

# Rosetta ends 12-year space odyssey

After chasing a comet across nearly seven billion km of space, the historic Rosetta mission will end when the spacecraft gently crashlands on its surface and shuts down forever

**Feb 2016:**

Temperature falls to  $-180^{\circ}\text{C}$ , Philae no longer able to function. Rosetta continues tracking 67P

**Mar 2004:**  
**Rosetta launched**

**June 2011:** After four flybys of Earth and Mars, Rosetta is put into hibernation to save energy

**Jan 2014:**  
Rosetta wakes

**Aug:** Comet comes within 186 million km of Sun

**Jul:** Last contact with Philae

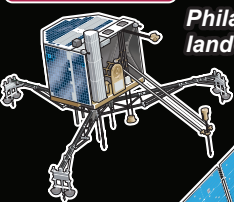
**Jun 2015:** Philae sends unexpected message: *"Hello Earth! Can you hear me?"*

**Nov 12:** Philae becomes first ever spacecraft to land on comet. Probe bounces three times before ending up in deep shade where it not be recharged

**Aug 6:** Rosetta enters orbit of Comet 67P/Churyumov-Gerasimenko and maps it to determine viable landing site for **Philae** lander

**Sep 30, 2016:**  
**Mission ends**

**Philae lander**



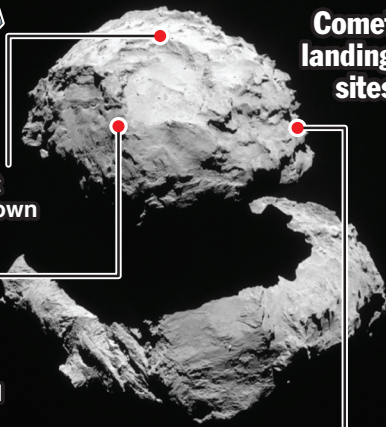
**Rosetta orbiter**



**Philae first touches down**

**Philae's final resting place:**  
On Sep 2, 2016, Rosetta's high-resolution camera spots Philae wedged into dark crack

**Comet landing sites**



**Organic compounds detected in 67P bolster notion that comets delivered chemical building blocks for life to Earth and throughout solar system**



**Rosetta's planned impact site:**  
In final hours of controlled 14-hour descent, Rosetta will take close-up pictures of comet and collect data on gases closer to surface