

World Encircling Tectonic Vortex Street – Geostreams Revisited: The Southern Ring Current EM Plasma-Tectonic Coupling in the Western Pacific Rim

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Interplanetary Magnetic Field (IMF) coupling to south polar magnetic ring currents transfers induction energy to the Southern Geostream ringing Antarctica and underlying its encircling mid-ocean ridge structure. Magnetic reconnection between the southward interplanetary magnetic field and the magnetic field of the earth is the primary energy transfer mechanism between the solar wind and the magnetosphere. Induced telluric currents focused within joule spikes along Geostreams heat the southern Pacific. Alignment of the Australian Antarctic Discordance to other tectonic vortexes along the Western Pacific Rim, provide electrical connections to Earths core that modulate global telluric currents. The Banda Sea Triple Junction, a mantle vortex north of Australia, and the Lake Baikal Continental Rift vortex in the northern hemisphere modulate atmospheric Jetstream patterns gravitationally linked to internal density oscillations induced by these telluric currents. These telluric currents are driven by solar magnetic power, rotation and orbital dynamics. A solar rotation 40 day power spectrum in polarity controls north-south migration of earthquakes along the Western Pacific Rim and manifest as the Madden Julian Oscillation a well-documented climate cycle. Solar plasma turbulence cycles related to Hale flares trigger El Nino Southern Oscillations (ENSO's), while solar magnetic field strength frequencies dominate global warming and cooling trends indexed to the Pacific Decadal Oscillation. These Pacific climate anomalies are solar-electro-tectonically modulated via coupling to tropical geostream vortex streets. Particularly the section along the Central Pacific Megatrend connecting the Banda Sea Triple Junction (up welling mantle vortex) north of Australia with the Easter Island & Juan Fernandez twin rotating micro-plates (twin down welling mantle vortexes) along the East Pacific Rise modulating ENSO. Solar eruptions also enhance the equatorial ring current located approximately at the boundary of the plasmasphere and the outer magnetosphere. Induction power of geo-magnetic storms, are linked to ring current strength, and depend on the speed of solar eruptions, along with the dynamic pressure, strength and orientation of the IMF.