

# NASA's Hubble pauses science due to gyro issue

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The Hubble Space Telescope as seen from the space shuttle Atlantis (STS-125) in May 2009, during the fifth and final servicing of the orbiting observatory.  
Credit: NASA

NASA is working to resume science operations of the agency's Hubble Space Telescope after it entered safe mode April 23 due to an ongoing

gyroscope (gyro) issue. Hubble's instruments are stable, and the telescope is in good health.

The telescope automatically entered safe mode when one of its three gyroscopes gave faulty readings. The gyros measure the telescope's turn rates and are part of the system that determines which direction the telescope is pointed. While in safe mode, science operations are suspended, and the telescope waits for new directions from the ground.

This particular gyro caused Hubble to enter safe mode in November after returning similar faulty readings. The team is currently working to identify potential solutions. If necessary, the [spacecraft](#) can be re-configured to operate with only one gyro, with the other remaining gyro placed in reserve.

The spacecraft had six new gyros installed during the fifth and final space shuttle servicing mission in 2009. To date, three of those gyros remain operational, including the gyro currently experiencing fluctuations. Hubble uses three gyros to maximize efficiency, but could continue to make science observations with only one [gyro](#) if required.

NASA anticipates Hubble will continue making groundbreaking discoveries, working with other observatories, such as the agency's James Webb Space Telescope, throughout this decade and possibly into the next.

Launched in 1990, Hubble has been observing the universe for more than three decades and recently celebrated its 34th anniversary.

Provided by NASA

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