Rocks from Space Picture of the Day - February 24, 2010

## LOVINA'S IR-UNGR CLASSIFICATION IS REAFFIRMED



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The Lovina meteorite was first described by a team of Canadian scientists in the Lunar and Planetary Sciences Journal (XXXVIII) in 2008 and certified as a meteorite by the scientists sanctioned to do so, the Nomenclature Committee of the Meteoritical Society. Extremely anomalous in a variety of dimensions, Lovina was classified as an ungrouped iron (IR-UNGR).

Following a visual inspection in December 2009, Smithsonian researchers expressed doubts as to Lovina's extraterrestrial origins and further research commenced. On February 22nd the world's foremost expert on iron meteorites, Dr. John Wasson, announced his findings: "On the basis of its composition, I am convinced Lovina is a meteorite. Every single element is within the range commonly encountered in iron meteorites; metals that have been made by man will always differ from meteorites in terms of several elements and element ratios."

Lovina's stature as one of the single most exotic meteorites is reaffirmed. An ataxite, Lovina contains the fourth highest nickel percentage of all meteorites and is the only meteorite known to feature ziggurat (stepped pyramidal) structures----the result of immersion for untold centuries in the tropical shallows of Bali.

The image seen below is of the etched face of Lovina. The grains are what become manifest following etching, to be distinguished from the organized matrix of inclusions---misidentified in postings as the etch pattern---whose oxidation contributed to the extraordinary ziggurat structures atop the meteorite.

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