



WebGIS Application of Ocean State Forecast for E & P Operations

**Training on
Operational Oceanography, Marine Meteorology & Operational Ocean
Forecasting, Warning and Advisory Services for offshore E & P industries
(DG HC)**

at ITCOcean, INCOIS, Hyderabad

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Overview

- Introduction
- Technology used
- Data & Layers
- Mockups
- Live Demo
- Q & A

- »» The WebGIS Application of Ocean State Forecast for E & P Operations links, the available Ocean State Forecast Products with WebGIS capabilities to analyze, visualize the Ocean State Forecast Information.
- »» Prototype has been designed & developed by INCOIS to fulfill the requirements.

»» Thredds Data Server (4.6.11)

- Web server that provides metadata and data access for scientific datasets
- Supports Web Map Service (WMS), OPeNDAP, HTTP, Netcdf Subset Service
- Open Source
- Java 1.7+, Tomcat 7+

»» Leaflet 1.5

- Open-source JavaScript library for interactive maps
- Light Weight with plugin support
- Supports WMS, GeoJSON

»» Map Services

- INCOIS GIS Web Map Services
- GEBCO WMS Service

Shape Files & Web Map Services

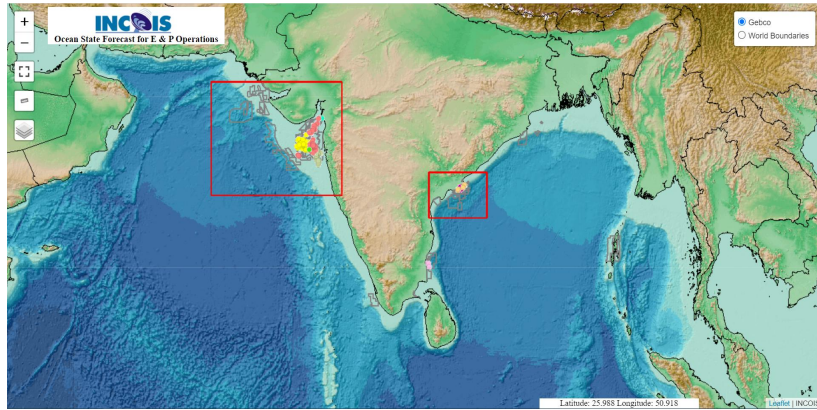
- ☒ Sectors
- ☒ Zones
- ☒ Nomination Blocks
- ☒ NELP Blocks
- ☒ HELP Blocks I-V
- ☒ DSF Blocks
- ☒ Locations
- ☒ RAVVA Oil & Gas Field
- ☒ PY-1 & PY-3
- ☒ NEELAM Heera Asset Western Offshore, ONGC
- ☒ MUMBAI High Asset Western Offshore, ONGC
- ☒ KG-DWN-98-3 Eastern Offshore
- ☒ Hazira Offshore
- ☒ EOA & HPHT Asset Eastern Offshore, ONGC
- ☒ B & S Asset Western Offshore, ONGC
- ☒ B-80_MOPU

GeoJSON, Shape Files &

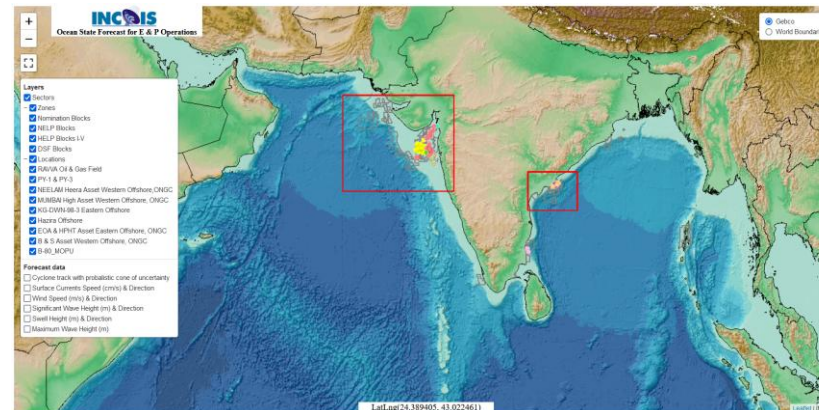
NetCDF

Forecast data

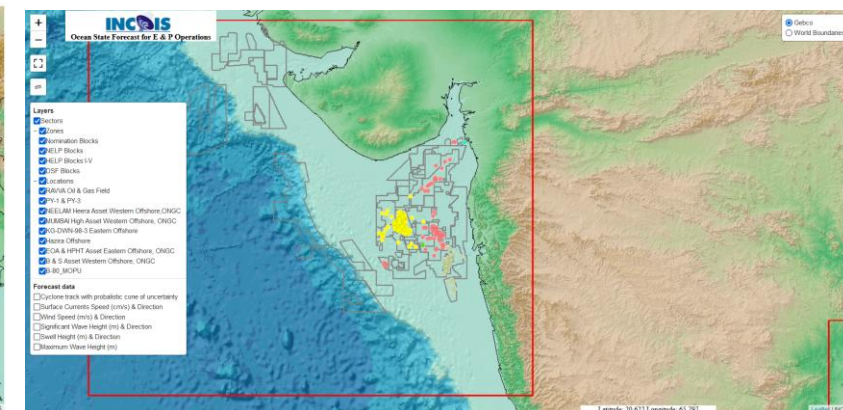
- ☐ Cyclone track with probabilistic cone of uncertainty
- ☐ Surface Currents Speed (cm/s) & Direction
- ☐ Wind Speed (m/s) & Direction
- ☐ Significant Wave Height (m) & Direction
- ☐ Swell Height (m) & Direction
- ☐ Maximum Wave Height (m)



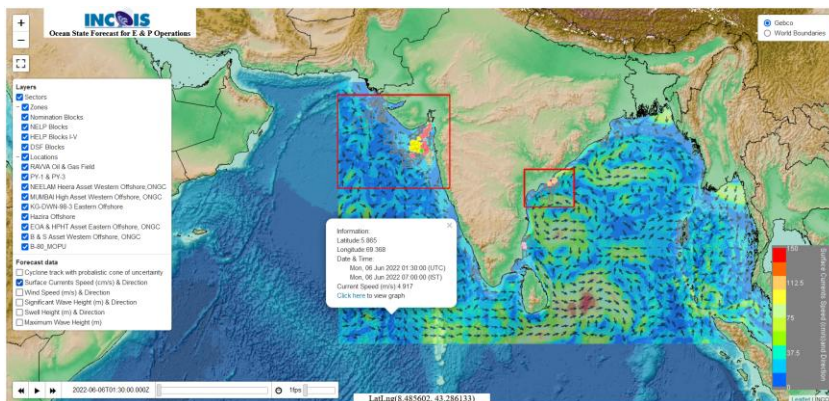
GIS Mapping Tools



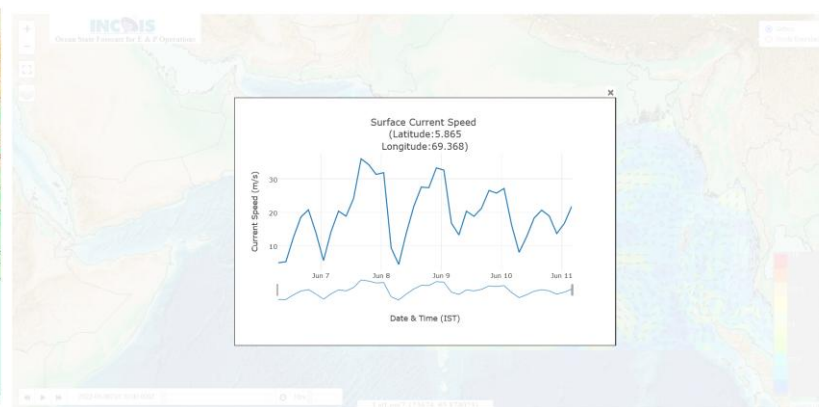
Layers Listing



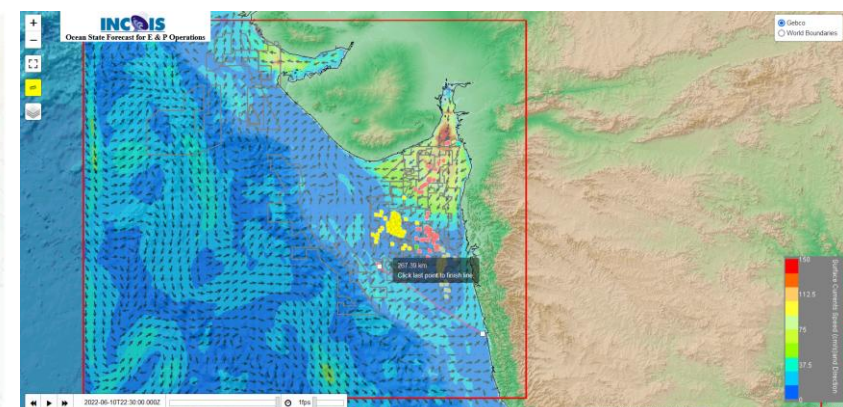
Zoomed View



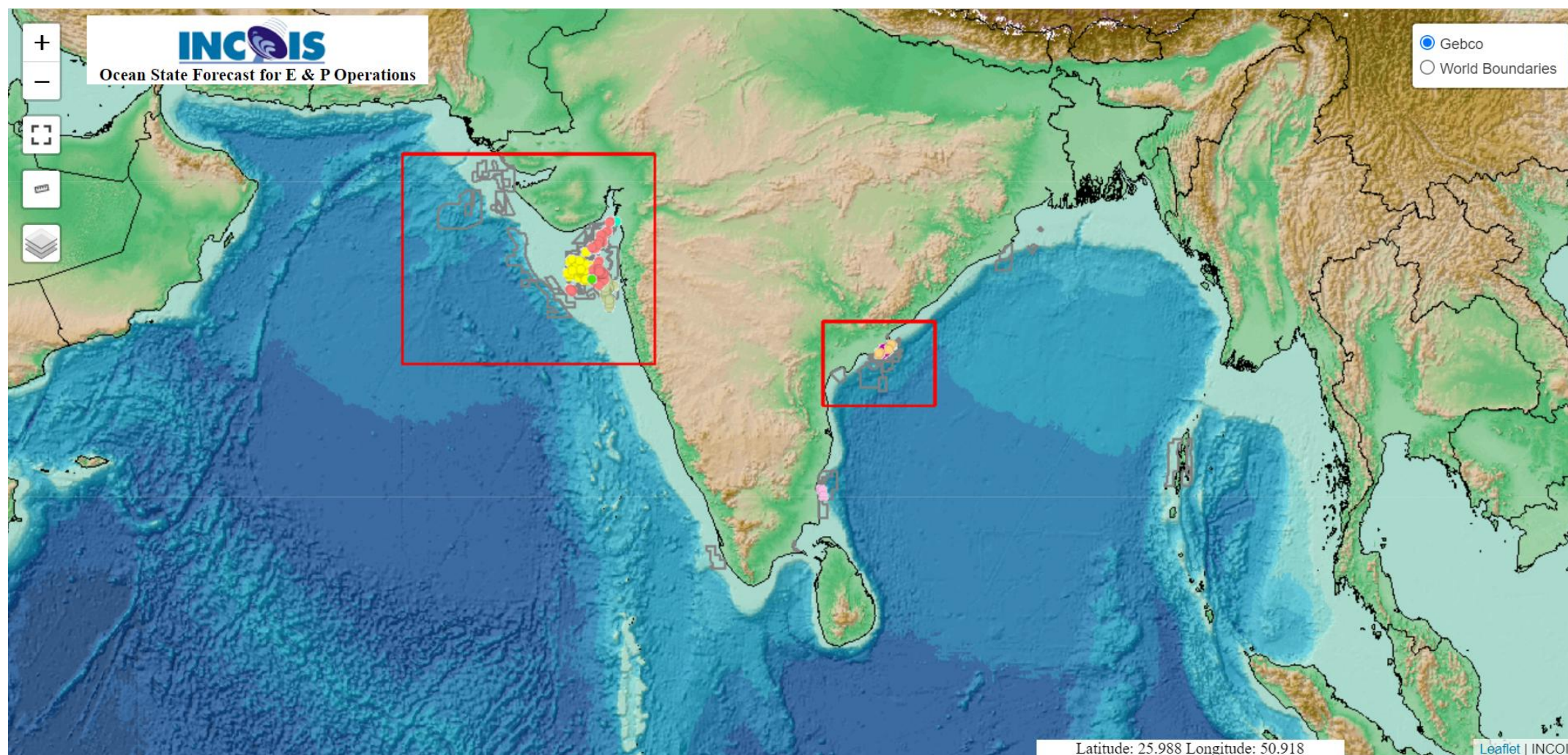
Data Visualization & Animations



Data Plots

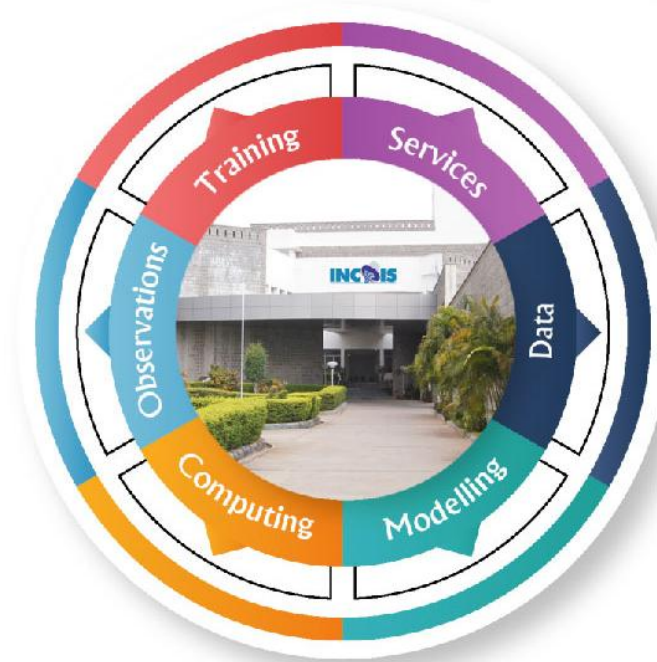


Distance Measure



<https://incois.gov.in/DGH/index2.html>

Ocean information at your fingertips



**Thank you for your kind
attention!!**

Q & A