

# Catchment Scale Land Use of Australia – Update December 2018

## Description of contents of the data package

This document describes the GIS data, supporting files and GIS dataset attributes published in the data package for *Catchment Scale Land Use of Australia – Update December 2018*. This data package is referred to as CLUM in this document. Land use is classified according to the *Australian Land Use and Management (ALUM) Classification version 8*. All spatial data were produced using ESRI ArcGIS Pro 2.2 and ESRI ArcGIS for Desktop 10.6.

Table 1 describes the principle file components of the data package.

Table 2 is a data dictionary for the attributes of the CLUM raster dataset.

Table 3 is a data dictionary for the attributes of the CLUM supporting polygon shapefile.

**Table 1: Brief description of the contents of this data package.**

File name	File description
raster_clum_50m1218m.zip	Catchment Scale Land Use of Australia - raster package (ESRI grid and supporting files). Details of the zip file contents are given in the indented list below.
<ul style="list-style-type: none"><li>clum_50m1218m</li></ul>	CLUM raster dataset of catchment scale land use of Australia. ESRI GRID, 16 bit integer, resolution 50 metres by 50 metres, coordinate system GDA94 / Australian Albers.
<ul style="list-style-type: none"><li>clum_50m1218m.aux.xml</li></ul>	ESRI raster dataset auxiliary file. Stores auxiliary information for: raster statistics and raster histogram from the "Calculate Statistics" command; pyramids information from "Build Pyramids" command.
<ul style="list-style-type: none"><li>clum_50m1218m.ovr</li></ul>	ESRI raster data pyramids file. Stores the pyramid layers for the raster dataset from the "Build Pyramids" command to improve the display performance.
<ul style="list-style-type: none"><li>ALUM_18_class_clum_50m1218m.lyr</li></ul>	ESRI ArcMap layer file for the CLUM raster. The summary 18 class raster symbology groups the tertiary ALUM numeric code (VALUE field) into broad classes related to conservation, grazing, forestry, cropping, horticulture, urban, intensive agriculture, rural residential, mining and water. Raster symbology, using a unique values classification on the field VALUE. The layer file stores a relative path to the data source in the current folder.
<ul style="list-style-type: none"><li>ALUM_18_class_clum_50m1218m.lyrx</li></ul>	ESRI ArcGIS Pro layer file for the CLUM raster. The summary 18 class raster symbology groups the tertiary ALUM numeric code (VALUE field) into broad classes related to conservation, grazing, forestry, cropping, horticulture, urban, intensive agriculture, rural residential, mining and water. Raster symbology, using a unique values classification on the field VALUE. The layer file stores a relative path to the data source in the current folder.
<ul style="list-style-type: none"><li>ALUM_18_class_clum_50m1218m_lyr.pdf</li></ul>	Description of the layer file. Provides the RGB values, labels and unique values grouped in the symbology of this layer file.
<ul style="list-style-type: none"><li>ALUM_secondary_clum_50m1218m.lyr</li></ul>	ESRI ArcMap layer file for the CLUM raster. The ALUM secondary class symbology groups the tertiary ALUM text code (LU_CODEV8 field) into the secondary classes of the ALUM classification. ALUM class 5.4 is subdivided into: rural residential and farm infrastructure (5.4.2, 5.4.3, 5.4.4, 5.4.5); and, urban residential (5.4.0 and 5.4.1). Raster symbology, using a unique values classification on the field LU_CODEV8. The layer file stores a relative path to the data source in the current folder.
<ul style="list-style-type: none"><li>ALUM_secondary_clum_50m1218m.lyrx</li></ul>	ESRI ArcGIS Pro layer file for the CLUM raster. The ALUM secondary class symbology groups the tertiary ALUM text code (LU_CODEV8 field) into the secondary classes of the ALUM classification. ALUM class 5.4 is subdivided into: rural residential and farm infrastructure (5.4.2, 5.4.3, 5.4.4, 5.4.5); and, urban residential (5.4.0 and 5.4.1). Raster symbology, using a unique values classification on the field LU_CODEV8. The layer file stores a relative path to the data source in the current folder.
<ul style="list-style-type: none"><li>ALUM_secondary_clum_50m1218m_lyr.pdf</li></ul>	Description of the layer file. Provides the RGB values, labels and unique values grouped in the symbology of this layer file.
<ul style="list-style-type: none"><li>ALUMCv8_Handbook4ednPart2_UpdateOctober2016.pdf</li></ul>	ABARES 2016, <i>The Australian Land Use and Management Classification Version 8, Detailed</i> , Australian Bureau of Agricultural and Resource Economics and Sciences, Canberra.
<ul style="list-style-type: none"><li>ALUM_classification_table.pdf</li></ul>	Table of classification codes used in the application of ALUM classifications to land use. Version 8 (October 2016)

File name	File description
geotiff_clum_50m1218m.zip	CLUM raster dataset of catchment scale land use of Australia (GeoTIFF format). Details of the zip file contents are given in the indented list below.
<ul style="list-style-type: none"> <li>clum_50m1218m.tif</li> </ul>	CLUM raster dataset of catchment scale land use of Australia. GEOTIFF, 16 bit integer, resolution 50 metres by 50 metres, coordinate system GDA94 / Australian Albers
<ul style="list-style-type: none"> <li>clum_50m1218m.tfw</li> </ul>	GeoTIFF world file, containing georeferencing information for the raster.
<ul style="list-style-type: none"> <li>clum_50m1218m.tif.aux.xml</li> </ul>	GeoTIFF raster dataset auxiliary file. Stores auxiliary information for: raster statistics and raster histogram from the "Calculate Statistics" command.
<ul style="list-style-type: none"> <li>clum_50m1218m.tif.ovr</li> </ul>	GeoTIFF raster data pyramids file. Stores the pyramid layers for the raster dataset from the "Build Pyramids" command to improve the display performance.
<ul style="list-style-type: none"> <li>clum_50m1218m.tif.vat.cpg</li> </ul>	GeoTIFF support file.
<ul style="list-style-type: none"> <li>clum_50m1218m.tif.vat.dbf</li> </ul>	GeoTIFF dataset attribute table.
<ul style="list-style-type: none"> <li>clum_50m1218m_with_colour_ramp.tif</li> </ul>	CLUM raster dataset of catchment scale land use of Australia. GEOTIFF, 16 bit integer, resolution 50 metres by 50 metres, coordinate system GDA94 / Australian Albers assigned the colour ramp used for the ALUM secondary classification
<ul style="list-style-type: none"> <li>clum_50m1218m_with_colour_ramp.tfw</li> </ul>	GeoTIFF world file, containing georeferencing information for the raster.
<ul style="list-style-type: none"> <li>clum_50m1218m_with_colour_ramp.tif.aux.xml</li> </ul>	GeoTIFF raster dataset auxiliary file. Stores auxiliary information for: raster statistics and raster histogram from the "Calculate Statistics" command.
<ul style="list-style-type: none"> <li>clum_50m1218m_with_colour_ramp.tif.ovr</li> </ul>	GeoTIFF raster data pyramids file. Stores the pyramid layers for the raster dataset from the "Build Pyramids" command to improve the display performance.
<ul style="list-style-type: none"> <li>clum_50m1218m_with_colour_ramp.tif.vat.cpg</li> </ul>	GeoTIFF support file.
<ul style="list-style-type: none"> <li>clum_50m1218m_with_colour_ramp.tif.vat.dbf</li> </ul>	GeoTIFF dataset attribute table.
shapefile_currency_clum_50m1218m.zip	Catchment Scale Land Use of Australia - currency shapefile package (ESRI shapefile). Details of the zip file contents are given in the indented list below.
<ul style="list-style-type: none"> <li>state_currency_and_scale_December2018.shp</li> </ul>	CLUM supporting polygon shapefile showing the year for which land use was mapped and the scale at which land use mapping was interpreted in the vector catchment scale land use data provided by state and territory agencies and combined to generate the CLUM raster. Coordinate system GDA94 / Australian Albers.
<ul style="list-style-type: none"> <li>DateOfMapping_clum50m1218m.lyr</li> </ul>	ESRI ArcMap layer file for the polygon shapefile, showing the year for which land use was mapped in the vector data that were compiled in the CLUM raster dataset. Polygon symbology, using a unique values classification on the field 'date'. The layer file stores a relative path to the data source in the current folder.
<ul style="list-style-type: none"> <li>DateOfMapping_clum50m1218m.lyrx</li> </ul>	ESRI ArcGIS Pro layer file for the polygon shapefile, showing the year for which land use was mapped in the vector data that were compiled in the CLUM raster dataset. Polygon symbology, using a unique values classification on the field 'date'. The layer file stores a relative path to the data source in the current folder.
<ul style="list-style-type: none"> <li>ScaleOfMapping_clum50m1218m.lyr</li> </ul>	ESRI ArcMap layer file for the polygon shapefile, showing the mapping scale of the source vector data that were compiled in the CLUM raster dataset. Polygon symbology, using a unique values classification on the field 'scale' The layer file stores a relative path to the data source in the current folder.
<ul style="list-style-type: none"> <li>ScaleOfMapping_clum50m1218m.lyrx</li> </ul>	ESRI ArcGIS Pro layer file for the polygon shapefile, showing the mapping scale of the source vector data that were compiled in the CLUM raster dataset. Polygon symbology, using a unique values classification on the field 'scale' The layer file stores a relative path to the data source in the current folder.
CLUM_DescriptiveMetadata_December2018.docx	Descriptive metadata for <i>Catchment Scale Land Use of Australia – Update December 2018</i> dataset.
CLUM_DescriptiveMetadata_December2018.pdf	Descriptive metadata for <i>Catchment Scale Land Use of Australia – Update December 2018</i> dataset.
CLUM_DatasetDescription_December2018.docx	This document, which describes the GIS data, supporting files and GIS dataset attributes published in this data package.
CLUM_DatasetDescription_December2018.pdf	This document, which describes the GIS data, supporting files and GIS dataset attributes published in this data package.

File name	File description
CLUM_map_December2018_ALUM_18class.pdf	Land use map showing the CLUM dataset, based on the ALUM summary 18 class classification. Map produced in landscape format, at A0 size (1189 millimetres by 841 millimetres), and suitable for printing at A3 size (420 millimetres by 297 millimetres).
CLUM_map_December2018_ALUM_secondary.pdf	Land use map showing the CLUM dataset, based on the ALUM secondary classes. Map produced in landscape format, at A0 size (1189 millimetres by 841 millimetres), and suitable for printing at A3 size (420 millimetres by 297 millimetres).
CLUM_map_December2018_dateofmapping.pdf	This map shows the year for which land use was mapped in the vector data that were compiled in the catchment scale land use of Australia raster. Map produced in landscape format, at A4 size (297 millimetres by 210 millimetres).
CLUM_map_December2018_scaleofmapping.pdf	This map shows the mapping scale of the source vector data that were compiled in the catchment scale land use of Australia raster. Map produced in landscape format, at A4 size (297 millimetres by 210 millimetres).
CLUM_map_December2018_areasupdatedsince2017.pdf	This map shows the areas updated since the September 2017 release of the catchment scale land use of Australia raster. Map produced in landscape format, at A4 size (297 millimetres by 210 millimetres).

**Table 2: Data dictionary for the attributes of the CLUM raster dataset**

Field name	Field description	Code values
VALUE	ALUM code as a three digit integer. First digit is primary code, second digit is secondary code, and third digit is tertiary code.	Integer numeric value. Range: 100 to 663
COUNT	Count of the number of raster cells in each class of VALUE	Integer count.
LU_CODEV8	ALUM code as text. Primary, secondary and tertiary codes are separated with a full stop character	Text, width 5. Range: "1.0.0" to "6.6.3"
TERTIARY_V8	ALUM tertiary code and description as a string. Examples: "1.1.1 Strict nature reserves" "6.6.3 Estuary/coastal waters - intensive use"	Text, width 100
SECONDARY_V8	ALUM secondary code and description as a string. Examples: "1.1 Nature conservation" "6.6 Estuary/coastal waters"	Text, width 100
PRIMARY_V8	ALUM primary code and description as a string. Examples: "1 Conservation and natural environments" "6 Water"	Text, width 100
CLASSES_18	Integer value class in the simplified 18 class land use classification.	Integer numeric value. Range: 1 to 18
C18_DESCRIPTION	Description of the corresponding class in the simplified 18 class land use classification. Examples: "Nature conservation (1.1)" "Other protected areas including indigenous uses (1.2)" "Urban intensive uses (5.3, 5.4, 5.4.1, 5.5, 5.6, 5.7)" "Water (6.0)"	Text, width 100

*Note:* all ALUM codes refer to the Australian Land Use and Management Classification, version 8.

**Table 3: Data dictionary for the attributes of the CLUM supporting polygon shapefile**

<b>Field name</b>	<b>Field description</b>	<b>Code values</b>
FID	Internal feature number that uniquely identifies each polygon	Integer numeric value.
Shape	Internal feature geometry ("polygon")	Geometry
STATE	Numeric code for the state or territory that supplied the data. 1=NSW, 2=VIC, 3= QLD, 4= SA, 5= WA, 6=TAS, 7=NT, 8=ACT.	Integer numeric value. Range 1 to 8
date	The year for which land use was mapped in the vector catchment scale land use data provided by state and territory agencies	Integer numeric value. Range 2003 to 2018
scale	The scale at which land use was mapped in the vector catchment scale land use data provided by state and territory agencies. One of: 1:5 000, 1:10 000, 1:20 000, 1:25 000, 1:50 000, 1:100 000, 1:250 000	String, width 15