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The TNO 7-wavelength transmissometer

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The TNO 7-wavelength transmissometer is a flexible instrument capable of measuring path-integrated atmospheric optical properties over a (near-horizontal) path length of several kilometers. The instrument covers a spectral domain between the visible and far-infrared, and can be operated in low- or high-frequency mode. The latter mode allows measurements of turbulent properties, such as scintillation. The low-frequency mode allows retrieval of the concentration and sizes of aerosols present in the atmosphere. The instrument has been deployed in several trials around the world, but mostly for coastal marine scenarios.