Earth Quake Model 2.0: Attract Force Equation Release Earthquake Mechanism with Explaining Related Phenomena

By Yan Ji

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Abstract- Earth quake was nature phenomena, which has huge destroyed power, and make huge economic loss and human injuries and deaths. The reason of Earth quake has caused lots of researches. And predicting Earthquake has been the very important work on every day. While the mechanism of Earth quake was still unclearly, and the Earthquake predictions were still at initial stage. This paper use attract force mathematic physics model to build Earthquake mechanism model by finite element method, and try to explain the reason of Earthquake formation. At same time it was used to explain the related phenomena about Earthquake. The aims were to help for accurate predict Earthquake, and try to redeem the economic loss and save more people. This model was named Earth Quake Model 2.0, which was different and distinguished from the models before, and it was wish to help for seismic researches.

Keywords: earth quake, mathematic model, attract force equation, seismic mechanism, explain phenomena.

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I. Introduction

Earth quake was an antiquity nature phenomenon, which was companied with the development of Earth. Earth quake took place more than ten-thousand times on Earth every year [1]. The Earth quake have huge destroy, and make people death and more damages, with more afraid of it, which caused the scientist to research on predict Earthquake and reduce the losing.

The consensus of Earth quake before was about that the plate crash [2] on fault areas to produce shake to Earth surface to be Earth quake. This plate crash theory cannot explain many Earth quake related phenomena. The Earth voice might be easy for understand, while some other earth quake phenomena, such as Earth light, Earth electric resistance reduce, Earth rotation sudden slow, and buildings rotated collapse, which were very difficult to be explained by the "plate crash theory". So it was necessary to build a new theory system to explain Earth quake reason and seismic related phenomena.

II. Results and Discussion

a) Theory equation

The paper introduced a new model to explain Earth quake mechanism, which was named as Earth Quake Model 2.0. This model was deduced from the Newton force principle attract force equation: $F=G(m1*m2)/(R^2)$ [Eq.1] [3]. The Einstein mass-energy equation $E=mc^2$ [4] to replace mass in Eq.1 by $m=E/(c^2)$, then it was got that energy attract force deduction $F(c^4)/G=E1*E2/R^2$ [Eq.2] [5]. This equation means that the energy bodies or fields have attract-force between each other. Celestial positions can change the potential energy, which produce energy attract -force on quantum group, photon, heat flow, and other energy fields. Another deduction was that point a (mx) with b and c points (m1, and m2). The point a have received two points attract force from b and c. The a point received attract force was the vector addition from point b and c. then it can be got that the vector addition attract force deduction: $F/G= m1*mx/(r1^2)-mx*m2/(r2^2)$. [Eq.3] [6]. The G was attract force constant, m was mass, which also can be replaced by E energy; r was distance between two mass bodies or energy bodies.

III. Energy Source

Firstly, It was to consider the energy source of Earth quake. The plate crash energy might be from Earth rotation [7]. Some scholar thought solid tide [8] caused Earth quake. It was well known that sea tides were caused by Sun and Moon movement positions' changing to produce different attract force on sea water. So it can be bold assumption that cause Earth quake energy was from cosmic celestial movements. Based on Eq. 2, energy changing can produce force actions. It means that the nearby Sun or Moon movement can effect on Earth quake, especially the solar eclipse and lunar eclipse, and with some other cosmic action, such as planets opposite the Sun, planet lined, even far distance supernova explosion. These were celestial movements that not produced the mass attract force, which produced energy attract-force, which was made by celestial movements and change related position. So it can be concluded that support Earth quake energy were from cosmic celestial energy events. These cosmic celestial movements produced attract force that acted on Earth, and then support the Earth quake energy.

Power source was from the celestial energy events. Celestial movements were normal and calm. And the mass of Sun or Moon was near to constant, and

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the distance between the Sun or Moon and Earth changed to produce energy attract force. From the Newton attract force equation (Eq. 1), it was difficult to find the attract force changing on Earth by Sun or Moon. While from the deduction of Newton attract force equation (Eq. 2), energy field also caused attract force changing. The solar eclipses or lunar eclipse gave seldom mass changing, which have huge potential energy field changing. The position related huge potential energy changing transformed to change the attract force that act on Earth, and which was the Earth quake energy source. It can be deduced that the cosmic celestial movements lead to huge energy field changing to change the attract force that acted on Earth, and then supported the energy of Earth quake. The movement of celestials was not increased mass attract-force; while which could can increase energy attract force. The Earth surface, mantle, and core of Earth layers all received energy attract force from celestial energy events. The celestial energy attract force can not only act on surface but also act on Earth deep layers matter or energy bodies.

IV. EARTH MODEL

Using finite element method was to build Earth attract force model. It set rigid balls array, every ball was 1 meter diameter and 1 Kg mass. The array set 11 X 11 balls with uniform distribution (Figure 1). Then using Newton attract force deduced equation (Eq.3) to calculate the every ball received attract force vector addition. And it was marked the attract force vector addition on every balls. Then the situation of Earth attract force distribution was shown in Figure 1.

Figure 1 gave the calculation results of the attract force distribution situation. It can be seen that the internal balls received outwards direction attract force. From center to surface, the outward attract force intensity was increased, which took on accelerated increasing and outward earth situation. While on the surface layers, the attract force take on inward attract force direction. It can be concluded that Earth internal attract force situation that the surface layer received inward attract force, the internal parts received outward attract force, and from center to surface, the attract force strength was show accelerated increasing outward earth. At the sub surface Earth layer, the internal parts received outward attract force, and surface layers received inward attract force, then the subsurface layers formed the in/out interface. There were attract force inward or outward interact in these complex interface layers.
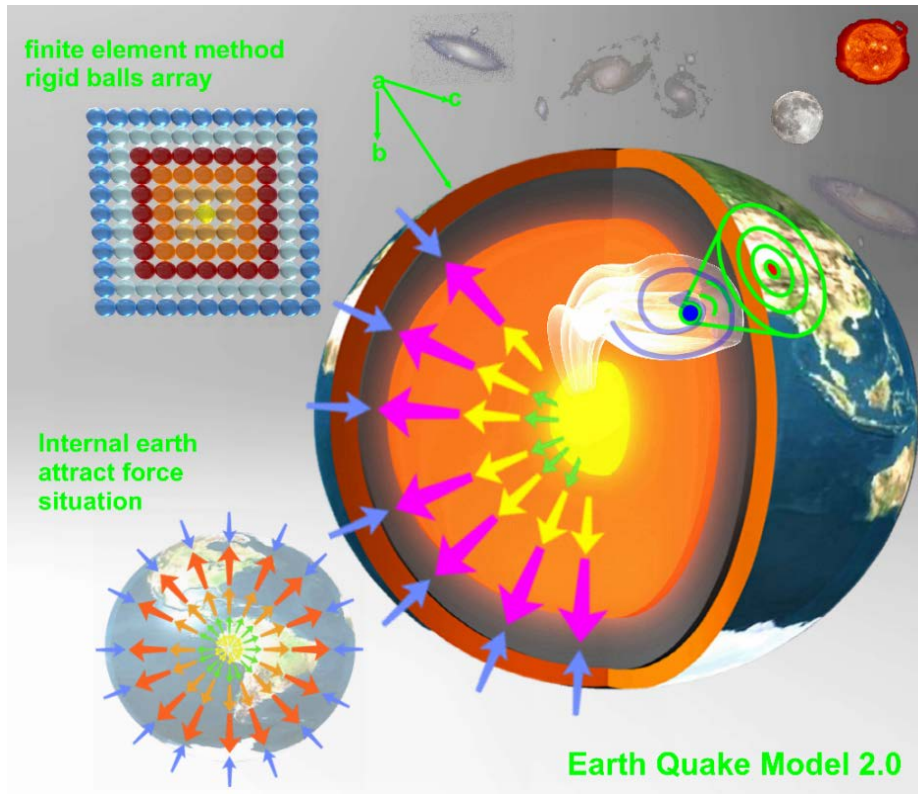

Figure 1: Attract force finite element model: Finite element method was used to consider the complex situations to give out approximated results. Base on equation F/G= m1*mx/(r1^2)-mx*m2/(r2^2)[Eq.3], it was to build Earth model. The arrows direction was attract force direction; arrows length was attract force relative strength. The finite element method gave the Earth attract force situations

Attract Force actions by cosmic celestial movements produced energy attract force. The energy fields changed energy attract-force strength, which acted on Earth core to surface. The celestial attract force vibrated the atom layer quantum to be moveable quantum clusters, and which was accelerated to be quantum flow by attract force. The Earth layers attract force gave variable acceleration on quantum flow from core to crash the in/out interface. The crash at in/out interface produced machine quake wave, and with the residue quantum flow spin and rotated to Earth surface. After celestial energy events, there was an accelerated period and an accelerated distance, through vary accelerated movements. The Earth radius was about 6000Km from center to surface, means it was about 6000Km progressive increased acceleration distance. The celestial energy attract-force leaded main quantum flow from Earth center core through mantle reach sub crust layer. The quantum flow was formed from atom layers quantum, heat quantum, light quantum, and other free quantum. Outward wave was quantum flow that formed real body wave, which moved with rotation and spin outwards. Based on Earth model, the internal quantum flow received outward attract force, and variable accelerated to fly out, the high speed real body wave was quantum flow rotated and spin. Based on the Earth finite element model, the surface Earth layers received inwards attract force, so there formed in/out interacted layer, which was higher density and hard stone solid layer. The in/out interface layer was nearby the surface of Earth, at sub layers of crust with high density that was different from mantle liquid. The internal outwards quantum flow was accelerated to fly out, when it reach in/out interface layer, and then which formed collision. The collided point was Earth quake source dot, then collision produce quake wave. And the residue quantum flow flied out the Earth surface, with rotation and spinning under Magnus effect [9] and Earth rotation effect. When quantum flow reach surface through buildings to spin twist and taper conical release, which formed respondent force to quake and destroyed buildings. There were two type waves, one was from collided source dot that give machine quake wave, the second was quantum flow that spin and rotated. Quantum flow was real body wave. The quantum flow energy equivalent load was dependent on cosmic celestial energy field that acted on Earth, which greatly exceed the plate collide point energy in plate crash theory.

Quantum flow was real body wave. Quantum flow was due to the Earth center free heat quantum and light free quantum, and some atom layer dissociated quantum. These quantum was vibrated by the celestial cosmic energy attract force events, to be related quantum group, and was accelerated from Earth core to surface. These quantum groups were accelerated outward by inner Earth layer energy/mass attract force,

which based on Newton attract force deduction (Eq. 3) and finite elements model, and was accelerated to form high speed quantum flow, then formed the real body wave. The quantum flow moved with spin and rotation under Magnus effect. When the quantum flow moved at high speed crashed on the in/out surface layer at one point in crust and to produce "quake source". The quake wave produced, companied with residue quantum flow together propagated to Earth ground, reached to "quake center" and spread to quake areas. The quake wave produced mechanical vibration, while the quantum flow produced spin and rotated real body wave, to produce rotary torque. The north hemisphere, the quantum flow produced right rotate direction. The south hemisphere, the quantum flow produced left rotated direction. The Earth quake areas were determined by the quantum flow volume or diameter.

And collide dot on in/out surface was "quake source", the quantum flow entrance angle was about northwest 45 degree. Based on Magnus effect, the quantum flow flied outward way line that may be bending the track. On the north hemisphere, the quantum flow can collide at the in/out layer from northwest to southeast directions. At the collide dot, the attract force vector direction with longitude or latitude included angle was nearby 45 degree. Rotation and spin directions were right (left) on north (south) hemisphere of Earth. The wave types have two, one was machine quake wave and the other was quantum flow real body wave. The rotation and spin phenomena were based on Earth self-rotation and north (south) hemisphere Magnus effects. The Figure 2 show the illuminate of Earth quake model 2.0

V. Explain Phenomena

The Earth quake had related phenomena: Earth light, voices, electron, electric resistance, and sudden slow of Earth self-rotation, buildings rotated collapse in remains. These could be explained by Earth Quake Model 2.0.

Quake layer produced voices [10] was easy to understand. The quantum flow crashed at the in/out interface in the sub-crust layer, the in/out interface was always was hard solid crust. So when crashed to produce quake wave by quantum flow, it was easy to produce Earth voices.

The quantum flow was accelerated by Earth layer attract force, and which reach too high speed that nearby light speed to fly out from Earth surface, that was Earth quake light [11].

The quantum flow real body wave was accelerated from Earth core to surface; the quantum flow blanked the atom gaps of Earth quake layer. The blanked quantum between atom and molecules changed the Earth electronic properties. The quantum flow increased the electronic conducted of Earth layer,

means while that reduced the Earth electric resistance. These were the Earth electron phenomena of Earth quake [12].

Sudden slow of Earth self-rotation: the quantum flow sudden crashed on in/out interface of sub crust layer. The crash power looked like as "brake" action on crust and slow the self-rotation, and then the Earth quake gave sudden slow on the Earth self-rotation and this have been observed [13].

By using Magnus effect and Earth self-rotation, the quantum flow flied out surface with keeping high speed, spin and rotated through buildings on Earth surface, to produce spin rotated collapse, which was to explain the right rotated collapsed in buildings on north hemisphere. These spin related collapse have been observed in many Earth quake remains [14, 15].

These earth quake phenomena could be explained by Earth quake Model 2.0, which show it was better theory for Earth quake mechanisms explain, that was superior to "Plate Crash Theory" or other theory before.
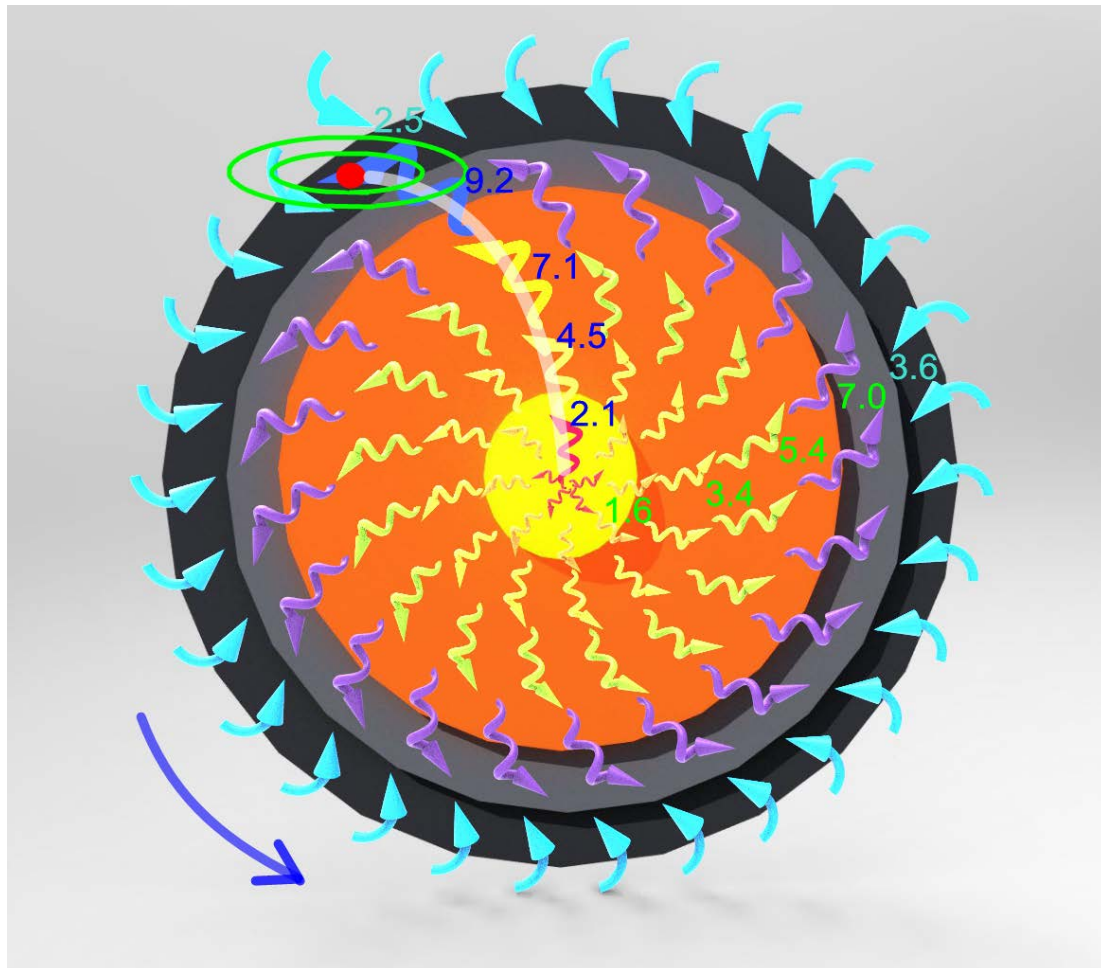

Figure 2: Earth internal models with core, mantle, and crust to explain Earth quake 2.0 model. The arrows regarded as quantum flow, at same time gave attract force directions. Right spin arrow was as quantum flow movements at earth rotated effect. Bending ways was show Magnus effect. The arrow length gave relative strength of attract force. The green numbers were attract-force relative situation at common earth states, which balanced not give earth quake. The blue numbers were attract force strength that acted by celestial events to improve the relative strength, which give earth quake at red point. The numbers were not absolute values, which were only relative values from finite elements model.

VI. Processes Summary

The whole processes of Earth quake can be described as follow: The cosmic celestial movements changed the related positions, to produce energy attract force. The energy attract force acted on Earth surface and even deep layers of Earth, to vibrate the quantum in atom layer. The quantum groups formed flow by gathering the atom layer quantum, the heat quantum, the light quantum, and other free quantum. The inner quantum flow was accelerated by internal Earth layers. The Earth layers variable accelerated the quantum flow to fly out from center core to surface. Under Magnus effect and Earth self-rotation effect, the accelerated

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quantum flow flied out to keep spin and rotated. The quantum flow was accelerated through about Earth radius distance and crashed on in/out interface layer, which were the sub layers in crust. The collided point was "quake source" and form machine quake wave, and companied with the residue quantum flow spin and rotated flied out to surface of Earth. The two waves firstly reached "quake center" and spread. The two waves, one was machine quake wave to produce quake, the other was quantum flow real body wave to fly out the Earth surface to produce spin and rotated to twist collapse force. The two waves fly out Earth surface and through buildings, to produce quake and spin rotated collapses. This was the Earth Quake Model 2.0.

VII. CONCLUSIONS

The Newton attract-force equation and its deductions have been used to build up Earth finite element model. The cosmic celestial movement that produce energy attract force was to vibrate the inner quantum flow of Earth. The inner quantum flow was accelerated fly out to Earth surface with spin and rotated state, which was based on Earth finite elements model and Magnus effect. When quantum flow crashed on in/out interface to be "Earth quake source", and that produced quake wave, with residue quantum flow spin and rotated through Earth surface buildings, and which produced twist destroyed phenomena. The Earth quake processes were rewrote as Earth Quake Model 2.0, which was different from the models before. This 2.0 model could explain many Earth quake related phenomena, such as Earth voices, Earth light, sudden slow Earth self-rotation, and spin rotated to twist collapse of buildings. It was believed that the Earth Quake Model 2.0 will help people to re-recognize Earth quake. And it can help to predict Earth quake more accurate, and it was further to reduce destroy and damage, and wish to save more people life. This Earth Quake Model 2.0 was donor to seismic research enterprise.

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