

NASA Discovers 20,000 MPH Winds on Extreme Alien Planet

Description

Scientists found strong winds on a gas giant planet called WASP-127b. This planet is more than 500 light years away from Earth. The winds move very fast—up to 33,000 kilometers (20,000 miles) per hour. This makes them the fastest winds known on any planet.

Researchers studied light reflected from WASP-127b. They found signals showing water and carbon dioxide. These signals suggest there are very fast winds around the planet's middle. Lisa Nortmann, the study's lead author, explained that part of the atmosphere moves toward us quickly, while another part moves away at the same speed.

WASP-127b is bigger than Jupiter, but it is lighter—only 16% of Jupiter's mass. One side of the planet is very hot, over 1,000 degrees Celsius (1,832 degrees Fahrenheit). The other side is very cold and dark.

The team also found carbon monoxide gas in expected amounts. This helps scientists understand how gas giant planets form. These findings can teach us more about our own Solar System.

This research was published in the journal Astronomy & Astrophysics.

Vocabulary List:

- 1. **Giant** /'dʒaɪənt/ (adjective): Of very large size or importance.
- 2. Atmosphere /'ætməsfir/ (noun): The envelope of gases surrounding the Earth or another planet.
- 3. Reflect /rɪˈflɛkt/ (verb): To throw back (light heat or sound) without absorbing it.
- 4. Signals /'sɪgnəlz/ (noun): Indicators or messages that convey information.
- 5. Understand /, Ander's tænd/ (verb): To grasp the meaning significance or nature of something.
- 6. **Published** /'pʌblɪʃt/ (verb): To prepare and issue (a book journal piece of music etc.) for public sale.

Comprehension Questions

Multiple Choice

1. How far away from Earth is the gas giant planet WASP-127b?

Option: More than 500 light years



Option: 100 light years Option: 50 light years Option: 1,000 light years

2. What is the speed of the winds on WASP-127b?

Option: 33,000 kilometers per hour Option: 10,000 kilometers per hour Option: 50,000 kilometers per hour Option: 5,000 kilometers per hour

3. What signals were found by researchers studying WASP-127b?

Option: Water and carbon dioxide Option: Methane and nitrogen Option: Helium and oxygen Option: Hydrogen and sulfur

ESL-NEWS.COM 4. How much of Jupiter's mass does WASP-127b have?

Option: 16% Option: 50% Option: 75% Option: 100%

5. What gas did the team find in expected amounts on WASP-127b?

Option: Carbon monoxide

Option: Oxygen Option: Nitrogen

Option: Carbon dioxide

6. Where was the research on WASP-127b published?

Option: Astronomy & Astrophysics

Option: Science Daily Option: Nature Journal

Option: National Geographic

True-False

7. WASP-127b is smaller than Jupiter in size.



- 9. The winds on WASP-127b are the slowest winds known on any planet.
- 10. Lisa Nortmann is the lead author of the study about WASP-127b.
- 11. The research on WASP-127b helps in understanding how rocky planets form.
- 12. The signals found by researchers on WASP-127b suggest the presence of helium and hydrogen only.

Gap-Fill

13. WASP-127b is more than	_ light years away from Earth.
14. The other side of WASP-127b is very	and dark.
15. The winds on WASP-127b move at a speed of 33,000 kilometers per	
16. WASP-127b has only 16% of	mass compared to Jupiter.
17. The team found gas in o	expected amounts on WASP-127b.
18. Research on WASP-127b was published in the journal Astronomy &	

Answer

Multiple Choice: 1. More than 500 light years 2. 33,000 kilometers per hour 3. Water and carbon dioxide 4.

16% 5. Carbon monoxide 6. Astronomy & Astrophysics

True-False: 7. False 8. True 9. False 10. True 11. False 12. False

Gap-Fill: 13. 500 14. cold 15. hour 16. Jupiter's 17. carbon monoxide 18. Astrophysics

Answer

CATEGORY

1. Health - LEVEL1

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