



A new MicroLidar for 3D aerosols load, clouds and PBL dynamics observations

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A very recent (end 2007) MicroLIDAR system configuration dedicated to PBL dynamic, aerosols load and clouds 3D high temporal and spatial resolution observations will be presented.

The system was obtained by coupling a 3D astronomic telescope (Cassegrain, 20 cm) with a solid state micropulse laser (Nd:YAG at 532 nm, 3 μ J/7Khz) for the transmitter and a PhotonCounting Module Detection for the receiver part.

First tests and results obtained in various atmospheric conditions made in November-December 2007 will be shown and discussed.

This relatively low cost system demonstrates easy operation and a clear potential for increasing its daytime performances up to the tropopause altitudes upon configuration.