4.9.4

Applicable User Manual: v4.9.4

Modifications:

- Added Python custom equations
- Improved convergence of Reimerdes model
- Changed criteria for crater probability computation
- Added craterized groups for total cratered area computation

4.9.3

Applicable User Manual: v4.9.1

Modifications:

- Improved computation of DW with low spacing
- Support negative values in STENVI files

4.9.2P2

Applicable User Manual: v4.9.1

No update

4.9.2P1

Applicable User Manual: v4.9.1

No update

4.9.2

Applicable User Manual: v4.9.1

Modifications:

- Fixed a bug with multiple sei files
- The software is now able to interpolate fluxes between bins. It is therefore possible to use lighter STENVI files.
- Merging walls is performed in equivalent thicknesses instead of equivalent densities

4.9.1

Applicable User Manual: v4.9.1

Modifications:

- Issue about selection in group fixed
- Management of STENVI input files
- Manage the spacing
- Add the possibility to merge walls
- Fix the undersized bumper

4.9.0

Applicable User Manual: v4.8.0

No update has been performed on Debris 4.9.0

4.8.3P1

Applicable User Manual: v4.8.0

Corrections

- Bug fix in the SDS/HDF5 library (h5 close on Windows)

4.8.3

Applicable User Manual: v4.8.0

No update has been performed on Debris 4.8.3.

4.8.0P1

Bug fixed in the modified version of the two walls equation.

4.8.0

Ray tracing algorithm has been optimized. User can now choose the number of rays to be fired on each mesh.

Modified version of the two walls equation can be used to compute penetration on surface behind undersized bumper.

Impenetrable surfaces have been added.

4.7.1

Minor bug fixed in the multiple wall equations.

4.7.0

First DEBRIS V4 commercial release

The Debris V4 software is a new module.

The main features of Debris V4 are:

- Computation of the numbers of direct impacts, penetrations, craters and associated probabilities of no occurrence on a spacecraft geometry encountering a particle environment.
- Debris environment is loaded from STENVI files.
- 3D modelling of the spacecraft.
- Two meshing libraries are available: by length or by number of cells.
- It is possible to define several kind of behaviour for the elements: structure, equipment, shadowing.
- Generic form of “Ballistic Limit Equations” allowing the user to set its parameters.
- Backward raytracing allowing fast computations.
- Numbers of direct impacts, penetrations and craters can be visualized in a 3D view.
- The flux of penetrations is computed on the applied mesh and can be integrated on user-defined groups. This allows computing a Probability of No Penetration on the selected groups.