

Central Bureau for Astronomical Telegrams

INTERNATIONAL ASTRONOMICAL UNION

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#### ORIONID METEORS 2008

Further to CBET 1518, P. Jenniskens, SETI Institute, reports that K. Miskotte (Dutch Meteor Society) noticed unusual Orionid activity on Oct. 20, mostly bright meteors between +1 and -2 magnitude. According to the International Meteor Organization, the Orionid meteor-shower rate had increased to a zenith hourly rate (ZHR) of  $34 \pm 3$  meteors/hr on Oct. 20 (solar longitude 207.0 deg, equinox 2000.0) and to  $ZHR = 33 \pm 7$  meteors/hr on Oct. 21 (solar long. 208.2 deg), significantly above the normal peak rate of  $ZHR = 23$  meteors/hr (Jenniskens 2006, \*Meteor Showers and Their Parent Comets\*, Cambridge University Press, p. 729). Hence, the peak of the outburst is later than the predicted date of 2008 Oct. 19d02h-19d08h UTC, when the earth was to cross the dust trail of comet 1P/Halley material ejected in the year -1265 (cf. CBET 1518). Rates are expected to stay higher than normal for at least another day or two. A live update is provided by the International Meteor Organization at the following website URL: <http://www.imo.net/live/orionids2008/>. Jenniskens also forwards the following report:

J. M. Trigo-Rodriguez, Institute of Space Sciences, Consejo Superior de Investigaciones Cientificas and Institut Estudis Espacials de Catalunya; J. M. Madiedo, University of Huelva; and P. Pujols, Agrupacio Astronomica Osona, report that the encounter with the -1265 dust trail on Oct. 19 coincided with a moderate ZHR rate of 20 meteors/hr from an apparent radiant R.A. = 95 deg, Decl. = +15 deg, and a low population index of  $1.5 \pm 0.4$  (N = 40). On Oct. 20, the ZHR was at the same level, but bright bolides were detected between 2h and 5h UT, with a magnificent bolide of magnitude -13 at Oct. 20d03h45m UT. High meteor rates and fireballs were also recorded over Europe on Oct. 21 when most Orionid meteors radiated from R.A. = 93 deg, Decl. = +17 deg, and the ZHR increased to  $40 \pm 8$  (solar longitude 208.03 deg) with a population index of  $1.6 \pm 0.4$  (N = 52).

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