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? WHY THE WEATHER ?

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IRIDESCENT CLOUDS

Tinted patches, generally of a delicate green or red, sometimes blue or yellow, are occasionally seen on high clouds in such locations that they evidently do not form portions of a halo or a corona. The boundaries of the tints are not circles, with the sun as a center, but tend to follow the outlines of the cloud. This phenomenon of atmospheric optics is usually called "irisation," and the clouds are said to be "iridescent."

Irision is supposed to be due to diffraction by small water drops, and the colors seen are determined partly by the distance from the sun and partly by the size of the drops. According to a British authority, the drops responsible for iridescence are very small and probably undercooled well below the freezing point. Thus, just as the occurrence of a halo shows the clouds to be composed of ice crystals, the occurrence of irisation is supposed to denote the presence of undercooled water drops.

The coloring is seen mostly at angular distances from the sun varying between 10 and 30 degrees and also shows a strong tendency to appear along a horizontal line through the sun's disk, though it also appears at other levels.

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