

Spectrophotometry of speckle binary stars. III

M.A. Al-Wardat

Special Astrophysical Observatory of the Russian AS, Nizhnij Arkhyz 369167, Russia
mwardat@sao.ru

Received December 26, 2002; accepted February 10, 2003.

Abstract. Spectrophotometric observations of the third set consisting of 11 stars of speckle interferometric binaries are presented. Observations covered the range 3700–8400 Å with a resolution of 18 Å. Results are presented in the form of the measured flux corrected for atmospheric extinction in the units of erg/cm² · s·Å, with no corrections for interstellar reddening. B , V , and R magnitudes, $B - V$ colour indices and entire spectral types are also presented and compared with those of Hipparcos catalogue and SIMBAD.

Key words: stars: spectrophotometry: spectral energy distribution — stars: binaries: speckle binary stars

1. Introduction

As we mentioned in paper I (Al-Wardat 2002a): “The study of binary and multiple systems by means of speckle interferometry made a valuable contribution to the understanding of formation and evolution of stellar systems, especially in the recent years with the aid of large telescopes and utilization of diffraction limited techniques”. The direct results of speckle interferometric observations are separation angle, orientation angle, and magnitude difference for the sub-components of each binary or multiple system (Balega et al. 2002). In its turn this leads to the determination of orbit and orbital period. Using other kinds of observations, like high resolution spectroscopy (Tokovinin 1995) or wide range spectrophotometry (Al-Wardat 2002b), the number of deduced parameters can be raised, and wide understanding of such systems can be achieved.

In paper I we introduced spectrophotometric observations of 20 stars, in paper II (Al-Wardat 2002c) we introduced another set of 15 stars. In this paper we are presenting the observations of a new set consisting of 11 stars. The observations cover the range 3700–8400 Å, with a resolution of 18 Å. The objects of the study were taken from the speckle interferometric programme which has been carried out at the 6 m telescope of the Special Astrophysical Observatory since the early 90s. The programme mainly includes late type dwarfs in the vicinity of the Sun, and their fundamental parameters are badly known. The presented data can be used as a reference for building theoretical spectral energy distributions on the basis of Kurucz blanketed models. This, along with the magnitude difference from speckle interferometric

observations, can be used to build a spectral energy distribution for each of the components from which we can get their T_{eff} , $\lg g$, and spectral types.

The stars are listed in Table 1 with different identifications: Hipparcos (Col. 1), HD (Col. 2), other identifications (Col. 3). The coordinates of the stars (Table 1, Cols. 4, 5) were taken from SIMBAD astronomical database.

2. Observations and data analysis

Spectra were obtained using the same system which was described in paper I, at the same telescope (Carl Zeiss Jena 1m of SAO) during the photometrical nights, July 20 and 21, 2002. The seeing was around 1.5''. The times of observations in terms of Julian Dates are listed in Table 1, Col.6.

The standards from Massey et al. (1988), Oke (1990) and Hamuy et al. (1992, 1994) were used for the calibration of the system. Spectra were reduced by the same way which was described in paper I using ESO-MIDAS¹ routines. The standard deviation of B and V magnitudes, obtained for each star from the sample of the spectra, is typically better than 0^m06, and for the R band it is better than 0^m07. The error bars are the lowest in the central part of the spectrum where the blue and red spectra overlap.

3. Results and discussion

The final results (B_J , V_J , R_C , $(B - V)_J$, and the entire spectral types) are listed in Table 2. The raw

¹ Munich Image Data Analysis System, developed, maintained and distributed by the European Southern Observatory.

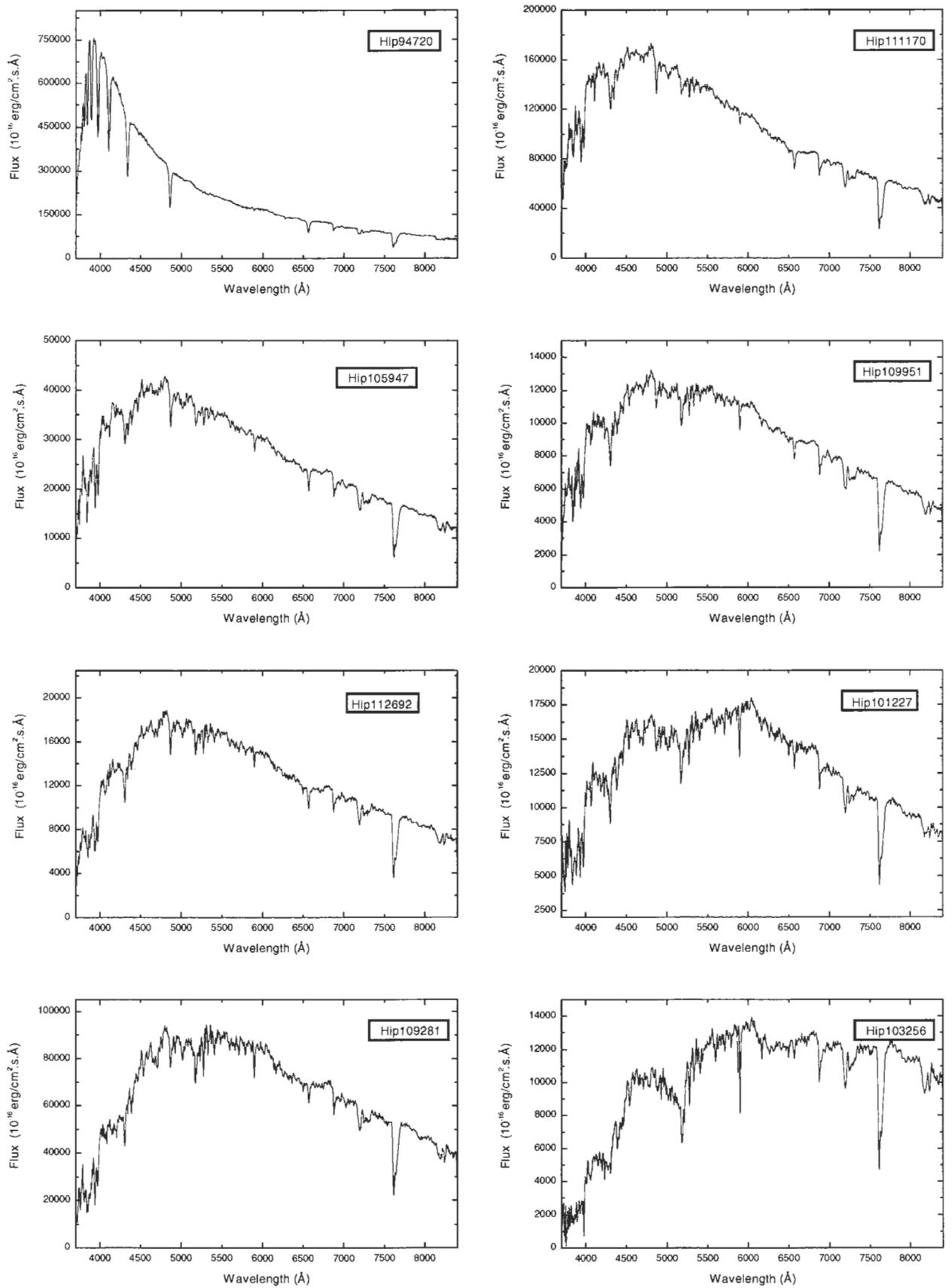


Figure 1: Spectral energy distributions of the stars labeled with the star names.

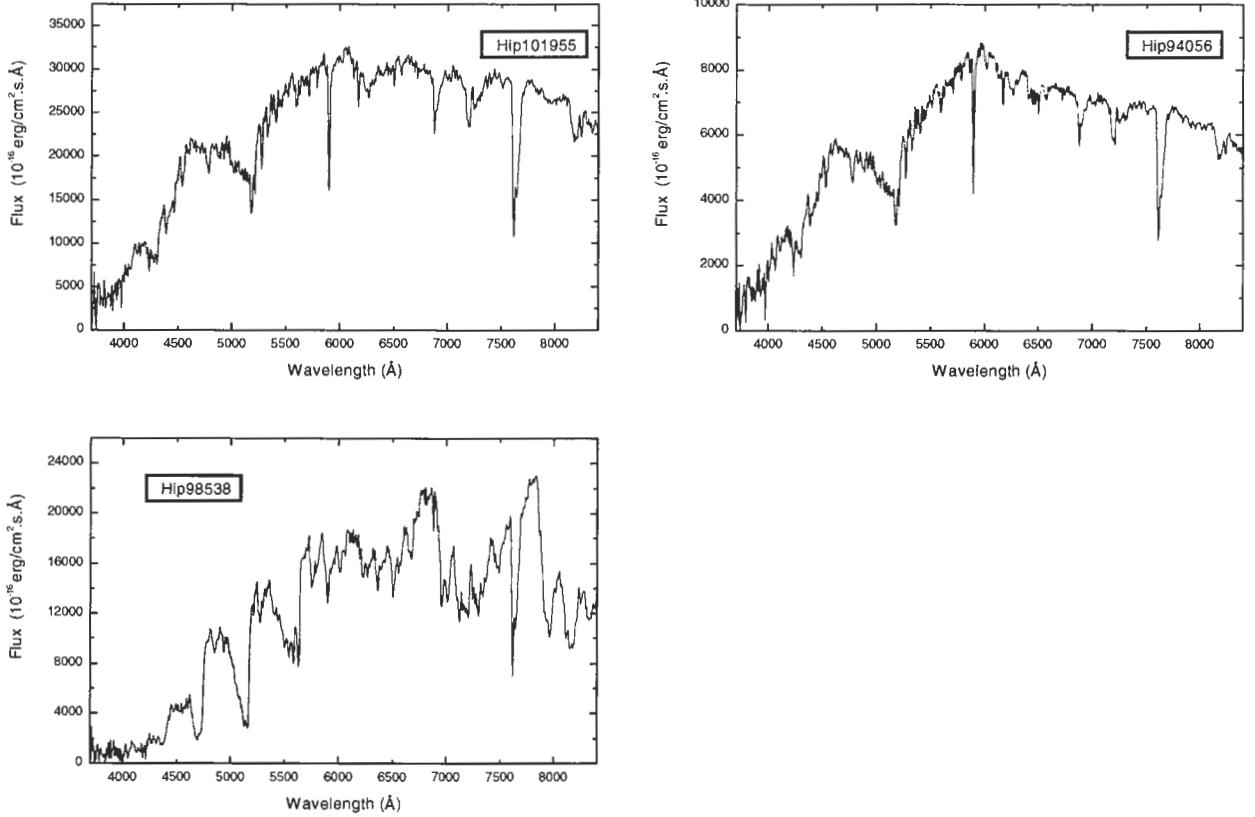


Figure 1: (Continued).

Table 1: List of the stars and log of observations

Star name			α_{2000}	δ_{2000}	Times of obs.
Hip (1)	HD (2)	Other identifications (3)	(h)(m)(s) (4)	(°) ('') ('') (5)	JD 2452470+ (6)
94056	-	Cou1462	19 08 53.9	+34 03 43.6	7.360, 7.402
94720	180555	-	19 16 26.7	+14 32 40.6	6.446, 6.450, 7.345, 7.391
98538	189711	CHA118	20 01 03.8	+09 30 51.3	7.377, 7.418
101227	-	Cou1962	20 31 07.72	+33 32 33.6	7.364, 7.407
101955	196795	KUI99	20 39 37.2	+04 58 18.7	7.372, 7.415
103256	-	-	20 55 06.5	+13 10 33.1	7.368, 7.410
105947	204236	-	21 27 23.3	- 07 00 56.1	7.450, 7.492
109281	210211	-	22 08 18.8	+24 09 25.1	7.445, 7.495
109951	211276	-	22 16 06.5	- 07 05 23.6	7.460, 7.481
111170	213429	CHA111	22 31 18.2	- 06 33 17.6	7.454, 7.486
112695	216027	-	22 49 17.3	+15 16 32.6	7.464, 7.469

data of the SED's of the stars (corrected for the atmospheric extinction) are listed in Table 3 in units of $\text{erg}/\text{cm}^2 \cdot \text{s} \cdot \text{\AA}$. These data are plotted in Fig. 1, where graphs were arranged according to spectral type.

BVR synthetic magnitudes were computed using the following integrals:

$$X = -2.5 \log \frac{\int S_x(\lambda) F_\lambda d\lambda}{\int S_x(\lambda) d\lambda} + ZP,$$

where $S_x(\lambda)$ is the transmission function for the passband X. We adopted the filter functions B_{90}, V_{90} and R_{90} published by Bessel (1990). ZP is the zero point for the magnitude scale. For V band ZP was solved

using the spectrophotometric calibration of Vega published by Hayes (1985) and the V magnitude of 0^m03 measured by Johnson et al. (1966). While for B and R bands it was solved using the Vega magnitudes published by Hamuy et al. (2001) as $B = 0^m014$, and $R = 0^m042$, since they are more reliable than those obtained by Johnson et al. (1966) (see Appendix B in Hamuy et al. 2001). The integrals were computed after interpolating $S_x(\lambda)$ to the wavelength spacing of F_λ^{star} which is 6 \AA .

Figs. 2 and 3 show comparisons between the calculated V magnitudes and $B - V$ colour indices with Johnson V and $B - V$ of Hipparcos catalogue (fields H5 and H37). The Hipparcos magnitudes were taken either from the ground based observations or calculated from V_T of Tycho using different relations for different kinds or luminosity classes of the stars (for more information see Hipparcos and Tycho catalogues, sec. 1.3 (ESA, 1997)).

The entire spectral types of the binaries were estimated by comparing $B - V$ with the intrinsic colours of FitzGerald (1970) neglecting interstellar reddening since all of the stars are nearby stars and their interstellar reddening lies within the error values of $B - V$ (see Al-Wardat 2002b). Results are listed in Table 2, Col. 8, along with those from SIMBAD (Col. 9) for comparison sake, where they show a good agreement (within the error values of $B - V$) for 9 stars, while the other two stars: (Hip94720 and Hip109281) show differences between the estimated spectral types in this work and those given by SIMBAD.

4. Conclusions

Composite spectral energy distributions of 11 speckle binary stars were measured. One was of B, two of F, two of G, five of K, and one of N spectral type.

The BVR magnitudes and the $B - V$ colour indices were calculated, and the entire spectral types of the pairs were estimated.

A good agreement was found between the calculated colour magnitudes and colour indices and those of Hipparcos catalogue. Also the entire spectral types of the stars were estimated and compared with those given by SIMBAD.

References

- Al-Wardat M.A., 2002a, Bull. Spec. Astrophys. Obs., **53**, 58 (Paper I)
- Al-Wardat M.A., 2002b, Bull. Spec. Astrophys. Obs., **53**, 51
- Al-Wardat M.A., 2002c, Bull. Spec. Astrophys. Obs., **54**, 29 (Paper II)
- Balega I.I., Balega Yu.Yu., Hofmann K. H., Maksimov A. F., Pluzhnik E. A., Schertl D., Shkhagosheva Z.U., Weigelt G., 2002, Astron. Astrophys., **385**, 87
- Bessel M.S., 1990, Publ. Astr. Soc. Pacific, **102**, 1181
- ESA, 1997, The Hipparcos and Tycho Catalogues, European Space Agency, **1**, 57
- FitzGerald M., 1970, Astron. Astrophys., **4**, 234
- Hamuy M., Suntzeff N.B., Heathcote S.R., Walker A.R., Gigoux P., Phillips M.M., 1992, Publ. Astr. Soc. Pacific, **104**, 533
- Hamuy M., Suntzeff N.B., Heathcote S.R., Walker A.R., Gigoux P., Phillips M.M., 1994, Publ. Astr. Soc. Pacific, **106**, 566
- Hamuy M., Pinto P.A., Maza J., et al., 2001, Astrophys. J., **558**, 615
- Hayes D.S., 1985, in: Calibration of Fundamental Stellar Quantities, IAU Symp. 111, eds.: D.S. Hayes, L.E. Pasinetti, and A.G. Davis Philip (Dordrecht: Reidel), 225
- Johnson H.L., Mitchell R.I., Iriarte B., Wisniewski W.Z., 1966, Commun. Lunar. Plan. Lab., **4**, 99
- Massey P., Strobel K., Barnes J.V., Anderson E., 1988, Astrophys. J., **328**, 315
- Oke J.B., 1990, Astron. J., **99**, 1621
- Tokovinin A.A., 1995, Pis'ma Astron. Zh., **21**, 250

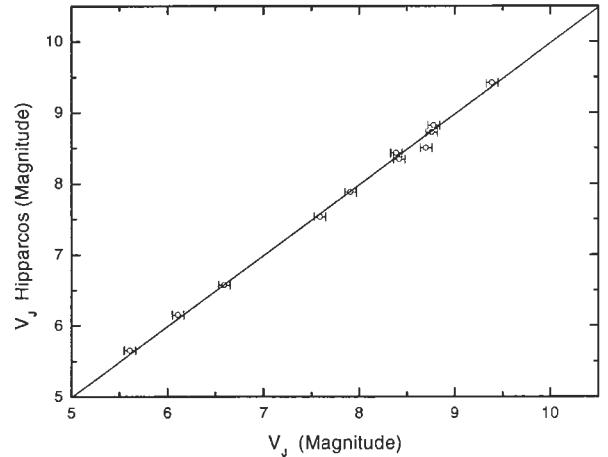


Figure 2: Comparison between the calculated V_J magnitudes and V_J magnitudes of Hipparcos catalogue.

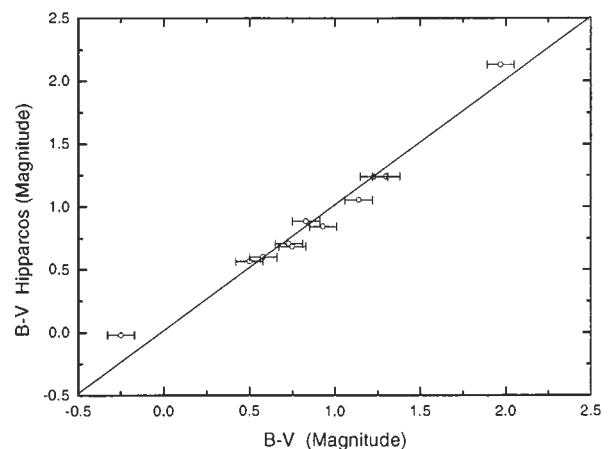


Figure 3: Comparison between the calculated $(B - V)_J$ and $(B - V)_J$ of Hipparcos catalogue.

Table 2: B_J , V_J , R_C , $(B - V)_J$, and spectral type results of this work

Star name			B_J mag ±0.06*	V_J mag ±0.06*	R_C mag ±0.07*	$(B - V)_J$ ±0.08*	Sp. type this work (8)	Sp. type SIMBAD (9)
Hip (1)	HD (2)	Other identifications (3)	(4)	(5)	(6)	(7)		
94056	-	Cou1462	10.62	9.39	8.70	1.23	K6	K8
94720	180555	-	5.36	5.61	5.57	-0.25	B1.5V	B9.5V
98538	189711	CHA118	10.67	8.70	7.83	1.97	N	Nvar
101227	-	Cou1962	9.25	8.42	7.97	0.83	K0	K0
101955	196795	KUI99	9.21	7.91	7.21	1.30	K6	K5V
103256	-	-	9.92	8.78	8.15	1.14	K5	K3V
105947	204236	-	8.17	7.59	7.39	0.58	F9	F8
109281	210211	-	7.52	6.59	6.25	0.93	K1	G2V
109951	211276	-	9.49	8.76	8.47	0.73	G7	G5
111170	213429	CHA111	6.61	6.11	5.96	0.50	F7	F7V
112695	216027	-	9.14	8.39	8.14	0.75	G8	G5

* The error values for most of the stars are better than these values.

Table 3: Flux ($E \cdot 10^{-16}$ erg/cm $^2 \cdot s \cdot \text{\AA}$)

Lambda Å	Hip 94056	Hip 94720	Hip 98538	Hip 101227	Hip 101955	Hip 103256	Hip 105947	Hip 109281	Hip 109951	Hip 111170	Hip 112695
3700	308	199682	248	4564	643	1339	1678	1836	551	8391	462
3706	308	199682	248	4564	643	1339	9716	10818	2841	47632	2861
3712	1298	269078	2943	7910	3198	2325	10964	13504	2883	55724	4670
3718	744	279973	962	5179	3095	2601	10932	10844	3985	47212	3806
3724	313	317487	1983	5975	6636	2715	13830	15039	4390	62412	4733
3730	1462	318508	1299	4722	1590	738	17546	17398	4275	78836	5549
3736	547	318801	944	4451	3571	1440	17885	25039	4946	69853	4940
3742	212	368987	610	3888	22	398	12809	25320	5823	73012	5336
3748	557	369419	928	7651	2202	2575	18054	23229	6334	78724	6425
3754	500	373305	265	4998	4479	81	19649	16072	5554	72179	6823
3760	984	432056	1426	6217	5458	1174	20013	18822	5620	73868	6115
3766	1138	404999	1053	8116	4883	931	19981	24308	5601	74572	6461
3772	1398	412560	1522	6413	5294	2201	18778	24997	6097	83200	6955
3778	1041	482093	675	5605	2851	1239	22605	30251	6112	90576	7785
3784	614	532452	167	7523	3894	1154	26729	34976	6939	99387	8163
3790	259	506700	969	8667	3563	2448	25264	23331	7300	109011	7674
3796	1407	456464	1210	9075	3718	1867	23060	21877	6191	95637	7314
3802	1570	465730	710	6704	2740	1338	20999	19228	5890	97222	7215
3808	1654	559308	653	6413	3560	1693	20156	23739	6001	104958	7395
3814	1336	622948	655	7014	5750	2524	22258	21054	6307	97714	6850
3820	1632	633610	494	6876	4664	1962	19865	24523	5415	101889	7917
3826	1282	574471	609	5109	2508	1503	19547	23816	6795	103485	6919
3832	1336	476326	720	4402	2937	1943	13109	14876	5038	83016	6322
3838	1089	458467	47	5092	3447	1752	13577	17728	4048	86494	6317
3844	896	549361	551	5544	3906	1440	17808	18359	4405	81518	5627
3850	1349	655082	1189	5977	4300	1728	21454	15254	5978	94831	5446
3856	955	714330	531	6422	3747	2058	18583	20950	6306	96860	7547
3862	1284	747516	1013	6304	4039	1717	22093	22854	4959	106357	6812
3868	1223	746449	1688	6021	3921	1765	23106	21877	7357	122672	6818
3874	1198	676013	1221	6107	3112	2063	23851	20645	6510	103074	6339
3880	904	583083	363	5400	2652	2322	24071	21716	5973	110266	6871
3886	1163	490910	975	5045	4861	2755	22904	22072	5957	102445	7518
3892	1245	478503	1812	6037	5127	1593	21109	27358	6336	99346	7168
3898	1870	546163	379	6918	2176	2022	22753	24979	6420	101262	7632

Table 3: *Flux (E-16 erg/cm² · s · Å), (continued)*

Lambda Å	Hip 94056	Hip 94720	Hip 98538	Hip 101227	Hip 101955	Hip 103256	Hip 105947	Hip 109281	Hip 109951	Hip 111170	Hip 112695
3904	1474	640774	883	7260	4092	2163	24007	33161	7706	112624	8170
3910	1197	706298	1083	8495	4193	2389	26346	30571	7992	108276	9096
3916	2030	741887	1198	8004	4945	2844	27511	35585	8420	119000	9359
3922	1301	753990	1818	6807	5397	2317	28368	38009	6379	113406	8313
3928	1072	747753	589	5932	4195	2083	25115	31729	6281	112473	7803
3934	1194	734728	1286	4888	3495	2481	19918	23062	5372	93034	6043
3940	1271	746372	621	7455	5656	2720	16159	18208	4808	77326	6037
3946	1609	718555	1267	7834	4013	2835	18831	24496	5944	81526	6623
3952	1258	688016	744	7795	5891	2819	23972	33065	6899	95345	7208
3958	1460	600296	481	8191	5780	2035	24858	33873	6587	108126	8706
3964	1769	474498	1206	6257	5646	2815	23658	31575	6207	103881	7710
3970	340	418116	562	5679	5305	2115	20487	26238	5425	95124	6910
3976	1237	463369	170	5957	2551	729	18742	26327	5812	88178	6922
3982	1541	558773	1152	8227	5663	2813	21543	34290	7438	98900	8623
3988	2142	639866	782	9982	6234	3809	26590	40570	8132	117578	9877
3994	2128	673231	192	11153	6231	4316	29797	44823	8322	124537	10483
4000	1505	692776	501	10568	5523	4255	31670	47752	8802	133323	11133
4006	1804	692836	713	10090	6945	3889	30286	49014	9252	139310	11464
4012	1919	706948	460	11027	7493	3908	31213	50462	9925	140584	12376
4018	2075	698798	609	11956	6350	4491	34023	46844	9972	142417	11879
4024	2224	684398	1346	11363	7093	5288	34755	47101	9659	140003	12463
4030	2695	686319	1496	11368	7060	5155	33020	52021	9877	141381	12388
4036	2368	689330	813	11361	6201	4444	33742	51557	9430	147726	12082
4042	2187	691776	1062	11294	7587	4453	34792	46792	9385	142749	12549
4048	2269	687788	340	11365	7175	4360	32833	50495	9894	145592	12001
4054	2172	681719	538	11955	6999	4187	32936	46482	9483	144252	11569
4060	1848	668188	862	11013	7093	4070	31690	47815	8648	144280	11137
4066	2017	665605	1042	10079	7030	4366	31721	45885	8963	137304	11418
4072	2408	650101	1215	10198	7653	4673	32383	48274	9488	142538	11435
4078	2814	626134	1177	11695	8455	4728	33290	48890	9008	147462	11691
4084	2908	570261	1753	12801	8590	5288	32092	43837	9980	141819	12940
4090	2776	492816	1612	13326	9419	5391	32516	51805	10293	142722	13003
4096	2626	401775	1492	12674	9726	5556	32856	51861	10702	149304	13397
4102	2453	366673	1483	11993	9866	5474	32858	52180	9968	138799	12006
4108	2423	415106	1418	12057	9277	5209	32512	51026	9784	127064	11960
4114	2568	500206	1340	12416	8929	5411	30479	53159	10078	137388	13140
4120	2873	554675	946	12505	8708	5496	33149	54213	10144	148752	13962
4126	2743	595032	906	12616	9018	5667	33826	50254	9882	144143	12773
4132	2755	599942	869	12398	9641	5296	34252	50056	9724	154341	12967
4138	2717	610443	1276	12225	10040	5548	36200	49845	9876	145976	13274
4144	2903	609479	1177	12114	8502	5010	37283	47722	10552	152380	13608
4150	2729	621107	1002	11612	8851	4936	37419	49544	9954	152652	14190
4156	3090	620669	949	11885	9819	5166	37109	50497	10275	153147	14431
4162	3150	614451	1083	12169	9858	5446	37121	47894	10456	157720	13534
4168	2871	608368	891	12444	9908	5810	36554	52478	9731	155604	13439
4174	3214	602690	1553	12329	9801	5384	35362	51672	10016	154785	13165
4180	2921	602564	649	12079	9575	5156	34413	49850	9771	149537	13154
4186	2695	593315	437	11185	10163	5362	34977	49463	10163	149386	13455
4192	3096	605429	1179	11640	9999	4943	36940	50283	9990	147347	13520
4198	2561	594526	1404	11539	10084	4636	35627	48995	9698	150015	13319
4204	3040	585475	1378	11608	8822	5699	34903	46331	9774	150910	13339
4210	2729	595018	321	11923	8899	5720	36135	51760	10396	155310	13666

Table 3: *Flux (E-16 erg/cm² · s · Å), (continued)*

Lambda Å	Hip 94056	Hip 94720	Hip 98538	Hip 101227	Hip 101955	Hip 103256	Hip 105947	Hip 109281	Hip 109951	Hip 111170	Hip 112695
4216	2435	582550	1084	12550	9504	5243	36300	53903	10374	157162	14099
4222	2329	578519	1782	11903	7939	5357	35524	54186	10297	153514	13998
4228	1670	571957	1376	10785	6766	4196	35477	52923	9734	149767	13689
4234	2055	561085	1810	11447	7106	4122	35148	53660	9018	144883	13581
4240	2138	565568	1898	12189	7494	4799	35038	55626	9265	145860	13744
4246	2712	554035	1999	11946	9251	5234	35595	56117	9591	146244	14091
4252	2519	564227	2405	12423	9185	5220	35059	54861	9530	148947	13776
4258	2775	549930	1826	12148	8262	5166	35891	54238	9668	147032	13364
4264	2646	535805	1541	11778	8650	4866	36162	54472	9716	148890	13522
4270	2480	534372	1880	11237	8203	4973	35523	55297	9534	149919	13443
4276	2373	527023	1616	10932	7785	4706	34871	53327	9492	147225	13301
4282	2357	522972	2071	11390	7859	4873	35032	54661	9250	145114	13347
4288	2437	524226	2200	10911	8716	4942	33582	55503	8729	139823	12869
4294	2466	509471	1920	10403	8636	5040	33249	53079	8743	134277	12191
4300	2225	500841	1862	9385	8398	5157	31098	48415	7817	127380	11637
4306	2406	498709	1815	8818	7598	4482	29307	42983	7390	120963	10619
4312	2888	485502	1553	10386	8399	4882	29081	43484	7651	120355	10464
4318	3301	456604	1742	11610	10208	6041	30752	53193	8803	128718	12492
4324	3182	416032	2055	12188	11368	5865	33135	58086	9221	139277	13496
4330	3440	355028	2120	12748	11524	6143	33283	59649	10012	137422	13508
4336	3456	290799	2075	12937	12336	6856	33273	60293	9840	137302	13710
4342	3557	280889	1824	12458	12987	6810	31153	56477	9235	130654	12613
4348	3597	329691	1518	12502	12778	7033	30907	60902	9671	127672	13564
4354	3860	389014	1508	13221	13118	7287	32888	62778	9926	138825	13888
4360	4064	428617	1610	13679	13788	7510	33673	64826	10698	147093	14889
4366	4170	453148	1511	13486	14354	7643	35367	67415	10273	152000	14814
4372	3908	466481	1454	12808	14047	7645	35490	63351	10103	150141	14830
4378	3369	461634	1686	11869	12603	6960	35952	62024	10015	151580	14080
4384	3214	460162	1677	11276	11239	6000	34793	58285	9336	146338	13598
4390	3418	459659	1779	11707	11054	5994	33041	56648	9511	142896	13445
4396	3614	460323	2200	12333	12294	6596	34816	62679	10254	146876	14135
4402	3603	458992	2425	12379	12964	6689	34176	64512	9908	147334	14514
4408	3531	457688	2849	13133	13012	6532	35955	61825	10001	152972	14166
4414	3654	459216	3150	13745	12991	7098	36174	67096	10464	152185	14735
4420	3921	458690	3459	13813	13647	7594	36918	67641	10625	154371	15373
4426	3864	453891	3764	13986	13781	7492	37858	70615	11294	159667	15758
4432	3762	448942	3420	13560	13750	7314	37932	70791	10684	161053	15939
4438	3904	450696	3869	13676	14293	7157	37398	69952	11115	157811	15520
4444	4262	443745	4399	14138	14666	7691	37495	73515	11044	160244	15869
4450	4157	442790	4676	13913	14926	7894	38389	73182	10885	157376	16043
4456	3957	445072	4468	13098	13574	7380	37277	71684	10660	154245	15354
4462	4035	437305	4433	13861	13564	7505	35600	70489	10579	152342	15211
4468	4523	433226	4097	14429	15054	7696	36251	70381	11131	153730	15483
4474	4832	425140	4171	15160	17003	8335	37794	72059	11729	157745	16183
4480	4705	425694	4288	15463	16943	8973	39508	76325	11583	162322	16521
4486	4693	430053	4419	15151	16915	8907	39194	76338	11709	163214	16565
4492	4697	431385	4727	15082	17824	9052	38592	75689	11804	164018	16527
4498	4949	427214	4284	15771	17250	9107	39798	76377	11842	165674	16466
4504	5359	423651	4249	16431	18622	9889	40394	79046	12074	165974	16717
4510	5293	429216	4688	16354	19925	10112	41870	83548	12340	170371	17475
4516	5273	421871	4184	15972	19916	9841	42180	82615	12247	169530	17324
4522	4807	415330	4207	15307	18628	10011	40419	79781	11792	165806	16800

Table 3: Flux ($E \cdot 10^{-16}$ erg/cm $^2 \cdot s \cdot \text{\AA}$), (continued)

Lambda Å	Hip 94056	Hip 94720	Hip 98538	Hip 101227	Hip 101955	Hip 103256	Hip 105947	Hip 109281	Hip 109951	Hip 111170	Hip 112695
4528	4388	421369	4164	14290	17119	9120	39418	76294	11130	163382	16489
4534	4435	416571	4077	14293	16469	8589	38653	72550	11051	160988	16315
4540	4915	417745	4796	15303	17003	8759	38489	74851	11510	159359	16667
4546	4904	411157	4327	15625	18054	9112	39665	77474	11657	161759	16771
4552	5008	404103	3987	15082	18176	9236	39598	77706	11687	164392	16647
4558	5453	402377	4358	15821	18895	9899	39677	80043	12014	165851	16745
4564	5520	410338	4518	16099	21105	10283	40475	82228	12031	165527	17050
4570	5679	403836	4508	16252	21284	10338	39787	81761	12141	164925	17320
4576	5741	397965	4354	15727	20475	10622	40397	83034	12199	165687	17394
4582	5456	397080	4558	15515	21066	10371	40928	81472	11956	166301	17011
4588	5500	389225	4674	15541	20327	10163	39740	80050	11823	164146	16981
4594	5389	392748	5152	15598	20669	10416	39984	79650	11817	164702	17006
4600	5536	392961	4562	15525	20692	9881	40215	80297	12119	163219	16904
4606	5647	389251	4404	15669	20165	10063	39664	81579	12216	164280	17240
4612	5816	383887	4844	15868	21536	10457	40521	83459	12138	166330	17518
4618	5781	384579	5341	16325	22070	10704	41079	85043	12296	167503	17410
4624	5875	383092	5495	16347	21755	10676	41258	86536	12482	168076	17712
4630	5694	379834	4947	16455	21778	10827	41380	86928	12488	165425	18004
4636	5722	378594	4344	15799	21894	10511	41156	84243	12274	165642	17861
4642	5567	375954	3862	15265	21427	10312	40656	81524	12277	164296	17344
4648	5447	376840	3967	15307	20902	9915	39384	78438	12020	164673	16949
4654	5629	371728	3366	15717	20821	9832	39209	78586	12258	163925	16962
4660	5656	366762	3023	15566	21778	10320	39999	80357	12248	164745	17038
4666	5539	365070	2868	14720	21439	10477	39851	78466	12384	164385	16664
4672	5615	364973	2648	14731	20453	9922	39058	77588	12166	158933	16387
4678	5570	361158	2193	15091	21131	10243	39056	79728	12332	159827	16688
4684	5509	358420	2046	15113	21023	10198	39553	80754	12146	163722	17204
4690	5585	357402	2094	15106	21046	10232	40072	80963	12070	162904	17126
4696	5471	356382	1850	15076	21045	10305	39756	77386	12154	163188	17125
4702	5329	352495	1995	14519	20872	10120	39093	76303	11701	162836	16489
4708	5350	349312	2324	14491	20320	9620	38882	76854	11823	160256	16425
4714	5561	348697	2260	15542	20736	9901	38967	75858	11907	157460	16853
4720	5596	347989	2334	16383	21334	10457	40512	82605	12202	161797	17369
4726	5420	345833	2475	15922	21430	10612	40295	84721	12431	164762	18046
4732	5305	343063	2541	15458	20866	10183	40244	83299	12166	163788	17244
4738	5376	345836	3075	15723	20305	10148	39544	82868	12362	163851	17507
4744	5436	343126	4278	15774	20590	10295	40564	85557	12490	165182	18015
4750	5317	341239	6103	15837	20959	10379	41889	89290	12966	165850	18184
4756	5250	342998	7882	15900	20458	10247	41108	88139	12525	165577	18087
4762	4965	338039	8708	15787	19691	9947	40658	86196	12548	162845	17807
4768	4720	334946	9177	16041	19186	9759	40088	84362	12185	165199	17551
4774	4621	336568	9670	16469	19053	9815	40768	88651	12617	166879	18291
4780	4543	335823	9789	16401	18511	9858	41457	91361	12859	170891	18815
4786	4672	333764	9635	16201	17984	9685	42126	91429	12697	168556	18549
4792	5030	329727	9744	16530	18645	9936	42587	92185	12888	168813	18200
4798	5261	328131	9820	16624	19941	10458	42794	93870	13096	166931	18817
4804	5378	329891	10247	16590	20779	10802	42330	92358	13225	173195	18811
4810	5507	327273	10735	16780	21054	10833	42085	91445	12999	169333	18478
4816	5547	320772	10700	16635	21399	10903	41476	92783	13041	169005	18580
4822	5245	315528	10455	16362	21101	10779	42205	93428	13008	171169	18824
4828	5113	311299	9933	16217	20941	10477	41943	90644	12720	170040	18534
4834	5138	300801	9688	15932	20682	10316	41423	90827	12704	163823	18451

Table 3: Flux ($E \cdot 16 \text{ erg/cm}^2 \cdot \text{s} \cdot \text{\AA}$), (continued)

Lambda Å	Hip 94056	Hip 94720	Hip 98538	Hip 101227	Hip 101955	Hip 103256	Hip 105947	Hip 109281	Hip 109951	Hip 111170	Hip 112695
4840	5223	284819	9441	16218	20873	10262	40505	89454	12613	163637	18070
4846	5475	254904	9092	16436	21228	10574	39950	88915	12681	161054	17797
4852	5370	206765	8824	15504	21378	10781	39238	88624	12434	159023	17684
4858	5199	175130	9184	14542	21010	10215	36582	82787	11623	149087	16580
4864	5111	187813	9213	14250	20111	9730	33360	76395	10889	136090	14919
4870	4990	228871	9737	14113	19983	9697	32481	76910	11038	132371	14799
4876	5012	260166	9940	14765	19807	9480	34867	79938	11525	141326	16291
4882	4979	277291	9953	14856	20469	9778	36857	84513	11928	149090	16955
4888	4863	286595	9848	14520	19876	9506	37092	83827	11736	152065	17123
4894	5258	291318	10320	15577	19744	9574	37536	83729	11753	153219	16938
4900	5243	292667	10890	15797	20962	10212	38684	88590	12391	157317	17550
4906	5492	293629	10587	15892	21536	10274	39226	89338	12519	157044	17847
4912	5216	289701	10331	15154	21302	10449	39299	88016	12258	158287	17602
4918	4984	287108	10393	14332	20894	9666	38524	84572	11742	153175	17110
4924	5155	286541	9796	14687	19668	8976	37635	82300	11599	150326	16884
4930	5391	291506	10157	15469	20918	10088	38103	85054	12012	151352	17221
4936	5093	286602	9019	15068	21291	10268	38561	86579	12012	154212	17480
4942	5353	287710	8887	15662	20701	9957	38357	87137	11994	154546	17596
4948	5488	282919	9474	15909	21588	10502	38780	89916	12382	154778	17882
4954	5138	286432	10072	15265	22259	10837	39519	89722	12400	156556	17983
4960	4934	282597	9674	15364	20417	9730	39019	88351	12120	155579	17656
4966	5111	281762	9535	15499	20314	9981	39484	89154	12117	154591	17649
4972	5404	280066	10057	15881	20590	10280	39124	89488	12142	155210	17782
4978	5076	280525	9865	14981	21666	10245	38553	88714	12067	155668	17805
4984	4757	280844	9606	14553	19625	9652	37314	85762	11850	153338	17366
4990	4886	275615	8693	14986	18945	9266	37055	85882	11856	150258	17179
4996	4864	275728	8965	15105	19422	9821	38256	87359	11983	149880	17394
5002	4579	276368	8392	14679	19328	9273	38146	84805	11803	149909	17196
5008	4584	274229	8551	14251	18922	9239	36873	81923	11482	148508	16839
5014	4476	275845	8228	14128	18681	8928	36463	80289	11473	146087	16595
5020	4679	271708	7979	14367	18053	9092	36278	79204	11516	143989	16351
5026	4664	271675	7680	14624	18429	9239	36412	80646	11603	146654	16612
5032	4775	267500	7882	15205	19431	9651	37519	85171	11891	149742	17218
5038	4375	265894	7193	14407	19131	9576	37632	84595	11716	150185	17293
5044	4615	270177	6454	15064	18241	8895	36880	83224	11489	147781	16917
5050	4641	268022	6372	15086	19226	9668	36893	84602	11719	149419	17070
5056	4873	269325	6318	16003	18881	9530	37748	86461	12075	152103	17598
5062	4694	268289	6065	15755	19396	9795	39311	88210	12228	153970	18057
5068	4364	265967	5546	15344	18692	9345	39406	88046	11969	153616	18120
5074	4325	267505	5312	15112	18099	9107	38776	87545	12014	153059	17862
5080	4232	268604	5165	14735	17923	9077	37781	85639	11850	151104	17370
5086	4545	267735	5384	15355	17825	8648	37400	85407	11837	151746	17205
5092	4555	266872	5241	15777	18437	9328	38320	88597	12218	154616	17939
5098	4311	265173	4444	15278	18537	9374	38852	87188	12083	153491	18038
5104	4161	264866	4724	15580	17942	8986	38426	87314	12006	154758	17736
5110	4235	266175	4300	15513	17176	8769	38479	85778	11893	151903	17748
5116	4450	265808	3904	15670	17909	9136	38860	85936	12147	153353	17930
5122	4195	259977	3307	15183	18597	9043	39003	88708	12414	156249	17907
5128	4116	259837	2929	14862	17374	8613	38385	83802	11954	153312	17476
5134	4263	256987	3051	14684	17105	8640	37876	84830	11703	150138	17314
5140	4204	258104	3443	14432	18131	8698	37121	84370	11406	148333	17021
5146	4164	252870	3238	14269	17517	8475	36736	81092	11380	144836	16701

Table 3: Flux ($E \cdot 16 \text{ erg/cm}^2 \cdot \text{s} \cdot \text{\AA}$), (continued)

Lambda Å	Hip 94056	Hip 94720	Hip 98538	Hip 101227	Hip 101955	Hip 103256	Hip 105947	Hip 109281	Hip 109951	Hip 111170	Hip 112695
5152	4125	249828	2991	14379	17119	8368	36713	82053	11597	147306	17051
5158	4339	251872	2803	14686	16874	8404	37373	82800	11576	146762	17090
5164	3929	246424	2994	13160	17853	8554	36310	81268	11428	145117	17183
5170	3245	244004	5133	11715	15697	7197	34114	70407	10002	137402	15496
5176	3293	243412	8899	12005	13408	6364	32869	69739	9813	131753	14804
5182	3224	241567	10777	12284	13520	6393	33534	76109	10263	135528	15969
5188	3851	241283	11317	12984	14326	6460	33472	73541	9972	134765	15258
5194	4306	239649	12418	13784	16611	7750	34169	78309	10883	135210	15945
5200	4354	241422	12672	14169	17814	8377	35061	82677	11163	138233	16163
5206	3802	237471	12405	13679	17236	8206	35717	82030	11078	140292	16716
5212	4319	236500	11872	14407	15682	7552	35428	81082	11128	138564	16414
5218	5161	235411	13168	14861	19242	9162	35747	83057	11625	141004	16685
5224	5311	234349	13703	14467	21326	10112	35684	85855	11680	143053	16784
5230	5359	233152	13451	14217	21438	9954	34918	78899	11192	139287	15823
5236	5844	232168	14296	15128	21996	10151	34798	82919	11377	137592	16465
5242	5965	233277	14507	15710	23261	11105	35423	87730	12050	142017	16892
5248	5866	231728	13570	15695	23677	11235	36298	89090	12162	145135	17035
5254	5838	229480	12086	15646	23508	10988	36623	85324	11764	143575	17039
5260	5507	226984	12018	14825	23365	10836	36359	87073	11772	142018	17112
5266	4678	225365	11732	13098	21123	9702	34995	79912	11009	139728	15805
5272	4837	226743	11220	13202	18569	8555	32908	72500	10458	129645	14957
5278	5502	228749	11769	14524	20117	9295	33104	79438	11126	130221	16047
5284	5897	228299	12868	15452	22568	10588	34572	86469	11544	135660	16245
5290	6146	228408	12997	16020	23794	11214	35358	89447	11951	141749	17095
5296	5906	223119	12551	15435	24429	11210	36362	93024	12231	144241	17550
5302	6018	222085	12458	15581	23907	10924	36426	84410	11471	142227	16393
5308	6426	224310	13046	16607	24559	11467	35880	91865	12174	140597	17159
5314	6471	221969	13629	16693	25458	12086	36377	94263	12143	143483	17636
5320	6136	221227	13914	15876	25668	11973	36215	92592	12292	145721	17185
5326	5529	218943	13583	14711	24060	10899	36301	88353	11596	138996	16957
5332	5631	219127	13329	15055	22177	10064	34127	81647	11021	137870	15958
5338	5881	218383	13968	15729	23035	10671	34479	86912	11741	133410	16454
5344	5856	219570	14134	15573	23471	11043	34391	87797	11695	137973	16556
5350	6316	223649	13931	16281	23700	11099	35122	87868	11991	140312	16609
5356	6860	222887	14440	17008	25471	12031	35829	89928	11954	138680	17226
5362	6758	220207	14665	16511	27077	12656	36674	94318	12366	143751	17685
5368	6186	220801	13989	15576	26502	11954	35922	90705	11959	143122	16929
5374	6273	217514	13368	15873	24837	11142	35297	86238	11668	138933	16745
5380	6777	218256	13392	16461	25905	11687	34996	91755	12334	140110	17356
5386	6766	219040	12944	16288	27042	12104	35945	91176	12257	142301	17011
5392	6385	217630	12488	15720	26479	11803	35493	89856	12057	140090	17016
5398	6258	215568	12004	15186	24818	11158	35073	85614	11755	138764	16492
5404	6050	214175	12086	14868	24189	10792	34226	84392	11592	136166	16313
5410	6153	213787	11877	15067	23900	10519	33888	81633	11300	133267	15933
5416	6731	213468	11967	15916	24679	10962	33928	85436	11485	133074	16378
5422	6896	215333	12477	16187	26688	11897	34606	89053	12057	137860	16811
5428	6523	214624	12363	15842	27566	12048	34824	88253	11846	136275	16682
5434	6424	212877	11580	15732	25715	11280	34616	86504	11844	137839	16548
5440	6785	212898	11407	16229	25789	11528	34939	88290	11760	137392	16763
5446	6640	211640	11620	16409	26517	11730	35679	92394	12127	138508	17186
5452	6486	211387	11906	16408	26435	12040	35473	88939	12031	138521	16847
5458	6622	211028	11518	16422	25605	11961	35037	91610	11923	138196	17171

Table 3: Flux ($E \cdot 16 \text{ erg/cm}^2 \cdot \text{s} \cdot \text{\AA}$), (continued)

Lambda Å	Hip 94056	Hip 94720	Hip 98538	Hip 101227	Hip 101955	Hip 103256	Hip 105947	Hip 109281	Hip 109951	Hip 111170	Hip 112695
5464	6835	210027	11177	16403	25884	11954	34983	91225	12109	137633	17089
5470	6980	208378	10846	16487	27109	12243	35078	90908	12033	139783	16894
5476	6877	208584	10642	16257	27251	12282	35223	89585	11984	138296	16778
5482	7030	208042	10660	16223	27006	12039	34740	86027	11733	136095	16352
5488	7220	207345	10308	16666	27615	12171	34714	87580	12041	134443	16671
5494	7140	205875	9638	16840	28307	12488	35246	88833	12251	140162	16900
5500	6967	202591	9283	16363	27359	12423	35380	89772	12192	139382	16959
5506	7031	205155	9561	16612	27428	12330	35000	89850	12137	136851	16837
5512	6827	205838	9901	16533	27572	12245	34689	88678	11890	135858	16642
5518	7132	203384	9953	16762	26825	12260	34516	88665	11912	134602	16752
5524	7384	203528	9857	16654	28383	12795	34814	91536	12285	138080	16916
5530	7272	200404	9309	16402	27798	12327	35521	91397	12300	138266	16888
5536	7420	201276	8779	16622	28313	12379	34899	88434	11980	135827	16608
5542	7484	201011	8484	16897	29113	12710	34863	90423	12139	135554	16650
5548	7534	201266	9069	17217	29110	12889	34855	90928	12246	136772	16801
5554	7579	200344	9654	17130	29612	13242	34487	91266	12143	136076	16905
5560	7403	199874	9691	16627	29108	13043	34933	90865	12199	136156	16854
5566	7266	198134	9722	16081	28459	12626	34581	89218	11969	135418	16597
5572	7191	199305	9294	16121	27592	12107	34047	87086	11708	133460	16078
5578	7299	197632	8364	16278	27456	12147	33904	87388	11755	131303	16294
5584	6934	197020	7990	15943	28214	12312	33848	87369	11705	131003	16172
5590	6679	195668	9430	15373	25728	11323	33432	84611	11449	130289	15773
5596	6755	197700	10799	15850	25727	11254	32727	83807	11219	128609	15571
5602	6905	195735	10923	15980	25889	11603	32376	85978	11269	127958	15622
5608	7497	192079	10594	16431	26954	12249	32507	86854	11600	129313	15883
5614	7119	195668	9952	15854	28663	12917	33507	88708	11874	130819	16325
5620	7179	193532	9086	16094	27053	12043	33792	86500	11472	129443	16141
5626	7240	191273	7798	16299	27085	12019	33064	85338	11514	128643	15943
5632	7689	187892	8215	16563	28193	12398	33131	86862	11718	128537	16128
5638	7634	189904	9208	16627	29184	12780	33683	86921	11752	129465	16020
5644	7540	188898	12151	16587	29040	12720	33198	85517	11663	128479	15727
5650	7602	187864	15166	16466	28689	12709	32765	86586	11771	127533	15953
5656	7498	190101	16295	16096	29132	12812	32717	86348	11726	127578	15819
5662	7483	186548	16360	16046	28349	12224	32119	83600	11460	125440	15434
5668	7572	185417	16471	16456	28142	12312	31738	83640	11319	124252	15441
5674	7659	186209	16413	16621	28102	12718	32395	86972	11591	125943	15809
5680	7695	184352	16433	16778	28979	12927	32839	89575	11772	126815	16037
5686	7492	185656	16691	16361	29101	12783	32504	87677	11506	124851	15774
5692	7609	183032	16411	16572	28016	12319	31963	85125	11342	124914	15425
5698	7743	183814	17248	16333	29203	12879	32052	86079	11425	124599	15492
5704	7472	184664	17105	16117	28687	12399	32525	85198	11299	123056	15497
5710	7257	181398	17055	15280	27793	11949	31849	81614	10988	121457	15077
5716	7542	181469	17008	15887	26894	11877	31358	82315	11078	120859	15091
5722	8099	180648	17920	17125	29086	12550	31897	86640	11406	123522	15584
5728	7794	181627	18207	17138	29949	13123	32376	89487	11548	125867	15850
5734	8025	179073	16238	17254	29472	12836	32452	88813	11497	127383	15945
5740	7894	176171	15943	16766	29610	13049	32467	88215	11613	127113	16096
5746	8126	179551	15010	17062	30250	13167	32250	88045	11565	125347	15944
5752	7935	178312	14038	16401	30004	12824	32146	86751	11329	124944	15714
5758	8061	174657	14287	16467	29533	12576	31819	87207	11316	123981	15524
5764	7948	177303	14604	16519	29879	12706	31906	85646	11291	121822	15406
5770	8204	175819	15004	16960	30031	13014	31771	86674	11354	121728	15619

Table 3: Flux ($E \cdot 16 \text{ erg/cm}^2 \cdot \text{s} \cdot \text{\AA}$), (continued)

Lambda Å	Hip 94056	Hip 94720	Hip 98538	Hip 101227	Hip 101955	Hip 103256	Hip 105947	Hip 109281	Hip 109951	Hip 111170	Hip 112695
5776	8118	176304	15108	16949	30354	12925	31530	87104	11411	122484	15469
5782	7726	174299	16178	16254	30053	12856	31666	83723	11178	120436	15253
5788	7641	174665	15198	15990	27888	12099	31276	81593	11044	119618	15041
5794	8032	172960	15385	16429	28739	12369	30971	82324	11036	120490	14795
5800	8128	177195	15764	16939	29846	12920	31165	85406	11196	120149	15015
5806	8166	170760	15997	16648	30321	12916	31013	86530	11334	120616	15319
5812	8085	174136	16050	17052	30338	12836	30992	86373	11366	120517	15325
5818	8252	172666	16518	16983	30440	12914	31425	85464	11210	118564	15286
5824	8346	174343	17109	17079	30776	13297	31392	86993	11418	120034	15321
5830	8392	174035	17449	17137	30457	13494	31620	87960	11621	122643	15432
5836	8446	172368	17744	17098	30951	13466	31923	86431	11459	120810	15405
5842	8522	170933	18317	17190	30526	13119	31853	86394	11382	121654	15545
5848	8380	171471	18443	17340	31833	13406	31725	86014	11389	121170	15511
5854	8199	173698	17622	16862	30973	13224	31909	85966	11351	121820	15450
5860	7892	174195	16822	16311	30115	12734	30971	82855	11091	118255	14982
5866	8086	175251	16162	16990	29714	12881	30928	83574	11154	118514	15059
5872	8246	174145	15979	17230	29267	13002	31234	86029	11387	120944	15452
5878	8313	172820	15571	17438	30507	13404	31188	87579	11326	120491	15590
5884	7422	168831	14702	16630	28951	12983	31193	85503	11091	118616	15360
5890	4739	164466	14324	14001	25948	11460	30118	79528	10306	114361	14877
5896	4188	165540	12867	13683	16597	8129	28199	71837	9555	108657	13736
5902	6316	170047	12838	16001	16108	8322	27603	74106	9921	108192	13776
5908	7632	171469	13822	16665	23151	11538	28926	81200	10629	111334	14687
5914	8134	169319	15003	16764	28191	12742	29846	84429	10901	114273	15094
5920	8172	170697	15582	17243	28658	13053	30104	84789	11074	115864	14970
5926	8363	170532	15210	17607	29914	13066	30356	85825	10949	116043	15055
5932	8478	171101	15605	16910	29821	13282	30501	85983	11095	116847	15103
5938	8655	172822	15602	17589	30469	13446	30785	86346	11186	116974	15154
5944	8394	167676	15893	17249	30509	13395	30672	84052	11154	115469	15016
5950	8414	167469	16161	16908	30324	13149	30166	84588	11034	115417	15058
5956	8808	168730	16382	17372	30694	13223	30389	83396	11020	115304	14858
5962	8740	170879	15943	17577	30867	13395	30203	84355	11031	114787	15019
5968	8607	164506	16753	17431	31170	13477	30451	84849	11122	116422	15192
5974	8814	169906	17100	17775	31286	13671	30977	87198	11152	117065	15222
5980	8656	168249	17430	17200	31508	13488	30703	85361	11146	116281	15009
5986	8629	168390	17213	17105	30744	13443	29607	83884	11008	114694	14947
5992	8725	167501	16932	17428	30863	13227	29829	84045	11192	115800	14801
5998	8306	169460	16616	17743	31530	13585	30317	84894	11205	115121	14939
6004	8241	168494	16021	17608	31366	13453	30359	83679	11166	114791	15136
6010	8168	164181	15424	17202	31028	13243	29931	82663	10982	114731	14816
6016	8047	168857	15292	17215	30849	13081	30197	82872	10991	114599	14885
6022	8019	166102	15427	17089	30815	13058	29830	81905	10890	113259	14714
6028	8172	165565	15981	17200	30688	13150	29506	82077	10952	112992	14510
6034	8291	167683	16839	17648	31336	13507	30100	84210	11084	113223	14809
6040	8533	165709	17000	17842	32321	13735	30123	86536	11328	114929	15081
6046	8445	166537	16988	18006	32280	13904	30254	85656	11203	114606	14942
6052	8532	165425	17064	17802	32394	13841	30496	85875	11176	115923	14968
6058	8379	163979	16902	17570	32511	13564	30245	84934	11223	114476	14670
6064	8432	164773	16589	17756	32115	13486	30216	83821	11080	113381	14957
6070	8352	161468	17191	17430	31659	13343	29801	82558	10936	113284	14582
6076	8435	162366	18362	17541	32224	13723	29580	83704	10988	112966	14787
6082	8420	159686	18676	17306	32599	13527	29511	83719	11084	112127	14762

Table 3: Flux ($E \cdot 10^{-16}$ erg/cm $^2 \cdot s \cdot \text{\AA}$), (continued)

Lambda Å	Hip 94056	Hip 94720	Hip 98538	Hip 101227	Hip 101955	Hip 103256	Hip 105947	Hip 109281	Hip 109951	Hip 111170	Hip 112695
6088	8352	159587	18493	17355	31977	13297	29058	82473	10879	112428	14594
6094	8309	159416	18527	17156	31545	13128	29439	81175	10709	110439	14356
6100	8197	158275	18504	17125	31424	13048	29093	81236	10837	111016	14411
6106	7953	158073	17631	16615	30753	12751	28950	79901	10652	109055	14072
6112	8113	156201	17791	16770	30622	12885	28225	81475	10679	109526	14210
6118	8218	157895	18436	17091	31262	13051	28273	80541	10625	107919	14251
6124	7733	157344	17787	16824	30882	12650	28315	80097	10558	108888	13918
6130	7809	156836	17670	16611	28879	12389	28091	79340	10556	108933	14129
6136	7840	154356	18680	16376	30063	12659	28731	80341	10592	107994	14174
6142	7732	151480	17904	16131	29921	12329	28146	75555	10245	105714	13530
6148	7974	154190	17654	16552	30388	12561	28316	78088	10391	105084	13552
6154	7967	153259	18106	16596	30944	12684	27806	77912	10328	104410	13968
6160	7704	148770	18296	16328	30260	12317	27320	77622	10278	105177	13730
6166	6941	151996	17812	15591	27915	11566	27419	73593	9965	102917	13373
6172	6926	150944	17259	15620	25669	11404	27097	74245	9777	101489	13344
6178	7514	150307	17886	15773	27140	12058	26724	75593	9973	101642	13330
6184	7891	149578	18331	16288	29147	12710	27517	77506	10153	102828	13484
6190	7937	148122	17284	16409	29692	12717	27703	77382	10247	104841	13765
6196	7783	149550	16333	16354	29211	12564	27527	76644	10140	103373	13676
6202	7876	149926	16707	16106	29134	12816	27481	77386	10149	103895	13683
6208	7923	149384	17188	16552	29543	12923	27546	79011	10161	104371	13691
6214	7862	146591	15789	16458	29510	12555	27264	79104	10092	104309	13706
6220	7644	147210	14986	16362	28693	12443	27155	76133	10147	102236	13481
6226	7602	146449	14903	15971	28100	12254	26907	75339	10059	102492	13448
6232	7457	145664	15045	16242	27875	12114	26479	75665	9996	103583	13518
6238	7438	146252	15297	15702	27596	12151	26959	75661	9922	103151	13477
6244	7401	145235	16017	16016	27505	12064	26476	74331	9861	100664	13126
6250	7433	145407	15814	15528	27538	11948	26019	72751	9743	99127	12929
6256	7376	145186	15996	15394	27792	11919	26145	73252	9725	99040	12937
6262	7190	143440	15319	15083	26893	11715	25875	72299	9570	99031	12981
6268	7272	141961	14893	15137	26725	11817	26041	73676	9744	98631	12904
6274	7479	140790	15545	15766	27473	12013	26617	74764	9731	100278	13213
6280	7645	136022	15951	16155	28462	12214	26156	73882	9657	97776	13099
6286	7577	137060	15703	15558	28113	12096	25396	73920	9649	96486	12801
6292	7709	138139	15829	15835	28338	12178	25393	74083	9476	96477	12756
6298	7689	139326	16297	15463	28789	12106	25919	73355	9555	97067	13047
6304	7537	139916	16261	15399	28309	11897	25818	72321	9480	97217	12880
6310	7603	140347	16476	15244	28275	11945	25486	71614	9394	95571	12681
6316	7652	138720	17243	15417	28481	11898	25713	72656	9550	97017	12956
6322	7691	139148	16954	15346	28984	11939	25562	71087	9594	95640	12569
6328	7798	139485	16312	14820	28635	12171	25542	71309	9474	96789	12673
6334	7902	140876	17016	15444	29659	12236	25747	73182	9658	97568	13008
6340	7886	139141	16331	15375	29640	12073	25636	72500	9597	96398	12892
6346	7844	136984	15495	15002	29421	12131	25717	72254	9573	95904	12695
6352	7969	138103	15202	15113	29907	12459	25743	72207	9687	97412	12782
6358	7993	138646	14702	15590	30405	12338	25726	72822	9758	94989	12812
6364	7891	138738	14005	15585	29965	12175	25449	70893	9590	93656	12542
6370	7808	137029	13842	15124	29274	12204	25476	69682	9559	95911	12598
6376	7959	137638	15269	15296	29710	12383	25540	72051	9730	97265	13016
6382	7962	137681	15896	15793	29817	12432	26068	73941	9736	95481	12957
6388	7791	137637	15506	15379	29377	12443	25709	73595	9672	97335	12851
6394	7838	138274	15494	15785	29510	12431	25869	73310	9691	95392	13008

Table 3: *Flux (E-16 erg/cm² · s · Å), (continued)*

Lambda Å	Hip 94056	Hip 94720	Hip 98538	Hip 101227	Hip 101955	Hip 103256	Hip 105947	Hip 109281	Hip 109951	Hip 111170	Hip 112695
6400	7803	140607	15621	15478	29184	12067	25593	72327	9604	96041	12810
6406	7146	139771	15803	15114	29496	12045	25040	71466	9484	94343	12582
6412	7114	138645	16088	15086	29475	11939	25373	71558	9379	94389	12335
6418	7129	138873	16315	14700	29947	12102	25124	70858	9322	92435	12509
6424	7216	138254	16182	14895	29818	12104	25112	70720	9435	93970	12407
6430	7360	138463	16058	15027	30163	12279	24990	71195	9436	93891	12619
6436	7423	137760	16310	15393	30789	12362	25061	71941	9446	94187	12668
6442	7105	136792	16752	15134	30015	12116	24913	71862	9443	92870	12372
6448	6937	135112	17310	14947	29263	12145	24989	71713	9389	92598	12535
6454	7324	135872	17402	15244	30165	12171	25165	71803	9450	93530	12483
6460	7395	134952	16854	14926	30212	12193	24752	70378	9171	91146	12140
6466	7221	132772	17196	14981	29834	11933	24317	69799	9138	90975	12091
6472	6924	133112	16520	14711	29405	12000	24499	69471	9210	89682	12107
6478	7093	130926	16552	14640	29669	12161	24358	70163	9206	89421	12092
6484	7315	130155	16303	14849	30177	12111	23870	69912	9060	88253	12100
6490	7264	131298	15734	14512	30428	12146	23667	69058	8953	88395	11873
6496	7179	130346	15205	14675	29791	11576	23667	68585	9009	88247	11855
6502	6632	130212	13454	13775	28084	11512	23433	66288	8782	84657	11264
6508	7020	131313	13314	13897	28821	12259	23553	67701	8891	85282	11587
6514	7260	129169	13997	14727	30412	12169	24058	69734	9095	87162	11857
6520	7317	128489	14467	14886	31085	12417	24109	69257	9156	86780	11789
6526	7495	127669	15207	14422	30841	12553	23732	68629	8943	85585	11715
6532	7526	126668	15913	14796	31333	12522	23676	68924	9021	85935	11798
6538	7528	124078	15753	14867	31310	12514	24081	69874	9052	86687	11874
6544	7532	120200	16489	14729	31575	12527	24000	69660	9118	86352	11794
6550	7440	111987	15974	14928	31131	12191	23473	69303	9015	85169	11605
6556	7317	100565	15209	14218	30566	11995	23016	67941	8843	82648	11310
6562	7135	88540	15425	13927	30440	11689	21912	65786	8500	79617	10810
6568	7109	89579	16038	13231	29813	11433	19783	61555	7898	73240	9925
6574	7069	98776	16118	12820	29315	11708	19610	61344	7814	71965	9980
6580	7151	109928	15885	13833	30257	12227	21399	64273	8184	75727	10806
6586	7573	117554	16588	13983	30672	12604	22536	67164	8648	79843	11297
6592	7331	120418	17109	14242	30821	12412	23192	67887	8764	82851	11491
6598	7398	122175	17627	14803	30694	12218	23647	67735	8872	84224	11585
6604	7372	124527	17819	13974	30915	12500	23594	69141	8855	84363	11424
6610	7497	126104	19056	14670	31282	12504	23497	69637	8823	84434	11619
6616	7432	126098	18268	14159	30848	12542	23870	68898	8855	85364	11681
6622	7523	126927	18533	14272	31506	12686	24212	69983	8912	85946	11713
6628	7460	126467	18902	14598	31407	12624	24117	70516	8918	85866	11834
6634	7467	126139	18436	14635	31616	12587	23730	68928	8959	85518	11744
6640	7487	126577	18296	14614	31068	12526	23587	68122	8960	85197	11676
6646	7433	126406	17066	14245	30606	12409	23790	67771	8812	84744	11628
6652	7580	126069	16919	14203	30902	12590	23993	68178	8923	85046	11663
6658	7583	126965	17021	14823	31495	12956	23928	69795	8988	84849	11759
6664	7412	125916	16973	14614	31372	12593	23572	69623	8873	85472	11693
6670	7410	126722	16513	14226	30400	12579	23699	68312	8867	84957	11700
6676	7448	126410	16317	14185	30725	12542	23705	68344	8903	85437	11734
6682	7468	125953	16612	14355	30678	12485	23330	67981	8754	84519	11619
6688	7321	125569	17493	14009	30348	12770	23404	68834	8898	85802	11771
6694	7330	125673	18540	14216	30172	12690	23550	69263	8875	84959	11782
6700	7306	126433	19618	14315	29726	12342	23636	68899	8875	85717	11648
6706	7459	127215	19236	14448	30936	12790	23533	68901	8720	84571	11456

Table 3: Flux ($E \cdot 10^6 \text{ erg/cm}^2 \cdot \text{s} \cdot \text{\AA}$), (continued)

Lambda Å	Hip 94056	Hip 94720	Hip 98538	Hip 101227	Hip 101955	Hip 103256	Hip 105947	Hip 109281	Hip 109951	Hip 111170	Hip 112695
6712	7393	124665	19391	14248	30344	12484	23264	68269	8792	83830	11399
6718	7443	126015	19646	14408	30756	12482	23491	68083	8778	84729	11360
6724	7061	124386	19463	13840	28954	12180	22859	67682	8723	84956	11593
6730	7225	125088	20206	14097	29775	12677	23123	68001	8713	84227	11598
6736	7456	124947	20063	14237	30216	12792	23215	69730	8770	83838	11622
6742	7338	124383	19848	14051	29894	12649	23138	68675	8799	84065	11588
6748	7220	123899	19743	14423	29765	12514	23386	67687	8843	85051	11544
6754	7356	124260	20797	14359	29998	12704	23400	67229	8753	84455	11513
6760	7348	124563	21421	14477	29881	12879	23347	69226	8760	84209	11761
6766	7488	126077	21862	14230	30075	12885	23604	70152	8839	84605	11924
6772	7345	125420	21456	14192	30039	12862	23593	69577	8858	85166	11927
6778	7304	124062	21568	14409	29979	12954	23474	69684	8872	85758	11812
6784	7536	123556	21654	14463	30549	13055	23611	70121	8937	85159	11983
6790	7223	123094	21930	14699	29756	12879	23855	69793	8868	84435	11999
6796	7272	123077	21402	14349	29530	12916	23961	69294	8881	85759	11828
6802	7333	124089	20722	14363	29754	12987	23753	68895	8944	85184	11961
6808	7348	122689	22067	14536	29950	13089	23427	70553	8941	84925	11934
6814	7222	120304	21617	14198	29512	12863	23402	70784	8896	85433	12002
6820	7187	119092	20668	14285	29432	12796	23737	70086	8915	85908	12003
6826	7240	120399	21174	14291	29642	12888	23705	69132	8890	85500	11827
6832	7219	122130	21364	14556	29861	12888	23481	70760	8753	84648	11931
6838	7277	122449	21129	14442	29859	12973	23573	70880	8689	85149	11748
6844	7144	118967	21407	14054	29296	12666	23547	68493	8712	84489	11600
6850	6976	116959	21537	13881	28737	12652	23416	68164	8622	84541	11685
6856	6948	116995	21497	13985	28397	12324	23294	68015	8684	84263	11666
6862	7019	118624	22084	14140	29023	12513	22963	67697	8609	83125	11713
6868	6804	106454	21834	13696	28179	11694	22107	67076	8524	80864	11138
6874	6077	93662	21098	12887	25208	10035	20472	60534	8060	72253	9973
6880	5634	102147	18613	11308	22659	10388	18499	56331	6858	66338	9626
6886	5974	103015	19182	11453	23519	10876	18943	58671	6870	69731	10150
6892	6364	102964	21754	12494	25295	11305	20124	61158	7482	72645	10500
6898	6275	104038	21466	12559	25251	11279	19743	61598	7403	72454	10388
6904	6320	105128	21043	12506	25420	11316	19869	62716	7449	73640	10550
6910	6450	107472	20806	12757	26054	11603	20472	63800	7654	75651	10889
6916	6505	108520	19021	12632	26381	11672	21122	62609	7869	75731	10792
6922	6792	108515	18572	12664	27394	12025	21275	63204	7940	77028	10811
6928	6768	108820	18985	12878	27520	11918	21000	64028	7999	77083	10992
6934	6739	105963	17341	12862	27976	11936	21408	63362	8004	78580	10879
6940	6795	106760	16805	12886	28212	11923	21483	63339	7906	78157	11127
6946	6813	105264	15836	12946	28149	11769	21063	63320	7888	76024	10869
6952	6973	107654	12759	12539	28553	12074	21010	61685	7865	76138	10724
6958	7091	108725	12539	12814	28834	12167	20646	61929	7926	77443	10888
6964	7048	108713	12892	12847	29158	12214	21303	62500	8062	76665	10916
6970	7173	110840	13504	13142	29455	12399	21752	64096	8050	78453	11090
6976	7224	109982	14385	13225	29879	12274	21735	65527	8349	79569	11423
6982	7133	109371	14787	13075	29556	12071	21854	63886	8354	78777	11175
6988	6984	108711	14230	12638	29004	12309	21776	63660	8183	78239	11066
6994	6963	105555	14593	13045	29079	12081	21194	63375	7987	77957	10955
7000	6951	105026	13938	12725	28736	11938	20972	63293	8094	78227	11067
7006	6994	104323	13060	12581	29009	12060	20927	61733	7962	77056	10989
7012	7023	106049	12973	12624	29459	12112	20441	62087	7904	74743	10818
7018	7034	106180	13143	12446	29217	12019	20540	60516	7750	74120	10506

Table 3: Flux ($E \cdot 10^{-16}$ erg/cm $^2 \cdot s \cdot \text{\AA}$), (continued)

Lambda Å	Hip 94056	Hip 94720	Hip 98538	Hip 101227	Hip 101955	Hip 103256	Hip 105947	Hip 109281	Hip 109951	Hip 111170	Hip 112695
7024	6885	102897	13653	12317	28647	11880	20383	59330	7693	74538	10542
7030	7011	102828	14635	12309	28658	11993	20220	60217	7567	74525	10534
7036	7098	107049	15129	12314	29209	12243	20420	61474	7604	74726	10761
7042	7112	104902	16241	12755	30051	12190	20398	60644	7788	75570	10617
7048	7050	104401	16660	12616	30031	12471	20741	62050	7820	76319	10667
7054	7300	104205	16593	12944	30417	12426	20755	62987	7866	76666	10776
7060	7175	105202	16573	12550	30122	12348	20929	61707	7856	76123	10734
7066	7050	103257	16978	12448	29282	12071	20705	62245	7737	76574	10836
7072	6994	102705	17367	12343	28988	12077	20953	60789	7922	76817	10866
7078	7234	106361	16263	12436	29818	12444	20636	61485	7877	76102	10812
7084	7194	104794	15079	12683	29920	12301	20653	62619	7936	74642	10873
7090	7118	104706	14644	12592	29788	12297	20954	61828	7984	76538	10840
7096	6940	103291	13669	12439	28729	12239	20815	61618	7708	76141	10593
7102	7087	102631	13061	12327	28880	12503	20771	61635	7754	77141	10894
7108	7131	103956	13310	12502	29188	12348	20754	62131	7885	76433	11029
7114	7047	103899	12948	12554	29366	12275	20947	61945	7969	77209	10961
7120	7061	104031	12166	12529	29012	12302	20662	62194	7837	76885	10758
7126	7098	104100	11312	12569	29065	12362	20543	60089	7888	75924	10653
7132	6989	103874	11514	12298	28634	12367	20547	61083	7948	75143	10901
7138	6942	103809	12757	12219	28259	12376	20584	61771	7869	75657	10844
7144	6952	101316	13726	12277	27981	12128	20718	62098	7786	75554	10681
7150	6826	101395	12669	12179	27914	11951	20686	61015	7852	76480	10784
7156	6656	102966	12293	12161	27650	12108	20176	60672	7744	75550	10712
7162	6856	100306	12787	12191	27830	11958	19966	60209	7601	74087	10648
7168	6742	94861	12701	12052	27697	11460	19650	59125	7445	71927	10321
7174	6406	87313	12370	11447	26442	10950	18572	55036	7149	67922	9739
7180	6089	84210	12132	10869	24773	10448	17253	54529	6746	63132	9306
7186	5921	84317	12162	10378	24187	10032	16897	52300	6274	61312	8871
7192	5851	85121	12499	10161	24129	9650	16071	50151	6084	57880	8641
7198	5907	83233	11976	9581	23443	9723	15696	49632	6060	56830	8401
7204	5813	83491	11840	9726	23491	9904	15822	51016	6064	58446	8902
7210	5710	89145	11699	9981	23402	10343	15759	50590	5949	59477	9015
7216	6178	95429	13086	10546	25004	11399	17253	53808	6321	65643	9797
7222	6704	97530	15138	11226	27267	11791	18493	57326	7053	69007	10091
7228	6852	94080	15689	11553	27880	11795	19132	58311	7339	70090	10226
7234	6724	90009	15941	11546	28000	11546	19246	57752	7261	69677	10113
7240	6442	87535	14759	11010	26606	10679	17967	55696	7078	64072	9615
7246	6440	89033	13134	10269	25440	10805	17325	52816	6572	62734	9214
7252	6340	90216	13500	10402	25466	10901	16918	53431	6523	63559	9528
7258	6464	90272	14094	10467	25998	10716	17192	53148	6481	63028	9296
7264	6472	90186	13148	10545	25701	10964	17446	55197	6609	64186	9522
7270	6530	90608	12743	10942	26058	11109	17684	53538	6595	64655	9506
7276	6605	89776	13556	10932	26653	11111	17627	55025	6653	65541	9670
7282	6554	91751	13164	10853	26650	11020	17205	53491	6725	63787	9432
7288	6688	91168	12329	10765	26463	11217	17616	54811	6535	65968	9814
7294	6568	90531	12625	10872	27019	11064	17403	53365	6699	64339	9251
7300	6432	91058	11804	10489	26375	11249	16934	52818	6565	63699	9692
7306	6596	88935	12318	10726	27408	11312	17874	53963	6759	64846	9530
7312	6499	90505	13515	10925	27251	11491	17554	53886	6624	64224	9635
7318	6478	89986	14484	10842	26951	11325	17126	53392	6541	64000	9617
7324	6650	92616	13565	10898	27479	11437	17636	54016	6689	65430	9678
7330	6806	95099	13742	11116	28007	11666	18220	56087	6870	68160	9908

Table 3: Flux ($E \cdot 10^{-16} \text{ erg/cm}^2 \cdot \text{s} \cdot \text{\AA}$), (continued)

Lambda Å	Hip 94056	Hip 94720	Hip 98538	Hip 101227	Hip 101955	Hip 103256	Hip 105947	Hip 109281	Hip 109951	Hip 111170	Hip 112695
7336	6817	95197	13782	11256	28076	11909	18168	56572	6962	68645	9982
7342	6892	94670	13353	11224	28577	12206	18561	57778	7097	70609	10312
7348	6974	94049	14066	11524	29083	12210	18977	58106	7289	71174	10362
7354	6946	95078	14854	11462	29198	12079	18960	57088	7313	70704	10179
7360	6847	92962	14610	11188	28384	11752	18653	56357	7071	68230	9809
7366	6768	92904	14588	11315	27857	11733	18672	56400	7127	68527	10074
7372	6842	94055	14845	11182	28216	12044	18447	56168	7039	68416	9950
7378	6974	94803	15206	11244	29057	12325	18447	56634	6903	68272	9973
7384	6986	93505	16069	11433	29608	12135	18741	57598	7051	69053	10103
7390	7002	94396	16378	11370	29234	11996	18462	56098	7204	69972	9854
7396	6905	93626	16303	11086	28743	12080	18285	55324	7017	67634	9731
7402	6850	93197	16411	11006	28404	12186	18286	56037	7111	67584	9763
7408	6802	92997	17327	11006	28418	11975	18316	55781	7073	69441	9813
7414	6820	92348	18040	11029	28879	11744	18205	56118	7015	67582	9737
7420	6904	92220	17627	10937	28896	12011	17735	54425	6872	67022	9821
7426	6931	92489	17430	10987	29154	12094	17813	54612	6919	66110	9646
7432	6919	93554	17908	11096	29491	12216	17915	55046	6994	67929	9762
7438	7058	92686	17531	11119	30022	12232	18032	56878	7073	68301	9942
7444	7019	93147	16703	11080	29601	12098	18203	56611	7087	68916	9855
7450	6869	91401	16141	10858	29031	11934	18184	55128	7068	66980	9825
7456	6784	90272	16815	10804	28909	12158	18121	54788	6970	67531	9863
7462	6919	89589	16460	11034	29027	12073	18137	55433	7001	67986	9815
7468	6995	91299	15646	11164	29064	12102	17988	55484	6920	66976	9617
7474	7055	90421	15827	11198	29348	12270	17680	54209	6979	67420	9717
7480	7012	90153	15653	11115	29574	12249	17941	55530	6989	66956	9738
7486	6960	91357	15838	11069	29245	12133	18130	55106	7049	67893	9896
7492	6871	89482	15234	10891	28803	11778	17864	54407	6759	66421	9579
7498	6723	87173	15736	10533	28520	11663	17820	53127	6905	64429	9565
7504	6735	87655	16718	10574	28356	11924	17568	53107	6743	65619	9590
7510	6628	86811	17217	10718	27853	11682	17309	52885	6760	64815	9463
7516	6630	87365	17276	10640	27888	11679	17406	52573	6810	64123	9349
7522	6739	87611	17587	10613	28452	11922	17477	53525	6618	65382	9347
7528	6777	85835	17681	10734	28425	11759	17089	52998	6617	64343	9387
7534	6814	86293	17573	10676	28785	11906	16926	51594	6571	63108	9343
7540	6786	85956	17992	10538	28955	12187	16917	51751	6616	63456	9379
7546	6781	86294	18033	10453	28817	12174	17197	53302	6744	64212	9553
7552	6819	87395	18671	10556	28902	12198	17306	52510	6627	65486	9496
7558	6857	87350	19092	10592	29042	12096	17105	53198	6665	64104	9457
7564	6906	87068	18995	10427	28989	12090	16883	52963	6614	63444	9316
7570	6812	86773	18758	10640	28778	12072	17156	52989	6629	63978	9303
7576	6826	85751	18832	10737	28578	12158	17168	52840	6638	64887	9349
7582	6826	84667	18861	10550	28512	11961	17005	53098	6662	63431	9384
7588	6725	81014	19301	10534	28605	11612	16932	53117	6645	61954	9322
7594	6390	68268	19764	10413	27639	10098	16384	50836	6363	60935	8798
7600	5226	48182	18650	9398	23654	7139	14688	44486	5863	51657	7125
7606	3597	37943	14512	7312	16173	5005	10544	31713	4469	34457	4855
7612	2764	39366	9335	5027	11068	4718	7052	22774	2890	23919	3599
7618	3127	47623	6995	4346	10757	6017	6165	22230	2214	23424	4039
7624	3935	50450	8773	5268	14119	7005	7629	28306	2633	30746	5377
7630	4148	50366	11593	6341	16491	6737	8838	31712	3358	32610	5396
7636	4081	51367	11659	6340	15681	6707	8656	31101	3379	31833	5260
7642	4091	53458	10814	6226	15318	7011	8358	30863	3230	32172	5296

Table 3: Flux ($E \cdot 16 \text{ erg/cm}^2 \cdot \text{s} \cdot \text{\AA}$), (continued)

Lambda Å	Hip 94056	Hip 94720	Hip 98538	Hip 101227	Hip 101955	Hip 103256	Hip 105947	Hip 109281	Hip 109951	Hip 111170	Hip 112695
7648	4414	58274	11147	6471	16300	7740	9097	33850	3454	34202	5718
7654	4868	65305	12079	6991	18144	8570	10201	36139	3751	38300	6344
7660	5212	70926	13294	7615	19544	8995	11262	38617	4130	42305	6791
7666	5430	72795	14974	8064	20462	9455	12008	40752	4568	46571	7211
7672	5630	75089	15633	8254	21722	10272	12912	43068	4999	50433	7790
7678	6008	79270	16712	8835	24074	10958	14127	46016	5414	53657	8294
7684	6391	81187	18624	9643	25900	11638	14949	47975	5770	57295	8772
7690	6613	82776	19997	10006	26710	11804	15367	50041	5936	59233	8925
7696	6656	83202	20005	10088	27335	11751	15838	50884	6179	60332	8822
7702	6456	83424	19782	10060	27013	11794	16057	52375	6318	60006	8960
7708	6532	84713	20188	10358	27254	12008	16325	52850	6353	61053	9087
7714	6680	84478	20505	10347	27846	12109	16413	51498	6311	60933	9024
7720	6694	85093	20475	10389	27962	12210	16411	51365	6275	61272	9108
7726	6755	85276	20615	10300	28099	12092	16544	51706	6462	61649	9235
7732	6814	85867	21289	10453	28587	12206	16720	51573	6449	62433	9158
7738	6878	86938	21101	10478	28636	12412	16425	52194	6412	62005	9100
7744	6851	85984	21293	10529	28792	12554	16562	52539	6416	62092	9064
7750	6772	84896	21228	10523	28669	12325	16635	52336	6325	61622	9238
7756	6685	84808	21478	10253	28351	12273	16447	51270	6305	61251	9149
7762	6767	83767	22202	10175	28618	12597	16500	51281	6377	61818	9042
7768	6842	82395	22398	10413	28392	12448	16407	52214	6403	62075	9166
7774	6862	81861	22758	10578	28643	12553	16440	52732	6424	62127	9202
7780	6815	82509	22345	10696	28853	12269	16272	51638	6447	61049	9101
7786	6774	82819	22302	10720	28607	12069	16119	51256	6428	60598	9054
7792	6719	83525	22469	10474	28348	12225	16257	51627	6242	59726	8877
7798	6631	82415	22469	10308	28077	12191	15875	51691	6266	60265	8830
7804	6679	84386	22832	10567	28131	12295	15867	51506	6312	61126	8902
7810	6656	83021	22516	10467	27981	12248	15944	51417	6269	60137	8896
7816	6579	82367	22504	10140	27702	12210	15985	50301	6222	60150	8962
7822	6537	81542	22800	10205	27339	12045	16090	50315	6202	61028	8978
7828	6627	80259	22961	10344	27643	11859	15909	50461	6165	61526	8944
7834	6531	80409	23004	10284	27817	11868	15850	49962	6143	59724	8743
7840	6372	80549	22889	10116	27107	11826	15946	49489	6219	58689	8625
7846	6449	80784	22245	10028	27315	11773	16068	49600	6193	59987	8615
7852	6534	80150	21637	10180	27660	11960	15856	50116	6132	59545	8591
7858	6539	78981	19786	10240	27165	11868	15632	50177	6115	59046	8636
7864	6602	79774	18296	10157	27552	11950	15818	50059	6095	59741	8658
7870	6589	79410	18660	10222	27866	11878	15812	49657	6150	59202	8610
7876	6550	77750	18657	10058	27529	11879	15512	49241	6206	58593	8620
7882	6519	77485	17123	10118	27569	11979	15464	49517	6176	58638	8619
7888	6496	78636	15989	10000	27361	11756	15581	49104	6083	58588	8611
7894	6379	77299	15505	9911	26762	11486	15713	48791	6027	58133	8653
7900	6310	78281	14145	9791	26788	11498	15565	48524	5968	56455	8574
7906	6340	79270	12330	9580	26505	11436	15253	47395	5846	55996	8557
7912	6226	77148	12042	9596	26655	11454	15197	47164	5912	55801	8533
7918	6210	78081	12099	9542	26569	11435	14985	46609	5880	55356	8377
7924	6402	77070	11635	9550	26467	11485	14718	46238	5784	56257	8313
7930	6432	78546	11359	9716	26111	11379	14623	46553	5847	57014	8280
7936	6375	77067	11411	9526	26610	11197	14832	46256	5875	56299	8269
7942	6317	76226	11452	9374	26298	11261	15004	45484	5871	55980	8289
7948	6284	75736	11153	9427	26443	11205	14773	45776	5832	56224	8380
7954	6191	76180	10267	9361	26094	11266	14814	46953	5847	55267	8322

Table 3: Flux ($E \cdot 10^{-16} \text{ erg/cm}^2 \cdot \text{s} \cdot \text{\AA}$), (continued)

Lambda Å	Hip 94056	Hip 94720	Hip 98538	Hip 101227	Hip 101955	Hip 103256	Hip 105947	Hip 109281	Hip 109951	Hip 111170	Hip 112695
7960	6229	74924	10105	9303	26115	11324	14794	46409	5772	55253	8185
7966	6343	74373	10393	9404	26219	11501	14732	45706	5710	55533	8339
7972	6347	75368	10872	9430	26139	11578	14508	46297	5670	55909	8396
7978	6361	75737	11439	9436	26347	11408	14620	46598	5636	56509	8372
7984	6370	75651	12272	9437	26413	11461	14889	46527	5726	56486	8415
7990	6380	76471	13192	9615	26445	11380	14933	46403	5900	57067	8326
7996	6365	78121	13692	9538	26573	11292	14969	46409	5922	56940	8360
8002	6324	76393	13956	9334	26191	11234	14641	46937	5807	55832	8219
8008	6216	76625	14062	9336	25932	11287	14651	46539	5685	55732	8268
8014	6142	76582	13700	9114	26642	11293	14648	45672	5713	55595	8225
8020	6204	76225	14011	9403	26615	11341	14450	46275	5786	55428	8193
8026	6269	76789	14735	9464	26540	11523	14469	46556	5729	54979	8260
8032	6226	76175	14728	9550	26589	11502	14370	47316	5706	55097	8186
8038	6333	76259	14970	9339	26837	11418	14649	47190	5779	55077	8226
8044	6206	76863	15300	9340	26301	11186	14653	46614	5766	54981	8248
8050	6143	75252	15345	9471	26393	11353	14517	45728	5703	55951	8226
8056	6186	76027	14567	9305	26389	11430	14503	45274	5656	55985	8059
8062	6295	74721	14151	9217	26488	11384	14441	45746	5583	55140	8078
8068	6340	74860	14319	9320	27086	11590	14694	46474	5829	56196	8345
8074	6344	75550	14042	9235	26863	11544	14727	46535	5856	56363	8334
8080	6322	76286	13304	9317	26425	11469	14663	45747	5722	55236	8386
8086	6304	75417	12898	9310	26654	11316	14198	44550	5765	56251	8193
8092	6348	75153	12746	9513	26888	11277	14517	44520	5722	55462	8043
8098	6348	74993	12113	9319	26564	11336	14265	44891	5540	54842	7953
8104	6381	73511	11002	9395	26620	11550	14011	44593	5683	54516	8045
8110	6137	71997	10413	9464	25821	11442	14245	44117	5588	54312	8177
8116	6192	75588	10046	9197	26346	11234	14530	44401	5573	53146	8019
8122	6256	74443	10427	9385	26674	11131	14225	43252	5549	54064	7991
8128	6224	71444	10397	9269	26288	10936	13972	43498	5463	52843	7853
8134	6192	71592	10635	9222	26202	10948	14108	43696	5536	51211	7849
8140	5971	63971	9890	9001	25128	10598	13889	44232	5488	51476	7579
8146	5869	65169	9300	8642	24009	10434	13477	42547	5263	49116	7522
8152	5675	65449	9174	8581	23876	9945	13128	42103	5151	48950	7453
8158	5633	63141	9368	8479	23399	9738	12471	40392	5071	45835	7174
8164	5485	63981	9318	8377	22835	9620	12350	39058	4844	46401	7113
8170	5267	64703	9591	8068	22414	9449	11885	39236	4836	44865	6852
8176	5279	63103	9252	7815	21608	9336	11733	39774	4658	43080	6769
8182	5414	63412	9574	8119	22499	9549	11605	37821	4477	43235	6777
8188	5279	62361	9579	8122	21785	9520	11954	37791	4452	44774	6780
8194	5391	61275	10124	8059	22078	9666	11400	37374	4404	42956	6719
8200	5455	63140	11181	8197	22212	9935	11403	39349	4669	43017	7067
8206	5533	65090	11323	8104	22035	10163	11718	37917	4508	44962	6874
8212	5611	65802	11368	8161	22956	10558	12051	39006	4836	45622	7341
8218	5799	64844	11849	8520	23709	10345	12696	41926	4879	46717	7382
8224	5820	61458	12946	8579	24663	9970	13021	40810	4898	51100	7582
8230	5727	61514	14046	8408	24171	9583	12398	40862	5208	48532	7084
8236	5440	64252	13900	8039	23050	9457	12437	39889	5034	44374	6589
8242	5426	61452	13081	7744	22178	9646	11560	36088	4848	42897	6675
8248	5681	66940	12730	8090	22694	10444	11031	38151	4442	43518	6780
8254	5883	68350	13088	8375	23732	10724	11876	38698	4751	46468	7040
8260	5950	66741	13335	8810	24973	11189	12181	39890	4638	47484	7548
8266	6014	66139	13592	8689	24536	10900	13209	43641	4912	49420	7588

Table 3: Flux ($E \cdot 10^6$ erg/cm $^2 \cdot s \cdot \text{\AA}$), (continued)

Lambda Å	Hip 94056	Hip 94720	Hip 98538	Hip 101227	Hip 101955	Hip 103256	Hip 105947	Hip 109281	Hip 109951	Hip 111170	Hip 112695
8272	6031	68619	13779	8400	25092	10575	12910	41680	5023	48269	7573
8278	6058	65370	13781	8559	25243	10642	13368	42952	5143	49802	7568
8284	5857	67540	13741	8831	25042	10799	13033	42509	5248	48671	7184
8290	5821	61554	13237	8537	23737	10266	12664	41012	4999	48527	7287
8296	5804	65963	12378	8422	23760	10300	12455	40239	4856	47172	7163
8302	5829	68755	12540	8198	23645	10371	12516	41152	4877	48406	7139
8308	5631	64175	11684	8031	24243	10197	12040	39375	4886	45550	7144
8314	5673	63695	11760	8117	23535	10101	11872	39643	4949	47532	7140
8320	5785	63859	11519	8190	23828	10081	12103	39661	4849	44987	7527
8326	5667	67415	11469	8387	23300	10413	11846	40440	4850	45443	7008
8332	5710	64517	11584	8377	23819	10152	11521	40364	4742	47009	7228
8338	5723	63311	11719	7859	22856	9876	12253	40128	4860	44813	7086
8344	5522	66231	11585	7816	22624	9848	11839	37775	4734	44246	6903
8350	5558	63374	12012	7822	23050	9933	12197	39714	4856	45770	7150
8356	5549	66661	12391	8013	23312	10125	12231	38257	4851	44429	6988
8362	5639	62209	12779	8213	23469	10589	11958	39105	4770	46029	7045
8368	5522	67838	12428	8119	24035	10296	12046	39865	4669	45059	7092
8374	5490	66902	12607	8295	24067	10358	12292	40849	4832	45389	7122
8380	5613	66904	12423	8228	23601	10456	12168	39686	4886	47928	7144
8386	5455	63443	12948	8189	23505	10205	12165	39918	4735	46989	7209
8392	5287	58349	12215	7688	22082	9505	9396	30389	3697	35065	5578
8398	5287	58349	12215	7688	22082	9505	9396	30389	3697	35065	5578