

# Geoscience WG update PRAGMA 21

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# Overview

- GEO Grid lead by AIST
- 3D GIS Taiwan Platform & Applications by NARL
- Development of location based service by NARL
- GEO Infra & Application by VAST
- Ocean simulation and Environment Informatorium by NECTEC

# GEO Grid

- NCHC & SDSC provided some resources for GEO Grid Disaster response after 311 Earthquake
- Disaster area monitoring service
- Workshop: Asia GEO Grid Initiative project for federating flux and satellite data (Discussion includes other data e.g. lake and coral reef)
- Demo: Visualization of GEO Science Data on TDW using SAGE Adapter
- Plan for redesigning architecture etc. (Call for Participants)

# 3D GIS Taiwan Platform & Applications

- Developed “World Wind Watershed” Web 3d GIS system for dedicated typhoon/precipitation and inundation model simulations and display in a 3D GIS Watershed.
- Developed virtualization of data servers for WMS Cloud service.
- Using Formosat-2 satellite image to produce 3d animation in surrounding areas of Fukushima nuclear power plants after Japan 311 earthquake .
- 3D GIS Taiwan project (2009-2011) will be ended this year, and followed up with a 4-year NARL multidisciplinary project, the Disaster Prevention Cloud Management .

# Location Based Service Development

- Making LBS as part of sensor network infrastructure
- Application in bridge monitoring & warning system

# VAST GEO Infra & Application

- Planing to develop infrastructure for data storage and computing: Climate change adaptation in Mekong area
- Weather simulation in Grid computing environment: WRF4G

# Ocean Simulation

Hydrodynamics modeling using FVCOM code



# Environment Informatorium

- One-stop portal for environment observation data (flexible, automatic)
- GEO Grid data, SEA-START climate change data, Thai irrigation and marine agencies,
- Portal being tested; expected to finish by end of October



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