

The ComCAL is a traditional Raman lidar. It has been introduced here:

<https://epic.awi.de/id/eprint/15547/1/Imm2006l.pdf>

Since 2018 it is located at Palau (7.3°N, 134.5°E). Its most important technical parameters are:

Laser: 20Hz with 120 mJ / 180 mJ and 65 mJ for the three colors of 355 nm, 532 nm and 1064 nm

Telescope: 40cm with 0.83mrad fov

Detection: 355 and 532 in "p" and "s" polarization. Further a 387nm channel is installed (not used here)

The data is in netcdf format with 10min / 60m resolution. The variables and their units are described there. Data is stored up to that altitude in which the SNR of the lidar signal drops below 3

Due to legal constrains, daytime measurements between 8 a.m. and 5 p.m. local time are not permitted.

The evaluation has been done according to Klett 1985:

http://www.lalinet.org/viiwlmla/Courses/Lecture4/Klett_Applied%20Optics_1985.pdf

The 1064nm channel is currently weaker than expected.

More information can be provided by:

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