

Photometry and imaging of Comet 103P/Hartley in the 2010?2011 apparition

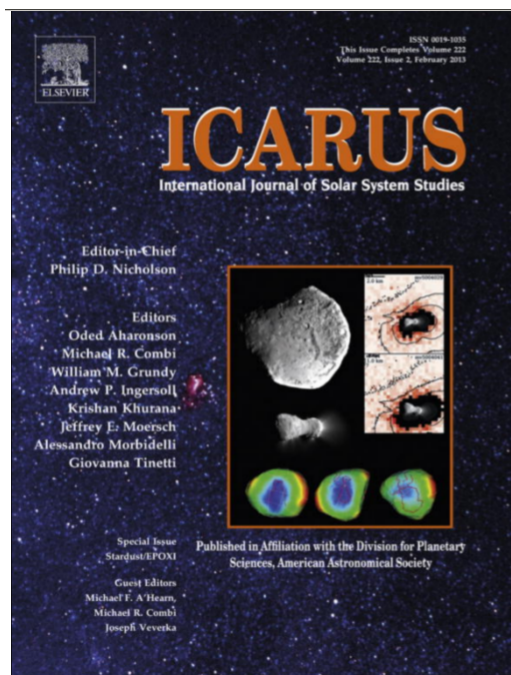


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Un altro traguardo raggiunto dagli astrofili che collaborano con la ricerca.

Nell'ambito del [Progetto CARA](#) ^[1] due nostri soci (Giannantonio Milani e Carlo Vinante) sono coinvolti in progetti di ricerca internazionali, sulle comete.

In pubblicazione sul numero di Febbraio di Icarus (Elsevier) un articolo sulla cometa 103P dal titolo **Photometry and imaging of Comet 103P/Hartley in the 2010?2011 apparition**.



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Photometry and imaging of Comet 103P/Hartley in the 2010–2011 apparition

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The results of a CARA (Cometary Archive for Afq) campaign on Comet 103P/Hartley 2 are presented. The main goal was to monitor extensively the comet during the apparition with CCD R and I imaging and photometry, as a support of EPOXI mission.

[2]

abstract

The results of a CARA (Cometary Archive for Af?) campaign on Comet 103P/Hartley 2 are presented. The main goal was to monitor extensively the comet during the apparition with CCD R and I imaging and photometry, as a support of EPOXI mission.

The Af? quantity showed a progressively rising ascending branch, followed by an apparent flat maximum

that lasted for 2 months, from about -10 to +50 days from perihelion. In this period, A_f peaked at around 100 cm in R band with strong short term fluctuations between 70 and 140 cm. Early signs of activity were detectable well before perihelion (about 80-90 days before) and a random variability is also present in the descending branch after perihelion. Three post perihelion data points (between +55 and +61 days) from the 1997-1998 apparition show a bit higher A_f value of our observation and a similar fast variation.

The average A_f behavior, corrected for the solar phase effect, is strongly asymmetric and shows a more steeper ascending branch, approaching to perihelion.

Morphology and coma asymmetry, as well as the sunward and tailward profiles are examined. An average gradient indicatively between ~ -0.7 and -1 is observed in the inner coma ($r < 2000$ km). Ten small amplitude outbursts have been detected and two ones were suspected.

[Osservazione e Ricerca](#) ^[3]

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Links:

[1] <http://www.astronomia-euganea.it/drupal/aae/cara>

[2] <http://www.astronomia-euganea.it/drupal/sites/default/files/articoli/icarus-103p.png>

[3] <http://www.astronomia-euganea.it/drupal/category/attivita%20C3%A0/osservazione-e-ricerca>