

Table 1. Like Table ??, for the optical observations.

Ion	Levels		f	$W_\lambda /$ mÅ	Wavelength/Å		$v_{\text{rad}} /$ km/s	Comment
	Lower	Upper			Theoretical	Observed		
O IV	3s $2P^o_{1/2}$	3p $2D_{3/2}$	2.84×10^{-1}		3348.055			newly identified
O IV	3s $2P^o_{3/2}$	3p $2D_{5/2}$	2.55×10^{-1}		3349.110			newly identified
O IV	3s $4P^o_{3/2}$	3p $4D_{5/2}$	1.83×10^{-1}		3381.212			newly identified
O IV	3s $4P^o_{1/2}$	3p $4D_{3/2}$	1.45×10^{-1}		3381.304			newly identified
O IV	3s $4P^o_{5/2}$	3p $4D_{7/2}$	2.32×10^{-1}		3385.518			newly identified
O IV	3s $4P^o_{1/2}$	3p $4D_{1/2}$	1.45×10^{-1}		3390.191			newly identified
O IV	3s $4P^o_{3/2}$	3p $4D_{3/2}$	9.29×10^{-2}		3396.803			newly identified
S V	4s $1S$	4p $1P^o$	6.37×10^{-1}		3397.334			blend with O IV, newly identified
O IV	3p $2P^o_{1/2}$	3d $2D_{3/2}$	2.95×10^{-1}		3403.545			newly identified
O IV	3s $4P^o_{5/2}$	3p $4D_{5/2}$	5.22×10^{-2}		3409.698			newly identified
O IV	3p $2P^o_{3/2}$	3d $2D_{5/2}$	2.65×10^{-1}	49.1	3411.688	3412.02	29.2	newly identified
O IV	3p $2P^o_{3/2}$	3d $2D_{3/2}$	2.95×10^{-2}		3413.633			newly identified
C III	4p $3P^o_0$	5d $3D_1$	3.17×10^{-1}		3608.778			newly identified
C III	4p $3P^o_1$	5d $3D_2$	2.38×10^{-1}		3609.051			newly identified
C III	4p $3P^o_1$	5d $3D_1$	7.96×10^{-2}		3609.071			newly identified
C III	4p $3P^o_2$	5d $3D_3$	2.67×10^{-1}		3609.620			newly identified
C III	4p $3P^o_2$	5d $3D_2$	4.78×10^{-2}		3609.676			newly identified
C III	4p $3P^o_2$	5d $3D_1$	3.20×10^{-3}		3609.695			newly identified
C IV	6f $2F^o_{5/2}$	9g $2G_{7/2}$	9.78×10^{-2}		3689.263			newly identified
C IV	6f $2F^o_{7/2}$	9g $2G_{7/2}$	2.76×10^{-3}		3689.263			newly identified
C IV	6f $2F^o_{7/2}$	9g $2G_{9/2}$	9.51×10^{-2}		3689.263			newly identified
C IV	6g $2G_{9/2}$	9h $2H^o_{11/2}$	9.15×10^{-2}		3689.635			newly identified
C IV	6g $2G_{9/2}$	9h $2H^o_{9/2}$	1.74×10^{-3}		3689.636			newly identified
C IV	6g $2G_{7/2}$	9h $2H^o_{9/2}$	9.32×10^{-2}		3689.636			newly identified
C IV	6h $2H^o_{9/2}$	9i $2I_{11/2}$	5.77×10^{-2}		3689.717			newly identified
C IV	6h $2H^o_{11/2}$	9i $2I_{11/2}$	8.54×10^{-4}		3689.717			newly identified
C IV	6h $2H^o_{11/2}$	9i $2I_{13/2}$	5.69×10^{-2}		3689.717			newly identified
C IV	6h $2H^o_{9/2}$	9g $2G_{7/2}$	2.73×10^{-4}		3689.753			newly identified
C IV	6h $2H^o_{9/2}$	9g $2G_{9/2}$	6.36×10^{-6}		3689.753			newly identified
C IV	6h $2H^o_{11/2}$	9g $2G_{9/2}$	2.79×10^{-4}		3689.753			newly identified
C IV	6g $2G_{7/2}$	9f $2F^o_{5/2}$	1.15×10^{-3}		3689.785			newly identified
C IV	6g $2G_{7/2}$	9f $2F^o_{7/2}$	4.34×10^{-5}		3689.785			newly identified
C IV	6g $2G_{9/2}$	9f $2F^o_{7/2}$	1.20×10^{-3}		3689.785			newly identified
O IV	3p $4D_{1/2}$	3d $4F^o_{3/2}$	2.31×10^{-1}		3725.889			newly identified
O IV	3p $4D_{3/2}$	3d $4F^o_{5/2}$	1.85×10^{-1}		3725.945			newly identified
O IV	3p $4D_{5/2}$	3d $4F^o_{7/2}$	1.89×10^{-1}		3729.030			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	3p	$4D_{3/2}$	3d	$4F_{3/2}^o$	4.62×10^{-2}	3736.682		newly identified	
O IV	3p	$4D_{7/2}$	3d	$4F_{9/2}^o$	2.06×10^{-1}	3736.850		newly identified	
He I	2s	$3S$	3p	$3P^o$	6.45×10^{-2}	3888.643		newly identified	
H I	2		8		8.04×10^{-3}	3889.049		newly identified	
C III	4d	$3D_3$	5f	$3F_4^o$	3.28×10^{-1}	3889.137		blend with H I, newly identified	
C III	4d	$3D_3$	5f	$3F_3^o$	2.89×10^{-2}	3889.462		blend with H I, newly identified	
C III	4d	$3D_3$	5f	$3F_2^o$	6.57×10^{-4}	3889.670		blend with H I, newly identified	
C IV	5s	$2S_{1/2}$	6p	$2P_{3/2}^o$	1.52×10^{-1}	3934.283		newly identified	
C IV	5s	$2S_{1/2}$	6p	$2P_{1/2}^o$	7.62×10^{-2}	3934.887		newly identified	
C III	4d	$1D_2$	5f	$1F_3^o$	3.70×10^{-1}	94.2 4056.061	4056.33	19.9	uncertain, newly identified
N IV	3p	$1P_1^o$	3d	$1D_2$	2.74×10^{-1}	4057.757		newly identified	
C III	4f	$3F_2^o$	5g	$3G_3$	1.02	4067.939		newly identified	
C III	4f	$3F_3^o$	5g	$3G_3$	6.50×10^{-2}	4068.916		newly identified	
C III	4f	$3F_3^o$	5g	$3G_4$	9.78×10^{-1}	4068.916		newly identified	
C III	4f	$3F_4^o$	5g	$3G_5$	9.92×10^{-1}	4070.260		newly identified	
C III	4f	$3F_4^o$	5g	$3G_3$	9.92×10^{-4}	4070.306		newly identified	
C III	4f	$3F_4^o$	5g	$3G_4$	5.06×10^{-2}	4070.306		newly identified	
C III	4p	$1P_1^o$	5d	$1D_2$	3.40×10^{-1}	4121.845		newly identified	
C III	3p'	$3D_2$	5f	$3F_3^o$	2.23×10^{-1}	4156.504		newly identified	
C III	3p'	$3D_2$	5f	$3F_2^o$	2.84×10^{-2}	4156.741		newly identified	
C III	3p'	$3D_3$	5f	$3F_4^o$	2.31×10^{-1}	4162.877		newly identified	
C III	4f	$1F_3^o$	5g	$1G_4$	1.18	4186.900		newly identified	
C III	3s'	$1P_1^o$	3p'	$1D_2$	5.03×10^{-1}	4325.561		newly identified	
He II	4		10		1.20×10^{-2}	4338.659		Barstow et al. (2000)	
C IV	5p	$2P_{1/2}^o$	6d	$2D_{3/2}$	4.14×10^{-1}	4440.335		newly identified	
C IV	5p	$2P_{3/2}^o$	6d	$2D_{5/2}$	4.62×10^{-1}	4441.499		newly identified	
C IV	5p	$2P_{3/2}^o$	6d	$2D_{3/2}$	5.13×10^{-2}	4441.736		newly identified	
C III	4p	$3P_0^o$	5s	$3P_1$	1.74×10^{-1}	4515.352		newly identified	
C III	4p	$3P_1^o$	5s	$3P_1$	1.74×10^{-1}	4515.811		newly identified	
C III	4p	$3P_2^o$	5s	$3P_1$	1.74×10^{-1}	4516.788		newly identified	
C IV	5f	$2F_{5/2}^o$	6g	$2G_{7/2}$	1.18	4657.474		Barstow et al. (2000)	
C IV	5f	$2F_{7/2}^o$	6g	$2G_{9/2}$	1.15	4657.606		Barstow et al. (2000)	
C IV	5f	$2F_{7/2}^o$	6g	$2G_{7/2}$	3.32×10^{-2}	4657.690		Barstow et al. (2000)	
C IV	5g	$2G_{7/2}$	6h	$2H_{9/2}^o$	1.66	4658.147		Barstow et al. (2000)	
C IV	5g	$2G_{9/2}$	6h	$2H_{11/2}^o$	1.63	4658.228		Barstow et al. (2000)	
C IV	5g	$2G_{9/2}$	6h	$2H_{9/2}^o$	3.10×10^{-2}	4658.278		Barstow et al. (2000)	
C III	3s'	$3P_1^o$	3p'	$3P_1$	7.53×10^{-2}	4659.058		newly identified	
C III	3s'	$3P_2^o$	3p'	$3P_2$	2.26×10^{-1}	4665.860		newly identified	

Table 1. Continued.

Ion	Levels		f	$W_\lambda /$ mÅ	Wavelength/Å		$v_{\text{rad}} /$ km/s	Comment
	Lower	Upper			Theoretical	Observed		
He II	3	4	8.43×10^{-1}		4686.059			Barstow et al. (2000)
He II	4	8	3.23×10^{-2}		4859.299			Barstow et al. (2000)
He II	4	7	6.55×10^{-2}		5411.492			Barstow et al. (2000)
C III	3p $^1P_1^o$	3d 1D_2	3.47×10^{-1}	53.9	5695.916	5696.47	29.2	newly identified
C IV	3s $^2S_{1/2}$	3p $^2P_{3/2}^o$	3.19×10^{-1}	159.2	5801.313	5801.78	24.1	Barstow et al. (2000)
C IV	3s $^2S_{1/2}$	3p $^2P_{1/2}^o$	1.59×10^{-1}		5811.970			Barstow et al. (2000)
N IV	3p' $^3P_{1/2}$	3d' $^3P_{2/3}^o$	1.12×10^{-2}		5812.308			blend with C IV, newly identified
He I	2p $^3P^o$	3d 3D	6.11×10^{-1}	264.8	5875.661	5876.10	22.4	Barstow et al. (2000)
He II	4	6	1.79×10^{-1}		6560.049			Barstow et al. (2000)

References

Barstow, M. A., Dreizler, S., Holberg, J. B., et al. 2000, *Monthly Notices of the Royal Astronomical Society*, 314, 109