INTEGRATED OCEAN OBSERVING SYSTEM

IOOS RA DMAC Workshop
CeNCOOS Briefing

Steven Le

IOOS®

CeNCOOS

Central & Northern California Ocean Observing System

Integrating marine observations to inform decision makers and the general public

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CeNCOOS Data Portal

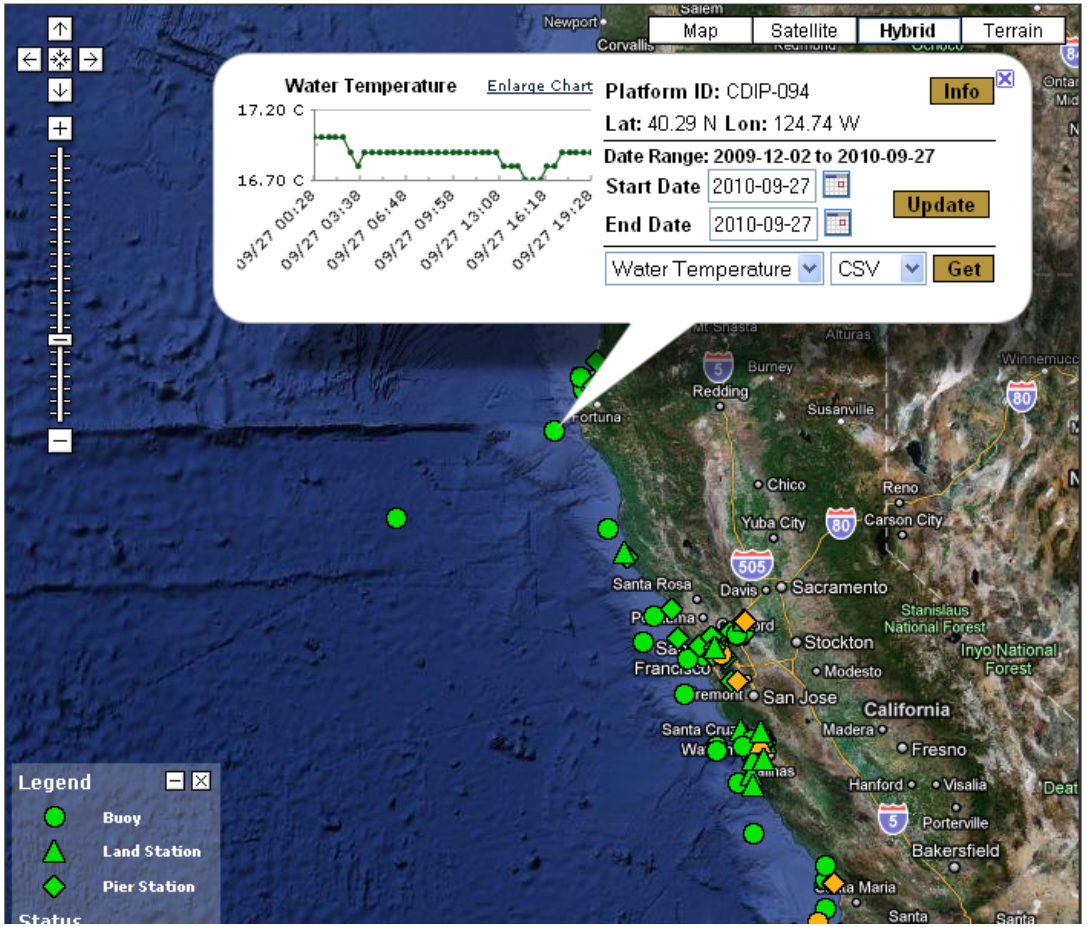
Region
-All-

IOOS Variables
-All-

Station Id Search
Go
Reset

Hide Station List
Click Row To View Data

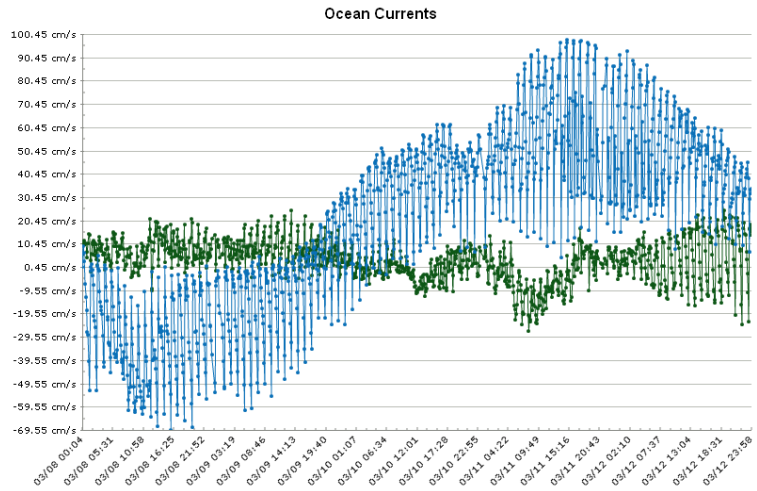
Organization	ID
BML	bml
BML	fpt
CALPOLY	bm1
CALPOLY	cpxc1
CDIP	029
CDIP	071
CDIP	076
CDIP	094
CDIP	128
CDIP	142
CDIP	156
CDIP	157
CDIP	158
CDIP	168
CO-OPS	9411406
CO-OPS	9412110

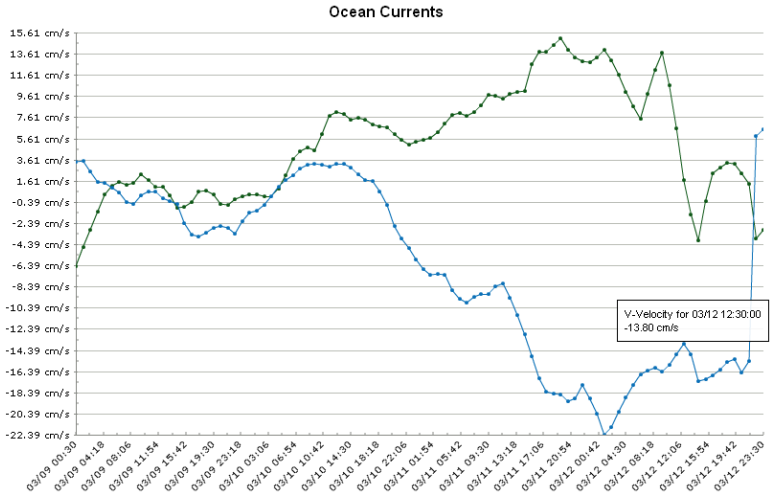


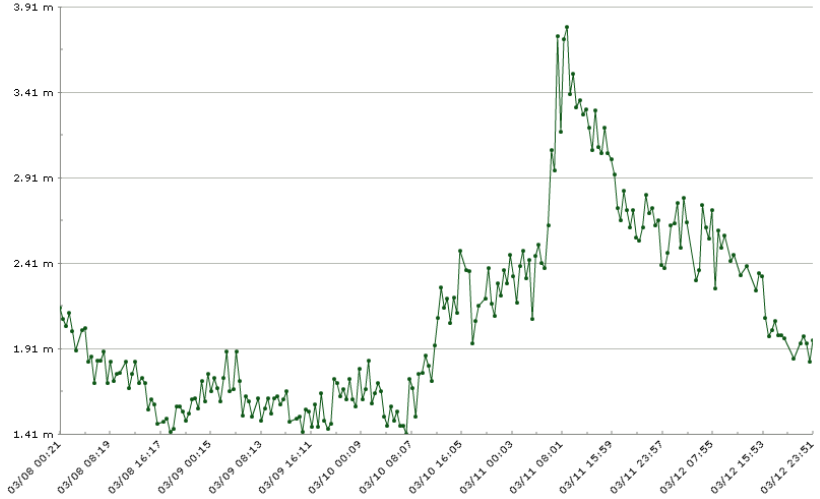
CeNCOOS Data Portal

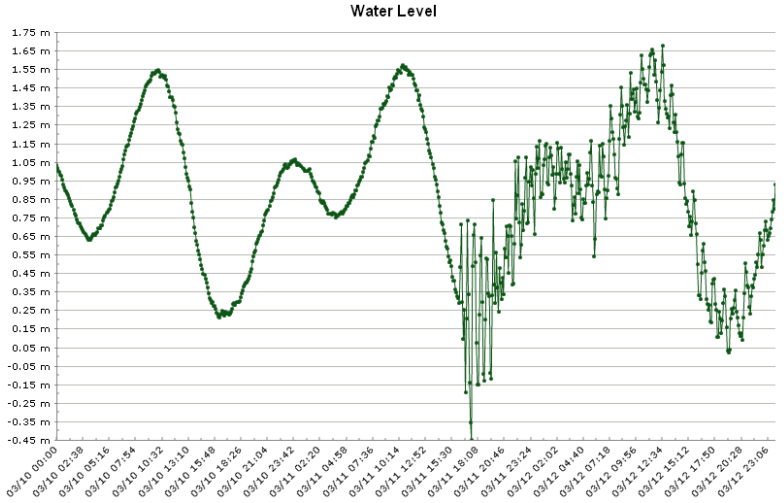
- Currently 125 stations/platforms including 222 sensors, including:
  - 79 Buoys
  - 33 Pier stations
  - 13 Land stations
- Coastal water area covered
  - South boundary: Point Concepcion
  - North boundary: Border line with Oregon state
  - 300 kms outward from shoreline

Japan Tsunami

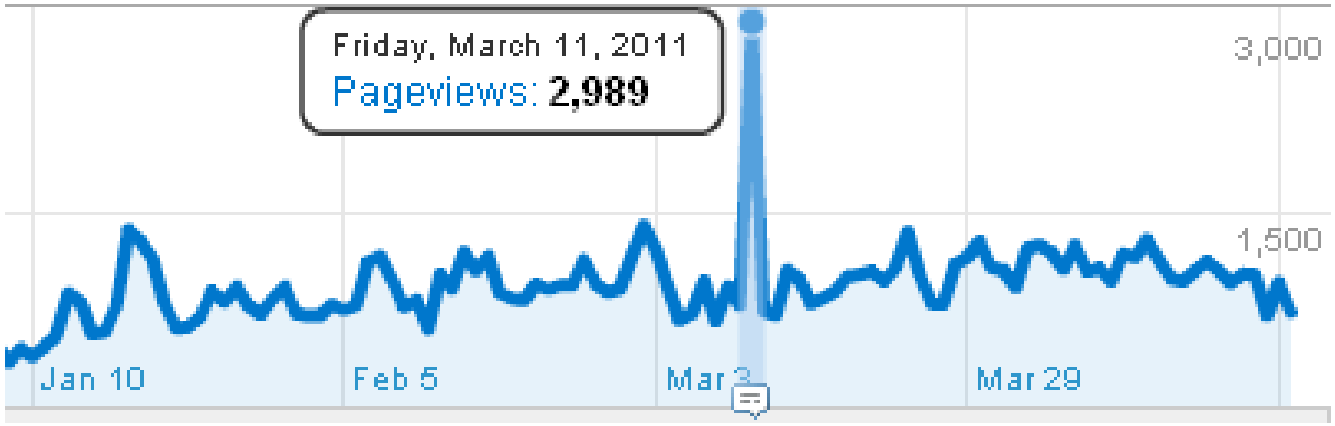








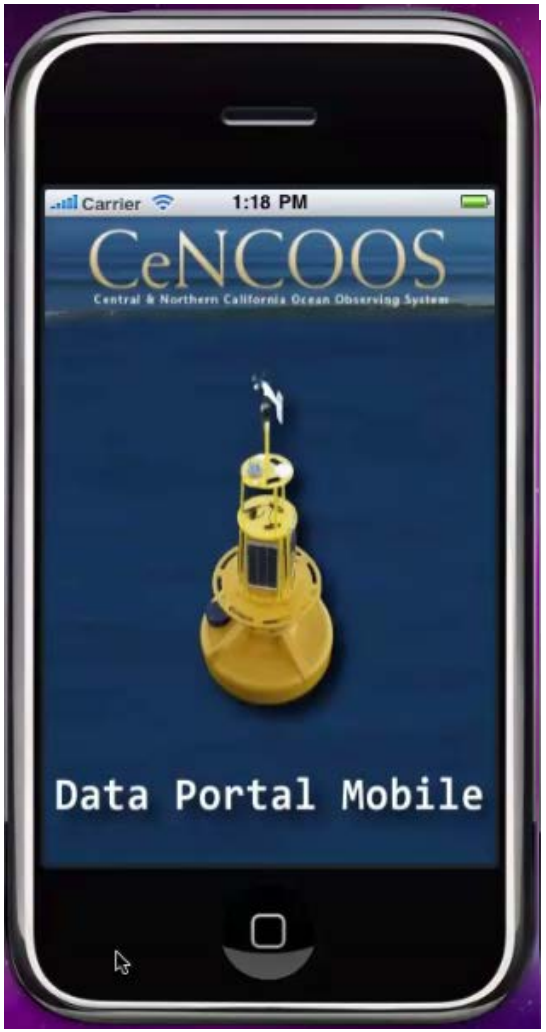
Activity Status



Smart Phone Application

- CeNCOOS Data Portal on mobile smart phones
  - Runs on iPhone, iPod Touch, iPad
  - App to be ported to Android devices and other smart phones
- Similar geo-based capabilities
  - Map GUI
  - Data viewing
  - Data charts
- Features:
  - User “Favorite” stations or bookmarks
  - Screenshot saves
  - Downloadable from iTunes
- Infrastructure building for phone data is a good investment for future mobile device apps
- It’s in Alpha testing right now

CeNCOOS iPhone App



SOS Client Application

- “Light” Java application
- Enabling machine-to-machine communication
- SOS protocol for data transport
- Data subscription for automated data retrieval
- Portable – independent of OS platforms
- User options:
  - Subscribing to data of interest only
  - Setting data retrieval frequency
  - Determining local folder for storage
  - Selecting a data type (CSV, TSV, XML, & JSON)
  - Plotting data on graph

IOOS RA Data Management Priorities

- List priorities for next 12 months
  - More in-situ data (shore and MET stations)
  - New IOOS core variables (Air temperature, sea water electrical conductivity, air pressure at sea level)
  - Glider data & visualization
  - Geo based portal integration
    - HF Radar
    - Webcam
    - Satellite images
    - Model outputs
  - Adding other regional variables

IOOS RA Data Management Priorities

- List priorities for next 12 months (cont'd)
  - Android app and other smart phones
  - SOS client app enhancement
  - Long-term hosting of server & data
  - Data QA/QC
  - Data archive
  - Adding historical data
  - MyCeNCOOS – user customized view & access

IOOS RA Data Management Challenges

- What are the challenges to implementing IOOS DMAC data standards, services, and functions?
  - Resource constraints
    - Operational burden increases which eats up your budget. Adding more features, more support and operational burden
  - DMAC vs. app development

How can the IOOS Office Assist your RA?

- List 3 ways that IOOS Office could help facilitate DMAC advances in your RA?
  - What about the other non-core IOOS variables?
  - QA/QC – an **interoperable** way of ensuring data quality
  - Continue pushing IOOS standards