

Explanation concerning the key's of VAAC Toulouse graphical production

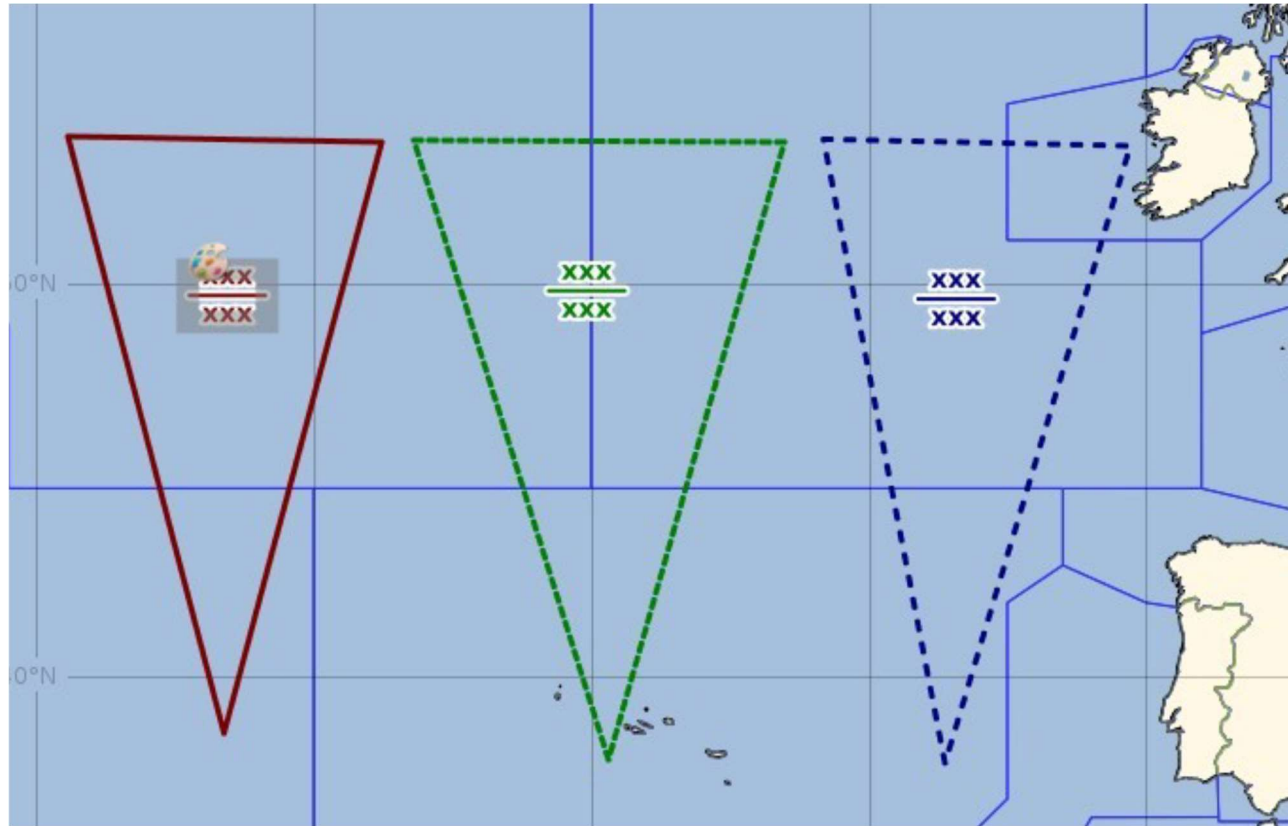
The VAG is a product **expertised by a forecaster**, showing the **shape** of the ash cloud. The T+00 stamp is an observation, mainly based on satellite imagery.

Ash clouds are generally detectable on satellite imagery with concentrations equal or higher than 0.14 mg/m³ for dry volcanic ash and 0.2 mg/m³ for wet volcanic ash.

The polygons on the VAG only show the ash clouds, and provide **no information on the concentration**.

The key

To take into account the different altitudes (LOW, MEDIUM, HIGH) and possible trajectories of ash clouds during an eruption, three graphical possibilities are available for the polygons: **red solid line**, **green dotted line**, **blue dotted line**.



The three polygon styles used on the VAG — one per ash cloud altitude.

The use of several different lines marks the differences in ash cloud altitudes: LOW, MEDIUM and HIGH. This representation must also be perceptible in black and white — one is in solid line, the second in small dotted line, the third in wider dotted line.

Although the three colours are proposed, VAAC Toulouse favours the **blue and green** colours, experience showing that users grant the red colour a greater severity.

The colour does not stand for concentration or severity, only for the height(s) of the ash cloud(s).

Sources

International Civil Aviation Organization — Doc 9974 AN/487 *Flight Safety and Volcanic Ash* — 9974_en.pdf

Doc 9766-AN/968 *Handbook on the International Airways Volcano Watch (IAVW)* — 450.pdf

VAAC Toulouse — <https://vaac.meteo.fr/docs/>