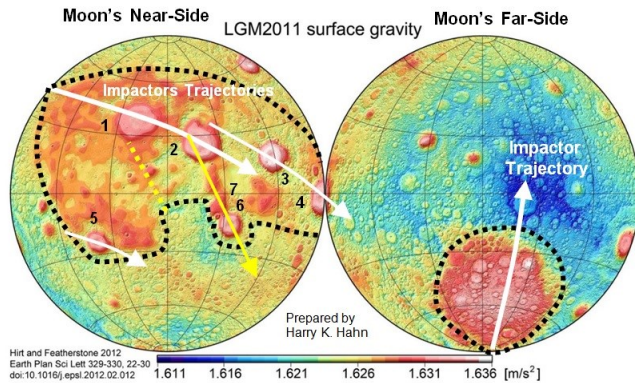


Earth's Moon shows traces of a global impact event which caused Expansion Tectonics

Earth's Moon

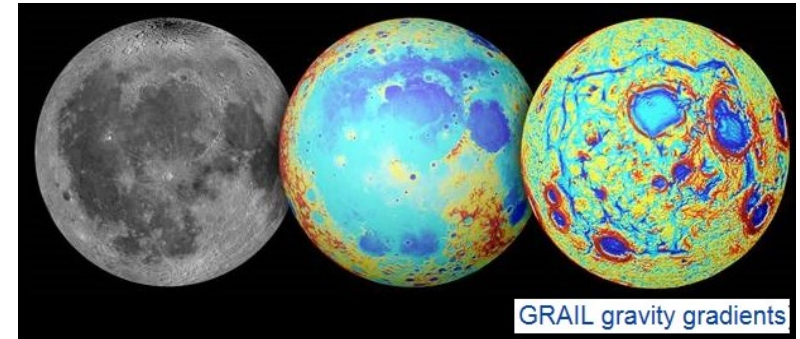
The gravity anomaly maps of Earth's Moon indicates at least one global impact event which triggered Expansion Tectonics on the Moon. This impact event caused the Mare areas on the near-side of the Moon. Another big impact event caused a circular area of Ø1500 km on Moon's far-side which comprises a handful 200 km craters. (e.g. Leibnitz- & Apollo-crater etc)



The global impact event :

The global impact event on Moon's near-side was caused by at least 5 large impactors, probably fragments of a large asteroid or comet, with approx. Ø 10 - 60 km each !

These impactors caused the base craters **No. 1 - 7** with the diameters : 600, 550, 420, 530, 320, 330 and 220 km, which then produced most of Moons flood-lava filled Mare.

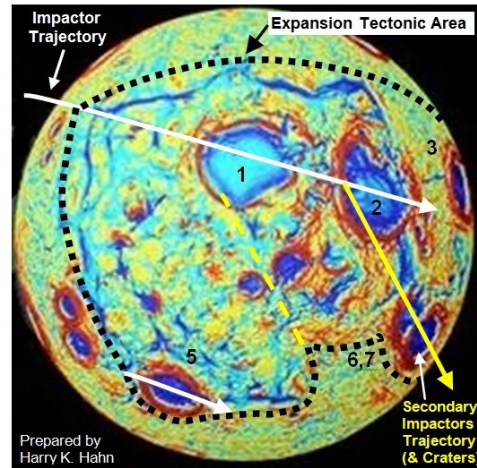
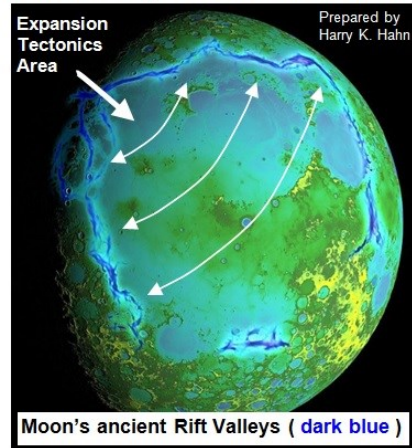


GRIL gravity gradients

The Mare formed by the impact craters No. 1 - 7 :

Mare 1 – 7 : Imbrium , Serenitatis , Crisium , Smythii , Humorum Nectaris , Asperitatis → the last two Mare are secondary craters !

Note the similarity to Earth's North-Pacific-Area !!



Expansion Tectonics on the Moon :

The nearly simultaneous impact of the mentioned ≥ 5 impactors caused an extensive fracture pattern on Moon's near-side. Similar as on Earth, volatiles in the mantle must then have been the driving force for the following expansion of Moon's mantle. These volatiles must have been in a super-saturated state at the time after the impact when Expansion Tectonics began. Because of their size the impactors may have been a result of the P-T Impact or of the 1. or 2. Sgr-DG pericenter event

