































































- ▼  atmosphere.py
- ▼  atmosphere
 -  *Initialization Methods*
 - ▶  `__init__`
 - ▶  `initAtmosphereModel`
 - ▶  `readInAbunLUT`
 - ▶  `readMoleculesProperties`
 - ▶  `read_CIA_LUT`
 - ▶  `read_Mie_LUT`
 - ▶  `readCarmaFile`
 - ▶  `prepare_1D_CrossSecLUT`
 -  *Run Model Methods*
 - ▶  `runModel`
 - ▶  `calcAtmosphere`
 - ▶  `createRunName`
 -  *Physical Modeling (highest level)*
 - ▶  `calcHydroEqui`
 - ▶  `calcTpProfile`
 - ▶  `calcComposition`
 - ▶  `InterpFromChemEquiGridLUT`
 -  *Opacities*
 - ▶  `calcOpacities`
 - ▶  `interpCrossSec`
 - ▶  `calcCIA`
 - ▶  `calcRayleighScat`
 - ▶  `calcMie`
 -  *Calculate planetary spectra*
 - ▶  `calcTransitSpectrum`
 - ▶  `calcEmissionSpectrum`
 - ▶  `calcRefISpectrum`
 -  *Scattering and Self-Consistent Tp Profiles*
 - ▶  `multiScatToon`
 - ▶  `calcJ`
 - ▶  `CP`
 - ▶  `CM`
 - ▶  `TDMA solver`
 -  *Saving/Loading Methods*
 - ▶  `save`
 - ▶  `load`
 - ▶  `saveSpectrum`






Plotting Methods

- ▶  plotSpectrum
- ▶  plotSpectraByMol
- ▶  plotThermalMuObs
-  makeStruc
- ▶  plotTp
- ▶  plotComp
- ▶  plotMixRatio
- ▶  plotBB
- ▶  plotCarmaCloud
- ▶  plotOpacity
- ▶  plotOpacityAtWave
- ▶  plotOpacityContributions

Instrument Response

- ▶  prepInstrResp
- ▶  instrResp
- ▶  simulateObs
-  averageThermalWithBBcolumn
- ▶  calcSecEclppm
- ▶  nPhotPerSecM2
-  convertUncertaintyToThermal
-  convertSecEclppmToThermal
-  thermalPhot
-  niriss



Instrument Plotting Routines

- ▶  plotInstrTrans
- ▶  plot_dmodeldT_instr
- ▶  plot_dmodeldT_model
- ▶  totalOutgoingFlux
- ▶  scaleThermalToTeq

Helper functions

- ▶  calcMolInd



- ▶  spectrum2instr
- ▶  calcNewRadiusToMatchDppms