

## PrismSPECT 7.1.0

- PrismSPECT now allows initialization of time-dependent calculations with a population file that does not contain information for population grouping (e.g. if population and spectral grouping models in atm file are the same)
- In the simulations with tabulated lineshapes, a more consistent treatment of merging with Voigt wings is implemented for the photon energies that are outside of the tabulated range within a given transition. Small changes in calculated opacities in the far wings of the lines can be expected.
- Added support for new \*.atm file format produced with Atomic Model Builder 3.1.0 or greater.
- All graphics windows have been updated to use new Prism plot library.
- For time-dependent simulations, an option to generate streaked spectra is added to the main window.
- Bug fixes:
  - In rare cases, Stewart-Pyatt and Ecker-Kroll continuum lowering models could produce unphysical simulation results. This problem has been fixed.
  - Sporadic ordering of spectral component line plots in legend is no longer an issue. Now, the ions are always displayed in order of ionization levels (even when showing Nth most abundant), and elements are displayed in order of atomic numbers.
  - PrismSPECT no longer crashes for time-dependent zero-width calculations that use steady-state solver option.
  - A potential crash in calculations that use a combination of a simple atomic model with the "Treat implicit multiply excited state transitions in detail" checkbox checked is now prevented.
  - Possible inconsistencies with spectral component calculations have been fixed.
  - *Line Intensity Viewer*: Fixed bug that can cause crash when, while adding a new *Line* or *Band*, performing operations in the *Lines/Bands List* if the new *Line* or *Band* has not been saved.