The following changes have been made to DAT/EM products between Release 6.2 and Release 6.3. Please review these revisions made to the software and update your software to implement changes.

As always, DAT/EM welcomes comments and suggestions from you, our clients, so please don't hesitate to contact our support department at support@datem.com, or by calling in or faxing us with your requests.

Operating Systems

Release 6.3 is supported on Windows XP Professional, VISTA Ultimate and Windows 7 Ultimate or Professional operating systems. Testing no longer occurs for Windows 2000. If you have a question, please contact Support.

CAD Versions

Release 6.3 has interfaces to the following 32-bit and 64-bit CAD versions:

- **AutoCAD**: Autodesk 2002, 2004, 2005, 2006, 2007, 2008, 2009, 2010, 2011, and 2012 products
- **ArcGIS**: ArcMap 9.1, 9.2, 9.3 (service pack 1), 9.3.1(service pack 2) and 10 (service pack 2)
- **MicroStation**: Approved versions are: On 32-bit operating systems, MicroStation V8 (08.05.00.34 or higher); On 32-bit and 64-bit operating systems, V8 2004 Edition (08.05.02.70 or higher), XM (08.09.04.88 or higher), V8i, V8i and Bentley Map Select Series 1, and V8i and Bentley Map Select Series 2. Select Series 2 is recommended over Select Series 1. Please DO NOT install DAT/EM version 6.3 with the upcoming MicroStation Select Series 3 unless DAT/EM announces otherwise. **Note for Select Series 1-to-2 upgrades:** If you upgrade to MicroStation or Bentley Map from Select Series 1 to Select Series 2, you must re-install any DAT/EM software. The Select Series 2 installation does not remove existing DAT/EM applications, which may not work well for several commands. Reinstalling the DAT/EM software provides new Select Series-2-specific DAT/EM applications.

Hardware Locks/Dongles

Please install Microsoft Updates and Service Packs for your operating system before applying lock reset programs. Network licensing should have the same Sentinel driver version on both the server and the local computers running the software.

SUMMIT EVOLUTION

1. Support for two or more system mouse devices has been added; call them Mouse1, Mouse2, Mouse3 …, MouseN. This applies to all editions: PROFESSIONAL, FEATURE COLLECTION, and LITE. If there are more than two system mice connected to the computer, the first mouse to move after SUMMIT EVOLUTION starts becomes Mouse1. Mouse 2, Mouse3, …., and MouseN are all treated as Mouse2. BUTTON MANAGER shows 10 buttons; buttons 1-5 are set for Mouse1 and buttons 6-10 are for Mouse2 and any others.

2. LITE EDITION can now run the applications that create images from LiDAR points and create orthophoto stereo mates. The menu items for these applications are: **Imagery>Generate LIDAR Image** and **Imagery>Generate Stereo Mates**. Previously, these applications were installed, but they would give a hardware lock error message when they were started.

3. A problem with Terrain Visualization was fixed. Previously, with certain input, it could lock up with "densify breaklines with constrain" or "densify off" set on.

4. The latest Mr. SID image file format is supported.

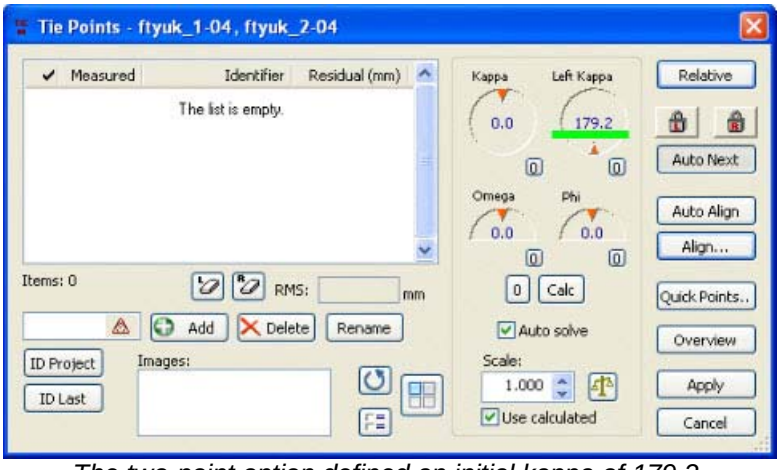
5. A superimposition color error has been corrected. If an object was edited to change its color, the object's color would initially change in superimposition; however, it would revert to the pre-edit color when SUMMIT EVOLUTION opened a different model. This was seen in some versions of AutoCAD and all versions of MicroStation. Now the new color is retained after a model change.

6. All multiple viewport settings are now saved in the project file. This includes the number of viewports, viewport channel map settings, open models in each viewport, and all Viewports dialog settings. Previously, some of these settings were saved in the registry for the next project or the next run of SUMMIT EVOLUTION. We found that these settings were not often needed for the next project, and that they belonged best with the individual project that was open when the settings were made.

7. Automatic Relative Orientation has been fixed to work with projects that have a rotation activated by the "Automatically select best stereo view (North/South/East/West)" setting. Previously, initial points needed to be measured manually before Automatic RO would work.

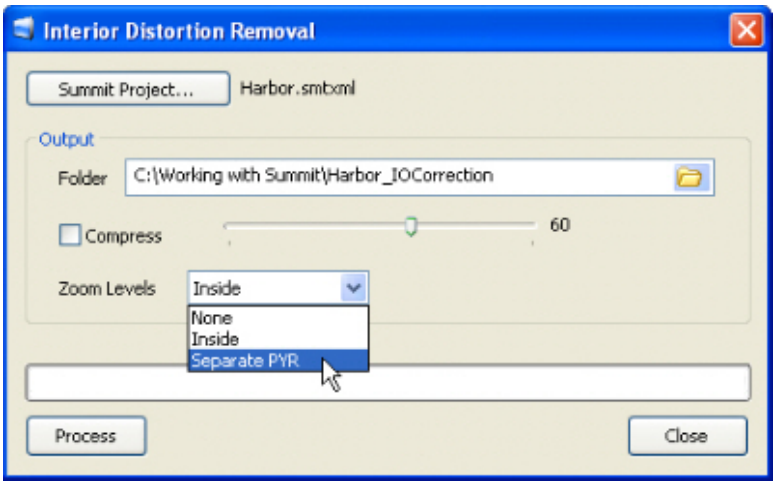
8. The Relative Orientation Tie Points **Align** dialog has a new **Two Points** option. Together, the first and second points define a similar object and an initial left kappa angle for the display. Use the **Two Points** option when the two images have a different north direction with respect to each other. For example, use **Two Points** when the two images are from adjoining strips and are approximately 180 degrees off from each other.

These images are approximately 180 degress from each other.
*Use **Two Point** and digitize two similar ground features in the same order.*



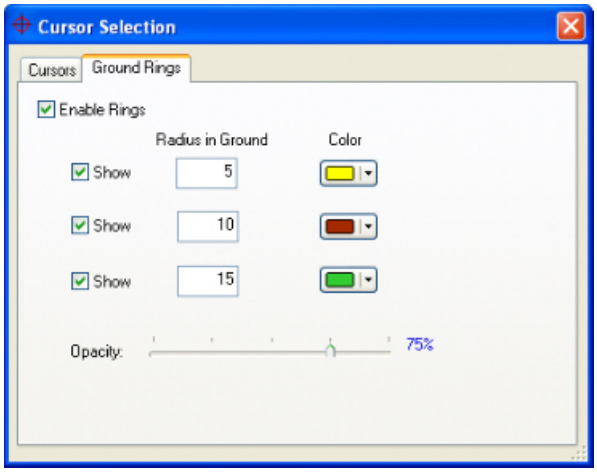
The two-point option defined an initial kappa of 179.2.
The initial relative point readings will already have the images "right side up" compared to each other.

9. There is a new Interior Distortion (IO) Removal tool called **IODistortRemoval.exe** in the Datem Software folder. This tool inputs any aerial project that has at least an IO and a camera with distortions applied (that is, the **Use Correction** setting is on when viewed in the Camera Editor). It outputs a project with adjusted images and a camera file that does not have distortions applied. To run, prepare a project that has a camera file with any type of distortion applied (distance, angular, formula radial, formula decentering, or grid). The original images can be any type of aerial imagery accepted by Summit. The project should have a finished IO; other orientations are optional. Start **IODistortRemoval.exe**. Use **Summit Project** to browse for the project. **Folder** must be different from the original project location. Make other settings as desired. **Zoom Levels** applies to the new images: **None** means there will only be a 1X level image, **Inside** means it will produce zoom levels inside the image, and **Separate PYR** means it will create new TIFs (1X) and PYRs (zoom levels) separately. After processing, there will be a new .smtxml project with new images and a new camera file; any other files such as control files will be directly copied to the new folder. The new camera file still contains the distortion settings, but the **Use Correction** setting is off. Since the new camera file and images are named the same as the original files, please be careful to keep them in separate folders.



10. The BUTTON MANAGER's existing **Plotter Cursor Set** type has a new option to toggle ground rings on and off. Previously, this type could only scroll through a list of cursor designs.

    - First, set ground rings on the **Summit > Tools > Cursor > Ground Rings** tab. Check **Enable Ground Rings** while making the settings, and leave at least one **Show** checkbox on. **Enable Ground Rings** may be on or off at the time you exit the dialog. The new BUTTON MANAGER **Plotter Cursor Set** type can eventually toggle the **Enable Ground Rings** setting.



- Next, in BUTTON MANAGER, set a button to **Type**=**Plotter Cursor Set**. For the **Action** setting, the previously available list of cursor designs separated by a semi-colon (;) character is still available. The ground ring settings may be added, or the ground ring settings may appear alone. The ground ring settings are **(RingsOn)** and **(RingsOff)**. These may be added before or after the cursor design name, or they may appear alone. **(RingsOn)** and **(RingsOff)** are not case sensitive, that is, **(RINGSON)** and **(ringsoff)** will also work. The separator for **Plotter Cursor Set** is still a semi-colon (;), whether or not the ground rings settings appear. Examples:

    a. **Example 1:** Toggle ground rings on and off with two different cursor designs called SimpleCross and YB1.

    SimpleCross(RingsOn);SimpleCross(RingsOff);YB1(RingsOff);YB1(RingsOn);
    Or,
    (RingsOn)SimpleCross;(RingsOff)SimpleCross;(RingsOff)YB1;(RingsOn)YB1;

    Press the button four times to see the complete cycle of cursors and ground ring settings. Press the button a fifth time to start the cycle over again.

    b. **Example 2:** Don't change the cursor design, but do toggle the ground rings. Use **(RingsOn)** and **(RingsOff)** alone between the semi-colon character:

    (RingsOn);(RingsOff);

    Press the button two times to toggle the ground rings. Press the button a third time to start the cycle over again.

11. CONTOUR CREATOR has the following changes:
    a. There is a new algorithm to better find depression contours. There are fewer settings on the Depression tab.

b. Contours will now be generated in an enforced right-left direction. If the direction of the contour is considered, “more uphill” is to the right of the contour vectors, and “more downhill” is to the left. Closed contours will be clockwise, while depression contours will be counterclockwise.
c. The **Depression** tab now offers to make a “Visit” file for use with MAPEDITOR for AutoCAD (VISIT in the EditMap application) or MicroStation (VISIT command). This is an ASCII file that contains the coordinate of the first vertex of each depression contour. This allows you to zoom to each depression contour for editing purposes, for example, to look at the patterning you might have applied to depression contours.
d. Crossing breaklines are supported.
e. The minimum area test now also removes tiny contour fragments.

12. IMAGE CREATOR has the following changes:
    a. IMAGE CREATOR has an overall speed improvement. Be aware that it also requires more memory to run.
    b. The IMAGE CREATOR was taking too long to process TIF images that had a very small tile size, such as 16x16. With the fix to speed up processing with smaller tile sizes, there is a significant speed difference. For example, on our development computer, a file that previously took 7 hours now takes only 3 minutes. Please note that this will not affect the speed of processing for the more commonly seen images that have a larger tile size, such as 128x128 or 256x256.
    c. The latest Mr. SID image file format is supported.

13. PROJECT VIEWER WITH ORTHOPHOTO AND MOSAIC has changes:

    a. Processing of exclusion areas for image adjustment has been optimized to run much faster.

    b. There is now a user choice to select the number of threads. It will default to either 1, 2, or 4. You can pick 1, 2, 4, or 8. The more threads selected, the more memory used. Please be sure you have the selected number of processors available on the computer. If you select more threads than there are processors available, it could actually run slower.

       Setting a number of threads is roughly comparable to setting a number of processors; however, the operating system – not DAT/EM – controls which threads go to which processors. If you choose more threads than processors, or if other processor-intensive applications are running, two or more threads may be sent to the same processor.

    c. Exclusion areas were not applied with the "Use scale of orthophoto" setting. This has been fixed.

    d. There is a new method to save orthophoto and mosaic settings separately from the SUMMIT EVOLUTION project. Previously, such settings were written to the **.smtxml** file; now, they are written to a new file called **<project name>_ortho.omXml**. More settings are saved now, such as exclusion/void areas and mosaic image balancing. The settings will be stored in a new folder under the project file's folder tree called *Settings_Project_name* where *Project_name* is the name of the project.

       Whenever an **.smtxml** project is opened (either by SUMMIT EVOLUTION or PROJECT VIEWER+ORTHOPHOTO & MOSAIC), it checks for an <OPS> area in the file. This is where orthophoto and mosaic settings were stored in version 6.2 and lower. If it has an <OPS> area, it will automatically create the settings folder and create the **.omXml** if one does not already exist. The <OPS> data will then be removed from the **.smtxml** file.

       Save As has been removed from PROJECT VIEWER since it no longer needs to be able to write to an .**smtxml** file. When PROJECT VIEWER prompts to save, it now refers to the **.omXml** settings file and not the SUMMIT EVOLUTION project.

       A note about backward compatibility: The <OPS> area is removed from the SUMMIT EVOLUTION project starting in version 6.3. If a **.smtprj** is created by version 6.3 or higher, it will not provide orthophoto and mosaic settings to any version 6.2-or-lower PROJECT VIEWER. If an orthophoto project is passed between newer and older DAT/EM versions, choose a solution: 1) Recommended. Upgrade all DAT/EM software to 6.3 or higher, or b) Copy the OPS data from the **.omXml** file and paste it to the bottom of the **.smtxml** file before opening the **.smtxml** file with version 6.2 or lower.

LANDSCAPE

1. The Selection Set Editor has been improved. All references to specific files have been removed. Now a Selection Set only contains Layer names and Types (include/exclude/nearline). When a Selection Set is applied the vector files stored in the LANDSCAPE project are used as the filename source.

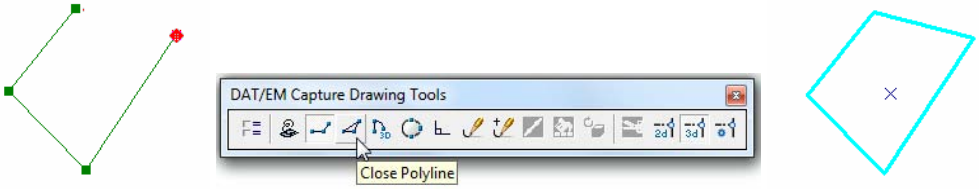
DAT/EM CAPTURE for ArcGIS

NOTE: Compatible with 32-bit versions of ArcGIS 9.1, 9.2, 9.3.1, and 10 (each with the latest service packs installed)

> **Hint/Reminder:** For DAT/EM tools that require an object to be selected, if the first pick selects the wrong object under the cursor, pick again without moving the cursor. Each pick in the same location will change the selection to the next possible object under the cursor.

1. This is the first version to support ArcGIS 10. Versions 9.1, 9.2, and 9.3.1 are also supported.

2. There is a new **Close Polyline** tool on the DAT/EM Capture Drawing Tools toolbar. The icon is active only while drawing a polyline-geometry object. To close and finish the polyline, do not cancel or finish sketch; instead, select the **Close Polyline** tool to snap the last vertex to the first vertex and automatically finish the sketch.

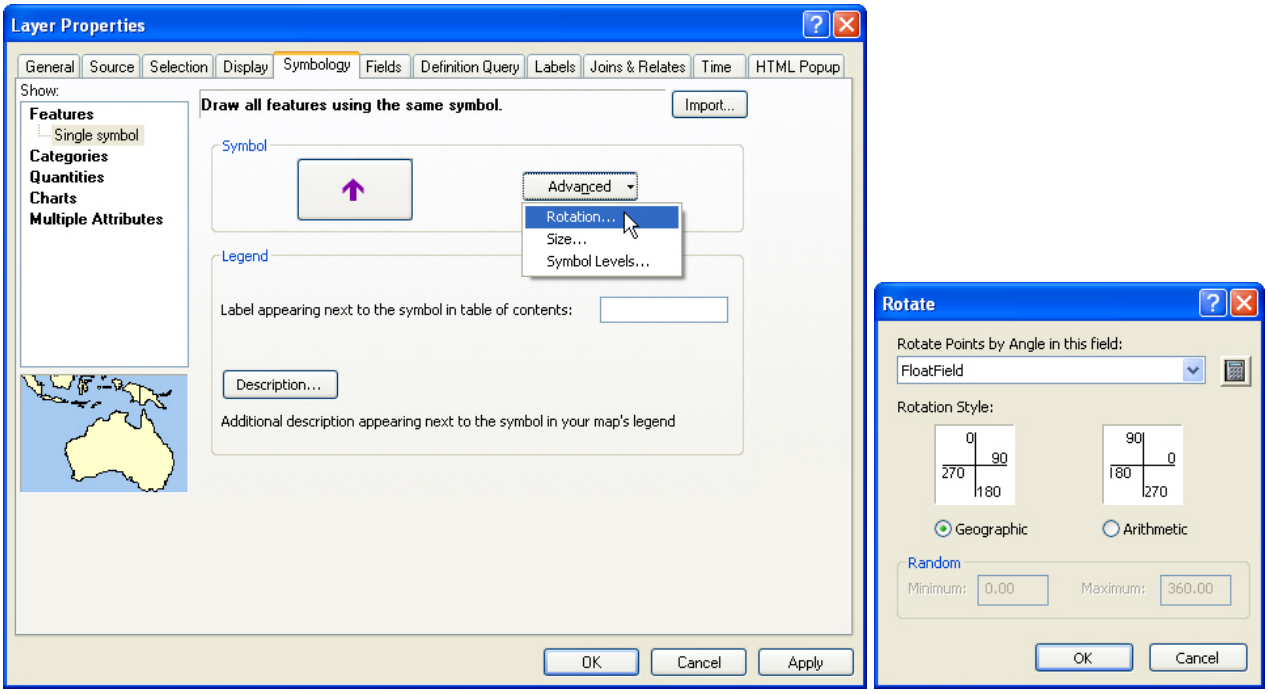


Close Polyline can be activated from the DAT/EM KEYPAD CONTROLLER or a digitizer button using the string:

```
CallCommand CaptureArcInfo.ClosePolyline
```

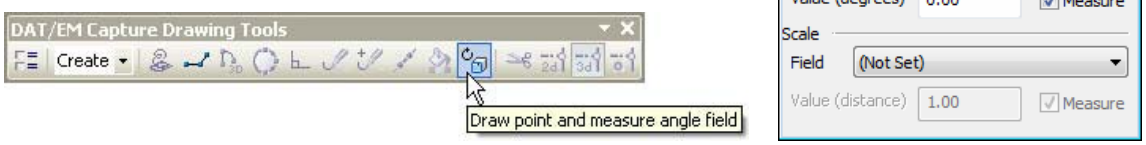
3. There is a new **Draw point and measure fields** tool that places a point and sets a rotation and/or size field for that point.

   To use, set the ArcMap 9.x target to a point-geometry shapefile or feature class, or select an ArcMap 10.x point-geometry feature class template as a target.
   - The point-geometry target must have a rotation angle field and/or size field that is defined as a “float” or “double” type.
   - For Rotation: Right click on the target in the Table of Contents (TOC) and select **Properties** > **Symbology** tab > **Rotation**. Set a float- or double-type field for the rotation angle value. Select your choice of **Arithmetic** or **Geographic** (**Geographic** rotates the same as the cursor direction, and is usually recommended).



- For Size: Right click on the target in the Table of Contents (TOC) and select **Properties** > **Symbology** tab > **Size**. Set a float- or double-type field for the size value.

Select the **Draw point and measure fields** option on the DAT/EM Drawing Tools toolbar. Set **Field** to the rotation value field and/or either enter a constant value for the angle or check on **Measure** to measure at least one angle.



Digitize the point location.

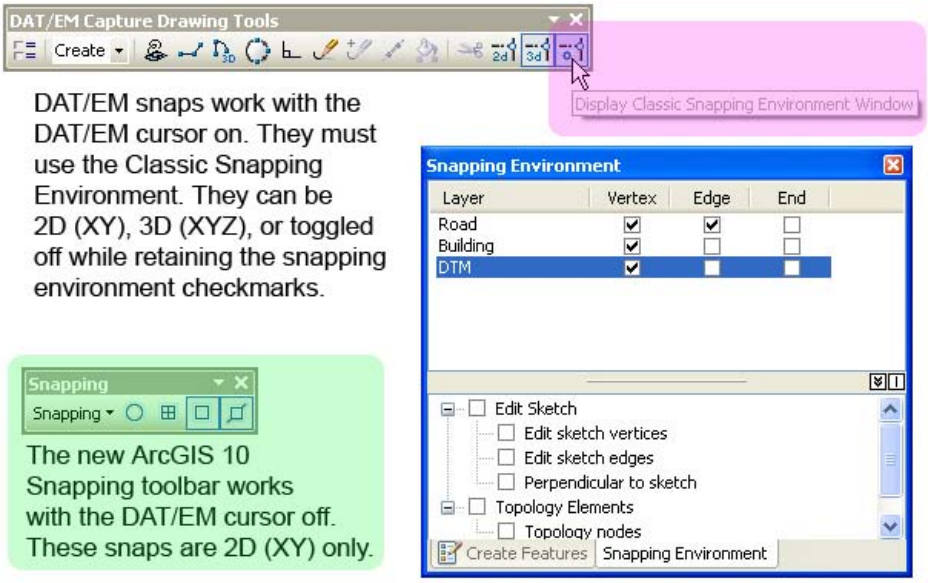
- If **Measure** is off, the **Angle (degrees)** value will be placed in the angle field and the point will rotate immediately.
- If **Measure** is on, digitize a second point that defines the angle. The angle will be sent to the angle field, and will also populate **Angle (degrees)** in the dialog. To use the initial measured angle for subsequent points, uncheck **Measure** and continue to measure point locations only; otherwise, continue to measure points and angles.
- The **size** field sets the distance between the first point picked and the second point. There is no traditional scale ability in ArcMap, since points are resized when zooming in or out. The sizeis measured at the same time the angle is measured, if both fields are set. If either field is not set then it is ignored. If both fields are not set then the point is simply inserted.

The **Draw and point measure fields** tool can be activated from the DAT/EM KEYPAD CONTROLLER or a digitizer button using the string:

```
CallCommand CaptureArcInfo.SetRotationPoint
```

4. For ArcGIS 10, there are three new items on the DAT/EM toolbars and special considerations for working in the ArcGIS 10 ArcMap environment:

   a. There is a new **Display Classic Snapping Environment Window** option on the DAT/EM Capture Drawing Tools toolbar. It activates the ArcMap classic snapping environment window. If you wish to use 3D snaps, classic snapping must be used; check on the **Vertex**, **Edge**, and/or **End** snapping methods for each potential target layer.



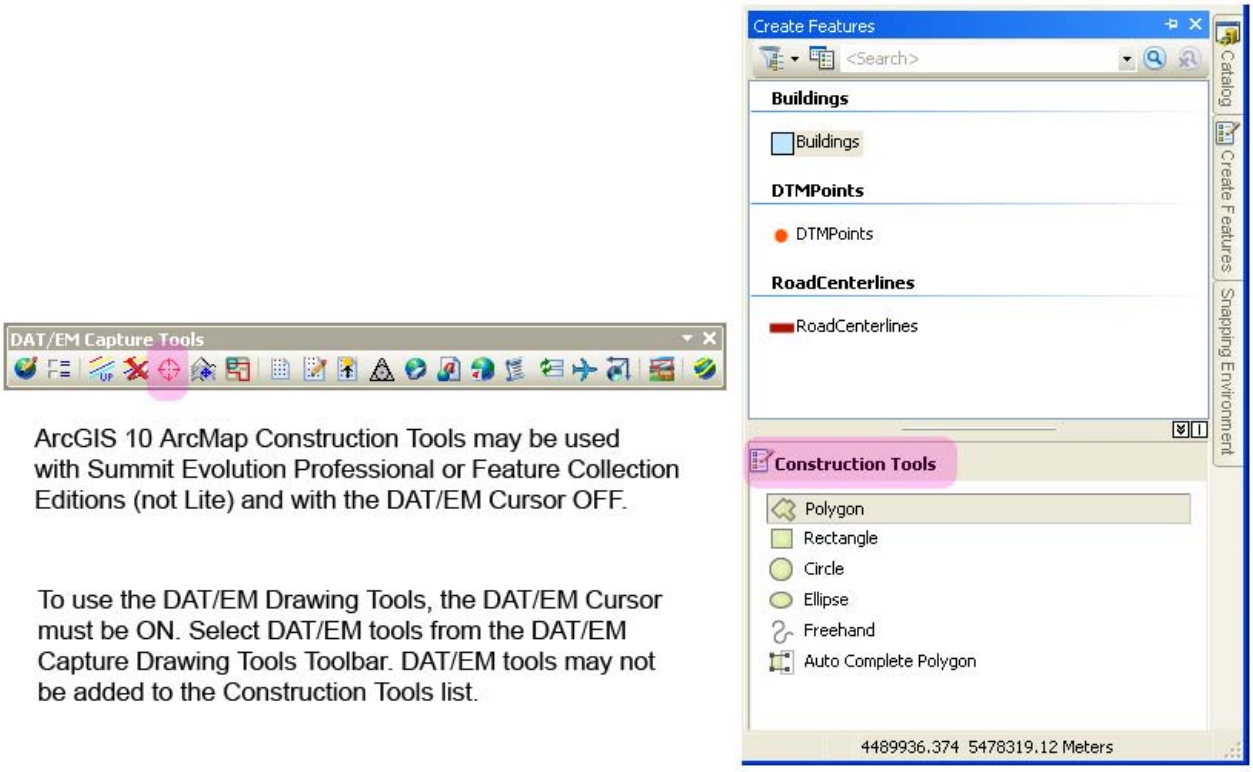
   The classic snapping environment can be activated from the DAT/EM KEYPAD CONTROLLER or a digitizer button using the string:

```
CallCommand CaptureArcInfo.SnapDialog
```

   b. There is a new menu on the DAT/EM Capture Drawing Tools toolbar. It has three options, **Create**, **Modify**, and **Cut**. Users who are familiar with previous versions of ArcGIS will recognize these options as classic "Task" settings. In order to use the DAT/EM drawing tools, the classic task settings must be used. Select the task to **Create** to draw a new object, **Modify** to edit an existing object, or **Cut** to cut an existing polygon into two polygons. Select the DAT/EM drawing tool to use with the task.

   Something new in ArcGIS 10 ArcMap is a method to select a target from the Create Features window and select a tool from the Construction Tools list. The Construction Tools can only be used with the DAT/EM cursor off. SUMMIT EVOLUTION LITE EDITION may not use the ArcMap Construction Tools, since it needs the DAT/EM cursor to be on at all times.

   The DAT/EM drawing tools cannot be added to the new ArcGIS 10 Construction Tools list.

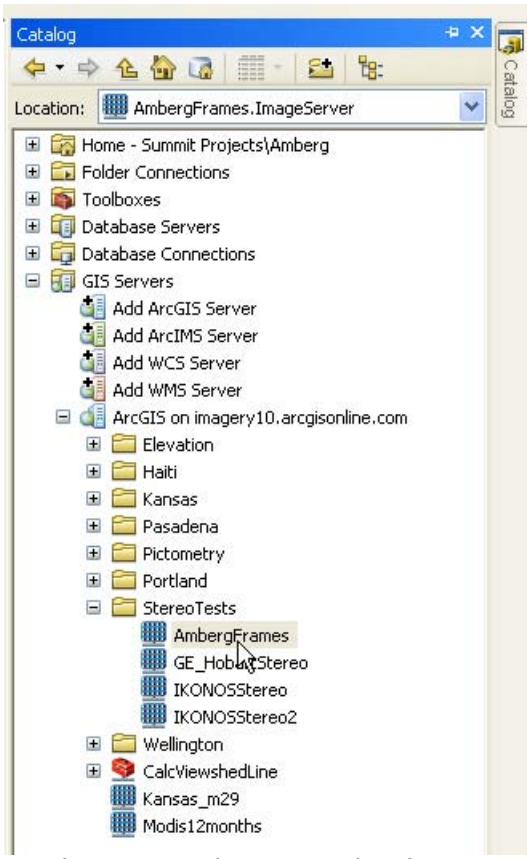


c. There is a new **Select Images on Image Server** icon on the DAT/EM Capture Tools toolbar. Please see the next item regarding Image Server (ArcGIS for Server) procedures.

5. For DAT/EM CAPTURE running with ArcGIS 10 only, there is a new workflow that automatically creates a SUMMIT EVOLUTION .smtxml project from imagery found on Esri Image Server (ArcGIS for Server). Complete instructions appear in the *DAT/EM Capture for ArcGIS Operation Manual for version 6.3*. Brief instructions follow:

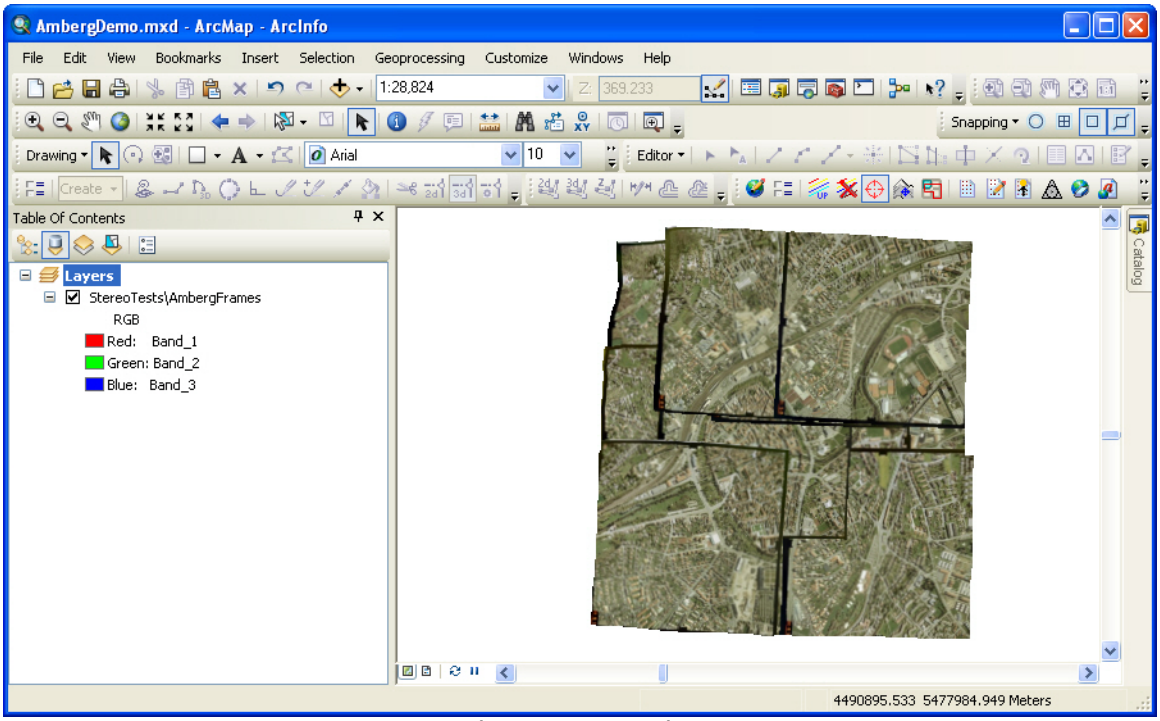
   a. Close SUMMIT EVOLUTION until the project has been created.

   b. In ArcMap's Catalog window, expand **GIS Servers** and connect to the server that contains stereo imagery projects. Select the stereo dataset on the server.



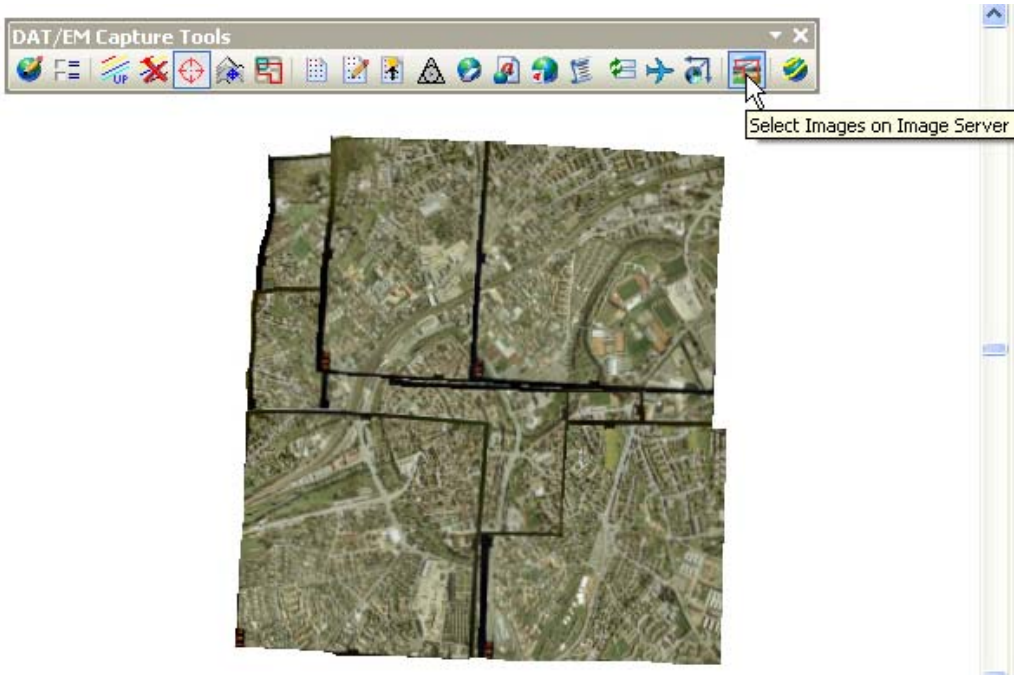
Example: Select a stereo imagery project from Image Server

c. Drag and drop the dataset into the ArcMap Table of Contents (TOC). The RGB composite raster appears.



Example RGB composite raster

d. Select **Select Images on Image Server** from the DAT/EM Capture Tools toolbar (ArcGIS 10.x).



The **Select Images on Image Server** tool can be activated from the DAT/EM KEYPAD CONTROLLER or a digitizer button using the string:

```
CallCommand CaptureArcInfo.ImageServerSelectTool
```

e. The Create Summit Project dialog appears. Check desired photogrammetric images. Files with default extensions are automatically selected. The system mouse cursor indicates a polygon drawing tool is active. If you do not draw a polygon on the overviews, all default files will remain selected, but you may manually check and uncheck them. You may optionally draw a polygon around an area of interest on the overviews to help select/reject catalog trees. Green dots indicate active trees, red dots indicate inactive trees; click on a dot to toggle its color. Download the checked/green dot images.

f. Open the resulting project in SUMMIT EVOLUTION.

6. In previous versions, when ArcMap was running, SI Update would happen even when SUMMIT was not running. This could slow down ArcMap response. Now DAT/EM software will automatically detect whether SUMMIT is running or not, and it will not update SI if it is not.

7. Layers containing millions of objects were editing slowly, and it was taking too long to find an object such as a polygon. Performance has been improved.

8. Polygon editing produced unreliable results if editing began in the first segment and the end of the edit was at the first vertex in the line segment. This was corrected.

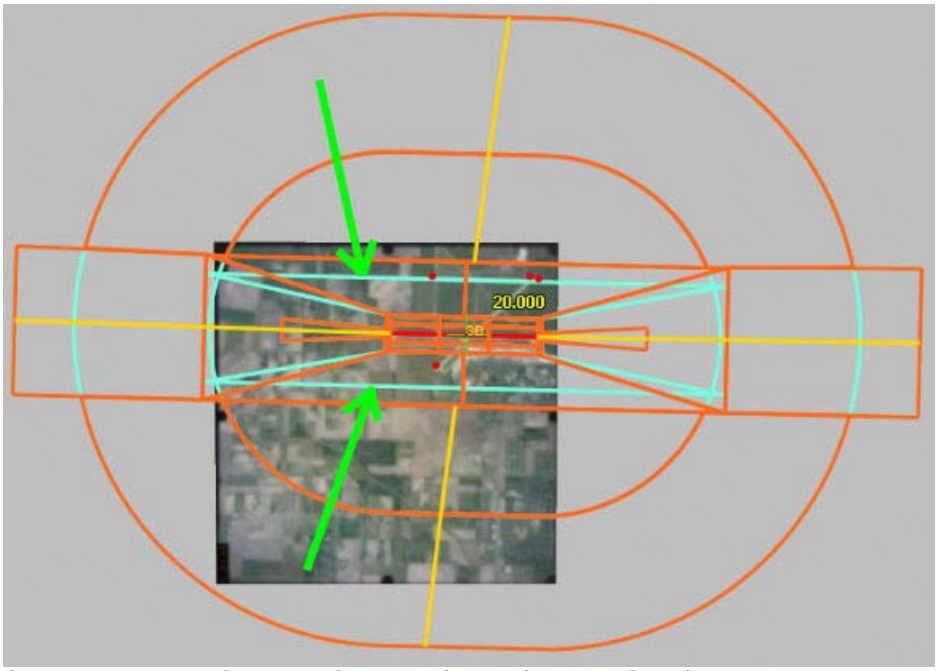
9. The DAT/EM **Draw Arc** tool has been fixed to distribute vertices more evenly. Previously, it would miss some vertices and leave a long segment at the beginning of the arc.

10. **ASCII Export** has been fixed for the following problems: It could write a checked field only until it found a <Null> value in that field. After finding a <Null>, it would drop the field out of the output format, even if subsequent fields had non-null values.

11. **ASCII Import** has been fixed for the following problem: If you used the yellow button to right of Format>Name field, it reset all dialog settings (except Filename and Layer) to defaults. Any settings you had made to Name, Rows per record, Comments, Delimeters, Skip consecutive, and checked field names were reset.

12. The following problems have has been fixed in Airfield3D:

    a. The AIRFIELD3D field update dialog did not always allow new entries in the dialog, especially in Windows 7 64-bit systems. This has been fixed.
    b. Previously, when AIRFIELD3D wrote the two VGATS polygons to the ObstructionIDSurface layer, they were made 2000 feet wide instead of 3000 feet wide. The calculations of the surfaces for the majority of AIRFIELD3D functions, such as surface following and distance calculations, were correct; it was only when the surfaces were written as polygon outlines to the ArcGIS layer that the polygon was made incorrectly. They are now made correctly at 3000 feet wide.



The two VGATS polygons written to ObstructionIDSurface layer were too narrow.
*Here, **orange** is the active AIRFIELD3D display in SUMMIT EVOLUTION, which has always been correct.*
Cyan is the ObstructionIDSurface layer in ArcGIS before the fix.
(The cyan arcs are correct; they are trimmed in the active display, but must be present in order to complete the polygons on the ObstructionIDSurface layer.)

DAT/EM CAPTURE for AutoCAD

NOTE: Compatible with 32-bit AutoCAD 2000-2012 versions with the latest service packs.
Compatible with 64-bit AutoCAD 2008-2012 versions with the latest service packs.

1. 6.3 is the first version to officially support AutoCAD 2012.

2. GRIDIT's polyline tick mark option has been fixed to work correctly. This option draws two crossing polylines rather than a block. Previously, it incorrectly inserted a block.

3. DATDRAW's dialog did not allow key-ins in the dialog fields. This has been fixed.

4. CLIPIT could leave polylines in a corrupted state and/or delete polylines that should be retained. These issues have been fixed.

5. CROSSCHECK has a new **Ignore intersections with vertex** option to ignore intersections where one or both objects have a vertex at the intersection. This also includes a fix for the case where it missed what appeared to be exact intersections at a near point snap locations. Near point snaps in AutoCAD are not exact to as many decimal places as CROSSCHECK previously expected, which caused an apparent intersection miss. Now, CROSSCHECK allows for the very tiny differences in the snap point with respect to the snapped-to object, and counts near snaps as if they are true intersections.

6. The Map/Editor menu partial cui(x) file for AutoCAD 2010/2011, **maped2010.cuix** or **maped2010_64.cuix**, had a problem loading if the DAT/EM menu cui(x) was added first. Or, if the Map/Editor menu was added first, it would prevent the DAT/EM menu from loading. This has been fixed.

7. Nested blocks were not displayed completely in SuperImpostion. This has been fixed.

8. The DTMIT application, DtmIt<ver>.arx, could have caused AutoCAD to crash on exit for AutoCAD 2007 and higher. This has been fixed.

9. A near-final beta version of the new MAPEDITOR is loaded automatically from the acad.rx file. This applies to licenses of stand-alone MAPEDITOR, SUMMIT EVOLUTION PROFESSIONAL, and SUMMIT EVOLUTION FEATURE COLLECTION for AutoCAD 2007 and higher. A near-final beta of the DAT/EM SCHEDULER is also provided to help schedule runs of MapEditor parameter files. The key-in to start the new MAPEDITOR is **maped**. The application is called EditMap<ver>.arx. Please try this software if you'd like, but be aware that it is still a beta. We would appreciate any feedback. We expect to release this software and provide an instruction manual with version 6.4.

DAT/EM CAPTURE for MicroStation

Changes apply to approved versions: On 32-bit operating systems, MicroStation V8 (08.05.00.34 or higher); On 32-bit and 64-bit operating systems, V8 2004 Edition (08.05.02.70 or higher), XM (08.09.04.88 or higher), V8i, V8i and Bentley Map Select Series 1, and V8i and Bentley Map Select Series 2. Select Series 2 is recommended over Select Series 1. Please DO NOT install DAT/EM version 6.3 with the upcoming MicroStation Select Series 3 unless DAT/EM announces otherwise. **Note for Select Series 1-to-2 upgrades:** If you upgrade to MicroStation or Bentley Map from Select Series 1 to Select Series 2, you must re-install any DAT/EM software. The Select Series 2 installation does not remove existing DAT/EM applications, which may not work well for several commands. Reinstalling the DAT/EM software provides new Select Series-2-specific DAT/EM applications.

1. The EZEDIT Arc Editing Extent block display has been suppressed from display.

2. V8i Select Series 2 is supported.

3. PSQR has the following changes:
   a. Tentative point snaps with PSQR sometimes did not snap correctly on the second snap when the first two points were snapped to another object. The snap would miss the snapped-to object by one unit of resolution. This has been corrected.
   b. Several additional internal fixes were made that will prevent PSQR from crashing.

4. SPOTINTERP has the following changes:

   a. It now allows input defined by selection sets. Previously, it would only use points defined by DTMPOINTSETTINGS as input. Now the selection set method may define additional element types, such as line strings and shapes.
   b. The option to *not* have the elevation rounded off.
   c. Before it places the spot height, it displays the elevation that will be used.
   d. It can use objects from reference files as elevation input.
   e. It allows the spot elevation cell to be placed at a snapped-to point.

5. ZLABEL GUIDERS (started from the key-in) has a fix. Previously, if you canceled the Change Settings dialog, it would lose the previous Guider Set setting. Recent Guider Set settings are now retained.

6. ZLABEL GUIDERS can now label stand-alone type 16 arcs.

7. ZLABEL SETTINGS has been fixed so that the import and export buttons work correctly.

8. Selection by classes can now pick a shared cell to match the cell name. Previously, it would match the attributes and set all element types instead of matching the cell type and cell name.

9. EZEDIT's direction arrow markers were being placed exactly at the start vertex for shapes and closed strings. It now draws them at the midpoint.

10. MAPEDITOR TOUCH (METOUCH, TOUCH BATCH) was processing complex elements incorrectly. It could leave many duplicates of different parts of the original components. This has been fixed

11. Commands such as VISIT, ZCHECK, SLOPECHECK, and CROSSCHECK have a new option to drive the SUMMIT EVOLUTION stereoplotter to the coordinate.

12. Breaklinefilter's "Ignore Z" setting was being reversed when written to a parameter file. It is now written correctly.

13. The MapEditor Parameter File Editor has the following fixes:

a. The MapEditor Parameter File Editor now correctly displays TOUCH values when editing an existing TOUCH line. When a TOUCH line was selected, it would show the incorrect values in the dialog; it got the values from the registry instead of the parameter file. The user was forced to re-enter all of the dialog fields.
b. When editing existing ZLABEL GUIDER and ZLABEL SETTINGS lines, any new dialog settings were not saved into the parameter file.

14. In MapEditor's "Pick" to define "Classes", if a shared cell was selected, it populated the class with the header symbology instead of the cell name. Now it gets the cell name.

15. MapEditor log files now contain more information. For example:

```
Wed Aug 17 2011    10:14:36
Map Editor log file

CMD: 53, FILE: F:\simnpler3d.dgn
CMD Description: ZLabel Settings, Not Placing Cells, Not Placing Elevation Labels

CMD: 55, FILE: F:\simnpler3d.dgn
CMD Description: ZLabel Guider, CSet:3D - CrossCheck, GSet:allcells, Align Rule:1

CMD: 53, FILE: F:\simnpler3d.dgn
CMD Description: ZLabel Settings, Placing Cells BUSH, Placing Elevation Labels

CMD: 55, FILE: F:\simnpler3d.dgn
CMD Description: ZLabel Guider, CSet:boundary, GSet:bounds, Align Rule:2
```

16. MECLIP has several changes:

    a. Clip has been replaced with a version that runs faster and avoids some of the older version's problems.

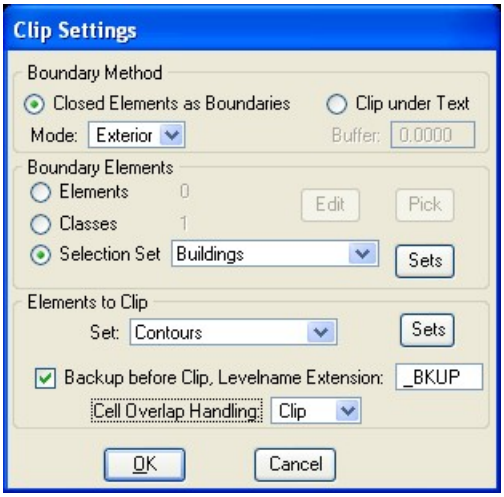
    b. The exterior option now runs faster and handles multiple boundaries better. When there are overlapping boundaries, an element must be outside all boundaries in order to be clipped.

    c. The **Cell Overlap Handling>Clip** has been improved to better clip cells along a boundary edge when in **Exterior** and **Interior** clip modes. When a cell is broken, its remaining parts are combined into a cell group with a cell header so that it may be selected as one object. Such new cells are neither named nor added to the cell library. Cell overlap settings are not active for **Break** and **Clip under Text** modes.

    d. There is a new level back up option. When checked on, it copies the original elements to a different level before clipping.

    e. The view orientation options have been removed due to unreliability and user confusion. All clipping will take place in a top view.

    f. There is a new **Clip under Text** radio button to better describe how clipping can occur underneath a text element. The **Buffer** setting defines a distance beyond the edge of the text so that it can clip a little beyond the text instead of exactly at the limits of the text. This functionality existed before, but it was not clear how to make the settings in the dialog's previous layout.



New Clip Settings dialog

17. CROSSCHECK has the following fixes:
    a. Simple (non-complex) shapes could cause CROSSCHECK processing to end.
    b. There was an unhandled boundary condition where there was an intersection at both the start and end point of an element. This fix affects libraries that are used by -- and may also fix similar boundary condition problems with -- the following commands: CLIP ROAD, LABELIT and BREAK.

18. Replace Cell (MEREPLACECELL) has a new cell scale option and the existing options for **Multiple existing scale by factor** have been renamed. There is a now a menu that offers: A) **Fixe scale (1.0, 1.0, 1.0)**, which sets the x, y, and z scale factors to 1.0; B) **Multiple existing scale by factor**, which multiplies each cell's existing

scale factors by the x, y, and z scale settings; and C) **Approximate replaced celll size**, which matches the new cell size as well as possible to the size of the original cell in master units. This may not be exactly the same size, since it also tries to avoid distortion caused by very different x, y, and z sizes and scales.