

# Predicting Potential Earthquakes and their Locations using Remote Sensing Technologies

**Dr. Shunji Murai**

**Prof. Emeritus, Univ, of Tokyo**

**and**

**Chairman, Japan Earthquake Science Exploration Agency**

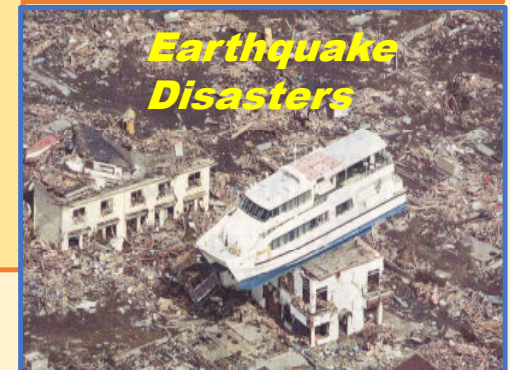
<https://www.jesea.co>



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**UN Conference  
Dec. 8, 2022  
At UN Bangkok**



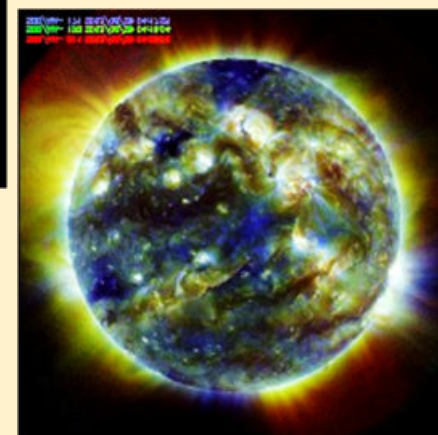
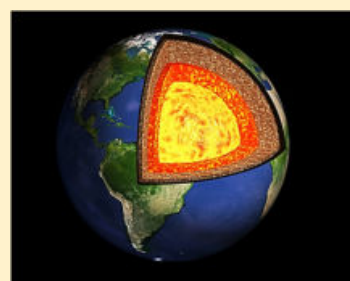
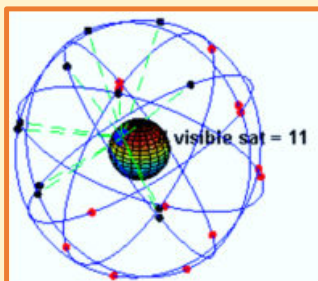
## My mission to save lives from Eq. disaster

- # Though Japan is an Eq. disaster prone country with huge number of victims, the Japanese government and seismic science society officially announced that it is impossible to make Eq. prediction after the Great East Japan Eq. with M9.1 occurred on 2011/3/11.
- # I as a RS scientist, I decided to achieve my mission of Eq. prediction using RS technologies to save human life.
- # I judged that only RS technologies can provide various types potential precursors of very complicate Eq. Phenomena.
- # I have continued to challenge precise Eq. prediction in these 20 years by keeping my research attitude to overcome all difficulties.



## Why is RS used?

- # A half century has passed since the first launch of Earth Observation Satellite “Landsat-1” launched in 1972. Now so many satellite RS data are available freely.
- # GPS, meteorological satellite such as GOES and “Himawari” etc., as well as ground base RS sensors such as infrasound sensor, thermometer, geomagnetic sensor, aurora device etc. are also used in my research.



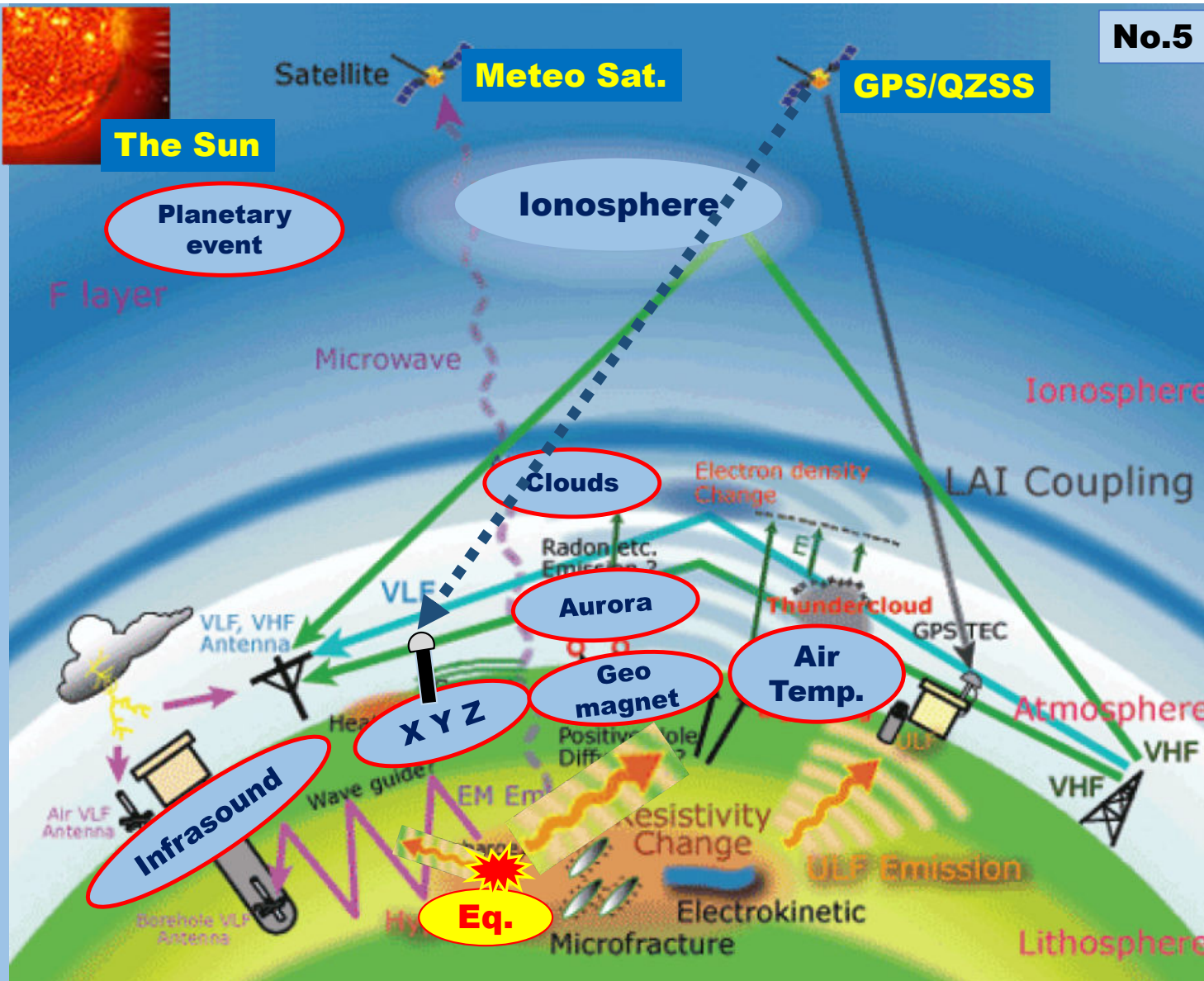
## Requirements of Eq. Prediction

No.4

- # According to the past commercialized Eq. Prediction business by JESEA, the subscribers used to request as follows.
  - “When” >>> “within a month”,
  - “Where” >>> “within a certain local area ”
  - “How large”>>> “a range of the predicted Magnitude  $\pm 0.5$ ”.
- # My company “JESEA” defines so called “**pinpoint Eq. prediction**” to fulfill the above requirements.
- # JESEA’s Pinpoint Prediction has been distributed to the subscribers in a form of “Weekly MEGA earthquake magazine or Web service” since Januar 2022.
- # The main role of pinpoint Eq. prediction is to provide preparedness in advance to incoming large Eq. to save human life as well as to protect economic activities.







No.5

**Various types of precursor**

1. **Daily Changes XYZ of GPS with AI** Patent
2. **Infrasound**
3. **Clouds pattern of satellite images**
4. **Air Temperature** Patent
5. **Geomagnetism & Aurora electrojet**
6. **Planetary event**

**All above RS data have been validated on the correlation between the anomalies and occurrence of Eq.**

## Contribution of RS data to Eq. Prediction

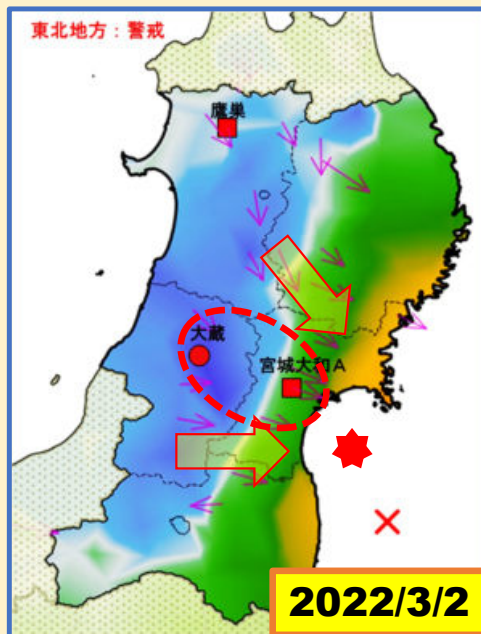
No.6

		When	Where	How large
<b>1</b>	<b>XYZ changes of GPS</b>	△ 2~3 months	○ district	△ >M5
<b>2</b>	<b>Infrasound</b>	○ 2~3 weeks	△ region	△ >M5
<b>3</b>	<b>Cloud anomaly of satellite images</b>	○ Within a month	○ district	○ M ± 0.5
<b>4</b>	<b>Anomaly of air temperature</b>	○ 2~4 weeks	△ region	△ >M5
<b>5</b>	<b>Geomagnetism &amp; Aurora electrojet</b>	○ 2~4 weeks	X unpredictable	△ >M6
<b>6</b>	<b>Anomaly of solar dynamics</b>	○ 2~4 weeks	X unpredictable	△ >M7
<b>7</b>	<b>Planetary event including new moon</b>	○ 2~4 weeks	X unpredictable	○ M7 to M8

# Various Types of Pre-cursor: GPS XYZ analysis

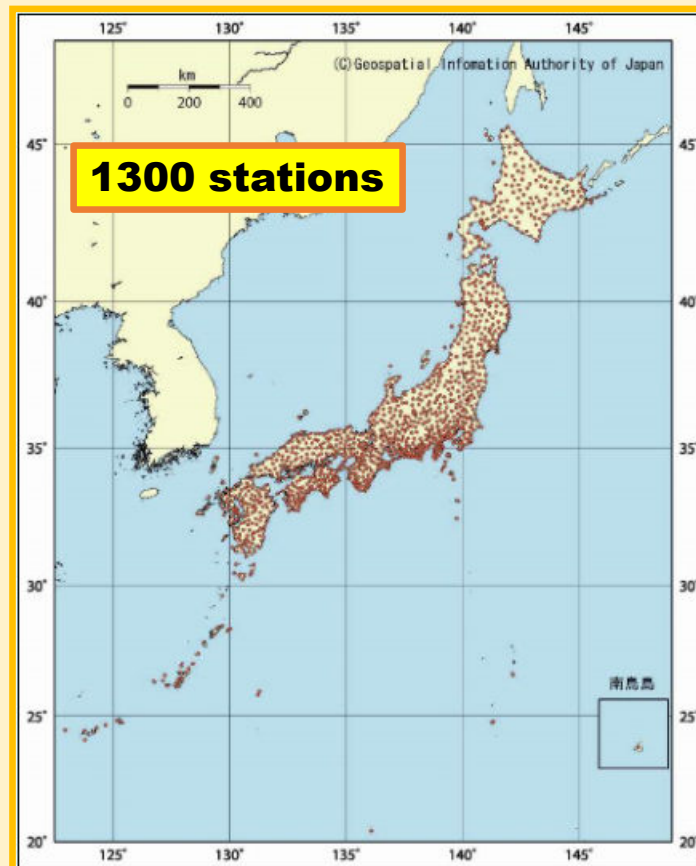
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## Horizontally convergent movement:



Two weeks after M7.4 Eq at

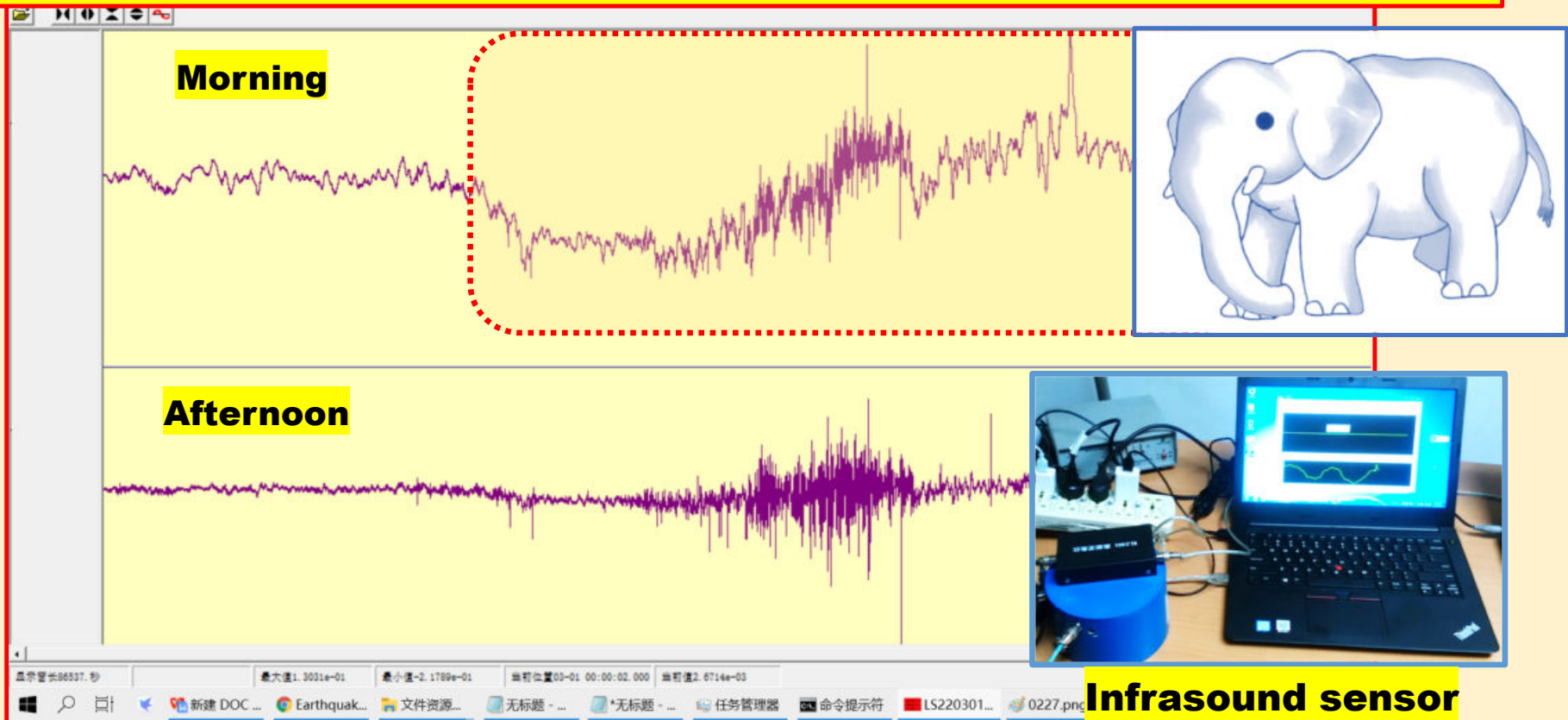
## GPS stations in Japan



# Various Types of Pre-cursor: **Infrasound**

No.8

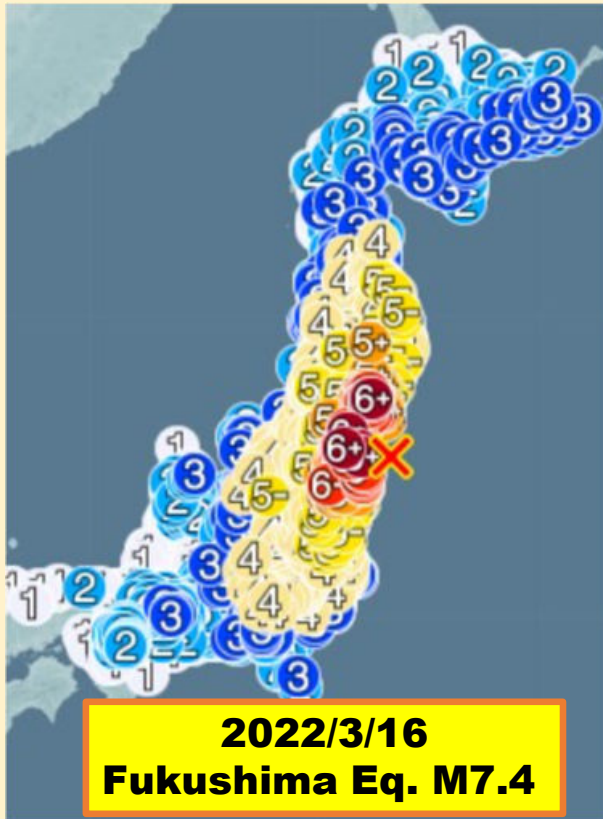
**2022/3/1: Anomaly appeared 15 days before 3/16 Fukushima Offshore Eq. with M7.4**



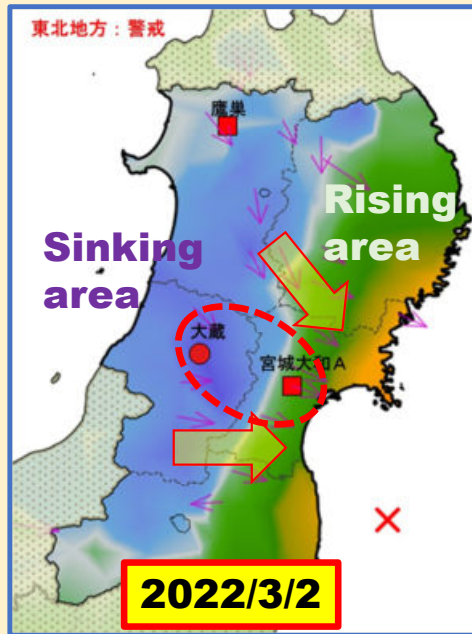


# Examples of Pre-cursor ~Fukushima Offshore Earthquake with M7.4~

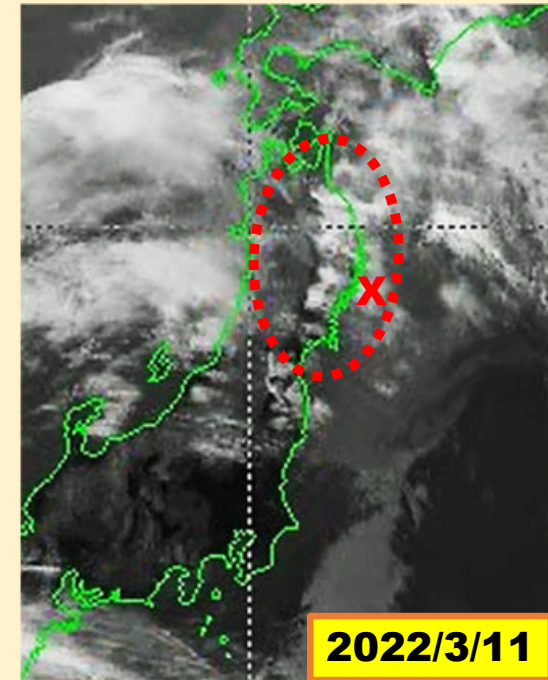
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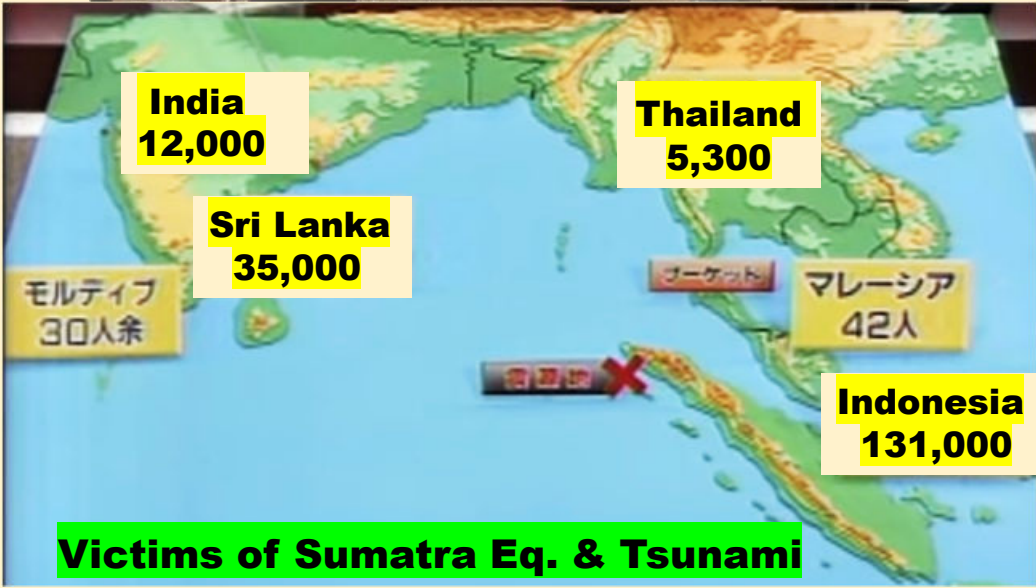
## Crustal Change Analysis



## Clouds Pattern due to degassing



**Sumatra Earthquake & Tsunami**  
**2004/12/26**  
**Banda Ache, Sumatra**  
**Indonesia**  
**M9.1**  
**Tsunami; 34m high max.**  
**Number of Victims: 227,000**

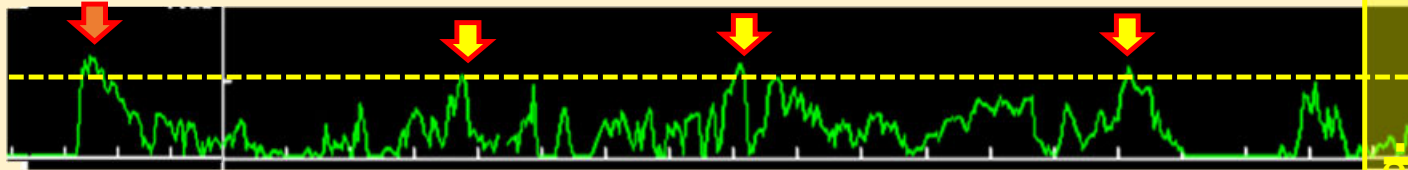


**A scientific evidence of anomalies of solar dynamics before huge Eq.**  
**~Sumatra EQ. 2004/12/24 M9.1~**

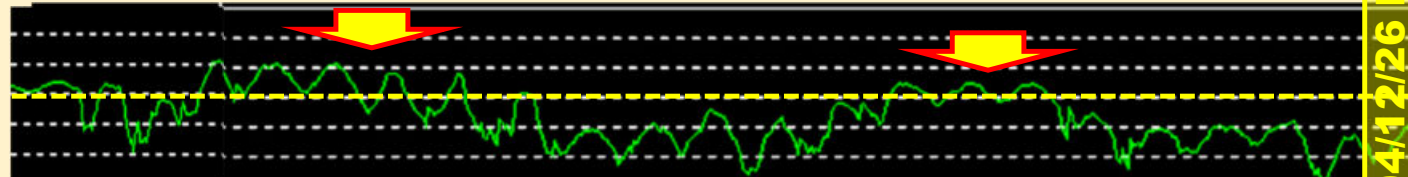
**Magnetic Field**  
**Very high**



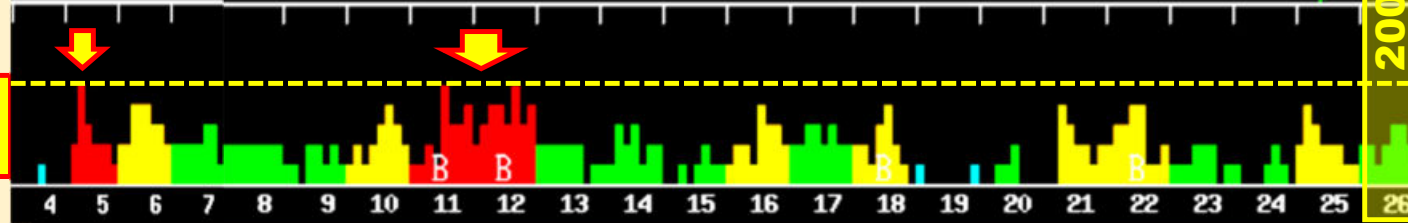
**Solar wind Density**  
**Very high**



**Electron**  
**Very high**



**Geomagnetism**  
**Magnetic storm**



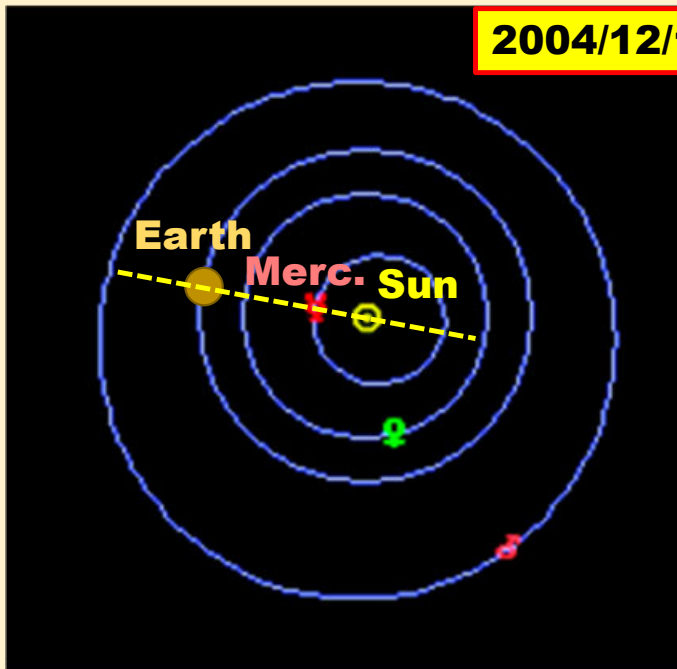


**Various Types of Pre-cursor: New Moon & Planetary Event  
Sumatra Eq. 2004/12/26 M9.1**

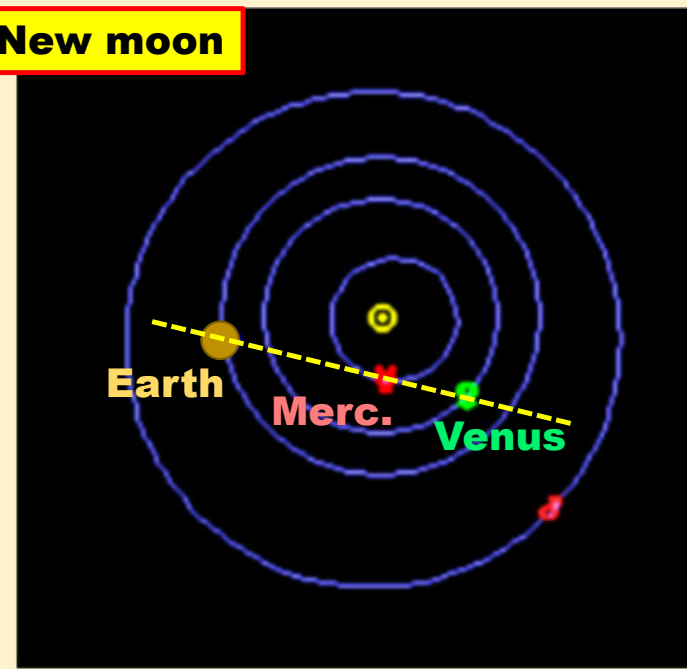
No.12

**When planetary series, planetary approaching and new moon almost synchronize within a few weeks, a huge EQ. may most possibly occur.**

**2004/12/12: New moon**



**2004/12/10: planetary series;  
The Sun, Mercury and Earth**

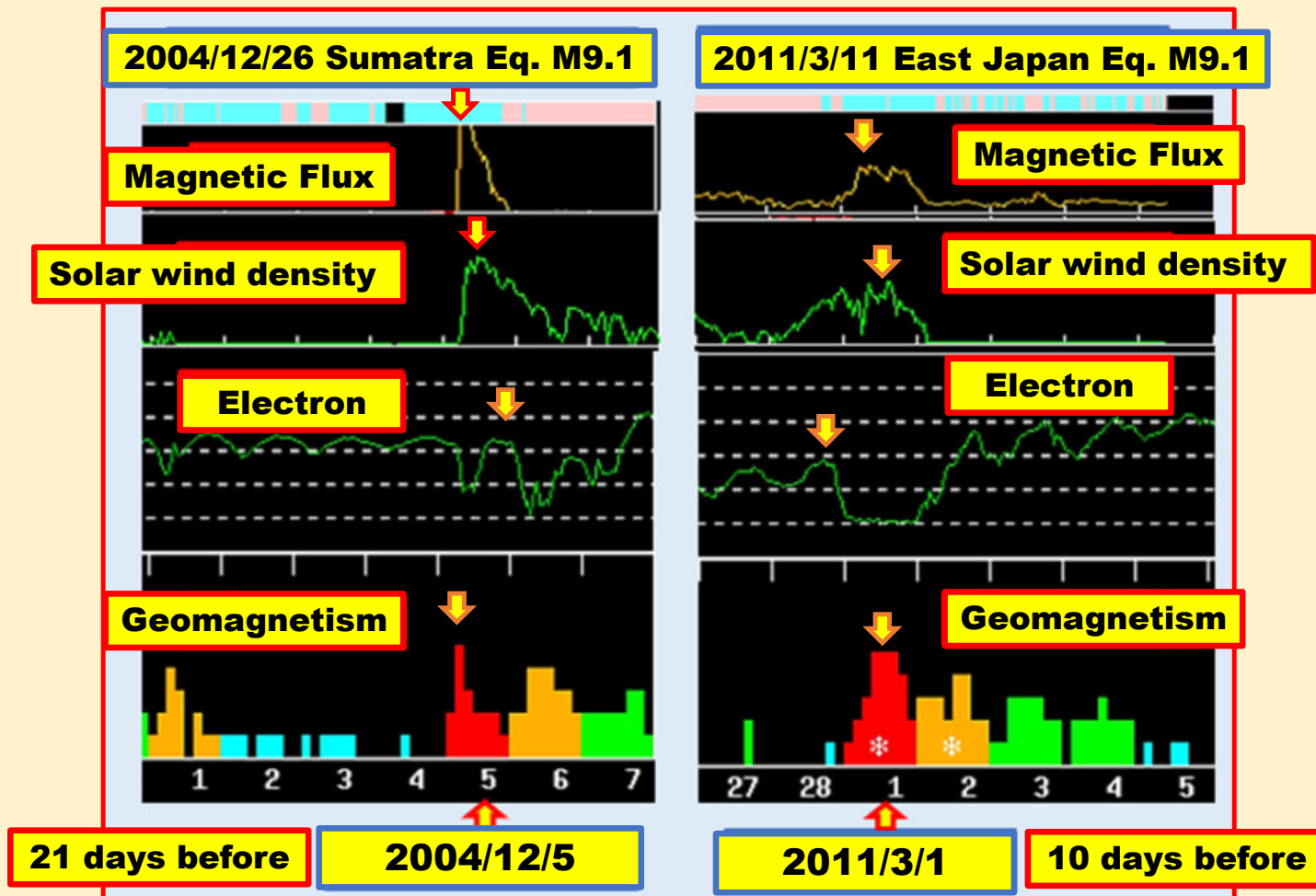


**2004/12/30: planetary approaching;  
Earth, Mercury and Venus**



## Correlation between huge Eq. and solar dynamics anomalies

No.14



# Result of pinpoint Eq. prediction in Jan. to Jul. 2022

No.15

1/22 地震発生 最大震度5強  
先週(1/19)発出のピンポイント予測

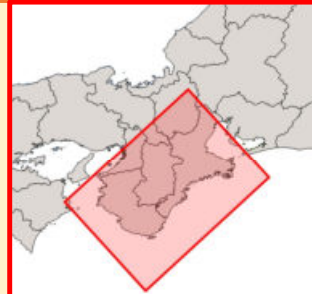


予測  
エリア：赤枠エリア  
時期：2/17頃まで  
規模：M5.5±0.5

**Predicted from 1/19 to 2/17**  
**Where; within the red frame**  
**How large; M5.5 ±0.5**  
**Eq. ; 1/22 at X M6.6 Correct!**

新規(2022.01.28発出)

エリア：紀伊半島周辺  
時期：2/28頃  
規模：M6.0±



**Predicted from 1/28 to 2/28**  
**Where; within the red frame**  
**How large; M6.0 ±0.5**  
**Eq. ; none, Incorrect!**

発出中(2022.01.19発出、01.26変更)

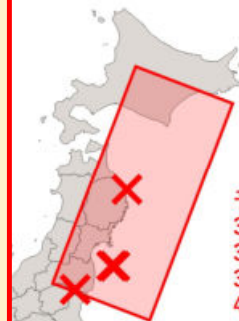


エリア：東北地方の  
陸域または海域  
時期：2/26頃まで  
規模：M6.0±0.5  
予測したエリア内  
エリア：宮城沖  
時期：2/18  
規模：M5.3

**Predicted from 1/19 to 2/26**  
**Where; within the red frame**  
**How large; M6.0 ±0.5**  
**Eq. ; 2/18 at X M5.3 Correct!**

発出中(2022.03.16発出)  
時期修正(2022.04.20修正)

エリア：東北地方から北海道  
時期：4/27頃まで  
規模：M6.5±0.5



予測したエリア内で地震発生  
3/16 福島県沖 最大震度5弱  
3/16 福島県沖 最大震度6強  
3/18 岩手県沖 最大震度5強  
4/19 福島県中通り 最大震度

**Predicted from 3/16 to 4/20**  
**Where; within the red frame**  
**How large; M6.5 ±0.5**  
**Eq. ; 3/16 at X M7.4 Correct!**

発出中(2022.01.26発出)



エリア：道北・道東の  
陸域または海域  
時期：2/26頃まで  
規模：M6.0±0.5  
予測したエリア  
エリア：浦河沖  
時期：2/17  
規模：M5.0

**Predicted from 1/26 to 2/26**  
**Where; within the red frame**  
**How large; M6.0 ±0.5**  
**Eq. ; 2/17 at X M5.0 ~Correct**

予測  
2022.05.23発出  
エリア：中部地方周辺  
時期：6/22頃まで  
規模：M5.5±0.5



**Predicted from 5/21 to 6/22**  
**Where; within the red frame**  
**How large; M5.5 ±0.5**  
**Eq. ; 6/19 at X M5.4 Correct!**

## My new theory concerning the cause of large Eq.

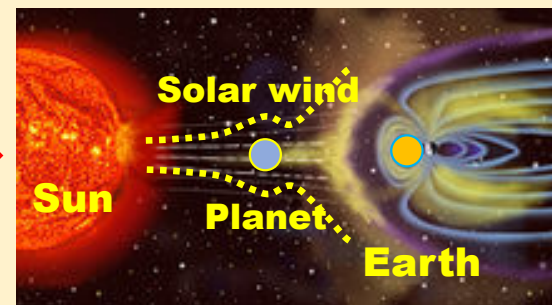
No.16

### [Justification of my theory]

- # The mechanism what causes Eq. is not yet verified scientifically.
- # Considering that the phenomena of Eq. are so complicated, I have reached an assumption that **solar dynamics anomalies accompanied with nuclear fusion of hydrogen atom may induce Eq.**
- # The solar wind is blowing to the earth with very high velocity of **300~700km per second**. When the velocity exceeds 600km/s with very active sun flare, the Earth would be moved by swirl phenomenon together with geomagnetic storm as well as solar storm.
- # As a result of such anomalies, high temperature and highly pressured liquid mantle or magma of deep underground is driven to erupt upward.
- # After gassing effect, sudden subsidence happens. I assume this could induce Eq.
- # In case when special planetary events are synchronized, **huge Eq.** may occur.



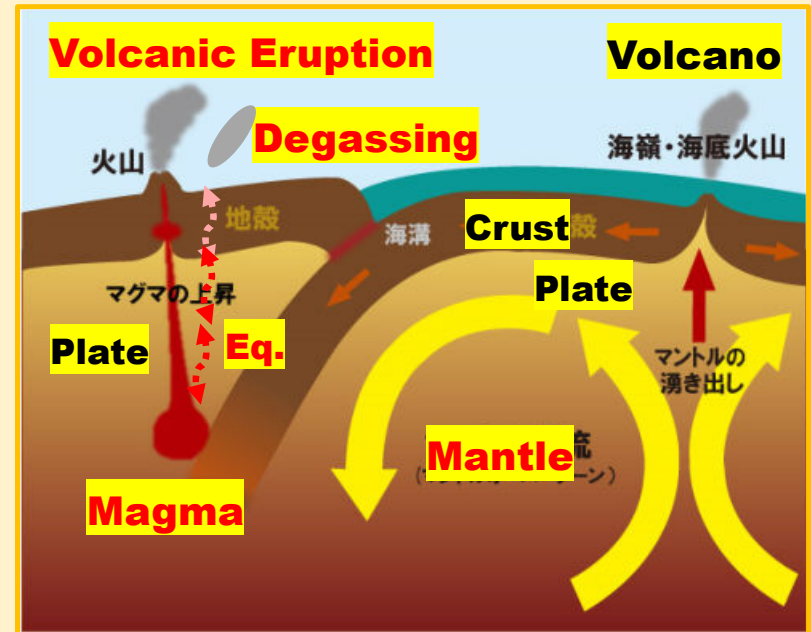
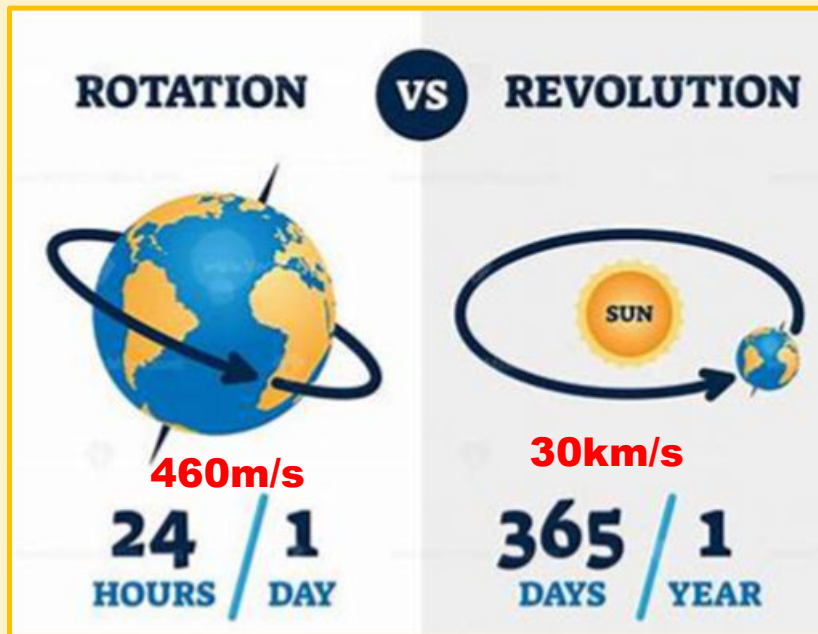
New moon  
Planetary events



## The Earth under influence of the solar dynamics

No.17

- # In addition, the earth is rotating with the speed of 460m/s and is revolving around the sun with the speed of 30km/s, high temperature liquid mantle and magma are always forced to erupt to the earth surface by centrifugal force.
- # **In conclusion, large earthquakes are caused with solar dynamics anomalies.**



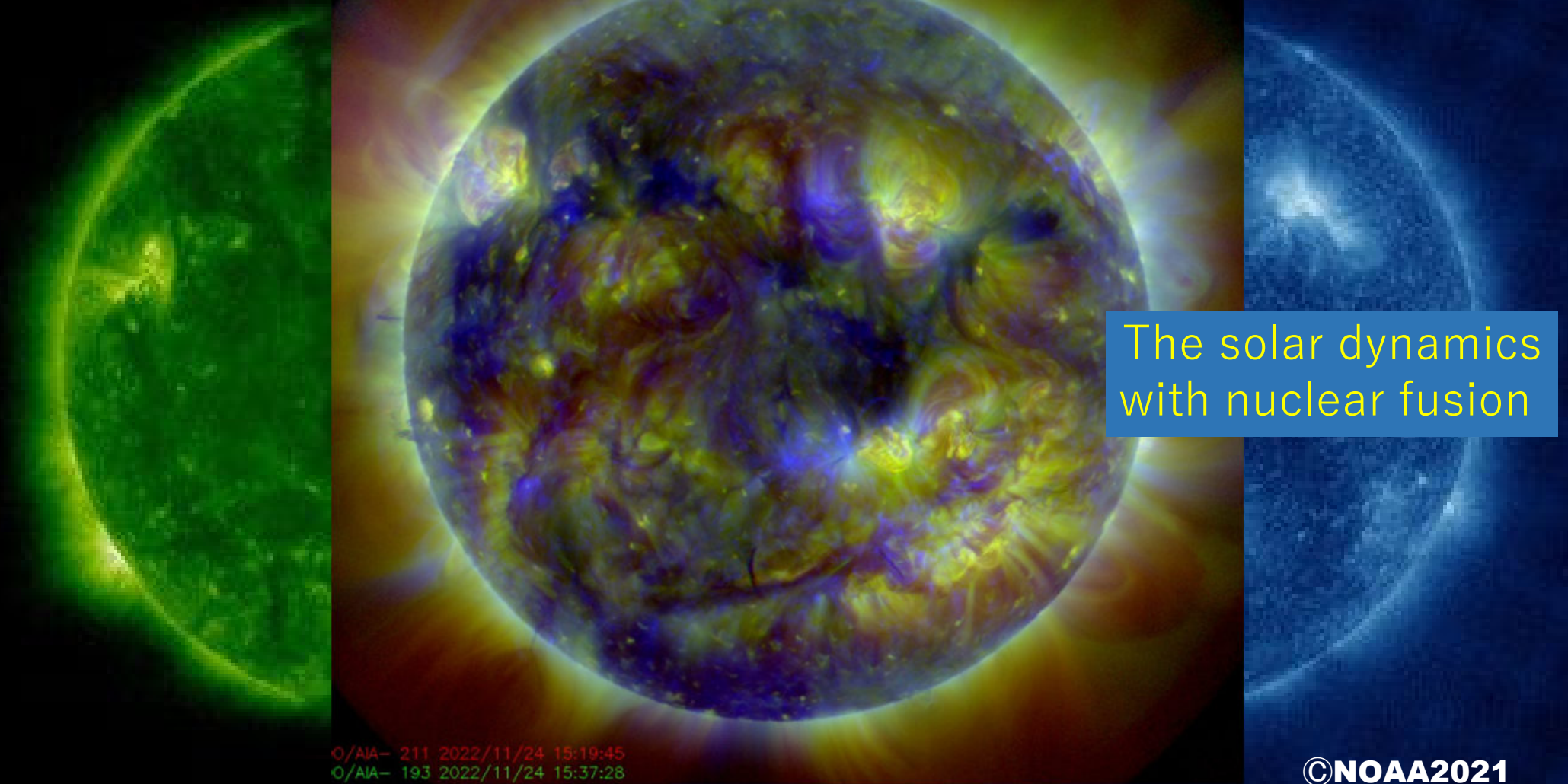


## Conclusions

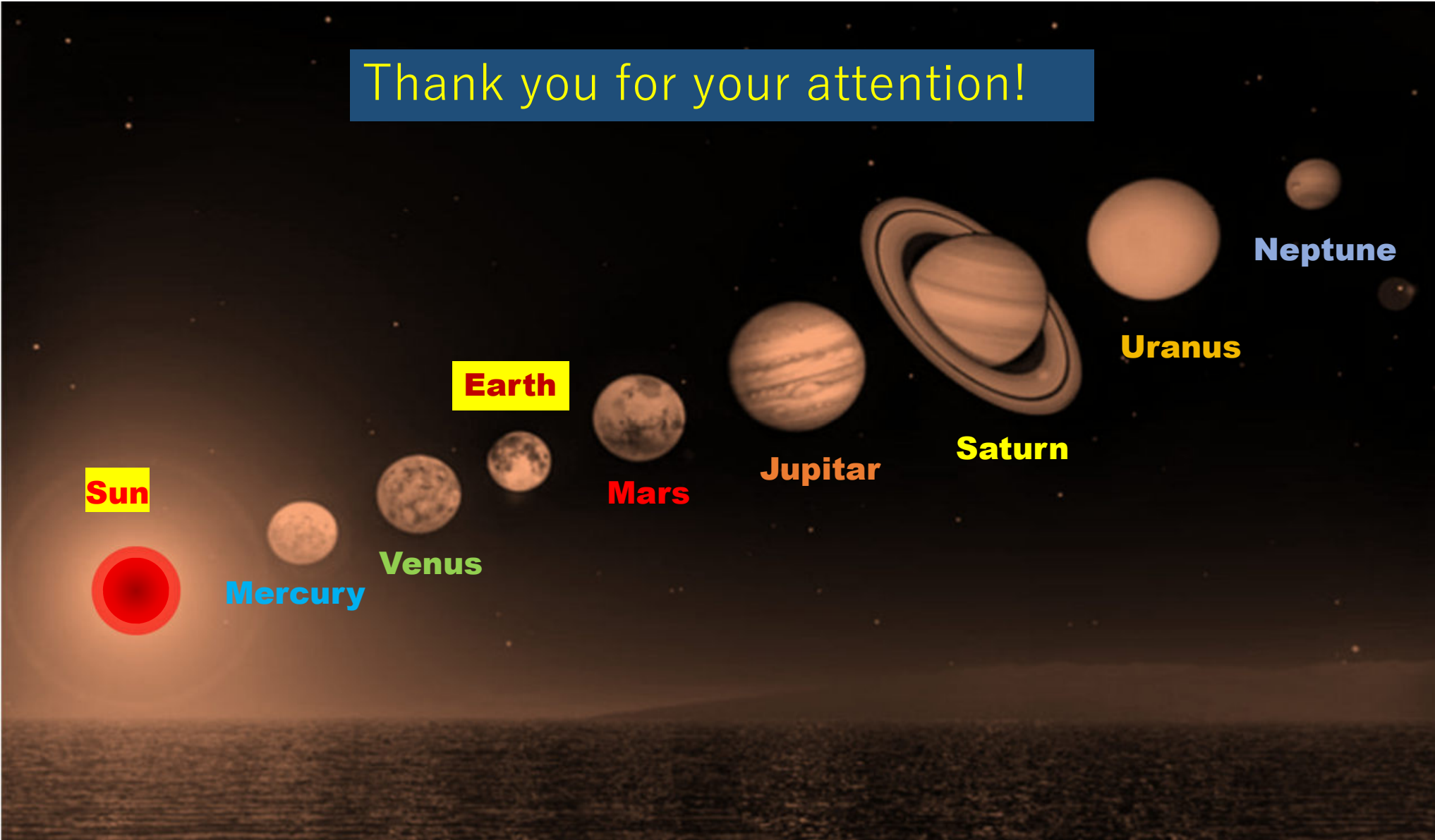
No.18

- # **Pinpoint Eq. prediction** to forecast **when**(within a month), **where** (within predicted area) and **how large** (predicted  $M \pm 0.5$ ) has been achieved without avoiding all possible relevant precursors observed with RS data.
- # **The correctness of the pinpoint Eq. prediction** served as business to about 40,000 subscribers since January 2022, the prediction accuracy is **75% to 80%**.
- # **As the result of my 20 years research activities on Eq. prediction, I propose a new theory that solar dynamics anomalies cause large earthquakes.**
- # **I wish to serve myself for particularly Asian people to rescue human life** from Eq. disasters by providing **accurate pinpoint Eq. prediction.**

Remote sensing of solar dynamics will be a key for Eq. Prediction



Thank you for your attention!



**Sun**

**Mercury**

**Venus**

**Earth**

**Mars**

**Jupiter**

**Saturn**

**Uranus**

**Neptune**