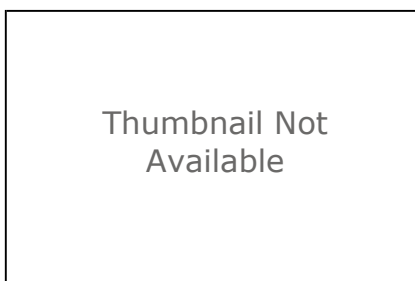


Crop_Biomass

Personal GeoDatabase Table



Tags

environment, geoscientificInformation, SMAPVEX12, crop biomass, oven-dry mass, wet mass, soil water content, phenology

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 summarizes the wet, dry and oven dry biomass values measured for samples taken during the course of the 2012 SMAPVEX12 field campaign between June 7 and July 19. Also included are crop type and phenology, and derived plant percentage water content values. In addition, the table the sample site identification number, allowing the biomass values to be geographically located.

Credits

Grant Wiseman Senior Geomatics Scientist – Scientifique principal en géomatique Agriculture and Agri-Food Canada – Agriculture et Agroalimentaire Canada Telephone - Téléphone: 204-984-4080 Cellular - Cellulaire: 204-293-6074 Facsimile - Télécopieur: 204-983-2178 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/MSCHAL 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 ►

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 ▲](#)

Geoprocessing history ►

PROCESS

DATE 2012-12-20 15:01:37

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

COMMAND ISSUED

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\projects\land\soil\SMAPVEX12\data\Kurt\SMAPVEX_PersonalGDB.mdb Crop_Biomass #
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\data\Kurt\SMAPVEX_MASTER2.gdb\Crop_Biomass,Area_Plant_Water_Cont_g_m2,-1,-
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0 ,First,#,W:\data8\projects\land\soil\SMAPVEX12
\data\Kurt\SMAPVEX_MASTER2.gdb\Crop_Biomass,Air_to_OD_Cor_Applied,-1,-1" #
```

INCLUDE IN LINEAGE WHEN EXPORTING METADATA No

[Hide Geoprocessing history ▲](#)

Distribution ►

DISTRIBUTION FORMAT

* NAME Personal GeoDatabase Table

[Hide Distribution ▲](#)

Fields ►

DETAILS FOR OBJECT [Crop_Biomass](#) ▶

* TYPE Table

* ROW COUNT 1326

DEFINITION

Wet, dry and oven dry crop biomass values

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 [Sample_Date](#) ▶

* ALIAS Sample_Date

* DATA TYPE Date

* WIDTH 8

* PRECISION 0

* SCALE 0

FIELD DESCRIPTION

Date when the samples were taken at the field.

DESCRIPTION SOURCE

AAFC

[Hide Field Sample_Date](#) ▲FIELD [Site_ID](#) ▶

* ALIAS Site_ID

* DATA TYPE String

* WIDTH 255

* PRECISION 0

* SCALE 0

FIELD DESCRIPTION

Identification site number of the point where the sample was taken.

DESCRIPTION SOURCE

AAFC

[Hide Field Site_ID](#) ▲FIELD [Crop_Type](#) ▶

* ALIAS Crop_Type

* DATA TYPE String
 * WIDTH 255
 * PRECISION 0
 * SCALE 0

FIELD DESCRIPTION

Type crop the field where the sample was taken.

DESCRIPTION SOURCE

AAFC

[Hide Field Crop_Type ▲](#)

FIELD Crop_Part ►

* ALIAS Crop_Part
 * DATA TYPE String
 * WIDTH 255
 * PRECISION 0
 * SCALE 0

FIELD DESCRIPTION

Plant part of crop sample (leaves, stems, flowers, pods, fruit). Total indicates the total biomass value of all plant parts for each site ID.

DESCRIPTION SOURCE

AAFC

[Hide Field Crop_Part ▲](#)

FIELD Total_Dry_Biomass_g ►

* ALIAS Total_Dry_Biomass_g
 * DATA TYPE Double
 * WIDTH 8
 * PRECISION 0
 * SCALE 0

FIELD DESCRIPTION

Total net dry biomass weight with the bag weight removed for total samples.

[Hide Field Total_Dry_Biomass_g ▲](#)

FIELD Plant_Water_Cont_PCT ►

* ALIAS Plant_Water_Cont_PCT
 * DATA TYPE Double
 * WIDTH 8
 * PRECISION 0
 * SCALE 0

FIELD DESCRIPTION

Plant water content as percentage. Calculated as (net wet sample weight - net dry sample weight) / (net wet sample weight)*100.

[Hide Field Plant_Water_Cont_PCT ▲](#)

FIELD Area_Plant_Water_Cont_g_m2 ►

* ALIAS Area_Plant_Water_Cont_g_m2
 * DATA TYPE Double
 * WIDTH 8
 * PRECISION 0
 * SCALE 0

FIELD DESCRIPTION

The area plant water is given in grams per square meter, and the calculation was made as following: for wheat and pasture, (plant water content*4); for row crops, (average water content per plant*plant density).

[Hide Field Area_Plant_Water_Cont_g_m2 ▲](#)

FIELD Air_to_OD_Cor_Applied ►

* ALIAS Air_to_OD_Cor_Applied

* DATA TYPE String

* WIDTH 255

* PRECISION 0

* SCALE 0

FIELD DESCRIPTION

No oven dry correction applied for Corn.

All other crops have the oven dry correction applied.

[Hide Field Air_to_OD_Cor_Applied ▲](#)

[Hide Details for object Crop_Biomass ▲](#)

[Hide Fields ▲](#)

Metadata Details ►

* METADATA LANGUAGE English (CANADA)

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

SCOPE NAME * dataset

* LAST UPDATE 2013-01-10

ARCGIS METADATA PROPERTIES

METADATA FORMAT ESRI-ISO

STANDARD OR PROFILE USED TO EDIT METADATA FGDC

LAST MODIFIED IN ARCGIS FOR THE ITEM 2013-01-10 15:57:30

AUTOMATIC UPDATES

LAST UPDATE 2013-01-10 15:57:30

[Hide Metadata Details ▲](#)

FGDC Metadata (read-only) ►**Identification ►****CITATION****CITATION INFORMATION****TITLE**

Crop_Biomass2

GEOSPATIAL DATA PRESENTATION FORM tabular digital data

DESCRIPTION

ABSTRACT

This table summarizes the wet, dry and oven dry biomass values measured for samples taken during the course of the 2012 SMAPVEX12 field campaign between June 7 and July 19. Also included are crop type and phenology, and derived plant percentage water content values. In addition, the table the sample site identification number, allowing the biomass values to be geographically located.

PURPOSE

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

STATUS

MAINTENANCE AND UPDATE FREQUENCY As needed

KEYWORDS

THEME

THEME KEYWORD THESAURUS ISO 19115 Topic Categories
THEME KEYWORD environment
THEME KEYWORD geoscientificInformation

THEME

THEME KEYWORD THESAURUS None
THEME KEYWORD SMAPVEX12
THEME KEYWORD crop biomass
THEME KEYWORD oven-dry mass
THEME KEYWORD wet mass
THEME KEYWORD soil water content
THEME KEYWORD phenology

ACCESS CONSTRAINTS

None

USE CONSTRAINTS

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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

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

POINT OF CONTACT

CONTACT INFORMATION

CONTACT ORGANIZATION PRIMARY

CONTACT ORGANIZATION Agriculture and Agri-Food Canada – Agriculture et Agroalimentaire Canada

CONTACT PERSON Grant Wiseman

CONTACT POSITION Senior Geomatics Scientist – Scientifique principal en géomatique

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COUNTRY Canada

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DATA SET CREDIT

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grant.wiseman@agr.gc.ca

NATIVE DATA SET ENVIRONMENT

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

Hide Identification ▲

Entities and Attributes ►

DETAILED DESCRIPTION

ENTITY TYPE

ENTITY TYPE LABEL Crop_Biomass

ENTITY TYPE DEFINITION

Wet, dry and oven dry crop biomass values

ENTITY TYPE DEFINITION SOURCE AAFC

ATTRIBUTE

ATTRIBUTE LABEL OBJECTID

ATTRIBUTE DEFINITION

Internal feature number.

ATTRIBUTE DEFINITION SOURCE ESRI

ATTRIBUTE DOMAIN VALUES

UNREPRESENTABLE DOMAIN

Sequential unique whole numbers that are automatically generated.

ATTRIBUTE

ATTRIBUTE LABEL Sample_Date

ATTRIBUTE DEFINITION

Date when the samples were taken at the field.

ATTRIBUTE DEFINITION SOURCE AAFC

ATTRIBUTE

ATTRIBUTE LABEL Site_ID

ATTRIBUTE DEFINITION

Identification site number of the point where the sample was taken.

ATTRIBUTE DEFINITION SOURCE AAFC

ATTRIBUTE

ATTRIBUTE LABEL Crop_Type

ATTRIBUTE DEFINITION

Type crop the field where the sample was taken.

ATTRIBUTE DEFINITION SOURCE AAFC

ATTRIBUTE

ATTRIBUTE LABEL Crop_Part

ATTRIBUTE DEFINITION

Plant part of crop sample (leaves, stems, flowers, pods, fruit). Total indicates the total biomass value of all plant parts for each site ID.

ATTRIBUTE DEFINITION SOURCE AAFC

ATTRIBUTE

ATTRIBUTE LABEL Total_Dry_Biomass_g

ATTRIBUTE DEFINITION

Total net dry biomass weight with the bag weight removed for total samples.

ATTRIBUTE

ATTRIBUTE LABEL Plant_Water_Cont_PCT

ATTRIBUTE DEFINITION

Plant water content as percentage. Calculated as (net wet sample weight - net dry sample weight) / (net wet sample weight)*100.

ATTRIBUTE

ATTRIBUTE LABEL Area_Plant_Water_Cont_g_m2

ATTRIBUTE DEFINITION

The area plant water is given in grams per square meter, and the calculation was made as following: for wheat and pasture, (plant water content*4); for row crops, (average water content per plant*plant density).

ATTRIBUTE

ATTRIBUTE LABEL Air_to_OD_Cor_Applied

ATTRIBUTE DEFINITION

No oven dry correction applied for Corn. All other crops have the oven dry correction applied.

Hide Entities and Attributes ▲

Metadata Reference ►

METADATA DATE 2012-12-20

METADATA STANDARD NAME FGDC Content Standard for Digital Geospatial Metadata

METADATA STANDARD VERSION FGDC-STD-001-1998

METADATA TIME CONVENTION local time

Hide Metadata Reference ▲