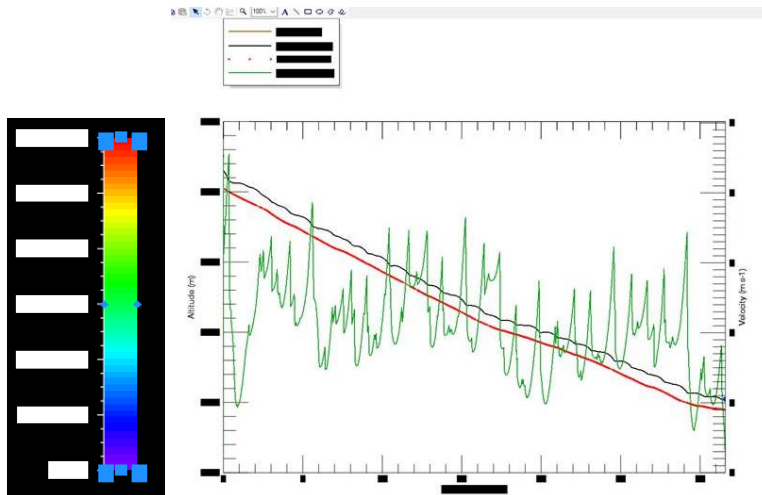


RAMMS::ROCKFALL CHANGELOG

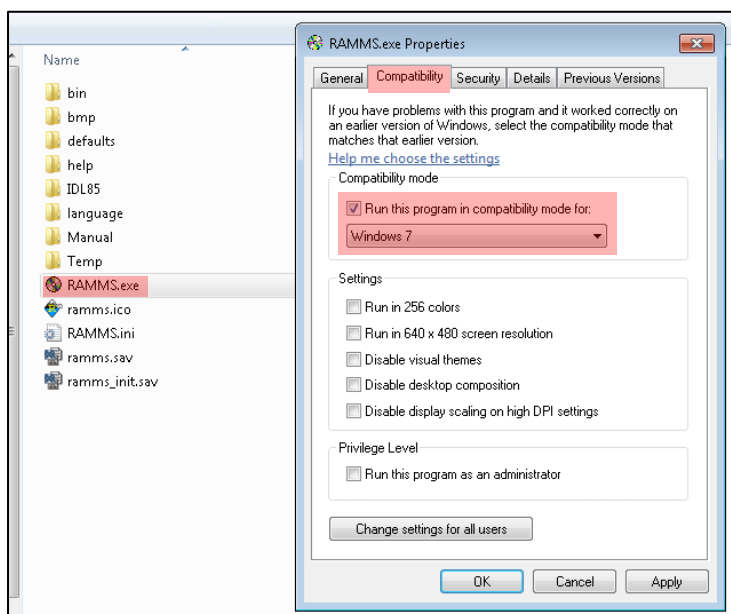
v 1.6.70 [2018-03-30]

- **Bugfix: Colorbar and Plot Problem** → we realized that this is a IDL problem with Windows 10. Many users complained about not seeing numbers and text from colorbars and plots.



You can fix this by running RAMMS in "Windows 7 Compatibility Mode". Please do the following:

- Exit RAMMS
- open Windows Explorer and navigate to your RAMMS installation folder.
- right-click on **RAMMS.exe**
- choose the tab **Compatibility**
- select the checkbox **"Run this program in compatibility mode for:"**
- choose **Windows 7** from the dropdown menu
- and then click Apply and OK.
- Restart RAMMS. All your plots and colorbars should be ok now.



- **Improvement: Shapefile Holes** → small improvement.

V 1.6.61 [2017-09-29]

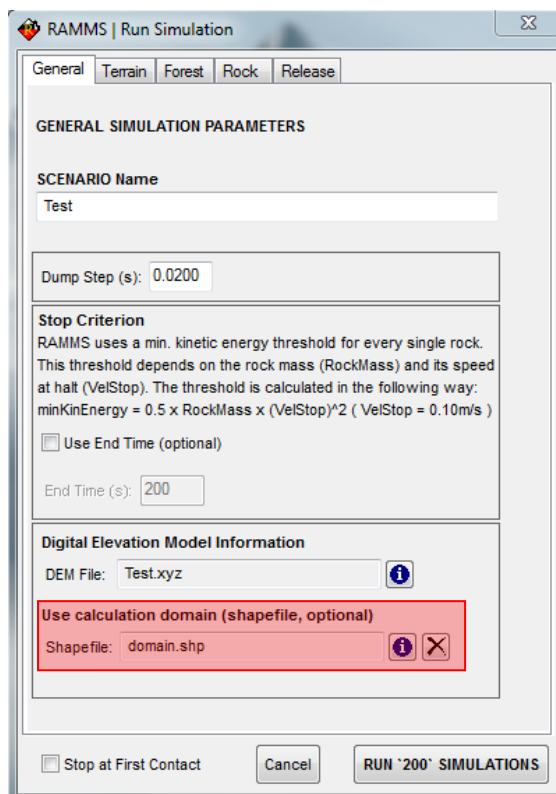
- Bugfix: **Polyline Shapefile** → A small issue from the last update. Resolved.

V 1.6.60 [2017-09-28]

- Bugfix: **Polyline Shapefile** → Due to a small bug, some polyline shapefiles (created in a GIS software) could not be used as release polyline shapefiles. Resolved.

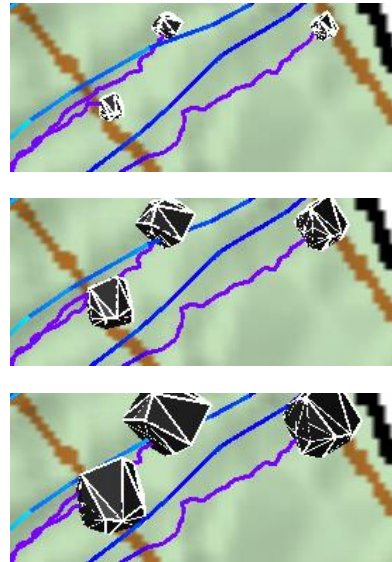
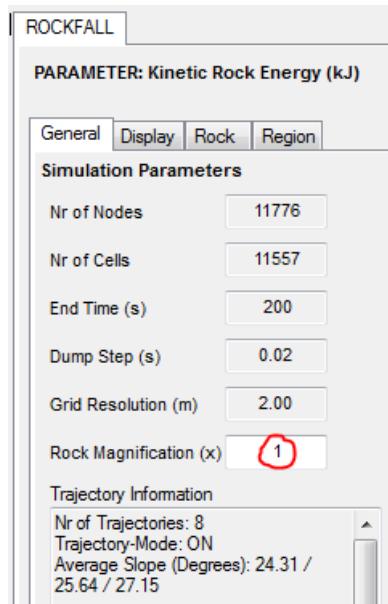
V 1.6.58 [2017-08-12]

- Bugfix: **Rock Magnification** → when specifying 0 (zero) as rock magnification, RAMMS crashed. Resolved.
- Bugfix: **Shapefile Holes** → Holes in release shapefiles were not accounted for until now. Resolved.
- Bugfix: RAMMS crashed when trying to open complicated polygon shapefiles. Resolved.
- Improvement: When using large DEM's with large polygon shapefile, the preparation of a scenario could take a very long time. Procedure improved. Preparation time in seconds.
- New Feature: All the scenario start positions are written into a point shapefile named `<scenario_name>_StartPositions.shp`.
- New Feature: Calculation Domain → to improve the calculation speed, we implemented the possibility to specify a polygon shapefile as a "calculation domain", similar to the avalanche and debrisflow modules of RAMMS.

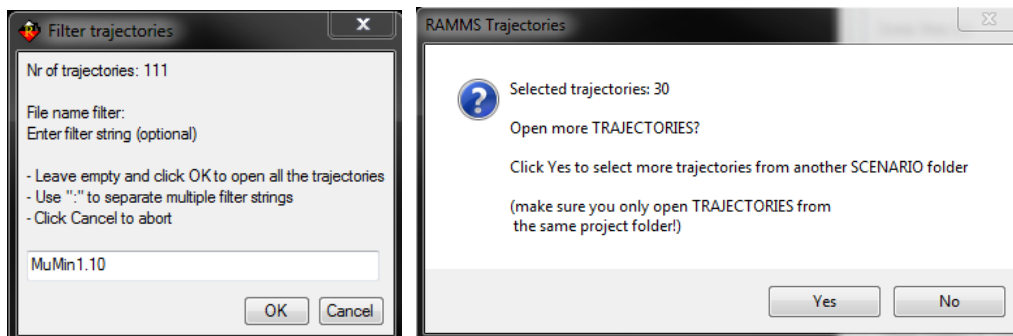


V 1.6.55 [2016-06-29]

- **Improvement:** Performance gain reading large scenarios in statistic mode → after a successful scenario calculation, RAMMS saves the information of all scenario-trajectories on disc in the scenario folder. When reopening the scenario in statistic mode, RAMMS can restore this information, resulting in a much faster opening of the scenario.
- **New Feature:** Rock magnification → in trajectory mode, the size of the rocks can be changed dynamically.

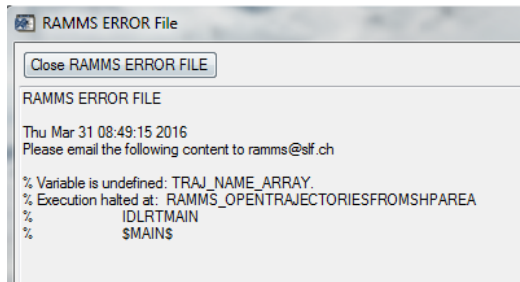


- **New Feature:** Open trajectories → it's possible to filter the trajectories (same as with scenarios) as well as open trajectories from different scenario folders (within the same project).



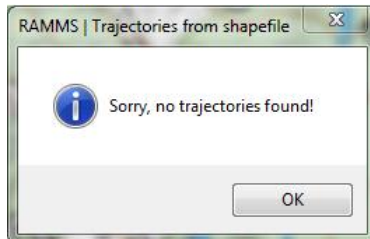
v 1.6.52 [2016-03-31]

- **Bugfix:** Extras → Open Trajectories from Shapefile: Selecting a shapefile where no trajectories pass resulted in this error message:



Resolved.


RAMMS displays this window in case of no trajectories:

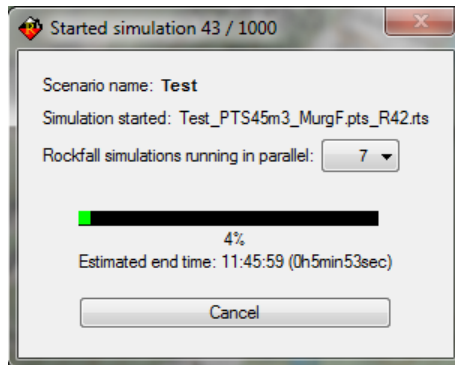


V 1.6.51 [2016-03-16]

- **Bugfix:** Update 1.6.50 introduced a small bug when selecting trajectories in *Trajectory Mode*. Name and details of trajectory were not updated. Resolved.
- **Bugfix:** After selecting a trajectory in *Trajectory Mode*, it could happen that the values of the main time slider changed from seconds to centiseconds (but not the unit). Resolved.
- **Bugfix:** Holes in shapefiles: If the holes of a shapefile lie outside of the project region, RAMMS cannot process the shapefile. Resolved.

V 1.6.50 [2016-03-09]

- **Bugfix:** The automatically saved shapefile `<Scenario-Name>_Trajectories.shp` (containing all the trajectories as polyline shapefiles) sometimes did not contain all contact points (resulting in wrong trajectory paths): Resolved.
- **Bugfix:** Error "ramms_rock.exe stopped working" resolved.
- **Bugfix:** Error "Variable is undefined: WBAD." resolved.
- **Bugfix:** Error "WIDGET_CONTROL: Illegal keyword value for SCR_XSIZE" resolved.
- **Improvement:** New button 'Open Rockfall Trajectories'  in horizontal toolbar.
- **Improvement:** new style of run calculation window. Nr of running simulations in parallel can be changed dynamically! Started simulation name and scenario name are indicated. Estimated end time as well as duration are indicated.

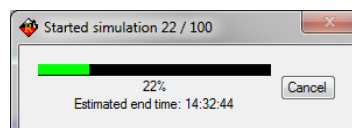


- **New Feature:** *Extras* → *Open Trajectories from Shapefile*: Select a shapefile in *Statistic Mode*, and all the trajectories passing or stopping in the shapefile are opened.
- **Improvement:** *Trajectory Data Log File* did not show units of parameters: resolved.
- **Improvement:** Holes within shapefiles were not handled correctly: resolved.
- **New Feature:** *Barrier Plot* shows nr of passing trajectories (Traj.) as well as nr of stopped rocks (Stopped) within barrier polygon or line profile shapefiles.

Barrier - Statistics Summary:	
Parameter: Jump Height (m)	Scenario: Engi
Min / Max: 1.62 / 10.46	Polygon: Test.shp
Mean / Median: 3.48 / 3.11	Traj./Stopped: 26/13
Std Dev: 1.23	Nr of Data Values: 786
Q1 / Q3 / IQR: 2.58 / 4.16 / 1.58	Histogram Bin Size: 0.33
Q90 / Q95 / Q99: 5.42 / 5.91 / 6.87	

V 1.6.43 [2015-06-19]

- **Improvement:** Performance of gathering model input data and preparation of input scenario improved. Finding release points within a release area benefits also from this improvement, see V 1.6.41.
- **Improvement:** Scenario-Calculation could not be cancelled easily. A new progress window was implemented, showing also the estimated end time of the calculation.

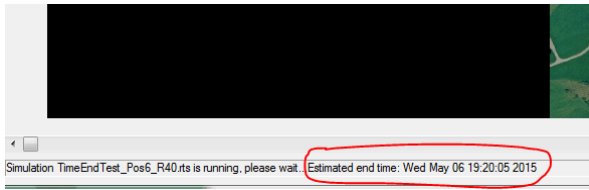


- **Bugfix:** Filename-Attribute of the automatically generated 'Trajectories.shp' shapefile sometimes did not show the full filename. Resolved.

V 1.6.41 [2015-05-27]

- **Improvement:** Procedure to find release points within polygon release areas improved. For huge release areas this procedure can still be time consuming. In a later release, this procedure will be further improved.
- **Improvement:** Manual included and available from the download section of ramms.slf.ch

- **New Feature:** During a simulation, an estimated end time is displayed in the lower left status bar, see picture below.



V 1.6.40 [2015-04-17]

- Official release of RAMMS::ROCKFALL Module
- Manual not yet available
- Web page at <http://ramms.slf.ch>
- Email: ramms@slf.ch