

Predicted XUV Line Intensities  
CHIANTI database - Version 10.1

Calculated with Constant pressure= 1.00e+16 (cm<sup>-3</sup> K)

\*\*\*\*\* to \*\*\*\*\* Å

Number of lines: 213

Minimum intensity = 1.00000

Units are: erg cm-2 sr-1 s-1

Lines marked with a "s" are satellite lines from autoionizing levels.

Lines marked with a \* do not have observed energy levels  
and have approximate wavelengths.

Calculated: Mon Jun 26 10:32:46 2023

Ionization Fractions file: chianti.ioneq

ionization equilibrium: CHIANTI

produced as part of the CHIANTI atomic data base collaboration

Created on Tue May 30 16:53:01 2023

comment:

Prepared for the release of CHIANTI 10.1.

Elemental Abundance file: sun\_photospheric\_2015\_scott.abund

created for the CHIANTI atomic database by Peter Young, 16-Aug-2017

abundances (F to Ca):

Scott et al., 2015, A&A, 573, A25

DOI: 10.1051/0004-6361/201424109

abundances (Sc to Ni):

Scott et al., 2015, A&A, 573, A26

DOI: 10.1051/0004-6361/201424110

abundances (Cu & Zn):

Grevesse et al., 2015, A&A, 573, A27

DOI: 10.1051/0004-6361/201424111

abundances (other elements):

Asplund, M., Grevesse, N., Sauval, A.J., & Scott, P. 2009, ARAA, 47, 481

DOI: 10.1146/annurev.astro.46.060407.145222

comment:

This updates the Asplund et al. (2009) results for elements F and higher. The  
changes  
are mostly small.

Minimum abundance = 8.51138e-08

Differential Emission Measure file: flare\_ext.dem

filename: flare.dem

dem: Dere, K.P., Cook, J.W., 1979, ApJ, 229, 772

comment: composite of August 9 1553 and 1554 UT data of an M2 X-ray class

flare

comment: modifies at high temperature (7.3 to 8.0) by G.Del Zanna to  
calculate

the emissivities of the hottest ions.

produced as part of the Arcetri/Cambridge/NRL 'CHIANTI' atomic data base  
collaboration

K.P.Dere and G. Del Zanna - Aug 2002

Calculation performed with population lookup tables.

Table 1: *Line List*

Ion	$\lambda$ (Å)	Transition	$T_{\max}$	Int
Al II	10079.1211	3s 3d $^3D_3$ - 3s 4p $^3P_2$	4.50	7.52e+00
Al II	10080.2393	3s 3d $^3D_2$ - 3s 4p $^3P_2$	4.50	1.34e+00
Al II	10110.2012	3s 3d $^3D_2$ - 3s 4p $^3P_1$	4.50	3.95e+00
Al II	10111.1211	3s 3d $^3D_1$ - 3s 4p $^3P_1$	4.50	1.32e+00
Al II	10125.4541	3s 3d $^3D_1$ - 3s 4p $^3P_0$	4.50	1.76e+00
He II	10125.6279	4p $^2P_{1/2}$ - 5d $^2D_{3/2}$	4.90	7.15e+00
He II	10125.6865	4s $^2S_{1/2}$ - 5p $^2P_{3/2}$	4.90	3.60e+00
He II	10125.9805	4p $^2P_{1/2}$ - 5s $^2S_{1/2}$	4.90	9.39e+00
He II	10126.0723	4s $^2S_{1/2}$ - 5p $^2P_{1/2}$	4.90	1.80e+00
He II	10126.2490	4d $^2D_{3/2}$ - 5f $^2F_{5/2}$	4.90	5.86e+01
He II	10126.2500	4p $^2P_{3/2}$ - 5d $^2D_{5/2}$	4.90	1.29e+01
He II	10126.3779	4p $^2P_{3/2}$ - 5d $^2D_{3/2}$	4.90	1.43e+00
He II	10126.4355	4d $^2D_{5/2}$ - 5f $^2F_{7/2}$	4.90	8.36e+01
He II	10126.4355	4f $^2F_{5/2}$ - 5g $^2G_{7/2}$	4.90	1.99e+01
He II	10126.4990	4d $^2D_{5/2}$ - 5f $^2F_{5/2}$	4.90	4.19e+00
He II	10126.5234	4f $^2F_{7/2}$ - 5g $^2G_{9/2}$	4.90	2.49e+01
He II	10126.7314	4p $^2P_{3/2}$ - 5s $^2S_{1/2}$	4.90	1.88e+01
Ar XIII	10148.7812	2s <sup>2</sup> 2p <sup>2</sup> $^3P_0$ - 2s <sup>2</sup> 2p <sup>2</sup> $^3P_1$	6.55	6.80e+01
S XIII	10300.7832	2s 2p $^3P_1$ - 2s 2p $^3P_2$	6.45	2.74e+01
O III	10324.6064	2s <sup>2</sup> 2p 4s $^3P_2$ - 2s <sup>2</sup> 2p 4p $^3D_3$	5.05	1.06e+00
Cl XII	10650.7617	2s <sup>2</sup> 2p <sup>2</sup> $^3P_1$ - 2s <sup>2</sup> 2p <sup>2</sup> $^3P_2$	6.45	2.11e+00
C I	10685.9814	2p 3s $^3P_1$ - 2p 3p $^3D_2$	4.50	6.67e+00
C I	10688.2480	2p 3s $^3P_0$ - 2p 3p $^3D_1$	4.50	3.17e+00
C I	10694.1768	2p 3s $^3P_2$ - 2p 3p $^3D_3$	4.50	1.27e+01
C I	10710.2119	2p 3s $^3P_1$ - 2p 3p $^3D_1$	4.50	2.30e+00
C I	10732.4834	2p 3s $^3P_2$ - 2p 3p $^3D_2$	4.50	2.09e+00
Fe XIII	10749.1055	3s <sup>2</sup> 3p <sup>2</sup> $^3P_0$ - 3s <sup>2</sup> 3p <sup>2</sup> $^3P_1$	6.30	6.07e+01
Fe XIII	10800.7686	3s <sup>2</sup> 3p <sup>2</sup> $^3P_1$ - 3s <sup>2</sup> 3p <sup>2</sup> $^3P_2$	6.30	6.05e+01
He I	10832.0576	1s 2s $^3S_1$ - 1s 2p $^3P_0$	4.50	2.06e+04
He I	10833.2168	1s 2s $^3S_1$ - 1s 2p $^3P_1$	4.50	6.15e+04
He I	10833.3066	1s 2s $^3S_1$ - 1s 2p $^3P_2$	4.50	1.03e+05
Mg II	10917.2734	3d $^2D_{5/2}$ - 4p $^2P_{3/2}$	4.50	2.98e+00
Mg II	10954.8252	3d $^2D_{3/2}$ - 4p $^2P_{1/2}$	4.50	1.65e+00
O II	11122.8516	2s <sup>2</sup> 2p <sup>2</sup> 4p $^4D_{7/2}$ - 2s <sup>2</sup> 2p <sup>2</sup> 4d $^4D_{7/2}$	4.75	1.95e+00
Al II	11251.5049	3s 4d $^1D_2$ - 3s 5f $^1F_3$	4.50	1.04e+00
Si III	11338.6396	3s 5s $^3S_1$ - 3s 5p $^3P_0$	4.80	1.23e+00
Si III	11339.6680	3s 5s $^3S_1$ - 3s 5p $^3P_1$	4.80	3.18e+00
Si III	11346.6162	3s 5s $^3S_1$ - 3s 5p $^3P_2$	4.80	5.32e+00
O II	11558.6895	2s <sup>2</sup> 2p <sup>2</sup> 3p $^2S_{1/2}$ - 2s 2p <sup>4</sup> $^2P_{3/2}$	4.75	1.52e+00
O II *	11598.3721	2s <sup>2</sup> 2p <sup>2</sup> 4p $^2F_{5/2}$ - 2s <sup>2</sup> 2p <sup>2</sup> 4d $^2G_{7/2}$	4.80	2.26e+00
O II *	11606.7178	2s <sup>2</sup> 2p <sup>2</sup> 4p $^2F_{7/2}$ - 2s <sup>2</sup> 2p <sup>2</sup> 4d $^2G_{9/2}$	4.80	3.06e+00
O II	11659.0879	2s <sup>2</sup> 2p <sup>2</sup> 4p $^4D_{5/2}$ - 2s <sup>2</sup> 2p <sup>2</sup> 4d $^4F_{7/2}$	4.75	6.56e+00
O II	11666.1611	2s <sup>2</sup> 2p <sup>2</sup> 4p $^4D_{3/2}$ - 2s <sup>2</sup> 2p <sup>2</sup> 4d $^4F_{5/2}$	4.75	4.33e+00
O II	11669.5654	2s <sup>2</sup> 2p <sup>2</sup> 4p $^4D_{1/2}$ - 2s <sup>2</sup> 2p <sup>2</sup> 4d $^4F_{3/2}$	4.75	2.87e+00
O II	11676.6504	2s <sup>2</sup> 2p <sup>2</sup> 4p $^4P_{5/2}$ - 2s <sup>2</sup> 2p <sup>2</sup> 4d $^4D_{7/2}$	4.75	4.48e+00
O II	11681.1514	2s <sup>2</sup> 2p <sup>2</sup> 4p $^4D_{7/2}$ - 2s <sup>2</sup> 2p <sup>2</sup> 4d $^4F_{9/2}$	4.75	1.00e+01
Si II	11718.0820	3s <sup>2</sup> 5p $^2P_{1/2}$ - 3s <sup>2</sup> 5d $^2D_{3/2}$	4.50	3.22e+00
Si II	11751.6133	3s <sup>2</sup> 5p $^2P_{3/2}$ - 3s <sup>2</sup> 5d $^2D_{5/2}$	4.50	5.74e+00
C I	11756.5371	2p 3p $^3D_3$ - 2p 3d $^3F_4$	4.50	1.46e+00

Table 1: (continued)

Ion	$\lambda$ (Å)	Transition	$T_{\max}$	Int
C II s *	11757.9189	2s 2p 4s $^4P_{1/2}$ - 2s 2p 4p $^4P_{3/2}$	4.70	5.43e+00
C II s *	11760.4248	2s 2p 4s $^4P_{3/2}$ - 2s 2p 4p $^4P_{5/2}$	4.70	5.80e+00
C II s *	11775.5068	2s 2p 4s $^4P_{1/2}$ - 2s 2p 4p $^4P_{1/2}$	4.70	1.08e+00
C II s *	11788.6953	2s 2p 4s $^4P_{3/2}$ - 2s 2p 4p $^4P_{3/2}$	4.70	1.73e+00
C II s *	11806.3750	2s 2p 4s $^4P_{3/2}$ - 2s 2p 4p $^4P_{1/2}$	4.70	5.41e+00
C II s *	11812.1064	2s 2p 4s $^4P_{5/2}$ - 2s 2p 4p $^4P_{5/2}$	4.70	1.35e+01
C II s *	11840.6250	2s 2p 4s $^4P_{5/2}$ - 2s 2p 4p $^4P_{3/2}$	4.70	5.91e+00
He I	11972.3340	1s 3p $^3P_2$ - 1s 5d $^3D_3$	4.50	3.65e+01
He I	11972.3340	1s 3p $^3P_2$ - 1s 5d $^3D_2$	4.50	6.37e+00
He I	11972.3516	1s 3p $^3P_1$ - 1s 5d $^3D_1$	4.50	6.83e+00
He I	11972.3662	1s 3p $^3P_1$ - 1s 5d $^3D_2$	4.50	1.91e+01
He I	11972.7402	1s 3p $^3P_0$ - 1s 5d $^3D_1$	4.50	9.12e+00
C III	11984.5156	2s 4s $^3S_1$ - 2s 4p $^3P_2$	4.95	3.44e+00
C III	11991.4141	2s 4s $^3S_1$ - 2s 4p $^3P_1$	4.95	2.06e+00
O II	12351.1680	$2s^2 2p^2 4s ^2P_{1/2}$ - $2s^2 2p^2 4p ^2P_{1/2}$	4.75	1.06e+00
O II	12446.6348	$2s^2 2p^2 5s ^2P_{3/2}$ - $2s^2 2p^2 5p ^2D_{5/2}$	4.80	1.55e+00
O II	12503.1260	$2s^2 2p^2 4s ^2P_{3/2}$ - $2s^2 2p^2 4p ^2P_{3/2}$	4.75	2.79e+00
S IX	12523.4824	$2s^2 2p^4 ^3P_2$ - $2s^2 2p^4 ^3P_1$	6.15	9.80e+00
He I	12530.7461	1s 3s $^3S_1$ - 1s 4p $^3P_0$	4.50	6.72e+00
He I	12530.9180	1s 3s $^3S_1$ - 1s 4p $^3P_1$	4.50	2.02e+01
He I	12530.9326	1s 3s $^3S_1$ - 1s 4p $^3P_2$	4.50	3.36e+01
He I	12788.4160	1s 3d $^3D_2$ - 1s 5f $^3F_2$	4.50	6.74e+00
He I	12788.4199	1s 3d $^3D_3$ - 1s 5f $^3F_4$	4.50	7.78e+01
He I	12788.4248	1s 3d $^3D_3$ - 1s 5f $^3F_3$	4.50	6.74e+00
He I	12788.4268	1s 3d $^3D_2$ - 1s 5f $^3F_3$	4.50	5.38e+01
He I	12788.4873	1s 3d $^3D_1$ - 1s 5f $^3F_2$	4.50	3.63e+01
He I	12794.0000	1s 3d $^1D_2$ - 1s 5f $^1F_3$	4.50	2.01e+01
H I	12821.4316	3p $^2P_{1/2}$ - 5d $^2D_{3/2}$	4.50	1.38e+02
H I	12821.4502	3s $^2S_{1/2}$ - 5p $^2P_{3/2}$	4.50	6.97e+01
H I	12821.4658	3p $^2P_{1/2}$ - 5s $^2S_{1/2}$	4.50	1.15e+02
H I	12821.4883	3s $^2S_{1/2}$ - 5p $^2P_{1/2}$	4.50	3.48e+01
H I	12821.5957	3d $^2D_{3/2}$ - 5f $^2F_{5/2}$	4.50	3.24e+02
H I	12821.5957	3p $^2P_{3/2}$ - 5d $^2D_{5/2}$	4.50	2.47e+02
H I	12821.6094	3p $^2P_{3/2}$ - 5d $^2D_{3/2}$	4.50	2.75e+01
H I	12821.6436	3p $^2P_{3/2}$ - 5s $^2S_{1/2}$	4.50	2.30e+02
H I	12821.6475	3d $^2D_{3/2}$ - 5p $^2P_{1/2}$	4.50	3.18e+00
H I	12821.6494	3d $^2D_{5/2}$ - 5f $^2F_{7/2}$	4.50	4.62e+02
H I	12821.6553	3d $^2D_{5/2}$ - 5f $^2F_{5/2}$	4.50	2.32e+01
H I	12821.6680	3d $^2D_{5/2}$ - 5p $^2P_{3/2}$	4.50	5.74e+00
He I	12849.4570	1s 3p $^3P_2$ - 1s 5s $^3S_1$	4.50	3.55e+01
He I	12849.4932	1s 3p $^3P_1$ - 1s 5s $^3S_1$	4.50	2.14e+01
He I	12849.9414	1s 3p $^3P_0$ - 1s 5s $^3S_1$	4.50	7.12e+00
He I	12971.9766	1s 3p $^1P_1$ - 1s 5d $^1D_2$	4.50	1.27e+01
He I	12988.4053	1s 3d $^3D_1$ - 1s 5p $^3P_0$	4.50	1.55e+00
He I	12988.4248	1s 3d $^3D_2$ - 1s 5p $^3P_1$	4.50	3.48e+00
He I	12988.4297	1s 3d $^3D_3$ - 1s 5p $^3P_2$	4.50	6.53e+00
He I	12988.4316	1s 3d $^3D_2$ - 1s 5p $^3P_2$	4.50	1.17e+00
He I	12988.4990	1s 3d $^3D_1$ - 1s 5p $^3P_1$	4.50	1.16e+00
O II	13020.4941	$2s^2 2p^2 4s ^2P_{1/2}$ - $2s^2 2p^2 4p ^2D_{3/2}$	4.75	3.14e+00

Table 1: (continued)

Ion	$\lambda$ (Å)	Transition	$T_{\max}$	Int
O II	13039.0000	$2s^2 2p^2 4s^2 P_{3/2} - 2s^2 2p^2 4p^2 D_{5/2}$	4.75	5.64e+00
Ca XIV	13147.8613	$2s^2 2p^3^2 D_{3/2} - 2s^2 2p^3^2 D_{5/2}$	6.65	2.09e+00
O II	13224.7139	$2s^2 2p^2 4s^4 P_{5/2} - 2s^2 2p^2 4p^4 P_{5/2}$	4.75	1.53e+00
N II	13348.4785	$2s^2 2p 4s^1 P_1 - 2s^2 2p 4p^1 D_2$	4.70	1.40e+00
He I	13415.3525	$1s 3p^1 P_1 - 1s 5s^1 S_0$	4.50	1.47e+01
O II	13599.8906	$2s^2 2p^2 4s^2 D_{5/2} - 2s^2 2p^2 5p^2 D_{5/2}$	4.80	2.69e+00
O II	13631.0352	$2s^2 2p^2 4s^2 D_{3/2} - 2s^2 2p^2 4p^2 D_{3/2}$	4.80	1.74e+00
Si II	13700.1133	$3s^2 5p^2 P_{3/2} - 3s^2 6s^2 S_{1/2}$	4.50	1.57e+00
Cl XII	13812.1553	$2s^2 2p^2^3 P_0 - 2s^2 2p^2^3 P_1$	6.45	1.68e+00
O II	13909.9473	$2s^2 2p^2 4s^4 P_{1/2} - 2s^2 2p^2 4p^4 D_{3/2}$	4.75	1.21e+00
S XI	13927.3828	$2s^2 2p^2^3 P_1 - 2s^2 2p^2^3 P_2$	6.35	2.24e+01
O II	13946.0293	$2s^2 2p^2 4s^4 P_{3/2} - 2s^2 2p^2 4p^4 D_{5/2}$	4.75	2.99e+00
O II	14004.0332	$2s^2 2p^2 4s^4 P_{1/2} - 2s^2 2p^2 4p^4 D_{1/2}$	4.75	1.12e+00
O II	14015.0244	$2s^2 2p^2 4s^4 P_{5/2} - 2s^2 2p^2 4p^4 D_{7/2}$	4.75	5.24e+00
O II *	14068.4570	$2s^2 2p^2 4s^2 D_{5/2} - 2s^2 2p^2 4p^2 F_{7/2}$	4.80	1.48e+00
Al II	14082.1270	$3s 5p^3 P_2 - 3s 5d^3 D_3$	4.50	1.86e+00
O II *	14082.9199	$2s^2 2p^2 4s^2 D_{3/2} - 2s^2 2p^2 4p^2 F_{5/2}$	4.80	1.01e+00
O II	14116.5176	$2s^2 2p^2 4s^4 P_{3/2} - 2s^2 2p^2 4p^4 D_{3/2}$	4.75	1.12e+00
Si X	14304.7188	$2s^2 2p^2 P_{1/2} - 2s^2 2p^2 P_{3/2}$	6.20	1.65e+01
C I	14546.4717	$2p 3s^1 P_1 - 2p 3p^1 P_1$	4.50	6.79e+00
He I	15087.7725	$1s 3s^1 S_0 - 1s 4p^1 P_1$	4.50	1.21e+00
O II	15173.1250	$2s^2 2p^2 4d^4 F_{9/2} - 2s^2 2p^2 5p^4 D_{7/2}$	4.75	2.64e+00
O II	15220.2373	$2s^2 2p^2 4d^4 F_{5/2} - 2s^2 2p^2 5p^4 D_{3/2}$	4.75	1.08e+00
O II	15235.0771	$2s^2 2p^2 4d^4 F_{7/2} - 2s^2 2p^2 5p^4 D_{5/2}$	4.75	1.66e+00
O II	15345.4258	$2s^2 2p^2 4d^4 P_{5/2} - 2s^2 2p^2 5p^4 S_{3/2}$	4.80	1.60e+00
O II	15434.0039	$2s^2 2p^2 4d^4 P_{3/2} - 2s^2 2p^2 5p^4 S_{3/2}$	4.80	1.23e+00
Si II	16911.4316	$3s^2 5s^2 S_{1/2} - 3s^2 5p^2 P_{3/2}$	4.50	6.56e+00
Si II	16981.8203	$3s^2 5s^2 S_{1/2} - 3s^2 5p^2 P_{1/2}$	4.50	3.25e+00
He I	17006.9785	$1s 3p^3 P_2 - 1s 4d^3 D_1$	4.50	1.05e+00
He I	17007.0332	$1s 3p^3 P_2 - 1s 4d^3 D_2$	4.50	1.47e+01
He I	17007.0371	$1s 3p^3 P_2 - 1s 4d^3 D_3$	4.50	8.42e+01
He I	17007.0430	$1s 3p^3 P_1 - 1s 4d^3 D_1$	4.50	1.56e+01
He I	17007.0977	$1s 3p^3 P_1 - 1s 4d^3 D_2$	4.50	4.41e+01
He I	17007.8262	$1s 3p^3 P_0 - 1s 4d^3 D_1$	4.50	2.09e+01
Al II	17765.7754	$3s 5s^3 S_1 - 3s 5p^3 P_2$	4.50	4.41e+00
Al II	17806.5859	$3s 5s^3 S_1 - 3s 5p^3 P_1$	4.50	2.60e+00
He I	18690.3965	$1s 3d^3 D_2 - 1s 4f^3 F_2$	4.50	2.04e+01
He I	18690.4258	$1s 3d^3 D_3 - 1s 4f^3 F_4$	4.50	2.36e+02
He I	18690.4492	$1s 3d^3 D_3 - 1s 4f^3 F_3$	4.50	2.72e+00
He I	18690.4531	$1s 3d^3 D_2 - 1s 4f^3 F_3$	4.50	2.17e+01
He I	18690.5508	$1s 3d^3 D_1 - 1s 4f^3 F_2$	4.50	1.10e+02
He I	18702.3164	$1s 3d^1 D_2 - 1s 4f^1 F_3$	4.50	5.07e+01
C II s *	18708.3633	$2s 2p 4p^4 D_{5/2} - 2s 2p 4d^4 F_{7/2}$	4.70	1.29e+00
C II s *	18726.5918	$2s 2p 4p^4 D_{7/2} - 2s 2p 4d^4 F_{9/2}$	4.70	1.92e+00
H I	18755.8047	$3p^2 P_{1/2} - 4d^2 D_{3/2}$	4.50	2.29e+02
H I	18755.8418	$3s^2 S_{1/2} - 4p^2 P_{3/2}$	4.50	1.05e+02
H I	18755.9473	$3p^2 P_{1/2} - 4s^2 S_{1/2}$	4.50	2.10e+02
H I	18756.0020	$3s^2 S_{1/2} - 4p^2 P_{1/2}$	4.50	5.22e+01
H I	18756.1309	$3d^2 D_{3/2} - 4f^2 F_{5/2}$	4.50	7.52e+02

Table 1: (continued)

Ion	$\lambda$ (Å)	Transition	$T_{\max}$	Int
H I	18756.1309	3p $^2P_{3/2}$ - 4d $^2D_{5/2}$	4.50	4.13e+02
H I	18756.1836	3p $^2P_{3/2}$ - 4d $^2D_{3/2}$	4.50	4.57e+01
H I	18756.1836	3d $^2D_{3/2}$ - 4p $^2P_{3/2}$	4.50	1.19e+00
H I	18756.2285	3d $^2D_{5/2}$ - 4f $^2F_{7/2}$	4.50	1.08e+03
H I	18756.2578	3d $^2D_{5/2}$ - 4f $^2F_{5/2}$	4.50	5.36e+01
H I	18756.3105	3d $^2D_{5/2}$ - 4p $^2P_{3/2}$	4.50	1.07e+01
H I	18756.3281	3p $^2P_{3/2}$ - 4s $^2S_{1/2}$	4.50	4.19e+02
H I	18756.3418	3d $^2D_{3/2}$ - 4p $^2P_{1/2}$	4.50	5.94e+00
He I	19094.5703	1s 3p $^1P_1$ - 1s 4d $^1D_2$	4.50	3.93e+01
S XI	19201.2285	2s <sup>2</sup> 2p <sup>2</sup> $^3P_0$ - 2s <sup>2</sup> 2p <sup>2</sup> $^3P_1$	6.35	8.32e+00
Si XI	19364.8320	2s 2p $^3P_1$ - 2s 2p $^3P_2$	6.30	3.44e+00
He I	19548.1758	1s 3d $^3D_1$ - 1s 4p $^3P_0$	4.50	4.23e+00
He I	19548.4277	1s 3d $^3D_2$ - 1s 4p $^3P_1$	4.50	9.56e+00
He I	19548.4570	1s 3d $^3D_3$ - 1s 4p $^3P_2$	4.50	1.78e+01
He I	19548.4629	1s 3d $^3D_2$ - 1s 4p $^3P_2$	4.50	3.17e+00
He I	19548.5957	1s 3d $^3D_1$ - 1s 4p $^3P_1$	4.50	3.18e+00
Si VI	19630.0449	2s <sup>2</sup> 2p <sup>5</sup> $^2P_{3/2}$ - 2s <sup>2</sup> 2p <sup>5</sup> $^2P_{1/2}$	5.65	1.71e+00
He I	20586.9004	1s 2s $^1S_0$ - 1s 2p $^1P_1$	4.50	7.05e+00
He I	21125.7852	1s 3p $^3P_2$ - 1s 4s $^3S_1$	4.50	1.94e+01
He I	21125.8828	1s 3p $^3P_1$ - 1s 4s $^3S_1$	4.50	1.17e+01
He I	21127.0918	1s 3p $^3P_0$ - 1s 4s $^3S_1$	4.50	3.89e+00
He I	21137.7969	1s 3p $^1P_1$ - 1s 4s $^1S_0$	4.50	3.35e+01
Ca XIII	22609.0898	2s <sup>2</sup> 2p <sup>4</sup> $^3P_1$ - 2s <sup>2</sup> 2p <sup>4</sup> $^3P_0$	6.60	1.99e+00
Al II	23594.9219	3s 4d $^3D_3$ - 3s 5p $^3P_2$	4.50	1.25e+00
Si IX	25846.4727	2s <sup>2</sup> 2p <sup>2</sup> $^3P_1$ - 2s <sup>2</sup> 2p <sup>2</sup> $^3P_2$	6.10	1.28e+00
He I	28550.2695	1s 4s $^3S_1$ - 1s 5p $^3P_2$	4.50	1.65e+00
He I	37035.5156	1s 4p $^3P_2$ - 1s 5d $^3D_3$	4.50	4.43e+00
He I	37035.6367	1s 4p $^3P_1$ - 1s 5d $^3D_2$	4.50	2.32e+00
He I	37037.0117	1s 4p $^3P_0$ - 1s 5d $^3D_1$	4.50	1.11e+00
He I	40377.2188	1s 4d $^3D_2$ - 1s 5f $^3F_2$	4.50	1.20e+00
He I	40377.2695	1s 4d $^3D_3$ - 1s 5f $^3F_4$	4.50	1.39e+01
He I	40377.3164	1s 4d $^3D_3$ - 1s 5f $^3F_3$	4.50	1.20e+00
He I	40377.3359	1s 4d $^3D_2$ - 1s 5f $^3F_3$	4.50	9.57e+00
He I	40377.5312	1s 4d $^3D_1$ - 1s 5f $^3F_2$	4.50	6.46e+00
He I	40409.3477	1s 4d $^1D_2$ - 1s 5f $^1F_3$	4.50	3.58e+00
He I	40490.0742	1s 4f $^3F_3$ - 1s 5g $^3G_4$	4.50	6.10e+00
He I	40490.1406	1s 4f $^3F_4$ - 1s 5g $^3G_5$	4.50	7.95e+00
He I	40490.2383	1s 4f $^3F_2$ - 1s 5g $^3G_3$	4.50	4.50e+00
He I	40490.3555	1s 4f $^1F_3$ - 1s 5g $^1G_4$	4.50	2.56e+00
H I	40521.8711	4p $^2P_{1/2}$ - 5d $^2D_{3/2}$	4.50	1.91e+01
H I	40521.9375	4s $^2S_{1/2}$ - 5p $^2P_{3/2}$	4.50	9.91e+00
H I	40522.2188	4p $^2P_{1/2}$ - 5s $^2S_{1/2}$	4.50	2.60e+01
H I	40522.3164	4s $^2S_{1/2}$ - 5p $^2P_{1/2}$	4.50	4.95e+00
H I	40522.4805	4d $^2D_{3/2}$ - 5f $^2F_{5/2}$	4.50	5.83e+01
H I	40522.4805	4p $^2P_{3/2}$ - 5d $^2D_{5/2}$	4.50	3.44e+01
H I	40522.6133	4p $^2P_{3/2}$ - 5d $^2D_{3/2}$	4.50	3.82e+00
H I	40522.6602	4f $^2F_{5/2}$ - 5g $^2G_{7/2}$	4.50	5.66e+01
H I	40522.6602	4d $^2D_{5/2}$ - 5f $^2F_{7/2}$	4.50	8.31e+01
H I	40522.7266	4d $^2D_{5/2}$ - 5f $^2F_{5/2}$	4.50	4.16e+00

Table 1: (continued)

Ion	$\lambda$ (Å)	Transition	$T_{\max}$	Int
H I	40522.7617	4f $^2F_{7/2}$ - 5g $^2G_{9/2}$	4.50	7.60e+01
H I	40522.7930	4f $^2F_{7/2}$ - 5g $^2G_{7/2}$	4.50	4.05e+00
H I	40522.8594	4f $^2F_{7/2}$ - 5d $^2D_{5/2}$	4.50	1.11e+00
H I	40522.8594	4d $^2D_{5/2}$ - 5p $^2P_{3/2}$	4.50	2.29e+00
H I	40522.9570	4p $^2P_{3/2}$ - 5s $^2S_{1/2}$	4.50	5.20e+01
H I	40522.9883	4d $^2D_{3/2}$ - 5p $^2P_{1/2}$	4.50	1.26e+00
He I	41227.3047	1s 4p $^1P_1$ - 1s 5d $^1D_2$	4.50	1.84e+00
He I	42440.6797	1s 4d $^3D_2$ - 1s 5p $^3P_1$	4.50	1.30e+00
He I	42440.7344	1s 4d $^3D_3$ - 1s 5p $^3P_2$	4.50	2.43e+00
He I	42954.1094	1s 3s $^3S_1$ - 1s 3p $^3P_0$	4.50	1.04e+01
He I	42959.1094	1s 3s $^3S_1$ - 1s 3p $^3P_1$	4.50	3.12e+01
He I	42959.5156	1s 3s $^3S_1$ - 1s 3p $^3P_2$	4.50	5.18e+01
He I	46066.0078	1s 4p $^1P_1$ - 1s 5s $^1S_0$	4.50	3.18e+00
He I	46949.4375	1s 4p $^3P_2$ - 1s 5s $^3S_1$	4.50	7.30e+00
He I	46949.6367	1s 4p $^3P_1$ - 1s 5s $^3S_1$	4.50	4.39e+00
He I	46952.0586	1s 4p $^3P_0$ - 1s 5s $^3S_1$	4.50	1.46e+00
He I	108822.5703	1s 4s $^3S_1$ - 1s 4p $^3P_2$	4.50	1.44e+00