

SLOPE II

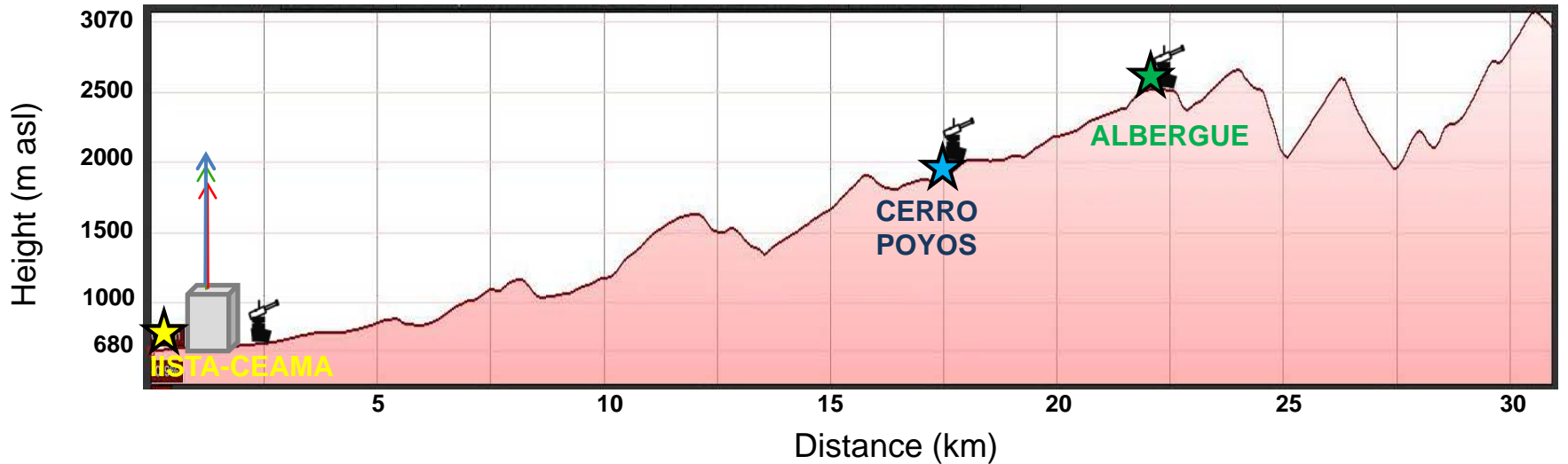
Sierra Nevada Lidar AerOsol Profiling Experiment II

SLOPE II, Sierra Nevada Lidar AerOsol Profiling Experiment, is a campaign in the framework of JRA1 and JRA2. It is designed for gathering data useful for testing the retrieval schemes to be applied for 24-hour absorption coefficient profiling through inversion of remote sensing observations. The campaign will combine active and passive remote sensing of the vertical column with in-situ measurements at several levels in the northern slope of Sierra Nevada. At the same time aerosol fluxes will be measured at Granada both by Remote Sensing and using Tower measurements from the 52m tall tower at the Science Museum.

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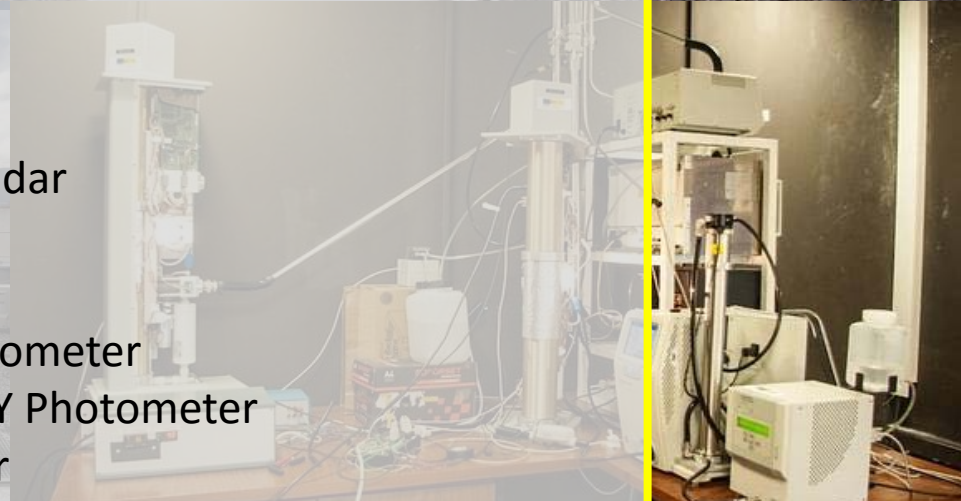
- **MEASUREMENT PERIOD** -> MAY-SEPTEMBER 2017
 - Remote sensing instrumentation at valley level (680 m a.s.l)
 - In-situ instrumentation at different levels in Sierra Nevada Northern slope and in the Valley.
- **CORE PERIOD** -> 15 JUNE-15 JULY 2017
 - Chemical speciation . ACSM.
 - Instrumented flights -> vertical profiles and horizontal passes
 - Gas measurements

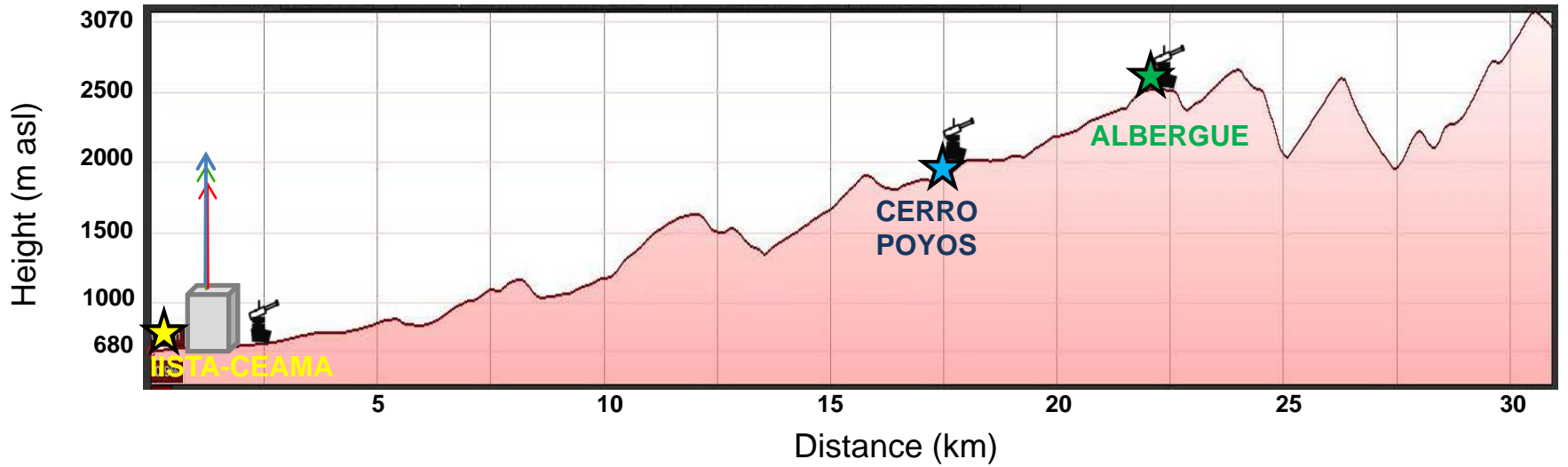




IISTA-CEAMA station (680 m asl)

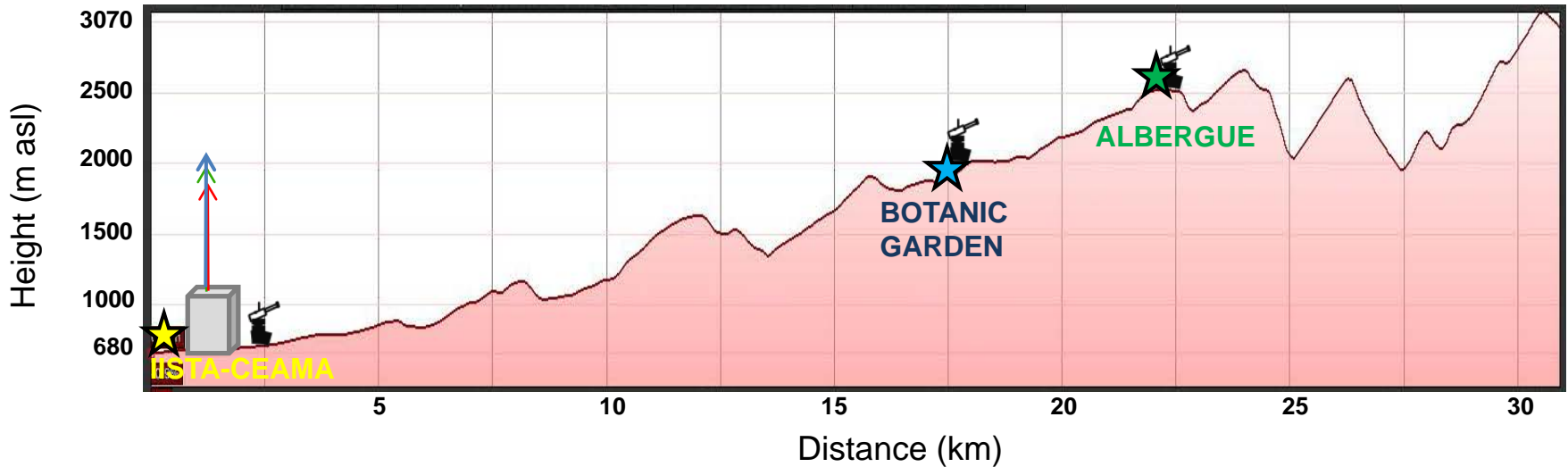
- INSITU measurements:
 - Size distribution (10 nm – 20 μ m): SMPS + APS
 - Aerosol light absorption: MAAP (1 λ) + AE33 (7 λ)
 - Aerosol light scattering: Nephelometer (3 λ)
 - Fux Tower
- Remote sensing:
 - Multi- λ LIDAR
 - Wind Doppler Lidar
 - Radiosondes
 - Ceilometer
 - Microwave Radiometer
 - SUN/LUNAR/SKY Photometer
 - Star Photometer





CERRO POYOS stations (1950 m asl)

- Remote sensing:
 - SUN/SKY Photometer



★ ALBERGUE station (2500 m asl)

- INSITU measurements:
 - Size distribution (10 nm – 20 μ m): SMPS + APS + GRIMM
 - Aerosol light absorption: MAAP (1 λ) + AE33 (7 λ)
 - Aerosol light scattering: Nephelometer (3 λ) + Polar Nephelometer
 - On-line chemical composition: ACSM
- Remote sensing:
 - SUN/LUNAR/SKY Photometer

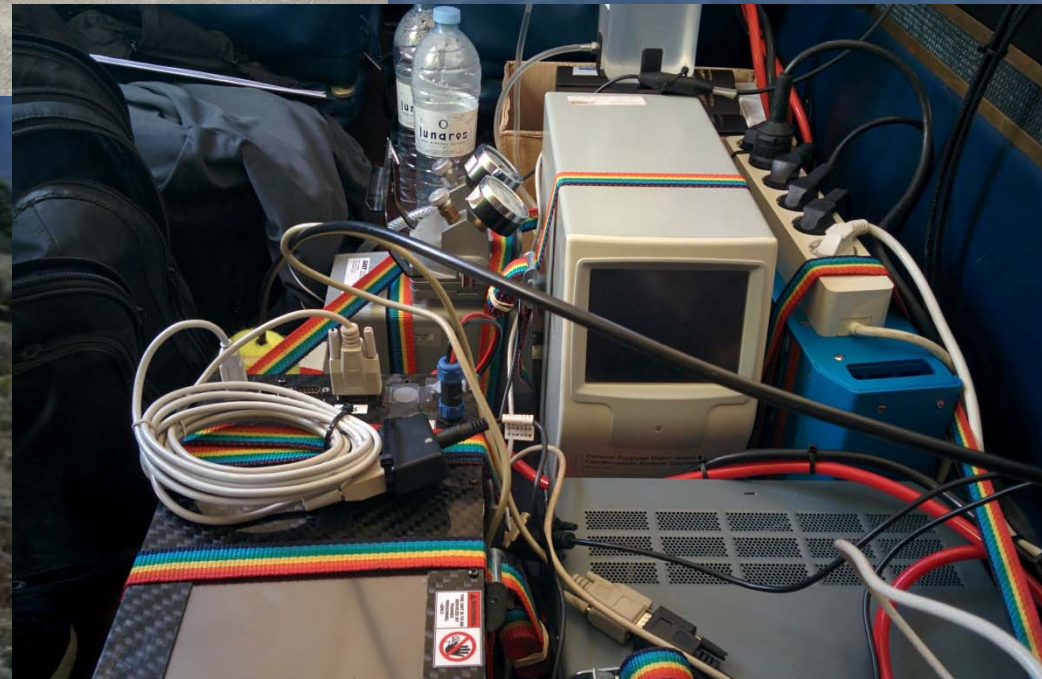


INSTRUMENTED FLIGHTS

- Nephelometer Aurora.
- Aethalometer AVIO AE33.
- GRIMM opc spectrometer
- Water based CPC 3787 TSI
- Vaisala DMT.
- Rotronic RH & T.
- GPS



Partenavia P68



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It is foreseen the participation of other research groups:

IDAEA, CSIC, Barcelona, Spain.

CIEMAT, Spain.

University of Elche, Spain.

ICT University of Évora, Portugal.

Interested researcher are welcome. TNA application to Granada station is possible.

For more information about SLOPE, please contact Lucas Alados-Arboledas (alados@ugr.es)

More information will follow soon (<http://atmosfera2.ugr.es/en/>)