## Geoprocessing Data Types of Parameters and Environments

Data types are classifications that identify possible values for data and operations that can be done on the data, as well as the way the data is stored.

<table>
<thead>
<tr>
<th>Data Type</th>
<th>Description</th>
<th>String Syntax ¹</th>
<th>Scripting Object ³</th>
<th>ArcObjects</th>
</tr>
</thead>
<tbody>
<tr>
<td>Address locator</td>
<td>A dataset, used for geocoding, that stores the address attributes, associated indexes, and rules that define the process for translating nonspatial descriptions of places to spatial data.</td>
<td>catalogPath</td>
<td><code>DEAddressLocator</code></td>
<td><code>DEAddressLocator</code></td>
</tr>
<tr>
<td>Address locator style</td>
<td>A template on which to base the new address locator.</td>
<td>catalogPath</td>
<td><code>GPAddressLocatorStyle</code></td>
<td><code>GPAddressLocatorStyle</code></td>
</tr>
<tr>
<td>Analysis cell size</td>
<td>The cell size used by raster tools.</td>
<td>cellSize</td>
<td><code>GPAnalysisCellSize</code></td>
<td><code>GPAnalysisCellSize</code></td>
</tr>
<tr>
<td>Any value</td>
<td>A data type that accepts any value.</td>
<td>any value</td>
<td><code>GPType [abstract datatype]</code></td>
<td><code>GPType [abstract datatype]</code></td>
</tr>
<tr>
<td>ArcMap Document</td>
<td>A file that contains one map, its layout, and its associated layers, tables, charts, and reports.</td>
<td>catalogPath</td>
<td><code>DEMapDocument</code></td>
<td><code>DEMapDocument</code></td>
</tr>
<tr>
<td>Area units</td>
<td>An areal unit type and value such as square meter or acre.</td>
<td>areaUnit unitOfMeasure</td>
<td><code>GPAreaUnit</code></td>
<td><code>GPAreaUnit</code></td>
</tr>
<tr>
<td>Boolean</td>
<td>A boolean value.</td>
<td>TRUE</td>
<td><code>GPBoolean</code></td>
<td><code>GPBoolean</code></td>
</tr>
<tr>
<td>CAD Drawing Dataset</td>
<td>A vector data source with a mix of feature types with symbology. The dataset is not usable for feature class-based queries or analysis.</td>
<td>catalogPath</td>
<td><code>DECadDrawingDataset</code></td>
<td><code>DECadDrawingDataset</code></td>
</tr>
<tr>
<td>Catalog Root</td>
<td>The top-level node in the catalog tree.</td>
<td>catalogPath</td>
<td><code>DECatalogRoot</code></td>
<td><code>DECatalogRoot</code></td>
</tr>
<tr>
<td>Cell Size</td>
<td>The cell size used by Spatial Analyst.</td>
<td>cellSize</td>
<td><code>GPACellSize</code></td>
<td><code>GPACellSize</code></td>
</tr>
<tr>
<td>Composite Datatype</td>
<td>A collection of datatypes.</td>
<td>. . dependent on datatypes in collection…</td>
<td><code>GPCompositeDataType [abstract datatype]</code></td>
<td><code>GPCompositeDataType [abstract datatype]</code></td>
</tr>
<tr>
<td>Composite Layer</td>
<td>A reference to a several children layers, including symbology and rendering properties.</td>
<td>layerName</td>
<td><code>GPCompositeLayer</code></td>
<td><code>GPCompositeLayer</code></td>
</tr>
<tr>
<td>Compression</td>
<td>Specifies the type of compression used for a raster.</td>
<td>compression</td>
<td><code>GPImageGDBEnvCompression</code></td>
<td><code>GPImageGDBEnvCompression</code></td>
</tr>
<tr>
<td>Coordinate System</td>
<td>A reference framework—such as the UTM system—consisting of a set of points, lines, and/or surfaces, and a set of rules, used to define the positions of points in two and three-dimensional space.</td>
<td>catalogPath</td>
<td><code>GPCoordinateSystem</code></td>
<td><code>GPCoordinateSystem</code></td>
</tr>
<tr>
<td>Coordinate Systems Folder</td>
<td>A folder on disk storing coordinate systems.</td>
<td>catalogPath</td>
<td><code>DESpatialReferencesFolder</code></td>
<td><code>DESpatialReferencesFolder</code></td>
</tr>
<tr>
<td>Coverage</td>
<td>A coverage dataset, a proprietary data model for storing geographic features as points, arcs, polygons, and associated feature attribute tables.</td>
<td>catalogPath</td>
<td><code>DECoverage</code></td>
<td><code>DECoverage</code></td>
</tr>
<tr>
<td>Coverage Feature Class</td>
<td>A coverage feature classes such as point, arc, node, route, route system, section, polygon, and region.</td>
<td>catalogPath</td>
<td><code>ICoverageFeatureClass</code></td>
<td><code>ICoverageFeatureClass</code></td>
</tr>
<tr>
<td>Data Element</td>
<td>A dataset visible in ArcCatalog.</td>
<td>catalogPath</td>
<td><code>DEType [abstract datatype]</code></td>
<td><code>DEType [abstract datatype]</code></td>
</tr>
<tr>
<td>Data Type</td>
<td>Description</td>
<td>String Syntax1</td>
<td>Scripting Object2</td>
<td>ArcObjects</td>
</tr>
<tr>
<td>-------------------</td>
<td>-----------------------------------------------------------------------------</td>
<td>----------------</td>
<td>-------------------</td>
<td>--------------------------</td>
</tr>
<tr>
<td>Database Connections</td>
<td>The database connection folder in ArcCatalog.</td>
<td><code>catalogPath</code></td>
<td><code>DEDiskConnection</code></td>
<td></td>
</tr>
<tr>
<td>Dataset</td>
<td>A collection of related data, usually grouped or stored together.</td>
<td><code>catalogPath</code></td>
<td><code>DEDatasetType</code></td>
<td></td>
</tr>
<tr>
<td>Date</td>
<td>A data value.</td>
<td><code>format depends on the regional settings of the computer;</code></td>
<td><code>GPDate</code></td>
<td></td>
</tr>
<tr>
<td>dBASE Table</td>
<td>Attribute data stored in dBASE format.</td>
<td><code>catalogPath</code></td>
<td><code>DEdBASETable</code></td>
<td></td>
</tr>
<tr>
<td>Decimate</td>
<td>Specifies a subset of nodes of a TIN to create a generalized version of that TIN.</td>
<td>`STOLERANCE Z_Tolerance maxNumberOfNodes</td>
<td>COUNT maxNumberOfNodes`</td>
<td><code>DecimateNodes</code></td>
</tr>
<tr>
<td>Disk Connection</td>
<td>An access path to a data storage device.</td>
<td><code>catalogPath</code></td>
<td><code>DEDiskConnection</code></td>
<td></td>
</tr>
<tr>
<td>Double</td>
<td>Any floating point number will be stored as a double-precision 64-bit value.</td>
<td><code>example: 5.6</code></td>
<td><code>GPDouble</code></td>
<td></td>
</tr>
<tr>
<td>Envelope</td>
<td>The coordinate pairs that define the minimum bounding rectangle the data source fall within.</td>
<td><code>X_Minimum Y_Minimum X_Maximum Y_Maximum</code></td>
<td><code>GPEnvelope</code></td>
<td></td>
</tr>
<tr>
<td>Evaluation Scale</td>
<td>The scale value range and increment value applied to inputs in a weighted overlay operation.</td>
<td><code>EvaluationScale Minimum Maximum Increment</code></td>
<td><code>GPEvaluationScale</code></td>
<td></td>
</tr>
<tr>
<td>Extent</td>
<td>Specifies the coordinate pairs that define the minimum bounding rectangle data source fall within this boundary.</td>
<td><code>catalogPath X_Minimum Y_Minimum X_Maximum Y_Maximum</code></td>
<td><code>GPExtent</code></td>
<td></td>
</tr>
<tr>
<td>Feature Class</td>
<td>A collection of spatial data with the same shape type: point, multipoint, polyline, polygon.</td>
<td><code>catalogPath</code></td>
<td><code>DEFeatureClass</code></td>
<td></td>
</tr>
<tr>
<td>Feature Dataset</td>
<td>A collection of feature classes that share a common geographic area and the same spatial reference system.</td>
<td><code>catalogPath</code></td>
<td><code>DEFeatureDataset</code></td>
<td></td>
</tr>
<tr>
<td>Feature Layer</td>
<td>A reference to a feature class, including symbology and rendering properties.</td>
<td>`featureLayerName</td>
<td>catalogPath`</td>
<td><code>GFeatureLayer</code></td>
</tr>
<tr>
<td>Field</td>
<td>A column in a table that stores the values for a single attribute.</td>
<td><code>fieldName</code></td>
<td><code>Field</code></td>
<td></td>
</tr>
<tr>
<td>Field Info</td>
<td>The details about a field in a FieldMap.</td>
<td><code>&quot;fieldName newFieldName visible;fieldName; fieldName visible;...fieldName newFieldName visible;&quot;</code></td>
<td><code>GFieldInfo</code></td>
<td></td>
</tr>
<tr>
<td>Field Mappings</td>
<td>A collection of fields in one or more input tables.</td>
<td>`use String Object; use of String Syntax not recommended; catalogPath</td>
<td><code>GFieldMapping</code></td>
<td></td>
</tr>
<tr>
<td>File</td>
<td>A file on disk.</td>
<td><code>catalogPath</code></td>
<td><code>DEFile</code></td>
<td></td>
</tr>
<tr>
<td>Folder</td>
<td>Specifies a location on a disk where data is stored.</td>
<td><code>CatalogPath</code></td>
<td><code>DEFolder</code></td>
<td></td>
</tr>
<tr>
<td>Formulated Raster</td>
<td>A raster surface whose cell values are represented by a formula or constant.</td>
<td><code>catalogPath</code></td>
<td><code>GPRasterFormulated</code></td>
<td></td>
</tr>
<tr>
<td>GeoDataServer</td>
<td>A coarse grain object that references a geodatabase.</td>
<td><code>catalogPath</code></td>
<td><code>DEGeoDataServer</code></td>
<td></td>
</tr>
<tr>
<td>Geodataset</td>
<td>A collection of data with a common theme in a geodatabase.</td>
<td><code>&quot;catalogPath;catalogPath;...;catalogPath&quot;</code></td>
<td><code>GGeoDataset</code></td>
<td></td>
</tr>
<tr>
<td>Geometric Network</td>
<td>A linear network represented by topologically connected edge and junction features. Feature connectivity is based on their geometric coincidence.</td>
<td><code>catalogPath</code></td>
<td><code>DEGeometricNetworkType</code></td>
<td><code>DEGeometricNetwork</code></td>
</tr>
<tr>
<td>Geostatistical Layer</td>
<td>A reference to a geostatistical data source, including symbology and rendering properties.</td>
<td>`geostatisticalLayerName</td>
<td>catalogPath`</td>
<td><code>GPGALayer</code></td>
</tr>
<tr>
<td>Data Type</td>
<td>Description</td>
<td>String Syntax</td>
<td>Scripting Object</td>
<td>ArcObjects</td>
</tr>
<tr>
<td>-----------</td>
<td>-------------</td>
<td>---------------</td>
<td>------------------</td>
<td>------------</td>
</tr>
<tr>
<td>Geostatistical Value Table</td>
<td>A collection of data sources and fields that define a geostatistical layer.</td>
<td>&quot;catalogPath field;catalogPath field;...;catalogPath field;&quot;</td>
<td>.</td>
<td>GPGAVValueObjects</td>
</tr>
<tr>
<td>Group Layer</td>
<td>A collection of layers that appear and act as a single layer. Group layers make it easier to organize a map, assign advanced drawing order options, and share layers for use in other maps.</td>
<td>&quot;groupLayerName;groupLayerName;...;groupLayerName;&quot;</td>
<td>.</td>
<td>GPGGroupLayer</td>
</tr>
<tr>
<td>Horizontal Factor</td>
<td>The relationship between the horizontal cost factor and the horizontal relative moving angle.</td>
<td>rasterName BINARY ZeroFactor CutAngle</td>
<td>.</td>
<td>GPSAHorizontalFactor</td>
</tr>
<tr>
<td>Index</td>
<td>A data structure used to speed the search for records in a geographic datasets and database.</td>
<td>number</td>
<td>.</td>
<td>Index</td>
</tr>
<tr>
<td>INFO Expression</td>
<td>A syntax for defining and manipulating data in an INFO table.</td>
<td>SUBSET itemName operator value</td>
<td>.</td>
<td>GPINFOExpression</td>
</tr>
<tr>
<td>INFO Item</td>
<td>An item in an INFO table.</td>
<td>itemName</td>
<td>.</td>
<td>GPArcInfoItem</td>
</tr>
<tr>
<td>INFO Table</td>
<td>A table in an INFO Database.</td>
<td>catalogPath</td>
<td>.</td>
<td>DEArcInfoTable IArcInfoTable</td>
</tr>
<tr>
<td>Layer</td>
<td>A reference to a data source, such as a shapefile, coverage, geodatabase feature class, or raster, including symbology and rendering properties. [lyr]</td>
<td>layerName</td>
<td>.</td>
<td>[abstract datatype]</td>
</tr>
<tr>
<td>Layer File</td>
<td>A file with a .lyr extension that stores the layer definition, including symbology and rendering properties.</td>
<td>catalogPath</td>
<td>.</td>
<td>DELayer ILayer</td>
</tr>
<tr>
<td>Line</td>
<td>A shape, straight or curved, defined by a connected series of unique x,y coordinate pairs.</td>
<td>coordinateList</td>
<td>.</td>
<td>GPLine</td>
</tr>
<tr>
<td>Linear Unit</td>
<td>A linear unit type and value such as meter or feet.</td>
<td>unitOfMeasure keywords: CENTIMETERS</td>
<td>.</td>
<td>GPLinearUnit</td>
</tr>
<tr>
<td>Long</td>
<td>An integer number value.</td>
<td>number</td>
<td>.</td>
<td>GPLong</td>
</tr>
<tr>
<td>M Domain</td>
<td>A range of lowest and highest possible value for m coordinates.</td>
<td>M_Minimum M_Maximum</td>
<td>.</td>
<td>GPMDomain</td>
</tr>
<tr>
<td>Map Algebra Expression</td>
<td>A query syntax used by Spatial Analyst to evaluate raster data.</td>
<td>catalogPath MA_expression --&gt; link to online doc</td>
<td>.</td>
<td>GPSAMapAlgebraExp</td>
</tr>
<tr>
<td><strong>Data Type</strong></td>
<td><strong>Description</strong></td>
<td><strong>String Syntax</strong></td>
<td><strong>Scripting Object</strong></td>
<td><strong>ArcObjects</strong></td>
</tr>
<tr>
<td>------------------------</td>
<td>---------------------------------------------------------------------------------</td>
<td>-----------------------------------------------------------------------------------</td>
<td>--------------------------------------</td>
<td>---------------</td>
</tr>
<tr>
<td>MultiValue</td>
<td>A collection of values stored in one column in a value table.</td>
<td>&quot;string;string;...;string&quot;</td>
<td>._.</td>
<td>GPMultiValue</td>
</tr>
<tr>
<td>Neighborhood</td>
<td>The shape of the area around each cell used to calculate statistics.</td>
<td>ANNULUS InnerRadius OuterRadius Units</td>
<td>CIRCLE Radius Units</td>
<td>RECTANGLE Height Width Units</td>
</tr>
<tr>
<td>Network Analyst Class</td>
<td>A mapping between location properties in a network analyst layer (such as stops, facilities, and incidents) and a point feature class.</td>
<td>property field defaultValue</td>
<td>._.</td>
<td>NAClassFieldMap</td>
</tr>
<tr>
<td>FieldMap</td>
<td></td>
<td></td>
<td>._.</td>
<td>NAClassFieldMap</td>
</tr>
<tr>
<td>Network Analyst Hierarchy</td>
<td>A hierarchy attribute that divides hierarchy values of a network dataset into three groups using two integers. The first integer, high rank ends, sets the ending value of the first group; the second number, low rank begin, sets the beginning value of the third group.</td>
<td>NONE</td>
<td>HIERARCHY defaultRanges</td>
<td>HIERARCHY customRanges upTo andHigher</td>
</tr>
<tr>
<td>Network Analyst Layer</td>
<td>A special group layer used to express and solve network routing problems. Each sublayer, held in-memory, in a Network Analyst layer represent some aspect of the routing problem and the routing solution.</td>
<td>layerName</td>
<td>catalogPath</td>
<td>._.</td>
</tr>
<tr>
<td>Network Dataset</td>
<td>A collection of topologically connected network elements (edges, junctions, and turns), derived from network sources and associated with a collection of network attributes.</td>
<td>catalogPath</td>
<td></td>
<td>._.</td>
</tr>
<tr>
<td>Network Dataset Layer</td>
<td>A reference to a network dataset, including symbology and rendering properties.</td>
<td>layerName</td>
<td>catalogPath</td>
<td>._.</td>
</tr>
<tr>
<td>Point</td>
<td>A pair of x,y coordinates.</td>
<td>coordinatePair</td>
<td></td>
<td>Point</td>
</tr>
<tr>
<td>Polygon</td>
<td>A connected sequence of x,y coordinate pairs, where the first and last coordinate pair are the same.</td>
<td>coordinateList</td>
<td></td>
<td>._.</td>
</tr>
<tr>
<td>Projection File</td>
<td>A file storing coordinate system information for spatial data [pg]</td>
<td>catalogPath</td>
<td></td>
<td>._.</td>
</tr>
<tr>
<td>Pyramid</td>
<td>Specifies if pyramids will be built.</td>
<td>NONE</td>
<td>PYRAMIDS pyramidLevel sampleMethod</td>
<td>sampleMethod keywords: NEAREST</td>
</tr>
<tr>
<td>Radius</td>
<td>Specifies which surrounding points will be used for interpolation.</td>
<td>FIXED Distance Min#OfPts</td>
<td>VARIABLE NumOfPts MaxDistance</td>
<td>._.</td>
</tr>
<tr>
<td>Random Number Generator</td>
<td>Specifies the seed and the generator to be used when creating random values.</td>
<td>seed randomGenType</td>
<td>randomGenType keywords: STANDARD_C</td>
<td>ACM599</td>
</tr>
<tr>
<td>Raster Band</td>
<td>A layer in a raster dataset.</td>
<td>catalogPath</td>
<td></td>
<td>._.</td>
</tr>
<tr>
<td>Raster Catalog</td>
<td>A collection of raster datasets defined in a table, each table records defines an individual raster datasets in the catalog.</td>
<td>catalogPath</td>
<td></td>
<td>._.</td>
</tr>
<tr>
<td>Raster Catalog Layer</td>
<td>A reference to a raster catalog, including symbology and rendering properties.</td>
<td>rasterCatalogLayer</td>
<td>catalogPath</td>
<td></td>
</tr>
<tr>
<td>Raster Dataset</td>
<td>A single dataset built from one or more rasters.</td>
<td>catalogPath</td>
<td></td>
<td>._.</td>
</tr>
<tr>
<td>Data Type</td>
<td>Description</td>
<td>String Syntax</td>
<td>Scripting Object</td>
<td>ArcObjects</td>
</tr>
<tr>
<td>---------------------------</td>
<td>------------------------------------------------------------------------------</td>
<td>----------------------------------------------------</td>
<td>-----------------------------------------</td>
<td>------------</td>
</tr>
<tr>
<td>Raster Layer</td>
<td>A reference to a raster, including symbology and rendering properties.</td>
<td>catalogPath</td>
<td>'-'</td>
<td>GPRasterLayer</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>IRasterLayer</td>
</tr>
<tr>
<td>Raster Statistics</td>
<td>Specifies if raster statistics will be built.</td>
<td>NONE</td>
<td>STATISTICS X-SkipFactor Y-SkipFactor statsIgnoreValue</td>
<td>'-'</td>
</tr>
<tr>
<td>Relationship Class</td>
<td>The details about the relationship between objects in the geodatabase.</td>
<td>catalogPath</td>
<td>'-'</td>
<td>DERelationshipClass</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>IRelationshipClass</td>
</tr>
<tr>
<td>Remap</td>
<td>A table that defines how raster cell values will be reclassified.</td>
<td>OldValues NewValue ClassifyMethod</td>
<td>'-'</td>
<td>GPSANumberRemap</td>
</tr>
<tr>
<td></td>
<td></td>
<td>OldValues: number</td>
<td>range</td>
<td>string</td>
</tr>
<tr>
<td>Route Measure Event</td>
<td>Specifies the fields on a table that describe events that are measured by a linear reference route system.</td>
<td>inEventProperties POINT mField</td>
<td>inEventProperties LINE fromMField</td>
<td>'-'</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>SemiVariogram</td>
<td>Specifies the distance and direction representing two locations that is used to quantify autocorrelation.</td>
<td>ORDINARY Spherical Lag size Major range Partial sill Nugget</td>
<td>ORDINARY CIRCULAR Lag size Major range Partial sill Nugget</td>
<td>ORDINARY EXPONENTIAL Lag size Major range Partial sill Nugget</td>
</tr>
<tr>
<td>Shapefile</td>
<td>Spatial data in shapefile format. [.shp]</td>
<td>catalogPath</td>
<td>'-'</td>
<td>DEShapefile</td>
</tr>
<tr>
<td>Spatial Reference</td>
<td>The coordinate system used to store a spatial dataset, including the spatial domain.</td>
<td>use String Object; use of String Syntax not recommended; catalogPath</td>
<td>SR_ID</td>
<td>Spatialreference</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>ISpatialReference</td>
</tr>
<tr>
<td>SQL Expression</td>
<td>A syntax for defining and manipulating data from a relational database.</td>
<td>fieldName operator value</td>
<td>'-'</td>
<td>GPSQLExpression</td>
</tr>
<tr>
<td>String</td>
<td>A text value.</td>
<td>any combination of characters including spaces</td>
<td>'-'</td>
<td>GPString</td>
</tr>
<tr>
<td>Table</td>
<td>Tabular data.</td>
<td>catalogPath</td>
<td>'-'</td>
<td>DETable</td>
</tr>
<tr>
<td>Table View</td>
<td>A representation of tabular data for viewing and editing purposes, stored in memory or on disk.</td>
<td>tableViewName</td>
<td>catalogPath</td>
<td>'-'</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>IFeatureclass</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>ITLayer</td>
</tr>
<tr>
<td>Terrain</td>
<td>A multiresolution TIN.</td>
<td>catalogPath</td>
<td>'-'</td>
<td>DETerrain</td>
</tr>
<tr>
<td>Terrain Layer</td>
<td>A reference to a terrain, including symbology and rendering properties.</td>
<td>terrainLayerName</td>
<td>catalogPath</td>
<td>'-'</td>
</tr>
<tr>
<td>Text File</td>
<td>Data stored in ASCII format.</td>
<td>catalogPath</td>
<td>'-'</td>
<td>DETextFile</td>
</tr>
<tr>
<td>Tile Size</td>
<td>Specifies the width and the height of a data stored in block.</td>
<td>width height</td>
<td>'-'</td>
<td>GPRasterGDBEnvTileSize</td>
</tr>
<tr>
<td>Time configuration</td>
<td>Specifies the time periods used for calculating solar radiation at specific locations.</td>
<td>SPECIAL DAYS</td>
<td>WITHIN A DAY numOfDays startTime endTime</td>
<td>MULTIPLE DAYS IN A YEAR year startDay endDay</td>
</tr>
<tr>
<td>TIN [Triangulated Irregular Network]</td>
<td>A vector data structure that partitions geographic space into contiguous, non-overlapping triangles. The vertices of each triangle are sample data points with x-, y-, and z-values.</td>
<td>catalogPath</td>
<td>'-'</td>
<td>DETin</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>ITin</td>
</tr>
<tr>
<td>TIN Layer</td>
<td>A reference to a TIN, including topological relationships, symbology, and rendering properties.</td>
<td>TINLayerName</td>
<td>catalogPath</td>
<td>'-'</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>ITINLayer</td>
</tr>
<tr>
<td>Data Type</td>
<td>Description</td>
<td>String Syntax</td>
<td>Scripting Object</td>
<td>ArcObjects</td>
</tr>
<tr>
<td>--------------------</td>
<td>------------------------------------------------------------------------------</td>
<td>---------------</td>
<td>------------------</td>
<td>------------</td>
</tr>
<tr>
<td>Topo Features</td>
<td>Features that are input to the interpolation.</td>
<td>catalogPath featureLayer field type</td>
<td>. -</td>
<td>GPSATopoFeatures</td>
</tr>
<tr>
<td></td>
<td>Type keywords: POINTELEVATION</td>
<td>CONTOUR</td>
<td>STREAM</td>
<td>SINK</td>
</tr>
<tr>
<td>Topology</td>
<td>A topology that defines and enforces data integrity rules for spatial data.</td>
<td>catalogPath</td>
<td>. -</td>
<td>DETopology</td>
</tr>
<tr>
<td>Topology Layer</td>
<td>A reference to a topology, including symbology and rendering properties.</td>
<td>topologyLayerName</td>
<td>catalogPath</td>
<td>. -</td>
</tr>
<tr>
<td>Variant</td>
<td>A data value that can contain any basic type: boolean, date, double, long, and string.</td>
<td>any combination of characters including spaces</td>
<td>. -</td>
<td>GPVariant</td>
</tr>
<tr>
<td>ValueTable</td>
<td>A collection of columns of values.</td>
<td>catalogPath</td>
<td>. -</td>
<td>GPValueTable</td>
</tr>
<tr>
<td>VPF Coverage</td>
<td>Spatial data stored in Vector Product Format.</td>
<td>catalogPath</td>
<td>. -</td>
<td>DEVPFCoverage</td>
</tr>
<tr>
<td>VPF Table</td>
<td>Attribute data stored in Vector Product Format.</td>
<td>catalogPath</td>
<td>. -</td>
<td>DEVPFTable</td>
</tr>
<tr>
<td>Weighted Overlay Table</td>
<td>A table with data to combine multiple rasters by applying a common measurement scale of values to each raster, weighting each according to its importance.</td>
<td>rasterName %Influence Field Remap</td>
<td>catalogPath %Influence Field Remap</td>
<td>. -</td>
</tr>
<tr>
<td>Weighted Sum</td>
<td>Specifies data for overlaying several rasters multiplied each by their given weight and then summed.</td>
<td>rasterName Field Weight</td>
<td>catalogPath Field Weight</td>
<td>. -</td>
</tr>
<tr>
<td>Workspace</td>
<td>A container such as a geodatabase or folder.</td>
<td>catalogPath</td>
<td>. -</td>
<td>DEWorkspace</td>
</tr>
<tr>
<td>XY Domain</td>
<td>A range of lowest and highest possible values for x,y coordinates.</td>
<td>X_Minimum Y_Minimum X_Maximum Y_Maximum</td>
<td>. -</td>
<td>GPXYDomain</td>
</tr>
<tr>
<td>Z Domain</td>
<td>A range of lowest and highest possible value for z coordinates.</td>
<td>Z_Minimum Z_Maximum</td>
<td>. -</td>
<td>GPZDomain</td>
</tr>
</tbody>
</table>

1 catalogPath: C:\workspace\datatypes\...; layerName/~LayerName: Layer on disk, as in C:\workspace\landuse.lyr; layer in ArcMap TOC; internal layer created by geoprocessing tools; collection: "string;string;...;string"; catalogPath, layerName, itemName: if spaces are present, must single or double quote each one in a collection; example: " 'string';'string1';...;'string N' "; coordinateList: x1 y1;x2 y2; ...;x N yN; polygon: x1 y1;x2 y2; ...;x N yN;x1 y1; keywords are in CAPS: as in ACRES and METERS;

2 For the string syntax refer to the Remap data type.

3 string objects are marked with a patterned background.