



## Revisions for VISRAD 14.1.0

- *NIF Laser Beam Spatial Profiles*: New CPP spatial profiles were added to the *VISRAD Phase Plate Library* (shown below).

NIF CPP	HWHM R-major ( $\mu\text{m}$ )	HWHM R-minor ( $\mu\text{m}$ )	Supergaussian $n$
Rev3-Inner-2w	890	660	7.6
1.0 Rev1a-Inner-2w	860	610	8.0
Rev3-Outer-2w	640	370	4.8
Rev1-Outer-2w	620	360	4.5

- *NIF Target Chamber*: When users start up a completely new workspace for the NIF target chamber, a default CPP spatial profile is given for each beam that depends on the ring (cone) in which it resides. The default CPP profiles for each ring are:

NIF CPP	Ring (Cone)
Rev3-Inner-2w	23 and 157
1.0 Rev1a-Inner-2w	30 and 150
Rev3-Outer-2w	44 and 135
Rev1-Outer-2w	50 and 130

- *Target Positioning Viewers*: When adding reticles automatically using the *Add for Beams* button, the treatment of situations where the beam pointings within a given laser beam cluster are not the same has been updated. Instead of displaying a warning that the beam pointings are inconsistent, an additional reticle is added, with the beam name is appended to the cluster name.
- Adding text boxes to *Main Graphics Window*: The tool button for adding text boxes (AI) is now visible in both orthographic and perspective projection modes.
- Bug fixes:
  - Bug associated with showing the color bar overlay in the *Main Graphics Window* (introduced in Ver. 14.0.0) has been fixed. NOTE: if the color bar overlay is not visible in the *Main Graphics Window* after specifying that it be shown, reset the color bar position using the right-click menu (*Graphics Decorators/Labels | Reset Color Bar Position*).
  - Bug associated with accessing *Chamber Components* from the *Chamber Components Library* (introduced in Ver. 14.0.0) has been fixed.
  - The handling of *Surface of Revolution* elements for *Multi-Element Objects* has been improved. Checks made on input parameters no longer result in erroneous warning messages.
  - When picking a surface element in the *Main Graphics Window* for generating surface element output files (📁), or displaying surface element properties (👉), node positions (📍), or target component key point positions (📍), updates were made to better handle cases when inadvertently picking on graphics decorators (e.g., color bars, text boxes).
  - Fixed crash that could occur when moving a combination of target components and their parent folders.
  - A bug occurring when writing selected rows from the *Surface Element Data Table* to a data file (using *File | Save Selected Rows*) has been fixed.
  - A bug occurring when adding a *Custom Laser Beam* to the *PLX* target chamber has been fixed.
  - Fixed problem associated with warning message that sometimes erroneously appeared when performing checks on size/grid parameters for *Multi-Element Objects*.
  - Clipping planes (set using the *Set | Clipping Planes* menu item) no longer hide graphics decorators.