The POGO related plan in China during 2011-2015

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Indian Ocean
The summer Dry/Flood pattern of China is controlled by Asia Monsoon.
Indian Ocean plays a key role in the onset of Asia Monsoon
Research Moored Array for African–Asian–Australian Monsoon Analysis and Prediction (RAMA)

November 2009

Solid=existing, open=planned

Japan (2000)
India (2000)
USA/India (2004)
USA/Indonesia (2006)
USA/France (2007)
China/Indonesia (2007)
USA/ASCLME (2008)

中国投放
8-10 monitoring buoys in the IO should be maintained
Under the umbrella of IOC/WESTPAC, we launched a project “Responses of Marine Hazards to Climate change (ROSE)” in May 2008, and for 10 years.
How the mid-latitude affects the tropical IO
The role of air-sea interaction in the onset of Monsoon
How the southern Ocean affects the mid-latitude
Prediction of Asia Monsoon
Key basic research project (973) by MOST during 2010-2014
Sothern Ocean and northern Atlantic
AMO Observed and Modeled: PC1

Ting et al, 2009, Journal of Climate
Global Ocean Surface Regressions
(Huang et al, 2010)
More than 100 ARGOS+ARGO in Southern Ocean are needed, and maybe Buoys
More than 10 monitoring buoys will be maintained in the Northwest Pacific.
Training activities on ocean dynamics and climate
On 11 May 2010, a signing ceremony was held during the Eighth Intergovernmental Session of UNESCO/IOC Sub-Commission for the Western Pacific (WESTPAC-VIII) in Bali, Indonesia, on the establishment of the first UNESC/IOC Regional Training and Research Center on Ocean Dynamics and Climate (ODC)
Each year, the center will organize a training course on ODC.

The first training course will be during June 10-16, 2011 in Qingdao China. Ten leading scientists on ocean models are invited as lecturers. They are from US, Europe, Japan, Australia and China.
At last, our institute would like to cooperate with all of you in the development of ocean circulation models and climate models.

By including the surface wave in ocean circulation models, such as POM, MOM4, ROMS, HIM, all models show dramatic improvement in the simulation of the upper mixed layer. Then the climate models of CCSM3 (NCAR, USA) and FGCM0 (IAP, China) also show much improvement.

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Exp1: CCSM3 without wave, Exp2: with wave
Thanks for your attention
NPOCE (the Northwestern Pacific Ocean Circulation and Climate Experiment)