



ESA/Hubble

ESA Office - Space Telescope Science Institute 3700 San Martin Dr, Baltimore, MD 21218, United States info@esahubble.org

ESAHubble.org

Space Sparks Episode 2	Visual Notes
0:00-0:10 Intro	SPACE
0:11-0:23 The NASA/ESA Hubble Space Telescope has seen a new atmosphere forming on a rocky exoplanet.	
 0:24-0:55 The planet GJ 1132 b has a similar density, size, and age to those of Earth. The exoplanet appears to have begun life as a gaseous world with a thick blanket of atmosphere. To the surprise of astronomers, new observations from Hubble have uncovered a secondary atmosphere that has replaced the planet's first atmosphere. 	
0:56-1:18 The new atmosphere is rich in hydrogen cyanide, methane and ammonia, and also has a hydrocarbon haze. Astronomers theorise that hydrogen from the original atmosphere was absorbed into the planet's molten magma mantle and is now being slowly released by volcanism to form a new atmosphere.	P ***
1:19-1:33 This is the first time that scientists have found evidence of volcanic activity reforming the atmosphere on a rocky planet around a distant star.	