

IWXXM Brief

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Outline

- ICAO Meteorological Information Exchange Model aka IWXXM Status
- IWXXM VAA Production by United States
- Upcoming IWXXM Volcanic Product

IWXXM Status

- IWXXM 3.0 released in November 2019
- IWXXM became a ICAO/WMO standard in November 2020.
- The WMO just released a new set of IWXXM schemas last month
 - “2021-2” is the overall release name
 - Internal versioning of the Volcanic Ash Advisory schema changed from 3.0.0 to 3.1.0
 - Reflects minor changes to schema
 - Allows elements to be properly ‘nilled’
- Previous versions of IWXXM remain valid
 - Recommendation to data producers to use IWXXM 3.0 or IWXXM 2021-2 packaged schemas.



US IWXXM VAA Production

- Washington VAAC producing IWXXM VAA XML products on operational basis

Advisories Last Updated: Fri Dec 3 14:05:03 UTC 2021

Most recent five messages, regardless of volcano:

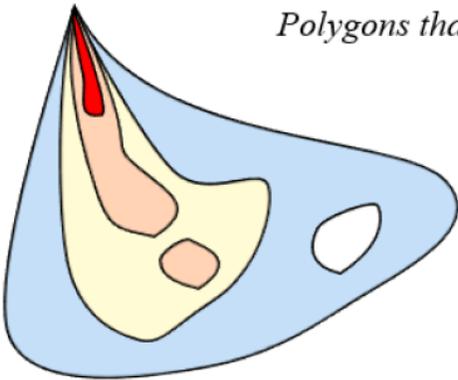
03 Dec 2021 - [1346 UTC \(XML\)](#) -- FUEGO GUATEMALA -- [\(JPEG Only\)](#) [\(KML\)](#)
03 Dec 2021 - [1043 UTC \(XML\)](#) -- MIZ COLOMBIA -- [\(JPEG Only\)](#) [\(KML\)](#)
03 Dec 2021 - [1008 UTC \(XML\)](#) -- TAY ECUADOR -- [\(JPEG Only\)](#) [\(KML\)](#)
03 Dec 2021 - [0941 UTC \(XML\)](#) -- ADOR ECUADOR -- [\(JPEG Only\)](#) [\(KML\)](#)
03 Dec 2021 - [0820 UTC \(XML\)](#) -- FUEGO GUATEMALA -- [\(JPEG Only\)](#) [\(KML\)](#)

- Available from their website, <https://www.ssd.noaa.gov/VAAC/messages.html>
 - Washington VAAC's IWXXM VAA products are embedded within a <MeteorologicalBulletin> “envelope” ready for transmission over the AMHS circuits.
- IWXXM VAA (and other) products available on NWS API service by early 2022
 - <https://weather.gov/documentation/services-web-api>

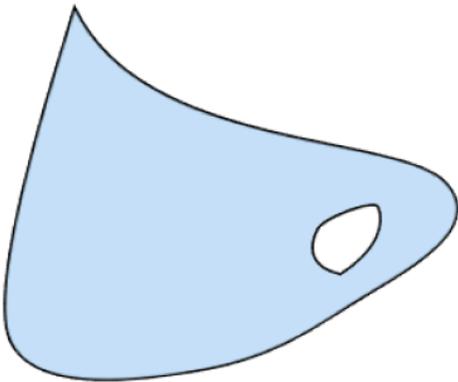
Quantitative Volcanic Ash (QVA) Product

- New volcanic ash product being formulated by ICAO METP
- IWXXM QVA schema under development now

Polygons that show concentrations \geq each of the thresholds

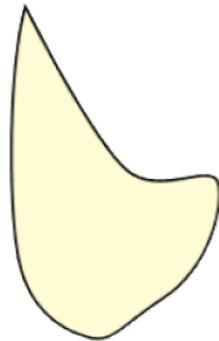


$\geq 0.2\text{mg/m}^3$



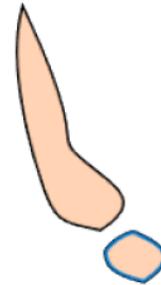
Poly 1: $\geq 0.2\text{mg/m}^3$
 - Outer boundary: BASE FL100/TOP FL500
 - Additional outer boundary defined (to deal with the "hole")

$\geq 2\text{mg/m}^3$



Poly 1: $\geq 2\text{mg/m}^3$
 - Outer boundary: BASE FL160/TOP FL440

$\geq 5\text{mg/m}^3$



Poly 1: $\geq 5\text{mg/m}^3$
 - Outer boundary: BASE FL200/TOP FL400

Poly 1: $\geq 5\text{mg/m}^3$
 - Outer boundary: BASE FL220/TOP FL380

$\geq 10\text{mg/m}^3$



Poly 1: $\geq 10\text{mg/m}^3$
 - Outer boundary: FL250/TOP FL380

Questions?

Send them also to: tt-avdata@groups.wmo.int

Thank you!

