



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 Episode 124 Light: Exoplanet K2-18b	Visual notes
00:00 Intro	
In an exciting discovery, <mark>water vapour has for the first time been detected</mark> in the atmosphere of a super-Earth with habitable temperatures.	Image heic1917a
Researchers from University College London used data captured by the NASA/ESA Hubble Space Telescope to analyse the starlight filtered through K2-18b's atmosphere.	Video heic1917a
K2-18b is eight times the mass of Earth and is now the only exoplanet known to have both water and temperatures that could support life.	Video heic 1917a (contd.)
This exoplanet is 110 light years from Earth and orbits a red dwarf star.	Video heic 1917b
Given the high level of activity of this red dwarf, K2-18b may be more hostile than Earth and is likely to be exposed to more radiation.	Video heic 1917b (contd.)
The next generation of space telescopes, including the NASA/ESA/CSA James Webb Space Telescope, will be able to characterise atmospheres of exoplanets in more detail.	<u>JWST</u>

Keywords: Hubble, UCL, exoplanet, water,

Ends 00:00