

## **When will it blow? - predicting eruptions**

### **How a simple tiltmeter can demonstrate the bulging of a volcano before eruption**

#### ***From Pete Loader, UK***

If 2 vertical sticks (cocktail sticks?) are attached to the two nearest ends of the dishes (tiltmeters) then the distance between the two can be measured before and after the "volcano" is inflated. In reality this is done by use of a very accurate electronic measuring device (laser etc) between two points on the volcano or from a fixed point away from the cone. Minute changes in the tilt and thus inflation or collapse of the volcano will be confirmed by the increase or decrease in the measurements.

#### ***From Chris King of Earth Learning Idea***

I guess we could extend Pete's idea even further by measuring the change in height of the sticks - then we'd be measuring: \*tilt; \*extension and \*altitude - all key predictors of eruptions.

#### ***From Gary of Geological Society of America***

Another extension could be to have different lengths of card on both sides, so that the tilt is different at different points on either side of the axis. You could even mark the change in fluid level and do some simple calculations!