

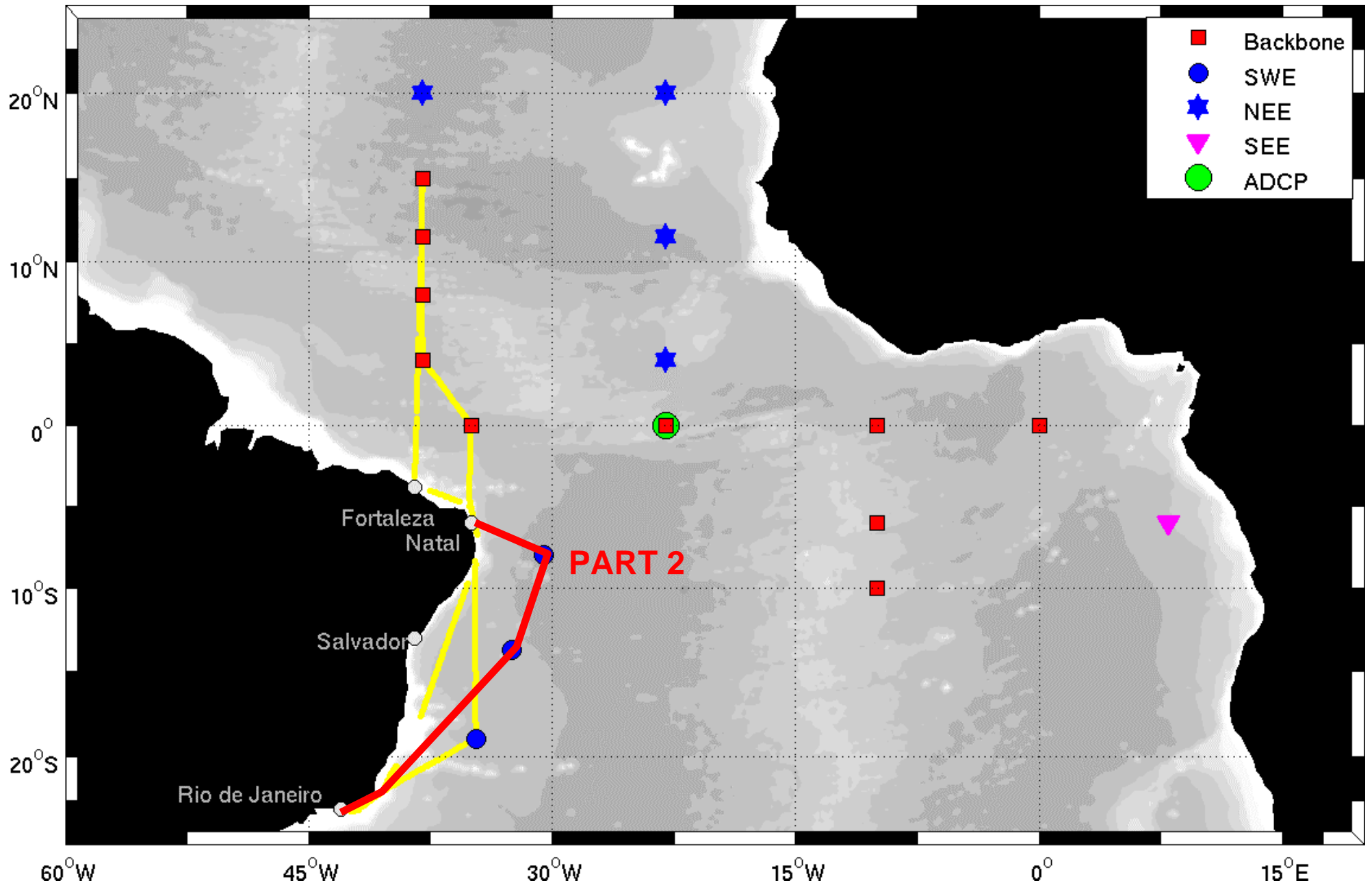
# PIRATA-15 Meeting

## PIRATA BR-XI / SWE-IV PART 1 & 2

Domingos Urbano, INPE

Miami – FL, 2010  
NOAA/AOML

# PBR-XI e SWE-IV



# PBR-XI e SWE-IV (PART 1)

## LEG 1: Niterói - Fortaleza

1A: Niterói – 19S34W

1B: 19S34W - Fortaleza

## LEG 2: Fortaleza - Natal

2A: Fortaleza – 15N38W

2B: 15N38W - Natal

## LEG 3: Natal – Niterói



**Período:** 09 MAR – 12 APR 2009 (34 days)

**Days sailing (DM):** 27

**ATLAS:** 06

**CTD:** 9

**XBT:** 37

**Radiosondes:** 19

**SVP:** 12

**VM-ADCP:** 4.040 NM

**TERMOSAL:** 4.040 NM

**pCO<sub>2</sub>:** Fortaleza -15N-Natal (~2240 MN)

**RADIOMETER:** 07 measurem. of 3 obs.

# PBR-XI e SWE-IV (PART 2)

## LEG 1: Natal – Niterói

### Single Leg

**Período:** 29 AUG – 06 SEP 2009 (14 days)

**Days sailing (DM):** 9

**ATLAS:** 02

**CTD:** 02

**XBT:** none

**Radiosondes:** 04

**SVP:** 04

**VM-ADCP:** 1.500 NM

**TERMOSAL:** 1.500 NM

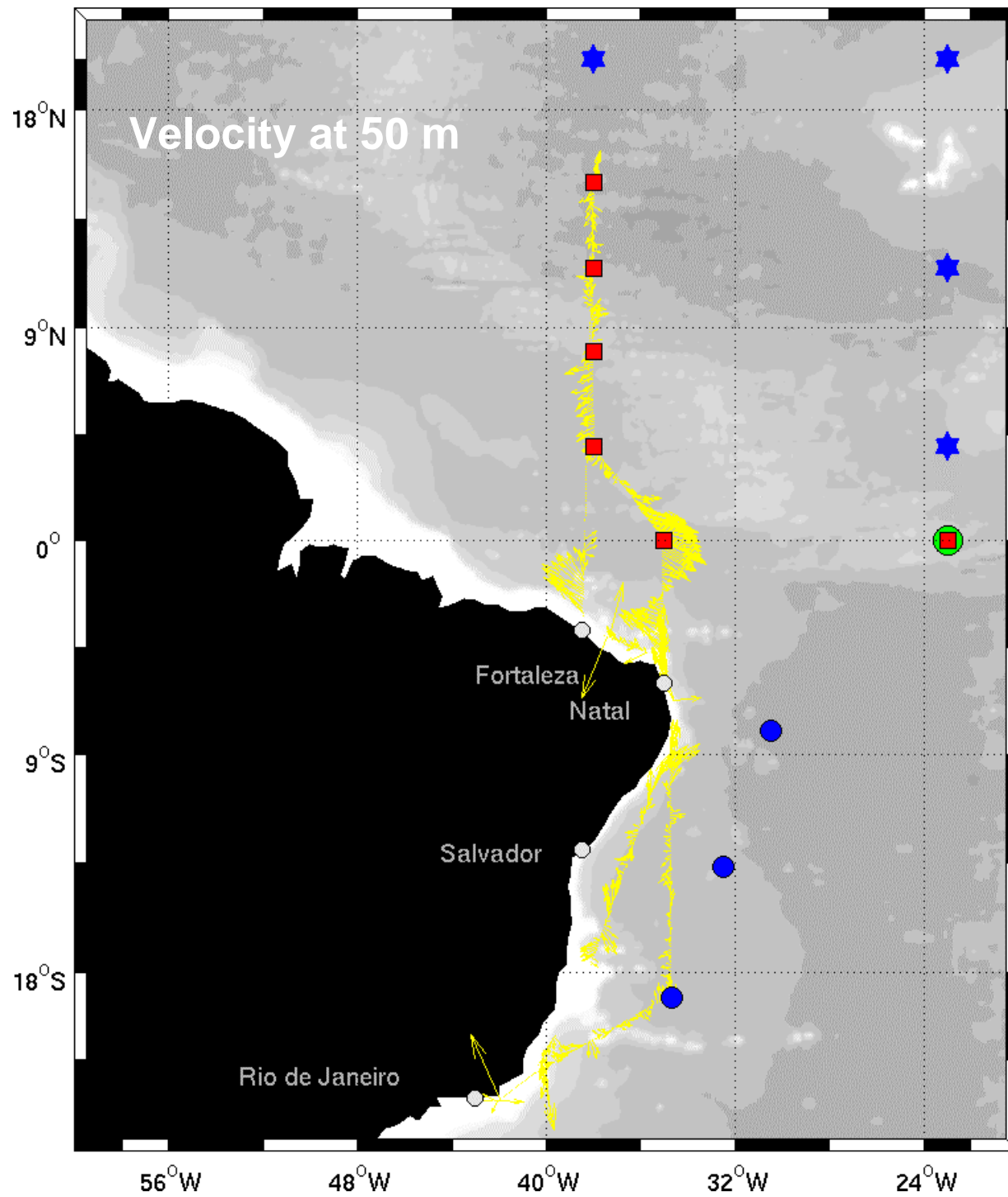
**pCO<sub>2</sub>:** none

**RADIOMETER:** none



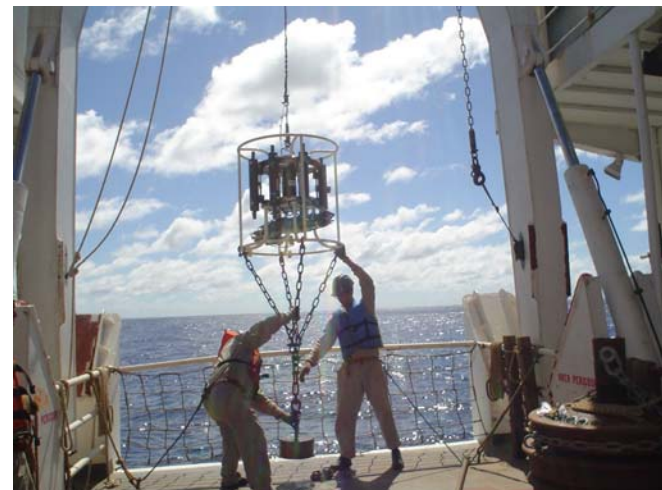
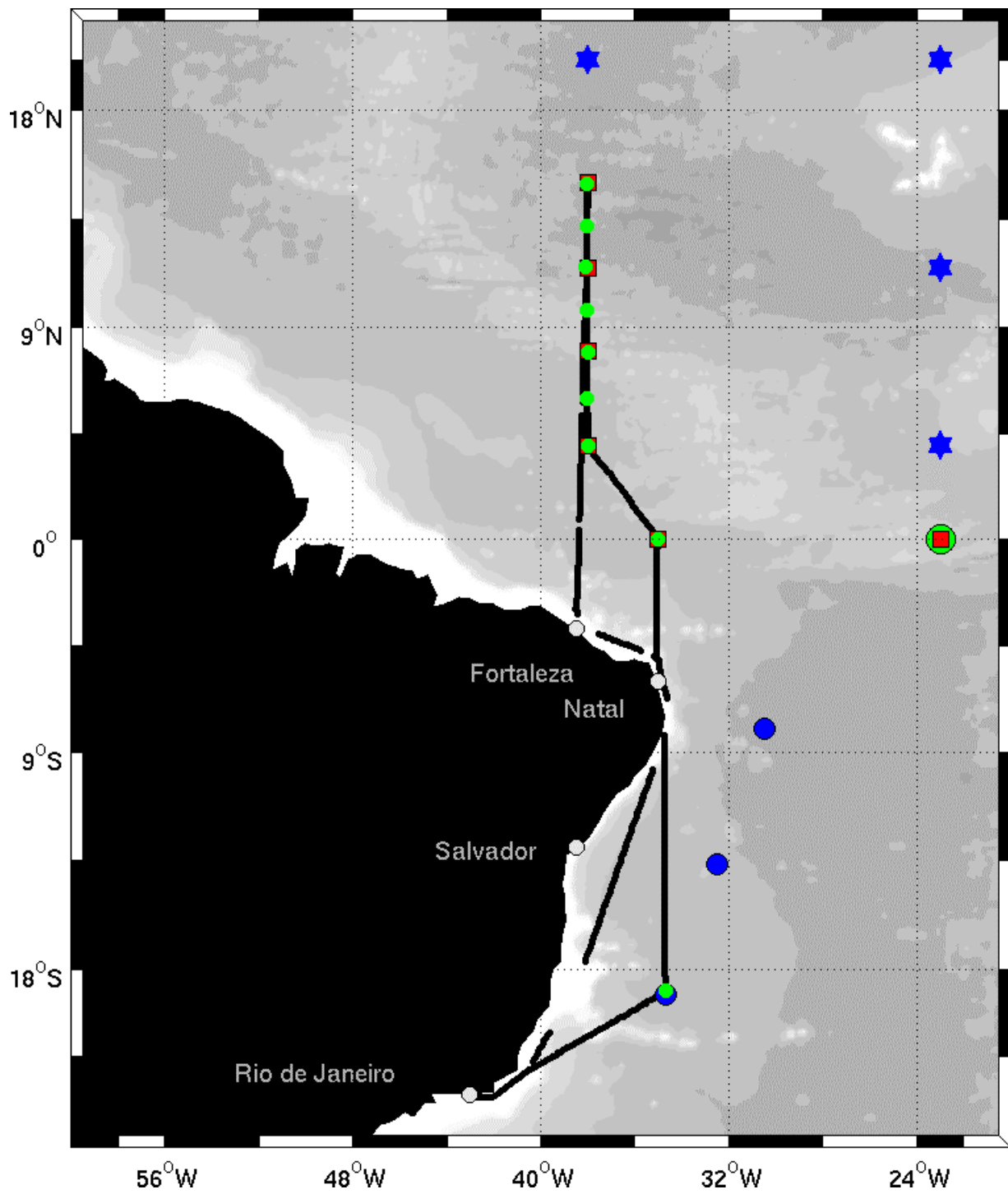
# **direct velocity measurements**

VM-ADCP

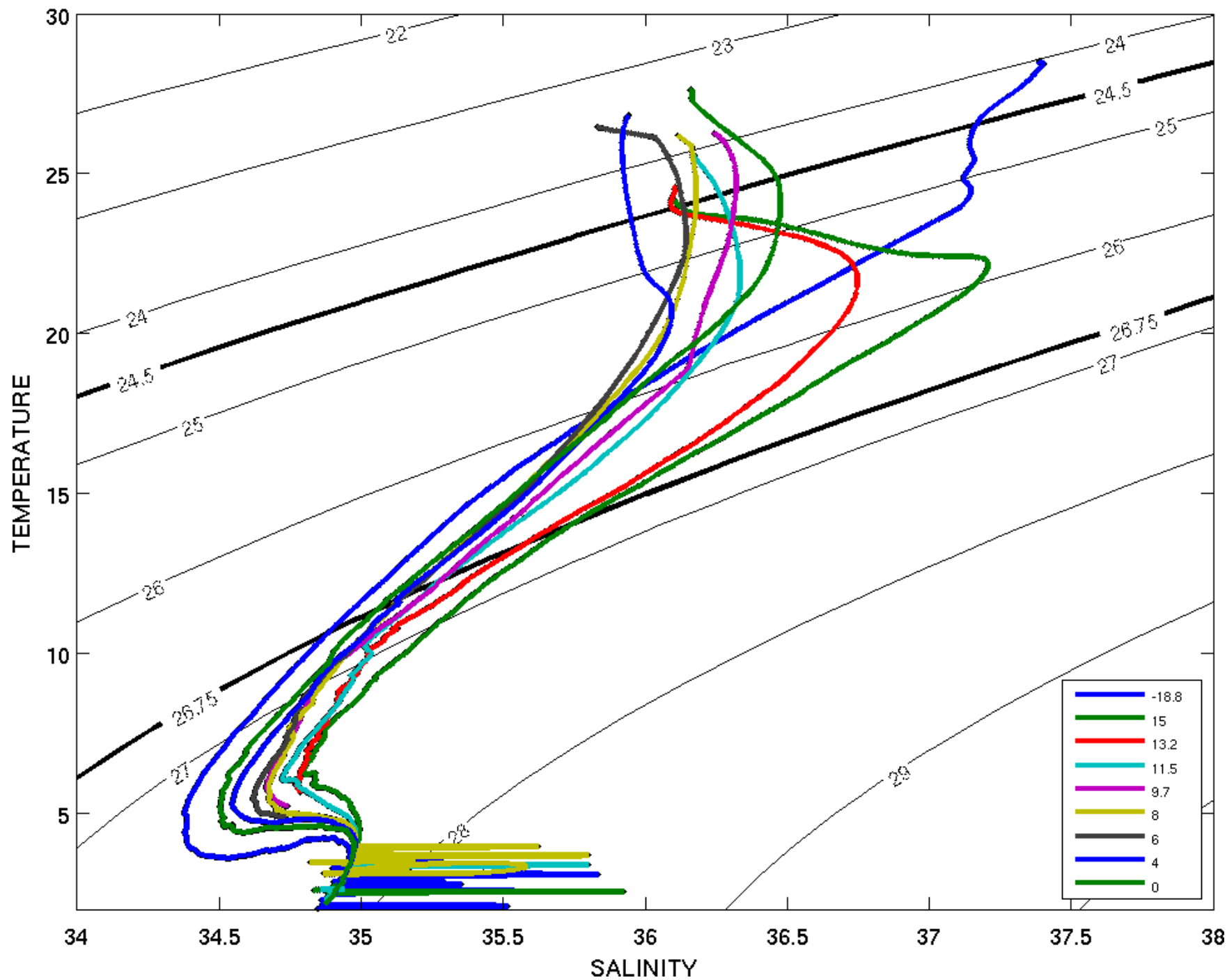


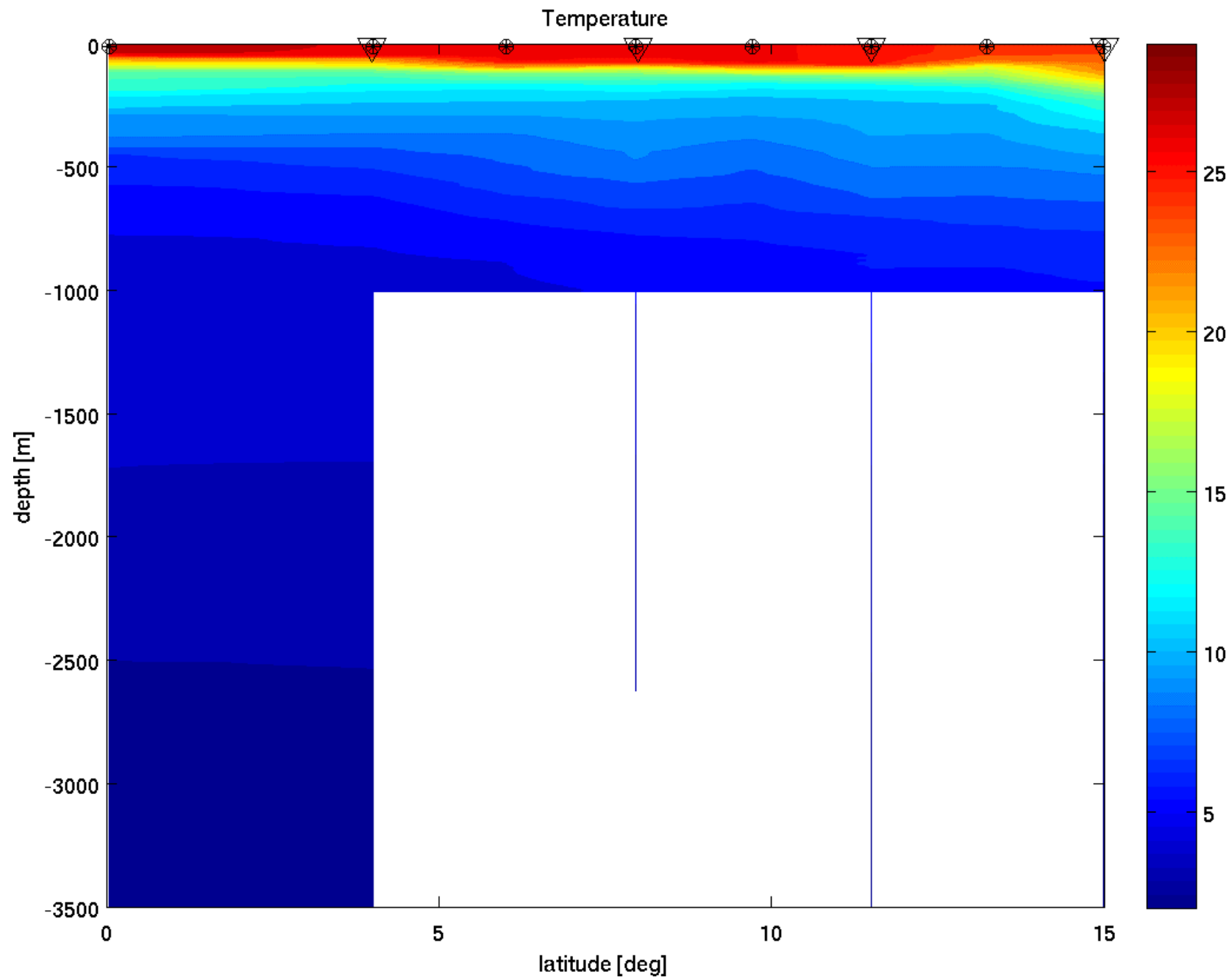
# **Oceanic profiles**

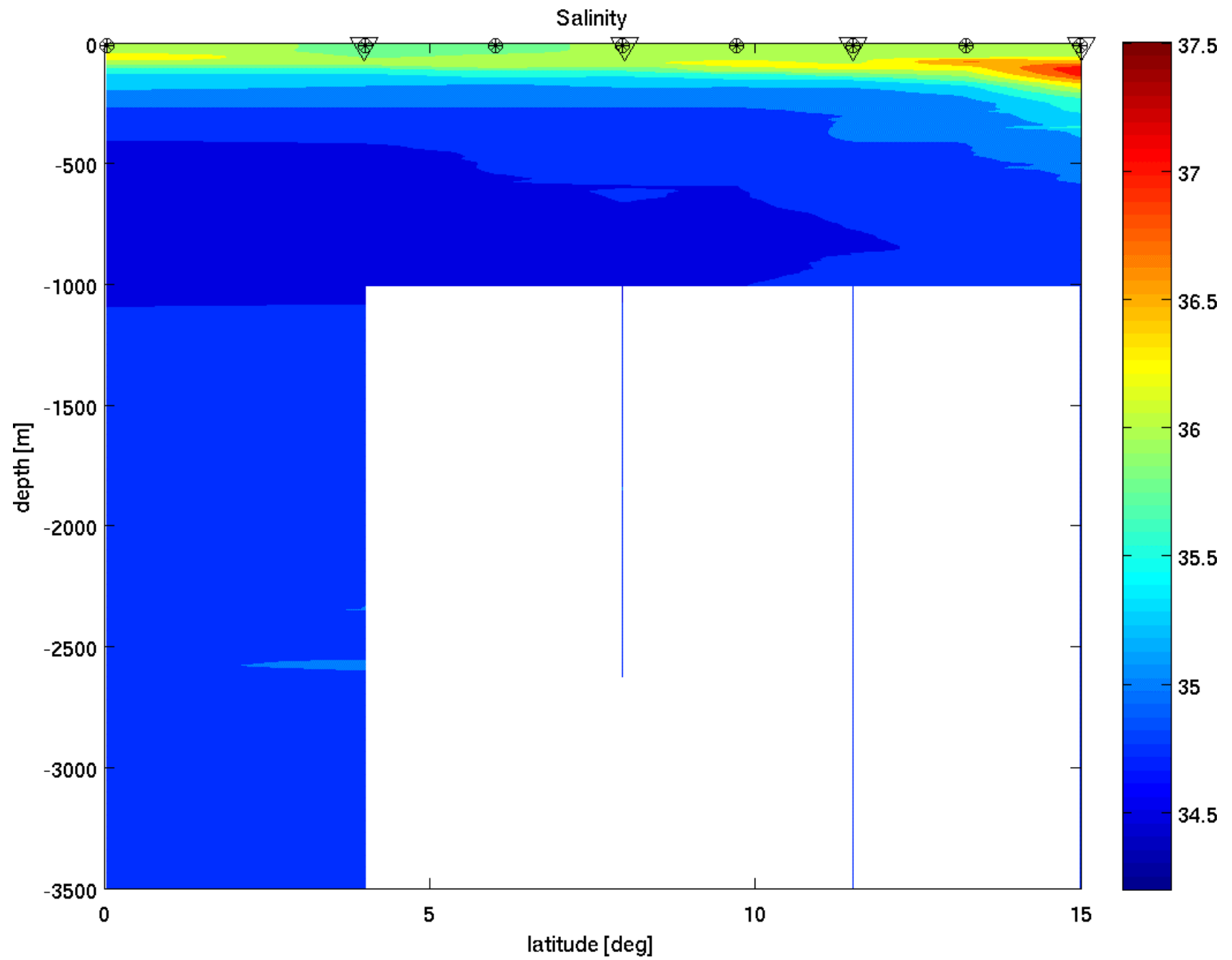
CTDO2

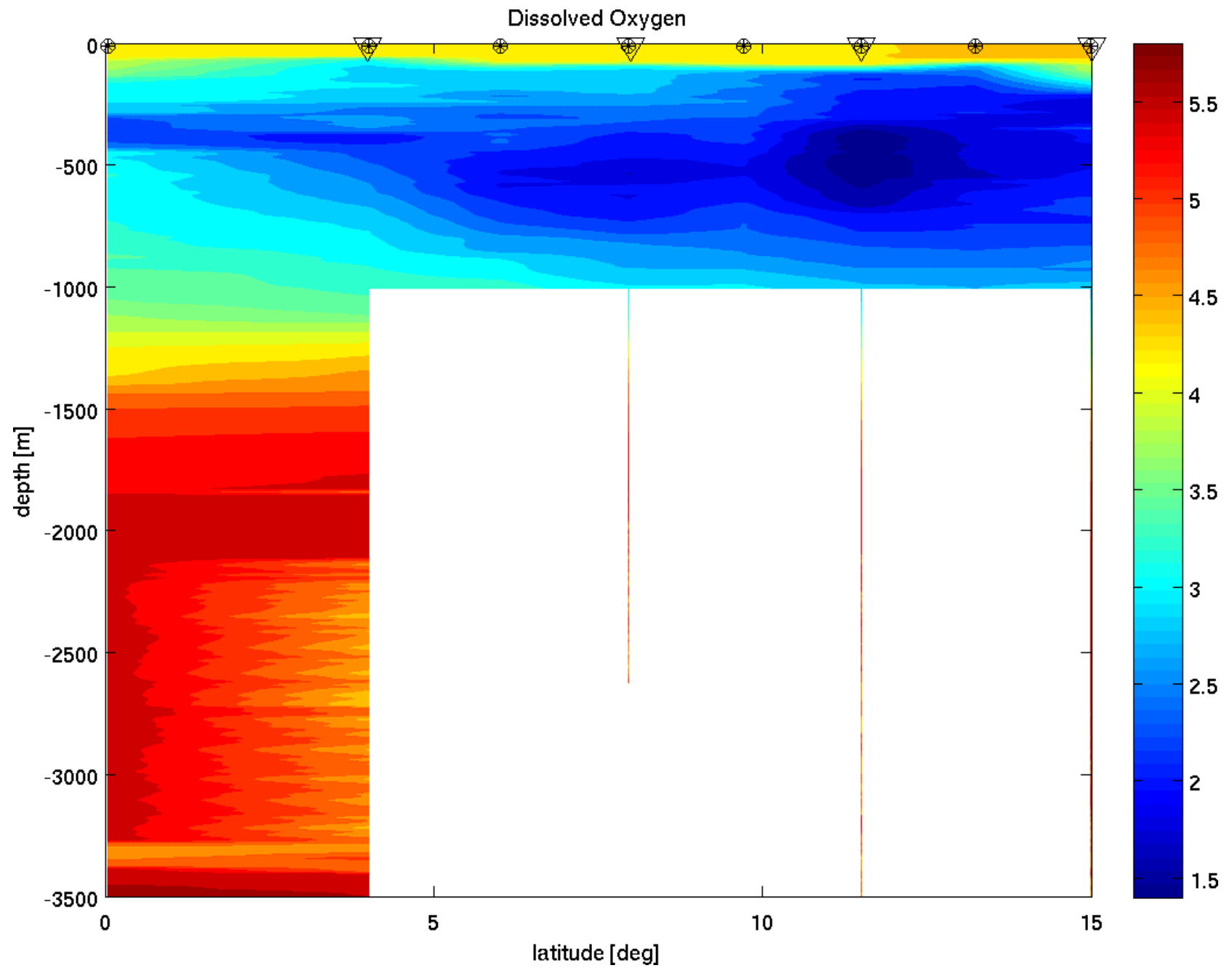


BR-XI / SWE-IV



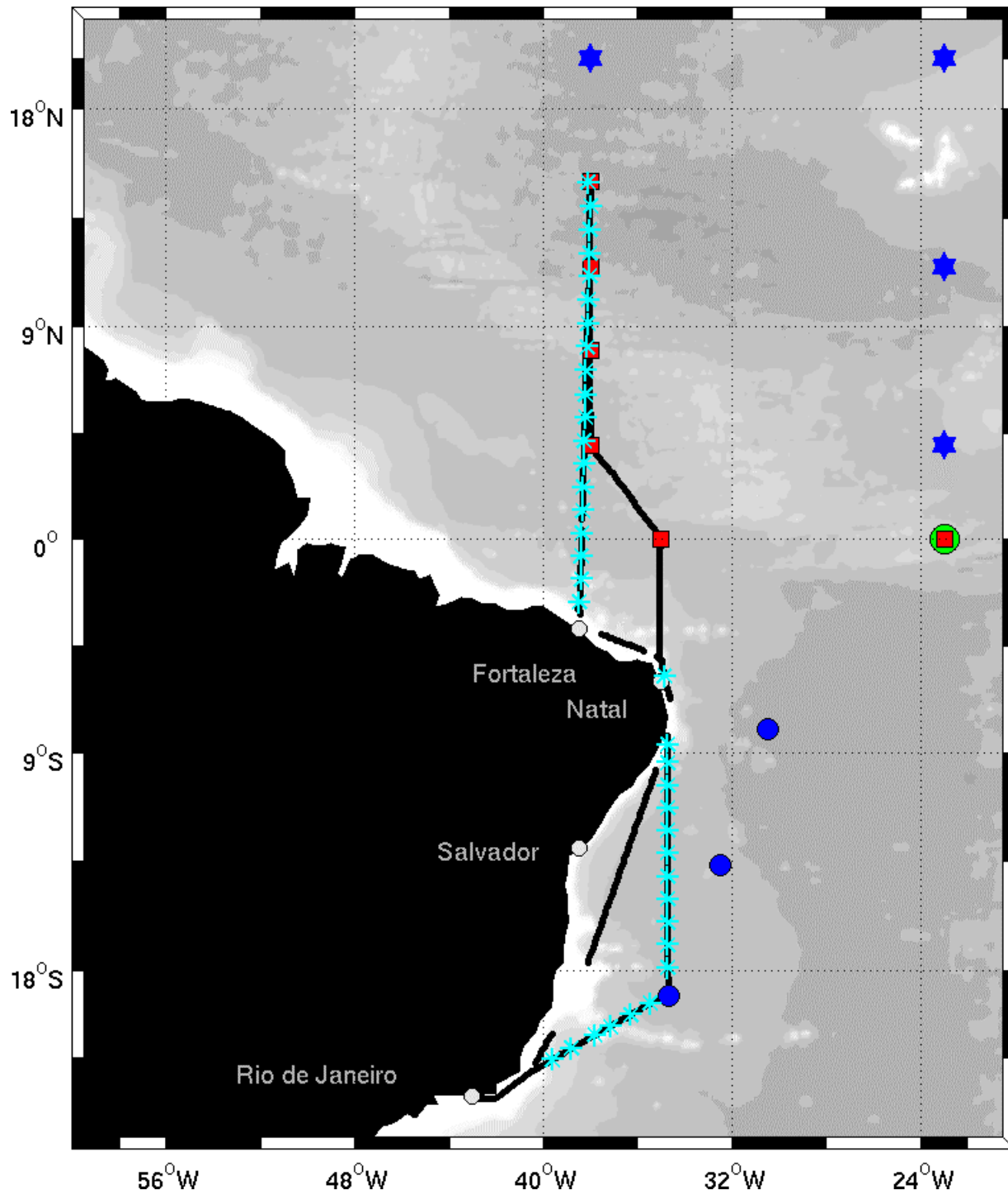






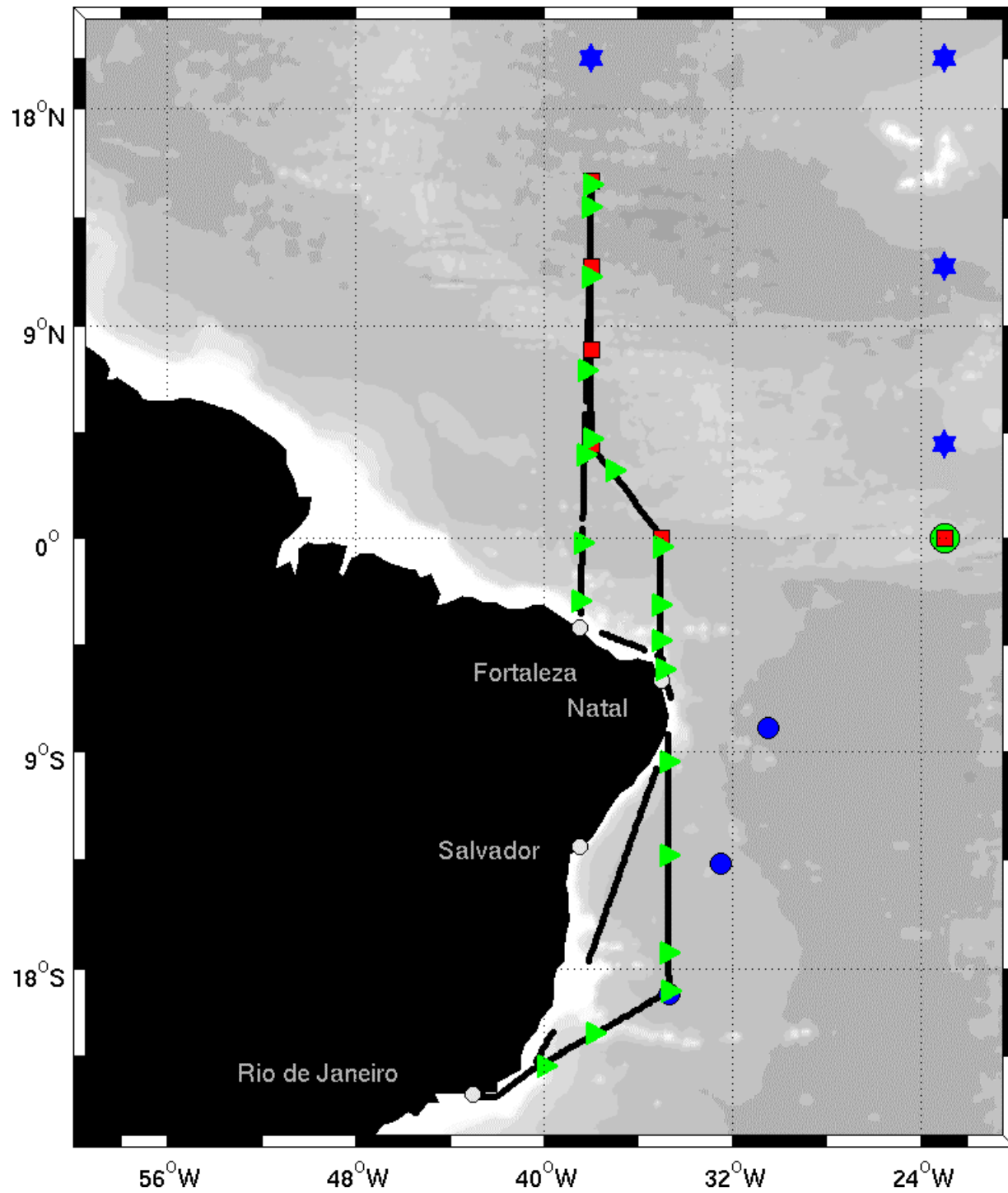
# **Ocean Temperature**

eXpendable BathyTermograph  
(XBT)



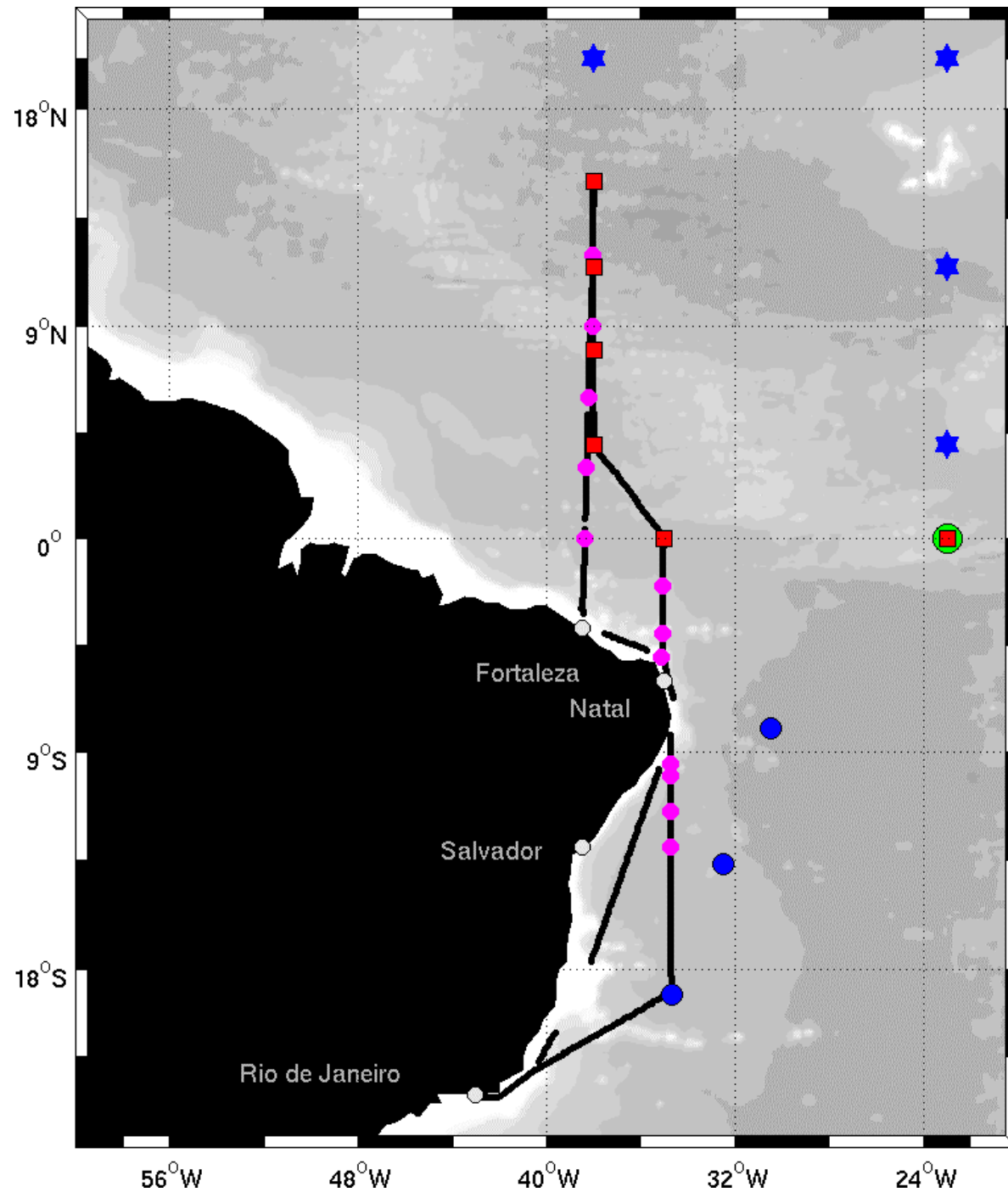
# **Atmospheric Measurements**

Radiosondes



# **Drifters**

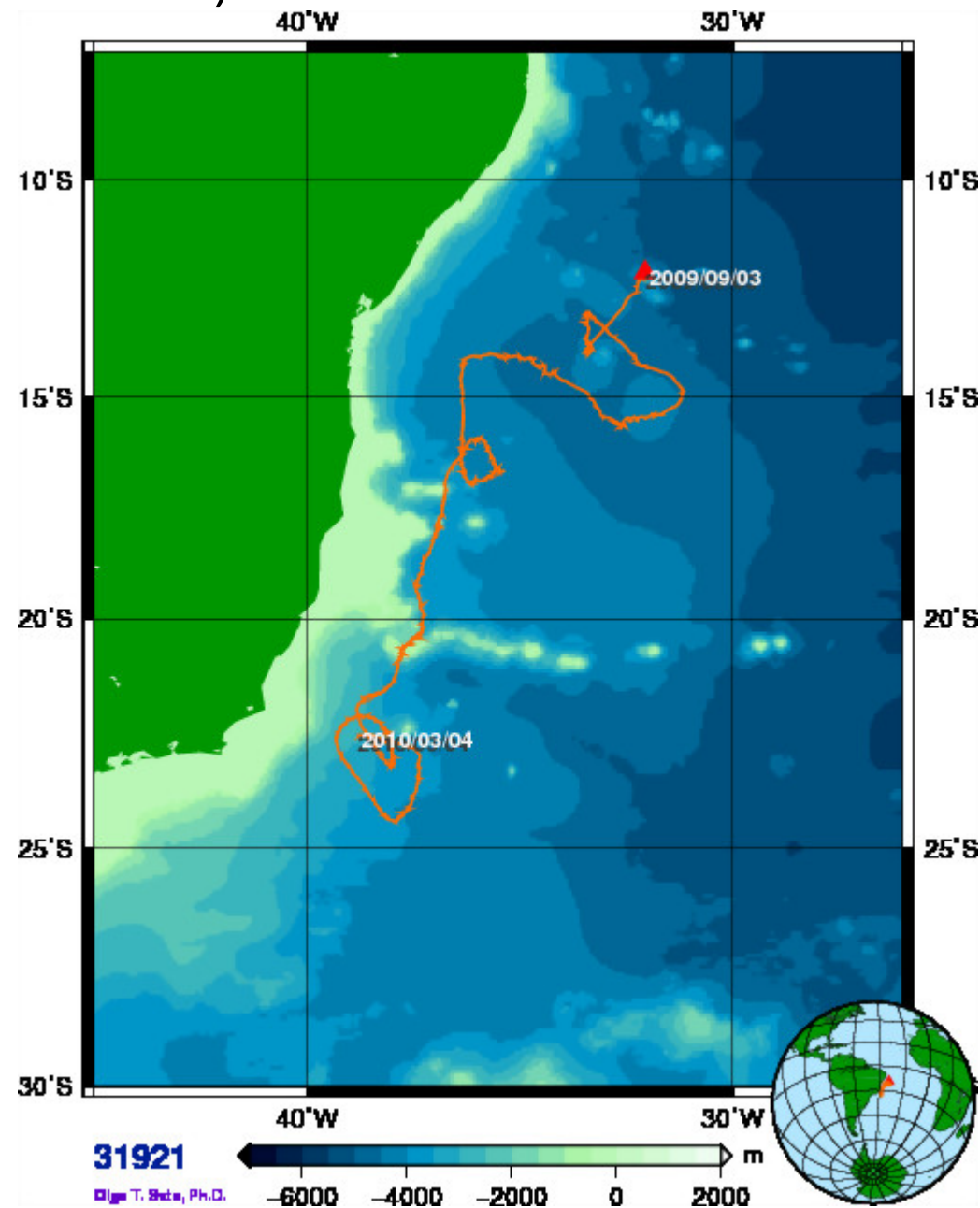
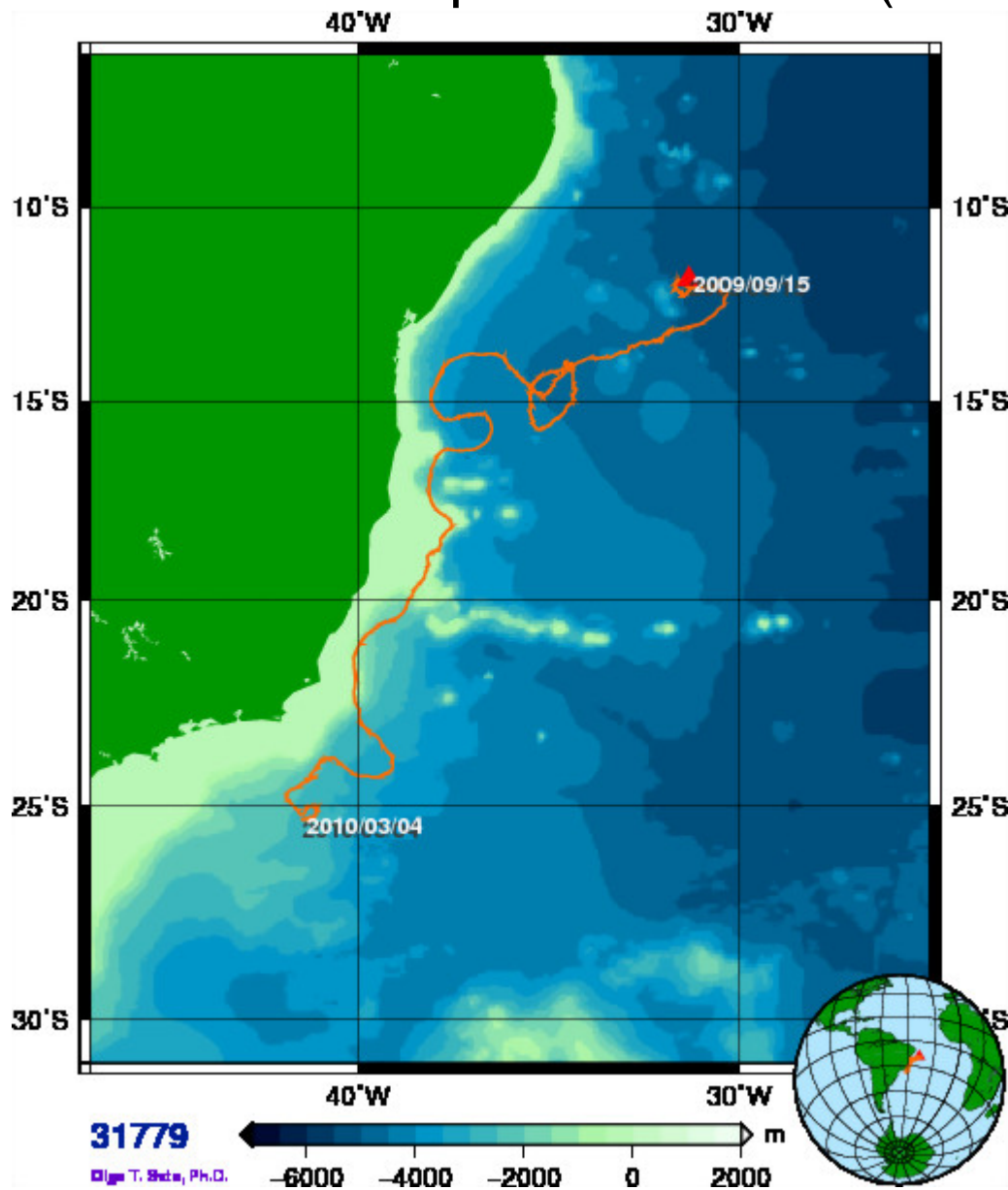
PNBOIA Project (GOOS)



12 floats

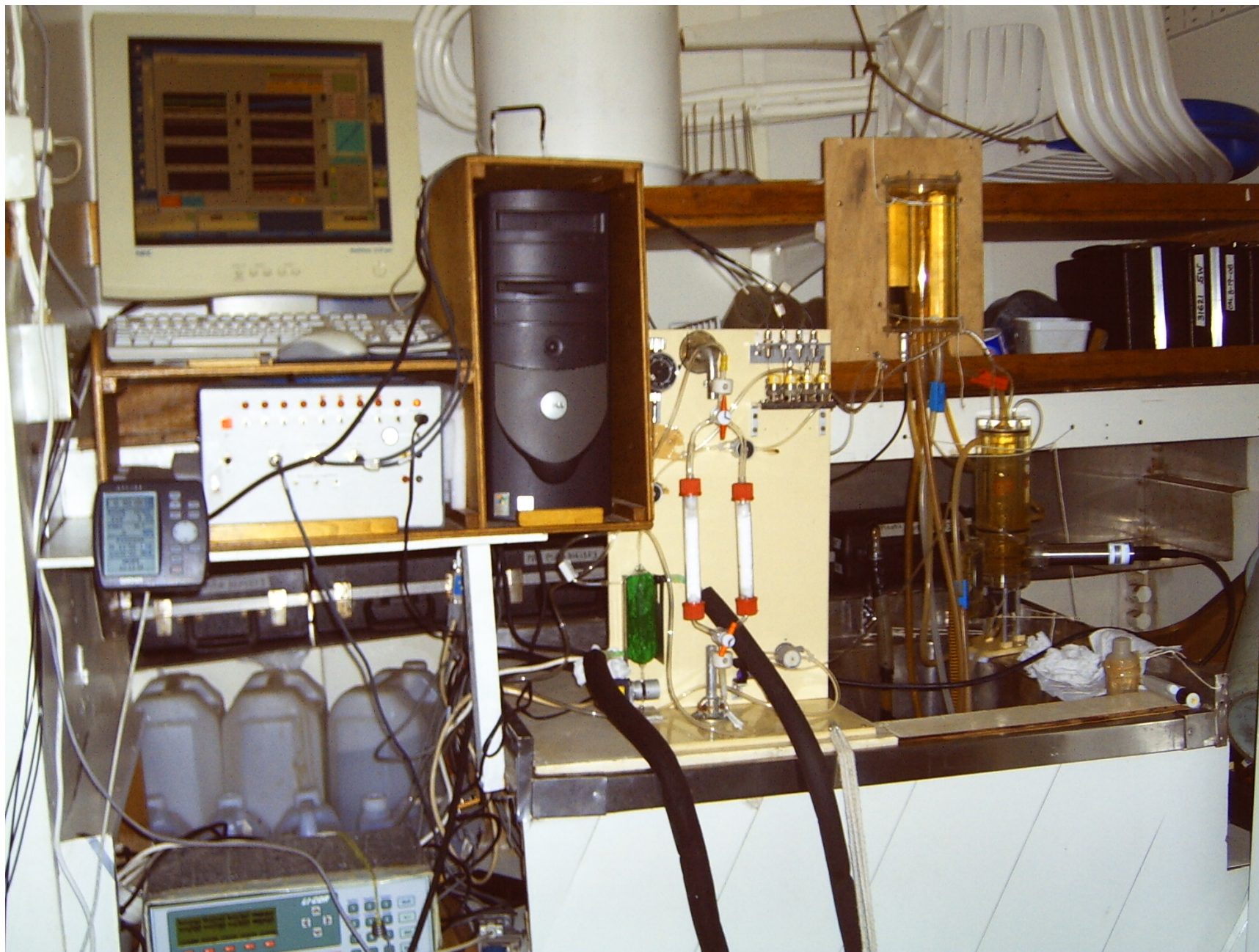


## Sep 2009 / Part 2 (10S and 12S)

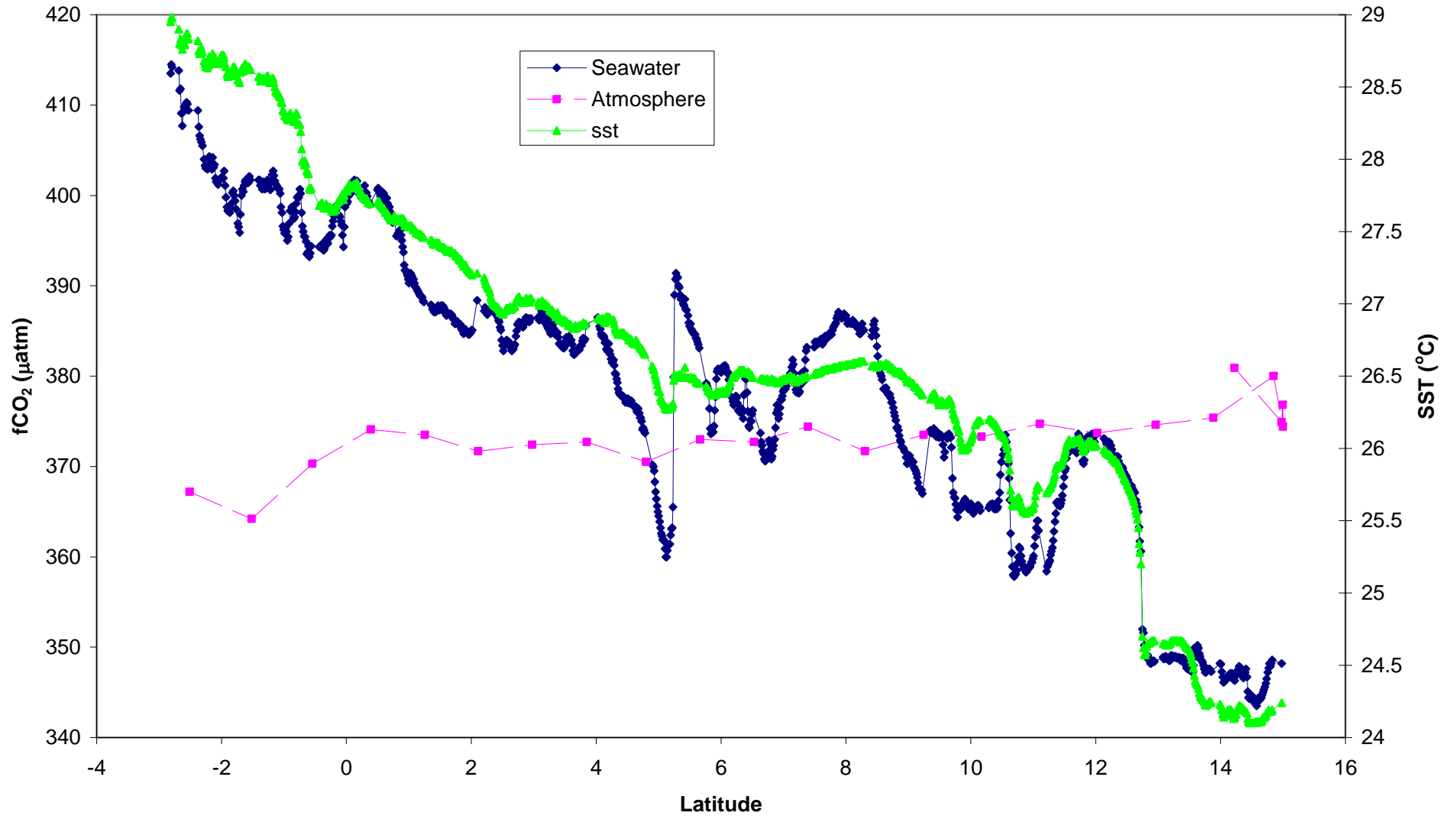


# **Underway pCO<sub>2</sub>**

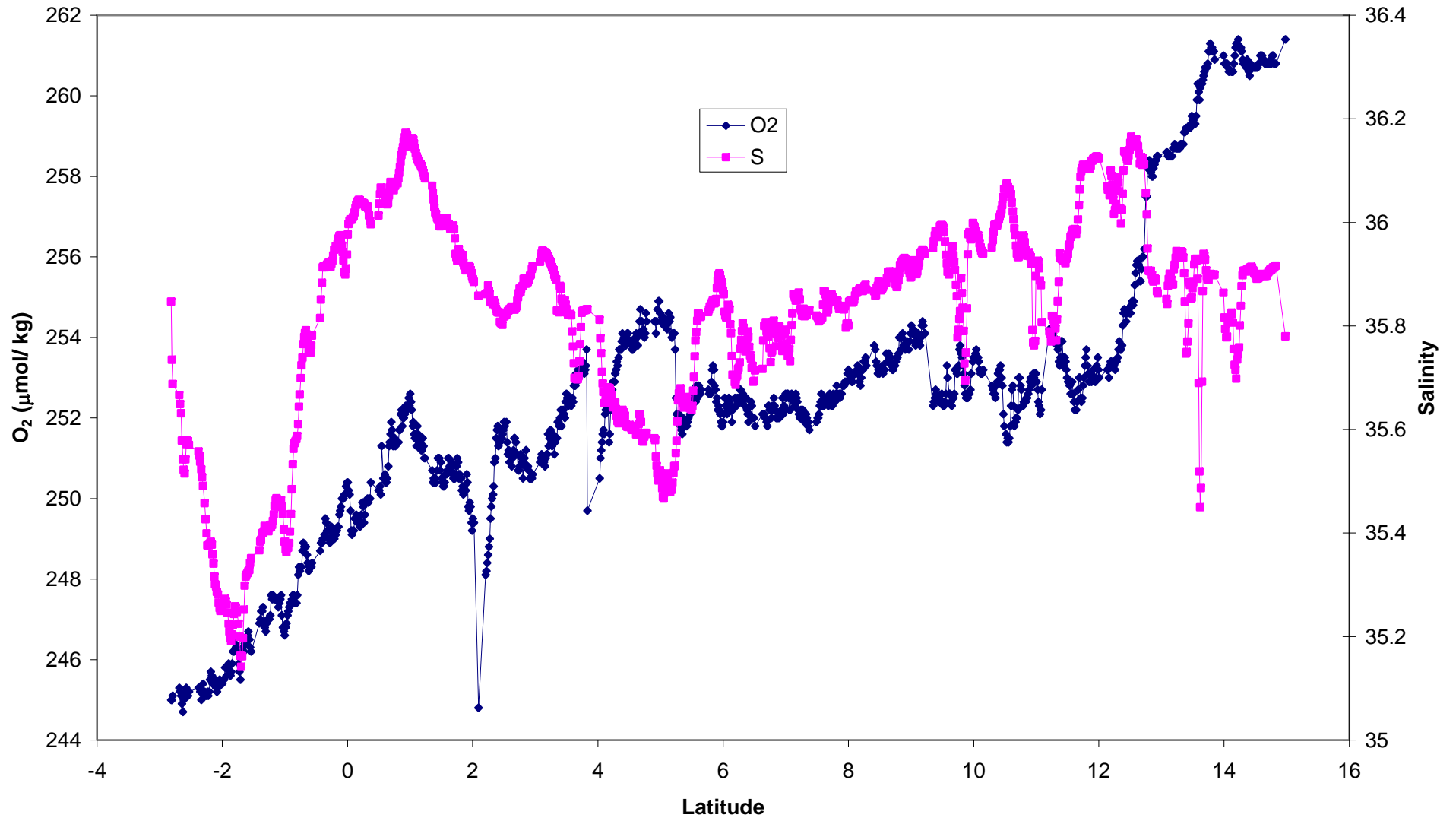
Brazil-France Collaboration  
(Nathalie Lefèvre)



### Fortaleza to 15N



### Fortaleza to 15N



# CO2 on ATLAS

