

## Multidirectional Serm Symmetries

**Abstract:** Multiscale contour, drainage map delineations show real, discrete symmetries about axes passing through mountain peaks/lakes/islands, ubiquitously, globally, multidirectionally, most emphatically as macros, y.02. These discrete, annular (spiralizing) symmetries, and the SERMs which produce/explain/ predict them, are proved real differentially: Perturbations produce diminutions globally, synchronously along full circle arcs. A "macro" phenomenon (y.02) is corroborative. A very high density of mantle serms is globally indicated, corroborating this ebook's super huge impact scenario.

Author: Peter Nielsen  
 Comment: Confirms earlier Vols 0-4 corroborations. See Vol y Slide Show in Appendices.  
 Journal Reference: Paper y.01 of Vol y of Impact Tectonogenesis, CD ebook ISBN 0-646-40916-6 at [www.nodrift.com](http://www.nodrift.com) since 21 Dec 04.

### PREAMBLE

While Vol 0's relic serm symmetries are frequently long enough to be convincingly real, they leave unexplained how they have come to be composed into river systems, coastlines and so on.

Serms are Supercrater Etalon Resonance Manifestations (SERMs), the 3-Dimensional, inscribed standing wave forms of planetary super huge shock waves, 4.5-11.

Simulation of river tributary genesis via translational wandering of symmetries in 0.003 hinted at wandering as a compositional agency.

This Vol y)'s serm symmetries reveals that while this may be true, but it is rotational more than translational wandering that serially connects segments. In 0.001, SERMS, I explained:

#### "ZIG-ZAGS

Faultlines are characteristically zig-zag-ed. Vol y)'s serm mountain peak-centred symmetries show good examples. The evidence of Vol y), 0 symmetries is that:

Zig-zag-ed spans, some of them 100s km long, manifest noise but also, evidently, composite pathways through phase-shifting serm symmetry coincidences.

"Zigs" become "zags", schematically, as one symmetry "drops off" while the next directional symmetry "comes on line".

In this Vol 0's slide show, I recommend Orinoco River Delta (Obs 181-192), Cape of Good Hope (Obs 211-234), California Peninsula (Obs 135-150) and Tasmania (Obs 276a-336) symmetries.

" In 0.001, THESIS, I explained:

#### "INTERFERENCE PATTERN

The effect of such irregularities on shock waves emanating from a super huge impact would be global, multiscale, nested interference pattern fracture-melt inscriptions, because such waves ubiquitously coarsen.

Such inscriptions would have been "developed" by antagonistic penetrations of magma and water. Huge volumes of water would have frozen many such inscriptions extensively, my Freeze Effect, 3.3.

Oceans, oceanic surf, geyser rainouts and foams have evidently fixed/frozen interference pattern inscriptions extensively across what would become island arcs, coastal lowlands, continental basins, mountain, river, lake, coastline systems . . . . .

#### SYMMETRIES

Such landforms could be expected to exhibit nested multiscale symmetries, because interference pattern inscription potentials are uniquely, profoundly symmetrical.

#### OVERALL PROOF

Finding such symmetries and showing that they are real would obviously be the best of all possible ways to corroborate 1.031's PROOF of my overall thesis!"

## REVIEW

v.002, Overview: "Cometary super huge impact, a most likely extreme Solar System planetary event, produces energies and forces consistent with mass extinction, tectonogenesis.

## DEGENERACY PATTERN

The unbounded sphere of the Earth subject to sufficiently huge impact, what I call "super huge impact", would have produced a symmetrical interference pattern globally.

This would have included congruent, symmetric degeneracies, because of the Earth's internal irregularities; composites of patterns generated by hemispheric impactors indicated by rhythmicity . . . .

## SYMMETRIES

This ebook's super huge impact (THESHI)-generated tidal wave ocean surf, geyser foam, rainout, ocean water penetrated multiscale impact-generated faultlines faster than magmas.

Highest mountains were least FOam-RAInout-FreeZE (FORAZE) Effect-ed, deep oceans most Foraze Effect-ed: Freeze Effect-ed, 3.3, y.03.

Highest mountains were least Foraze Effect-ed, deep oceans were Freeze Effect-ed.

## COAST, CONTINENTAL SHELF GENESIS

y.03: Coastlines, continental shelf edges, river systems are generally multiscale symmetric, consistent with post- THESHI Foraze/Freeze Effect genesis, Vols x, 0-1, 3-4 . . . .

RHYTHMS: A 16-fold ( $\frac{1}{2}$ )<sup>4</sup>th order ghostly (interference pattern degeneracy) "resonating object" inscription patterning is corroborative.."

## INTRODUCTION

This Vol y)'s demonstrations began as a verification of a prediction in 0.004. Each set of Vol y)'s 1,000s of symmetries shows anticipated symmetries, continuations of macros.

## MOUNTAIN PEAKS

I knew from my 1997-9 serm survey (4.25-6) that mountains stood at the centres of the most prominent of the 100s of serms I had traced in Tasmania, including its Federation Peak-centred, 1,000 kd 4<sup>th</sup> order  $\frac{1}{4}$  - wave mantle serm.

These mountain peaks were also often micro-symmetric. Both mantle and crustal serms showed many emphatic radial faultlines quite often also.

Most recently, I had been observing that my over-simplified dot representations of major peaks, 0.002, lie within or alongside NEsted MULTiscale Symmetries (NEMUS) axes of symmetry unusually often.

This seemed to indicate that major mountain peaks are probably NEMIS, NEsted Mlcroscale Symmetries, something I had been biased against seeing. As explained in 0.002, Method, Serendipidy:

"In Vol 0, I was unduly shy of mountain ranges, which Vol y) has since indicated are most important centres of mantle serm symmetries.

This shyness enabled Vol 0 breakthrough (0.001 Keys 1-4), delayed Vol y) breakthrough, may have been intentional, a subconscious way of correcting a bias".

## DISCUSSION

I began recalling what my serm surveys (4.25, 6) had shown. . . . It then dawned on me that serm-central mountain peaks were an overlooked key to proving my thesis.

Fig 1 below (0.004's Fig 3), inspired me to see, using my Vol 0 Method initially, if High Dome is indeed a centre of multidirectional symmetry.

## DETAIL

I had already convincingly shown and argued, 1999-2002, that mantle and crustal serms, and multi- and macro-scale symmetries are globally ubiquitous, Vols 0, 1, 3, 4.

Mountain peaks are frequently short, often curved ridges. My serm surveys (4.25-6) had shown that these serm centres, usually 4 kd in Tasmania, often exhibit micro-symmetries:

There are about four half-domes in Tasmania and a similar number of hexagonally arranged peaks and/or lakes (4. 111, 17, 18). Frenchmans Cap combines both forms into a 4-peaked half dome with two lakes below.

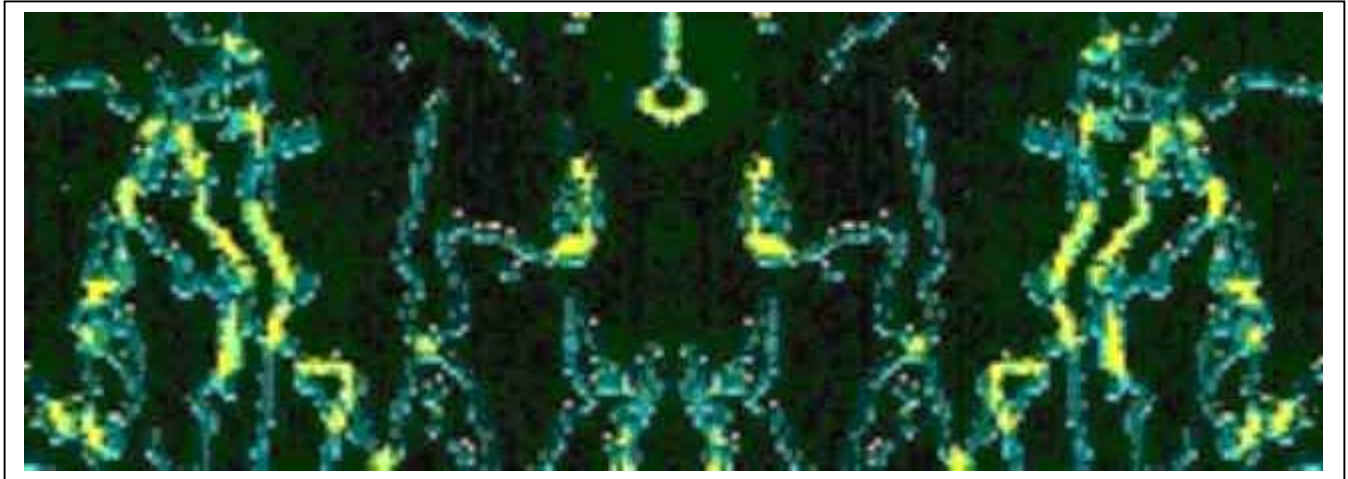


Fig 1: Tasmanian Great Lake-Macquarie Harbour symmetry detail.

The NEMIS is the circular source of the Murchison River surrounding High Dome. Great Lake and Macquarie Harbour are two of this central Western region's most emphatic features.

Vol 0's 0.868-76 confirmed that lines drawn through High Dome and prominent S and E coastal capes and bays are often axes of symmetry. This inspired this Vol y).

It dawned on me that some of these micro-symmetric mountain peaks may be centres of much more extensive symmetries, crustal and mantle serm multidirectional relic symmetries.

There had been a hint of this in some of my Pacific islands symmetries. Such symmetries have long been implicit in serm theoretical explanation, 4.5-27, of my super huge impact scenario, 3.1-4.

Vol 0 had shown that such symmetries could be readily demonstrated. These could become the kind of "proof" of my super huge impact-ed serm scenario and so on, my ebook needed:

1. Simple graphic demonstrations may show that map contour, drainage delineations are generally discretely, multidirectionally symmetric about mountain peaks/lakes/islands, ubiquitously, globally.
2. Distinctive, albeit noisy symmetries verifying coherent preceding super huge impact-ed serm scenario prediction-verifications, would be generally recognised as unlikely to be happening randomly.
3. These "symmetries" are scientific. Many rigorous scientific procedures could validate/invalidate them as real/unreal.

Point 3 is dealt with in y.06.

Under-performing peaks are not a distraction. Mantle serm centres are often minor peaks, even lakes on the slopes of mountains (presumably because of Freeze Effect).

My Mount Fuji serm (4.25), is an example of this. The ebook front cover shows other examples: Mount Siple, Antarctica and Aleutian islands:

## METHOD

After producing Fig 1 above, I started using Vol 0 transparencies, produced by making tracings from maps (as explained in 0.004, Method) in a more revealing, much faster way:

#### SKETCH METHOD

I inverted the Tasmanian transparency to produce a symmetry relic potential, which I call a "potential", placed it atop its inscriptional "relic" copy so that a mountain peak "potential" coincided with its "relic" underneath.

I fixed the "potential" of the mountain peak upon its "relic" inscription by pressing gently with the ball point of my pen while slowly rotating the inverted transparency.

I looked for, and noted, lineal coincidences of riverine/coastal inscriptions grouped into annular (spiralizing) symmetries, saw my first "macros" phase-shifting loci, y.02.

I did this for 8 of the ten prominent mountains appearing on my map tracing of Tasmania. I started with High Dome, where the 0.868- series left off, ended with Federation Peak.

This test was affirmative. My sketch method was revealing. Fast also:

A single rotation produces 100s of discrete, annular (spiralizing) symmetries, synchronously along full circle arcs, with connecting macros, y.02.

I added a couple of small highland lakes I had long perceived as important, strongly Freeze Effect-ed serm centres: Brady's Lake and Lake Tooms. Within a few hours I had seen that:

All 8 most prominent Tasmanian mountains and a couple of highland lakes are centres of island-spanning serms, consistent with 4.9 mantle serm genesis explanation.

Such spans are greater than the local maximal,  $\frac{1}{4}$  -wave crustal serm diameter. Mantle serms are obviously more common than I had originally thought, 4.25-6. There had been an earlier clue:

PROTO-SERMS: I was reminded of the paradoxically large, ~40 kd, "proto-serms" of Hokkaido and Italy, 4.17. . .

I had explained my much smaller, ~2 kd Tasmanian originals as the very smallest, "subcritical" crustal resonances. I could now entertain the idea that the larger variety may be mantle proto-serms, smallest, "subcritical" mantle resonances..

Often encircling the centres of  $\frac{1}{4}$  -wave crustal serms, my crustal proto-serms are hexagonal arrays of hills/lakes  $\frac{1}{2}$  the diameter of smallest serms, "super-critical" crustal resonances.

We can thus presume that the ~40 kd proto-serms may be "subcritical" mantle resonances at the centres of maximal-scale,  $\frac{1}{4}$  -wave mantle serms,  $\frac{1}{2}$  the diameter of smallest mantle serms, ~ 80 kd.

#### GLOBAL SURVEY

The high density of mantle serms in Tasmania implies extreme impact energisation. Proving global ubiquity of such high mantle serm density would be a good way to prove my super huge impact scenario, 3.1-4.

I thus used my large, global, Vol 0 collection of photographic Black-White Transparencies and white paper copies of maps, in a similar way globally. Affirmative, for 1,000's of discrete, annular (spiralizing) symmetries.

The Sketch Method showed that map contours, including ocean depth contours, reveal many of these symmetries as macros at steep slopes, as at continental shelf edges, y.03, CONTINENTAL SHELF GENESIS.

Vol 0's method had been too tedious. Could my sketch method be developed for public demonstration I wondered? It could, for tracings of Drainage Patterns instead of contours, for 100s of symmetries.

#### VOL Y) METHOD

I refined my Sketch Method to produce this Vol y)'s symmetries as follows. I:

1. Scanned selected, red Vol 0 transparencies into my PhotoStudio software against a White background to produce a file for a Red transparency.
2. Produced a file for a Green transparency by taking Negatives, Enhancing Hue to 180 and taking Negatives again.
3. Burned Red and Green transparency files onto a CD.

4. Got Red and Green transparencies produced from the CD files commercially. These would show Coincidences as Black against a White background.
5. Superposed Red upon Green transparencies so that their images exactly coincided, indicated by a black image without any Red or Green edges. Taped them together using masking tape.
6. Melted holes at the selected mantle serm central point, using a dressmaker's pin heated in a steam hole of a Dry, Very Hot electric iron.
7. I inverted the green transparency to produce a symmetry relic potential, which I call a "potential", placed it atop its inscriptional "relic" red transparency.
8. Joined them together using a tiny, 12BA model maker's bolt screwed into the holes.
9. Used this assembly atop my scanner, much as I had used Vol 0's transparencies atop photocopies in my Sketch Method, to produce a series of symmetries, recognisable by long lineal coincidences.
10. I stopped at each distinctive, segmental symmetry as I found it, scanned it into my computer, Fig 2:

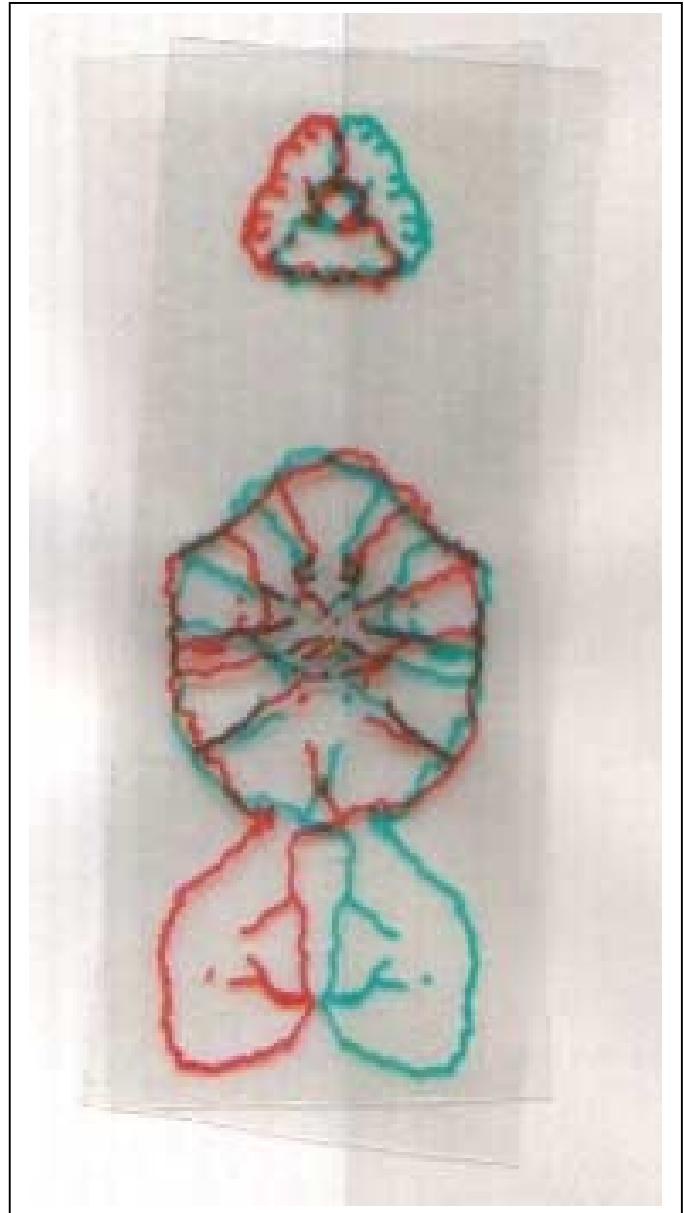


Fig 2: Transparencies of Tahiti bolted together at central mountain valley river junction to reveal island group-extensive multidirectional symmetries, as long Greyish-Black (Red-Green) linearities. The inverse Red transparency was rotated to produce 0.3000-.

I produced my Figures using PhotoStudio as follows:

11. Took Negatives, producing Whitish coincidences of red, green lines against a Dark Greyish background.
12. Tone Adjusted Shadows to zero, to restrict the next step's Solarisation, by Blackening surrounding Greys.
13. Solarised, as an effective way of colourising my Whitish coincidences. Remaining steps further enhance tonal and colour contrast between coincidences, relic and potentials:
14. Enhanced RGB Brightness and Contrast to +93.
15. Enhanced Blue Brightness to Zero. This step was dropped from y.5157 onwards.
16. Enhanced Hue to -65.
17. Enhanced Green Brightness to Zero.

18. Enhanced Hue to +94. This Hue was +91 from y.5157 onwards (after producing Tasmania, Polynesia, China, Japan symmetries) producing Orange-Blue instead of Yellow-Green coincidence-relics.

Instead of Step 17, Japan symmetries y.1202-20, were produced using the following steps:

19. Enhanced Blue Brightness to Zero.

20. Enhanced Hue to +65. Enhanced Hue to -140, a subsequent improvement. Steps 17, 19 were skipped for Tasmania symmetries. Tasmania symmetries y.200-62 included step 18.

21. When I redid Polynesia, with Mindanao, Noto, I replaced Steps 14-20 with: Hue to +20, RGB Brightness and Contrast to 50; from y.3071- RGB Brightness and Contrast to +93, Hue to +30. y.3000-a.3031 included a 2 pixel Minimum operation between Steps 10, 11.

## OBSERVATIONS

Fig 2 equivalents for each set of Vol y) symmetries appear as papers 0. Note that sets are often truncated, not full circular rotations, very few contoured inscriptions also, due to limited resources.

Hokkaido and White Sea, SE Iceland sets may be most convincing. I have had no doubts about symmetry distinctiveness since temporarily misplacing some of SW Iceland's and re-generating an almost identical subset a month later!

Note that the SE Iceland coastal fjord symmetries are representative of fjords everywhere, along Norwegian, Novaya Zemlya, Baffin Island, Greenland, other Arctic, New Zealand, Patagonian coastlines.

Observations are classified as Small and Large due to anticipated mapping distortions in large serm tracings. Hokkaido, Tasmania are my largest Small examples. SW Japan is my smallest Large example.

### SMALL

Generally, small tracings are coarser, more forgiving, small regional maps less distorted . . .

Rotational small serm coincidences group into 50-350 discrete, annular (spiralizing) symmetries, synchronously along full circle arcs, for 100s of Vol y) symmetries, 1,000s of Sketch Method symmetries.

### LARGE

As anticipated, I found both macro effects, y.02, and mapping distortion in my 1<sup>st</sup>, Tasmania example of rotational large serm coincidences, distortion as explained in Synchronicity below.

EXCEPTIONALISM: China seemed exceptional. China's large mapping errors produced relatively small distortions. I reasoned that this was because its rotations were concentric with unusual, coastal circularity.

However, exceptionalism continued through all of my larger example rotations. All coincidences seemed undistorted, synchronised, as though they were of small Polynesian islands:

The macroed coasts of Korea, Manchuria, Scandinavian macroed coasts, fjords, smaller coincidences of rivers and so on. All contradicted the Tasmania anticipation and finding.

The large aberrations, distortional differentials I had been anticipating had evidently been "corrected". . . . an interpretation corroborated by most impressive Hokkaido, undistorted symmetries.

While the Hokkaido and Tasmania symmetry sets were of similar scale, they were not similarly distorted in their peripheries, consistent with Hokkaido rotational-mapping distortional concentricity.

Such correction is consistent with both distortions and rotations of my larger examples having been serm centred, serm concentric. Serm symmetries and macros both tend to be radial, quasi-/concentric.

There had been no such correction for the original example of Tasmania because the Tasmania serm rotational centre is peripheral, its mapping distortion disjoint, island-centred.

I thus went on to fill my Japan, SW Japan, Hokkaido, SW Scandinavia, White Sea and other symmetry sets with examples, would do Amazon, Congo, Mississippi River, Great Lakes sets.

Refer to y.02-4 for further explanation, y.02 for "macro" Observations. Refer to y.08, 9 for general comments on observations.

### SOLARISATION

Solarisation, Step 13 above, produces true, most readable coincidences.

But it also produces non-coincidental parts of potentials as brown outlines, which are difficult to read where lineal densities are high.

Such regions can be read by looking at the other side of the figure also, where the same scene is inverted.

#### STATISTICS

A large portion of coincidences within symmetries must be produced randomly, but random "symmetries" would be tellingly asynchronous, patchy in a random way throughout the circle.

Synchrony along full circle arcs is proof that 1000s of discrete, annular (spiralizing) symmetries are essentially "real", consistent with spiralizing, "rotationally phase-shifting macro" genesis, y.02.

#### QUALITY

In producing this Vol y)'s rotational symmetries, I usually erred on the side of caution, tended to include marginal candidate symmetries, knowing that "duds" could be culled later on.

Sometimes I became alarmed at the large number of symmetries. Too many duds?!? Many real symmetries were missed subsequent to such alarms.

I oscillated between over-, under-compensation. I thus got a good feel for the reality of my symmetries; their true frequencies, the quality of my symmetry sets, my Method, and so on.

I gained the impression that my symmetry sets are uneven, but usually less than 10% out, either way. My projection of a 350 symmetry set upper limit might be anywhere between 300-400 symmetries.

The larger numbers of Scandinavian and Japanese symmetries is consistent with Vols 1, 3 impact indications. This paper's Method should obviously be computerised, as explained in y.06.

#### SYNCHRONICITY

More fully explained in y.02, y.06, synchronicity was peripherally marginal in my first rotational example, Fig 2. Its mapping distortions approached line widths in the North.

It was drawn fairly small, close to A5 size. Because of these distortion problems, I decided to concentrate on smaller tracings of smaller regions, look at more extensive regions for coarse/macro effects only. . . .

An important theoretical anticipation was fortuitously confirmed by this 1<sup>st</sup> example. I might otherwise have been confused by apparently contradictory, China, Japan, SW Scandinavia and other much more extensive symmetries.

#### PROOF

These discrete, annular (spiralizing) symmetries, and the SERMs which produce/explain/ predict them, are proved real differentially: Perturbations produce diminutions globally, synchronously along full circle arcs. A "macro" phenomenon (y.02) is corroborative.

Already seen here, easily proved/disproved experimentally, y.06, these findings corroborate 1.023 morphological proof of my overall thesis.

A very high density of mantle serms is indicated globally, corroborating my super huge impact scenario of 3.1-4, Vol x.

My explanation of the unexpected coincidence synchronicity of my largest rotations, that they are serm concentric, and serm phenomena are largely serm concentric or radial, can be turned around:

My largest rotations of axially concentric serm phenomena would not have produced such fruitfulness had they not been serm concentric. Fruitfulness proves serm-, rotational- centre conjunction.

Serm, multidirectional relic symmetry, macro subtheses are thus corroborated.

#### RETROSPECTION

#### OCEAN-CONTINENT RE-CONFIGURATION

In 0.001, under SERMS, I have explained how a large portion of delivered cometary kinetic energy may have been converted into ¼-wave mantle resonances very quickly, enabling ocean-continent re-configuration:

"

#### WAVE COARSENING

I have explained ubiquitous, planetary/stellar layer wave coarsening in terms of etalon resonance, 4.9, 4.5-12, 14.

. . . . long waves are most sustainable, tend to accumulate.

A large portion of delivered cometary kinetic energy may thus have been converted into ¼-wave mantle resonances before much melting had occurred, consistent with ocean-continent re-configuration, Vols 1, 4, y.01, RETROSPECTION.

#### PLANETARY RHYTHMS

Earth, Mars, Venus planetary rhythms/hemispheric dichotomies are thus explained:

Shock waves emanating from sufficiently energetic super huge impacts on small rocky planets generally rapidly coarsen to planetary, ¼-wave mantle resonance scale, 4.9.

Wave coarsening can be expected to produce hemi-, quattro-, octo- hexadeci-chotomies, depending on impactor multiplicities, spacings, 4.3.

Serm cluster-encompassing serms have evidently attained such order of magnitude: 4.8, MANTLE RESONANCE, Planetary Rhythms.

These ideas have been confirmed by Vols v-x's IHBO-consistent flared antipodal conjugacies."

Consistent with "100-350 distinctive candidate symmetries", such sustained ¼-wave mantle resonances may have numbered ~400 inscriptive resonances, a 2-week super huge earthquake."

THESI wave coarsening would have started with impact hemispheric crustal serm resonances, crustal fringe finessing and so on.

¼-wave crustal serm resonances, fringes became high ¼-wave order mantle serm resonances, fringes, many of which became ¼-wave mantle serm resonances, fringes, consistent with 4.9 explanation.

y.02 Macro Genesis explanation, 4.5-11 explanation of crustal and mantle serm energisation are thus corroborated, and vice versa.

#### SERM HIERARCHIES

Why is it that serm rotational zig-zags, what I used to call serbils, 0.001, macros, y.02, are so strongly hierarchical?

Serms are profoundly nested, are generally dominated by a bisectional river, island arc, mountain range, coastline and so on, reflecting diverse factors, Freeze Effect, 3.3, randomness and so on.

This has been obvious in all my approaches to serms. In this Vol y)'s rotations for example, the SW Sweden serm exhibited such a dominant bisectional axis connecting Aland to Jotun Heiman/far W Norway.

These hierarchies evidently reflect that fact that, in serm etalon resonance, "the winner takes all". Thus indicated impact-energisation of serm etalons is consistent with various collinearities/orthogonalities:

As explained in 0.001 INTRODUCTION, IHBO Effect, many major long lineal morphologies are tellingly either collinear or orthogonal to the Impact Hemispheric limb Boundary (IHBO), Vol 1.

Serm hierarchy explanation is thus consistent with IHBO, corroborative of my ebook thesis.

#### DIFFERENTIATION

Planetary faultline inscriptions are evidently generally composed as phase-shifting serm symmetry coincidence macros, variously energised by "laser pumping", y.02, Vol x.

Continental shelf edges, fjords, coastlines, island arcs, mountain ranges, large river systems, cliff faces and so on are evidently differentially produced by an hierarchy of processes, starting with "Inscription Phase" rotational macros, ending with variously Freeze Effect-ed uplifts, 3.3.

Continued as y.02, 3