

More on Beresheet



Beresheet taking a "selfie" with the Earth at a distance of 265,000 kilometers above the planet's surface in a photo released on March 24, 2019. (courtesy Beresheet)

Israel's Beresheet spacecraft selfie camera is continuing to click away as the satellite performs its largest elliptical orbit around Earth ahead of a planned moon landing on April 11.

On Sunday, engineers with SpaceIL and Israel Aerospace Industries released a number of photos from Beresheet's camera, including a selfie with the Earth from 265,000 kilometers (165,000 miles) above the planet's surface and a video of the sunrise in space.

The four-legged Beresheet, about the size of a small car, is circling Earth in increasingly larger elliptical loops until it maneuvers into the moon's orbit.

It is currently on the last loop around the Earth, which will take until April 4. Touchdown is planned for April 11 at the Sea of Serenity.

Aside from a few small glitches with an [unexpected system reset](#) and some problems with [the star tracking navigation system](#), the spacecraft is on schedule to make the landing.

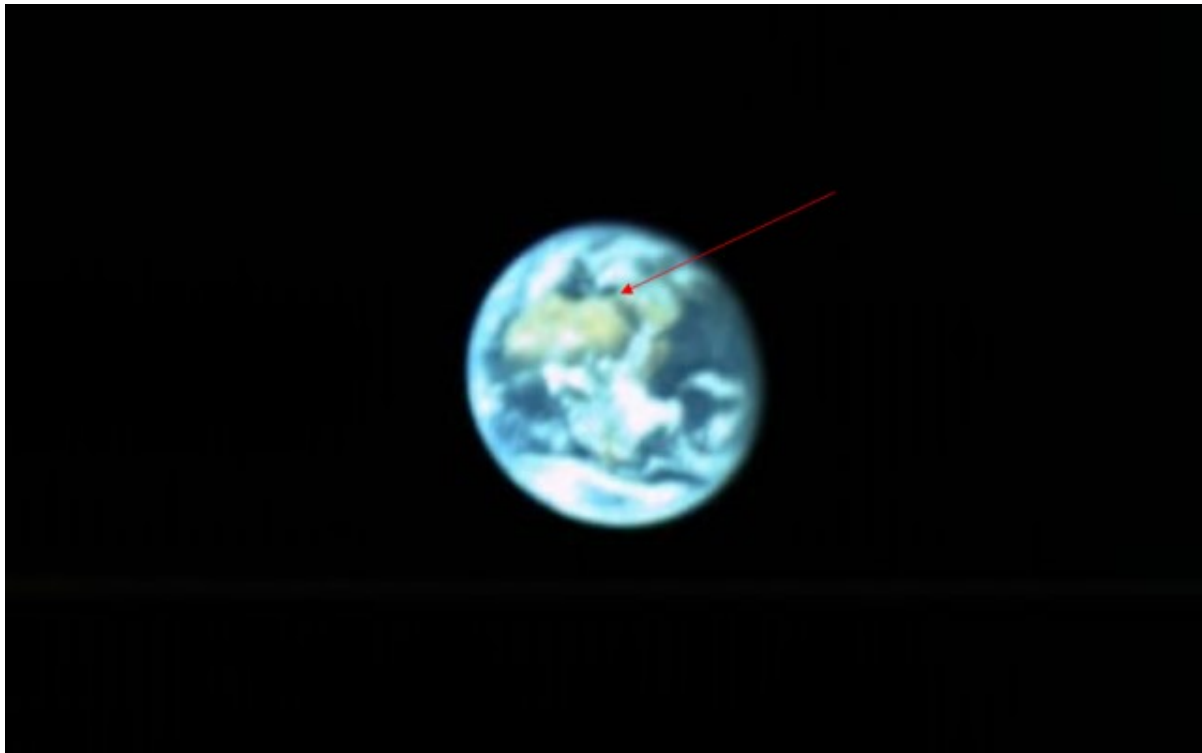
Also on Sunday, engineers released footage of Beresheet's landing gear deploying. The spacecraft has four landing legs that will touch down on the lunar surface.

Last week, [Beresheet's engine was activated for 60 seconds](#), putting it into a new orbit that takes it as far as 405,000 kilometers (252,000 miles) from Earth.

Beresheet, which means “Genesis” in Hebrew, lifted off on February 22 from Cape Canaveral atop a Falcon 9 rocket from the private US-based SpaceX company of entrepreneur Elon Musk.

Earlier this month, Beresheet [sent back a photo](#) taken with its “selfie camera,” in which the Israeli flag can be seen 37,600 kilometers (23,000 miles) above Earth.

A plaque installed on the outside of the lunar lander depicts Israel’s national flag as well as the phrases “Am Yisrael Chai” (the people of Israel live) and “Small country, big dreams.”



A photo the Beresheet spacecraft took of Israel at a distance of 131,000 km in a photo released on March 24, 2019. (courtesy Beresheet)

The NIS 370 million (\$100 million) Beresheet spacecraft is a joint venture between private companies SpacEL and Israel Aerospace Industries, funded almost entirely by private donations from well-known Jewish philanthropists. The project launched as Israel’s entry into the Google LunarX challenge for nongovernmental groups to land a spacecraft on the moon. Google ended the contest in 2018 with no winners, but the Israeli team decided to continue its efforts privately.

With Beresheet, Israel hopes to become the fourth country in the world to land a spacecraft on the moon, following the US, Russia, and China.

If successful, Beresheet will make history twice: as the first private-sector landing on the Moon, and the first craft from Israel to reach the orb.

If Beresheet successfully lands on April 11, the spacecraft is expected to carry out two or three days of experiments collecting data about the moon's magnetic fields before shutting down. There, all 160 kilograms (350 pounds) of the lunar lander will stay, possibly for eternity, on the moon's surface, joining approximately 181,000 kilograms (400,000 pounds at Earth weight) of [manmade debris strewn across the moon's surface](#).

The distance between Earth and the moon is approximately 384,000 kilometers (240,000 miles). Beresheet's elliptical route, which saves on fuel needs by harnessing the gravitational pull of the Earth, will cover about 6.5 million kilometers (4 million miles). The spacecraft is traveling at a speed of about 10 km/sec (36,000 km/h) on its way to the moon, or 13 times faster than the maximum speed of an F15 fighter jet.