

Electronic Telegram No. 5207

Central Bureau for Astronomical Telegrams

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OMEGA CARINID METEOR SHOWER 2023

P. Jenniskens, SETI Institute and NASA Ames Research Center; S. Heathcote and T. Abbott, NOIRLAB and Cerro Tololo Interamerican Observatory; and E. Jehin, University of Liege, report that the minor meteor shower omega Carinid (IAU shower 1033) showed unusual activity between 2023 Jan. 10d02h and 10d08h UTC (cf. <http://cams.seti.org/FDL/> for the date of 2023 Jan. 10). The CAMS Chile network triangulated eleven meteors from this shower during the solar longitude interval from 289.22 to 289.48 deg, centered on 289.35 +/- 0.03 deg (equinox J2000.0). In prior years 2020 and 2021, only three omega Carinids were triangulated in this solar longitude range by all southern-hemisphere CAMS networks combined. The shower originates from an unknown long-period comet and had median orbital elements $q = 0.958 \pm 0.001$ AU, $e = 0.986 \pm 0.062$, $i = 66.9 \pm 0.7$ deg, Peri = 341.3 +/- 0.7 deg, Node = 109.35 +/- 0.03deg. During what may have been a prior meteor outburst in 2016, five omega Carinids were triangulated by the CAMS New Zealand network (coordinated by W. J. Baggaley, University of Christchurch) during the 1.5 hr between Jan.9d12h31m and 9d13h58m UTC, centered on solar longitude 288.51 +/- 0.01 deg.

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