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<td>0D</td>
<td>Zero Dimension</td>
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<td>AOD</td>
<td>Aerosol Optical Depth</td>
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<td>AIRS</td>
<td>Atmospheric Infra Red Sounder</td>
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<td>AR5</td>
<td>Assessment Report 5</td>
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<td>ATN</td>
<td>Attenuation</td>
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<td>AWS</td>
<td>Automatic Weather Station</td>
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<td>BC</td>
<td>Black Carbon</td>
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<td>BLH</td>
<td>Boundary Layer Height</td>
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<td>BoB</td>
<td>Bay of Bengal</td>
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<td>CCD</td>
<td>Charge Coupled Device</td>
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<td>CCN</td>
<td>Cloud Condensation Nucleus</td>
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<td>CIMS</td>
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<td>CPCB</td>
<td>Central Pollution Control Board</td>
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<td>DOAS</td>
<td>Differential Optical Absorption Spectroscopy</td>
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<td>DOMINO</td>
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<td>Global burden of disease</td>
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<td>HS</td>
<td>High Sensitivity</td>
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<td>ICON</td>
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<td>Indo Gangetic Basin</td>
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<td>IPCC</td>
<td>Intergovernmental Panel for Climate Change</td>
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<td>ISRO-GBP</td>
<td>Indian Space Research Organisation – Geosphere Biosphere Program</td>
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<td>Koninklijke Nederlandse Meteorologisch Instituut (Royal Netherlands Meteorological Institute)</td>
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<td>Lagrangian particle dispersion model</td>
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<td>mean atmospheric ground level</td>
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<td>Potential Emission Sensitivity</td>
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<tr>
<td>PM</td>
<td>Particulate Matter</td>
</tr>
<tr>
<td>PM$_{10}$</td>
<td>Particulate Matter of size less than 10 µm</td>
</tr>
<tr>
<td>PMT</td>
<td>Photo Multiplier Tube</td>
</tr>
<tr>
<td>RETRO</td>
<td>REanalysis of the TROpospheric</td>
</tr>
<tr>
<td>RH</td>
<td>Relative Humidity</td>
</tr>
<tr>
<td>RMSD</td>
<td>Root Mean Square Deviation</td>
</tr>
<tr>
<td>RTD</td>
<td>Resistance Temperature Dependence</td>
</tr>
<tr>
<td>SAFAR</td>
<td>System of Air quality Forecasting and Research</td>
</tr>
<tr>
<td>Abbreviation</td>
<td>Description</td>
</tr>
<tr>
<td>--------------</td>
<td>-------------</td>
</tr>
<tr>
<td>SCIAMACHY</td>
<td>Scanning Imaging Absorption spectroMeter for Atmospheric ChartographY</td>
</tr>
<tr>
<td>SD</td>
<td>Solar Diffuser</td>
</tr>
<tr>
<td>SDSM</td>
<td>Solar Diffuser Stability Monitor</td>
</tr>
<tr>
<td>SLPM</td>
<td>Standard Litre Per Minute</td>
</tr>
<tr>
<td>SPM</td>
<td>Respirable Suspended Particulate Matter</td>
</tr>
<tr>
<td>SRCA</td>
<td>Spectro Radiometric Calibration Assembly</td>
</tr>
<tr>
<td>SSA</td>
<td>Single Scattering Albedo</td>
</tr>
<tr>
<td>TRMM</td>
<td>Tropical Rainfall Measurement Machine</td>
</tr>
<tr>
<td>TUV</td>
<td>Tropospheric Ultraviolet-Visible</td>
</tr>
<tr>
<td>UCAR</td>
<td>University Corporation for Atmospheric Research</td>
</tr>
<tr>
<td>USD</td>
<td>US Dollar</td>
</tr>
<tr>
<td>UV</td>
<td>Ultraviolet</td>
</tr>
<tr>
<td>VOC's</td>
<td>Volatile Organic Compounds</td>
</tr>
<tr>
<td>WHO</td>
<td>World Health Organisation</td>
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</table>
### List of Symbols

<table>
<thead>
<tr>
<th>Symbol</th>
<th>Description</th>
</tr>
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<tbody>
<tr>
<td>O₃</td>
<td>Ozone</td>
</tr>
<tr>
<td>SO₂</td>
<td>Sulphur dioxide</td>
</tr>
<tr>
<td>NOₓ</td>
<td>Oxides of nitrogen</td>
</tr>
<tr>
<td>NO</td>
<td>Nitrogen Oxide</td>
</tr>
<tr>
<td>NO₂</td>
<td>Nitrogen dioxide</td>
</tr>
<tr>
<td>CO</td>
<td>Carbon monoxide</td>
</tr>
<tr>
<td>CH₄</td>
<td>Methane</td>
</tr>
<tr>
<td>µm</td>
<td>micro meter</td>
</tr>
<tr>
<td>CO₂</td>
<td>Carbon dioxide</td>
</tr>
<tr>
<td>N₂O</td>
<td>Nitrous oxide</td>
</tr>
<tr>
<td>HONO</td>
<td>Nitrous acid</td>
</tr>
<tr>
<td>km</td>
<td>kilometer</td>
</tr>
<tr>
<td>I₀ and I</td>
<td>Intensities initial and after absorption</td>
</tr>
<tr>
<td>σ</td>
<td>Standard deviation</td>
</tr>
<tr>
<td>A</td>
<td>area</td>
</tr>
<tr>
<td>V</td>
<td>volume</td>
</tr>
<tr>
<td>nm</td>
<td>nano meter</td>
</tr>
<tr>
<td>ppbv</td>
<td>parts per billion volume</td>
</tr>
<tr>
<td>h</td>
<td>Plank's constant (6.62606957 × 10⁻³⁴ m² kg / s)</td>
</tr>
<tr>
<td>V</td>
<td>frequency</td>
</tr>
<tr>
<td>Tg/yr</td>
<td>Tera gram per year</td>
</tr>
<tr>
<td>ρ</td>
<td>density</td>
</tr>
<tr>
<td>dₚ</td>
<td>Diameter of aerosol</td>
</tr>
<tr>
<td>dsig</td>
<td>standard deviation in diameter</td>
</tr>
<tr>
<td>λ</td>
<td>wet scavenging coefficient</td>
</tr>
<tr>
<td>R</td>
<td>Correlation Coefficient</td>
</tr>
<tr>
<td>DU</td>
<td>Dobson Unit</td>
</tr>
<tr>
<td>α</td>
<td>Angstrom Exponent</td>
</tr>
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</table>