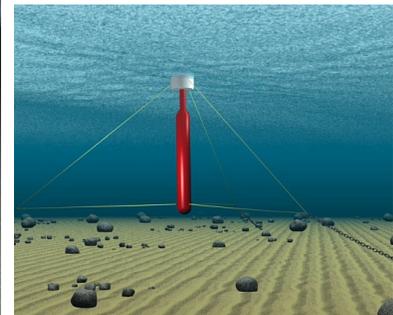
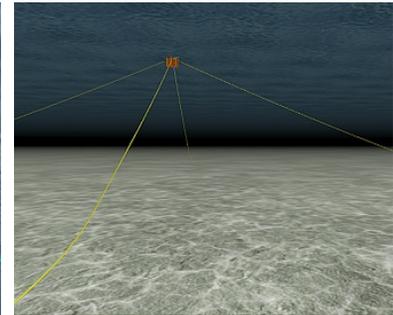
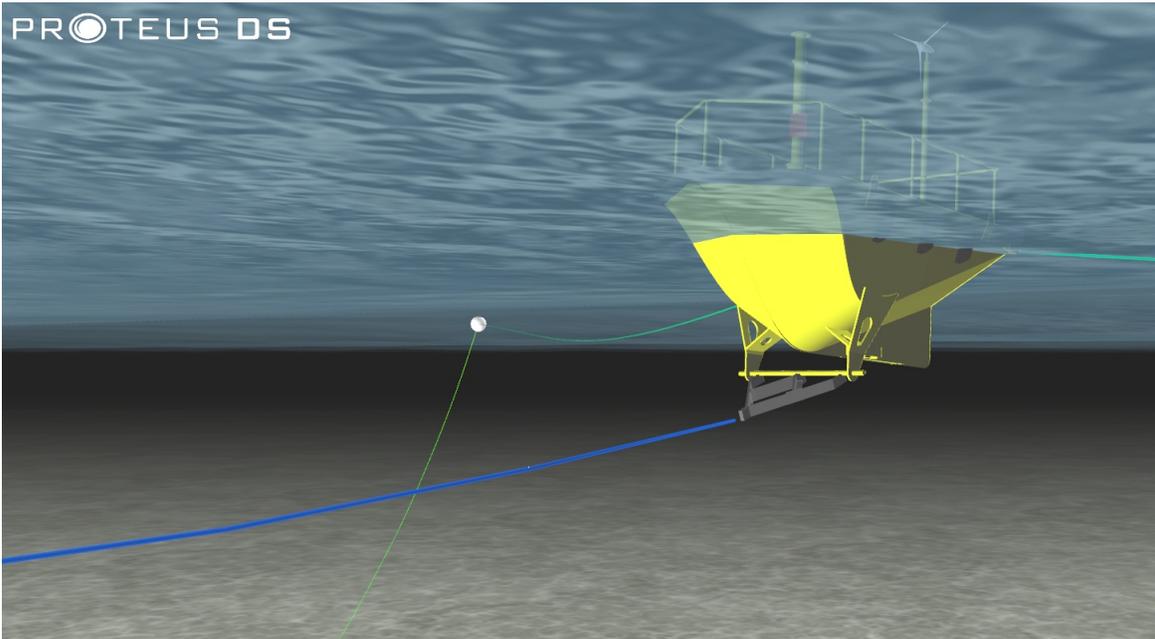


Mooring analysis and design

Complex systems require powerful analysis tools. DSA provides mooring analysis services and software built on experience.

PROTEUS DS



The Challenge

There are many variables to consider when completing mooring analysis and design:

- Water depth and bathymetry
- Current profiles and wave conditions
- Line materials and properties
- Drag / added mass properties
- Surface and subsurface platforms / buoyancy
- Watch circle diameter
- Mooring deflection
- Line tensions
- Dynamic loading

The consequences of not considering one of these variables can be expensive. DSA provides mooring analysis services and software tools to reduce the complexity and uncertainty of mooring analysis.

Services

DSA specializes in dynamic analysis of moorings using its software ProteusDS and ShipMo3D. DSA has completed a wide range of projects assessing and designing:

- Single leg moorings (surface and subsurface)
- Wave energy device moorings
- Tidal energy device moorings
- Fish farm / aquaculture moorings
- Multi-leg moorings
- Moorings for navigation aid buoys
- In-shore barge moorings

- Temporary vessel moorings
- Station keeping systems
- Cabled ferries
- Floating breakwaters
- Floating pipeline moorings
- Barges and docks

Software

For users looking to design and assess moorings, DSA offers the ProteusDS software application. ProteusDS is a time-domain simulation tool. Features include:

- Irregular and regular wave models
- Spectral wind models
- Finite-element line model
- 6 DOF rigid body model (platforms, ships, buoys)
- 3 DOF point mass model (floats, clump weights)
- Nonlinear and linear seabed contact model
- Powerful 3D post-processor
- Custom bathymetry import
- Parts and material library (line types, buoy sizes, etc)
- Integrated documentation / help
- Radiation / diffraction hydrodynamic database import
- Built-in primitive spheroid, cuboid, cylinder objects
- Batch queue management tool

ProteusDS is validated against model and theoretical data and tested frequently to ensure accurate and reliable performance.

For more information visit: <http://dsa-ltd.ca/software/ProteusDS>