

**THE METEORIC EVENT OF PIRENOPSIS- BRAZIL:
VIDEO REGISTRATION AND CORRELATIONS.**

P.R.Martini [1]; A. Lerro [2]. [1] Brazilian Institute on Space Research-INPE. martini@tid.inpe.br. [2] Alta Filmes Limited Sao Paulo.

A fireball was registered above the sky of the city of Pirenópolis, state of Goiás in the mid west region of Brazil. The city is located at latitude S15:51 and longitude W48:57. The event arose from the heavens at 7:30 PM (10:30 UT) of July 25th, 2002. The meteoroid was registered by a CCD video camera with lenses 72-millimeter wide augmented 14 times. The internal timer of the camera indicated that the fire started at 13 minutes 14:17 seconds and ended at 13 minutes 19 seconds with maximum brightness at 13 minutes 18 seconds. The fireball crossed the direction of the full moon that happened to be just arising (+1.8 degrees) from the azimuth 108.9 degrees (E-S-E). The trajectory crossed this azimuth coming from the north and dipping to the southern horizon as a meteoroid brighter than the full moon. The event was completely recorded by the VHS-CCD and no sonic boom or ground shaking were registered just the yellow to red straight descending ball. Scientific literature [1] indicates that a distinguished meteoroid was registered by DOD-NDS in that same day but earlier (7:00 PM-UT) in the skies of Eastern Europe. According to Ratcliffe and Ling [2] the late July of 2002 was time for strong activity of southern Delta Aquarids. The source of the shower from the heavens coincides with the source of the Pirenópolis meteoroid (N-N-E). Oberst and others [3] describe the detection and the recovering of the Neuschwanstein Meteorite in the Alps near Innsbruck. According to these authors the recovering site was about 20-kilometers away the last and loud explosion. The Pirenópolis event was a quiet meteor to the witness and so the meteorite could have fallen very far from the city. A Remote Sensing satellite image was recorded over the region by the CBERS Satellite in the very next morning and is being analyzed but no ground evidences of a fall were found so far. Astronomers are being asked to help to depict the landing site of the meteoroid.

References: [1] Tagliaferri, E. Mercury Magazine. 1998. 27(6): 18-23. [2] Ratcliffe, M. and Ling, A. 2002. Astronomy 30(7): 56-65. [3] Oberst, J. et al. 2003. EOS, Transactions, AGU 84(39): 393-4.