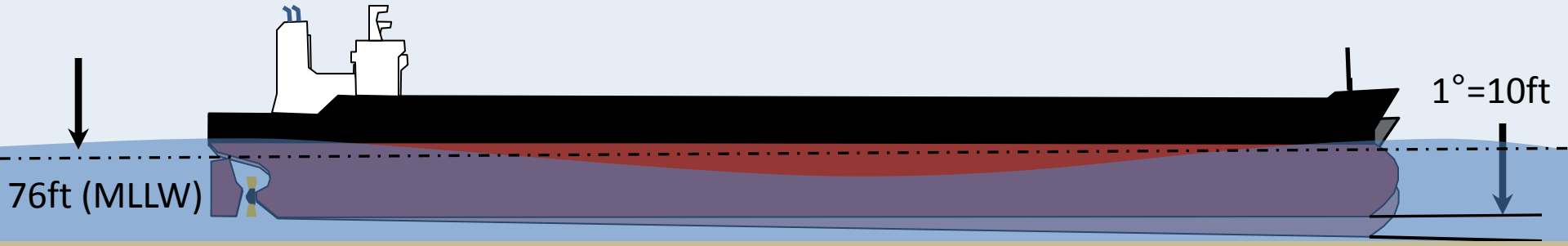
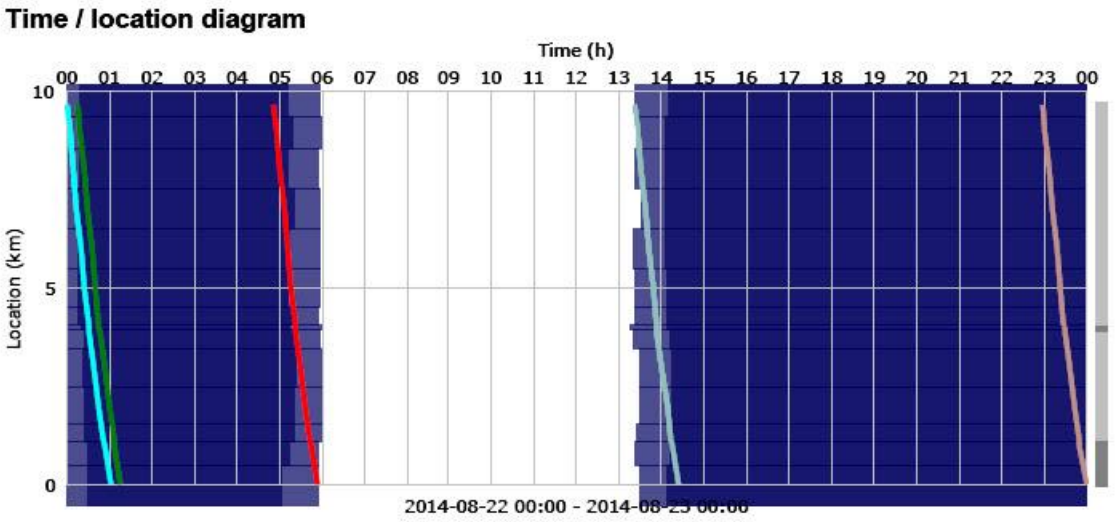
Precision Navigation

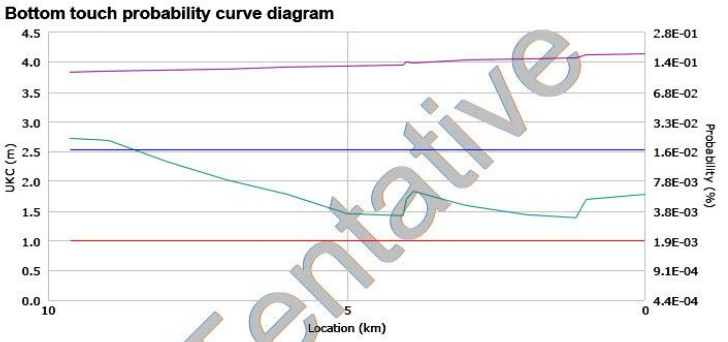
ttp://www.ted.com/talks/simon_sinek_how_great_leaders_inspire_action#t-281

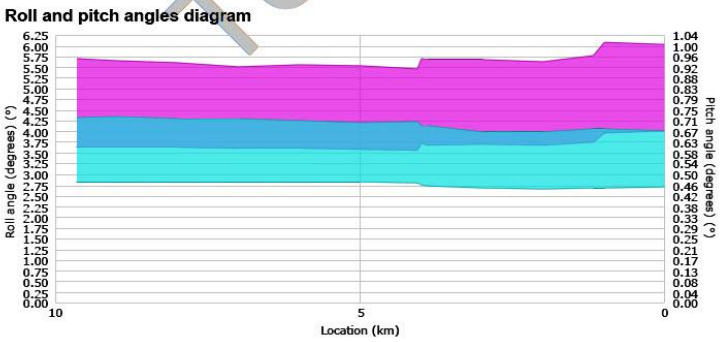

76ft (MLLW)
1°=10ft

Example of PROTIDE Output

- Multi page report
- All input data presented on 1st page
- 24 hour timeframe
- Wave, WL, and Current Time Series
- Safe Transit Windows and Table
- Anticipated Roll/Pitch graphic







Advice

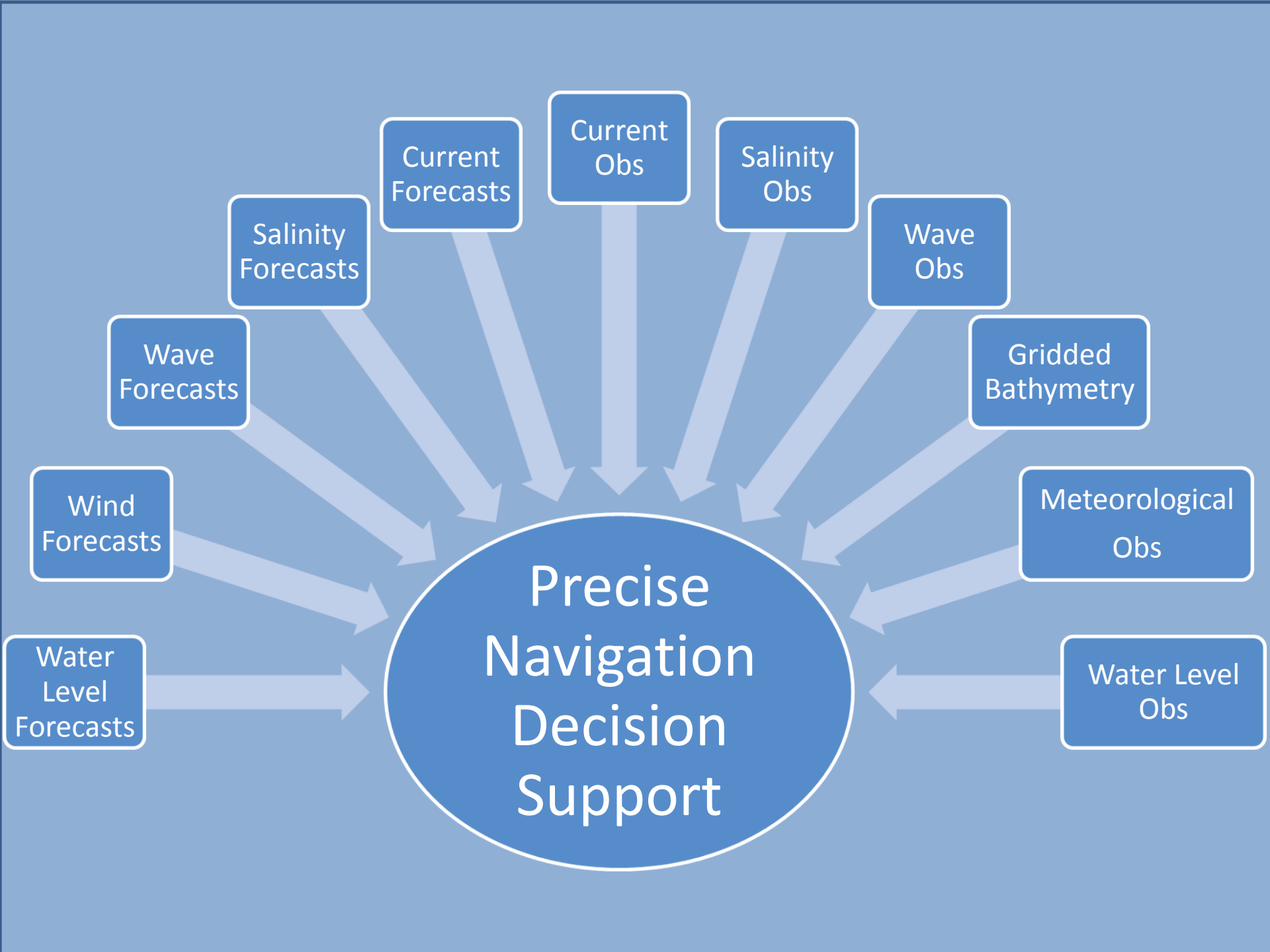
Location	Km	Open	Reference	Close
Outside breakwater	9.65	2014-08-22 00:00	2014-08-22 00:15	2014-08-22 04:52
Breakwater entrance	4.06	2014-08-22 00:30	2014-08-22 00:45	2014-08-22 05:22
Breakwater entrance	3.89	2014-08-22 00:31	2014-08-22 00:46	2014-08-22 05:23
Inside breakwater	1.17	2014-08-22 00:50	2014-08-22 01:05	2014-08-22 05:43
Harbor entrance	0	2014-08-22 01:01	2014-08-22 01:16	2014-08-22 05:53

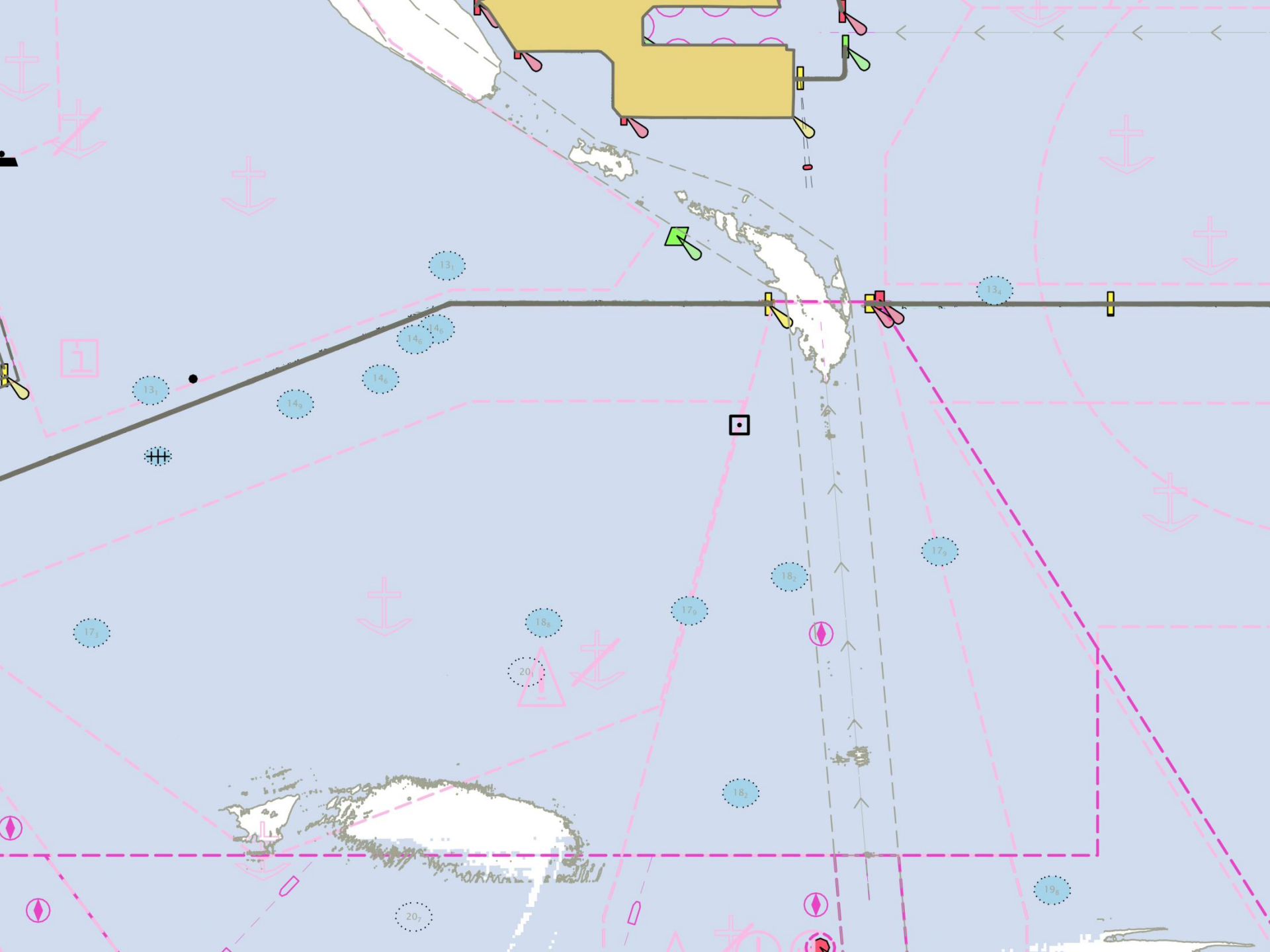
Statistics

Maximum bottom touch probability (upper bound of reliability)	1.8E-08
Mean under keel clearance	4.27 m
Mean under keel clearance with squat reduction	4.08 m
Wait time	00:15
Down time	34.54%

The “What”


High resolution bathymetry
Forecast Models
+ Real time Observations
Precision Navigation


Water Level Forecasts
Wind Forecasts
Wave Forecasts
Salinity Forecasts
Current Forecasts
Current Obs
Salinity Obs
Wave Obs
Gridded Bathymetry
Meteorological Obs
Water Level Obs
Precise Navigation Decision Support



The “How”

- Provide NOAA Data in standard, easily ingestible format.
- Provide “one-stop shop” for all NOAA Precision Navigation products.
- Provide statistical uncertainty for all observations and forecasts.
- Bathy & Feature Database is critical to flexible product maintenance and creation.

- Operationalize for 5 years
- Will be used in Pilot Mate (BAH)
- Wave Model Development
- Demo tool

Questions?

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