

Tessmann Focal Points



Comet 67P/C-G

Rosetta Orbits "Rubber Ducky" Comet

After traveling 10 years, the Rosetta spacecraft finally reached Comet 67P/Churyumov-Gerasimenko. (aka 67P/C-G) in August. On its way to the comet, the spacecraft performed complicated orbital maneuvers around Mars and the Earth, known as gravity assists, to sling shot itself faster through space. As a bonus, the spacecraft examined two asteroids along the way.

The first images sent back to Earth in July as the spacecraft drew near revealed the comet's shape as something no one could have ever imagined. It was as if two separate comets heads had smashed and fused together. Its improbable shape gave it the resemblance to popular bath time toy, earning it the nickname "rubber ducky."

Now orbiting the comet, Rosetta is sending back amazing hi-res images. The comet is beginning to near the sun. As it gets closer and begins to melt, the gas and ice of the comet will form a tail. Currently, about a tablespoon of water per minute is being degassed. On August 4th, Rosetta was able to take a five and a half minute exposure to reveal the developing tail, otherwise invisible in normal snapshots.

In November, the spacecraft will attempt to launch and land a probe that will anchor itself upon the surface of the comet. Earthbound team member of the Rosetta mission are currently studying the comet for a suitable landing site. If successful, the probe will scoop up material and analyze the composition of 67P/C-G. It is hoped that we will discover clues to better understand the role comets may have had in affecting life on ancient Earth.

The comet will make its closest approach to the sun in December and the tail should be quite dense and visible at this point. The Rosetta team hopes to study the evolution of the tail as it forms.

Images on this page are releases from the European Space Agency that Rosetta has captured so far.

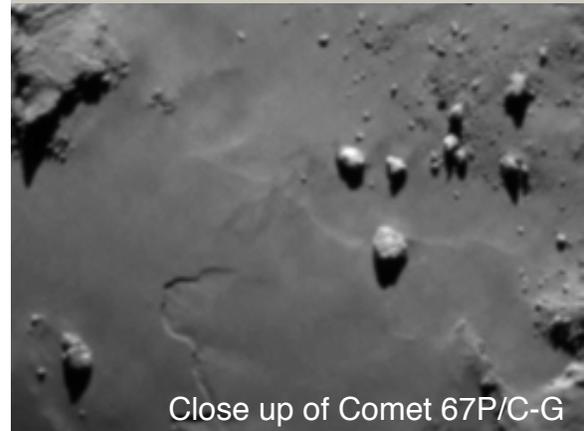
Images courtesy of ESA

Construction Update

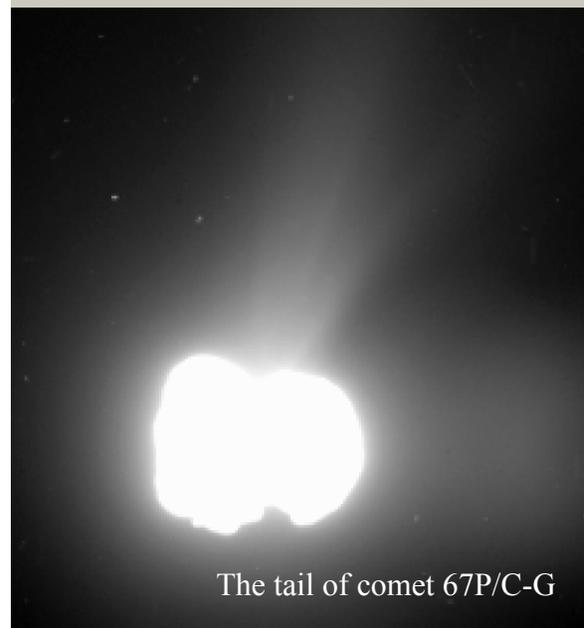


The latest word is that the planetarium will reopen shortly after the beginning of the new year. Opening date is dependent on construction issues and the possibility of EL Nino rains.

However, work seems to be moving along rapidly at present.



Close up of Comet 67P/C-G



The tail of comet 67P/C-G