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Low frequency earthquakes in aftershock activity

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What is aftershock? The problem is old one but still unsolved problem. Redistribution of stress field around main shock area causes main role for the understanding. Reduction of aftershock activity may be caused by relaxation process. On the process relative low stress field may excite somewhat specific seismic event. We monitor very broadband seismic data as for aftershock activity of large scale earthquakes around Japan. Ishigaki (ISG) and Ogasawara (OGS) of OHP seismic network are used in this analysis. They had large earthquakes, magnitude of greater than 7, and had high aftershock activities nearby these stations. We applied to distribute earthquakes some classes by their spectrum and/or dominant frequency of signal. In our applications, low and very low frequency earthquakes are identified in these activities. And the beginnings of these events are originated about one to some days delayed from main shock. The delay of very low frequency seismic events' activation is also known in 2004 SE off Kii-hanto earthquake. The time history is related with stress relaxation indirectly. The fine monitoring of aftershock expects to be new view for aftershock activity.

Keywords: Low frequency earthquake, aftershock activity