Geneva Model

To find the data the link is:

https://www.unige.ch/sciences/astro/evolution/fr/recherche/geneva-grids-stellar-evolutionmodels/

In the webpage, we can see grids of Geneva's Stellar Evolution Models, when the simulation will be finished we can add the rotation but it is better to start with the basic:

Grids of Geneva's Stellar Evolution Models

The available grids are summarized in the table below. The data can be extracted under the column Grid, which points to the CDS data center in Strasbourg. The publications related to each grid can be found under the column Paper. They do NOT include the data tables, except for Schaller et al. 1992.

Grid	Z	Х	Υ	Mass loss	Paper	Notes
PMS	0.001, 0.02	Pre-Ma	ain Sequ	ence	Bernasconi & Maeder 1996, Bernasconi 1996	Canonical and accretion scenarios available
I	0.001	0.756	0.243	standard	Schaller et al. 1992	
I	0.020	0.680	0.300	standard	Schaller et al. 1992	
II	800.0	0.728	0.264	standard	Schaerer et al. 1993	
Ш	0.004	0.744	0.252	standard	Charbonnel et al. 1993	
IV	0.040	0.620	0.340	standard	Schaerer et al. 1993	
V	0.001->0.04			${\scriptstyle 2\times standard}$	Meynet et al. 1994	M >= 12 Msun
VI	0.001, 0.02	Horizo	ntal Bra	nch	Charbonnel et al. 1996	o.8 <= M/Msun <= 1.7
VII	0.100	0.420	0.480	standard	Mowlavi et al. 1998	
VIII	0.001, 0.02	Low-m	ass star	'S	Charbonnel et al. 1998	0.4 <= M/Msun <= 1.0
CoStar	Combined inte stars)	erior + a	tmosph	ere (massive	Schaerer et al. 1996a, Schaerer et al. 1996b, Schaerer 1996	spectra predictions

-I took the PMS VIII.

For that one need to click on the paper and we are redirected to this page:

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Grids of stellar models. VIII. From 0.4 to 1.0 $\{M_{sun}\}$ at Z=0.020 and Z=0.001, with the MHD equation of state

Authors: Affiliation:

Charbonnel, C.; Däppen, W.; Schaerer, D.; Bernasconi, P. A.; Maeder, A.; Meynet, G.; Mowlavi, N.

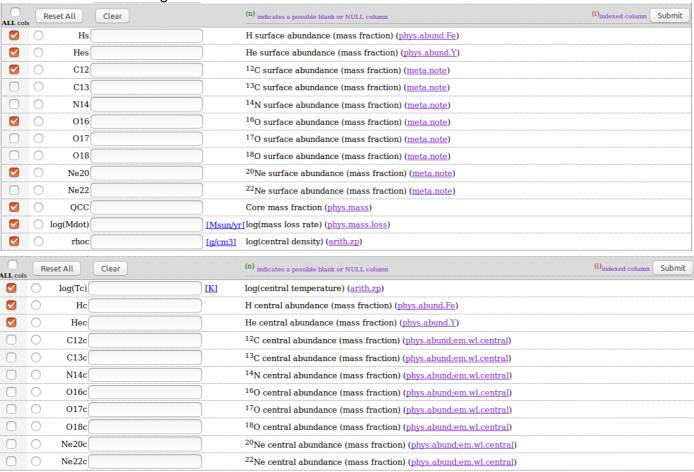
AA(Laboratoire d'Astrophysique de Toulouse, CNRS UMR 5572, 14 Av. E. Belin, 31400 Toulouse, France; Space Telescope Science
Institute, 3700 San Martin Drive, Baltimore, MD 21218, USA), AB(Department of Physics and Astronomy, University of Southern California, Los Angeles, CA 90089-1342, USA), AC(Laboratoire d'Astrophysique de Toulouse, CNRS UMR 5572, 14 Av. E. Belin, 31400 Toulouse, France; Space Telescope Science Institute, 3700 San Martin Drive, Baltimore, MD 21218, USA), AD(Geneva Observatory, CH-1290 Sauverny, Switzerland), AF(Geneva Observatory, CH-1290 Sauverny, Switzerland) Switzerland), AG(Geneva Observatory, CH-1290 Sauverny, Switzerland)

Then, one click on « On-line Data »

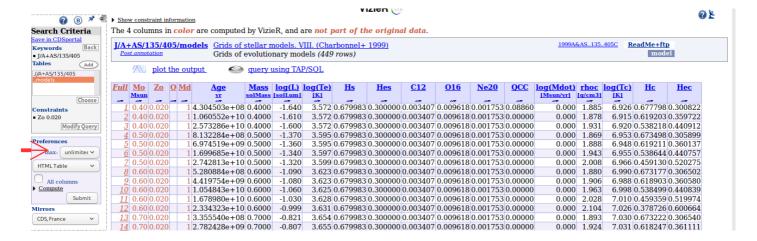
- One choose the information that we need for the simulation

Show	Sort	Column	Clear Constr	int	Explain (UCD)
	0	recno			Record number assigned by the VizieR team. Should Not be used for identification. (meta.record)
	0	Tno		(char)	Number of table in the publication (meta.id;meta.dataset)
	0	Mo		Msun	(n)Star initial mass (phys.mass)
	0	Zo	0,02		⁽ⁿ⁾ Star initial metallicity: 0.001 or 0.020 (<u>phys.abund.Z</u>)
	0	0		(char)	O ifor model with overshooting (meta.note)
	0	Md			(n)Mass loss in post-Main Sequence: 1 for standard mass loss rate, 2 for model with twice the standard mass loss rate (meta.note)
	0	No			Number of selected point (meta.id)
	0	Age		<u>yr</u>	Age (time.age)
	0	Mass		solMass	Actual mass (phys.mass)
	0	log(L)		[solLum]	log(luminosity Mass s.luminosity)
	0	log(Te)		[K]	log(effective temperature) (phys.temperature.effective)

It can be interesting to have the abundance of different elements



- Then click on submit and a table appear with the html format Click on unlimited data in the « Search Criteria »



- To download the data, instead of « HTML Table » choose «Tab-Seperated-Values ».