

VIRTUAL IMAGE RECONSTRUCTION OF AN INTENSE Z-PINCH AURORA AT EARTH'S SOUTHERN AXIS FROM ARCHAIC PETROGLYPHS

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The identification of archaic petroglyphs as artists recordings of MHD Z-pinch instabilities has led to a global survey of their directionality. In all cases, after a survey of fields of several million, the field-of-view (FOV) alignment is axial south. Each unmoved petroglyph is treated as a pixel containing GPS position, survey transit FOV, and angle of inclination. GIS techniques on a large computer allows the reconstruction of a virtual image of the gigaampere aurora. To date, the reconstructed image at the south pole is found to consist of two pinched plasmoids below the auroral horn and Birkeland current filamentation of the outer auroral sheath.

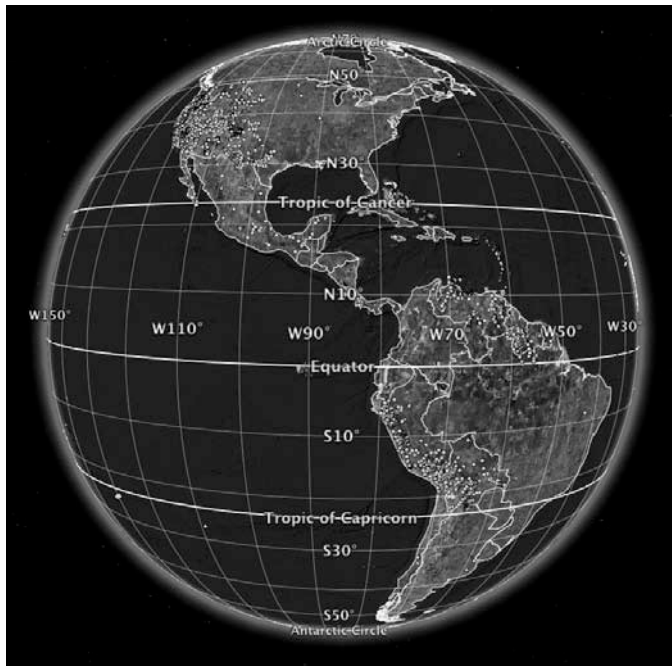


Figure: North and South America view of GPS petroglyph locations (dots).

This work was supported in part by the National Nuclear Security Agency.

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