

The contribution of observations collected during DYNAMO to MJO predictability

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The large-scale field campaign DYNAMO, which took place during the boreal winter of 2011-2012 over the tropical Indian Ocean, specifically focused on the MJO initiation. Most of the collected observational data have been routinely assimilated in the ECMWF forecast system. In order to assess whether the data collected contribute to improve MJO forecasts, assimilation/forecast experiments with and without DYNAMO data have been performed. The analysis is shown to draw to the additional sondes data at certain locations. However, overall the DYNAMO observations have little impact on the analysis and the MJO forecasts due to the relatively small number of observational data (compared to routine satellite data) and the small extension of the observational array.