

THE EVENT NEAR THE CURUÇÁ RIVER.

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This event, also known as the "Brazilian-Tunguska Event" (Bailey et al. 1995), refers to a supposed fall of three bodies in the early morning of August 13, 1930 on the Brazilian Amazonian forest, near the Peruvian border.

In this work we will try to summarize the following aspects: a) the historical backgrounds; b) the search for possible occulted astrobloemes; c) seismic evidences d) the expedition and exploration of the area d) the astronomical evidences. All these points produced separate evidences indicating that the event could have happened. Some descriptions about the fall were captured from the newspapers and the local atholic missionaries. Based on this very general information an analysis of LANDSAT image over the Curuça high waters was undertaken in order to find a feature that could indicate the falling site. One structure measuring 1 kilometer structure centered in latitude S 05:11 and longitude W 071:38 was mapped and aerial survey was done to collect photos and panoramic views. A field trip was organized in the first week of June 1997. The mission arrived in the site in June 12th and spent about a half a day searching for anomalies. Firstly the drainage pattern indicates an up-lifted circular feature with internal aligned (S-W) ridges dipping 22 degrees for 48 S-E and 42 N-W. These geomorphic attributes are different from the general aspects of the surrounded relief. Two samples of rock were collected in the vicinities but not within the structure. They did not show any evidence of impact. The vegetation also did not present visual evidences of impact but some study must be done in the internal rings of the trees in order to look for some anomaly. Soils are being analyzed for Iridium and the preliminary results suggest the presence of the element. Seismic and magnetic evidences are still to be found. From the astronomical point of view, the most interesting scenario refers to the fall of at least one important piece of the comet Swift-Tuttle that provoked an almost circular crater of nearly 1 km of diameter. In fact, the yearly encounter of the Earth with the path of this periodic comet produces the well known "Perseid Shower" of particles with a present maximum near the night of August 12. The Brazilian Tunguska Event is asking for more scientific evidences.

References: [1] Bailey, E.M. et al. 1995. The Observatory 115(1128): 250-253.