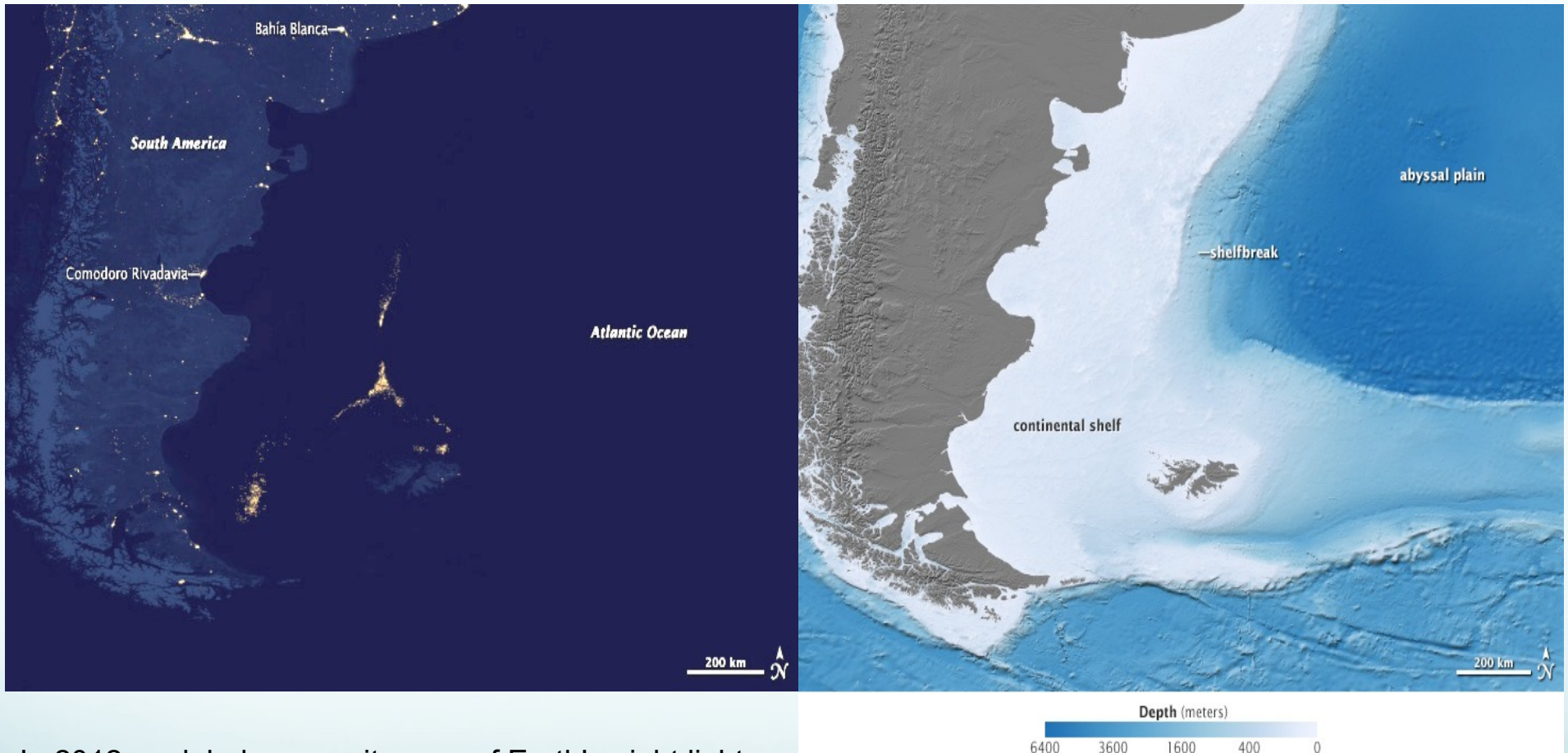


El océano, la memoria del clima

Lina E. Sitz

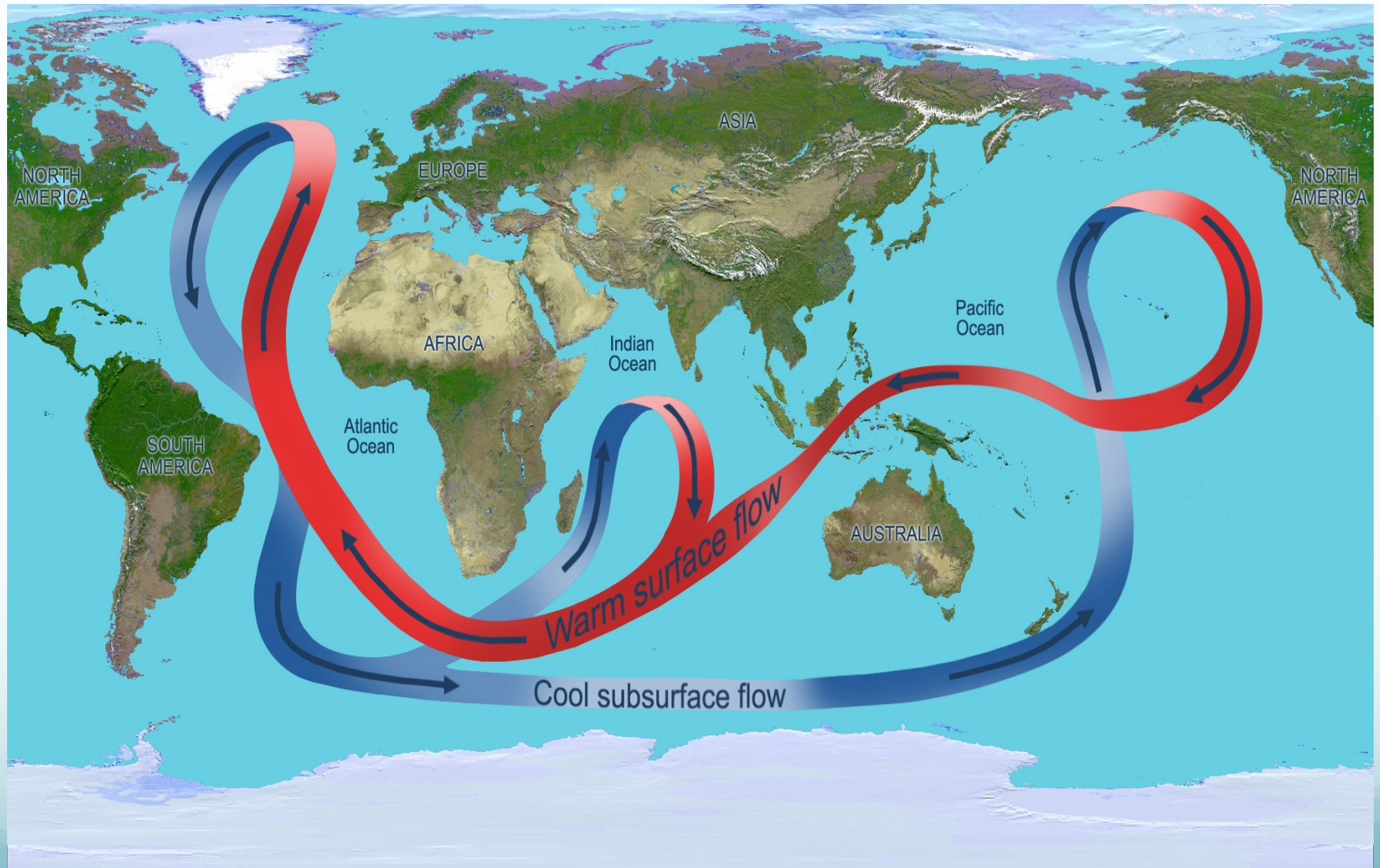
Universidad Nacional del Sur, Departamento de Física – International Centre for Theoretical Physics, ICTP – Istituto Nazionale di Geofisica Sperimentale, OGS.

Motivación

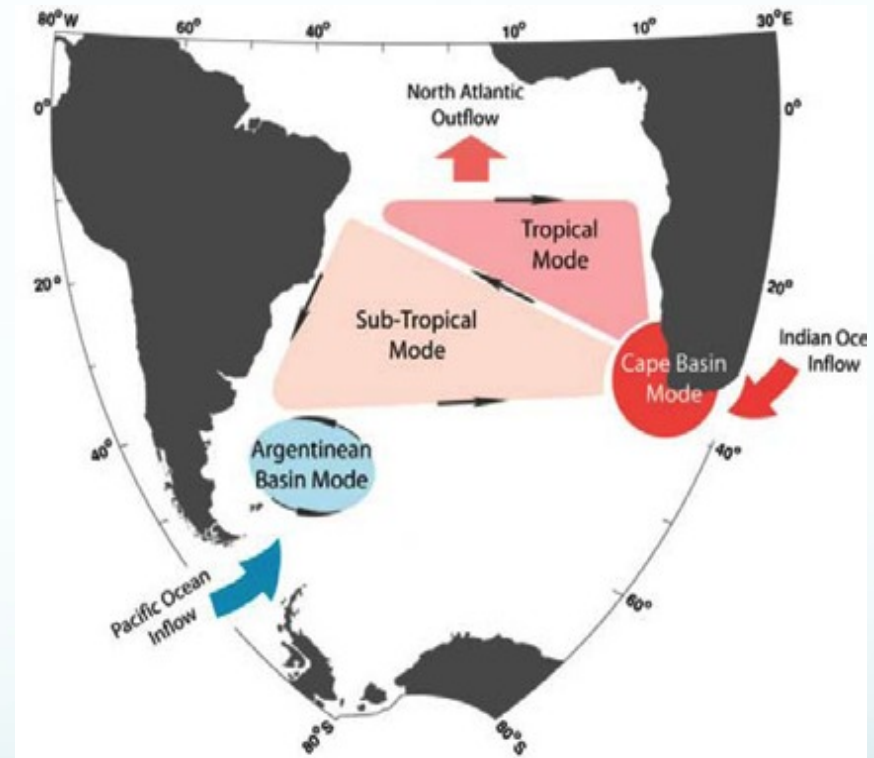


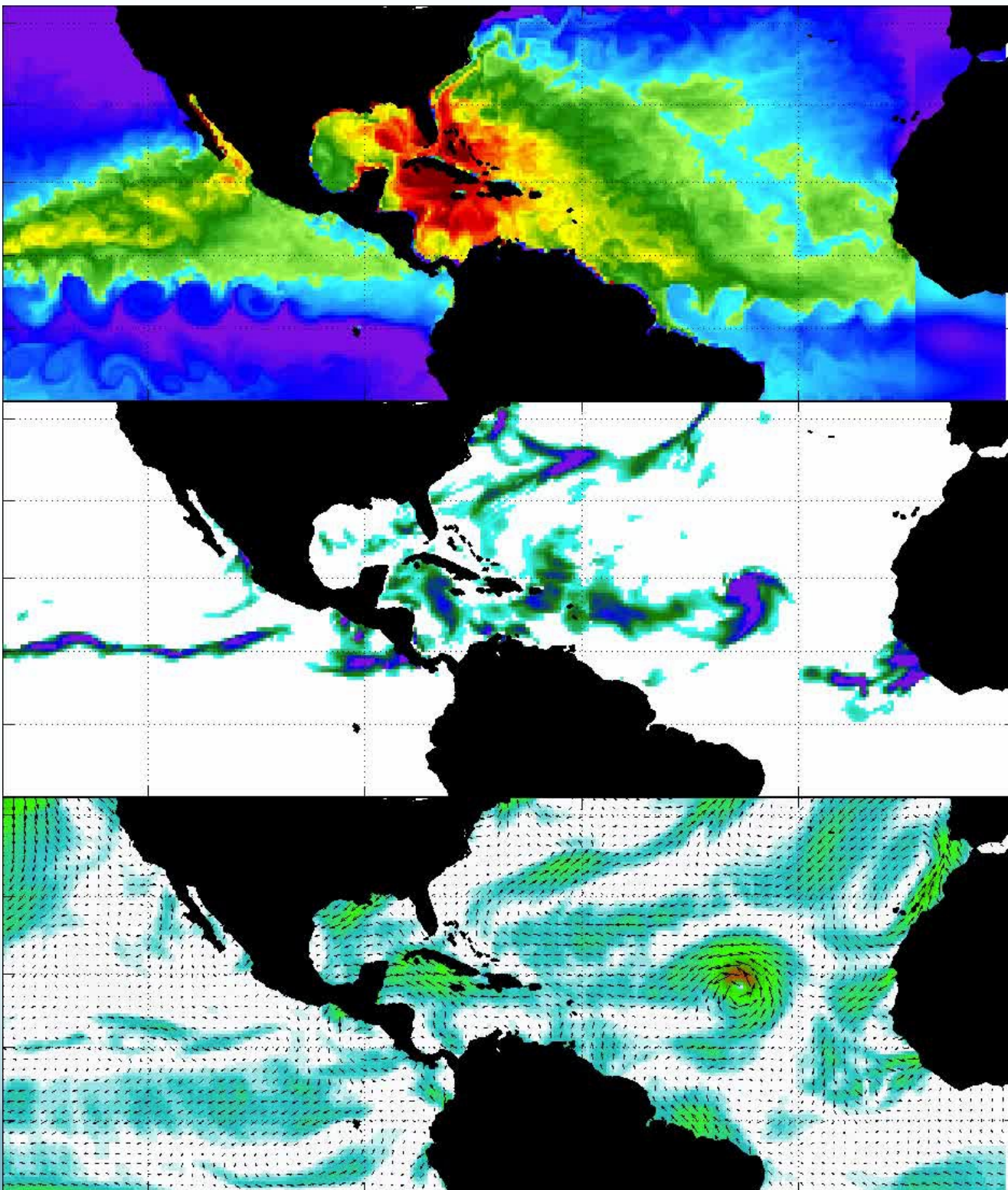
In 2012, a global composite map of Earth's night lights revealed human activity well offshore from South America. (NASA Earth Observatory/NOAA National Geophysical Data Center)

Circulación termohalina y clima: la importancia de Océano Atlántico



Circulación termohalina y clima: el Atlántico Sur





Open Science in a Big Data World

This collaboration is expected to help researchers to access and build on new information and knowledge, providing opportunities to accelerate the progress of research and improvements in earth system physics and climate science. Providing a foundation for a continued long term collaboration between scientists at ICTP and international cyberinfrastructure providers.

- To perform fine-grained simulations with a newly-developed Earth System Regional Climate Model.
- To make all data publicly available through a dedicated portal and the existing CORDEX repository using FAIR (Findable, Accessible, Interoperable, and Reusable) data principles.

Organisations involved: International Centre for Theoretical Physics (ICTP), Indiana University (IU), Open Science Grid (OSG), European Grid Infrastructure (EGI) and Extreme Science and Engineering Discovery Environment (XSEDE).

Big Red II is IU's main system for HPC. With a theoretical Rpeak of 1 PFLOPS (one thousand trillion floating-point operations per second), is among the world's fastest research supercomputers.

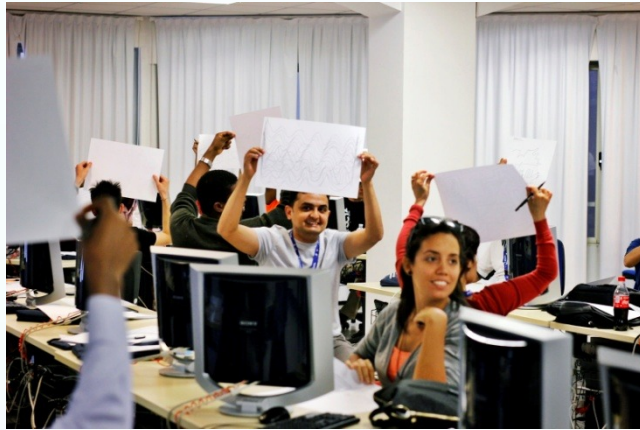
Comp. System	Total	Per node
CPUs	1364	2 (comp) / 1(GPU)
Proc. cores	21824	32 (comp) /16 (GPU)
RAM	43648 GB	64 GB (comp) / 32 GB (GPU)

LINPACK Benchmark performance

Rmax	596.4 TFLOPS	0,884 TFLOPS
Rpeak	1006 PFLOPS	320 GFLOPS (comp) 1317 GFLOPS (GPU)

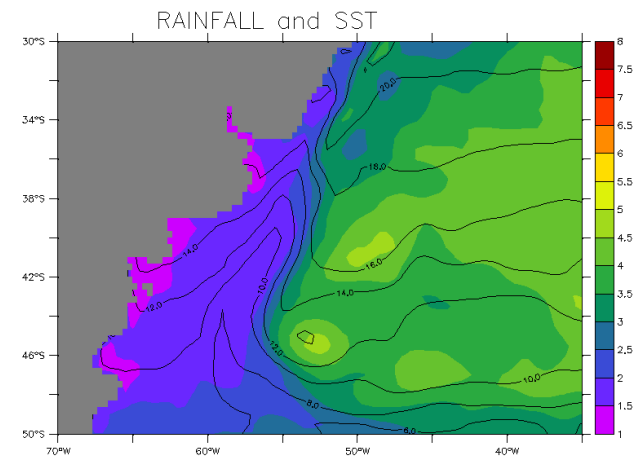
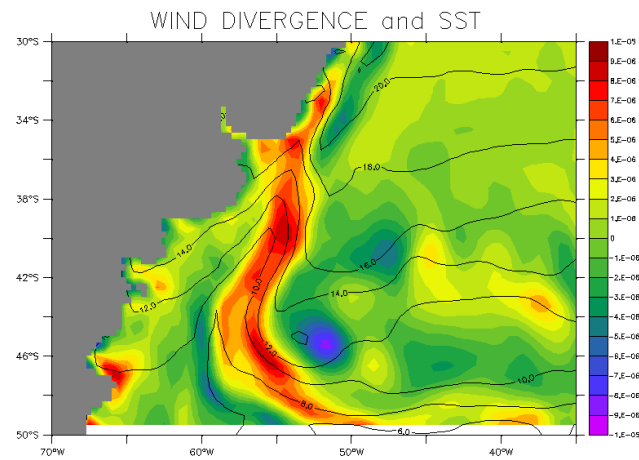
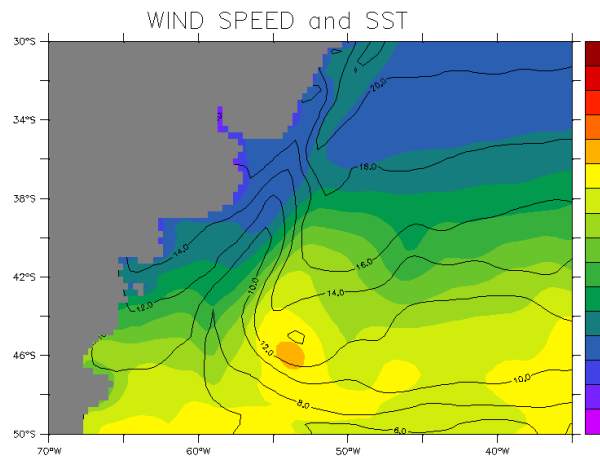


ICTP: Conferencias internacionales, workshops y seminarios



Gracias :)

Interacción océano- atmósfera en la Confluencia Brasil-Malvinas



Interacción océano- atmósfera en el Sistema de Agulhas

