

Talk:Elastic and inelastic scattering

When light passes through a rarefied gas, it is scattered by the gas molecules.

- **Flexible dispersion** – occurs on particles significantly smaller than the wavelength of light, scattered light retains its original wavelength,
- **Inelastic scattering** – on particles comparable to the wavelength of light, scattered light has a different wavelength in different directions.

The intensity of scattered light is **inversely proportional** to the fourth power of its wavelength, i.e. the sky appears **blue** to us because the shortwave radiation has the greatest intensity. If the atmosphere contains more large particles (dust), all components of light are scattered equally and the sky is '*white*'.

At dawn, the path of the sun's rays is the longest and is therefore most affected by scattering. At this moment, the ``red light *passes best (directly) through the atmosphere*.

Links

Related articles

- Electromagnetic spectrum
- Visible light
- Infrared radiation
- Ultraviolet radiation (biophysics)

Used literature

- {{#switch: web

|book =

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|collection =

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|article =
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|corporate_literature =

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