SeaSonde Combine Suite Existing License Upgrade from Basic to Extended Version

CODAR Product Code: SSDP-CS-UPEX

Description:

SSDP-CS-UPEX is the upgrade of an existing (previously purchased) SeaSonde Combine Suite basic license to Extended Version so that it can interact with up to 24 SeaSonde Remote Units. No hardware is included.

Output Data Product Specifications:

Surface Currents: Maps of 2D surface currents created from data taken at two or more radar sites, using data from up to 24 SeaSonde Remote Units
Map Displays: color monitor screen, archived ASCII vector files
Map Spatial Resolution: (vectors on grid) user configurable; 200m x 200m up to 12 km x 12 km typical spacing
Map Area Coverage: user configurable; typical minimum 20-50 km alongshore x 20-30 km offshore or greater
Map temporal interval: user configurable; minimum 15 minutes, typical 1 hour

Combine Site Software Suite††:

Application.	*Function.*
Sentinel	real-time startup. log status events. track applications.
AnalyzeCurrents	real-time script to process radials and ellipticals into total current vectors.
CheckForRadials	determines which newly transferred radials and ellipticals need to be processed.
RadialsToCurrents	combine radial and elliptical vectors into total current vectors.
TotalArchiver	finalize total current vectors into output LonLatUV format with much metadata.
Archivalist	archive output data and diagnostics on site to manage disk space to help with data retrieval.
SeaDisplaySetup	create a customized coastline site map.
FileExchange	suite of scripts and tools for real-time transfer of data (typically radials, waves and diagnostics) from the remote radial sites using Timbuktu® (IP or Modem) or ssh over IP.

Data Display Tools. Data at all levels can be displayed on plots controlled by simple graphical user interfaces. For example, raw or averaged cross spectra can be plotted in 3D color form or as time-series/spectral curves. Wave data have several formats for display. Radial and total current-vector map algorithms include coastlines and bathymetry contours, with several full-color options for vector and uncertainty displays. The latter tools also permit easy creation of movies over time, and vector density coverage distributions for diagnosis. Touching the screen with a mouse-click, for example, gives a numerical value for any vector or uncertainty at that point.
SeaDisplay. Plot total, radials and ellipticals over coastline site map. create and modify total vector grid. create image output. create movies over time.
Vector display software allowing statistical analyses of multiple current-map data sets and their errors that will compute statistics (i.e., means, root-mean-square differences, and standard deviations) over a period of time as user selects.
WaveDisplay is another useful application used to visualize wave data gathered by CODAR systems. WaveDisplay can plot wave time series from one range cell or multiple ranges in one display
Data Transfer Software & Protocols. Both the central site and radial/remote sites come equipped with several tools that facilitate scheduling and executing data transfers. Software (such as Timbuktu) delivered will also permit interactive control and transfers between any site to any location in the world. This software has been refined after many years and thousands of hours of use.
Movie making capability that allows users to make a movie of vector fields or radial velocity maps over any period for which data were observed.
Drift and trajectory calculation and plot display movies.
Tidal Analysis tool.

†† Many more useful utilities are included. Refer to operation manual for complete description of software features.