Home
Online Library
- Recent Papers
- Volumes
- Library Search
- Title and Author Search

RSS Feeds
General Information
Submission
Review
Production
Subscription

Volumes Contents of Volume 23

Adv. Geosci., 23, 25-30, 2010
www.adv-geosci.net/23/25/2010/
doi:10.5194/adgeo-23-25-2010

Operational forecasting of a snowfall event over the Greater Athens Area

P. Louka, D. Boucouvala, F. Gofa, M. Balami, and D. Ziakopoulos
Hellenic National Meteorological Service, El. Venizelou 14, Hellinikon, 16777, Greece

Abstract. A case of an intense snowfall in the Greater Athens Area (GAA) between 16 and 18 February 2008 is investigated. The physical processes that forced the snowfall event are identified and analysed. The main factor causing the event at its start was the entrainment of arctic air masses from North-Eastern Europe. At a second stage, the Aegean Sea acted as the Great Lakes of Canada and North-East USA and in association with the existing extremely cold air masses aloft and the enrichment of the air with humidity and heat led to the enhancement of the snowfall in the GAA. In the final stage of the event, the local meteorological conditions associated with the topography of the area resulted in the occurrence of very intense snowfall event on the leeward side of the GAA. The available operational observations and forecast tools were used for accurately predicting the intensity, duration and evolution of the event.

Full Article in PDF (PDF, 2619 KB)

Citation: Louka, P., Boucouvala, D., Gofa, F., Balami, M., and Ziakopoulos, D.: Operational forecasting of a snowfall event over the Greater Athens Area, Adv. Geosci., 23, 25-30, doi:10.5194/adgeo-23-25-2010, 2010. Bibtex EndNote Reference Manager XML

Search ADGEO
Full Text Search
Title Search
Author Search

News
Please Note: Updated Reference Guidelines

Recent Papers
01 | ADGEO, 22 Nov 2010: Tropopause and jetlet characteristics in relation to thunderstorm development over Cyprus
02 | ADGEO, 22 Nov 2010: Probabilistic prediction of raw and BMA calibrated AEMET-SREPS: the 24 of January 2009 extreme wind event in Catalunya
03 | ADGEO, 15 Nov 2010: Investigation of trends in synoptic patterns over Europe with artificial neural networks