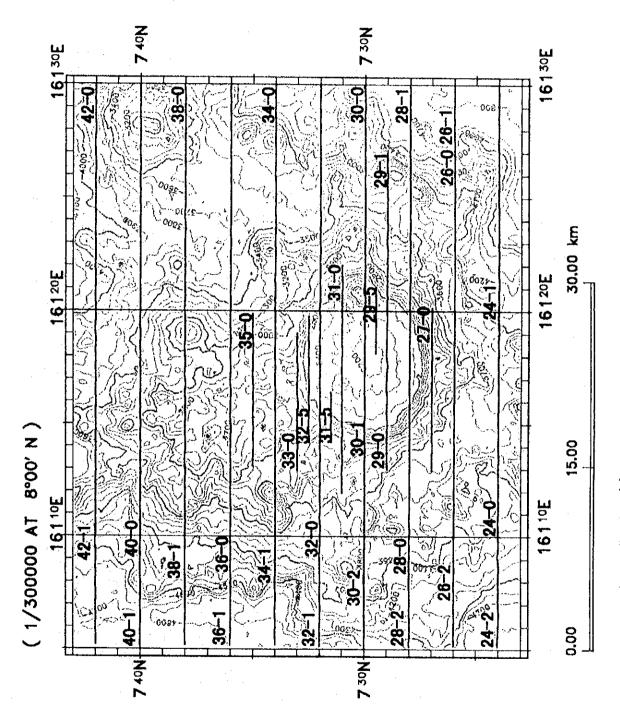
[Appendix]

Fig. 1(1)~(5)	Location map of track line (MC11,MS13,MC12,MC13,and MC02 Area)
Fig. 2(1)~(5)	Bathymetric map based on MBES (MC11,MS13,MC12,MC13,and MC02 Area)
Fig 3(1)~(4)	Topographic gradient map based on MBE

(MC11,MS13,MC12, and MC13 Area)

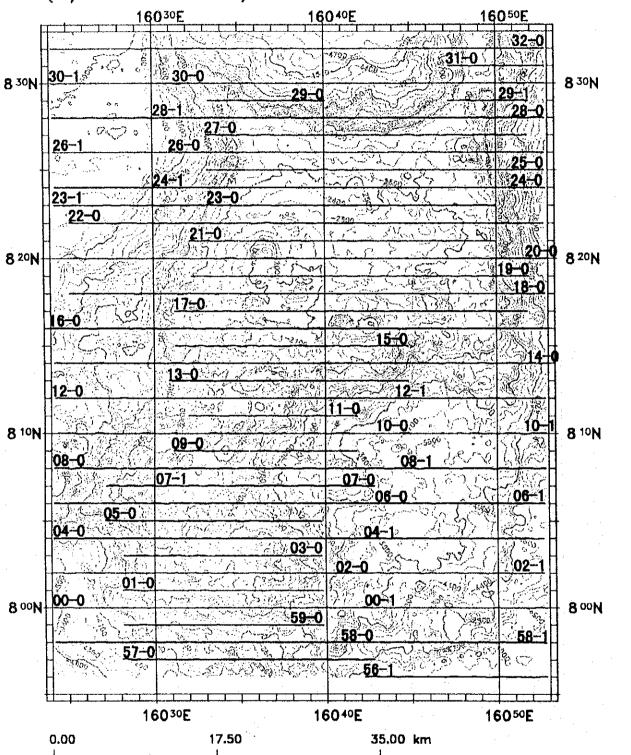
Fig. 4	Columnar charts of LC core
Fig. 5(1)~(8)	Route map of FDC observation and exposed rate diagram of
	manganese crusts (MC11,MS13,MC12,MC13,and MC02 Area)
Fig. $6(1)(2)$	Results of CTD measurement(Temperature),(Salinity)



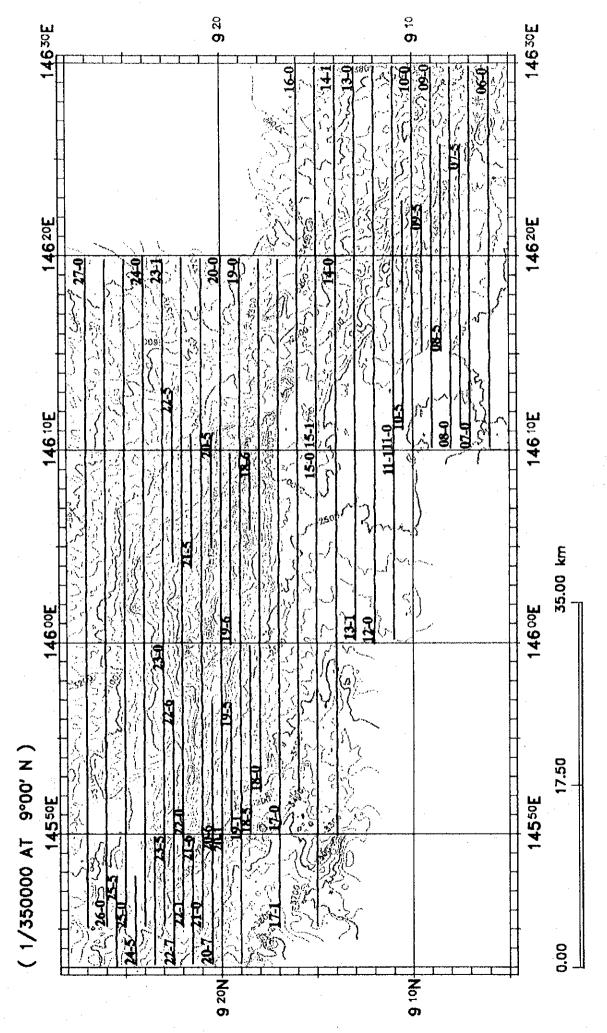
Appendix Fig.1 (1) Location map of track line of MC11 area.

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(1/350000 AT 8°00' N)



Appendix Fig.1 (2) Location map of track line of MS13 area.



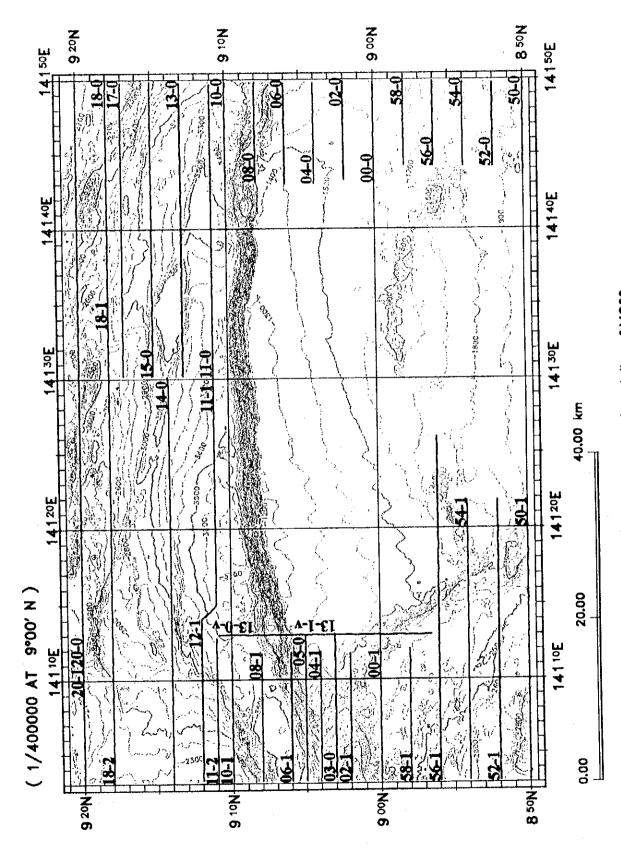
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Appendix Fig.1 (3) Location map of track line of MC12 area.

(1/300000 AT 10°00'N)

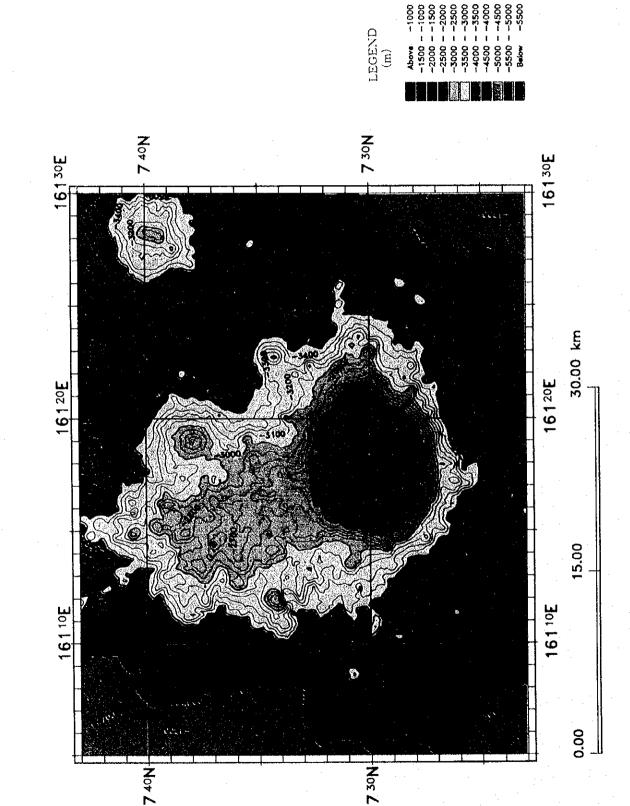
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Appendix Fig.1 (4) Location map of track of MC13 area.



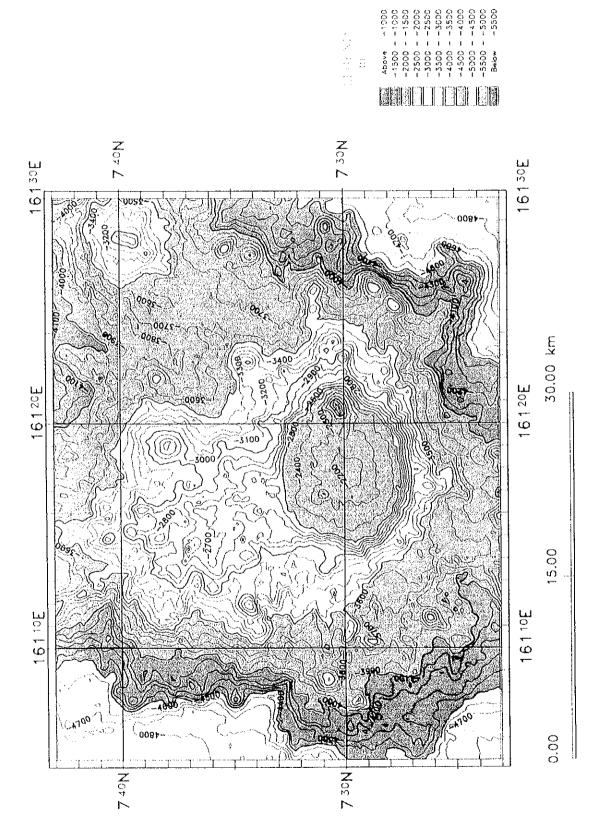
Appendix Fig.1(5) Lacation map of track line of MC02 area.

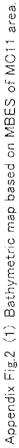
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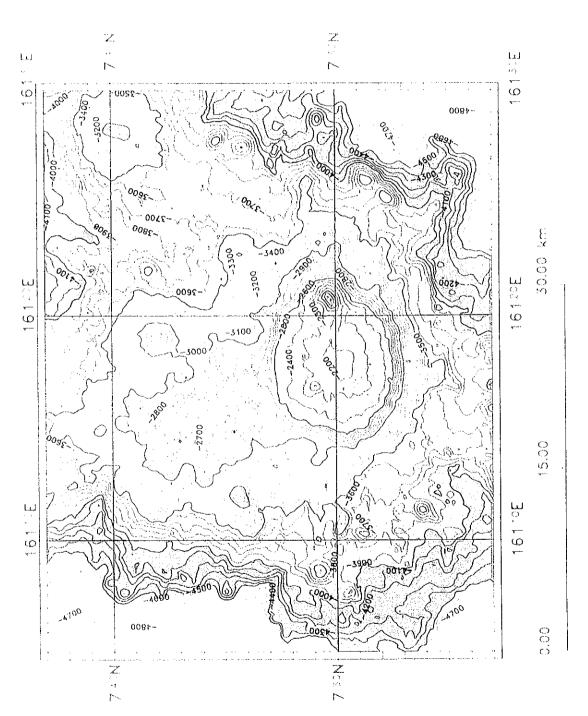


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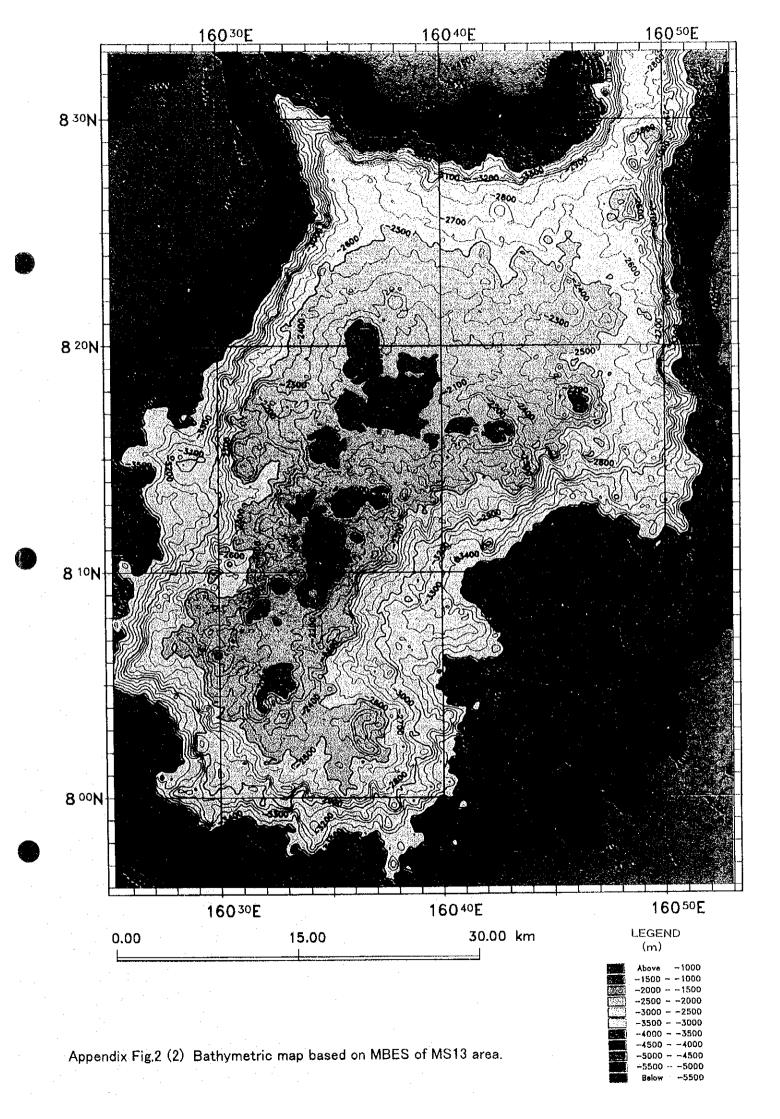
Appendix Fig.2 (1) Bathymetric map based on MBES of MC11 area.

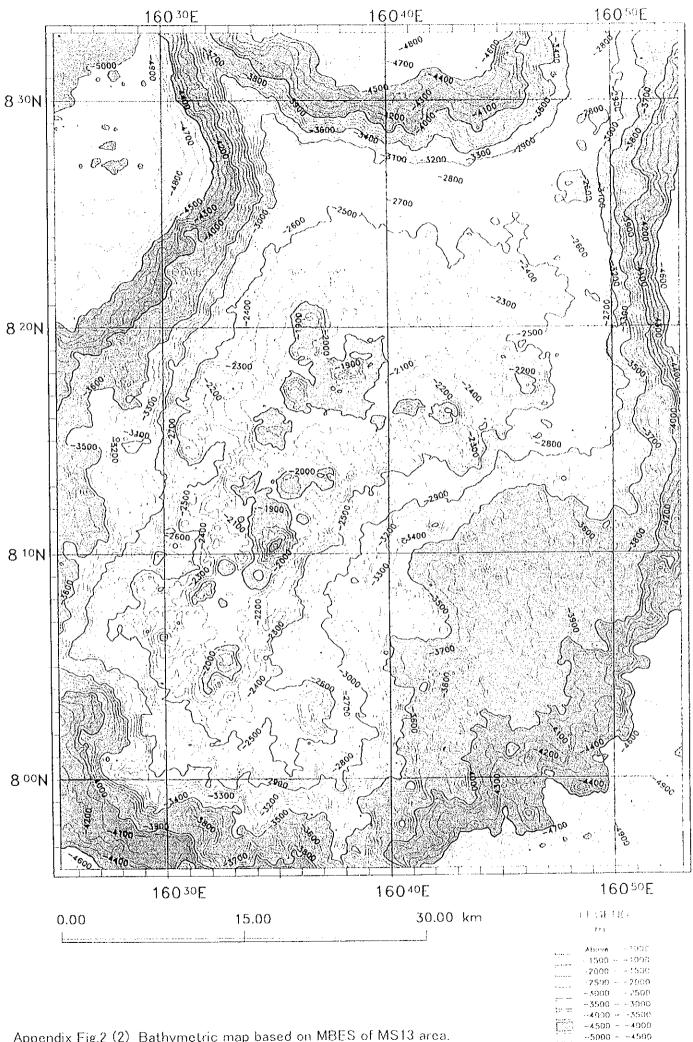












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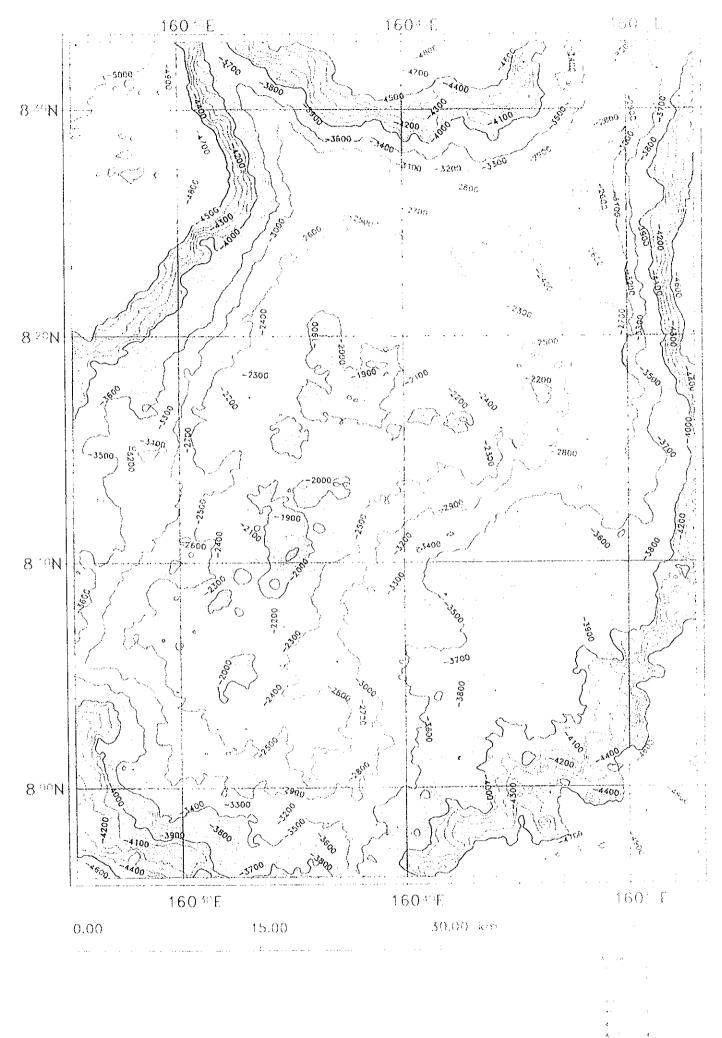
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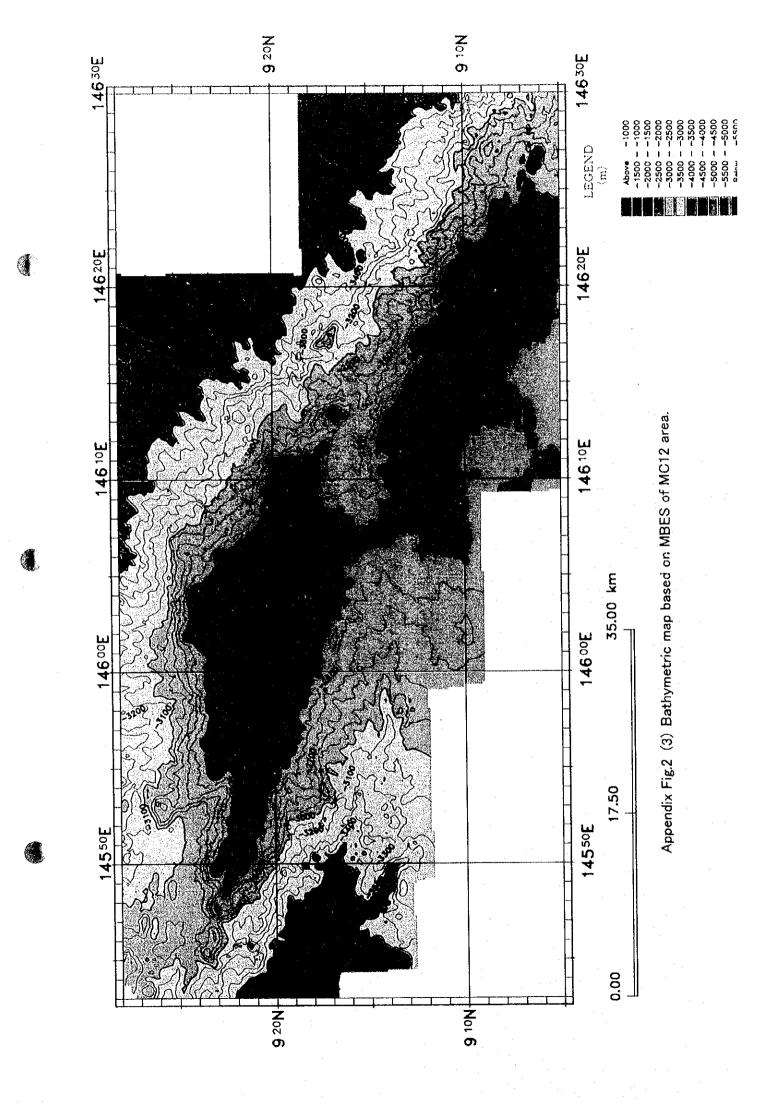
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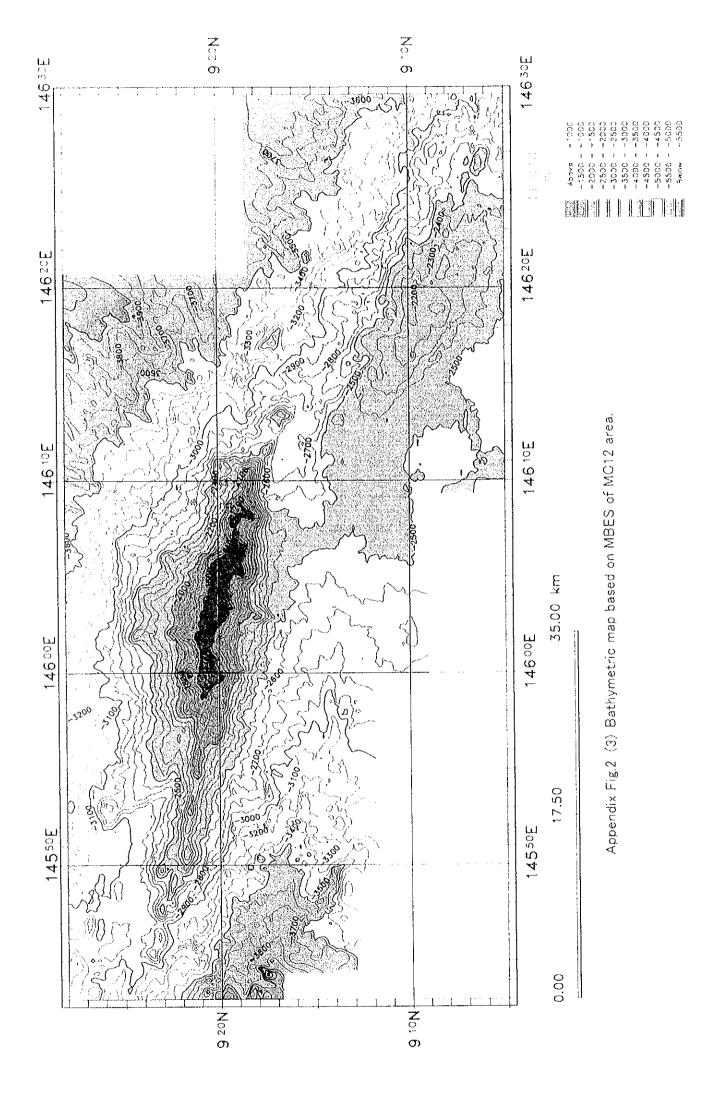
Appendix Fig.2 (2) Bathymetric map based on MBES of MS13 area.

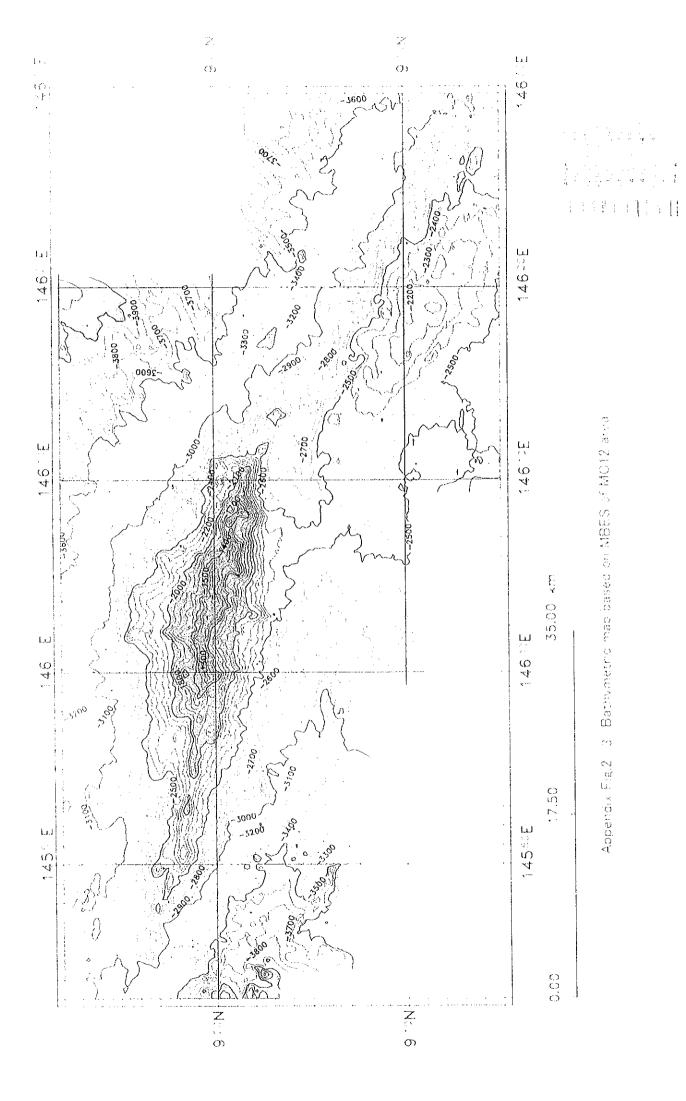


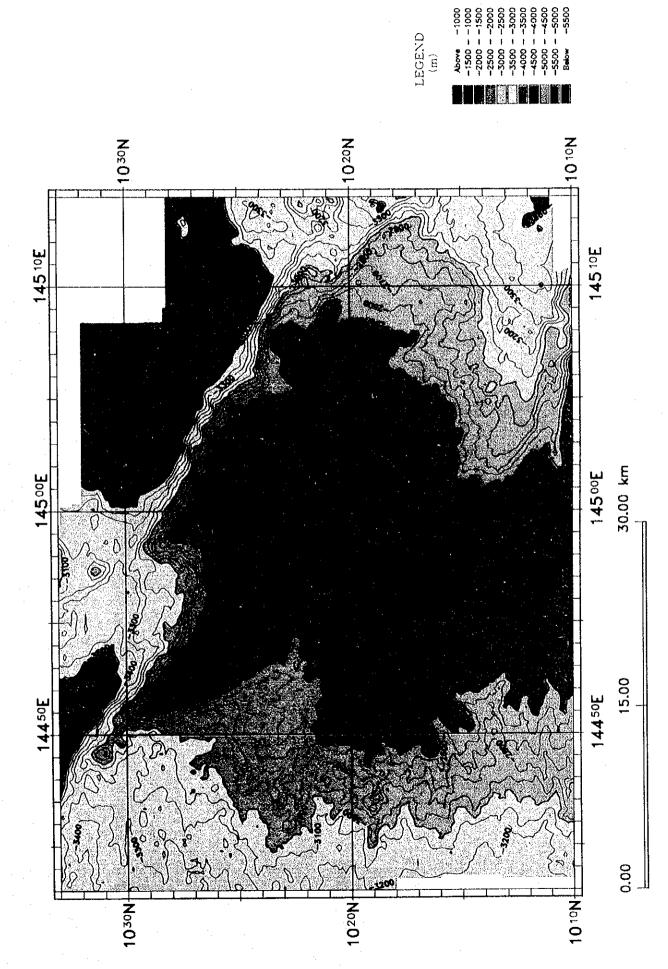
Appendix Fig.2 [2] Bathymetric map based on MBES of MS13 area

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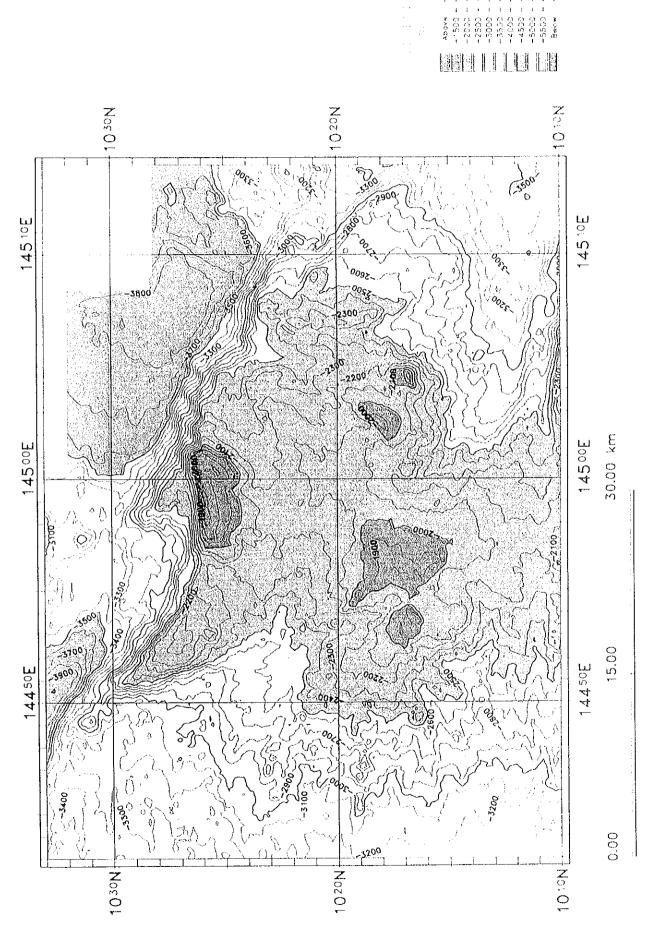




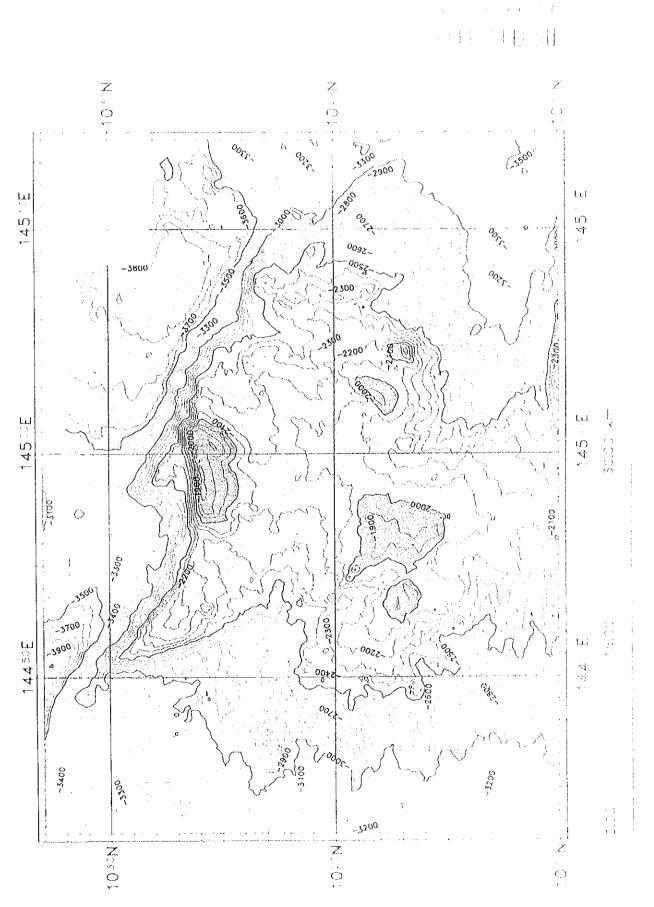


Appendix Fig.2 (4) Bathymetric map based on MBES of MC13 area.

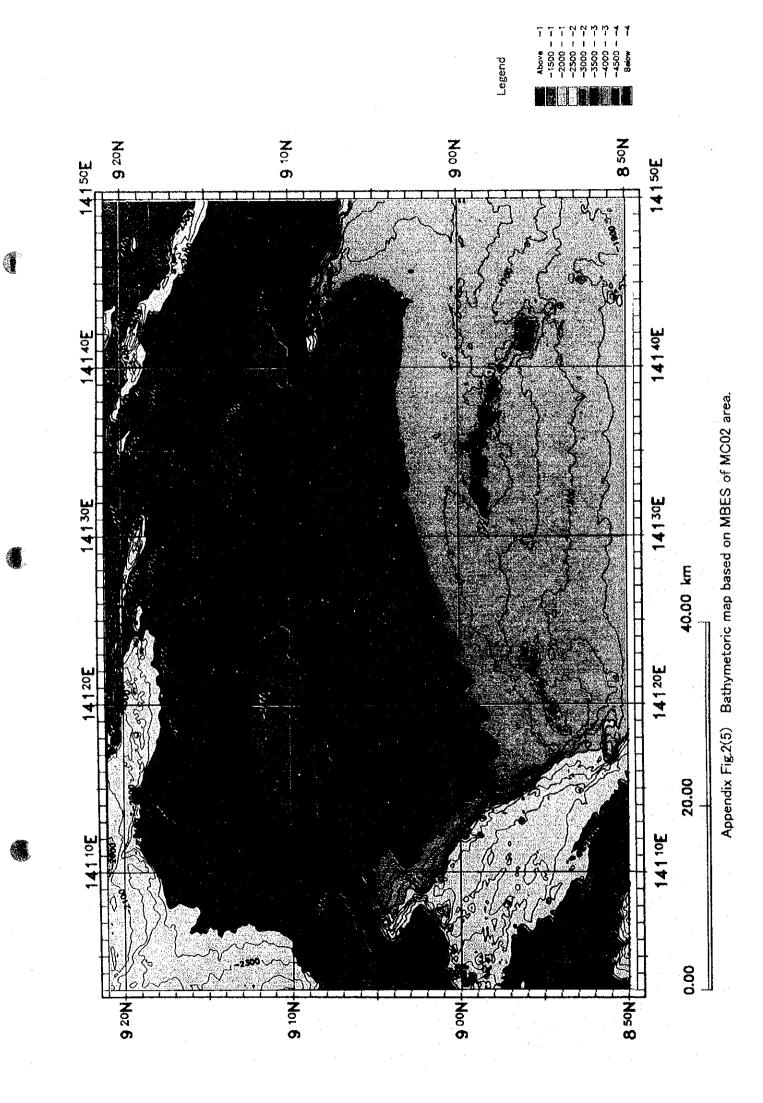
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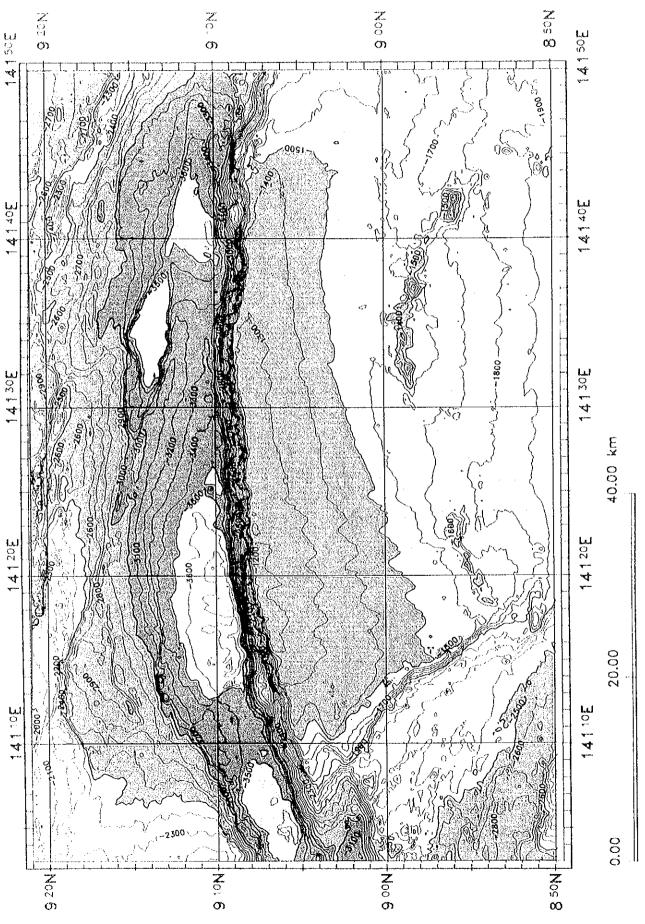
Appendix Fig.2 (4) Bathymetric map based on MBES of MC13 area.



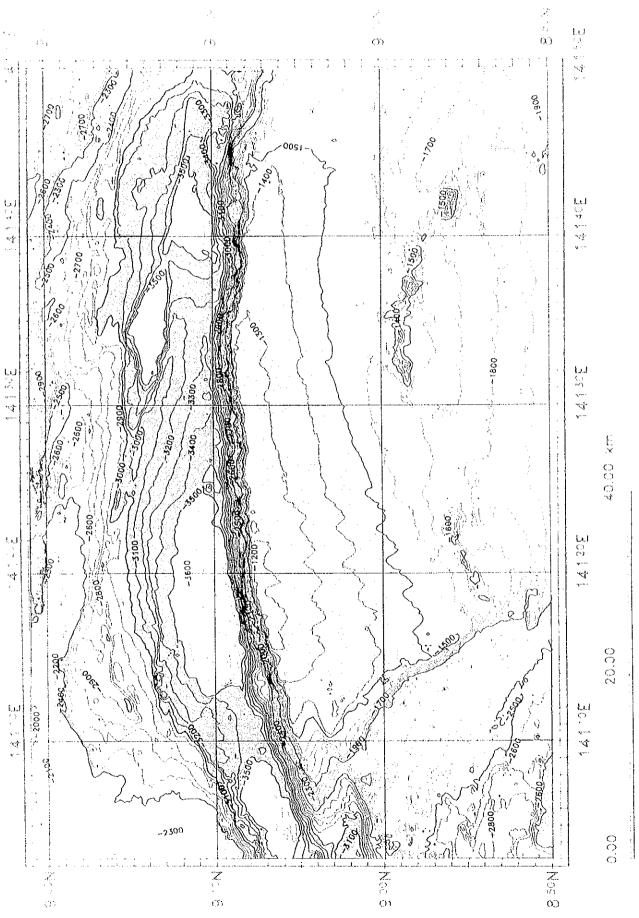
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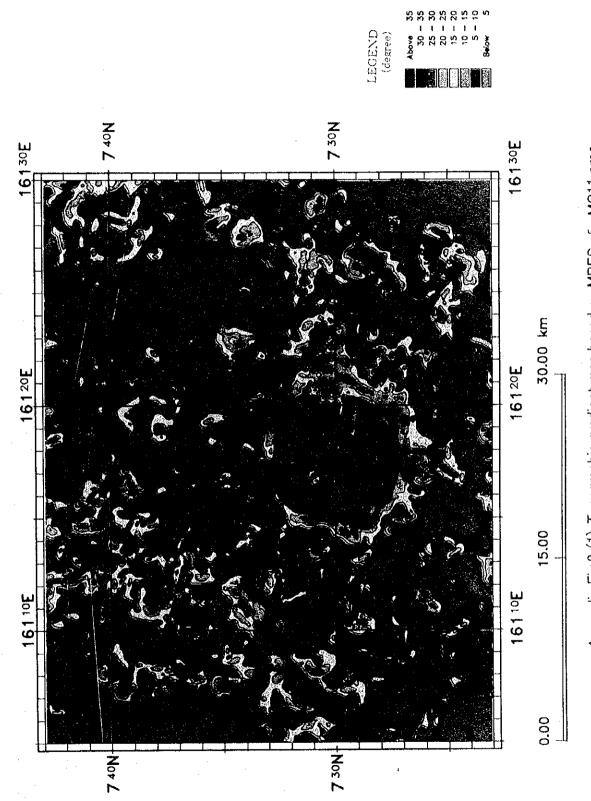
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Appendix Fig.2(5) Bathymetoric map based on MBES of MC02 area.



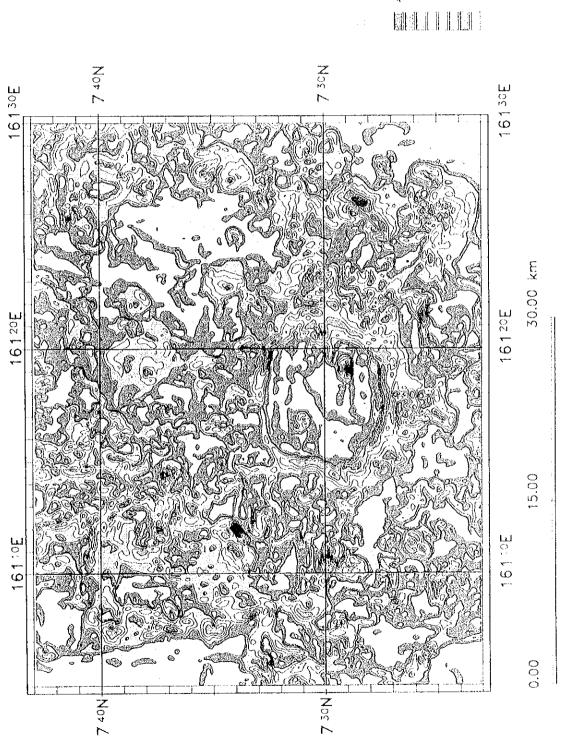
Abbendix Fig 2151 Bathymetoric mad based on MBES of MCC2 a Ha



Appendix Fig.3 (1) Topographic gradient map based on MBES of MC11 area.

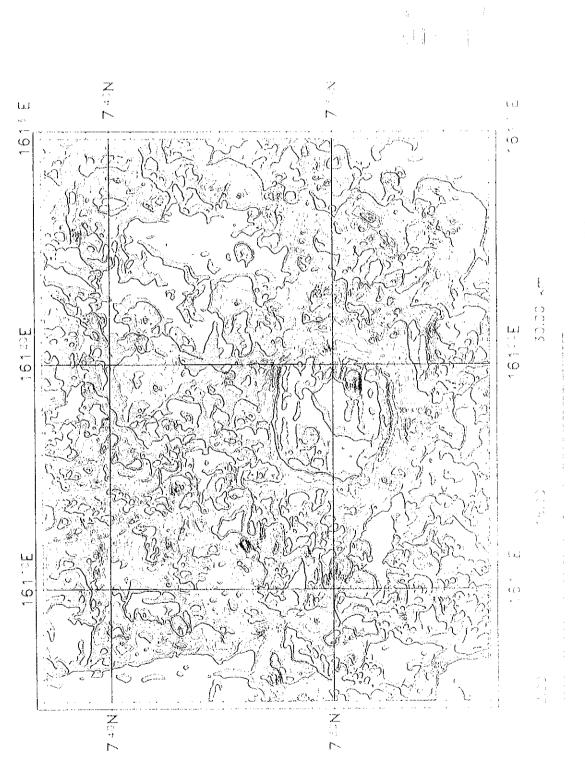
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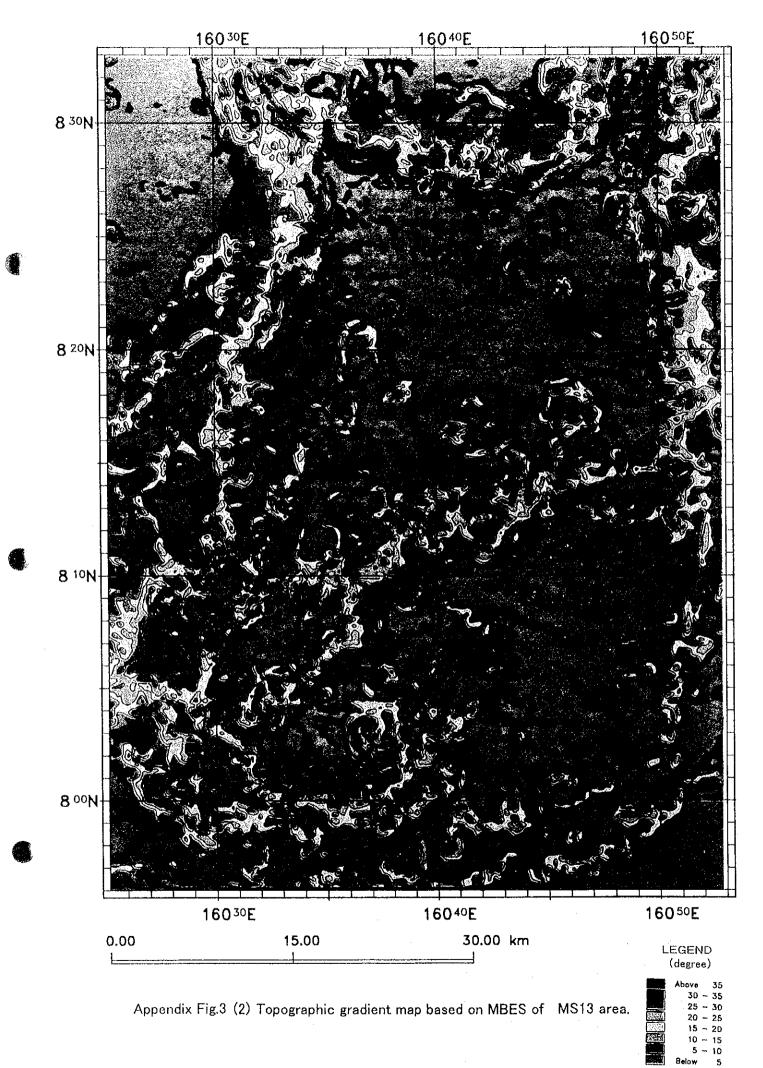


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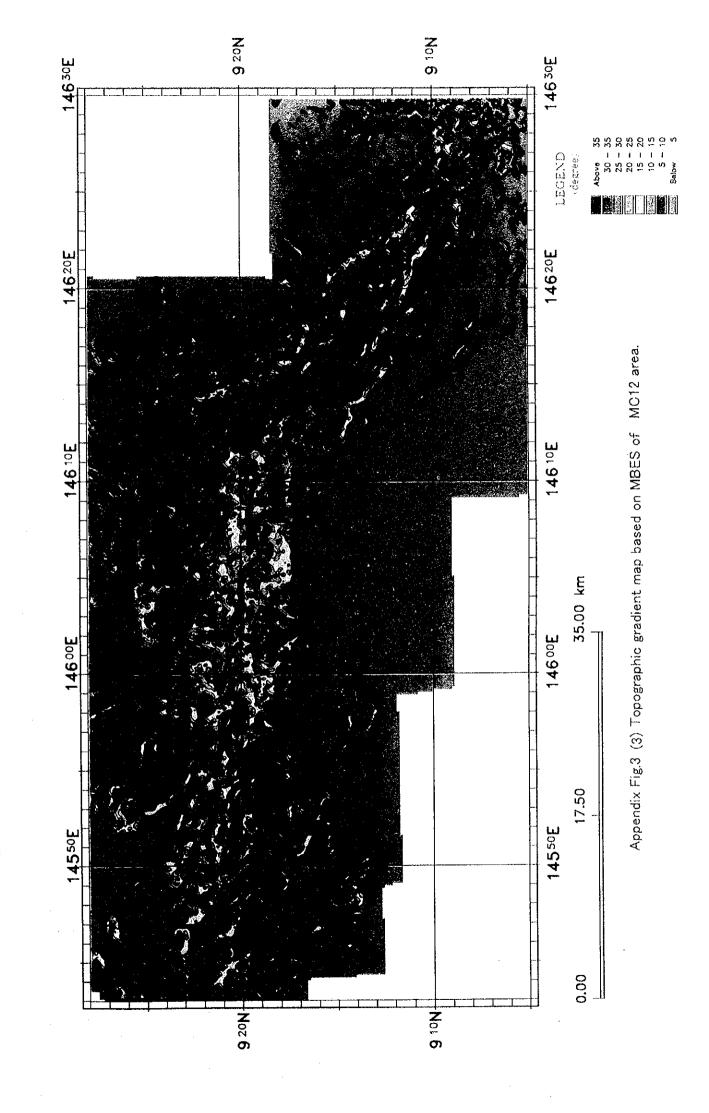


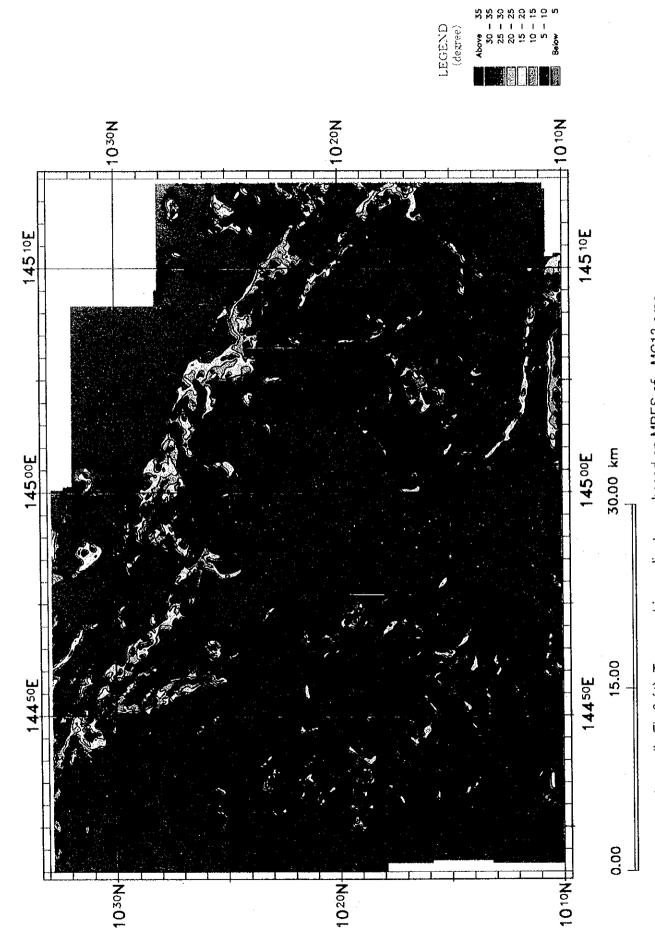
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Appendix Fig.3 (4) Topographic gradient map based on MBES of MC13 area.

r Geological Description column Cabareous clay not diding foreminitiers send and micro-module in the whole. Water containt high and coft At 30cm, 43cm, 210cm point.	Smpling No.		B8SMS13LC01	201	
3) column 3/5/R Calcareous city 3/2 Incrumotive in the whole. 7/5/R and micromotive in the whole. 7/5 Water containt high and coft. 7/5 At 30cm, 43cm, 210cm point. 8/2 215	Depth	5	Geological		Thickness
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 8.2 • Including forminitiens send including in the whole. 7.5YR • and micro-rodule in the whole. 7.5YR • At 30cm, 43cm, 210cm point. 8.2 • some cm rodule samoled. 2.5 •		7.5YR	and a product of the	Calcansous clay	
7.5YR The incrumation sand 7.5YR And micromodule in the whole. Water containt high and soft At 30em, 43em, 216em point 8.2 215		8/2			
2.57R And micro-module in the whole. 7.27 Water containt high and coft. 7.57R 2.15 2.15 2.15				Including foreminifera sand	
7/2 Water containt high and coft 7.5YR & 20cm, 430cm, 43cm, 210cm point 8.2 & some cm nodule sambed	ŝ	7.5YR	•	and micro-module in the whole.	
7.5YR 8.2 3.5 3.5 3.5 3.5 3.5		27			
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t	۲ ۶	22.5			
		2,8			
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	Sampli		96SMS13LC	211	
Sampling No. 96SMS13LC11	Deeth		Geological	Description	Thickness
ne No. 9685M/S13LC11 Color Geological Description	(cm)		column		(cm)
<mark>og No. 965/MS13LC11</mark> Color Geological Description Column				Not sampled	
or No. 965MS13LC11 Cobr Geological Description column Not sampled				Cost description of the second second	

		Thickness	(cm)		bit.
UNITS SELECTING ALL DOITH OF DI.	212	Description		Not sampled	Orust sturcking at point of bit.
].	Sampling No. 1985MS13LC12	Depth Color Geological	column	ľ	
	No.	Color			
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Water containt high and coft	At 30em, 43em, 210em point, ¢ some em nodule sampled)			10	Description	Not sampled Crutz sturcking at point of bit
		•		96SMS13LC11	Geological column	
	7.5YR 8/2	215			Color	
1 <u>0</u>	150	200		Sampling No.	Deoth (m)	
			_			
		Thickness	(cm)			Thickness

Description

Sampling No. 98SMC13LC09 Depth Color Geological (cm) Colormn

(CII)			Thickness	(cm)	129	
	Not sampled. Crust Stucking at point of bit.	010	Description		White-bravnish foreminiferal sand pervean sarface to 80cm perint including curv and some part and y avoil layer, partially, including coarse foreminiferal sand or white clay	
		BESMC13LC10	Geological	Column		
			Color		7.5YR 7/2 129	
Ê		Sampling No.	Depth	(EO)	5 5 0 2 0	

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Appendix

11-C01		Sampling No. 985MC13LC01	SMC13LC01		
cal Description	Thickness	Depth Color Geological		Description	Thickness
	(le)	(cm)	column {		(cm)
Foreminiferal sand Stinctuding much clay between 30 03 03 35cm point 20 Bareit sampled at 66 cm	12	50107R	Barakish ooze At eurface and weter cont hity and very soft At 80cm point. 2cm nodule sampled	Barakish coze At euritae part, water containt Jang, and very soft. At 60cm point, 2cm nodule sampled	140
		<u>8</u>	Between surf point . Spots	Between surface and 60cm point . Spots which are trace	
211001			Scalitering		
besorption	Thickness (cm)				
Barakish ooze At surface part, water containt		150			

Sampling No. 88SMC)11LC01 Depth Color Geological ((em)

10YR F

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Samoli	ng No.	Sampling No. 88SMC121LC01	C01	
Depth (cm)	Color	Depth Color Geological (cm) Column	Description	Thickness (cm)
53 Ş	7.5YR 4/4 88		Barakish ooza Ratrifaos sur, waker containt, higy and very soft. 5~9cm part, clay become to be hard result on shinking. oodo	88
₹				

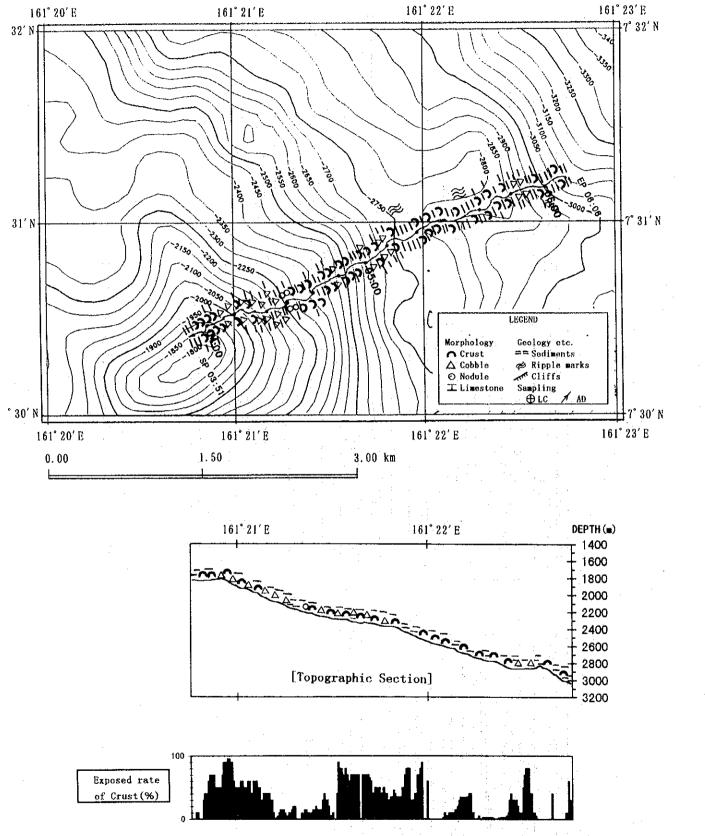




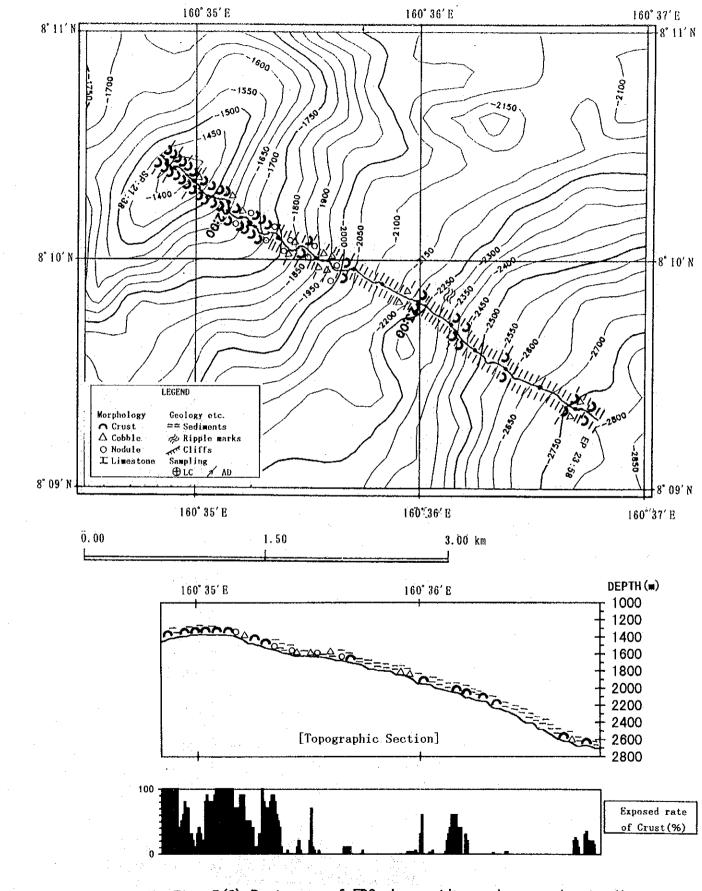
Nodule

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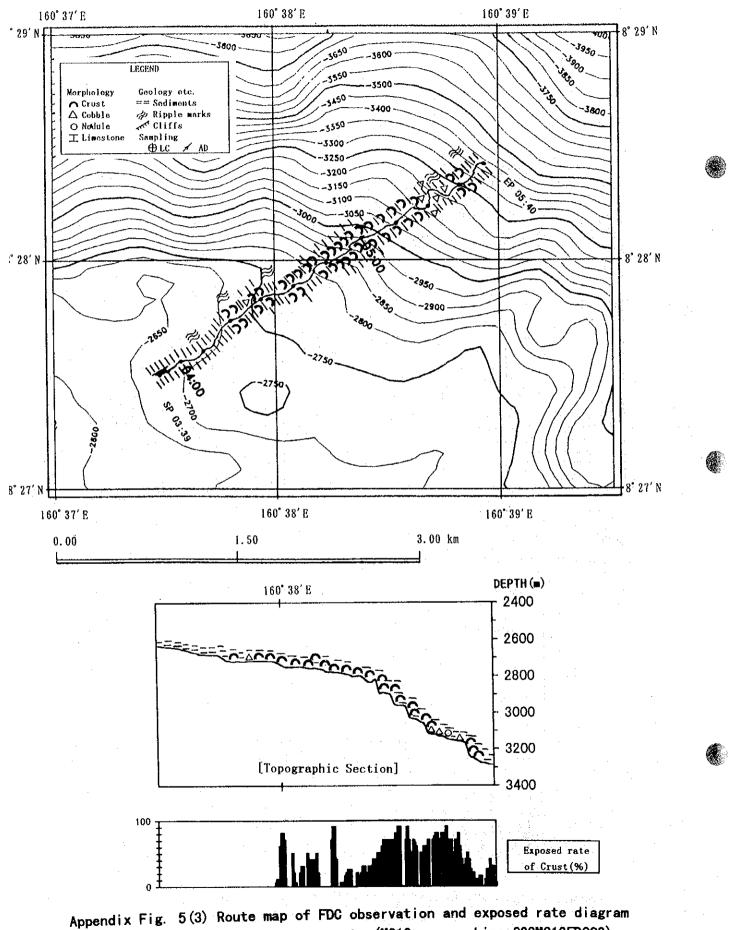


Appendix Fig. 5(1) Route map of FDC observation and exposed rate diagram Of manganese crusts (MC11 area : Line 98SMC11FDC01) (

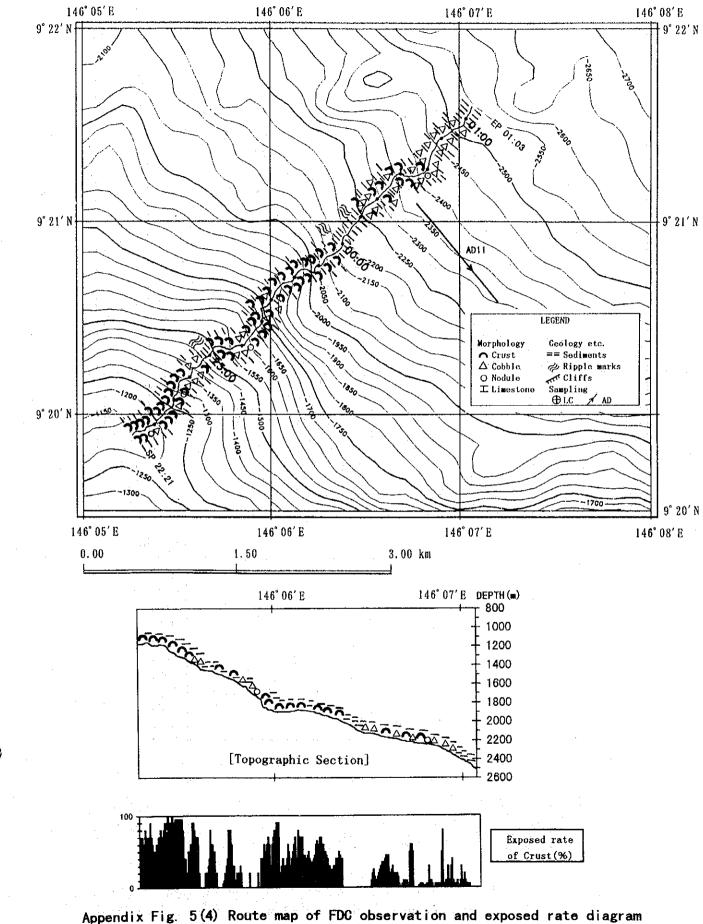


Appendix Fig. 5(2) Route map of FDC observation and exposed rate diagram Of manganese crusts (MS13 area : Line 98SMS13FDC01)

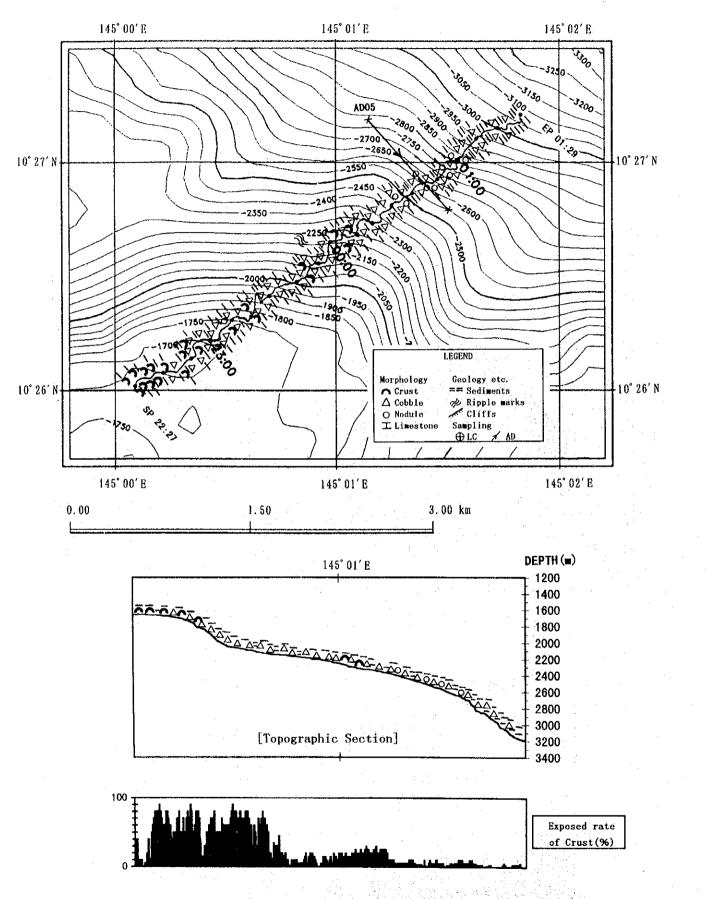
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Of manganese crusts (MS13 area : Line 98SMS13FDC02)

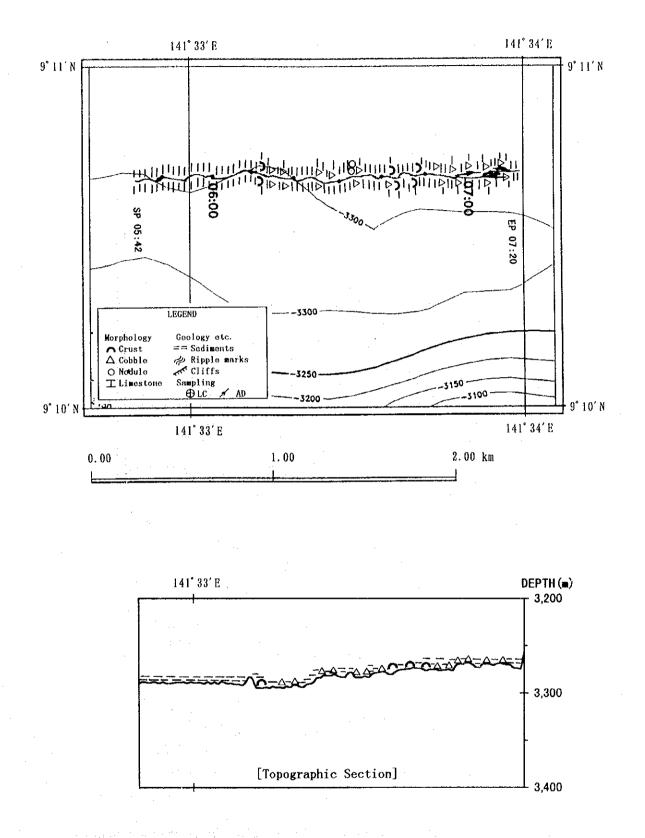


g. 5(4) Route map of FDC observation and exposed rate dragra Of manganese crusts (MC12 area : Line 98SMC12FDC01)

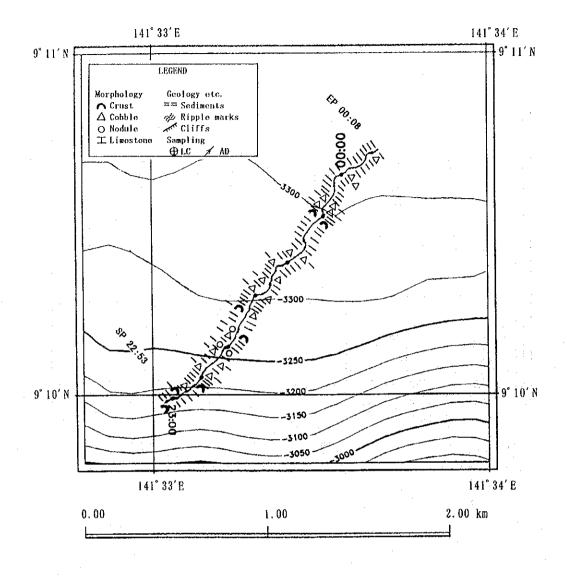


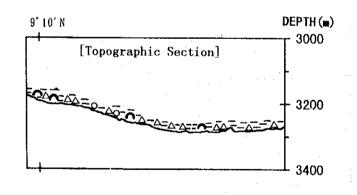
Appendix Fig. 5(5) Route map of FDC observation and exposed rate diagram Of manganese crusts (NC13 area : Line 98SNC13FDC01)

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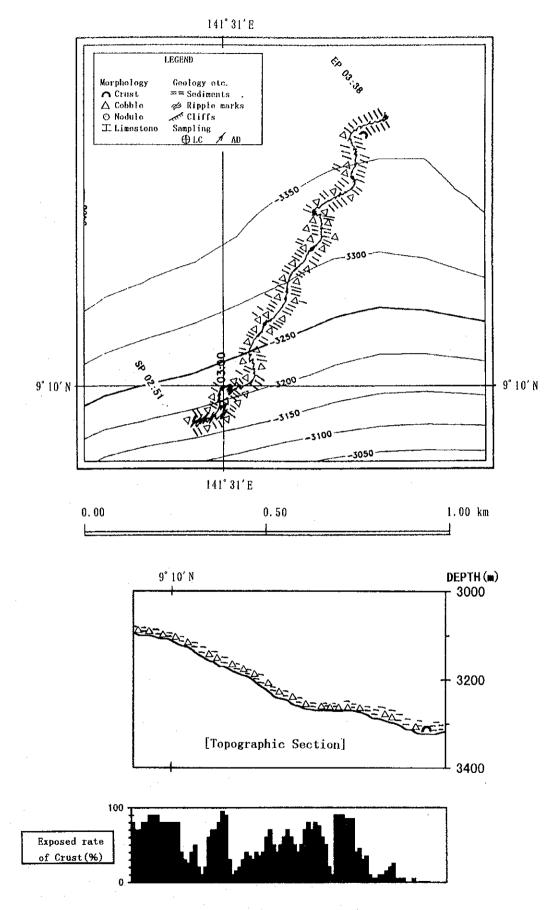
Appendix Fig. 5(6) Route map of FDC observation Of manganese crusts (MCO2 area : Line 98SMCO2FDCO1)

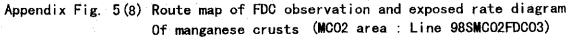




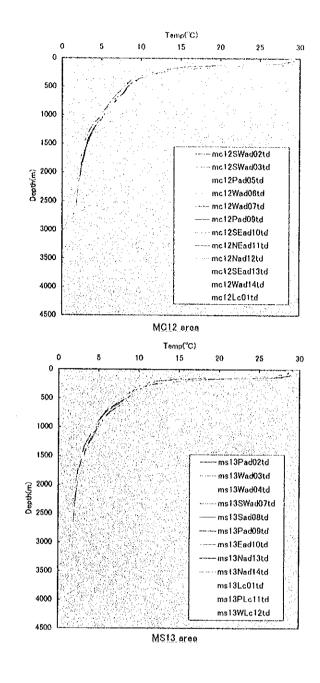
Appendix Fig. 5(7) Route map of FDC observation Of manganese crusts (MCO2 area : Line 98SMCO2FDCO2)

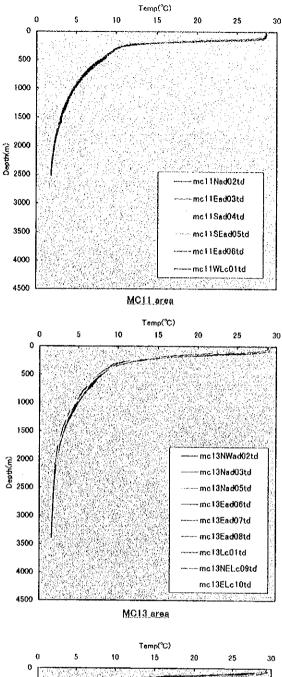
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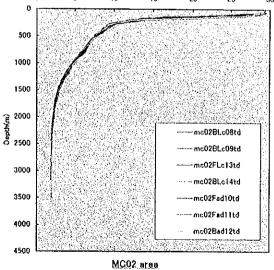




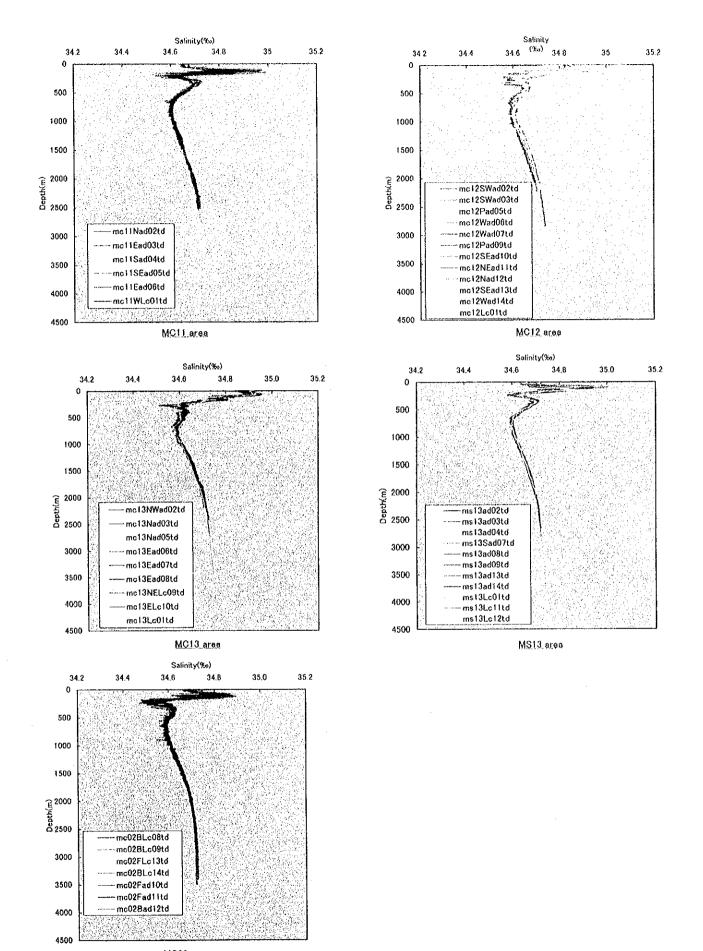
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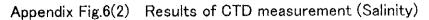












MC02 area

