

Re-suspended Ash

WMO Volcanic Ash Advisory Centre
Best Practice Workshop 2017



Tokyo Volcanic Ash Advisory Centre
Japan Meteorological Agency

Sheveluch: 16 Sept. 2015
From KVERT

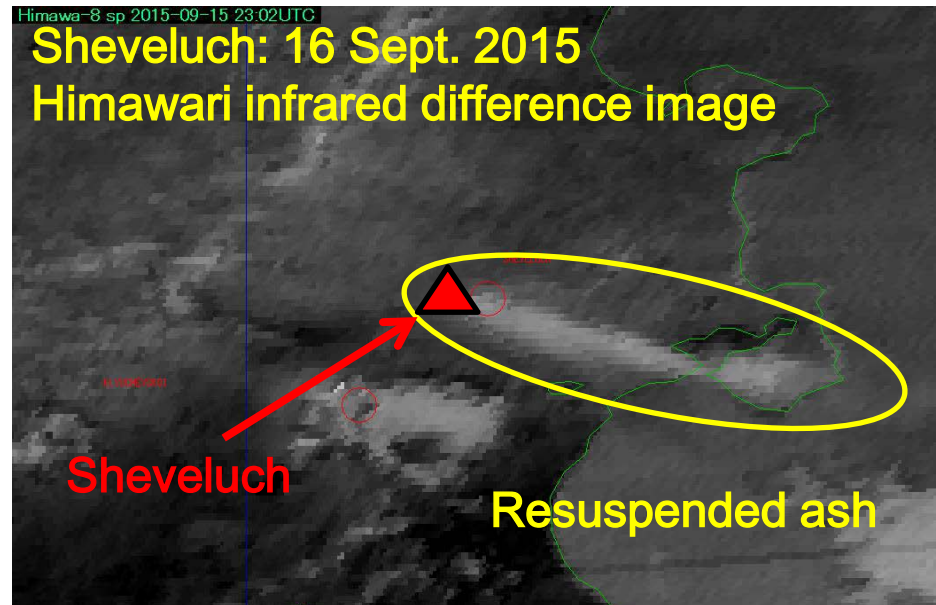
Institute of volcanology and seismology, KVERT & Weathernews Inc. 2015-09-16 00:03:03

What is Re-suspended Ash



Deposited volcanic ash can be re-suspended by strong winds. Although this phenomenon is not common, it causes volcanic ash contamination which may pose a significant hazards in aviation operations.

Sheveluch: 16 Sept. 2015
Web camera image from KVERT



VAAC Tokyo experiences several re-suspended ash events every year in the Kamchatka peninsula.

VAA for Re-suspended Ash



VAAC Tokyo issues VAA for re-suspended ash when the Center detects it on satellite imagery or receives information from observatories.

In such cases, VAAC Tokyo specifies the comment in the remarks section to let users know its origin.

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FCST VA CLD +12 HR: 27/1120Z SFC/FL110 N5306 E16535 - N5233 E16748 -  
N5151 E16850 - N5149 E16750 - N5220 E16556 SFC/FL090 N5546 E16413 -  
N5506 E16558 - N5458 E16651 - N5433 E16653 - N5434 E16558 - N5520  
E16422  
FCST VA CLD +18 HR: 27/1720Z SFC/FL090 N5154 E16630 - N5057 E16858 -  
N5006 E16939 - N5021 E16809 - N5120 E16620 SFC/FL070 N5513 E16609 -  
N5410 E16753 - N5403 E16906 - N5329 E16845 - N5334 E16738 - N5447  
E16611  
RMK: T+0 CONFIDENCE HIGH. RESUSPENDED ASH. THIS RELATES TO ASH  
DRIFTING FROM THE GROUND RATHER THAN TO ASH FROM A NEW ERUPTION.  
NXT ADVISORY: 20150927/0600Z=
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History



- Several VAACs issue VAA for re-suspended ash for aviation safety.
- In the MOG-2 meeting, Japan submitted a study note (SN/010) which contained proposal to introduce provisions related to re-suspended ash in Annex 3.
- During the meeting, two topics were discussed, but the group did not reach consensus and decided the work should be continued.
 1. The definition of VAAC in Annex 3
 2. Inclusion of re-suspended ash in information (SIGMET)

The definition of VAAC in Annex 3

Although VAACs agreed to keep efforts for VAAs provision for re-suspended ash, the definition of VAAC in Annex 3 doesn't reflect this operations.

CHAPTER1. DEFINISIONS

1.1 Definitions

Volcanic ash advisory centre (VAAC).

*A meteorological centre designated by regional air navigation agreement to provide advisory information to meteorological watch offices, area control centres, flight information centres, world area forecast centres and international OPMET databanks regarding the lateral and vertical extent and forecast movement of **volcanic ash in the atmosphere following volcanic eruptions.***

Inclusion in Other Information



Similar discussion applies for other information, including SIGMET, but its situation is different from the situation of VAA.

In order to include/specify re-suspended volcanic ash, lots of modifications are required, including information templates, regulations and operational procedures.

Appendix 2 1.3.3 Items included in SIGWX forecasts

i) Information on the location of volcanic eruptions that are producing ash clouds of significant to aircraft operations ...

Appendix 6 Table A-1 Template for SIGMET

[VA ERUPTION] [MT] [nnnnnnnnnn] [PSN Nnn[nn] or Snn[nn] Ennnn[nn] or Wnnnn[nn]] VA CLD

Proposal for the upcoming MOG



- **Modification of the definition of VAACs**
Other descriptions in Annex 3 and IAVW handbook relating to volcanic ash don't limit VAAC operations to volcanic ash following/from eruptions; this change won't affect any current operations.
- **Consideration of the inclusion of re-suspended ash in other information**
Although it may be beneficial for users to identify the origin of volcanic ash in information, it also affects a wide range of ICAO documentation and operations of organizations concerned.