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## Sea-ice deformation forecasts for the MOSAiC Arctic drift campaign in the SIDFEx database

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The Sea Ice Drift Forecast Experiment (SIDFEx) database comprises more than 180,000 forecasts for trajectories of single sea-ice buoys in the Arctic and Antarctic, collected since 2017. SIDFEx is a community effort originating from the Year Of Polar Prediction. Forecasts are provided by various forecast centres and collected, and archived by the Alfred Wegener Institute (AWI). AWI provides a dedicated software package and an interactive online platform for analysing the forecasts. Their lead times range from daily to seasonal scales. Among the buoys targeted by SIDFEx are the buoys of the Distributed Network (DN) array which was deployed during the Multidisciplinary drifting Observatory for the Study of Arctic Climate (MOSAiC) expedition. In this contribution, we show to what extent the deformation (divergence, shear and vorticity) of the DN can be forecasted by the SIDFEx forecasts. We investigate the performance of single models as well as a consensus forecast which merges the single forecasts to a seamless best-guess forecast.

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