

# PIRATA-Brazil: 2009 Status and National Report

PIRATA-XV Meeting  
Miami, 5 February 2010

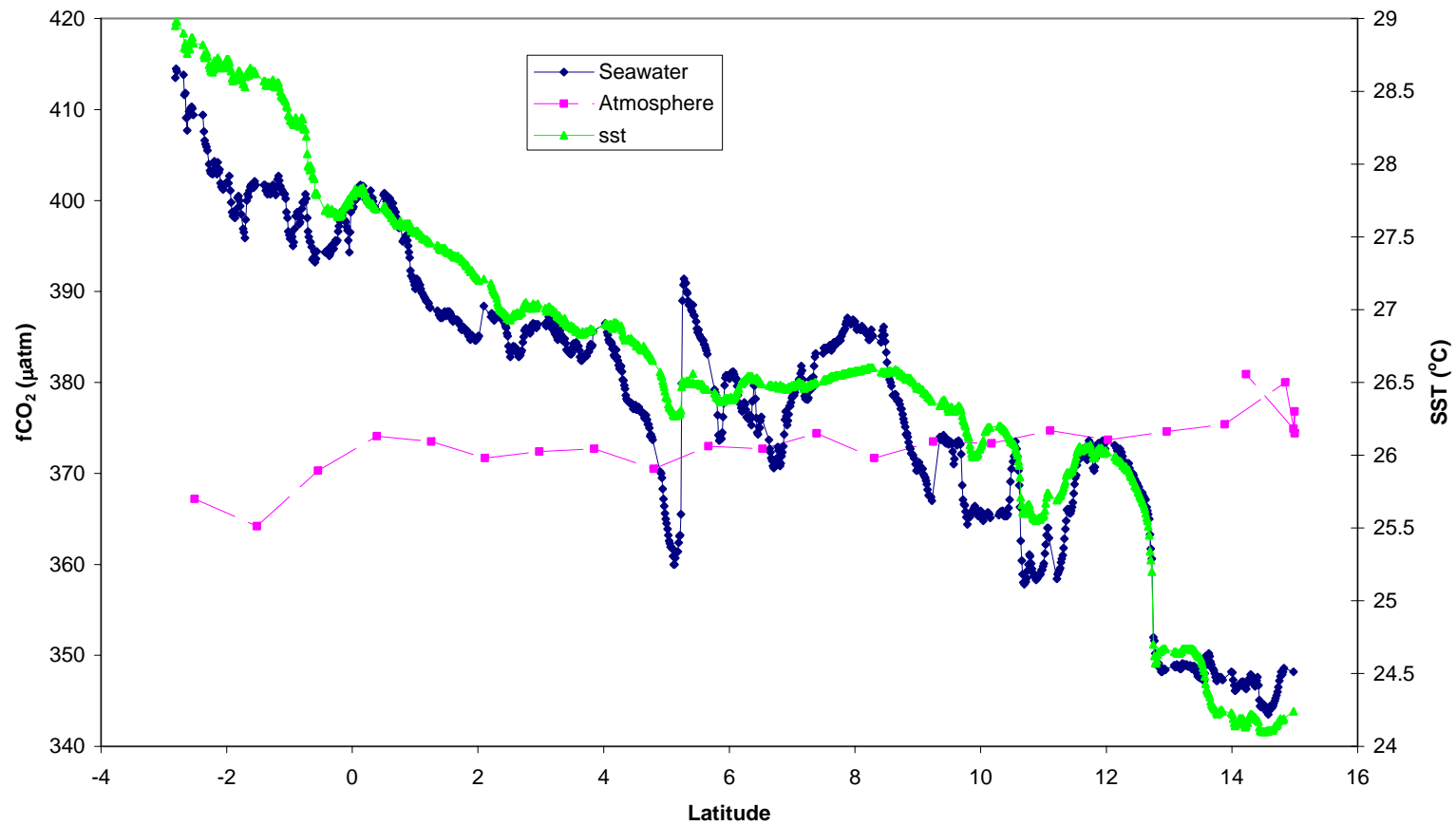
# Summary of PIRATA Brazil Activities during 2009

- PIRATA BR-XI and SWE-IV cruises [Mar/Apr and Aug/Sep'09] with underway CO<sub>2</sub> monitoring.
- ATLAS sensors and electronic shipped to PMEL [May/Jun]
- 8N, 38W PIRATA Backbone buoy recovery [Jan'10]
- Created <http://pirata.cptec.inpe.br> with auxiliary oceanographic data
- CNPq Grant of US\$1.5M
  - [\$750K] Improvement of oceanographic and atmospheric monitoring – PIRATA-BR (Paulo Nobre)
  - [\$250K] Ocean circulation and Island monitoring (Domingos Urbano)
  - [\$250K] Biogeochemistry modeling over tropical Atlantic (Moacyr Araujo)
  - [\$250K] ATLAS-like buoy construction in Brazil (Edmo Campos, coop. PMEL)
- Nathalie Lefèvre will embark PIRATA BR-XII for pCO<sub>2</sub> at ANTARES and maintenance of CO<sub>2</sub> sensors at 38W 8N

# Underway pCO<sub>2</sub> at 38W

## PIRATA BR March 2009

Fortaleza to 15N

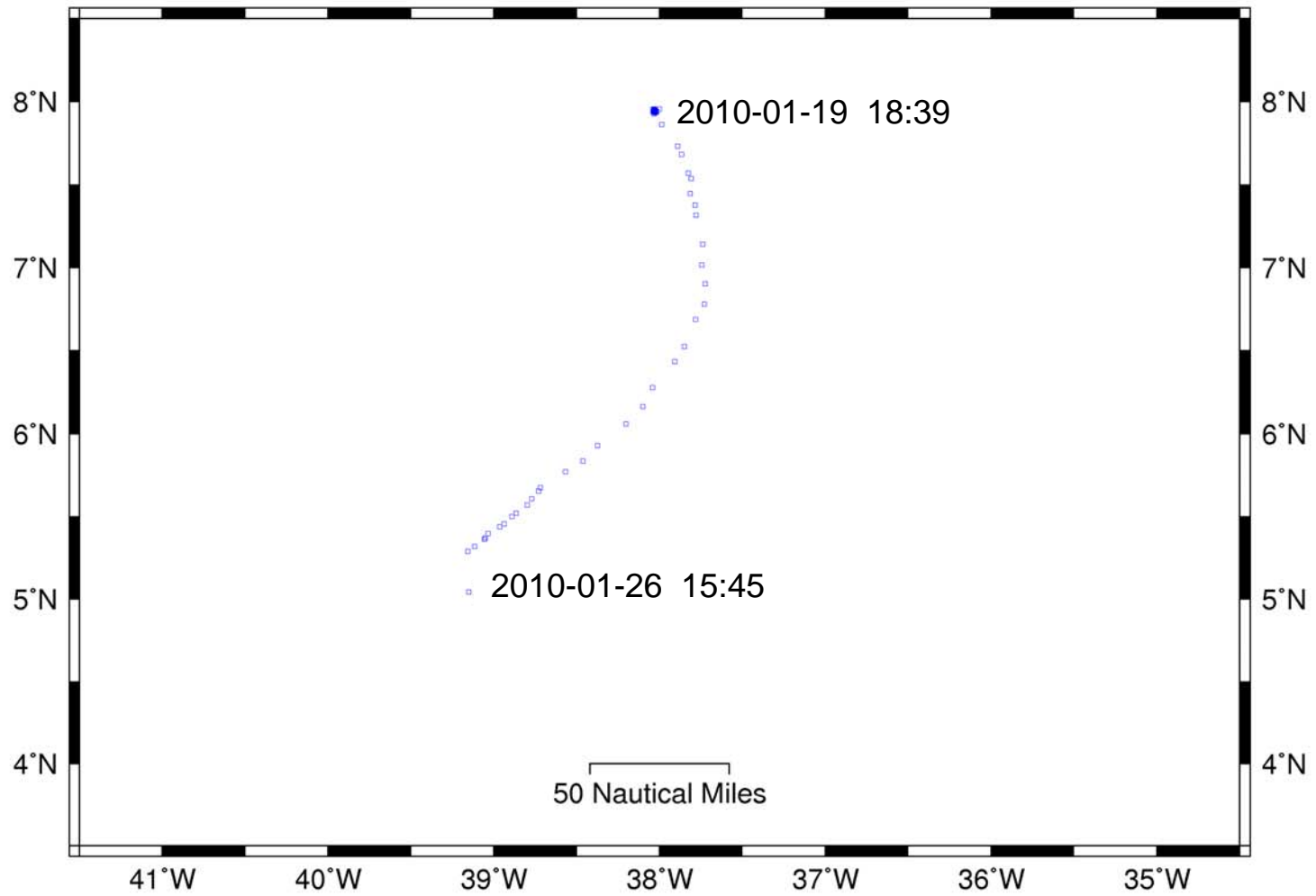


## 8N, 38W PIRATA ATLAS buoy adrift!...

- Jan 19, 2010 at 6:49 PM:
  - NOAA/PMEL sets off info of buoy adrift.
- Jan 19, 2010 at 7:13 PM:
  - DHN contacted and procedures taken.
- Jan 21, 2010: DHN Ship Comandante Munhoz sails from Fortaleza in rescue mission
- Jan 26, 2010 at 8:40 AM:
  - at 05deg17min 59sec N, 039deg 09min 30sec W
  - Buoy recovered by DHN Ship Comandante Munhoz
- All underwater sensors lost, damaged anemometer
- Buoy sensors & electronic at INPE/Natal,
- Will be shipped to PMEL with PIRATA-BR12 materials, Jun/2010

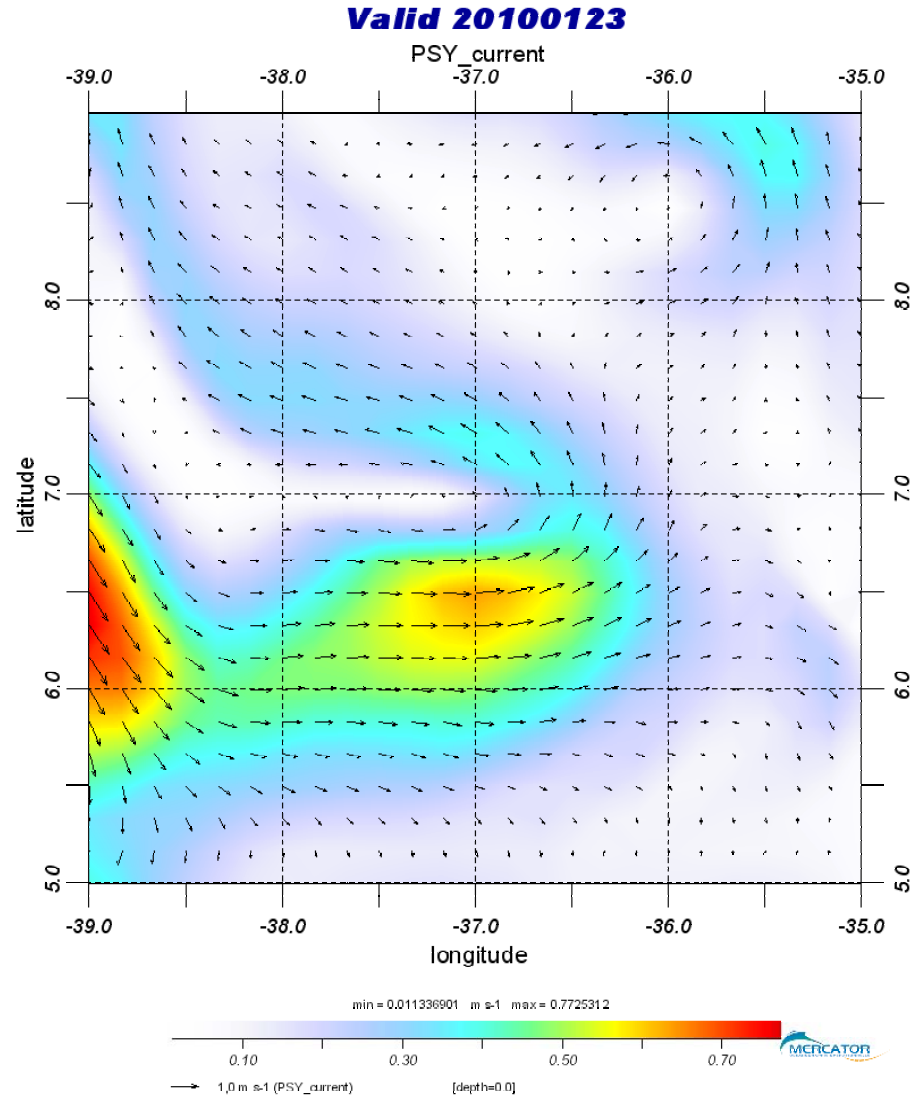
# Buoy Drift

PM-807A at 8N38W



# Mercator Currents FCST

sent by Fabrice Hernandez



# Journal articles (2009-10)

- De Almeida and P. Nobre, 2010, Bjerknes feedback over the equatorial Atlantic on PIRATA data. Submitted to GRL.
- Silva, M., Araujo, M., Servain, J., Pierrick, P., and Lentini, C. A.D, 2009 High-resolution regional ocean dynamics simulation in the southwestern tropical Atlantic, Ocean Modeling, published.