
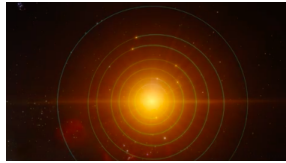
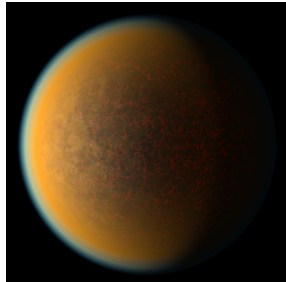

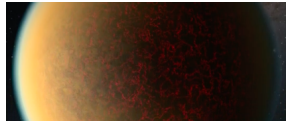





## ESA/Hubble

ESA Office - Space Telescope Science Institute  
 3700 San Martin Dr, Baltimore, MD 21218, United States  
[info@esahubble.org](mailto:info@esahubble.org)

[ESAHubble.org](http://ESAHubble.org)

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

Total Time: 01:43