Sulfates, Clouds and Radiation (SCAR)
Langley DAAC Project/Campaign Document

Summary:

The primary objective of Sulfates, Clouds, and Radiation - America (SCAR-A), conducted during Summer 1993,is to help scientists characterize the relationship between sulfate particles and clouds, thereby gaining a better understanding of how sulfates affect clouds' reflective properties.

The Smoke, Clouds, and Radiation - Brazil (SCAR-B) experiment, completed in September 1995, studies the effects of biomass burning on atmospheric processes and aids in the preparation of new techniques for remote sensing of these processes from space.

Table of Contents:

1. Project/Campaign Overview:

Name of Project/Campaign:

Sulfates/Smoke, Clouds and Radiation (SCAR)

Project/Campaign Introduction:

See Summary.

Project/Campaign Mission Objectives:

The objectives for the SCAR mission are: to advance our knowledge of how the physical, chemical and radiative processes in our atmosphere are affected by sulfate aerosol and smoke from biomass burning; to improve our expertise at remotely sensing smoke, water vapor, clouds, vegetation and fires; and to assess the effects of deforestation and biomass burning on tropical landscapes.

Discipline(s):

Earth Science
Atmosphere

Geographic Region(s):

SCAR-A Eastern U.S.
SCAR-B Brazil

Detailed Project/Campaign Description:

2. Data Availability:

Data Type(s):

All data currently archived at the Langley DAAC are in hierarchical data format (HDF).

Input/Output Media:

Data are available via FTP from the Langley DAAC.

Proprietary Status:

There is no proprietary status for the data sets currently on-line at the Langley DAAC.

3. Data Access:

Data Center Location:

Langley DAAC User and Data Services Office
NASA Langley Research Center
Mail Stop 157D
Hampton, Virginia 23681-2199
USA
Telephone: (757) 864-8656
FAX: (757) 864-8807
E-mail: support-asdc@earthdata.nasa.gov

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Associated Costs:

Currently, there is no charge for data.

4. Principal Investigator Information:

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6. References:

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- Gumley, L.E., P.A. Hubanks, E.J. Masuoka, 1994: MODIS Technical Report Series: Volume 3, MODIS Airborne Simulator Level 1B Data User's Guide. NASA Goddard Space Flight Center, NASA Technical Memorandumn 104594.
- Jedlovec, G.J., K.B. Batson, R.J. Atkinson, C.C. Moeller, W.P. Menzel, and M.W. James, 1989: Improved Capabilities of the Multispectral Atmospheric Mapping Sensor (MAMS). NASA Marshall Space Flight Center, NASA Technical Memorandum 100352.
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- King, M.D., Y.J. Kaufman, W.P. Menzel and D.Tanre, 1992: Remote sensing of cloud, aerosol, and water vapor Properties from the Moderate Resolution Imaging Spectrometer (MODIS). IEEE Trans. Geosci. Remote Sens., 30, 2-27.
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7. Glossary and Acronyms:

EOSDIS Acronyms (PDF).

8. Document Information:

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