S-41X Product Specifications

Project Scopes

S-411: Dynamic Ice Information

Dynamic Ice Information provides visual portrayals and messages to the maritime community to notify them of the local ice analyses and forecasts in their area of operations, in accordance with WMO No. 558/471/574, IMO Resolutions and SOLAS Convention. The information will include ranges of ice concentration, the extent of sea and lake ice, and the locations/concentrations of icebergs. This is supplementary dynamic information to support the static information contained in S-101.

S-412: Marine Weather Warnings

Marine Weather Warnings are in the form of polygons depicting areas where wind, wave, and ice accretion are ongoing or predicted to meet WMO Pub. No. 558/471, IMO Resolutions and SOLAS Convention established criteria within a defined period of time. Polygon warning portrayals will provide ample warnings of adverse weather along a vessel's route. For coastal and offshore waters, warning polygons may also be provided for near gale force winds, thunderstorms/squall events, and reduced visibility, also based on WMO Pub. 558.

S-413: Marine Weather Conditions

Weather and Wave Conditions includes synoptic meteorological and oceanographic anaylsis and forecast in graphical and gridded forms. Graphical portrayals will illustrate the locations of various weather systems over the oceans, including frontal systems, cyclonic low pressure systems, and regions of high barometric pressures. Gridded data of winds, waves, visibility, etc. will also be available in Hierarchical Data Format 5 (HDF5). This product specification provides polygons and gridded information beyond the warning period as defined in S-412. S-413 should be in accordance with WMO No 702 (Guide to Wave Analysis and Forecasting) and WMO No. 485 (Manual on the WMO Integrated Processing and Prediction System).

S-414: Marine Weather Observations

Weather and Wave Observations will include measured conditions from a variety of in situ and remote observational sources. S-414 should be in accordance with WMO No. 8 (Guide to Instruments and Methods of Observation)