



## Fleet recruitment and management

We can recruit vessels of all types and sizes in the area of interest, supply them with appropriate loggers, and support them to keep them active.



## Data Collection Methods

A wide choice of data collection methods



Many 3rd party chart plotter, app and software products supported



Own range of data loggers



Satellite AIS

## Parameters Logged

### Calibration:

Transducer depth, GPS antenna and transducer positions, instrument models, ship parameters

### Standard Data

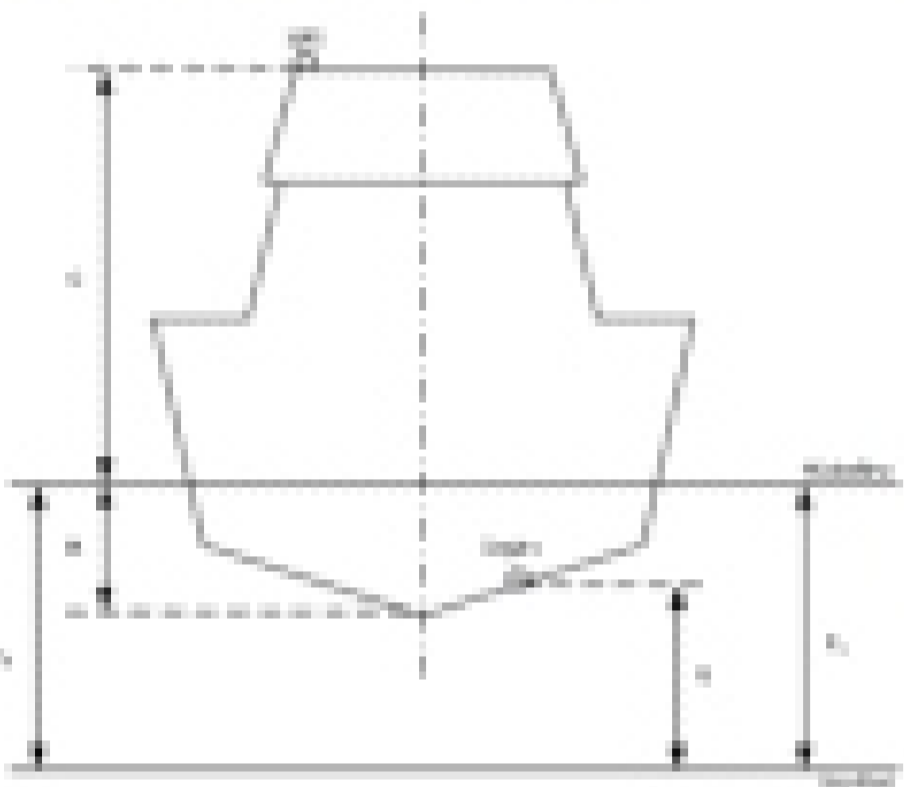
Date/time, position, heading/COG, depth

### Additional Data from Vessel Sensors

COG, SOG, compass and log -> Surface current  
Sea surface temperature  
Wind speed and direction

## Calibration

Basic dimensions



Hull parameters for squat

Draft on each voyage for cargo vessels



## Speed of Sound

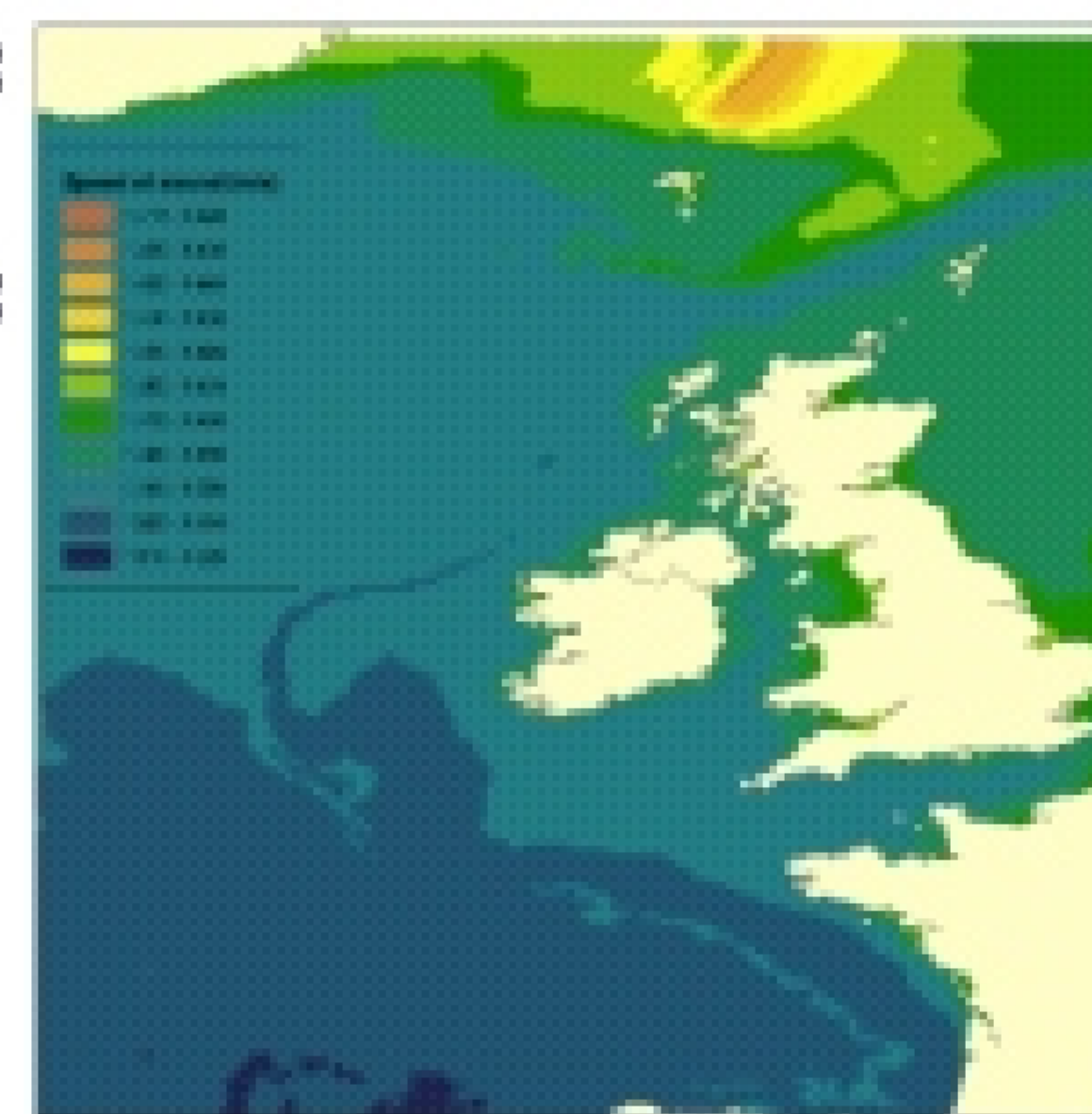
Depths > 1500m:

Carter's Tables

Depths < 1500m:

We have created a 1 degree global monthly speed of sound atlas.

Higher resolution monthly atlases are also created where data is available.

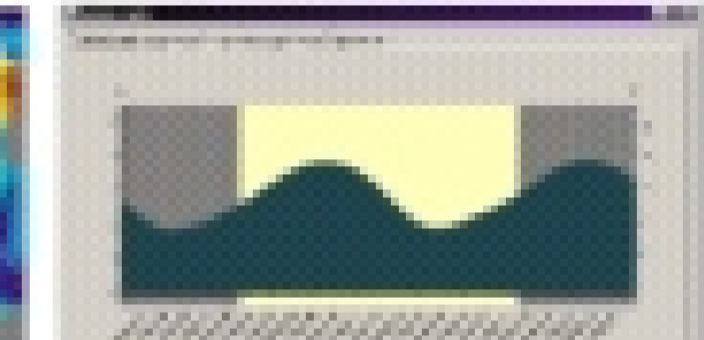
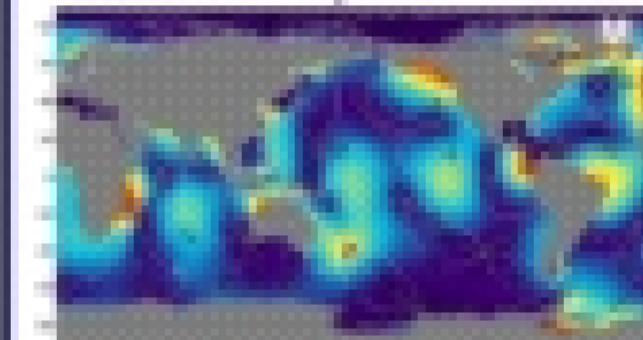


## Sea Level Corrections

### Tidal Predictions

Combination of two models

- TPX08 global gridded model, 1/6 resolution offshore, 1/30 resolution in many coastal areas
- Point predictions at coastal tide stations



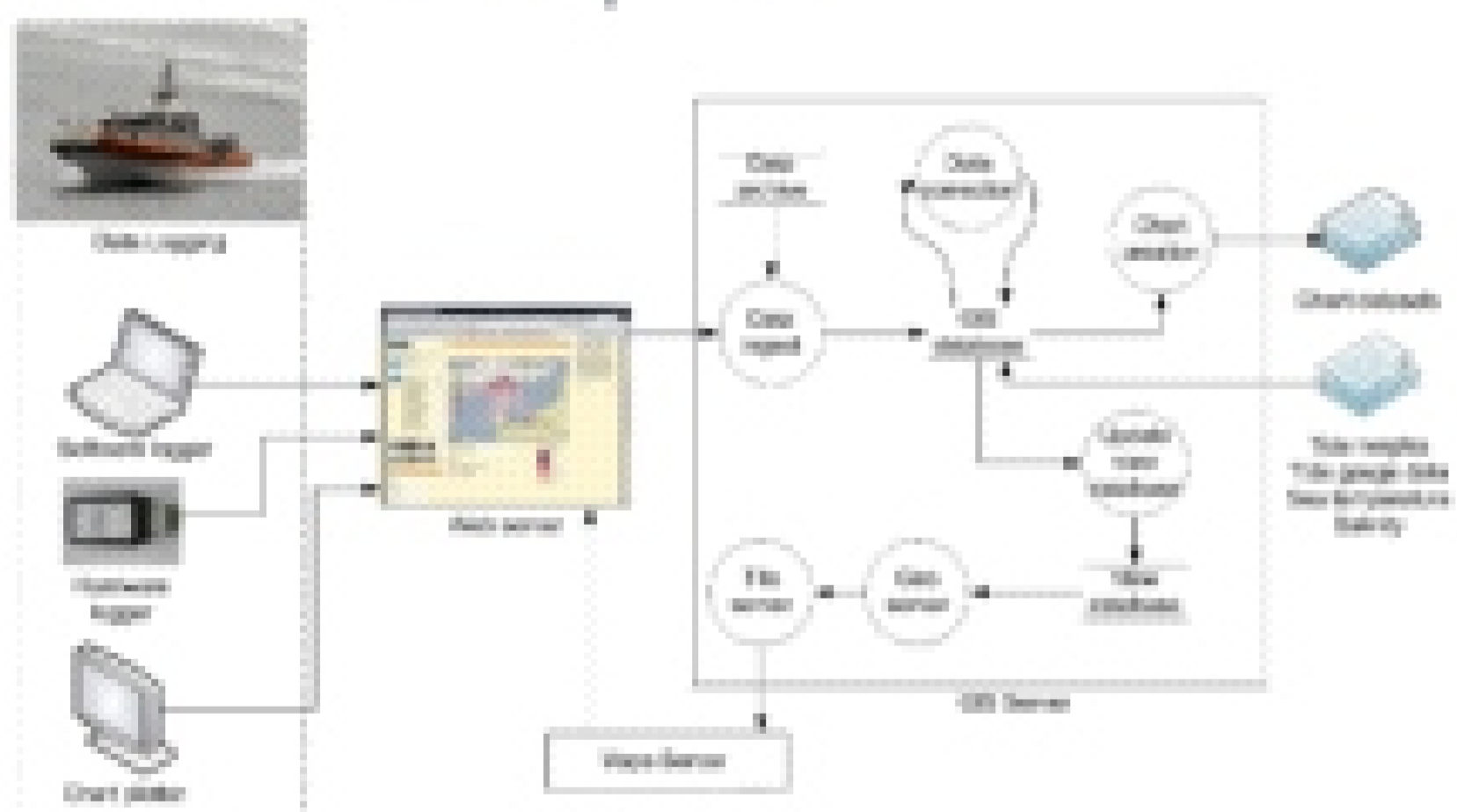
### Tide Gauges

Generate a residual from predicted data, often applied in arrears as seldom real time data

## Automated, Near Real Time Data Processing

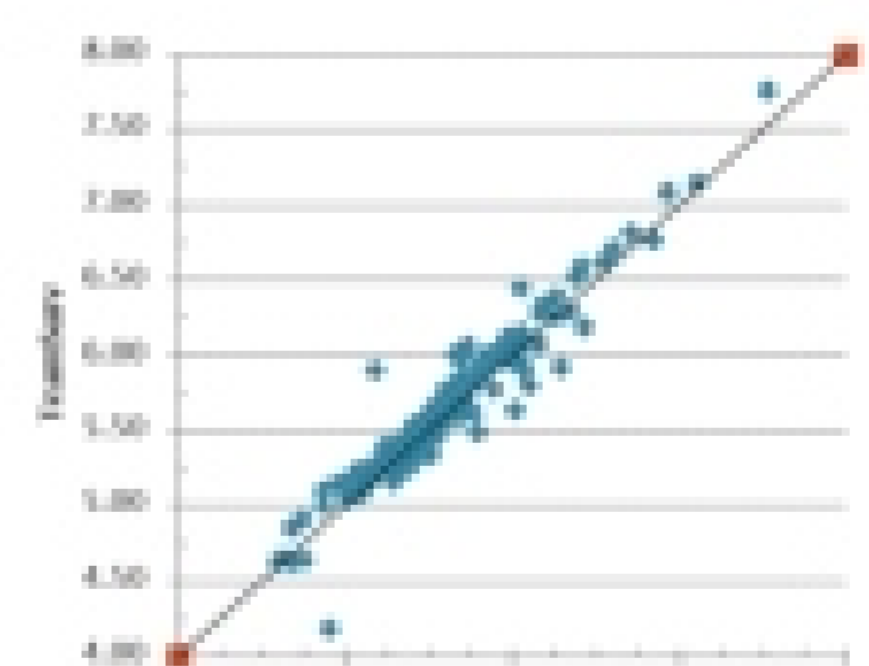
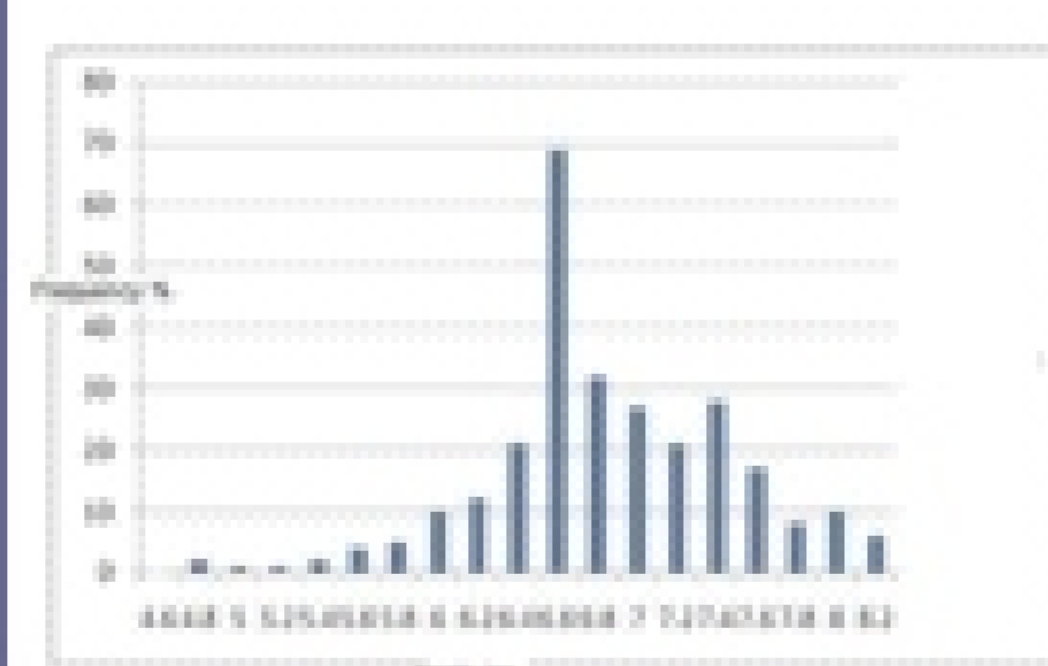
Track data incorporated in gridded product within 24 hours of upload.

Routine processing is fully automated, with no human interaction required.



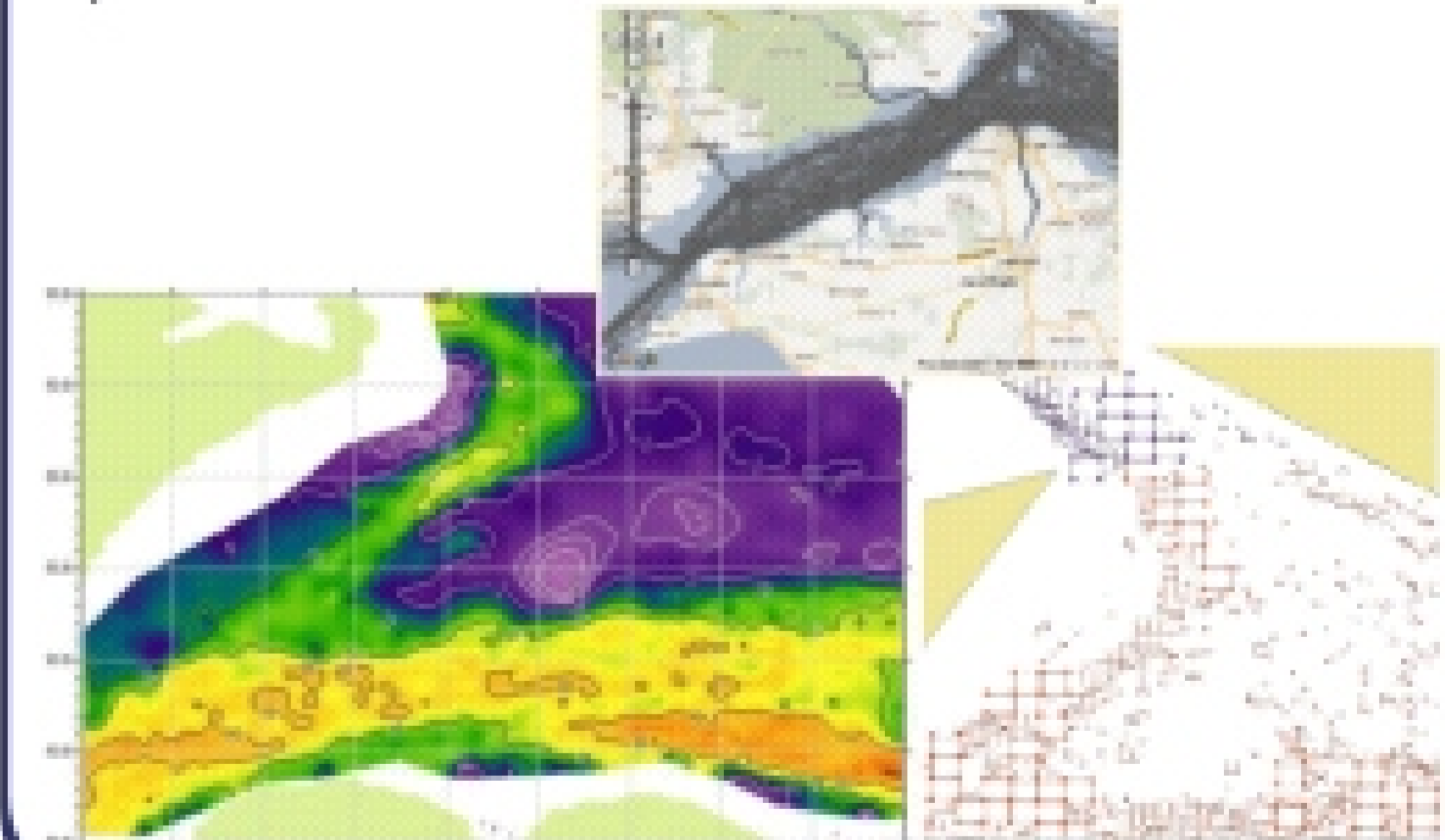
## Crowd Optimised Algorithms

Crowd sourced data is noisier, of highly variable sampling density, and has a non-normal distribution. We have developed algorithms to get the best output data sets, as well as to produce data quality metrics.



## Output Data

An adaptive grid is output due to the variable input data distribution and consistency.



## Capabilities

10 million seagoing vessels that could log data  
Depths to 100m for small craft or 2000m for ships  
TeamSurv can meet IHO S-44 Order 1b



Potential coverage and shipping tracks

## Applications

We see the key application areas as:

- Surveying of areas not critical for navigation
- Baseline survey tool for poorly surveyed areas, e.g. capacity building in developing countries
- Use in conjunction with satellite derived bathymetry
- Pre-survey tool for planning a professional single beam or multi beam survey
- Monitoring changes in the sea bed, e.g. underwater dunes, shifting channels, underwater pipeline and cable runs

## Integration with Satellite Derived Bathymetry

TeamSurv can provide ground truth data  
Each can fill in gaps in the other's coverage  
Overall extended depth range  
Base Platform H2020 project  
www.base-platform.com

