POSTER ABSTRACTS

Theme 1:
Operational Oceanography:
Past, Present, and Future

Activity of CLIVAR-GSOP and its contribution to the GODAE OceanView community

Fujii, Yosuke[1], Storto, Andrea[2], Jayne, Steven[3] [1]JMA/MRI, Tsukuba, Japan [2]CMRE, La Spezia, Italy [3]WHOI, Woods Hole, USA yfujii@mri-jma.go.jp

Global Synthesis and Observations Panel (GSOP) is a global panel of CLIVAR, and responsible for the definition and promotion of CLIVARs overall global needs for sustained ocean observations, and advancement and evaluation of synthesis of ocean observations based on numerical ocean models and data assimilation techniques, including methodological research uptake and development of new climate-related validation metrics. GSOP has been leading the Ocean Reanalysis Intercomparison Project (ORA-IP) under the collaboration with GODAE OceanView (GOV). The project offered a good opportunity to assess the consistency among state-of-the-art data assimilation products, to evaluate their advances along time, and to identify the problems that are common among systems or specific to some of them. GSOP also supports the International Real-Time Ocean Reanalysis Intercomparison (RT-ORA-IP) project, mainly led by NCEP and Australian BoM. RT-ORA-IP regularly provides information on the status of the tropical Pacific observing system as well as reliable near-real time ocean fields useful for ENSO monitoring. GSOP also supports gathering quality-controlled historical ocean observation profiles in the International Quality-Controlled Ocean Database (IQuOD) project. GSOP contributes to establish data archives including ocean reanalysis data (e.g., NASA CREATE-ORA, Ocean Synthesis/Reanalysis Directory by University of Hamburg). An overview of all the activities performed under the auspices of GSOP will be provided here.

Keywords: Evolution - Enhancing community collaboration (observations, modelling, operations, users), Evolution - International and intergovernmental collaboration, Systems - Ocean reanalysis, Observations - International ocean observation projects (e.g. YOPP, TPOS2020, etc.), Systems - Ocean product distribution/dissemination and accessibility

Presenter:
Yosuke Fujii
JMA/MRI
Tsukuba, Japan
yfujii@mri-jma.go.jp

A regional weather, wind wave, and storm surge forecast system

Zavala-Hidalgo, Jorge[1], Gómez-Ramos, Octavio[1], Zavala-Romero, Olmo[1], Romero-Centeno, Rosario[1], Pedraza-Díaz, Angélica[1], López-Espinoza, Erika Danaé[1], Arellano-Guerrero, Fernando [1], Robles-Muñoz, Daniel[1], Osorio-Tia, Ma. Elena[1], Díaz-García, Ovel[1], Ruiz-Angulo, Ángel[1], Pierard-Manzano, Claudio Marcelo[1], Hernández-Vargas, Gisell[1], Calva-Chávez, Miriam Alin[1], Herrera-Moro, Dulce[1], Oropeza-Alfaro, Pavel Ernesto[1], Cruz-Santiago, Pedro Damian[1], Zazueta-García, Ixchel Stephanie[1], Gutiérrez-Valdez, Vladimir Mijail Aaron[1], Medina-Peña, Rául [1], Pantoja-Ortiz, Samantha[1]
[1]Centro de Ciencias de la Atmósfera, UNAM, Mexico City, México jzavala@atmosfera.unam.mx

A regional forecast system that includes meteorology, wind waves, and storm surge, and an uncertainty and alert system was developed.

This project was developed in order to improve the quality of the forecast. It includes different postprocessed products presented in a friendly visualization web site. The system was implemented based on the Weather, Research, and Forecasting model, the Wave Watch III model, and the ADCIRC model for meteorology, waves, and storm surge respectively. It generates graphs with alerts based on a climatology and threshold values that are represented in maps and time series and it is completely automatized, running every day, by scrips developed at home.

Keywords: Applications - Coastal protection, Applications - Disaster & risk management, Applications - Oil & gas industries, Applications - Search and rescue, Applications - Insurances

Presenter:
Jorge Zavala-Hidalgo
Centro de Ciencias de la Atmósfera, UNAM
Mexico City, México
jzavala@atmosfera.unam.mx