

LIDAR DIRECTORY FORM

LIDAR RESEARCHER: (Title, First Name, Middle Initial, Last Name)

Dr. Stella Moreno Grau
Dr. José María Moreno Grau
Dr. Antonio García Sánchez
Amadeo Pascual Hernández

RESEARCH ASSOCIATES:

MAILING ADDRESS:

José María Moreno Grau
Dpto de Ing. Química y Ambiental
Universidad Politécnica de Cartagena
Dr Fleming sn
30203 Cartagena

TELEPHONE NUMBER: +34 968325561

FAX NUMBER: +34 968326561

E-MAIL ADDRESS:

Sele.moreno@upct.es (José María Moreno Grau)

WEB SITE:

DATE: October 31, 2007

LIDAR LOCATION (CITY, COUNTRY, LAT., LONG.): Cartagena, 37° 37' N, 0° 57' W

SITE ELEVATION: 5 m

PARAMETER(S) OR CONSTITUENT(S) MEASURED:

Ozone, SO₂, NO₂, Benceno, Tolueno, P-xileno, Estireno, ...
Aerosoles: base don the extinction of the signal
Measurement of the boundary layer height

RESEARCH OBJECTIVES AND SPONSOR: Ozone distribution in the lower troposphere, evolution of this pollutant during the night. Climatological studies (Local companies, Spanish Ministry of Education and Sciences)

MEASUREMENT TECHNIQUE: DIAL lidar

MEASUREMENT RANGE: 0.25 - 5 km

VERTICAL RESOLUTION: 7.5 m

FREQ. OF MEASUREMENT (TYPICALLY): 1-2 times/month

MEASUREMENT TIMES (TYPICALLY): All day long.

LASER TYPE AND WAVELENGTH (s): Continuum 8020 Nd:YAG at 1064 with SHG and THG. 355 nm feed an OPO to tune the different wavelengths

LASER ENERGY/PULSE: 180 mJ/pulse at 1064

PULSE REPETITION RATE: 20 Hz

RECEIVER SIZE AND CONFIGURATION: 40 cm custom telescope

DETECTORS USED: PMT licel

SIGNAL PROCESSING: Analog

ANALOG-TO-DIGITAL CONVERTER: Unknown

COMPUTER: PC

PLATFORM (if applicable): LabView

PUBLICATIONS (5 recent and/or significant):

COMMENTS:

PICTURES: