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03_OIL AND GAS

Ice Drift

Analyses and Simulations

Sea ice incursions are a design challenge for the Shtokman Offshore development. Severe sea ice conditions are observed regularly at the location. The severity of the sea ice threat is not only governed by the characteristics of the ice features that may drift by, but also the ice drift characteristics. Ice drift dynamics can be challenge with regards to operations, ice risk management and ice actions on the moored ship-shape platform.

Measurements of ice drift are analysed, and the properties of ice drift heading changes, ice drift curvature radius or ice drift speed are analysed. Based on the characteristics of the metocean conditions met at the site, a probabilistic numerical model is developed able to simulate thousands of years of ice intrusions, ice properties and ice drift. The model validity is checked against field measurements. The model is a useful tool, both for extreme event analysis or operational analyses.

PROJECT	PROJECT TYPE	CLIENT	PARTNERS	TIME PERIOD
Ice Drift Analyses and Simulations	Pre-engineering / preliminary design	Shtokman Development AG	AARI	2008 - 2009

SCOPE OF WORK

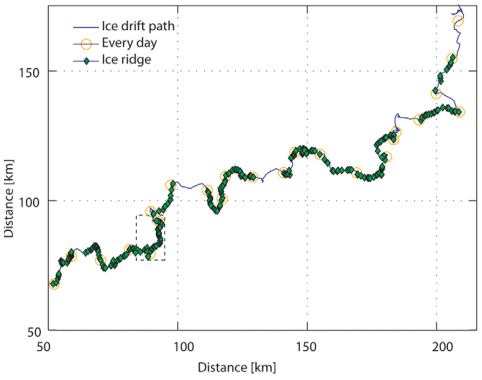
text

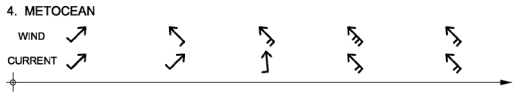
OUR SERVICES

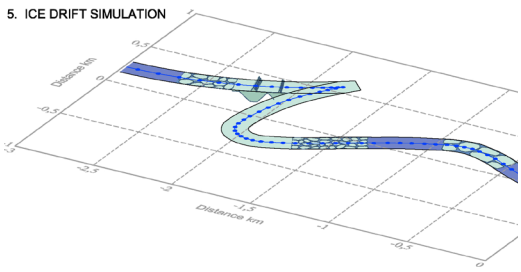
- text

DISCIPLINES

- text







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