

Erratum

The ISO–SWS spectrum of planetary nebula NGC 7027[★]

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Key words. ISM: abundances – planetary nebulae: individual: NGC 7027 – infrared: ISM: lines and bands – errata, addenda

In this paper we complemented the infrared spectrum with published ultraviolet and optical data to derive abundances. We found some mistakes in Table 3 which affect the ultraviolet fluxes. We present here the correct Table 3. These corrected ultraviolet fluxes imply the following changes: (1) The temperature of the O IV is now 14 500 and better matches the trend (solid line) in Fig. 3 of the article. That of Mg V is 13 000 K, slightly lower than the erroneous value. This last deviation does not alter any ionic abundance because at high ionization potentials only infrared lines (which are not temperature dependent) are used to derive the abundances. (2) The abundances of silicon, nitrogen and carbon should be 6.0(–6), 1.5(–4) and 5.2(–4) respectively and not 6.2(–6), 1.6(–4) and 6.0(–4) as published. Since the error on the abundances is ~30%, none of these erratum change any main conclusion of the paper. The authors regret these mistakes.

As minor details; in Fig. 1 (top-panel) there is a line at 4.48 μm that has been labeled as H I but is [Mg IV]. In Table 2 the 3.625 μm lines is identified as a blend of H I transitions, 6–20 and 6–19, but is probably due to Zn IV (see Dinerstein & Geballe 2001).

References

Dinerstein, H. L., & Geballe, T. R. 2001, ApJ, 562, 515

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Table 3. Ultraviolet (IUE) and optical line fluxes (Keyes & Aller 1990). Keyes fluxes were dereddened fluxes using an interstellar extinction of $E_{B-V} = 0.85$.

Wavelength (nm)	Ident.	Measured Fluxes ¹	Dereddened Intensities ¹
123.83	N V	0.12	240
140.06	O IV	0.61	271
148.50	N IV	0.70	415
154.83	C IV	20.80	12 100
157.57	[Ne V]	0.21	17.4
164.20	He II	5.00	2700
174.95	N III	0.62	275
189.20	Si III	0.17	87.5
190.67	C III	4.23	2300
190.88	C III	6.85	3700
232.55	C II	0.61	526
232.75	C II	0.48	411
242.14	[Ne IV]	1.32	609
242.45	[Ne IV]	0.43	198
278.23	[Mg V]	0.83	98.4
334.68	[Ne V]		700
342.68	[Ne V]		2100
372.62	[O II]	5.98	220
372.88	[O II]	2.19	80.2
386.98	[Ne III]	43.34	1500
396.86	[Ne III]	15.56	500
436.44	[O III]	13.36	340
447.10	He I	1.90	45.4
468.60	He II	32.3	660
471.14	[Ar IV]	1.91	38.1
474.00	[Ar IV]	6.74	131.7
486.10	H β	75.9	1360
493.26	[O III]	0.17	2.9
496.03	[O III]	388.61	6400
500.82	[O III]	1178.73	19 000
551.70	[Cl III]	0.20	2.23
553.80	[Cl III]	0.77	8.6
658.40	[N II]	202.65	1500
671.63	[S II]	3.57	24.1
673.10	[S II]	8.20	56
857.70	[Cl II]	1.01	3.6

¹ Units: 10^{-12} erg cm^{-2} s^{-1} .