

Diffraction and Other Phenomena



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Corona around the Moon



Colors appear when particles have uniform size

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Iridescence – Diffraction

- Different sized droplets distort a corona
- Pastel colors appear in high, thin clouds

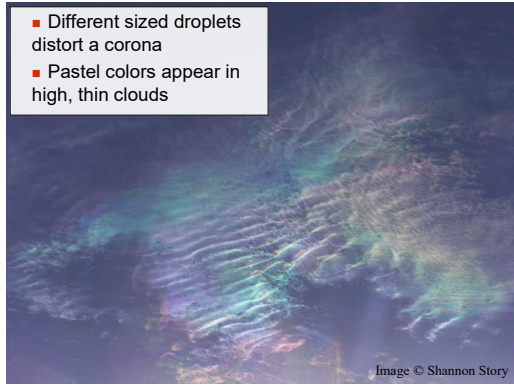


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Glory



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Brocken Spectre and Glory



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Other Optical Phenomena



Rocket Trails

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Crepuscular Rays



- Dust, water droplets, and haze all scatter light from the sun after passing through breaks in the clouds
- Rays are parallel
- Perspective makes rays appear to diverge

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Crepuscular Rays



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Crepuscular Rays



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Crepuscular Rays

Note scattering of light above the cloud

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Anticrepuscular Rays

- Convergent at the antisolar point*
- Extension of crepuscular rays

*Don't confuse the antisolar point with the *anthetic* point, which lies 180° in azimuth away from the Sun

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Anticrepuscular Rays

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Anticrepuscular Rays

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Sun Pillar: A reflection phenomenon

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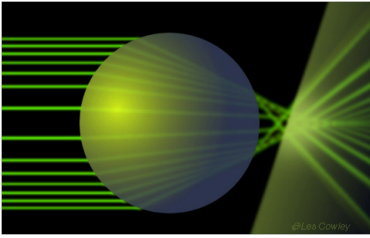
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Heiligenschein

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Heiligenschein



Dew drop near a leaf.
The droplet rests on small hairs which separate it from the leaf's surface.
The drop brings sunlight to a crude focus. When this is at the leaf surface, some light from the bright spot is scattered backwards through the drop to form the heiligenschein.

