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Earthquake prediction from peak gust(6)-The 2011 off the Pacific coast of Tohoku Earthquake-

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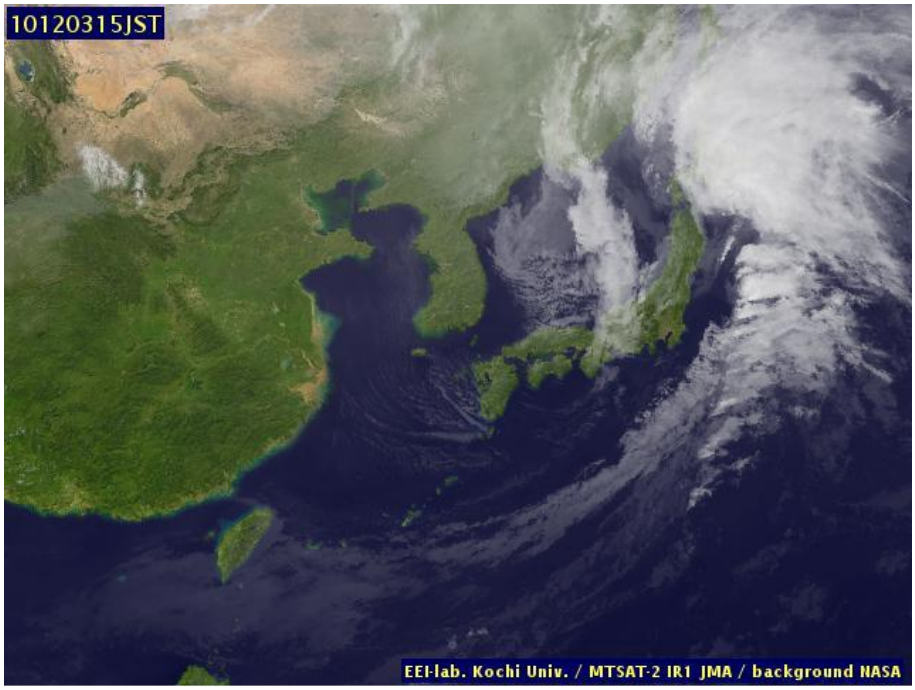

Fig.1. **The 2011 off the Pacific coast of Tohoku Earthquake is shown in the satellite image of 15:00 on December 3, 2010. The tip of the dry slot shows the epicenter. The width of the dry slot shows the length of the focal region. The direction of the wind shows the focal mechanism axis.**

1.Process

The seismology is based on the hypothesis with ”Energy is liberated when the energy of the swerve accumulated in the plate by the mantle convection exceeds a certain limit and the earthquake occurs”. It thought being not able doing the earthquake prediction for the problem to exist in this hypothesis.

Because there was many earthquake outbreak, after the typhoon passage, I paid my attention to the wind velocity / the direction of the wind of the epicenter.

The maximum instantaneous wind speed of the epicenter neighborhood understood that it was a record of the maximum instantaneous wind speed for the first time in several years from several months. Furthermore, the direction of the wind understood that I agreed in a pressure axis or the pulling axis in the transcurrent fault in the normal fault in the reverse fault in the pulling axis in the pressure axis. This is that a course of the power accords with the direction of the wind and shows that the velocity of the wind is the cause of the earthquake not mantle convection. And foretelling an earthquake is possible using time lag.

However, it is necessary to identify it in the smaller place because the range of the prediction of the epicenter is too wide. Therefore as a result of having examined energy of the wind, I understood that a downdraft was necessary so that wind affected

the earth crust. The downdraft is seen as a dry slot in the meteorology conspicuously for time and the development period to turn into an extratropical cyclone from a typhoon of the low pressure and is related to the maximum instantaneous wind speed.

As a result of I thought that I might pinpoint the epicenter on a satellite image from a dry slot, and having analyzed a satellite image about the cause of the major earthquake after 2000 and a large low pressure thought about, I understood that I could identify the epicenter.

1) The place where the maximum instantaneous wind speed for the first time in several years was recorded in the occurring place from several months is very likely to be the epicenter. The tip of the dry slot as for the epicenter of major earthquakes more than M6.5.

2) The volume of earthquake relates to strong winds level more than the threshold with the maximum instantaneous wind speed.

3) Outbreak time: From one week to seven months later (three months on the average)

(It has announced in JPGU and Seismological Society of Japan)

2. The prediction of the 2011 off the Pacific coast of Tohoku Earthquake

As had spoken on the top, it pays attention when it changes from the typhoon into the extratropical cyclone and the low-pressure develops. A low pressure of October 31 and December 3 falls under it. A major earthquake was expected distance offing Tohoku by the weather charts, but did not analyze it in detail concerning the distance offing. I analyzed it after an earthquake . (The analysis of the low-pressure on December 3 is recorded here.)

1)March 9, 2011 11:45 Sanriku-oki Earthquake (M7.2 P:WNW-ESE reverse fault)

http://www.data.jma.go.jp/fcd/yoho/data/hibiten/2010/201012.pdf

http://weather.is.kochi-u.ac.jp/sat/gms.fareast/2010/12/04/fe.10120402.jpg

The dry slot point shows the epicenter. The wind direction of the WNW is corresponding to P axis of the mechanism solution.

2)March 11, 2011 14:46 The 2011 off the Pacific coast of Tohoku Earthquake (M9.0 P:WNW-ESE reverse fault)

http://weather.is.kochi-u.ac.jp/sat/gms.fareast/2010/12/03/fe.10120315.jpg Fig.1

The dry slot of the satellite image is seen conspicuously at 15:00 from 13:00. Width of the tip of the dry slot accords with the length of the focal region. The others are the same as 1).

Keywords: peak gust, earthquake prediction, dry slot, downdraft, satellite image