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WOVOdat' Classic Episodes of Unrest: Pinatubo 1991

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The World Organisation of Volcanic Observatories' WOVODat is an online database of volcanic unrest from volcanoes around the world. Historical unrest can be visualized in time and space. WOVODat is currently being built and hosted at the Earth Observatory of Singapore. The 1991 Pinatubo eruption was the first ever Plinian eruption monitored instrumentally, and the data are available on WOVODat. The climactic eruption occurred on 15 June 1991, 13:42 (local time), having built up from a phreatic eruption which occurred on 2 April 1991 and small-to-moderate magmatic eruptions from 7-14 June. Multi-parameter datasets include hypocenters, real-time seismic amplitudes (RSAM), SO₂ flux, tilt, prehistoric eruptions, and a chronology of preclimactic dome growth and early magmatic explosive events in 1991. These data helped volcanologists to forecast the onset and size of the climactic eruption and to advise on evacuation plans. Metadata, e.g., the locations and settings of seismic, deformation, gas, hydrologic, thermal and meteorological stations, are also included, and spectral data on earthquakes will be added as soon as possible. Based on these multi-parameters data collected by these stations, a chronological order of eruption can be displayed. At the time, scientists had neither time nor WOVODat in which they could compare Pinatubo unrest to other unrest. For the next plinian eruption, this data set and others in WOVODat will be available.