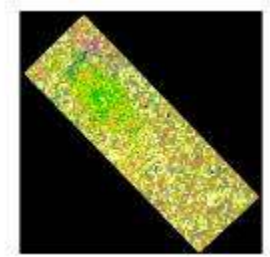


SMAPVEX_2012_Crop_Map

File Geodatabase Raster Dataset



Tags

SMAPVEX12, crop map, landcover, environment, geoscientificInformation

Summary

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

Description

This dataset displays a detailed crop map across the SMAPVEX12 study area. Land cover classes were derived from classified Rapid multispectral imagery with a resolution of 5 m. Several images, encompassing the study area, were captured between May 14 and September 26, 2012. An overall map accuracy of 82.43% (kappa=0.78) was achieved. Classification accuracies for individual landcover classes are as follows:

| Class Name | Class Code | Users Accuracy | Producers Accuracy |
|--------------|------------|----------------|--------------------|
| Forage Crops | 122 | 80.77 | 67.57 |
| Barley | 133 | 39.57 | 50.90 |
| Oats | 136 | 93.42 | 78.70 |
| Rye | 137 | 70.78 | 32.06 |
| Wheat | 146 | 83.81 | 66.36 |
| Corn | 147 | 90.54 | 94.43 |
| Canola | 153 | 95.40 | 96.02 |
| Flaxseed | 154 | 0.00 | 0.00 |
| Sunflowers | 157 | 82.91 | 94.94 |
| Soybeans | 158 | 91.24 | 83.41 |
| Peas | 162 | 0.00 | 0.00 |
| Potatoes | 177 | 0.00 | 0.00 |

Class names and codes are displayed below:

| No. | Class Code | Class Name |
|-----|------------|--------------|
| 1 | 0 | Unclassified |
| 2 | 20 | Water |
| 3 | 30 | Barren |
| 4 | 34 | Urban |
| 5 | 50 | Shrubland |
| 6 | 80 | Wetland |
| 7 | 110 | Grassland |
| 8 | 122 | Forage Crops |
| 9 | 131 | Fallow |
| 10 | 133 | Barley |
| 11 | 136 | Oats |
| 12 | 137 | Rye |
| 13 | 139 | Triticale |
| 15 | 146 | Wheat |

| | | |
|----|-----|------------------|
| 16 | 147 | Corn |
| 17 | 153 | Canola/Rapeseed |
| 18 | 154 | Flaxseed |
| 19 | 157 | Sunflowers |
| 20 | 158 | Soybeans |
| 21 | 162 | Peas |
| 23 | 177 | Potatoes |
| 24 | 179 | Other Vegetables |
| 25 | 181 | Berries |
| 26 | 194 | Nursery |
| 27 | 220 | Broadleaf |

Credits

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Use limitations

SMAPVEX12 DATA DISTRIBUTION AGREEMENT

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.

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Steven Chan, JPL

Vanessa Escobar, NASA GSFC

[ArcGIS Metadata ►](#)

Topics and Keywords ►

[THEMES OR CATEGORIES OF THE RESOURCE](#) environment, geoscientificInformation

* [CONTENT TYPE](#) Downloadable Data

[THEME KEYWORDS](#) environment, geoscientificInformation

THESAURUS ►

TITLE ISO 19115 Topic Categories

[Hide Thesaurus ▲](#)

THEME KEYWORDS SMAPVEX12, crop map, landcover

[Hide Topics and Keywords ▲](#)

Citation ►

* TITLE SMAPVEX_2012_Crop_Map

PRESENTATION FORMATS digital map

FGDC GEOSPATIAL PRESENTATION FORMAT raster digital data

[Hide Citation ▲](#)

Resource Details ►

DATASET LANGUAGES English (CANADA)

SPATIAL REPRESENTATION TYPE * grid

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

CREDITS

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ARCGIS ITEM PROPERTIES

* NAME SMAPVEX_2012_Crop_Map

* LOCATION

file:///\\mbwinnfs106\gis\$\data8\projects\land\soil\SMAPVEX12\data\Kurt\SMAPVEX_MAST
ER.gdb

* ACCESS PROTOCOL Local Area Network

[Hide Resource Details ▲](#)

Extents ►

EXTENT

GEOGRAPHIC EXTENT

BOUNDING RECTANGLE

WEST LONGITUDE -98.637699
EAST LONGITUDE -97.535039
SOUTH LATITUDE 49.355952
NORTH LATITUDE 50.067912

EXTENT

GEOGRAPHIC EXTENT

BOUNDING RECTANGLE

EXTENT TYPE Extent used for searching
* WEST LONGITUDE -98.637699
* EAST LONGITUDE -97.535039
* NORTH LATITUDE 50.067912
* SOUTH LATITUDE 49.355952
* EXTENT CONTAINS THE RESOURCE Yes

EXTENT IN THE ITEM'S COORDINATE SYSTEM

* WEST LONGITUDE 526305.723891
* EAST LONGITUDE 604858.385532
* SOUTH LATITUDE 5468029.129532
* NORTH LATITUDE 5546246.169193
* EXTENT CONTAINS THE RESOURCE Yes

[Hide Extents ▲](#)

Resource Points of Contact ►

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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 ▲](#)

Spatial Reference ►

ARCGIS COORDINATE SYSTEM

* TYPE Projected

* GEOGRAPHIC COORDINATE REFERENCE GCS_North_American_1983

* PROJECTION NAD83_UTM_zone_14N

* COORDINATE REFERENCE DETAILS

PROJECTED COORDINATE SYSTEM

X ORIGIN -5120900

Y ORIGIN -9998100

XY SCALE 450445547.3910538

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["NAD83_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]]

REFERENCE SYSTEM IDENTIFIER

*VALUE 0

[Hide Spatial Reference ▲](#)

Spatial Data Properties ►

GEORECTIFIED GRID ►

NUMBER OF DIMENSIONS 2

CELL GEOMETRY area

[Hide Georectified Grid ▲](#)

[Hide Spatial Data Properties ▲](#)

Geoprocessing history ►

PROCESS

PROCESS NAME

DATE 2013-01-15 15:08:36

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

COMMAND ISSUED

CopyRaster

W:\data8\projects\land\soil\SMAPVEX12\data\Landcover\SMAPVEX_2012_Crop_Map.tif

W:\data8\projects\land\soil\SMAPVEX12\data\Kurt\SMAPVEX_MASTER.gdb\SMAPVEX_2012_Crop_Map # # # NONE NONE #

INCLUDE IN LINEAGE WHEN EXPORTING METADATA No

[Hide Geoprocessing history ▲](#)

Distribution ►

DISTRIBUTION FORMAT

*NAME File Geodatabase Raster Dataset

[Hide Distribution ▲](#)

Metadata Details ►

METADATA LANGUAGE English (CANADA)
METADATA CHARACTER SET utf8 - 8 bit UCS Transfer Format

SCOPE OF THE DATA DESCRIBED BY THE METADATA dataset
SCOPE NAME *dataset

* LAST UPDATE 2013-01-18

ARCGIS METADATA PROPERTIES

METADATA FORMAT ArcGIS 1.0
METADATA STYLE ISO 19139 Metadata Implementation Specification
STANDARD OR PROFILE USED TO EDIT METADATA ISO19139

CREATED IN ARCGIS FOR THE ITEM 2013-01-15 15:08:33
LAST MODIFIED IN ARCGIS FOR THE ITEM 2013-01-18 14:43:57

AUTOMATIC UPDATES

HAVE BEEN PERFORMED Yes
LAST UPDATE 2013-01-18 14:43:57

[Hide Metadata Details ▲](#)

Thumbnail and Enclosures ►

THUMBNAIL
THUMBNAIL TYPE JPG

[Hide Thumbnail and Enclosures ▲](#)

FGDC Metadata (read-only) ▼

RASTER OBJECT INFORMATION
RASTER OBJECT TYPE Pixel
ROW COUNT 3911
COLUMN COUNT 3928
VERTICAL COUNT 1

[Hide Spatial Data Organization ▲](#)

HORIZONTAL COORDINATE SYSTEM DEFINITION
PLANAR
PLANAR COORDINATE INFORMATION
PLANAR COORDINATE ENCODING METHOD row and column
COORDINATE REPRESENTATION
ABSCISSA RESOLUTION 19.998132
ORDINATE RESOLUTION 19.999243

[Hide Spatial Reference ▲](#)