SAEON ODP - South African Environmental Observation Network Open Data Platform: (AGULHAS SYSTEM CLIMATE ARRAY)

SUPPLEMENTARY INFORMATION

DATA DESCRIPTION

Description:

Environmental data collected by various instrumentation either fixed to the individual ASCA moorings or sampled along the mooring line.

Dataset Reference Date (Data collected during the following cruises):

1) ASCA215 (7 - 26 April 2015)
2) ASCA0416 (6 April – 1 May 2016)
3) ASCA0716 (5 - 15 July 2016) – Seamester I
4) ASCA0118 (20 – 25 January 2018)
5) ASCA0618 (31 May – 13 June 2018)
6) ASCA0718 (16 – 27 July 2018) – Seamester III

INDIVIDUAL ASCA CTD STATION POSITIONS PER RESEARCH CRUISE

ASCA215 (7 - 26 April 2015)

Station #	Grid #	Date	Time (GMT)	Latitude	Longitude	Depth (m)
Alg11194	CTD--001	11/04/2015	13:49	-34,0262	27,8617	3603,60
Alg11195	CTD--002	12/04/2015	07:00	-33,7887	27,6941	2415,00
Alg11196	CTD--003	12/04/2015	15:58	-33,6704	27,6313	1167,00
Alg11197	CTD--004	12/04/2015	18:20	-33,5543	27,5936	299,25
Alg11198	CTD--005	13/04/2015	05:57	-33,4227	27,5149	72,00
Alg11199	CTD--006	13/04/2015	06:51	-33,5119	27,5681	117,00
Alg11201	CTD--008a+b	20/04/2015	04:00	-33,3430	27,4804	52,26
Alg11202	CTD--009a+b	20/04/2015	06:54	-33,4633	27,5479	88,43
Alg11203	CTD--010a+b	20/04/2015	08:23	-33,5560	27,5975	314,75
Alg11204	CTD--011a+b	20/04/2015	10:16	-33,5955	27,6225	599,44
Alg11205	CTD--012a+b	20/04/2015	12:26	--33,6539	27,6569	1264,00
Alg11206	CTD--013a+b	20/04/2015	15:25	--33,7051	27,6829	1754,00
Alg11207	CTD--014a+b	20/04/2015	17:47	--33,7876	27,7309	2222,00
Alg11208	CTD--015a+b	20/04/2015	20:15	--33,8967	27,7974	3210,00

Alg11209	CTD--016a+b	20/04/2015	22:37	--34,0203	27,8645	3595,17
Alg11210	CTD--017a+b	21/04/2015	00:53	--34,1349	27,9385	3614,78
Alg11211	CTD--018a+b	21/04/2015	03:26	--34,2871	28,0238	3699,16
Alg11212	CTD--019a+b	21/04/2015	05:33	--34,3982	28,0974	3821,22
Alg11213	CTD--020a+b	21/04/2015	07:52	--34,5391	28,1616	3990,29
Alg11214	CTD--021a+b	21/04/2015	10:20	--34,6726	28,2585	4146,00

ASCA0416 (6 April – 1 May 2016)

Station #	Date	Time (GMT)	Latitude	Longitude	Depth (m)
CTD--00 (test cast)	02/06/2018	08:15	35˚ 31 081	30˚ 5. 555	11.5
CTD--01	02/06/2018	15:59	35˚ 43. 9298	28˚ 54. 1006	10
CTD--01b	02/06/2018	16:33	35˚ 44. 224	28˚ 53. 890	n/a
CTD--02	03/06/2018	09:13	35˚ 31 336	28˚ 46. 526	n/a
CTD--03	03/06/2018	13:49	35˚ 15. 97	28˚ 41. 14	n/a
CTD--04	04/06/2018	19:35	34˚ 50. 111	28˚ 22. 23	n/a
CTD--05	05/06/2018	10:50	34˚ 32. 62	28˚ 11. 43	n/a
CTD--06	05/06/2018	15:58	34˚ 19. 13	28˚ 01. 79	n/a
CTD--07	07/06/2018	19:54	33˚ 38. 809	27˚ 38. 62	1083
CTD--08	10/06/2018	11:17	34˚ 17. 08	27˚ 57. 97	n/a
CTD--09	10/06/2018	15:35	34˚ 18. 93	27˚ 55. 31	n/a
CTD--10	10/06/2018	19:44	34˚ 17. 525	28˚ 1. 08	n/a
CTD--11	10/06/2018	23:45	34˚ 19. 525	27˚ 58. 87	n/a

ASCA0716 (5 - 15 July 2016) – SEAMESTER I

Station Name/#	Date (DDMMYYYY)	Time (GMT)	Latitude	Longitude	Depths/Comments
CTD001	07/07/2016	09:30	33 20.6S	27 28.7E	49.6 m
CTD002	07/07/2016	14:20	33 27.7S	27 32.8E	95 m
CTD003	07/07/2016	17:25	33 33.3S	27 35.7E	310 m
CTD004	07/07/2016	20:22	33 55.7S	27 37.0E	556.9 m
CTD005	07/07/2016	0	33 39.5S	27 38.8E	1247 mm, Strong wind nets cancelled
CTD006	08/07/2016	01:58	33 42.4S	27 41.1E	1798 m
CTD007	08/07/2016	06:51	33 47.0S	27 42.8E	2400 m
CTD008	08/07/2016	11:42	33 53.9S	27 47.7E	3326.89 m, bongo net loss
CTD009	08/07/2016	16:31	34 01.5S	27 51.8E	3525 m
CTD010	08/07/2016	21:09	34 08.3S	27 56.1E	3651 m
CTD011	09/07/2016	01:35	34 17.5S	28 01.5E	3735 m
CTD012	09/07/2016	06:30	34 24.0S	28 05.6E	3868.88 m
CTD013	09/07/2016	11:25	34 32.3S	28 09.1E	4029.66 m
CTD014	09/07/2016	16:45	34 40.3S	28 15.4E	4196 m
CTD015	10/07/2016	22:10	34 49.3S	28 20.6E	4305.8 m
CTD016	10/07/2016	03:36	34 57.4S	28 24.9E	4364.8 m
CTD017	10/07/2016	09:22	35 09.6S	28 32.5E	4429.22 m
CTD018	10/07/2016	15:24	35 20.71S	28 40.5E	4399.66 m
CTD019	10/07/2016	21:22	35 32.1S	28 46.5E	4551.66 m

CTD020	11/07/2016	03:16	35 44.0S	28 54.1E	4650.98 m
CTD021	11/07/2016	09:03	35 55.7S	29 01.2E	4717.8 m, extension of ASCA
CTD022	12/07/2016	07:50	33 39.1S	27 39.2E	1264.9 m, Redo CTD005 to 200 m depth
CTD023	12/07/2016	09:12	33 46.6S	27 43.4E	2216.63 , CTD to 250 m depth

ASCA0118 (20 – 25 January 2018)

Station Name/Number	Date (DDMMYYYY)	Time (GMT)	Latitude	Longitude
1	22-Jan-18	06:02	-33.344167	27.4801667
2	22-Jan-18	17:32	-33.468167	27.5396667
3	22-Jan-18	08:28	-33.567333	27.5848333
4	22-Jan-18	12:41	-33.601167	27.6191667
5	22-Jan-18	14:21	-33.639	27.657
6	22-Jan-18	16:18	-33.705667	27.6876667
7	22-Jan-18	18:47	-33.786	27.7136667
13	27-Jan-18	22:27	-31.5085	29.8943333
16	28-Jan-18	02:58	-31.452	29.7961667
25	28-Jan-18	16:24	-30.9085	30.5031667
26	28-Jan-18	18:04	-30.890333	30.4728333
28	28-Jan-18	19:36	-30.856333	30.4003333
29	29-Jan-18	02:34	-30.4085	31.1015
30	29-Jan-18	05:18	-30.345167	30.9625
32	29-Jan-18	09:49	-30.306	30.8778333
34	29-Jan-18	13:54	-29.899833	31.0631667
35	29-Jan-18	17:08	-29.906	31.1428333
37	29-Jan-18	20:54	-30.285833	30.8228333
38	30-Jan-18	03:30	-29.904	31.1428333
39	30-Jan-18	03:11	-29.904167	31.1745
40	30-Jan-18	09:26	-29.911333	31.5513333
41	31-Jan-18	03:59	-29.488167	31.2686667
44	31-Jan-18	08:32	-29.576	31.56
46	31-Jan-18	13:14	-29.657333	31.7806667
47	31-Jan-18	15:00	-29.681667	31.9053333
53	03-Feb-18	01:54	-29.120833	31.75
56	03-Feb-18	15:30	-28.751167	32.2093333
58	03-Feb-18	18:15	-28.783	32.3246667
59	03-Feb-18	20:06	-28.799667	32.3775
60	04-Feb-18	23:28	-28.841167	32.528
61	04-Feb-18	06:40	-28.5285	32.411
62, 63	04-Feb-18	09:20	-28.542833	32.4681667
64	04-Feb-18	16:08	-28.553833	32.5126667
69	05-Feb-18	17:30	-28.6605	32.3551667
71	06-Feb-18	07:12	-29.031333	31.8495

ASCA0416 (6 April – 1 May 2016)

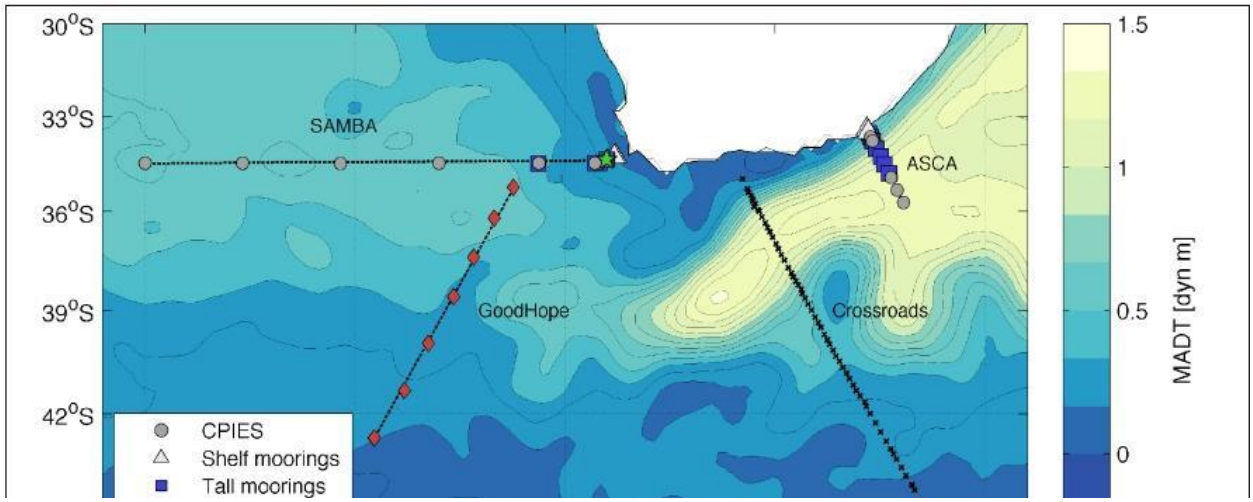
Station	Date	Time	Latitude	Longitude	Comments

Name/Number	(DDMMYYYY)	(UTC)			
Alg11517	09-04-2016	15:54	33 39.3254 S	27 39.4045E	Calibration cast
Alg11518	11-04-2016	11:47	35 44.0057 S	28 54.0466 E	Calibration cast
Alg11519	12-04-2016	08:41	35 14. 4657 S	28 37.5110 E	Calibration cast
Alg11520	12-04-2016	16:05	34 49.2619 S	28 20.6924 E	Calibration cast
Alg11521	15-04-2016	17:20	34 01.5773 S	27 51.9235 E	Calibration cast
CTD001	09-04-2016	12:25	33 41.0220 S	27 36.074 E	Test station
CTD002	16-04-2016	14:55	33 55.60765 S	27 46.1698 E	Test station
CTD003	17-04-2016	14:17	33 45.9509 S	27 42.8469 E	Test station
CTD004	17-04-2016	16:36	33 45. 8776 S	27 41.8318 E	Test station
CTD005	18-04-2016	10:08	33 46. 3762 S	27 42.3181 E	Test station
CTD006	18-04-2016	11:22	33 47. 6699 S	27 39.4440 E	Test station
CTD007	18-04-2016	16:10	33 46. 1846 S	27 41.0010 E	Test station
CTD008	24-04-2016	21:01	33 36.190 S	27 34.3003 E	500 m test
CTD010	25-04-2016	01:13	33 36.820 S	27 36.701 E	

ASCA0718 (16 – 27 JULY 2018) - SEAMESTER III

Station Name/Number	Date (DDMMYYYY)	Time (GMT)	Latitude	Longitude	Depth (m)
AM00931	17-07-2018	11:32	34 22.718 S	020 48.127 E	74.98
AM00933	18-07-2018	07:59	34 24.336 S	026 04.778 E	226
AM00934	18-07-2018	13:00	34 15.981 S	026 28.953 E	129
AM00935 (ASC-1)	18-07-2018	21:50	34 21.133 S	027 28.706 E	50.59
AM00936 (ASC-2)	19-07-2018	00:03	33 27.811 S	027 32.979 E	82.28
AM00937 (ASC-3)	19-07-2018	04:05	33 33.397 S	027 35.979 E	82.28
AM00939 (ASC-4)	19-07-2018	07:12	33 35.718 S	027 37.483 E	610
AM00940 (ASC-5)	19-07-2018	12:05	33 39.330 S	027 39.328 E	1254
AM00941 (ASC-6)	19-07-2018	16:18	33 42.212 S	027 43.067 E	1763
AM00942 (ASC-7)	19-07-2018	20:58	33 47.055 S	027 43.067 E	2206
AM00943 (ASC-8)	20-07-2018	01:47	33 53 738 S	027 47.914 E	3058
AM00944 (ASC-9)	20-07-2018	07:37	34 01.378 S	027 51.789 E	3595
AM00945 (ASC-10)	20-07-2018	14:38	34 08.208 E	027 56.357 E	3608
AM00946 (ASC-11)	20-07-2018	20:56	34 17.199 E	028 01.535 E	3694
AM00947 (ASC-12)	21-07-2018	02:07	34 27.062 S	028 05.533 E	3818
AM00948 (ASC-13)	21-07-2018	07:24	34 32.341 S	028 09.780 E	3988
AM00949 (ASC-14)	21-07-2018	13:50	34 40.500 S	028 15.495 E	4144
AM00950 (ASC-15)	21-07-2018	19:49	34 40.500 S	028 15.495 E	4266
AM00951 (ASC-16)	22-07-2018	02:48	34 59.159 S	028 26.309 E	4329
AM00952 (ASC-17)	22-07-2018	10:19	35 09.079 E	028 32.562 E	4377
AM00953 (ASC-18)	22-07-2018	16:26	35 20.744 S	028 39.791 E	4356
AM00954 (ASC-19)	22-07-2018	22:41	35 32.037 S	028 46.538 E	4496
AM00955 (ASC-20)	23-07-2018	05:17	35 44.049 S	028 54.223 E	4607
AM00956 (SEM-01)	23-07-2018	13:05	35 14.098 S	028 36.929 E	4392
AM00957 (ASC-21)	24-07-2018	03:02	33 55.456 S	027 48.670 E	3268
AM00958 (ASC-22)	24-07-2018	06:55	33 42.228 S	027 41.192 E	1759.33

MAPS AND ILLUSTRATIONS



Agulhas Current Climate Array (ASCA)

Fig
and

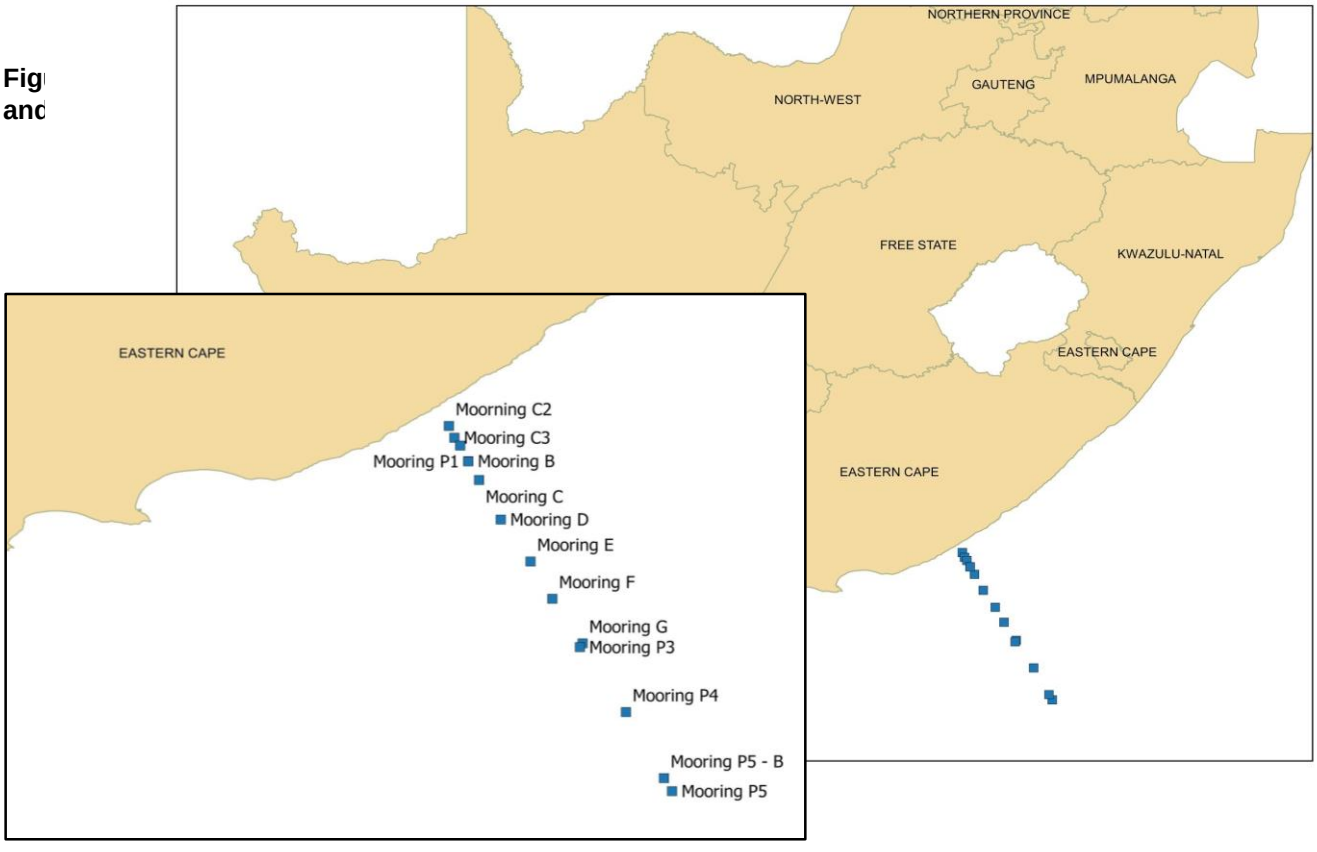


Figure 2: Map if South Africa, blue squares indicating the ASCA mooring line. Inset illustrates individual mooring identification.

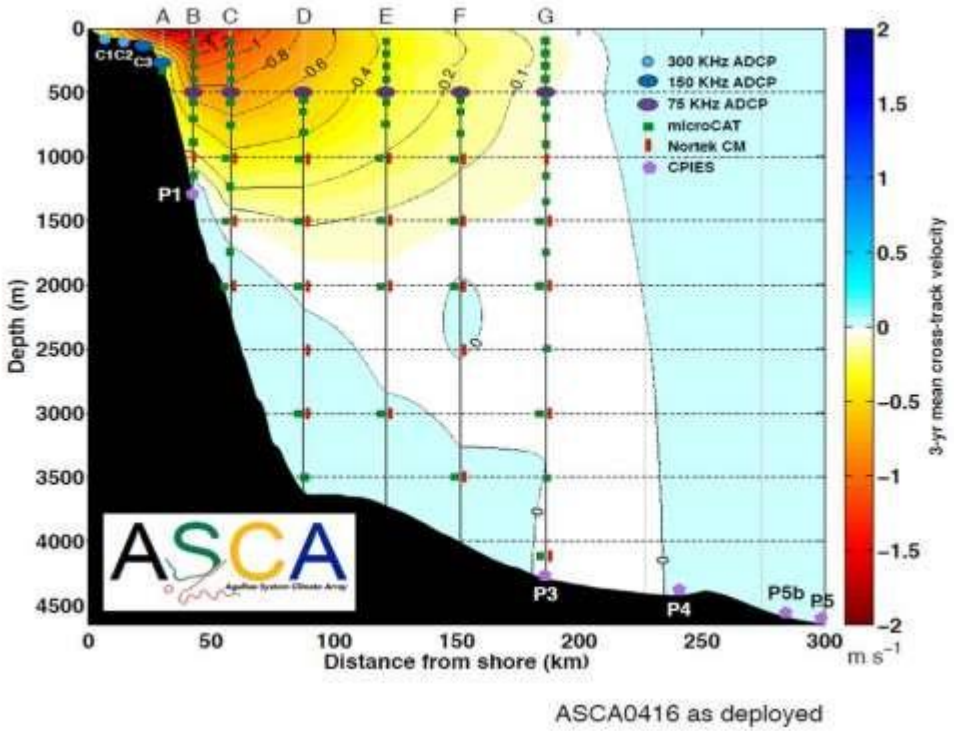


Figure 3: Cross-section of the Agulhas System Climate Array as deployed, indicating individual instrumentation (figure by Prof Lisa Beal, University of Miami).