



NOW TRENDING: OCTOBER 8, 2014

WILL PHILAE LAND

SUCCESSFULLY

ON THE SURFACE OF A

COMET?

Discussion on SciCast about landing date

Leading forecast:

NOT BEFORE DECEMBER 14, 2014
57% PROBABILITY**BACKGROUND**

SciCasters are following the ESA's International Rosetta Mission and counting down the days of the much-anticipated landing of the Philae on a periodic comet known as Comet 67P/Churyumov-Gerasimenko. The latest news from ESA states that it will deploy the Philae to the comet on November 12. <http://bit.ly/1DQEAcy>

The odd shape and poor choice of landing sites has made the landing riskier. But how much? Rosetta mission manager Fred Jansen declined to estimate the chances. But SciCast says they've been cut in half.

FORECAST NOW:

When will the Rosetta's small robotic lander, Philae, land successfully on the surface of a comet?

Will SciCast predict the landing date?

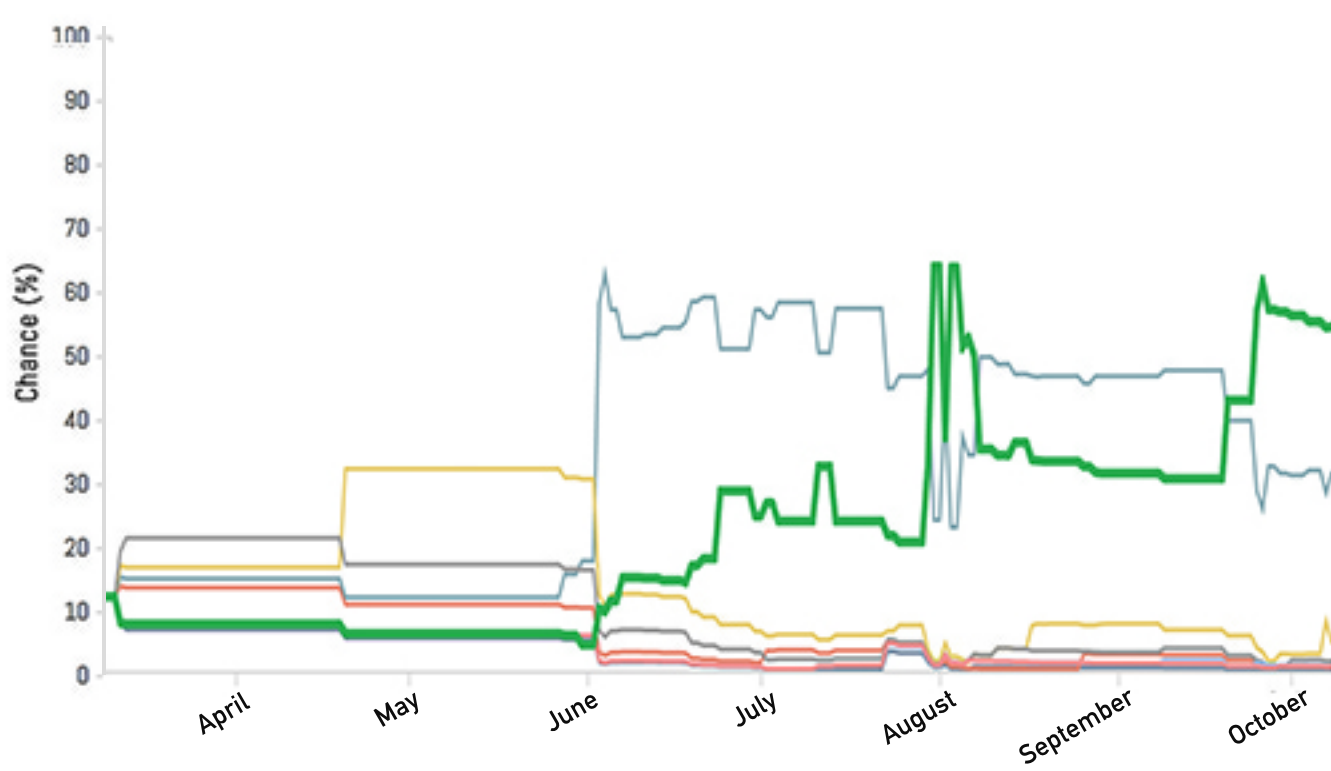
SciCasters are forecasting only a 33 percent chance of a successful landing between November 9 and 15, 2014 – the scheduled ESA landing date, and nearly a 60 percent likelihood that Philae either will not land safely, or will not attempt a landing before December 14. (The difference is the chance of a safe landing delayed by 1-4 weeks, as might happen if ESA switches to the backup site.)

A recent surge in forecasts occurred after Philae's lead navigator Eric Jurado commented on a recent video of the comet, which unveiled a double nucleus. "Landing the Philae probe however, could be more difficult, as this form restricts potential landing zones."

SciCast has been known to beat the experts. SciCasters accurately forecasted the first two phases of the Rosetta Mission*, and beat baseline forecasts at least 2 out of 3 times on hundreds of questions.

When SpaceX vice president of mission assurance estimated the odds of a successful recovery at 30 or 40 percent, SciCasters were far more optimistic, predicting a >70% percent chance of success. The recovery ended up being successful.

Until June, SciCast was much more optimistic than the ESA, giving only a 10 percent chance of failure or serious delay, compared with their pre-launch estimate of about 30 percent. But that chance rose steadily from June to August, spiked in early August before settling near the ESA's estimate, and started climbing again in mid-September.

HOW HAS THIS QUESTION TRENDED?

Legend for the graph:

- Before 11.01.14
- 11.01.14 - 11.08.14
- 11.09.14 - 11.15.14
- 11.16.14 - 11.22.14
- 11.23.14 - 11.29.14
- 11.30.14 - 12.06.14
- 12.07.14 - 12.13.14
- Not before 12.14.14

RELATED QUESTIONS

This question is part of a series of questions covering the Rosetta space probe mission that have been live since March 11, 2014. SciCasters accurately predicted the first two parts of Rosetta's mission. Forecasters believed both events would come to fruition, and this conviction grew stronger as time went on.

- 1. Will Rosetta successfully fire its thrusters to begin its trip to Comet 67P/Churyumov-Gerasimenko? (Resolved positively in line with forecasts)**
- 2. Will Rosetta rendezvous with Comet 67P/Churyumov-Gerasimenko? (Resolved positively in line with forecasts)**