

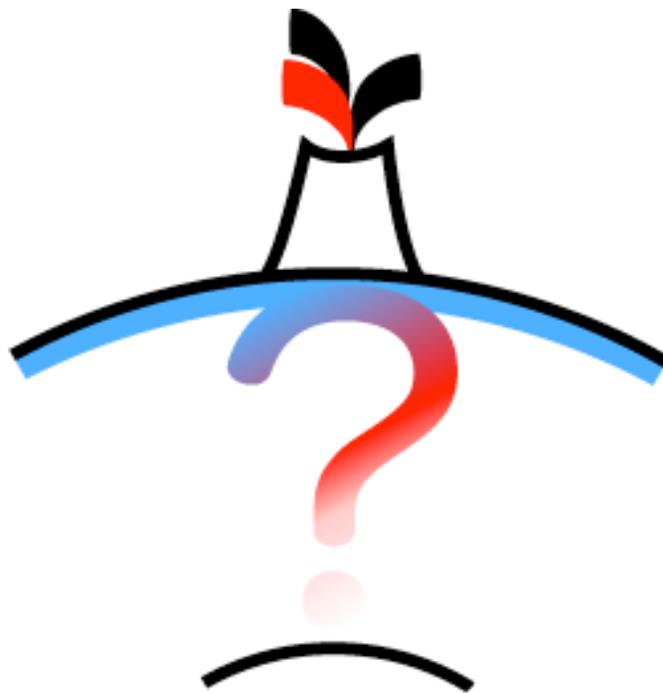
Penrose Conference

Plume IV:

Beyond the Plume Hypothesis

Testing the plume paradigm and alternatives

The Website Handbook



August 25th – 29th, 2003
Hveragerdi, Iceland

<http://www.mantleplumes.org/>

Background

While the Penrose conference *Plume IV: Beyond the Plume Hypothesis* was in the early stages of planning, it emerged that there was almost nothing on the Web about alternative mechanisms for hotspot volcanism. Thus, www.mantleplumes.org was born 5th March 2003. Since then over 30 scientists have contributed, and a similar number of web pages on specific topics have been placed online. The growing site resides on a server at University of Durham, UK, and is maintained by Gillian R. Foulger in consultation with the wide group of colleagues who have contributed pages.

The objective of the website is to foster debate about the origin of “anomalous” intraplate and plate-boundary volcanism, and “hotspots”, and to make readily available information, ideas and theories that bear on this problem. Debate concerning whether plumes underlie particular areas, or exist at all, is also included.

Suggestions are welcomed for additional material that would be of use to scientists interested in this field. Additional contributed webpages on specific topics or field areas are also welcomed. Email notification of new contributions is sent out approximately once per month, and we will be happy to add you to the mailing list if you wish.

We hope you will consider contributing.

Gillian R. Foulger

Contents

of webpage

1. Background
2. Website front page
3. The Plume Assumption: Frequently Used Arguments
4. Primary magmas at mid-ocean ridges, ‘hot-spots’ and other intraplate settings: constraints on mantle potential temperatures, by David H. Green
5. Mantle Convection, by Don L. Anderson
6. The hotspot reference frame and the “westward” drift of the lithosphere, by Carlo Doglioni
7. Seismology: The hunt for plumes, by Bruce R. Julian
8. Variations in Global Transition Zone Thickness, by G. R. Foulger & B. R. Julian
9. Why is heat flow not high at hotspots?, by Carol A. Stein & Seth Stein
10. Potential Temperature Variations Along Spreading Centers – An Issue Critical to the Existence of Hot Plumes, by Dean C. Presnall
11. Helium : Fundamental models, by Don L. Anderson, G. R. Foulger & Anders Meibom
12. Helium-Osmium Systematics, by Anders Meibom
13. Pt-Os isotope systematics do not prove an ultra-deep origin for intraplate volcanism, by Alan D. Smith
14. Does the variation in $^3\text{He}/^4\text{He}$ prove that MORB and OIB come from different reservoirs?, by Don L. Anderson
15. Bayesian Statistics and Helium Isotopes, by Don L. Anderson
16. Plate Tectonics, Platonics & Logic, by Don L. Anderson
17. The General Theory of Plate Tectonics, by Don L. Anderson
18. Iceland & the North Atlantic Igneous Province, by G. R. Foulger
19. The Emperor and Hawaiian Volcanic Chains: How well do they fit the plume hypothesis?, G. R. Foulger & Don L. Anderson
20. Yellowstone, by G. R. Foulger
21. Sea-floor spreading and deformation processes in the South Atlantic Ocean: Are hot spots needed?, by J. Derek Fairhead & Marjorie Wilson

22. The Columbia River Basalts & Yellowstone Hot Spot: A Mantle Plume?, by Peter R. Hooper
23. The Deccan: Exploring non-plume models, by Hetu Sheth
24. The Gulf of California and Mexican Volcanic Belt, by Alan D. Smith, Ignacio S. Torres-Alvarado & Surendra P. Verma
25. Stress Fields and the Distribution of Intraplate Volcanism in the Pacific Basin, by Alan D. Smith
26. Igneous Features and Geodynamic Models of Rifting and Magmatism Around the Central Atlantic Ocean, by J. Gregory McHone
27. The Samoan Chain: A Shallow Lithospheric Fracture System, by James H. Natland
28. Magmatism Within Africa: Lithosphere Control and Global Tectonics, by D. Ken. Bailey & Alan R. Woolley
29. The Demise of the Siberian Plume, by Gerald K. Czamanske & Valeri A. Fedorenko
30. How to Generate Late-Collision, Calc-Alkaline and Alkaline, Mafic Volcanism, by Françoise Chalot-Prat and Radu Girbacea
31. The Oregon High Lava Plains: Proof against a plume origin for Yellowstone?, by Brennan T. Jordan
32. The Superswell and Darwin Rise: Thermal no longer?, by Carol A. Stein & Seth Stein
33. Tectonic Evolution of Shatsky Rise: A Plateau Formed by a Plume Head or Not?, by William W. Sager
34. Definition of a Cenozoic alkaline magmatic province in the southwest Pacific mantle domain and without rift or plume origin, by Carol A. Finn, R. Dietmar Müller & Kurt S. Panter
35. Bibliography: Papers pivotal to the inception, evolution and criticism of the plume hypothesis
36. Bibliography: Key papers in the development and debate of alternative hypotheses

What causes "hotspots"?

Are they hot?

Are they underlain by plumes?

This website discusses the ongoing controversy about the origin of "hotspots", with emphasis on shallow processes



[Hawaii Focus Group](#)



[Who's saying what?](#)

[recent conference presentations](#)



[Click me](#)



[Bibliography: The inception, evolution and criticism of the plume hypothesis](#)

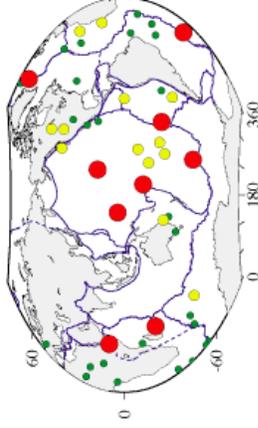


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[Bibliography: Alternative hypotheses](#)

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Hotspots proposed to originate from the core-mantle boundary (red), the base of the upper mantle (yellow) and in the lithosphere (green). ([Courtillot et al., 2003](#)) (Figure by G. Sella).

What causes the shallow ones?

[Penrose Conference, Iceland 2003](#)

[Plume IV: Beyond the Plume Hypothesis](#)



DETAILS
****ABSTRACTS****
****FIELDTRIPS****
****AGENDA****

Comments & letters

[Vice](#)

[Global plate reorganisation](#)

What's in the News?

- [Hot spot hits sticky patch](#)
- [In search of the enigmatic plumes beneath hotspots](#)
- **Recent debate in Science:**
 - [The plate tectonic model](#)
 - [The plume model](#)
- [Intraplate volcanism: Concepts, problems & proofs](#)
- [Wot. no plumes?](#)
- [Are "hotspots" consequences of plate tectonics?](#)
- ["Hotspot" volcano theory debated](#)

- [Volcanic bombshell](#)
- [Theories on Park Challenged](#)
- [Studies cast major doubts](#)
- [Raising Hotspots](#)
- [A Hotspot Alternative](#)
- [No Plume Under Iceland](#)
- [The Yellowstone Plume: Fact or Fiction?](#)
- [A cold, hard look at hotspots](#)
- ["Fixed" Hawaiian hotspot not fixed](#)
- [Iceland plume: four articles, pro and con](#)
- [Hotspots & warmspots](#)
- [Plumes from the core?](#)
- [On the rocks](#)

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