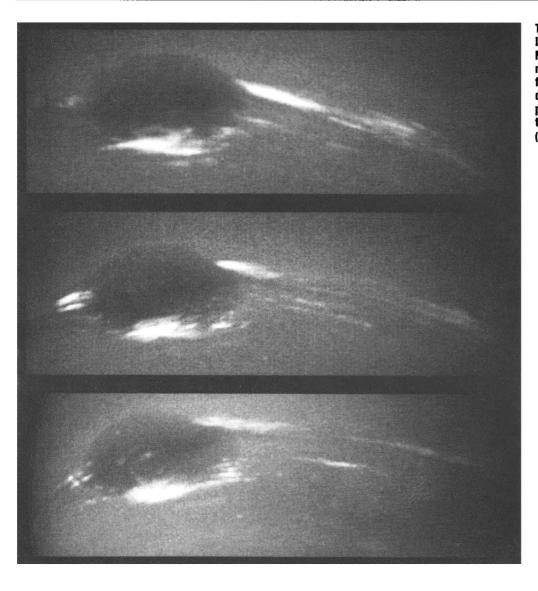
Voyager

B U L L E T I N

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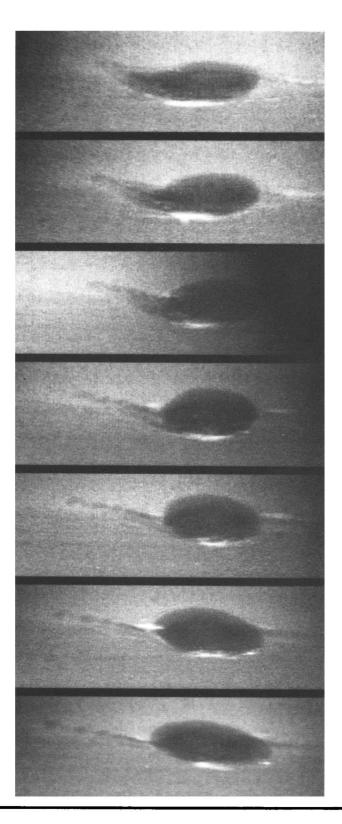
The bright cirruslike clouds of Neptune change rapidly, often forming and dissipating over periods of several to tens of hours. (P-34622)

Cloud Evolution

In some regions, Neptune's weather is perhaps as dynamic and variable as that of the

Earth. However, the scale is immense by our standards—the Earth and the Great Dark Spot (GDS) are of similar size—and in Neptune's frigid atmosphere,

where temperatures are as low as 55 degrees Kelvin (-360°F), the cirrus clouds are composed of frozen methane rather than Earth's crystals of water ice.



These images show changes in the clouds around Neptune's Great Dark Spot over a four-and-one-half day period. From top to bottom the images show successive rotations of the planet—an interval of about 18 hours. (P-34610)

String of Beads . . .

Large changes can be seen in the clouds at the western end of Neptune's Great Dark Spot (GDS). A dark extension apparent in earlier images converges into an extended string of small dark spots over the next five rotations. This "string of beads" extends from the GDS at a surprisingly large angle relative to horizontal lines of constant latitude. The large bright cloud at the southern border of the GDS is a more or less permanent companion of the GDS. The apparent motion of smaller clouds at the periphery of the GDS suggests a counterclockwise rotation of the GDS—reminiscent of flow around the Great Red Spot of Jupiter's atmosphere. This activity of the GDS is surprising because the total energy flux from the Sun and from Neptune's interior is only 5 percent as large as the total energy flux on Jupiter.

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