

The Yonsei-Yale Isochrones and the Stellar Evolutionary Tracks

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The YY group has recently released their updated isochrones (Yi et al. 2001; Kim et al. 2002). These isochrones have been tested against many high-quality observational data and proved reasonably accurate. Besides such successes, their wide coverage in metallicity and age, which is useful to population synthesis studies, triggered many requests for the corresponding stellar evolutionary tracks. Thus, we provide a database of the latest stellar models of the Yonsei-Yale collaboration. This database contains the stellar evolutionary tracks from the pre-main-sequence birthline to the helium core flash that were used to construct the YY isochrones. We also provide simple interpolation routines that generate isochrones for given set of parameters (metallicity, age, and alpha element enhancement factor), and stellar tracks for given sets of metallicity, mass, and alpha-enhancement.