

Table 1. Like Table ??, for the HST/STIS observations.

Ion	Levels		f	$W_\lambda /$ mÅ	Wavelength/Å		$v_{\text{rad}} /$ km/s	Comment
	Lower	Upper			Theoretical	Observed		
						1150.35		unid.
						1151.10		unid.
Zn v	201973	288704	2.26×10^{-1}		1152.985			
O III	$2p^3 \ ^3S_1$	$2p^4 \ ^3P_2$	1.41×10^{-1}		1153.775	1153.92	37.7	
Zn v	208715	295293	7.17×10^{-2}	29.8	1155.027	1155.12	24.1	
Zn v	285885	372360	3.17×10^{-1}		1156.394			newly identified
Ga v	246133	332600	3.44×10^{-1}		1156.511			
Zn v	231997	318436	2.76×10^{-2}		1156.885			
						1158.00		unid.
Zn v	200644	286943	2.38×10^{-1}	19.0	1158.759	1158.83	18.4	
						1159.90		unid.
Sn v				36.4	1160.740	1160.85	28.4	uncertain
				25.2		1161.97		unid.
Ge v	241935	327891	1.29×10^{-2}		1163.389			
O IV	$3d \ ^2F_{5/2}^o$	$4f \ ^2G_{7/2}$	8.50×10^{-1}	17.7	1164.321	1164.41	22.9	
O IV	$3d \ ^2F_{7/2}^o$	$4f \ ^2G_{9/2}$	8.26×10^{-1}	44.0	1164.546	1164.65	26.8	
Zn v	255763	341627	5.07×10^{-2}		1164.632			
Zn v	228335	314197	1.72×10^{-2}		1164.656			newly identified
Zn v	210973	296796	4.52×10^{-2}		1165.186			blend with Ge v
Ge v	241935	327753	1.48×10^{-2}		1165.259			blend with Zn v
				23.1		1165.40		unid.
Zn v	210973	296757	5.56×10^{-2}		1165.716			
Zn v	234846	320618	3.60×10^{-1}		1165.880			
C IV	$3d \ ^2D_{3/2}$	$4f \ ^2F_{5/2}^o$	1.02		1168.849			
C IV	$3d \ ^2D_{5/2}$	$4f \ ^2F_{7/2}^o$	9.97×10^{-1}		1168.993			
C IV	$3d \ ^2D_{5/2}$	$4f \ ^2F_{5/2}^o$	4.88×10^{-2}		1168.993			
				10.2		1169.26		unid.
C IV					1170.130			forbidden C IV component
C IV					1170.330			forbidden C IV component
Zn v	231831	317220	7.01×10^{-2}		1171.106			
						1172.35		unid.
				15.4		1173.37		unid.
Zn v	239843	325068	3.11×10^{-1}		1173.366			
Zn v	237032	322224	7.26×10^{-2}		1173.823			newly identified
Zn v	230614	315801	1.79×10^{-1}		1173.892			newly identified
Zn v	198962	284116	3.01×10^{-1}	23.6	1174.346	1174.43	21.4	
				14.1		1174.72		unid.
C III	$2s2p \ ^3P_1^o$	$2p^2 \ ^3P_2$	1.17×10^{-1}	100.0	1174.933	1175.03	24.8	
C III	$2s2p \ ^3P_0^o$	$2p^2 \ ^3P_1$	2.72×10^{-1}	100.0	1175.263	1175.37	27.3	
C III	$2s2p \ ^3P_1^o$	$2p^2 \ ^3P_1$	7.03×10^{-2}		1175.590			

Table 1. Continued.

Ion	Levels		f	$W_\lambda /$ mÅ	Wavelength/Å		$v_{\text{rad}} /$ km/s	Comment
	Lower	Upper			Theoretical	Observed		
C III	2s2p $^3P_2^0$	2p ² 3P_2	2.11×10^{-1}		1175.711			
C III	2s2p $^3P_1^0$	2p ² 3P_0	9.07×10^{-2}	104.7	1175.987	1176.09	26.3	blend with Zn v
Zn v	226334	311359	8.10×10^{-2}		1176.122			blend with C III
C III	2s2p $^3P_2^0$	2p ² 3P_1	7.02×10^{-2}	130.7	1176.370	1176.45	20.4	blend with Zn v
Zn v	231831	316827	7.34×10^{-2}		1176.527			blend with C III, newly identified
Ge v	238765	323749	2.06×10^{-3}		1176.690			blend with C III
Zn v	198962	283933	1.86×10^{-1}		1176.868			newly identified
Zn v	201973	286936	1.46×10^{-1}		1176.980			newly identified
Zn v	226334	311295	7.56×10^{-2}		1177.016			newly identified
Zn v	202929	287888	1.00×10^{-1}		1177.036			newly identified
Zn v	200644	285603	1.68×10^{-1}		1177.044			newly identified
Zn v	231831	316786	3.06×10^{-1}		1177.087			newly identified
				20.2		1178.68		unid.
Zn v	260880	345723	8.22×10^{-2}		1178.639			newly identified
Zn v	241829	326664	1.12×10^{-1}		1178.759			
Ni v	232655.6	317477.9	9.35×10^{-3}		1178.935			
Zn v	236969	321776	1.93×10^{-1}		1179.145			
Zn v	230435	315239	1.10×10^{-1}		1179.179			
Xe VI	5p $^2P_{3/2}^0$	5p ² $^4P_{3/2}$	4.65×10^{-4}		1179.537			
Zn v	208715	293463	2.79×10^{-1}		1179.969			
Xe VI	5d $^2D_{3/2}$	6p $^2P_{1/2}^0$	1.54×10^{-1}		1181.455			
Xe VI	5d $^2D_{5/2}$	5d $^4F_{7/2}^0$	6.24×10^{-3}		1181.474			newly identified
Zn v	227195	311796	2.22×10^{-2}		1182.019			
Zn IV	151574	236175	5.65×10^{-2}		1182.022			newly identified
Mo VI	283611	368203	7.44×10^{-1}	15.0	1182.142	1182.24	24.9	
Zn v	212471	297033	7.26×10^{-2}		1182.567			
Zn v	235730	320257	1.94×10^{-2}		1183.041			
Zn v	230435	314958	3.17×10^{-2}		1183.100			
Zn v	232946	317466	2.31×10^{-2}		1183.158			
Zn v	230614	314958	8.97×10^{-2}		1185.619			
Zn v	231997	316339	5.02×10^{-2}		1185.645			
Zn v	203548	287888	1.30×10^{-1}		1185.676			
Zn v	212471	296796	3.24×10^{-1}		1185.898			
Zn v	210973	295293	1.84×10^{-1}		1185.948			
Zn v	285523	369843	1.03×10^{-1}		1185.961			
Zn v	235730	320043	2.18×10^{-1}		1186.057			
Zn v	212471	296757	2.05×10^{-1}	18.0	1186.447	1186.54	23.5	
				8.9		1187.05		unid.
Zn v	228335	312534	2.72×10^{-1}		1187.664			
Zn v	210973	295168	3.51×10^{-1}		1187.706			

Table 1. Continued.

Ion	Levels		f	$W_\lambda /$ mÅ	Wavelength/Å		$v_{\text{rad}} /$ km/s	Comment
	Lower	Upper			Theoretical	Observed		
N iv	2s3s 1S_0	2p($^2P_{3/2}^o$)3s $^1P_1^o$	6.02×10^{-1}	24.8	1188.005	1188.11	26.5	
Ge iv	84102.3	0	5.52×10^{-1}	51.7	1189.028	1189.11	20.7	
Zn v	227195	311295	2.43×10^{-1}		1189.072			newly identified
Zn v	234846	318927	2.55×10^{-2}		1189.331			newly identified
Zn v	235903	319984	7.13×10^{-2}		1189.332			newly identified
Sn v				23.3	1189.920	1190.04	30.2	
Zn v	235599	319632	1.40×10^{-1}		1190.003			newly identified
Zn v	208715	292722	3.13×10^{-1}		1190.376			newly identified
Zn v	202929	286936	8.34×10^{-2}		1190.380			newly identified
				83.2		1190.48		unid.
Ga v	235609	319570	2.23×10^{-2}		1191.029			newly identified
Zn v	260880	344771	6.24×10^{-2}		1192.014			newly identified
				4.9		1192.35		unid.
Ga iv	153086	236907	1.87×10^{-1}		1193.024			newly identified
Ga v	235752	319570	1.20×10^{-1}		1193.061			newly identified
				60.1		1193.34		unid.
Zn v	231997	315801	1.66×10^{-2}		1193.260			newly identified
C i					1193.264			ISM multi-component
				3.1		1193.45		unid.
Ba vii	157675	241412	3.06×10^{-3}		1194.221			newly identified
				11.0		1194.65		unid.
				20.2		1194.99		unid.
Zn v	201973	285603	7.16×10^{-2}		1195.745			newly identified
O iii	3p 3D_2	4d $^3F_3^o$	8.82×10^{-2}	9.5	1196.753	1196.85	24.3	
O iii	3p 3D_3	4d $^3F_4^o$	9.11×10^{-2}		1197.239			
O iii	3p 3D_1	4d $^3F_2^o$	9.93×10^{-2}		1197.331			
						1197.81		unid.
C iv	3d $^2D_{3/2}$	4p $^2P_{3/2}^o$	2.76×10^{-3}		1198.403			
C iv	3d $^2D_{5/2}$	4p $^2P_{3/2}^o$	1.65×10^{-2}		1198.554			
C iv	3d $^2D_{3/2}$	4p $^2P_{1/2}^o$	1.38×10^{-2}		1198.591			
Ni v	241773.6	325148.4	1.18×10^{-1}		1199.403			
N i					1199.550			ISM multi-component
				27.0		1199.61		unid.
				22.9		1199.75		unid.
				13.6		1199.99		unid.
				18.0		1200.28		unid.
N i					1200.223			ISM multi-component
Zn v	200644	283933	6.25×10^{-2}		1200.639			newly identified
Zn v	236969	320257	3.36×10^{-1}		1200.643			newly identified
N i					1200.710			ISM multi-component

Table 1. Continued.

Ion	Levels		f	$W_\lambda /$ mÅ	Wavelength / Å		$v_{\text{rad}} /$ km/s	Comment
	Lower	Upper			Theoretical	Observed		
Zr v	453681	536961	8.10×10^{-1}		1200.760			blend with Mo vi
Mo vi	151213	234490	5.26×10^{-1}		1200.808			blend with Zr v, newly identified
				19.5		1201.37 1201.60		unid. unid.
Zn v	234846	317978	2.38×10^{-1}		1202.906			newly identified
Zn v	239843	322969	4.20×10^{-2}		1202.983			newly identified
						1204.72		unid.
Zn v	231831	314838	9.24×10^{-2}		1204.722			newly identified
						1205.01 1205.36		unid. unid.
Sn v				14.1	1205.720	1205.85	32.3	
Si iii					1206.500			ISM multi-component
						1209.56		unid.
C iii	3d 1D_2	6f $^1F_3^o$	1.01×10^{-1}		1210.081			
						1213.15 1214.31		unid. unid.
He ii	2	4	1.19×10^{-1}		1215.133			
				6.7 7.5 11.2		1219.94 1220.07 1220.23 1221.46		unid. unid. unid. unid.
Ge v	241935	323749	4.91×10^{-3}		1222.289			
						1222.80		unid.
Zn iv	160886	242640	2.88×10^{-1}		1223.182			newly identified
N iv	2s3p $^3P_2^o$	2s4s 3S_1	2.03×10^{-2}		1225.722			
Sb v				9.0	1226.000	1226.11	26.9	
Zn v	235903	317466	2.59×10^{-2}		1226.057			newly identified
Se v				43.7 6.9	1227.600	1227.64 1227.91	9.8	unid.
Ga iv	156025	237458	1.95×10^{-1}	17.3	1227.999	1228.090	22.2	newly identified
Xe vi	5p 2 $^2P_{3/2}^o$	5p 3 $^2D_{5/2}^o$	3.96×10^{-2}		1228.426			blend with Zn v, newly identified
Zn iv	160919	242320	3.07×10^{-1}		1228.486			blend with Xe vi, newly identified
				8.4 2.6		1228.93 1229.04		unid. unid.
Ni v	274695.4	356036.3	1.89×10^{-1}		1229.394			blend with Mo v
Mo v	157851	239189	1.52×10^{-1}		1229.447			blend with Ni v, newly identified
				3.7		1229.66		unid.
Ge iv	81311.4	0	2.66×10^{-1}	27.7	1229.839	1229.95	27.1	
C iv	3p $^2P_{1/2}^o$	4s $^2S_{1/2}$	8.14×10^{-2}		1230.043			
C iv	3p $^2P_{3/2}^o$	4s $^2S_{1/2}$	8.15×10^{-2}		1230.521			
Ni v	225200.7	306377.8	1.26×10^{-1}		1231.875			

Table 1. Continued.

Ion	Levels		f	$W_\lambda /$ mÅ	Wavelength/Å		$v_{\text{rad}} /$ km/s	Comment
	Lower	Upper			Theoretical	Observed		
Ni v	208163.7	289298	7.34×10^{-2}	12.3	1232.524	1232.01		unid.
Ni v	246240.9	327356.6	1.68×10^{-1}		1232.807	1232.73		unid.
Ni v	263805.8	344911.2	3.57×10^{-1}		1232.964			
Ni v	234082.1	315168.2	1.59×10^{-1}		1233.257			
Ni v	208164.6	289247.1	9.35×10^{-2}		1233.312			
Ni v	274695.4	355765.2	2.33×10^{-3}		1233.505			
Ni v	263735.7	344805.3	3.16×10^{-1}		1233.508			
Ni v	234125.4	315168.2	1.10×10^{-1}		1233.916			
Ni v	208151.5	289163	1.33×10^{-1}		1234.393	1234.41		unid.
Ni v	233839.2	314756.4	2.15×10^{-1}		1235.831			
Ni v	240193.8	321081.9	3.86×10^{-2}		1236.276			
Ni v	234412.7	315300.7	1.12×10^{-1}		1236.277			
Zn v	230435	311296	4.58×10^{-2}		1236.689			newly identified
Zn v	234846	315594	3.44×10^{-5}		1238.425			newly identified
Zn v	260880	341627	1.01×10^{-1}		1238.430			newly identified
N v	2s $^2S_{1/2}$	2p $^2P_{3/2}^o$	1.56×10^{-1}	141.3	1238.821	1238.93	26.4	
Zn v	231831	312534	2.67×10^{-2}		1239.108			newly identified
Kr v	278928	359544	2.25×10^{-1}	9.2	1240.449	1239.82		unid.
Ni v	243331.5	323908.6	3.93×10^{-2}		1241.047			newly identified
Ni v	234125.4	314702.2	3.71×10^{-2}		1241.052			
Ni v	234275.2	314834.7	1.28×10^{-1}		1241.319			
Ni v	233839.2	314392	6.46×10^{-2}		1241.422			
Ni v	234082.1	314599.2	1.24×10^{-1}		1241.972	1241.86		unid.
Ni v	229408.8	309919.5	1.85×10^{-1}		1242.071	1241.99		unid.
O iv	3d $^2D_{3/2}$	4p $^2P_{3/2}^o$	8.21×10^{-3}		1242.176			
O iv	3d $^2D_{5/2}$	4p $^2P_{3/2}^o$	4.93×10^{-2}		1242.434			
N v	2s $^2S_{1/2}$	2p $^2P_{1/2}^o$	7.80×10^{-2}	132.4	1242.804	1242.91	25.6	blend with O iv
O iv	3d $^2D_{3/2}$	4p $^2P_{1/2}^o$	4.11×10^{-2}		1242.838			blend with N v
Ni v	234125.4	314562.8	1.46×10^{-1}		1243.203			
Ni vi	337993.9	418368.8	3.60×10^{-2}	21.2	1244.170	1244.29	28.9	
Ni v	164525.9	244900.5	3.97×10^{-1}	21.2	1244.174	1244.29	28.0	
Ni v	229408.8	309743.6	1.68×10^{-2}		1244.791			
Ni v	234275.2	314599.2	9.70×10^{-2}		1244.958			
Ni v	216596	296919.3	3.91×10^{-2}		1244.969			

Table 1. Continued.

Ion	Levels		f	$W_\lambda /$ mÅ	Wavelength / Å		$v_{\text{rad}} /$ km/s	Comment
	Lower	Upper			Theoretical	Observed		
Ni v	240193.8	320513.8	1.23×10^{-1}		1245.020			
Ni v	234082.1	314392	2.55×10^{-1}		1245.176			
Ni v	274695.4	354989.6	3.46×10^{-1}		1245.420			
Ga iv	156025	236312	1.38×10^{-1}		1245.529			newly identified
				9.5		1245.74		unid.
				10.1		1245.87		unid.
Zr v	491116	571376	8.57×10^{-3}		1245.951			
Zr v	457547	537807	7.85×10^{-1}		1245.951			
Ni v	263700.9	343905.7	3.56×10^{-1}		1246.808			
Zn v	208715	288903	3.85×10^{-2}		1247.074			newly identified
C iii	2s2p $^1P_1^o$	2p 2 1S_0	1.62×10^{-1}	93.2	1247.383	1247.50	28.1	newly identified
				12.8		1247.81		unid.
Ni v	208131	288161.6	1.30×10^{-1}		1249.522			
Zn v	232946	312967	5.28×10^{-2}		1249.675			newly identified
				6.5		1249.98		unid.
Ni v	208163.7	288161.6	5.58×10^{-2}		1250.033			
				13.8		1250.40		unid.
Ni v	208046.4	288021.6	3.50×10^{-1}		1250.388			blend with Zn v
Zn v	231831	311796	9.46×10^{-3}		1250.539			blend with Ni v, newly identified
Ni v	217048.7	296932.9	2.74×10^{-1}		1251.812			
Ni v	232910.8	312778.2	1.69×10^{-1}		1252.075			
Ni v	208046.4	287906.9	1.62×10^{-1}		1252.183			
Ni v	229408.8	309264	8.26×10^{-2}		1252.267			
Ni v	217048.7	296897	2.05×10^{-2}		1252.375			
Ni v	229440.6	309264	1.67×10^{-1}		1252.765			
						1253.38		unid.
Ni v	263700.9	343478.2	1.77×10^{-1}		1253.489			
Ni v	208131	287906.9	4.65×10^{-2}		1253.511			
Kr v	213932.87	293705	3.74×10^{-2}		1253.571			newly identified
Ni v	217129.1	296897	2.43×10^{-1}		1253.637			
Ni v	217101	296847.1	2.52×10^{-1}		1253.980			
				19.0		1254.22		unid.
				7.4		1255.40		unid.
Ba vii	42514	122163	6.18×10^{-4}		1255.520			newly identified
C iii	3s 3S_1	4p $^3P_2^o$	4.26×10^{-2}		1256.466			
C iii	3s 3S_1	4p $^3P_1^o$	2.56×10^{-2}		1256.542			
C iii	3p $^1P_1^o$	5s 1S_0	2.55×10^{-2}		1256.549			
C iii	3s 3S_1	4p $^3P_0^o$	8.52×10^{-3}		1256.577			
				14.1		1256.83		unid.
Ni v	208131	287645.9	3.46×10^{-1}		1257.626			

Table 1. Continued.

Ion	Levels		f	$W_\lambda /$ mÅ	Wavelength/Å		$v_{\text{rad}} /$ km/s	Comment
	Lower	Upper			Theoretical	Observed		
Ni v	243331.5	322820.8	7.67×10^{-2}		1258.031			
Ga iv	149512	228953	4.03×10^{-1}		1258.801			newly identified
Ni v	229413	308804.1	9.65×10^{-2}		1259.587			
Ni v	234082.1	313464.7	8.37×10^{-2}		1259.722			
				84.4		1260.47		unid.
Ni v	234125.4	313464.7	1.98×10^{-1}		1260.409			blend with ?
Si ii					1260.422			ISM multi-component
Zr v	391998	471306	1.05		1260.909			
Ni v	212253.4	291541.7	6.11×10^{-2}		1261.220			
Ni v	243331.5	322617.6	1.13×10^{-1}		1261.255			
Ni v	235420.6	314702.2	2.90×10^{-1}		1261.327			
Ni v	279199.5	358475.6	3.28×10^{-1}		1261.414			
Ni v	216189.9	295444.3	3.32×10^{-1}		1261.760			
Zn v	230435	309658	3.99×10^{-2}		1262.252			newly identified
				15.9		1262.38		unid.
Ni v	274738.6	353944.1	1.81×10^{-1}		1262.539			
				13.3		1262.81		unid.
				17.7		1263.27		unid.
				10.8		1263.50		unid.
Mo vi	395181	474296	2.07×10^{-1}		1263.989			
Mo vi	395184	474297	2.04×10^{-1}		1264.023			
				11.0		1264.24		unid.
Ni v	164525.9	243608.5	2.98×10^{-1}		1264.501			
Ga iv	150967	230040	9.57×10^{-2}		1264.654			newly identified
Ni v	243370.5	322436.4	1.14×10^{-1}		1264.768			
Zr v	376898	455925	8.93×10^{-1}	11.2	1265.381	1265.49	25.8	
Zn iv	128730	207737	2.04×10^{-1}		1265.707			newly identified
				8.5		1266.00		unid.
Ni v	247049.1	326029.9	1.14×10^{-1}		1266.131			
Ni v	208163.7	287127.2	3.11×10^{-1}	12.3	1266.408	1266.52	26.5	
Ni v	240193.8	319138.7	7.81×10^{-2}		1266.706			
Ni v	212455.7	291390	3.00×10^{-1}		1266.876			
Ga iv	156025	234940	1.26×10^{-1}		1267.189			newly identified
Ni v	229408.8	308317.3	1.59×10^{-1}		1267.291			
				8.0		1267.56		unid.
				9.7		1267.77		unid.
Ni v	229440.6	308317.3	1.60×10^{-1}		1267.802			
Ni v	236454.1	315326.2	1.02×10^{-1}		1267.875			
				18.6		1268.09		unid.
						1268.40		unid.
Ni v	274738.6	353548.7	2.22×10^{-1}		1268.873			

Table 1. Continued.

Ion	Levels		f	$W_\lambda /$ mÅ	Wavelength / Å		$v_{\text{rad}} /$ km/s	Comment
	Lower	Upper			Theoretical	Observed		
Ni v	241082.2	319860.4	1.63×10^{-1}		1269.387			
Ni v	242290.4	321018.3	1.44×10^{-1}		1270.198			
N iv	2s3p $^3P_2^o$	2p($^2P^o$)3p 3D_3	1.39×10^{-1}		1270.270			
Mo vi	316477	395184	1.14×10^{-2}		1270.523			
Ni v	229440.6	308138.8	3.40×10^{-1}	14.0	1270.677	1270.80	29.0	
Ni v	234275.2	312889.4	7.80×10^{-2}		1272.035			
N iv	2s3p $^3P_1^o$	2p($^2P^o$)3p 3D_2	1.23×10^{-1}		1272.145			
				6.9		1272.52		unid.
Ni v	242504.3	321081.9	9.12×10^{-2}		1272.627			
Ni v	208131	286706.6	1.33×10^{-2}		1272.660			
Ni v	274773.5	353347.1	8.85×10^{-2}		1272.692			
Zn iv	130366	208921	1.65×10^{-1}	13.8	1272.990	1273.08	21.2	newly identified
Ni v	208164.6	286706.6	3.51×10^{-1}		1273.204			
				15.7		1274.39		unid.
				10.0		1274.83		unid.
Ni v	216596	294939.6	2.88×10^{-1}		1276.428			
				11.8		1276.72		unid.
Ni v	164525.9	242837	2.13×10^{-1}	17.9	1276.958	1277.06	24.0	
				9.7		1277.64		unid.
				8.2		1278.29		unid.
				16.9		1279.04		unid.
Ni v	212095.8	290262	2.31×10^{-1}	10.6	1279.325	1279.45	29.3	
Ni v	208151.5	286293.6	3.95×10^{-1}		1279.720			
Ni v	247104.9	325222.9	1.05×10^{-1}		1280.115			
Ni v	240959.6	319076.2	2.26×10^{-1}		1280.138			
Xe vi	5p 2 $^4P_{5/2}^o$	4f $^2F_{7/2}^o$			1280.213			newly identified
Zn iv	131805	209899	1.71×10^{-1}	13.0	1280.500	1280.58	18.7	newly identified
				7.2		1280.78		unid.
				6.8		1281.26		unid.
				7.3		1281.49		unid.
				7.0		1281.62		unid.
				7.5		1281.76		unid.
				4.5		1281.99		unid.
Ni v	229408.8	307399.7	1.14×10^{-1}		1282.201			
Ni v	229413	307399.7	1.08×10^{-1}		1282.270			
Zn iv	151250	229231	1.22×10^{-1}		1282.357			newly identified
Ni v	251654.9	329614.3	1.78×10^{-3}		1282.719			
Zn v	212471	290424	9.80×10^{-3}		1282.832			newly identified
				3.5		1283.77		unid.
Sn v				18.2	1283.810	1283.91	23.4	
Ni v	216590.5	294443.3	2.73×10^{-1}		1284.475			

Table 1. Continued.

Ion	Levels		f	$W_\lambda /$ mÅ	Wavelength/Å		$v_{\text{rad}} /$ km/s	Comment
	Lower	Upper			Theoretical	Observed		
Ni v	253905.2	331678.2	3.87×10^{-1}	9.8	1285.793	1286.64	unid.	
Ni v	232545.9	310212.6	1.60×10^{-1}		1287.553			
Ni v	268273.9	345936.1	3.03×10^{-1}		1287.628			
Ni v	216434.7	294086	2.41×10^{-1}		1287.808			
				6.0		1288.22		unid.
				9.1		1288.37		unid.
Zn iv	132777	210187	2.44×10^{-1}		1291.826			newly identified
				6.6		1292.01		unid.
				5.6		1292.19		unid.
Zn iv	130366	207737	1.11×10^{-1}		1292.476			newly identified
Sn v				25.8	1294.360	1294.45	20.8	
Ni v	212095.8	289298	1.20×10^{-1}		1295.300			
Zn v	221631	298801	1.03×10^{-1}		1295.850			newly identified
						1296.10		unid.
Ni v	212095.8	289247.1	4.28×10^{-2}		1296.154			blend with C iii
Ni v	242504.3	319652.7	8.59×10^{-2}		1296.203			blend with C iii
C iii	3d 3D_2	5f $^3F_3^o$	2.04×10^{-1}		1296.322			
C iii	3d 3D_1	5f $^3F_2^o$	2.29×10^{-1}		1296.327			
C iii	3d 3D_3	5f $^3F_4^o$	2.10×10^{-1}		1296.333			
C iii	3d 3D_2	5f $^3F_2^o$	2.59×10^{-2}		1296.345			
C iii	3d 3D_3	5f $^3F_3^o$	1.85×10^{-2}		1296.369			
C iii	3d 3D_3	5f $^3F_2^o$	4.21×10^{-4}		1296.392			
Zn iv	131805	208921	1.67×10^{-1}		1296.734			newly identified
Ni v	242862.6	319860.4	1.61×10^{-1}		1298.738			
Xe vi	5p $^2P_{3/2}^o$	5p 2 $^4P_{1/2}$			1298.921			
Ga iv	153086	230040	3.26×10^{-1}		1299.476			newly identified
Ni v	178019.8	254885	1.79×10^{-1}		1300.979			
Zn iv	148180	225033	3.10×10^{-1}		1301.189			newly identified
O i					1302.167			ISM multi-component
Ni v	242862.6	319652.7	5.50×10^{-2}		1302.251			
Ni v	212095.8	288877.9	7.57×10^{-2}		1302.387			
Zn v	222042	298801	8.34×10^{-2}		1302.786			newly identified
Ni v	235736.5	312463.3	2.32×10^{-1}	2.2	1303.326	1303.43	23.9	
Ga iv	150967	227681	3.17×10^{-1}	5.4	1303.540	1303.66	27.6	newly identified
Zr v	378753	455444	9.01×10^{-1}	16.1	1303.933	1304.05	26.9	
Ni v	247165	323853.1	7.66×10^{-2}		1303.983			
				7.1		1304.19		unid.
				27.2		1304.44		unid.
Ni v	229408.8	306049	4.36×10^{-2}		1304.798			

Table 1. Continued.

Ion	Levels		f	$W_\lambda /$ mÅ	Wavelength/Å		$v_{\text{rad}} /$ km/s	Comment
	Lower	Upper			Theoretical	Observed		
Ni v	229413	306049	1.78×10^{-1}		1304.870			
Ni v	212253.4	288877.9	1.26×10^{-1}		1305.066			
Ni v	229408.8	305996.3	1.66×10^{-1}		1305.696			
Ni v	243370.5	319926.5	1.30×10^{-3}		1306.233			
Ni v	229440.6	305996.3	1.24×10^{-1}		1306.238			
Ni v	208046.4	284579.5	2.83×10^{-1}		1306.624			blend with Zn iv, blend with Zr v
Zn iv	128730	205261	3.80×10^{-1}		1306.657			blend with Ni v, blend with Zr v, newly identified
Zr v	395995	472520	1.00	16.1	1306.762			blend with Ni v, blend with Zn iv
Ni v	178019.8	254495.6	2.94×10^{-1}	8.1	1307.603	1307.71	24.5	
				8.9		1308.07		unid.
C iii	$2p^2 \ ^1S_0$	$2s3p \ ^1P_1^o$	2.52×10^{-2}		1308.705			
				6.8		1309.08		unid.
				3.8		1309.18		unid.
				2.6		1309.26		unid.
Zn v	240446	316827	1.47×10^{-2}		1309.233			newly identified
N iv	$2s3p \ ^1P_1^o$	$2p(^2P_{1/2}^o)3p \ ^1P_1$	1.79×10^{-1}		1309.555			
Ni v	208046.4	284402.5	3.96×10^{-2}		1309.653			
Ni v	243266.2	319620.2	1.60×10^{-1}		1309.689			
				3.5		1310.00		unid.
Ni v	221087.6	297418.1	2.79×10^{-1}		1310.092			
Ni v	243331.5	319652.7	1.63×10^{-1}		1310.252			
Ni v	242862.6	319138.7	6.10×10^{-2}		1311.027			
Ni v	208131	284402.5	2.40×10^{-1}	14.8	1311.106	1311.21	23.8	
				3.2		1312.39		unid.
Ni v	229408.8	305590.8	9.64×10^{-2}		1312.646			
Ni v	208131	284308.9	5.48×10^{-2}		1312.717			
Ni v	229413	305590.8	2.17×10^{-1}		1312.718			
Ni v	208163.7	284308.9	2.21×10^{-1}		1313.280			
				18.3		1314.01		unid.
Ni v	208164.6	284249	2.12×10^{-1}	7.5	1314.330	1314.46	29.7	
Sn iv	$5s \ ^2S_{1/2}$	$5p \ ^2P_{3/2}^o$	6.00×10^{-1}	11.4	1314.537	1314.64	23.5	
Ni v	208151.5	284215.5	2.17×10^{-1}		1314.682			
C iv	$4p \ ^2P_{1/2}^o$	$7d \ ^2D_{3/2}$	5.89×10^{-2}		1315.623			
Ni v	225545.1	301553	3.32×10^{-1}		1315.653			blend with C iv
C iv	$4p \ ^2P_{3/2}^o$	$7d \ ^2D_{3/2}$	5.88×10^{-3}		1315.849			
C iv	$4p \ ^2P_{3/2}^o$	$7d \ ^2D_{5/2}$	5.29×10^{-2}		1315.855			
Ni v	225616.5	301553	6.38×10^{-2}		1316.890			
Ni v	232655.6	308592	1.42×10^{-1}		1316.892			
Ni v	221087.6	297013.9	4.55×10^{-2}		1317.067			

Table 1. Continued.

Ion	Levels		f	$W_\lambda /$ mÅ	Wavelength/Å		$v_{\text{rad}} /$ km/s	Comment
	Lower	Upper			Theoretical	Observed		
				5.7		1317.45		unid.
Ni v	233839.2	309743.6	3.13×10^{-1}	7.7	1317.447	1317.56	25.7	
Zn iv	135951	211824	1.73×10^{-1}		1318.001			newly identified
Zn v	222940	298801	5.79×10^{-2}		1318.204			newly identified
Ni v	225616.5	301470.2	3.22×10^{-1}		1318.327			
Ni v	178019.8	253862.7	4.05×10^{-1}	11.4	1318.515	1318.62	23.9	
						1319.03		unid.
				9.6		1319.54		unid.
Kr v	291138	366900	1.91×10^{-1}		1319.923			newly identified
						1320.14		unid.
Ni v	225200.7	300918.1	3.27×10^{-1}		1320.700			blend with Zn iv
Zn iv	128730	204447	1.10×10^{-1}		1320.704			blend with Ni v, newly identified
Ni v	212253.4	287960	4.38×10^{-2}		1320.889			blend with Zn iv
Zn iv	138479	214167	2.77×10^{-1}	9.7	1321.215	1321.32	23.8	blend with Ni v, newly identified
				7.1		1322.25		unid.
Zn iv	130366	205991	1.37×10^{-1}		1322.316			newly identified
Zn iv	135951	211570	1.98×10^{-1}		1322.428			newly identified
Ni v	236454.1	312008.3	9.08×10^{-2}	7.6	1323.553	1323.66	24.2	
Ni v	241773.6	317327.3	1.52×10^{-1}	7.6	1323.562	1323.66	22.2	
Zr v	382985	458524	7.96×10^{-1}	18.8	1323.826	1323.94	25.8	
Ni v	217101	292631	3.50×10^{-1}		1323.977			
Zn v	208715	284116	9.90×10^{-3}		1326.253			newly identified
Zn iv	131805	207175	1.08×10^{-1}		1326.774			newly identified
N iv	2s3d 3D_1	2p($^2P^o$)3d $^3F_2^o$	1.46×10^{-2}	12.8	1326.957	1327.08	27.8	uncertain
Zn iv	135951	211190	1.11×10^{-1}		1329.110			newly identified
Ni v	217129.1	292353.4	3.28×10^{-1}		1329.358			
Zn v	208715	283933	4.42×10^{-3}		1329.471			newly identified
Zn iv	160919	236109	2.17×10^{-1}		1329.959			newly identified
Zn iv	157075	232246	2.56×10^{-1}		1330.302			newly identified
Zr v	327617	402688	6.65×10^{-2}		1332.065			
Zn iv	157930	232938	5.48×10^{-1}		1333.180			newly identified
Zn iv	138479	213480	1.59×10^{-1}	13.3	1333.326	1333.45	27.9	newly identified
Ni v	233839.2	308804.1	1.31×10^{-1}		1333.958			
Ni v	241773.6	316726.6	1.38×10^{-1}		1334.169			
Ni v	225616.5	300563.3	4.14×10^{-2}		1334.280			
C ii					1334.532			ISM multi-component
Ni v	241082.2	315990.5	1.60×10^{-1}		1334.966			
				22.8		1335.83		unid.
Ni v	217048.7	291891.4	3.25×10^{-1}	14.1	1336.136	1336.28	32.3	
Ga iv	149512	224243	2.02×10^{-1}	9.0	1338.129	1338.25	27.1	newly identified

Table 1. Continued.

Ion	Levels		f	$W_\lambda /$ mÅ	Wavelength / Å		$v_{\text{rad}} /$ km/s	Comment
	Lower	Upper			Theoretical	Observed		
O IV	2s2p ² ² P _{1/2}	2p ³ ² D _{3/2} ^o	1.17×10 ⁻¹	91.9	1338.615	1338.75	30.2	
				11.3		1339.18		unid.
Zn IV	157075	231693	3.70×10 ⁻¹		1340.156			newly identified
Ni V	225616.5	300224.9	1.26×10 ⁻¹		1340.332			
Ni V	216189.9	290757	8.26×10 ⁻²		1341.074			
Zn V	241829	316339	1.10×10 ⁻²		1342.104			newly identified
Ni V	217048.7	291554.6	2.03×10 ⁻¹		1342.176			
O IV	2s2p ² ² P _{3/2}	2p ³ ² D _{3/2} ^o	1.16×10 ⁻²	54.9	1342.990	1343.12	29.0	
O IV	2s2p ² ² P _{3/2}	2p ³ ² D _{5/2} ^o	1.04×10 ⁻¹	106.7	1343.514	1343.65	30.4	
Zn IV	149191	223609	3.61×10 ⁻¹		1343.750			newly identified
Ni V	240959.6	315370.1	1.30×10 ⁻¹		1343.896			
Zn IV	132777	207175	2.94×10 ⁻¹		1344.122			newly identified
Zn V	240446	314838	4.45×10 ⁻²		1344.241			newly identified
O III	3p ³ P ₂	3p ³ D ₃ ^o	7.89×10 ⁻²		1344.943			
O III	3p ³ P ₁	3p ³ D ₂ ^o	7.05×10 ⁻²		1344.962			
				14.4		1345.78		unid.
				16.0		1346.26		unid.
Ni V	217129.1	291328.5	1.82×10 ⁻¹		1347.720			
C III	3p ¹ P ₁ ^o	3p' ¹ D ₂	3.03×10 ⁻²	16.7	1347.947	1348.07	27.4	blend with Zn IV
Zn IV	131805	205991	2.15×10 ⁻¹	16.7	1347.954	1348.07	25.8	blend with C III, newly identified
Zn IV	130366	204447	1.98×10 ⁻¹	7.9	1349.876	1350.00	27.5	newly identified
Ni V	216189.9	290262	6.02×10 ⁻²		1350.036			
C IV	4d ² D _{3/2}	4f ² F _{5/2} ^o	7.22×10 ⁻²		1351.214			
C IV	4d ² D _{5/2}	4f ² F _{5/2} ^o	3.44×10 ⁻³		1351.287			
C IV	4d ² D _{5/2}	4f ² F _{7/2} ^o	6.88×10 ⁻²		1351.292			
C IV	4f ² F _{7/2} ^o	7g ² G _{9/2}	5.65×10 ⁻²		1352.975			
C IV	4f ² F _{7/2} ^o	7g ² G _{7/2}	1.64×10 ⁻³		1352.975			
C IV	4f ² F _{5/2} ^o	7g ² G _{7/2}	5.81×10 ⁻²		1352.975			
C IV	4f ² F _{5/2} ^o	7d ² D _{3/2}	5.37×10 ⁻⁴		1353.427			
C IV	4f ² F _{7/2} ^o	7d ² D _{5/2}	5.75×10 ⁻⁴		1353.433			
C IV	4f ² F _{5/2} ^o	7d ² D _{5/2}	3.85×10 ⁻⁵		1353.433			
Zr V	402688	476677	1.05		1355.216			
				9.7		1355.74		unid.
Zr V	328941	402688	4.39×10 ⁻²		1355.975			
Zn IV	160886	234623	3.72×10 ⁻¹		1356.171			newly identified
				7.4		1357.45		unid.
Zn IV	131805	205453	1.79×10 ⁻¹	23.0	1357.801	1357.92	26.3	newly identified
Zn IV	148180	221737	2.35×10 ⁻¹	11.2	1359.477	1359.61	29.3	newly identified
Zn IV	138479	211824	1.39×10 ⁻¹		1363.432			newly identified

Table 1. Continued.

Ion	Levels		f	$W_\lambda /$ mÅ	Wavelength / Å		$v_{\text{rad}} /$ km/s	Comment
	Lower	Upper			Theoretical	Observed		
Zn iv	130366	203685	2.01×10^{-1}	12.7	1363.912	1364.06	32.5	newly identified
				3.9		1364.33		unid.
				9.7		1364.65		unid.
				9.7		1364.97		unid.
Zn iv	148180	221426	1.18×10^{-1}	11.7	1365.253	1365.38	27.9	newly identified
Zn iv	135951	208970	3.07×10^{-1}	9.3	1369.510	1369.63	26.3	newly identified
				15.3		1370.26		unid.
				2.5		1370.61		unid.
O v	2s2p $^1P_1^o$	2p 2 1D_2	1.57×10^{-1}	90.9	1371.294	1371.43	29.7	
Sr v				8.3	1372.838	1372.96	26.6	
Zn iv	138479	211190	2.47×10^{-1}		1375.325			newly identified
				5.3		1376.45		unid.
Zr v	382985	455631	3.17×10^{-1}		1376.544			
				6.3		1376.79		unid.
				6.3		1377.50		unid.
Zn iv	128730	201319	2.29×10^{-1}	15.7	1377.615	1377.75	29.4	newly identified
				9.8		1379.19		unid.
C iii	3d 1D_2	5f $^1F_3^o$	3.46×10^{-1}	37.7	1381.652	1381.76	23.4	
Kr v	211336.57	283559	5.14×10^{-2}	10.6	1384.611	1384.72	23.6	
Zn iv	160919	232981	3.61×10^{-1}		1387.694			newly identified
Kr v	213932.87	285981	7.46×10^{-2}	7.5	1387.961	1388.07	23.5	
				14.1		1390.73		unid.
				14.2		1390.94		unid.
Ni v	221087.6	292983	1.41×10^{-1}		1390.910			
Kr v	216874.54	288683	4.28×10^{-2}		1392.594	1392.77	38.3	
Kr v	219381.57	291138	9.66×10^{-2}		1393.603			
Si iv	3s $^2S_{1/2}$	3p $^2P_{3/2}^o$	5.13×10^{-1}	82.1	1393.755	1393.87	24.7	
				12.8		1395.98		unid.
						1396.48		unid.
Kr v	219823.27	291138	2.40×10^{-2}	8.0	1402.235	1402.32	18.2	newly identified
				14.5		1402.53		unid.
Si iv	3s $^2S_{1/2}$	3p $^2P_{1/2}^o$	2.55×10^{-1}	62.4	1402.770	1402.90	27.8	
				13.0		1408.56		unid.
				13.9		1409.60		unid.
				17.4		1413.09		unid.
				7.0		1413.31		unid.
Sr v				12.8	1413.882	1414.02	29.3	
						1423.36		unid.
						1423.48		unid.
				9.9		1424.44		unid.
				7.0		1424.95		unid.

Table 1. Continued.

Ion	Levels		f	$W_\lambda /$ mÅ	Wavelength / Å		$v_{\text{rad}} /$ km/s	Comment		
	Lower	Upper			Theoretical	Observed				
C III	3d	3D_1	3d'	$^3P_0^o$	3.40×10^{-2}	1425.903				
C III	3d	3D_1	3d'	$^3P_1^o$	3.56×10^{-2}	1426.194				
C III	3d	3D_2	3d'	$^3P_1^o$	4.60×10^{-2}	1426.216				
C III	2s3s	3S_1	2p($^2P^o$)3s	$^3P_2^o$	1.62×10^{-1}	27.0	1426.446	1426.58	28.2	
C III	3d	3D_1	3d'	$^3P_2^o$	1.03×10^{-3}		1426.716			
C III	3d	3D_2	3d'	$^3P_2^o$	1.10×10^{-2}		1426.739			
C III	3d	3D_3	3d'	$^3P_2^o$	4.77×10^{-2}		1426.796			
Mo VI	316477		386552		7.53×10^{-4}	7.6	1427.030	1427.15	25.2	
C III	2s3s	3S_1	2p($^2P^o$)3s	$^3P_1^o$	9.78×10^{-2}	39.5	1427.839	1427.97	27.5	
C III	3p	$^3P_1^o$	3p'	3P_2	4.56×10^{-2}		1427.911			
C III	3p	$^3P_2^o$	3p'	3P_2	8.22×10^{-2}	23.8	1428.178	1428.31	27.7	
C III	2s3s	3S_1	2p($^2P^o$)3s	$^3P_0^o$	3.26×10^{-2}		1428.498			
C III	3p	$^3P_0^o$	3p'	3P_1	1.10×10^{-1}		1428.553			
C III	3p	$^3P_1^o$	3p'	3P_1	2.74×10^{-2}		1428.668			
C III	3p	$^3P_2^o$	3p'	3P_1	2.74×10^{-2}		1428.935			
C III	3p	$^3P_1^o$	3p'	3P_0	3.66×10^{-2}		1429.099			
						22.2		1431.72	unid.	
Sn IV	5s	$^2S_{1/2}$	5p	$^2P_{1/2}^o$	3.00×10^{-1}	15.1	1437.525	1437.64	24.0	
Kr V	213932.87		283439.05		1.10×10^{-2}	8.0	1438.722	1438.83	22.5	newly identified
C IV	4s	$^2S_{1/2}$	6p	$^2P_{3/2}^o$	4.70×10^{-2}		1440.283			
C IV	4s	$^2S_{1/2}$	6p	$^2P_{1/2}^o$	2.35×10^{-2}		1440.364			
						7.7		1447.25	unid.	
								1451.78	unid.	
								1454.45	unid.	
Ba VII	173154		241412		1.46×10^{-2}		1465.045		newly identified	
								1475.13	unid.	
								1475.29	unid.	
								1475.41	unid.	
								1475.50	unid.	
								1477.59	unid.	
C III	3d	3D_2	3d'	$^3D_3^o$	1.92×10^{-2}		1477.626			
C III	3d	3D_3	3d'	$^3D_3^o$	1.10×10^{-1}	32.2	1477.688	1477.810	24.8	
Ba VII	156151		223820		1.72×10^{-2}		1477.775		newly identified	
C III	3d	3D_1	3d'	$^3D_2^o$	3.09×10^{-2}		1478.021			
C III	3d	3D_2	3d'	$^3D_2^o$	8.56×10^{-2}	38.7	1478.045	1478.170	25.4	
C III	3d	3D_3	3d'	$^3D_2^o$	1.37×10^{-2}		1478.106			
C III	3d	3D_1	3d'	$^3D_1^o$	9.25×10^{-2}		1478.303			
C III	3d	3D_2	3d'	$^3D_1^o$	1.86×10^{-2}		1478.327			
Mo VI	119726		187331		6.15×10^{-1}	38.8	1479.168	1479.30	26.8	
						15.6		1479.49	unid.	

Table 1. Continued.

Ion	Levels		f	$W_\lambda /$ mÅ	Wavelength / Å		$v_{\text{rad}} /$ km/s	Comment
	Lower	Upper			Theoretical	Observed		
				21.8		1485.53		unid.
Ge IV	4d $^2D_{3/2}$	4f $^2F_{5/2}^o$			1494.889	1494.97	16.2	
C III	3d 1D_2	5p $^1P_1^o$	2.98×10^{-2}		1497.563			
Ge IV	4d $^2D_{5/2}$	4f $^2F_{5/2}^o$			1500.519			newly identified
Ge IV	4d $^2D_{5/2}$	4f $^2F_{7/2}^o$			1500.609			newly identified
S V	3p $^1P^o$	3p 2 1D	1.04×10^{-1}	45.0	1501.799	1501.92	24.2	
				78.5		1511.07		unid.
Zr VI	393555	459581	2.70×10^{-1}		1514.568			
Kr V	278928	344908	8.37×10^{-1}		1515.611			
Zr VI	369712	435428	1.99×10^{-1}		1521.699			
Ba VII	178316	243933	1.07×10^{-2}		1524.009			newly identified
				21.4		1526.05		unid.
Si II					1526.707			ISM multi-component
C III	3p $^1P_1^o$	4d 1D_2	2.03×10^{-1}	23.4	1531.835	1531.97	26.4	
				22.9		1536.23		unid.
C III	3d 1D_2	3d' $^1F_3^o$	6.86×10^{-2}	56.6	1541.115	1541.26	28.2	
C IV	2s $^2S_{1/2}$	2p $^2P_{3/2}^o$	1.90×10^{-1}	245.9	1548.203	1548.33	24.6	
C IV	2s $^2S_{1/2}$	2p $^2P_{1/2}^o$	9.52×10^{-2}	217.7	1550.772	1550.90	24.8	
						1561.93		unid.
						1563.99		unid.
Kr V	288683	352537	6.65×10^{-1}		1566.073			
				27.1		1567.70		unid.
C III	3d 3D_3	3d' $^3F_4^o$	2.28×10^{-1}	36.5	1576.479	1576.61	24.9	
C III	3p $^3P_2^o$	3p' 3D_3	1.07×10^{-2}		1576.888			
C III	3d 3D_2	3d' $^3F_3^o$	2.21×10^{-1}		1577.297			
C III	3d 3D_3	3d' $^3F_3^o$	2.01×10^{-1}		1577.366			
C III	3p $^3P_1^o$	3p' 3D_2	9.58×10^{-1}		1577.532			
C III	3p $^3P_2^o$	3p' 3D_2	1.92×10^{-3}		1577.858			
C III	3d 3D_1	3d' $^3F_2^o$	2.49×10^{-1}		1577.880			
C III	3d 3D_2	3d' $^3F_2^o$	2.81×10^{-2}		1577.907			
C III	3d 3D_3	3d' $^3F_2^o$	4.56×10^{-4}		1577.977			
C III	3p $^3P_0^o$	3p' 3D_1	1.28×10^{-2}		1578.001			
C III	3p $^3P_1^o$	3p' 3D_1	3.20×10^{-3}		1578.142			
Ba VII	178140	241412	4.22×10^{-3}		1580.480			newly identified
Ba VII	156256	219528	2.05×10^{-3}		1580.483			newly identified
						1582.54		unid.
Kr V	291138	354291	3.56×10^{-1}		1583.456			
C IV	4p $^2P_{1/2}^o$	6d $^2D_{3/2}$	1.36×10^{-1}		1585.811			
C IV	4p $^2P_{3/2}^o$	6d $^2D_{5/2}$	1.22×10^{-1}		1586.111			

Table 1. Continued.

Ion	Levels		f	$W_\lambda /$ mÅ	Wavelength / Å		$v_{\text{rad}} /$ km/s	Comment	
	Lower	Upper			Theoretical	Observed			
C IV	4p	$^2P^{\circ}_{3/2}$	6d	$^2D_{3/2}$	1.35×10^{-2}	1586.141			
Mo V	94835		157851		1.46×10^{-1}	1586.898			
Kr V	283677		346599		9.57×10^{-1}	1589.269			
Mo V	99380		162257		1.66×10^{-1}	1590.414			
C III	3s	1S_0	3s'	$^1P^{\circ}_1$	6.85×10^{-1}	37.5	1591.443	1591.59	27.7
Zr VI	364827		427649		4.28×10^{-1}		1591.799		
Kr V	291138		353957		6.18×10^{-1}		1591.875		
Mo VI	119726		182404		2.81×10^{-1}	27.3	1595.435	1595.58	27.2
Zr IV	84461		147002		9.73×10^{-1}		1598.948		
							1600.88		unid.
							1610.42		unid.
							1610.70		unid.
							1616.99		unid.
C III	3p	$^3P^{\circ}_2$	4d	3D_3	4.57×10^{-1}	46.1	1620.069	1620.18	20.5
C III	3p	$^3P^{\circ}_1$	4d	$^3D^{\circ}_2$	4.03×10^{-1}	19.9	1620.338	1620.46	22.6
C III	3p	$^3P^{\circ}_0$	4d	3D_1	5.44×10^{-1}		1620.594		
C III	3p	$^3P^{\circ}_2$	4d	3D_2	8.18×10^{-2}		1620.681		
C III	3p	$^3P^{\circ}_1$	4d	3D_1	1.36×10^{-1}		1620.743		
C III	3p	$^3P^{\circ}_2$	4d	3D_1	5.49×10^{-3}		1621.087		
Zr V	327617		388853		1.21×10^{-1}		1633.027		
C IV	4d	$^2D_{3/5}$	6f	$^2F^{\circ}_{5/2}$	1.86×10^{-1}		1637.543		
C IV	4d	$^2D_{5/2}$	6f	$^2F^{\circ}_{5/2}$	8.85×10^{-3}		1637.650		
C IV	4d	$^2D_{5/2}$	6f	$^2F^{\circ}_{7/2}$	1.77×10^{-1}		1637.650		
He II	2		3		6.41×10^{-1}	254.3	1640.377	1640.54	29.8
Mo V	99380		159857		3.81×10^{-1}		1653.541		
C IV	4p	$^2P^{\circ}_{1/2}$	6s	$^2S_{1/2}$	2.46×10^{-2}		1653.633		
C IV	4p	$^2P^{\circ}_{3/2}$	6s	$^2S_{1/2}$	2.46×10^{-2}		1653.992		
C IV	4d	$^2D_{3/2}$	6p	$^2P^{\circ}_{3/2}$	1.35×10^{-3}		1654.457		
C IV	4d	$^2D_{3/2}$	6p	$^2P^{\circ}_{1/2}$	6.75×10^{-3}		1654.564		
C IV	4d	$^2D_{5/2}$	6p	$^2P^{\circ}_{3/2}$	8.10×10^{-3}		1654.566		
						29.5		1659.43	unid.
Mo V	94835		155032		3.93×10^{-1}		1661.215	1661.37	28.0
Xe VI	5p ²	$^2D_{3/2}$	4f	$^2F^{\circ}_{5/2}$			1663.116		newly identified
Xe VI	5d'	$^2F^{\circ}_{5/2}$	5g	$^2G^{\circ}_{7/2}$	3.02×10^{-1}		1663.146		newly identified
						58.4		1667.83	unid.
Mo V	93111		153040		2.83×10^{-1}		1668.662		
						30.4		1669.99	unid.
								1673.23	unid.
Zr VI	393555		453000		4.00×10^{-1}		1682.241		

Table 1. Continued.

Ion	Levels		f	$W_\lambda /$ mÅ	Wavelength / Å		$v_{\text{rad}} /$ km/s	Comment
	Lower	Upper			Theoretical	Observed		
N IV	2s2p $^1P_1^o$	2p ² 1D_2	1.71×10^{-1}	106.7	1718.550	1718.69	24.4	
Zr V	325015	382985	2.14×10^{-1}		1725.024			uncertain
Zr VI	364827	421991	2.77×10^{-1}	79.8	1749.350	1749.50	26.7	uncertain
						1751.72		unid.
						1752.87		unid.
						1757.05		unid.
				138.8		1757.86		unid.
				37.6		1760.23		unid.
						1761.20		unid.
Kr V	250993	307667	2.31×10^{-1}		1764.478			
				27.0		1767.98		unid.
Ba VII	157675	213712	2.22×10^{-2}		1784.535			newly identified
				49.4		1796.62		unid.
				34.9		1803.15		unid.
						1807.71		unid.
				33.0		1808.36		unid.
						1819.61		unid.
Ba VII	152397	206668	1.50×10^{-2}		1842.595			newly identified
						1849.26		unid.
						1851.95		unid.
						1855.49		unid.
				27.3		1855.77		unid.
				38.6		1879.01		unid.
Xe VI	5p ² $^2D_{5/2}$	5d $^2D_{5/2}$			1884.016			newly identified
				23.6		1885.53		unid.
				10.2		1888.08		unid.
C III	2s3p $^1P_1^o$	2s4s 1S_0	9.68×10^{-2}		1894.290			
				30.9		1901.53		unid.
				16.3		1901.77		unid.
				25.6		1901.97		unid.
				37.5		1902.29		unid.
C III	3d 3D_3	4f $^3F_4^o$	5.77×10^{-1}		1922.957			
C III	3d 3D_2	4f $^3F_3^o$	5.58×10^{-1}		1923.164			
C III	3d 3D_3	4f $^3F_3^o$	5.08×10^{-2}		1923.268			
C III	3d 3D_1	4f $^3F_2^o$	6.29×10^{-1}		1923.341			
C III	3d 3D_2	4f $^3F_2^o$	7.11×10^{-2}		1923.382			
C III	3d 3D_3	4f $^3F_2^o$	1.15×10^{-3}		1923.486			
				19.3		1937.28		unid.
Kr VI	275380	326657	6.59×10^{-1}		1950.192			newly identified
				93.3		1957.24		unid.
				20.3		1967.57		unid.

Table 1. Continued.

Ion	Levels		f	$W_\lambda /$ mÅ	Wavelength / Å		$v_{\text{rad}} /$ km/s	Comment
	Lower	Upper			Theoretical	Observed		
				37.7		1984.64		unid.
C III	3p $^3P_0^o$	4s 3S_1	1.39×10^{-1}		2009.985			
C III	3p $^3P_1^o$	4s 3S_1	1.39×10^{-1}		2010.214			
C III	3p $^3P_2^o$	4s 3S_1	1.39×10^{-1}	45.0	2010.743	2010.91	24.9	
				15.9		2011.39		unid.
				17.9		2011.83		unid.
				12.7		2012.15		unid.
						2029.38		unid.
				19.9		2051.02		unid.
				38.8		2051.89		unid.
				23.3		2066.42		unid.
C III	3d 3D_1	4p $^3P_2^o$	7.22×10^{-4}		2092.467			
C III	3d 3D_2	4p $^3P_2^o$	7.69×10^{-3}		2092.516			
C III	3d 3D_3	4p $^3P_2^o$	3.34×10^{-2}		2092.639			
C III	3d 3D_1	4p $^3P_1^o$	1.80×10^{-2}		2092.677			
C III	3d 3D_2	4p $^3P_1^o$	3.23×10^{-2}		2092.725			
C III	3d 3D_1	4p $^3P_0^o$	2.39×10^{-2}		2092.776			
				27.3		2098.66		unid.
C IV	4s $^2S_{1/2}$	5p $^2P_{3/2}^o$	1.43×10^{-1}		2104.607			
C IV	4s $^2S_{1/2}$	5p $^2P_{1/2}^o$	7.14×10^{-2}		2104.922			
Xe VI	6s $^2S_{1/2}$	6p $^2P_{3/2}^o$	7.40×10^{-1}		2135.479			newly identified
						2146.69		unid.
C III	3d 1D_2	4f $^1F_3^o$	7.96×10^{-1}	76.5	2163.605	2163.84	32.6	
				8.3		2212.24		unid.
				5.9		2212.49		unid.
				5.5		2212.92		unid.
				19.1		2240.01		unid.
C III	2p $^1P_1^o$	2p ² 1D_2	1.80×10^{-1}	109.9	2297.578	2297.78	26.4	
				21.5		2314.97		unid.
C IV	5d $^2D_{3/2}$	8f $^2F_{5/2}^o$	8.12×10^{-2}		2333.504			
C IV	5d $^2D_{5/2}$	8f $^2F_{5/2}^o$	3.87×10^{-3}		2333.597			
C IV	5d $^2D_{5/2}$	8f $^2F_{7/2}^o$	7.73×10^{-2}		2333.597			
C IV	5f $^2F_{7/2}^o$	8g $^2G_{7/2}$	2.39×10^{-3}		2336.247			
C IV	5f $^2F_{7/2}^o$	8g $^2G_{9/2}$	8.23×10^{-2}		2336.247			
C IV	5f $^2F_{5/2}^o$	8g $^2G_{7/2}$	8.46×10^{-2}		2336.247			
C IV	5g $^2G_{7/2}$	8h $^2H_{9/2}^o$	5.98×10^{-2}		2336.700			
C IV	5g $^2G_{9/2}$	8h $^2H_{9/2}^o$	1.12×10^{-3}		2336.700			
C IV	5g $^2G_{9/2}$	8h $^2H_{11/2}^o$	5.87×10^{-2}		2336.700			
C IV	5p $^2P_{1/2}^o$	8s $^2S_{1/2}$	1.32×10^{-2}		2336.722			

Table 1. Continued.

Ion	Levels		f	$W_\lambda /$ mÅ	Wavelength / Å		$v_{\text{rad}} /$ km/s	Comment
	Lower	Upper			Theoretical	Observed		
C IV	5g $^2G_{7/2}$	8f $^2F_{5/2}^o$	3.77×10^{-4}		2336.787			
C IV	5g $^2G_{7/2}$	8f $^2F_{7/2}^o$	1.42×10^{-5}		2336.787			
C IV	5g $^2G_{9/2}$	8f $^2F_{7/2}^o$	3.91×10^{-4}		2336.787			
C IV	5f $^2F_{5/2}^o$	8d $^2D_{5/2}$	1.11×10^{-4}		2337.066			
C IV	5f $^2F_{5/2}^o$	8d $^2D_{3/2}$	1.56×10^{-3}		2337.066			
C IV	5f $^2F_{7/2}^o$	8d $^2D_{5/2}$	1.67×10^{-3}		2337.066			
C IV	5p $^2P_{3/2}^o$	8s $^2S_{1/2}$	1.32×10^{-2}		2337.109			
				46.5		2344.31		unid.
				73.5		2382.82		unid.
He II	3	8	1.60×10^{-2}		2386.221			
C IV	4p $^2P_{1/2}^o$	5d $^2D_{3/2}$	5.23×10^{-1}		2405.170			
C IV	4p $^2P_{3/2}^o$	5d $^2D_{5/2}$	4.61×10^{-1}		2405.830			
C IV	4p $^2P_{3/2}^o$	5d $^2D_{3/2}$	5.12×10^{-2}		2405.928			
O IV	4f $^2F_{5/2}^o$	5g $^2G_{7/2}$	1.20		2450.116			
O IV	4f $^2F_{7/2}^o$	5g $^2G_{7/2}$	3.38×10^{-2}		2450.782			
O IV	4f $^2F_{7/2}^o$	5g $^2G_{9/2}$	1.17		2450.782			
				17.6		2460.82		unid.
Ge IV	5p $^2P_{3/2}^o$	5d $^2D_{5/2}$			2488.691			newly identified
He II	3	7	2.77×10^{-2}		2512.059			
						2524.41		unid.
						2524.72		unid.
C IV	4d $^2D_{3/2}$	5f $^2F_{5/2}^o$	8.86×10^{-1}		2525.017			
C IV	4d $^2D_{5/2}$	5f $^2F_{5/2}^o$	4.22×10^{-2}		2525.272			
C IV	4d $^2D_{5/2}$	5f $^2F_{7/2}^o$	8.44×10^{-1}		2525.272			
C IV	4f $^2F_{7/2}^o$	5g $^2G_{9/2}$	1.30		2530.736			
C IV	4f $^2F_{7/2}^o$	5g $^2G_{7/2}$	3.78×10^{-2}		2530.736			
C IV	4f $^2F_{5/2}^o$	5g $^2G_{7/2}$	1.34		2530.736			
C IV	4f $^2F_{7/2}^o$	5d $^2D_{5/2}$	9.08×10^{-3}		2534.488			
C IV	4f $^2F_{5/2}^o$	5d $^2D_{5/2}$	6.05×10^{-4}		2534.488			
C IV	4f $^2F_{5/2}^o$	5d $^2D_{3/2}$	8.47×10^{-3}		2534.597			
				6.7		2586.31		unid.
						2586.65		unid.
						2586.83		unid.
				18.4		2595.53		unid.
C IV	4d $^2D_{3/2}$	5p $^2P_{3/2}$	6.74×10^{-3}		2595.596			
C IV	4d $^2D_{5/2}$	5p $^2P_{3/2}$	4.06×10^{-2}		2595.865			
C IV	4d $^2D_{3/2}$	5p $^2P_{1/2}$	3.38×10^{-2}		2596.074			
				23.6		2597.57		unid.

Table 1. Continued.

Ion	Levels		f	$W_\lambda /$ mÅ	Wavelength / Å		$v_{\text{rad}} /$ km/s	Comment
	Lower	Upper			Theoretical	Observed		
				33.0		2598.08		unid.
				45.4		2599.11		unid.
				44.3		2599.80		unid.
				67.1		2600.27		unid.
C IV	4p $^2P_{1/2}^o$	5s $^2S_{1/2}$	1.28×10^{-1}		2698.516			
C IV	4p $^2P_{3/2}^o$	5s $^2S_{1/2}$	1.28×10^{-1}		2699.471			
He II	3	6	5.59×10^{-2}		2734.220			
Mg II					2796.352			ISM multi-component
Mg II					2803.531			ISM multi-component
C IV	5p $^2P_{1/2}^o$	7d $^2D_{3/2}$	1.40×10^{-1}		2819.687			
C IV	5p $^2P_{3/2}^o$	7d $^2D_{3/2}$	1.40×10^{-2}		2820.251			
C IV	5p $^2P_{3/2}^o$	7d $^2D_{5/2}$	1.26×10^{-1}		2820.278			
O IV	3s $^4P_{5/2}^o$	3p $^4S_{3/2}$	6.83×10^{-2}		2837.105			
				54.5		2881.55		unid.
C IV	5d $^2D_{3/2}$	7f $^2F_{5/2}^o$	1.96×10^{-1}		2902.303			
C IV	5d $^2D_{5/2}$	7f $^2F_{5/2}^o$	9.34×10^{-3}		2902.446			
C IV	5d $^2D_{5/2}$	7f $^2F_{7/2}^o$	1.87×10^{-1}		2902.466			
C IV	5f $^2F_{7/2}^o$	7g $^2G_{9/2}$	2.21×10^{-1}		2906.502			
C IV	5f $^2F_{7/2}^o$	7g $^2G_{7/2}$	6.42×10^{-3}		2906.502			
C IV	5f $^2F_{5/2}^o$	7g $^2G_{7/2}$	2.27×10^{-1}		2906.502			
C IV	5g $^2G_{7/2}$	7h $^2H_{9/2}^o$	2.00×10^{-1}		2907.193			
C IV	5g $^2G_{9/2}$	7h $^2H_{9/2}^o$	3.73×10^{-3}		2907.193			
C IV	5g $^2G_{9/2}$	7h $^2H_{11/2}^o$	1.96×10^{-1}		2907.193			
C IV	5g $^2G_{7/2}$	7f $^2F_{5/2}^o$	1.13×10^{-3}		2907.382			
C IV	5g $^2G_{7/2}$	7f $^2F_{7/2}^o$	4.24×10^{-5}		2907.402			
C IV	5g $^2G_{9/2}$	7f $^2F_{7/2}^o$	1.17×10^{-3}		2907.402			
C IV	5f $^2F_{5/2}^o$	7d $^2D_{5/2}$	3.01×10^{-4}		2907.589			
C IV	5f $^2F_{5/2}^o$	7d $^2D_{3/2}$	4.21×10^{-3}		2907.589			
C IV	5f $^2F_{7/2}^o$	7d $^2D_{5/2}$	4.52×10^{-3}		2907.617			
				60.1		2958.83		unid.
O III	3p 1P_1	3d $^1D_2^o$	4.20×10^{-1}		2960.559			
C III	3d 1D_2	3s' $^1P_1^o$	6.72×10^{-2}	36.9	2982.986	2983.23	24.5	