

II-4 BT CARD

No.	AREA OFF NORTH-WEST OF KUMESHIMA		DATE MAY 8-10 1974		VESSEL TONAN MARU										SURFACE CL. #	AIR TEMP. °C	
	DATE	TIME	POSITION		TEMPERATURE												
			LAT. N	LONG. E	DEPTH												
1	MAY 8	1325-1235	26°-23'	127°-17'	234	334	234	231	223	218	215	203	200	200	250	34465	250
4.5	MAY 8	1520-1530	26°-31'	127°-27'	231	230	224	220	218	213	209	201	191	—	—	—	—
2	MAY 8	1705-1710	26°-49'	127°-33'	231	232	228	228	217	211	208	201	193	—	—	34695	251
2.5	MAY 8	2030-2035	26°-57'	127°-20'	223	223	222	219	216	211	205	196	186	—	—	—	—
3	MAY 8	2225-2230	27°-06'	127°-06'	226	228	224	224	221	215	212	201	189	—	—	34722	240
3.5	MAY 9	0110-0115	27°-15'	126°-53'	249	249	248	245	238	231	224	208	195	—	—	—	—
4	MAY 9	0300-0305	27°-24'	126°-40'	251	252	250	250	243	234	227	211	195	—	—	34033	251
4.5	MAY 9	0600-0610	27°-33'	126°-26'	256	256	256	254	248	238	226	214	181	—	—	—	—
5	MAY 9	0750-0755	27°-42'	126°-13'	248	248	247	247	233	216	210	190	165	—	—	34255	230
5.5	MAY 9	1110-1115	27°-51'	125°-59'	234	231	227	223	205	184	176	—	—	—	—	—	—
6	MAY 9	1320-1325	28°-00'	125°-46'	226	222	214	210	190	176	176	—	—	—	—	34416	175
6.5	MAY 9	1525-1530	27°-47'	125°-38'	226	219	210	203	180	176	176	—	—	—	—	—	—
7	MAY 9	1655-1700	27°-35'	125°-30'	214	214	214	217	198	179	179	—	—	—	—	34443	180
7.5	MAY 9	1910-1915	27°-21'	125°-22'	226	224	219	202	191	175	178	—	—	—	—	—	—
8	MAY 9	2050-2055	27°-08'	125°-13'	225	226	225	216	199	180	176	—	—	—	—	34333	180
8.5	MAY 9	2320-2325	26°-51'	125°-27'	229	229	227	225	210	206	181	—	—	—	—	—	—
9	MAY 10	0120-0125	26°-50'	125°-40'	231	237	231	222	209	200	188	178	139	—	—	34411	190
9.5	MAY 10	0340-0345	26°-43'	125°-50'	238	237	235	231	222	216	208	191	172	—	—	—	—
10	MAY 10	0515-0520	26°-32'	126°-05'	243	243	238	237	231	217	201	192	177	—	—	34375	215
10.5	MAY 10	0755-0800	26°-23'	126°-18'	254	254	254	253	249	249	241	225	181	—	—	—	—
11	MAY 10	1000-1005	26°-13'	126°-34'	254	254	254	254	250	240	229	216	205	—	—	34535	220
11.5	MAY 10	1230-1225	26°-04'	126°-45'	251	251	251	251	250	239	228	214	198	—	—	—	—
12	MAY 10	1400-1405	25°-54'	127°-00'	246	246	246	246	245	234	226	215	198	—	—	34599	220

I-4 BT CARD

No	AREA OFF NORTH-WEST OF KUMESHIMA		DATE JULY 23-26 1974					VESSEL TONAN MARU								
	DATE	TIME	P SITION		TEMPERATURE					SURFACE		AIR TEMP				
			LAT. N	LONG. E	0 M	10	20	30	50	75	100	150	200	250	S #6	°C
1	JULY. 23	1520-1530	26°-23'	127°-17'	291	288	280	266	251	241	226	212	190	-	34342	292
15	JULY. 23	1910-1920	26°-31'	127°-27'	287	287	285	273	261	244	232	216	204	-		
2	JULY. 23	2130-2140	26°-49'	127°-33'	285	285	286	284	268	246	224	211	193	-	34333	286
25	JULY. 24	0115-0125	26°-57'	127°-20'	289	289	289	286	272	251	231	216	200	-		
3	JULY. 24	0310-0320	27°-06'	127°-06'	289	289	288	282	267	255	241	216	200	-	34329	286
35	JULY. 24	0555-0605	27°-15'	126°-53'	291	291	291	287	270	255	240	215	206	-		
4	JULY. 24	0810-0820	27°-24'	126°-40'	292	292	292	291	281	258	247	229	202	-	34581	287
45	JULY. 24	1205-1220	27°-33'	126°-26'	292	287	283	280	262	247	233	207	-	-		
5	JULY. 24	1345-1355	27°-42'	126°-13'	292	290	283	277	264	231	210	178	130	-	34033	300
55	JULY. 24	1715-1725	27°-51'	125°-59'	291	280	263	255	240	218	-	-	-	-		
6	JULY. 24	1920-1925	28°-00'	125°-46'	301	283	272	263	254	191	191	-	-	-	33937	283
65	JULY. 24	2150-2200	27°-47'	125°-38'	286	285	269	261	261	193	-	-	-	-		
7	JULY. 25	0010-0020	27°-35'	125°-30'	291	287	280	265	259	200	190	-	-	-	33851	280
75	JULY. 25	0310-0320	27°-21'	125°-22'	291	287	272	269	267	202	187	-	-	-		
8	JULY. 25	0540-0550	27°-08'	125°-13'	292	285	278	267	246	211	-	-	-	-	33424	289
85	JULY. 25	0800-0805	26°-59'	125°-27'	284	281	274	266	248	228	-	-	-	-		
9	JULY. 25	1010-1020	26°-50'	125°-40'	287	282	281	268	259	245	236	207	169	-	34123	290
95	JULY. 25	1240-1245	26°-43'	125°-50'	297	293	291	288	271	255	244	214	195	-		
10	JULY. 25	1410-1420	26°-32'	126°-05'	298	294	294	294	279	257	245	217	197	-	34605	298
105	JULY. 25	1725-1736	26°-23'	126°-16'	299	295	293	289	269	250	242	221	200	-		
11	JULY. 25	1945-1950	26°-13'	126°-13'	293	289	284	278	268	250	238	214	197	-	34369	289
115	JULY. 25	2230-2240	26°-04'	126°-45'	283	277	271	266	258	238	226	206	192	-		
12	JULY. 26	0030-0035	25°-54'	127°-00'	288	286	281	269	244	226	220	213	197	-	34562	0

II-4 BT CARD

ARE OFF NORTH WEST OF KUME Is DATE OCT. 15-18 1974 VESSEL TONAN MARU

No	DATE	TIME	POSITION		TEMPERATURE										SURFACE S 96	AIR TEMP. °C
			LAT N	LONG E	DEPTH											
					10	20	30	50	75	100	150	200	250			
1	74-OCT15	1530-1535	26°-23'	127°-17'	27.2	27.2	27.1	26.9	25.6	22.5	20.7	19.8	17.4	34.348	24.0	
1.5	74-OCT15	2005-2010	26°-31'	127°-27'	26.8	26.8	26.8	26.4	25.2	23.5	20.8	19.5	16.9	34.324	23.5	
2	74-OCT15	2100-2105	26°-49'	127°-33'	26.9	26.9	26.9	25.5	23.9	22.8	20.5	19.0	16.8	34.348	24.5	
2.5	74-OCT16	0210-0215	26°-57'	127°-20'	26.0	26.0	26.0	26.1	25.0	23.9	21.3	18.6	-	34.411	25.0	
3	74-OCT16	0430-0435	27°-06'	127°-06'	26.9	26.9	26.9	26.7	25.2	23.6	21.2	19.5	16.8	34.330	25.3	
3.5	74-OCT16	0745-0750	27°-15'	126°-53'	26.6	26.7	26.8	26.8	25.2	24.1	22.0	20.2	-	34.357	25.5	
4	74-OCT16	1020-1025	27°-24'	126°-40'	26.6	26.7	26.8	26.7	26.1	24.9	23.6	21.3	19.0	34.283	26.0	
4.5	74-OCT16	1250-1255	27°-33'	126°-26'	26.8	26.8	26.8	26.8	25.1	24.5	21.1	18.5	14.5	34.252	26.0	
5	74-OCT16	1448-1452	27°-42'	126°-13'	26.8	26.8	26.8	26.7	26.0	24.8	20.6	14.7	11.9	34.375	26.2	
5.5	74-OCT16	1748-1752	27°-51'	125°-59'	26.3	26.3	26.3	26.3	24.6	20.2	19.0	-	-	34.310	26.0	
6	74-OCT16	2000-2005	28°-00'	125°-46'	25.8	25.8	25.8	25.8	25.8	19.3	-	-	-	34.234	26.0	
6.5	74-OCT16	2247-2252	27°-47'	125°-38'	26.2	26.0	25.7	22.5	19.2	19.2	-	-	-	34.310	26.0	
7	74-OCT17	0047-0050	27°-35'	125°-30'	26.0	26.0	26.0	22.3	20.0	18.1	-	-	-	34.310	26.0	
7.5	74-OCT17	0251-0254	27°-21'	125°-22'	25.0	24.8	23.2	21.4	20.0	17.0	-	-	-	34.229	25.9	
8	74-OCT17	0502-0505	27°-08'	125°-13'	24.8	23.1	22.8	21.2	19.0	17.0	-	-	-	34.160	25.2	
8.5	74-OCT17	0735-0740	26°-59'	125°-27'	25.2	24.7	24.5	21.2	20.0	18.0	-	-	-	34.330	25.6	
9	74-OCT17	1007-1012	26°-50'	125°-40'	26.9	26.8	26.8	26.5	22.8	22.0	18.6	15.7	-	34.348	27.0	
9.5	74-OCT17	1345-1350	26°-43'	125°-50'	26.5	26.6	26.6	26.3	24.3	22.7	20.2	18.7	15.0	34.256	27.1	
10	74-OCT17	1557-1602	26°-32'	126°-05'	27.2	27.0	26.9	26.8	24.6	23.5	20.5	19.0	17.5	34.297	27.5	
10.5	74-OCT17	1910-1915	26°-23'	126°-18'	27.8	27.6	27.5	27.4	25.0	24.6	20.4	19.3	-	34.238	27.5	
11	74-OCT17	2237-2242	26°-13'	126°-34'	27.8	27.8	27.8	27.8	27.0	23.5	21.2	19.3	17.0	34.321	27.3	
11.5	74-OCT18	0130-0135	26°-04'	126°-45'	27.8	27.8	27.8	27.8	26.1	23.4	22.0	20.3	-	34.343	27.5	
12	74-OCT18	0430-0435	25°-54'	127°-00'	27.7	27.7	27.7	27.7	26.8	24.8	21.8	20.0	-	34.324	27.2	

II-4 BT CARD

No	AREA OFF NORTH-WEST OF KUMESHIMA		DATE DECEMBER 9-12 1974										VESSEL TOMAN MARU			
	DATE	TIME	POSITION		TEMPERATURE										SURFACE	AIR TEMP
			LAT. N	LONG. E	DEPTH											
					0	10	20	30	50	75	100	150	200	250	S 49	°C
1	DEC. 9	1836-1840	26°-23'	127°-17'	240	240	240	240	239	237	227	200	184	165	34650	236
15	DEC. 9	2105-2110	26°-31'	127°-27'	238	238	238	238	238	238	233	197	-	-	-	235
2	DEC. 9	2342-2345	26°-49'	127°-33'	236	237	237	237	235	234	232	200	182	162	34664	232
25	DEC. 10	0250-0300	26°-57'	127°-20'	236	236	235	232	230	230	229	196	182	165	34682	236
3	DEC. 10	0507-0510	27°-06'	127°-06'	235	235	235	234	233	232	221	196	182	161	34626	238
35	DEC. 10	0835-0840	27°-15'	126°-53'	235	235	235	235	235	235	235	203	181	160	34652	242
4	DEC. 10	1110-1113	27°-24'	126°-40'	246	246	246	246	246	244	234	198	182	147	34626	247
45	DEC. 10	1415-1420	27°-33'	126°-26'	245	245	245	245	245	243	225	196	173	122	34627	209
5	DEC. 10	1641-1645	27°-42'	126°-13'	243	243	243	239	235	223	199	178	127	105	34668	223
55	DEC. 10	2015-2020	27°-51'	125°-59'	242	242	242	242	225	217	199	-	-	-	34604	216
6	DEC. 10	2350-2355	28°-00'	125°-46'	220	220	220	220	220	213	190	-	-	-	34604	210
65	DEC. 11	0112-0120	27°-47'	125°-38'	237	237	237	232	221	214	187	-	-	-	34613	-
7	DEC. 11	0310-0314	27°-35'	125°-30'	235	235	235	235	215	204	180	-	-	-	34602	208
75	DEC. 11	0555-0610	27°-21'	125°-22'	222	223	223	223	221	210	186	-	-	-	34590	204
8	DEC. 11	0805-0810	27°-08'	125°-13'	223	223	223	223	223	200	165	-	-	-	34585	204
85	DEC. 11	1025-1035	26°-59'	125°-27'	222	222	222	223	222	195	182	-	-	-	34593	210
9	DEC. 11	1225-130	26°-50'	125°-40'	247	250	250	250	250	250	234	186	160	115	34617	210
11	DEC. 12	0833-0838	26°-13'	126°-34'	238	238	238	238	238	227	215	197	183	172	34668	204
115	DEC. 12	1120-1125	26°-04'	126°-45'	243	243	243	243	237	237	230	207	188	165	34691	211
12	DEC. 12	1336-1340	25°-54'	127°-00'	247	247	247	247	247	247	238	213	193	166	34653	209

II-4 BT CARD

No	DATE	TIME	POSITION		DATE MARCH 6-8 1975							VESSEL TONAN MARU			SURFACE S ₉₀	AIR TEMP °C
			LAT N	LONG E	0	10	20	30	50	75	100	150	200	250		
1	MARCH. 6	2000-2005	26°-28'	127°-17'	21.1	21.0	20.9	20.9	20.6	20.4	20.1	1.96	1.94	-	34.760	18.7
15	MARCH. 6	2340-2350	26°-31'	127°-27'	22.6	22.5	21.7	20.6	20.5	20.1	20.1	1.99	1.88	-	34.700	16.0
2	MARCH. 7	0140-0145	26°-49'	127°-33'	22.7	22.6	22.8	22.8	22.8	22.5	22.0	20.4	1.93	-	34.641	16.3
25	MARCH. 7	0445-0455	26°-57'	127°-20'	23.5	23.1	23.1	23.1	22.3	22.2	20.7	20.7	20.7	-	34.700	16.8
3	MARCH. 7	0630-0635	27°-06'	127°-06'	23.2	23.0	23.0	23.0	22.8	21.6	21.2	20.6	20.4	-	34.700	16.8
35	MARCH. 7	0810-0820	27°-15'	126°-53'	22.9	22.9	22.9	22.9	22.8	21.3	20.8	20.1	1.91	-	34.686	14.0
4	MARCH. 7	1100-1105	27°-24'	126°-40'	22.6	22.6	22.6	22.6	22.6	22.4	22.3	1.99	1.83	-	34.823	14.6
45	MARCH. 7	1330-1340	27°-33'	126°-26'	23.6	23.6	23.6	23.6	23.6	23.6	23.1	1.97	1.76	-	34.682	13.6
5	MARCH. 7	1500-1505	27°-42'	126°-13'	23.4	23.3	23.3	23.3	23.3	23.0	21.2	1.79	1.54	-	34.644	14.1
55	MARCH. 7	1730-1740	27°-51'	125°-59'	22.1	22.1	22.1	22.1	22.1	21.6	1.85	-	-	-	34.682	13.5
6	MARCH. 7	1910-1915	28°-00'	125°-46'	21.5	21.2	21.2	21.2	19.1	18.2	1.82	-	-	-	34.585	12.5
65	MARCH. 7	2110-2115	27°-47'	125°-38'	21.0	21.0	21.0	20.9	19.0	18.9	1.79	-	-	-	34.651	12.5
7	MARCH. 7	2245-2250	27°-35'	125°-30'	20.8	20.9	20.9	20.9	19.3	18.6	-	-	-	-	34.673	14.0
75	MARCH. 8	0032-0037	27°-21'	125°-22'	21.7	21.7	21.7	21.7	20.9	17.9	1.71	-	-	-	34.677	13.8
8	MARCH. 8	0208-0216	27°-08'	125°-13'	21.8	21.8	21.8	21.8	20.5	18.9	1.70	-	-	-	34.650	14.2
85	MARCH. 8	0400-0405	26°-59'	125°-27'	21.1	21.1	21.1	21.1	20.6	19.1	1.78	-	-	-	34.659	14.7
9	MARCH. 8	0600-0605	26°-50'	125°-40'	20.8	20.8	20.8	20.8	20.7	20.6	1.88	1.69	1.39	-	34.626	16.1
95	MARCH. 8	0807-0813	26°-43'	125°-50'	23.4	23.4	23.4	23.4	23.4	23.2	1.99	1.79	1.68	-	34.677	16.7
10	MARCH. 8	0940-0945	26°-32'	126°-05'	23.7	23.7	23.7	23.7	23.7	23.7	23.7	22.5	20.1	-	34.718	17.3
105	MARCH. 8	1145-1150	26°-23'	126°-18'	23.8	23.7	23.7	23.7	23.7	23.7	23.6	2.21	1.91	-	34.686	18.6
11	MARCH. 8	1330-1415	26°-13'	126°-34'	23.1	23.1	23.1	23.1	22.9	22.9	2.28	2.11	1.99	-	34.751	19.7
11.5	MARCH. 8	1530-1535	26°-04'	126°-45'	22.1	22.1	22.0	21.9	21.8	21.3	2.07	2.02	2.01	-	34.894	19.7
12	MARCH. 8	1710-1715	25°-54'	127°-00'	21.3	21.3	21.3	21.3	21.1	20.5	2.04	2.02	1.98	-	34.915	19.9