

REVISIONS RECORD 1.0

Terrestrial Planet Hotspots and Secular Whole-Mantle Shift

Executive Summary

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Draft 1.0 posted on 19 December 2012

Draft 1.0 to 2.0 Changes:

1. Section 1 - In sentence 2, insert a comma after 'plumes' so that plumes is not restricted.
2. Section 1 - In sentence 3, after 'postulates' was inserted "both hotspot superposition and" for logical completeness.
3. Section 1 - In sentence 5, replace 'regularity' with "uniformity" for accuracy.
4. Section 1 - In sentence 6, change 'highest' to "high" to allow later use of the term "maximum".
5. Section 1 - In sentence 7, after 'zone' was added, "and initiate where maximum heat transfer is likely, above the upwelling centers of convection cells." for logical completeness.
6. Section 1 - Sentence 8 was replaced with, "The modeled equatorial cell arrays also exhibit a persistent tendency for uniformity of cell size and a quasi-stability of cell position." for increased precision of description.
7. Section 2 - Before sentence 1 was inserted, "Application of the method determined that a statistically prominent, convection-array pattern for Earth is formed by ten, 36° cells." for clarity.
8. Section 2 - (newly incremented) sentence 2 was changed before 'occupy' to, "Many of the hotspot pairs that have GSAs fitting this pattern," for consistent clarity.
9. Section 2 - In (newly incremented) sentence 3, 'If hotspots are' was changed to "Because hotspots are presumed" for accuracy.
10. Section 3 - In the last sentence, replace 'attractions' with "interactions" for completeness.
11. Section 5 - In sentence 2, replace, 'planetary' with "celestial" for accuracy.
12. Section 5 - In sentence 4, replace 'evidently' with "certainly" for accuracy.
13. Section 5 - In sentence 5, after 'cells' was added "of 32.7° each" for quantitative clarity.
14. Section 5 - In sentence 6, replace 'the scenario of' with, "a recognized dynamic evolution for" for increased specificity.
15. Section 5 - In sentence 7, after the first 'cells' add, "of 32.7° each" and after the second 'cells' add, "of 36° each" for increased specificity.
16. Section 5 - In sentence 9, after the first 'planet' insert "or differentiated moon," for accuracy and replace 'other Solar System bodies' with, "gravitationally prominent, celestial neighbors." for accuracy.

17. Section 5 - In sentence 10, replace entire sentence with, "A complete description of the relative shifting of mobile layers, certainly involves a complex analysis of a planet's (or moon's) composition, structure, spin and orbital parameters as they evolve over geological time." for clarity.

18. Section 6 - In sentence 1, after 'indicate a' replace 'principal, statistically strong' with "statistically prominent" and delete, 'planetary'; both changes for accuracy.

19. Section 13 - In sentence 1, replace 'attractions' with "interactions" for completeness.

20. Section 13 - In sentence 2, replace 'This gravitational interaction produces' with "These interactions produce" for plural consistency.

21. Section 14 - In item 1., 'Independent' was changed to "Globally irregular" for clarity and accuracy.

Draft 2.0 posted on 30 October 2013

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