

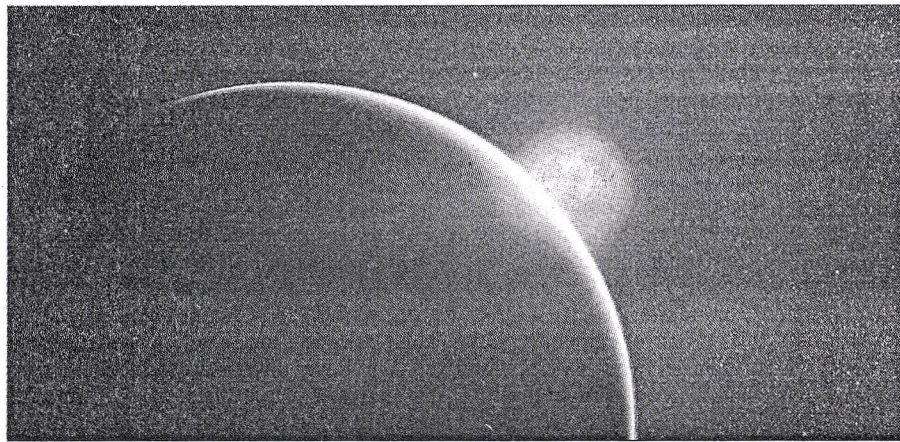
SPACE EXPLORATION

Distant 'super earth' may have water

A planet, which is 2.6 times bigger than our planet Earth and is orbiting a star just 40 light years away, possibly has water in the form of steam, research scientists suggest. The planet has given these scientists their first chance to analyse the atmosphere of a world outside the solar system.

Astronomers using the European Southern Observatory's 3.6-metre telescope in Chile have discovered a possible evidence of water in the form of steam shrouding the planet, according to a report in the journal, "Nature." In an alternative scenario, the planet could have a mostly hydrogen atmosphere hidden beneath the high clouds or hazes, as seen on Venus or Saturn's moon Titan, according to the newspaper, "Daily Mail."

Jacob Bean, the scientist who led the research team, from the Harvard-Smithsonian Center for Astrophysics in Massachusetts, US, said, "This is the first super-earth to have its atmosphere analysed. We've



surely reached a real milestone on the road toward characterising these worlds."

The planet lies in the constellation of Ophiuchus, the Serpent Bearer. It orbits around its parent star at a distance of only two million kilometres, which is 70 times closer than the Earth is to

the Sun — obviously the conditions on its surface are much hotter," Bean said. The team of astronomers carried out their study by analysing the light coming from the star as the planet passed in front of it. The planet travels across the disc of its parent star once every 38 hours as it orbits. IANS