

HUBBLE PROVIDES SPECTACULAR DETAIL OF A COMET'S BREAKUP (STScI-PRC06-18)

Source: <http://sci.tech-archive.net/Archive/sci.astro/2006-04/msg00181.html>

- *From:* INBOX ASTRONOMY: NEWS ALERT <hst-news@xxxxxxxxx>
 - *Date:* Thu, 27 Apr 2006 13:16:45 -0400
-

FOR RELEASE: 1:00 pm (EDT) April 27, 2006

PHOTO NO.: STScI-PRC06-18

HUBBLE PROVIDES SPECTACULAR DETAIL OF A COMET'S BREAKUP

NASA's Hubble Space Telescope is providing astronomers with extraordinary views of Comet 73P/Schwassmann-Wachmann 3. The fragile comet is rapidly disintegrating as it approaches the Sun. Hubble images have uncovered many more fragments than have been reported by ground-based observers. These observations provide an unprecedented opportunity to study the demise of a comet nucleus. The comet is currently a chain of over three dozen separate fragments, named alphabetically, stretching across the sky by several times the angular diameter of the Moon. Hubble caught two of the fragments, B and G (top frames) shortly after large outbursts in activity on April 18, 19, and 20, 2006. Hubble shows several dozen "mini-comets" trailing behind each main fragment, probably associated with the ejection of house-sized chunks of surface material. Deep-freeze relics of the early solar system, cometary nuclei are porous and fragile mixes of dust and ices that can break apart due to the thermal, gravitational, and dynamical stresses of approaching the Sun. Whether any of the many fragments survive the trip around the Sun remains to be seen in the weeks ahead.

Credit for Hubble images: NASA, ESA, H. Weaver (JHU/APL), M. Mutchler and Z. Levay (STScI)

Credit for ground-based image: G. Rhemann and M. Jager

To see and read more about the comet on the Web, visit:

<http://hubblesite.org/news/2006/18>

<http://www.jhuapl.edu/newscenter/pressreleases/2006/060427.asp>

<http://www.spacetelescope.org>

For more information, contact:

Ray Villard
Space Telescope Science Institute, Baltimore, Md.

HUBBLE PROVIDES SPECTACULAR DETAIL OF A COMET'S BREAKUP (STScI-PRC06-18)

(Phone: 410-338-4514, E-mail: villard@xxxxxxxx) or

Michael Buckley

Johns Hopkins University Applied Physics Lab, Laurel, Md.

(Phone: 443-778-7536, E-mail: michael.buckley@xxxxxxxx) or

Hal Weaver

Johns Hopkins University Applied Physics Laboratory, Laurel, Md.

(Phone: 443-778-8078, Cell phone: 410-978-5172, E-mail: hal.weaver@xxxxxxxx)

The Hubble Space Telescope is an international cooperative project between NASA and the European Space Agency. The Space Telescope Science Institute in Baltimore conducts Hubble science operations. The Institute is operated for NASA by the Association of Universities for Research in Astronomy, Inc., Washington.

You are receiving this e-mail because you are subscribed to the notifications whenever there is a new Hubble Space Telescope image, product, or news update. If you would like to unsubscribe or change your e-mail preferences, please go to:

http://hubblesite.org/newscenter/hubble_on_the_go/inbox_astronomy/.