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## **WOVOdat – A Worldwide Volcano Unrest Database – aimed at improving eruption forecasts**

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WOVOdat is a unique global database on volcanic unrest aimed at improving the understanding of the geochemical and geophysical signals that occur before, during and after an eruptions and which should ultimately be useful for improving eruption forecasts. It is an international effort of the volcano community, directly attached to WOVO (World Organization of Volcano Observatories) and is complementary to other volcano-related databases like the Global Volcanism Program and the Global Volcano Model. Since 2009 Earth Observatory of Singapore has taken the lead on hosting and developing it. WOVodat is intended to provide reference data useful during volcanic crises, for comparative studies, and basic research on pre-eruption processes. We have now incorporated ~20% of worldwide unrest data into the database, covering more than 100 unrest episodes. We have developed a main web interface for data submission, data visualizations, data query and download, and currently developing tools by which WOVodat can be used for probabilistic eruption forecasting. Main tools in WOVodat ([www.wovodat.org](http://www.wovodat.org)), currently include: (1) Single volcano view with shaded relief and monitoring stations, with 2D or 3D hypocenter display, and time-series for multiple parameters (2) Side by side visual comparisons of episodes of unrest or between volcanoes (3) Temporal evolution of unrest including hypocenters and other parameters through time and space (4) Data search by volcano with link to data visualization (single volcano view) and data download (5) Boolean searches, and (6) Classic episodes of unrest (e.g. Pinatubo 1991) where the entire dataset of volcanic unrest has been thoroughly organized and compiled for quick reference.