IOOS RA DMAC Workshop Briefing Guidance Document

Southern California Coastal Ocean Observing System
(SCCOOS)

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INTEGRATED OCEAN OBSERVING SYSTEM

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IOOS RA Data Management Activities

- List up to 3 projects/activities in your RA that would be valuable in sharing.
    - Harmful Algal Bloom Partnership (SCCOOS & CeNCOOS -> + NANOOS (tbd))
        - Species type and methodology
        - Data format, reporting, listserv, and visualization
    - Water Quality: U.S./Mexico Beach Water Quality (SCCOOS & NOAA)
        - Merge trajectories from hf radar derived surface currents with alongshore currents from wave model to produce more accurate flow from contamination sources (TJ River, San Antonio de Los Buenos, South Bay Ocean Outfall)
    - Water Quality: Ocean Outfalls and Areas of Special Biological Significance (SCCOOS, CeNCOOS & State Water Resources Control Board)
        - Evaluation of exposure to nearby sources (e.g. River Inlets) based on HF radar derived surface currents.
        - Potential near real-time trajectories to view source influence
        - Reduce formatting conversion for Nonpoint Source Discharge Elimination System (NPDES) Permit (SWAMP – ambient waters; CIWQS – effluent; CEDEN – all water quality) => all different…
    - Ocean Acidification (SCCOOS, CeNCOOS, NANOOS*)
        - West Coast Inventory

HABs: SCCOOS and CeNCOOS

support habmap.info

U.S./Mexico Border Beach Water Quality

http://www.sccoos.org/data/track

PUNTA BANDERA – PLUME MODELING

INTERMITTENT SIGNAL – APPROXIMATELY 10% OVER 4 YEARS.
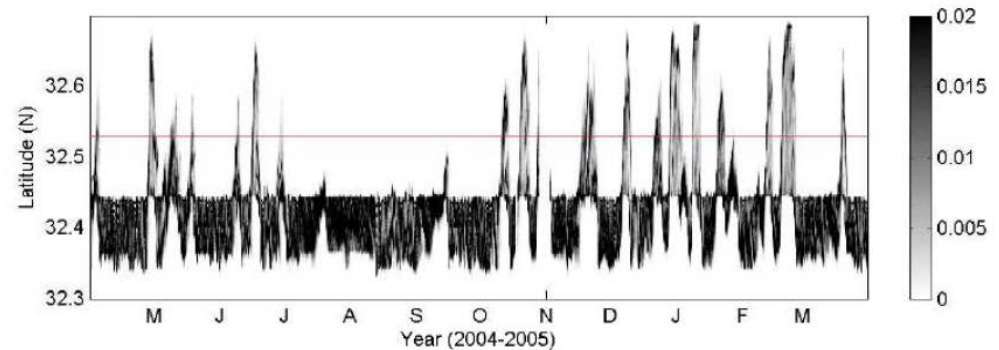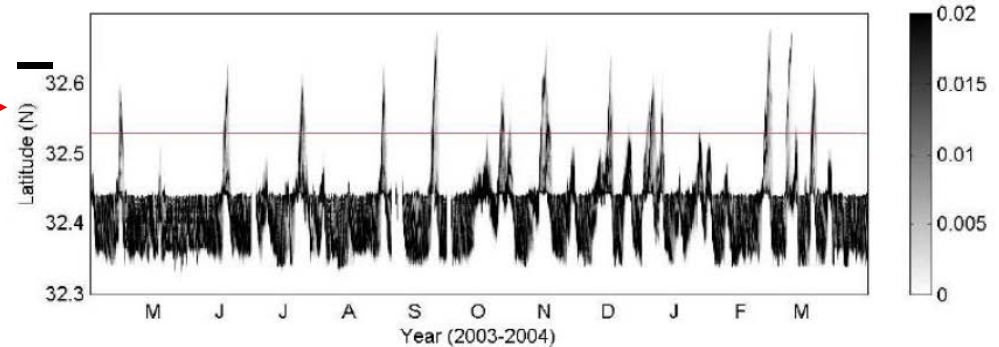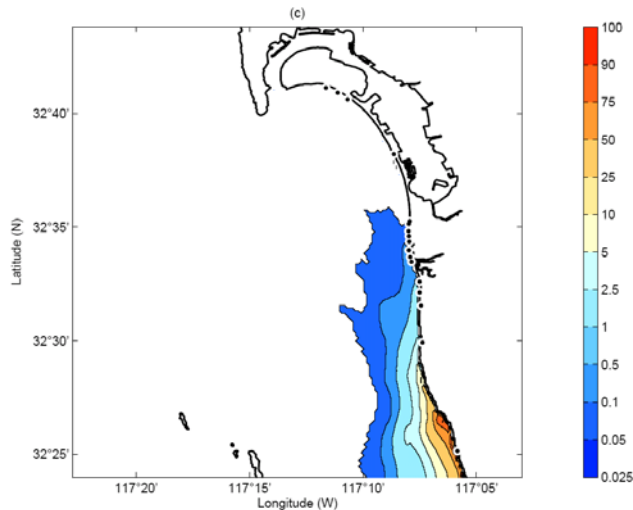
Figure 3: Concentration of the particles in latitude based on random walk model. 50 particles are released at every hour, and each particle has 3 days life time. extended border line (red line)

Along-Coast plume potential modeled for 4 years.

Water Quality
Areas of Special Biological Significance

3 day lifetime used to
replicate efficacy of FIB

ASBS: TRAJ : 2008 03 10 17:00 (PDT) [1]
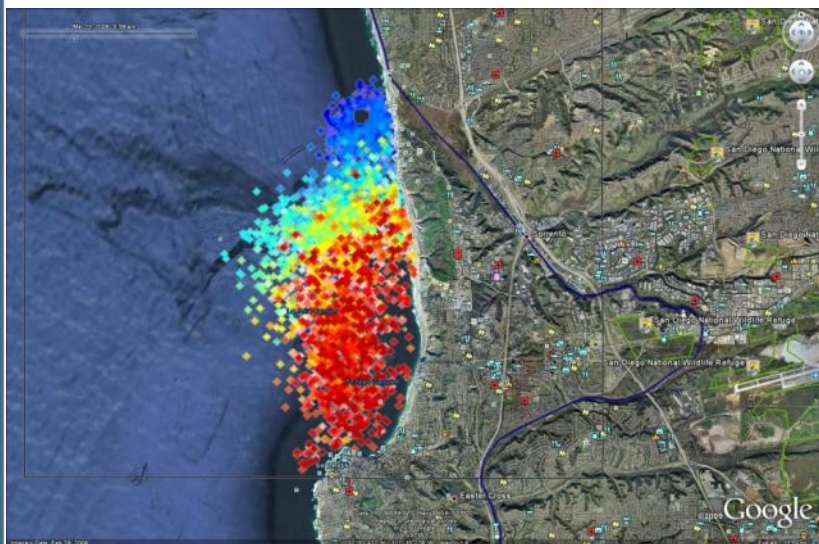
Eric Terrill, Director,
Coastal Observing R&D Center (CORDC)
cordc.ucsd.edu
Technical Director, SCCOOS sccoos.org
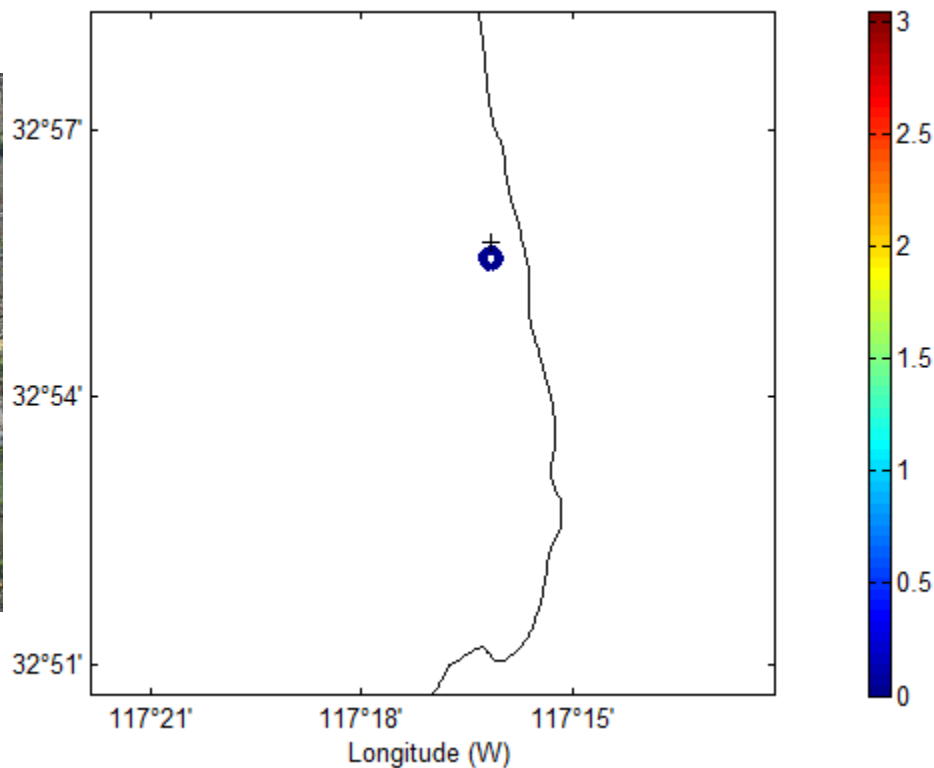
Trajectories from Los Penasquitos
River Inlet. 5-day discharge.

Water Quality
Areas of Special Biological Significance

**Tijuana River Estuary plume
exposure probability map**

Water Quality: Ocean Outfalls

Real-time tracking: Los Angeles Hyperion sewage outfall diversion

Asset Map and Visualization: Orange County Sanitation District
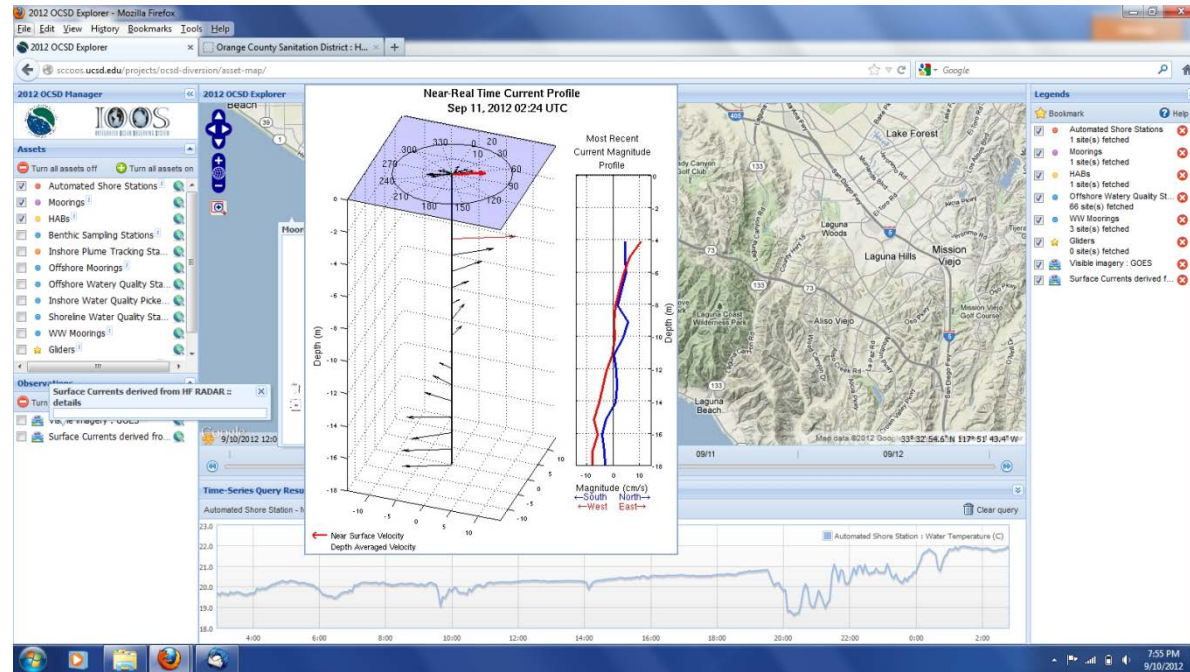
IOOS RA Data Management Priorities

- List priorities for next 12 months
  - Maintenance and Support Product Development
    - **Maintain existing data feeds / visualizations**
    - Extend SCCOOS HAB visualization and support California HABMAP
    - Implement MARACOOS Asset Map for Sewage Outfall Diversion Support
    - Support NPDES permit submission for ASBS
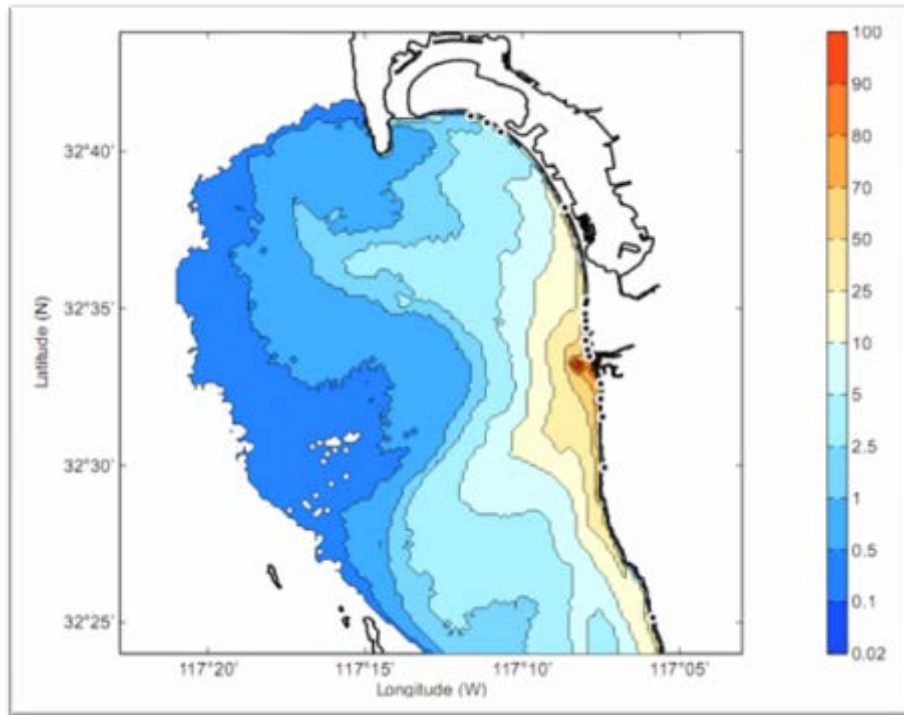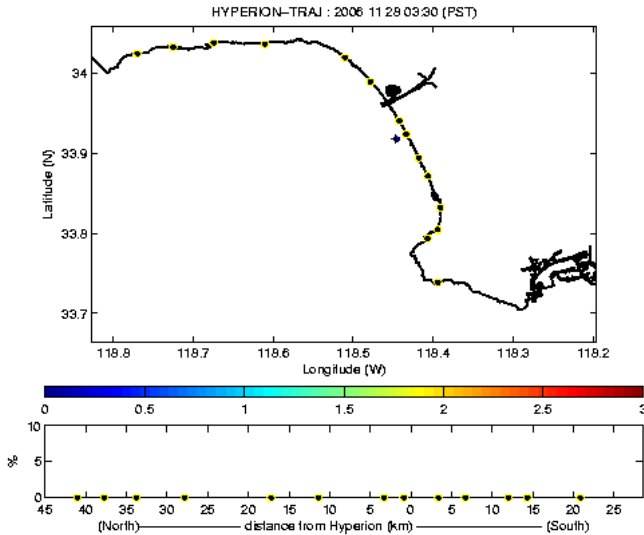   - Automated and manual shore stations (NetCDF and THREDDS)
  - Re-organization of website "About Section"
    - Partnerships, Documents, Acknowledgements
  - Proper acknowledgement of data feed/products
  - Implement Content Management System & Code Repository

  Needed:
  - Review of data feeds and backend
  - Data dictionary
  - Metadata
  - Alert systems for when datafeeds/products go offline

IOOS RA Data Management Challenges

- What are your challenges to implementing IOOS DMAC data standards, services, and functions?
  - Staffing (1.3 FTE programmer (and .3 DMAC Coordinator) *not full-time SCCOOS RA DMAC*
  - Funding (additional funding for products and support not standards, services, and functions)
  - Incomplete knowledge of metadata
  - Inconsistent standards between data types
  - Complex data types or non standardization

How can the IOOS Office Assist your RA?

- List 4 ways that IOOS Office could help facilitate DMAC advances in your RA?

1.) Draft liability language for all Regional Associations

2.) Support feedback on Asset Map visualization
- qty. 2+ Y-axis timeseries on plot
- support for alternate backend

3.) Continue to highlight most advanced/successful data management practices
- Services, Metadata, Vocabularies

4.) Continue to support collaboration and communications

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