



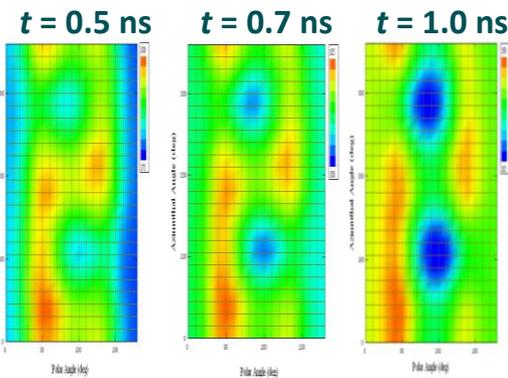
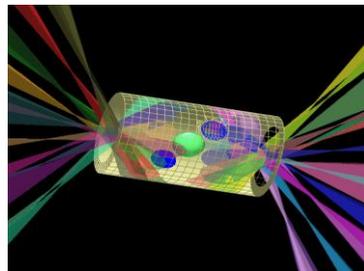
VISRAD, 3-D Target Design and Radiation Simulation Code

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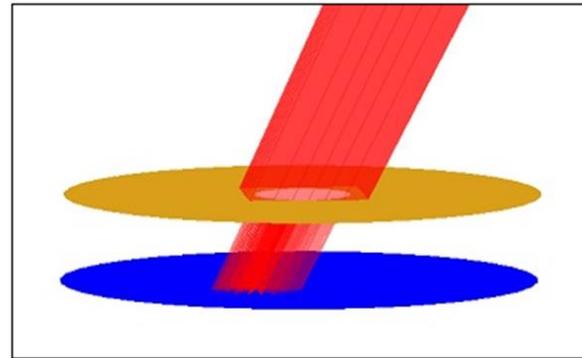
What is VisRad?

- VISRAD is a 3-D thermal radiation and CAD code that simulates the reflection, emission, and absorption of light radiation throughout a complex system of surfaces



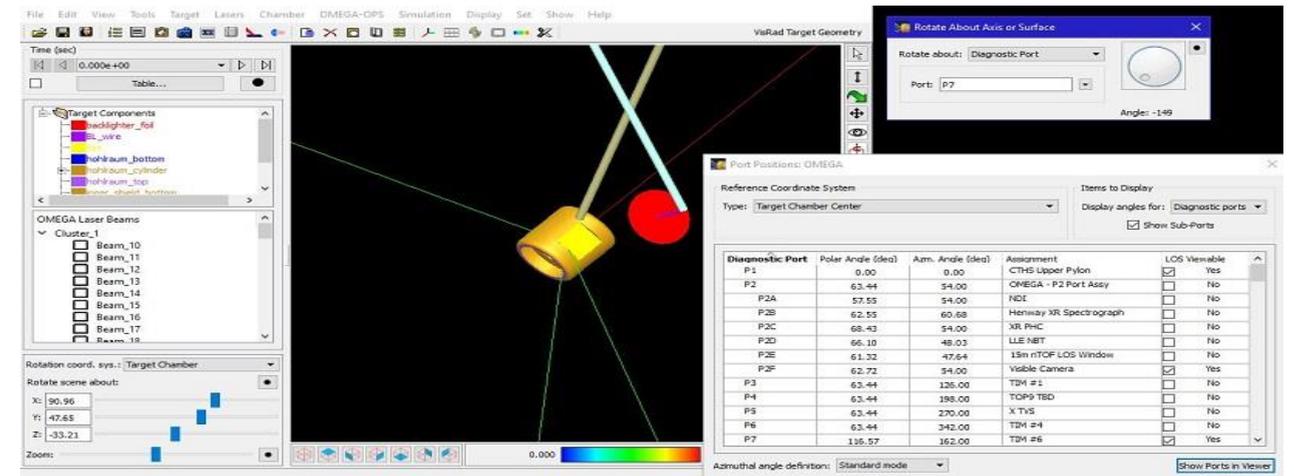
Laser Beam Interiors:

- Support was added to show the interiors of laser beams. When rendering the interior of a laser beam, a series of rays extending from the final optic to each ray's intersection with the target is shown. The grid of rays is the same as that used in computing the laser intensity on the target grid (which is also similar to *Blue Cone Capture* calculations).



Line of Sight Viewing:

- The ability to display lines of sight from *Diagnostic Ports* in the *Main Graphics Frame* has been added. It is also possible to rotate about a line of sight.
- The lines of sight (LOS) for individual *Diagnostic Ports* are set to be viewable in the *Port Positions* dialog.



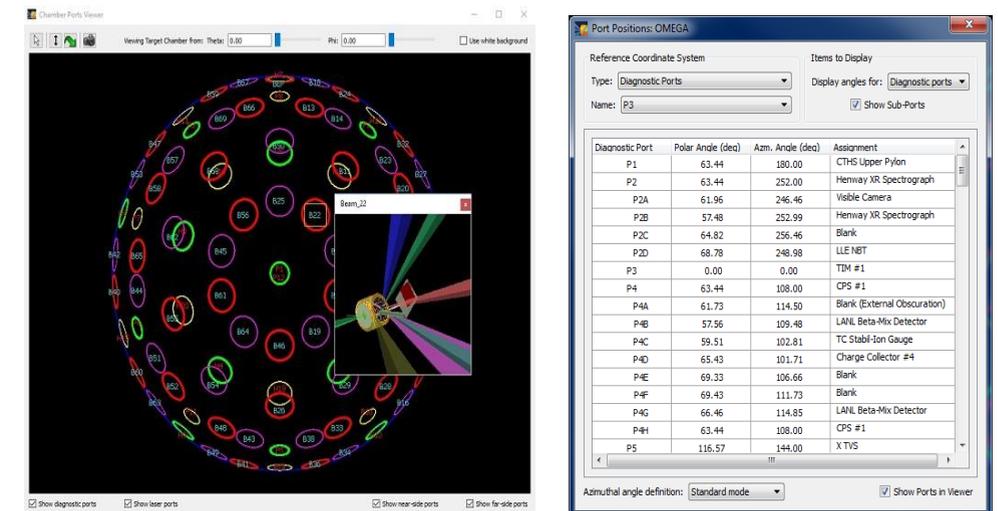
Arc Lasers:

Four ARC beamlets can be added to the NIF laser system in VISRAD

Beamlet	F# (horiz.)	F# (vert.)	Polar Angle (deg)	Azimuthal Angle (deg)	R (turning mirror) (cm)
B353A	63.5	27.2	74.879	202.864	814.0582
B353B	63.5	27.2	74.830	201.528	814.9699
B354A	59.5	25.5	79.882	202.760	752.0928
B354B	59.5	25.5	79.835	201.363	752.9649

Chamber Port Viewer:

- Tool buttons have been added at the top of the viewer to support zooming, rotations, and previewing views from Diagnostic Ports and Laser Beam Ports.



Engineering Views:

- New tools feature that allows for fast and easy previewing of target components along three axis

