



Impact of NATReC observations on the UK Global model forecasts

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The impact of observations that were targeted during the North Atlantic THORPEX Regional Campaign (NATReC) on the UK Global model forecasts were investigated. The number of observations as well as type varied between the 38 cases targeted. Forecasts including the additional observations were compared to forecasts without the observations. In over half of the cases there was an improvement in the forecast when additional observations were included at initial time, while 30-40% of the cases had an improvement of more than 5%. In general the improvements were small, due to the fact that there were little uncertainties in the 1-3 day forecasts during the campaign. The forecasts did not benefit much, if at all, from additional observations taken earlier than the initial time of the forecast in questions. The forecasts were sometimes deteriorated by the additional observations, indicating that the assimilation of the data is not satisfactory, and there are indications that it might be more effective to target large areas coarsely than small areas densely. The sensitive area calculations turned out to be valuable, the impact of additional observations in areas predicted to be sensitive was often found in or near the verification area at verification time.