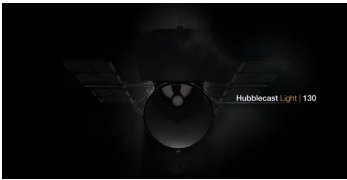
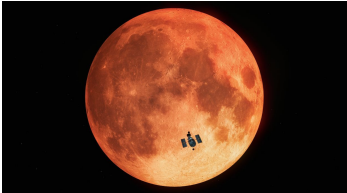
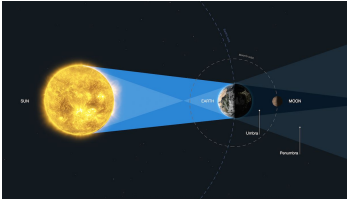



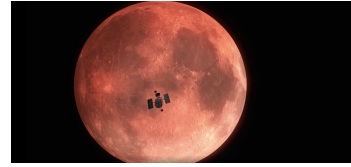


ESO, Karl-Schwarzschild-Str.2
D-85748 Garching bei München,
Germany
Telephone: +49 (0)89 3200 6855
Telefax: +49 (0)89 3200 6480
hubble@eso.org

www.spacetelescope.org

Hubblecast 130 Light: Hubble Observes a Total Lunar Eclipse	Visual notes
0:00-0:07 Intro	
0:08-0:28 Taking advantage of a total lunar eclipse in January 2019, astronomers using the NASA/ESA Hubble Space Telescope tested a new observational technique to be applied in the search for ozone on extrasolar planets.	
0:29-0:39 This is because our planet's perfect alignment with the Sun and Moon during a total lunar eclipse mimics the geometry of a transiting terrestrial planet with its star.	
0:40-0:48 Hubble did not look at Earth directly. Instead, astronomers used the Moon as a mirror that reflects the sunlight that has been filtered through Earth's atmosphere.	
0:49-0:0:57	

The measurements detected the strong spectral fingerprint of **ozone**, a key prerequisite for the presence – and possible evolution – of **life as we know it** in an exo-Earth.



0:58-1:04
This spectroscopy method serves as a proxy for how astronomers will observe Earth-like planets around other stars in the **search for life** in the future.



1:05-1:15
This is the **first time** a total lunar eclipse was captured from a space telescope and the first time such an eclipse has been studied in **ultraviolet wavelengths**.



Ends 01:26