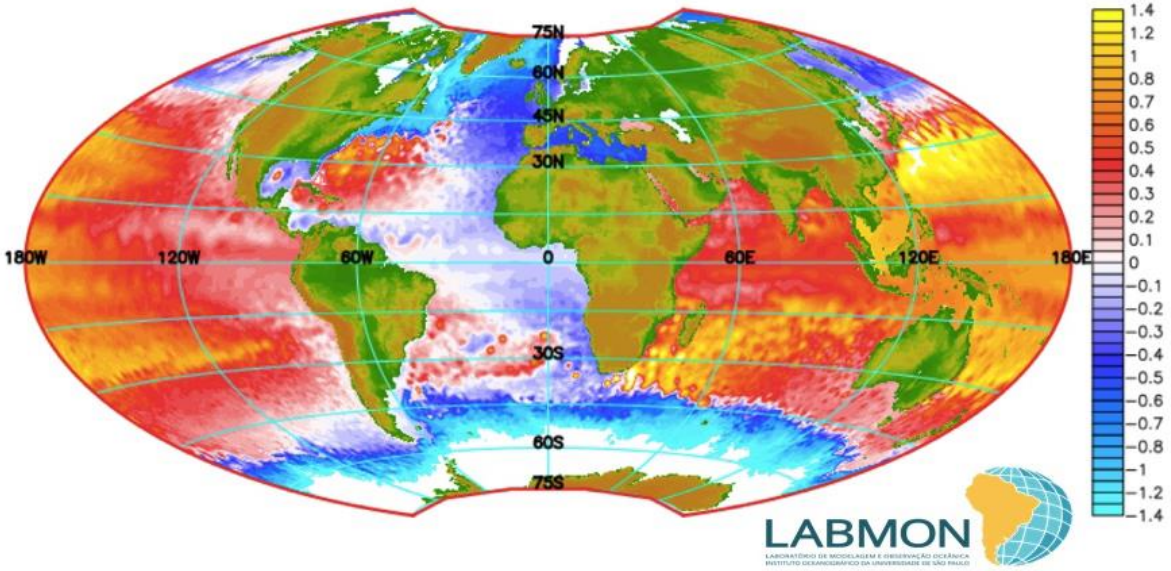
South Atlantic Operational Multi-model Evaluation



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Introduction

A system for operational multi-model evaluation was developed.

The methodological approach consisted on procedures to evaluate different operational simulations.

The operational models used:

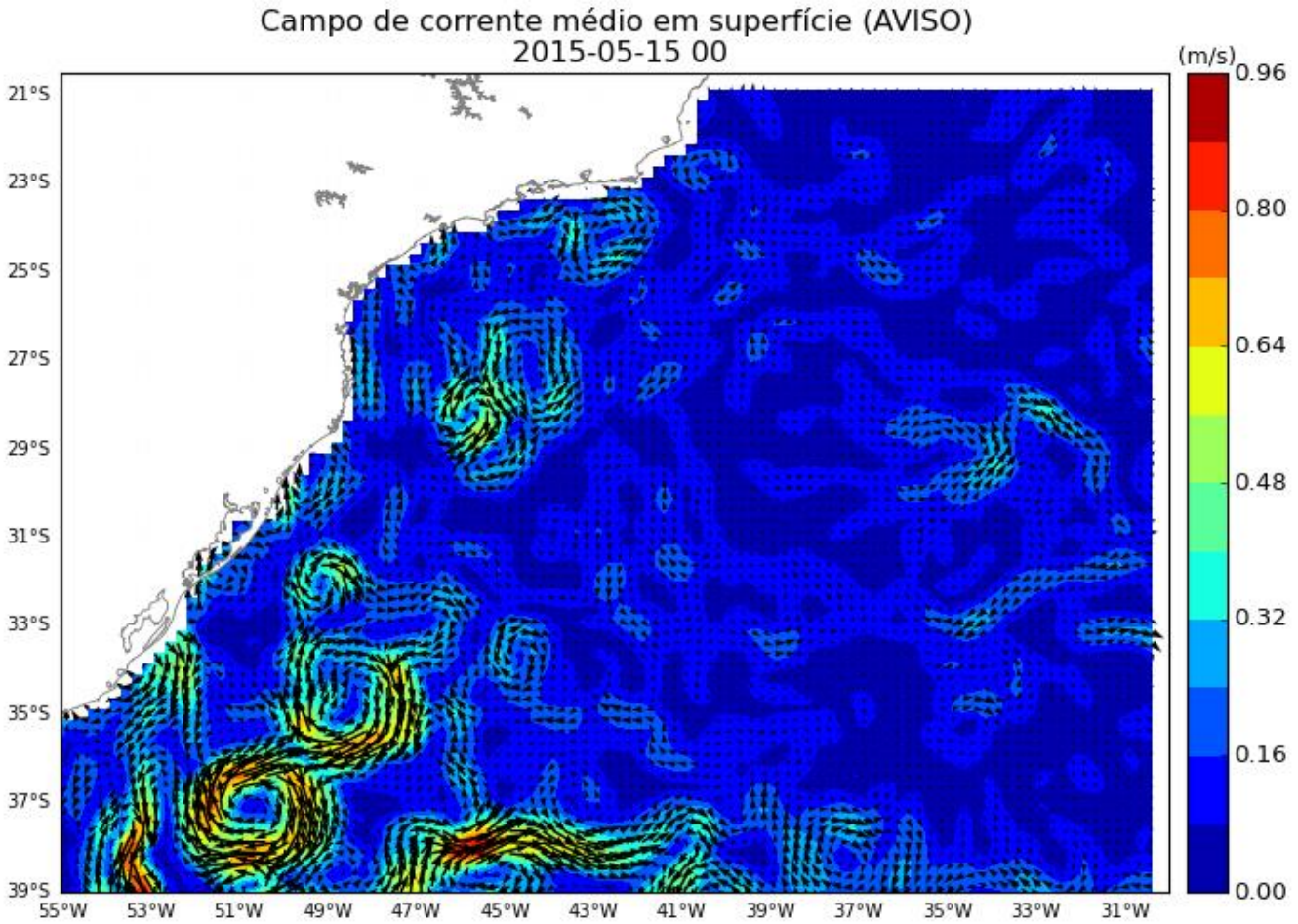
Model Id.	Model	Provider
RTOFS	HYCOM	NCEP/NCAR
GOFS	HYCOM	NRL/RSMAS
MERCATOR	NEMO	MERCATOR
LABMON	HYCOM	USP/Tetra Tech
Base4.2	POM	Tetra Tech

The operational data used:

- **Altimetry from AVISO**

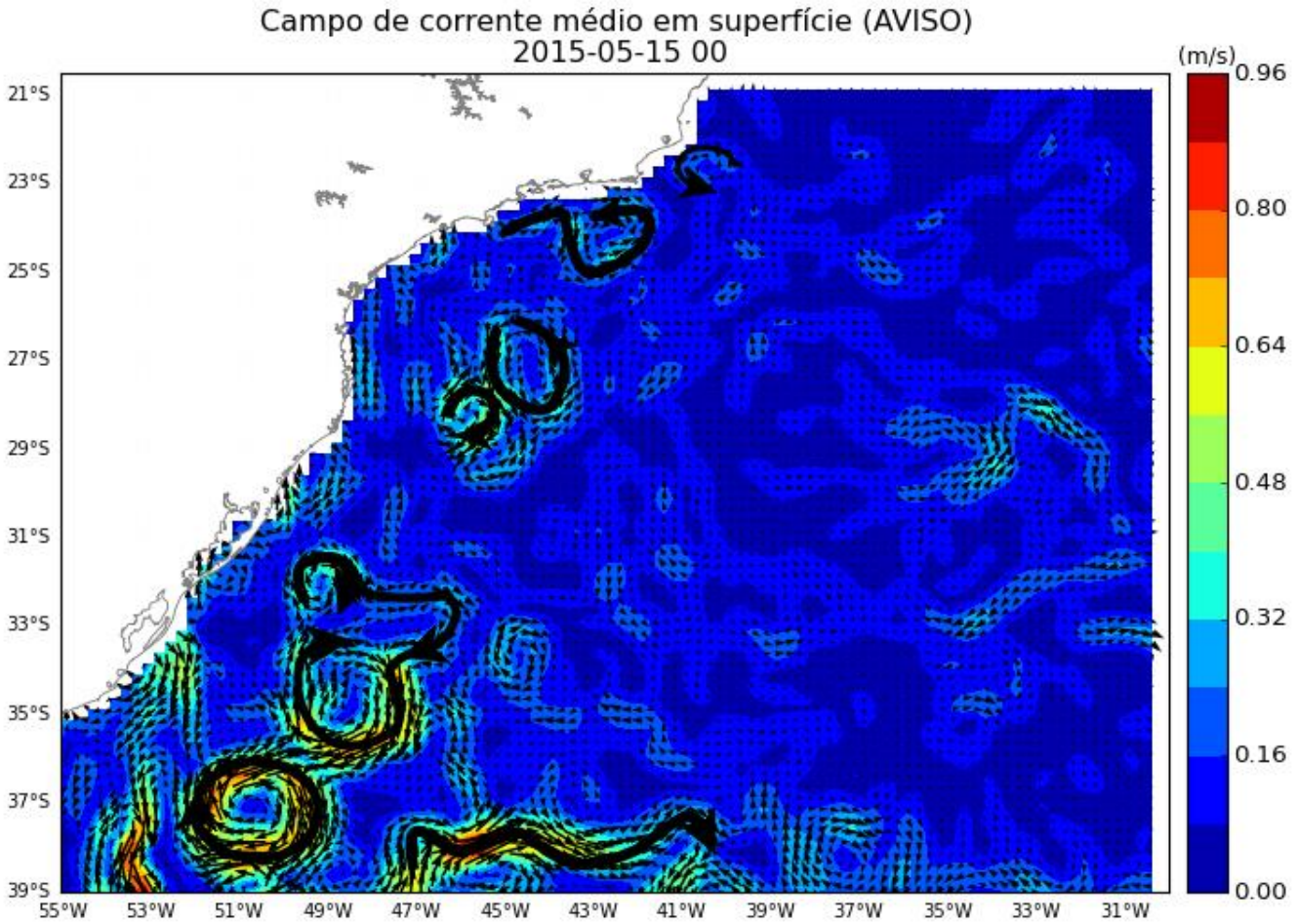
- **SST from GHRSST**

Dynamic velocities from AVISO altimetry

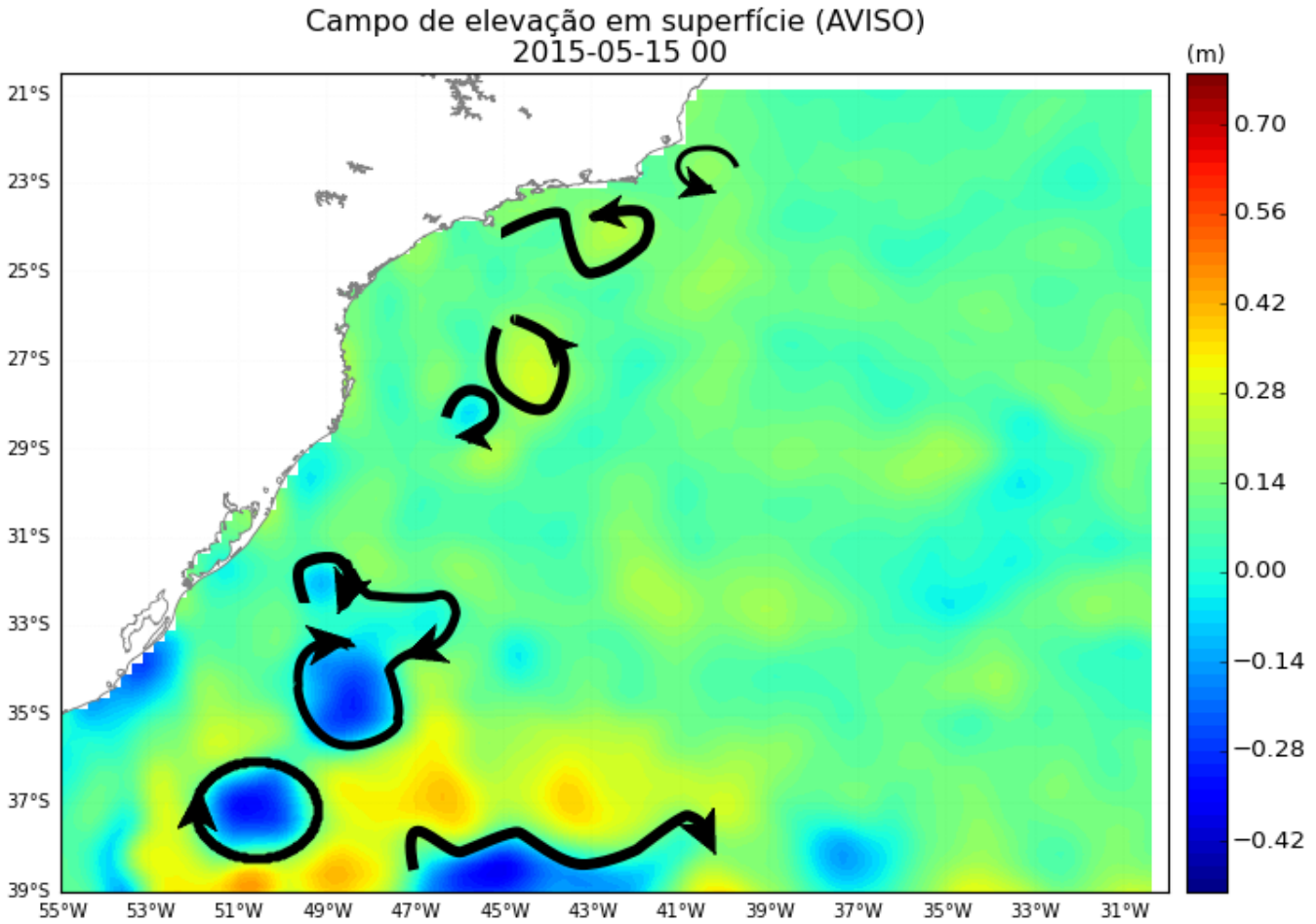


Main features – Mean surface currents (AVISO)

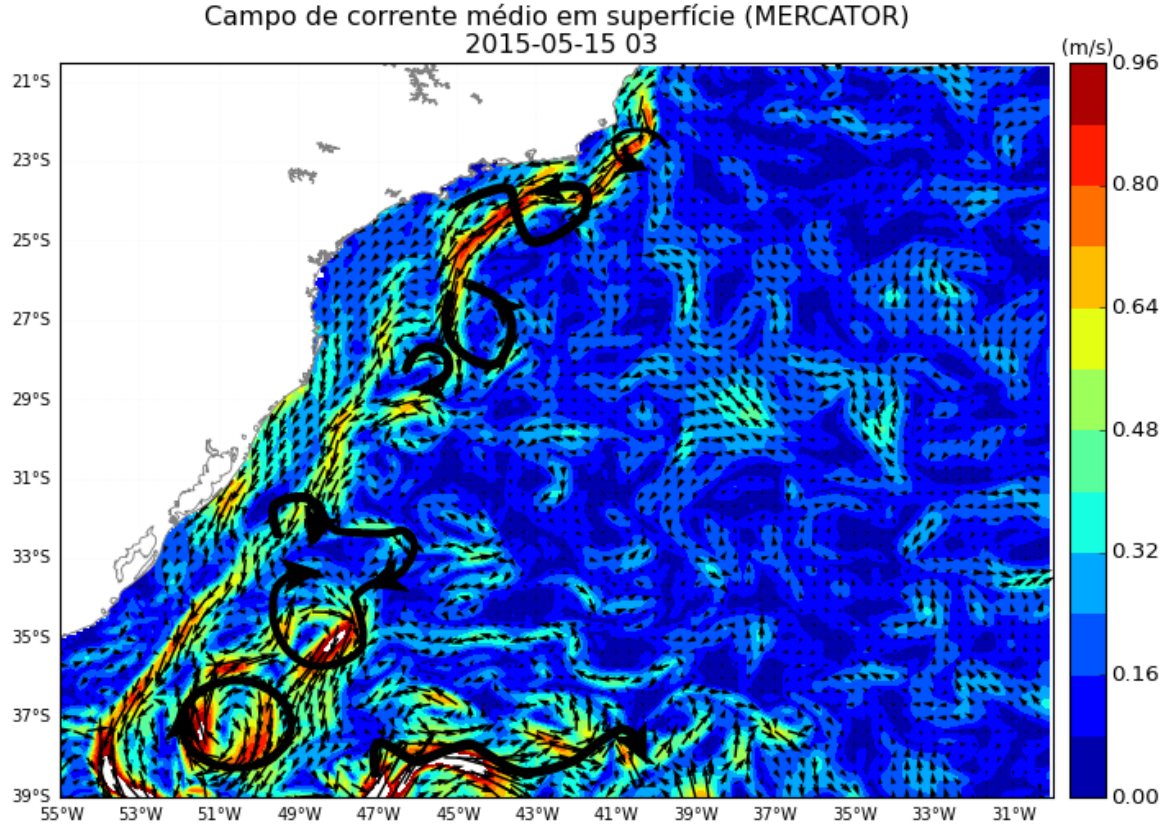
Features Map!



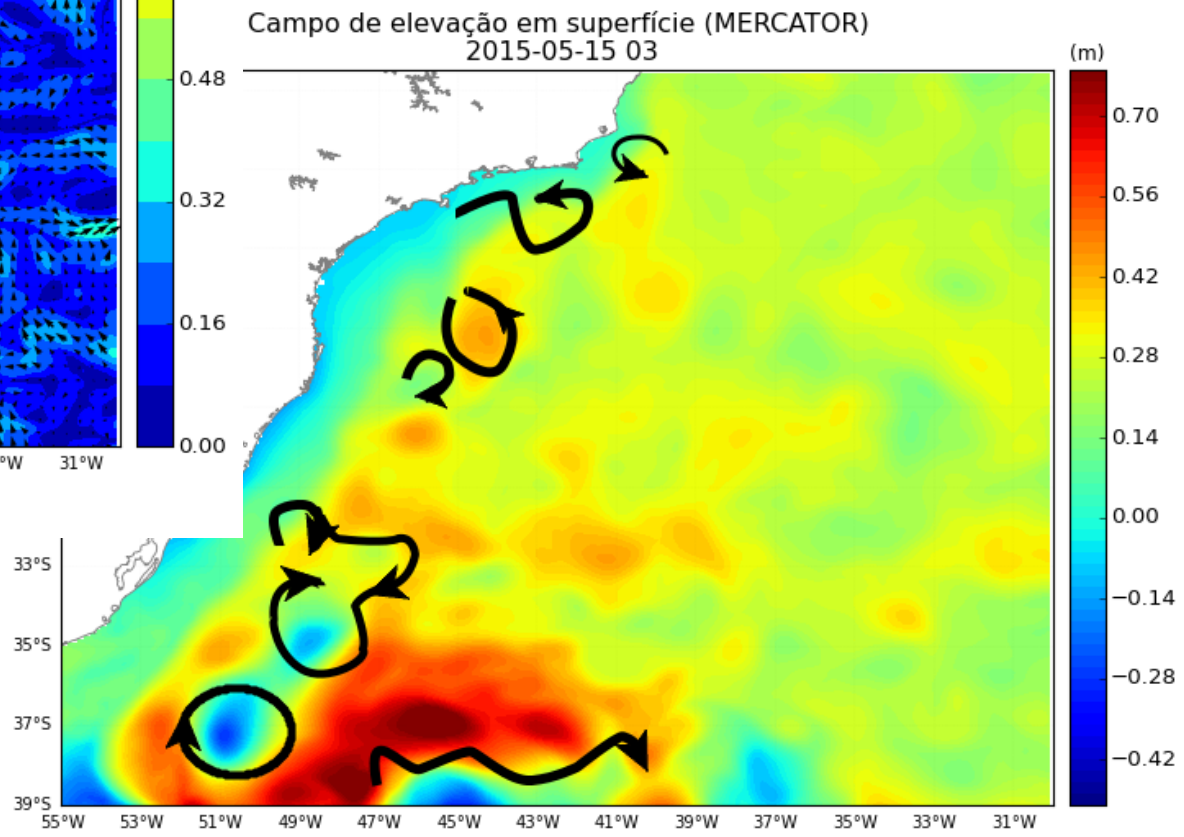
Main features – Surface elevation anomaly (AVISO)



Features from different models:



Mean surface currents (MERCATOR)

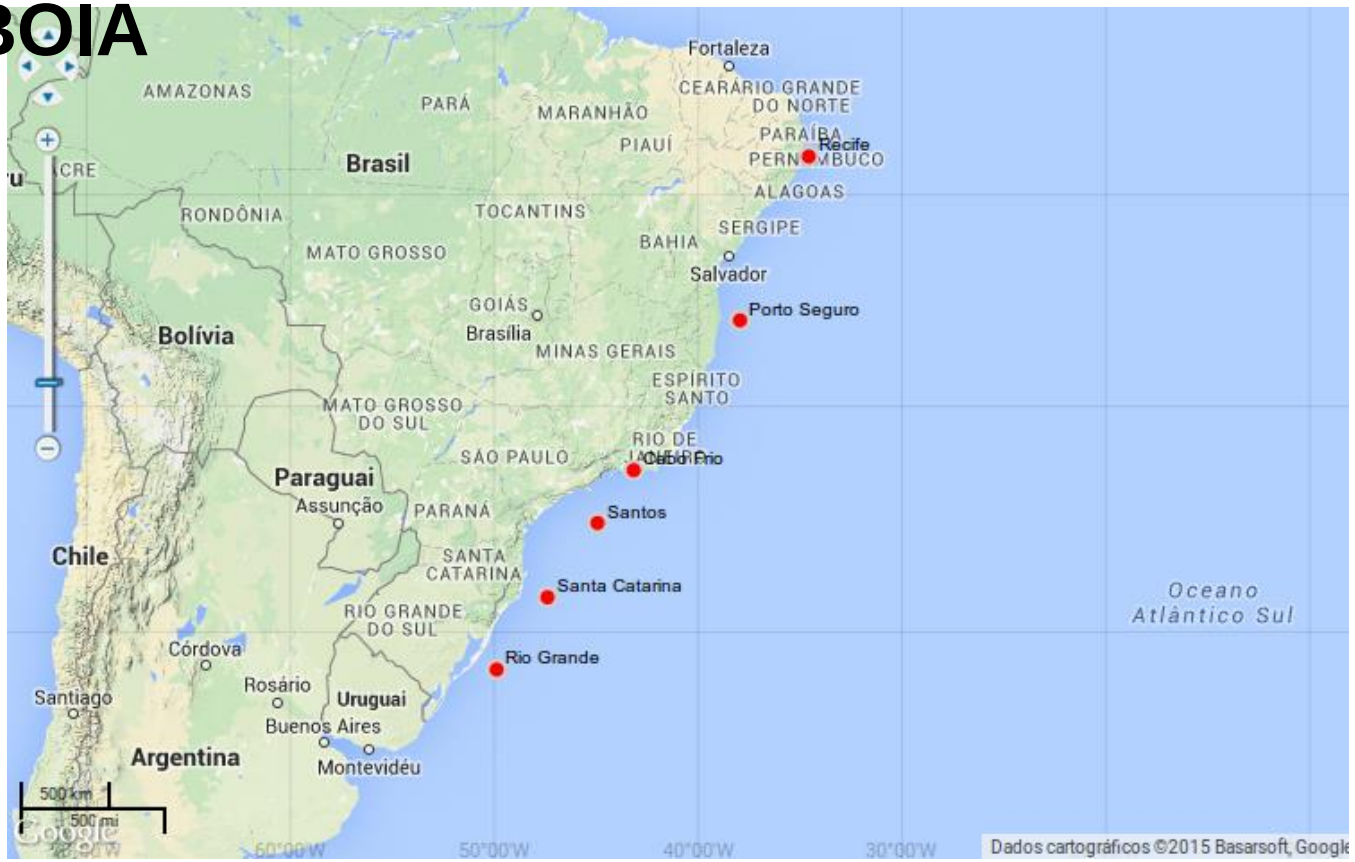


Surface elevation (MERCATOR)

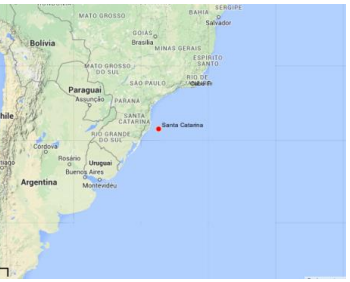
Operational data used

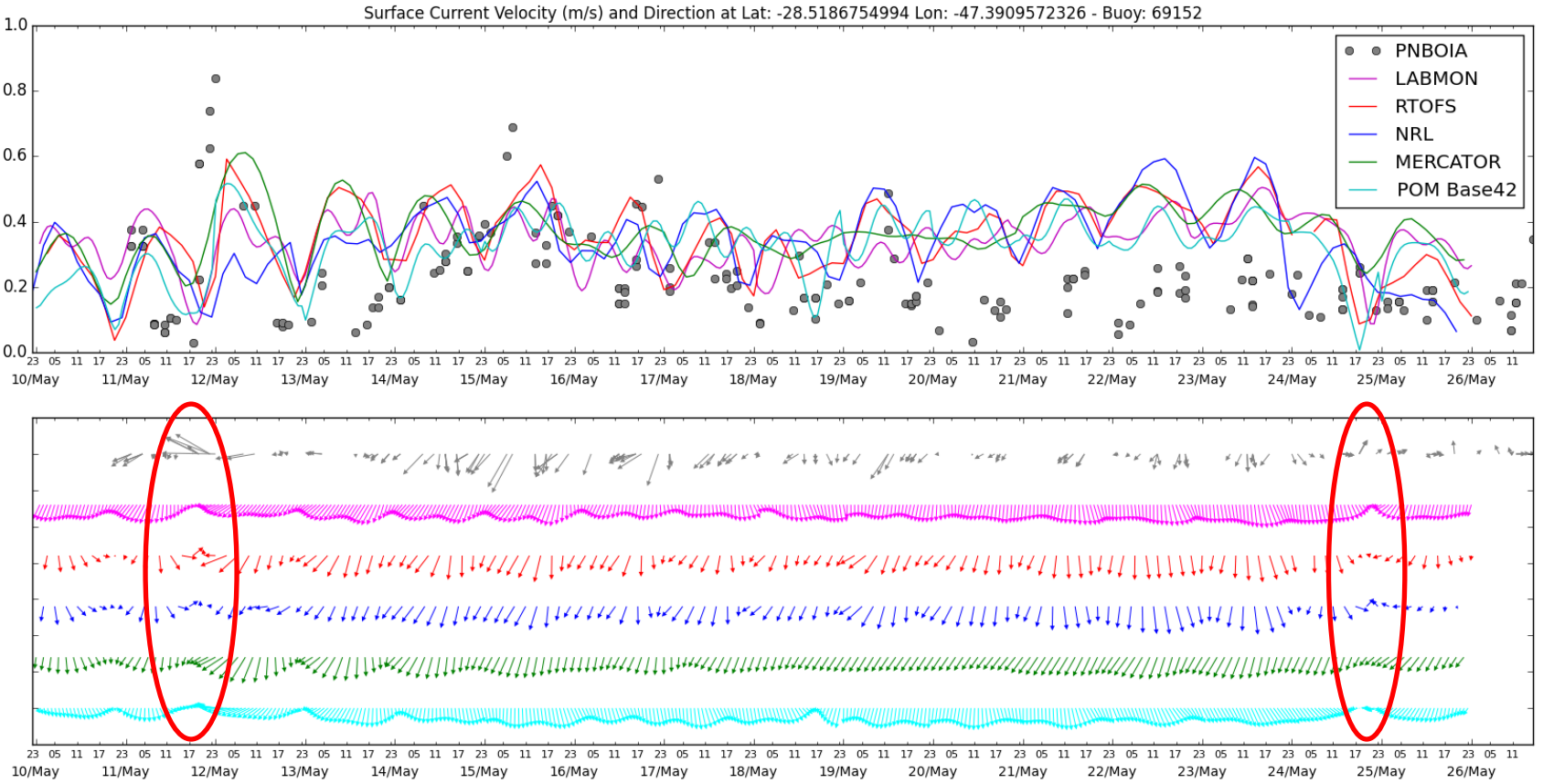
Altimetry from AVISO

Buoys from PNBOIA

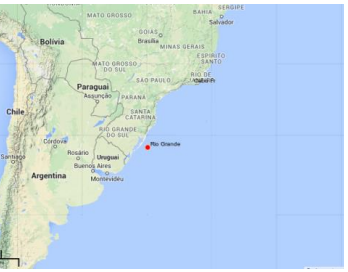


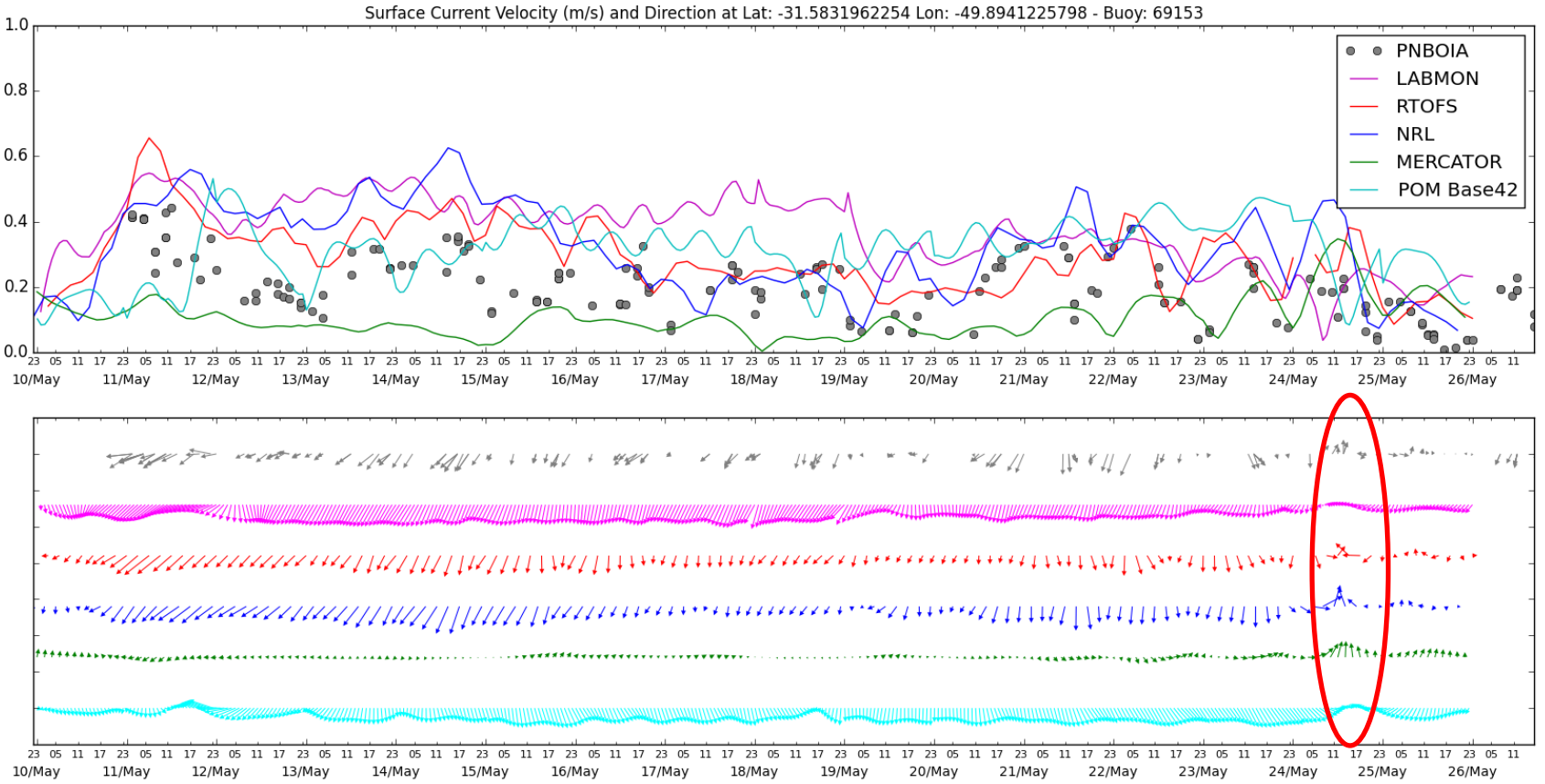
Time series from models and buoy B69152





Time series from models and buoy B69153



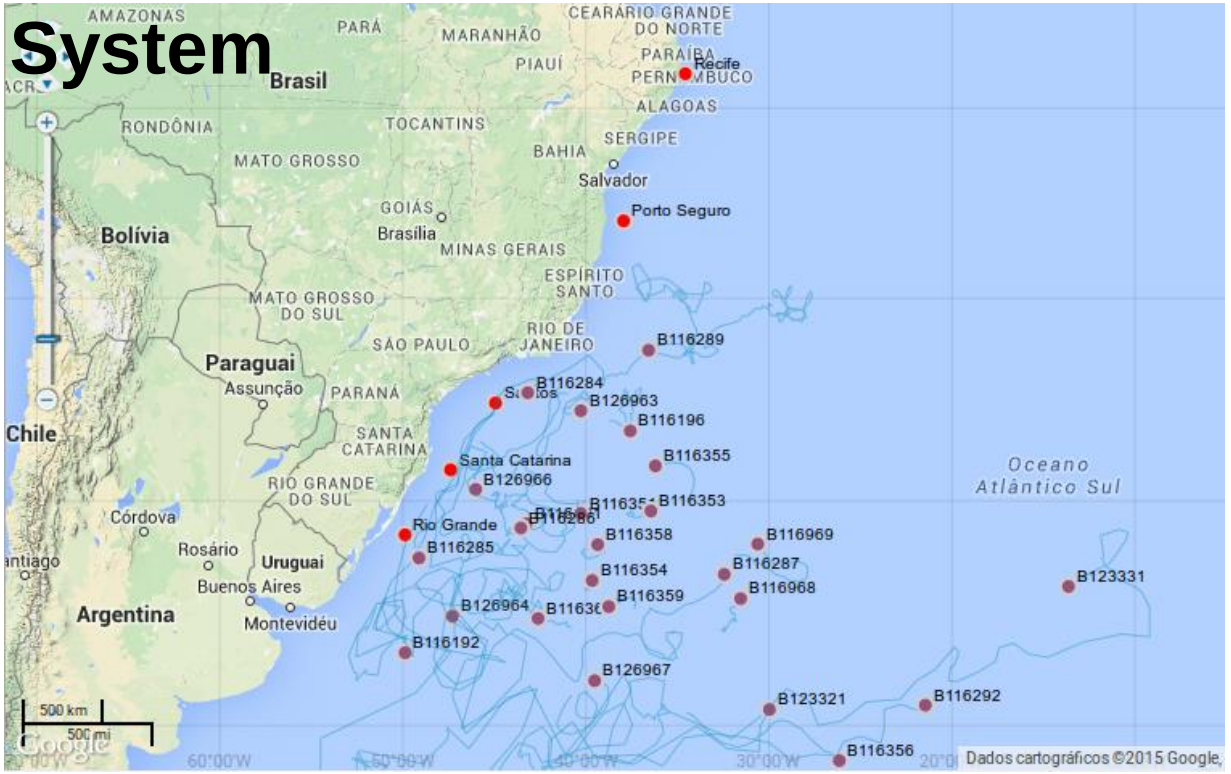


Operational data used

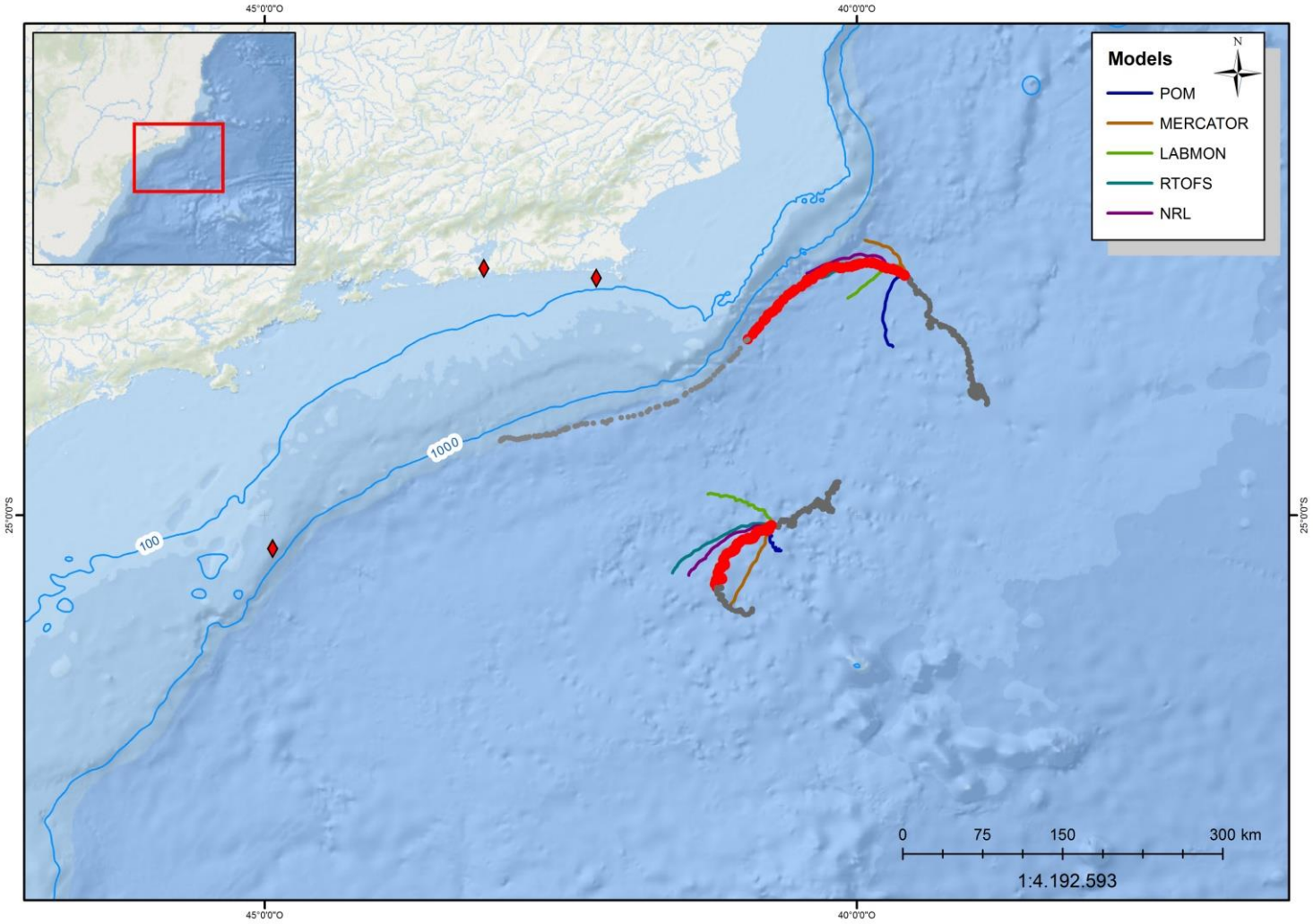
Altimetry from AVISO

Buoys from PNBOIA

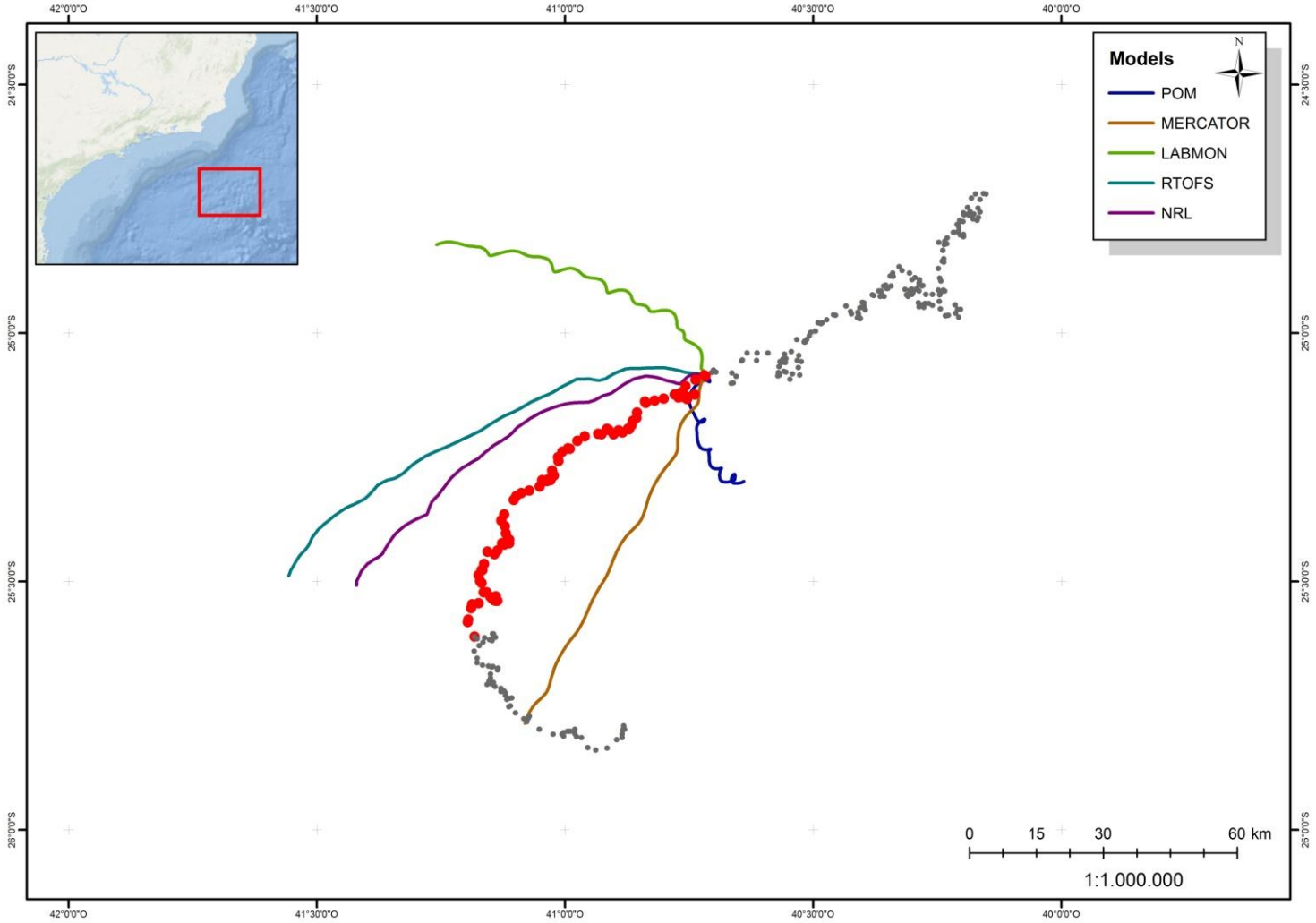
Drifters from Argos System



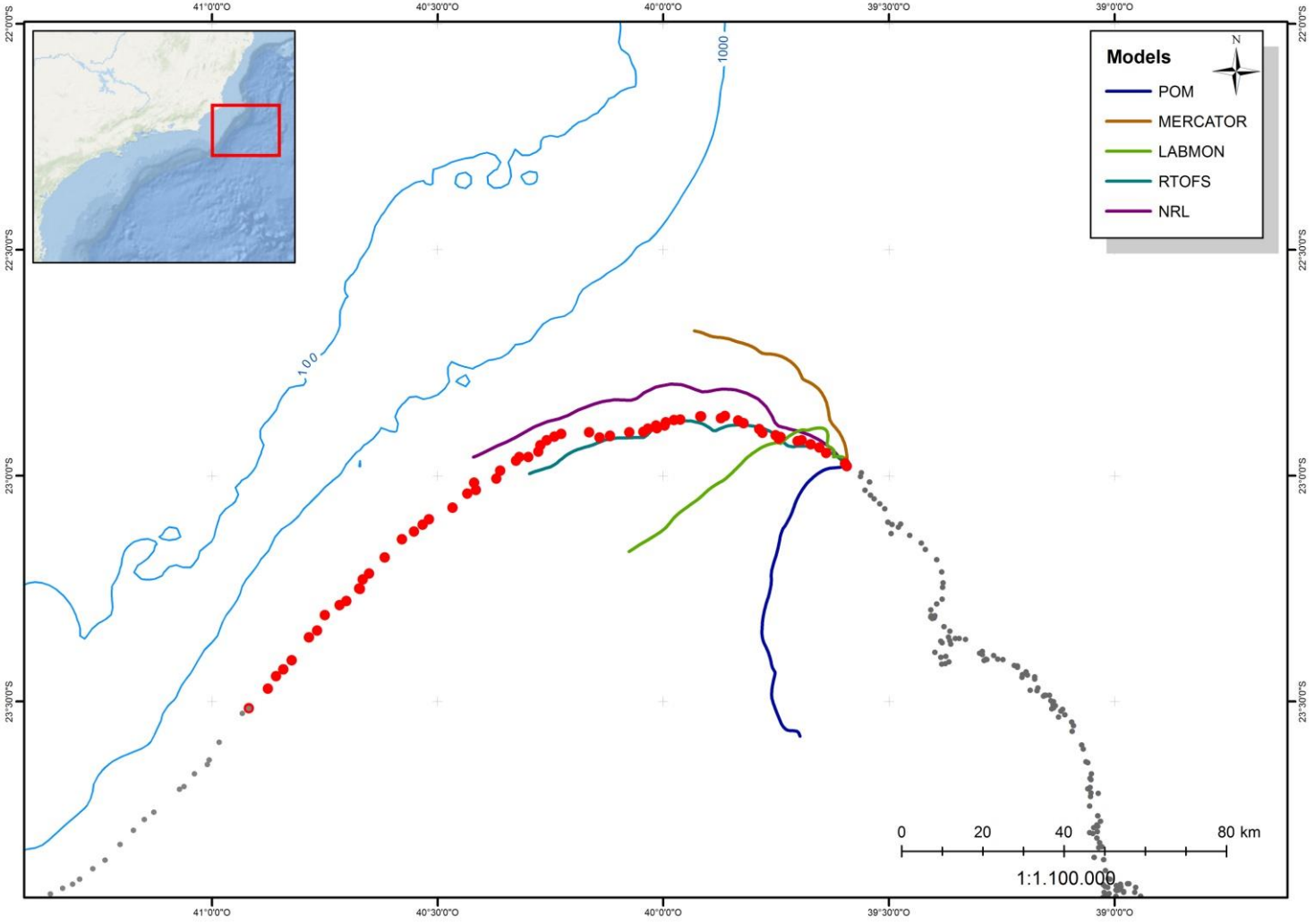
The drifters available in the analyzed period:



Drifter B126963 *vs* 5 days modeling starting at 15/05/2015 00Z



Drifter B116284 *vs* 5 days modeling starting at 15/05/2015 00Z



Conclusion:

- The combination of different models can be helpful to forecast oceanic patterns, specially when combined with real-time observational data.
- A set of models can be used in operational forecasting to support decision making.
- A tool developed for operational multi-model comparison is effective to support oceanic forecasts.