

**A Study On The
Volcanic Activities & Its Forecasting Methods
(G.R. Irlapalti'S Geoscope)**

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Abstract: Volcano is a rupture in the crust of a planetary – mass object such as earth that allows hot lava, volcanic ash and gases to escape from a magna chamber, below the surface. Earth's volcanoes occur because its crust is broken into 17 major, rigid tectonic plates that float on a hotter, softer layer in its mantle. There are many volcanic activities such as volcanic gases, steam generated eruptions, explosive eruption of high – silica lava, effusive eruption of low-silica lava, debris flow and carbon dioxide emission. All of these activities can pose a hazard to humans. Volcano Activities, hot springs, fumaroles, mud pots and geysers often accompany volcanic activity. Indonesia, Philippines, Japan, Mexico, Ethiopia, Guatemala, Ecuador, Italy, EL Salvador, Kenya etc are most hazardous countries for volcanoes.

Hundred of small Volcano Activities are caused as magma rises up through cracks in the earth's crust. Temperatures around the volcano rise as activity increases. Thermal imaging techniques and satellite cameras can be used to detect heat around a volcano. When a volcano is close to erupting it starts to release gases. Geoscope is very useful to study and predict the volcanic activities.

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Key Words: G.R. Irlapati's Geoscope, Electrogeopuses.

1. Introduction: By establishing the Geoscope in accordance with the conditions of a country and maintain, impending earthquakes can be studied, estimated and predicted in advance. Observe the geophysical & geochemical changes such as earthquakes etc taking place in the underground. The onset of earthquakes can be guessed by observing the aforesaid changes in the concerned analyzing departments of the observatory. I have proposed much type of studies to study the earth's underground through the Geoscope by which we can predict the earthquakes in advance. Here shows an example of method to study and predict such geophysical condition.

2. G.R.Irlapati'S Geoscope: Geoscope means- a mechanical architecture established in between the underground and observatory with the help of bore-well proposed for conducting geological studies to know the earthquakes and mineral resources etc.

A borehole having suitable width and depth has to be dug. An observatory having the most modern high-technological research facilities has to be constructed on that well. Most modern mechanical systems like electronic, physical and chemical sensors and apparatus to recognize the rise and fall of the underground water levels, micro-vibrations and waves generated in the underground, differences in pressure, temperature and other seismic activities should be

inserted into the underground and linked with the concerned research analyzing departments of the observatory that is above the well to observe the seismic changes taking place in the underground. The results of researches on the quakes like Richter scale etc., also should be setup in the Geoscope. The apparatus related to the geology and geography such as Richter scale etc also should be set in the observatories of the Geoscope Many kinds of super high remote sensing technology in the area of sensor physics, signal processing used specially image processing, electromagnetic detection technology etc should be used in the Geoscope. Geophysical deep underground detectors and mineral exploration equipments, natural gas sensors etc should be used in the Geoscope. Electromagnetic sensors may also be used in the Geoscope project. e. That means-relative results of geological & geographical researches & developments of past, present and future should be interposed, coordinated and constantly developed. we can make many more modern ideas & modifications thus bringing many more improvements & developments in the Geoscope.

2.1. Seismic Luminescence Study: This is a very easy and simple study in the Geoscope Project. Construct a room over a well having suitable width and depth. Wash the inner walls of the room with white lime. Fix an ordinary electric bulb in the room. (Otherwise by making certain changes and alternations any home or

office having a well can be converted into the Geoscope. Wash the inner walls of the house with white lime. Fix an ordinary electric bulb but don't fix fluorescent lamp in the house. This method involves no expenditure).

Observe the colour of the lightning in the Geoscope room daily 24 hours 365 days. When the bulb glows, the lightning in the room generally appears as white (reddish). But before occurrence of an earth-quake, the room lightning turns violet in colour.

Because, before occurring of an earthquake-gas anomalies such as radon, helium, hydrogen and chemico-mineral evaporations such as sulphur, calcium, nitrogen and other fracto-luminescence radiations show up earlier even at large distances from the epicenter due to stress, disturbances, shock waves and fluctuations in the underground forces. These gas anomalies & fracto luminescence radiations and other chemical evaporations enter into the well through the underground springs. When these anomalies occupy the room above the well, the room lighting turns violet in colour. The light in the room scattered in the presence of these gas anomalies, fracto-luminescence radiations and other chemico-mineral evaporations the ultra violet radiation is emitted more and the room lighting turns in violet colour. Our eye catches these variations in the radiation of the lighting in the room easily since_

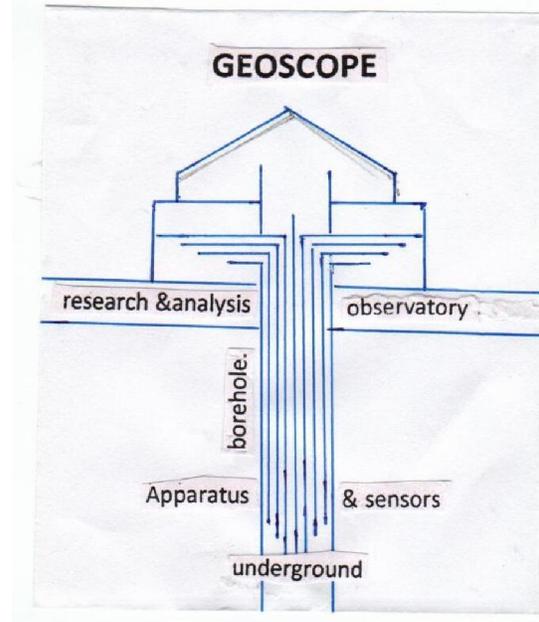
- The violet rays having smaller wave length.
- The violet radiation having property of extending greatly.
- The light becoming weak in the violet region.
- The eyes having greater sensitivity to violet radiation.

Due to all reasons the room may appear violet in colour then we can predict the impending Volcane Activities 12 hours in advance.

2.2. Electro Geopulses Study: This is also easy study in the Geoscope system to recognize the impending earth quake. A borehole having suitable width and depth has to be dug. An earth wire or rod should be inserted into the underground by the borehole and linked with the concerned analysis section having apparatus to detect, compare measure of the electric currents of the electric circuit of the earth systems. Otherwise by observing the home electric fans etc. We can also study the electrogeopulses studies to predict the impending earth quake.

Observe the changes in the electric currents of the earth system 24 hours, 365 days. From a power station, the electricity is distributed to the far-off places. Normally the circuit of the power supply being completed through the earth system. Whenever if the disturbances occurs in the layers of the earth's underground, the fluctuation rate will be more due to

the earth quake obstructions such as pressure, faults, vibrations, water currents etc., of the earth's underground. So we can forecast the impending earth quake by observing the obstruction of electric currents of circuit of the earth system in the observatory of the Geoscope and also by the obstruction sounds in the electric fans etc.



3. Hazard Detection Method: And also we can find out many more secrets of the underground by keen study of the Geoscope.

For example, build Geoscope in the seismic areas and earthquakes can be predicted by virtue of performing studies as described above.

Another example, build Geoscope in the coastal areas of the sea and earthquakes and its consequent secondary hazards such as tidal forces, rogue waves, tsunami can be predicted by virtue of performing studies as described above.

Furthermore example, build Geoscope in the possible areas where landslides are likely to occur and the earthquakes and its secondary consequent hazards such as landslides mud slides, mass movements, sink holes, coastal erosion, lahar, mud flows, etc can be estimated by virtue of performing studies as described above.

One more example, build Geoscope in the volcano areas and volcanic activities such as volcanic gases, steam generated eruptions, explosive eruption of high – silica lava, effusive eruption of low-silica lava, debris flow and carbon dioxide emission etc can be predicted by virtue of performing studies as described above.

These are some examples only. We can find out many more secrets of a country weather conditions by keen study of its monsoon time scale.

4. Conclusion: We can make many more changes in the Geoscope thus bringing many more methods can be designed to predict the volcanic activities in advance.

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