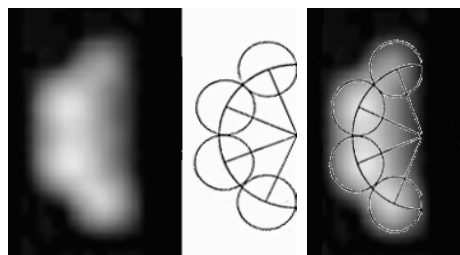


Earth's wave tectonic granulation, Indian geoid minimum, its symmetric surroundings and the Arctic-Antarctic opposition in this network.

G.G. Kochemasov

Symmetrical tectonic features revealing a regular global tectonic net surround the deepest geoid minimum of Earth in the Indian Ocean (Fig. 2). The net is created by an interference of warping standing waves of four directions. They arise in rotating planetary bodies moving in keplerian elliptical orbits due to periodical acceleration changes. Two tectonic grains with characteristic for Earth size  $\pi R/4$  (about 5000 km across) are noticeable: superstructures of the Congolese Archean craton and Indonesia (Island system of the Malay Archipelago). Configurations (patterns) of their internal structures coincide under  $180^\circ$  rotation (this follows from a global net of wave woven structural pattern). The Congo River bend repeats the Borneo outlines. The Central African greenstone belts repeat the Malay Island arc and so on. Two superstructures are separated by the Indian superstructure of an equal size. All together are parts of 8 superstructures circling the equator. This geographic-geomorphologic-tectonic revelation adds significantly to a true understanding of the Earth's structural history [1]. It is important that the opposing Arctic and Antarctic are also symmetric features relative to the Indian geoid minimum.

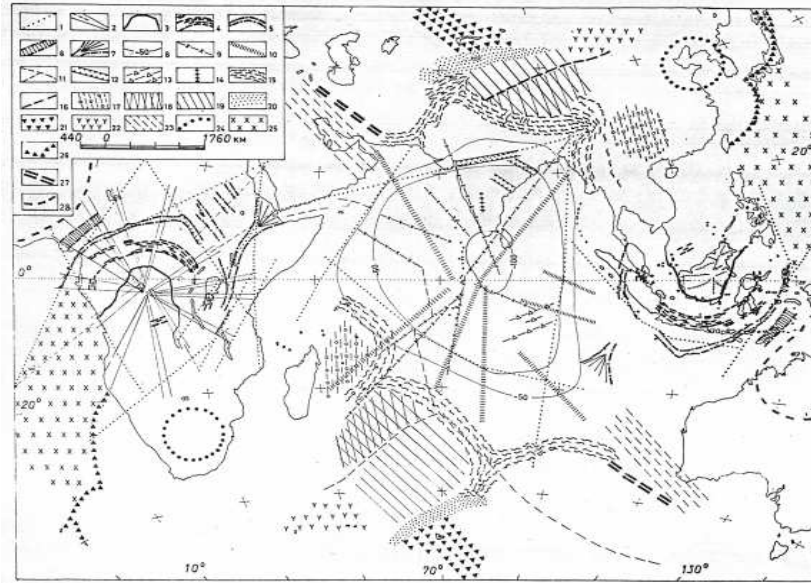
The figure 1 shows a real tectonic granulation of Earth as it is seen from more than 1 million kms distance. In the middle of the figure is a schematic geometric representation of this granulation developed earlier [2, 3 & others]. In the right side is a combination of the prediction and the real structure. This superposition graphically proves validity of the wave planetology developed in the last 25 years [4 & others]. A detailed structure of three equatorial granules is in Fig. 2.



**Fig. 1.** Earth from the distance of 1.2 million km (Mars Reconnaissance Orbiter image PIA04159). Its granular structure is well represented by the geometrical model ( $\pi R/4$  granule size).

**References:** [1] Kochemasov G.G. (2009) Geometric tectonic regularities in the Eastern hemisphere of Earth // MatGeoS'09. Geosciences from Earth to Space. 2<sup>nd</sup> workshop on mathematical geosciences, 07 to 08 December 2009, Freiberg, Germany. [2] Kochemasov G.G. (1992). Concerted wave supergranulation of the solar system bodies // 16<sup>th</sup> Russian-American microsposium on planetology, Abstracts, Moscow, Vernadsky Inst.

(GEOKHI), p. 36-37. [3] Kochemasov G.G. (1992). Comparison of blob tectonics (Venus) and pair tectonics (Earth). LPS XXIII, Houston, LPI, pt. 2, p. 703-704. [4] Kochemasov G. G. (1998) Tectonic dichotomy, sectoring and granulation of Earth and other celestial bodies // Proceedings of international symposium on new concepts in global tectonics ('98 TSUKUBA)", Tsukuba, Japan, Nov. 1998, p.144-147.



**Fig. 2. Earth's tectonopairs.** 1. Tangential weakness zones; 2-7. Congolese superstructure and its superposition with rotation at 180° on Indonesian one: 2. Radial weakness zones, 3. Congo River and Borneo outlines, 4. Archean greenshist belts and Malay island arc, 5. Rifts in the craton frame and sea troughs, 6. Benoue trough, 7. Afar depression; 8-14. Indian superstructure: 8. Geoid isolines, m, 9-10. Radial weakness zones ( according to surface features-9, geoid anomalies-10), 11. Underwater ridges, 12. Grabens, 13. Folds in oceanic crust, 14. Closepet granit; 15-28. Tectonopairs: 15. Himalayas – “Anti-Himalayas”, 16. Altyn-Tagh – SW Indian Ridge, 17. Yangzi platform (Emeishan basalts) – Mascarene basin, 18. Tibet – Madagascar basin, 19. Tarim – Crozet basin, 20. Tian-Shan – elevated bottom between Isls. Kerguelen and St. Paul, 21. Central Kazakhstan – Kerguelen Plateau, 22. Gobi – Crozet Plateau, 23. Persian Gulf & Mesopotamia – basins off SW Australia, 24. AR cratons; South African – Sino-Korean, 25. Angola basin – Philippine plate, 26. Walvis Ridge – Ryukyu-Japan Isls., 27. Fracture zones; Zagros – Diamantina, 28. Archean cratons: West African – North Australian.

