

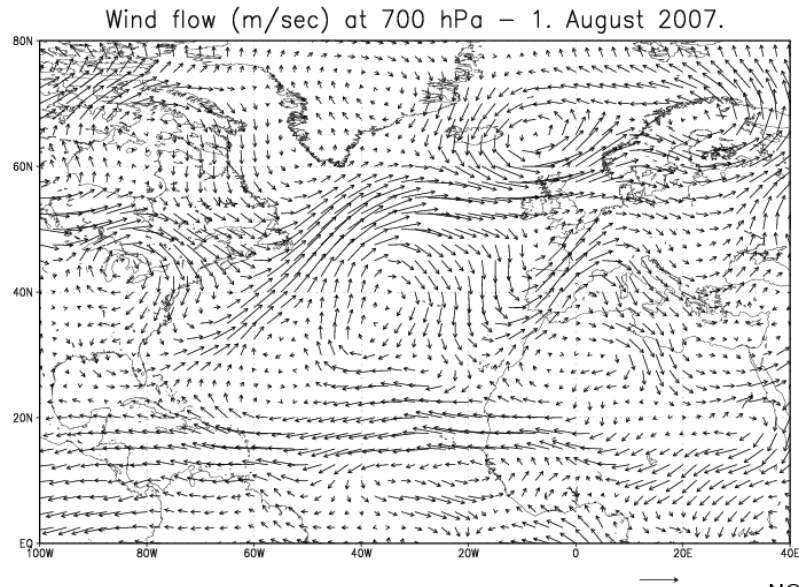
Synoptic analysis of a rare event of Saharan dust reaching the Arctic Region.

Joseph Barkan and Pinhas Alpert

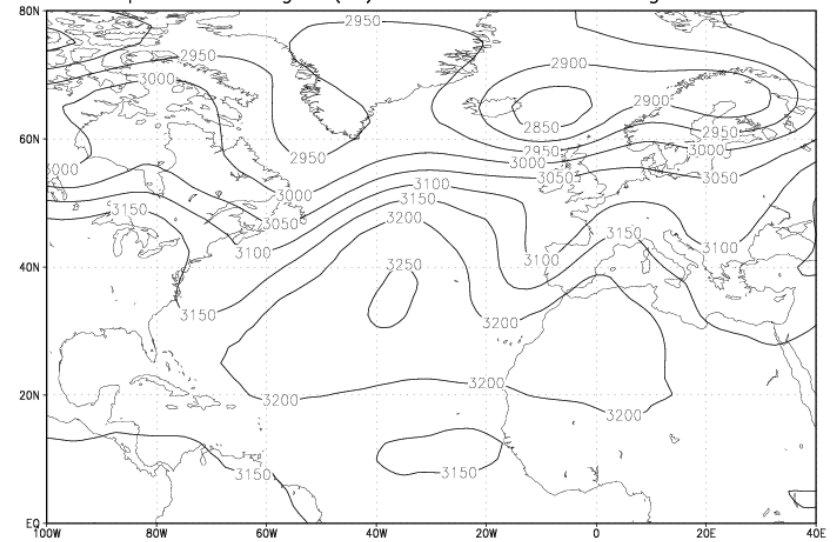
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A rare event of Saharan dust cloud in the sub arctic region north of the Scandinavian Peninsula was discovered by the LIDAR of the Arctic LIDAR Observatory (ALOMAR) on the 7th August 2007. Presumably this cloud was the remnant of a large amount of dust lifted from the Western Sahara several days previously.

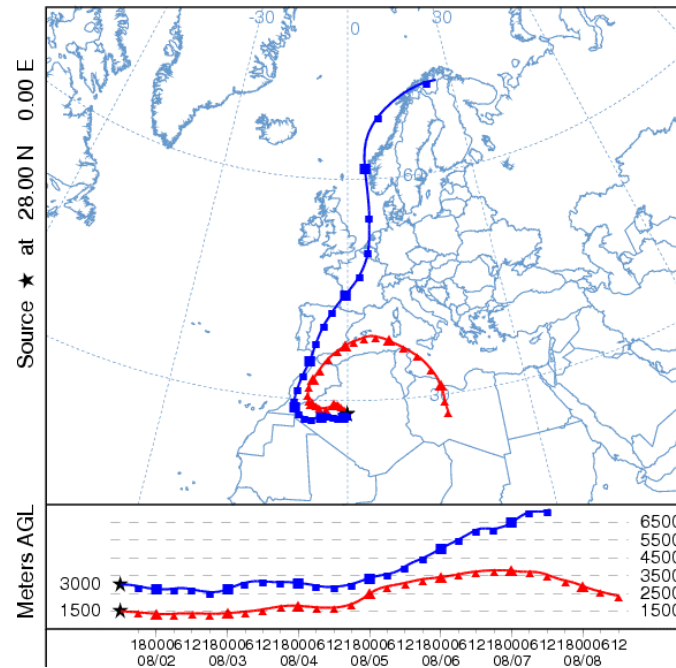
In this work we try to identify the synoptic situation which caused this long range transportation.

b

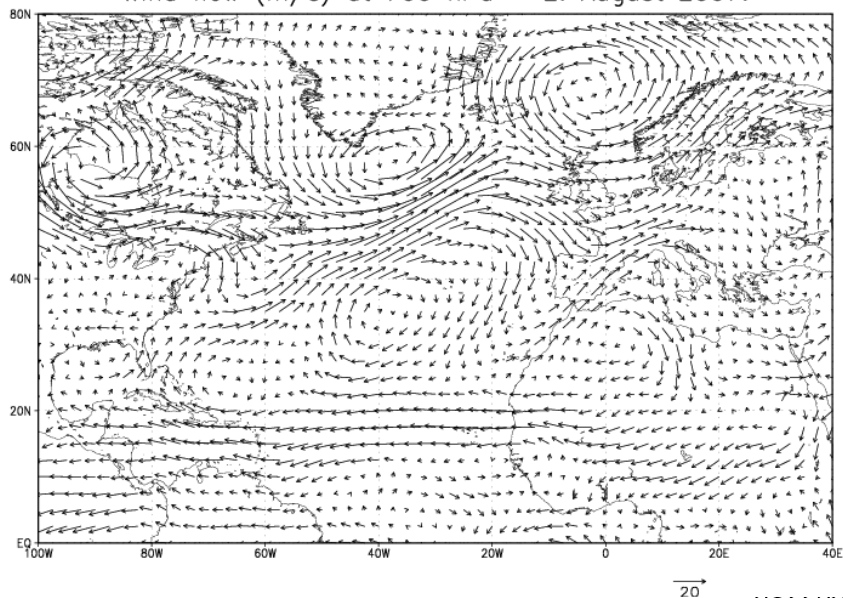
Geopotential height (m) at 700 hPa – 1. August 2007.



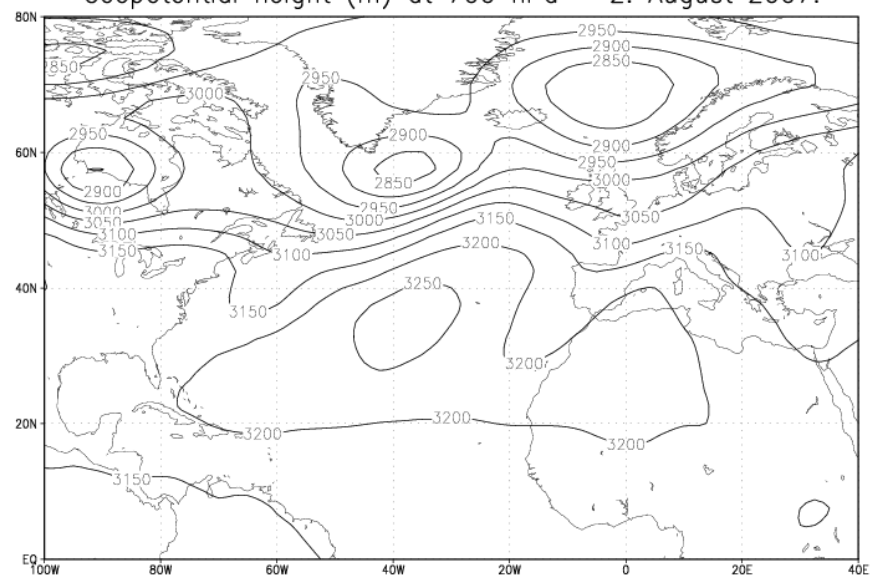
NOAA HYSPLIT MODEL
Forward trajectories starting at 12 UTC 01 Aug 07
CDC1 Meteorological Data

c

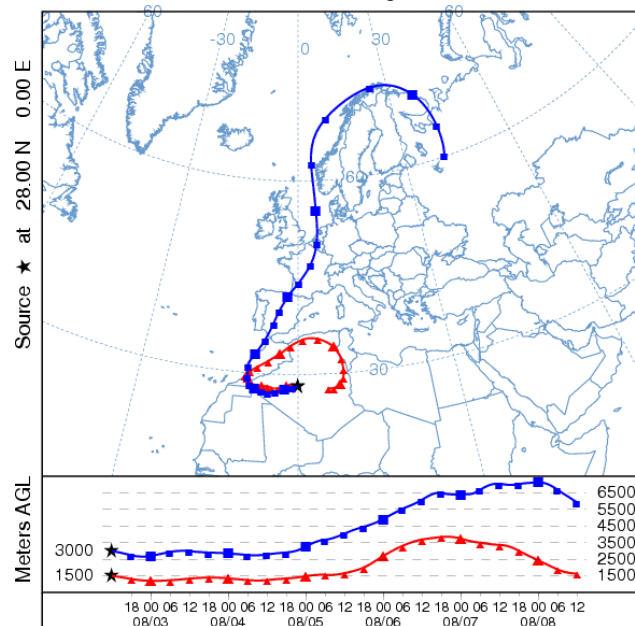
Wind flow (m/s) at 700 hPa – 2. August 2007.



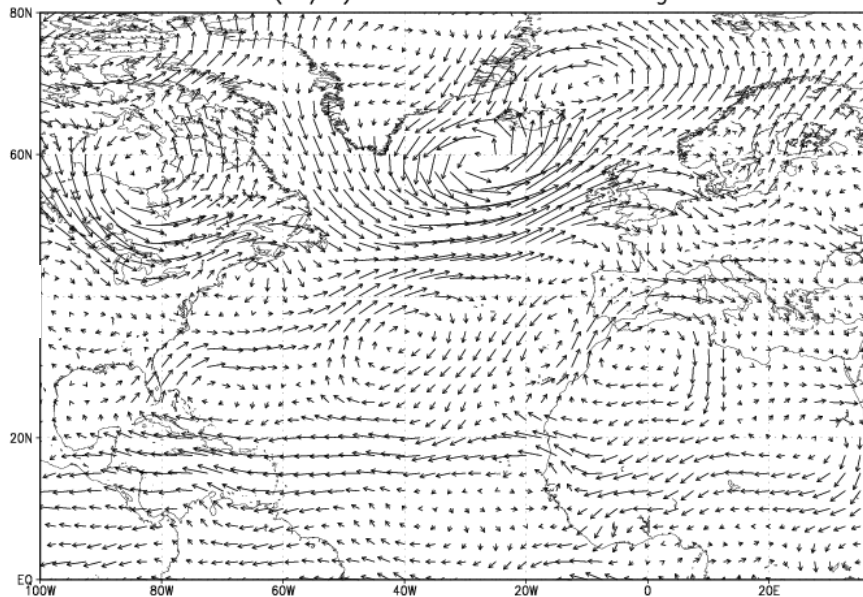
Geopotential height (m) at 700 hPa – 2. August 2007.



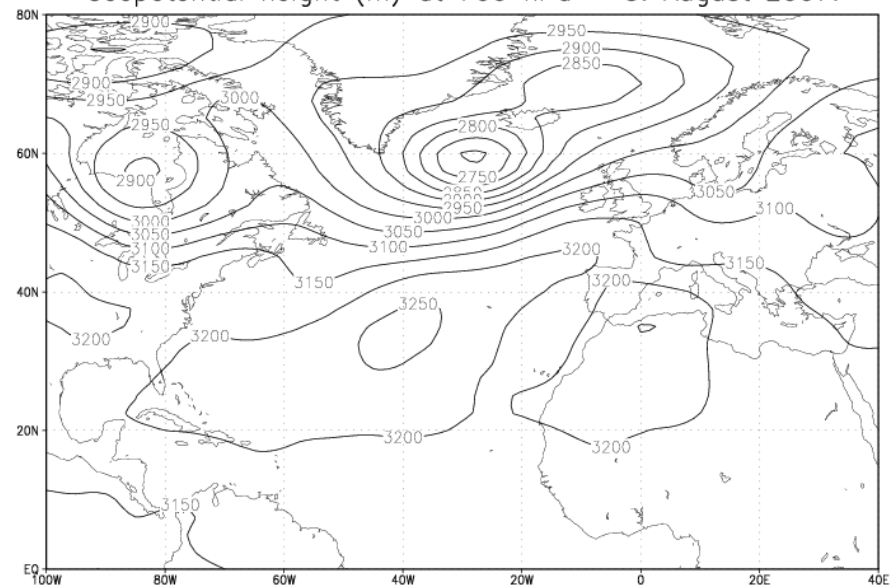
NOAA HYSPLIT MODEL
Forward trajectories starting at 12 UTC 02 Aug 07
CDC1 Meteorological Data



Wind flow (m/s) at 700 hPa – 3. August 2007.



Geopotential height (m) at 700 hPa – 3. August 2007.



NOAA HYSPLIT MODEL
Forward trajectories starting at 12 UTC 03 Aug 07
CDC1 Meteorological Data

