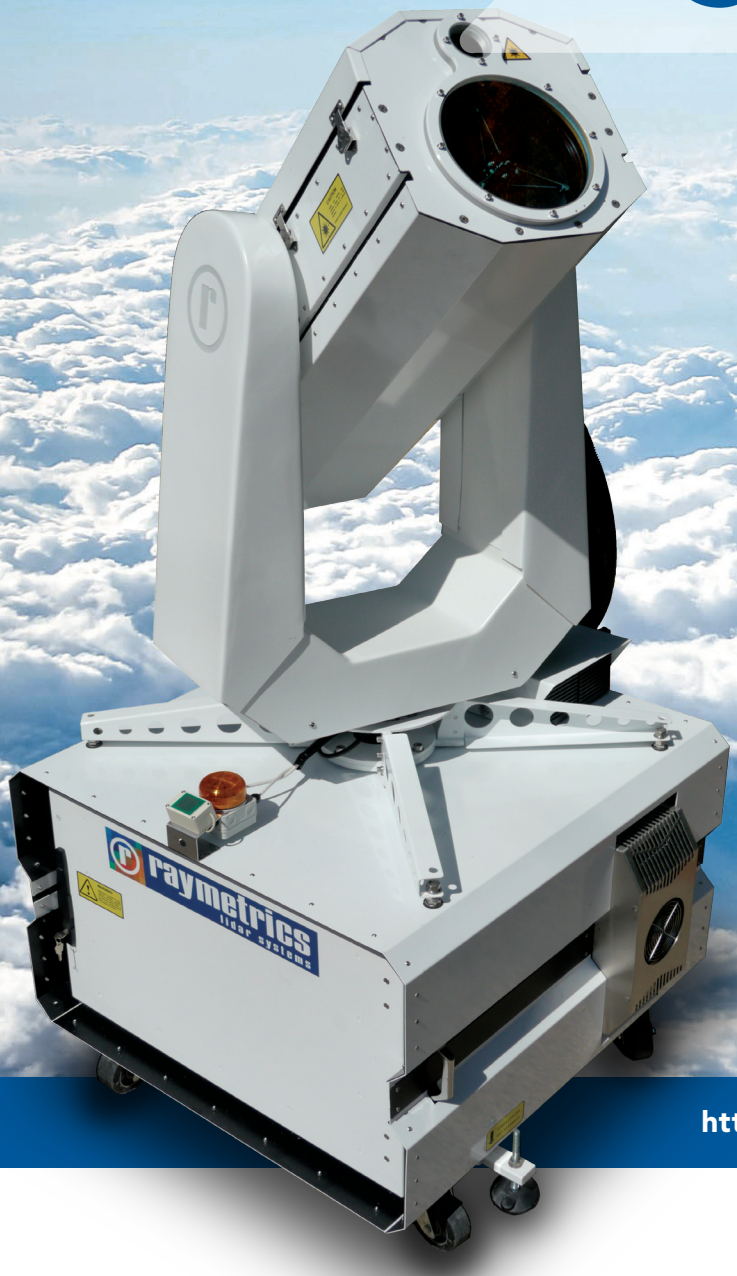
3D Ceilometer

Accurate three-dimensional
cloud measurements
for Aviation and Meteorology.



http://www.raymetrics.com/3d-aerosol-lidar

raymetrics
lidar systems

Truly accurate remote detection capability

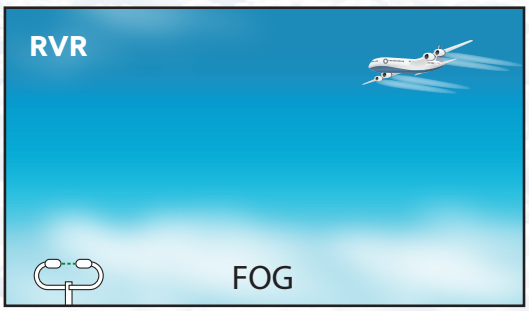
Whether it is the critical information on the state of the atmosphere over the airport or the need to detect early incoming phenomena like fog, Raymetrics can supply you with the best remote sensing technology. Combining a decade of innovative development, providing products customized to various environmental conditions, Raymetrics 3D Ceilometer provides increased safety and efficiency of air operations.

Why choose a 3D Ceilometer from Raymetrics?

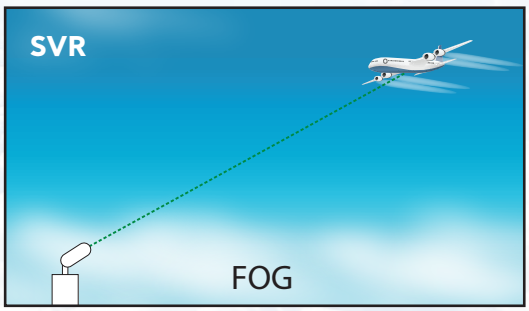
- Provides Slant Visual Range (SVR), a more accurate reflection of pilot's visibility compared to Runway Visual Range
- Provides 3D cloud base (total ceiling), instead of cloud height at a single point like a regular ceilometer
- Remotely detects incoming fog banks, helping forecasters formulate early warning scenarios
- Provides detection of volcanic ash, natural dust and smoke, as an additional feature

A whole new dimension in Aviation and Meteorology

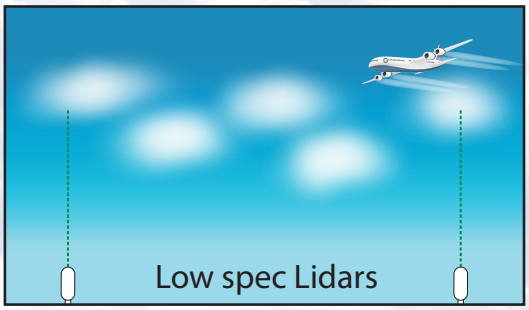
Introducing the revolution in remote observation on the atmosphere (clouds, volcanic ash, etc), the Raymetrics 3D Ceilometer is designed to work as a visual radar, as well as to deliver records of the radiation that is backscattered in the components of the atmosphere (molecules, aerosols, clouds, etc.).



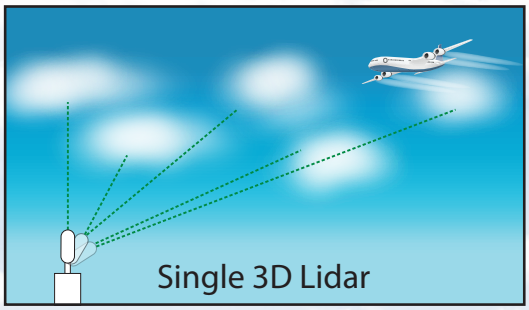
Runway Visual Range (RVR) is currently measured in-situ on the runway



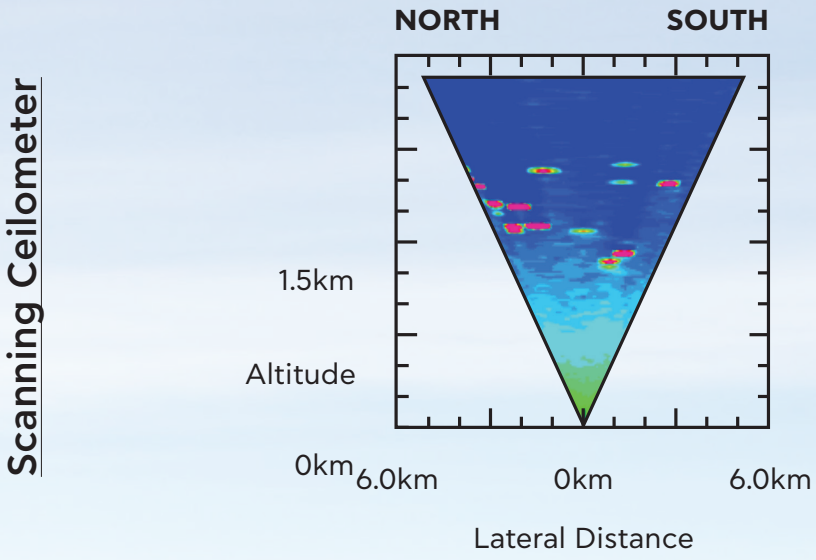
LIDARs can provide Slant Visual Range (SVR) – pilot's visibility



Cloud base only measured vertically by ceilometers



LIDARs provide cloud base & total cloud cover in 3D



3D Ceilometer: strength for increased safety

Traditional Lidar systems are designed to produce single wavelength backscatter measurement, however, this is not enough in many cases.

Unlike other ceilometers, Raymetrics 3D Ceilometer is the only system to provide accurate three dimensional, scientific-grade precision measurements with a range up to 15Km.

What are the benefits to Aviation?

- Increasing airport traffic and functionality
- Reducing aircraft time spent in airport airspace
- Reducing travel time for passengers and goods
- Reducing landing and take-off run time

System Suitable for:

- Civil aviation authorities
- Airports
- Meteorological agencies

Intelligent remote sensing advantages

- Operates day and night, as it is based on its own radiation source
- Provides real-time results, since no sampling and time-consuming chemical analysis required
- Fully automated, remotely controlled 3D Data
- Unique technology in the sector

CERTIFICATES

Raymetrics is to become the first atmospheric LIDAR manufacturer able to offer certifications for its products, as well as for their systematic uncertainties, from LiCAL/ACTRIS, according to document doi:10.5194/amt-9-4181-2016.

The Company is ISO 9001:2008 certified.

3D Ceilometer

Accurate three dimensional cloud measurements for Aviation and Meteorology.

Since 2002 Raymetrics has been designing and manufacturing atmospheric remote sensing systems for meteorological and other similar applications.

Today we are the world leader in the rising wave of remote sensing technology in operational and commercial sectors such as Meteorology, Aviation, Environmental Protection, Mining, Oil & Gas and Heavy Industry.

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raymetrics lidar systems

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