

Notice to Data Users:
The documentation for this data set was provided solely by the Principal Investigator(s) and was not further developed, thoroughly reviewed, or edited by NSIDC. Thus, support for this data set may be limited.

SMEX03 Rain Gauge Data: Georgia

This data set contains five-minute precipitation data collected throughout 2003 at various rain gauge sites in the Little River (LR) micronet located in Georgia, USA. Data were collected for the Soil Moisture Experiment 2003 (SMEX03) by researchers at the Southeast Watershed Research Laboratory (SEWRL) using Vitel rain gauges. The volume of the data set is approximately 1.4 megabytes. Data are in ASCII text format and are available via FTP.

The Advanced Microwave Scanning Radiometer - Earth Observing System (AMSR-E) is an instrument launched aboard NASA's Aqua Satellite on 04 May 2002. AMSR-E validation studies linked to SMEX are designed to evaluate the accuracy of AMSR-E soil moisture data. Specific validation objectives include assessing and refining soil moisture algorithm performance, verifying soil moisture estimation accuracy, investigating the effects of vegetation, surface temperature, topography, and soil texture on soil moisture accuracy, and determining the regions that are useful for AMSR-E soil moisture measurements.

Citing These Data

Bosch, D. 2009. *SMEX03 Rain Gauge Data: Georgia*. Boulder, Colorado USA: National Snow and Ice Data Center. Digital media.

The Data

The file PREC5MIN.03 is an ASCII text file containing one year's worth of five minute data from all of the active rain gauges. The year is indicated by the file extension; for example, PREC5MIN.03 indicates these data are for 2003. Within the file, data are listed sequentially for all active rain gauges. Only non-zero data are listed. The data are in the following format:

Little River Watershed 5-Minute Data Format:

Record Length is 22.

FIELD ID	FORMAT	COLUMNS
GAUGE	I4	1-4
YEAR	I2	6-7
MONTH	I2	8-9
DAY OF MONTH	I2	10-11
HOUR	I2	13-14
MINUTE	I2	15-16
TIME	I4	13-16
5-MIN PREC (in)	F5.2	18-22

Note: 9.99 indicates beginning/ending of missing data period.

The number 100 has been added to the gauge number. The first two digits of the time parameter are the hour, the second two the minutes. There are no spaces between the variables so they sometimes run together.

As an example, the line of data:

108 01 1 8 135 0.01

Is gauge 8, the year 2001, January, the 8th day of the month, for the time period from 1:30:01 to 1:35:00, a total of 0.01 inches of precipitation was recorded.

For geolocation information, refer to the Microsoft Excel Rain_Gauge_Coordinates.xls file in the ftp://sidads.colorado.edu/pub/DATASETS/AVDM/data/soil_moisture/SMEX03/Georgia/ancillary_data/geolocation/ directory.

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