

## WP 6: MONITORING CAPACITY AT TARGET VOLCANOES

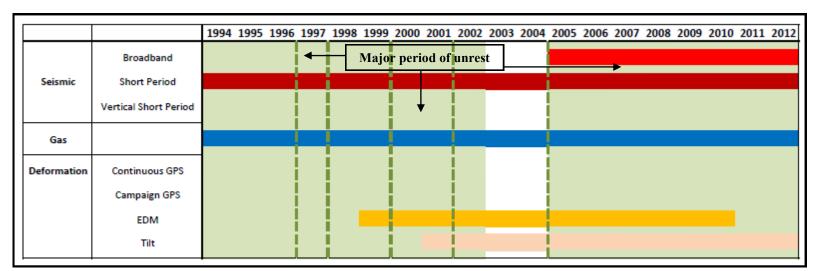
## **POPOCATEPETL, MEXICO**

|                        | Popocatepetl                |
|------------------------|-----------------------------|
| Broadband Seismometers | 4                           |
| Short Period Geophones | 5                           |
| Gas monitoring         | 4                           |
| EDM                    | 2                           |
| Continuous GPS         | -                           |
| Campaign GPS           | 2                           |
| Other                  | 3 Tiltmeters                |
|                        | Infrasound                  |
|                        | 3 Remote Cameras            |
|                        | Flow monitoring             |
|                        | Thermal Imaging             |
|                        | Hydrogeochemistry (7 sites) |
|                        | Photogrammetric monitoring  |
| D 1 0                  |                             |

Popcatepetl is located within the central Mexican Volcanic belt which is a complex tectonic setting of continental arc and back arc volcanism. Most importantly, Popocatepetl sits within a densely population region with over 20 million people at risk from an eruption.

A wide range of eruption styles have been observed at Popocatepetl, including Plinian events.

Popocatepetl reawoke from 70 years of quiescence in 1994 and has had almost continuous activity since then. Activity includes lava dome growth and destruction cyclic episodes, small emissions of gas and ash as well as moderately explosive activity separated by periods of almost total quiescence. The destruction of such domes occurs in Strombolian and Vulcanian style eruptions.



From May 2003 to June 2005 activity was at a minimum, but since July 2005 the emplacement and destruction of small domes has continued.

Popocatepetl is currently one of the largest passive producers of carbon

Time Series of data collection for Cotopaxi (in state of unrest since 1994)