Geophysical Research Abstracts
Vol. 18, EGU2016-1553, 2016
EGU General Assembly 2016

How to predict Italy L'Aquila M6.3 earthquake

Guangmeng Guo
Remote Sensing Center, Nanyang Normal University, China

According to the satellite cloud anomaly appeared over eastern Italy on 21-23 April 2012, we predicted the M6.0 quake occurred in north Italy successfully. Here checked the satellite images in 2011-2013 in Italy, and 21 cloud anomalies were found. Their possible correlation with earthquakes bigger than M4.7 which located in Italy main fault systems was statistically examined by assuming various lead times. The result shows that when the leading time interval is set to $23 \leq \Delta T \leq 45$ days, 8 of the 10 quakes were preceded by cloud anomalies. Poisson random test shows that AAR (anomaly appearance rate) and EOR (EQ occurrence rate) is much higher than the values by chance. This study proved the relation between cloud anomaly and earthquake in Italy. With this method, we found that L'Aquila earthquake can also be predicted according to cloud anomaly.