

Station_Weather

File Geodatabase Feature Class



Tags

SMAPVEX12, precipitation, temperature, soil moisture, Environment Canada, MAFRI, WeatherFarm

Summary

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

Description

This shapefile contains the point locations of 16 permanent weather recording stations situated within 50 km of the SMAPVEX12 study area. The stations are variously operated Environment Canada, Weatherfarm, and by Manitoba Agriculture, Food and Rural Initiatives (MAFRI).

Credits

Grant Wiseman 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/MS/CHAL 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 Goïta, University of Sherbrooke Marco Carrera, Environment Canada, Meteorological Research Division Steven Chan, JPL Vanessa Escobar, NASA GSFC

ArcGIS Metadata ►

Topics and Keywords ►

* CONTENT TYPE Downloadable Data

Hide Topics and Keywords ▲

Citation ►

* TITLE Station_Weather

PRESENTATION FORMATS * digital map

RESOURCE IDENTIFIER

VALUE Station_Weather

Hide Citation ▲

Resource Details ►

DATASET LANGUAGES * English (CANADA)

DATASET CHARACTER SET utf8 - 8 bit UCS Transfer Format

SPATIAL REPRESENTATION TYPE * vector

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

CREDITS

Grant Wiseman

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

ARCGIS ITEM PROPERTIES

* NAME Station_Weather

* SIZE 0.000

* LOCATION

file:///\\mbwinnfs106\\gis\$\\data8\\projects\\land\\soil\\SMAPVEX12\\data\\Geodatabase\\SMAPVEX_MASTER.gdb

* ACCESS PROTOCOL Local Area Network

Hide Resource Details ▲

Extents ►

EXTENT

GEOGRAPHIC EXTENT

BOUNDING RECTANGLE

EXTENT TYPE Extent used for searching

* WEST LONGITUDE -98.679470

* EAST LONGITUDE -97.285167

* NORTH LATITUDE 50.167800

* SOUTH LATITUDE 49.113079

* EXTENT CONTAINS THE RESOURCE Yes

EXTENT IN THE ITEM'S COORDINATE SYSTEM

* WEST LONGITUDE 523385.735000

* EAST LONGITUDE 622496.717300

* SOUTH LATITUDE 5441383.098600

* NORTH LATITUDE 5557339.086700

* EXTENT CONTAINS THE RESOURCE Yes

Hide Extents ▲

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

VOICE 204-259-4006

FAX 204-259-4055

ADDRESS

TYPE

DELIVERY POINT 200-303 Main Street

CITY Winnipeg

ADMINISTRATIVE AREA Manitoba

POSTAL CODE R3C 3G7

COUNTRY Canada

E-MAIL ADDRESS grant.wiseman@agr.gc.ca

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

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/MSC/HAL 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 Goïta, University of Sherbrooke Marco Carrera, Environment Canada, Meteorological Research Division Steven Chan, JPL Vanessa Escobar, NASA GSFC

[Hide Resource Constraints ▲](#)

Spatial Reference ►

ARCGIS COORDINATE SYSTEM

- * TYPE Projected
- * GEOGRAPHIC COORDINATE REFERENCE GCS_North_American_1983
- * PROJECTION NAD_1983_UTM_Zone_14N
- * COORDINATE REFERENCE DETAILS

PROJECTED COORDINATE SYSTEM

WELL-KNOWN IDENTIFIER 26914

X ORIGIN -5120900

Y ORIGIN -9998100

XY SCALE 10000

Z ORIGIN -100000

Z SCALE 10000

M ORIGIN -100000

M SCALE 10000

XY TOLERANCE 0.001

Z TOLERANCE 0.001

M TOLERANCE 0.001

HIGH PRECISION true

WELL-KNOWN TEXT

PROJCS["NAD_1983_UTM_Zone_14N",GEOGCS["GCS_North_American_1983",DATUM["D_North_American_1983",SPHEROID["GRS_1980",6378137.0,298.257222101]],PRIMEM["Greenwich",0.0],UNIT["Degree",0.0174532925199433]],PROJECTION["Transverse_Mercator"],PARAMETER["False_Easting",500000.0],PARAMETER["False_Northing",0.0],PARAMETER["Central_Meridian",-99.0],PARAMETER["Scale_Factor",0.9996],PARAMETER["Latitude_Of_Origin",0.0],UNIT["Meter",1.0],AUTHORITY["EPSG",26914]]

REFERENCE SYSTEM IDENTIFIER

- *VALUE 26914
- *CODESPACE EPSG
- *VERSION 7.4.1

REFERENCE THAT DEFINES THE VALUE ►

RESOURCE IDENTIFIER

VALUE UTM NAD83 Zone14N

Hide Reference that defines the value ▲

Hide Spatial Reference ▲

Spatial Data Properties ►

VECTOR ►

- * LEVEL OF TOPOLOGY FOR THIS DATASET geometry only

GEOMETRIC OBJECTS

FEATURE CLASS NAME Station_Weather

* OBJECT TYPE point

* OBJECT COUNT 16

Hide Vector ▲

ARCGIS FEATURE CLASS PROPERTIES ►

* FEATURE TYPE Simple

* GEOMETRY TYPE Point

* HAS TOPOLOGY FALSE

* FEATURE COUNT 16

* SPATIAL INDEX TRUE

* LINEAR REFERENCING FALSE

Hide ArcGIS Feature Class Properties ▲

Hide Spatial Data Properties ▲

Data Quality ►

SCOPE OF QUALITY INFORMATION ►

RESOURCE LEVEL dataset

Hide Scope of quality information ▲

Hide Data Quality ▲

Geoprocessing history ►

PROCESS

PROCESS NAME

DATE 2012-10-22 09:51:33

TOOL LOCATION c:\program files (x86)\arcgis\desktop10.0\ArcToolbox\Toolboxes\Data Management Tools.tbx\Project

COMMAND ISSUED

```
Project MAFRI_Stations
P:\SMAP\Soil_Moisture\Weather_Data\MAFRI_Stations_NAD83.shp
PROJCS['NAD_1983_UTM_Zone_14N',GEOGCS['GCS_North_American_1983',DATUM['D_North_American_1983',SPHEROID['GRS_1980',6378137.0,298.257222101]],PRIMEM['Greenwich',0.0],UNIT['Degree',0.0174532925199433]],PROJECTION['Transverse_Mercator'],PARAMETER['False_Easting',500000.0],PARAMETER['False_Northing',0.0],PARAMETER['Central_Meridian',-99.0],PARAMETER['Scale_Factor',0.9996],PARAMETER['Latitude_Of_Origin',0.0],UNIT['Meter',1.0]] WGS_1984_(ITRF00)_To_NAD_1983
GEOGCS['GCS_WGS_1984',DATUM['D_WGS_1984',SPHEROID['WGS_1984',6378137.0,298.257223563]],PRIMEM['Greenwich',0.0],UNIT['Degree',0.0174532925199433]]
```

INCLUDE IN LINEAGE WHEN EXPORTING METADATA No

PROCESS

PROCESS NAME

DATE 2012-10-22 09:53:49

TOOL LOCATION c:\program files (x86)\arcgis\desktop10.0\ArcToolbox\Toolboxes\Data Management Tools.tbx\Merge

COMMAND ISSUED

```
Merge MAFRI_Stations_NAD83;WeatherFarm_Stations_NAD83;'Environement Canada Stations' P:\SMAP\Soil_Moisture\Weather_Data\SMAPVEX12_WeatherStations.shp
"STATION_NA "STATION_NA" true true false 254 Text 0 0
,First,#,MAFRI_Stations_NAD83,STATION_NA,-1,-1;LATITUDE "LATITUDE" true true false 19 Double 0 0 ,First,#,MAFRI_Stations_NAD83,LATITUDE,-1,-1;LONGITUDE "LONGITUDE" true true false 19 Double 0 0
,First,#,MAFRI_Stations_NAD83,LONGITUDE,-1,-1;STATION "STATION" true true false 254 Text 0 0 ,First,#,WeatherFarm_Stations_NAD83,STATION,-1,-1;Environement Canada Stations,STATION,-1,-1;LONG "LONG" true true false 16 Double 6 15 ,First,#,WeatherFarm_Stations_NAD83,LONG,-1,-1;LAT "LAT" true true false 16 Double 6 15 ,First,#,WeatherFarm_Stations_NAD83,LAT,-1,-1"
```

INCLUDE IN LINEAGE WHEN EXPORTING METADATA No

PROCESS

PROCESS NAME

DATE 2012-10-22 10:03:02

TOOL LOCATION C:\Program Files (x86)\ArcGIS\Desktop10.0\ArcToolbox\Toolboxes\Data Management Tools.tbx\CalculateField

COMMAND ISSUED

```
CalculateField SMAPVEX12_WeatherStations SOURCE "MAFRI" VB #
```

INCLUDE IN LINEAGE WHEN EXPORTING METADATA No

PROCESS

PROCESS NAME

DATE 2012-10-22 10:04:06

TOOL LOCATION C:\Program Files (x86)\ArcGIS\Desktop10.0\ArcToolbox\Toolboxes\Data Management Tools.tbx\CalculateField

COMMAND ISSUED

```
CalculateField SMAPVEX12_WeatherStations SOURCE "EC" VB #
```

INCLUDE IN LINEAGE WHEN EXPORTING METADATA No

PROCESS

PROCESS NAME

DATE 2012-10-22 10:04:30

TOOL LOCATION C:\Program Files (x86)\ArcGIS\Desktop10.0\ArcToolbox\Toolboxes\Data Management Tools.tbx\CalculateField

COMMAND ISSUED

```
CalculateField SMAPVEX12_WeatherStations SOURCE "WeatherFarm" VB #
```

INCLUDE IN LINEAGE WHEN EXPORTING METADATA No

PROCESS

PROCESS NAME

DATE 2012-10-22 14:04:43

TOOL LOCATION c:\program files (x86)\arcgis\desktop10.0\ArcToolbox\Toolboxes\Conversion Tools.tbx\FeatureClassToFeatureClass

COMMAND ISSUED

```
FeatureClassToFeatureClass
W:\data8\projects\land\soil\SMAPVEX12\data\Kurt\WeatherData\SMAPVEX12_WeatherS
tations\SMAPVEX12_WeatherStations.shp
W:\data8\projects\land\soil\SMAPVEX12\data\Kurt\SMAP_tables.gdb\SMAPdatasets
SMAP_Weather_Stations # "LATITUDE "LATITUDE" true true false 19 Double 0 0
,First,#,W:\data8\projects\land\soil\SMAPVEX12\data\Kurt\WeatherData\SMAPVEX12
_WeatherStations\SMAPVEX12_WeatherStations.shp,LATITUDE,-1,-1;LONGITUDE
"LONGITUDE" true true false 19 Double 0 0
```

```
,First,#,W:\data8\projects\land\soil\SMAPVEX12\data\Kurt\WeatherData\SMAPVEX12_WeatherStations\SMAPVEX12_WeatherStations.shp, LONGITUDE,-1,-1;STATION "STATION" true true false 254 Text 0 0
,First,#,W:\data8\projects\land\soil\SMAPVEX12\data\Kurt\WeatherData\SMAPVEX12_WeatherStations\SMAPVEX12_WeatherStations.shp, STATION,-1,-1;SOURCE "SOURCE" true true false 50 Text 0 0
,First,#,W:\data8\projects\land\soil\SMAPVEX12\data\Kurt\WeatherData\SMAPVEX12_WeatherStations\SMAPVEX12_WeatherStations.shp, SOURCE,-1,-1" #
```

INCLUDE IN LINEAGE WHEN EXPORTING METADATA No

[Hide Geoprocessing history](#) ▲

Distribution ►

DISTRIBUTION FORMAT

* NAME File Geodatabase Feature Class

VERSION ArcGIS 10

TRANSFER OPTIONS

* TRANSFER SIZE 0.000

[Hide Distribution](#) ▲

Fields ►

DETAILS FOR OBJECT [Station_Weather](#) ►

* TYPE Feature Class

* ROW COUNT 16

DEFINITION

Point locations of 16 permanent weather recording stations situated within 50 km of 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 Shape ►

* ALIAS Shape

* DATA TYPE Geometry

* WIDTH 0

* PRECISION 0

* SCALE 0

* FIELD DESCRIPTION

Feature geometry.

* DESCRIPTION SOURCE

ESRI

* DESCRIPTION OF VALUES Coordinates defining the features.

Hide Field Shape ▲

FIELD STATION ►

* ALIAS Station

* DATA TYPE String

* WIDTH 254

* PRECISION 0

* SCALE 0

FIELD DESCRIPTION

Weather station name.

DESCRIPTION SOURCE

AAFC

Hide Field STATION ▲

FIELD Data_Source ►

* ALIAS Data_Source

* DATA TYPE String

* WIDTH 50

* PRECISION 0

* SCALE 0

FIELD DESCRIPTION

Weather station operator and data provider.

DESCRIPTION SOURCE

AAFC

LIST OF VALUES

VALUE MAFRI

DESCRIPTION Manitoba Agriculture, Food and Rural Initiatives

ENUMERATED DOMAIN VALUE DEFINITION SOURCE AAFC

VALUE Environment Canada

DESCRIPTION Environment Canada Weather Office

ENUMERATED DOMAIN VALUE DEFINITION SOURCE AAFC

VALUE WeatherFarm

ENUMERATED DOMAIN VALUE DEFINITION SOURCE AAFC

Hide Field Data_Source ▲

FIELD X ►

* ALIAS X

* DATA TYPE Double

* WIDTH 8

* PRECISION 0

* SCALE 0

Hide Field X ▲

FIELD Y ►

* ALIAS Y

* DATA TYPE Double

* WIDTH 8

* PRECISION 0

* SCALE 0

Hide Field Y ▲

Hide Details for object Station_Weather ▲

Hide Fields ▲

Metadata Details ►

* METADATA LANGUAGE English (CANADA)

* METADATA CHARACTER SET utf8 - 8 bit UCS Transfer Format

METADATA IDENTIFIER 3D749D3A-BC4B-4644-8C4D-03FD231A7AC8

SCOPE OF THE DATA DESCRIBED BY THE METADATA * dataset

SCOPE NAME * dataset

* LAST UPDATE 2013-03-19

ARCGIS METADATA PROPERTIES

METADATA FORMAT ArcGIS 1.0

STANDARD OR PROFILE USED TO EDIT METADATA FGDC

METADATA STYLE FGDC CSDGM Metadata

CREATED IN ARCGIS FOR THE ITEM 2012-12-20 12:37:13

LAST MODIFIED IN ARCGIS FOR THE ITEM 2013-03-19 10:45:34

AUTOMATIC UPDATES

HAVE BEEN PERFORMED Yes

LAST UPDATE 2013-03-19 10:45:34