A Science Service Feature

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? WHY THE WEATHER ?

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ATMOSPHERES OF THE PLANETS.

While, of course, we think our own atmosphere is the best, the other planets have atmospheres of different kinds. The atmospheres retained by a planet appears to be directly dependent on its gravity and temperature. There is apparently an ample source of atmospheric gases in the bodies of the planets; and the planets are old enough to have fairly settled atmospheres by now. As is well known, the atmosphere of the moon, if, indeed, there is any, is too small to have any visible effects. The moon is smaller than any of the planets and, therefore, its gravity is least able to hold the rapidly moving molecules of atmospheric gases. Mercury is small and hot, and has either a very thin atmosphere or none at all. Venus, about the size of the earth, but hotter probably, gives us every evidence of an atmosphere like our own in extent and nearly so in density, though perhaps not quite the same in composition. Venus appears densely cloud covered. Mars, a tenth the weight of the earth, has an atmosphere, but oneas thin as or thinner than that of our highest mountains. While its gravity may not be sufficient to hold the water vapor, nevertheless, clouds and haziness are observed from time to time. The atmosphere of large Jupiter is enormous and probably composed of all known atmospheric gases. Its pressures probably are very great in the lower layers. Jupiter's appearance is one of cloud belts, but its atmosphere extends above the clouds, for stars approaching Jupiter become dim before they fade out behind the planet. The atmospheres of Saturn, Uranus, and Neptune may be somewhat like that of the earth, though denser, for their gravities are greater and their temperatures lower.

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