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Forecasting Oil Cargoes on the UK EEZ in the 2020s from AIS data

As part of the 2020 Risk Review of marine oil spill in UK Waters, 3-years vessel Automatic Identification System data was analysed to profile of the oil cargo and bunkers carried by shipping in the UK EEZ, and to forecast how this trade may change in the next decade. The principal objectives of this study were to establish profiles for mineral oil cargoes and bunker fuels for all vessels exceeding 1,000 GT, provide relevant oil properties where available and forecast how profiles may change over the decade spanning 2020 to 2030. By enriching the provided AIS data using a range of additional information sources and applying novel approaches to estimating bunker remaining on board , it was possible to provide detailed profiles for the two oil categories and analyses with a strong locational component. Data were further enriched by linking trade flow data to specific oil properties from Xodus' in-house resources. This paper will describe this project and discuss the patterns seen, forecasts made and how these have been affected by world events over the last 5-years e.g. international sanctions and the COVID