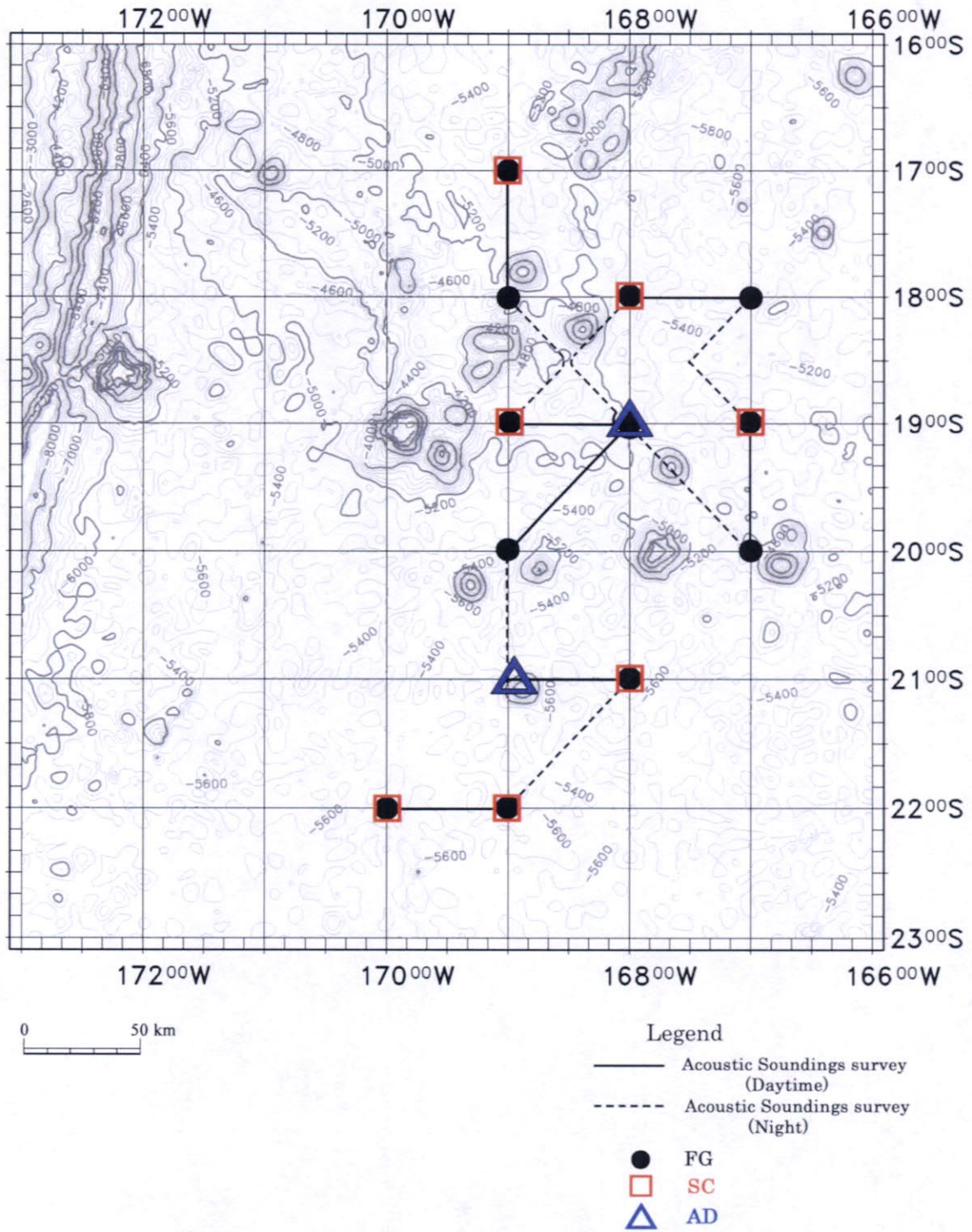
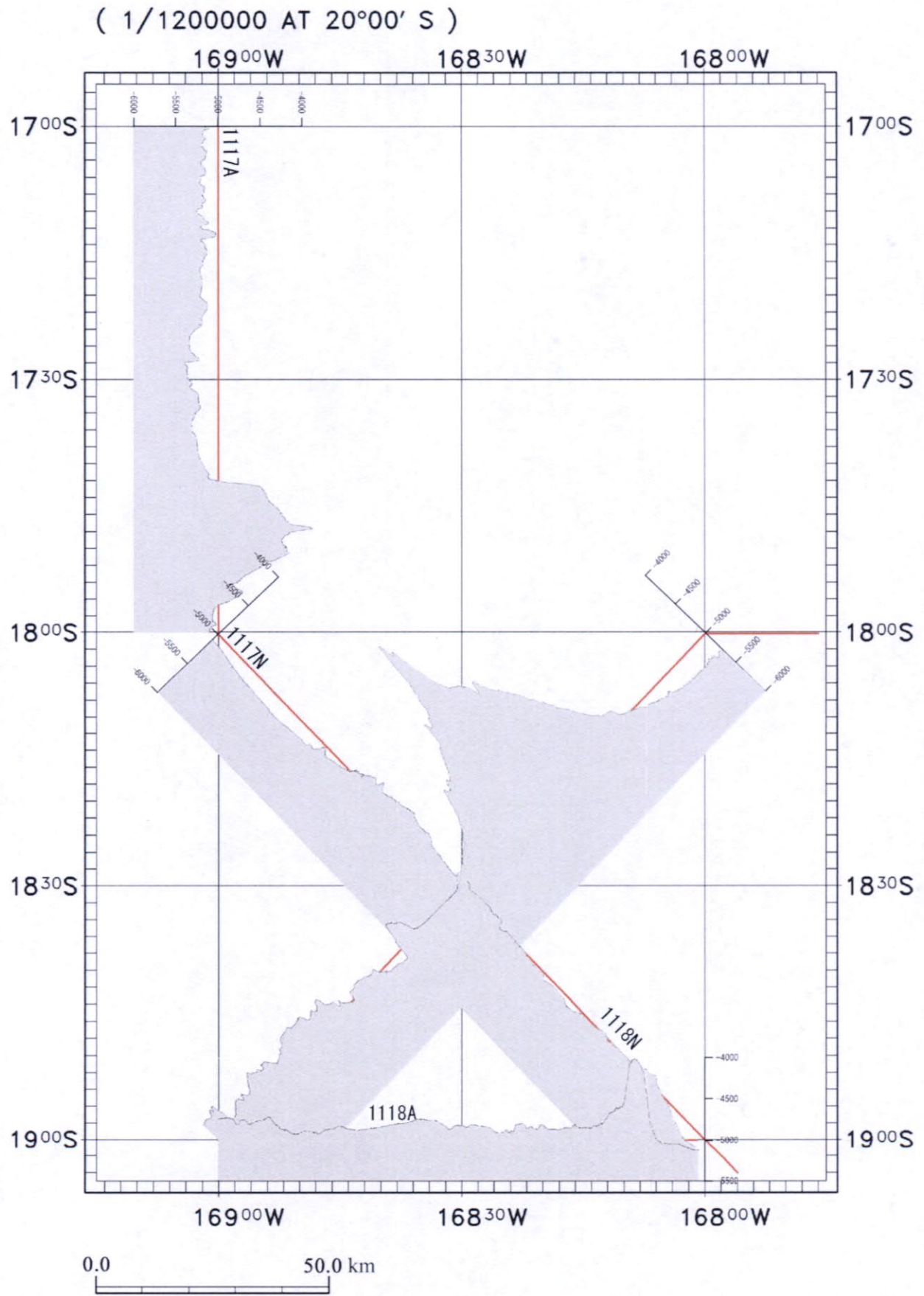


[**Appendix Figure**]

- Appendix Figure 1 Location Map of Track Line
- Appendix Figure 2 Section of Bathymetry (1)–(4)
- Appendix Figure 3 Section of SBP (1)–(4)
- Appendix Figure 4 Location Map of Sampling Sites
- Appendix Figure 5 Columnar charts of SC core
- Appendix Figure 6 Sea bottom Photographs and Samles collected
by FG and SC (1)–(12)
- Appendix Figure 7 Photograph of SC Sample (1)–(3)
- Appendix Figure 8 Photograph of AD Sample (1)–(2)

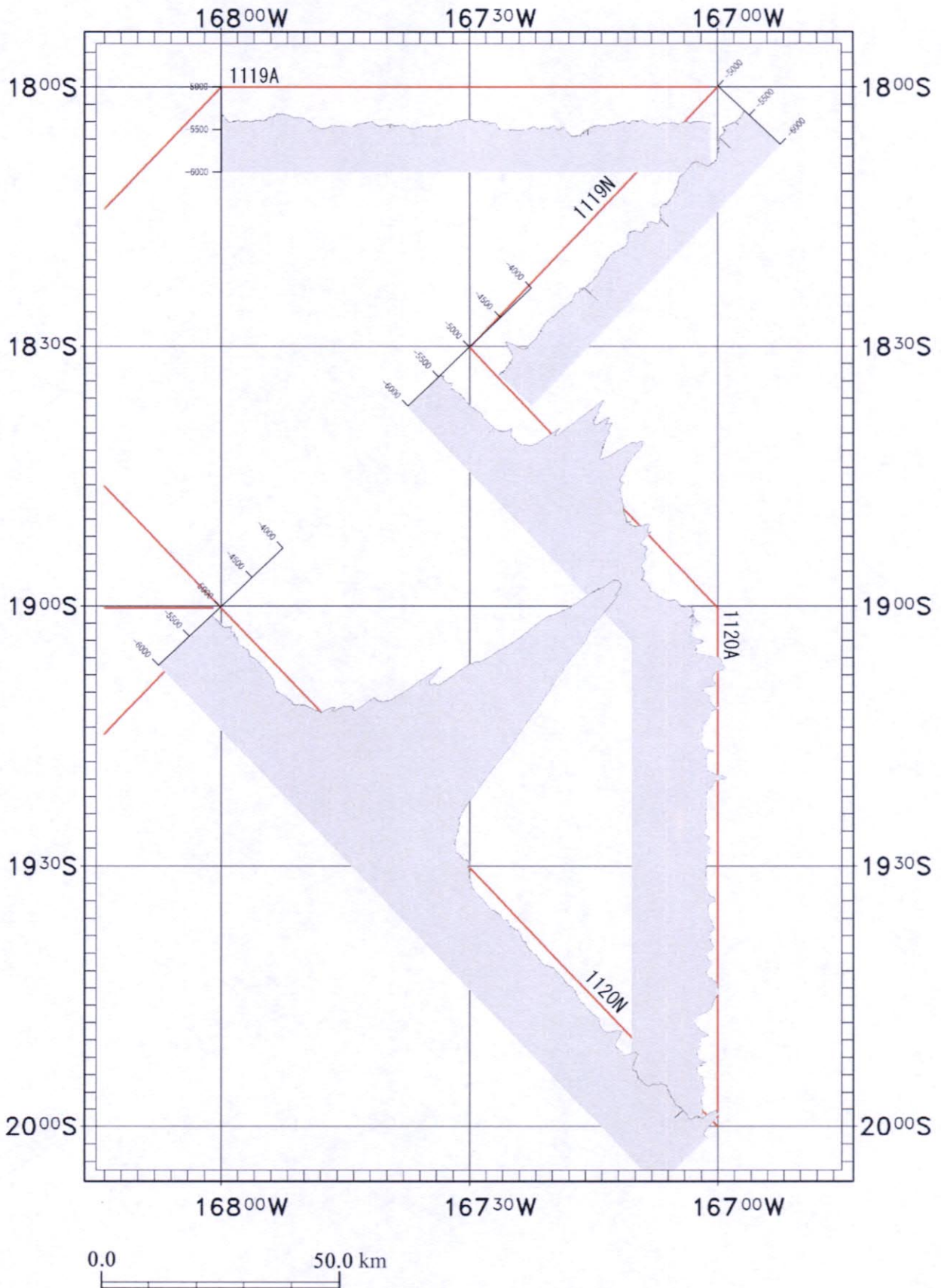


Appendix Fig. 1 Location Map of Track Line

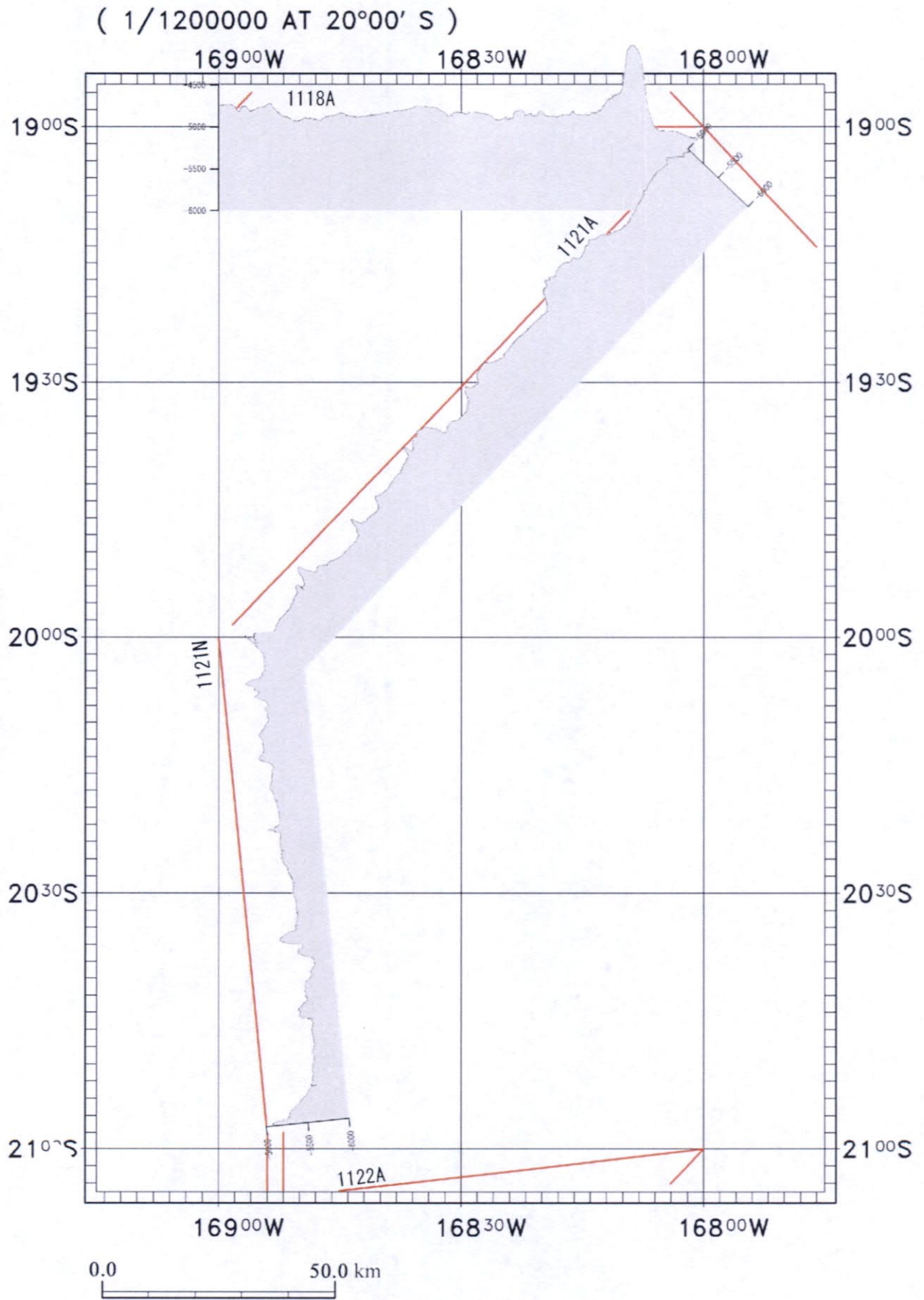


Appendix Fig. 2 Section of Bathymetry (1)

(1/1200000 AT 20°00' S)

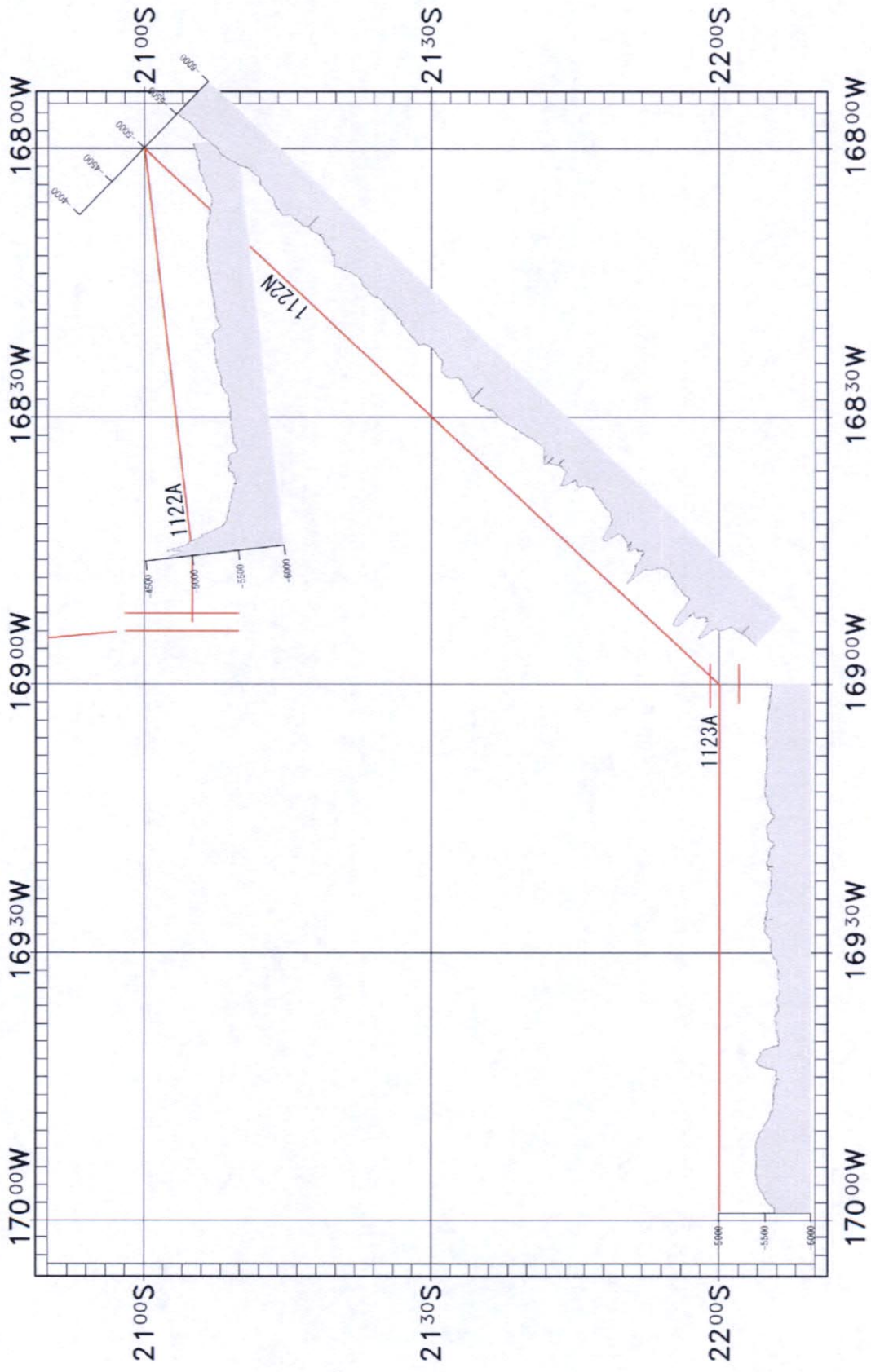


Appendix Fig. 2 Section of Bathymetry (2)



Appendix Fig. 2 Section of Bathymetry (3)

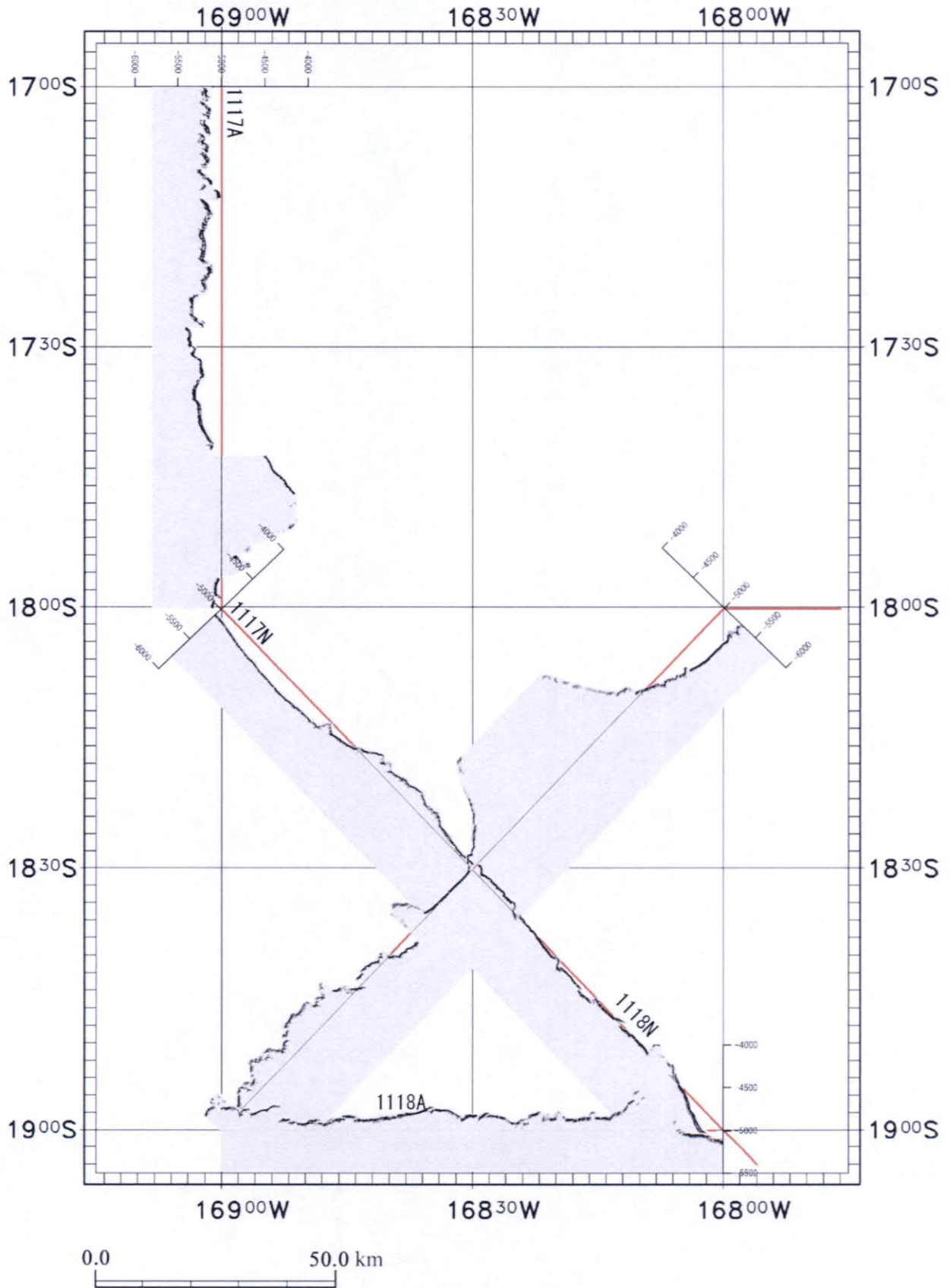
(1/1200000 AT 20°00' S)



0.0 50.0 km

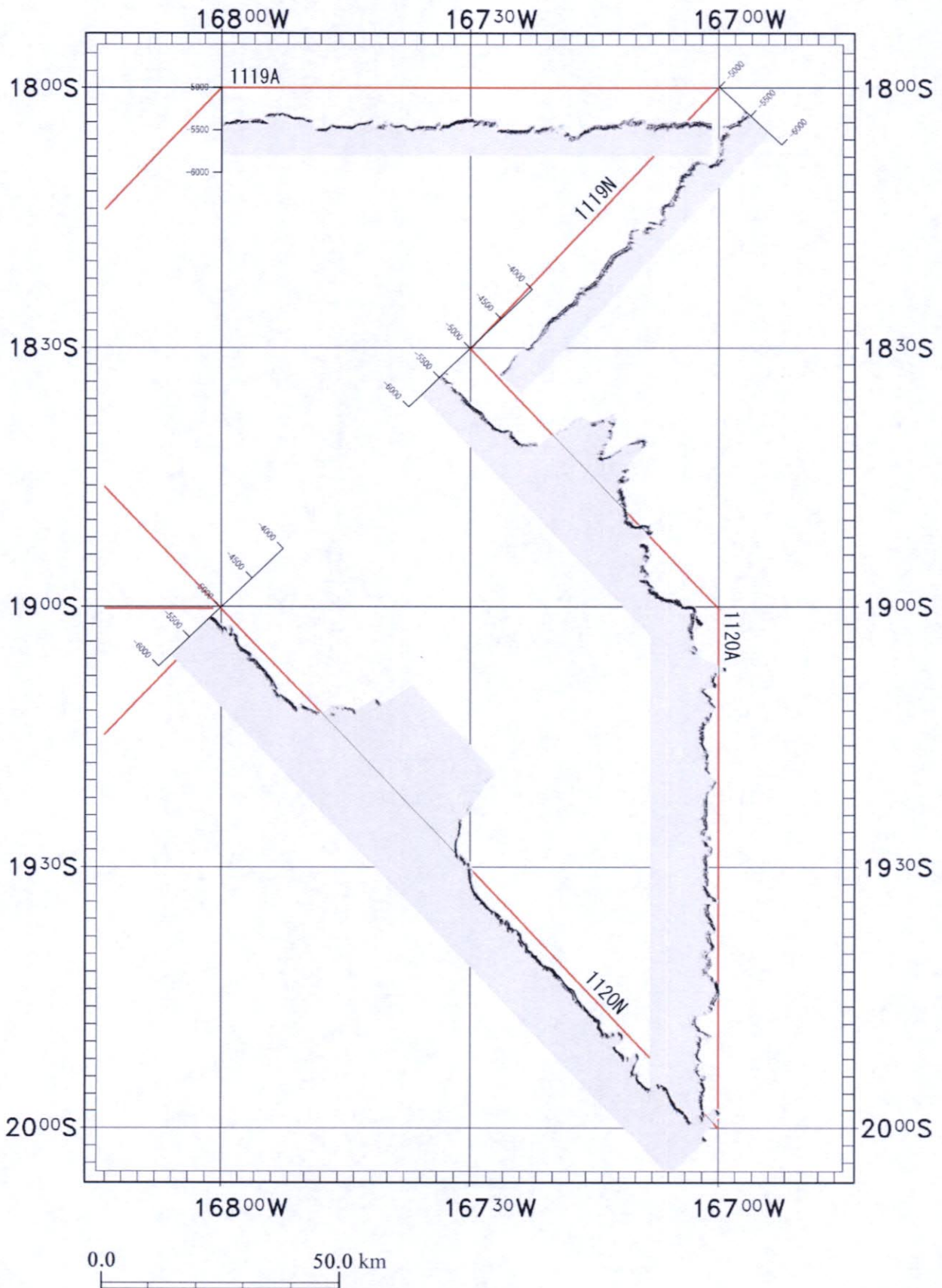
Appendix Fig. 2 Section of Bathymetry (4)

(1/1200000 AT 20°00' S)

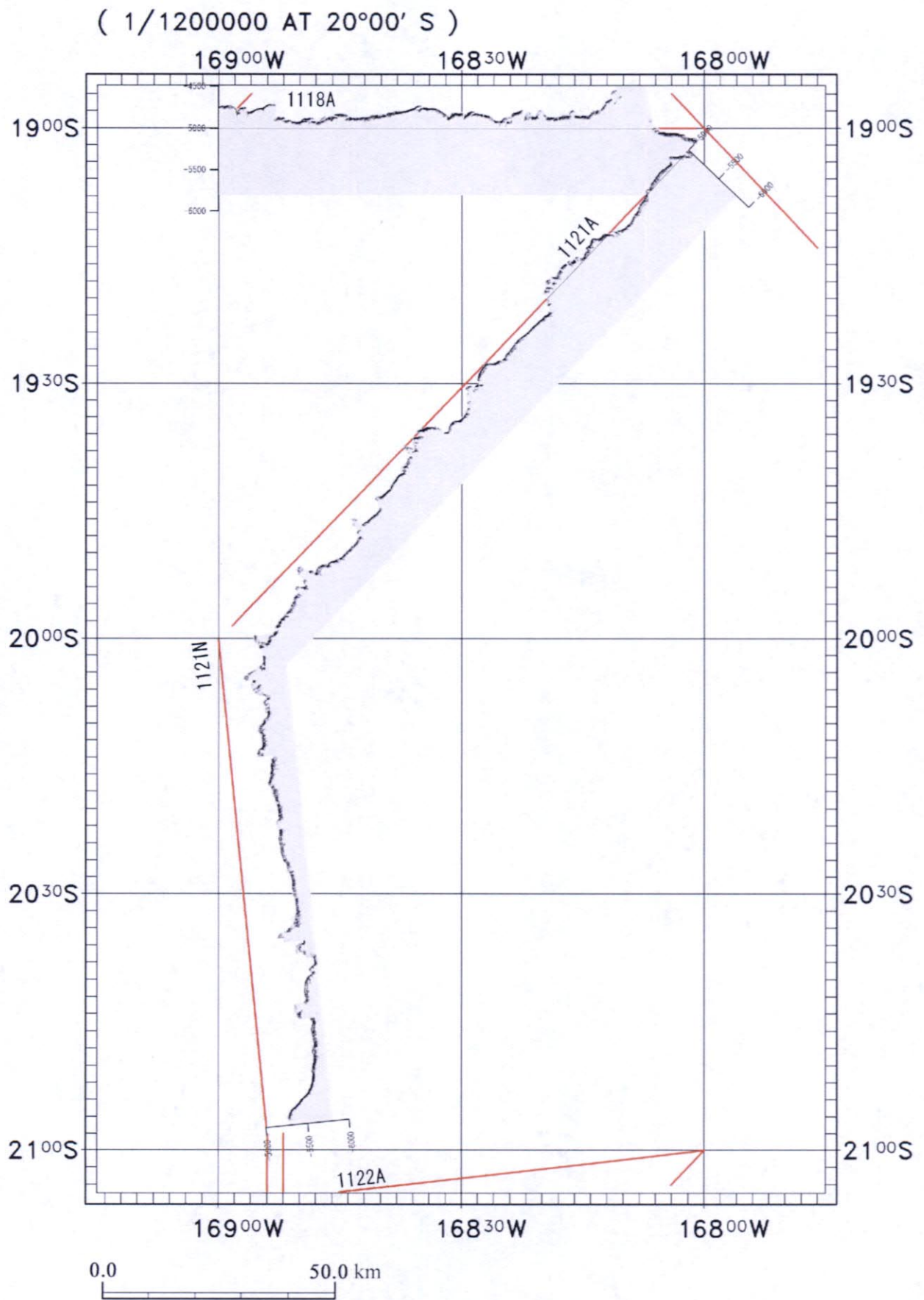


Appendix Fig. 3 Section of SBP (1)

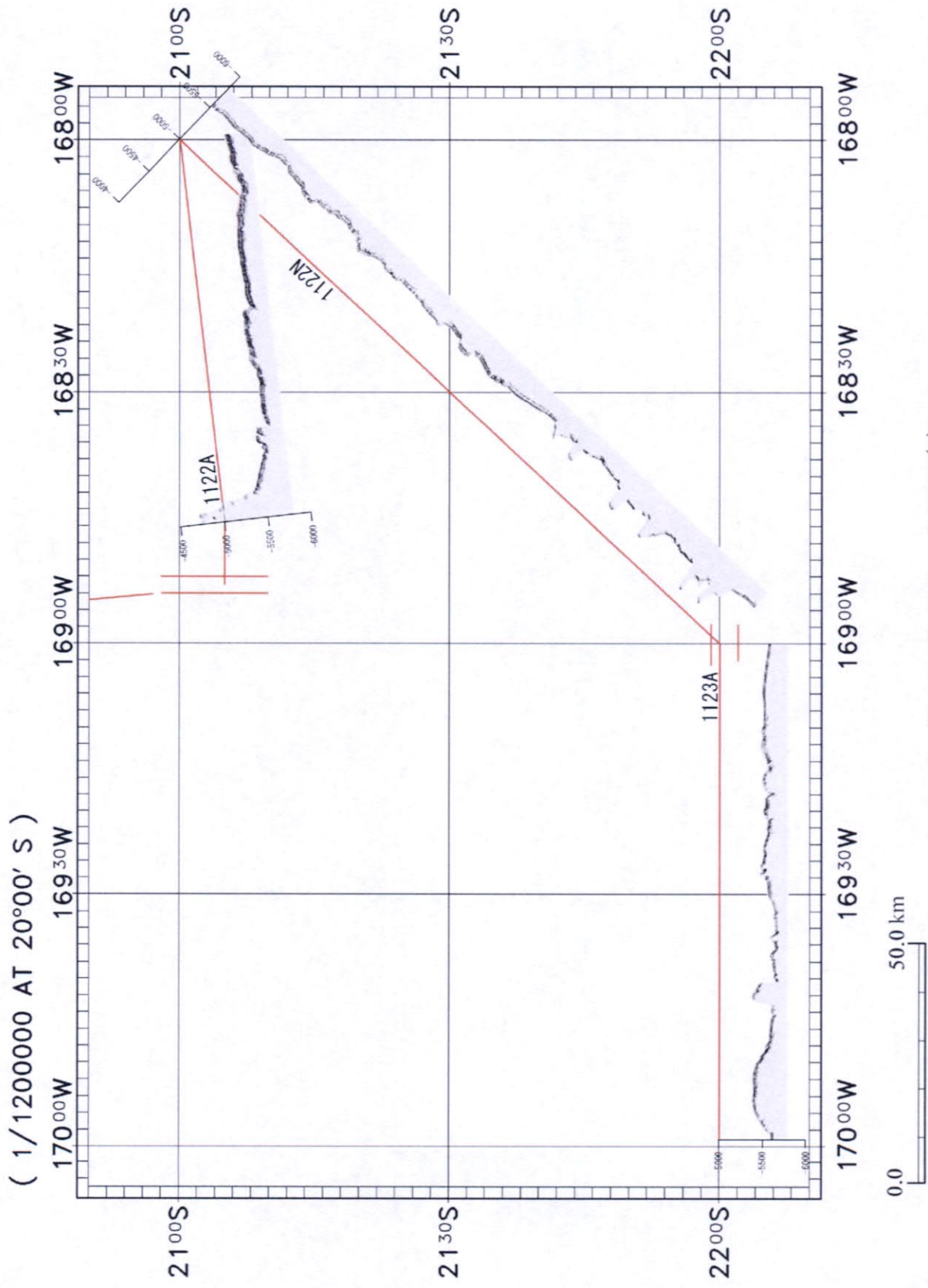
(1/1200000 AT 20°00' S)



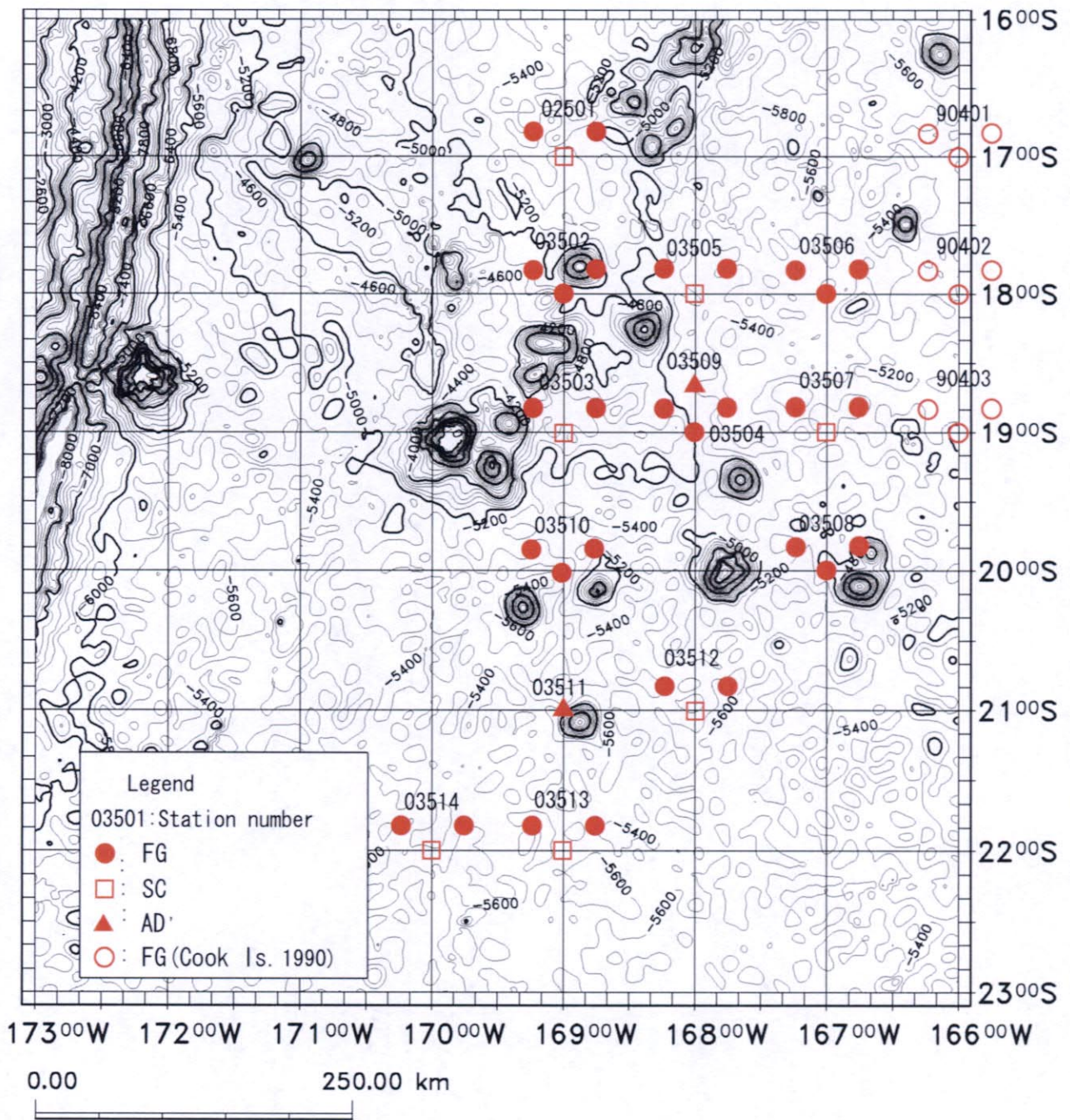
Appendix Fig. 3 Section of SBP (2)



Appendix Fig. 3 Section of SBP (3)

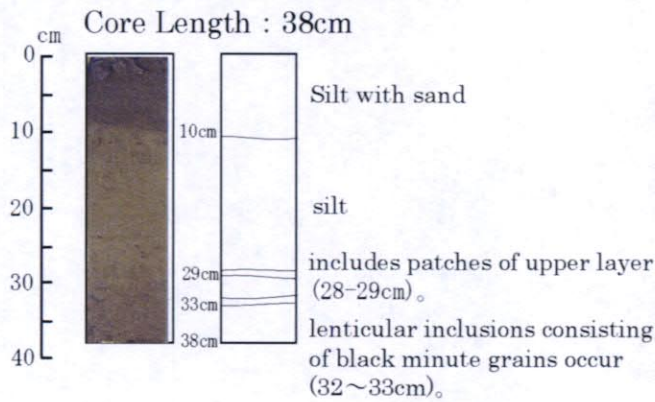


Appendix Fig. 3 Section of SBP (4)



Appendix Fig. 4 Location Map of Sampling Sites

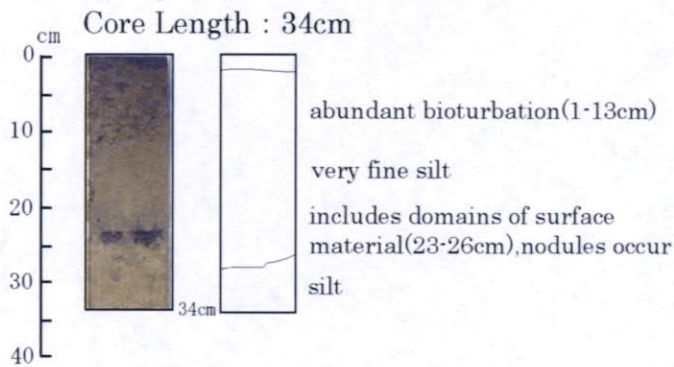
Sampling Point : 03S2027SC01 (03503 Station)



Laboratory Work	
Depth	Sample No.
0-5cm	CS01,XR01,FS01
10-15cm	FS02
20-25cm	CS02,XR02,FS03
30-35cm	FS04

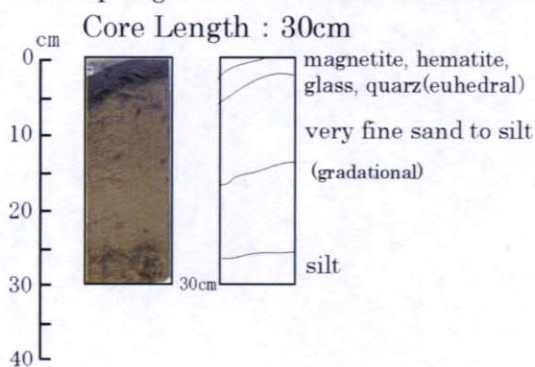
CS:Chemical analysis
XR:X-ray diffeaction analysis
FS:Fossil identification

Sampling Point : 03S2327SC01 (03513 Station)



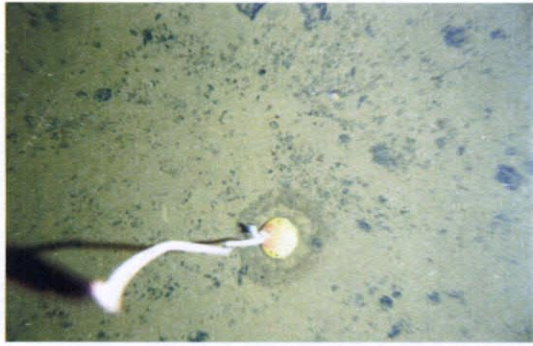
Laboratory Works	
Depth	Sample No.
0-1cm	CS01,XR01,FS01
15-20cm	CS02,XR02,FS02
26-28cm	CS02,XR02,FS03
30-33cm	CS04,XR04,FS04

Sampling Point : 03S2326SC01 (03514 Station)



Laboratory Work	
Depth	Sample No.
0-3cm	CS01,XR01,FS01
10-15cm	CS02,XR02,FS02
15-20cm	CS03,XR03,FS03
26-30cm	CS04,XR04,FS04

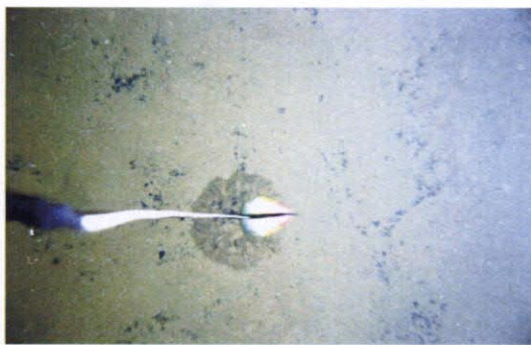
Appendix Fig. 5 Columnar Charts of SC Core



03S1827SC01 (Sea bottom)
Depth : 5,135m



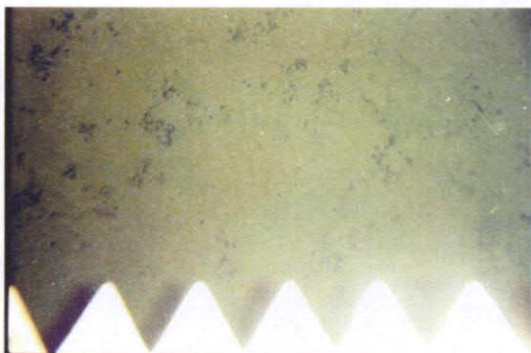
03S1827SC01 (Sample collected)



03S1827FG02 (Sea bottom)
Depth : 5,229m



03S1827FG02 (Sample collected)



03S1827FG03 (Sea bottom)
Depth : 5,220m
(Incline of camera ?)

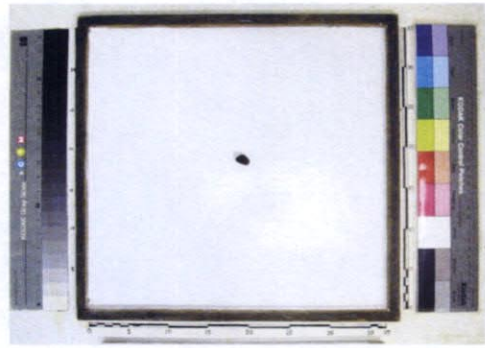


03S1827FG03 (Sample collected)

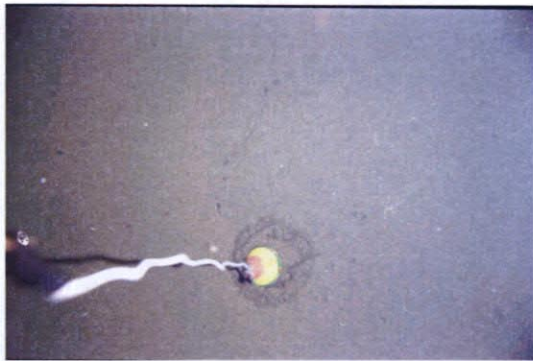
Appendix Fig. 6(1) Sea bottom Photographs and Samples Collected
by FG and SC (Station No. 03501)



03S1927FG01 (Sea bottom)
Depth : 5,092m



03S1927FG01 (Sample collected)
Manganese oxide coated pumice (17mm x 10mm)



03S1927FG02 (Sea bottom)
Depth : 5,079m



03S1927FG02 (Sample collected)



03S1927FG03 (Sea bottom)
Depth : 5,105m

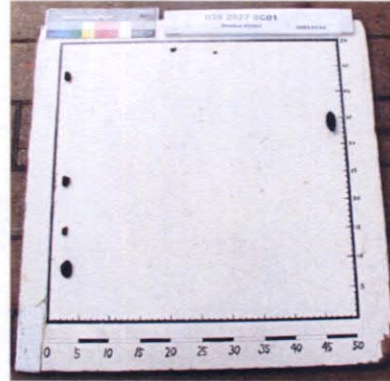


03S1927FG03 (Sample collected)

Appendix Fig. 6(2) Sea Bottom Photographs and Samples Collected
by FG (Station No. 03502)



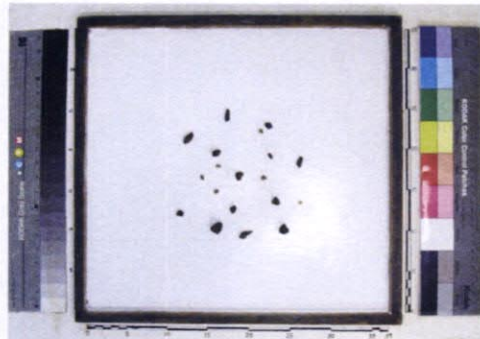
03S2027SC01 (Sea bottom)
Depth : 4,754m



03S2027SC01 (Sample collected)
Manganese oxide coated pumice 27g
(Max. 40mm x 17mm)



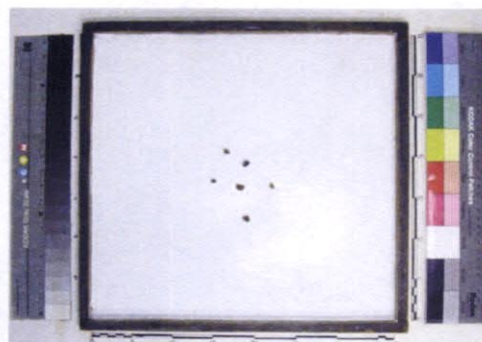
03S2027FG02 (Sea bottom)
Depth : 4,785m



03S2027FG02 (Sample collected)
Manganese oxide coated pumice 7g
(Max. 15mm x 12mm)

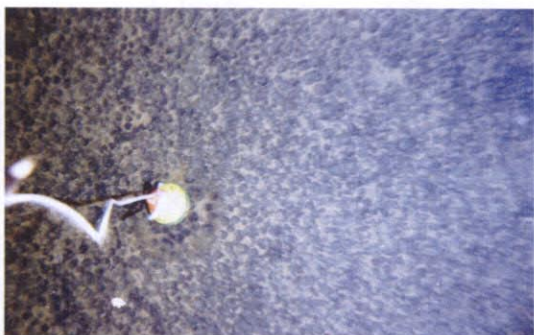


03S2027FG03 (Sea bottom)
Depth : 4,738m

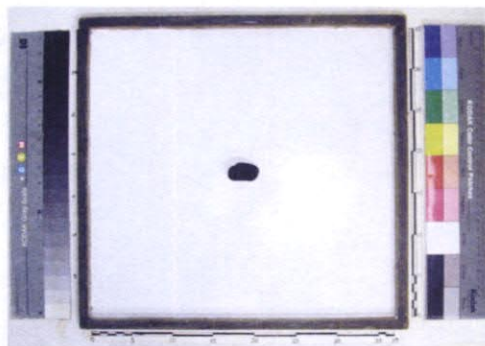


03S2027FG03 (Sample collected)
Manganese oxide coated pumice (1g)

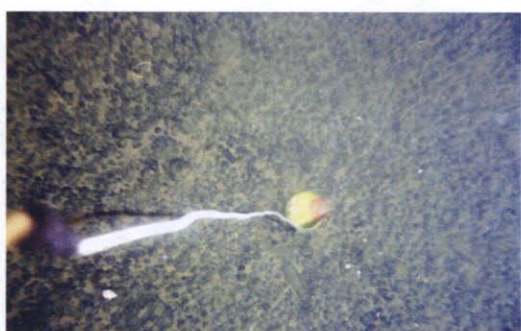
Appendix Fig. 6(3) Sea Bottom Photographs and Samples Collected
by FG and SC (Station No. 03503)



03S2028FG01 (Sea bottom) Depth: 5, 149m
Nodule on the crust (30mm or less)
Bottom sediment is thin
Coverage surface ratio 54.1%



03S2028FG01 (Sample collected)
Nodule of pebble type (20mm x 35mm)



03S2028FG02 (Sea bottom) Depth: 5, 176m
Nodule on the crust (30mm or less)
Bottom sediment is thin
Coverage surface ratio 46.3%



03S2028FG02 (Sample collected)

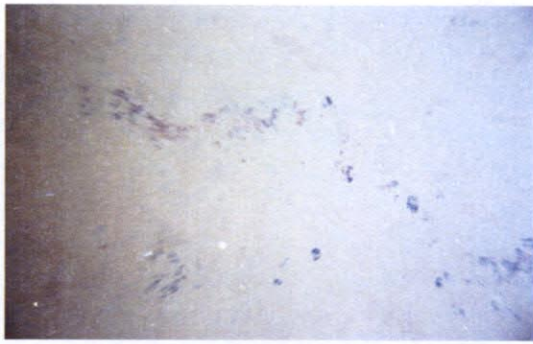


03S2028FG03 (Sea bottom) Depth: 5, 211m
Nodule on the crust (30mm or less)
Bottom sediment is thin
Coverage surface ratio 46.2%



03S2028FG03 (Sample collected)

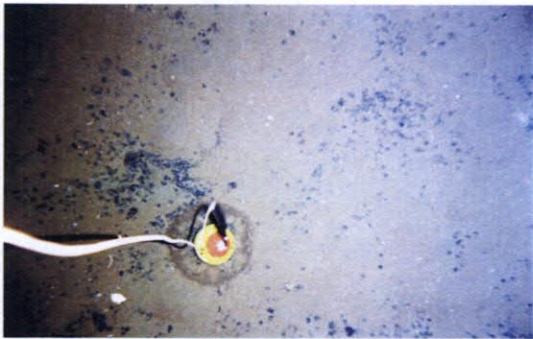
Appendix Fig. 6(4) Sea Bottom Photographs and Samples Collected
by FG (Station No. 03504)



03S1928SC01 (Sea bottom)
Depth : 5,349m



03S1928SC01 (Sample collected)



03S1928FG02 (Sea bottom)
Depth : 5,323m



03S1928FG02 (Sample collected)

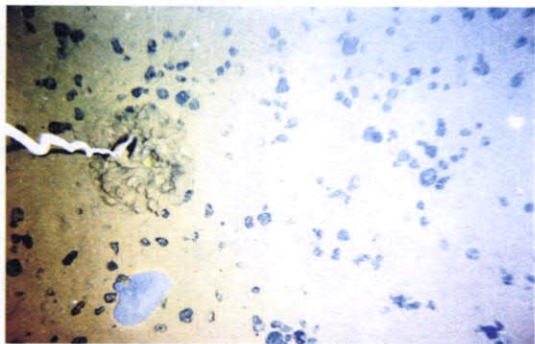


03S1928FG03 (Sea bottom)
Depth : 5,396m

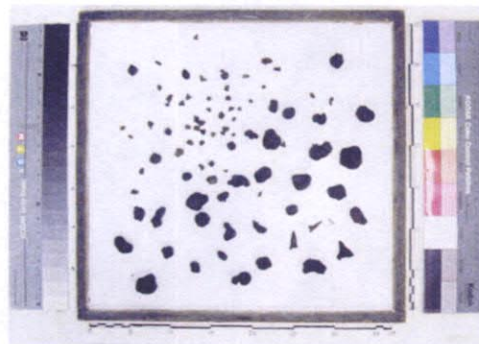


03S1928FG03 (Sample collected)

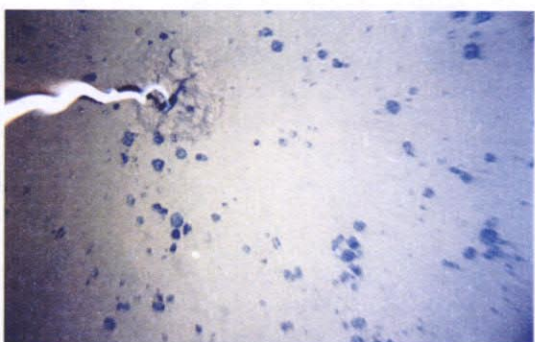
Appendix Fig. 6(5) Sea Bottom Photographs and Samples Collected
by FG and SC (Station No. 03505)



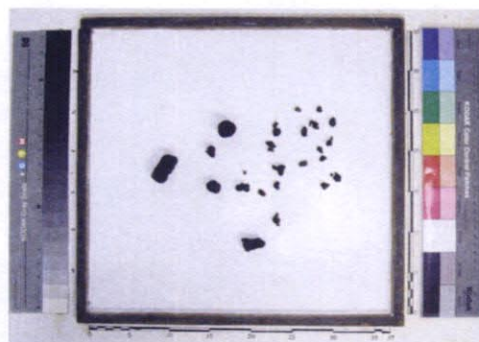
03S1929FG01(Sea bottom)
Depth 5,412m
Covering surface ratio 7.9%



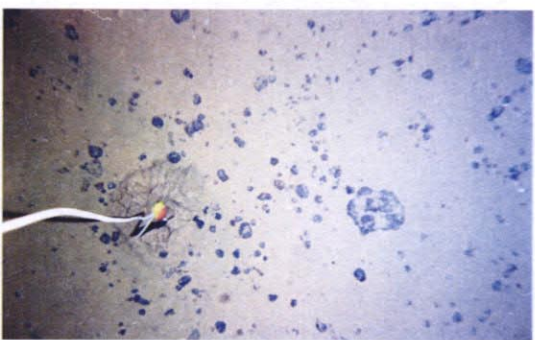
03S1929FG01(Samples collected)
Pebble type
Occupation ratio 8.0%
Abundance 1.3kg/m²



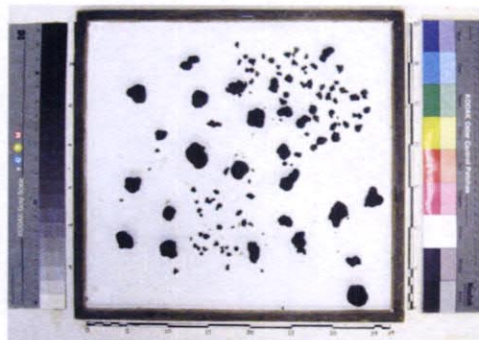
03S1929FG02(Sea bottom)
Depth 5,396m
Covering surface ratio 4.5%



03S1929FG02(Samples collected)
Pebble type
Occupation ratio 2.5%
Abundance 0.7kg/m²

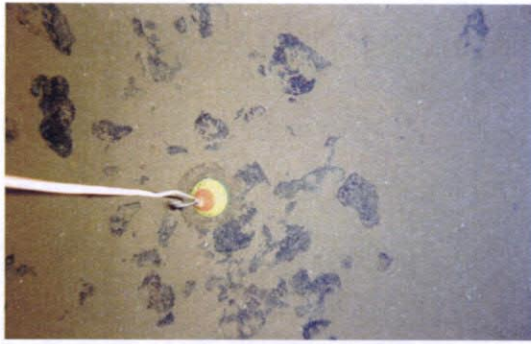


03S1929FG03(Sea bottom)
Depth 5,391m
Covering surface ratio 6.6%



03S1929FG03(Samples collected)
Pebble type
Occupation ratio 7.9%
Abundance 1.1kg/m²

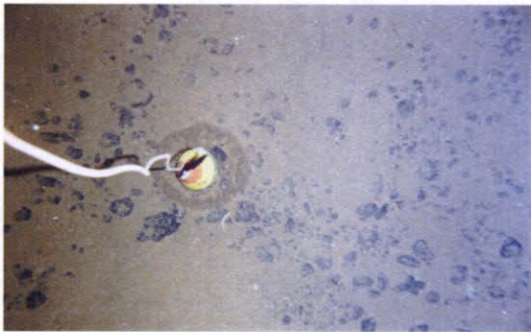
Appendix Fig. 6(6) Sea Bottom Photographs and Samples Collected
by FG (Station No. 03506)



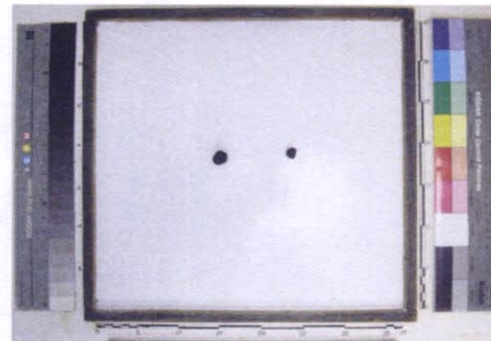
03S2029SC01 (Sea bottom)
Depth : 5,264m
Crust and bottom sediment



03S2029SC01 (Sample collected)



03S2029FG02(Sea bottom)
Depth 5,260m
Covering surface ratio 11.3%



03S2029FG02(Samples collected)
Pebble type
Occupation ratio 0.2%
Abundance 2.5kg/m²



03S2029FG03(Sea bottom)
Depth 5,261m
Covering surface ratio 24.7%



03S2029FG03 (Sample collected)

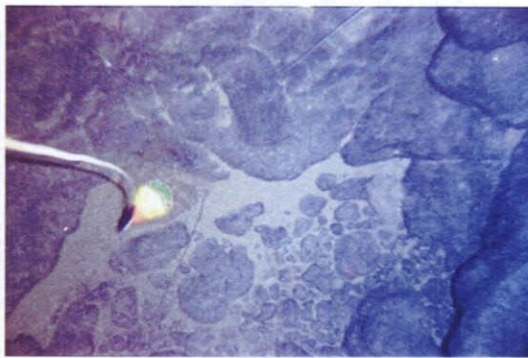
Appendix Fig. 6(7) Sea Bottom Photographs and Samples Collected
by FG and SC (Station No. 03507)



03S2129FG01 (Sea bottom)
Depth : 5,196m



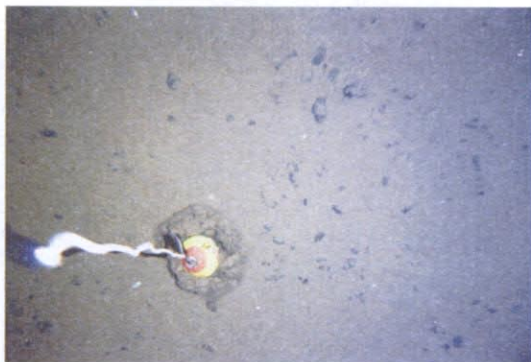
03S2129FG01 (Sample collected)



03S2129FG02 (Sea bottom)
Depth : 4,903m
Crust



03S2129FG02 (Sample collected)



03S2129FG03 (Sea bottom)
Depth : 5,114m
Manganese nodule ?

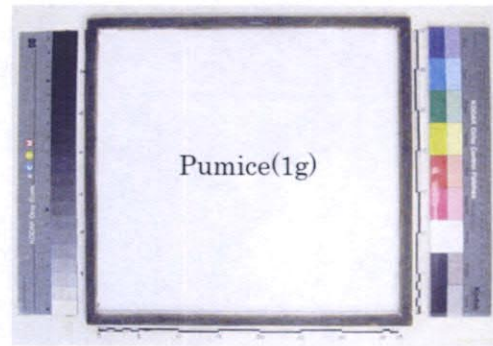


03S2129FG03 (Sample collected)
Manganese oxide coated siltstone
(1mm or less)

Appendix Fig. 6(8) Sea Bottom Photographs and Samples Collected
by FG (Station No. 03508)



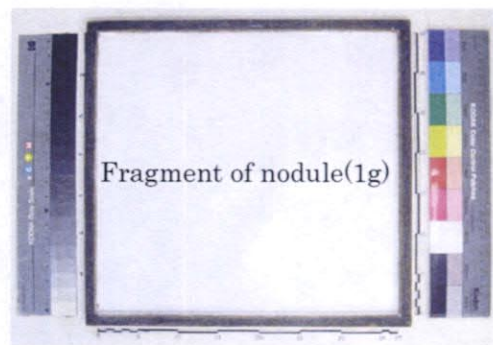
03S2127FG01 (Sea bottom)
Depth : 5,440m



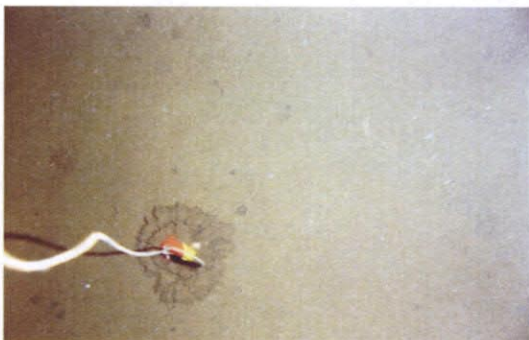
03S2127FG01 (Sample collected)



03S2127FG02 (Sea bottom)
Depth : 5,450m



03S2127FG02 (Sample collected)



03S2127FG03 (Sea bottom)
Depth : 5,303m



03S2127FG03 (Sample collected)

Appendix Fig. 6(9) Sea Bottom Photographs and Samples Collected
by FG (Station No. 03510)



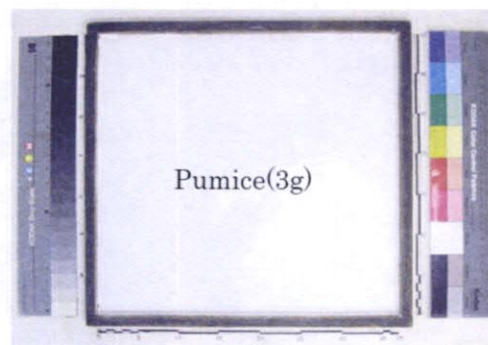
03S2228SC01 (Sea bottom)
Depth : 5,523m



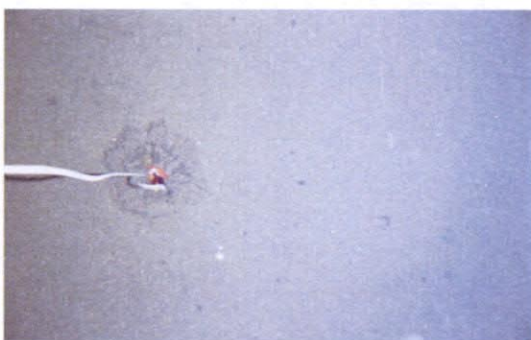
03S2228SC01 (Sample collected)



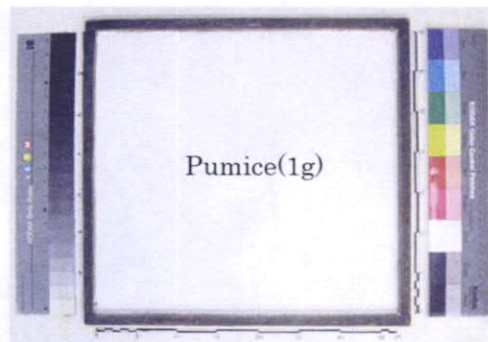
03S2228FG02 (Sea bottom)
Depth : 5,629m



03S2228FG02 (Sample collected)

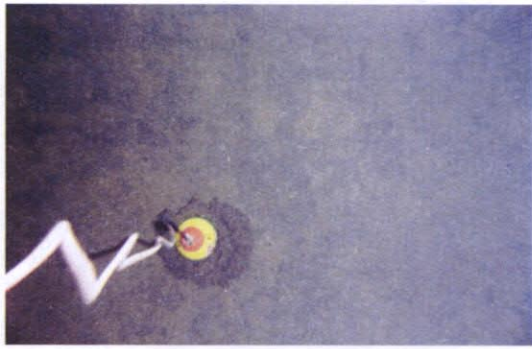


03S2228FG03 (Sea bottom)
Depth : 5,593m

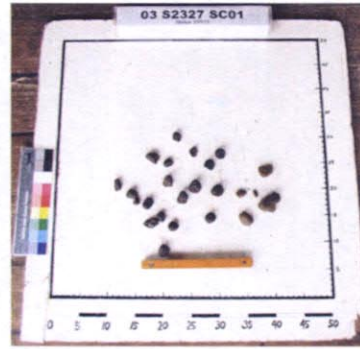


03S2228FG03 (Sample collected)

Appendix Fig. 6(10) Sea Bottom Photographs and Samples Collected
by FG and SC (Station No. 03512)



03S2327SC01 (Sea bottom)
Depth : 5,569m



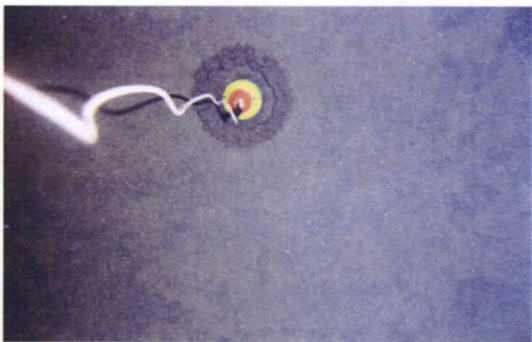
03S2327SC01 (Sample collected)
Manganese nodule buried 30cm
below from the surface



03S2327FG02 (Sea bottom)
Depth : 5,555m



03S2327FG02 (Sample collected)

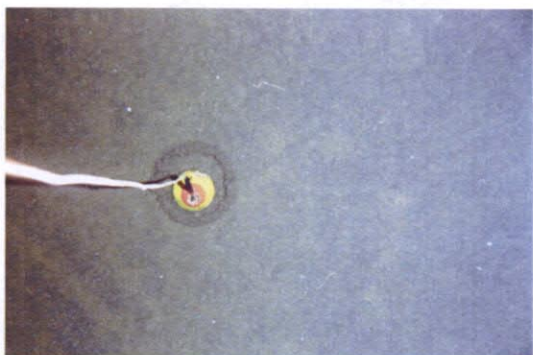


03S2327FG03 (Sea bottom)
Depth : 5,574m



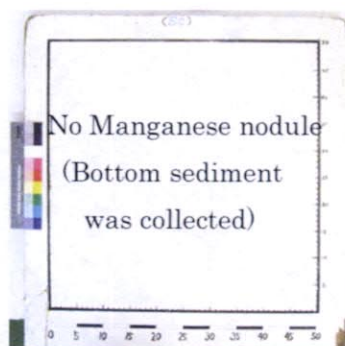
03S2327FG03 (Sample collected)

Appendix Fig. 6(11) Sea Bottom Photographs and Samples Collected
by FG and SC (Station No. 03513)



03S2326SC01 (Sea bottom)

Depth : 5,620m



03S2326SC01 (Sample collected)

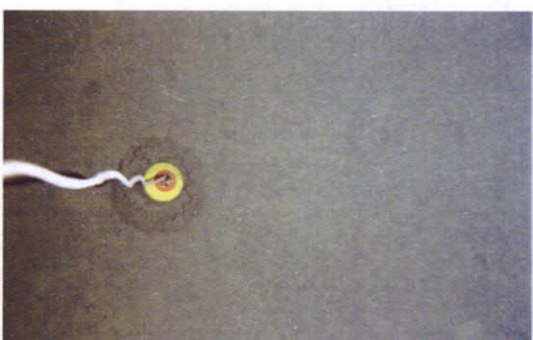


03S2326FG02 (Sea bottom)

Depth : 5,584m



03S2326FG02 (Sample collected)



03S2326FG03 (Sea bottom)

Depth : 5,560m



03S2326FG03 (Sample collected)

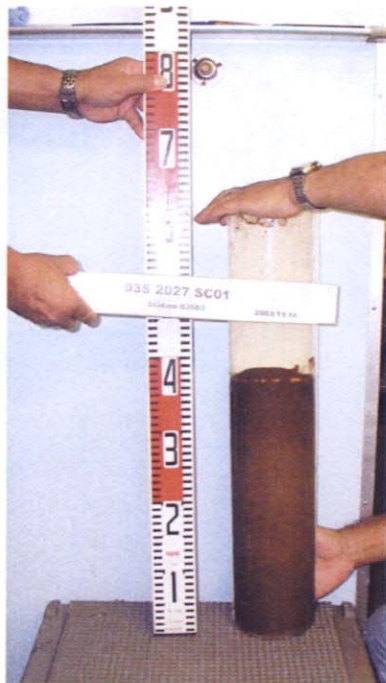
Appendix Fig. 6(12) Sea Bottom Photographs and Samples Collected by FG and SC (Station No. 03514)



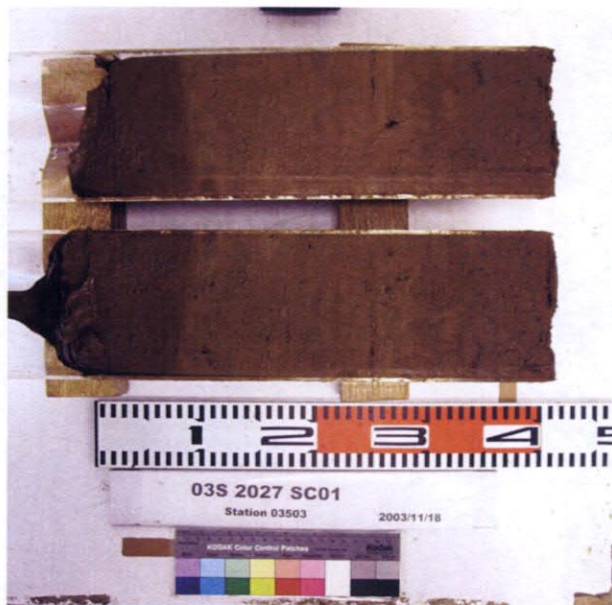
Surface of bottom sediment



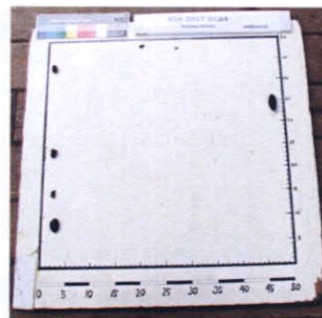
Section of bottom sediment sample



Bottom sediment
(Insoluble brown clay)



Split sample

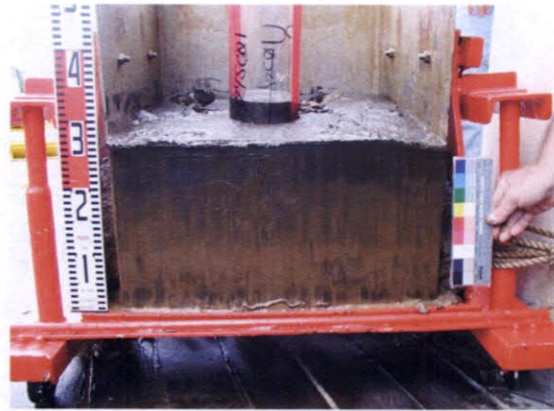


No manganese nodule on surface
Seven pieces of buried pumice

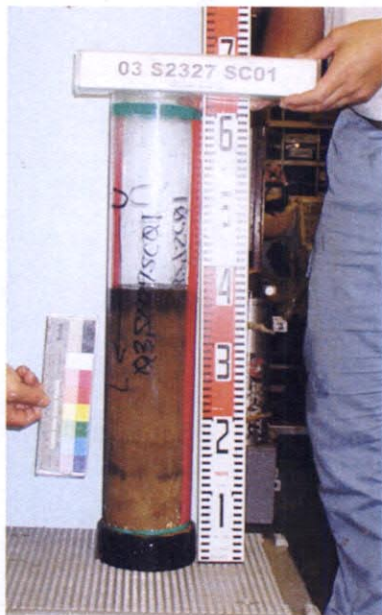
Appendix Fig. 7(1) Photograph of SC Sample
(Station No. 03503 ,Sample No. 03S2027SC01)



Surface of bottom sediment



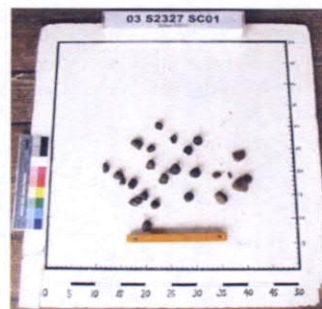
Section of bottom sediment sample



Bottom sediment
(Insoluble brown clay)



Split sample



No manganese nodule on surface
Manganese nodule buried 30cm
below from surface

Appendix Fig. 7(2) Photograph of SC Sample

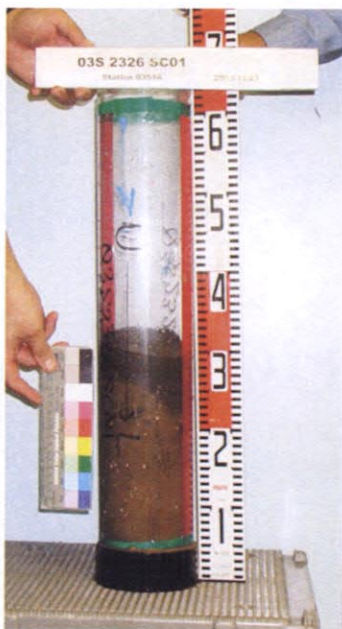
(Station No. 03513 ,Sample No. 03S2327SC01)



Surface of bottom sediment



Section of bottom sediment sample



Bottom sediment
(Insoluble brown clay)



Split sample
(No manganese nodule)

Appendix Fig. 7(3) Photograph of SC Sample
(Station No. 03514 ,Sample No. 03S2326SC01)



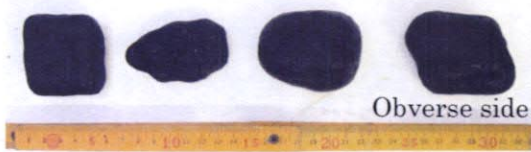
Manganes nodules and crusts



Manganes nodules



Crusts

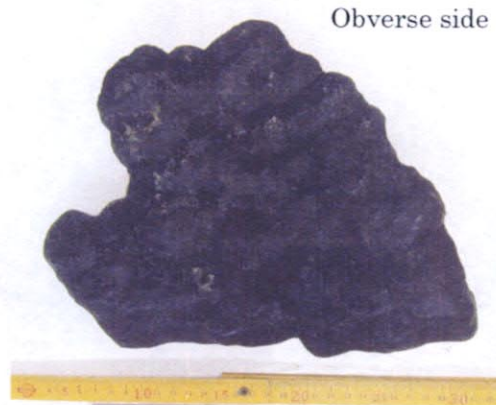


Obverse side



Reverse side

Manganes nodules (6-8cm across)



Obverse side



Cross section



Obverse side

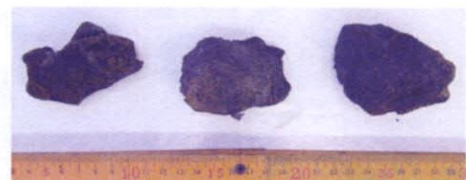


Cross section

Manganes nodules (More than 8cm)



Crusts



Mudstone

Appendix Fig. 8(1) Photograph of AD Sample

(Station No. 03509 ,Sample No. 03S2028AD01)



Collected samples



Obverse side



Obverse side



Cross section



Cross section

Manganes nodules

Manganes nodules



Crusts

Obverse side



Reverse side



Cross section

Appendix Fig. 8(2) Photograph of AD Sample

(Station No. 03511 ,Sample No. 03S2227AD01)