



EARTHQUAKES - VOLCANOES(Causes - Forecast - Counteraction)

Elias Tsiapas (1), Despina Soumelidou (2), and Christos Tsiapas (3)

(1) KOSMOS, Geo-physical, Nea Stira Evia, Greece (tsiapas@hol.gr), (2) KOSMOS, Geo-physical, Nea Stira Evia, Greece (dtsiapa@gmail.com), (3) KOSMOS, Geo-physical, Nea Stira Evia, Greece (tsiapas@hol.gr)

Earthquakes and volcanoes are caused by:

-) Various liquid or gas elements (e.g. H₂O, H₂S, SO₂) which emerge from the pyrosphere and are trapped in the space between the Earth's crust and the pyrosphere (Moho discontinuity).
-) Protrusions of the crust at the Moho discontinuity (mountain range roots, sinking of the lithosphere's plates).
- C) The differential movement of crust and pyrosphere. The crust misses one full rotation for approximately every 100 pyrosphere rotations, mostly because of the lunar pull.

The above mentioned elements can be found in small quantities all over the Moho discontinuity, and they are constantly causing minor earthquakes and small volcanic eruptions. When large quantities of these elements (H₂O, H₂S, SO₂, etc) concentrate, they are carried away by the pyrosphere, moving from west to east under the crust. When this movement takes place under flat surfaces of the crust, it does not cause earthquakes. But when these elements come along a protrusion (a sunken plate or a mountain root) they concentrate on its western side, displacing the pyrosphere until they fill the space created. Due to the differential movement of pyrosphere and solid crust, a vacuum is created on the eastern side of these protrusions and when the aforementioned liquids overflow this space, they explode, escaping to the east. In other words, at the point of their escape, these liquids are vaporized and compressed, their flow accelerates, their temperature rises due to fluid friction and they are ionized. On the Earth's surface, a powerful rumbling sound and electrical discharges in the atmosphere, caused by the movement of the gasses, are noticeable.

When these elements escape, the space on the west side of the protrusion is violently taken up by the pyrosphere, which collides with the protrusion, causing a major earthquake, attenuation of the protrusions, cracks on the solid crust and damages to structures on the Earth's surface.

It is easy to foresee when an earthquake will occur and how big it is going to be, when we know the record of specific earthquakes and the routes they have followed towards the East. For example, to foresee an earthquake in the Mediterranean region, we have to follow the route from Equator, Latin America, to South California. The aforementioned elements will reach Italy in an average time period of 49 days and Greece in 53 days.

The most reliable preceding phenomenon to determine the epicenter of an earthquake is the rise of the crust's temperature at the area where a large quantity of elements is concentrated, among other phenomena that can be detected either by instruments or by our senses.

When there is an active volcano along the route between the area where the "starting-point" earthquake occurred and the area where we expect the same elements to cause a new earthquake, it is possible these elements will escape through the volcano's crater, carrying lava with them. We could contribute to that end, nullifying earthquakes that might be triggered by these elements further to the east, by using manmade resources, like adequate quantities of explosives at the right moment.