Abstract

In the night from 15 to 16 February 1941, a disastrous storm hit the Iberian Peninsula and caused devastation across the peninsula. Historical reports and sparse observational data show the exceptional strength and impact of the storm. No comparable event has been recorded since. Therefore, studying this specific historical storm event is important from a present-day perspective in order to better understand storm risks in the Iberian Peninsula. The focus of this paper is to assess whether the Twentieth Century Reanalysis Version 2c (20CRv2c) is able to reproduce this unique storm. We compare the ensemble mean reanalysis fields with historical observations with respect to mean sea-level pressure and wind. The comparison shows that the Iberian Storm of 1941 is well reproduced in 20CRv2c. Mean sea-level pressure is reproduced better than wind. Discrepancies can be due to measurement errors in the historical observations as well as inaccuracies in the reanalysis. Our results suggest that 20CRv2c is a good tool to reproduce and analyse historical storm events.