

File name	Description	Source
_su	Segmented unit features, no attributes	eCognition export
_wv	Woody vegetation features, no attributes (from QB2 using texture, shape, size, NDVI)	eCognition export
_water	Digitized water bodies and channels for spatial queries	Polygon feature class
gvEMF	Green vegetation endmember fractions in ESRI .grid format; from 20051028 scene subset	Clipped ENVI export
npvEMF	Non-photosynthetic vegetation endmember fractions in ESRI .grid format; from 20051028 scene subset	Clipped ENVI export
shadeEMF	Shade endmember fractions in ESRI .grid format; from 20051028 scene subset	Clipped ENVI export
LCCS_su	<p>Segmented units classified with Land Cover Classification System; has gdb representation assigned (Override field)</p> <p>FIELDS:</p> <p>AREA= Segmented unit area (square meters)</p> <p>OvC=Coded value: 0=sparse cover, 1=open cover, 2=closed cover</p> <p>SvT=Coded value: 0=herbaceous lifeform dominated, 1=shrub lifeform dominated, 2=tree lifeform dominated</p> <p>PCTTC=proportion of segmented unit that is covered by woody vegetation</p> <p>COVCODE=LCCS code for cover classifier (A12= closed (70+%), A14= open (40-70%), A15= open (40-10%), A17= sparse (10-5%), A18= sparse (4-1%))</p> <p>LIFCODE= LCCS code for lifeform classifier (A2= herbaceous, A3= trees, A4=shrubs)</p> <p>LIFNAME= Class name corresponding to dominant lifeform classifier</p> <p>COVNAME= Designation based on LCCS cover classifier (Sparse (4-1%), Sparse (5-9%), Open (10-40%), Open (40-70%), Closed (70+%))</p> <p>CLASSNAME= Full LCCS class name (for symbolizing)</p> <p>RuleID= field for file geodatabase representation</p>	Polygon feature class
lifeform_wv	<p>Individual woody vegetation polygon features with extracted endmember fractions (green vegetation, non-photosynthetic vegetation, shade) as well as fraction index and 3 experimental fields used to evaluate fraction thresholds.</p> <p>NPV= non-photosynthetic vegetation endmember</p>	Polygon feature class (features exported from eCognition)

	<p>fractions averaged from 20051028 Landsat 5 TM scene</p> <p>SHADE= shade endmember fractions averaged from 20051028 Landsat 5 TM scene</p> <p>GV= green vegetation endmember fractions averaged from 20051028 Landsat 5 TM scene</p> <p>TCArea= area of individual woody vegetation polygons (used to calculate percent of woody vegetation cover within segmented units)</p> <p>GV_TYPE, SHADE_TYPE, NPV_TYPE, CLASS= experimental fields used to evaluate possible endmember fraction thresholds in relation to dominant lifeform. Did not use in final classification.</p> <p>LIFEFORM= LCCS code for dominant lifeform classifier</p> <p>CLASSNAME= LCCS name for dominant lifeform classifier</p> <p>INDEX= result of weighted endmember fraction index</p> <p><i>(Index = 0.7 * shade + 0.3 * green vegetation)</i></p> <p>SvT= Short coded value for classname (1=shrub, 2=tree)</p>	and values extracted in ArcGIS)
proc_vegmask	<p>Polygon feature class used to mask out areas that are not of interest (not in floodplain, not vegetated). Mask was generated by unsupervised classification of Quickbird mosaic where vegetated classes were exported as ESRI shapefile. Used to clip data for use in eCognition.</p>	Polygon feature class
mesma_su	<p>Polygon feature class at segmented unit level that contains extracted endmember fractions from Multiple Endmember SMA. MESMA fractions generated using same library collected by J. Isherwood. Unprocessed MESMA results also included outside of file geodatabase.</p> <p>AREA= segmented unit area (square meters)</p> <p>COUNT= Landsat 5 TM pixels that intersect individual segmented unit</p> <p>SHADE= average shade fraction within segmented unit</p> <p>var_SHADE= variance of shade fraction within segmented unit</p> <p>SAND= average sand fraction within segmented unit</p> <p>var_SAND= variance of sand fraction within segmented unit</p> <p>NPV= average non-photosynthetic fraction within</p>	Polygon feature class

	<p>segmented unit</p> <p>var_NPV= variance of non-photosynthetic fraction within segmented unit</p> <p>GV= average green vegetation fraction within segmented unit</p> <p>var_GV= variance of green vegetation fraction within segmented unit</p>	
mesma_wv	<p>Table that stores MESMA endmember fractions extracted at woody vegetation level. Can be joined to woody vegetation features.</p> <p>Mean_SHADE= average shade endmember fraction within woody vegetation feature</p> <p>Mean_SAND= average sand endmember fraction within woody vegetation feature</p> <p>Mean_NPV= average non-photosynthetic vegetation endmember fraction within woody vegetation feature</p> <p>Mean_GV= average green vegetation endmember fraction within woody vegetation feature</p> <p>COUNT= count of Landsat 5 TM pixels that intersected with the woody vegetation feature</p> <p>ID= unique ID field used to join to FID of woody vegetation features (_wv feature class)</p>	File geodatabase table
val_MESMA_su	<p>Table that stores manually interpreted validation segmented units and lifeform classification based on MESMA fractions. Can join to val_LCCS_pt for location.</p> <p>FID_1= unique ID field used to join to FID of val_LCCS_pt</p> <p>AREA= segmented unit area (square meters)</p> <p>REF_OvC= coded value for manually interpreted cover (0=sparse, 1=open, 2=closed)</p> <p>REF_SvT= coded value for manually interpreted dominant lifeform (0=shrub, 1=tree, 2=herbaceous)</p> <p>OvC_1= coded value for single model SMA endmember fraction classification for cover (0=sparse, 1=open, 2=closed). This classification was determined by the proportion of a segmented unit that woody vegetation covers (independent of fraction differences).</p> <p>SvT_1= coded value for single model SMA endmember fraction classification for dominant lifeform (0=shrub, 1=tree, 2=herbaceous)</p> <p>MESMA_SvT= coded value for single model SMA endmember fraction classification for dominant lifeform (0=shrub, 1=tree)</p>	File geodatabase table

val_LCCS_pt	<p>Point feature class of segmented unit centroids used to assess accuracy of LCCS classification. <i>N</i>=255</p> <p>AREA= area of segmented unit (square meters)</p> <p>PCTTC= percent of segmented unit covered by woody vegetation (cover)</p> <p>R_LIFENAM= name of LCCS dominant lifeform class; manually interpreted from Quickbird imagery</p> <p>R_COVNAME= name of LCCS cover class; manually interpreted from Quickbird imagery</p> <p>ROUND= points added in 2 rounds to increase sample size for each unique class combination</p> <p>OvC= coded value for cover classifier (0=sparse, 1=open, 2=closed) ; manually interpreted from Quickbird imagery</p> <p>SvT= coded value for dominant lifeform classifier (0=herbaceous, 1=shrub, 2=tree) ; manually interpreted from Quickbird imagery</p> <p>FID_SU= Unique identifier for corresponding segmented unit. Use to join to segmented unit polygon.</p> <p>OvC_1= coded value for cover classification (0=sparse, 1=open, 2=closed)</p> <p>SvT_1= coded value for dominant lifeform classification (0=herbaceous, 1=shrub, 2=tree)</p> <p>COVCODE= LCCS code for cover classifier class (A12= closed (70+%), A14= open (40-70%), A15= open (40-10%), A17= sparse (10-5%), A18= sparse (4-1%))</p> <p>LIFCODE= LCCS code for dominant lifeform classifier class (A2= herbaceous, A3= trees, A4=shrubs)</p> <p>COVNAME= name of LCCS cover class; from hierarchical object-based classification</p> <p>LIFNAME= name of LCCS dominant lifeform class from hierarchical object-based classification</p> <p>CLASSNAME= concatenation of COVNAME and LIFNAME for unique classifier combinations</p> <p>A_SvT= <i>for lifeform</i>: agreement in manually interpreted reference and hierarchical object-based classification; 0= disagreement, 1=agreement</p> <p>A_OvC= <i>for cover</i>: agreement in manually interpreted reference and hierarchical object-based classification; 0= disagreement, 1=agreement</p>	Point feature class
val_woodyveg_pt	Point feature class used to assess the accuracy of the woody vegetation classification. Contains 5,000 points, 425 points are non-woody vegetation/bare	Point feature class

	<p>and remainder are woody vegetation.</p> <p>TC= binary field indicating manually interpreted presence of woody vegetation (0=woody vegetation absent, 1= woody vegetation present)</p>	
val_vcf_pt	<p>Point feature class storing Landsat VCF values to manually interpreted cover for segmented units.</p> <p>SUAREA=area of segmented unit in square meters</p> <p>PCTTC=calculated woody vegetation cover</p> <p>R_LIFENAM=manually interpreted dominant lifeform for segmented unit</p> <p>R_COVNAME=manually interpreted woody vegetation cover for segmented unit</p> <p>CLASSNAME=combined class name from classification (NOT REFERENCE)</p> <p>COVER_AGRE=binary field for agreement between reference cover and mean VCF tree cover (0=disagreement in class (sparse, open, closed) between reference woody vegetation cover and mean tree cover from VCF, 1=agreement in class (sparse, open, closed) between reference woody vegetation cover and mean tree cover from VCF)</p> <p>DIFF=difference between classified cover and meanVCF tree cover (DIFF=PCTTC – meanVCF)</p> <p>VCFmeanOvC= coded value for cover using VCF tree cover (0=sparse, 1=open, 2=closed)</p> <p>R_OvC= coded value for cover using woody vegetation cover classification (0=sparse, 1=open, 2=closed)</p>	Point feature class
vcf_herbaceous	<p>Table storing tree cover (canopy cover*0.8) from Landsat VCF 2005 and classification-based woody vegetation cover for segmented units classified as dominantly herbaceous (e.g., sparse woody vegetation cover).</p> <p>SU_EMF_FID= FID for corresponding segmented units</p> <p>OvC= coded value for cover classifier (0=sparse)</p> <p>SvT= coded value for dominant lifeform classifier (0=herbaceous)</p> <p>PCTTC= proportion of segmented unit covered by classified woody vegetation</p> <p>SUAREA= area in square meters of the segmented unit</p> <p>meanVCF=mean VCF tree cover within segmented unit</p> <p>minVCF=minimum VCF tree cover cell within segmented unit</p>	File geodatabase table

	<p>maxVCF=maximum VCF tree cover cell within segmented unit</p> <p>DIFF=difference between classified cover and meanVCF tree cover ($\text{DIFF} = \text{PCTTC} - \text{meanVCF}$)</p> <p>minDIFF= difference between classified cover and minVCF tree cover ($\text{minDIFF} = \text{PCTTC} - \text{minVCF}$)</p> <p>maxDIFF= difference between classified cover and maxVCF tree cover ($\text{maxVCF} = \text{PCTTC} - \text{maxVCF}$)</p> <p>errMEAN=mean of error reported with Landsat VCF product within segmented unit</p> <p>errSTD=standard deviation of error reported within segmented unit</p> <p>COUNT= VCF cells within segmented unit</p> <p>AREA_1=calculated area of VCF cells within segmented unit</p> <p>RANGE=range in tree cover values of VCF cells within segmented unit</p> <p>VARIETY= count of unique tree cover values of VCF cells within segmented unit</p> <p>MEDIAN= median of tree cover of VCF cells within segmented unit</p>	
vcf_shrub	<p>Table storing tree cover (canopy cover*0.8) from Landsat VCF 2005 and classification-based woody vegetation cover for segmented units classified as dominated by shrubs.</p> <p>SU_EMF_FID= FID for corresponding segmented units</p> <p>OvC= coded value for cover classifier (1=open, 2=closed)</p> <p>SvT= coded value for dominant lifeform classifier (1=shrub)</p> <p>PCTTC= proportion of segmented unit covered by classified woody vegetation</p> <p>SUAREA= area in square meters of the segmented unit</p> <p>meanVCF=mean VCF tree cover within segmented unit</p> <p>minVCF=minimum VCF tree cover cell within segmented unit</p> <p>maxVCF=maximum VCF tree cover cell within segmented unit</p> <p>DIFF=difference between classified cover and meanVCF tree cover ($\text{DIFF} = \text{PCTTC} - \text{meanVCF}$)</p> <p>minDIFF= difference between classified cover and minVCF tree cover ($\text{minDIFF} = \text{PCTTC} - \text{minVCF}$)</p> <p>maxDIFF= difference between classified cover and</p>	File geodatabase table

	<p>maxVCF tree cover ($\text{maxVCF} = \text{PCTTC} - \text{maxVCF}$)</p> <p>errMEAN=mean of error reported with Landsat VCF product within segmented unit</p> <p>errSTD=standard deviation of error reported within segmented unit</p> <p>COUNT= VCF cells within segmented unit</p> <p>AREA_1=calculated area of VCF cells within segmented unit</p> <p>RANGE=range in tree cover values of VCF cells within segmented unit</p> <p>VARIETY= count of unique tree cover values of VCF cells within segmented unit</p> <p>MEDIAN= median of tree cover of VCF cells within segmented unit</p>	
vcf_tree	<p>Table storing tree cover (canopy cover*0.8) from Landsat VCF 2005 and classification-based woody vegetation cover for segmented units classified as dominated by trees.</p> <p>SU_EMF_FID= FID for corresponding segmented units</p> <p>OvC= coded value for cover classifier (1=open, 2=closed)</p> <p>SvT= coded value for dominant lifeform classifier (2=tree)</p> <p>PCTTC= proportion of segmented unit covered by classified woody vegetation</p> <p>SUAREA= area in square meters of the segmented unit</p> <p>meanVCF=mean VCF tree cover within segmented unit</p> <p>minVCF=minimum VCF tree cover cell within segmented unit</p> <p>maxVCF=maximum VCF tree cover cell within segmented unit</p> <p>DIFF=difference between classified cover and meanVCF tree cover ($\text{DIFF} = \text{PCTTC} - \text{meanVCF}$)</p> <p>minDIFF= difference between classified cover and minVCF tree cover ($\text{minDIFF} = \text{PCTTC} - \text{minVCF}$)</p> <p>maxDIFF= difference between classified cover and maxVCF tree cover ($\text{maxVCF} = \text{PCTTC} - \text{maxVCF}$)</p> <p>errMEAN=mean of error reported with Landsat VCF product within segmented unit</p> <p>errSTD=standard deviation of error reported within segmented unit</p> <p>COUNT= VCF cells within segmented unit</p> <p>AREA_1=calculated area of VCF cells within</p>	File geodatabase table

	<p>segmented unit</p> <p>RANGE=range in tree cover values of VCF cells within segmented unit</p> <p>VARIETY= count of unique tree cover values of VCF cells within segmented unit</p> <p>MEDIAN= median of tree cover of VCF cells within segmented unit</p>	
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