Service Pack 1: Release Notes

OpticStudio 15.5 SP1 contains important fixes and enhancements. The Zemax team recommends downloading and using SP1 immediately. Modifications include:

- The Code V to OpticStudio conversion macro has been updated (v1.37) to include the following improvements:

- Added support for CDGM glass catalog conversion.

- Added support to convert aperture decenter commands ADX & ADY.

- Fix to default settings for CIR command conversion.

- The DENC and DENF optimization operands now use an algorithm to determine if sampling is sufficient.

- In an NSC file with source units in Lumens, the photometric power recorded on a detector is now calculated based on the photometric power of each ray that hits the detector. Previously this was done by scaling the total radiometric power that hits the detector with a spectrally-averaged conversion factor.

- Optimization of Biconic and Biconic Zernike surfaces in sequential mode is now done using the X curvature rather than the radius of curvature.

- Results generated in the Incident Angle vs. Image Height analysis are no longer sensitive to the material of the image plane.

- The Skew Gaussian Beam calculation uses separate references for the X and Y beams, allowing for more accurate calculations from off-axis field points.

- Rays generated for the Source Radial object now account for non-zero values of the Minimum Angle input.

- An error causing the TRAI optimization operand to return incorrect values has been fixed.

- An exception to the sequential rule that requires rays to hit surfaces in order, which is invoked when rays become parallel to a dummy surface, has been streamlined to handle more cases.

- An error causing RSS tolerance results to return incorrect values has been fixed. This error could occur when selecting the option "Separate Fields/Configs".

- The following objects may now be selected as detectors in NSC:

- Annular Aspheric Lens

- Annular Axial Lens

- Aspheric Surface 2

- Axicon Surface

- Elliptical Volume

- Biconic Zernike Lens

- Biconic Zernike Surface

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- Grid Sag Lens

- Grid Sag Lens 2

- Grid Sag Surface

- Rectangular Torus Surface

- Rectangular Torus Volume

- Toroidal Hologram

- Toroidal Surface Odd Asphere

- User Defined Object

- An error with the calculation of the power contained in a non-spectral Source File has been corrected. This error occurred for the specific case when the system units are Lumens and the spectrum of the source is not defined via the system wavelengths.

- The pupil position solve now correctly accounts for tilts and decenters in an optical system when the solve is on a surface for which an After Surface coordinate change is specified in the Tilt/Decenter properties for that surface.

- The Ray Aiming algorithm has been improved to treat surfaces with infinite radii of curvature similarly to those with extremely large radii of curvature. It has also been improved to more easily handle surfaces with high order aspheric terms.