

PRESENT STATUS  
OF JMA-BAPMON

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## JMA-BAPMON

RYORI (40N, 141E)

1976 WET/DRY DEPOSITION  
TURBIDITY

1987 CO<sub>2</sub> (NDIR)

1990 CFCs, N<sub>2</sub>O (ECD-GC)  
Surface O<sub>3</sub> (UVabs)

1991 CH<sub>4</sub>, CO (NDIR)  
CCl<sub>4</sub>, CH<sub>3</sub>CCl<sub>3</sub> (ECD-GC)

MINAMITORISHIMA (24N, 152E)

1993 CO<sub>2</sub> (NDIR)

RYOFU-MARU (0~30N, 155E)  
(5~35N, 135E)

1989 CO<sub>2</sub>, CH<sub>4</sub>, CFCs, N<sub>2</sub>O  
(SURFACE SEAWATER  
AND AIR)

1992 CO<sub>2</sub>, CH<sub>4</sub>, CFCs, N<sub>2</sub>O  
(MIDDLE AND DEEP  
SEAWATER)

CIVIL AVIATION  
(MOT, JMA, JAL)

1992 CO<sub>2</sub> (SAMPLING)

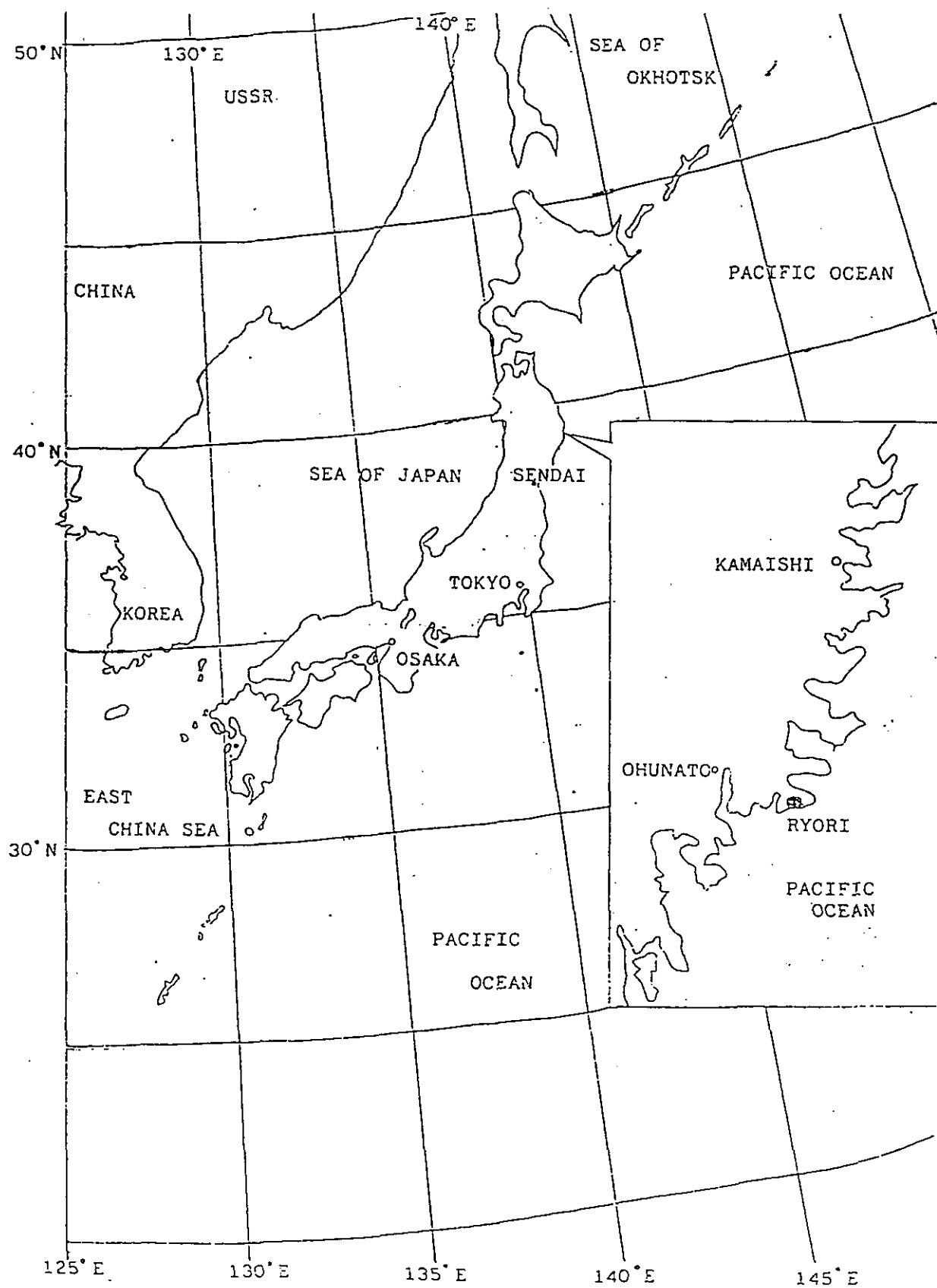
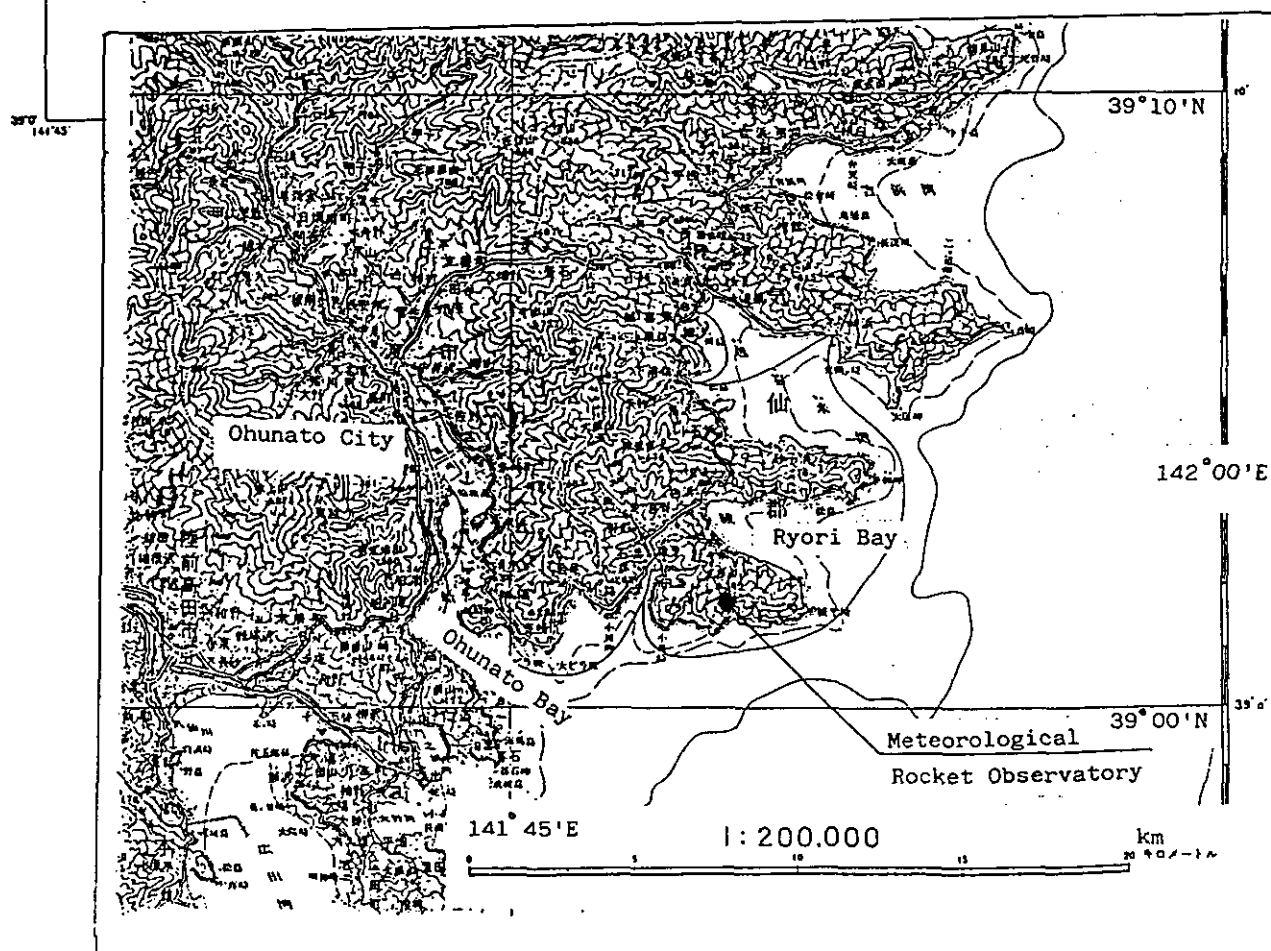
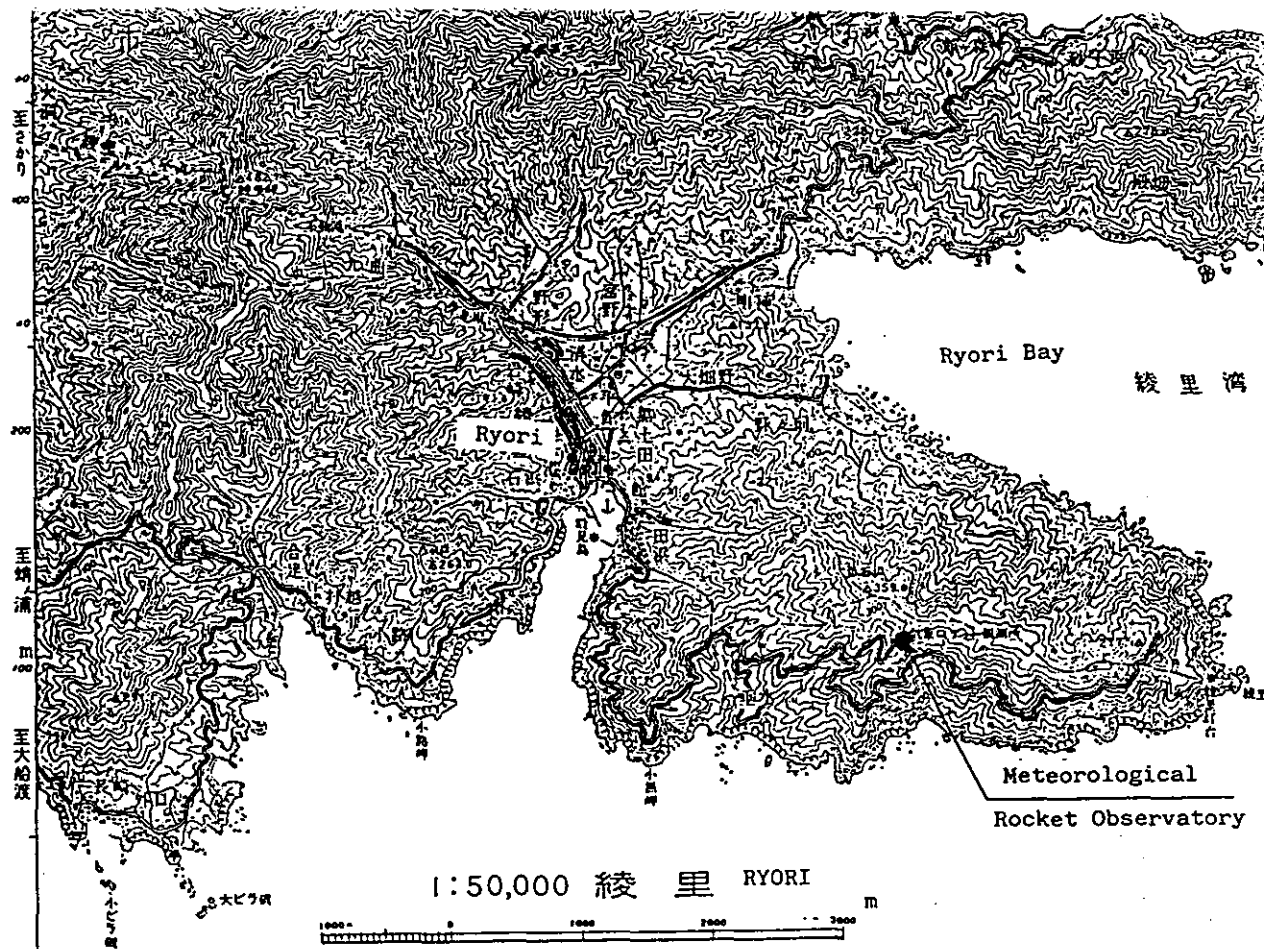
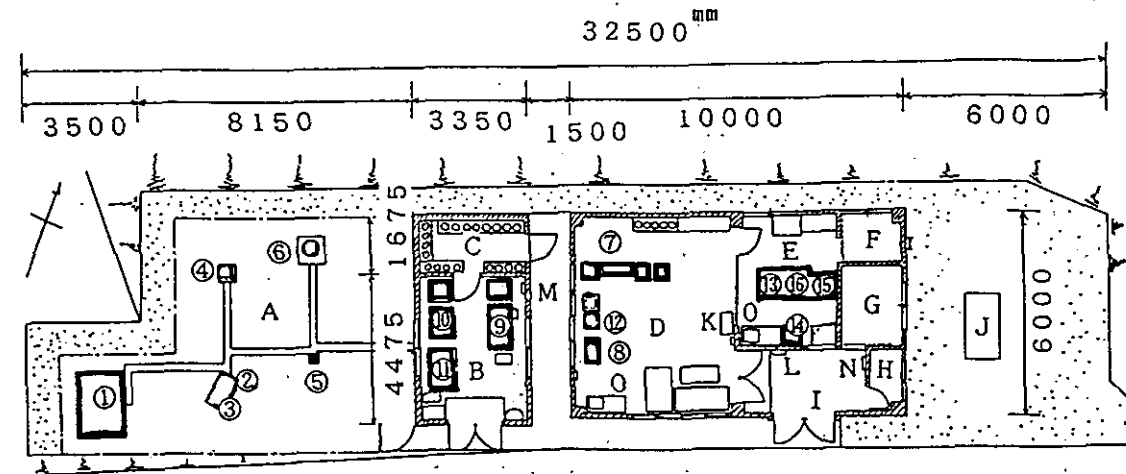


Fig. 1 The location of Ryori Meteorological Rocket Observatory



# 大気バックグラウンド汚染観測所見取図 (Jan.1991-)

Background Air-Pollution Observatory since January 1991



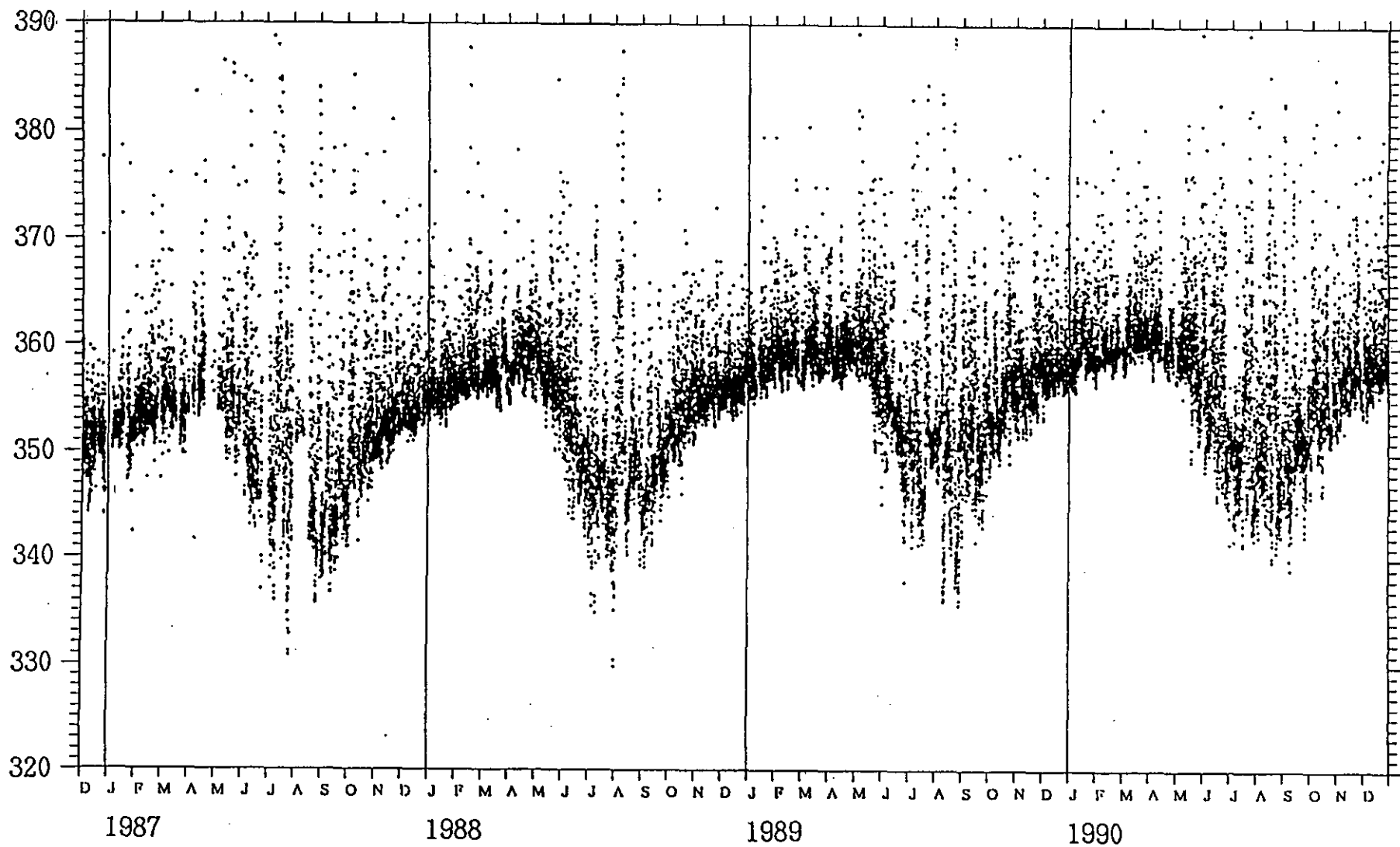
## 《観測装置関係 (Instruments)》

- ①降水・降下塵採取装置 (Rain Sample Gauge:Oct.1975-1986. Renewed 1986-)
- ②全天日射計 (Pyranometer:Oct.1975-)
- ③サンフォトメーター (Selfrecording Sunphotometer:Jan.1988-)
- ④波長別自記直達日射計 (Wavelength-separated Pyrheliometer:Oct.1975-Dec.1987)
- ⑤温湿度計 (Thermometer and Dew-point Thermometer:Oct.1975-)
- ⑥雨量計 (Rain Gauge:Oct.1975-)
- ⑦測風柱 (Anemometer Tower:Oct.1975-)
- ⑧大気二酸化炭素濃度観測装置 (Atmospheric CO<sub>2</sub>:Dec.1986-)
- ⑨地上オゾン濃度観測装置 (Surface Ozone:Dec.1989-)
- ⑩大気フロン・一酸化二窒素濃度観測装置 (Atmospheric CFCs and N<sub>2</sub>O:Dec.1989-)
- ⑪大気メタン・一酸化炭素濃度観測装置 (Atmospheric CH<sub>4</sub> and CO:Dec.1990-)
- ⑫大気四塩化炭素・メチルクロロフォルム濃度観測装置  
(Atmospheric CCl<sub>4</sub> and CH<sub>3</sub>CCl<sub>3</sub>:Jan.1991-)
- ⑬地上気象観測装置 (Surface Observation:Oct.1975-)
- ⑭降水化学成分分析装置 (Chemical Composition Analysis of Precipitation:Oct.1975-)
- ⑮純水製造装置 (Pure Water Maker:Oct.1975-)
- ⑯乾燥器 (Dryer)
- ⑰pHメーター (pH meter:Oct.1975-Dec.1987. Jan.1988-)

## 《設備関係 (Equipment)》

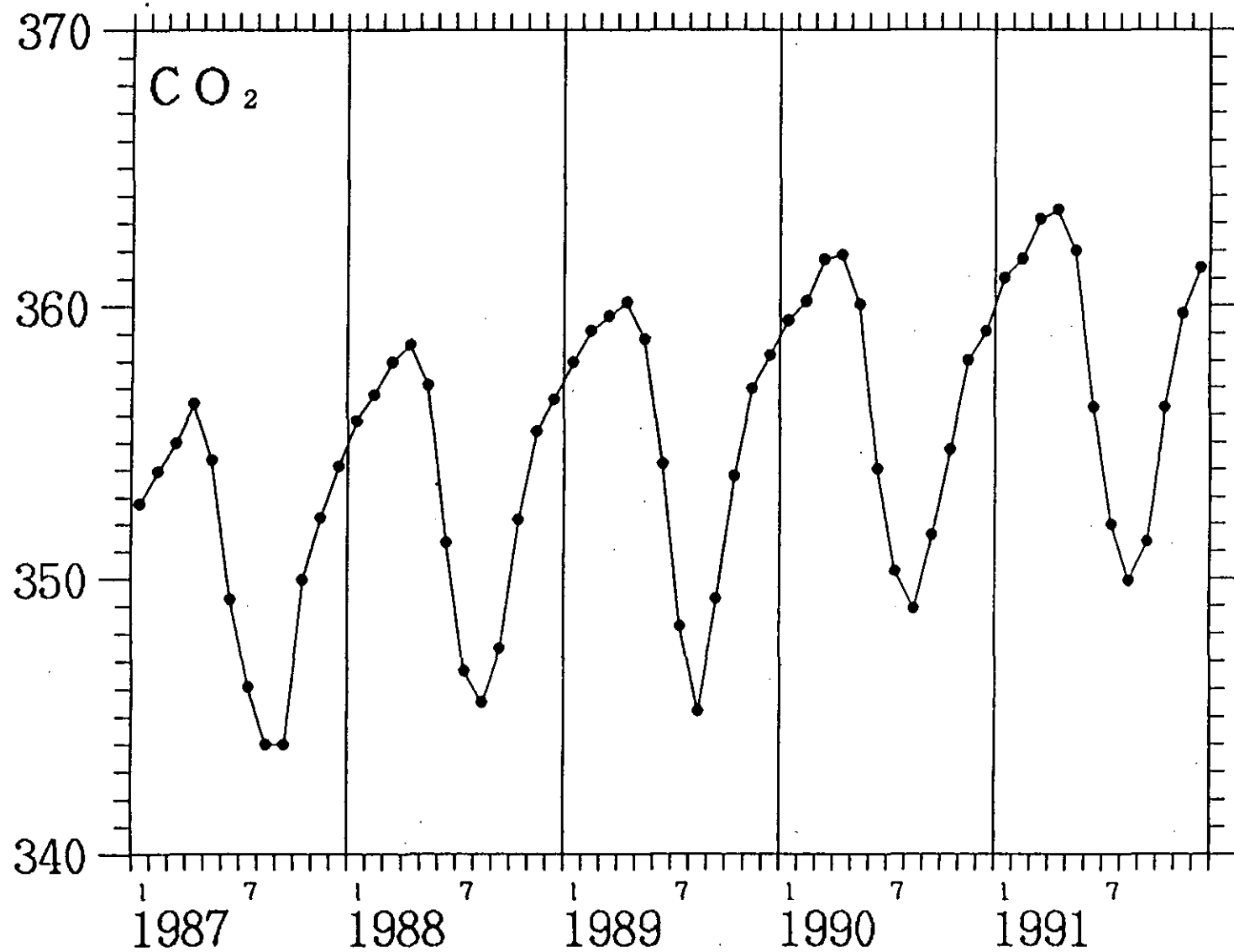
- A 露場 (Observation Field) B 新観測室 (Extended Observation Room)
- C シリンダー置き場 (Cylinder Store Room) D 観測室 (Observatory Room)
- E 降水分析室 (Precipitation Analysis Room) F 気圧計室 (Barometer Room)
- G 資料室 (Store Room) H トイレ (Lavatory) I 玄関 (Entrance)
- J キュービクル (Transformer) K 空調 (Air Conditioner) L 分電盤 (Terminal Box)
- M 換気扇 (Fan) N 警報装置 (Alarm) O 流し (Sink)

PPMV

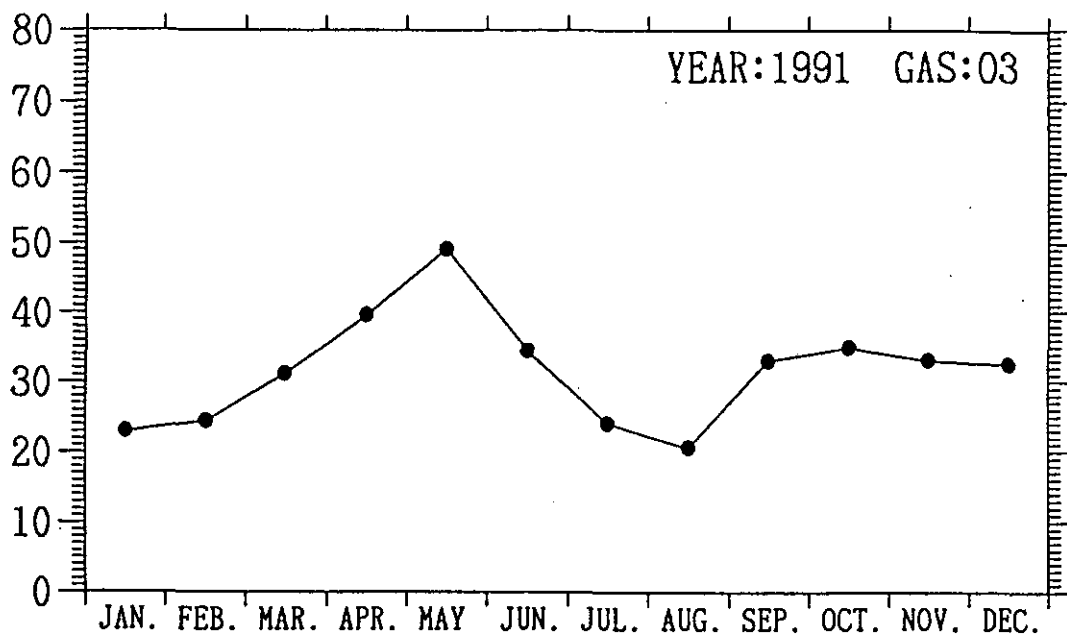


PPMV

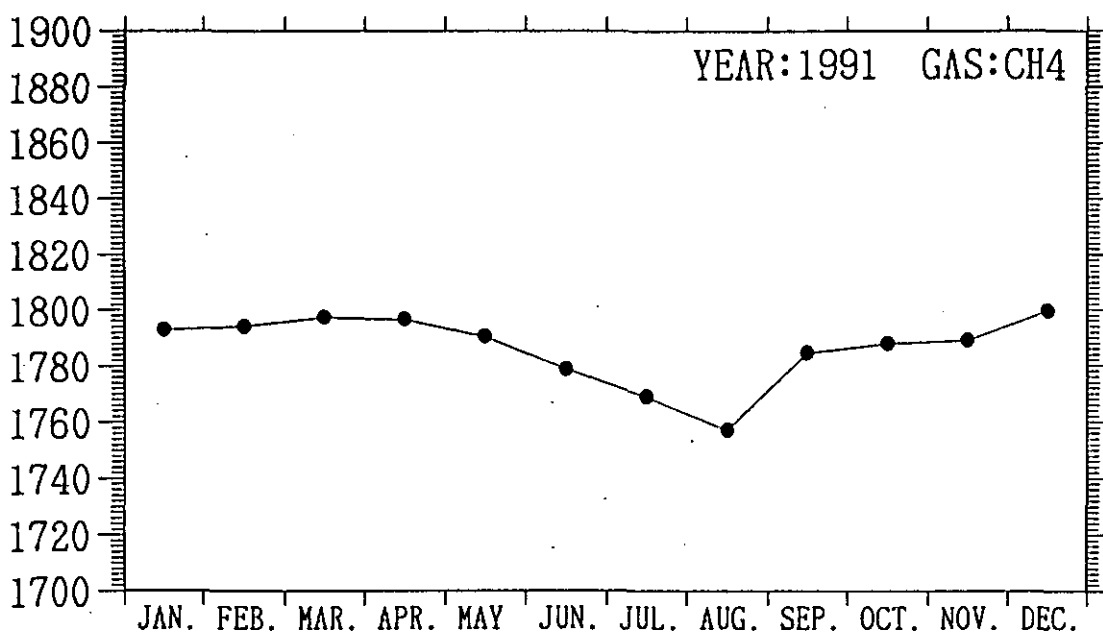
RYORI



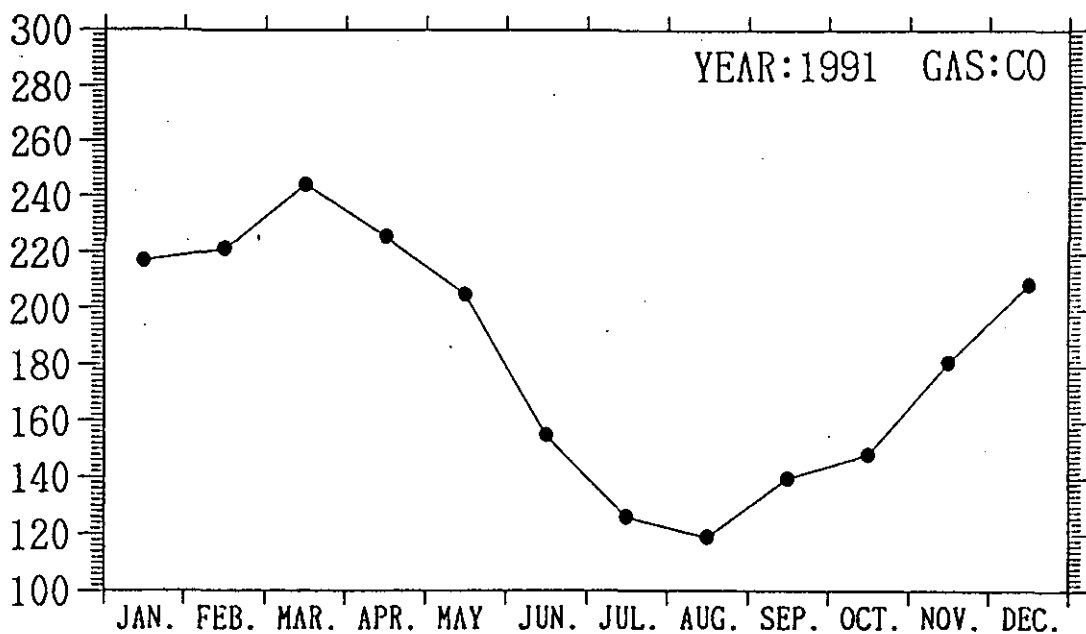
PPBV



PPBV



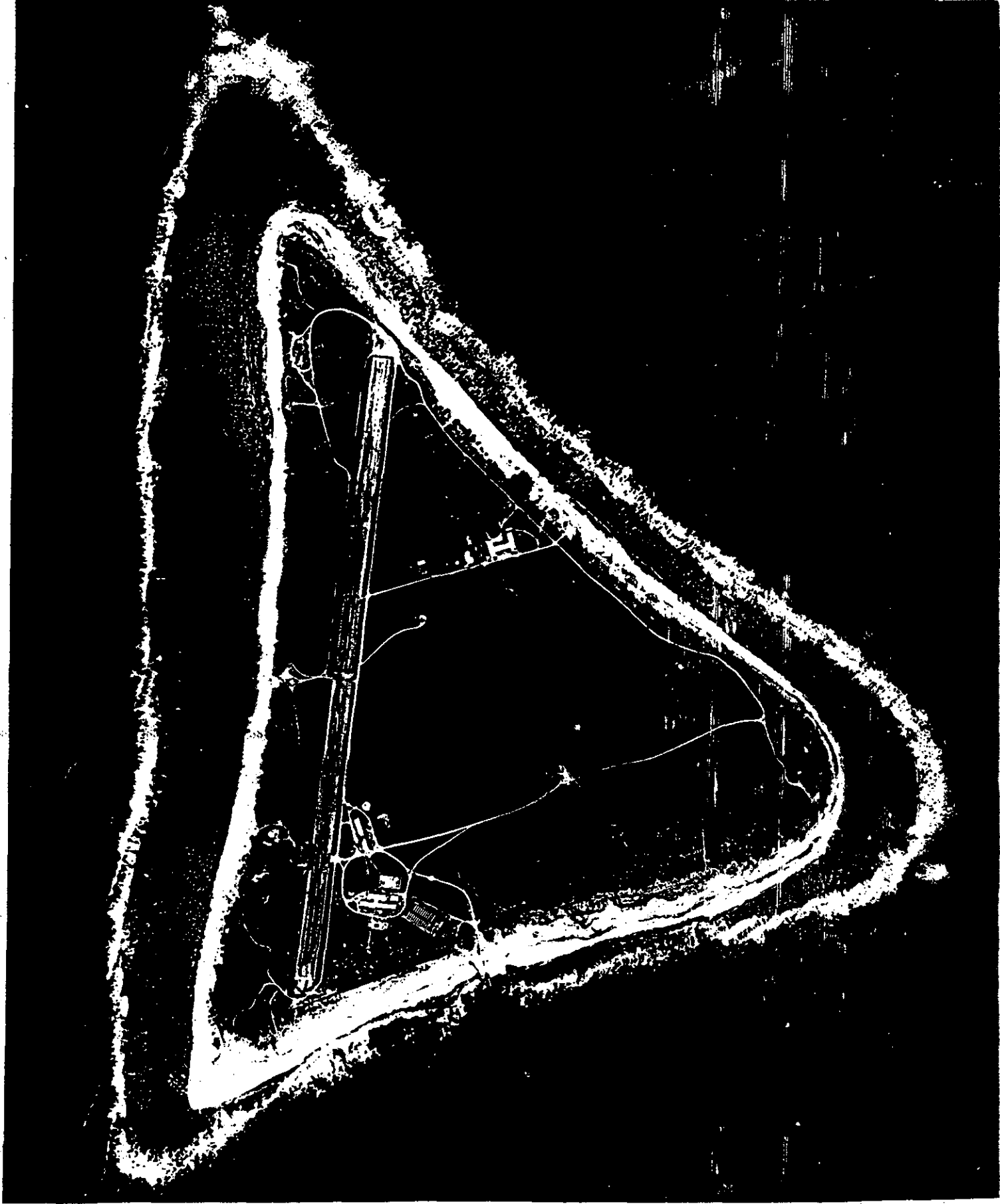
PPBV





# CONCENTRATION AT RYORI

ELEMENT (UNIT)	1990	1991
CO <sub>2</sub> (ppmv)	356.7	358.2
CFC-11 (ppbv)	0.27	0.29
N <sub>2</sub> O (ppbv)	306	309
surf. O <sub>3</sub> (ppbv)		31.7
CH <sub>4</sub> (ppmv)		1.79
CO (ppmv)		0.18





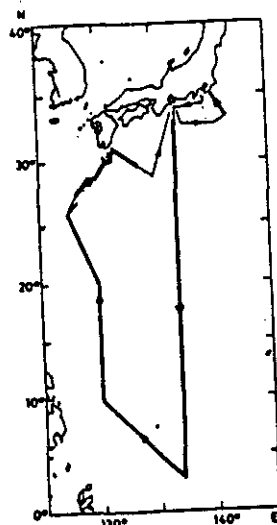


Fig. 3

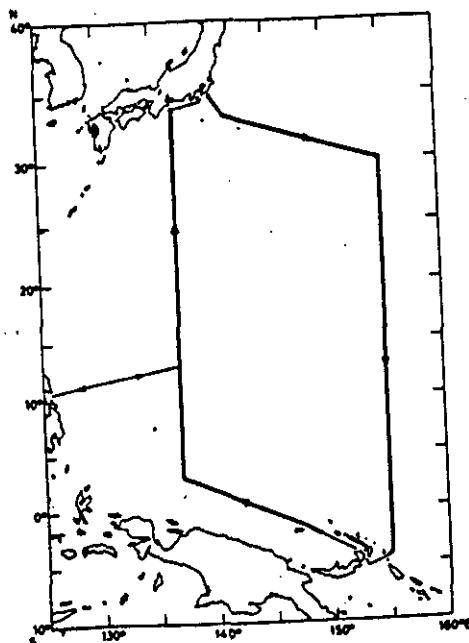


Fig. 4

Fig. 3. Cruise track of the R/V Ryofu Maru. Jan. 20-Feb. 27, 1990. Observations were performed on thick lines.

Fig. 4. Cruise track of the R/V Ryofu Maru. June 14-Aug. 3, 1990. Observations were performed on thick lines.

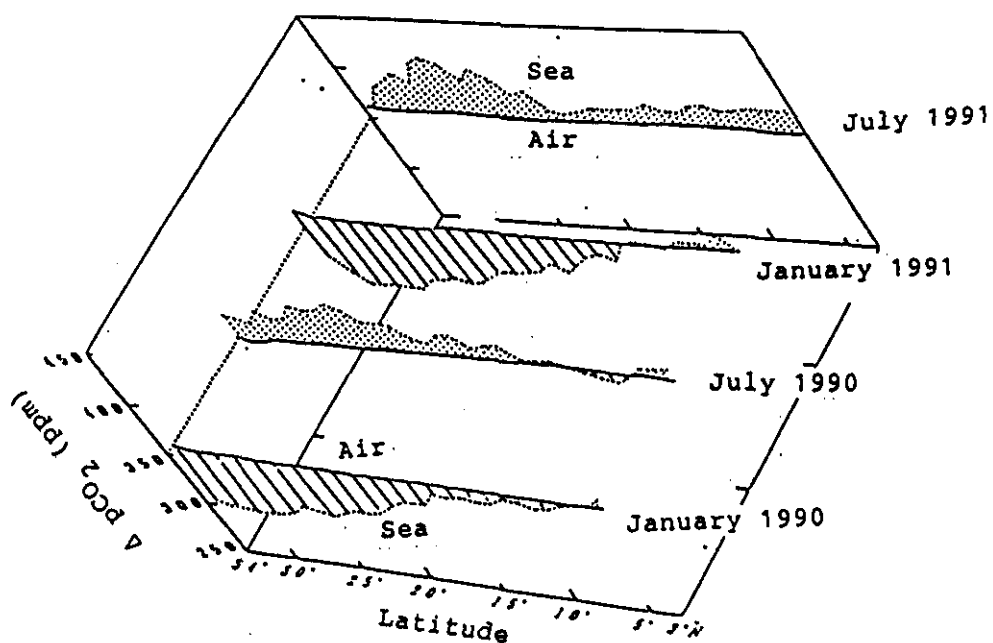


Figure 5: Time series of meridional distribution of  $p\text{CO}_2$  at  $137^\circ\text{E}$  from 1990 to 1991.