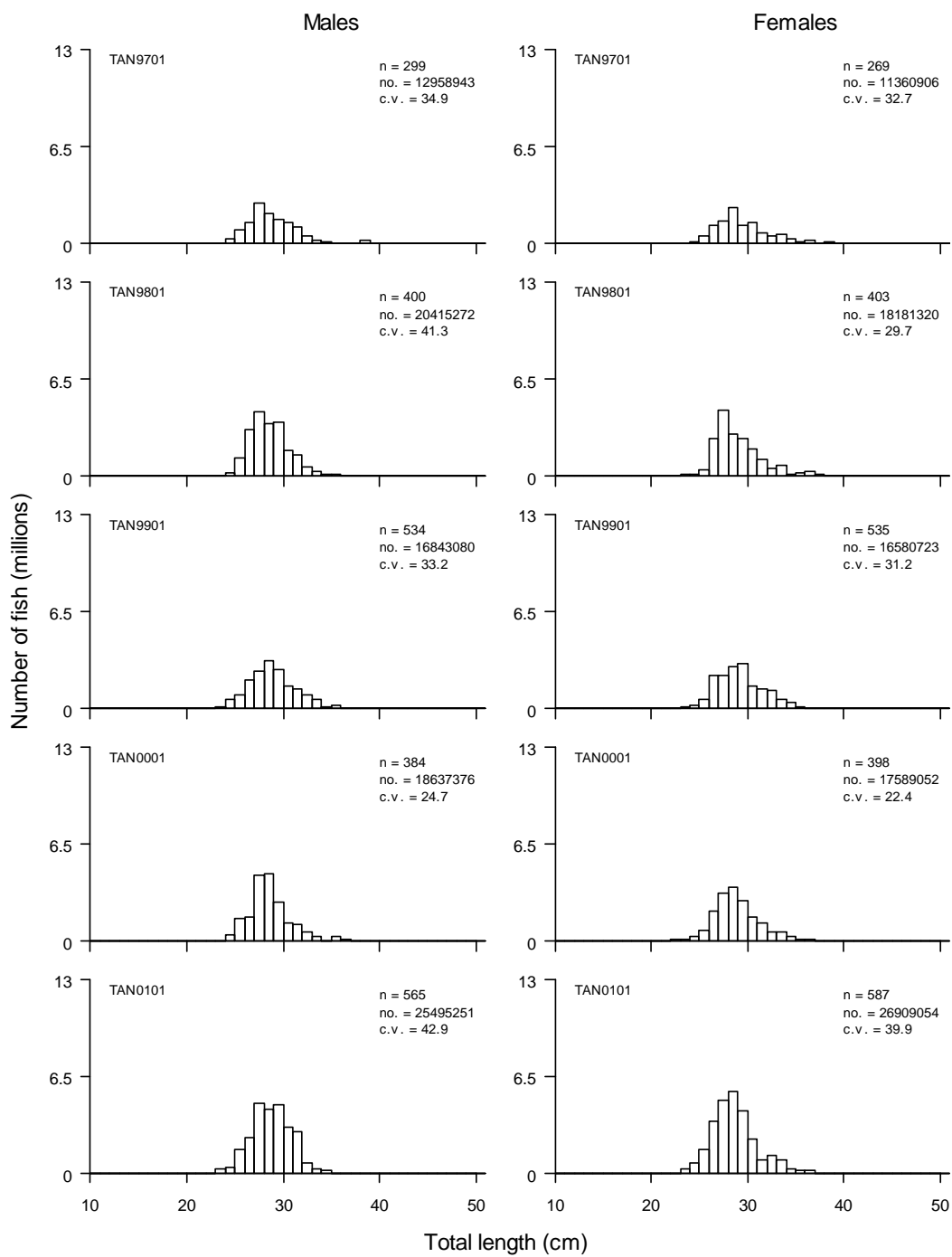


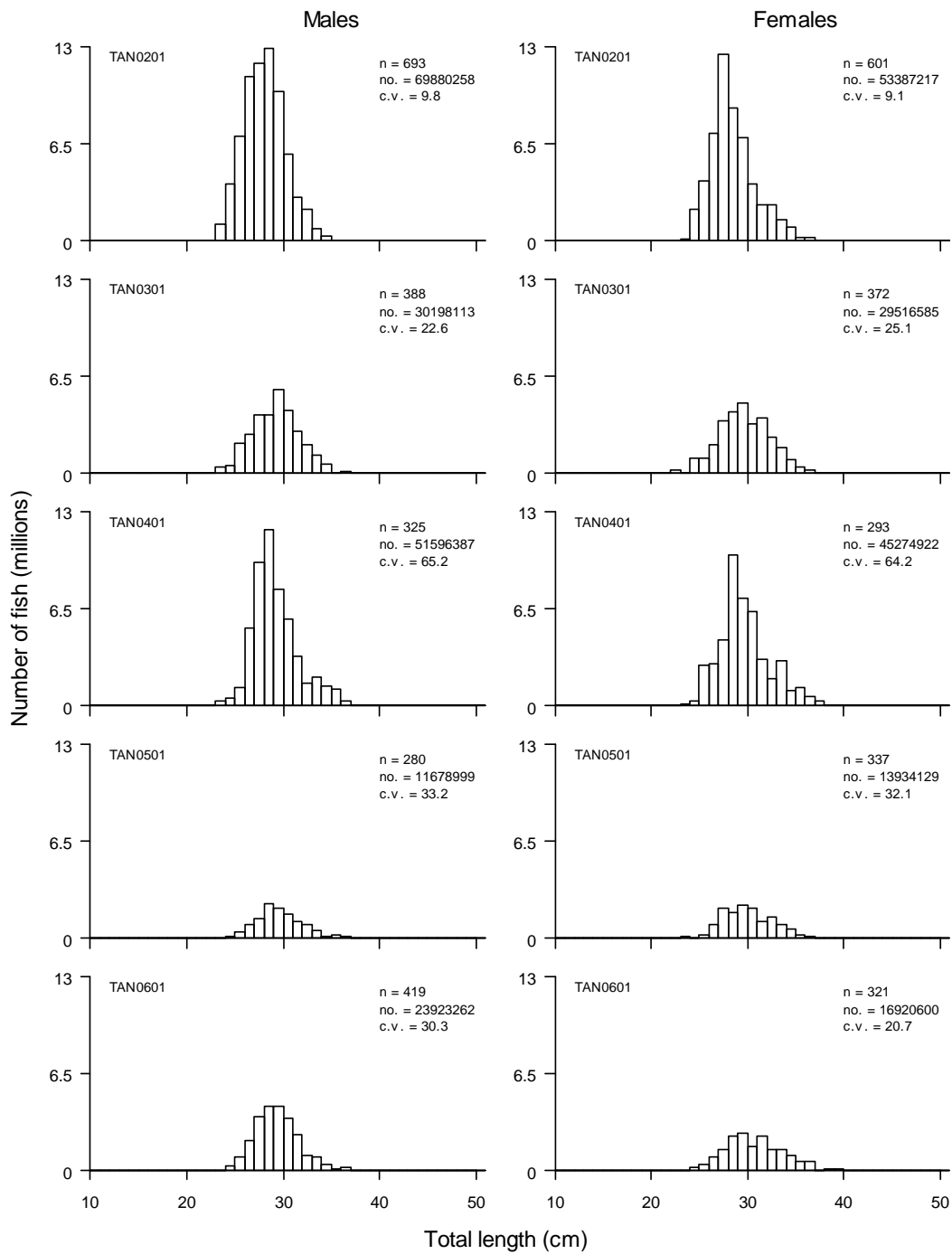


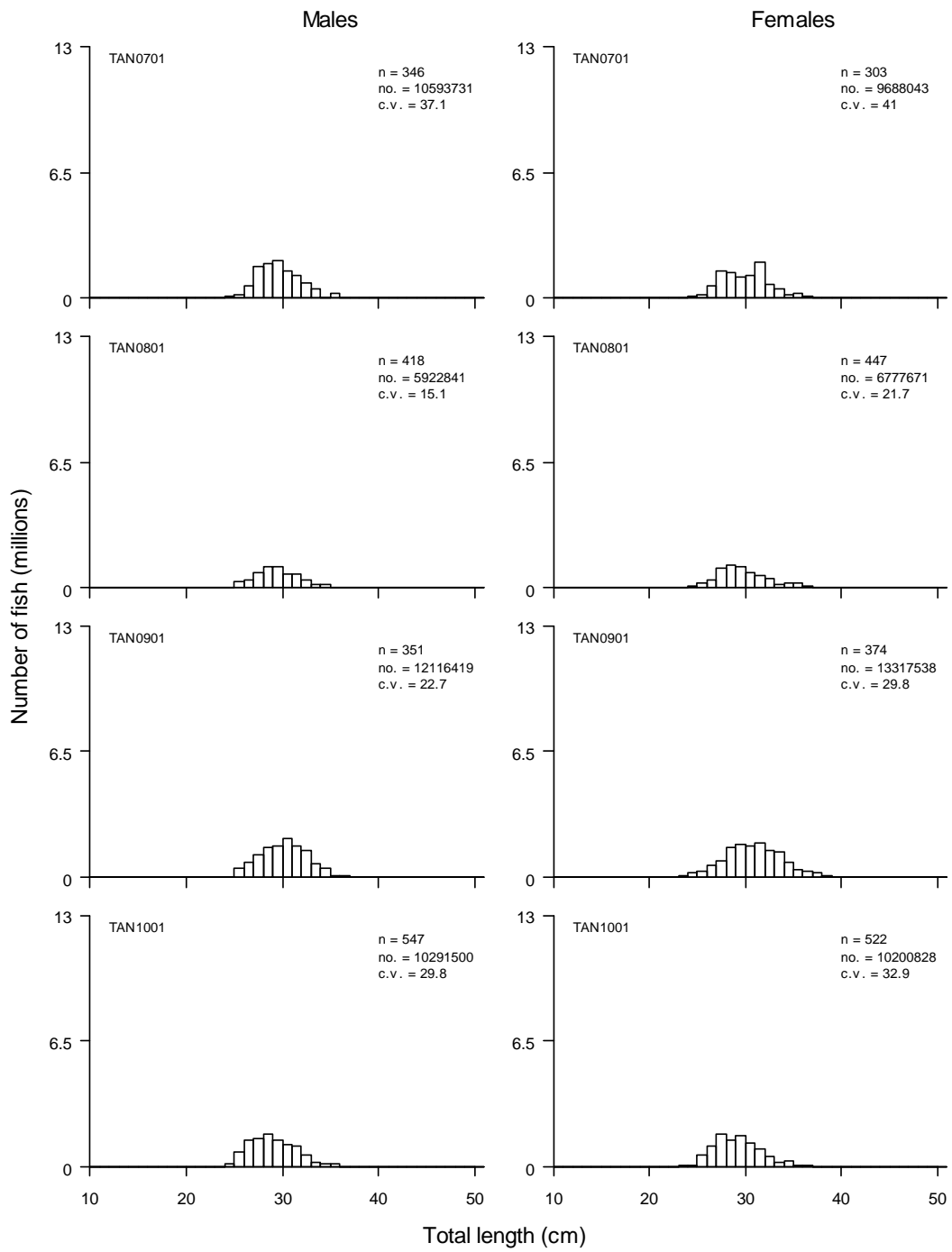


Length Frequencies









Gonad Stage Information (Deepwater)

Males

Year	p_M1	p_M2	p_M3	p_M4	p_M5	p_M6	p_M7	p_M8	p_M9	n_allM
1992	NA	NA	NA	NA	NA	NA	NA	NA	NA	0
1993	NA	NA	NA	NA	NA	NA	NA	NA	NA	0
1994	NA	NA	NA	NA	NA	NA	NA	NA	NA	0
1995	NA	NA	NA	NA	NA	NA	NA	NA	NA	0
1996	NA	NA	NA	NA	NA	NA	NA	NA	NA	0
1997	NA	NA	NA	NA	NA	NA	NA	NA	NA	0
1998	NA	NA	NA	NA	NA	NA	NA	NA	NA	0
1999	NA	NA	NA	NA	NA	NA	NA	NA	NA	0
2000	NA	NA	NA	NA	NA	NA	NA	NA	NA	0
2001	NA	NA	NA	NA	NA	NA	NA	NA	NA	0
2002	NA	NA	NA	NA	NA	NA	NA	NA	NA	0
2003	NA	NA	NA	NA	NA	NA	NA	NA	NA	0
2004	NA	NA	NA	NA	NA	NA	NA	NA	NA	0
2005	NA	NA	NA	NA	NA	NA	NA	NA	NA	0
2006	NA	NA	NA	NA	NA	NA	NA	NA	NA	0
2007	NA	NA	NA	NA	NA	NA	NA	NA	NA	0
2008	NA	NA	NA	NA	NA	NA	NA	NA	NA	0
2009	NA	NA	NA	NA	NA	NA	NA	NA	NA	0
2010	0.7	0.21	0.09	0	0	0	0	0	0	547
ALL	0.7	0.21	0.09	0	0	0	0	0	0	547

Females

Year	p_F1	p_F2	p_F3	p_F4	p_F5	p_F6	p_F7	p_F8	p_F9	n_allF
1992	NA	NA	NA	NA	NA	NA	NA	NA	NA	0
1993	NA	NA	NA	NA	NA	NA	NA	NA	NA	0
1994	NA	NA	NA	NA	NA	NA	NA	NA	NA	0
1995	NA	NA	NA	NA	NA	NA	NA	NA	NA	0
1996	NA	NA	NA	NA	NA	NA	NA	NA	NA	0
1997	NA	NA	NA	NA	NA	NA	NA	NA	NA	0
1998	NA	NA	NA	NA	NA	NA	NA	NA	NA	0
1999	NA	NA	NA	NA	NA	NA	NA	NA	NA	0
2000	NA	NA	NA	NA	NA	NA	NA	NA	NA	0
2001	NA	NA	NA	NA	NA	NA	NA	NA	NA	0
2002	NA	NA	NA	NA	NA	NA	NA	NA	NA	0
2003	NA	NA	NA	NA	NA	NA	NA	NA	NA	0
2004	NA	NA	NA	NA	NA	NA	NA	NA	NA	0
2005	NA	NA	NA	NA	NA	NA	NA	NA	NA	0
2006	NA	NA	NA	NA	NA	NA	NA	NA	NA	0
2007	NA	NA	NA	NA	NA	NA	NA	NA	NA	0
2008	NA	NA	NA	NA	NA	NA	NA	NA	NA	0
2009	NA	NA	NA	NA	NA	NA	NA	NA	NA	0
2010	0.52	0.44	0.04	0	0	0	0	0	0	518
ALL	0.52	0.44	0.04	0	0	0	0	0	0	518

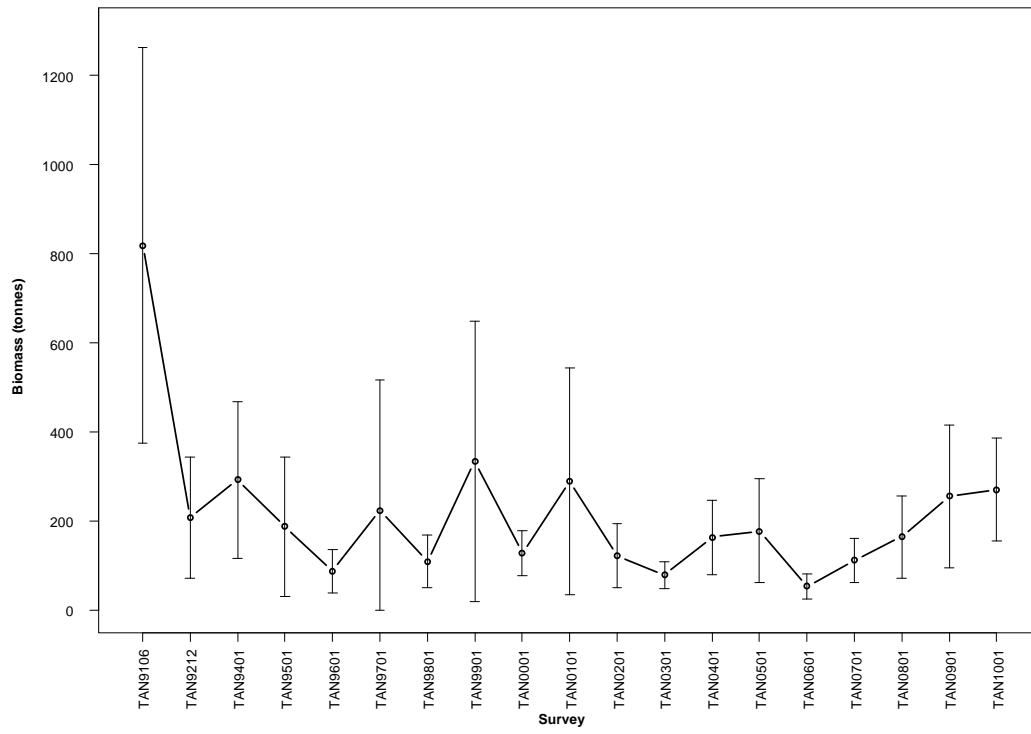


Number of surveys caught 1992–2010 (out of 19):	19
Total catch weight (kg):	2 614
Number measured	415
Length range (mean) (cm, TL)	36–147 (57.9)
Number weighed	358
Length-weight parameters a, b (r^2)	–

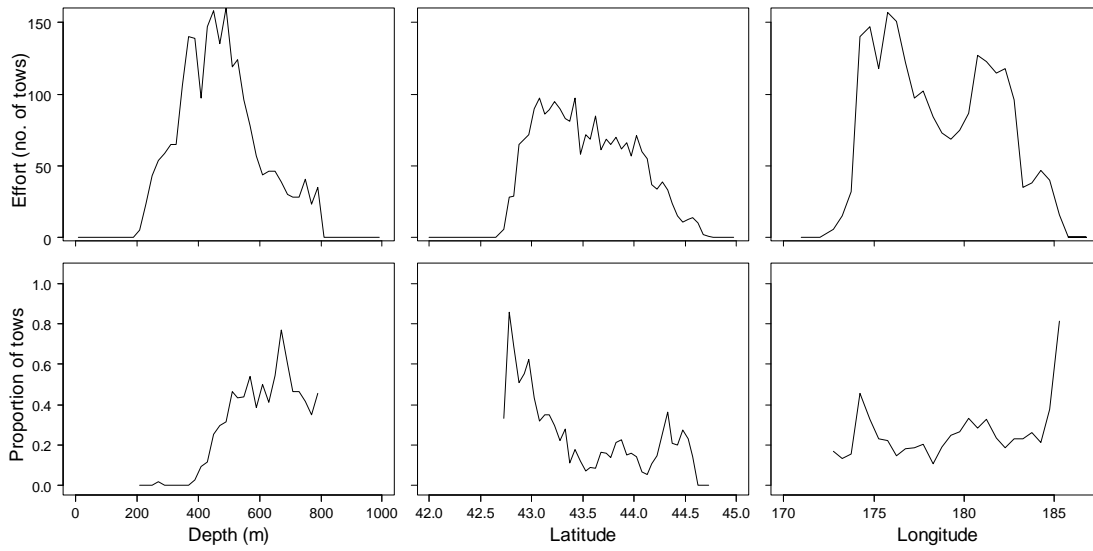
The core survey area and depth range **is not** appropriate for this species. It is found **deeper than 800 m**. Biomass of this species is **moderately well** estimated in the core survey area. Biomass **shows no clear trend** since the start of the time series. Catch rates are highest in the **north**.

Relative biomass estimates

Year	Biomass (t)	cv (%)
1992	818	27
1993	208	33
1994	292	30
1995	187	42
1996	87	28
1997	223	66
1998	109	27
1999	333	47
2000	128	20
2001	289	44
2002	121	30
2003	78	20
2004	163	26
2005	177	33
2006	53	26
2007	111	22
2008	164	28
2009	255	31
2010	270	21



Distribution



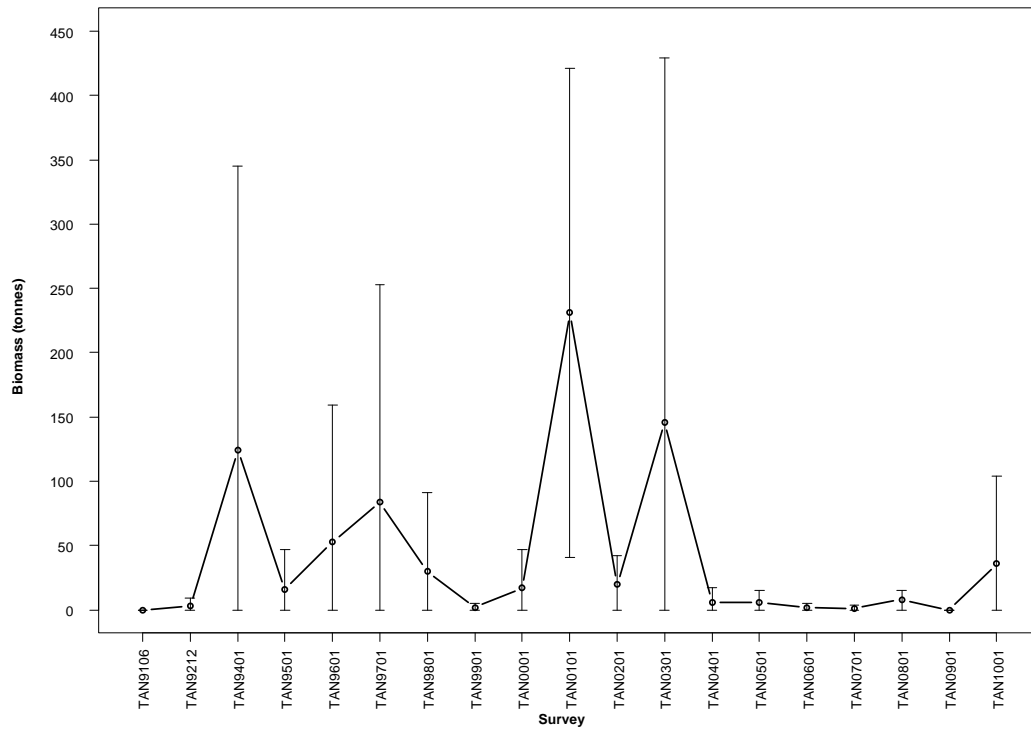


Number of surveys caught 1992–2010 (out of 19):	17
Total catch weight (kg):	492.6
Number measured	666
Length range (mean) (cm, FL)	20–36 (28.2)
Number weighed	258
Length-weight parameters a, b (r^2)	–

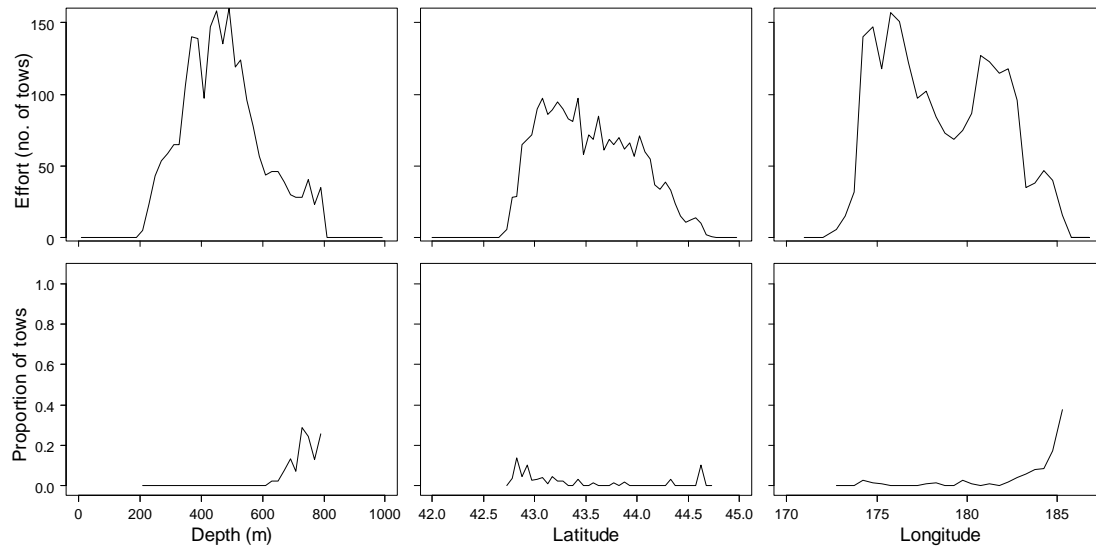
The core survey area and depth range **is not** appropriate for this species. It is found **deeper than 800 m**. Biomass of this species is **poorly** estimated in the core survey area. Biomass **shows no clear trend** since the start of the time series. Catch rates are highest in the **east**.

Relative biomass estimates

Year	Biomass (t)	cv (%)
1992	0	-
1993	3	100
1994	124	89
1995	16	100
1996	53	100
1997	84	100
1998	30	100
1999	2	100
2000	17	91
2001	231	41
2002	20	56
2003	146	97
2004	6	100
2005	6	74
2006	2	61
2007	1	75
2008	8	51
2009	0	-
2010	36	96



Distribution



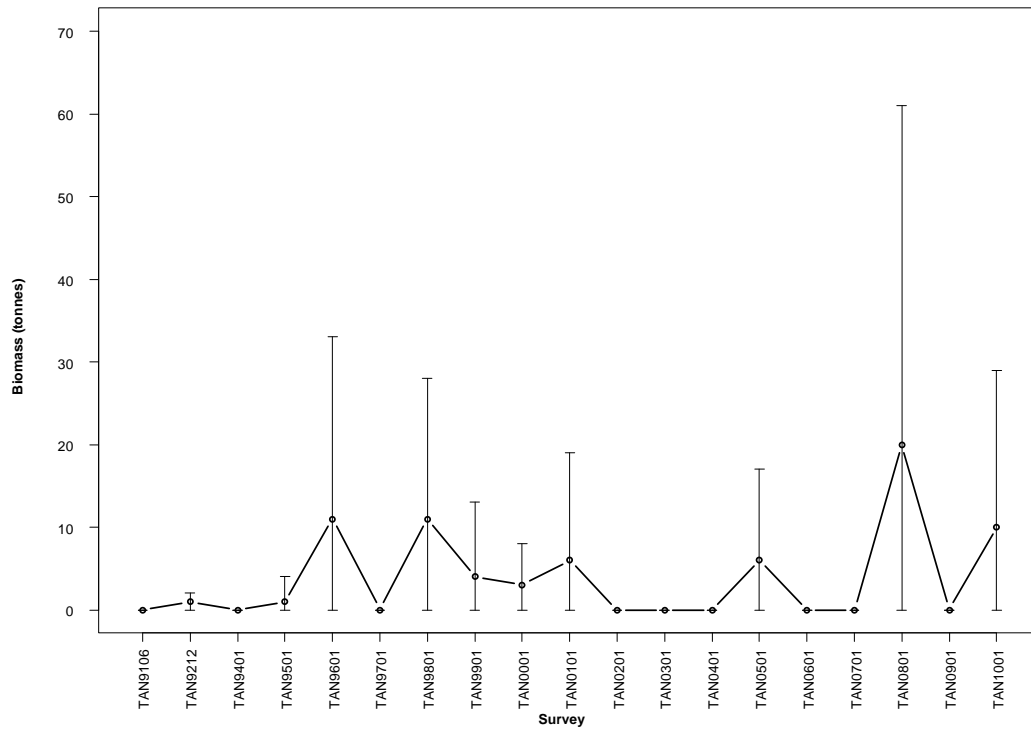


Number of surveys caught 1992–2010 (out of 19):	11
Total catch weight (kg):	54.4
Number measured	9
Length range (mean) (cm, FL)	44–59 (48.2)
Number weighed	3
Length-weight parameters a, b (r^2)	–

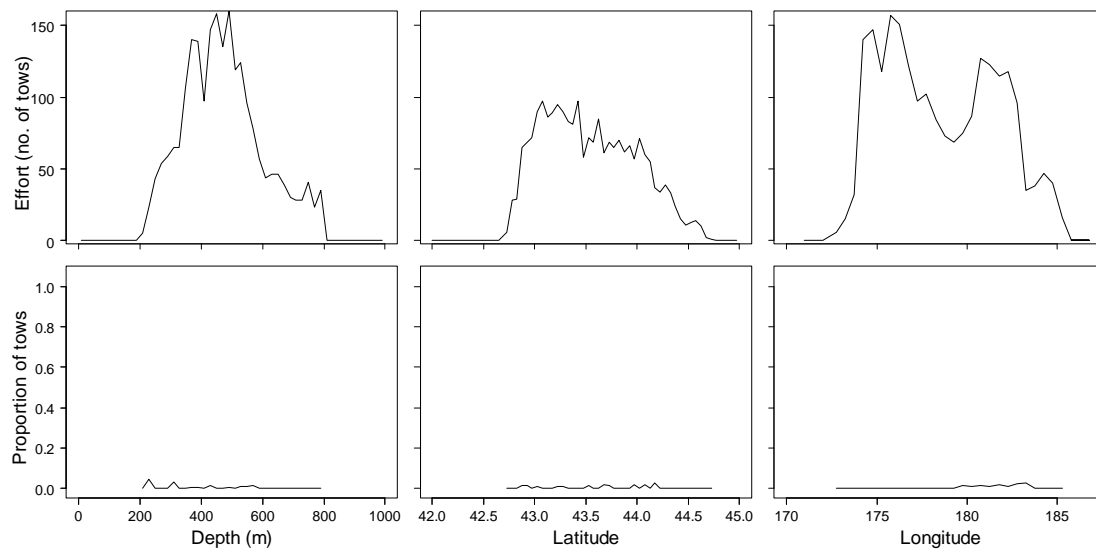
There were **too few fish caught to determine whether the core survey area is appropriate for this species**. Biomass of this species is **poorly** estimated in the core survey area. Biomass shows **no clear trend** since the start of the time series.

Relative biomass estimates

Year	Biomass (t)	cv (%)
1992	0	-
1993	1	100
1994	0	-
1995	1	100
1996	11	100
1997	0	-
1998	11	77
1999	4	100
2000	3	100
2001	6	100
2002	0	-
2003	0	-
2004	0	-
2005	6	100
2006	0	-
2007	0	-
2008	20	100
2009	0	-
2010	10	100



Distribution



Longfinned beryx (*Beryx decadactylus*)

BYD

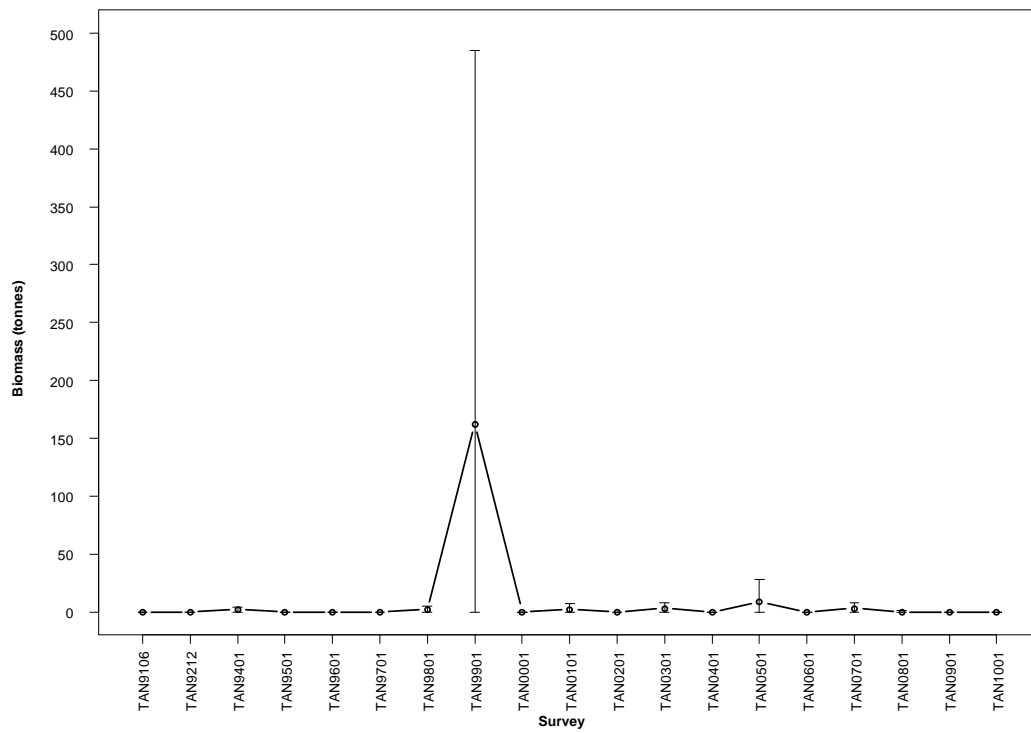


Number of surveys caught 1992–2010 (out of 19):	9
Total catch weight (kg):	45.5
Number measured	47
Length range (mean) (cm, FL)	18–49 (32.5)
Number weighed	40
Length-weight parameters a, b (r^2)	–

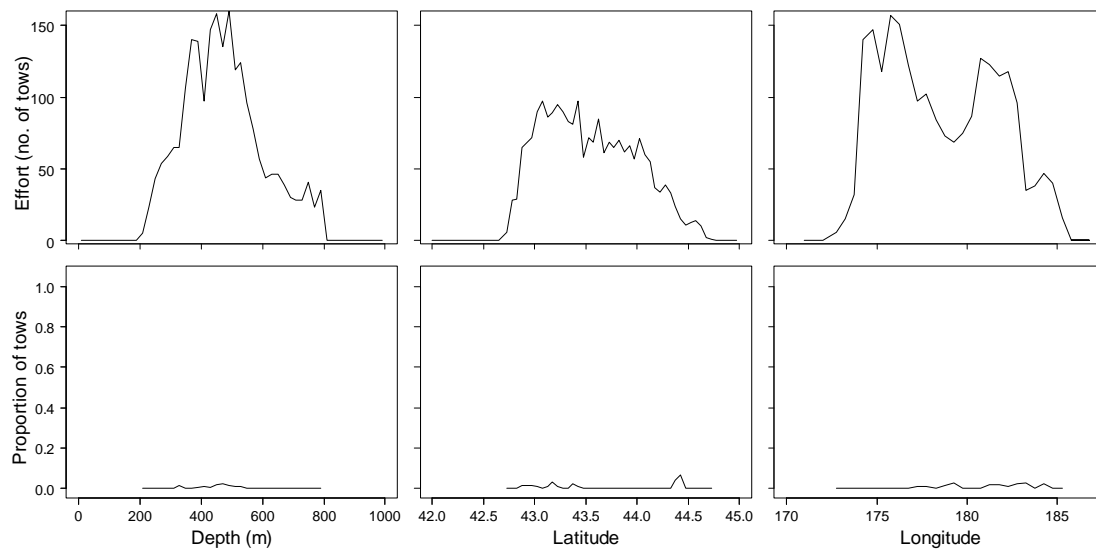
There were **too few fish caught to determine whether the core survey area is appropriate for this species**. Biomass of this species is **poorly** estimated in the core survey area. Biomass **shows no clear trend** since the start of the time series.

Relative biomass estimates

Year	Biomass (t)	cv (%)
1992	0	-
1993	0	-
1994	2	52
1995	0	-
1996	0	-
1997	0	-
1998	2	100
1999	162	100
2000	0	-
2001	2	100
2002	0	-
2003	3	82
2004	0	100
2005	9	100
2006	0	-
2007	3	100
2008	0	71
2009	0	-
2010	0	-



Distribution



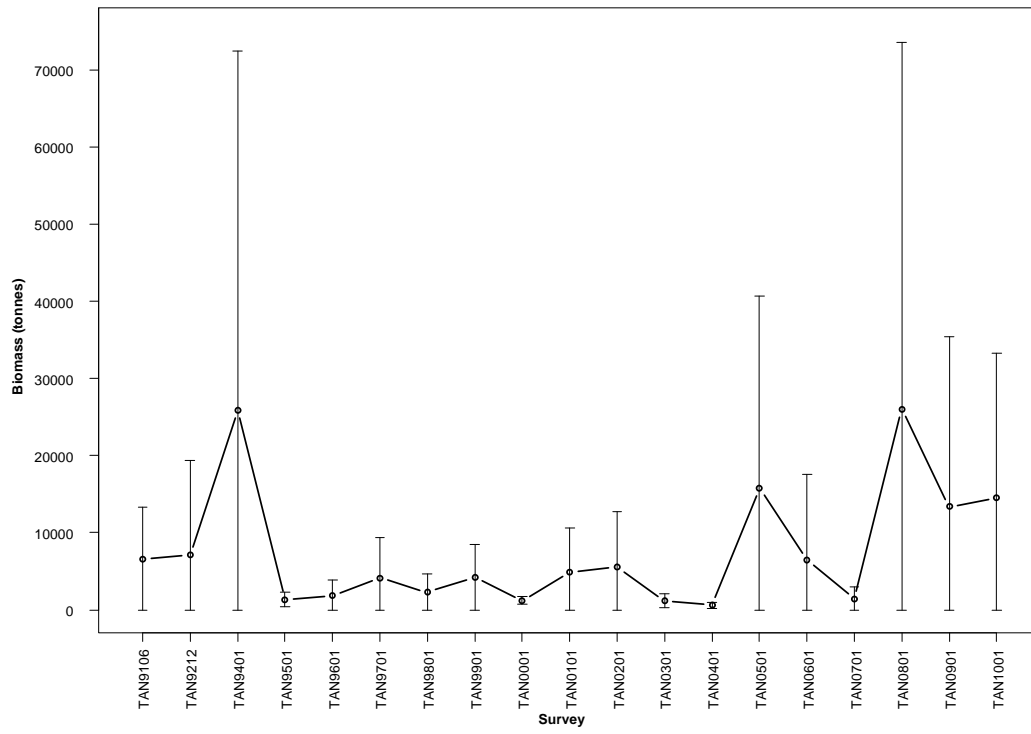


Number of surveys caught 1992–2010 (out of 19):	19
Total catch weight (kg):	77 509.4
Number measured	20 533
Length range (mean) (cm, FL)	16–52 (26.1)
Number weighed	4 766
Length-weight parameters a, b (r^2)	0.019375, 3.048875 (98.29)

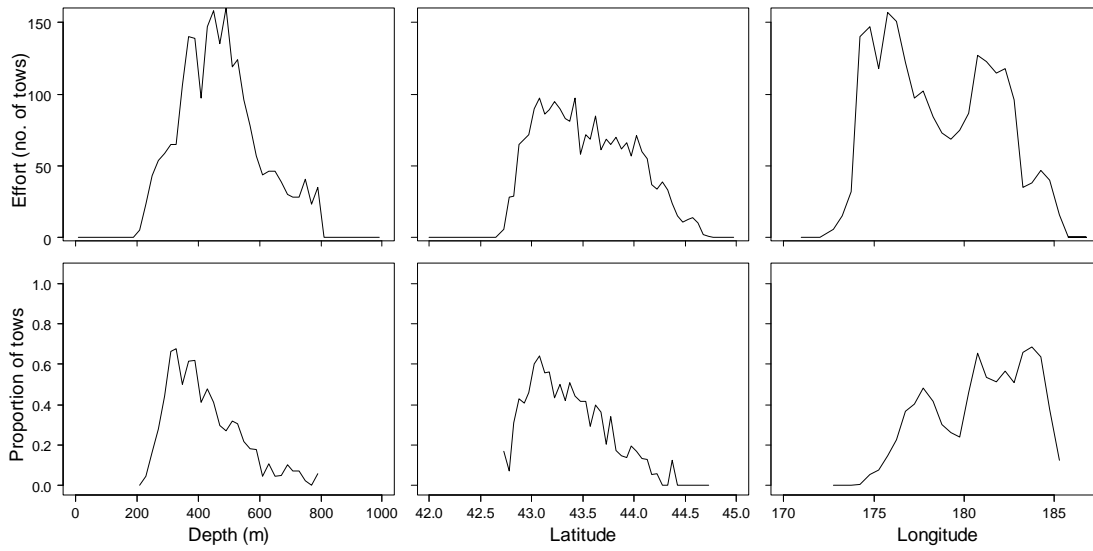
The core survey area and depth range **is** appropriate for this species. Biomass of this species is **poorly** estimated in the core survey area. Biomass has **decreased and then increased** since the start of the time series. Catch rates are highest in the **north**. Length frequencies are usually **unimodal**. Mean length **shows no clear trend** since the start of the time series. Gonad stage data indicate that most fish are **immature or resting**.

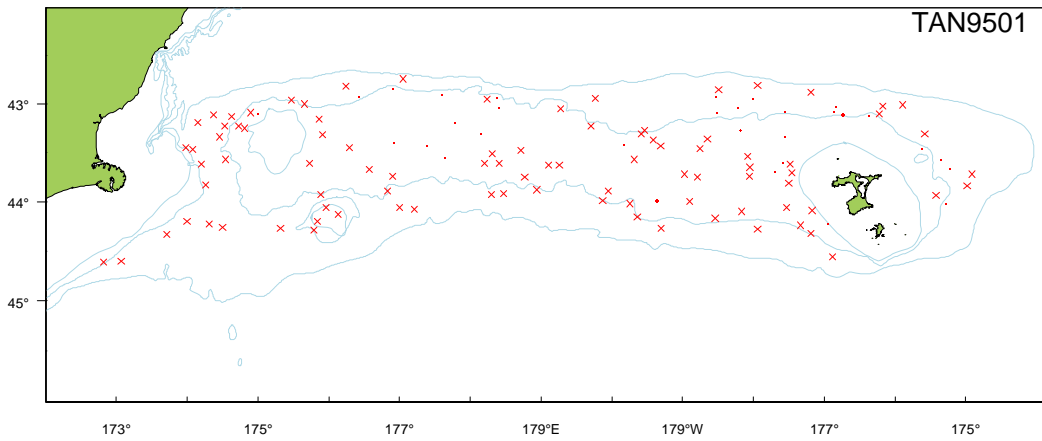
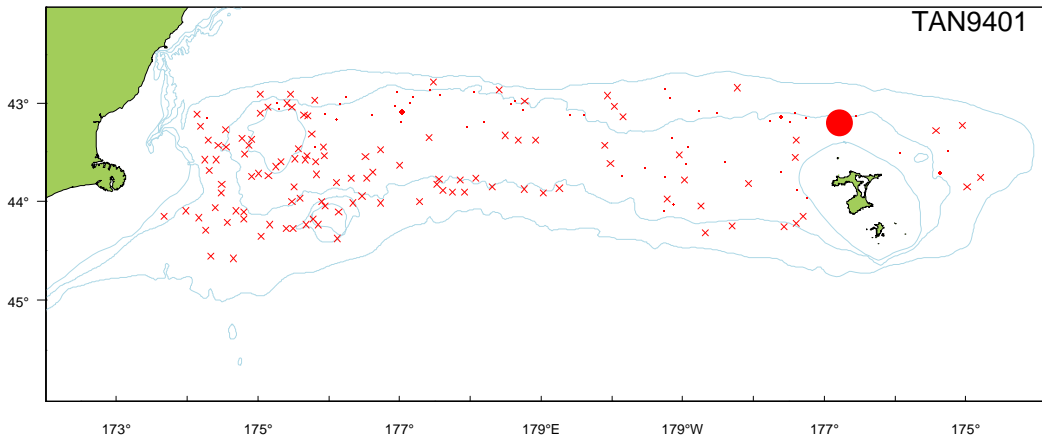
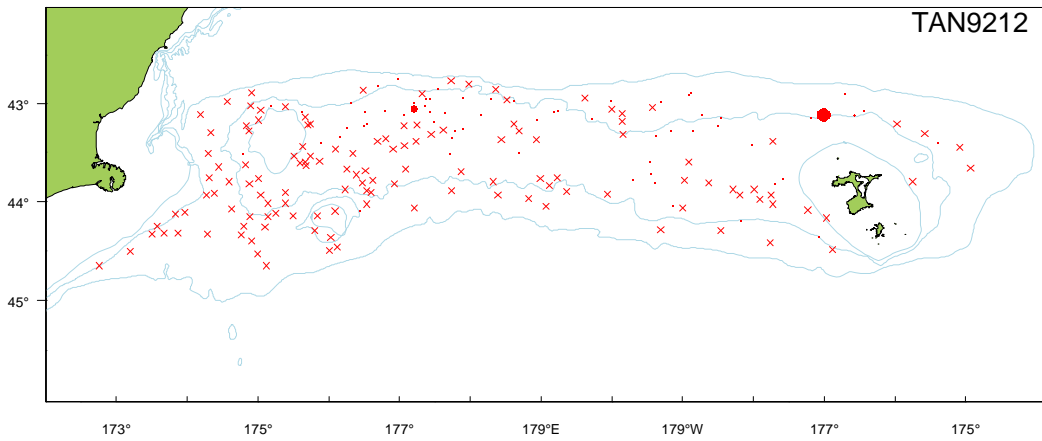
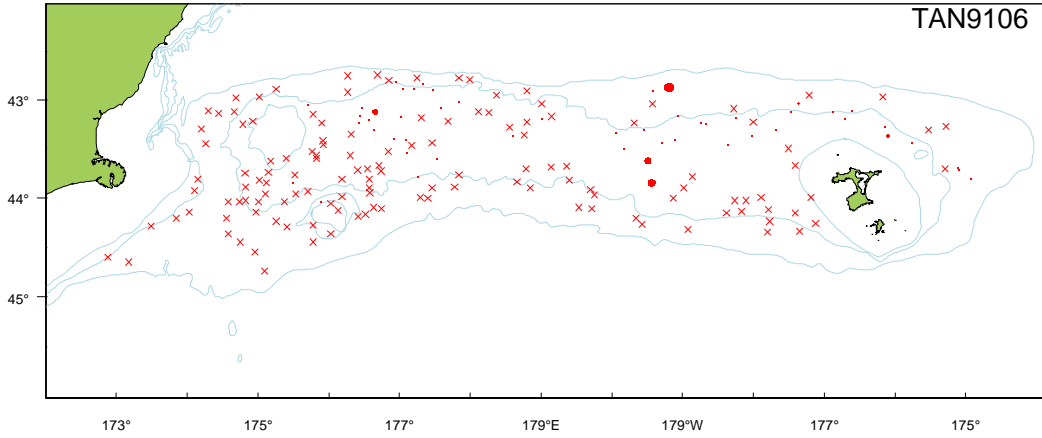
Relative biomass estimates and length summary

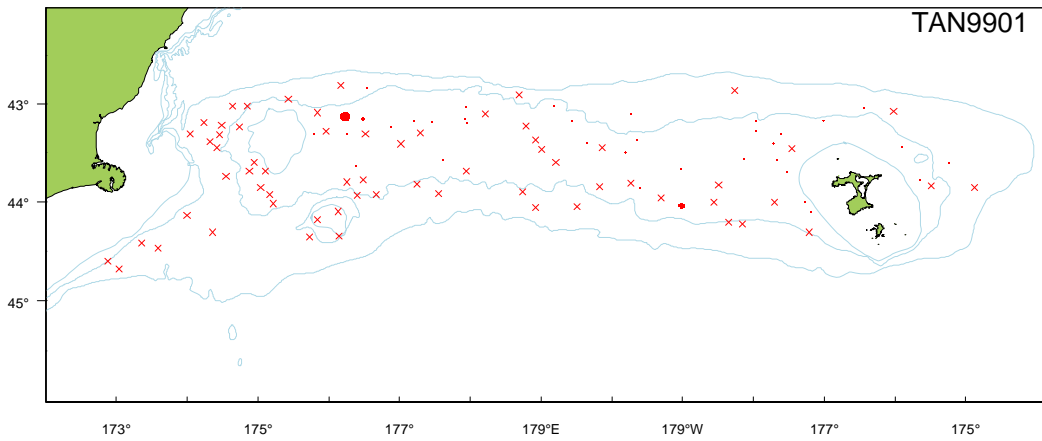
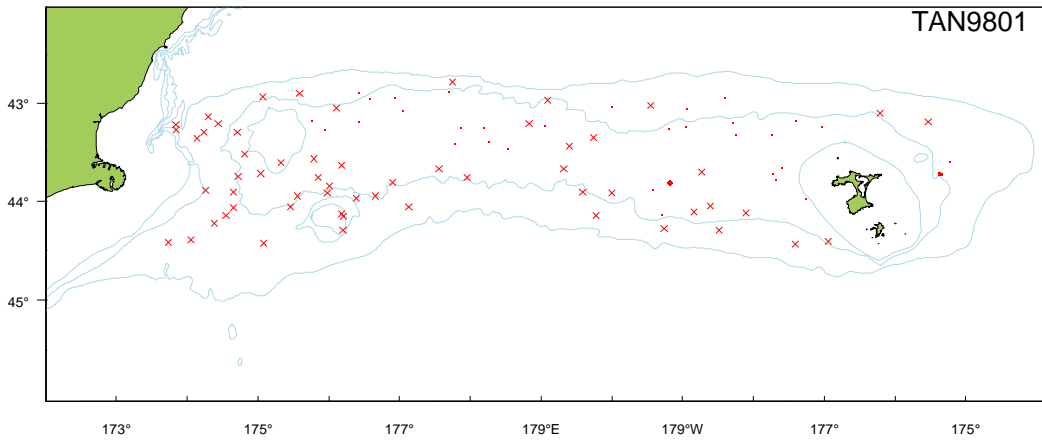
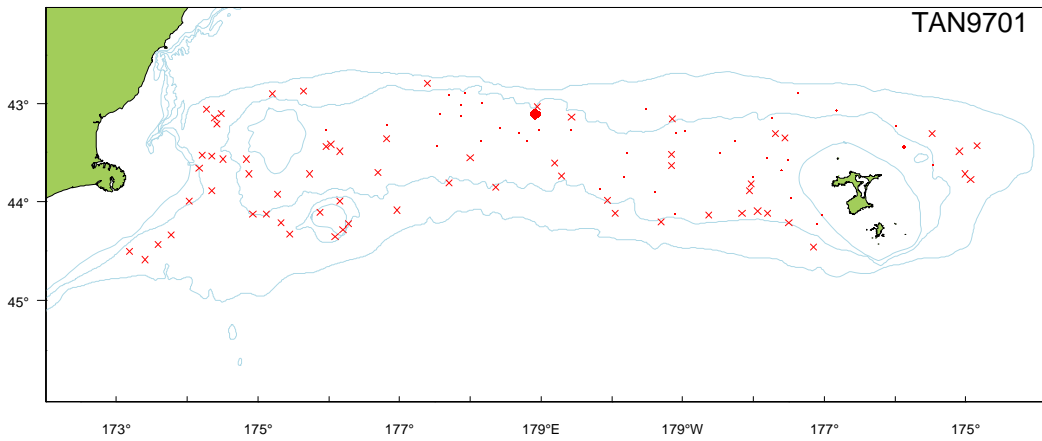
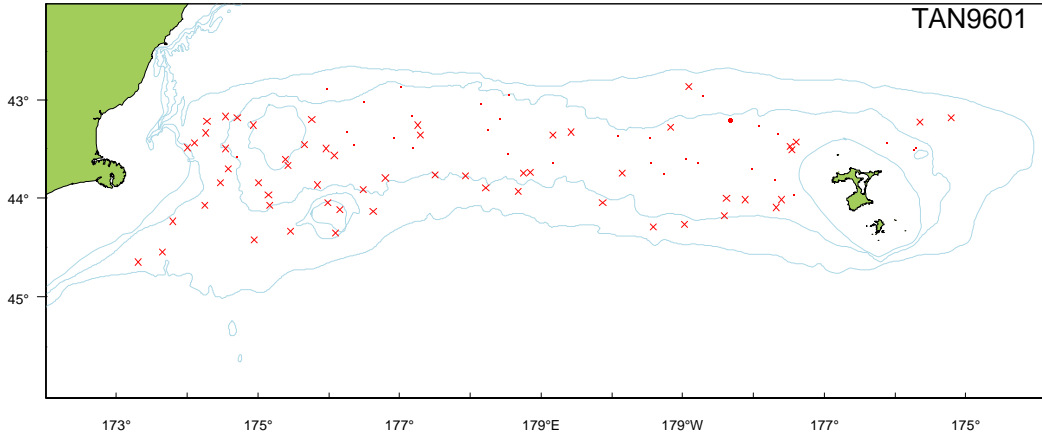
Year	Biomass (t)	cv (%)	Length (cm)			No. measure d
			Min.	Max.	Mean	
1992	6 598	51	17	48	26.8	1 412
1993	7 168	85	17	51	27.6	1 042
1994	25 853	90	17	52	26.2	1 461
1995	1 338	36	19	48	26.9	1 057
1996	1 807	58	17	44	24.4	871
1997	4 152	63	17	48	25.5	1 111
1998	2 269	52	18	47	25.2	897
1999	4 216	51	17	45	24.3	1 326
2000	1 216	20	17	50	25.5	1 603
2001	4 867	60	17	51	25.1	1 260
2002	5 570	64	17	50	29.5	676
2003	1 151	39	16	49	25.2	860
2004	594	31	17	50	29.9	480
2005	15 813	79	16	48	25.0	913
2006	6 439	86	16	47	27.6	552
2007	1 384	57	16	46	25.7	613
2008	26 027	91	16	48	25.0	1 044
2009	13 378	82	16	52	27.3	1 204
2010	14 533	65	16	51	26.4	1 366

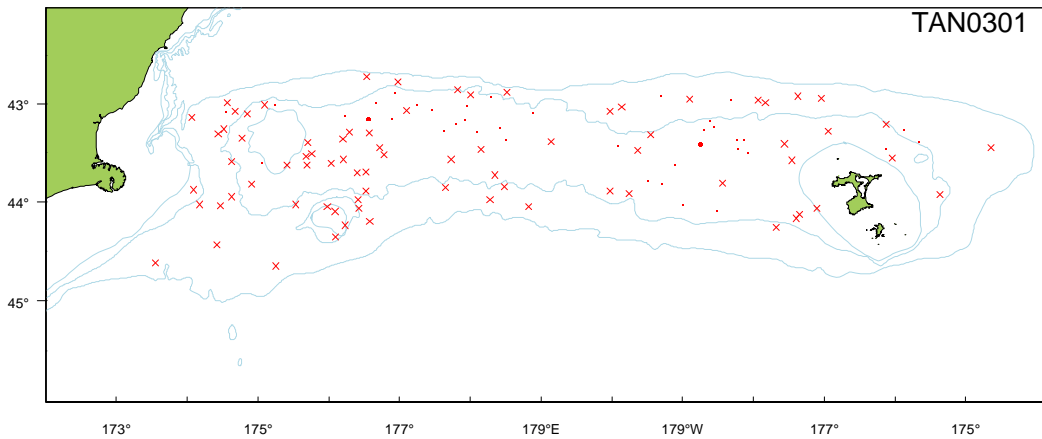
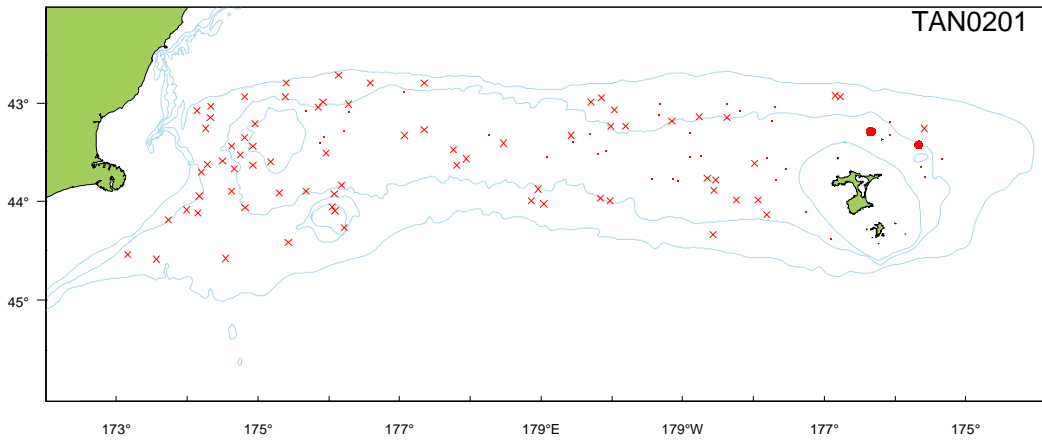
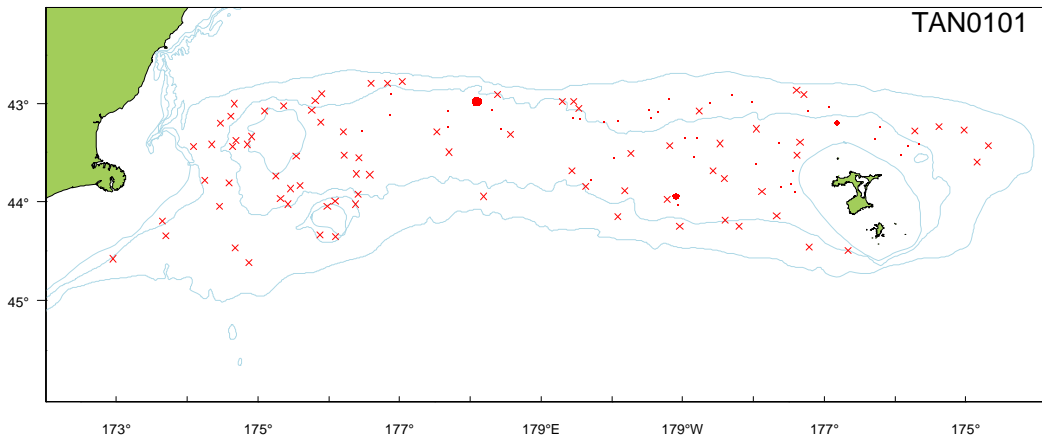
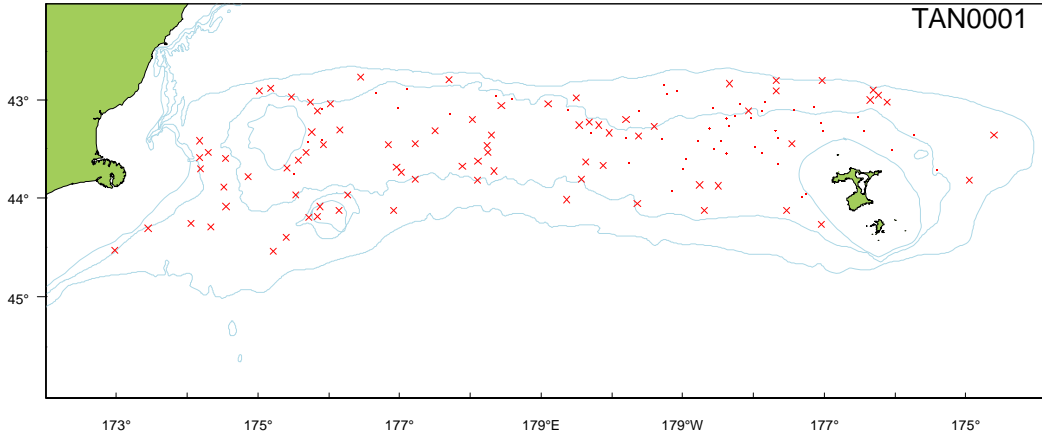


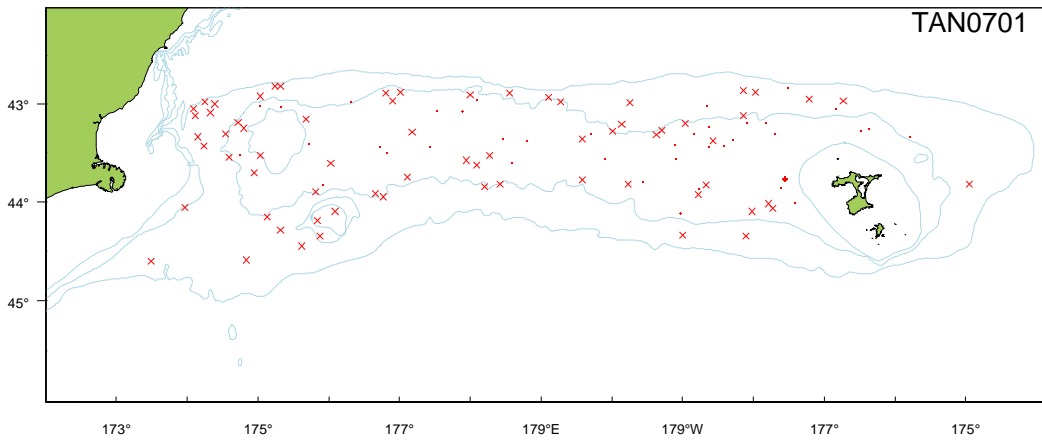
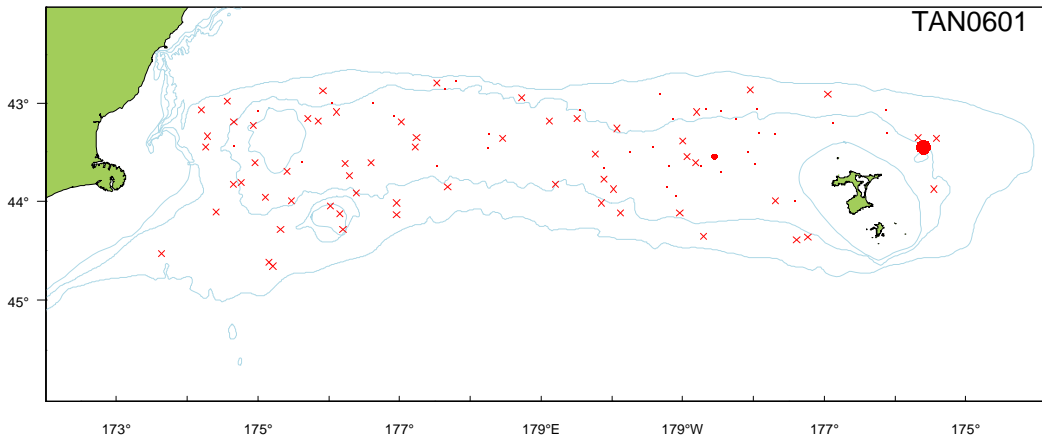
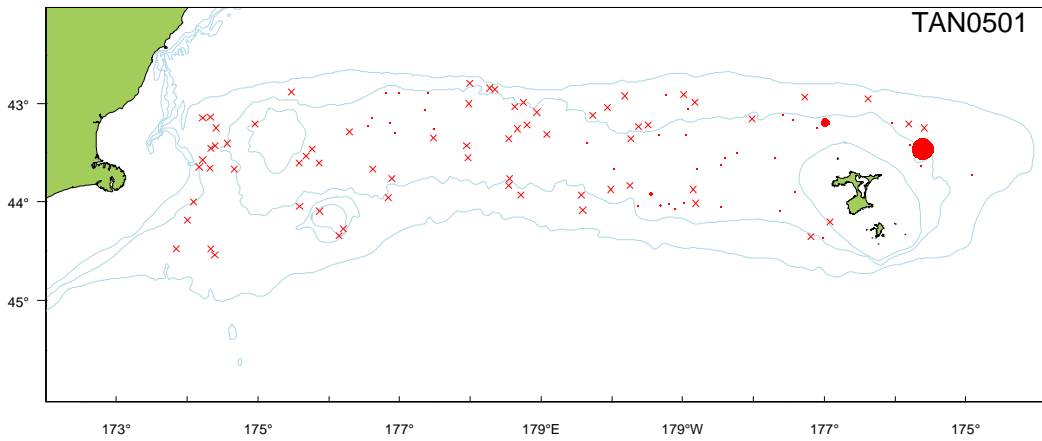
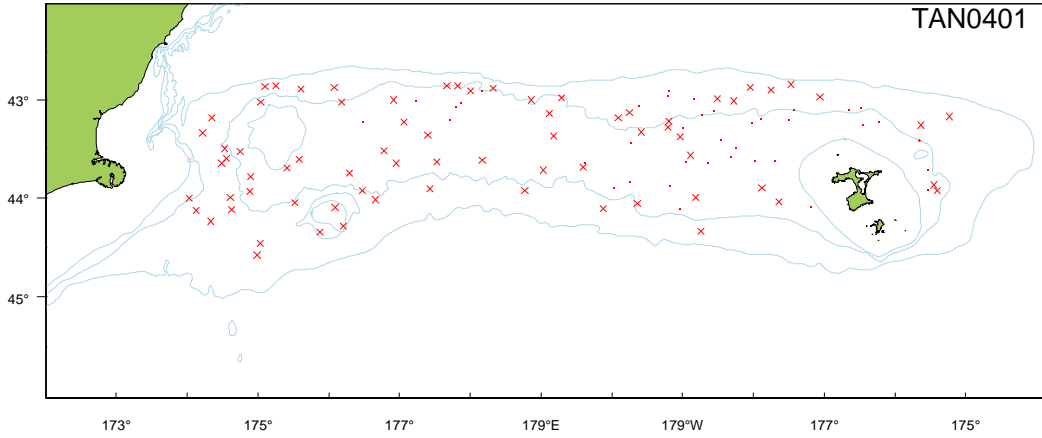
Distribution

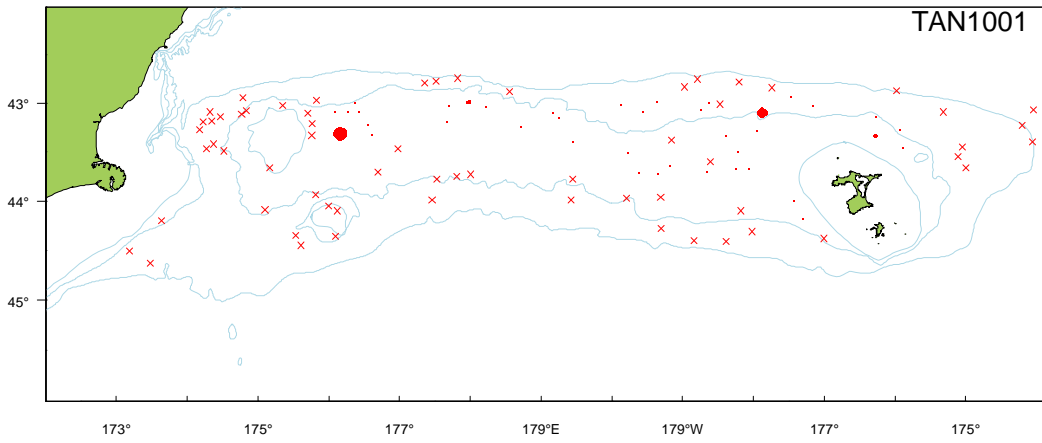
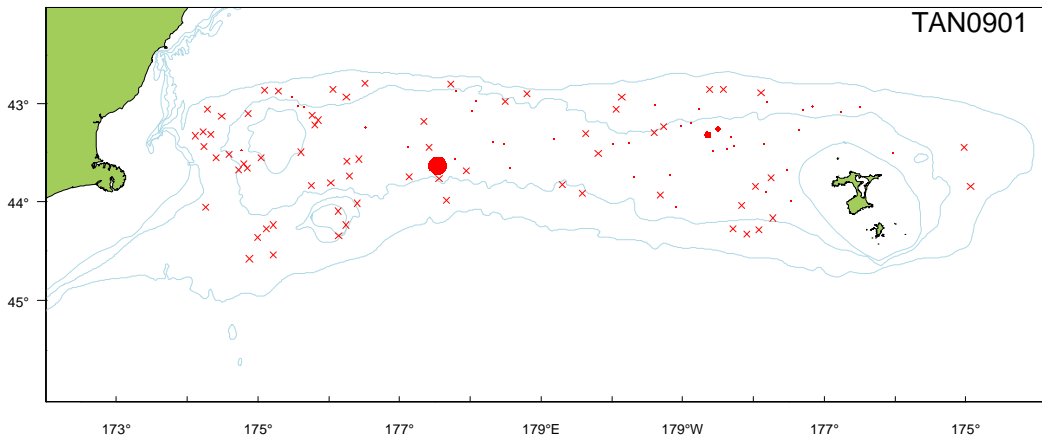
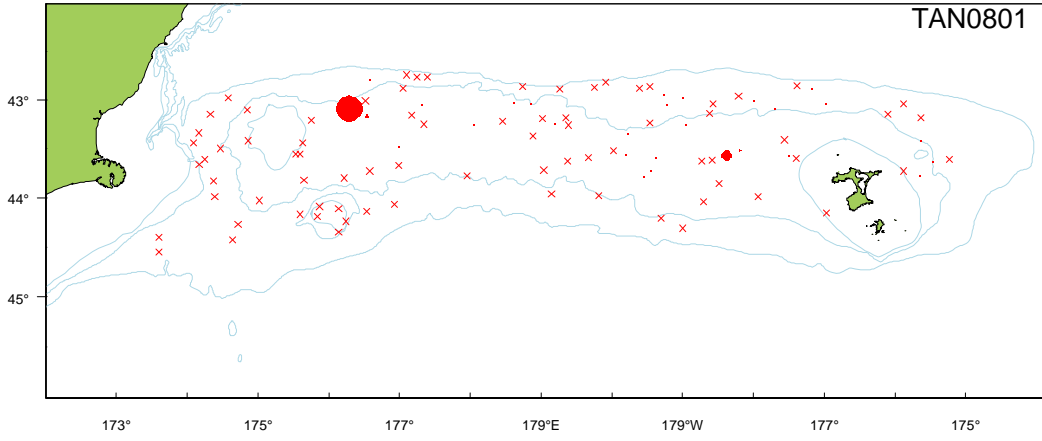




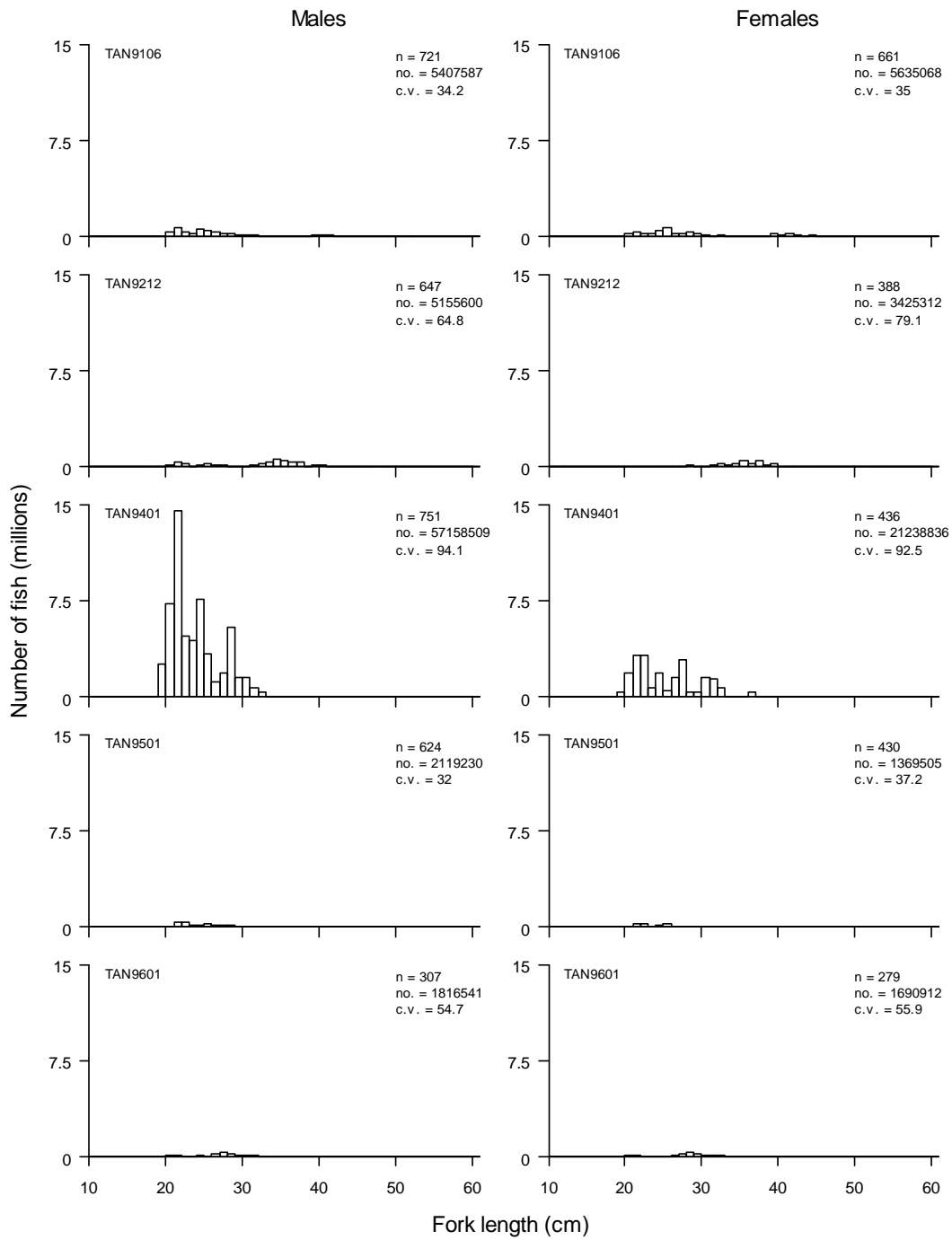


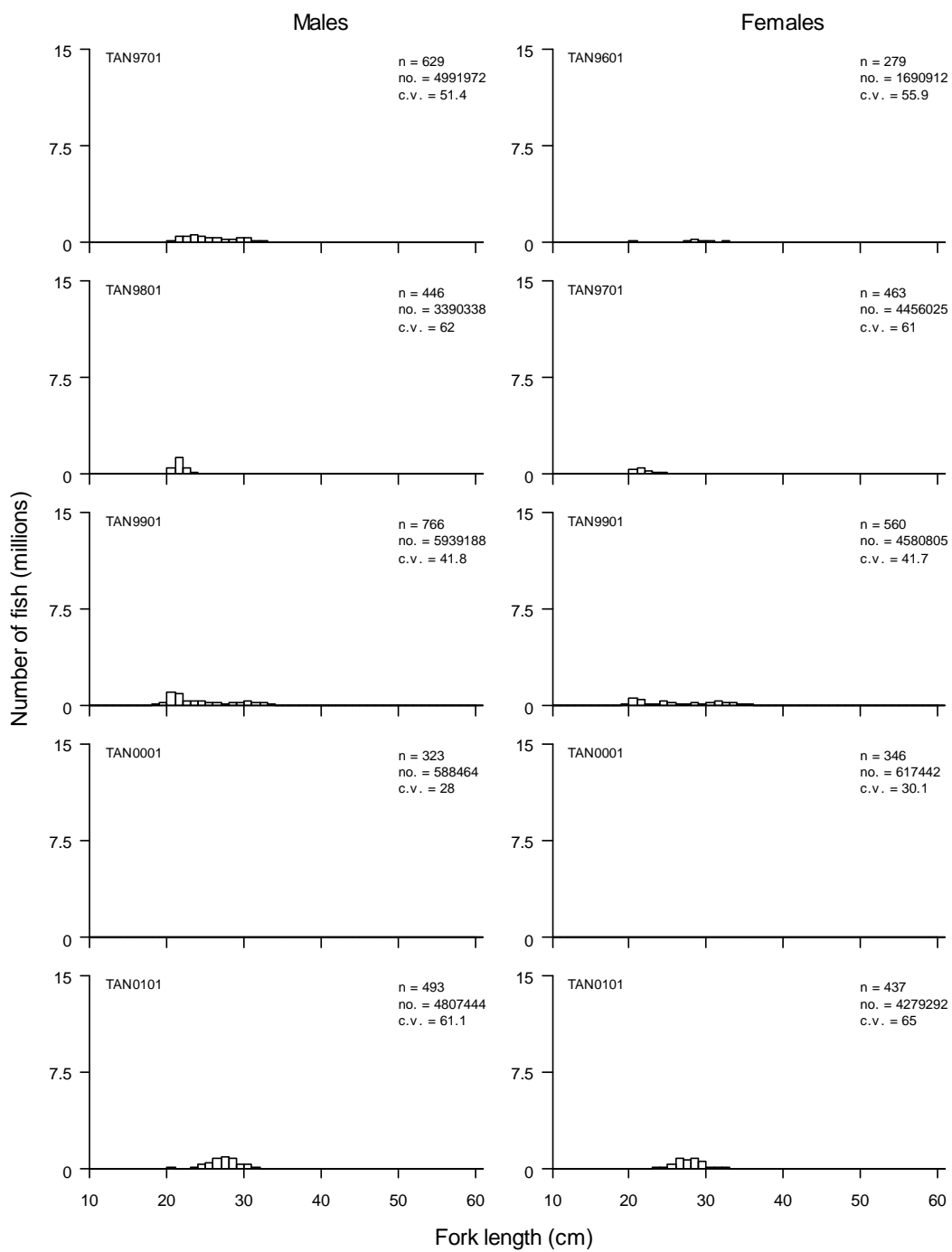


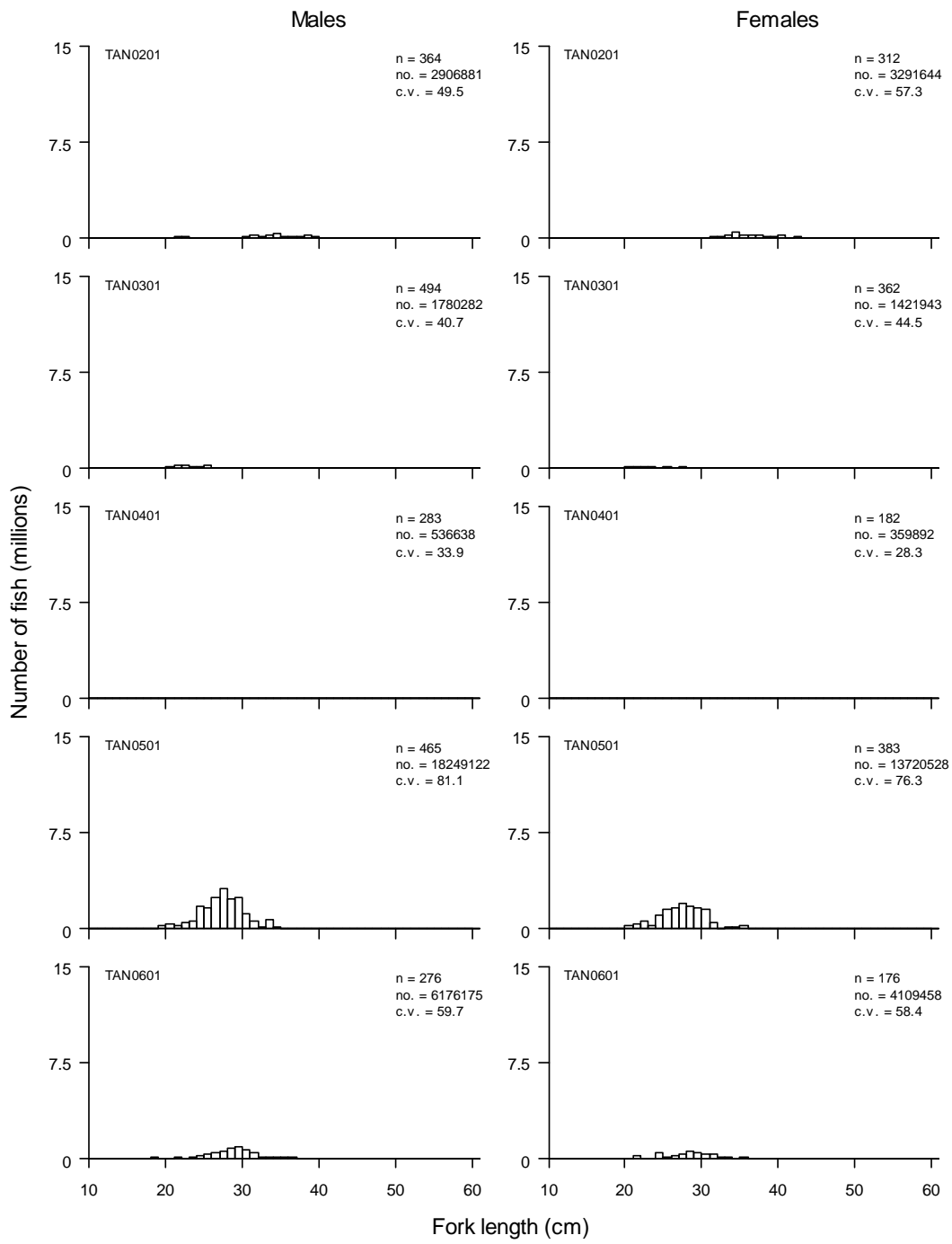


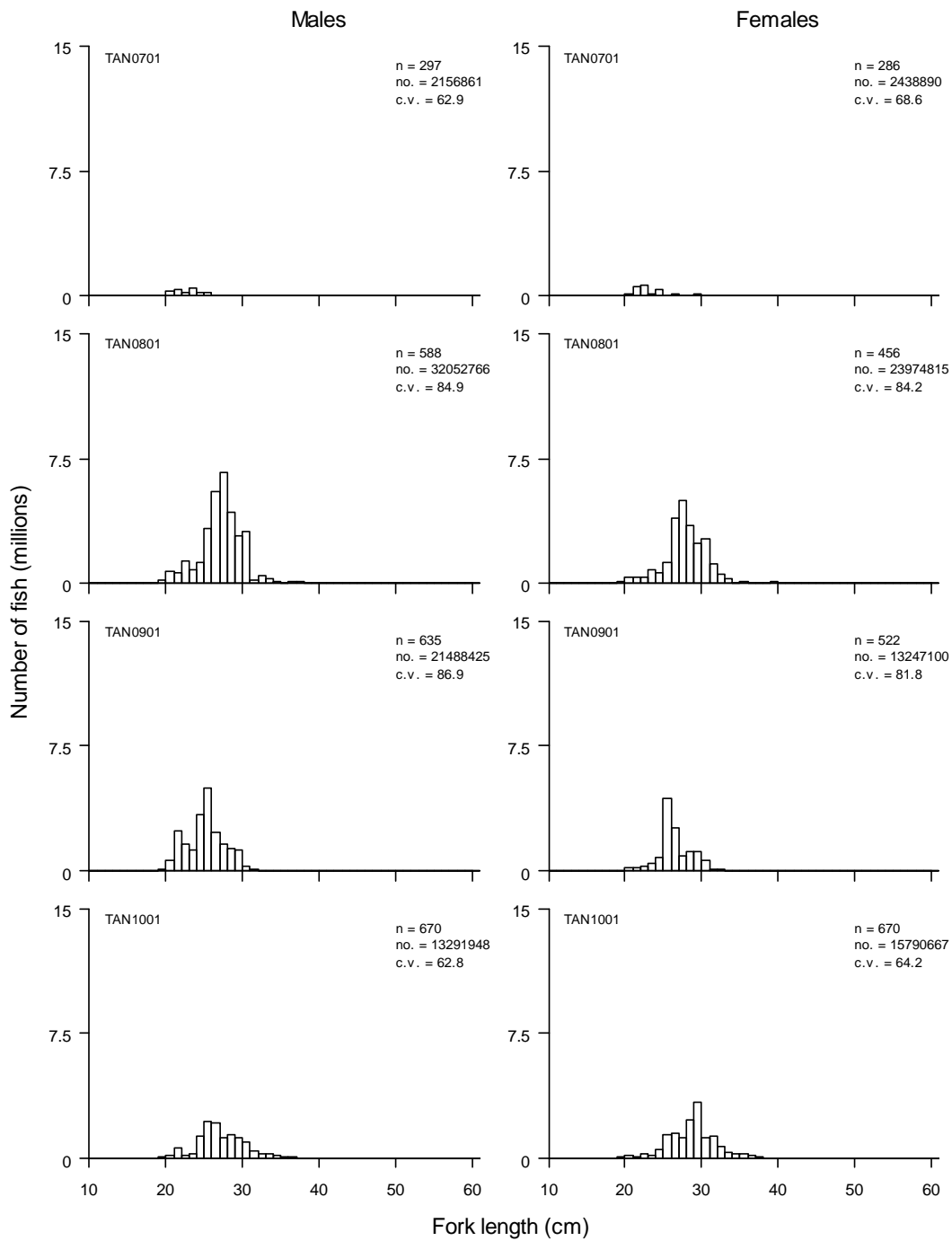


Length Frequencies









Gonad Stage Information

Males

Year	p_M1	p_M2	p_M3	p_M4	p_M5	p_M6	p_M7	n_allM
1992	NA	NA	NA	NA	NA	NA	NA	0
1993	NA	NA	NA	NA	NA	NA	NA	0
1994	NA	NA	NA	NA	NA	NA	NA	0
1995	NA	NA	NA	NA	NA	NA	NA	0
1996	NA	NA	NA	NA	NA	NA	NA	0
1997	NA	NA	NA	NA	NA	NA	NA	0
1998	0.01	0.99	0	0	0	0	0	67
1999	NA	NA	NA	NA	NA	NA	NA	0
2000	NA	NA	NA	NA	NA	NA	NA	0
2001	0.18	0.82	0	0	0	0	0	11
2002	NA	NA	NA	NA	NA	NA	NA	0
2003	NA	NA	NA	NA	NA	NA	NA	0
2004	NA	NA	NA	NA	NA	NA	NA	0
2005	0.74	0.25	0	0	0	0	0.01	84
2006	NA	NA	NA	NA	NA	NA	NA	0
2007	NA	NA	NA	NA	NA	NA	NA	0
2008	NA	NA	NA	NA	NA	NA	NA	0
2009	0.18	0.77	0.02	0	0	0.02	0	44
2010	0.63	0.37	0	0	0	0	0	65
ALL	0.42	0.57	0	0	0	0	0	271

Females

Year	p_F1	p_F2	p_F3	p_F4	p_F5	p_F6	p_F7	n_allF
1992	NA	NA	NA	NA	NA	NA	NA	0
1993	NA	NA	NA	NA	NA	NA	NA	0
1994	NA	NA	NA	NA	NA	NA	NA	0
1995	NA	NA	NA	NA	NA	NA	NA	0
1996	NA	NA	NA	NA	NA	NA	NA	0
1997	NA	NA	NA	NA	NA	NA	NA	0
1998	0.04	0.95	0.01	0	0	0	0	75
1999	NA	NA	NA	NA	NA	NA	NA	0
2000	NA	NA	NA	NA	NA	NA	NA	0
2001	0.21	0.79	0	0	0	0	0	14
2002	NA	NA	NA	NA	NA	NA	NA	0
2003	NA	NA	NA	NA	NA	NA	NA	0
2004	NA	NA	NA	NA	NA	NA	NA	0
2005	0.68	0.32	0	0	0	0	0	60
2006	0.5	0.5	0	0	0	0	0	2
2007	NA	NA	NA	NA	NA	NA	NA	0
2008	NA	NA	NA	NA	NA	NA	NA	0
2009	0.18	0.82	0	0	0	0	0	34
2010	0.42	0.58	0	0	0	0	0	83
ALL	0.33	0.66	0	0	0	0	0	268

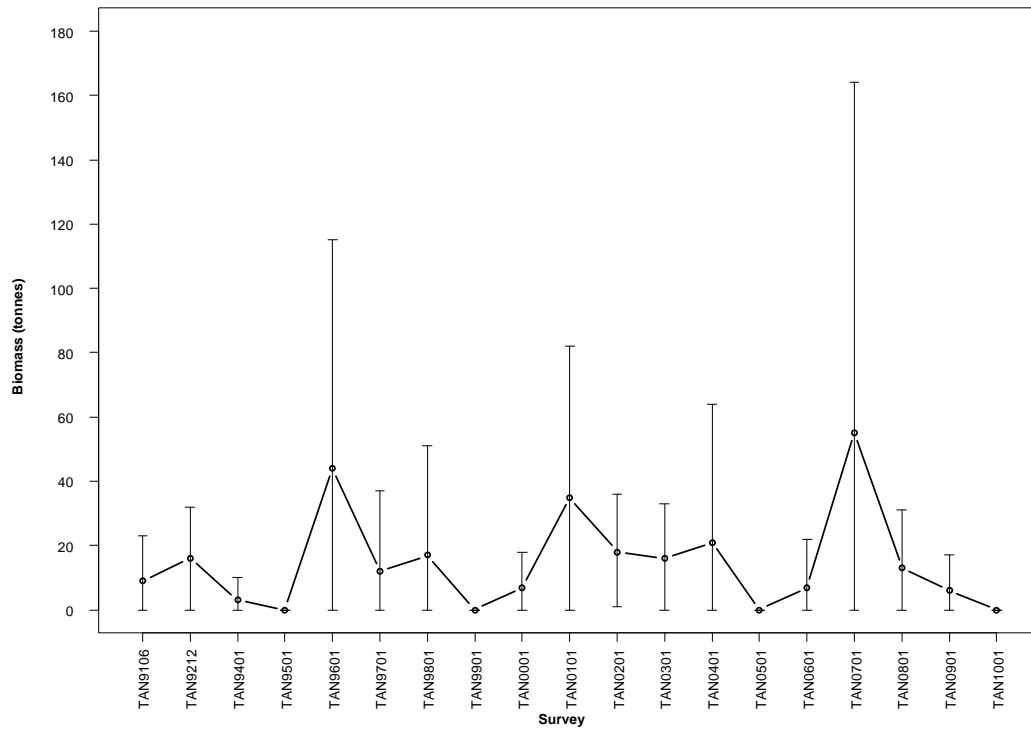


Number of surveys caught 1992–2010 (out of 19):	15
Total catch weight (kg):	189.9
Number measured	1
Length range (mean) (cm, TL)	90–90 (90)
Number weighed	–
Length-weight parameters a, b (r^2)	–

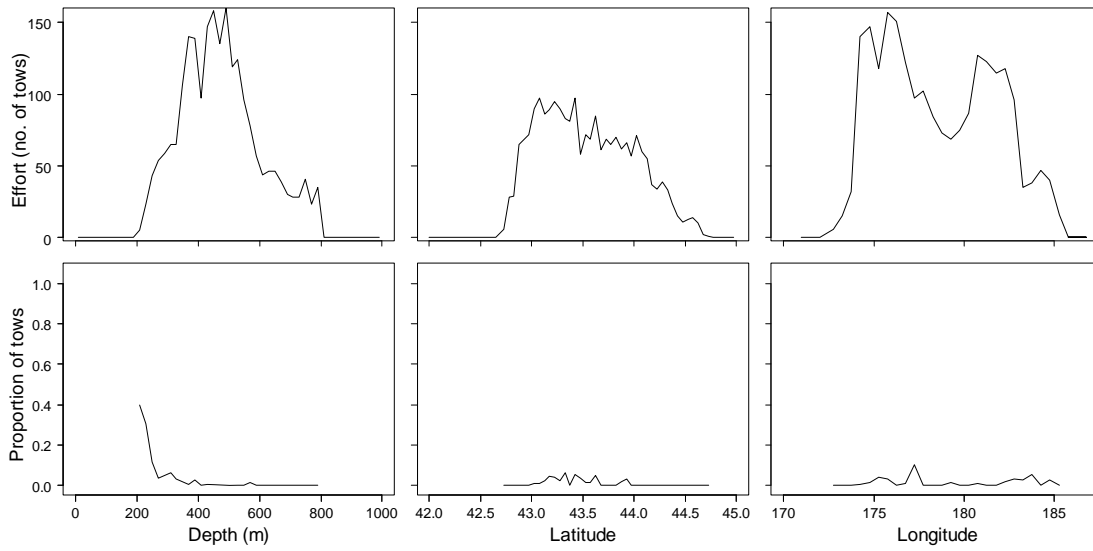
The core survey area and depth range **is not** appropriate for this species. It is found **shallower than 200 m**. Biomass of this species is **poorly** estimated in the core survey area. Biomass **shows no clear trend** since the start of the time series.

Relative biomass estimates

Year	Biomass (t)	cv (%)
1992	9	88
1993	16	50
1994	3	100
1995	0	-
1996	44	81
1997	12	100
1998	17	100
1999	0	-
2000	7	68
2001	35	66
2002	18	48
2003	16	54
2004	21	100
2005	0	-
2006	7	100
2007	55	100
2008	13	71
2009	6	100
2010	0	-



Distribution



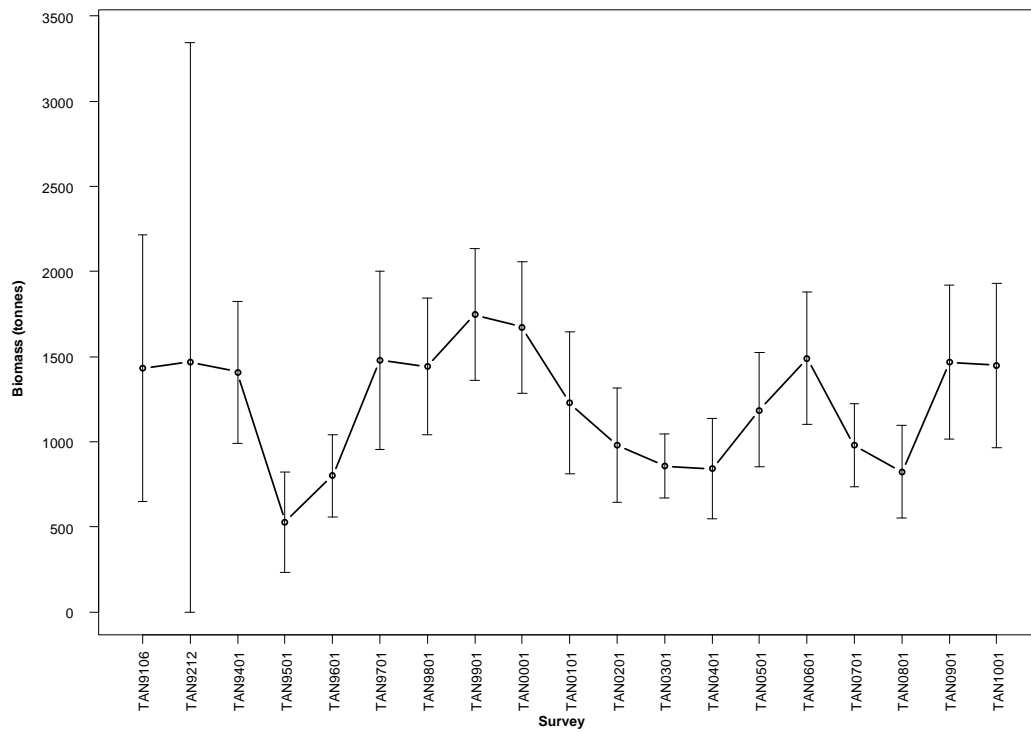


Number of surveys caught 1992–2010 (out of 19):	19
Total catch weight (kg):	19 473.9
Number measured	10 646
Length range (mean) (cm, TL)	10–48 (29.6)
Number weighed	3 305
Length-weight parameters a, b (r^2)	0.002381, 3.18126 (89.91)

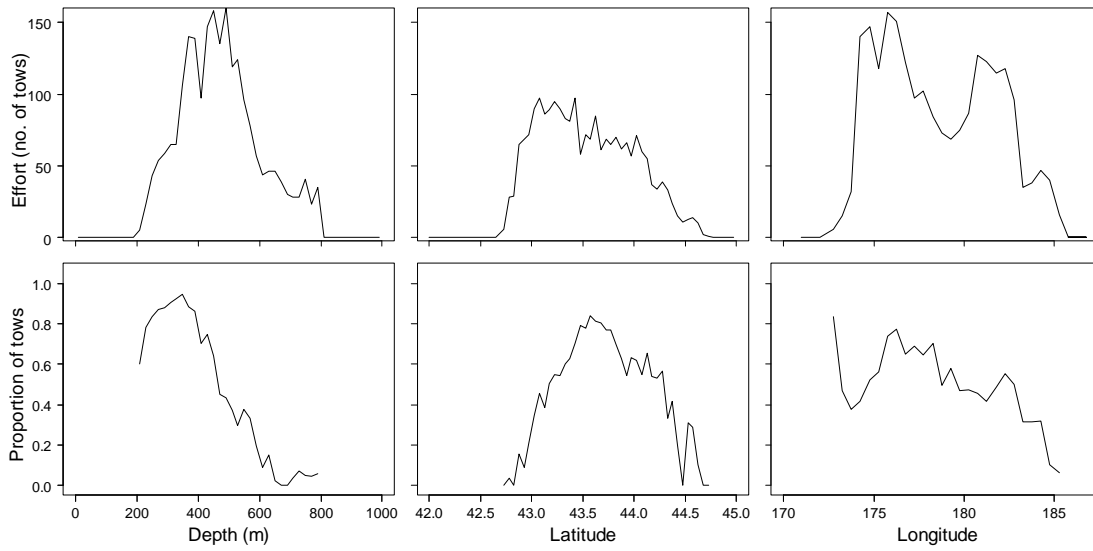
The core survey area and depth range is appropriate for this species. Biomass of this species is **very well** estimated in the core survey area. Biomass **shows no clear trend** since the start of the time series. Catch rates are highest on the **Veryan Bank**. Length frequencies are usually **bimodal, which may represent larger females and smaller males**. Mean length **shows no clear trend** since the start of the time series.

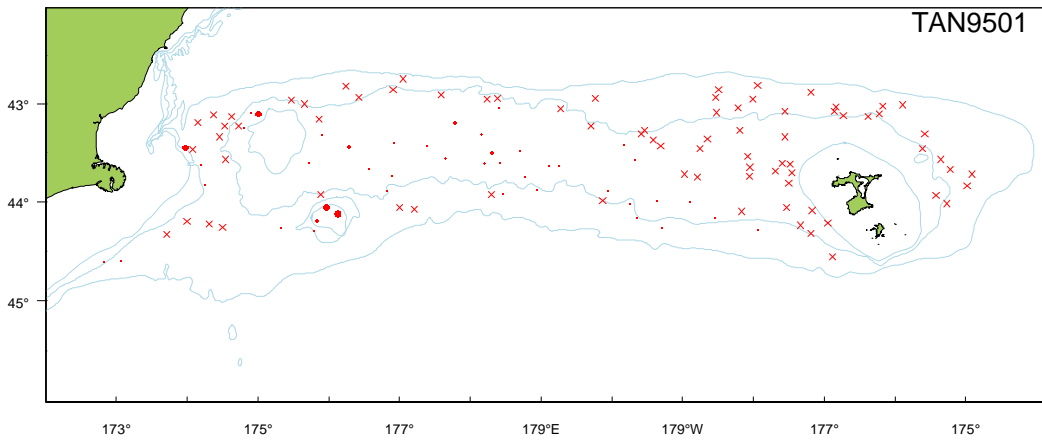
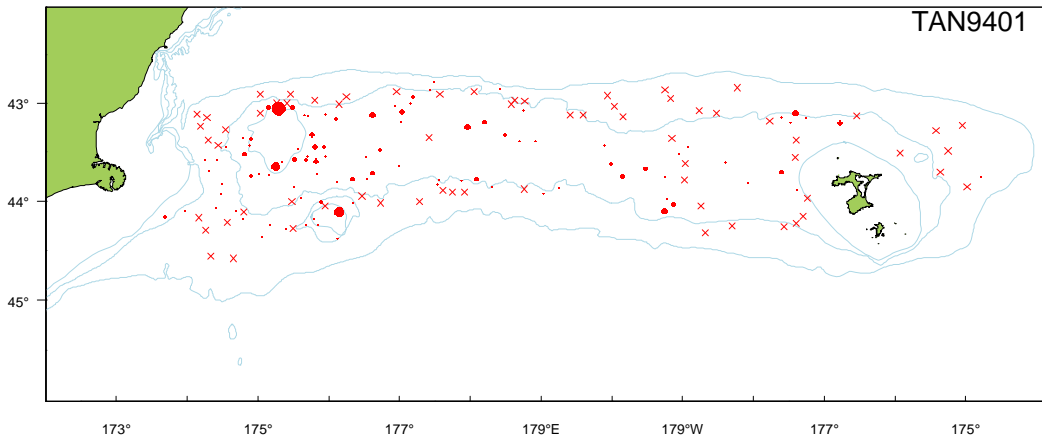
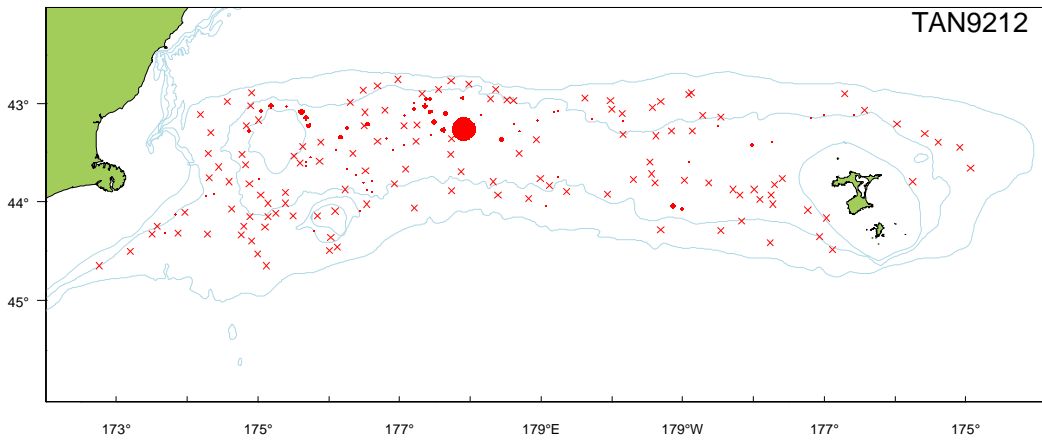
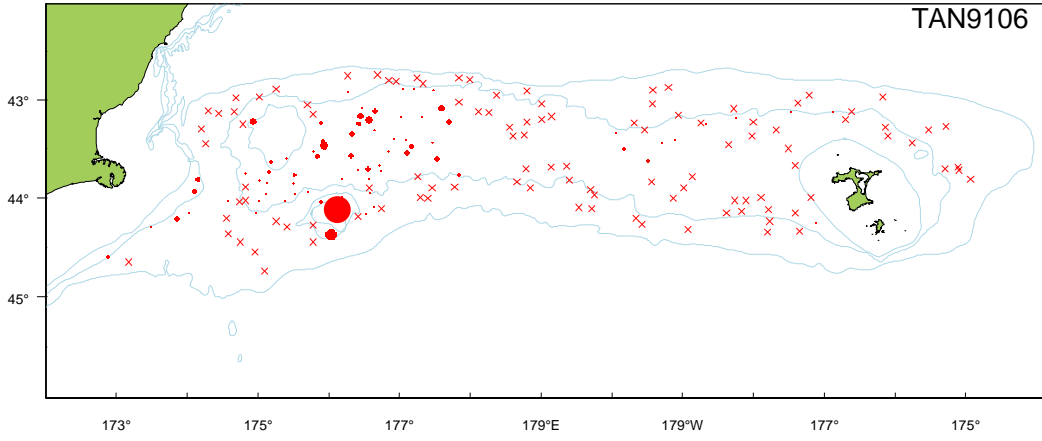
Relative biomass estimates and length summary

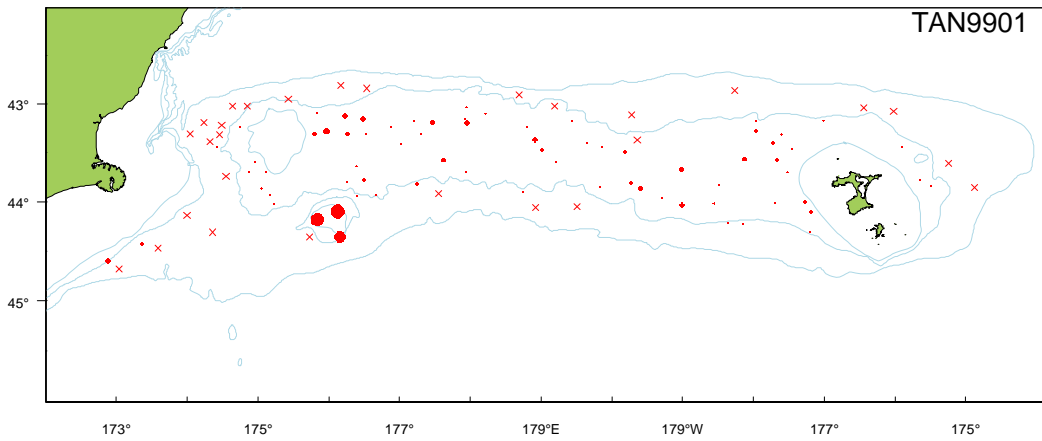
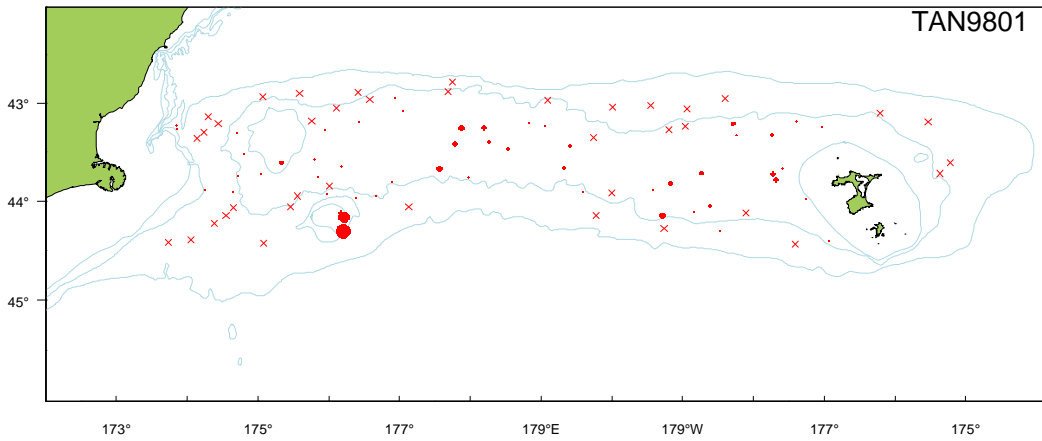
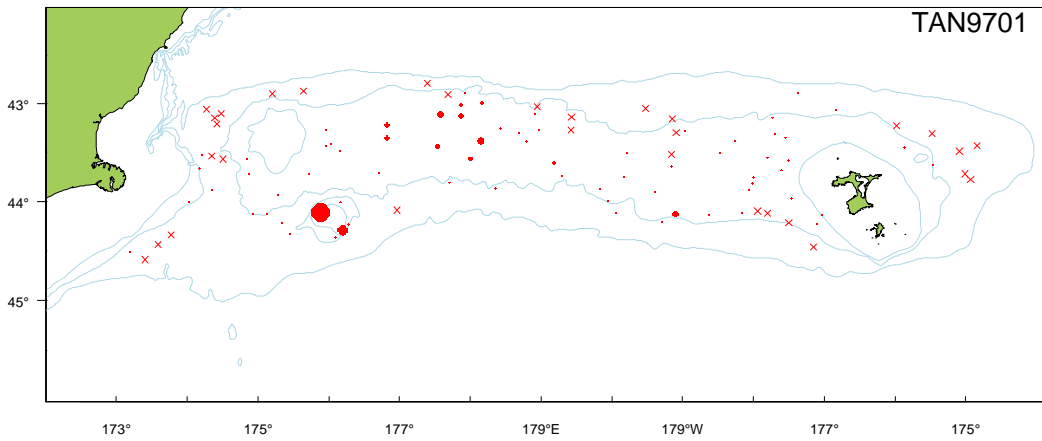
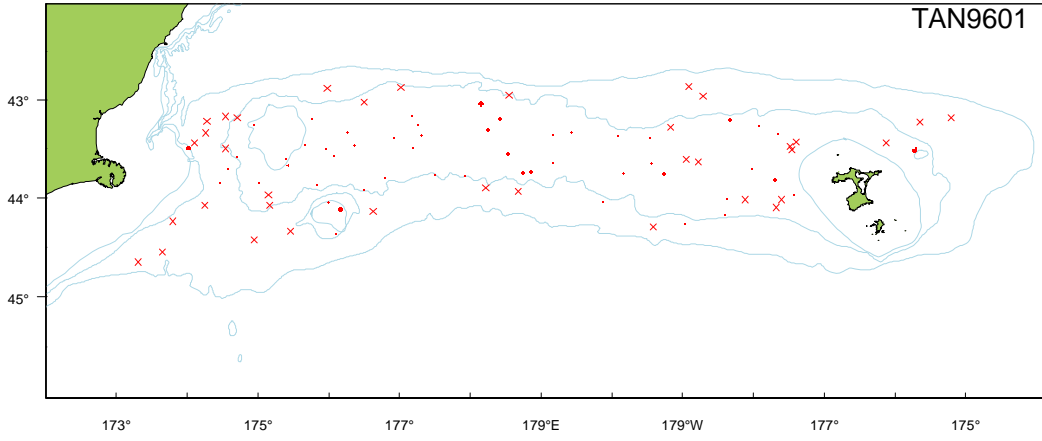
Year	Biomass (t)	cv (%)	Length (cm)			No. measure
			Min.	Max.	Mean	
1992	1 432	27	-	-	-	0
1993	1 470	64	-	-	-	0
1994	1 409	15	-	-	-	0
1995	527	28	-	-	-	0
1996	799	15	-	-	-	0
1997	1 477	18	-	-	-	0
1998	1 442	14	19	48	34.1	188
1999	1 747	11	25	42	33.5	6
2000	1 672	12	-	-	-	0
2001	1 227	17	-	-	-	0
2002	978	17	16	46	28.0	739
2003	857	11	16	43	29.2	952
2004	841	18	16	41	30.1	103
2005	1 185	14	10	48	29.5	1 336
2006	1 489	13	14	44	29.9	1 465
2007	978	12	16	46	31.3	1 238
2008	824	16	16	42	29.1	878
2009	1 468	15	14	43	29.1	1 023
2010	1 447	17	16	43	29.3	2 103

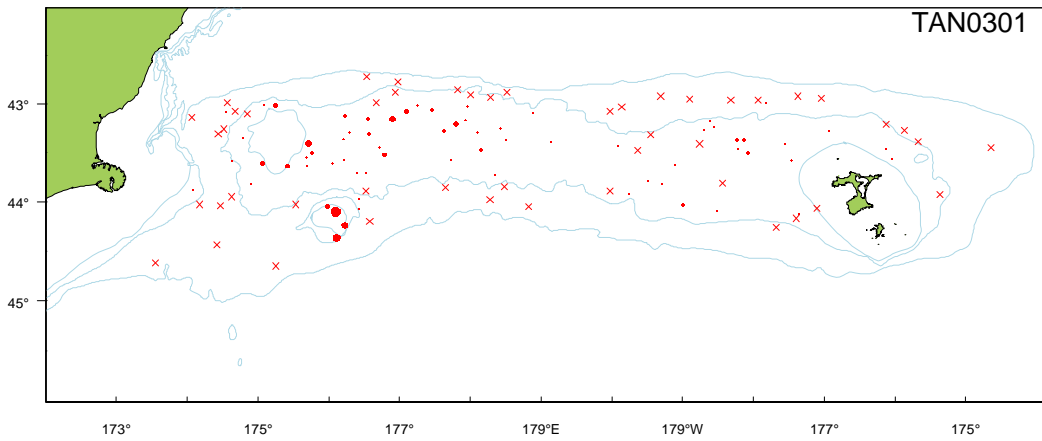
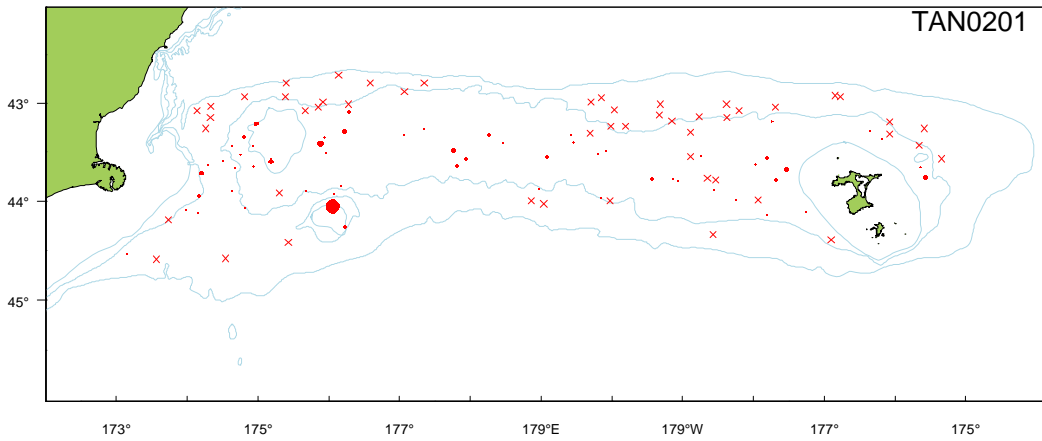
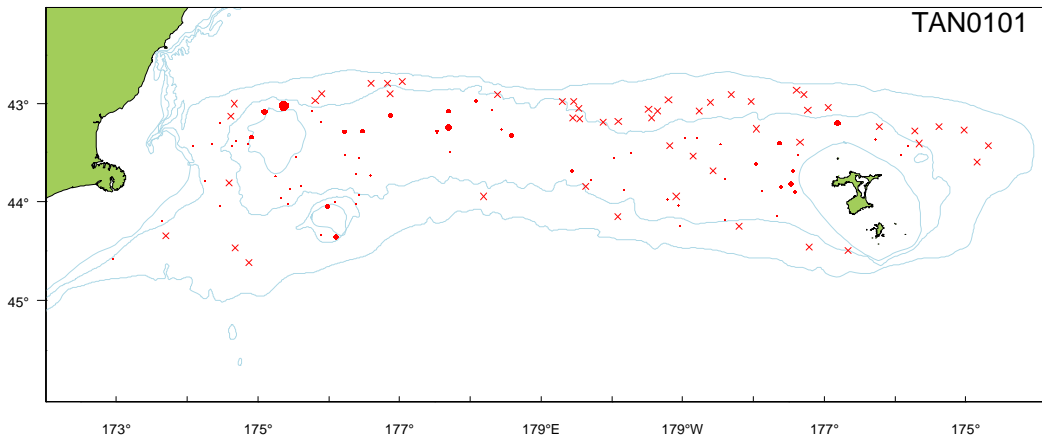
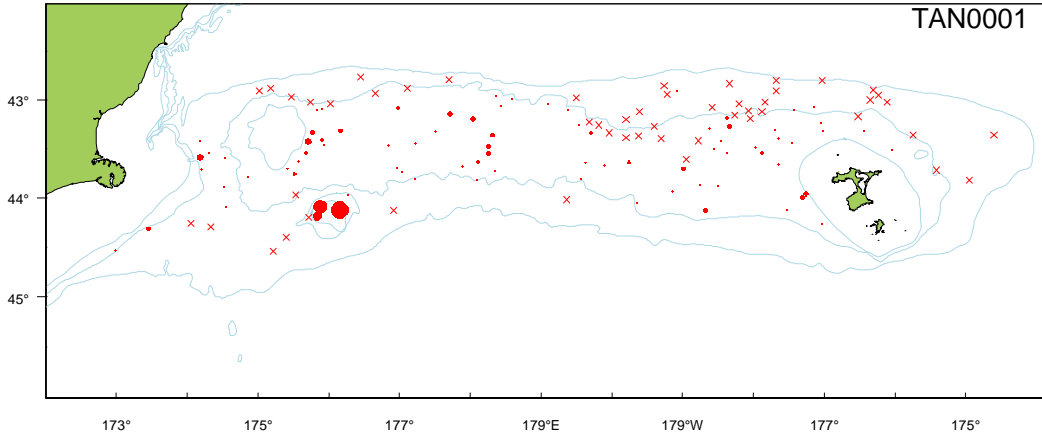


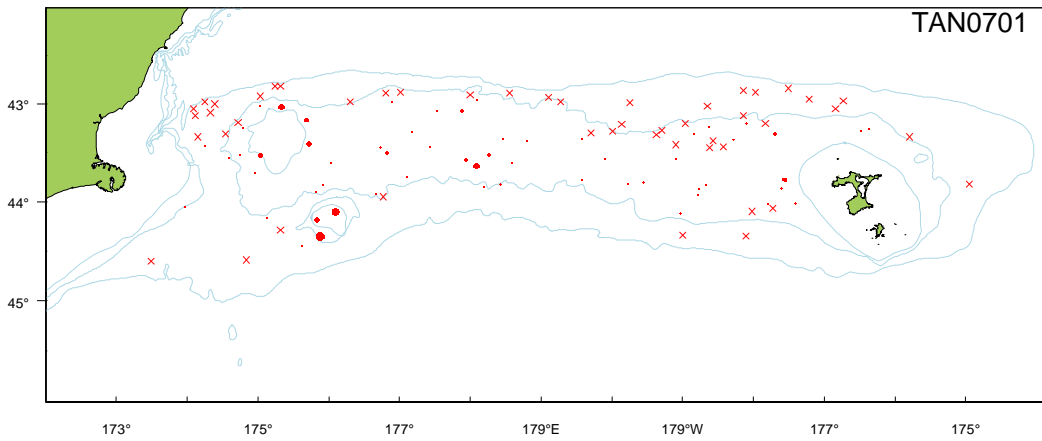
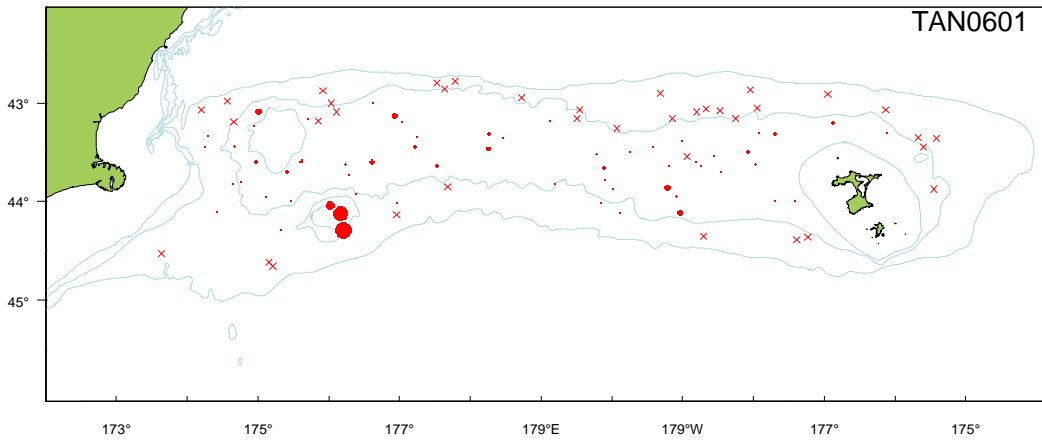
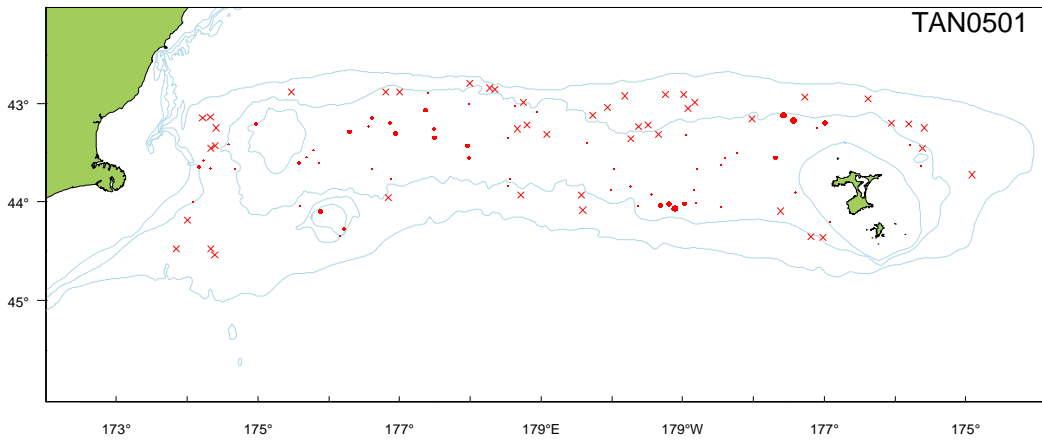
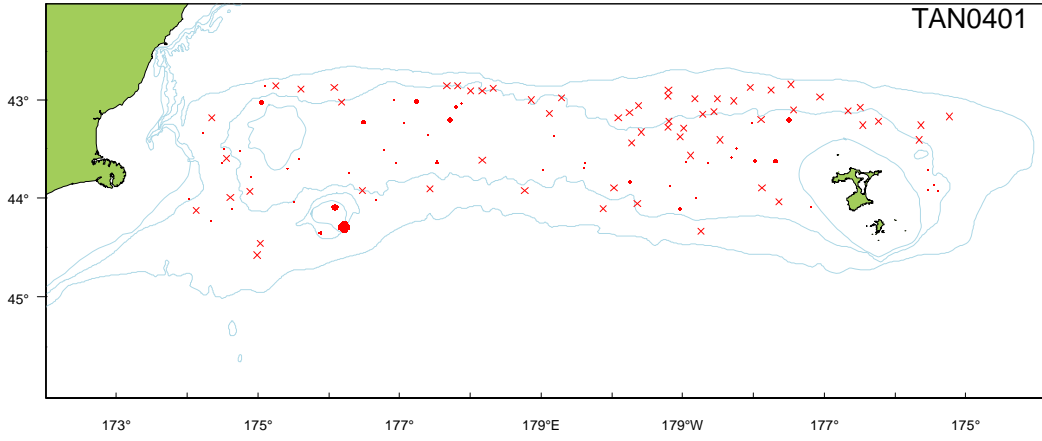
Distribution

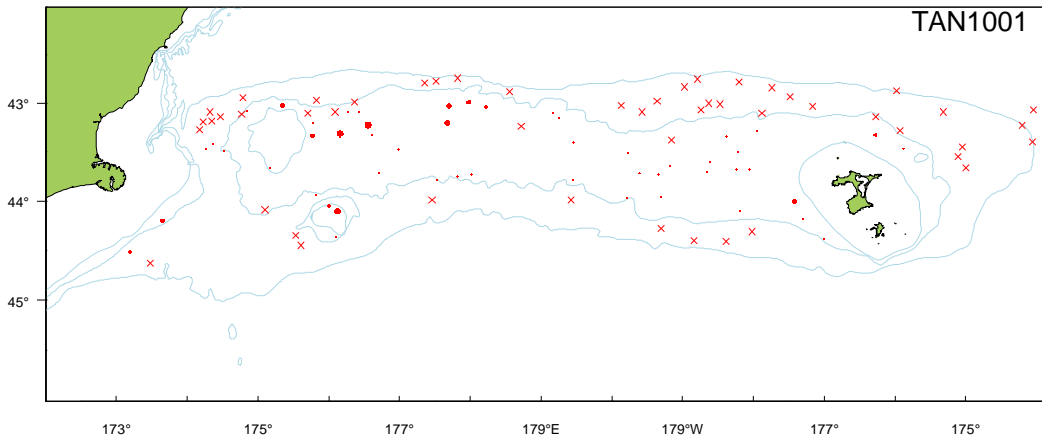
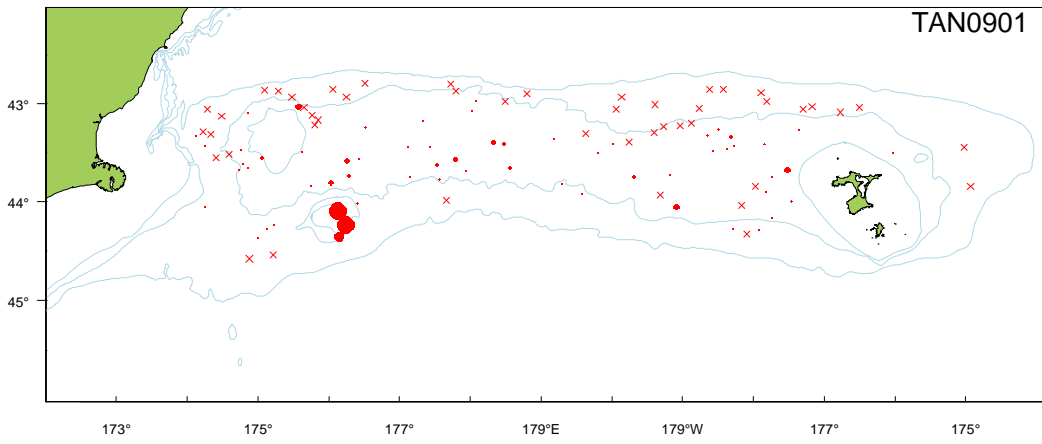
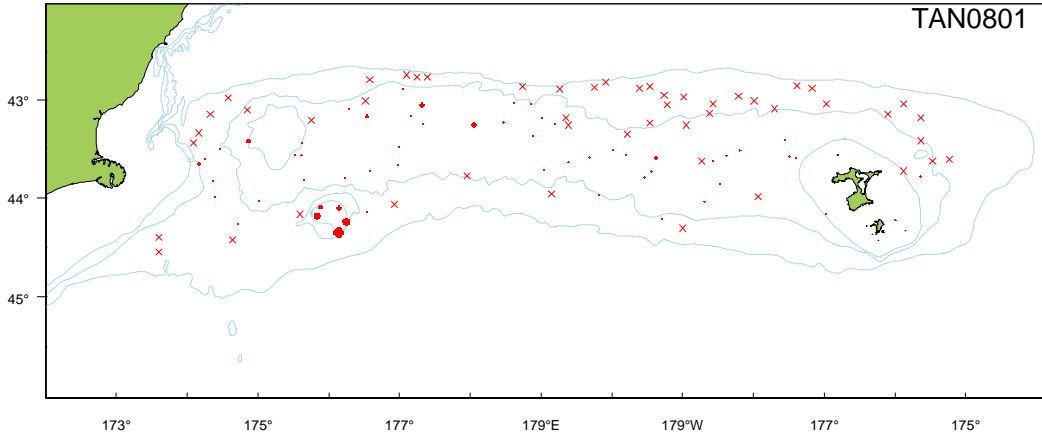




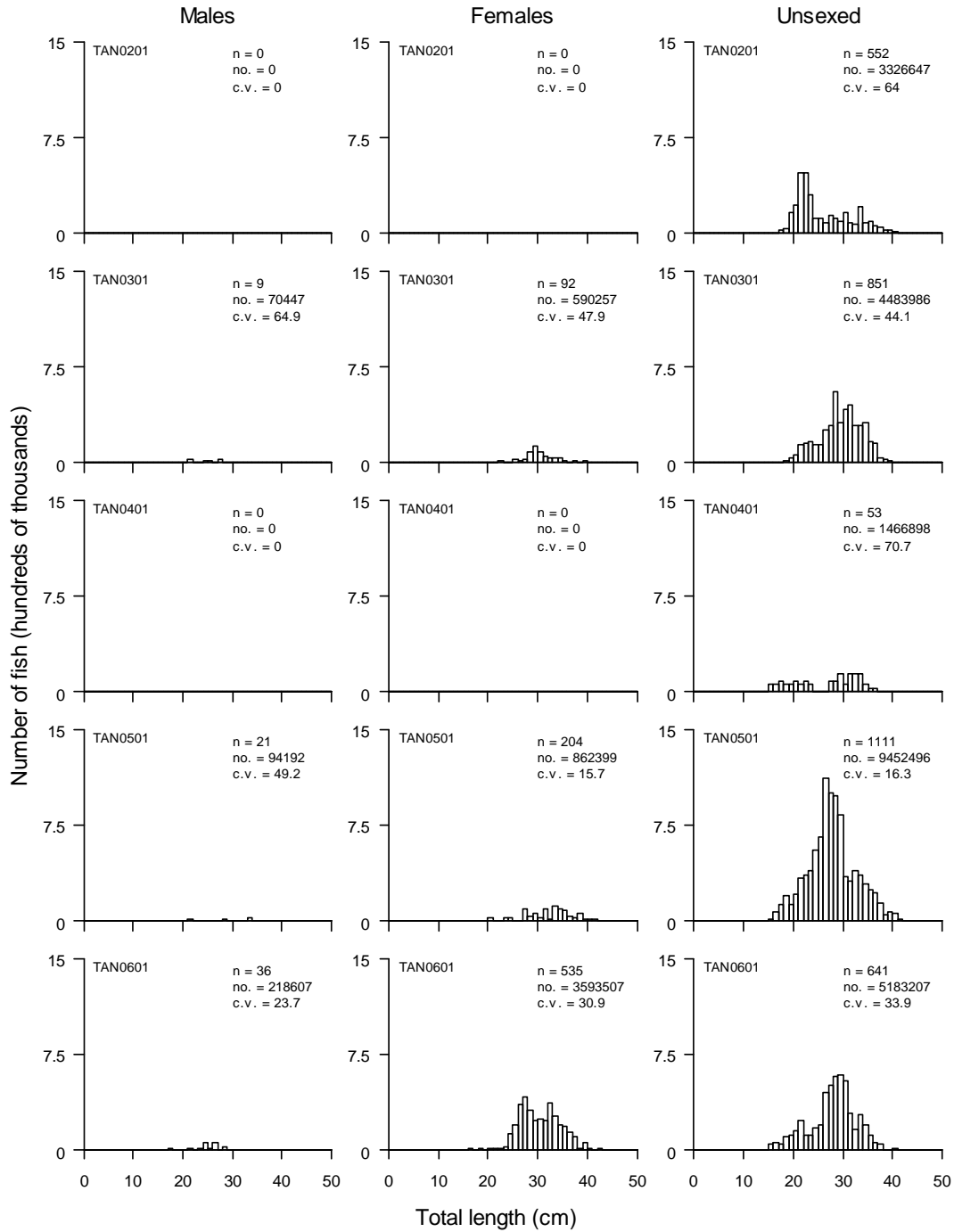


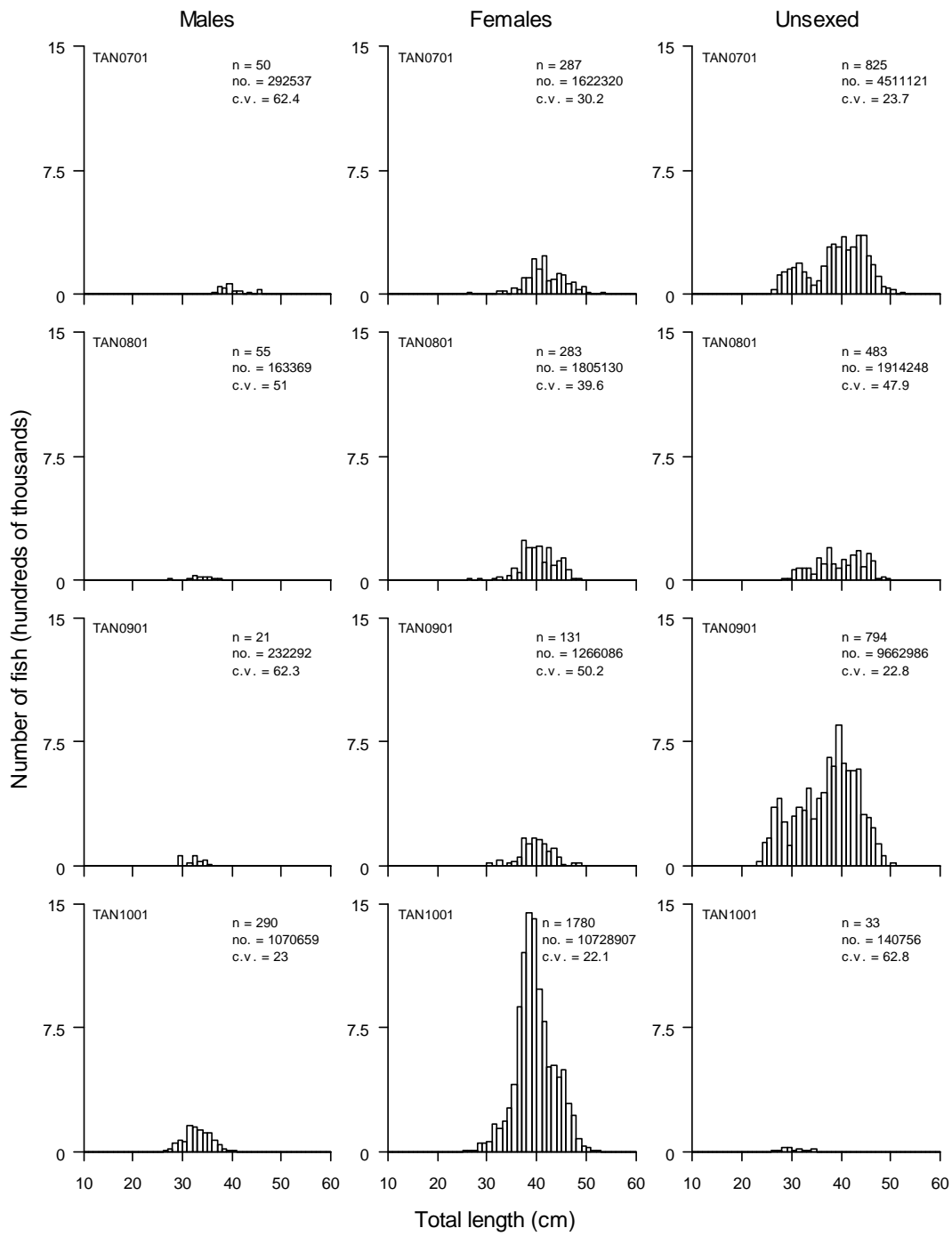






Length Frequencies





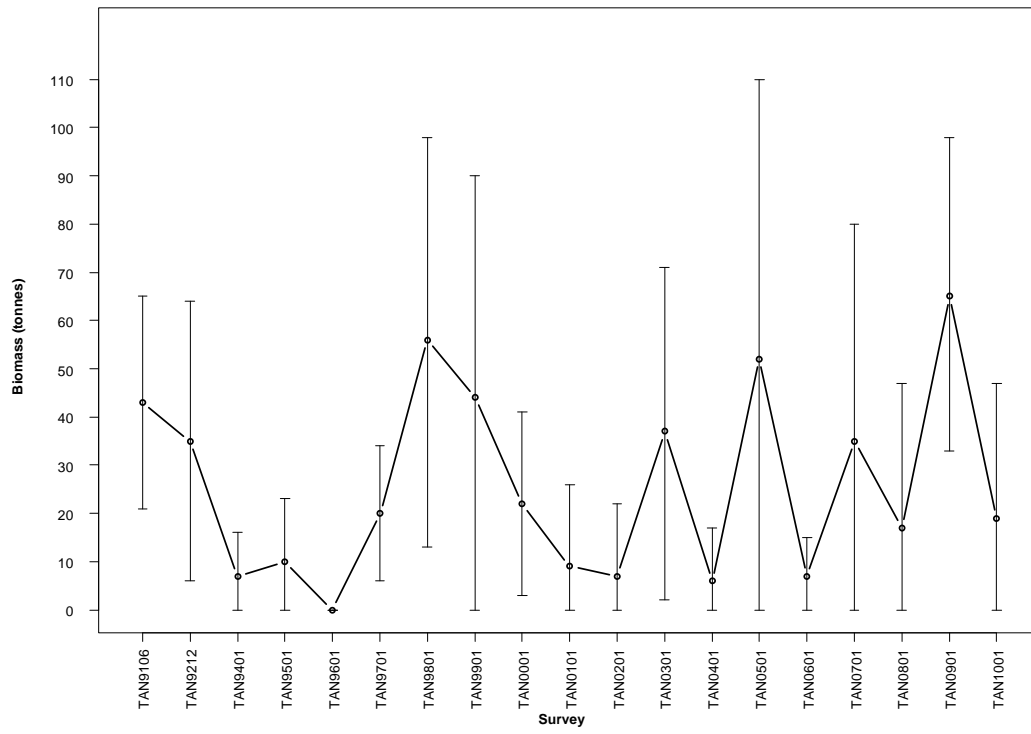


Number of surveys caught 1992–2010 (out of 19):	18
Total catch weight (kg):	192.4
Number measured	11
Length range (mean) (cm, TL)	67–70 (68.5)
Number weighed	7
Length-weight parameters a, b (r^2)	–

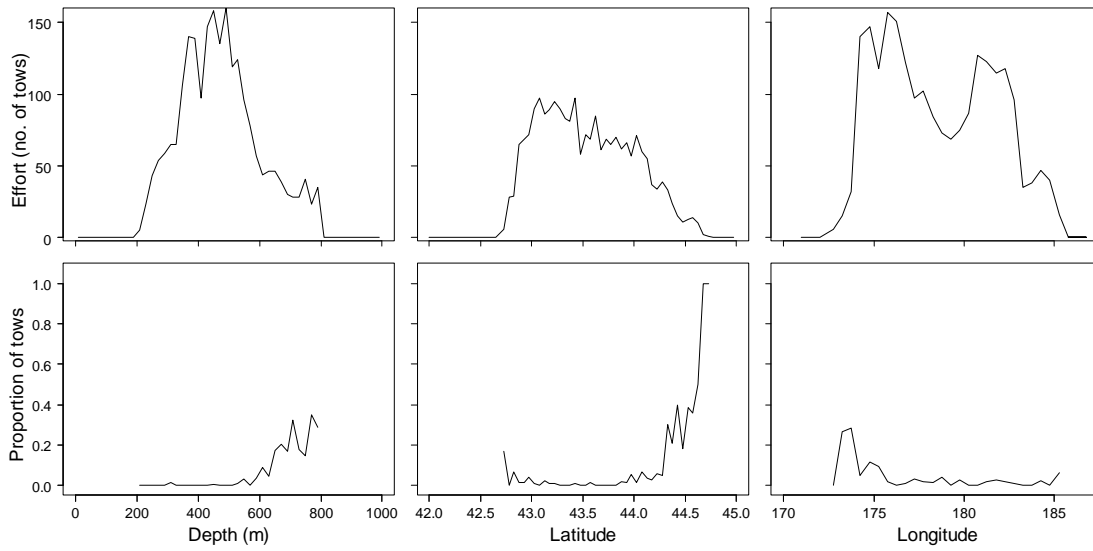
The core survey area and depth range **is not** appropriate for this species. It is found **deeper than 800 m**. Biomass of this species is **poorly** estimated in the core survey area. Biomass **shows no clear trend** since the start of the time series. Catch rates are highest in the **south**.

Relative biomass estimates

Year	Biomass (t)	cv (%)
1992	43	25
1993	35	42
1994	7	63
1995	10	61
1996	0	-
1997	20	35
1998	56	38
1999	44	52
2000	22	44
2001	9	100
2002	7	100
2003	37	47
2004	6	100
2005	52	55
2006	7	57
2007	35	64
2008	17	86
2009	65	25
2010	19	71



Distribution



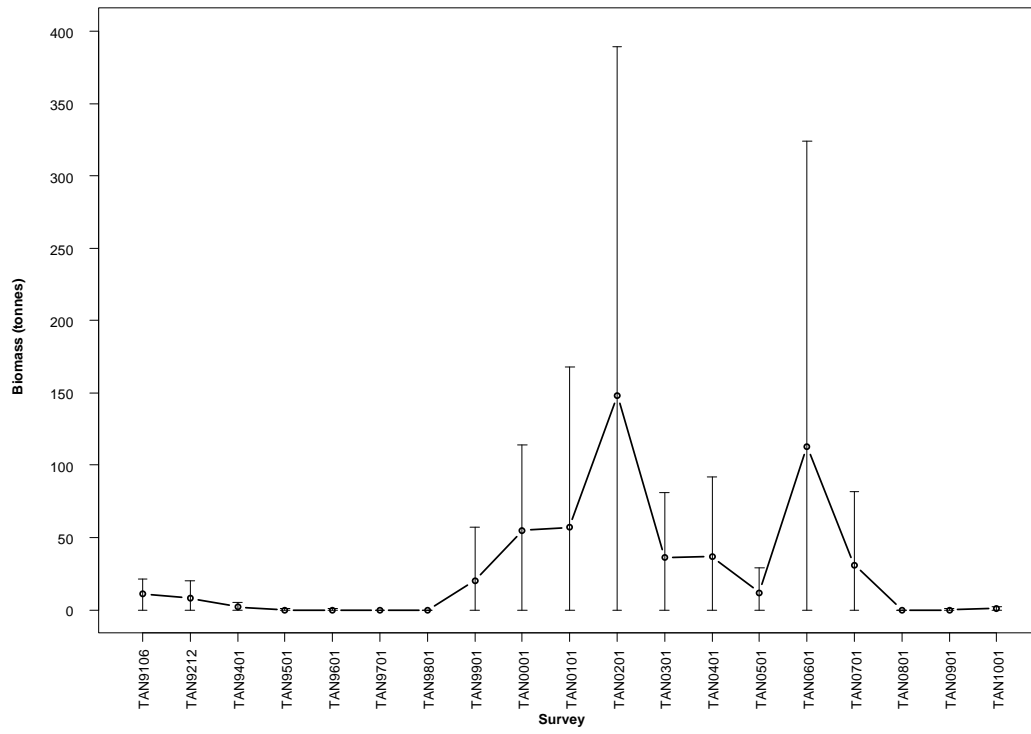


Number of surveys caught 1992–2010 (out of 19):	16
Total catch weight (kg):	266.5
Number measured	0
Length range (mean) (cm, TL)	–
Number weighed	0
Length-weight parameters a, b (r^2)	–

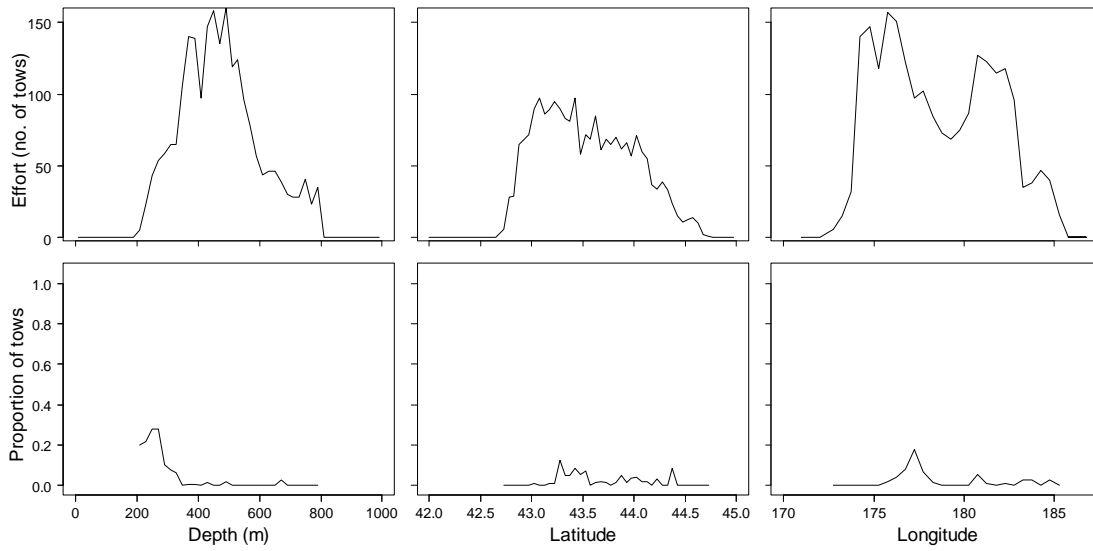
The core survey area and depth range **is not** appropriate for this species. It is found **shallower than 200 m**. Biomass of this species is **poorly** estimated in the core survey area. Biomass has **increased and then decreased** since the start of the time series.

Relative biomass estimates

Year	Biomass (t)	cv (%)
1992	11	50
1993	8	75
1994	2	72
1995	0	100
1996	0	100
1997	0	-
1998	0	-
1999	20	95
2000	55	54
2001	57	98
2002	148	82
2003	36	62
2004	37	75
2005	12	75
2006	113	93
2007	31	81
2008	0	-
2009	0	100
2010	1	100



Distribution



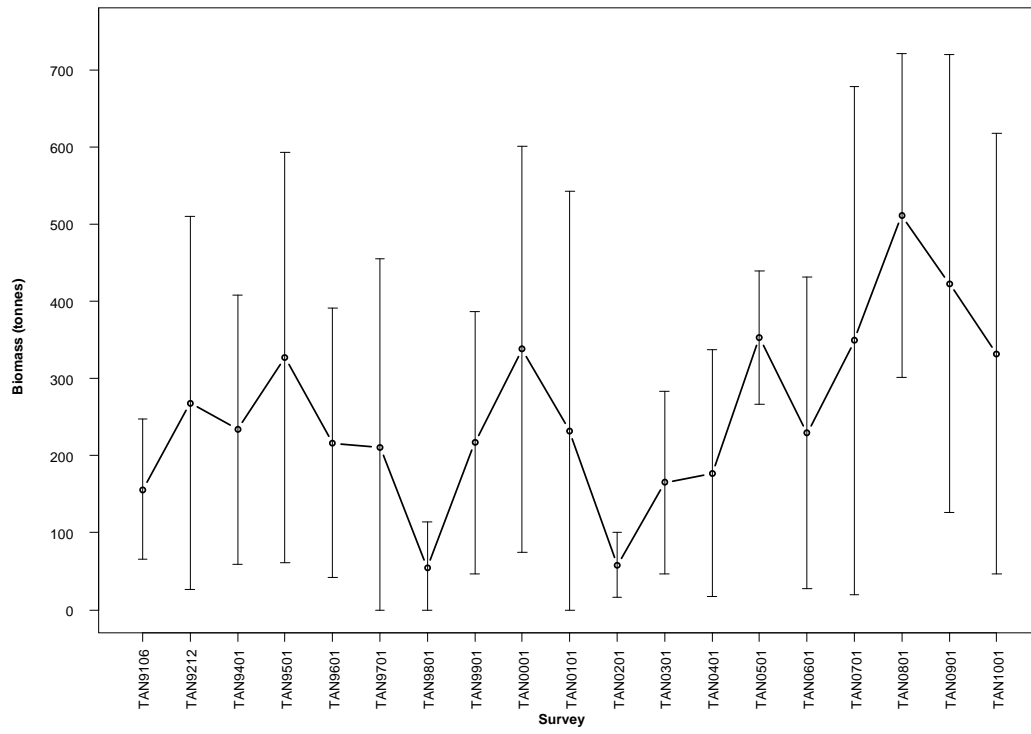


Number of surveys caught 1992–2010 (out of 19):	19
Total catch weight (kg):	3 202.7
Number measured	1 077
Length range (mean) (cm, TL)	20–71 (41.3)
Number weighed	499
Length-weight parameters a, b (r^2)	0.001815, 3.247555 (97.55)

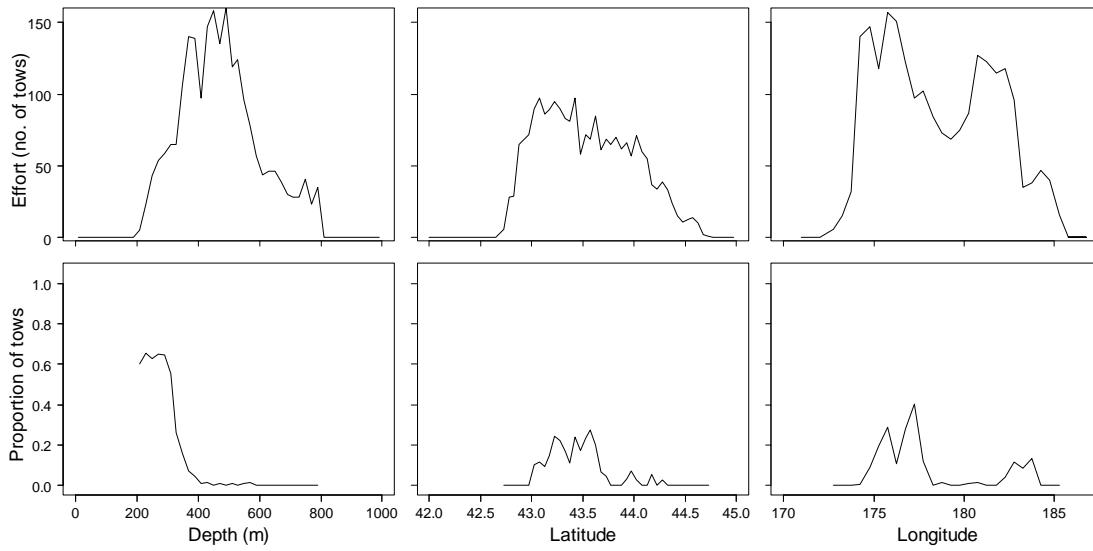
The core survey area and depth range **is not** appropriate for this species. It is found **shallower than 200 m**. Biomass of this species is **moderately well** estimated in the core survey area. Biomass **has increased** since the start of the time series. Catch rates are highest in the **west**. Length frequencies are sometimes **bimodal**. Mean length **shows no clear trend** since the start of the time series. Gonad stage data indicate that fish are **of all stages except running ripe** are observed in the survey.

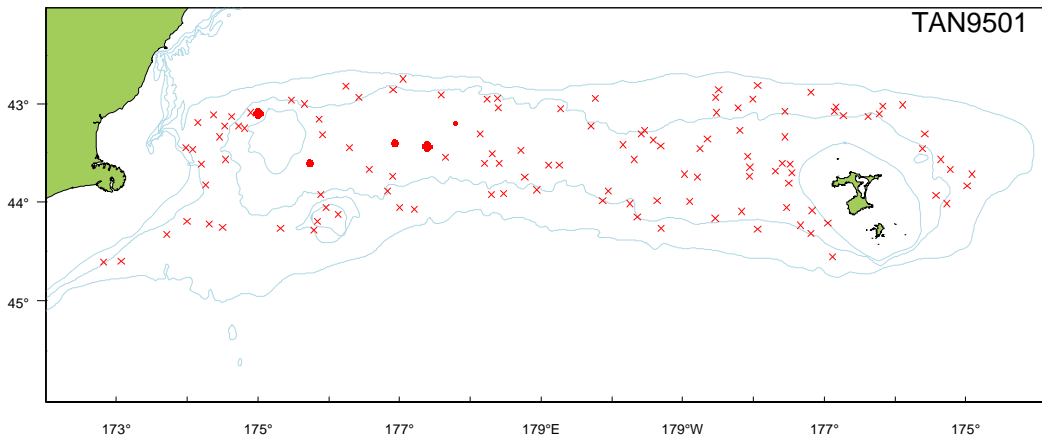
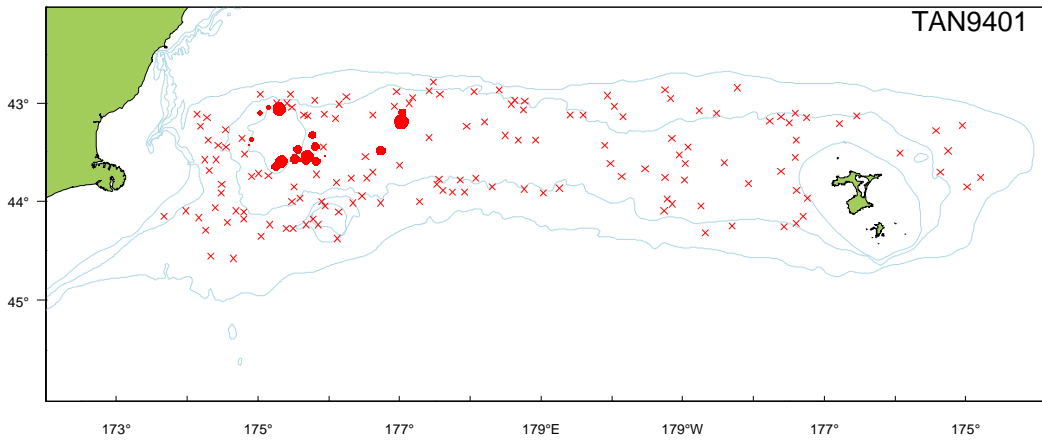
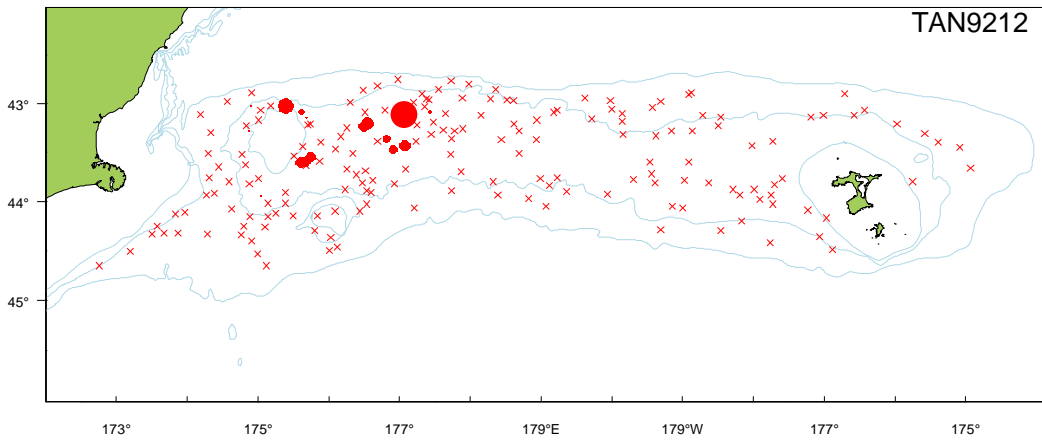
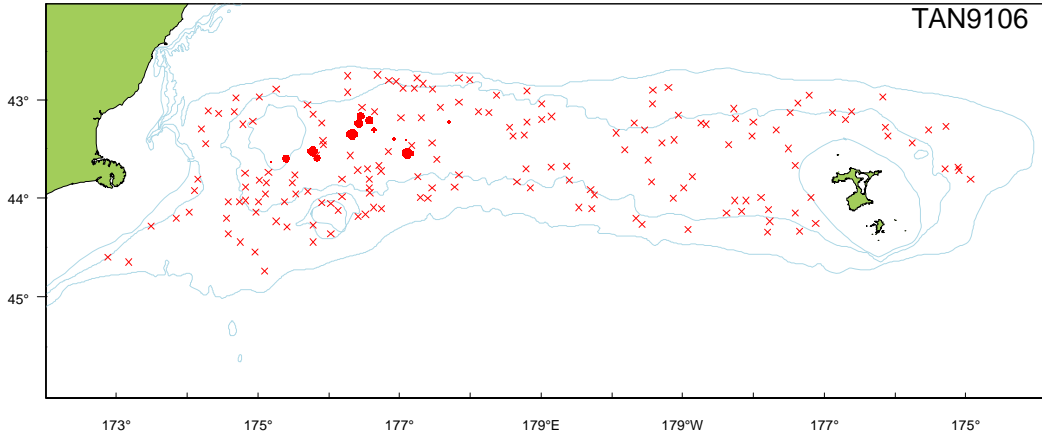
Relative biomass estimates and length summary

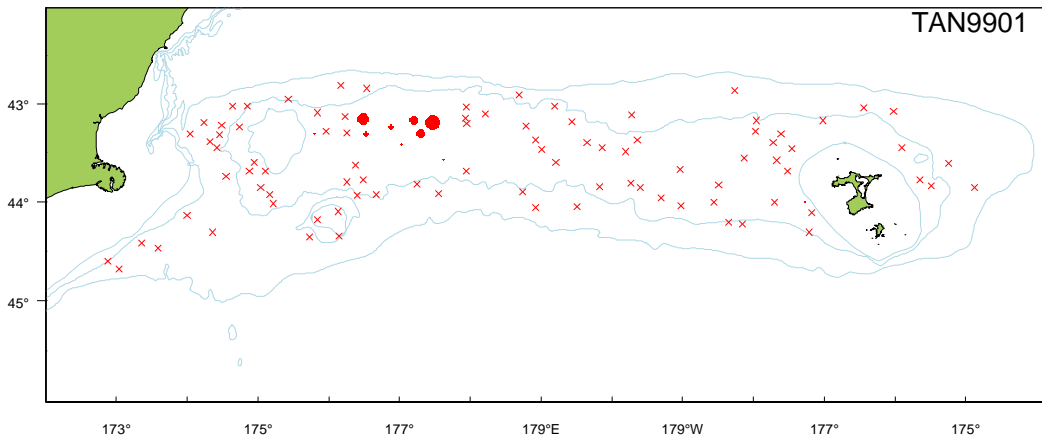
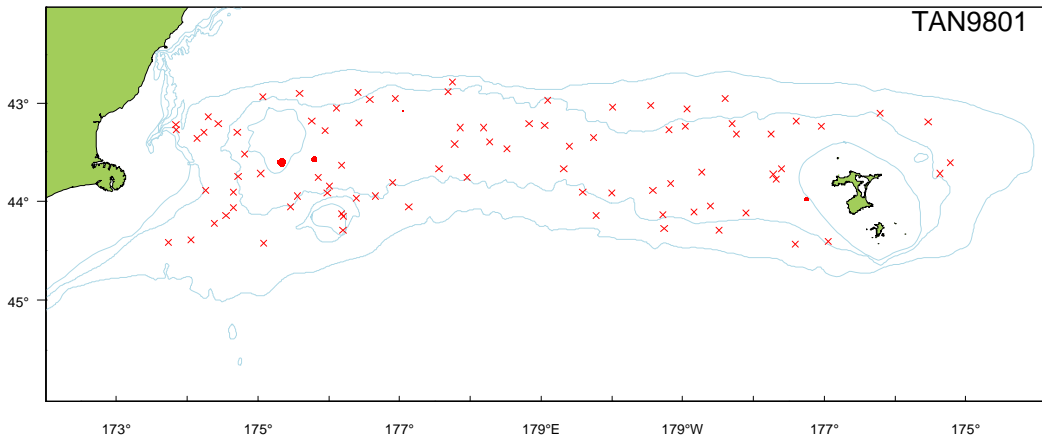
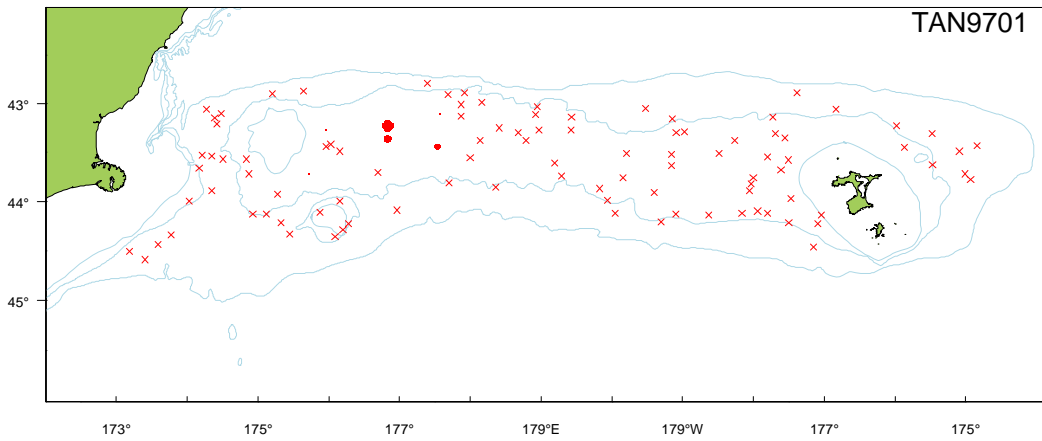
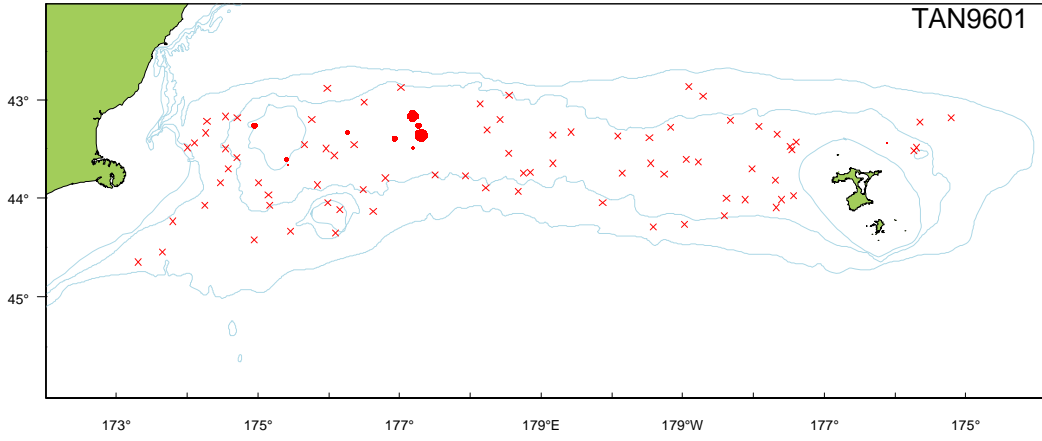
Year	Biomass (t)	cv (%)	Length (cm)			No. measure
			Min.	Max.	Mean	
1992	156	29	-	-	-	0
1993	268	45	-	-	-	0
1994	234	37	-	-	-	0
1995	327	41	-	-	-	0
1996	216	40	-	-	-	0
1997	210	58	-	-	-	0
1998	54	55	-	-	-	0
1999	217	39	-	-	-	0
2000	338	39	-	-	-	0
2001	232	67	-	-	-	0
2002	58	36	27	55	35.6	66
2003	165	36	-	-	-	0
2004	177	45	-	-	-	0
2005	353	12	-	-	-	0
2006	229	44	-	-	-	0
2007	349	47	25	58	44.6	161
2008	511	20	20	64	43.5	213
2009	423	35	24	71	38.8	346
2010	332	43	27	59	42.1	257

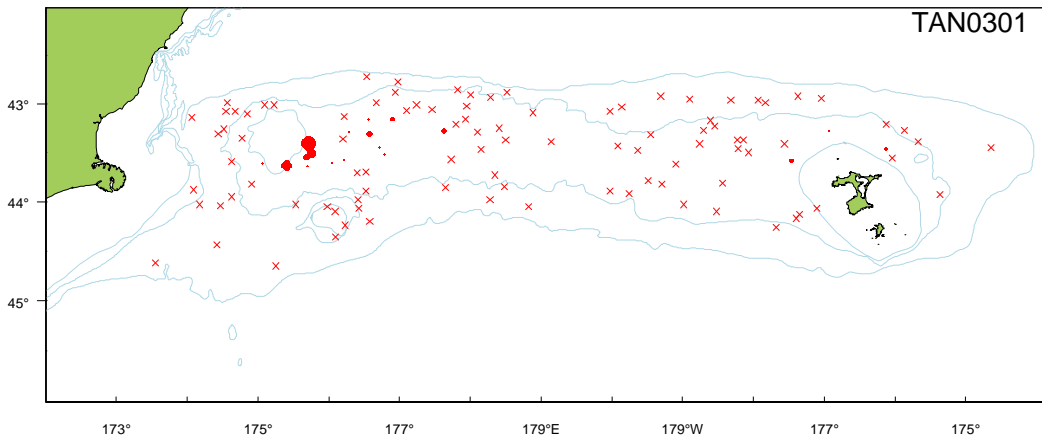
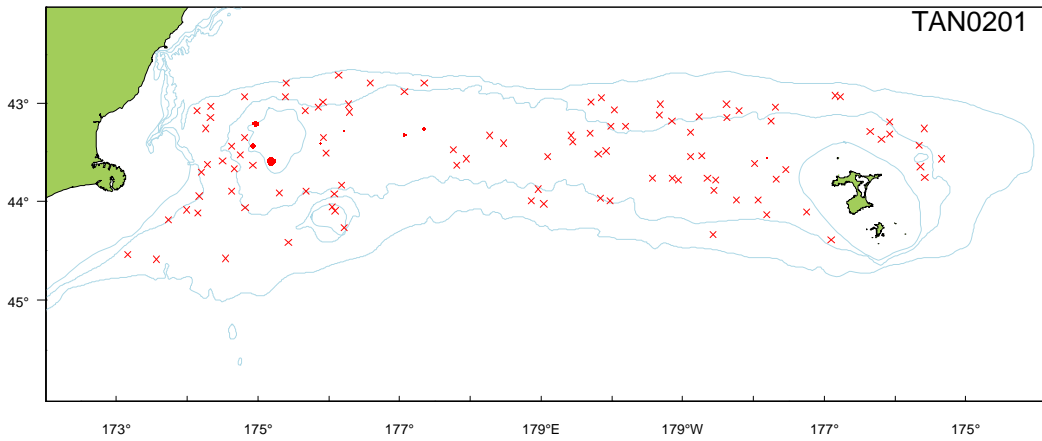
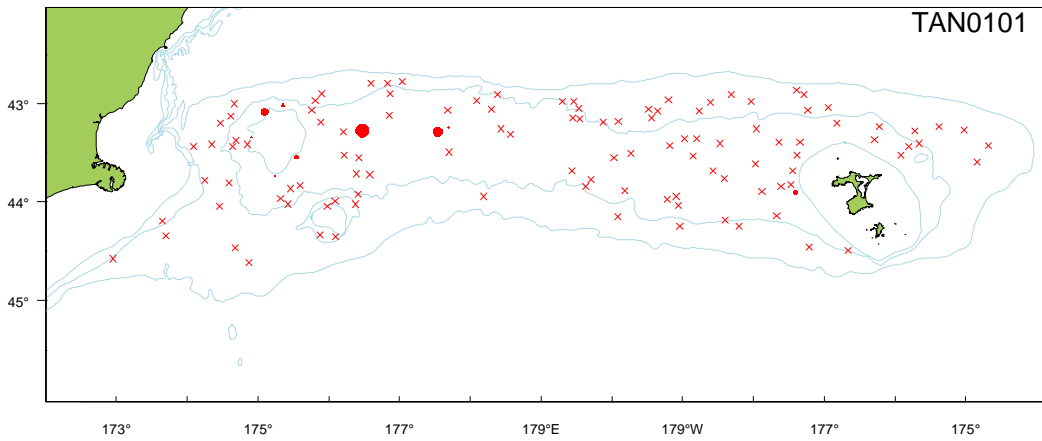
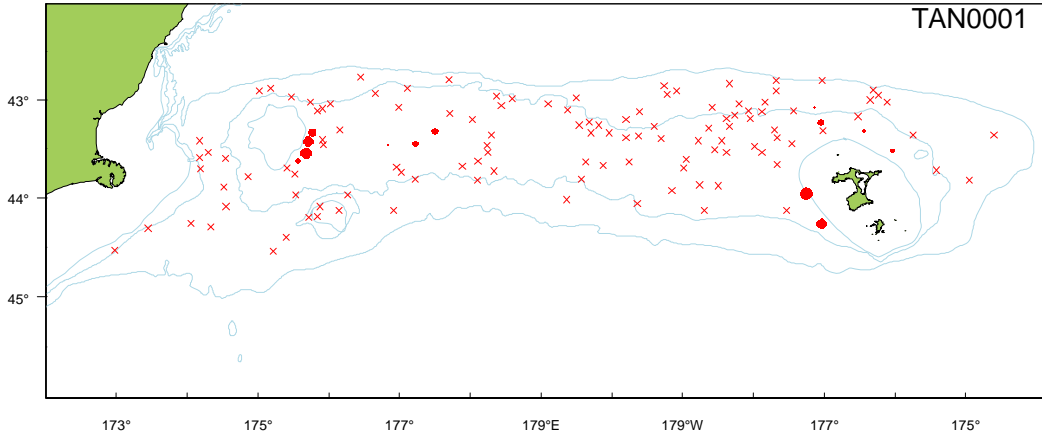


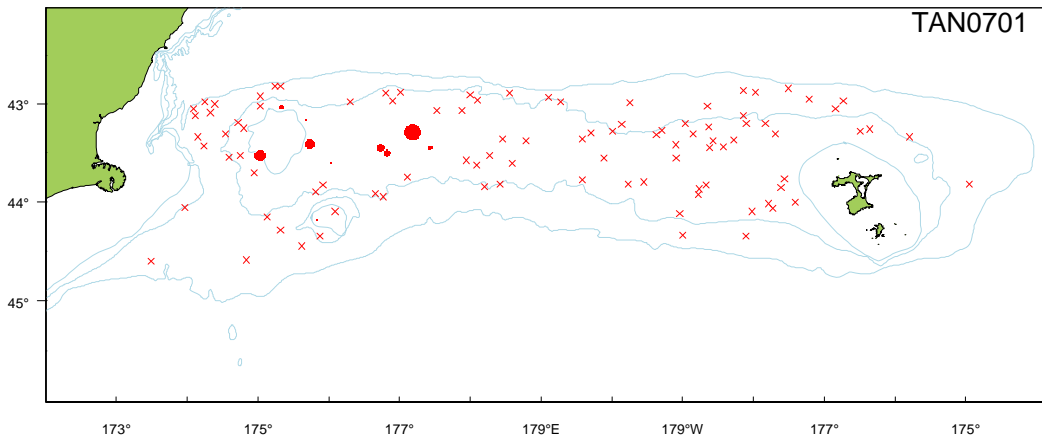
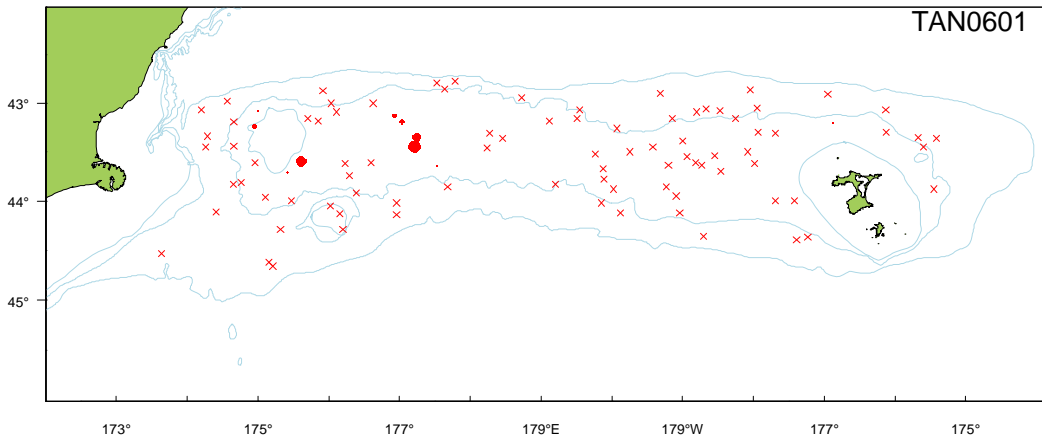
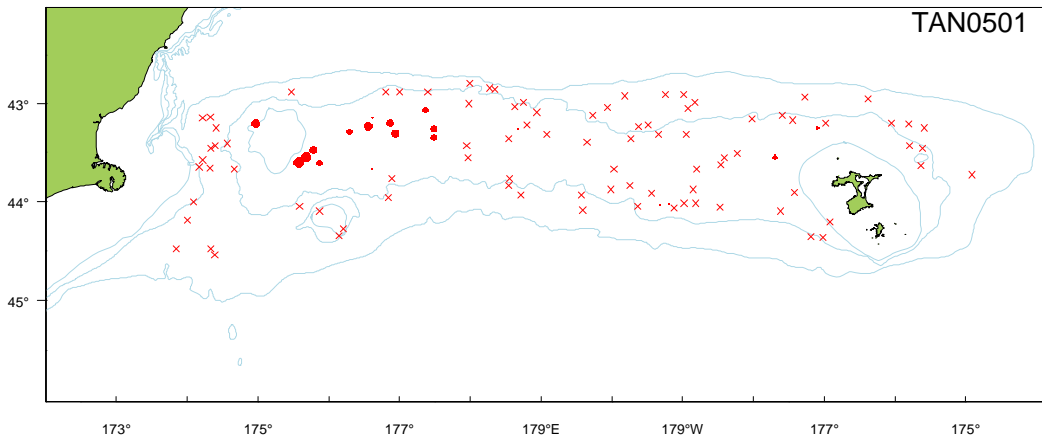
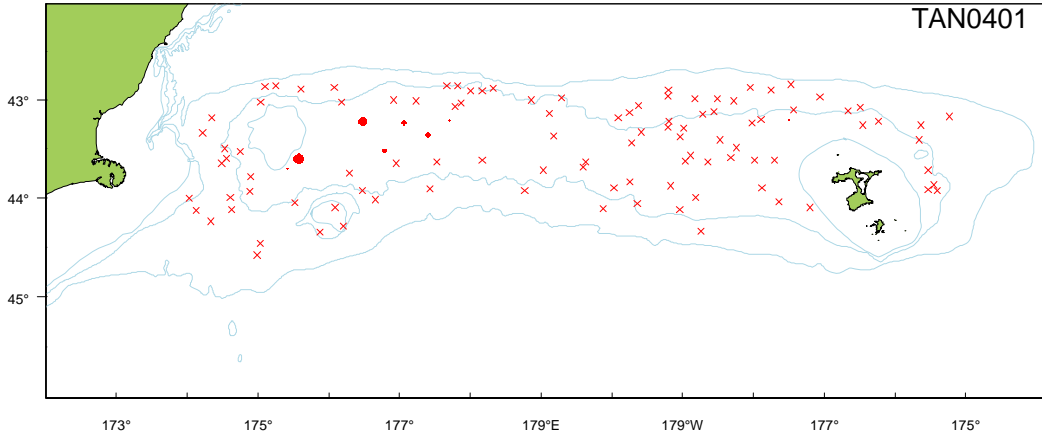
Distribution

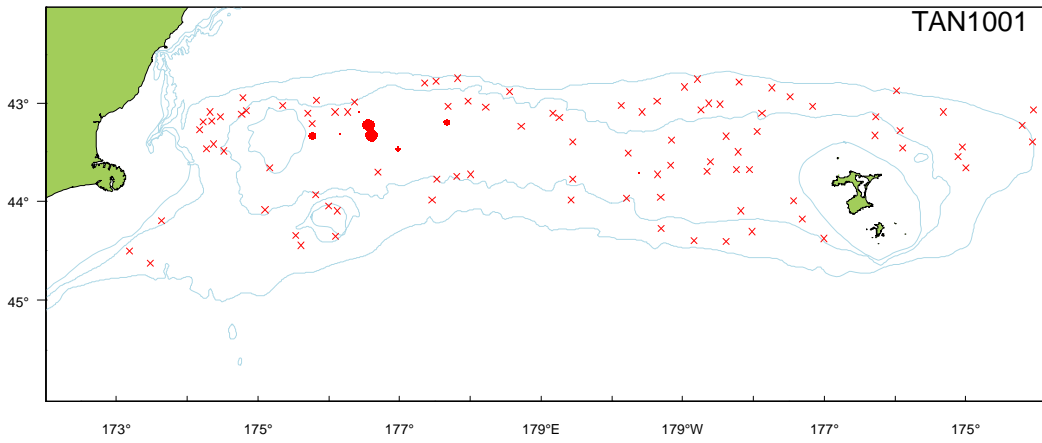
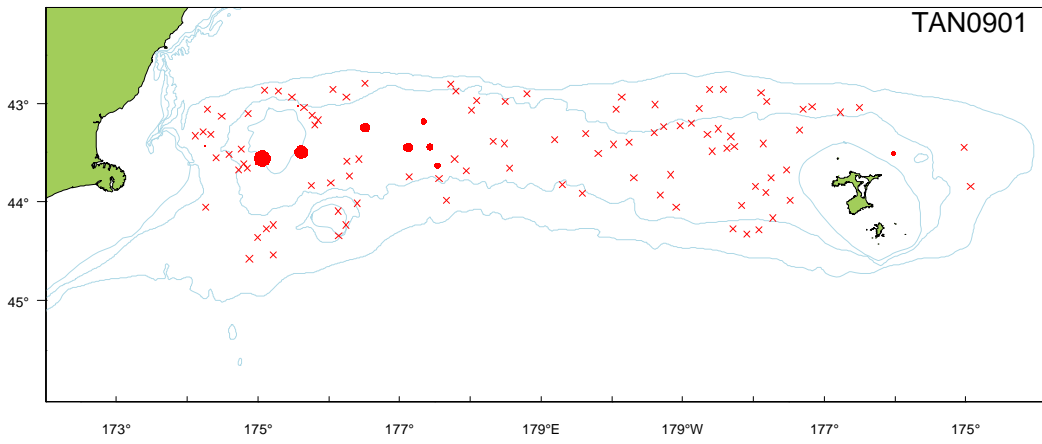
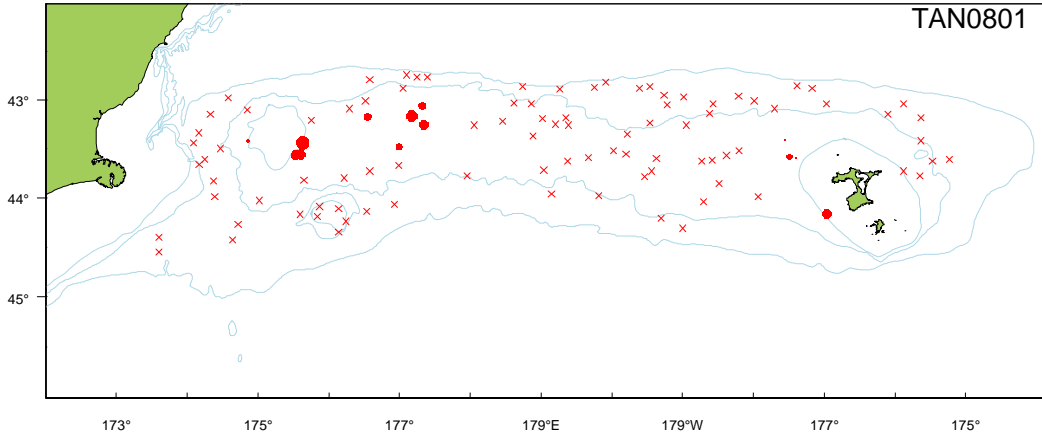




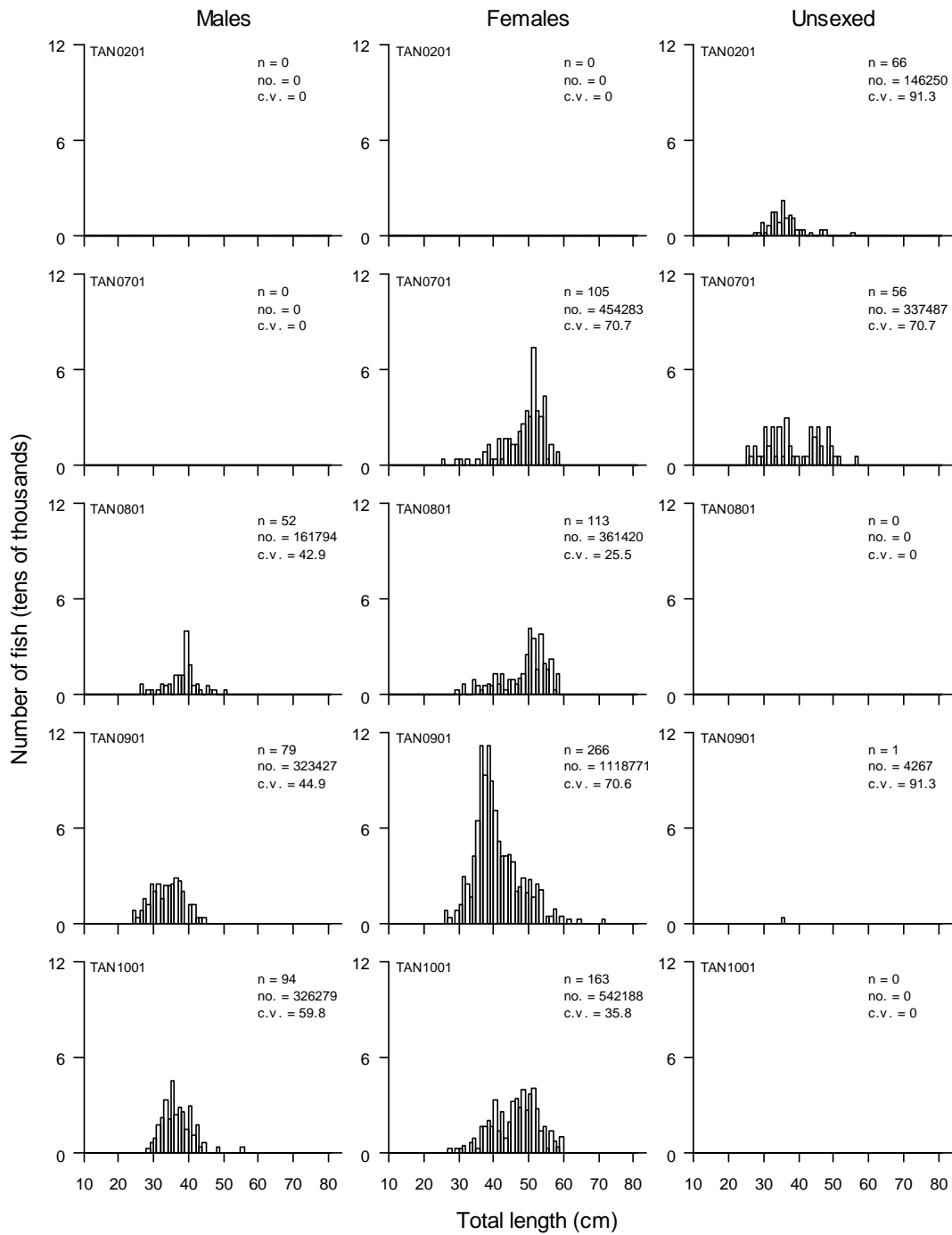








Length Frequencies



Gonad Stage Information

Males

Year	p_M1	p_M2	p_M3	p_M4	p_M5	p_M6	p_M7	n_allM
1992	NA	NA	NA	NA	NA	NA	NA	0
1993	NA	NA	NA	NA	NA	NA	NA	0
1994	NA	NA	NA	NA	NA	NA	NA	0
1995	NA	NA	NA	NA	NA	NA	NA	0
1996	NA	NA	NA	NA	NA	NA	NA	0
1997	NA	NA	NA	NA	NA	NA	NA	0
1998	NA	NA	NA	NA	NA	NA	NA	0
1999	NA	NA	NA	NA	NA	NA	NA	0
2000	NA	NA	NA	NA	NA	NA	NA	0
2001	NA	NA	NA	NA	NA	NA	NA	0
2002	NA	NA	NA	NA	NA	NA	NA	0
2003	NA	NA	NA	NA	NA	NA	NA	0
2004	NA	NA	NA	NA	NA	NA	NA	0
2005	NA	NA	NA	NA	NA	NA	NA	0
2006	NA	NA	NA	NA	NA	NA	NA	0
2007	NA	NA	NA	NA	NA	NA	NA	0
2008	NA	NA	NA	NA	NA	NA	NA	0
2009	0.02	0.47	0.28	0.09	0.13	0	0	53
2010	0	0.1	0.9	0	0	0	0	29
ALL	0.01	0.34	0.5	0.06	0.09	0	0	82

Females

Year	p_F1	p_F2	p_F3	p_F4	p_F5	p_F6	p_F7	n_allF
1992	NA	NA	NA	NA	NA	NA	NA	0
1993	NA	NA	NA	NA	NA	NA	NA	0
1994	NA	NA	NA	NA	NA	NA	NA	0
1995	NA	NA	NA	NA	NA	NA	NA	0
1996	NA	NA	NA	NA	NA	NA	NA	0
1997	NA	NA	NA	NA	NA	NA	NA	0
1998	NA	NA	NA	NA	NA	NA	NA	0
1999	NA	NA	NA	NA	NA	NA	NA	0
2000	NA	NA	NA	NA	NA	NA	NA	0
2001	NA	NA	NA	NA	NA	NA	NA	0
2002	NA	NA	NA	NA	NA	NA	NA	0
2003	NA	NA	NA	NA	NA	NA	NA	0
2004	NA	NA	NA	NA	NA	NA	NA	0
2005	NA	NA	NA	NA	NA	NA	NA	0
2006	NA	NA	NA	NA	NA	NA	NA	0
2007	0.05	0.48	0.19	0.03	0	0	0.25	104
2008	NA	NA	NA	NA	NA	NA	NA	0
2009	0.08	0.12	0.14	0.13	0	0.08	0.45	144
2010	0.08	0.16	0.05	0.7	0	0	0	37
ALL	0.07	0.26	0.15	0.17	0	0.04	0.32	285

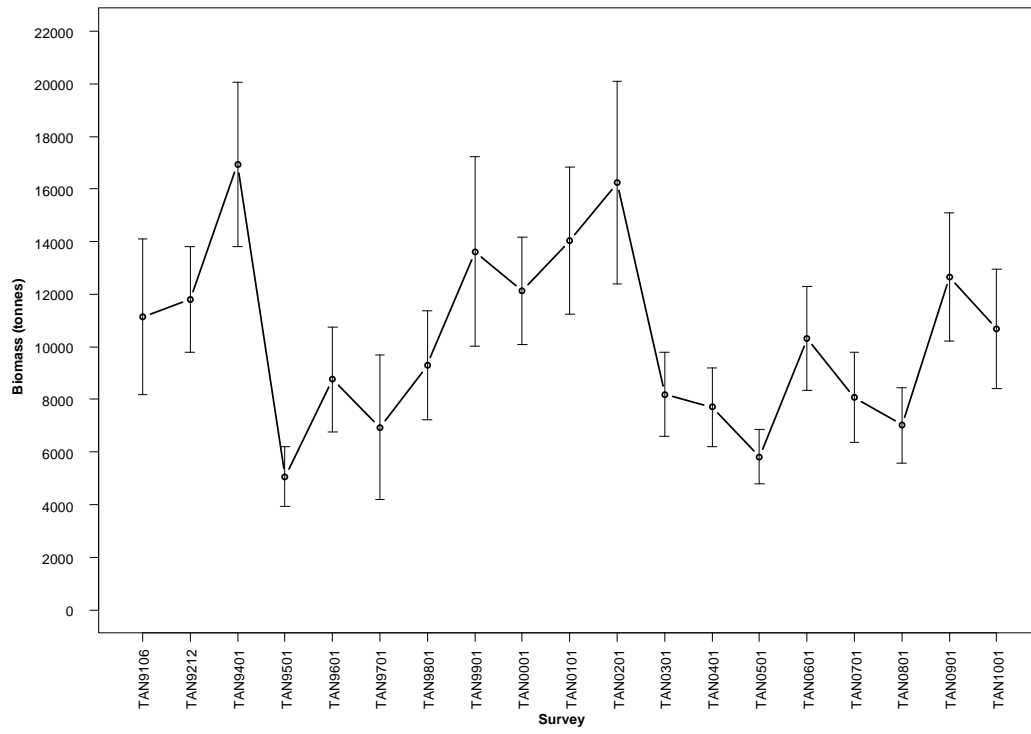


Number of surveys caught 1992–2010 (out of 19):	19
Total catch weight (kg):	117 007.8
Number measured	27 252
Length range (mean) (cm, TL)	15–65 (42.8)
Number weighed	7 298
Length-weight parameters a, b (r^2)	0.001583, 3.327274 (93.61)

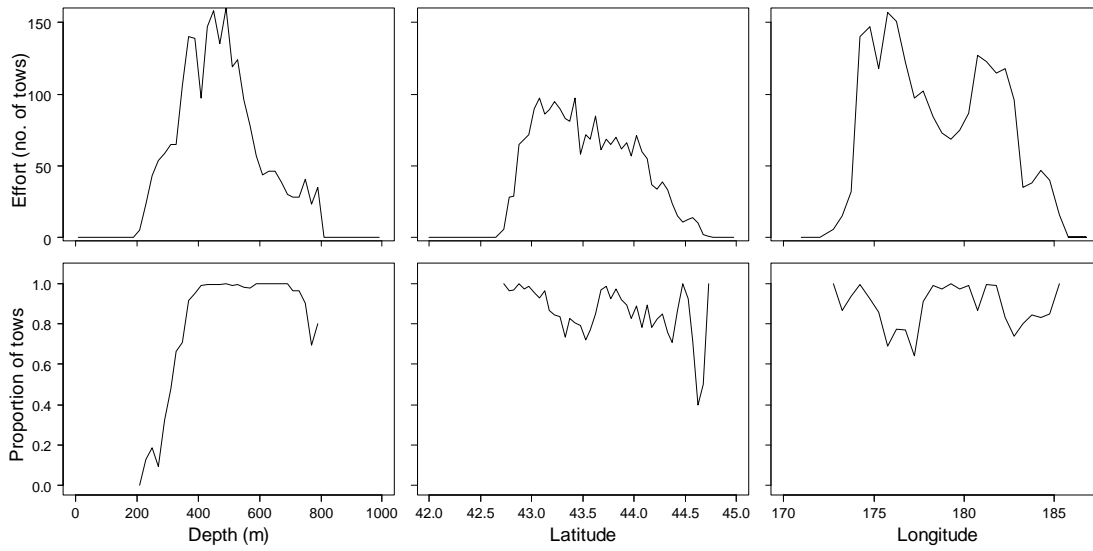
The core survey area and depth range **is** appropriate for this species. Biomass of this species is **very well** estimated in the core survey area. Biomass **shows no clear trend** since the start of the time series. Catch rates are highest in the **west**. Length frequencies are usually **unimodal**. Mean length **shows no clear trend** since the start of the time series. Gonad stage data indicate that most fish are **immature or resting**.

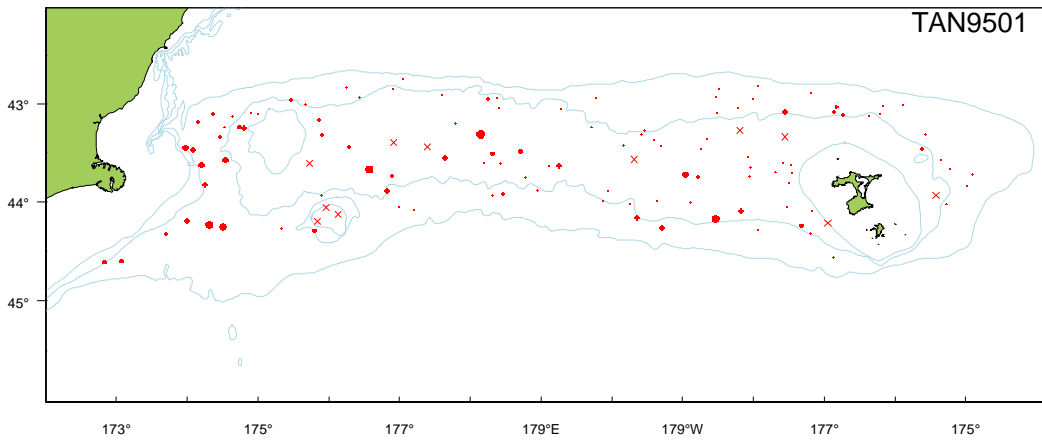
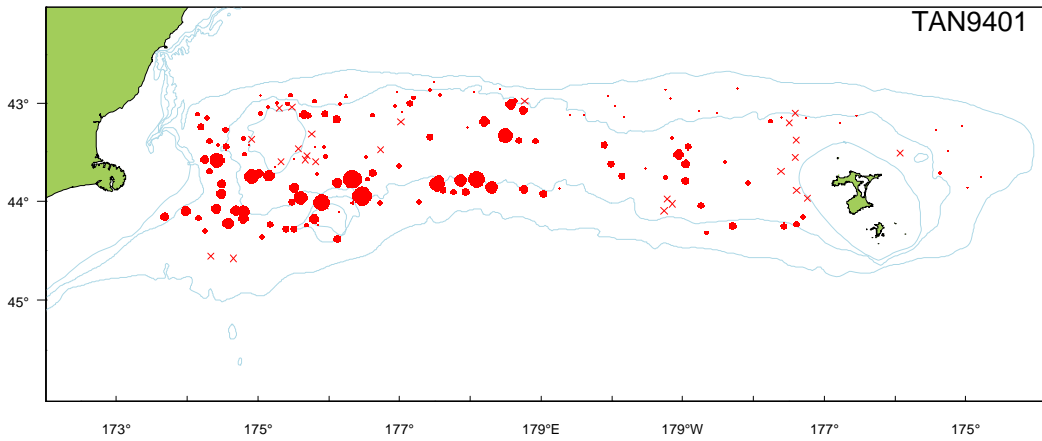
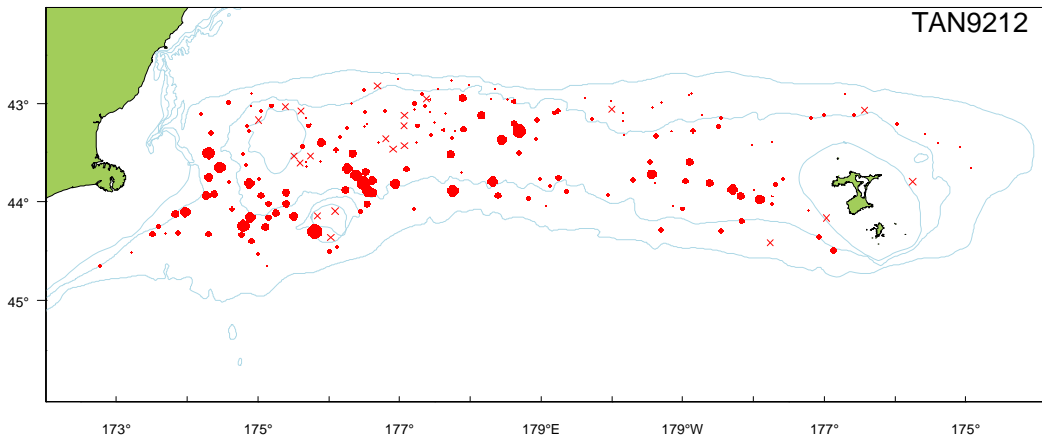
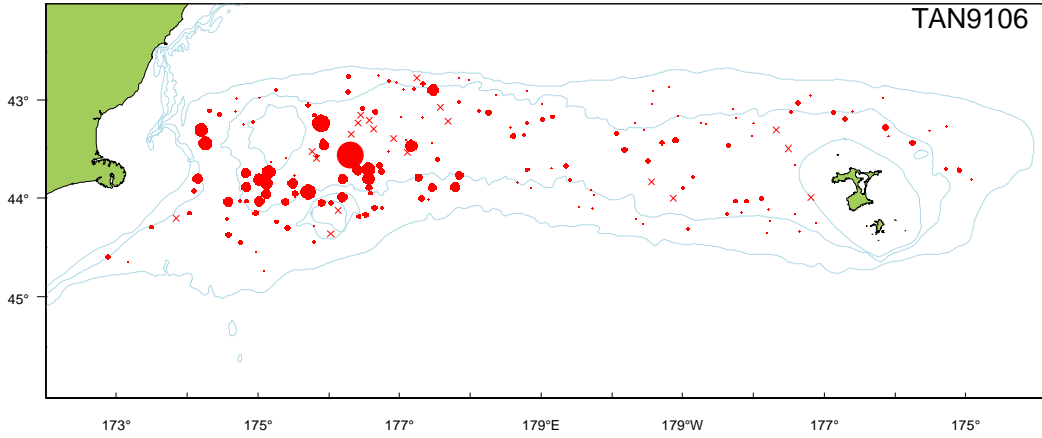
Relative biomass estimates and length summary

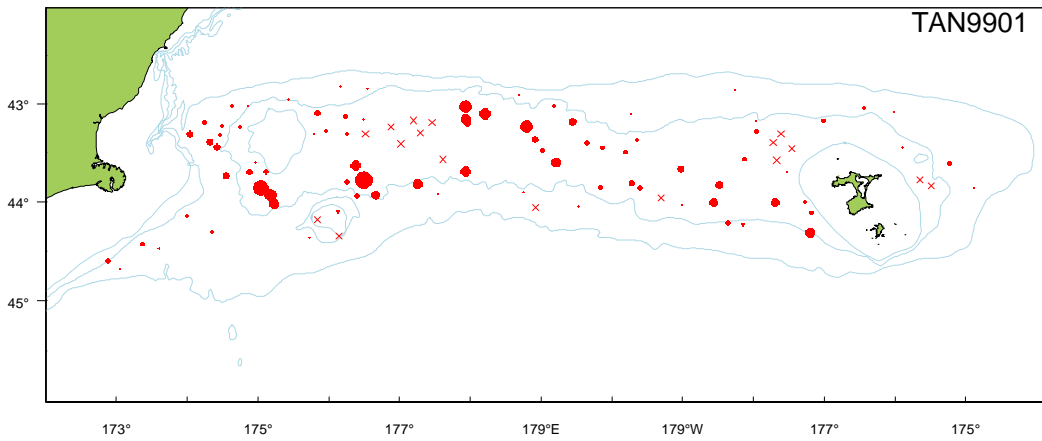
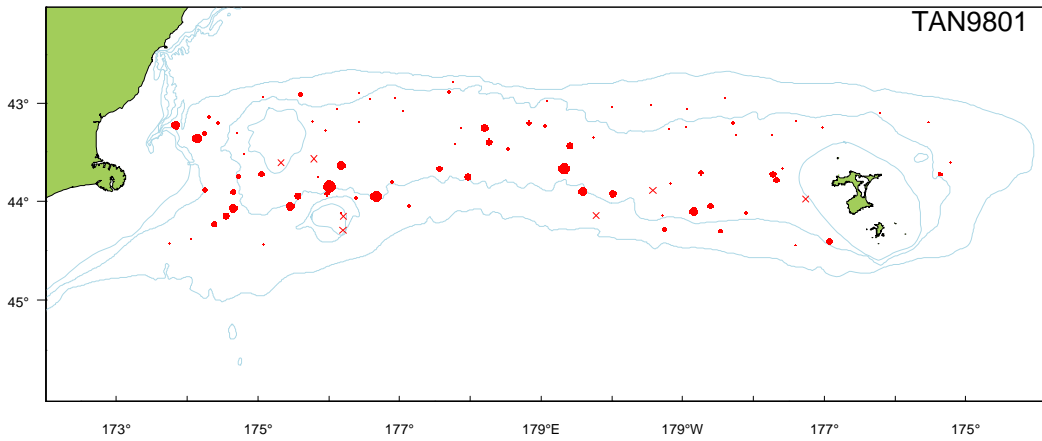
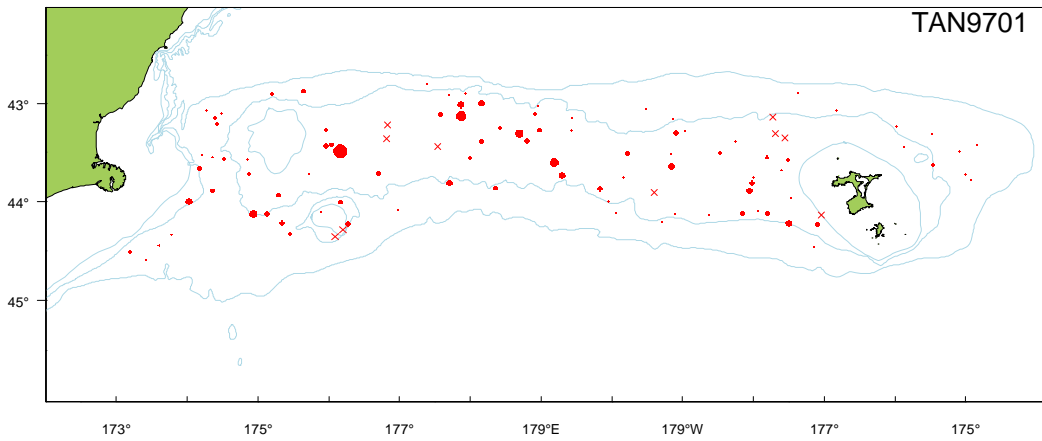
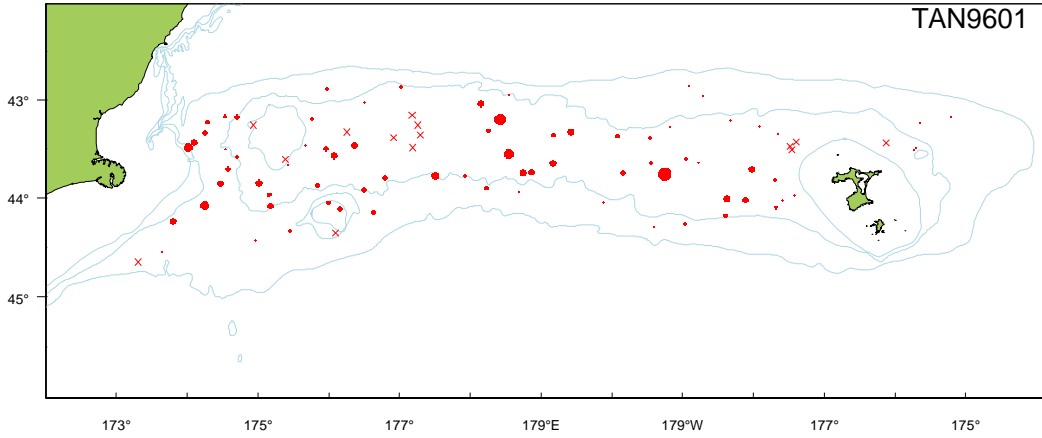
Year	Biomass (t)	cv (%)	Length (cm)			No. measure
			Min.	Max.	Mean	
1992	11 145	13	-	-	-	0
1993	11 810	8	-	-	-	0
1994	16 925	9	-	-	-	0
1995	5 063	11	-	-	-	0
1996	8 768	11	-	-	-	0
1997	6 936	20	-	-	-	0
1998	9 289	11	25	59	46.3	195
1999	13 621	13	28	51	41.5	115
2000	12 137	8	-	-	-	0
2001	14 036	10	-	-	-	0
2002	16 238	12	22	63	44.2	4 425
2003	8 186	10	20	65	43.5	2 686
2004	7 705	10	25	65	42.9	1 518
2005	5 823	9	15	62	43.1	1 646
2006	10 326	10	18	62	41.9	2 604
2007	8 071	11	15	62	42.3	2 081
2008	7 020	10	17	62	41.4	2 466
2009	12 646	10	22	64	41.9	3 310
2010	10 669	11	18	63	42.8	3 576

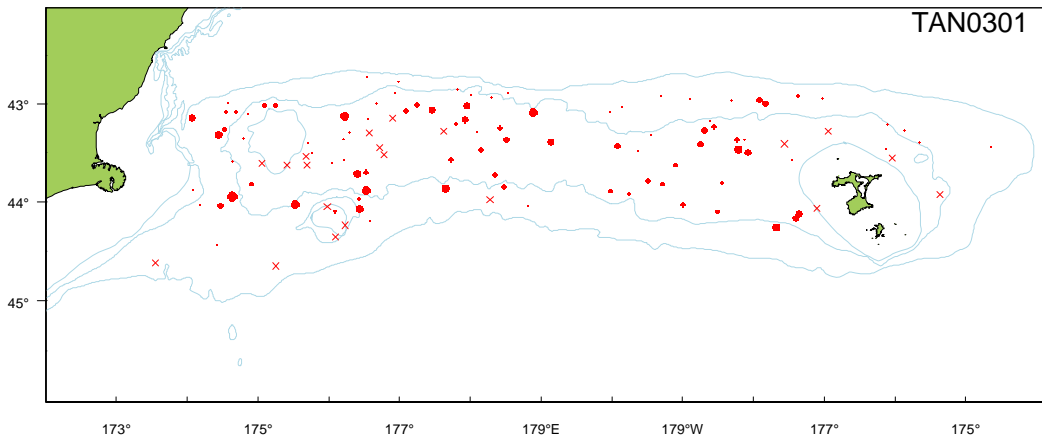
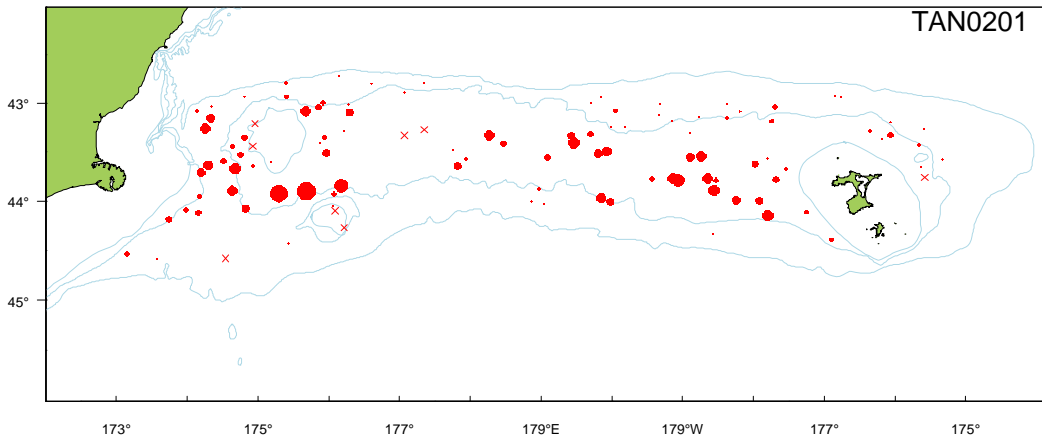
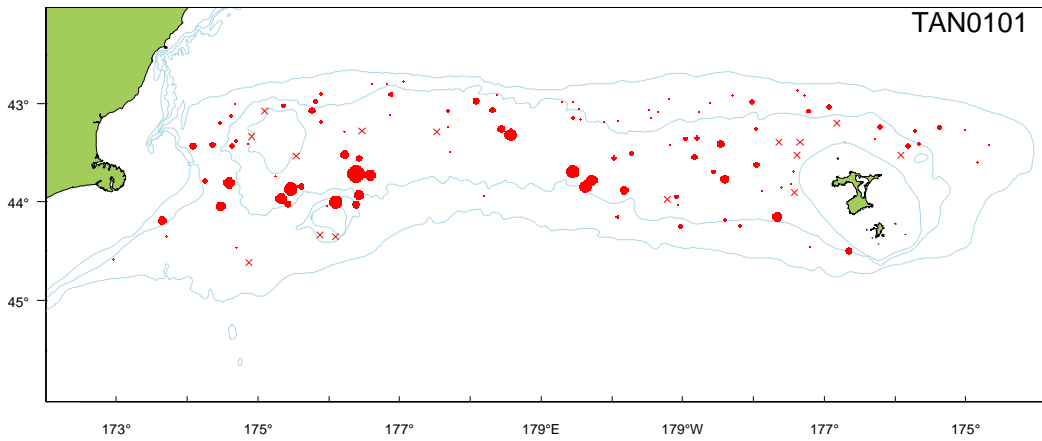
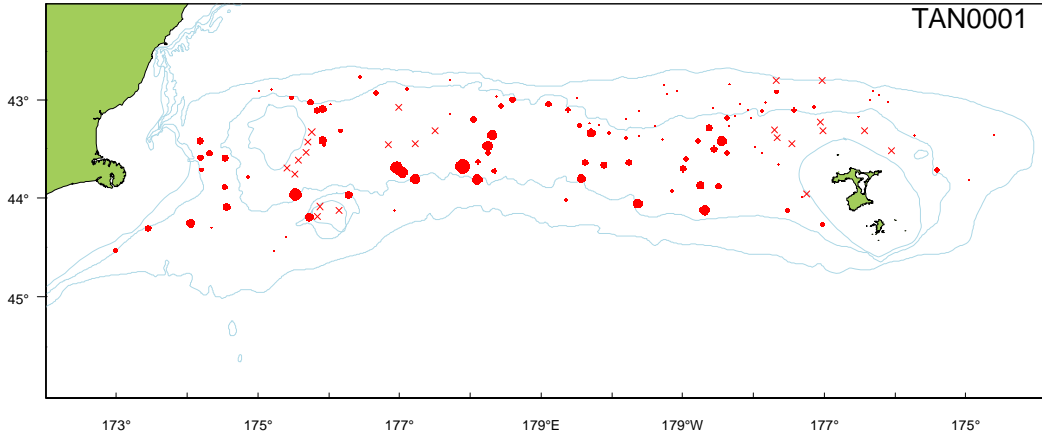


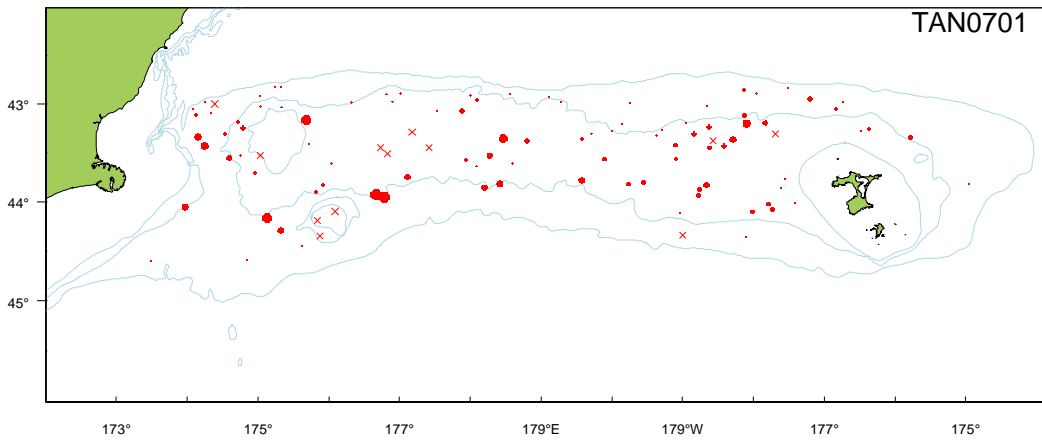
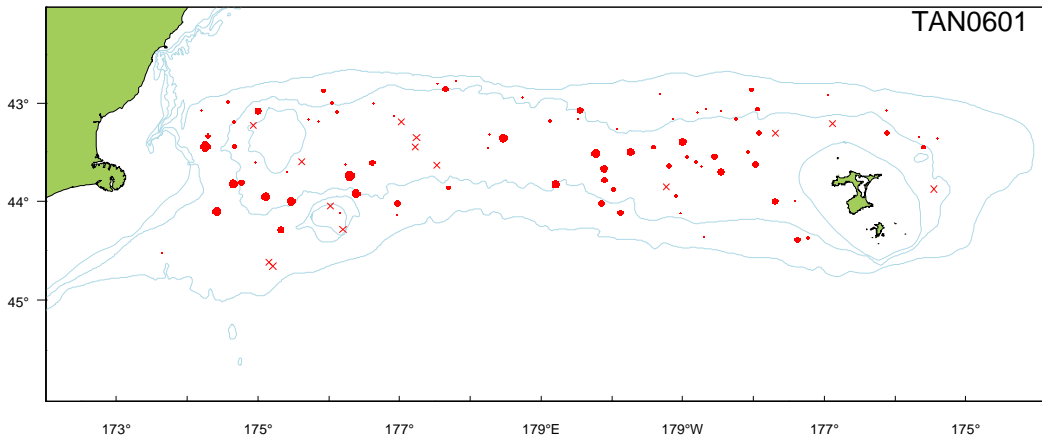
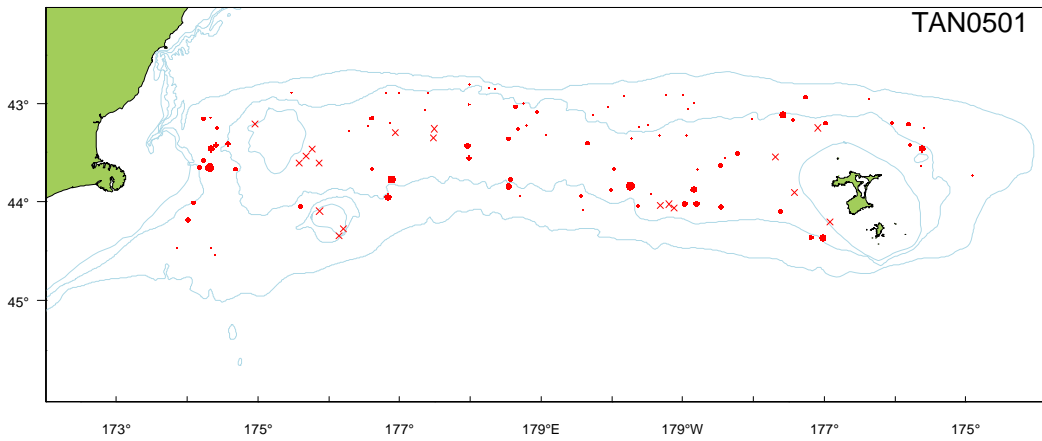
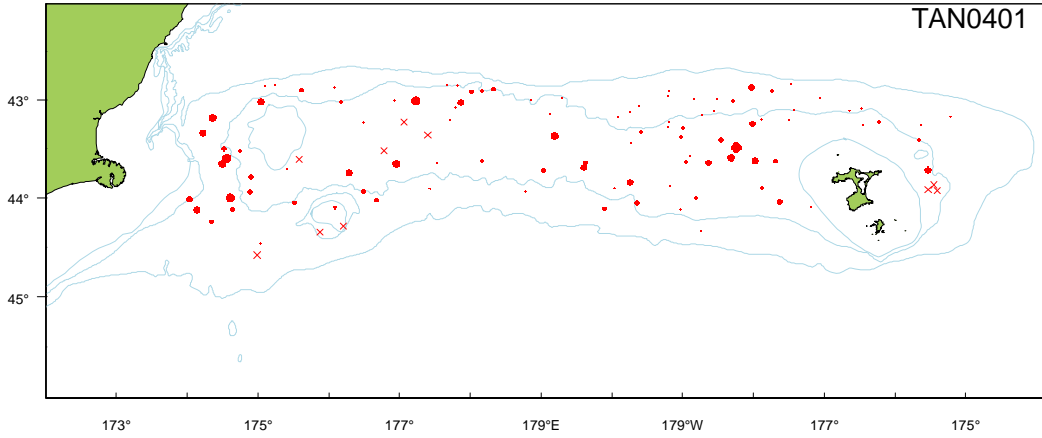
Distribution

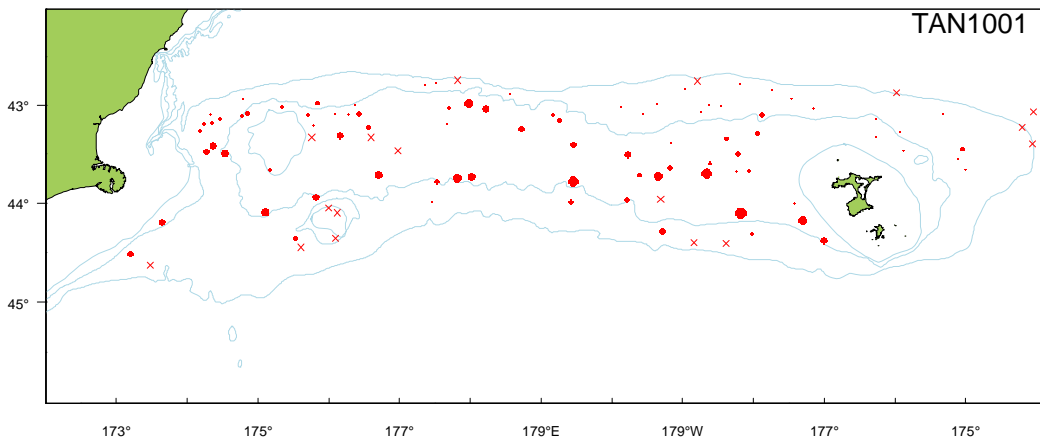
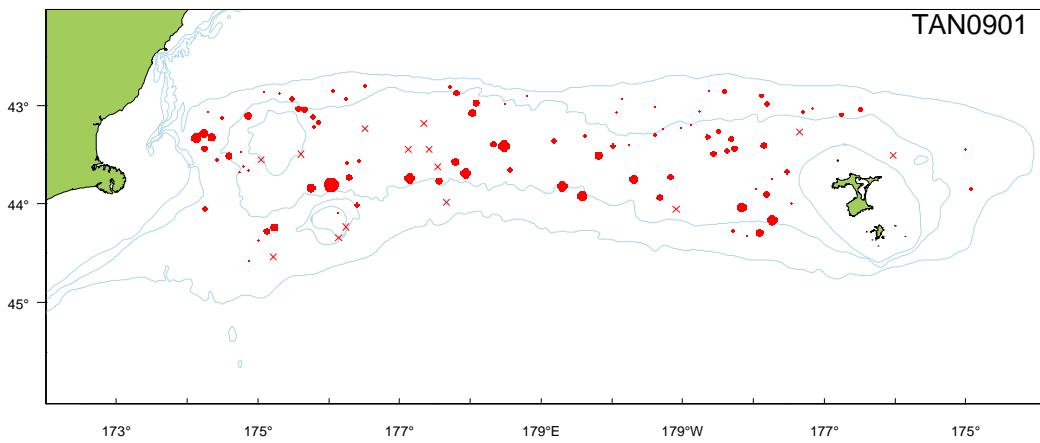
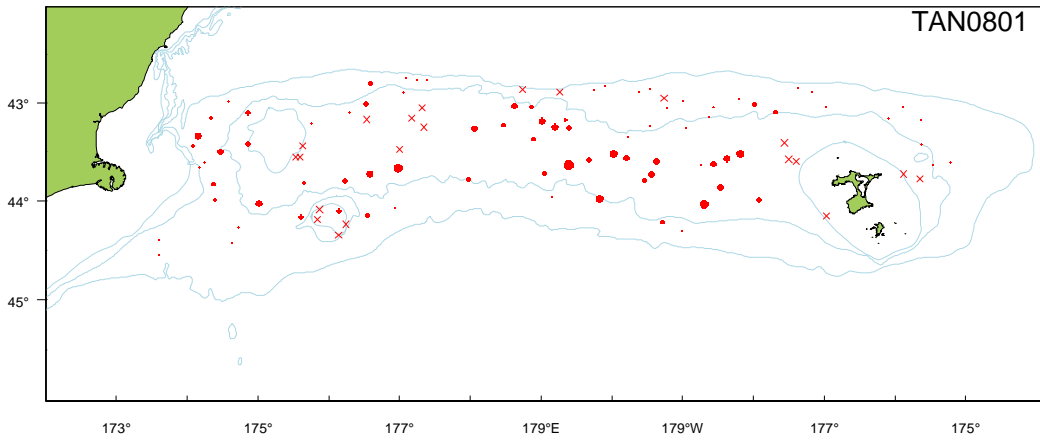




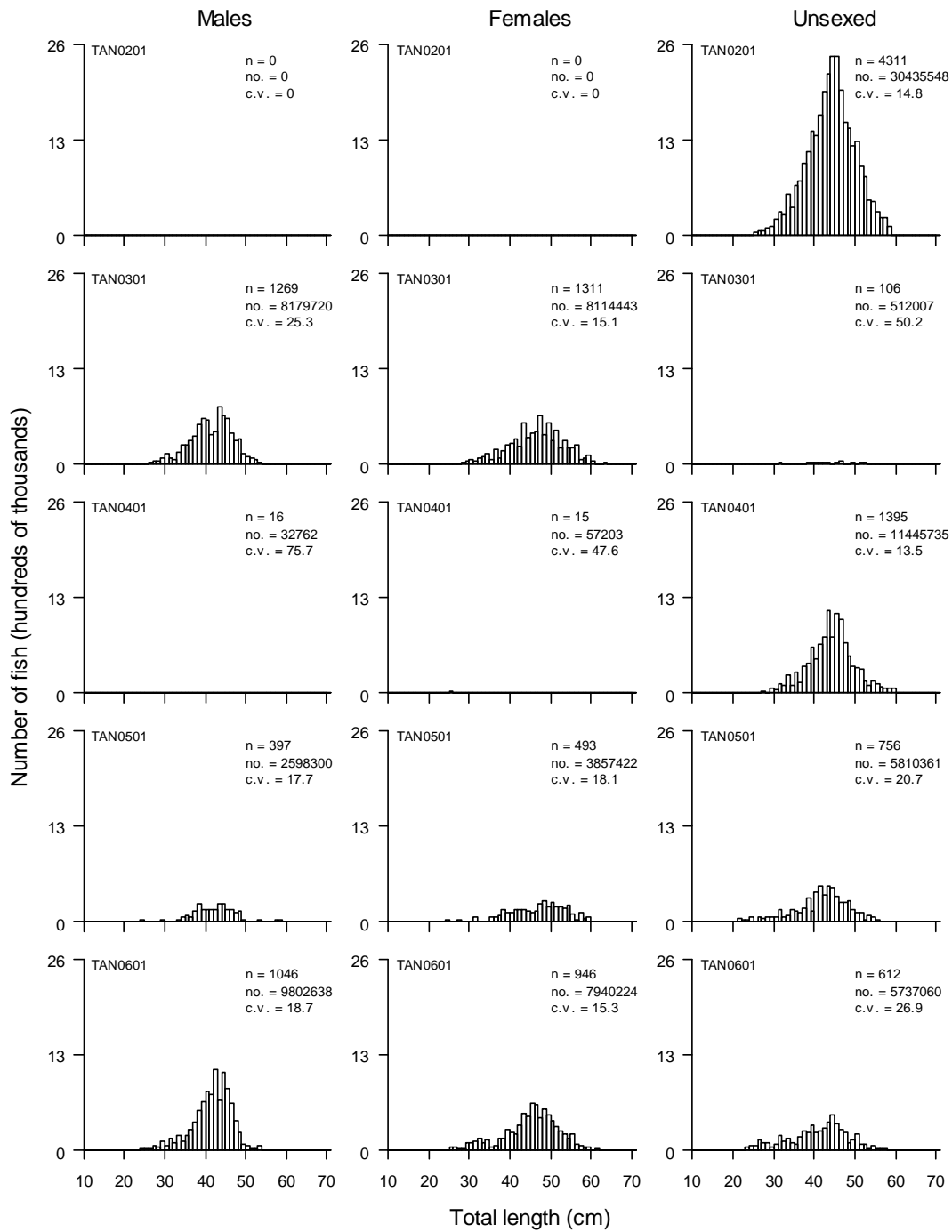


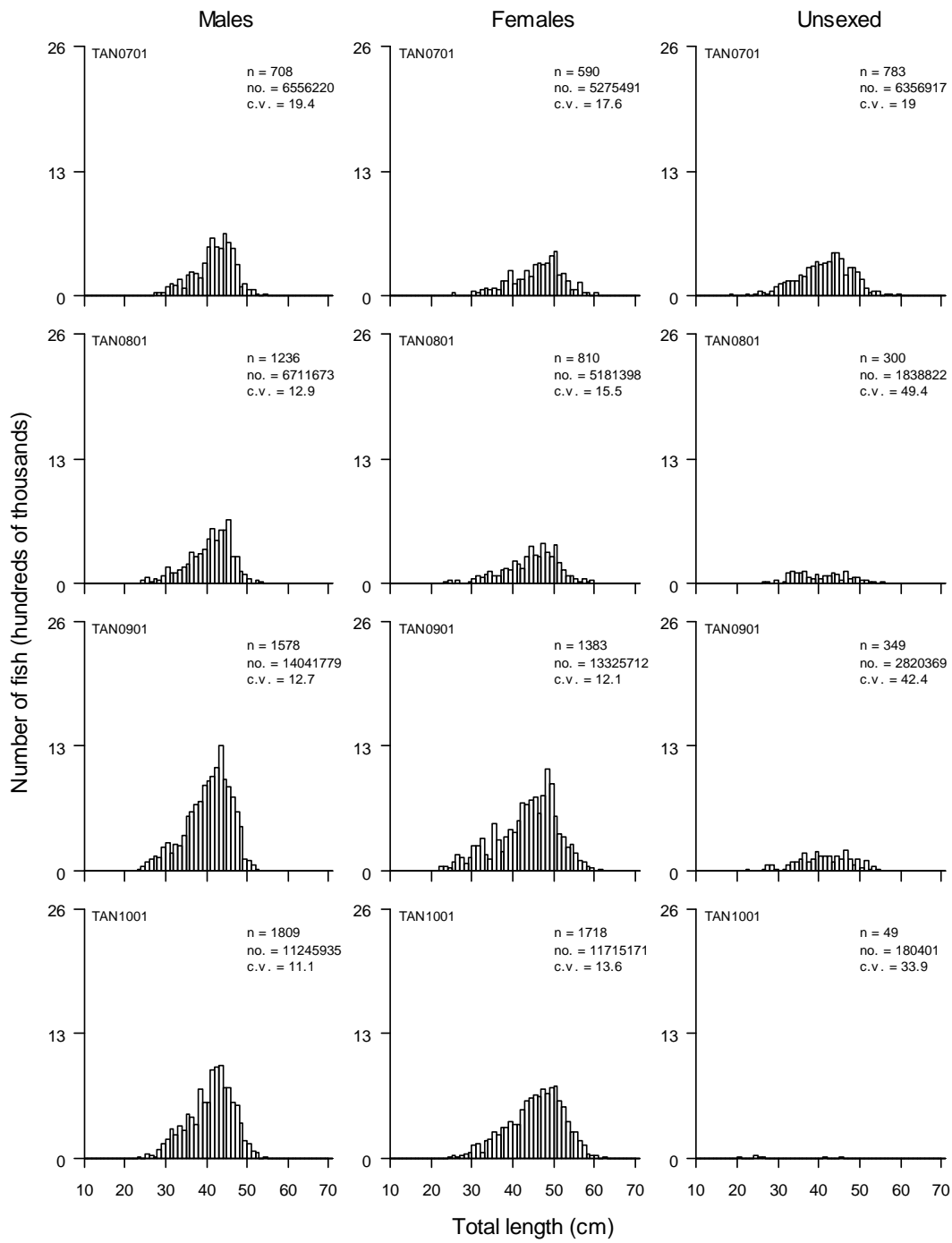






Length Frequencies





Gonad Stage Information

Males

Year	p_M1	p_M2	p_M3	p_M4	p_M5	p_M6	p_M7	n_allM
1992	NA	NA	NA	NA	NA	NA	NA	0
1993	NA	NA	NA	NA	NA	NA	NA	0
1994	NA	NA	NA	NA	NA	NA	NA	0
1995	NA	NA	NA	NA	NA	NA	NA	0
1996	NA	NA	NA	NA	NA	NA	NA	0
1997	NA	NA	NA	NA	NA	NA	NA	0
1998	NA	NA	NA	NA	NA	NA	NA	0
1999	NA	NA	NA	NA	NA	NA	NA	0
2000	NA	NA	NA	NA	NA	NA	NA	0
2001	NA	NA	NA	NA	NA	NA	NA	0
2002	NA	NA	NA	NA	NA	NA	NA	0
2003	NA	NA	NA	NA	NA	NA	NA	0
2004	NA	NA	NA	NA	NA	NA	NA	0
2005	0.2	0.79	0.01	0	0	0	0	173
2006	0.11	0.89	0	0	0	0	0	37
2007	NA	NA	NA	NA	NA	NA	NA	0
2008	NA	NA	NA	NA	NA	NA	NA	0
2009	0.24	0.76	0	0	0	0	0	90
2010	0.33	0.67	0	0	0	0	0	12
ALL	0.21	0.79	0.01	0	0	0	0	312

Females

Year	p_F1	p_F2	p_F3	p_F4	p_F5	p_F6	p_F7	n_allF
1992	NA	NA	NA	NA	NA	NA	NA	0
1993	NA	NA	NA	NA	NA	NA	NA	0
1994	NA	NA	NA	NA	NA	NA	NA	0
1995	NA	NA	NA	NA	NA	NA	NA	0
1996	NA	NA	NA	NA	NA	NA	NA	0
1997	NA	NA	NA	NA	NA	NA	NA	0
1998	NA	NA	NA	NA	NA	NA	NA	0
1999	NA	NA	NA	NA	NA	NA	NA	0
2000	NA	NA	NA	NA	NA	NA	NA	0
2001	NA	NA	NA	NA	NA	NA	NA	0
2002	NA	NA	NA	NA	NA	NA	NA	0
2003	NA	NA	NA	NA	NA	NA	NA	0
2004	NA	NA	NA	NA	NA	NA	NA	0
2005	0.2	0.77	0.03	0	0	0	0	182
2006	0.09	0.91	0	0	0	0	0	11
2007	NA	NA	NA	NA	NA	NA	NA	0
2008	NA	NA	NA	NA	NA	NA	NA	0
2009	0.16	0.78	0.05	0	0	0	0.02	131
2010	0.1	0.9	0	0	0	0	0	10
ALL	0.18	0.78	0.03	0	0	0	0.01	334

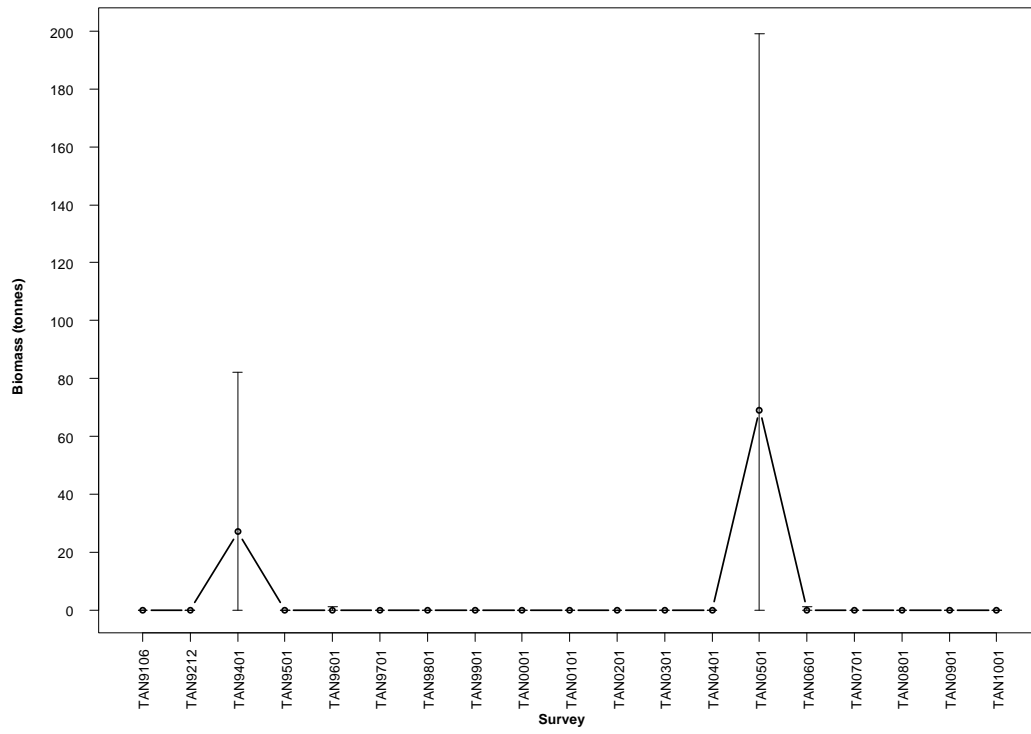


Number of surveys caught 1992–2010 (out of 19):	4
Total catch weight (kg):	101.9
Number measured	0
Length range (mean) (cm)	–
Number weighed	0
Length-weight parameters a, b (r^2)	–

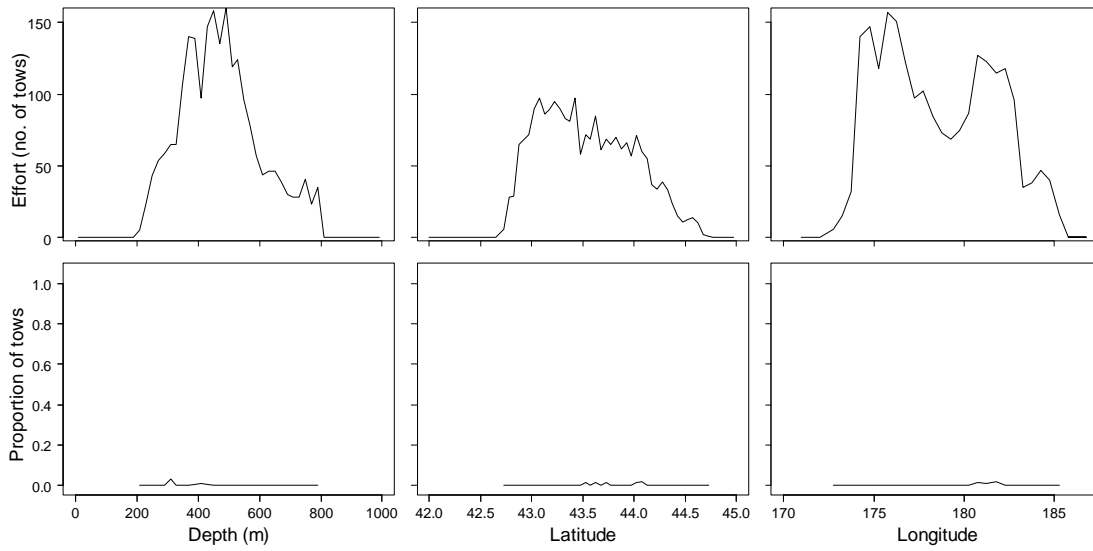
There were **too few fish caught to determine whether the core survey area is appropriate for this species**. Biomass of this species is **poorly** estimated in the core survey area. Biomass **shows no clear trend** since the start of the time series.

Relative biomass estimates

Year	Biomass (t)	cv (%)
1992	0	-
1993	0	-
1994	27	100
1995	0	-
1996	0	100
1997	0	-
1998	0	-
1999	0	-
2000	0	-
2001	0	-
2002	0	-
2003	0	-
2004	0	-
2005	69	94
2006	0	100
2007	0	-
2008	0	-
2009	0	-
2010	0	-



Distribution



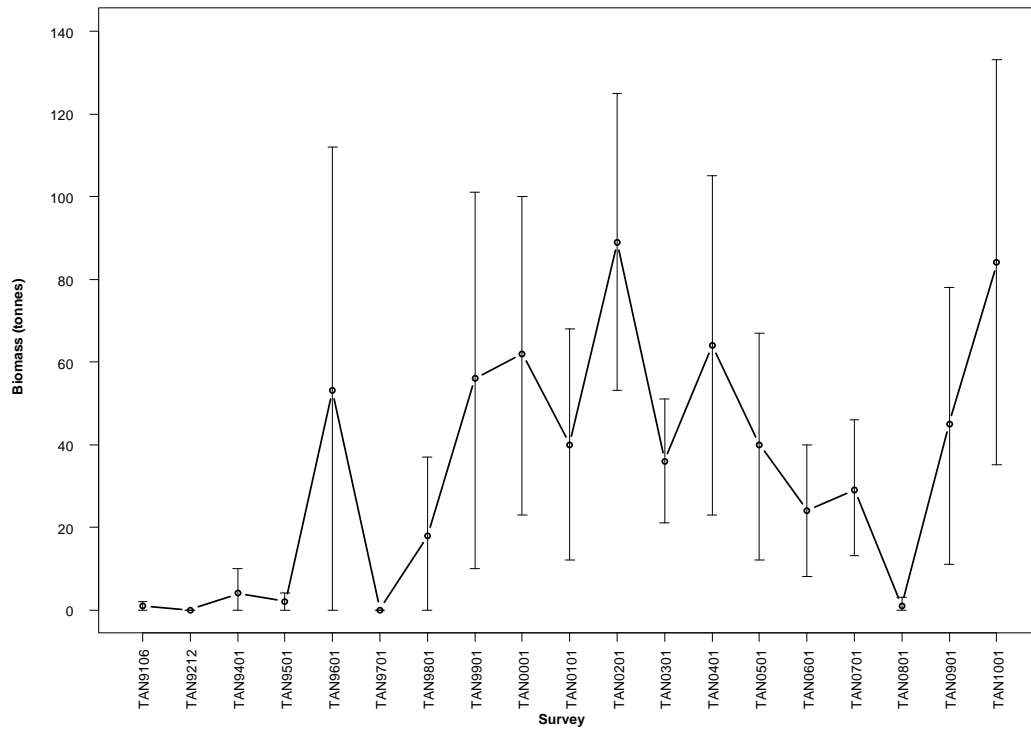


Number of surveys caught 1992–2010 (out of 19):	17
Total catch weight (kg):	347.6
Number measured	323
Length range (mean) (cm, TL)	15–35 (28.4)
Number weighed	16
Length-weight parameters a, b (r^2)	–

The core survey area and depth range **is** appropriate for this species. Biomass of this species is **poorly** estimated in the core survey area. Biomass has **increased and then decreased** since the start of the time series.

Relative biomass estimates

Year	Biomass (t)	cv (%)
1992	1	100
1993	0	-
1994	4	73
1995	2	56
1996	53	56
1997	0	-
1998	18	54
1999	56	41
2000	62	31
2001	40	35
2002	89	20
2003	36	20
2004	64	32
2005	40	34
2006	24	33
2007	29	28
2008	1	51
2009	45	37
2010	84	29



Distribution

