Russian researcher claims to have found rocks from object that caused Tunguska explosion
3 May 2013, by Bob Yirka

(Phys.org)—Andrei Zlobin of the Russian Academy of Sciences’ Vernadsky State Geological Museum, claims in a paper he's uploaded to the preprint server arXiv, that he's found rocks he believe to be from the object that caused the Tunguska explosion over Siberia in 1908. If further analysis of the rocks confirms them to be from space, it will mark the discovery of the first physical evidence of the source of the famous blast.

The Tunguska Event, as it's known, was a very powerful explosion that occurred in the air over a part of Siberia near the Podkamennaya Tunguska River. The force of it flattened forests for 2,150 square kilometers—it's considered to be the largest impact event in modern history. Despite the immensity of the explosion, no debris from the object that caused it has ever been found—likely due to the remoteness of the impact zone and the political climate in Russia at that time. Even more mysterious is the lack of an impact crater. Because of the dearth of evidence, there has been a lot of speculation about what caused the explosion, with the two most likely candidates being a meteoroid or a comet.

In his paper, Zlobin says he dug some holes in the permafrost in an area believed to be near the center of the impact zone, back in 1988. He reports that he found nothing that could be tied to the explosion. Before returning home, however, he collected some rock samples from the bottom of a shoal on the Khushmo River and brought them back with him to the museum. Zlobin says he didn't sort or examine the rock samples until twenty years later. He doesn't say so, but perhaps it was the hundred year anniversary of the Tunguska Event that spurred him into action—in any case, he found three samples that he believes came from outer-space. He thinks so because they exhibit signs of...
both melting and ablations known as regmaglypts. Scientists believe the explosion was not hot enough to cause rocks on the ground to melt, thus, the melting of rocks in the area must have come as a result of the intense heat of passage through the Earth's atmosphere.

Zlobin says he believes the impact was caused by a comet, likely of a size close to Halley's Comet. Further testing of the rocks will need to be done to confirm they came from outer-space, of course. If they come back positive, scientists will then have to debate amongst themselves whether they were part of the object that caused the Tunguska Event, or were a separate event altogether.


**Abstract**
The author describes some stones which he found at the bottom of Khushmo River's shoal during 1988 expedition into the region of the Tunguska impact (1908). Photos of stones are presented. Three stones have traces of melting and the author consider these stones as probable Tunguska meteorites. Some arguments are presented to confirm author's opinion. Results of investigation of prospect holes in peat-bogs are briefly described too. New data concerning heat impulse of the Tunguska impact are obtained. There is the assumption that some meteorites which are formed during comet impact looks like stony or glass-like thin plates with traces of melting.