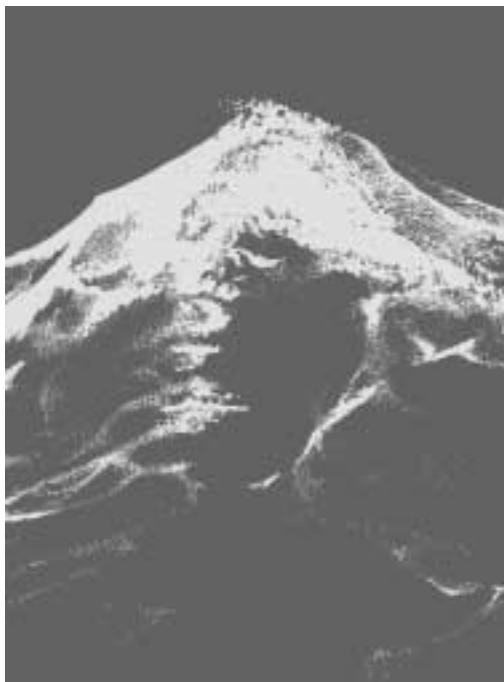


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Magnesium (Mg), calcium (Ca) and strontium (Sr) in the southern Tasman Sea

Station	Depth (m)	Mg (ppm)	Ca (ppm)	Sr (ppb)	Salinity	Temperature (°C)
SO136-159	3650	1270	408	7770	34.35	1.0
Filtered	3000	1280	409	7750	34.73	1.6
	2500	1270	407	7750	34.73	2.0
	2000	1270	407	7750	34.66	2.4
	1500	1260	403	7700	34.49	2.8
	1000	1260	401	7640	34.33	4.5
	500	1270	403	7660	34.54	8.3
	200	1270	405	7670	34.53	8.7
	100	1270	405	7720	34.79	10.0
	50	1260	402	7670	34.52	9.0
	30	1290	407	7680	34.52	9.0
	10	1280	405	7690	34.52	9.1
SO136-151	1800	1260	409	7730	34.61	2.6
Filtered	1500	1270	409	7680	34.48	2.9
	1000	1260	405	7650	34.34	5.0
	500	1250	403	7660	34.55	8.7
	200	1250	404	7640	34.60	8.8
	100	1260	405	7640	34.47	8.6
	50	1260	405	7650	34.43	8.6
	30	1260	408	7660	34.43	8.7
	10	1260	404	7650	34.43	8.7
SO136-144	2100	1280	407	7650	34.69	2.4
Filtered	1500	1260	412	7600	34.54	2.7
	1000	1260	409	7530	34.33	3.7
	500	1260	415	7530	34.32	6.5
	200	1270	407	7480	34.27	7.2
	100	1260	405	7510	34.28	7.7
	50	1280	407	7510	34.30	8.1
	30	1260	404	7510	34.30	8.2
	10	1290	407	7520	34.30	8.3
	10	1290	407	7520	34.30	8.3
SO136-136	3000	1240	404	7680	34.73	1.7
Filtered	2500	1250	404	7690	34.73	2.0
	2000	1270	407	7670	34.66	2.4
	1500	1250	404	7660	34.48	2.9
	1000	1240	401	7620	34.38	5.2
	500	1250	402	7590	34.55	8.5
	200	1270	404	7560	34.51	8.4
	100	1240	403	7570	34.49	8.5
	50	1250	402	7570	34.48	8.6
	30	1260	403	7560	34.42	8.6
	10	1250	402	7610	34.41	8.6
SO136-132	3300	1290	407	7780	34.71	1.1
Unfiltered	3000	1280	406	7770	34.72	1.3
	2500	1280	405	7780	34.72	1.8
	2000	1270	405	7750	34.72	2.2
	1500	1270	403	7700	34.62	2.5
	1000	1270	402	7640	34.40	2.8
	500	1280	402	7580	34.31	5.2

Magnesium (Mg), calcium (Ca) and strontium (Sr) in the southern Tasman Sea (continued)

Station	Depth (m)	Mg (ppm)	Ca (ppm)	Sr (ppb)	Salinity	Temperature (°C)
	200	1250	396	7570	34.10	5.8
	100	1260	397	7580	34.18	6.5
	50	1270	399	7590	34.12	6.5
	10	1260	399	7600	34.13	6.7
SO136-132	3300	1310	408	7740	34.71	1.1
Filtered	3000	1300	408	7750	34.72	1.3
	2500	1280	407	7790	34.72	1.8
	2000	1290	406	7750	34.72	2.2
	1500	1260	403	7760	34.62	2.5
	1000	1260	400	7710	34.40	2.8
	500	1260	399	7660	34.31	5.2
	200	1250	397	7610	34.10	5.8
	100	1280	401	7670	34.18	6.5
	50	1290	401	7720	34.12	6.5
	10	1250	398	7710	34.13	6.7
SO136-127	4000	1300	411	7800	34.70	0.9
Unfiltered	3000	1300	411	7810	34.73	1.3
	2500	1310	412	7800	34.74	1.8
	2000	1290	409	7820	34.71	2.2
	1474	1270	407	7830	34.57	2.5
	1000	1270	404	7790	34.34	3.2
	500	1300	406	7730	34.38	6.3
	200	1270	402	7680	34.32	7.5
	100	1270	400	7610	34.33	7.7
	50	1270	402	7640	34.32	7.7
	30	1260	401	7640	34.32	7.8
SO136-127	10	1260	402	7620	34.32	7.8
Filtered	4000	1290	407	7770	34.70	0.9
	3000	1290	409	7810	34.73	1.3
	2500	1300	410	7810	34.74	1.8
	2000	1290	407	7780	34.71	2.2
	1474	1270	406	7780	34.57	2.5
	1000	1300	408	7700	34.34	3.2
	500	1280	402	7640	34.38	6.3
	200	1280	402	7630	34.32	7.5
	100	1280	400	7620	34.33	7.7
	50	1270	400	7630	34.32	7.7
	30	1270	400	7610	34.32	7.8
	10	1270	403	7670	34.32	7.8
SO136-118	3800	1280	410	7660	34.71	1.1
Unfiltered	3000	1280	410	7660	34.72	1.1
	2500	1280	410	7640	34.73	1.6
	2000	1290	402	7620	34.73	2.0
	1500	1280	403	7610	34.68	2.3
	1000	1280	401	7580	34.48	2.7
	500	–	400	7530	34.19	3.4
	200	1250	401	7470	33.91	3.9
	100	1270	403	7480	34.11	5.8
	50	1270	400	7490	34.14	6.1
	30	1280	402	7480	34.19	6.4
	10	1280	403	7520	34.22	6.7

Magnesium (Mg), calcium (Ca) and strontium (Sr) in the southern Tasman Sea (continued)

Station	Depth (m)	Mg (ppm)	Ca (ppm)	Sr (ppb)	Salinity	Temperature (°C)
SO136-104	3900	1290	410	7670	34.69	0.7
Unfiltered	3500	1320	–	7690	34.69	0.7
	3000	1290	409	–	34.70	0.8
	2500	1290	409	7640	34.70	1.0
	2000	1290	410	7660	34.72	1.3
	1500	1300	–	7680	34.74	1.7
	1000	1300	403	7650	34.71	2.1
	1000	1300	403	7650	34.71	2.1
	750	1290	409	–	34.66	2.2
	500	1300	404	7610	34.52	1.9
	200	1300	415	–	34.16	1.2
	100	1270	400	7470	33.97	1.2
	50	1290	410	7350	33.92	1.9
	30	1270	401	–	33.92	2.0
	10	1260	399	7470	33.91	2.0
SO136-102	4200	1300	411	7700	34.69	0.7
Unfiltered	4000	1290	409	7700	34.69	0.7
	3500	1280	409	7660	34.70	0.8
	3000	1280	409	7640	34.70	0.9
	2500	1290	411	7630	34.72	1.1
	2000	1300	408	7650	34.73	1.4
	1500	1300	407	7640	34.73	1.9
	1000	1300	406	7640	34.67	2.2
	500	1280	406	7590	34.46	2.5
	200	1270	400	7480	34.16	3.1
	100	1250	397	7470	33.90	2.4
	50	1250	399	7390	33.92	3.6
	30	1250	399	7380	33.92	3.6
	10	1250	402	–	33.92	3.6
SO136-96	4100	1270	412	7640	34.71	1.1
Unfiltered	3000	1290	412	7640	34.73	1.5
	2000	1260	408	7620	34.70	2.2
	1000	1280	404	7570	34.37	3.2
	500	1250	401	7560	34.38	6.7
	200	1260	383	7710	34.37	7.5
	100	1260	400	7540	34.38	7.6
	50	1260	400	7550	34.38	7.6
	30	1240	402	7710	34.38	7.6
	10	1250	404	7730	34.38	7.6
SO136-91	2900	1260	414	7670	34.68	2.0
Unfiltered	2500	1260	409	7660		2.3
	2000	1270	409	7650	34.68	2.7
	1000	1260	404	7590	34.32	3.6
	500	1280	406	7570	34.39	7.1
	200	1260	403	7510	34.41	7.6
	100	1270	405	7550	34.41	7.6
	50	1260	405	7550	34.41	7.6
	10	1280	406	7520	34.41	7.6
	10	1280	406	7520	34.41	7.6
SO136-86	2000	1270	406	7610	34.67	2.3
Unfiltered	1500	1260	402	7550	34.45	3.0
	1000	1260	401	7520	34.32	4.9

Magnesium (Mg), calcium (Ca) and strontium (Sr) in the southern Tasman Sea (continued)

Station	Depth (m)	Mg (ppm)	Ca (ppm)	Sr (ppb)	Salinity	Temperature (°C)
	500	1280	403	7530	34.40	7.5
	200	1270	402	7510	34.40	7.5
	100	1280	404	7530	34.40	7.5
	50	1270	403	7500	34.40	7.5
	30	1280	403	7520	34.40	7.5
	10	1280	404	7520	34.40	7.5
SO136-80	1650	1250	426	7450	34.49	2.8
Unfiltered	1500	1250	422	7440	34.45	2.8
	1000	1260	429	7330	34.31	4.7
	500	1250	419	7380	34.40	7.5
	200	1260	422	7410	34.40	7.5
	100	1280	405	7550	34.40	7.5
	50	1250	404	7560	34.41	7.5
	30	1250	404	7550	34.41	7.5
	10	1250	426	7380	34.41	7.5
SO136-73	1050	1260	399	7610	34.36	4.2
Unfiltered	750	1270	400	7620	34.36	6.3
	500	1270	401	7600	34.38	7.1
	200	1270	405	7580	34.40	7.4
	100	1270	403	7560	34.36	7.2
	50	1270	404	7590	34.34	7.2
	30	1270	401	7530	34.34	7.2
	10	1280	406	7590	34.34	7.2
SO136-65	950	1260	403	7570	34.34	4.9
Unfiltered	750	1260	403	7580	34.36	6.2
	500	1270	400	7500	34.37	7.0
	200	1260	401	7570	34.38	7.1
	100	1260	404	7600	34.38	7.1
	50	1270	402	7580	34.38	7.1
	30	1270	403	7580	34.38	7.2
	10	1270	404	7600	34.38	7.2
SO136-59	580	1260	398	7570	34.37	6.7
Unfiltered	500	1270	398	7560	–	6.8
	400	1280	400	7570	–	7.0
	300	1260	399	7570	–	7.2
	200	1280	402	7570	34.40	7.2
	100	1290	404	7580	34.40	7.2
	50	1250	397	7570	34.40	7.2
	30	1250	398	7570	34.40	7.3
	10	1280	401	7580	34.40	7.3
SO136-52	500	1270	404	7540	34.37	6.9
Filtered	350	1290	403	7510	34.33	6.8
	200	1280	404	7550	34.33	6.8
	100	1280	403	7520	34.32	7.1
	50	1280	403	7520	34.32	7.2
	30	1280	404	7520	34.32	7.2
	10	1280	403	7510	34.32	7.2
SO136-48	700	1280	401	7510	34.36	6.4
Filtered	500	1280	402	7520	34.35	6.8
	200	1290	405	7510	34.34	6.9
	100	1280	403	7510	34.33	7.1
	50	1280	403	7500	34.33	7.1

Magnesium (Mg), calcium (Ca) and strontium (Sr) in the southern Tasman Sea (continued)

Station	Depth (m)	Mg (ppm)	Ca (ppm)	Sr (ppb)	Salinity	Temperature (°C)
	30	1270	401	7520	34.33	7.2
	10	1290	400	7540	34.32	7.2
SO136-41	900	1270	400	7590	34.34	4.5
Filtered	750	1270	400	7570	34.35	5.7
	500	1270	398	7530	34.33	6.7
	200	1270	400	7490	34.32	6.9
	100	1270	403	7510	34.32	7.0
	50	1270	400	7470	34.32	7.2
	30	1270	402	7490	34.32	7.2
	10	1270	402	7510	34.31	7.2
SO136-35	1300	1300	394	7649	34.43	3.1
Filtered	1000	1300	394	7639	34.32	4.2
	750	1290	392	7629	34.31	5.6
	500	1300	391	7609	34.34	6.7
	200	1270	404	7520	34.33	6.9
	100	1260	399	7510	34.30	6.9
	50	1270	399	7520	34.27	6.8
	30	1270	396	7520	34.27	6.8
	10	1280	403	7748	34.27	6.8
SO136-28	1500	1280	396	7637	34.54	2.6
Filtered	1250	1280	393	7588	34.42	3.1
	1000	1290	393	7568	34.35	3.8
	750	1270	389	7539	34.25	4.7
	500	1260	385	7529	34.30	6.1
	200	–	–	–	34.27	6.6
	100	1260	399	7470	34.24	6.6
	50	1260	396	7450	34.26	6.8
	30	1250	394	7490	34.26	6.8
	10	1250	388	7500	34.25	6.8
SO136-23	3400	1300	413	7711	34.71	1.2
Filtered	3000	1280	409	7722	34.73	1.6
	2000	1290	410	7691	34.68	2.3
	1000	1260	403	7640	34.33	3.4
	500	1270	402	7600	34.34	
	200	1290	409	–	34.30	6.8
	100	1260	399	7569	34.28	6.8
	50	1280	402	7600	34.27	6.8
	10	1280	403	7630	34.27	6.8
SO136-23	3400	1290	413	7722	34.71	1.2
Unfiltered	3000	1280	410	7691	34.73	1.6
	2000	1290	410	7701	34.68	2.3
	1000	1270	404	7610	34.33	3.4
	500	1270	403	7610	34.34	
	200	1250	400	7610	34.30	6.8
	100	1260	401	7600	34.28	6.8
	50	1260	401	7620	34.27	6.8
	10	1260	400	7630	34.27	6.8
SO136-16	4500	1250	408	7780	34.70	0.8
Filtered	3000	1260	408	7760	34.73	1.5
	2000	1250	407	7760	34.71	2.2
	1000	1250	406	7720	34.40	2.9
	500	1250	404	7650	34.23	4.6

Magnesium (Mg), calcium (Ca) and strontium (Sr) in the southern Tasman Sea *(continued)*

Station	Depth (m)	Mg (ppm)	Ca (ppm)	Sr (ppb)	Salinity	Temperature (°C)
	200	1250	403	7600	34.12	4.9
	100	1270	403	7590	34.14	5.5
	50	1270	406	7620	34.14	5.9
	30	1280	406	7620	34.15	5.9
	10	1280	412	7770	34.19	6.1
SO136-10	1500	1280	405	7640	34.57	2.9
Filtered	1000	1280	402	7610	34.44	5.2
	750	1280	403	7591	34.49	7.0
	500	1290	405	7570	34.60	8.7
	200	1310	410	7680	35.10	11.7
	100	1300	410	7660	34.98	12.2
	50	1290	410	7670	34.95	12.4
	30	1310	411	7670	34.95	12.4
	10	1310	409	7630	34.95	12.4
SO136-7	950	1350	410	7561	34.46	5.8
Filtered	500	1330	412	7640	34.67	9.1
	350	1330	412	7660	34.89	10.7
	200	1330	414	7690	35.11	12.3
	100	1320	413	7690	35.18	13.3
	50	1330	416	7670	35.19	13.7
	30	1320	415	7660	35.19	13.7
	10	1330	416	7670	35.19	13.7