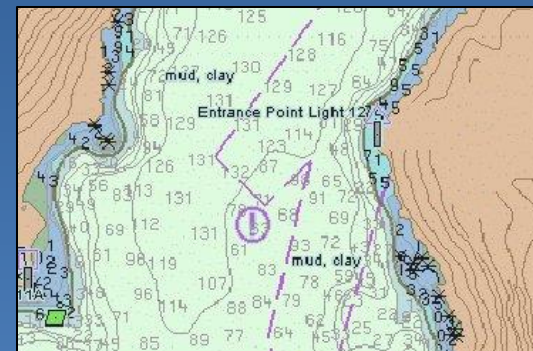




S-100 Weather Overlay Project

- Integrate meteorological and oceanographic information into Electronic Chart and Navigation Display Systems (ECDIS)
- ECDIS integrates critical information into a single display: radar, GPS, ship identification, etc.
- S-100: a new transfer standard being developed by the IHO to replace current electronic charting standards
- S-100 will incorporate more flexibility, including informational overlays





Project History

- **2009** – WMO intern collected weather objects & attributes
- **October 2012** – OPC began Feature Catalog development
- **April 2013** – Draft Feature Catalog completed by OPC
- **July 2013**– First ETMSS review period started
- **December 2013**– 2nd review period started, included Product Specification review
- **End of February 2014** – End of review period
- **April to May 2014** – Final draft of Feature Catalog completed, send to ETMSS (AOP Milestone satisfied)



Current Involvement

- **National Weather Service Headquarters** – Office of Climate Weather & Water Services
 - Tim Rulon (ETMSS member)
- **Ocean Prediction Center:** GIS focal points
 - LT Christy Schultz (Tech. Operations Coordinator, NOAA Corps)
 - James Kells (marine forecaster)
 - Tim Collins (marine forecaster)
- **Office of Coast Survey** - Marine Charting Division
 - Julia Powell (technical expert)
- **ESRI:**
 - Jeff Donze (government contract liaison)
 - Dan Zimble (technical expert)
- **Brazil:** LTC Cesar Reinert Bulhoes de Moraes (international visitor/collaborator – Science Without Borders program)



WMO Met-Ocean Feature Catalog & S-101 Development

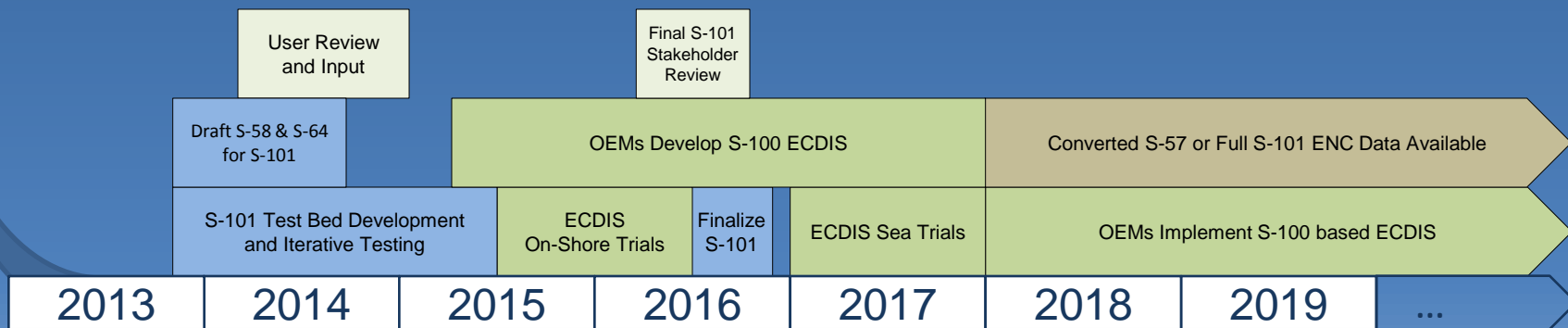
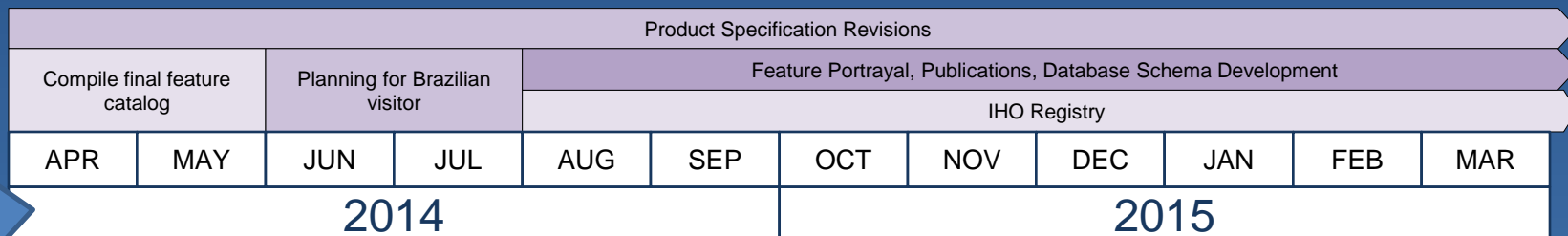


Responsible Party

NWS

ETMSS

Private
Industry



Responsible Party

Stakeholders

HOs

OEMs

TSMAD

S-101 Draft Version

Update S-57 to S-101 Converter and Make Sample S-101 Data Available for Review

Draft S-58 & S-64 for S-101 Available

IEC 61174 PAS made available

Sample S-101 Data made Available

Update S-57 to S-101 Converter

HSSC Approves S-101

Member States Approve S-101

Release S-101 for Operational Use

Retire S-57 and S-52



Future Work/Project Challenges

Responsible Party
NWS
ETMSS
Private Industry

Product Specification Revisions											
Compile final feature catalog		Planning for Brazilian visitor		Visualization & Database Schema Development							
				IHO Registry							
APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR
2014						2015					

Future Work:

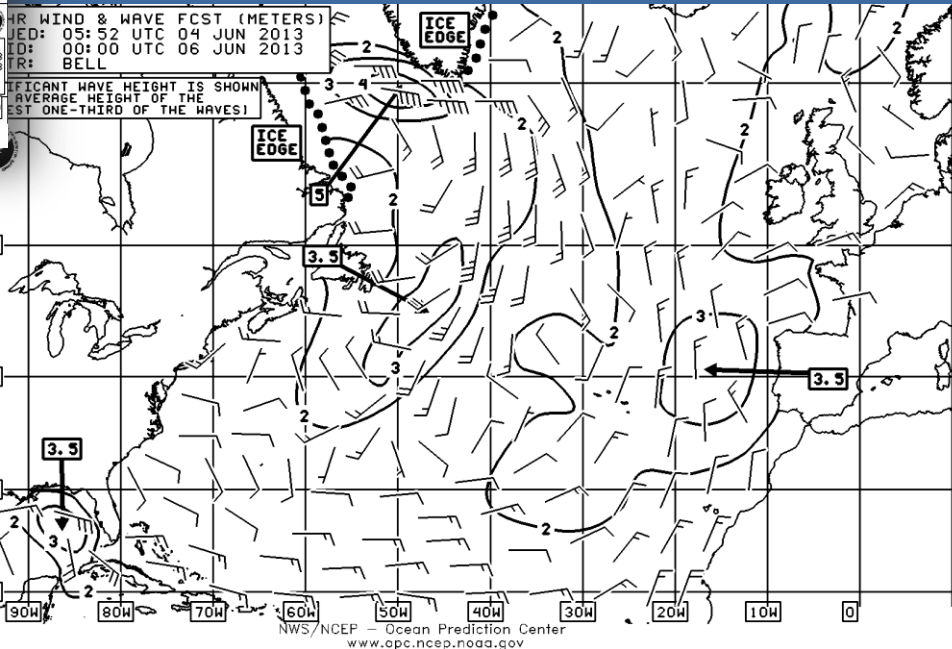
- **August – November 2014** – Brazilian Visitor (portrayal catalog, articles, IHO registry?)
- **May/June 2015** – Project management turnover
- **November -?** – Workflow development, testing

Challenges:

- **IHO Registry** - Requires WMO/ETMSS representative, IHO TSMAD approving body imminent restructuring
- **Industry Collaboration**
- **OPC workflow development/data testing**



48 Hour Wind/Wave Forecast



Surface Analysis