Supplementary information

S1. Statistics of multi-year emission from 32 volcanoes in NOVAC and corresponding statistics from OMI. For NOVAC, the following statistics have been calculated from the daily-average SO2 emission for each volcano within each year: mean flux, lower and upper bounds of the mean flux (calculated from the mean minus/plus the standard deviation divided by the square root of the number of valid measurements and multiplied by an uncertainty factor of 0.9/1.3 for lower/upper bounds, respectively to reflect uncertainty of -10 to 30%), standard deviation of daily flux, minimum flux, first quartile (25%), second quartile (median), third quartile (75%), maximum flux, number of valid plume detections, and number of total scans. For OMI, the annual mean, standard deviation and uncertainty, as indicated in Carn et al. (2017) is reported.

S2. List of volcanoes, institutions, contact information and links to DOI of files with statistics of daily flux of SO_2 from volcanoes in NOVAC.

S3. Example of file in database (full description of algorithms for spectral and flux evaluation) in different formats: ascii, netCDF and xml (DOI registry).

References

Carn, S., Fioletov, V., McLinden, C., Li, C., and Krotkov, N.: A decade of global volcanic SO_2 emissions measured from space, Scientific Reports, 7, 44095, doi:10.1038/srep44095, 2017.

Figures

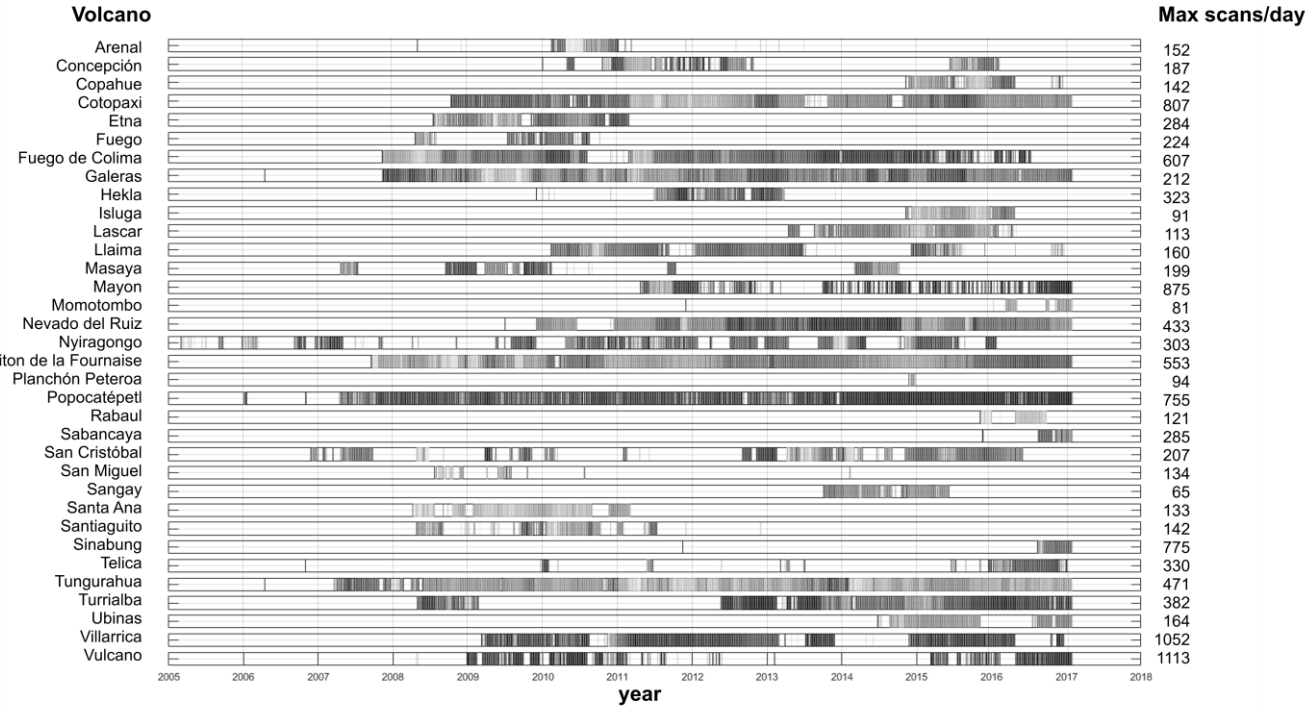

Figure S1. Time series of available data in the NOVAC archive until 2017. Each day where at least one scan was acquired is indicated with a bar and the colour density is proportional to the number of scans divided by the maximum number of scans per day, running from 0 (white) to 1 (black). Other volcanoes in NOVAC have not been included due to lack of plume detections before February 2017 or due to installations occurring after this date. These volcanoes (country, institution) are: Gamalama (Indonesia, CVGHM), Tavurvur and Ulawun (Papua New Guinea, RVO), Hekla and Katla (Iceland, IMO), Sierra Negra, Cayambe and El Reventador (Ecuador, IGEPN), Puracé (Colombia, SGC), Nevados de Chillán (Chile, SERNAGEOMIN), Poás (Costa Rica, OVSICORI), and Soufrière Hills (Montserrat, MVO).