New Concepts in Global Tectonics NEWSLETTER

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THE CLOUD OF THE M8.4 INDONESIAN EARTHQUAKE ON SEPTEMBER 12, 2007

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Abstract: This paper reveals the vapor precursor of the M8.4 Sumatra, Indonesian earthquake on 12 September 2007. It has a sudden, local, high temperature and high pressure like other vapor precursors. Both properties are basically clear although the low frequency of four images a day takes a lot of details away. This paper identifies serious problems in meteorology, seismology and widely studied short-term precursors that are holding back scientific development and preventing earthquake evacuation. Since earthquakes killed 678 people in 2007, including 25 by the M8.4 Indonesian earthquake, the author would like to repeat his appeal **(1)**. He requests governments to use 0.1% of their budgets to solve satellite data problems and earthquake data problems, detailed in **(2, 3)**, so the vapor precursor will be able to predict a large epicenter in a circle with a 20 km radius independently of very cold surroundings, i.e. as exactly and easily as Shou's Bam prediction in any surroundings, and the magnitude with an error of +/- 0.2M. Afterwards, if more work is done to narrow the time window to a week, successful evacuation will be possible.

Keywords: *earthquake, vapor, prediction, cloud, Indonesia*

Precursor

The M8.4 Sumatra, Indonesia earthquake occurred at -4.5, 101.36 on 12 September 2007 and killed 25 people. This paper will discuss its vapor precursor.

Figure 1 shows a series of infrared satellite images over Sumatra, Indonesia and the Indian Ocean from 6:00 (UTC) on 10 August 2007 to 0:00 on 15 August. In spite of a low frequency of four images a day, it is clear that a dark hole, marked by a series of "X", appeared around the epicenter, marked by white ring, at about 12:00 on 10 August 2007 and became bigger and darker at 18:00 on 10 August and at 0:00 on 11 August or at night from 18:00 (LT) on 10 August to 6:00 on 11 August. It indicated a sudden increase in local heat that meteorology could not explain, but the Earthquake Vapor Theory could. It was due to a hot earthquake vapor eruption, denoted a geoeruption **(2, 3)**. In addition, a wave-shaped earthquake cloud or a row of linear earthquake clouds emerged from the epicenter northwestward beginning at about 18:00 on 10 August and then perpendicularly crossed and melted the northeastward weather cloud at about 6:00 on 11 August, and finally became a big dense earthquake cloud sticking at the epicenter, like the Bam cloud, from about 12:00 on 13 August to 18:00 on 14 August. Figure 2 shows the details.

Figure 2 contains two magnified images, each of which has a ring at -4.5, 101.36 for the epicenter. The image at 6:00 on 11 August shows the northwestward wave-shaped earthquake cloud perpendicularly crossing and melting the northeastward weather cloud between a pair of black arrows. This kind of shape forms due to vapor coming to the surface through many crevices from a common hypocenter. The image at 12:00 on 13 August has the same pair of black arrows in terms of size and location. Although 54 hours elapse from 6:00 on 11 August to 12:00 on 13 August, the cloud keeps the same direction from the epicenter to the northwest and the same width between the black arrows. Both facts suggest that the clouds are the same.

The vapor exactly predicted the epicenter by its source at the ring continuously from 12:00 on 13 August to 18:00 on 14 August. It predicted the magnitude by its mass, its cloud being about 5,000 km in length, and lasted for 96 hours from 18:00 on 10 August to 18:00 on 14 August. Because the Bam cloud with a duration of 28 hours had predicted the M6.8 Bam earthquake, the above cloud should have predicted an M7.5 earthquake at least. It predicted the time within a common period of 112 days, this being the longest delay **(1),** i.e. from 10 August to 30 November, which contained the actual date of 12 September. Therefore, the vapor precursor correctly predicted the epicenter, magnitude and time of the M8.4 Indonesia earthquake.

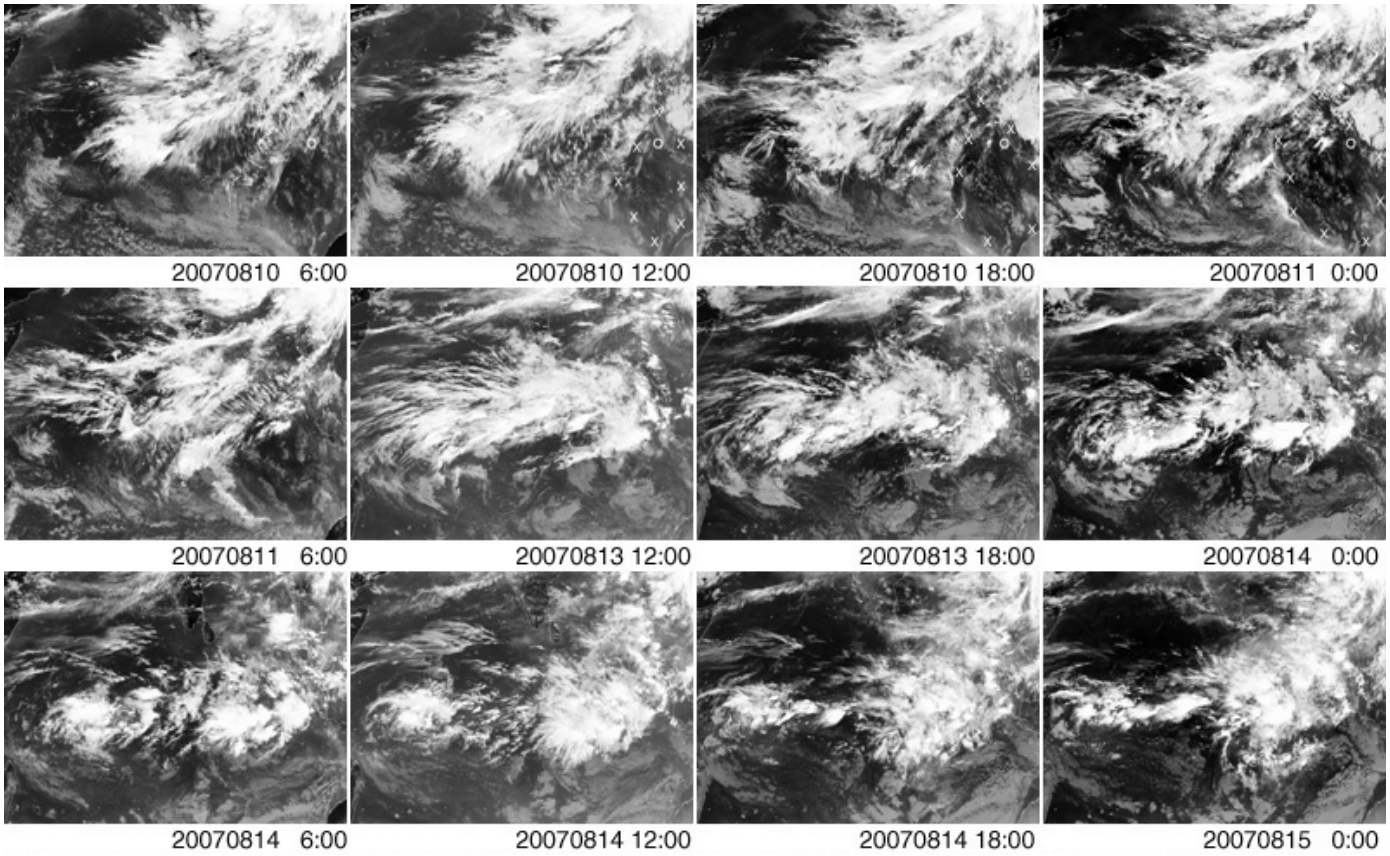

Figure 1. This series of infrared images are from EUMETSAT's IODC satellite with a frequency of 4 images an hour (http://www.eumetsat.de/en/index.html), transformed and offered to the public with a frequency of 4 images a day by Dundee University, UK (http://www.sat.dundee.ac.uk/pdus.html). Here are all the images available to the public between 6:00 (UTC) on 10 August 2007 and 0:00 on 15 August. The white rings in the top four images reveal the M8.4 epicenter. A dark hole appeared at 12:00 on 10 August, and became bigger and darker at 18:00 on 10 August and at 0:00 of 11 August, roughly marked by white "X".

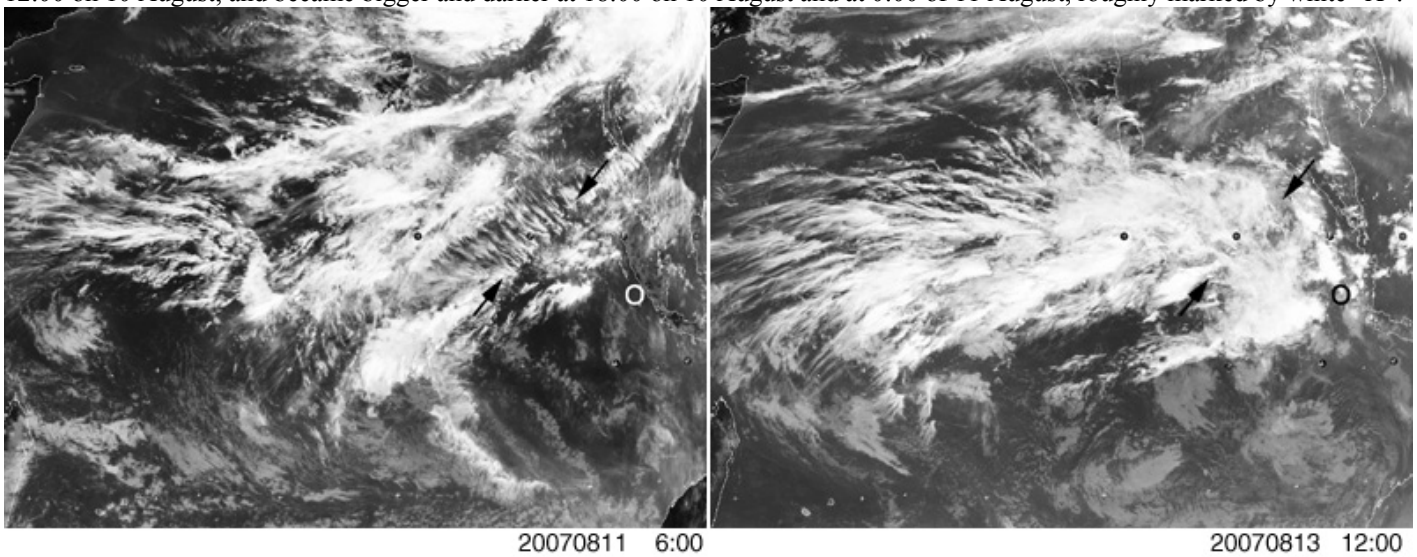

Figure 2. The two images are the same as those at the same time in Figure 1 except that they are enlarged to show more details: the rings at -4.5, 101.36 for the M8.4 epicenter, a pair of black arrows in the image of at 6:00 on 11 August to show the northwestward wave-shaped cloud perpendicularly crossing and melting the northeastward weather cloud, and another pair of similar black arrows in the image at 12:00 on 13 August to show both images having the same earthquake cloud with the same width and direction in spite of no image for 54 hours.

Discussion

The M8.4 Indonesian earthquake vapor precursor shows its high temperature by melting part of weather clouds and its high pressure by perpendicularly crossing the weather cloud and moving for a long distance. Sudden, local heat and abnormal current are its two important characteristics. Some meteorologists attribute abnormal currents to Global Warming, but this can not explain why abnormal currents happen locally and suddenly. Some meteorologists create the term El Niño to explain abnormal temperature, but they do not mention where its energy comes from. Most mainstream seismologists explain earthquakes by the Plate Theory, but it can explain neither why two plates do not collide along their long boundary together to form many earthquakes, but only at a point where earthquake vapor erupted, nor why the two plates collide at that point neither before, nor after, but during a common period of 112 days after the vapor erupted (1). Moreover, the Plate Theory can not explain earthquake vapor, inner earthquakes, the difference between inner earthquakes and boundary earthquakes and so on.

Many scientists repeat various widely studied short-term precursors, but the *Nature* Debates denied all of them **(4)**. If they work for science and people, they ought to set up a strict model to explain how those precursors could trigger earthquakes and how those precursors link to various earthquake phenomena, e.g. the Bam cloud, step by step like Shou's Earthquake Vapor Theory. Moreover, they ought to demonstrate those precursors with statistically significant predictions like Shou's Bam prediction, which has a probability close to zero, his Hector Mine, California prediction **(5)**, which disproved JPL's (NASA's Jet Propulsion Laboratory) prediction of the next major earthquake in Los Angeles on 3 August 1999 that cost multi-million dollars **(6)**, and his 50 independent predictions, verified by the United States Geological Survey (USGS), which have an overall probability of 1 in 16,000 under American "Peer on" i.e. to suppose data of the USGS without error and an earthquake to be at a point without a tiny radius and to blame all problems of satellite data, earthquake data, and Shou's experience as a pioneer on the vapour precursor. Without statistical significance, one can claim anything one wants, but it is meaningless. Both a strict model and statistic significance will help them to find serious problems.

In 2005, the United Nations published Shou's Earthquake Vapor Theory in its yearbook: No. 16 *SEMINARS of the United Nations Programme on Space Applications* and sent the book to all of its members during the 42nd Session of the Scientific and Technical Subcommittee in Vienna from 21 February to 4 March 2005. However, no government paid attention to Shou's work. In 2006, Shou wrote, "To save lives, Shou suggested that governments use 0.1% of their budgets to solve satellite data problems and earthquake data problems, detailed in **(2, 3)**, while introducing his work to Chinese scientists in Beijing three times in April 2006. If this happens, it will be possible to predict a large epicenter in a circle with a 20 km radius independently of very cold surroundings, i.e. as exactly and easily as Shou's Bam prediction in any surroundings, and the magnitude with an error of +/- 0.2M. Later, if more work is done to narrow the time window to a week, successful evacuation will be possible." **(1)** However, nobody has paid attention to those problems. On the other hand, billion-dollars-a-year budgets have not produced a reliable prediction, and 678 people have been killed in 2007 so far. Earthquake prediction looks more like a societal problem than a scientific problem. Before evacuation becomes possible, society will have to solve the societal problem first.

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