Title

Grid Garage ArcGIS Toolbox

Abstract

The **Grid Garage** Toolbox is designed to help you undertake the Geographic Information System (GIS) tasks required to process GIS data (geodata) into a standard, spatially aligned format. This format is required by most, grid or raster, spatial modelling tools such as the <u>Multi-criteria Analysis Shell for Spatial Decision Support (MCAS-S)</u>. Grid Garage contains 36 tools designed to save you time by batch processing repetitive GIS tasks as well diagnosing problems with data and capturing a record of processing step and any errors encountered.

Grid Garage provides tools that function using a list based approach to batch processing where both inputs and outputs are specified in tables to enable selective batch processing and detailed result reporting. In many cases the tools simply extend the functionality of standard ArcGIS tools, providing some or all of the inputs required by these tools via the input table to enable batch processing on a 'per item' basis. This approach differs slightly from normal batch processing in ArcGIS, instead of manually selecting single items or a folder on which to apply a tool or model you provide a table listing target datasets. In summary the Grid Garage allows you to:

- List, describe and manage very large volumes of geodata.
- Batch process repetitive GIS tasks such as managing (renaming, describing etc.) or processing (clipping, resampling, reprojecting etc.) many geodata inputs such as time-series geodata derived from satellite imagery or climate models.
- Record any errors when batch processing and diagnose errors by interrogating the input geodata that failed.
- Develop your own models in ArcGIS ModelBuilder that allow you to automate any GIS workflow utilising one or more of the Grid Garage tools that can process an unlimited number of inputs.
- Automate the process of generating MCAS-S TIP metadata files for any number of input raster datasets.

The Grid Garage is intended for use by anyone with an understanding of GIS principles and an intermediate to advanced level of GIS skills. Using the Grid Garage tools in ArcGIS ModelBuilder requires skills in the use of the ArcGIS ModelBuilder tool.

Download Instructions: Create a new folder on your computer or network and then download and unzip the zip file from the GitHub Release page for each of the following items in the 'Data and Resources' section below. There is a folder in each zip file that contains all the files. See the <u>Grid Garage User Guide</u> for instructions on how to install and use the Grid Garage Toolbox with the sample data provided.

Resource locator

Data Quality Statement Name: Data Quality Statement

Protocol: WWW:DOWNLOAD-1.0-http--download

Description:

Data quality statement for Grid Garage ArcGIS Toolbox

Function: download

Grid Garage V3.1 User Guide Name: Grid Garage V3.1 User Guide

Protocol: WWW:DOWNLOAD-1.0-http--download

Description:

Grid Garage ArcGIS Toolbox User Guide. Also contains technical documentation for each of the 36 tools and tutorials.

Function: download

Grid Garage V3.1 ArcGIS Toolbox Name: Grid Garage V3.1 ArcGIS Toolbox

Protocol: WWW:DOWNLOAD-1.0-http--download

Description:

Grid Garage V3.1 ArcGIS Toolbox. See instructions in the Grid Garage User Guide to install and use the toolbox in ArcGIS.

Function: download

Grid Garage

Name: Grid Garage Sample Data v1.0.2

Sample Data Protocol: WWW:DOWNLOAD-1.0-http--download <u>v1.0.2</u> Description: Sample Data v1.0.2 for use with Grid Garage V3.1 ArcGIS Toolbox User Guide and tutorials. Function: download Unique resource identifier Code 16f10f27-9506-4452-a317-31fa9df4dfba Presentation documentDigital form Edition 3.1.2.1 Dataset eng language Metadata standard ANZLIC Metadata Profile: An Australian/New Zealand Profile of AS/NZS ISO Name 19115:2005, Geographic information - Metadata Version 1.1 Dataset URI https://datasets.seed.nsw.gov.au/dataset/16f10f27-9506-4452-a317-31fa9df4dfba Purpose Manage and manipulate spatial data **Status** completed Spatial reference system Authority code GDA94 Geographic (Lat\Long) Code identifying the spatial 4283 reference system Topic category Keyword set keyword value software Originating controlled vocabulary Title **ANZLIC Search Words** Reference date 2008-05-16 **Geographic location** -170.31096 West bounding longitude East bounding longitude 180 North bounding latitude -84.82788 South bounding latitude 84.4442

Vertical extent information	
Minimum value	-100
Maximum value	2228
Coordinate reference system	
Authority code	urn:ogc:def:cs:EPSG::
Code identifying the coordinate reference system	5711
Temporal extent	
Begin position	2017-03-06
End position	N/A
Dataset reference date	
Date type	publication
Effective date	2017-08-15
Date type	revision
Effective date	2017-08-15
Resource maintenance	
Maintenance and update frequency	None
Contact info	
Organisation name	NSW Department of Climate Change, Energy, the Environment and Water
Full postal address	NSW
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	data.broker@environment.nsw.gov.au
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Responsible party role	pointOfContact
Limitations on public access	
Scope	dataset

Responsible party

Contact position Data Broker

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Responsible party role pointOfContact

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Responsible party role distributor

Metadata date 2017-08-15

Metadata language eng