

Barcelona Station



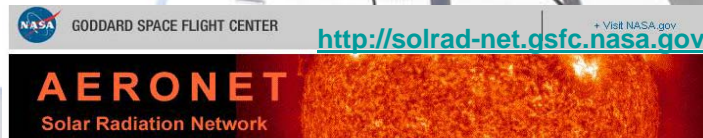
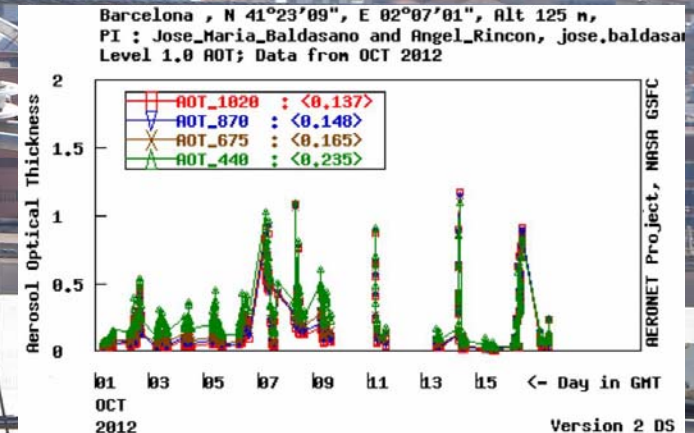
Global & Diffuse irradiance,
Sunshine [W/m²] (400-2700 nm)

Total solar irradiance
[W/m²] (310-2800 nm)

PAR sensor
[μmol/m²-s] (400-700 nm)



Sun photometer measurements of the direct solar radiation provide information to calculate the columnar aerosol optical depth (AOD). AOD can be used to compute columnar water vapor (Precipitable Water) and estimate the aerosol size using the Angstrom parameter relationship.



High-frequency solar flux measurements of shortwave at ground surface for the study of atmospheric extinction of solar flux as complement of aerosols measures of sun photometers of AERONET network.

SolRad-Net studies the influence of the biomass-burning for its long-term monitoring.