<u>Underwire</u> Taking the Pulse of Pop Culture

## **Rosetta Disk Passes Earth on Gravitational Slingshot to Tail Comet**

By Jenna Wortham Movember 12, 2007 | 7:57 am | Categories: Uncategorized



On Nov. 13, amateur astronomers will want to train their 'scopes on the skies for a last glimpse of the Rosetta

Space Probe, as it passes Earth, picking up speed in a gravitational slingshot on its way to outer space. The probe's final destination is the <u>Comet 67/P Churyumov-Gerasimenko</u>, which orbits the Sun once every seven years. After the final rendezvous, it will tag along with the comet for the rest of its lifespan.

In 2004, the <u>European Space Agency</u> launched the Rosetta Space Probe, which holds a copy of <u>the</u> <u>Rosetta Disk</u>, a 15,000 page archive of more than 1,000 human languages. The disk launch is a collaboration with

<u>the Rosetta Project</u>, an organization that works to preserve the world's languages. According to their site, as much as 90% of the world's linguistic diversity will disappear within the next century.

The information on the disk will serve as a durable artifact and record of human languages to provide clues and insight to human culture for eons to come. For each language, the disk contains descriptions of sounds, linguistics basics and vocabulary lists, as well as transcribed oral narratives and translated materials like the UN Declarations of Human Rights and chapters from the Book of Genesis.

No special platform or format is necessary to read the disk (which is actually a sphere made up of two hemispheres, the top portion an optical magnifier) since the text is micro-etched into its nickel surface. Future finders need only to magnify the script 1,000

times to read the encodings, which start at an eye-readable scale and spiral down to nano-scale. Each page is .019 inches (about half a millimeter) across, about the width of five human hairs and can be read with a high powered microscope.

However, the probe and disk still have quite a ways to go before actually reaching the comet – a lengthy trajectory with multiple gravity assists are planned though 2009, giving the probe an scheduled ETA in 2014.

Photo via <u>Rosetta Project</u>.

See also:

• Children's Books Online: The Rosetta Project

Tags: design, science, spacePost CommentIPermalink

**Comments** (0)