

HYDRODYNAMIC CALIBRATION WITH CO-RANGE & CO-TIDAL CONTOURS – NORTH SEA

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A modelling system has been set up covering the whole of the North Sea and English Channel from Duncansby Head in Scotland to the Norwegian coast in the north to the western approaches to the English Channel in the south.

The model has calibrated and validated using conventional Eulerian and Lagrangian field data where available. However, the scale of the model means that it is very difficult to provide confidence in the model's accuracies across such a wide area. The co-range and co-tidal contours provided by the Admiralty provide another source of calibration data which due to its extent is able to provide an additional level of confidence across a very wide area. The model calibration carried out using the co-range and co-tidal lines showed that agreement was very sensitive to model bed roughness. A good level of model calibration was achieved with both the conventional field data and the co-range and co-tidal contours.