

# Station\_Soil\_Moisture\_USDA

## File Geodatabase Table

Thumbnail Not Available

### Tags

SMAPVEX12, USDA, soil moisture, soil temperature, calibration

### Summary

This table was generated for use in analysis and validation associated with the SMAPVEX12 (Soil Moisture Active-Passive Validation Experiment 2012) project.

### Description

This table presents data recorded at hourly intervals using forty USDA small footprint soil moisture sensors deployed between June 7 and July 19 in the SMAPVEX12 study area. Stations consist of a Stevens Hydra Soil Moisture Sensor, a datalogger, and solar panel. Data presented include calibrated soil moisture and soil temperature.

### Credits

Grant Wiseman Senior Geomatics Scientist – Scientifique principal en géomatique Agriculture and Agri-Food Canada – Agriculture et Agroalimentaire Canada Telephone - Téléphone: 204-259-4006 Cellular - Cellulaire: 204-293-6074 Facsimile - Télécopieur: 204-259-4055 200-303 Main Street, Winnipeg, MB R3C 3G7 grant.wiseman@agr.gc.ca

### Use limitations

All SMAPVEX12 data (except those already on public domain servers) will be placed on the University of Sherbrooke site. Access will be limited by password that will be provided to principle investigators and co-investigators listed below. It will be up to the principle investigators and co-investigators to ensure that staff, graduate students and post docs respect the terms of the agreement on usage and distribution. Access to the website will be restricted until July 1, 2013 for preliminary research and quality control. After July 1, 2013 all data will be transferred to a SMAP DAAC. Principle Investigators Heather McNairn, Agriculture and Agri-Food Canada Tom Jackson, USDA, ARS Hydrology and Remote Sensing Laboratory Co-Investigators Aaron Berg, University of Guelph Amine Merzouki, Agriculture and Agri-Food Canada Andreas Colliander, JPL Anne Walker, Environment Canada Brenda Toth, Environment Canada/MSCH/AL Catherine Champagne, Agriculture and Agri-Food Canada Craig Smith, Environment Canada Dara Entekhabi, MIT Eni Njoku, JPL Grant Wiseman, Agriculture and Agri-Food Canada Jarrett Powers, Agriculture and Agri-Food Canada Jiali Shang, Agriculture and Agri-Food Canada John Fitzmaurice, Agriculture and Agri-Food Canada Mahta Moghaddam, University Southern California Mike Cosh, USDA, ARS Hydrology and Remote Sensing Laboratory Narendra Das, JPL Paul Bullock, University of Manitoba Peggy O'Neill, NASA GSFC Ramata Magagi, University of Sherbrooke Rotimi Ojo, University of Manitoba Sab Kim, JPL Stéphane Bélair, Environment Canada - NWP and Data Assimilation Alicia Joseph, NASA GSFC Erika Podest, JPL John Kimball, University of Montana Kalifa Goita, University of Sherbrooke Marco Carrera, Environment Canada, Meteorological Research Division Steven Chan, JPL Vanessa Escobar, NASA GSFC

[ArcGIS Metadata](#) ►

## Topics and Keywords ►

THEMES OR CATEGORIES OF THE RESOURCE environment, geoscientificInformation

\* CONTENT TYPE Downloadable Data

[Hide Topics and Keywords ▲](#)

## Citation ►

\* TITLE Station\_Soil\_Moisture\_USDA

PRESENTATION FORMATS \* digital table

[Hide Citation ▲](#)

## Resource Details ►

DATASET LANGUAGES \* English (CANADA)

DATASET CHARACTER SET utf8 - 8 bit UCS Transfer Format

SPATIAL REPRESENTATION TYPE \* text table

\* PROCESSING ENVIRONMENT Microsoft Windows 7 Version 6.1 (Build 7601) Service Pack 1; ESRI ArcGIS 10.0.5.4400

### CREDITS

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204-259-4055 200-303 Main Street, Winnipeg, MB R3C 3G7 grant.wiseman@agr.gc.ca

### ARCGIS ITEM PROPERTIES

\* NAME Station\_Soil\_Moisture\_USDA

\* LOCATION

file:///\\mbwinnfs106\gis\data8\projects\land\soil\SMAPVEX12\data\Geodatabase\SMAPVEX\_MASTER.gdb

\* ACCESS PROTOCOL Local Area Network

[Hide Resource Details ▲](#)

## Resource Points of Contact ►

### POINT OF CONTACT

INDIVIDUAL'S NAME Grant Wiseman

ORGANIZATION'S NAME Agriculture and Agri-Food Canada – Agriculture et Agroalimentaire Canada

CONTACT'S POSITION Senior Geomatics Scientist – Scientifique principal en géomatique

CONTACT'S ROLE point of contact

#### CONTACT INFORMATION ►

##### PHONE

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FAX 204-259-4055

##### ADDRESS

TYPE both

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COUNTRY Canada

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*Hide Contact information ▲*

*Hide Resource Points of Contact ▲*

## Resource Maintenance ►

##### RESOURCE MAINTENANCE

UPDATE FREQUENCY as needed

*Hide Resource Maintenance ▲*

## Resource Constraints ►

##### CONSTRAINTS

## LIMITATIONS OF USE

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[Hide Resource Constraints](#) ▲

## Data Quality ►

SCOPE OF QUALITY INFORMATION ►

RESOURCE LEVEL    non-geographic dataset

[Hide Scope of quality information](#) ▲

[Hide Data Quality](#) ▲

## Distribution ►

DISTRIBUTION FORMAT

\* NAME    File Geodatabase Table

[Hide Distribution](#) ▲

## Fields ►

DETAILS FOR OBJECT [Station\\_Soil\\_Moisture\\_USDA](#) ►

\* TYPE Table

\* ROW COUNT 42160

#### DEFINITION

Calibrated soil moisture and soil temperature recorded at hourly intervals using forty USDA small footprint soil moisture sensors deployed in the SMAPVEX12 study area.

#### DEFINITION SOURCE

AAFC

#### FIELD OBJECTID ►

\* ALIAS OBJECTID

\* DATA TYPE OID

\* WIDTH 4

\* PRECISION 0

\* SCALE 0

\* FIELD DESCRIPTION

Internal feature number.

\* DESCRIPTION SOURCE

ESRI

\* DESCRIPTION OF VALUES Sequential unique whole numbers that are automatically generated.

*Hide Field OBJECTID ▲*

#### FIELD DATE ►

\* ALIAS DATE

\* DATA TYPE String

\* WIDTH 254

\* PRECISION 0

\* SCALE 0

FIELD DESCRIPTION

Date of soil moisture\temperature reading.

DESCRIPTION SOURCE

AAFC

*Hide Field DATE ▲*

FIELD TIME ►

\* ALIAS TIME

\* DATA TYPE String

\* WIDTH 254

\* PRECISION 0

\* SCALE 0

FIELD DESCRIPTION

Central Daylight Time of soil moisture\temperature readinG.

DESCRIPTION SOURCE

AAFC

*Hide Field TIME ▲*

FIELD USDA\_FIELD ►

\* ALIAS USDA\_FIELD

\* DATA TYPE String

\* WIDTH 254

\* PRECISION 0

\* SCALE 0

FIELD DESCRIPTION

Identification number of the field in which the USDA station was installed.

DESCRIPTION SOURCE

AAFC

*Hide Field USDA\_FIELD ▲*

FIELD CAL\_MOISTU ►

\* ALIAS CAL\_MOISTU

\* DATA TYPE String

\* WIDTH 50

\* PRECISION 0

\* SCALE 0

FIELD DESCRIPTION

Volumetric soil moisture in m3/m3, calibrated using a field-specific equation.

DESCRIPTION SOURCE

AAFC

*Hide Field CAL\_MOISTU ▲*

FIELD CAL\_TEMP ►

\* ALIAS CAL\_TEMP

\* DATA TYPE String

\* WIDTH 50

\* PRECISION 0

\* SCALE 0

FIELD DESCRIPTION

Soil temperature is in degrees Celsius, calibrated using a field-specific equation.

DESCRIPTION SOURCE

AAFC

[Hide Field CAL\\_TEMP ▲](#)

[Hide Details for object Station\\_Soil\\_Moisture\\_USDA ▲](#)

[Hide Fields ▲](#)

## Metadata Details ►

\* METADATA LANGUAGE English (CANADA)

\* METADATA CHARACTER SET utf8 - 8 bit UCS Transfer Format

METADATA IDENTIFIER 61C062C6-18AC-420B-BE10-93268107ACC2

SCOPE OF THE DATA DESCRIBED BY THE METADATA \* non-geographic dataset

SCOPE NAME \* dataset

\* LAST UPDATE 2013-03-19

### ARCGIS METADATA PROPERTIES

METADATA FORMAT ArcGIS 1.0

METADATA STYLE FGDC CSDGM Metadata

STANDARD OR PROFILE USED TO EDIT METADATA FGDC

CREATED IN ARCGIS FOR THE ITEM 2012-12-20 12:37:07

LAST MODIFIED IN ARCGIS FOR THE ITEM 2013-03-19 10:29:50

### AUTOMATIC UPDATES

HAVE BEEN PERFORMED Yes

LAST UPDATE 2013-03-19 10:29:50