

## Volcanic plume meets and occluded weather front, changes wind direction

May 13 2010



A visible satellite image on Wednesday, May 12 at 13:10 UTC (9:10 a.m. EDT) from NASA's Aqua satellite's moderate resolution imaging spectroradiometer instrument captured the Eyjaf jallajokull Volcano's ash plume (brown). Compared to the MODIS image from May 11, this image shows that lower level winds have shifted from blowing to a southerly direction to a more east-southeasterly direction, as an occluded front is positioned just to the east of the volcano. An occluded front is a frontal boundary where cold, warm and cool air come in conflict. This system is a cold occlusion, where cold air near the surface is moving under less cold air aloft. It has created winds that are blowing from the west-northwest (as the front passes), taking the brown volcanic ash plume in an east-southeasterly direction in this image. Credit: NASA Goddard / MODIS Rapid Response Team

A visible satellite image on Wednesday, May 12 at 13:10 UTC (9:10 a.m. EDT) from NASA's Aqua satellite's Moderate Resolution Imaging Spectroradiometer (MODIS) instrument captured the Eyjafjallajokull



Volcano's ash plume (brown).

Compared to the MODIS image from May 11, the May 12 image shows that lower level winds have shifted from blowing to a southerly direction to a more east-southeasterly direction, as an occluded front is positioned just to the east of the <u>volcano</u>.

An occluded front is a frontal boundary where cold, warm and cool air come in conflict. This system is a cold occlusion, where cold air near the surface is moving under less cold air aloft.

It has created winds that are blowing from the west-northwest (as the front passes), taking the brown volcanic ash plume in an east-southeasterly direction in the May 12 image.

Provided by NASA's Goddard Space Flight Center

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