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The 11–12 December 2003 storm in Southern Italy

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Abstract. We review an intense and heavy impact storm that occurred over Calabria, southern Italy, during the 11 and 12 December 2003. The event is traced back, at synoptic and planetary scales, up to 5 December 2003 by National Centre for Environmental Prediction/National Centre for Atmospheric Research (NCEP/NCAR) reanalysis fields and backtrajectories.

The role of tropical storm Odette is clearly shown as well as that of the Azores high. Even if non negligible water vapour sources are expected from the Mediterranean sea, unusually large precipitable water was present over the Atlantic mid-latitudes. It is shown that tropical storm Odette determined large evaporation from Atlantic Tropics and the cooperative action of synoptic scale and planetary scale pressure centres focused this humidity into a plume and conveyed it into the Mediterranean area.

Full Article in PDF (PDF, 1202 KB)

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