

ASPECTS OF L'AQUILA EARTHQUAKE PREDICTION

The town of L'Aquila was hit by earthquake on April 6, 2009 (M6.4) and 309 people were killed. Gianpaolo Giuliani predicted such an earthquake on March 23 based on his radon and local seismicity measurement in L'Aquila and its surrounding. He detected two anomalies – one in the beginning of March and the second between March 19 and March 23, 2009. He predicted that the main shock will occur during one week, i.e. until March 30, 2009.

The Major Risks Committee was held on March 31. There were seismologists and rescue workers inside this committee. They marked G. Giuliani as a charlatan, forced him to remove his prediction from net and prohibit him any access to media. Later, they declared that there will be no catastrophic event, because observed seismic swarms are common in this area.

The observations by G. Giuliani were of high quality from the scientific point of view, but when we compared his anomalies with the tilt measurement in Central Europe (Příbram, Lubeník) or in the southern Italy (Potenza), we found that both anomalies were observed everywhere and they were probably excited by stress waves, which were generated before the deep Tonga earthquake on March 19, 2009 (M7.6).

The question remains, how we can distinguish between local and global processes. If we would measure the radon not only in the surrounding of L'Aquila but in the whole Europe, it is probable that radon anomalies would be measurable on many faults activated by these stress waves from Tonga. From our point of view, the faults in L'Aquila region were activated by these global stress waves and L'Aquila earthquake seems to be the “aftershock” of Tonga earthquake, similar to Iceland earthquake on May 29, 2008 (M6.3) which was triggered by stress wave from Wenchuan earthquake on May 12, 2008 (M7.9).