

AEROCLO-sA F20 SPP300

General information

Dataset name: AEROCLO-sA F20 SPP300
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Contact(s)

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Period

Date begin (yyyy-mm-jj): 2017-09-05
Date end (yyyy-mm-jj): 2017-09-12

Project(s)

AEROCLO

Instrument information

Sensor

Instrument type: Chemical Meters/Analyzers
Manufacturer: DMT

Geographic information

Falcon 20 Safire

Location name: Falcon 20 Safire
Plateform type: F-FALCON 20

Measured parameter

Aerosol Particle Properties

Parameter keyword: Atmosphere > Aerosols > Aerosol Particle Properties
Unit: particles/cm³
Acquisition methodology and quality: Size bins are nominal and not corrected for the ambient refractive index. The computer controlling the in situ probes on the Falcon-20 experienced a

time lag which was only noticed prior to the last two flights, fs170014 and fs170015. The correlation between the vertical profiles of aerosol extinction at 532 nm from the lidar and the merged size distribution from the in situ probes was used to determine the time lag during each flight. This was done by applying a series of time lags between 0s and 160s and observing the maximum correlation. A clear trend in the time lag becoming larger from the beginning of the campaign was observed. The following table indicates the time lag that yielded the maximum coefficient of determination and the value that has been applied to the in situ data.

Flight:	Time lag (s)
fs170006:	90
fs170007 :	NA
fs170008 :	90
fs170009 :	90
fs170010 :	100
fs170011:	100
fs170012:	125
fs170013:	130
fs170014:	0
fs170015:	0

Data use information

Use constraints:

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Data policy:

AERO-CLO data policy