

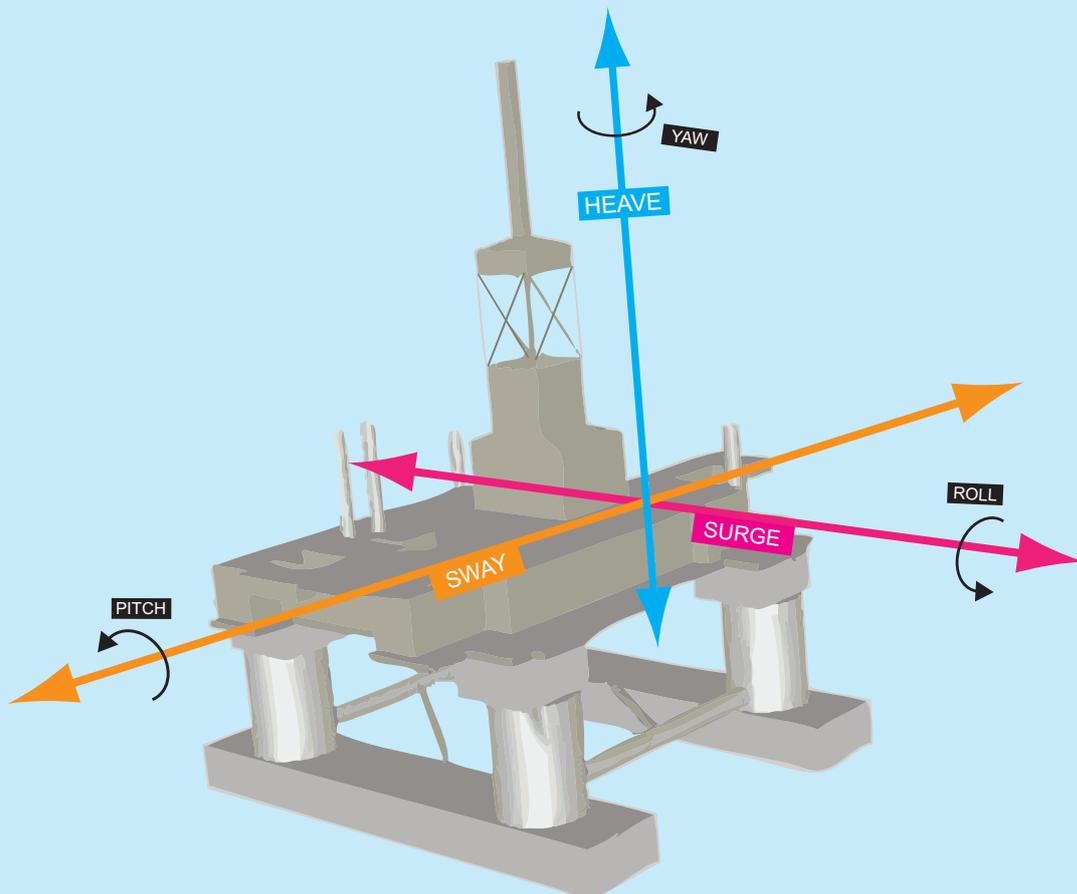


# Response Forecasting

## *Predict Rig Movements*

Undesirable movements in floating offshore installations can be the origin of potentially dangerous situations and expensive shutdowns of operations.

StormGeo's Response Forecasting is designed to predict the movements of the rig and drilling deck by combining accurate weather information with detailed knowledge of the predicted response of each floating unit. This increases the accuracy of operational planning and logistics, reducing risk and drilling costs.





## Hydrodynamic Analysis and Modeling Forecast Critical Response

State-of-the-art technology and advanced hydrodynamic models forecast motions of offshore floating units to improve performance and ensure cost-effective operations.

- Rig and Drilling Deck Forecasts predict heave, sway, surge, pitch and roll motion tailored to each floating structure.
- Helideck Motion Forecasts predict the helideck's heave, pitch and roll movements, then give the appropriate green, red or yellow light to support planning a more optimal helicopter schedule.
- Forecasted Modeling optimizes positioning of a flotel, by forecasting the relative movement of the flotel and the gangway stroke to the attached platform. It simulates multiple headings in a predefined sector, ensuring maximum availability of the gangway connection. This ensures scheduled disconnections according to procedures, avoiding disconnecting in high seas or worst case an auto-disconnect. Other typical modeling involves mooring lines, DP system and thrusters, and lifting lines.
- Information available in a customizable online portal for both onshore and offshore users, supported by a 24/7/365 team of forecasting specialists at StormGeo.
- StormGeo's forecasts increase HSE performance, using SIMO or MIMOSA models, which receive information from ECMWF wave models, and allow operators to make knowledge-based decisions to save costs.



Scan to learn more

Response Forecasting Features	Response Forecasting Benefits
Forecast expected responses, based on hydrodynamic models and forecasted weather, for the vessel.	Predict vessel behavior and rig response to optimize critical response operations.
Forecast heave, surge, sway, pitch and roll of the drilling deck.	Optimize drilling operations and save costs.
Forecast heave, pitch and roll of the helideck.	Enhance helicopter logistics and save costs.
Simulate multiple headings in a pre-defined sector.	Maximize gangway availability to accurately and safely schedule procedures.
Access a dedicated online portal and receive Availability Analysis (AA) and Hydrodynamic Analysis to calculate rig motion.	Ensure knowledge-based decisions based on weather conditions are used to predict operational results.