An Overview of Side-by-Side (SbS)

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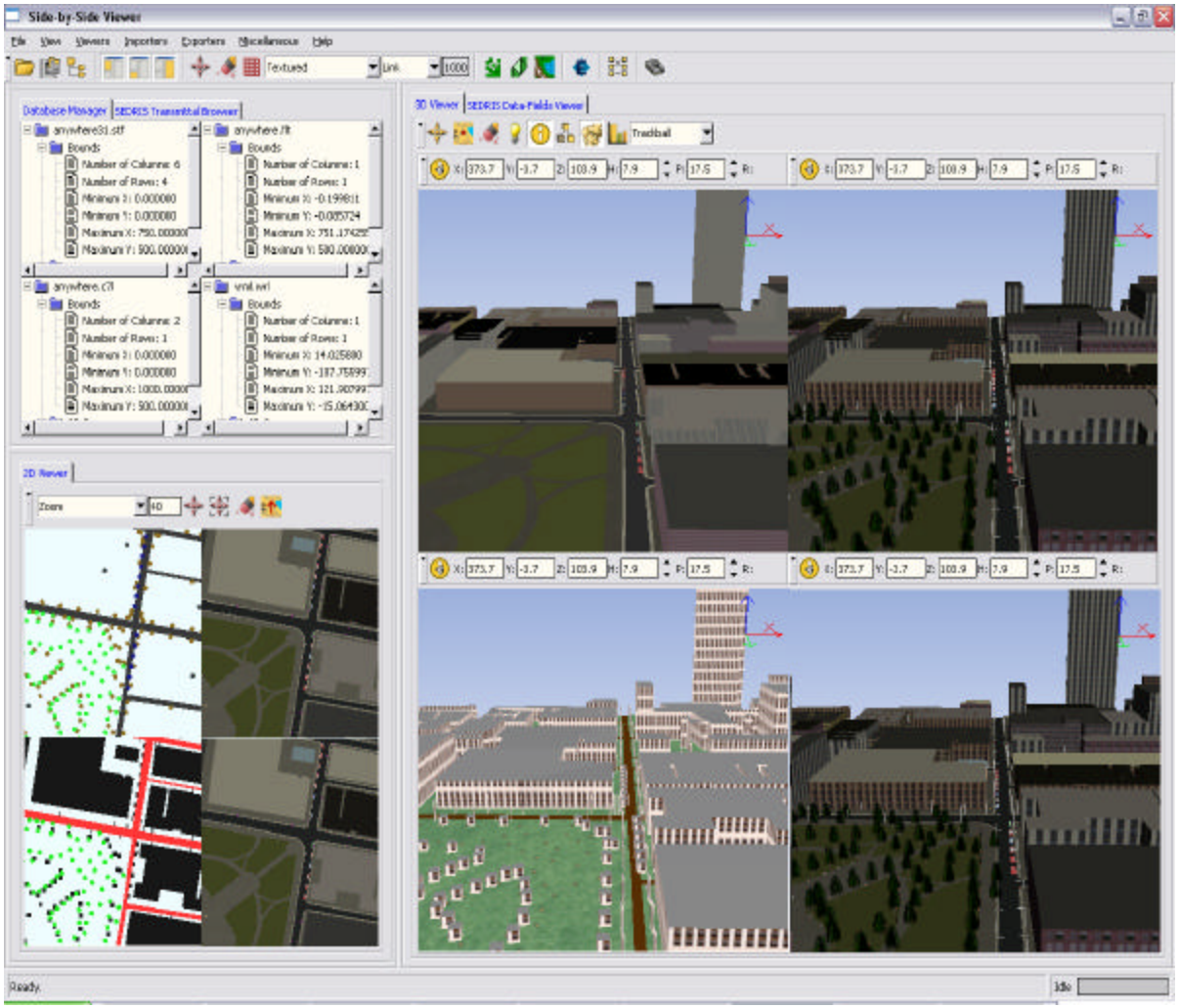
Topics

- What is SbS?
- STF Importing
- CTDB Importing
- OpenFlight Importing
- View Modes
- Rendering Modes
- Conversions

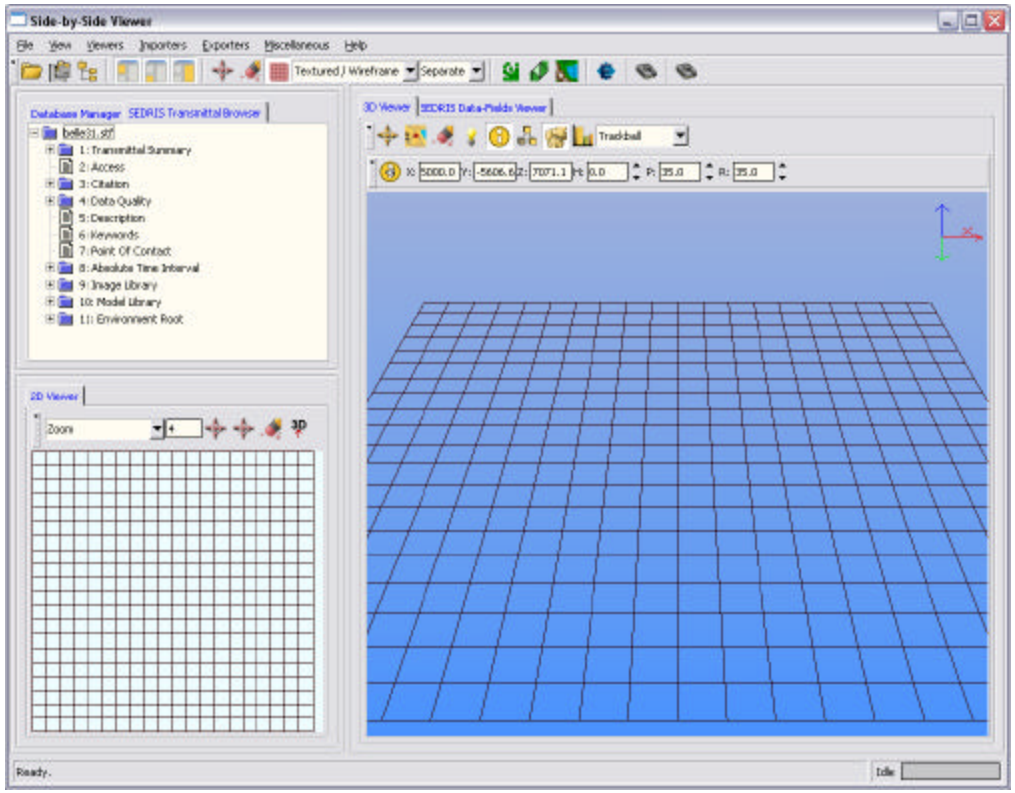
What is SbS?

- Side-by-Side is an application that provides inspection, correlation, intensification and conversion features.
- It can load any number of databases to provide visual comparisons.



STF Importing: Spatial Organization

- When an STF is loaded, the SEDRIS Importer Plug-In will attempt to determine a spatial organization (if that option is enabled).
- It is specifically looking for <Spatial Index Related Geometry/Features>.
- Embedded <SIRG/F> are supported.



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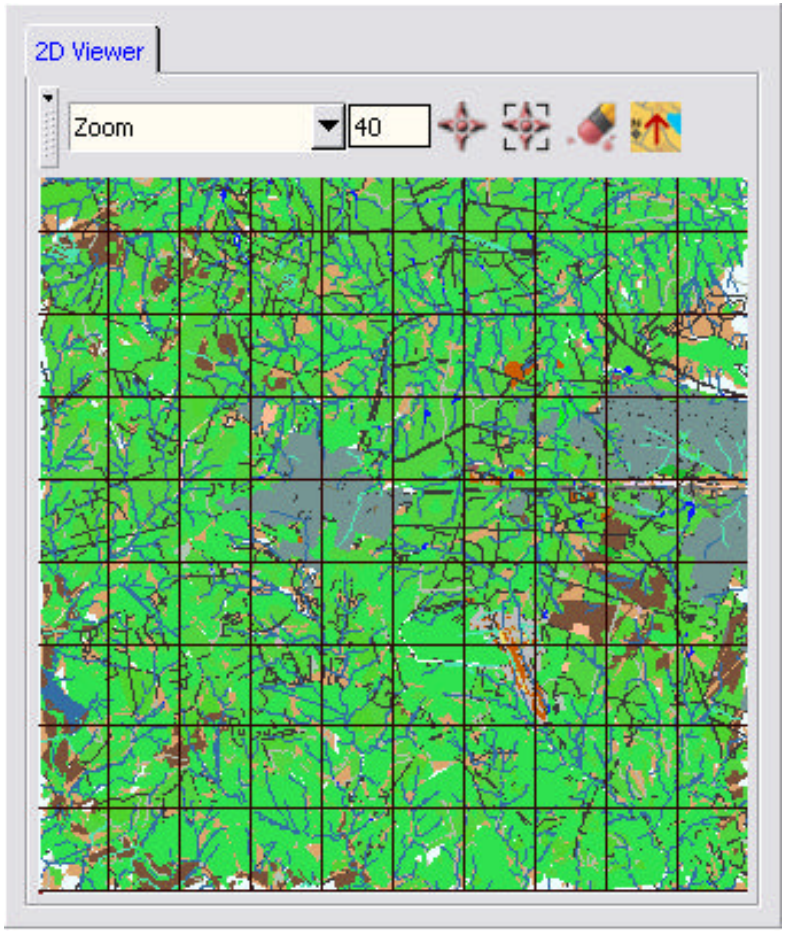
STF Importing: Import Geometry and Features

- From the 2D Viewer, portions of the terrain can be loaded.
- The SEDRIS Feature data (for the area selected) will be rendered in the 2D Viewer, while the SEDRIS Geometry data goes into the 3D Viewer.



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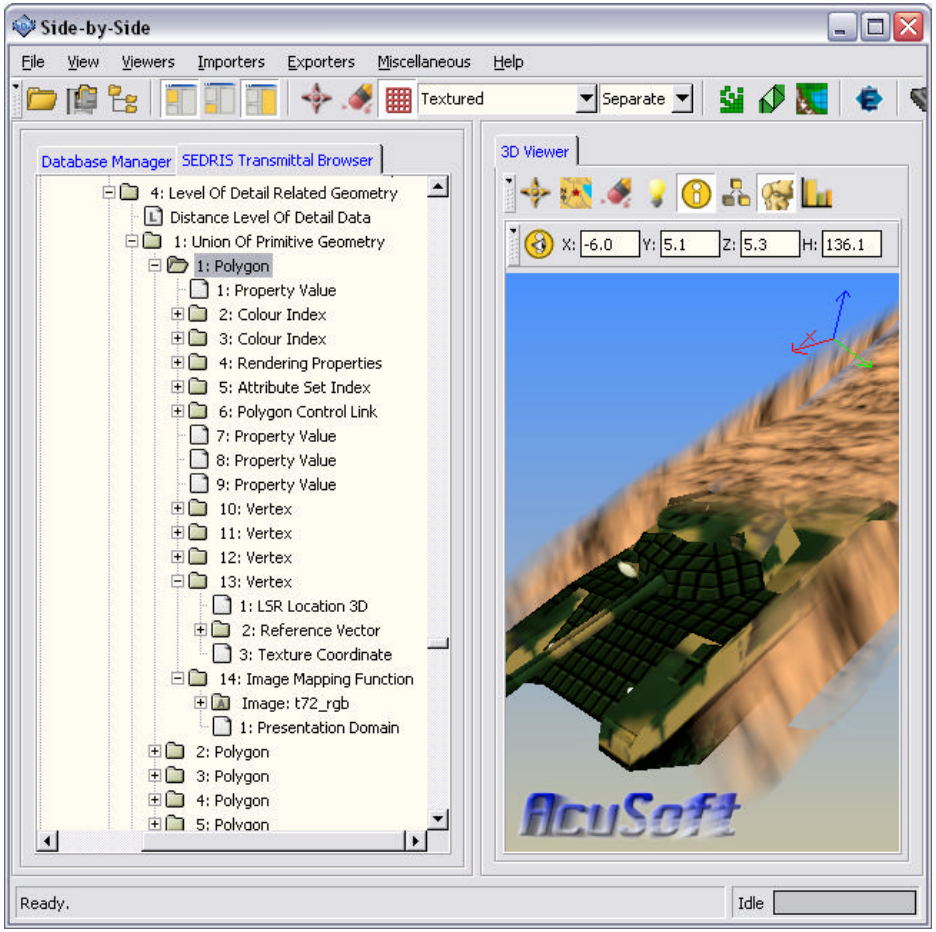
STF Importing: DRM Support

- SbS supports the visualization of STFs with:
  - Polygons
  - Feature Data
  - Animations
  - Light Points (with varying behaviors)
  - Multiple Texture Layers
  - Levels of Detail
  - State Switches (e.g., damage states)



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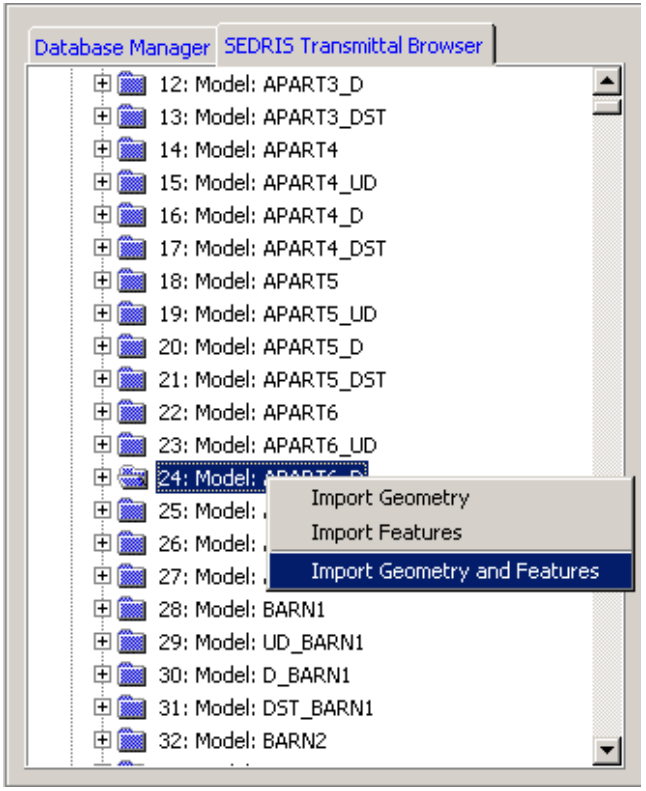
STF Importing: SEDRIS Transmittal Browser

- The SEDRIS Transmittal Browser provides a directory-explorer style hierarchical view of an STF.
- This tree view can be used to browse the contents of the entire STF.



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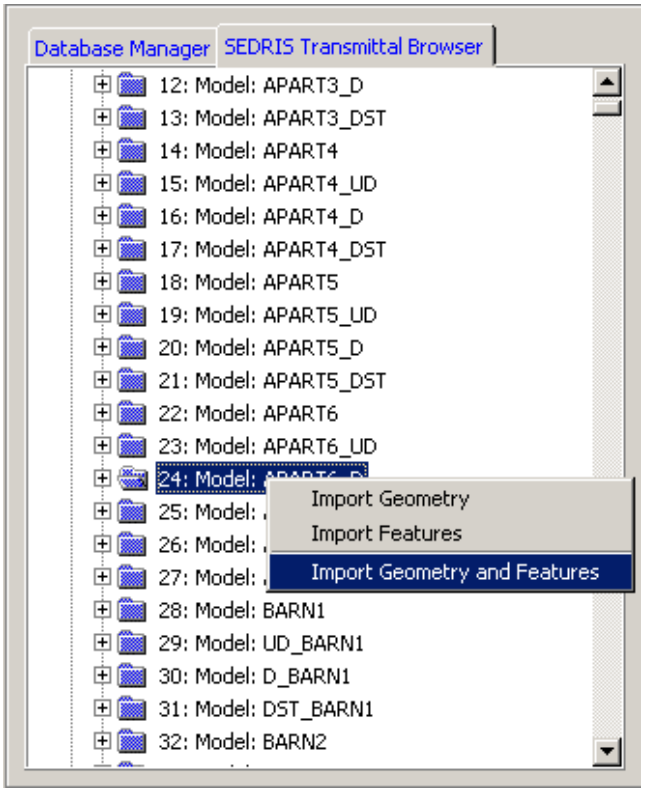
STF Importing: SEDRIS Transmittal Browser

- On any SEDRIS object, one can right click to get a pop-up menu (shown to the right).
- From this pop-up menu, the user can choose to load all of the geometry and/or features from the selected SEDRIS object down.
- The geometry will be loaded into the 3D scene, while features are stored in the 2D scene.
- Multiple Objects can be selected and loaded simultaneously.



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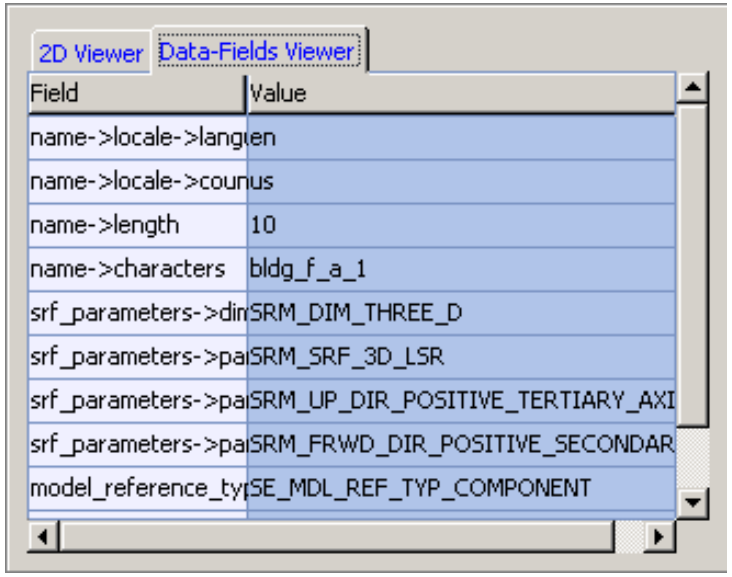
STF Importing: SEDRIS Data-Fields Viewer

- The SEDRIS Data-Fields Viewer displays all the fields of the SEDRIS object that is currently selected in the SEDRIS Transmittal Browser.



STF Importing: SEDRIS Model/Image Dialog

- The Model/Image Dialog provides a simple interface for browsing and viewing SEDRIS models and images.
- If you decide you want to look at a model in one of the main viewers, click “Add to Scene”.

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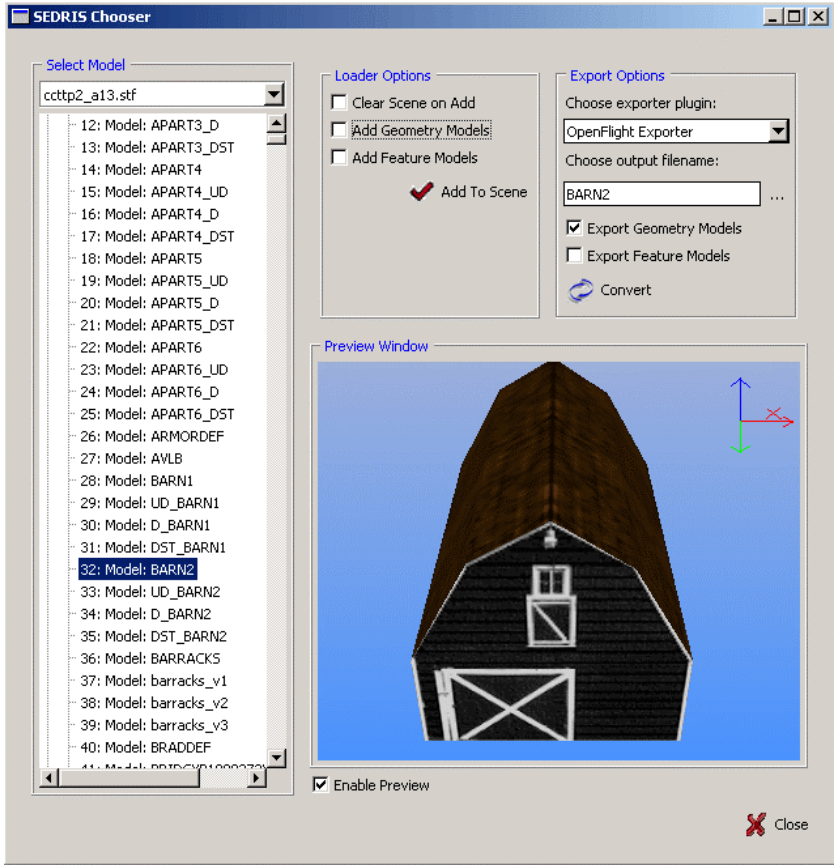
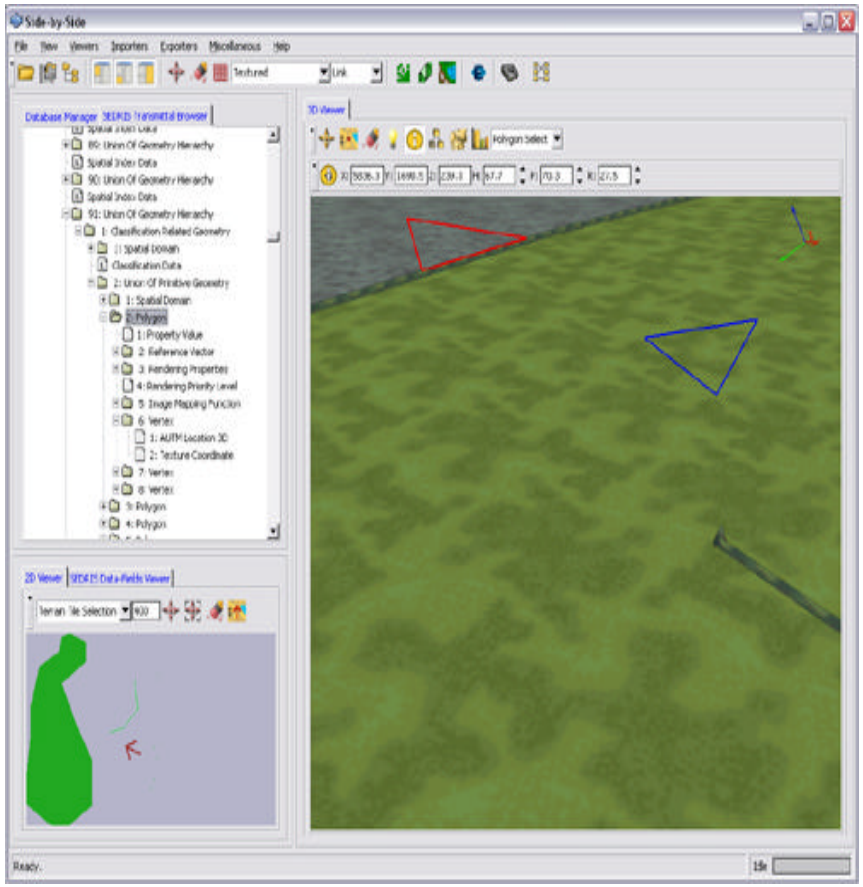


STF Importing: SEDRIS Polygon Selection

- Polygon Selection
  - When a polygon is selected from the 3D Viewer, the corresponding geometry node in the scene-graph will be found in the Database Manager's 3D Scene Tree Hierarchy (see Database Manager section of this presentation).
  - If the polygon being selected comes from SEDRIS, then the SEDRIS <Polygon> will also be found in the SEDRIS Browser Window (see SEDRIS Transmittal Browser section of this presentation).



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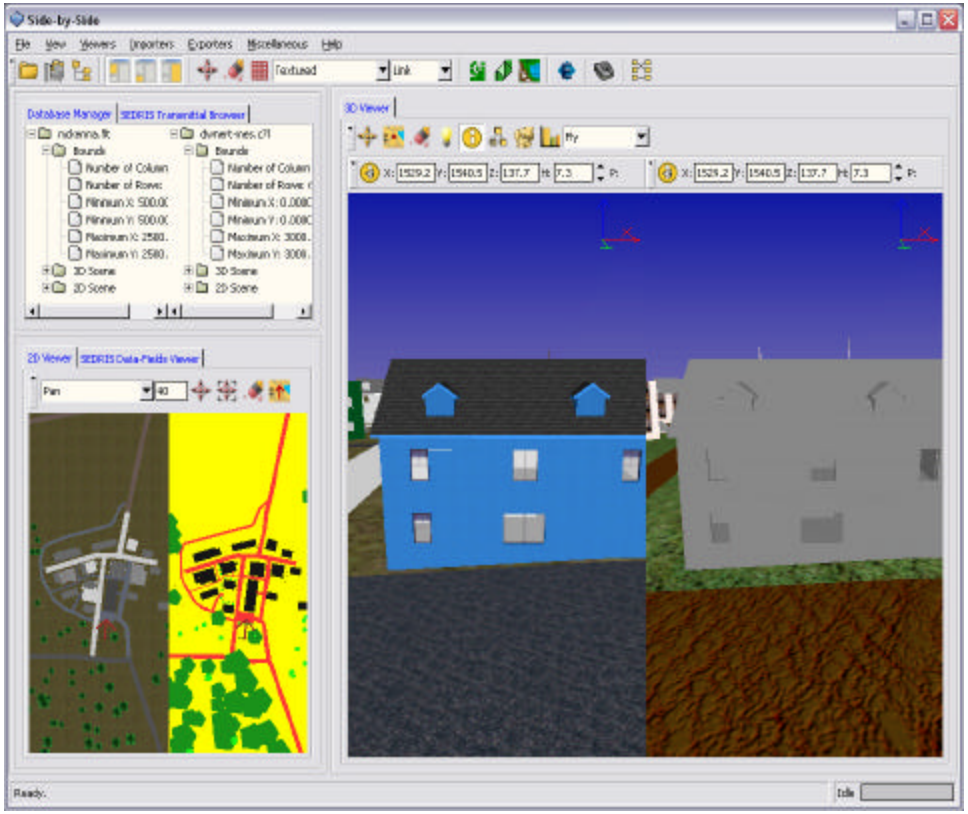
CTDB Importing

- SbS can import the SAF format CTDB.
- From the CTDB feature data, SbS will generate a complete 3D environment.
- It is often useful to compare the CTDB to the corresponding visual database to ensure correlation.



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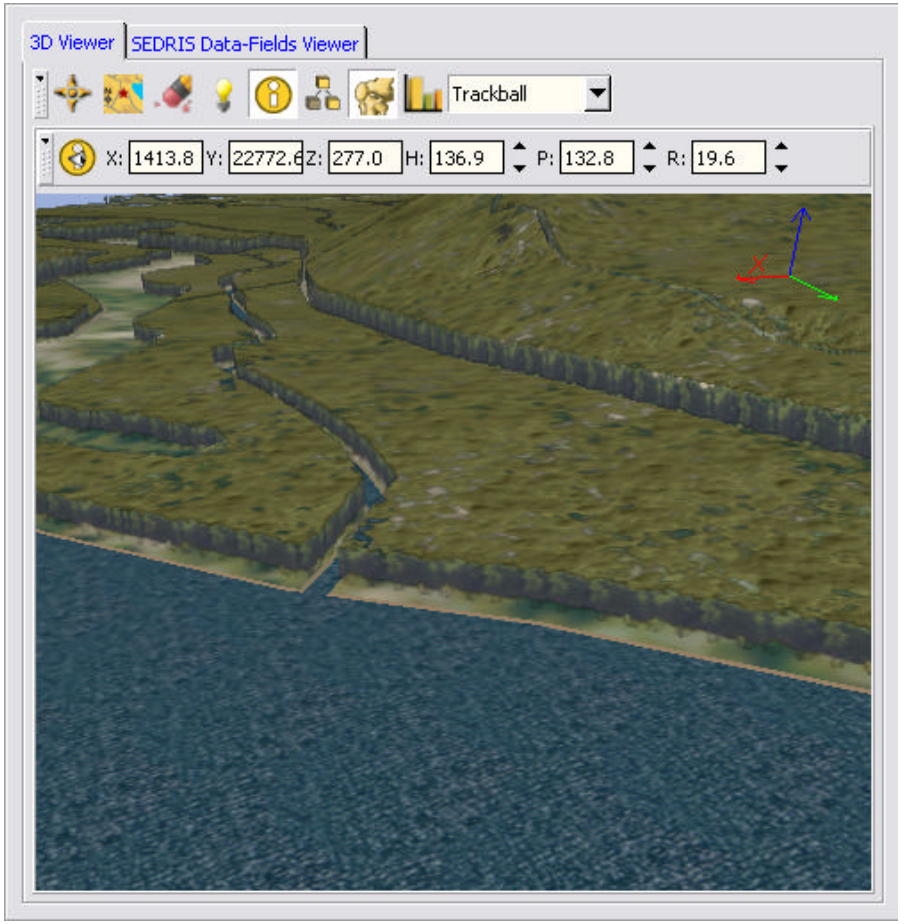
Other Support Formats

- SbS can also import:
  - OpenFlight
  - VRML
  - Performer
- Other formats can be supported through SbS' Plug-in Interface.

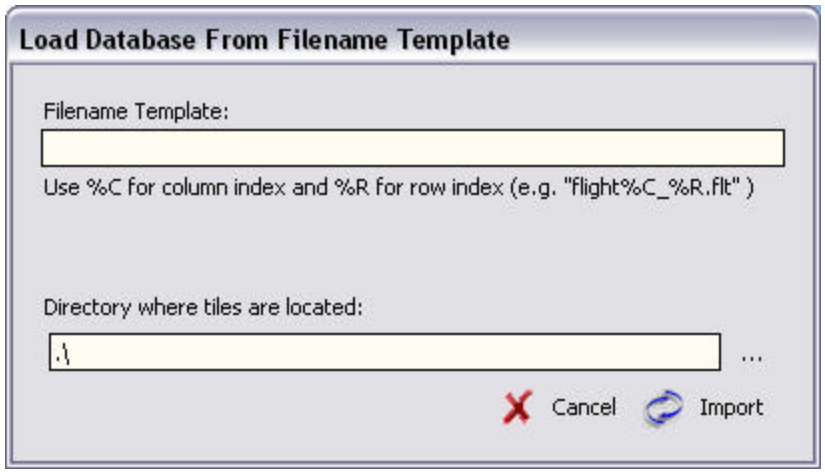


Filename Template Loading

- It is common for data producers to build an OpenFlight database that is broken up into tiles.
- Where each tile is a separate OpenFlight file.
- Often there will be a Master OpenFlight that externally references each of the terrain tiles.
- The problem with loading that Master File is that it may be very time consuming, and rendering performance may suffer.

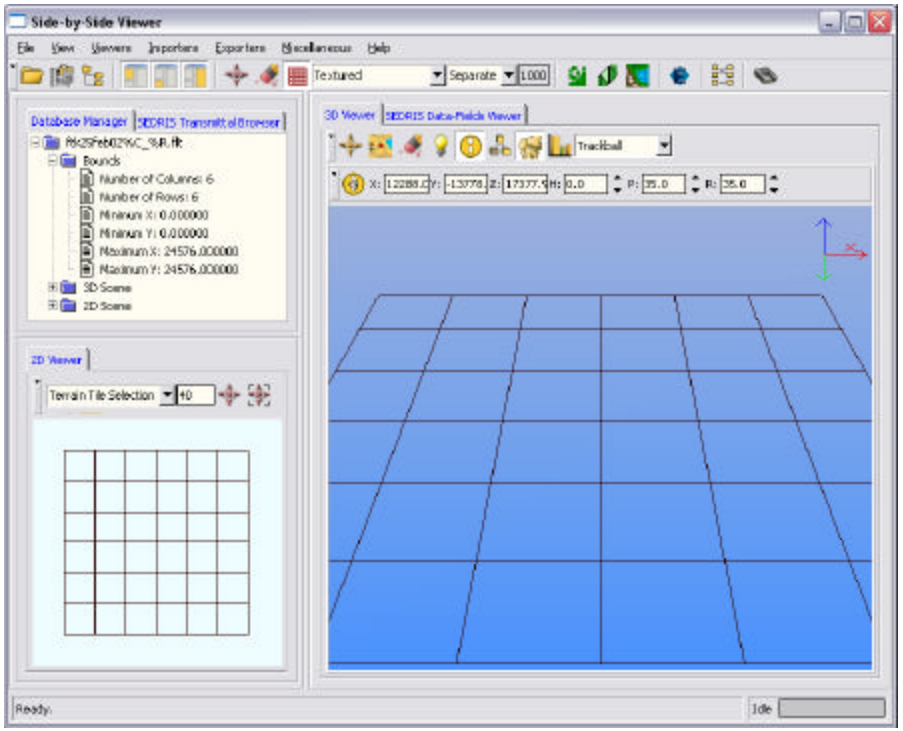
Filename Template Loading

- To deal with this issue, SbS comes equipped with the feature: Filename Template Loading.
- This feature allows you to specify the naming convention of the individual files.
- “%C” is used to indicate where the column index should be in the filename, while “%R” is for the row.
  - E.g. “flight%C-%R.flt”



Filename Template Loading

- SbS will find all of the files that match the format.
- The user can then select which tile (that corresponds to a separate file) to load in the same fashion as tiles are loaded from a CTDB or STF.



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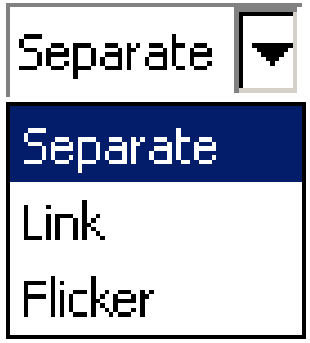
View Modes

- The View Mode is used to control how the views (one corresponding to each open database) should be arranged and behave.
- The modes include:
  - Separate
    - Each view operates independently from all other views.
  - Link
    - All views lock to the same position.
  - Flicker
    - Cycles through each channel giving a single channel all of the window space for a fixed amount of time.
- The View Mode effects both the 3D and 2D Viewers.



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Rendering Modes

- The Rendering Mode is used to specify how the geometry and feature data should be displayed.
- The possible modes include:
  - Solid (no Textures)
  - Textured
  - Wireframe
  - Solid and Overlaid-Wireframe
  - Textured and Overlaid-Wireframe
  - Points
  - Classification Colors
- Classification Coloring will only work for databases that contain classification information (e.g. CTDB and STF).
- Controls the 3D and 2D Viewers

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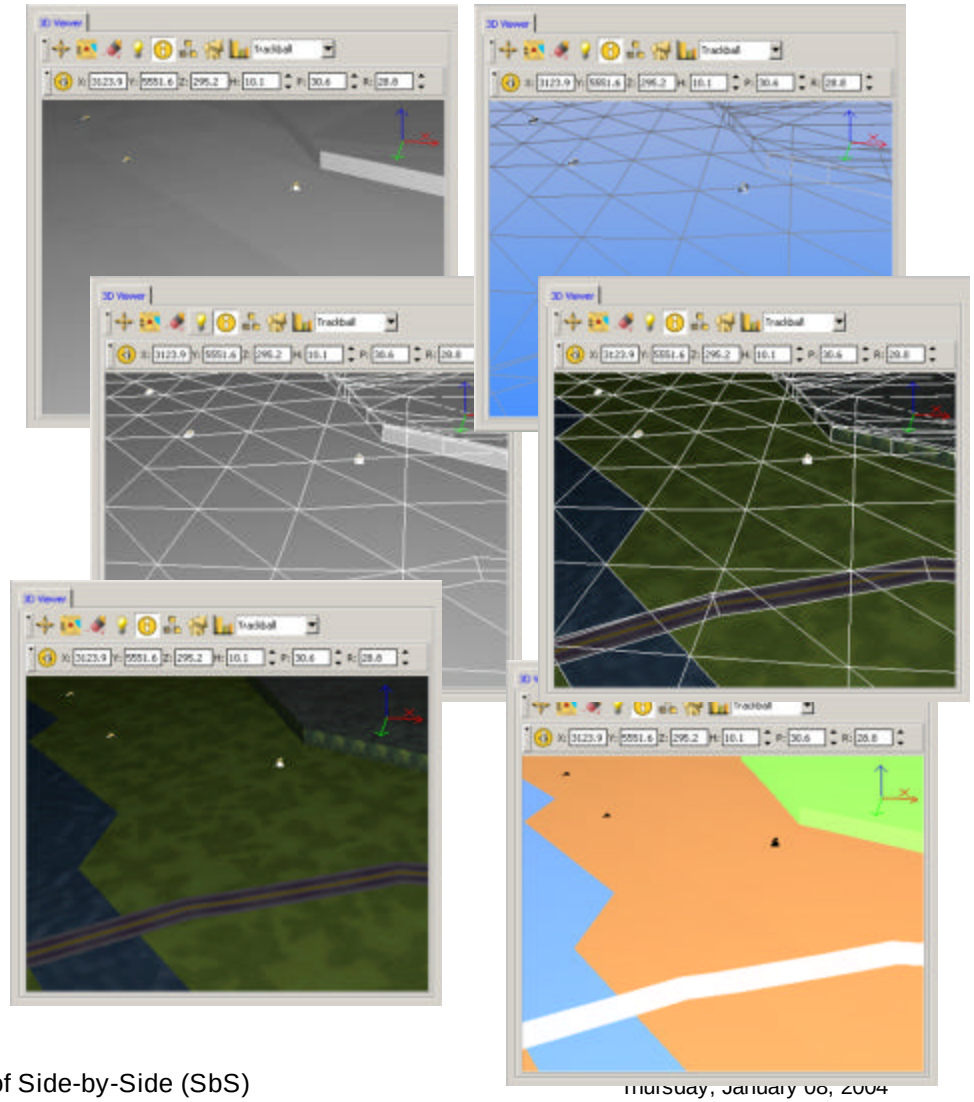
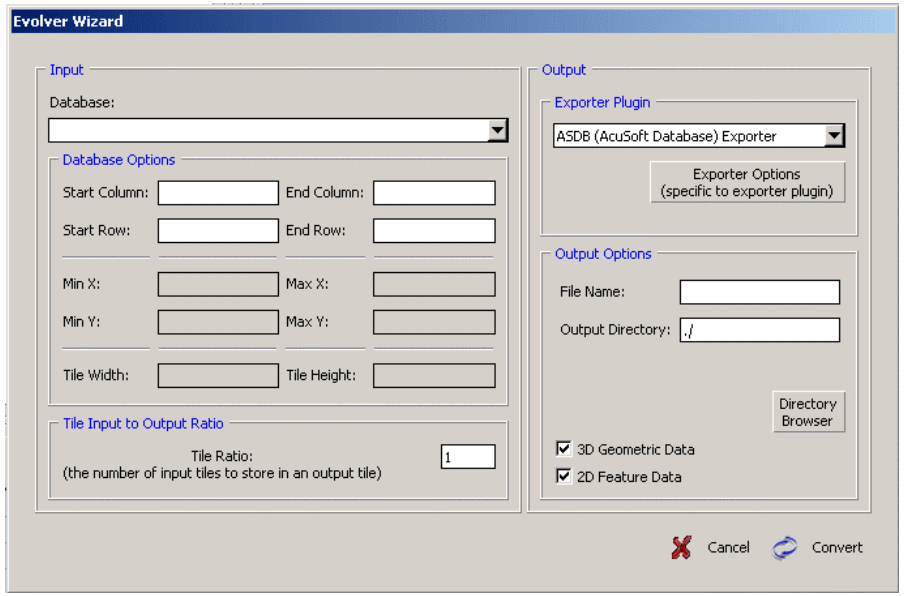


Conversion

- The Evolver Wizard is used to convert a database from one format to another.
- From the “Evolver Wizard Dialog” the user can select:
  - Which database to convert
  - The column and row bounds
  - Tile Input to Output Ratio
    - Used to combine multiple source tiles into a single destination tile.
  - Which Exporter Plug-In to use (see Exporter Section)
  - The destination filename.
  - Whether to convert the 3D and/or 2D tiles.
- SbS can export into OpenFlight or ASDB (AcuScene Database).



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More Information

- SbS can be downloaded from the AcuSoft web-site, www.acusoft.com
- SbS comes with complete documentation on all of its features.
- For questions, please contact sidebyside@acusoft.com.