# Revisions for VISRAD 18.3.0

- Support for Apple's Big Sur operating system has been added:
    - A number of platform-specific upgrades were necessary to ensure the appearance is adequate for a number of user interface features (including menus, combo boxes, and tables).
    - Changes were made to fix a crash that occurred when the color dialog was shown the second time.
- Importing *Laser Beam Pointing Data*: An option has been added to import beam pointing data from a *Custom* csv-formatted file ("csv" = comma-separated values). When importing beam data using the *File | Import Laser Beam Data | Pointing Data* menu item, users now have the option to import either the "Standard" VISRAD csv-formatted file (previously supported) or a "Custom" csv-formatted file.
    - A *Standard* csv-formatted file has the format used when exporting data from the *Laser Beam Summary Table*. In addition to pointing data, it contains beam power and beam spatial profile data.
    - A *Custom* csv-formatted file contains pointing data, which is identified by the column header. Users map the column headers to the *Beam ID*, the *Pointing Position* (*x,y,z* in *Target Chamber* coordinates), and the *Focus Offset*.
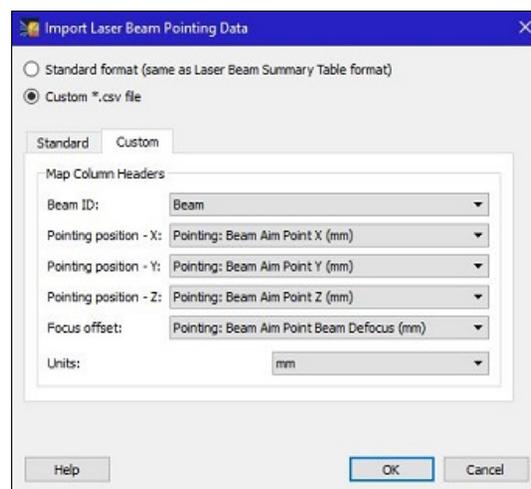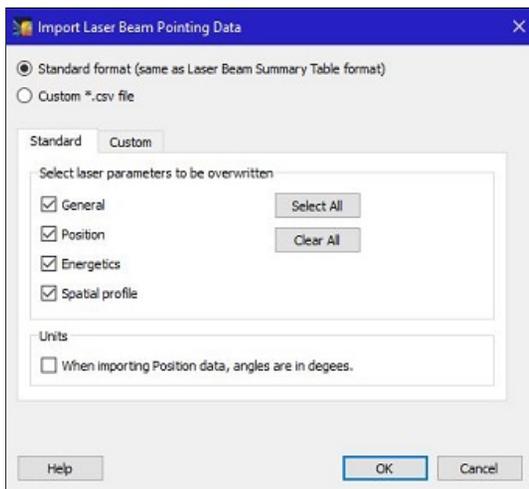
- *Target Components List*: Selected items now saved when the list is updated. In addition, shortcut have been added for the following
    - Ctrl-1: Show
    - Ctrl-2: Hide
    - Ctrl-3: Include in calculations
    - Ctrl-4: Ignore in calculations
- *Lighting Systems* for the OpenGL graphics in the *Main Window* and in the *Target Positioning Viewer* can now be edited (use the *Edit | Lighting System* menu items).
    - *VISRAD*'s lighting systems use up to 8 light sources. The light sources are "directional" (see OpenGL documentation). The direction vector and light source color are editable.
    - In the *Target Positioning Viewer*, the same lighting system parameters are applied to all of the target positioning views.
    - The lighting system parameters are saved to the workspace file so that the visual appearance of the views are maintained.
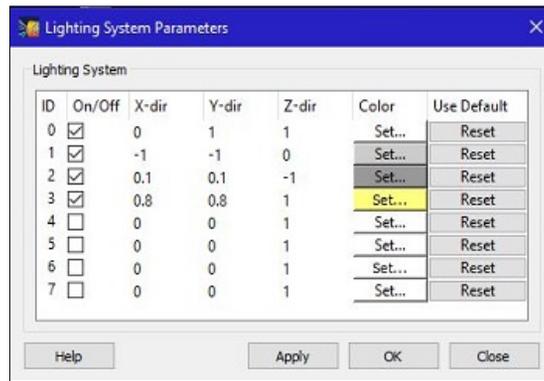
- A CAD file for GEKKO Target Chamber 2 was added to the *VISRAD* distribution (see image below). It can be accessed using the *Chambers | Open Chamber Components Lib* menu item.
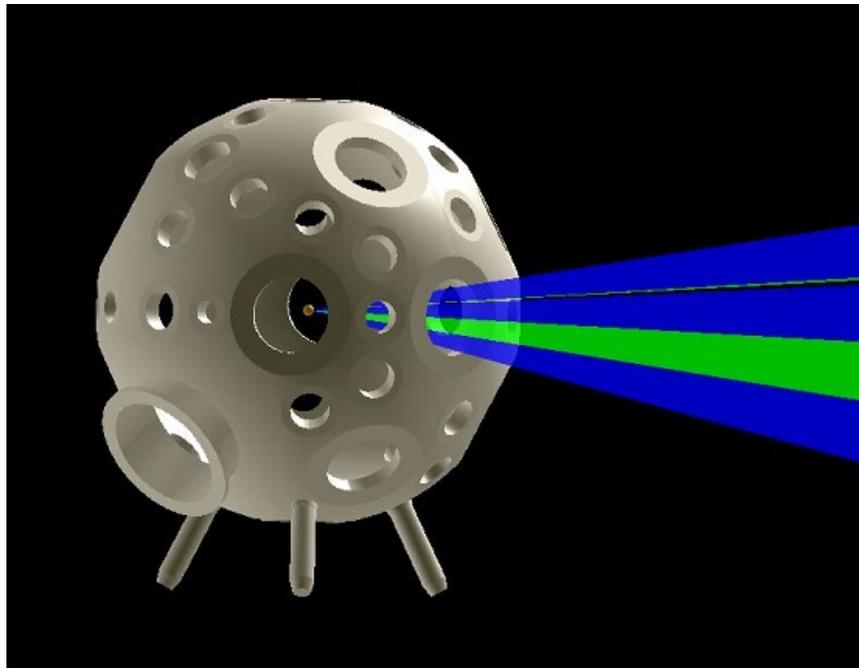
- When exporting *Target Components* to a STP-formatted CAD file, a warning is displayed for non-regular *Polygon* objects and *GENERALIZED MESH* objects. *VISRAD* does not support exporting these object types to STP-formatted files.
- Bug fixes:
  - Fixed crash that occurred when editing, and then canceling, an *Individual Surface Element* on the *Output* tab of the *Simulation Parameters* dialog (displayed used the *Simulations | Configure* menu item).