

Appendix D: Tables of values and references

References

- Amayo, A., Delgado-Inglada, G., & Stasińska, G. 2021, MNRAS, 505, 2361
- Arellano-Córdova, K. Z., Esteban, C., García-Rojas, J., & Méndez-Delgado, J. E. 2021, MNRAS, 502, 225
- Ballance, C. P., Griffin, D. C., & McLaughlin, B. M. 2007, Journal of Physics B Atomic Molecular Physics, 40, F327
- Bautista, M. A., Fivet, V., Ballance, C., et al. 2015, ApJ, 808, 174
- Berg, D. A., Chisholm, J., Erb, D. K., et al. 2021, ApJ, 922, 170
- Berg, D. A., Pogge, R. W., Skillman, E. D., et al. 2020, ApJ, 893, 96
- Berg, D. A., Skillman, E. D., Croxall, K. V., et al. 2015, ApJ, 806, 16
- Berg, D. A., Skillman, E. D., Garnett, D. R., et al. 2013, ApJ, 775, 128
- Bresolin, F. 2007, ApJ, 656, 186
- Butler, K. & Zeppen, C. J. 1989, A&A, 208, 337
- Croxall, K. V., Pogge, R. W., Berg, D. A., Skillman, E. D., & Moustakas, J. 2015, ApJ, 808, 42
- Croxall, K. V., Pogge, R. W., Berg, D. A., Skillman, E. D., & Moustakas, J. 2016, ApJ, 830, 4
- Deb, N. C. & Hibbert, A. 2009, Atomic Data and Nuclear Data Tables, 95, 184
- Delgado-Inglada, G., Mesa-Delgado, A., García-Rojas, J., Rodríguez, M., & Esteban, C. 2016, MNRAS, 456, 3855
- Domínguez-Guzmán, G., Rodríguez, M., García-Rojas, J., Esteban, C., & Toribio San Cipriano, L. 2022, MNRAS, 517, 4497
- Egorova, E. S., Egorov, O. V., Moiseev, A. V., et al. 2021, MNRAS, 504, 6179
- Esteban, C., Bresolin, F., García-Rojas, J., & Toribio San Cipriano, L. 2020, MNRAS, 491, 2137
- Esteban, C., Bresolin, F., Peimbert, M., et al. 2009, ApJ, 700, 654
- Esteban, C., Carigi, L., Copetti, M. V. F., et al. 2013, MNRAS, 433, 382
- Esteban, C., Fang, X., García-Rojas, J., & Toribio San Cipriano, L. 2017, MNRAS, 471, 987
- Esteban, C. & García-Rojas, J. 2018, MNRAS, 478, 2315
- Esteban, C., García-Rojas, J., Carigi, L., et al. 2014, MNRAS, 443, 624
- Esteban, C., Peimbert, M., García-Rojas, J., et al. 2004, MNRAS, 355, 229
- Fernández, V., Amorín, R., Pérez-Montero, E., et al. 2022, MNRAS, 511, 2515
- Fernández, V., Terlevich, E., Díaz, A. I., Terlevich, R., & Rosales-Ortega, F. F. 2018, MNRAS, 478, 5301
- Fernández-Martín, A., Pérez-Montero, E., Vílchez, J. M., & Mampaso, A. 2017, A&A, 597, A84
- Fritzsche, S., Fricke, B., Geschke, D., Heitmann, A., & Sienkiewicz, J. E. 1999, ApJ, 518, 994
- Froese Fischer, C., Rubin, R. H., & Rodríguez, M. 2008, MNRAS, 391, 1828
- Froese Fischer, C. & Tachiev, G. 2004, Atomic Data and Nuclear Data Tables, 87, 1
- Froese Fischer, C., Tachiev, G., & Irimia, A. 2006, Atomic Data and Nuclear Data Tables, 92, 607
- Galavis, M. E., Mendoza, C., & Zeppen, C. J. 1995, A&AS, 111, 347
- García-Rojas, J., Esteban, C., Peimbert, A., et al. 2005, MNRAS, 362, 301
- García-Rojas, J., Esteban, C., Peimbert, A., et al. 2007, Rev. Mexicana Astron. Astrofis., 43, 3
- García-Rojas, J., Esteban, C., Peimbert, M., et al. 2006, MNRAS, 368, 253
- García-Rojas, J., Esteban, C., Peimbert, M., et al. 2004, ApJS, 153, 501
- Garnett, D. R. 1992, AJ, 103, 1330
- Gómez-González, V. M. A., Mayya, Y. D., Zaragoza-Cardiel, J., et al. 2024, MNRAS, 529, 4369
- Grieve, M. F. R., Ramsbottom, C. A., Hudson, C. E., & Keenan, F. P. 2014, ApJ, 780, 110
- Guseva, N. G., Izotov, Y. I., Stasińska, G., et al. 2011, A&A, 529, A149
- Guseva, N. G., Papaderos, P., Meyer, H. T., Izotov, Y. I., & Fricke, K. J. 2009, A&A, 505, 63
- Guseva, N. G., Thuan, T. X., & Izotov, Y. I. 2024, MNRAS, 527, 3932
- Hägele, G. F., Díaz, Á. I., Terlevich, E., et al. 2008, MNRAS, 383, 209
- Hägele, G. F., Firpo, V., Bosch, G., Díaz, Á. I., & Morrell, N. 2012, MNRAS, 422, 3475
- Hägele, G. F., García-Benito, R., Pérez-Montero, E., et al. 2011, MNRAS, 414, 272
- Hägele, G. F., Pérez-Montero, E., Díaz, Á. I., Terlevich, E., & Terlevich, R. 2006, MNRAS, 372, 293
- Irimia, A. & Froese Fischer, C. 2005, Phys. Scr, 71, 172
- Isobe, Y., Ouchi, M., Suzuki, A., et al. 2022, ApJ, 925, 111
- Izotov, Y. I., Chaffee, F. H., Foltz, C. B., et al. 1999, ApJ, 527, 757
- Izotov, Y. I., Guseva, N. G., Fricke, K. J., & Papaderos, P. 2009, A&A, 503, 61
- Izotov, Y. I., Stasińska, G., Meynet, G., Guseva, N. G., & Thuan, T. X. 2006, A&A, 448, 955
- Izotov, Y. I. & Thuan, T. X. 1998, ApJ, 500, 188
- Izotov, Y. I. & Thuan, T. X. 2004, ApJ, 602, 200
- Izotov, Y. I., Thuan, T. X., & Guseva, N. G. 2017, MNRAS, 471, 548
- Izotov, Y. I., Thuan, T. X., & Guseva, N. G. 2021, MNRAS, 508, 2556
- Izotov, Y. I., Thuan, T. X., Guseva, N. G., & Liss, S. E. 2018, MNRAS, 473, 1956
- Izotov, Y. I., Thuan, T. X., & Lipovetsky, V. A. 1997, ApJS, 108, 1
- Izotov, Y. I., Thuan, T. X., & Privon, G. 2012, MNRAS, 427, 1229
- Kaufman, V. & Sugar, J. 1986, Journal of Physical and Chemical Reference Data, 15, 321
- Kisielius, R., Storey, P. J., Ferland, G. J., & Keenan, F. P. 2009, MNRAS, 397, 903
- Kojima, T., Ouchi, M., Rauch, M., et al. 2021, ApJ, 913, 22
- López-Sánchez, Á. R., Esteban, C., García-Rojas, J., Peimbert, M., & Rodríguez, M. 2007, ApJ, 656, 168
- López-Sánchez, Á. R., Westmeier, T., Esteban, C., & Koribalski, B. S. 2015, MNRAS, 450, 3381
- Luridiana, V., Morisset, C., & Shaw, R. A. 2015, A&A, 573, A42
- Méndez-Delgado, J. E., Esteban, C., García-Rojas, J., & Henney, W. J. 2022, MNRAS, 514, 744
- Méndez-Delgado, J. E., Esteban, C., García-Rojas, J., et al. 2021a, MNRAS, 502, 1703
- Méndez-Delgado, J. E., Esteban, C., García-Rojas, J., Kreckel, K., & Peimbert, M. 2023, Nature, 618, 249
- Méndez-Delgado, J. E., Henney, W. J., Esteban, C., et al. 2021b, ApJ, 918, 27
- Mendoza, C. 1983, in IAU Symposium, Vol. 103, Planetary Nebulae, ed. L. H. Aller, 143–172
- Mendoza, C., Méndez-Delgado, J. E., Bautista, M., García-Rojas, J., & Morisset, C. 2023, Atoms, 11, 63
- Mendoza, C. & Zeppen, C. J. 1982, MNRAS, 198, 127
- Mesa-Delgado, A., Esteban, C., García-Rojas, J., et al. 2009, MNRAS, 395, 855
- Nahar, S. N., Delahaye, F., Pradhan, A. K., & Zeppen, C. J. 2000, A&AS, 144, 141
- Peña-Guerrero, M. A., Peimbert, A., Peimbert, M., & Ruiz, M. T. 2012, ApJ, 746, 115
- Peimbert, A. 2003, ApJ, 584, 735
- Peimbert, A., Peña-Guerrero, M. A., & Peimbert, M. 2012, ApJ, 753, 39
- Peimbert, A., Peimbert, M., & Ruiz, M. T. 2005, ApJ, 634, 1056
- Ramsbottom, C. A. & Bell, K. L. 1997, Atomic Data and Nuclear Data Tables, 66, 65
- Rodríguez, M. & Rubin, R. H. 2005, ApJ, 626, 900
- Rogers, N. S. J., Skillman, E. D., Pogge, R. W., et al. 2022, ApJ, 939, 44
- Rogers, N. S. J., Skillman, E. D., Pogge, R. W., et al. 2021, ApJ, 915, 21
- Skillman, E. D. 1985, ApJ, 290, 449
- Storey, P. J. & Hummer, D. G. 1995, MNRAS, 272, 41
- Storey, P. J., Sochi, T., & Badnell, N. R. 2014, MNRAS, 441, 3028
- Storey, P. J. & Zeppen, C. J. 2000, MNRAS, 312, 813
- Tayal, S. S. 2011, ApJS, 195, 12
- Tayal, S. S. & Zatsarinny, O. 2010, ApJS, 188, 32
- Thuan, T. X. & Izotov, Y. I. 2005, ApJS, 161, 240
- Toribio San Cipriano, L., García-Rojas, J., Esteban, C., Bresolin, F., & Peimbert, M. 2016, MNRAS, 458, 1866
- Valerdi, M., Peimbert, A., & Peimbert, M. 2021, MNRAS, 505, 3624
- Valerdi, M., Peimbert, A., Peimbert, M., & Sixtos, A. 2019, ApJ, 876, 98
- Watanabe, K., Ouchi, M., Nakajima, K., et al. 2024, ApJ, 962, 50
- Welch, B., Rivera-Thorsen, T. E., Rigby, J., et al. 2024, arXiv e-prints, arXiv:2405.06631
- Wiese, W. L., Fuhr, J. R., & Deters, T. M. 1996, Journal of Physical and Chemical Reference Data, Monograph 7, 403
- Zhang, H. 1996, A&AS, 119, 523
- Zhang, H. L. & Pradhan, A. K. 1997, A&AS, 126, 373
- Zurita, A. & Bresolin, F. 2012, MNRAS, 427, 1463

Table D.1. Atomic data set used for collisionally excited lines.

Ion	Transition probabilities	Collision strengths
O ⁺	Froese Fischer & Tachiev (2004)	Kisieliuss et al. (2009)
O ²⁺	Wiese et al. (1996) , Storey & Zeippen (2000)	Storey et al. (2014)
N ⁺	Froese Fischer & Tachiev (2004)	Tayal (2011)
S ⁺	Irimia & Froese Fischer (2005)	Tayal & Zatsarinny (2010)
S ²⁺	Froese Fischer et al. (2006)	Grieve et al. (2014)
Cl ²⁺	Fritzsche et al. (1999)	Butler & Zeippen (1989)
Ar ²⁺	Mendoza (1983) , Kaufman & Sugar (1986)	Galavis et al. (1995)
Ar ³⁺	Mendoza & Zeippen (1982)	Ramsbottom & Bell (1997)
Fe ⁺	Bautista et al. (2015) , Mendoza et al. (2023)	Bautista et al. (2015) , Mendoza et al. (2023)
Fe ²⁺	Deb & Hibbert (2009) , Mendoza et al. (2023)	Zhang (1996) , Mendoza et al. (2023)
Fe ³⁺	Froese Fischer et al. (2008)	Zhang & Pradhan (1997)
Fe ⁴⁺	Nahar et al. (2000)	Ballance et al. (2007)

Table D.2. Reference number, galaxy, region name and references to the sample of nebular objects analyzed in this study.

Reference number	Galaxy	Region	Reference
D1	0275-51910-445	-	Izotov et al. (2006)
D2	0308-51662-081	-	Izotov et al. (2006)
D3	0329-52056-633	-	Izotov et al. (2006)
D4	0330-52370-471	-	Izotov et al. (2006)
D5	0337-51997-097	-	Izotov et al. (2006)
D6	0358-51818-504	-	Izotov et al. (2006)
D7	0364-52000-187	-	Izotov et al. (2006)
D8	0390-51900-445	-	Izotov et al. (2006)
D9	0417-51821-513	-	Izotov et al. (2006)
D10	0445-51873-404	-	Izotov et al. (2006)
D11	0456-51910-076	-	Izotov et al. (2006)
D12	0481-51908-289	-	Izotov et al. (2006)
D13	0485-51909-306	-	Izotov et al. (2006)
D14	0485-51909-550	-	Izotov et al. (2006)
D15	0501-52235-602	-	Izotov et al. (2006)
D16	0516-52017-315	-	Izotov et al. (2006)
D17	0521-52326-073	-	Izotov et al. (2006)
D18	0526-52312-097	-	Izotov et al. (2006)
D19	0549-51981-621	-	Izotov et al. (2006)
D20	0550-51959-092	-	Izotov et al. (2006)
D21	0554-52000-190	-	Izotov et al. (2006)
D22	0556-51991-312	-	Izotov et al. (2006)
D23	0564-52224-216	-	Izotov et al. (2006)
D24	0573-52325-099	-	Izotov et al. (2006)
D25	0575-52319-521	-	Izotov et al. (2006)
D26	0582-52045-440	-	Izotov et al. (2006)
D27	0616-52374-393	-	Izotov et al. (2006)
D28	0723+692A	-	Izotov et al. (1997)
D29	0769-52282-100	-	Izotov et al. (2006)
D30	0775-52295-029	-	Izotov et al. (2006)
D31	0831-52294-526	-	Izotov et al. (2006)
D32	0844-52378-041	-	Izotov et al. (2006)
D33	0844-52378-299	-	Izotov et al. (2006)
D34	0847-52426-040	-	Izotov et al. (2006)
D35	0875-52354-142	-	Izotov et al. (2006)
D36	0899-52620-594	-	Izotov et al. (2006)
D37	0906-52368-534	-	Izotov et al. (2006)
D38	0917+527	-	Izotov et al. (1997)
D39	0920-52411-575	-	Izotov et al. (2006)
D40	0926+606	-	Izotov et al. (1997)
D41	0930+554N	-	Izotov et al. (1997)
D42	0934-52672-369	-	Izotov et al. (2006)

Table D.2. Reference number, galaxy, region name and references to the sample of nebular objects analyzed in this study.

Reference number	Galaxy	Region	Reference
D43	0943-52376-631	-	Izotov et al. (2006)
D44	0946-52407-618	-	Izotov et al. (2006)
D45	0951-52398-600	-	Izotov et al. (2006)
D46	0967-52636-339	-	Izotov et al. (2006)
D47	0999-52636-517	-	Izotov et al. (2006)
D48	1010-52649-328	-	Izotov et al. (2006)
D49	1039-52707-119	-	Izotov et al. (2006)
D50	1048-52736-424	-	Izotov et al. (2006)
D51	1050-52721-402	-	Izotov et al. (2006)
D52	1158-52668-062	-	Izotov et al. (2006)
D53	1222+614	-	Izotov et al. (1997)
D54	1223+487	-	Izotov et al. (1997)
D55	1233-52734-136	-	Izotov et al. (2006)
D56	1256+351	-	Izotov et al. (1997)
D57	1288-52731-390	-	Izotov et al. (2006)
D58	1305-52757-269	-	Izotov et al. (2006)
D59	1319+579A	-	Izotov et al. (1997)
D60	1319+579C	-	Izotov et al. (1997)
D61	1321-52764-624	-	Izotov et al. (2006)
D62	1322-52791-470	-	Izotov et al. (2006)
D63	1323-52797-002	-	Izotov et al. (2006)
D64	1323-52797-008	-	Izotov et al. (2006)
D65	1325-52762-353	-	Izotov et al. (2006)
D66	1351-52790-474	-	Izotov et al. (2006)
D67	1358+576	-	Izotov et al. (1997)
D68	1371-52821-059	-	Izotov et al. (2006)
D69	1533+574A	-	Izotov et al. (1997)
D70	1533+574B	-	Izotov et al. (1997)
D71	AM0644-741	ID39	Gómez-González et al. (2024)
D72	CGCG007-025-1	-	Izotov & Thuan (2004)
D73	G1815-6701	-	Guseva et al. (2009)
D74	G2052-6912	1	Guseva et al. (2009)
D75	HS0122+0743	-	Izotov & Thuan (2004)
D76	HS0128+2832	-	Izotov & Thuan (2004)
D77	HS0735+3512	-	Izotov & Thuan (2004)
D78	HS0822+3542	-	Thuan & Izotov (2005)
D79	HS0837+4717-1	-	Thuan & Izotov (2005)
D80	HS0837+4717	-	Thuan & Izotov (2005)
D81	HS0924+3821	-	Izotov & Thuan (2004)
D82	HS1028+3843	-	Izotov & Thuan (2004)
D83	HS1851+6933	-	Izotov et al. (2021)
D84	Haro15	KnotB	Hägele et al. (2012)
D85	He2-10	E	Guseva et al. (2011)
D86	He2-10	-	Esteban et al. (2014)
D87	IIZw40	-	Thuan & Izotov (2005)
D88	IZw18NW	-	Thuan & Izotov (2005)
D89	IZw18SE	-	Thuan & Izotov (2005)
D90	IZw70	-	Fernández et al. (2018)
D91	J0002+1715	-	Kojima et al. (2021)
D92	J0021+005	-	Hägele et al. (2006)
D93	J0032+150	-	Hägele et al. (2006)
D94	J0125+0759	-	Watanabe et al. (2024)
D95	J0126-0038	J0126-0038-1	Guseva et al. (2009)
D96	J0240-0828	-	Thuan & Izotov (2005)
D97	J0338+0013	-	Guseva et al. (2009)
D98	J0519+0007-1	-	Thuan & Izotov (2005)
D99	J0944-0038	-	Thuan & Izotov (2005)
D100	J104457	-	Berg et al. (2021)
D101	J1253-0312	-	Thuan & Izotov (2005)
D102	J1404+5423	-	Thuan & Izotov (2005)
D103	J141851	-	Berg et al. (2021)

Table D.2. Reference number, galaxy, region name and references to the sample of nebular objects analyzed in this study.

Reference number	Galaxy	Region	Reference
D104	J1429-0110	-	Kojima et al. (2021)
D105	J1608+4337	-	Isobe et al. (2022)
D106	J1624-002	-	Hägele et al. (2006)
D107	J1631+4426	-	Kojima et al. (2021)
D108	J1642+2233	-	Kojima et al. (2021)
D109	J1657+321	KnotA	Hägele et al. (2011)
D110	J2115-1734	-	Kojima et al. (2021)
D111	J2253+1116	-	Kojima et al. (2021)
D112	J2302+0049	1	Guseva et al. (2009)
D113	J2310-0211	-	Kojima et al. (2021)
D114	J2327-0200	-	Kojima et al. (2021)
D115	LMC	30Doradus	Peimbert (2003)
D116	LMC	IC2111	Domínguez-Guzmán et al. (2022)
D117	LMC	N11B	Domínguez-Guzmán et al. (2022)
D118	LMC	N44C	Domínguez-Guzmán et al. (2022)
D119	LMC	NGC1714	Domínguez-Guzmán et al. (2022)
D120	M101	H1013	Bresolin (2007)
D121	M101	H1013	Croxall et al. (2016)
D122	M101	H1013	Esteban et al. (2009)
D123	M101	H1018	Croxall et al. (2016)
D124	M101	H103	Croxall et al. (2016)
D125	M101	H1040	Croxall et al. (2016)
D126	M101	H1045	Croxall et al. (2016)
D127	M101	H104	Croxall et al. (2016)
D128	M101	H1052	Croxall et al. (2016)
D129	M101	H1122	Croxall et al. (2016)
D130	M101	H1125	Croxall et al. (2016)
D131	M101	H1146	Croxall et al. (2016)
D132	M101	H1148	Croxall et al. (2016)
D133	M101	H1151	Croxall et al. (2016)
D134	M101	H1216	Croxall et al. (2016)
D135	M101	H1216	Esteban et al. (2020)
D136	M101	H143	Croxall et al. (2016)
D137	M101	H167	Croxall et al. (2016)
D138	M101	H185	Croxall et al. (2016)
D139	M101	H203	Croxall et al. (2016)
D140	M101	H206	Croxall et al. (2016)
D141	M101	H219	Croxall et al. (2016)
D142	M101	H237	Croxall et al. (2016)
D143	M101	H246	Croxall et al. (2016)
D144	M101	H260	Croxall et al. (2016)
D145	M101	H27	Croxall et al. (2016)
D146	M101	H321	Croxall et al. (2016)
D147	M101	H336	Croxall et al. (2016)
D148	M101	H399	Croxall et al. (2016)
D149	M101	H46	Croxall et al. (2016)
D150	M101	H493	Croxall et al. (2016)
D151	M101	H504	Croxall et al. (2016)
D152	M101	H618	Croxall et al. (2016)
D153	M101	H641	Croxall et al. (2016)
D154	M101	H681	Croxall et al. (2016)
D155	M101	H699	Croxall et al. (2016)
D156	M101	H71	Croxall et al. (2016)
D157	M101	H798	Croxall et al. (2016)
D158	M101	H875	Croxall et al. (2016)
D159	M101	H8	Croxall et al. (2016)
D160	M101	H949	Croxall et al. (2016)
D161	M101	H953	Croxall et al. (2016)
D162	M101	H959	Croxall et al. (2016)
D163	M101	H969	Croxall et al. (2016)
D164	M101	H972	Croxall et al. (2016)

Table D.2. Reference number, galaxy, region name and references to the sample of nebular objects analyzed in this study.

Reference number	Galaxy	Region	Reference
D165	M101	NGC5447-1	Croxall et al. (2016)
D166	M101	NGC5447-2	Croxall et al. (2016)
D167	M101	NGC5447-3	Croxall et al. (2016)
D168	M101	NGC5447	Esteban et al. (2009)
D169	M101	NGC5449-1	Croxall et al. (2016)
D170	M101	NGC5449-2	Croxall et al. (2016)
D171	M101	NGC5451	Croxall et al. (2016)
D172	M101	NGC5455	Croxall et al. (2016)
D173	M101	NGC5455	Esteban et al. (2020)
D174	M101	NGC5461-2	Croxall et al. (2016)
D175	M101	NGC5461-3	Croxall et al. (2016)
D176	M101	NGC5461	Croxall et al. (2016)
D177	M101	NGC5461	Esteban et al. (2009)
D178	M101	NGC5462-1	Croxall et al. (2016)
D179	M101	NGC5462-2	Croxall et al. (2016)
D180	M101	NGC5471A	Skillman (1985)
D181	M101	NGC5471B	Skillman (1985)
D182	M101	NGC5471	Croxall et al. (2016)
D183	M101	NGC5471	Esteban et al. (2020)
D184	M31	BA373	Zurita & Bresolin (2012)
D185	M31	BA379-2	Zurita & Bresolin (2012)
D186	M31	BA423	Zurita & Bresolin (2012)
D187	M31	K160	Esteban et al. (2020)
D188	M31	K932	Esteban et al. (2009)
D189	M33	B0013c	Rogers et al. (2022)
D190	M33	B0017d	Rogers et al. (2022)
D191	M33	B0027b	Rogers et al. (2022)
D192	M33	B0029	Toribio San Cipriano et al. (2016)
D193	M33	B0043b	Toribio San Cipriano et al. (2016)
D194	M33	B0290	Toribio San Cipriano et al. (2016)
D195	M33	B0623	Rogers et al. (2022)
D196	M33	B0691	Rogers et al. (2022)
D197	M33	LGCHII3	Toribio San Cipriano et al. (2016)
D198	M33	NGC588	Toribio San Cipriano et al. (2016)
D199	M33	NGC595	Esteban et al. (2009)
D200	M33	NGC604A	Rogers et al. (2022)
D201	M33	NGC604	Esteban et al. (2009)
D202	M33	-224-437	Rogers et al. (2022)
D203	M33	-267-462	Rogers et al. (2022)
D204	M33	-36+312	Rogers et al. (2022)
D205	M33	-442+797	Rogers et al. (2022)
D206	M33	+209+473	Rogers et al. (2022)
D207	M33	+553+448	Rogers et al. (2022)
D208	M33	+62+354	Rogers et al. (2022)
D209	M51	CCM10	Croxall et al. (2015)
D210	M51	CCM53	Croxall et al. (2015)
D211	M51	CCM54	Croxall et al. (2015)
D212	M51	CCM55	Croxall et al. (2015)
D213	M51	CCM57	Croxall et al. (2015)
D214	M51	CCM72	Croxall et al. (2015)
D215	M51	P203	Croxall et al. (2015)
D216	M51	-82d0-102d7	Croxall et al. (2015)
D217	M51	+30d2+2d2	Croxall et al. (2015)
D218	M51	+30d8+139d0	Croxall et al. (2015)
D219	M51	+56d8+126d5	Croxall et al. (2015)
D220	Milky Way	M17	García-Rojas et al. (2007)
D221	Milky Way	M20	García-Rojas et al. (2006)
D222	Milky Way	M42-1	Méndez-Delgado et al. (2021a)
D223	Milky Way	M42-1	Méndez-Delgado et al. (2021b)
D224	Milky Way	M42-2	Méndez-Delgado et al. (2021a)
D225	Milky Way	M42-2	Méndez-Delgado et al. (2021b)

Table D.2. Reference number, galaxy, region name and references to the sample of nebular objects analyzed in this study.

Reference number	Galaxy	Region	Reference
D226	Milky Way	M42-2	Méndez-Delgado et al. (2022)
D227	Milky Way	M42-3	Méndez-Delgado et al. (2021a)
D228	Milky Way	M42-3	Méndez-Delgado et al. (2022)
D229	Milky Way	M42-4	Méndez-Delgado et al. (2021a)
D230	Milky Way	M42-NIL	Méndez-Delgado et al. (2021b)
D231	Milky Way	M42-P1	Delgado-Inglada et al. (2016)
D232	Milky Way	M42	Esteban et al. (2004)
D233	Milky Way	M42	Mesa-Delgado et al. (2009)
D234	Milky Way	M8	García-Rojas et al. (2007)
D235	Milky Way	NGC2579	Esteban et al. (2013)
D236	Milky Way	NGC3576	García-Rojas et al. (2004)
D237	Milky Way	NGC3603	García-Rojas et al. (2006)
D238	Milky Way	Sh2-100	Esteban et al. (2017)
D239	Milky Way	Sh2-127	Esteban et al. (2017)
D240	Milky Way	Sh2-128	Esteban et al. (2017)
D241	Milky Way	Sh2-152	Esteban & García-Rojas (2018)
D242	Milky Way	Sh2-156	Fernández-Martín et al. (2017)
D243	Milky Way	Sh2-212	Esteban et al. (2017)
D244	Milky Way	Sh2-235	Esteban & García-Rojas (2018)
D245	Milky Way	Sh2-254	Arellano-Córdova et al. (2021)
D246	Milky Way	Sh2-266	Esteban & García-Rojas (2018)
D247	Milky Way	Sh2-288	Esteban et al. (2017)
D248	Milky Way	Sh2-297	Esteban & García-Rojas (2018)
D249	Milky Way	Sh2-311	García-Rojas et al. (2005)
D250	Mrk1063	-	Izotov & Thuan (2004)
D251	Mrk1089	-	Izotov & Thuan (1998)
D252	Mrk1236	-	Izotov & Thuan (2004)
D253	Mrk1271	-	Esteban et al. (2014)
D254	Mrk1271	-	Guseva et al. (2011)
D255	Mrk1271	-	Izotov & Thuan (1998)
D256	Mrk1315	-	Izotov & Thuan (2004)
D257	Mrk1329	-	Izotov & Thuan (2004)
D258	Mrk162	-	Izotov & Thuan (1998)
D259	Mrk178-2	-	Thuan & Izotov (2005)
D260	Mrk178-3	-	Thuan & Izotov (2005)
D261	Mrk35-1	-	Thuan & Izotov (2005)
D262	Mrk35	-	Izotov & Thuan (2004)
D263	Mrk36	A1	Fernández et al. (2018)
D264	Mrk36	A2	Fernández et al. (2018)
D265	Mrk36	-	Izotov & Thuan (1998)
D266	Mrk450-1	-	Izotov & Thuan (2004)
D267	Mrk475	-	Fernández et al. (2018)
D268	Mrk59-1	-	Thuan & Izotov (2005)
D269	Mrk59-2	-	Thuan & Izotov (2005)
D270	Mrk5	-	Izotov & Thuan (1998)
D271	Mrk600	-	Izotov & Thuan (1998)
D272	Mrk627	-	Fernández et al. (2018)
D273	Mrk67	-	Fernández et al. (2018)
D274	Mrk689	-	Fernández et al. (2018)
D275	Mrk71A	-	Thuan & Izotov (2005)
D276	Mrk71B	-	Thuan & Izotov (2005)
D277	Mrk71CC	-	Thuan & Izotov (2005)
D278	Mrk724	-	Izotov & Thuan (2004)
D279	Mrk930	-	Izotov & Thuan (1998)
D280	Mrk94	-	Thuan & Izotov (2005)
D281	NGC1510	-	López-Sánchez et al. (2015)
D282	NGC1741	NGC1741-C	Esteban et al. (2009)
D283	NGC2366	Mrk71	Esteban et al. (2009)
D284	NGC2403	HK423	Berg et al. (2013)
D285	NGC2403	VS24	Esteban et al. (2009)
D286	NGC2403	VS38	Esteban et al. (2009)

Table D.2. Reference number, galaxy, region name and references to the sample of nebular objects analyzed in this study.

Reference number	Galaxy	Region	Reference
D287	NGC2403	VS44	Berg et al. (2013)
D288	NGC2403	VS44	Esteban et al. (2009)
D289	NGC2403	VS44	Rogers et al. (2021)
D290	NGC2403	VS9	Berg et al. (2013)
D291	NGC2403	-196+58	Rogers et al. (2021)
D292	NGC2403	-99-59	Rogers et al. (2021)
D293	NGC2403	+125-142	Rogers et al. (2021)
D294	NGC300	R14	Toribio San Cipriano et al. (2016)
D295	NGC300	R23	Toribio San Cipriano et al. (2016)
D296	NGC3125	-	Esteban et al. (2014)
D297	NGC3125	-	Guseva et al. (2011)
D298	NGC3184	-14d9-95d5	Berg et al. (2020)
D299	NGC3184	-172d5-30d2	Berg et al. (2020)
D300	NGC3184	-59d5-37d7	Berg et al. (2020)
D301	NGC3184	-67d3+87d1	Berg et al. (2020)
D302	NGC3184	-82d5+57d7	Berg et al. (2020)
D303	NGC3184	+14d9-139d6	Berg et al. (2020)
D304	NGC3184	+16d4+119d8	Berg et al. (2020)
D305	NGC3184	+18d8-115d7	Berg et al. (2020)
D306	NGC3184	+41d9+148d8	Berg et al. (2020)
D307	NGC3184	+48d9+97d3	Berg et al. (2020)
D308	NGC3184	+51d2+60d4	Berg et al. (2020)
D309	NGC3184	+75d7+89d1	Berg et al. (2020)
D310	NGC3184	+80d0-148d2	Berg et al. (2020)
D311	NGC3184	+8d2-132d1	Berg et al. (2020)
D312	NGC4861	-	Esteban et al. (2009)
D313	NGC5253	NGC5253-C2	Guseva et al. (2011)
D314	NGC5253	P1	Guseva et al. (2011)
D315	NGC5253	UV-1	López-Sánchez et al. (2007)
D316	NGC5253	UV-2	López-Sánchez et al. (2007)
D317	NGC5398	Tol89-1	Guseva et al. (2011)
D318	NGC5398	Tol89-2	Guseva et al. (2011)
D319	NGC5408	1	Guseva et al. (2011)
D320	NGC5408	-	Esteban et al. (2014)
D321	NGC628	-130d9+71d8	Berg et al. (2015)
D322	NGC628	-184d7+83d4	Berg et al. (2015)
D323	NGC628	-35d7+119d6	Berg et al. (2015)
D324	NGC628	-42d8-158d2	Berg et al. (2015)
D325	NGC628	-59d6-111d6	Berg et al. (2015)
D326	NGC628	-73d1+27d3	Berg et al. (2015)
D327	NGC628	-90d1+190d2	Berg et al. (2015)
D328	NGC628	-90+186	Berg et al. (2013)
D329	NGC628	+131d9+18d5	Berg et al. (2015)
D330	NGC628	+163d5+64d4	Berg et al. (2015)
D331	NGC628	+176d7-50d0	Berg et al. (2015)
D332	NGC628	+232d7+6d6	Berg et al. (2015)
D333	NGC628	+49d8+48d7	Berg et al. (2015)
D334	NGC6822	HubbleV	Esteban et al. (2014)
D335	NGC6822	HubbleV	Guseva et al. (2011)
D336	NGC6822	HubbleV	Peimbert et al. (2005)
D337	NGC7667	l-m	Guseva et al. (2011)
D338	NGC7667	a	Valerdi et al. (2021)
D339	NGC7667	b	Valerdi et al. (2021)
D340	NGC7667	c	Valerdi et al. (2021)
D341	POX36	-	Izotov & Thuan (2004)
D342	POX4	-	Esteban et al. (2014)
D343	POX4	-	Guseva et al. (2011)
D344	SBS-0335-052E	-	Watanabe et al. (2024)
D345	SBS0335-052E	-	Thuan & Izotov (2005)
D346	SBS0335-052	06NE	Izotov et al. (1999)
D347	SBS0335-052	06SW	Izotov et al. (1999)

Table D.2. Reference number, galaxy, region name and references to the sample of nebular objects analyzed in this study.

Reference number	Galaxy	Region	Reference
D348	SBS0335-052	12NE	Izotov et al. (1999)
D349	SBS0335-052	18NE	Izotov et al. (1999)
D350	SBS0335-052	18SW	Izotov et al. (1999)
D351	SBS0335-052	Center	Izotov et al. (1999)
D352	SBS0335-052E	1+2_h	Izotov et al. (2009)
D353	SBS0335-052E	1+2_l	Izotov et al. (2009)
D354	SBS0335-052E	1+2a	Izotov et al. (2009)
D355	SBS0335-052E	7_h	Izotov et al. (2009)
D356	SBS0911+472	-	Thuan & Izotov (2005)
D357	SBS0926+606A	-	Thuan & Izotov (2005)
D358	SBS0940+544	-	Thuan & Izotov (2005)
D359	SBS1030+583	-	Thuan & Izotov (2005)
D360	SBS1159+545	-	Izotov & Thuan (1998)
D361	SBS1415+437	-	Izotov & Thuan (1998)
D362	SBS1420+540	-	Guseva et al. (2024)
D363	J0519+0007	-	Guseva et al. (2009)
D364	J0811+4730	-	Izotov et al. (2018)
D365	J0813+3132	-	Fernández et al. (2018)
D366	J0823+0313	-	Fernández et al. (2018)
D367	J0905+0335	-	Izotov et al. (2012)
D368	J1011+1308	-	Fernández et al. (2022)
D369	J1016+3754	-	Izotov et al. (2012)
D370	J1032+4919	-	Izotov et al. (2017)
D371	J1044+0353	-	Izotov et al. (2012)
D372	J1050+1538	-	Izotov et al. (2012)
D373	J1053+5016	-	Izotov et al. (2012)
D374	J1205+4551	-	Izotov et al. (2017)
D375	J1205+4551	-	Izotov et al. (2021)
D376	J1219+1560	-	Fernández et al. (2022)
D377	J1221+2822	-	Fernández et al. (2018)
D378	J1222+3602	-	Izotov et al. (2021)
D379	J1230+1202	-	Izotov et al. (2012)
D380	J1253-0312	-	Esteban et al. (2014)
D381	J1423+2257	-	Izotov et al. (2012)
D382	J1426+3822	-	Izotov et al. (2012)
D383	J1455+3808	-	Hägele et al. (2008)
D384	J1509+4543	-	Hägele et al. (2008)
D385	J1528+3956	-	Hägele et al. (2008)
D386	J1545+0858	-	Izotov et al. (2012)
D387	J1608+3528	-	Izotov et al. (2017)
D388	J1657+3211	-	Hägele et al. (2008)
D389	J2324-0006	-	Guseva et al. (2009)
D390	SHOC133	-	Izotov et al. (2021)
D391	SHOC137	-	Fernández et al. (2018)
D392	SHOC148	-	Fernández et al. (2022)
D393	SHOC220	-	Fernández et al. (2018)
D394	SHOC22	-	Fernández et al. (2018)
D395	SHOC254b	-	Izotov et al. (2012)
D396	SHOC391	-	Guseva et al. (2011)
D397	SHOC486	-	Izotov et al. (2012)
D398	SHOC513	-	Hägele et al. (2008)
D399	SHOC575	-	Hägele et al. (2008)
D400	SHOC579	-	Fernández et al. (2018)
D401	SMC	N66A	Domínguez-Guzmán et al. (2022)
D402	SMC	N81	Domínguez-Guzmán et al. (2022)
D403	SMC	N88A	Domínguez-Guzmán et al. (2022)
D404	SMC	N90	Domínguez-Guzmán et al. (2022)
D405	SMC	NGC346	Valerdi et al. (2019)
D406	SMC	NGC456-1	Peña-Guerrero et al. (2012)
D407	SMC	NGC456-2	Peña-Guerrero et al. (2012)
D408	SMC	NGC456-a-1	Guseva et al. (2011)

Table D.2. Reference number, galaxy, region name and references to the sample of nebular objects analyzed in this study.

Reference number	Galaxy	Region	Reference
D409	SMC	NGC456-a-3-l	Guseva et al. (2011)
D410	SMC	NGC456-a-3-m	Guseva et al. (2011)
D411	SMC	NGC456-a1	Guseva et al. (2011)
D412	SMC	NGC456-a2	Guseva et al. (2011)
D413	TOL1457-262	-	Esteban et al. (2014)
D414	TOL1924-416	-	Esteban et al. (2014)
D415	Tol0357-3915	C	Peimbert et al. (2012)
D416	Tol0357-3915	E	Peimbert et al. (2012)
D417	Tol0357-3915	l	Guseva et al. (2011)
D418	Tol0357-3915	m	Guseva et al. (2011)
D419	Tol0513-393	-	Valerdi et al. (2021)
D420	Tol0513-393	l	Guseva et al. (2011)
D421	Tol0513-393	m	Guseva et al. (2011)
D422	Tol0618-402	-	Guseva et al. (2011)
D423	Tol1214-277	l	Guseva et al. (2011)
D424	Tol1214-277	m	Guseva et al. (2011)
D425	Tol1457-262	-	Guseva et al. (2011)
D426	Tol1924-416	1	Guseva et al. (2011)
D427	Tol1924-416	2	Guseva et al. (2011)
D428	Tol2138-405	1	Guseva et al. (2011)
D429	Tol2138-405	3	Guseva et al. (2011)
D430	Tol2138-405	Tol2138-405-1	Guseva et al. (2011)
D431	Tol2146-391	1-l	Guseva et al. (2011)
D432	Tol2146-391	1-m	Guseva et al. (2011)
D433	Tol2146-391	2-l	Guseva et al. (2011)
D434	Tol2146-391	2-m	Guseva et al. (2011)
D435	Tol2146-391	C	Peimbert et al. (2012)
D436	Tol2146-391	E	Peimbert et al. (2012)
D437	Tol2240-384	m	Guseva et al. (2011)
D438	Tol65	1	Guseva et al. (2011)
D439	Tol65	2	Guseva et al. (2011)
D440	UM133	-	Izotov & Thuan (2004)
D441	UM238	-	Izotov & Thuan (2004)
D442	UM254	-	Guseva et al. (2011)
D443	UM286	-	Egorova et al. (2021)
D444	UM396	-	Izotov & Thuan (2004)
D445	UM420	1	Guseva et al. (2011)
D446	UM420	2-m	Guseva et al. (2011)
D447	UM420	B	Valerdi et al. (2021)
D448	UM420	C	Valerdi et al. (2021)
D449	UM439	-	Izotov & Thuan (2004)
D450	UM462	SW	Izotov & Thuan (1998)
D451	W1702+18	-	Izotov et al. (2021)
D452	SunburstArc	-	Welch et al. (2024)

Table D.3. Electron densities derived from the nebular sample.

Reference number	$n_e([S II])$ [cm ⁻³]	$n_e([O II])$ [cm ⁻³]	$n_e([Fe III])$ [cm ⁻³]	$n_e([Cl III])$ [cm ⁻³]	$n_e([Ar IV])$ [cm ⁻³]	Adopted n_e [cm ⁻³]
D1	-	-	-	-	-	100 ± 100
D2	-	-	-	-	-	100 ± 100
D3	-	-	-	-	-	100 ± 100
D4	-	-	-	-	-	100 ± 100
D5	-	-	-	-	-	100 ± 100
D6	-	-	-	-	-	100 ± 100
D7	-	-	-	-	-	100 ± 100
D8	-	-	-	-	-	100 ± 100
D9	-	-	-	-	-	100 ± 100
D10	-	-	-	-	-	100 ± 100
D11	-	-	-	-	-	100 ± 100
D12	-	-	-	-	-	100 ± 100
D13	-	-	-	-	-	100 ± 100
D14	-	-	-	-	-	100 ± 100
D15	-	-	-	-	-	100 ± 100
D16	-	-	-	-	-	100 ± 100
D17	-	-	-	-	-	100 ± 100
D18	-	-	-	-	-	100 ± 100
D19	-	-	-	-	-	100 ± 100
D20	-	-	-	-	-	100 ± 100
D21	-	-	-	-	-	100 ± 100
D22	-	-	-	-	-	100 ± 100
D23	-	-	-	-	-	100 ± 100
D24	-	-	-	-	-	100 ± 100
D25	-	-	-	-	-	100 ± 100
D26	-	-	-	-	-	100 ± 100
D27	-	-	-	-	-	100 ± 100
D28	90 ⁺⁵⁰ ₋₄₀	-	-	-	-	100 ± 100
D29	-	-	-	-	-	100 ± 100
D30	-	-	-	-	-	100 ± 100
D31	-	-	-	-	-	100 ± 100
D32	-	-	-	-	-	100 ± 100
D33	-	-	-	-	-	100 ± 100
D34	-	-	-	-	-	100 ± 100
D35	-	-	-	-	-	100 ± 100
D36	-	-	-	-	-	100 ± 100
D37	-	-	-	-	-	100 ± 100
D38	20 ⁺²⁰ ₋₁₀	-	-	-	-	100 ± 100
D39	-	-	-	-	-	100 ± 100
D40	170 ± 30	-	-	-	-	170 ± 30
D41	180 ⁺¹³⁰ ₋₈₀	-	-	-	-	180 ⁺¹³⁰ ₋₈₀
D42	-	-	-	-	-	100 ± 100
D43	-	-	-	-	-	100 ± 100
D44	-	-	-	-	-	100 ± 100
D45	-	-	-	-	-	100 ± 100
D46	-	-	-	-	-	100 ± 100
D47	-	-	-	-	-	100 ± 100
D48	-	-	-	-	-	100 ± 100
D49	-	-	-	-	-	100 ± 100
D50	-	-	-	-	-	100 ± 100
D51	-	-	-	-	-	100 ± 100
D52	-	-	-	-	-	100 ± 100
D53	40 ± 20	-	-	-	-	100 ± 100
D54	60 ⁺⁵⁰ ₋₃₀	-	-	-	-	100 ± 100
D55	-	-	-	-	-	100 ± 100
D56	80 ± 10	-	-	-	-	100 ± 100
D57	-	-	-	-	-	100 ± 100
D58	-	-	-	-	-	100 ± 100
D59	130 ⁺²⁰ ₋₁₀	-	-	-	-	130 ⁺²⁰ ₋₁₀

Table D.3. Electron densities derived from the nebular sample.

Reference number	$n_e(\text{[S II]})$ [cm ⁻³]	$n_e(\text{[O II]})$ [cm ⁻³]	$n_e(\text{[Fe III]})$ [cm ⁻³]	$n_e(\text{[Cl III]})$ [cm ⁻³]	$n_e(\text{[Ar IV]})$ [cm ⁻³]	Adopted n_e [cm ⁻³]
D60	30 ⁺³⁰ ₋₂₀	-	-	-	-	100 ± 100
D61	-	-	-	-	-	100 ± 100
D62	-	-	-	-	-	100 ± 100
D63	-	-	-	-	-	100 ± 100
D64	-	-	-	-	-	100 ± 100
D65	-	-	-	-	-	100 ± 100
D66	-	-	-	-	-	100 ± 100
D67	40 ⁺³⁰ ₋₂₀	-	-	-	-	100 ± 100
D68	-	-	-	-	-	100 ± 100
D69	40 ⁺³⁰ ₋₂₀	-	-	-	-	100 ± 100
D70	30 ⁺³⁰ ₋₂₀	-	-	-	-	100 ± 100
D71	60 ± 10	-	-	-	-	100 ± 100
D72	110 ⁺³⁰ ₋₅₀	-	-	80 ⁺³¹⁰ ₋₆₀	-	110 ⁺³⁰ ₋₅₀
D73	-	-	-	-	-	100 ± 100
D74	-	-	-	-	-	100 ± 100
D75	60 ⁺⁶⁰ ₋₅₀	-	-	-	-	100 ± 100
D76	100 ± 30	-	-	3960 ⁺¹⁹⁶⁰ ₋₂₄₂₀	-	100 ± 100
D77	80 ⁺³⁰ ₋₄₀	-	-	2970 ⁺⁷⁰¹⁰ ₋₁₉₆₀	-	100 ± 100
D78	-	-	-	-	-	100 ± 100
D79	370 ⁺²⁵⁰ ₋₂₄₀	-	-	-	-	370 ⁺²⁵⁰ ₋₂₄₀
D80	-	-	-	-	-	100 ± 100
D81	40 ± 20	-	-	320 ± 80	-	100 ± 100
D82	420 ⁺¹²⁰ ₋₈₀	-	-	-	-	420 ⁺¹²⁰ ₋₈₀
D83	490 ± 120	-	-	440 ⁺²⁹⁰ ₋₂₆₀	-	490 ± 120
D84	-	-	-	-	-	100 ± 100
D85	680 ⁺⁷⁰ ₋₆₀	-	-	5690 ⁺¹³¹⁰ ₋₁₄₇₀	-	680 ⁺⁷⁰ ₋₆₀
D86	560 ⁺¹⁵⁰ ₋₁₆₀	950 ⁺¹⁹⁰ ₋₁₈₀	-	-	-	750 ± 170
D87	-	-	-	-	-	100 ± 100
D88	-	-	-	-	-	100 ± 100
D89	-	-	-	-	-	100 ± 100
D90	40 ⁺²⁰ ₋₁₀	-	-	-	-	100 ± 100
D91	-	80 ⁺¹⁰ ₋₂₀	-	-	4500 ⁺¹⁵⁰⁰ ₋₁₃₈₀	100 ± 100
D92	150 ± 60	-	-	-	-	150 ± 60
D93	60 ⁺⁴⁰ ₋₃₀	-	-	-	-	100 ± 100
D94	360 ⁺⁶⁰ ₋₉₀	-	-	-	-	360 ⁺⁶⁰ ₋₉₀
D95	-	-	-	-	-	100 ± 100
D96	410 ⁺²⁴⁰ ₋₁₉₀	-	-	-	-	410 ⁺²⁴⁰ ₋₁₉₀
D97	100 ± 40	-	-	-	-	100 ± 40
D98	-	-	-	-	-	100 ± 100
D99	140 ± 70	-	-	-	-	140 ± 70
D100	210 ⁺⁵⁰ ₋₄₀	-	-	-	100 ± 50	210 ⁺⁵⁰ ₋₄₀
D101	440 ± 60	-	-	-	-	440 ± 60
D102	-	-	-	-	-	100 ± 100
D103	70 ± 50	-	-	-	340 ⁺²⁶⁰ ₋₂₁₀	100 ± 100
D104	120 ⁺²⁰ ₋₁₀	-	-	-	-	120 ⁺²⁰ ₋₁₀
D105	120 ± 30	-	-	-	-	120 ± 30
D106	60 ⁺⁴⁰ ₋₃₀	-	-	-	-	100 ± 100
D107	-	-	-	-	-	100 ± 100
D108	140 ± 20	40 ⁺²⁰ ₋₁₀	-	-	16430 ⁺⁸¹⁵⁰ ₋₉₈₉₀	100 ± 100
D109	60 ⁺⁵⁰ ₋₄₀	-	-	-	-	100 ± 100
D110	370 ± 30	100 ± 20	-	-	2250 ⁺⁸⁵⁰ ₋₅₇₀	230 ± 20
D111	140 ± 20	80 ± 20	-	-	610 ⁺¹⁴⁰ ₋₁₇₀	110 ± 20
D112	130 ⁺⁴⁰ ₋₃₀	-	-	-	-	130 ⁺⁴⁰ ₋₃₀
D113	40 ± 20	130 ± 20	-	-	930 ± 130	100 ± 100
D114	70 ± 20	150 ± 20	-	-	230 ⁺²²⁰ ₋₁₇₀	100 ± 100
D115	350 ± 20	450 ⁺²⁰ ₋₃₀	1930 ⁺²³⁹⁰ ₋₁₇₇₀	390 ⁺²⁸⁰ ₋₂₂₀	630 ⁺⁶²⁰ ₋₃₉₀	400 ± 20
D116	250 ⁺¹³⁰ ₋₁₁₀	310 ⁺¹¹⁰ ₋₁₂₀	3630 ⁺⁷¹⁵⁰ ₋₂₉₀₀	790 ⁺³⁹⁰ ₋₄₃₀	2500 ⁺²⁵⁴⁰ ₋₁₅₈₀	280 ± 120

Table D.3. Electron densities derived from the nebular sample.

Reference number	$n_e([\text{S II}])$ [cm ⁻³]	$n_e([\text{O II}])$ [cm ⁻³]	$n_e([\text{Fe III}])$ [cm ⁻³]	$n_e([\text{Cl III}])$ [cm ⁻³]	$n_e([\text{Ar IV}])$ [cm ⁻³]	Adopted n_e [cm ⁻³]
D117	270 ⁺⁵⁰ ₋₆₀	290 ⁺¹¹⁰ ₋₁₀₀	2240 ⁺²¹⁸⁰ ₋₁₆₃₀	340 ⁺¹²⁰ ₋₁₄₀	770 ⁺⁵⁶⁰ ₋₄₃₀	280 ± 80
D118	100 ± 40	190 ± 100	3200 ⁺³⁵⁵⁰ ₋₂₃₈₀	550 ⁺²⁸⁰ ₋₂₆₀	610 ⁺⁴¹⁰ ₋₃₆₀	140 ± 70
D119	360 ⁺¹³⁰ ₋₁₂₀	440 ⁺¹⁵⁰ ₋₁₄₀	3880 ⁺⁸⁰¹⁰ ₋₃₃₁₀	580 ⁺³⁷⁰ ₋₃₅₀	1630 ⁺¹⁴¹⁰ ₋₁₀₂₀	400 ⁺¹⁴⁰ ₋₁₃₀
D120	50 ⁺⁴⁰ ₋₃₀	-	-	200 ⁺²¹⁰ ₋₁₂₀	-	100 ± 100
D121	60 ⁺⁴⁰ ₋₃₀	220 ± 50	-	-	-	100 ± 100
D122	80 ⁺⁸⁰ ₋₅₀	90 ⁺⁶⁰ ₋₅₀	-	580 ⁺⁴⁴⁰ ₋₃₉₀	-	100 ± 100
D123	30 ⁺³⁰ ₋₁₀	160 ± 60	-	-	-	100 ± 100
D124	40 ⁺⁴⁰ ₋₃₀	180 ± 60	-	-	-	100 ± 100
D125	50 ⁺⁵⁰ ₋₃₀	200 ⁺⁵⁰ ₋₄₀	-	-	-	100 ± 100
D126	40 ⁺⁴⁰ ₋₂₀	310 ⁺⁵⁰ ₋₆₀	-	-	-	100 ± 100
D127	40 ⁺⁸⁰ ₋₃₀	90 ⁺⁵⁰ ₋₄₀	-	-	-	100 ± 100
D128	140 ± 60	280 ⁺⁶⁰ ₋₅₀	-	-	-	210 ± 60
D129	40 ⁺²⁰ ₋₃₀	320 ⁺⁵⁰ ₋₄₀	-	-	-	100 ± 100
D130	70 ⁺⁶⁰ ₋₅₀	180 ⁺⁸⁰ ₋₉₀	-	-	-	100 ± 100
D131	50 ⁺⁸⁰ ₋₄₀	210 ⁺⁷⁰ ₋₆₀	-	-	-	100 ± 100
D132	50 ⁺⁶⁰ ₋₄₀	130 ± 70	-	-	-	100 ± 100
D133	50 ± 30	240 ⁺⁶⁰ ₋₇₀	-	-	-	100 ± 100
D134	40 ⁺⁴⁰ ₋₃₀	20 ± 10	-	-	-	100 ± 100
D135	50 ⁺⁴⁰ ₋₃₀	30 ⁺³⁰ ₋₂₀	-	250 ⁺³⁶⁰ ₋₁₉₀	-	100 ± 100
D136	70 ⁺⁵⁰ ₋₄₀	60 ⁺⁵⁰ ₋₃₀	-	-	-	100 ± 100
D137	80 ⁺⁷⁰ ₋₅₀	220 ± 50	-	-	-	100 ± 100
D138	80 ⁺⁶⁰ ₋₅₀	90 ⁺⁷⁰ ₋₅₀	-	-	-	100 ± 100
D139	80 ⁺⁵⁰ ₋₃₀	40 ⁺³⁰ ₋₂₀	-	-	-	100 ± 100
D140	40 ⁺⁴⁰ ₋₃₀	130 ± 50	-	-	-	100 ± 100
D141	50 ± 30	110 ± 50	-	-	-	100 ± 100
D142	50 ⁺⁶⁰ ₋₃₀	130 ± 50	-	-	-	100 ± 100
D143	80 ± 40	290 ± 40	-	-	-	100 ± 100
D144	60 ⁺⁵⁰ ₋₃₀	220 ± 50	-	-	-	100 ± 100
D145	70 ⁺⁷⁰ ₋₄₀	170 ⁺⁶⁰ ₋₅₀	-	-	-	100 ± 100
D146	50 ± 30	100 ± 60	-	-	-	100 ± 100
D147	50 ± 40	320 ± 50	-	-	-	100 ± 100
D148	60 ± 30	110 ± 50	-	-	-	100 ± 100
D149	30 ± 20	220 ± 50	-	-	-	100 ± 100
D150	60 ⁺⁴⁰ ₋₃₀	100 ⁺⁴⁰ ₋₃₀	-	-	-	100 ± 100
D151	50 ± 30	30 ⁺³⁰ ₋₁₀	-	-	-	100 ± 100
D152	50 ⁺⁴⁰ ₋₃₀	30 ± 20	-	-	-	100 ± 100
D153	40 ⁺⁴⁰ ₋₃₀	210 ⁺⁸⁰ ₋₇₀	-	-	-	100 ± 100
D154	60 ⁺⁴⁰ ₋₅₀	150 ⁺⁴⁰ ₋₆₀	-	-	-	100 ± 100
D155	30 ⁺⁴⁰ ₋₂₀	-	-	-	-	100 ± 100
D156	50 ⁺⁴⁰ ₋₃₀	110 ⁺⁶⁰ ₋₅₀	-	-	-	100 ± 100
D157	110 ± 40	60 ± 30	-	-	-	100 ± 100
D158	40 ⁺⁴⁰ ₋₂₀	160 ± 50	-	-	-	100 ± 100
D159	20 ⁺²⁰ ₋₁₀	200 ± 40	-	-	-	100 ± 100
D160	40 ⁺⁴⁰ ₋₂₀	290 ⁺⁹⁰ ₋₈₀	-	-	-	100 ± 100
D161	50 ± 30	210 ± 60	-	-	-	100 ± 100
D162	50 ⁺⁵⁰ ₋₃₀	80 ⁺⁴⁰ ₋₃₀	-	-	-	100 ± 100
D163	40 ± 30	150 ± 50	-	-	-	100 ± 100
D164	50 ⁺⁴⁰ ₋₃₀	210 ± 40	-	-	-	100 ± 100
D165	60 ⁺⁵⁰ ₋₃₀	50 ⁺⁵⁰ ₋₃₀	-	-	-	100 ± 100
D166	80 ⁺⁵⁰ ₋₄₀	50 ⁺⁴⁰ ₋₃₀	-	-	-	100 ± 100
D167	110 ± 60	150 ⁺⁵⁰ ₋₄₀	-	-	-	130 ± 50
D168	200 ± 130	-	6990 ⁺³⁰⁷⁰⁰ ₋₅₀₉₀	660 ⁺⁶⁹⁰ ₋₄₁₀	1530 ⁺¹⁵⁰⁰ ₋₁₀₄₀	200 ± 130
D169	50 ⁺⁶⁰ ₋₃₀	60 ⁺⁵⁰ ₋₄₀	-	-	-	100 ± 100
D170	60 ± 40	390 ⁺⁸⁰ ₋₇₀	-	-	-	100 ± 100
D171	60 ⁺⁵⁰ ₋₃₀	220 ⁺⁸⁰ ₋₆₀	-	-	-	100 ± 100
D172	170 ± 90	390 ⁺¹⁰⁰ ₋₉₀	-	-	-	280 ± 90

Table D.3. Electron densities derived from the nebular sample.

Reference number	n_e ([S II]) [cm ⁻³]	n_e ([O II]) [cm ⁻³]	n_e ([Fe III]) [cm ⁻³]	n_e ([Cl III]) [cm ⁻³]	n_e ([Ar IV]) [cm ⁻³]	Adopted n_e [cm ⁻³]
D173	160 ± 40	250 ⁺⁶⁰ ₋₅₀	-	90 ⁺¹⁷⁰ ₋₆₀	-	200 ± 50
D174	30 ± 20	210 ± 40	-	-	-	100 ± 100
D175	40 ⁺⁴⁰ ₋₃₀	270 ⁺⁵⁰ ₋₆₀	-	-	-	100 ± 100
D176	200 ⁺¹⁰⁰ ₋₉₀	320 ⁺¹⁰⁰ ₋₈₀	-	-	-	260 ⁺¹⁰⁰ ₋₉₀
D177	220 ± 130	310 ⁺⁸⁰ ₋₁₀₀	-	410 ⁺⁷⁶⁰ ₋₂₆₀	-	270 ± 110
D178	70 ⁺⁵⁰ ₋₄₀	70 ⁺⁴⁰ ₋₅₀	-	-	-	100 ± 100
D179	60 ± 40	60 ⁺⁵⁰ ₋₄₀	-	-	-	100 ± 100
D180	90 ⁺⁷⁰ ₋₆₀	-	-	-	-	100 ± 100
D181	250 ± 100	-	-	-	-	250 ± 100
D182	190 ⁺⁸⁰ ₋₇₀	270 ⁺¹⁰⁰ ₋₇₀	-	-	-	230 ⁺⁹⁰ ₋₇₀
D183	180 ± 60	210 ± 60	-	230 ⁺²³⁰ ₋₁₈₀	-	190 ± 60
D184	110 ⁺¹⁰⁰ ₋₆₀	-	-	680 ⁺⁵⁷⁰ ₋₄₅₀	-	110 ⁺¹⁰⁰ ₋₆₀
D185	70 ⁺⁷⁰ ₋₅₀	-	-	860 ⁺⁸⁴⁰ ₋₅₈₀	-	100 ± 100
D186	190 ⁺⁹⁰ ₋₈₀	-	-	1170 ⁺⁶⁰⁰ ₋₅₅₀	-	190 ⁺⁹⁰ ₋₈₀
D187	80 ± 40	80 ⁺⁵⁰ ₋₃₀	-	1440 ⁺¹³⁵⁰ ₋₈₇₀	-	100 ± 100
D188	120 ± 40	250 ± 30	3190 ⁺⁵²²⁰ ₋₂₄₃₀	810 ⁺³⁴⁰ ₋₄₀₀	2490 ⁺³²⁰⁰ ₋₁₆₄₀	180 ⁺⁴⁰ ₋₃₀
D189	100 ⁺⁶⁰ ₋₅₀	-	-	790 ⁺¹³⁶⁰ ₋₅₁₀	-	100 ± 100
D190	90 ⁺⁸⁰ ₋₆₀	-	-	700 ⁺⁷³⁰ ₋₄₅₀	-	100 ± 100
D191	60 ⁺⁴⁰ ₋₃₀	-	-	-	-	100 ± 100
D192	100 ⁺¹²⁰ ₋₇₀	110 ⁺¹⁰⁰ ₋₆₀	-	910 ⁺⁷⁵⁰ ₋₅₂₀	-	110 ⁺¹¹⁰ ₋₇₀
D193	210 ⁺⁴²⁰ ₋₁₃₀	400 ⁺³³⁰ ₋₂₁₀	-	850 ⁺¹⁰⁶⁰ ₋₅₆₀	-	310 ⁺³⁷⁰ ₋₁₇₀
D194	150 ⁺¹⁶⁰ ₋₁₀₀	60 ⁺¹²⁰ ₋₄₀	-	490 ⁺⁴⁹⁰ ₋₃₂₀	-	110 ⁺¹⁴⁰ ₋₇₀
D195	470 ⁺¹⁷⁰ ₋₁₈₀	-	-	1870 ⁺⁵⁰⁰ ₋₄₄₀	-	470 ⁺¹⁷⁰ ₋₁₈₀
D196	220 ± 120	-	-	370 ⁺³⁵⁰ ₋₂₅₀	-	220 ± 120
D197	100 ⁺¹³⁰ ₋₆₀	50 ⁺⁸⁰ ₋₄₀	-	670 ⁺⁷⁸⁰ ₋₅₅₀	-	100 ± 100
D198	100 ⁺²³⁰ ₋₆₀	90 ⁺⁹⁰ ₋₅₀	-	670 ⁺⁶³⁰ ₋₅₀₀	-	100 ± 100
D199	40 ⁺³⁰ ₋₂₀	60 ± 20	-	680 ⁺³⁵⁰ ₋₂₉₀	-	100 ± 100
D200	110 ⁺⁹⁰ ₋₇₀	-	-	200 ⁺²³⁰ ₋₁₁₀	-	110 ⁺⁹⁰ ₋₇₀
D201	40 ⁺⁴⁰ ₋₂₀	70 ⁺²⁰ ₋₃₀	-	560 ⁺⁴²⁰ ₋₃₃₀	-	100 ± 100
D202	110 ⁺⁹⁰ ₋₇₀	-	-	-	-	110 ⁺⁹⁰ ₋₇₀
D203	60 ⁺⁶⁰ ₋₄₀	-	-	-	-	100 ± 100
D204	90 ⁺⁸⁰ ₋₅₀	-	-	-	-	100 ± 100
D205	100 ⁺⁹⁰ ₋₇₀	-	-	510 ⁺⁴²⁰ ₋₃₁₀	-	100 ⁺⁹⁰ ₋₇₀
D206	120 ⁺⁹⁰ ₋₈₀	-	-	470 ⁺³⁹⁰ ₋₂₉₀	-	120 ⁺⁹⁰ ₋₈₀
D207	200 ⁺¹²⁰ ₋₁₁₀	-	-	900 ⁺³³⁰ ₋₃₈₀	-	200 ⁺¹²⁰ ₋₁₁₀
D208	130 ⁺⁹⁰ ₋₈₀	-	-	520 ⁺⁴⁹⁰ ₋₃₇₀	-	130 ⁺⁹⁰ ₋₈₀
D209	40 ± 20	60 ⁺⁶⁰ ₋₄₀	-	-	-	100 ± 100
D210	100 ± 30	290 ⁺⁸⁰ ₋₇₀	-	-	-	100 ± 100
D211	50 ± 20	40 ⁺³⁰ ₋₂₀	-	-	-	100 ± 100
D212	110 ± 30	120 ± 30	-	-	-	120 ± 30
D213	50 ± 20	50 ± 30	-	-	-	100 ± 100
D214	130 ± 20	300 ⁺⁵⁰ ₋₄₀	-	-	-	210 ± 30
D215	100 ⁺³⁰ ₋₂₀	350 ± 100	-	-	-	100 ± 100
D216	40 ± 20	390 ⁺¹⁷⁰ ₋₁₆₀	-	-	-	100 ± 100
D217	380 ± 50	360 ± 70	-	-	-	370 ± 60
D218	80 ± 20	50 ± 30	-	-	-	100 ± 100
D219	50 ± 30	200 ± 90	-	-	-	100 ± 100
D220	400 ⁺¹⁰⁰ ₋₁₂₀	510 ⁺⁹⁰ ₋₁₁₀	-	360 ⁺³⁰⁰ ₋₂₁₀	-	460 ⁺⁹⁰ ₋₁₂₀
D221	270 ± 80	260 ⁺⁵⁰ ₋₆₀	-	430 ⁺³⁶⁰ ₋₂₄₀	-	270 ± 70
D222	4180 ⁺⁹⁹⁰ ₋₇₇₀	5330 ⁺⁶⁸⁰ ₋₆₀₀	10170 ⁺³¹⁰⁰ ₋₂₆₇₀	6980 ⁺⁶⁷⁰ ₋₆₈₀	4200 ⁺¹⁴³⁰ ₋₁₂₁₀	5640 ± 1260
D223	1310 ± 190	1130 ⁺¹⁰⁰ ₋₁₁₀	-	1570 ⁺²⁸⁰ ₋₂₆₀	-	1210 ± 140
D224	4170 ⁺¹⁰⁰⁰ ₋₇₈₀	5130 ⁺⁶⁷⁰ ₋₅₀₀	10240 ⁺²⁷³⁰ ₋₁₉₁₀	6590 ⁺⁵⁵⁰ ₋₆₂₀	5880 ⁺⁷⁰⁰ ₋₇₄₀	5720 ± 1050
D225	1180 ⁺²⁰⁰ ₋₁₇₀	1470 ± 120	-	2100 ⁺⁵³⁰ ₋₅₅₀	-	1400 ± 190
D226	3980 ⁺¹²⁶⁰ ₋₉₂₀	5910 ⁺⁸⁴⁰ ₋₇₀₀	9960 ⁺²⁵⁶⁰ ₋₂₀₀₀	7590 ⁺⁷⁷⁰ ₋₇₂₀	6680 ⁺⁵⁷⁰ ₋₅₈₀	6510 ± 1180
D227	4440 ⁺¹²⁶⁰ ₋₁₀₂₀	5440 ⁺⁶³⁰ ₋₆₂₀	11170 ⁺³⁶³⁰ ₋₂₃₄₀	7430 ⁺⁸¹⁰ ₋₈₉₀	6450 ⁺¹¹⁵⁰ ₋₁₃₅₀	6040 ± 1260
D228	4190 ⁺⁸⁹⁰ ₋₆₉₀	5460 ⁺⁶⁷⁰ ₋₇₁₀	7400 ⁺²⁶⁸⁰ ₋₂₀₅₀	7730 ⁺⁷¹⁰ ₋₆₉₀	4680 ± 460	5390 ± 1250

Table D.3. Electron densities derived from the nebular sample.

Reference number	$n_e(\text{[S II]})$ [cm ⁻³]	$n_e(\text{[O II]})$ [cm ⁻³]	$n_e(\text{[Fe III]})$ [cm ⁻³]	$n_e(\text{[Cl III]})$ [cm ⁻³]	$n_e(\text{[Ar IV]})$ [cm ⁻³]	Adopted n_e [cm ⁻³]
D229	4030 ⁺¹¹⁶⁰ ₋₈₁₀	4950 ⁺⁵⁸⁰ ₋₅₅₀	9940 ⁺³¹⁵⁰ ₋₂₄₁₀	7000 ⁺⁶⁹⁰ ₋₇₄₀	5300 ⁺⁷⁸⁰ ₋₇₆₀	5490 ± 1130
D230	290 ± 120	390 ⁺¹⁰⁰ ₋₈₀	-	2720 ⁺²⁷⁹⁰ ₋₁₆₉₀	-	340 ⁺¹¹⁰ ₋₁₀₀
D231	2810 ⁺⁶⁶⁰ ₋₅₆₀	4760 ⁺⁸⁰⁰ ₋₇₈₀	6760 ⁺³⁰⁶⁰ ₋₂₁₆₀	6030 ⁺¹³¹⁰ ₋₁₂₈₀	6120 ⁺⁴¹²⁰ ₋₃₂₇₀	3960 ± 1300
D232	4850 ⁺³²⁸⁰ ₋₁₇₀₀	6950 ⁺²⁴⁴⁰ ₋₁₇₀₀	9020 ⁺³⁷¹⁰ ₋₂₅₉₀	7000 ⁺⁶²⁰ ₋₅₇₀	4930 ⁺¹⁰¹⁰ ₋₁₀₆₀	6510 ± 990
D233	1750 ⁺⁶⁰⁰ ₋₅₄₀	2780 ⁺⁷⁴⁰ ₋₆₀₀	-	2190 ⁺¹⁰⁸⁰ ₋₁₀₉₀	-	2190 ± 470
D234	1240 ⁺¹⁹⁰ ₋₁₆₀	1750 ⁺⁶²⁰ ₋₅₇₀	1980 ⁺¹⁷⁹⁰ ₋₁₃₉₀	1840 ⁺²⁹⁰ ₋₂₈₀	5440 ⁺⁵⁵²⁰ ₋₃₄₉₀	1430 ± 310
D235	880 ⁺¹⁸⁰ ₋₁₇₀	1240 ⁺³¹⁰ ₋₂₁₀	2220 ⁺²⁸³⁰ ₋₂₀₁₀	1680 ⁺⁵¹⁰ ₋₄₃₀	5130 ⁺⁷³⁴⁰ ₋₃₅₆₀	1060 ⁺²⁵⁰ ₋₁₉₀
D236	1070 ⁺³⁶⁰ ₋₃₁₀	1700 ⁺²⁶⁰ ₋₂₇₀	1670 ⁺¹³⁷⁰ ₋₁₆₁₀	2920 ⁺⁶⁶⁰ ₋₆₀₀	3060 ⁺¹⁷⁵⁰ ₋₁₃₈₀	1630 ± 550
D237	2850 ⁺¹⁰³⁰ ₋₈₀₀	2440 ⁺⁵⁷⁰ ₋₄₉₀	10690 ⁺³⁰⁴³⁰ ₋₈₂₈₀	4340 ⁺¹²⁷⁰ ₋₁₂₉₀	1630 ⁺¹³⁹⁰ ₋₉₉₀	2620 ± 690
D238	430 ⁺²³⁰ ₋₁₇₀	-	-	800 ⁺³⁵⁰ ₋₃₉₀	-	430 ⁺²³⁰ ₋₁₇₀
D239	600 ⁺¹²⁰ ₋₉₀	-	-	1970 ⁺⁷⁶⁰ ₋₁₂₀₀	-	600 ⁺¹²⁰ ₋₉₀
D240	480 ⁺⁷⁰ ₋₈₀	-	-	760 ⁺⁶¹⁰ ₋₃₉₀	-	480 ⁺⁷⁰ ₋₈₀
D241	750 ⁺⁷⁰ ₋₈₀	-	-	1020 ⁺³⁷⁰ ₋₃₅₀	-	750 ⁺⁷⁰ ₋₈₀
D242	880 ± 40	-	-	2660 ⁺⁹¹⁰ ₋₉₇₀	-	880 ± 40
D243	90 ⁺¹¹⁰ ₋₇₀	-	-	2470 ⁺²¹⁵⁰ ₋₁₃₀₀	-	100 ± 100
D244	140 ⁺⁴⁰ ₋₃₀	-	-	520 ⁺⁷²⁰ ₋₃₃₀	-	140 ⁺⁴⁰ ₋₃₀
D245	180 ± 50	-	-	610 ⁺⁶⁷⁰ ₋₄₂₀	-	180 ± 50
D246	330 ⁺¹⁸⁰ ₋₂₀₀	-	-	-	-	330 ⁺¹⁸⁰ ₋₂₀₀
D247	460 ⁺²⁰⁰ ₋₂₁₀	-	-	460 ⁺³⁸⁰ ₋₃₀₀	-	460 ⁺²⁰⁰ ₋₂₁₀
D248	110 ⁺²⁰ ₋₄₀	-	-	930 ⁺¹⁴⁶⁰ ₋₆₆₀	-	110 ⁺²⁰ ₋₄₀
D249	310 ± 80	290 ⁺⁷⁰ ₋₈₀	-	-	-	300 ± 80
D250	90 ± 30	-	-	-	-	100 ± 100
D251	90 ⁺⁴⁰ ₋₃₀	-	-	-	-	100 ± 100
D252	60 ± 30	-	-	-	-	100 ± 100
D253	180 ± 100	220 ± 100	-	470 ⁺⁴⁷⁰ ₋₃₂₀	850 ⁺¹²⁶⁰ ₋₆₀₀	200 ± 100
D254	80 ⁺⁴⁰ ₋₃₀	-	-	240 ⁺²⁹⁰ ₋₁₅₀	-	100 ± 100
D255	60 ⁺⁵⁰ ₋₄₀	-	-	-	-	100 ± 100
D256	30 ± 20	-	-	660 ⁺⁵⁹⁰ ₋₄₄₀	-	100 ± 100
D257	30 ⁺³⁰ ₋₂₀	-	-	400 ⁺⁴⁸⁰ ₋₂₆₀	-	100 ± 100
D258	-	-	-	-	-	100 ± 100
D259	-	-	-	-	-	100 ± 100
D260	-	-	-	-	-	100 ± 100
D261	-	-	-	-	-	100 ± 100
D262	170 ⁺³⁰ ₋₄₀	-	-	420 ⁺³³⁰ ₋₂₉₀	-	170 ⁺³⁰ ₋₄₀
D263	20 ⁺³⁰ ₋₂₀	-	-	-	-	100 ± 100
D264	90 ⁺¹⁰ ₋₂₀	-	-	220 ⁺⁴²⁰ ₋₁₄₀	-	100 ± 100
D265	60 ⁺⁶⁰ ₋₄₀	-	-	-	-	100 ± 100
D266	120 ⁺³⁰ ₋₄₀	-	-	5880 ⁺²⁸⁸⁰ ₋₂₅₁₀	-	120 ⁺³⁰ ₋₄₀
D267	20 ± 20	-	-	440 ⁺³⁹⁰ ₋₃₆₀	-	100 ± 100
D268	-	-	-	-	-	100 ± 100
D269	-	-	-	-	-	100 ± 100
D270	50 ± 40	-	-	-	-	100 ± 100
D271	70 ⁺⁴⁰ ₋₃₀	-	-	-	-	100 ± 100
D272	60 ⁺¹⁰ ₋₂₀	-	-	-	-	100 ± 100
D273	80 ± 40	-	-	-	-	100 ± 100
D274	50 ⁺¹⁰ ₋₂₀	-	-	-	-	100 ± 100
D275	-	-	-	-	-	100 ± 100
D276	-	-	-	-	-	100 ± 100
D277	-	-	-	-	-	100 ± 100
D278	40 ⁺³⁰ ₋₂₀	-	-	1720 ⁺²³¹⁰ ₋₁₁₄₀	-	100 ± 100
D279	60 ⁺³⁰ ₋₂₀	-	-	-	-	100 ± 100
D280	-	-	-	-	-	100 ± 100
D281	90 ⁺⁹⁰ ₋₆₀	-	-	-	-	100 ± 100
D282	50 ⁺⁶⁰ ₋₃₀	150 ⁺⁶⁰ ₋₅₀	-	-	-	100 ± 100
D283	170 ⁺¹²⁰ ₋₁₀₀	290 ± 100	9530 ⁺¹⁸²¹⁰ ₋₇₄₆₀	280 ⁺⁴⁰⁰ ₋₂₀₀	530 ⁺²⁷⁰ ₋₃₀₀	230 ⁺¹¹⁰ ₋₁₀₀
D284	70 ⁺⁶⁰ ₋₄₀	-	-	1520 ⁺¹⁰⁸⁰ ₋₉₆₀	-	100 ± 100

Table D.3. Electron densities derived from the nebular sample.

Reference number	$n_e(\text{[S II]})$ [cm ⁻³]	$n_e(\text{[O II]})$ [cm ⁻³]	$n_e(\text{[Fe III]})$ [cm ⁻³]	$n_e(\text{[Cl III]})$ [cm ⁻³]	$n_e(\text{[Ar IV]})$ [cm ⁻³]	Adopted n_e [cm ⁻³]
D285	110 ⁺⁴⁰ ₋₅₀	240 ⁺³⁰ ₋₂₀	-	760 ⁺⁷⁷⁰ ₋₅₀₀	-	170 ± 40
D286	60 ⁺⁴⁰ ₋₃₀	120 ⁺⁴⁰ ₋₃₀	-	240 ⁺²⁷⁰ ₋₁₁₀	-	100 ± 100
D287	100 ⁺⁷⁰ ₋₆₀	-	-	480 ⁺³⁵⁰ ₋₃₀₀	-	100 ⁺⁷⁰ ₋₆₀
D288	100 ⁺³⁰ ₋₄₀	150 ± 20	-	580 ⁺⁵³⁰ ₋₄₀₀	-	130 ± 30
D289	140 ⁺¹⁰⁰ ₋₈₀	-	-	-	-	140 ⁺¹⁰⁰ ₋₈₀
D290	160 ± 80	-	-	1120 ⁺¹²⁹⁰ ₋₇₁₀	-	160 ± 80
D291	70 ⁺⁶⁰ ₋₅₀	-	-	-	-	100 ± 100
D292	60 ⁺⁵⁰ ₋₄₀	-	-	-	-	100 ± 100
D293	100 ⁺⁹⁰ ₋₇₀	-	-	-	-	100 ± 100
D294	110 ⁺¹¹⁰ ₋₈₀	30 ⁺⁶⁰ ₋₁₀	-	-	-	100 ± 100
D295	60 ⁺⁶⁰ ₋₄₀	40 ⁺⁵⁰ ₋₃₀	-	-	-	100 ± 100
D296	140 ⁺⁸⁰ ₋₇₀	170 ⁺¹¹⁰ ₋₁₀₀	6200 ⁺¹⁴³³⁰ ₋₄₅₉₀	1490 ⁺⁹⁰⁰ ₋₁₀₀₀	790 ⁺¹¹⁴⁰ ₋₄₉₀	160 ⁺⁹⁰ ₋₈₀
D297	200 ± 40	-	-	340 ⁺²⁸⁰ ₋₂₄₀	-	200 ± 40
D298	30 ± 20	-	-	-	-	100 ± 100
D299	50 ± 10	-	-	-	-	100 ± 100
D300	60 ± 10	-	-	-	-	100 ± 100
D301	30 ± 20	-	-	-	-	100 ± 100
D302	20 ⁺²⁰ ₋₁₀	-	-	-	-	100 ± 100
D303	40 ⁺¹⁰ ₋₂₀	-	-	-	-	100 ± 100
D304	40 ± 20	-	-	-	-	100 ± 100
D305	10 ⁺¹⁰ ₋₀	-	-	-	-	100 ± 100
D306	30 ⁺³⁰ ₋₂₀	-	-	-	-	100 ± 100
D307	40 ± 20	-	-	-	-	100 ± 100
D308	50 ± 10	-	-	-	-	100 ± 100
D309	80 ⁺³⁰ ₋₂₀	-	-	-	-	100 ± 100
D310	50 ⁺³⁰ ₋₂₀	-	-	-	-	100 ± 100
D311	20 ± 10	-	-	-	-	100 ± 100
D312	90 ⁺⁶⁰ ₋₅₀	140 ± 70	16170 ⁺³⁷⁷³⁰ ₋₁₀₈₇₀	450 ⁺⁵⁹⁰ ₋₂₇₀	910 ⁺⁸⁰⁰ ₋₅₇₀	100 ± 100
D313	200 ⁺⁴⁰ ₋₃₀	-	-	920 ⁺⁴¹⁰ ₋₃₇₀	-	200 ⁺⁴⁰ ₋₃₀
D314	290 ⁺⁴⁰ ₋₆₀	-	-	3060 ⁺¹³⁷⁰ ₋₁₄₃₀	-	290 ⁺⁴⁰ ₋₆₀
D315	280 ⁺⁸⁰ ₋₇₀	190 ± 70	4800 ⁺¹²²⁸⁰ ₋₃₃₉₀	880 ⁺⁷⁶⁰ ₋₅₄₀	2500 ⁺³⁰³⁰ ₋₁₆₆₀	230 ⁺⁸⁰ ₋₇₀
D316	170 ± 60	60 ⁺⁵⁰ ₋₄₀	-	-	-	110 ⁺⁶⁰ ₋₅₀
D317	110 ± 30	-	-	280 ⁺¹⁷⁰ ₋₁₄₀	-	110 ± 30
D318	80 ⁺²⁰ ₋₃₀	-	-	-	-	100 ± 100
D319	280 ± 50	-	-	1130 ⁺⁷⁹⁰ ₋₆₅₀	-	280 ± 50
D320	200 ⁺¹¹⁰ ₋₁₀₀	220 ± 90	2730 ⁺⁴⁰²⁰ ₋₂₆₅₀	350 ⁺³⁷⁰ ₋₂₅₀	1080 ⁺³⁹⁰ ₋₅₂₀	210 ± 100
D321	30 ± 20	130 ± 30	-	-	-	100 ± 100
D322	60 ± 30	100 ± 30	-	-	-	100 ± 100
D323	80 ⁺²⁰ ₋₃₀	280 ⁺⁴⁰ ₋₃₀	-	-	-	100 ± 100
D324	50 ⁺³⁰ ₋₂₀	60 ⁺⁷⁰ ₋₃₀	-	-	-	100 ± 100
D325	70 ⁺³⁰ ₋₂₀	360 ⁺¹³⁰ ₋₁₀₀	-	-	-	100 ± 100
D326	40 ± 20	130 ⁺³⁰ ₋₂₀	-	-	-	100 ± 100
D327	70 ± 30	360 ± 40	-	-	-	100 ± 100
D328	50 ± 20	-	-	-	-	100 ± 100
D329	290 ± 40	270 ± 40	-	-	-	280 ± 40
D330	70 ± 20	10 ± 0	-	-	-	100 ± 100
D331	30 ⁺²⁰ ₋₁₀	60 ⁺⁶⁰ ₋₃₀	-	-	-	100 ± 100
D332	40 ⁺²⁰ ₋₃₀	100 ⁺⁷⁰ ₋₆₀	-	-	-	100 ± 100
D333	160 ± 30	80 ± 30	-	-	-	120 ± 30
D334	130 ⁺¹¹⁰ ₋₈₀	150 ⁺¹⁰⁰ ₋₇₀	5770 ⁺¹²¹⁹⁰ ₋₄₁₀₀	600 ⁺⁵⁵⁰ ₋₃₆₀	530 ⁺⁸⁷⁰ ₋₃₆₀	140 ⁺¹⁰⁰ ₋₇₀
D335	110 ± 30	-	-	80 ⁺⁹⁰ ₋₆₀	-	110 ± 30
D336	100 ⁺⁶⁰ ₋₅₀	80 ⁺⁵⁰ ₋₃₀	-	1610 ⁺¹⁶⁸⁰ ₋₁₀₆₀	-	100 ± 100
D337	130 ± 30	-	-	2640 ⁺¹¹³⁰ ₋₁₅₉₀	-	130 ± 30
D338	130 ⁺¹²⁰ ₋₉₀	30 ⁺³⁰ ₋₂₀	-	-	-	100 ± 100
D339	50 ⁺⁴⁰ ₋₃₀	40 ± 40	-	-	-	100 ± 100
D340	50 ⁺⁶⁰ ₋₃₀	20 ⁺³⁰ ₋₁₀	-	550 ⁺⁷⁸⁰ ₋₃₁₀	-	100 ± 100
D341	60 ⁺³⁰ ₋₂₀	-	-	1150 ⁺¹⁰⁰⁰ ₋₇₉₀	-	100 ± 100

Table D.3. Electron densities derived from the nebular sample.

Reference number	$n_e([\text{S II}])$ [cm ⁻³]	$n_e([\text{O II}])$ [cm ⁻³]	$n_e([\text{Fe III}])$ [cm ⁻³]	$n_e([\text{Cl III}])$ [cm ⁻³]	$n_e([\text{Ar IV}])$ [cm ⁻³]	Adopted n_e [cm ⁻³]
D342	70 ⁺⁶⁰ ₋₄₀	140 ⁺⁸⁰ ₋₇₀	58180 ⁺⁵⁵³³⁵⁰ ₋₃₃₈₇₀	1380 ⁺¹²⁵⁰ ₋₇₅₀	1920 ⁺⁸⁹⁰ ₋₁₁₁₀	100 ± 100
D343	130 ± 40	-	-	170 ⁺¹⁸⁰ ₋₁₂₀	-	130 ± 40
D344	290 ⁺¹⁹⁰ ₋₁₆₀	-	-	-	-	290 ⁺¹⁹⁰ ₋₁₆₀
D345	-	-	-	-	-	100 ± 100
D346	440 ⁺¹⁵⁰ ₋₁₂₀	-	-	-	-	440 ⁺¹⁵⁰ ₋₁₂₀
D347	620 ⁺¹⁹⁰ ₋₁₄₀	-	-	-	-	620 ⁺¹⁹⁰ ₋₁₄₀
D348	170 ⁺⁸⁰ ₋₁₀₀	-	-	-	-	170 ⁺⁸⁰ ₋₁₀₀
D349	220 ⁺¹⁷⁰ ₋₁₄₀	-	-	-	-	220 ⁺¹⁷⁰ ₋₁₄₀
D350	310 ⁺²²⁰ ₋₁₆₀	-	-	-	-	310 ⁺²²⁰ ₋₁₆₀
D351	480 ⁺¹¹⁰ ₋₉₀	-	-	-	-	480 ⁺¹¹⁰ ₋₉₀
D352	310 ± 50	-	-	2000 ⁺²³²⁰ ₋₁₃₅₀	-	310 ± 50
D353	500 ⁺¹⁰⁰ ₋₉₀	-	-	1850 ⁺¹⁴⁷⁰ ₋₁₄₄₀	-	500 ⁺¹⁰⁰ ₋₉₀
D354	40 ⁺⁴⁰ ₋₃₀	-	-	-	-	100 ± 100
D355	140 ⁺¹³⁰ ₋₉₀	-	-	-	-	140 ⁺¹³⁰ ₋₉₀
D356	-	-	-	-	-	100 ± 100
D357	-	-	-	-	-	100 ± 100
D358	-	-	-	-	-	100 ± 100
D359	-	-	-	-	-	100 ± 100
D360	80 ± 40	-	-	-	-	100 ± 100
D361	80 ⁺¹⁰ ₋₂₀	-	-	-	-	100 ± 100
D362	20 ± 10	-	-	24420 ⁺⁵³⁸²⁰ ₋₁₈₅₆₀	-	100 ± 100
D363	460 ⁺⁷⁰ ₋₅₀	-	-	-	-	460 ⁺⁷⁰ ₋₅₀
D364	360 ⁺¹⁵⁰ ₋₁₁₀	-	-	-	-	360 ⁺¹⁵⁰ ₋₁₁₀
D365	60 ⁺¹⁰ ₋₂₀	-	-	-	-	100 ± 100
D366	130 ± 20	-	-	-	-	130 ± 20
D367	-	-	-	-	-	100 ± 100
D368	210 ⁺⁵⁰ ₋₄₀	-	-	1830 ⁺²²²⁰ ₋₁₃₁₀	-	210 ⁺⁵⁰ ₋₄₀
D369	-	-	-	-	-	100 ± 100
D370	430 ⁺⁹⁰ ₋₁₀₀	-	-	1300 ⁺¹¹⁹⁰ ₋₉₀₀	-	430 ⁺⁹⁰ ₋₁₀₀
D371	-	-	-	-	-	100 ± 100
D372	-	-	-	-	-	100 ± 100
D373	-	-	-	-	-	100 ± 100
D374	640 ⁺¹³⁰ ₋₁₄₀	-	-	-	-	640 ⁺¹³⁰ ₋₁₄₀
D375	600 ⁺¹⁶⁰ ₋₁₄₀	-	-	-	-	600 ⁺¹⁶⁰ ₋₁₄₀
D376	490 ⁺⁶⁰ ₋₅₀	-	-	-	-	490 ⁺⁶⁰ ₋₅₀
D377	60 ⁺⁴⁰ ₋₃₀	-	-	-	-	100 ± 100
D378	670 ⁺²²⁰ ₋₂₆₀	-	-	-	-	670 ⁺²²⁰ ₋₂₆₀
D379	-	-	-	-	-	100 ± 100
D380	1250 ± 60	320 ⁺¹²⁰ ₋₁₄₀	5620 ⁺¹⁷¹⁶⁰ ₋₄₅₀₀	3910 ⁺⁴⁸⁷⁰ ₋₂₇₃₀	-	1090 ± 360
D381	-	-	-	-	-	100 ± 100
D382	-	-	-	-	-	100 ± 100
D383	140 ± 50	-	-	-	-	140 ± 50
D384	90 ± 40	-	-	-	-	100 ± 100
D385	80 ⁺⁶⁰ ₋₅₀	-	-	-	-	100 ± 100
D386	-	-	-	-	-	100 ± 100
D387	180 ± 80	-	-	-	-	180 ± 80
D388	50 ⁺⁵⁰ ₋₃₀	-	-	-	-	100 ± 100
D389	90 ⁺³⁰ ₋₄₀	-	-	1440 ⁺¹⁶²⁰ ₋₉₇₀	-	100 ± 100
D390	450 ⁺⁷⁰ ₋₈₀	-	-	-	-	450 ⁺⁷⁰ ₋₈₀
D391	70 ± 20	-	-	-	-	100 ± 100
D392	-	-	-	-	-	100 ± 100
D393	130 ⁺⁸⁰ ₋₇₀	-	-	-	-	130 ⁺⁸⁰ ₋₇₀
D394	40 ⁺³⁰ ₋₂₀	-	-	-	-	100 ± 100
D395	-	-	-	-	-	100 ± 100
D396	1300 ⁺¹¹⁰ ₋₁₂₀	-	-	-	-	1300 ⁺¹¹⁰ ₋₁₂₀
D397	-	-	-	-	-	100 ± 100
D398	70 ± 40	-	-	-	-	100 ± 100

Table D.3. Electron densities derived from the nebular sample.

Reference number	$n_e([\text{S II}])$ [cm ⁻³]	$n_e([\text{O II}])$ [cm ⁻³]	$n_e([\text{Fe III}])$ [cm ⁻³]	$n_e([\text{Cl III}])$ [cm ⁻³]	$n_e([\text{Ar IV}])$ [cm ⁻³]	Adopted n_e [cm ⁻³]
D399	140 ± 40	-	-	-	-	140 ± 40
D400	150 ± 20	300 ⁺⁵⁰ ₋₄₀	-	-	-	230 ± 30
D401	180 ± 80	200 ⁺¹¹⁰ ₋₈₀	2400 ⁺²³⁵⁰ ₋₂₂₆₀	410 ⁺³⁰⁰ ₋₂₃₀	290 ⁺³⁹⁰ ₋₂₃₀	190 ⁺⁹⁰ ₋₈₀
D402	350 ± 90	460 ⁺¹⁴⁰ ₋₁₃₀	2480 ± 1830	450 ⁺¹⁷⁰ ₋₁₆₀	1000 ⁺⁵⁸⁰ ₋₄₈₀	400 ± 110
D403	1900 ⁺⁴³⁰ ₋₃₃₀	2780 ⁺⁵⁰⁰ ₋₄₆₀	7050 ⁺⁴⁶⁶⁰ ₋₂₅₄₀	3990 ⁺³⁵⁰ ₋₃₄₀	6160 ⁺⁸⁰⁰ ₋₁₀₀₀	3190 ± 1190
D404	110 ⁺⁹⁰ ₋₆₀	230 ⁺²⁹⁰ ₋₁₆₀	-	-	-	170 ⁺¹⁹⁰ ₋₁₁₀
D405	30 ⁺⁴⁰ ₋₂₀	30 ⁺³⁰ ₋₂₀	-	2590 ⁺¹⁰⁷⁰ ₋₇₆₀	-	100 ± 100
D406	70 ⁺⁹⁰ ₋₅₀	130 ⁺³⁰ ₋₄₀	-	1540 ⁺¹⁸²⁰ ₋₁₁₂₀	-	100 ± 100
D407	220 ⁺⁴⁰ ₋₆₀	210 ± 20	-	490 ⁺⁸²⁰ ₋₃₄₀	-	210 ⁺³⁰ ₋₄₀
D408	220 ⁺⁵⁰ ₋₃₀	-	-	220 ⁺³⁶⁰ ₋₁₇₀	-	220 ⁺⁵⁰ ₋₃₀
D409	100 ± 30	-	-	2330 ⁺⁸⁶⁰ ₋₁₀₆₀	-	100 ± 100
D410	110 ± 30	-	-	590 ⁺⁴⁰⁰ ₋₃₅₀	-	110 ± 30
D411	300 ⁺⁵⁰ ₋₄₀	-	-	1150 ⁺²⁵⁰ ₋₂₇₀	-	300 ⁺⁵⁰ ₋₄₀
D412	70 ± 30	-	-	1010 ⁺⁴⁶⁰ ₋₅₂₀	-	100 ± 100
D413	110 ⁺⁵⁰ ₋₈₀	220 ± 100	7340 ⁺²⁵¹³⁰ ₋₅₅₃₀	2960 ⁺²⁵⁹⁰ ₋₁₇₄₀	780 ⁺³⁸⁰ ₋₄₁₀	170 ⁺⁸⁰ ₋₉₀
D414	110 ± 80	130 ⁺¹⁰⁰ ₋₇₀	6790 ⁺¹⁵⁶⁵⁰ ₋₅₃₂₀	2280 ⁺²¹⁰⁰ ₋₁₃₂₀	750 ⁺⁷⁴⁰ ₋₄₉₀	120 ⁺⁹⁰ ₋₇₀
D415	120 ⁺⁹⁰ ₋₆₀	120 ⁺⁴⁰ ₋₃₀	-	1140 ⁺¹⁸²⁰ ₋₇₃₀	-	120 ⁺⁶⁰ ₋₄₀
D416	140 ⁺¹¹⁰ ₋₈₀	180 ⁺⁶⁰ ₋₅₀	-	-	-	160 ⁺⁸⁰ ₋₇₀
D417	220 ⁺⁸⁰ ₋₆₀	-	-	17770 ⁺⁴³⁷⁷⁰ ₋₁₄₂₁₀	-	220 ⁺⁸⁰ ₋₆₀
D418	200 ⁺⁴⁰ ₋₅₀	-	-	1010 ⁺¹⁵⁸⁰ ₋₆₇₀	-	200 ⁺⁴⁰ ₋₅₀
D419	270 ± 110	210 ⁺⁶⁰ ₋₅₀	-	410 ⁺⁷⁸⁰ ₋₃₁₀	-	240 ⁺⁹⁰ ₋₈₀
D420	190 ⁺³⁰ ₋₄₀	-	-	640 ⁺¹²³⁰ ₋₄₈₀	-	190 ⁺³⁰ ₋₄₀
D421	250 ± 50	-	-	400 ⁺⁵⁰ ₋₁₀	-	250 ± 50
D422	-	-	-	-	-	100 ± 100
D423	-	-	-	-	-	100 ± 100
D424	250 ⁺⁷⁰ ₋₆₀	-	-	-	-	250 ⁺⁷⁰ ₋₆₀
D425	90 ± 30	-	-	670 ⁺⁵²⁰ ₋₄₇₀	-	100 ± 100
D426	110 ⁺³⁰ ₋₄₀	-	-	230 ⁺³⁰⁰ ₋₁₇₀	-	110 ⁺³⁰ ₋₄₀
D427	150 ± 30	-	-	100 ⁺²⁰ ₋₁₀	-	150 ± 30
D428	320 ⁺³⁰ ₋₄₀	-	-	-	-	320 ⁺³⁰ ₋₄₀
D429	50 ⁺⁵⁰ ₋₂₀	-	-	-	-	100 ± 100
D430	300 ⁺⁴⁰ ₋₅₀	-	-	590 ⁺⁷¹⁰ ₋₄₇₀	-	300 ⁺⁴⁰ ₋₅₀
D431	180 ⁺⁴⁰ ₋₆₀	-	-	-	-	180 ⁺⁴⁰ ₋₆₀
D432	150 ⁺⁴⁰ ₋₃₀	-	-	510 ⁺⁷¹⁰ ₋₃₃₀	-	150 ⁺⁴⁰ ₋₃₀
D433	100 ± 60	-	-	-	-	100 ± 60
D434	150 ⁺³⁰ ₋₄₀	-	-	1030 ⁺¹⁴⁹⁰ ₋₅₉₀	-	150 ⁺³⁰ ₋₄₀
D435	150 ⁺⁵⁰ ₋₄₀	50 ± 30	-	-	-	100 ± 40
D436	130 ⁺⁸⁰ ₋₉₀	60 ± 40	-	380 ⁺³⁰⁰ ₋₂₃₀	-	100 ± 100
D437	320 ± 60	-	-	-	-	320 ± 60
D438	170 ⁺³⁰ ₋₄₀	-	-	-	-	170 ⁺³⁰ ₋₄₀
D439	20 ⁺¹⁰ ₋₂₀	-	-	-	-	100 ± 100
D440	30 ⁺³⁰ ₋₂₀	-	-	-	-	100 ± 100
D441	240 ⁺⁵⁰ ₋₄₀	-	-	-	-	240 ⁺⁵⁰ ₋₄₀
D442	-	-	-	-	-	100 ± 100
D443	30 ± 10	-	-	-	-	100 ± 100
D444	50 ⁺³⁰ ₋₂₀	-	-	-	-	100 ± 100
D445	50 ± 30	-	-	-	-	100 ± 100
D446	60 ⁺⁴⁰ ₋₃₀	-	-	-	-	100 ± 100
D447	160 ± 90	180 ± 60	-	-	-	170 ⁺⁸⁰ ₋₇₀
D448	140 ⁺¹³⁰ ₋₈₀	60 ⁺⁷⁰ ₋₃₀	-	-	-	100 ± 100
D449	170 ⁺³⁰ ₋₅₀	-	-	26350 ⁺⁷⁶⁷²⁰ ₋₁₈₆₀₀	-	170 ⁺³⁰ ₋₅₀
D450	10 ⁺¹⁰ ₋₀	-	-	-	-	100 ± 100
D451	290 ⁺⁸⁰ ₋₇₀	-	-	-	-	290 ⁺⁸⁰ ₋₇₀
D452	830 ⁺³⁸⁰ ₋₂₈₀	1530 ⁺¹⁰⁵⁰ ₋₇₀₀	-	-	6550 ⁺⁶⁷⁹⁰ ₋₄₂₅₀	1180 ⁺⁷¹⁰ ₋₄₉₀

Table D.4. Measured electron temperatures from the nebular sample.

Reference number	$T_e(\text{[N II]})$ [K]	$T_e(\text{[S III]})$ [K]	$T_e(\text{[O III]})$ [K]
D1	-	-	11410 ⁺³²⁰ ₋₂₂₀
D2	-	-	13070 ⁺²⁰⁰ ₋₂₆₀
D3	-	14340 ⁺⁴³⁰ ₋₇₈₀	14310 ⁺²³⁰ ₋₁₅₀
D4	-	13970 ⁺¹¹⁶⁰ ₋₁₄₄₀	14430 ⁺⁴³⁰ ₋₃₆₀
D5	-	-	13300 ⁺¹³⁰ ₋₁₆₀
D6	-	-	12490 ⁺¹⁵⁰ ₋₂₉₀
D7	-	-	11590 ⁺¹⁹⁰ ₋₂₃₀
D8	-	-	11450 ⁺⁴⁹⁰ ₋₅₃₀
D9	-	-	12090 ⁺³⁰⁰ ₋₃₁₀
D10	-	12780 ⁺⁴⁵⁰ ₋₄₂₀	12780 ⁺²³⁰ ₋₁₅₀
D11	-	12150 ⁺³⁶⁰ ₋₃₂₀	13420 ⁺²²⁰ ₋₂₀₀
D12	-	-	12260 ⁺¹⁸⁰ ₋₂₀₀
D13	-	-	10120 ⁺⁸²⁰ ₋₇₀₀
D14	-	13270 ⁺⁶⁷⁰ ₋₆₈₀	13070 ⁺²⁷⁰ ₋₃₁₀
D15	-	-	11520 ⁺³⁰⁰ ₋₄₃₀
D16	-	-	13010 ⁺⁵⁷⁰ ₋₅₉₀
D17	-	-	11930 ⁺⁴¹⁰ ₋₄₄₀
D18	-	-	9700 ⁺⁷⁹⁰ ₋₇₀₀
D19	-	-	18860 ⁺⁴⁵⁰ ₋₅₇₀
D20	-	-	19120 ⁺⁶⁰⁰ ₋₄₇₀
D21	-	13290 ⁺¹⁰⁷⁰ ₋₈₆₀	14270 ⁺²⁵⁰ ₋₃₁₀
D22	-	19060 ⁺⁴⁶⁰⁰ ₋₄₁₉₀	17380 ⁺⁵⁷⁰ ₋₅₂₀
D23	-	-	11690 ⁺⁴⁴⁰ ₋₅₁₀
D24	-	-	11720 ⁺⁴⁴⁰ ₋₄₃₀
D25	-	-	14650 ⁺³⁸⁰ ₋₃₅₀
D26	-	-	10200 ⁺⁷⁶⁰ ₋₁₃₂₀
D27	-	11490 ⁺⁴⁷⁰ ₋₄₄₀	12470 ⁺²⁰⁰ ₋₂₄₀
D28	-	-	15660 ⁺¹⁰⁰ ₋₇₀
D29	-	-	12960 ⁺³⁴⁰ ₋₂₉₀
D30	-	-	12340 ⁺⁴⁸⁰ ₋₃₉₀
D31	-	-	12780 ⁺⁴⁸⁰ ₋₄₉₀
D32	-	17350 ⁺⁶²⁰ ₋₉₂₀	9970 ⁺²⁹⁰ ₋₂₈₀
D33	-	-	9960 ⁺¹⁰⁰⁰ ₋₁₀₉₀
D34	-	9940 ⁺¹⁵²⁰ ₋₁₀₆₀	10660 ⁺¹⁰⁰⁰ ₋₁₁₅₀
D35	-	12560 ⁺⁶⁶⁰ ₋₇₅₀	13400 ⁺³⁵⁰ ₋₂₈₀
D36	-	-	12550 ⁺²⁵⁰ ₋₂₈₀
D37	-	-	10190 ⁺⁹⁵⁰ ₋₁₃₁₀
D38	-	-	14970 ⁺²⁹⁰ ₋₂₂₀
D39	-	-	12940 ⁺²⁵⁰ ₋₂₈₀
D40	-	-	14190 ⁺²⁰⁰ ₋₁₉₀
D41	-	-	20000 ⁺³⁸⁰ ₋₃₃₀
D42	-	11230 ⁺⁸³⁰ ₋₆₅₀	11200 ⁺³³⁰ ₋₃₇₀
D43	-	10410 ⁺⁸⁴⁰ ₋₈₉₀	10190 ⁺⁶¹⁰ ₋₁₂₁₀
D44	-	12250 ⁺⁶³⁰ ₋₁₀₁₀	10920 ⁺³⁵⁰ ₋₄₅₀
D45	-	9430 ⁺¹⁴⁹⁰ ₋₁₂₆₀	-
D46	-	-	10630 ⁺³³⁰ ₋₃₅₀
D47	-	-	9920 ⁺⁹³⁰ ₋₉₇₀
D48	-	8960 ⁺³⁹⁰ ₋₂₈₀	9830 ⁺²⁶⁰ ₋₃₅₀
D49	-	-	10320 ⁺⁴²⁰ ₋₃₈₀
D50	-	-	13040 ⁺⁴⁶⁰ ₋₄₄₀
D51	-	-	10700 ⁺⁵⁰⁰ ₋₃₅₀
D52	-	-	13910 ⁺⁴⁷⁰ ₋₅₈₀
D53	-	-	14090 ⁺¹⁰⁰ ₋₁₁₀
D54	-	-	16040 ⁺¹³⁰ ₋₁₂₀
D55	-	-	11110 ⁺⁵⁸⁰ ₋₈₀₀

Table D.4. Measured electron temperatures from the nebular sample.

Reference number	$T_e(\text{[N II]})$ [K]	$T_e(\text{[S III]})$ [K]	$T_e(\text{[O III]})$ [K]
D56	-	-	13440^{+60}_{-50}
D57	-	10200^{+380}_{-630}	10240^{+510}_{-620}
D58	-	11340^{+370}_{-420}	11190 ± 210
D59	-	-	12880^{+140}_{-90}
D60	-	-	11190^{+420}_{-360}
D61	-	-	11230^{+450}_{-460}
D62	-	-	10750^{+390}_{-480}
D63	-	9810^{+250}_{-270}	9340^{+180}_{-160}
D64	-	9340^{+260}_{-250}	8940^{+420}_{-350}
D65	-	12670^{+300}_{-540}	18370^{+280}_{-480}
D66	-	-	13640^{+470}_{-390}
D67	-	-	14520^{+170}_{-160}
D68	-	9300^{+270}_{-290}	9660^{+220}_{-270}
D69	-	-	14220^{+450}_{-420}
D70	-	-	12310^{+340}_{-290}
D71	7760^{+510}_{-680}	6880^{+680}_{-870}	-
D72	-	-	16390^{+170}_{-180}
D73	-	-	14040^{+320}_{-220}
D74	-	-	10850 ± 70
D75	-	-	17640^{+260}_{-230}
D76	-	-	12450^{+130}_{-100}
D77	-	-	11950^{+160}_{-170}
D78	-	-	18110^{+170}_{-220}
D79	-	-	19070 ± 450
D80	-	-	19020^{+270}_{-250}
D81	14540^{+1980}_{-2750}	-	12460^{+210}_{-220}
D82	-	-	15780^{+140}_{-190}
D83	12020^{+460}_{-570}	15270^{+500}_{-490}	16170^{+250}_{-290}
D84	-	11900^{+1210}_{-1440}	12460^{+300}_{-380}
D85	-	7210 ± 140	7390^{+280}_{-330}
D86	-	8050^{+270}_{-300}	8040^{+290}_{-350}
D87	-	-	12930^{+70}_{-110}
D88	-	-	19890^{+260}_{-230}
D89	-	-	18050^{+300}_{-320}
D90	-	10890^{+470}_{-340}	12910^{+670}_{-690}
D91	-	-	11770 ± 50
D92	11100^{+360}_{-380}	12970^{+360}_{-400}	12500^{+240}_{-230}
D93	-	13270 ± 520	12740^{+320}_{-290}
D94	-	-	18390^{+100}_{-110}
D95	-	-	14060^{+290}_{-300}
D96	-	-	15480^{+310}_{-380}
D97	-	-	17860^{+210}_{-260}
D98	-	-	19230^{+190}_{-260}
D99	-	14820^{+620}_{-1020}	15330^{+210}_{-200}
D100	-	17950^{+350}_{-520}	19160^{+250}_{-220}
D101	12120^{+1270}_{-1500}	-	13370 ± 130
D102	-	-	13320^{+80}_{-120}
D103	-	17890^{+1160}_{-970}	17820^{+220}_{-180}
D104	-	-	13160^{+180}_{-170}
D105	-	-	16180 ± 310
D106	14330^{+590}_{-550}	12650^{+390}_{-350}	12360^{+150}_{-130}
D107	-	-	24430^{+470}_{-600}
D108	-	-	12110 ± 80
D109	-	14230^{+600}_{-540}	12280^{+250}_{-200}
D110	-	-	18010^{+120}_{-170}
D111	-	-	14760^{+70}_{-80}

Table D.4. Measured electron temperatures from the nebular sample.

Reference number	$T_e(\text{[N II]})$ [K]	$T_e(\text{[S III]})$ [K]	$T_e(\text{[O III]})$ [K]
D112	-	-	17180^{+220}_{-150}
D113	-	-	16270^{+100}_{-130}
D114	-	-	15600 ± 130
D115	10340^{+210}_{-230}	10040 ± 80	9900 ± 70
D116	9800 ± 350	9300^{+250}_{-230}	9120^{+120}_{-130}
D117	9830^{+70}_{-110}	10550^{+190}_{-270}	9160^{+120}_{-110}
D118	10510^{+300}_{-370}	11510^{+300}_{-350}	11330^{+150}_{-130}
D119	10180^{+500}_{-460}	9540^{+320}_{-340}	9530^{+170}_{-190}
D120	8140^{+180}_{-170}	7590^{+590}_{-760}	7620 ± 210
D121	7570^{+180}_{-130}	6920 ± 160	7380^{+170}_{-150}
D122	7790^{+330}_{-400}	-	7250^{+510}_{-570}
D123	7540^{+380}_{-390}	7630^{+340}_{-390}	-
D124	9360^{+800}_{-760}	11350^{+740}_{-860}	9010^{+230}_{-360}
D125	7380^{+370}_{-490}	7550^{+250}_{-260}	-
D126	7630^{+350}_{-360}	7400^{+330}_{-370}	-
D127	-	-	10860^{+320}_{-420}
D128	8420^{+150}_{-230}	8990^{+130}_{-220}	7760^{+60}_{-70}
D129	-	8900^{+390}_{-500}	9080^{+180}_{-190}
D130	-	-	11940^{+230}_{-220}
D131	-	-	10740 ± 130
D132	-	-	11080^{+230}_{-210}
D133	-	-	10770^{+180}_{-220}
D134	9990^{+1210}_{-1630}	9920^{+270}_{-240}	10670^{+70}_{-80}
D135	10820 ± 260	-	10570^{+130}_{-150}
D136	9500^{+370}_{-390}	11200^{+270}_{-320}	9760^{+70}_{-80}
D137	-	-	11060^{+150}_{-210}
D138	8870^{+710}_{-750}	9160^{+930}_{-810}	8990^{+330}_{-220}
D139	-	7710^{+390}_{-460}	-
D140	8590^{+320}_{-340}	7500^{+390}_{-490}	8420^{+230}_{-270}
D141	10960^{+610}_{-860}	9380 ± 290	9650^{+210}_{-150}
D142	7920^{+720}_{-690}	8090^{+440}_{-490}	-
D143	7930^{+500}_{-580}	-	-
D144	-	-	8260^{+150}_{-180}
D145	-	14960^{+720}_{-1160}	12940^{+120}_{-150}
D146	-	-	8430 ± 70
D147	7020^{+370}_{-300}	-	-
D148	7230^{+280}_{-290}	-	-
D149	-	12810^{+900}_{-510}	11480^{+130}_{-120}
D150	6300^{+400}_{-420}	5720^{+440}_{-430}	-
D151	7640^{+460}_{-820}	-	-
D152	8460^{+390}_{-510}	-	-
D153	-	-	13300^{+160}_{-250}
D154	-	-	13290^{+190}_{-180}
D155	6830^{+410}_{-460}	-	-
D156	10610^{+1110}_{-1300}	14680^{+560}_{-620}	11360^{+110}_{-150}
D157	8420^{+340}_{-330}	9470^{+280}_{-380}	8560^{+100}_{-110}
D158	8220^{+390}_{-430}	8050^{+430}_{-400}	8940^{+480}_{-530}
D159	-	16030^{+950}_{-1050}	13590^{+150}_{-130}
D160	7300^{+410}_{-580}	7970^{+850}_{-1060}	-
D161	7180^{+380}_{-380}	7110^{+540}_{-540}	-
D162	7350^{+430}_{-520}	7930^{+490}_{-630}	-
D163	8030^{+310}_{-410}	-	-
D164	7410^{+310}_{-370}	6710^{+160}_{-220}	-
D165	9450^{+380}_{-320}	11160^{+260}_{-330}	9760^{+70}_{-90}
D166	9210^{+230}_{-250}	11090^{+330}_{-180}	9280^{+70}_{-60}
D167	9400^{+330}_{-350}	11210 ± 260	9560^{+80}_{-60}

Table D.4. Measured electron temperatures from the nebular sample.

Reference number	$T_e(\text{[N II]})$ [K]	$T_e(\text{[S III]})$ [K]	$T_e(\text{[O III]})$ [K]
D168	10520 ⁺⁴²⁰ ₋₅₀₀	-	9190 ⁺¹⁴⁰ ₋₁₆₀
D169	8620 ⁺³⁸⁰ ₋₅₄₀	7790 ⁺⁴¹⁰ ₋₃₄₀	9680 ⁺¹³⁰ ₋₁₅₀
D170	40020 ⁺¹³³⁵⁰ ₋₅₉₃₀	-	9440 ± 430
D171	-	-	8830 ⁺²⁰⁰ ₋₂₄₀
D172	9730 ⁺²⁵⁰ ₋₃₂₀	-	9410 ⁺⁷⁰ ₋₆₀
D173	10220 ⁺¹⁹⁰ ₋₁₇₀	-	9580 ⁺⁸⁰ ₋₁₀₀
D174	8370 ⁺³⁵⁰ ₋₄₀₀	9010 ⁺¹³⁰ ₋₁₉₀	8520 ⁺¹⁵⁰ ₋₁₁₀
D175	8500 ⁺⁵³⁰ ₋₅₅₀	8740 ⁺⁴⁶⁰ ₋₅₀₀	9170 ⁺¹⁸⁰ ₋₂₀₀
D176	8800 ⁺²⁰⁰ ₋₁₄₀	9420 ⁺³¹⁰ ₋₃₂₀	8730 ⁺⁵⁰ ₋₆₀
D177	9090 ⁺³⁴⁰ ₋₃₅₀	-	8450 ⁺²⁸⁰ ₋₁₈₀
D178	-	-	9510 ⁺¹⁰⁰ ₋₇₀
D179	-	-	9150 ± 80
D180	-	-	13210 ⁺¹⁵⁰ ₋₂₀₀
D181	-	-	13750 ⁺³⁰⁰ ₋₃₆₀
D182	11050 ⁺⁹¹⁰ ₋₇₁₀	-	12740 ⁺¹⁸⁰ ₋₁₆₀
D183	-	-	13790 ⁺¹⁵⁰ ₋₁₇₀
D184	9240 ⁺²⁵⁰ ₋₃₄₀	-	11190 ⁺²⁴⁰ ₋₂₂₀
D185	9680 ⁺³⁸⁰ ₋₄₀₀	9740 ⁺³⁶⁰ ₋₄₆₀	9520 ⁺³³⁰ ₋₄₅₀
D186	7530 ⁺¹⁶⁰ ₋₁₇₀	7580 ⁺²²⁰ ₋₁₆₀	12440 ⁺³⁴⁰ ₋₃₀₀
D187	8090 ⁺²¹⁰ ₋₃₂₀	-	7950 ⁺⁵⁷⁰ ₋₇₅₀
D188	9280 ⁺¹⁷⁰ ₋₁₆₀	-	8340 ± 160
D189	9100 ⁺⁷⁴⁰ ₋₈₉₀	8020 ⁺²⁰⁰ ₋₁₉₀	7660 ⁺³⁷⁰ ₋₄₉₀
D190	8050 ⁺³³⁰ ₋₂₃₀	7960 ⁺²³⁰ ₋₁₈₀	8940 ⁺⁹⁷⁰ ₋₈₇₀
D191	7840 ⁺²²⁰ ₋₂₀₀	-	-
D192	7690 ⁺³¹⁰ ₋₃₉₀	-	-
D193	8500 ⁺⁸¹⁰ ₋₅₆₀	-	-
D194	9640 ⁺⁵⁶⁰ ₋₅₇₀	-	8250 ⁺⁴⁰⁰ ₋₃₅₀
D195	11010 ⁺⁴⁰⁰ ₋₄₆₀	10520 ± 220	11260 ⁺²³⁰ ₋₁₉₀
D196	9670 ⁺²⁴⁰ ₋₃₉₀	11840 ⁺⁴³⁰ ₋₄₆₀	9060 ± 180
D197	10620 ⁺¹¹²⁰ ₋₇₃₀	-	-
D198	10720 ⁺⁷⁰⁰ ₋₆₅₀	-	10710 ⁺³⁶⁰ ₋₃₄₀
D199	8340 ⁺¹⁴⁰ ₋₁₅₀	-	7310 ⁺³⁴⁰ ₋₂₉₀
D200	8930 ⁺²⁶⁰ ₋₂₄₀	8600 ⁺²³⁰ ₋₂₄₀	8360 ⁺¹⁴⁰ ₋₁₆₀
D201	8720 ⁺¹⁷⁰ ₋₂₃₀	-	8110 ⁺¹⁷⁰ ₋₁₈₀
D202	8120 ⁺⁹⁴⁰ ₋₁₂₂₀	7310 ⁺⁴⁰⁰ ₋₄₇₀	-
D203	7440 ⁺²⁹⁰ ₋₂₁₀	7380 ⁺³⁶⁰ ₋₂₁₀	-
D204	-	10700 ⁺⁷³⁰ ₋₇₁₀	-
D205	10490 ⁺⁴⁹⁰ ₋₅₃₀	-	9850 ⁺²⁵⁰ ₋₂₇₀
D206	8420 ⁺²³⁰ ₋₂₇₀	9400 ⁺¹⁵⁰ ₋₁₆₀	8150 ⁺¹⁵⁰ ₋₂₁₀
D207	9210 ⁺³⁴⁰ ₋₃₀₀	8730 ⁺¹⁶⁰ ₋₁₃₀	8800 ± 130
D208	7750 ⁺²⁹⁰ ₋₃₄₀	7920 ⁺²⁰⁰ ₋₃₀₀	7780 ± 500
D209	6710 ⁺¹⁷⁰ ₋₂₀₀	6420 ⁺³⁶⁰ ₋₃₂₀	-
D210	6960 ⁺¹⁵⁰ ₋₂₀₀	6270 ⁺¹²⁰ ₋₁₄₀	-
D211	7310 ⁺³⁵⁰ ₋₃₂₀	6410 ⁺³⁹⁰ ₋₄₆₀	-
D212	6580 ⁺⁷⁰ ₋₈₀	5840 ⁺¹⁰⁰ ₋₁₂₀	-
D213	6740 ⁺¹⁴⁰ ₋₂₅₀	5960 ⁺²⁴⁰ ₋₂₈₀	-
D214	6020 ⁺¹¹⁰ ₋₁₃₀	5430 ⁺¹⁸⁰ ₋₂₃₀	-
D215	5640 ⁺³⁰⁰ ₋₃₇₀	-	-
D216	6430 ⁺⁵⁵⁰ ₋₅₈₀	-	-
D217	8970 ⁺²³⁰ ₋₂₄₀	7530 ± 580	21620 ⁺¹⁸⁹⁰ ₋₃₁₇₀
D218	6280 ⁺¹⁹⁰ ₋₃₇₀	7130 ⁺³⁶⁰ ₋₄₉₀	-
D219	6550 ⁺⁴¹⁰ ₋₅₇₀	-	-
D220	8900 ⁺²⁰⁰ ₋₂₁₀	8160 ⁺¹²⁰ ₋₁₅₀	7960 ⁺⁸⁰ ₋₁₀₀
D221	8240 ⁺¹³⁰ ₋₁₄₀	8310 ⁺²¹⁰ ₋₁₈₀	7800 ⁺²⁵⁰ ₋₂₇₀
D222	9980 ⁺¹⁹⁰ ₋₂₃₀	9230 ⁺¹⁹⁰ ₋₂₄₀	8420 ⁺⁶⁰ ₋₅₀
D223	8530 ⁺¹⁵⁰ ₋₉₀	8100 ⁺¹¹⁰ ₋₁₃₀	8010 ⁺⁵⁰ ₋₄₀

Table D.4. Measured electron temperatures from the nebular sample.

Reference number	$T_e(\text{[N II]})$ [K]	$T_e(\text{[S III]})$ [K]	$T_e(\text{[O III]})$ [K]
D224	9930 ⁺¹⁹⁰ ₋₂₁₀	9170 ⁺¹⁴⁰ ₋₂₃₀	8410 ± 60
D225	8490 ⁺¹¹⁰ ₋₁₂₀	8030 ⁺¹⁷⁰ ₋₁₅₀	8100 ⁺⁹⁰ ₋₇₀
D226	9800 ⁺²⁰⁰ ₋₁₄₀	8730 ⁺¹⁷⁰ ₋₂₂₀	8510 ± 60
D227	10140 ⁺¹⁹⁰ ₋₂₁₀	9090 ⁺²²⁰ ₋₂₆₀	8530 ⁺⁵⁰ ₋₈₀
D228	9910 ⁺²⁰⁰ ₋₁₇₀	9010 ⁺²⁰⁰ ₋₁₉₀	8400 ± 50
D229	9930 ⁺²²⁰ ₋₁₆₀	8770 ⁺¹³⁰ ₋₁₉₀	8340 ⁺⁵⁰ ₋₆₀
D230	8220 ⁺¹⁶⁰ ₋₂₆₀	7950 ⁺²⁹⁰ ₋₂₅₀	-
D231	9550 ⁺²²⁰ ₋₂₆₀	9140 ⁺³⁰⁰ ₋₂₇₀	8340 ⁺⁶⁰ ₋₈₀
D232	9980 ⁺²⁴⁰ ₋₂₅₀	9540 ⁺³⁶⁰ ₋₄₇₀	8370 ± 50
D233	9580 ⁺⁴⁰⁰ ₋₄₂₀	9180 ⁺²⁵⁰ ₋₂₂₀	8160 ⁺²⁰⁰ ₋₂₂₀
D234	8380 ⁺¹⁰⁰ ₋₁₁₀	8650 ⁺¹⁸⁰ ₋₁₅₀	8030 ⁺⁷⁰ ₋₈₀
D235	-	10980 ⁺²⁰⁰ ₋₂₄₀	9310 ⁺¹⁷⁰ ₋₁₄₀
D236	8810 ⁺¹⁶⁰ ₋₂₁₀	8780 ⁺⁴⁵⁰ ₋₃₆₀	8450 ⁺³⁰ ₋₄₀
D237	11270 ⁺⁶²⁰ ₋₆₀₀	9070 ⁺²³⁰ ₋₃₀₀	9020 ⁺¹⁴⁰ ₋₁₆₀
D238	8650 ⁺²⁵⁰ ₋₃₅₀	-	8210 ⁺¹³⁰ ₋₁₂₀
D239	9830 ⁺¹²⁰ ₋₁₅₀	-	-
D240	10590 ⁺²⁶⁰ ₋₂₈₀	-	9990 ⁺²⁶⁰ ₋₃₈₀
D241	8200 ± 90	-	-
D242	9310 ⁺⁴³⁰ ₋₄₂₀	8250 ⁺⁸⁰ ₋₁₁₀	9080 ⁺²⁹⁰ ₋₃₈₀
D243	-	-	11470 ⁺⁸²⁰ ₋₁₂₉₀
D244	8100 ⁺¹⁵⁰ ₋₂₃₀	-	-
D245	7470 ⁺²⁵⁰ ₋₂₄₀	-	-
D246	8320 ⁺⁴¹⁰ ₋₄₆₀	-	-
D247	9510 ⁺³⁴⁰ ₋₃₅₀	-	9220 ⁺³³⁰ ₋₄₁₀
D248	7790 ⁺¹³⁰ ₋₂₂₀	-	-
D249	9290 ⁺²¹⁰ ₋₂₀₀	9280 ⁺¹⁷⁰ ₋₂₁₀	8920 ⁺¹³⁰ ₋₉₀
D250	-	-	10150 ⁺⁵³⁰ ₋₅₅₀
D251	-	-	10990 ⁺⁸⁴⁰ ₋₇₆₀
D252	12480 ⁺¹⁹⁷⁰ ₋₁₉₉₀	-	12120 ⁺¹⁰⁰ ₋₁₁₀
D253	-	14630 ⁺⁸⁴⁰ ₋₇₇₀	13290 ⁺²³⁰ ₋₂₆₀
D254	-	-	13340 ⁺⁶⁰ ₋₈₀
D255	-	-	13950 ± 150
D256	12060 ⁺¹⁷¹⁰ ₋₁₉₃₀	-	10920 ± 70
D257	10880 ⁺¹⁰²⁰ ₋₁₀₇₀	-	10690 ⁺⁷⁰ ₋₆₀
D258	-	-	11820 ⁺⁴⁵⁰ ₋₃₉₀
D259	-	-	15280 ⁺¹³⁰ ₋₁₅₀
D260	-	-	10010 ± 100
D261	-	-	9990 ± 100
D262	11170 ⁺⁴²⁰ ₋₅₆₀	-	10100 ⁺¹²⁰ ₋₁₄₀
D263	-	15110 ⁺⁶⁵⁰ ₋₇₁₀	14830 ⁺⁶⁶⁰ ₋₇₆₀
D264	-	12980 ⁺³²⁰ ₋₃₀₀	15950 ⁺³⁰⁰ ₋₃₅₀
D265	-	-	15070 ⁺³⁸⁰ ₋₃₄₀
D266	10790 ⁺¹³³⁰ ₋₁₁₁₀	-	11570 ⁺¹²⁰ ₋₁₃₀
D267	-	13410 ⁺³³⁰ ₋₃₀₀	14370 ⁺³⁴⁰ ₋₄₂₀
D268	-	-	13430 ⁺¹¹⁰ ₋₁₂₀
D269	-	-	13690 ⁺³²⁰ ₋₃₀₀
D270	-	-	12060 ⁺⁵¹⁰ ₋₄₆₀
D271	-	-	15660 ⁺²⁴⁰ ₋₂₁₀
D272	-	10410 ⁺³⁸⁰ ₋₅₀₀	11290 ⁺⁸⁹⁰ ₋₇₄₀
D273	-	12620 ⁺⁴⁵⁰ ₋₄₂₀	14760 ⁺⁵⁵⁰ ₋₅₀₀
D274	-	10230 ⁺³⁰⁰ ₋₃₈₀	11190 ⁺⁸⁹⁰ ₋₈₅₀
D275	-	-	15600 ⁺¹⁰⁰ ₋₁₃₀
D276	-	-	14640 ⁺¹⁵⁰ ₋₁₈₀
D277	-	-	13780 ⁺¹⁸⁰ ₋₁₇₀
D278	-	-	12840 ⁺¹⁰⁰ ₋₉₀
D279	-	-	12250 ⁺⁴⁰⁰ ₋₃₇₀

Table D.4. Measured electron temperatures from the nebular sample.

Reference number	$T_e(\text{[N II]})$ [K]	$T_e(\text{[S III]})$ [K]	$T_e(\text{[O III]})$ [K]
D280	-	-	12570^{+110}_{-150}
D281	-	-	11670^{+590}_{-820}
D282	9660^{+690}_{-820}	-	8440^{+580}_{-560}
D283	13350^{+1520}_{-1480}	-	16010^{+390}_{-360}
D284	10740^{+1140}_{-2120}	-	11280^{+120}_{-160}
D285	8380^{+220}_{-330}	-	8110^{+380}_{-390}
D286	8110^{+410}_{-450}	-	8730^{+300}_{-310}
D287	8990^{+470}_{-420}	-	8650^{+110}_{-150}
D288	8890^{+250}_{-320}	-	8210^{+230}_{-150}
D289	9110^{+860}_{-1000}	9420^{+300}_{-390}	8510 ± 240
D290	-	-	11050^{+110}_{-120}
D291	8540^{+840}_{-940}	8810^{+290}_{-240}	8220 ± 300
D292	8660^{+730}_{-560}	8990^{+310}_{-350}	8790^{+230}_{-310}
D293	8980^{+1080}_{-970}	8070^{+170}_{-320}	7990 ± 300
D294	-	9600^{+390}_{-700}	8260^{+310}_{-440}
D295	8710^{+1030}_{-1140}	8260^{+480}_{-600}	7870^{+360}_{-520}
D296	-	11310^{+420}_{-570}	10310^{+140}_{-210}
D297	-	9830^{+120}_{-100}	11000 ± 80
D298	6990^{+570}_{-650}	9570^{+1000}_{-1370}	-
D299	-	-	9630^{+230}_{-260}
D300	6200^{+450}_{-500}	-	-
D301	7810^{+270}_{-380}	6800^{+360}_{-380}	-
D302	7330^{+380}_{-340}	-	-
D303	-	-	9490^{+330}_{-320}
D304	8060^{+410}_{-430}	6740^{+230}_{-270}	-
D305	8150^{+270}_{-310}	-	-
D306	8740^{+620}_{-470}	8560^{+590}_{-520}	-
D307	7820^{+490}_{-620}	6630^{+400}_{-350}	-
D308	6590^{+430}_{-370}	-	-
D309	6920^{+220}_{-300}	-	-
D310	-	-	9050^{+560}_{-610}
D311	8180^{+340}_{-400}	-	-
D312	12030^{+1710}_{-1890}	-	12740^{+250}_{-160}
D313	11080^{+290}_{-320}	11570^{+160}_{-200}	10180 ± 60
D314	-	11380^{+130}_{-220}	-
D315	10060^{+630}_{-680}	10860^{+630}_{-560}	10860^{+190}_{-170}
D316	-	11170^{+960}_{-1070}	10820^{+440}_{-420}
D317	10720^{+400}_{-490}	10080^{+130}_{-140}	10190^{+50}_{-60}
D318	-	7280^{+140}_{-130}	9330^{+140}_{-200}
D319	13730^{+100}_{-90}	17790^{+280}_{-390}	15510^{+90}_{-100}
D320	11870^{+680}_{-840}	14030^{+620}_{-520}	15570^{+360}_{-390}
D321	7770^{+440}_{-480}	7020^{+180}_{-210}	-
D322	7970^{+340}_{-410}	7120^{+150}_{-190}	9390^{+450}_{-280}
D323	7040^{+480}_{-580}	6510^{+310}_{-350}	-
D324	8260^{+500}_{-490}	7260^{+190}_{-290}	8370^{+350}_{-460}
D325	7270^{+380}_{-450}	6430^{+230}_{-270}	-
D326	-	6470^{+420}_{-450}	-
D327	8520^{+530}_{-560}	8100^{+200}_{-310}	8810^{+410}_{-510}
D328	8850^{+180}_{-190}	-	9880^{+310}_{-300}
D329	7800^{+390}_{-380}	6890^{+260}_{-330}	10800^{+390}_{-420}
D330	7680^{+370}_{-340}	6860^{+220}_{-230}	-
D331	-	7750^{+560}_{-740}	-
D332	-	7720^{+860}_{-680}	10180^{+1050}_{-1080}
D333	7290^{+300}_{-390}	6430^{+270}_{-200}	-
D334	11430^{+1340}_{-1360}	14630^{+660}_{-860}	11550^{+180}_{-230}

Table D.4. Measured electron temperatures from the nebular sample.

Reference number	$T_e(\text{[N II]})$ [K]	$T_e(\text{[S III]})$ [K]	$T_e(\text{[O III]})$ [K]
D335	11970 ⁺⁴⁶⁰ ₋₅₇₀	11330 ± 140	11320 ⁺¹⁰⁰ ₋₈₀
D336	14330 ⁺²³⁷⁰ ₋₁₈₇₀	-	11770 ⁺²⁸⁰ ₋₁₉₀
D337	-	-	13980 ⁺¹⁶⁰ ₋₁₂₀
D338	-	-	13790 ⁺⁴⁷⁰ ₋₄₁₀
D339	-	-	13090 ⁺⁴⁴⁰ ₋₆₉₀
D340	-	-	11720 ⁺⁴⁶⁰ ₋₃₃₀
D341	15590 ⁺²⁸⁰⁰ ₋₃₂₈₀	-	12510 ⁺²⁸⁰ ₋₃₇₀
D342	-	16000 ⁺⁷⁸⁰ ₋₉₀₀	13140 ⁺²¹⁰ ₋₂₅₀
D343	-	14050 ⁺²⁴⁰ ₋₁₈₀	13000 ⁺⁶⁰ ₋₇₀
D344	-	-	20420 ⁺¹²⁰ ₋₁₈₀
D345	-	-	19930 ⁺¹²⁰ ₋₁₄₀
D346	-	-	20140 ⁺³¹⁰ ₋₂₄₀
D347	-	-	21420 ⁺³⁵⁰ ₋₃₀₀
D348	-	-	20900 ⁺³⁴⁰ ₋₂₇₀
D349	-	-	20940 ⁺⁵²⁰ ₋₄₃₀
D350	-	-	22180 ⁺⁵⁹⁰ ₋₅₁₀
D351	-	-	20250 ⁺³²⁰ ₋₂₈₀
D352	24120 ⁺³⁶⁴⁰ ₋₃₆₉₀	-	21300 ⁺²⁶⁰ ₋₂₅₀
D353	-	-	20500 ⁺³¹⁰ ₋₂₄₀
D354	-	13230 ⁺⁴⁵⁰ ₋₄₁₀	20460 ⁺¹⁹⁰ ₋₁₆₀
D355	-	-	19230 ⁺³⁸⁰ ₋₄₂₀
D356	-	-	12700 ⁺¹¹⁰ ₋₁₂₀
D357	-	-	13000 ⁺¹³⁰ ₋₁₂₀
D358	-	-	18960 ⁺¹⁶⁰ ₋₂₃₀
D359	-	-	15290 ⁺¹⁸⁰ ₋₁₆₀
D360	-	-	18380 ⁺¹⁹⁰ ₋₂₆₀
D361	-	-	16870 ⁺⁹⁰ ₋₁₃₀
D362	-	17540 ⁺⁵⁴⁰ ₋₆₈₀	17510 ⁺²⁴⁰ ₋₂₈₀
D363	19000 ⁺¹⁴³⁰ ₋₁₇₄₀	-	20140 ± 280
D364	-	20550 ⁺²⁶⁸⁰ ₋₃₃₅₀	21710 ⁺⁴⁸⁰ ₋₄₉₀
D365	-	12300 ⁺⁵⁴⁰ ₋₆₄₀	14940 ⁺³²⁰ ₋₂₈₀
D366	-	13340 ⁺²⁵⁰ ₋₄₀₀	13820 ⁺¹³⁰ ₋₁₆₀
D367	-	-	16030 ⁺²⁶⁰ ₋₂₈₀
D368	-	-	14840 ⁺⁵³⁰ ₋₇₀₀
D369	-	-	17770 ⁺²¹⁰ ₋₂₀₀
D370	-	18580 ⁺⁷⁹⁰ ₋₈₅₀	19160 ⁺⁴⁶⁰ ₋₄₄₀
D371	-	-	19910 ⁺²⁹⁰ ₋₂₆₀
D372	-	-	14760 ⁺¹⁷⁰ ₋₁₀₀
D373	-	-	14060 ⁺¹⁵⁰ ₋₁₃₀
D374	25510 ⁺²⁴³⁰ ₋₂₁₁₀	21900 ⁺¹⁵⁶⁰ ₋₁₂₃₀	19010 ⁺⁴⁸⁰ ₋₄₇₀
D375	25450 ⁺²⁸⁷⁰ ₋₂₁₆₀	23600 ⁺¹¹⁸⁰ ₋₁₄₉₀	18970 ⁺³⁴⁰ ₋₄₈₀
D376	-	-	16030 ⁺¹¹⁰ ₋₇₀
D377	-	12920 ⁺³²⁰ ₋₄₉₀	12950 ⁺²⁸⁰ ₋₄₀₀
D378	-	-	20620 ⁺³⁷⁰ ₋₅₀₀
D379	-	-	16580 ⁺²⁷⁰ ₋₂₅₀
D380	-	13060 ⁺⁵⁶⁰ ₋₅₅₀	13340 ⁺³²⁰ ₋₃₆₀
D381	-	-	17340 ⁺¹⁹⁰ ₋₂₀₀
D382	-	-	15940 ⁺¹⁸⁰ ₋₁₅₀
D383	-	13630 ⁺⁴³⁰ ₋₄₆₀	13960 ± 200
D384	-	10420 ± 260	10830 ⁺¹⁹⁰ ₋₂₂₀
D385	-	12250 ± 520	11530 ⁺¹⁹⁰ ₋₁₆₀
D386	-	-	16900 ⁺¹⁹⁰ ₋₁₄₀
D387	-	30810 ⁺²²⁷⁰ ₋₂₃₁₀	17200 ⁺³¹⁰ ₋₄₃₀
D388	-	14150 ⁺⁶⁵⁰ ₋₅₀₀	12320 ⁺²⁴⁰ ₋₂₂₀
D389	-	-	14210 ± 100
D390	15520 ⁺⁷⁸⁰ ₋₆₃₀	-	15730 ⁺²⁵⁰ ₋₃₀₀

Table D.4. Measured electron temperatures from the nebular sample.

Reference number	$T_e(\text{[N II]})$ [K]	$T_e(\text{[S III]})$ [K]	$T_e(\text{[O III]})$ [K]
D391	-	12230 ⁺⁴⁰⁰ ₋₄₈₀	12750 ⁺³⁴⁰ ₋₂₃₀
D392	13630 ⁺¹⁴²⁰ ₋₁₆₇₀	-	15090 ⁺³⁵⁰ ₋₄₆₀
D393	-	17800 ⁺⁹⁷⁰ ₋₁₅₁₀	19610 ⁺¹²⁰ ₋₁₄₀
D394	-	11490 ⁺⁹⁴⁰ ₋₅₀₀	12110 ± 510
D395	-	-	14410 ⁺¹⁰⁰ ₋₁₅₀
D396	-	12900 ⁺¹⁴⁰ ₋₁₈₀	13740 ⁺⁶⁰ ₋₇₀
D397	-	-	13390 ⁺²⁰⁰ ₋₁₇₀
D398	-	9850 ⁺³⁸⁰ ₋₂₅₀	11250 ⁺¹⁷⁰ ₋₃₁₀
D399	13150 ⁺⁶⁸⁰ ₋₈₀₀	11390 ⁺⁴³⁰ ₋₃₄₀	12530 ⁺³¹⁰ ₋₂₂₀
D400	10770 ⁺⁸⁴⁰ ₋₇₃₀	-	12420 ⁺⁶⁰ ₋₄₀
D401	12080 ⁺³²⁰ ₋₄₀₀	16290 ⁺⁵⁸⁰ ₋₅₄₀	12520 ⁺²²⁰ ₋₂₀₀
D402	11930 ⁺²³⁰ ₋₂₇₀	16010 ⁺⁶¹⁰ ₋₈₄₀	12810 ⁺¹⁸⁰ ₋₂₄₀
D403	13120 ⁺³⁹⁰ ₋₃₅₀	21720 ⁺¹⁰⁸⁰ ₋₁₂₈₀	13880 ⁺²⁹⁰ ₋₁₈₀
D404	-	13380 ⁺⁸⁸⁰ ₋₇₈₀	12050 ⁺²²⁰ ₋₁₅₀
D405	-	-	12800 ⁺¹²⁰ ₋₉₀
D406	-	-	12550 ⁺³⁰⁰ ₋₃₇₀
D407	11110 ⁺¹⁴¹⁰ ₋₈₄₀	-	12060 ⁺¹⁴⁰ ₋₁₉₀
D408	11550 ± 80	-	12190 ⁺⁹⁰ ₋₈₀
D409	-	-	12000 ⁺¹⁴⁰ ₋₉₀
D410	11990 ⁺¹¹⁴⁰ ₋₈₁₀	-	11970 ⁺⁹⁰ ₋₁₁₀
D411	11920 ⁺³³⁰ ₋₃₄₀	-	12180 ± 100
D412	11140 ⁺⁹⁶⁰ ₋₁₁₂₀	-	11920 ⁺¹¹⁰ ₋₉₀
D413	-	11040 ⁺⁶⁰⁰ ₋₆₃₀	11330 ⁺²⁵⁰ ₋₁₇₀
D414	-	12540 ⁺³⁰⁰ ₋₅₈₀	13500 ⁺²³⁰ ₋₂₇₀
D415	-	-	14660 ⁺²⁸⁰ ₋₂₀₀
D416	-	-	14620 ⁺²⁶⁰ ₋₃₁₀
D417	-	-	15320 ⁺¹³⁰ ₋₁₅₀
D418	-	-	15000 ⁺¹⁵⁰ ₋₁₃₀
D419	-	-	15070 ⁺³²⁰ ₋₃₀₀
D420	-	-	15060 ⁺¹²⁰ ₋₁₆₀
D421	-	-	15050 ⁺¹⁴⁰ ₋₂₀₀
D422	-	-	11300 ⁺¹⁸⁰ ₋₂₉₀
D423	-	25260 ⁺¹¹⁶⁰ ₋₁₄₅₀	20020 ⁺¹⁸⁰ ₋₂₉₀
D424	-	-	19600 ⁺²⁹⁰ ₋₂₆₀
D425	9360 ⁺²⁹⁰ ₋₃₄₀	12520 ⁺²¹⁰ ₋₁₆₀	11790 ⁺³⁰ ₋₆₀
D426	-	12150 ⁺¹⁷⁰ ₋₂₃₀	12360 ⁺¹⁴⁰ ₋₉₀
D427	-	13430 ⁺¹⁵⁰ ₋₂₂₀	12160 ⁺⁶⁰ ₋₅₀
D428	-	-	13020 ⁺¹⁴⁰ ₋₁₅₀
D429	-	-	14330 ⁺²⁴⁰ ₋₁₉₀
D430	11940 ⁺⁸⁸⁰ ₋₁₀₉₀	-	13810 ⁺¹⁴⁰ ₋₁₂₀
D431	-	-	15920 ± 140
D432	-	-	15720 ⁺¹⁷⁰ ₋₁₆₀
D433	-	-	16450 ⁺²⁵⁰ ₋₂₈₀
D434	-	-	15940 ⁺¹⁷⁰ ₋₁₉₀
D435	-	-	15640 ⁺²¹⁰ ₋₁₅₀
D436	-	-	15760 ⁺²⁰⁰ ₋₂₄₀
D437	24970 ⁺³⁶²⁰ ₋₃₀₄₀	-	14430 ⁺¹³⁰ ₋₁₄₀
D438	-	-	17760 ± 200
D439	-	-	17480 ⁺²⁶⁰ ₋₃₈₀
D440	-	-	16630 ⁺²⁸⁰ ₋₂₃₀
D441	-	-	12380 ± 150
D442	-	-	10620 ⁺¹⁷⁰ ₋₂₆₀
D443	11080 ⁺¹¹²⁰ ₋₁₁₇₀	-	9630 ⁺⁸²⁰ ₋₆₇₀
D444	-	-	11220 ⁺¹⁸⁰ ₋₁₃₀
D445	-	-	12050 ⁺⁴⁴⁰ ₋₄₁₀
D446	-	-	13510 ⁺³¹⁰ ₋₂₉₀

Table D.4. Measured electron temperatures from the nebular sample.

Reference number	$T_e(\text{[N II]})$ [K]	$T_e(\text{[S III]})$ [K]	$T_e(\text{[O III]})$ [K]
D447	-	-	13070^{+800}_{-620}
D448	-	-	15960^{+770}_{-920}
D449	-	-	13960 ± 120
D450	-	-	13650^{+140}_{-200}
D451	-	16010^{+600}_{-430}	16950^{+310}_{-270}
D452	-	10440^{+550}_{-460}	15170^{+600}_{-370}

Table D.5. Adopted electron temperatures for the nebular sample. The information in this table is derived from the values in Table D.4 and the T_e relations from Garnett (1992) and Méndez-Delgado et al. (2023).

Reference number	$T_e([\text{N II}])$ [K]	$T_e([\text{O III}])$ [K]	$T_0(\text{O}^{2+})$ [K]
D1	10990 ⁺³¹⁰ ₋₂₁₀	11410 ⁺³²⁰ ₋₂₂₀	9510 ⁺²⁷⁰ ₋₁₈₀
D2	12150 ⁺¹⁹⁰ ₋₂₄₀	13070 ⁺²⁰⁰ ₋₂₆₀	10880 ⁺¹⁷⁰ ₋₂₂₀
D3	13020 ⁺²¹⁰ ₋₁₄₀	14310 ⁺²³⁰ ₋₁₅₀	11890 ⁺¹⁹⁰ ₋₁₃₀
D4	13100 ⁺³⁹⁰ ₋₃₃₀	14430 ⁺⁴³⁰ ₋₃₆₀	11990 ⁺³⁶⁰ ₋₃₀₀
D5	12310 ⁺¹²⁰ ₋₁₅₀	13300 ⁺¹³⁰ ₋₁₆₀	11060 ⁺¹¹⁰ ₋₁₄₀
D6	11740 ⁺¹³⁰ ₋₂₇₀	12490 ⁺¹⁵⁰ ₋₂₉₀	10400 ⁺¹³⁰ ₋₂₄₀
D7	11110 ⁺¹⁸⁰ ₋₂₂₀	11590 ⁺¹⁹⁰ ₋₂₃₀	9660 ⁺¹⁵⁰ ₋₁₉₀
D8	11010 ⁺⁴⁷⁰ ₋₅₁₀	11450 ⁺⁴⁹⁰ ₋₅₃₀	9540 ⁺⁴¹⁰ ₋₄₄₀
D9	11460 ± 290	12090 ⁺³⁰⁰ ₋₃₁₀	10070 ⁺²⁵⁰ ₋₂₆₀
D10	11950 ⁺²²⁰ ₋₁₄₀	12780 ⁺²³⁰ ₋₁₅₀	10640 ⁺¹⁹⁰ ₋₁₃₀
D11	12390 ⁺²⁰⁰ ₋₁₉₀	13420 ⁺²²⁰ ₋₂₀₀	11160 ⁺¹⁸⁰ ₋₁₇₀
D12	11580 ⁺¹⁷⁰ ₋₁₉₀	12260 ⁺¹⁸⁰ ₋₂₀₀	10210 ⁺¹⁵⁰ ₋₁₇₀
D13	10090 ⁺⁸²⁰ ₋₆₉₀	10120 ⁺⁸²⁰ ₋₇₀₀	8460 ⁺⁶⁹⁰ ₋₅₈₀
D14	12150 ⁺²⁵⁰ ₋₂₈₀	13070 ⁺²⁷⁰ ₋₃₁₀	10870 ⁺²³⁰ ₋₂₅₀
D15	11060 ⁺²⁹⁰ ₋₄₂₀	11520 ⁺³⁰⁰ ₋₄₃₀	9600 ⁺²⁵⁰ ₋₃₆₀
D16	12110 ⁺⁵³⁰ ₋₅₅₀	13010 ⁺⁵⁷⁰ ₋₅₉₀	10830 ⁺⁴⁷⁰ ₋₄₉₀
D17	11350 ⁺³⁹⁰ ₋₄₁₀	11930 ⁺⁴¹⁰ ₋₄₄₀	9940 ⁺³⁴⁰ ₋₃₆₀
D18	9790 ⁺⁷⁹⁰ ₋₇₁₀	9700 ⁺⁷⁹⁰ ₋₇₀₀	8120 ⁺⁶⁶⁰ ₋₅₈₀
D19	16200 ⁺³⁹⁰ ₋₄₉₀	18860 ⁺⁴⁵⁰ ₋₅₇₀	15620 ⁺³⁸⁰ ₋₄₇₀
D20	16390 ⁺⁵²⁰ ₋₄₁₀	19120 ⁺⁶⁰⁰ ₋₄₇₀	15830 ⁺⁵⁰⁰ ₋₃₉₀
D21	12990 ⁺²³⁰ ₋₂₈₀	14270 ⁺²⁵⁰ ₋₃₁₀	11860 ⁺²¹⁰ ₋₂₅₀
D22	15170 ⁺⁵⁰⁰ ₋₄₅₀	17380 ⁺⁵⁷⁰ ₋₅₂₀	14410 ⁺⁴⁸⁰ ₋₄₃₀
D23	11180 ⁺⁴²⁰ ₋₄₈₀	11690 ⁺⁴⁴⁰ ₋₅₁₀	9750 ⁺³⁶⁰ ₋₄₂₀
D24	11200 ⁺⁴²⁰ ₋₄₁₀	11720 ⁺⁴⁴⁰ ₋₄₃₀	9770 ⁺³⁷⁰ ₋₃₆₀
D25	13250 ⁺³⁴⁰ ₋₃₁₀	14650 ⁺³⁸⁰ ₋₃₅₀	12170 ⁺³¹⁰ ₋₂₉₀
D26	10140 ⁺⁷⁶⁰ ₋₁₃₂₀	10200 ⁺⁷⁶⁰ ₋₁₃₂₀	8530 ⁺⁶⁴⁰ ₋₁₁₁₀
D27	11730 ⁺¹⁹⁰ ₋₂₃₀	12470 ⁺²⁰⁰ ₋₂₄₀	10390 ⁺¹⁷⁰ ₋₂₀₀
D28	13960 ⁺⁹⁰ ₋₆₀	15660 ⁺¹⁰⁰ ₋₇₀	12990 ⁺⁸⁰ ₋₆₀
D29	12080 ⁺³¹⁰ ₋₂₇₀	12960 ⁺³⁴⁰ ₋₂₉₀	10790 ⁺²⁸⁰ ₋₂₄₀
D30	11640 ⁺⁴⁵⁰ ₋₃₇₀	12340 ⁺⁴⁸⁰ ₋₃₉₀	10280 ⁺⁴⁰⁰ ₋₃₃₀
D31	11950 ⁺⁴⁵⁰ ₋₄₆₀	12780 ⁺⁴⁸⁰ ₋₄₉₀	10640 ⁺⁴⁰⁰ ₋₄₁₀
D32	9980 ⁺²⁹⁰ ₋₂₈₀	9970 ⁺²⁹⁰ ₋₂₈₀	8340 ⁺²⁵⁰ ₋₂₃₀
D33	9970 ⁺¹⁰⁰⁰ ₋₁₀₉₀	9960 ⁺¹⁰⁰⁰ ₋₁₀₉₀	8330 ⁺⁸³⁰ ₋₉₁₀
D34	10460 ⁺⁹⁸⁰ ₋₁₁₃₀	10660 ⁺¹⁰⁰⁰ ₋₁₁₅₀	8900 ⁺⁸³⁰ ₋₉₆₀
D35	12380 ⁺³²⁰ ₋₂₆₀	13400 ⁺³⁵⁰ ₋₂₈₀	11140 ⁺²⁹⁰ ₋₂₄₀
D36	11790 ⁺²⁴⁰ ₋₂₆₀	12550 ⁺²⁵⁰ ₋₂₈₀	10450 ⁺²¹⁰ ₋₂₃₀
D37	10140 ⁺⁹⁵⁰ ₋₁₃₀₀	10190 ⁺⁹⁵⁰ ₋₁₃₁₀	8520 ⁺⁸⁰⁰ ₋₁₁₀₀
D38	13480 ⁺²⁷⁰ ₋₂₀₀	14970 ⁺²⁹⁰ ₋₂₂₀	12430 ⁺²⁴⁰ ₋₁₉₀
D39	12060 ⁺²³⁰ ₋₂₆₀	12940 ⁺²⁵⁰ ₋₂₈₀	10770 ⁺²¹⁰ ₋₂₃₀
D40	12930 ⁺¹⁹⁰ ₋₁₇₀	14190 ⁺²⁰⁰ ₋₁₉₀	11790 ⁺¹⁷⁰ ₋₁₅₀
D41	17000 ⁺³³⁰ ₋₂₈₀	20000 ⁺³⁸⁰ ₋₃₃₀	16550 ⁺³²⁰ ₋₂₇₀
D42	10840 ⁺³²⁰ ₋₃₆₀	11200 ⁺³³⁰ ₋₃₇₀	9340 ⁺²⁸⁰ ₋₃₁₀
D43	10140 ⁺⁶⁰⁰ ₋₁₂₁₀	10190 ⁺⁶¹⁰ ₋₁₂₁₀	8520 ⁺⁵¹⁰ ₋₁₀₁₀
D44	10640 ⁺³⁵⁰ ₋₄₃₀	10920 ⁺³⁵⁰ ₋₄₅₀	9110 ⁺³⁰⁰ ₋₃₇₀
D45	9590 ⁺¹⁵²⁰ ₋₁₂₈₀	9360 ⁺¹⁴⁸⁰ ₋₁₂₅₀	7880 ⁺¹²⁵⁰ ₋₁₀₅₀
D46	10440 ⁺³²⁰ ₋₃₅₀	10630 ⁺³³⁰ ₋₃₅₀	8880 ⁺²⁷⁰ ₋₂₉₀
D47	9940 ⁺⁹³⁰ ₋₉₈₀	9920 ⁺⁹³⁰ ₋₉₇₀	8290 ⁺⁷⁸⁰ ₋₈₁₀
D48	9880 ⁺²⁷⁰ ₋₃₅₀	9830 ⁺²⁶⁰ ₋₃₅₀	8220 ⁺²²⁰ ₋₂₉₀
D49	10220 ⁺⁴²⁰ ₋₃₈₀	10320 ⁺⁴²⁰ ₋₃₈₀	8620 ⁺³⁵⁰ ₋₃₂₀
D50	12130 ⁺⁴³⁰ ₋₄₁₀	13040 ⁺⁴⁶⁰ ₋₄₄₀	10850 ⁺³⁸⁰ ₋₃₇₀
D51	10490 ⁺⁴⁹⁰ ₋₃₄₀	10700 ⁺⁵⁰⁰ ₋₃₅₀	8930 ⁺⁴²⁰ ₋₂₉₀
D52	12740 ⁺⁴³⁰ ₋₅₃₀	13910 ⁺⁴⁷⁰ ₋₅₈₀	11560 ⁺³⁹⁰ ₋₄₈₀
D53	12860 ⁺⁹⁰ ₋₁₀₀	14090 ⁺¹⁰⁰ ₋₁₁₀	11710 ± 90
D54	14230 ⁺¹¹⁰ ₋₁₀₀	16040 ⁺¹³⁰ ₋₁₂₀	13310 ⁺¹¹⁰ ₋₁₀₀

Table D.5. Adopted electron temperatures for the nebular sample. The information in this table is derived from the values in Table D.4 and the T_e relations from Garnett (1992) and Méndez-Delgado et al. (2023).

Reference number	T_e ([N II]) [K]	T_e ([O III]) [K]	T_0 (O ²⁺) [K]
D55	10780 ⁺⁵⁶⁰ ₋₇₇₀	11110 ⁺⁵⁸⁰ ₋₈₀₀	9270 ⁺⁴⁸⁰ ₋₆₇₀
D56	12410 ⁺⁶⁰ ₋₅₀	13440 ⁺⁶⁰ ₋₅₀	11180 ⁺⁵⁰ ₋₄₀
D57	10170 ⁺⁵¹⁰ ₋₆₂₀	10240 ⁺⁵¹⁰ ₋₆₂₀	8550 ⁺⁴³⁰ ₋₅₂₀
D58	10840 ± 200	11190 ± 210	9340 ± 170
D59	12020 ⁺¹³⁰ ₋₉₀	12880 ⁺¹⁴⁰ ₋₉₀	10720 ⁺¹²⁰ ₋₈₀
D60	10840 ⁺⁴¹⁰ ₋₃₅₀	11190 ⁺⁴²⁰ ₋₃₆₀	9340 ⁺³⁵⁰ ₋₃₀₀
D61	10860 ⁺⁴³⁰ ₋₄₄₀	11230 ⁺⁴⁵⁰ ₋₄₆₀	9360 ⁺³⁷⁰ ₋₃₈₀
D62	10530 ⁺³⁸⁰ ₋₄₇₀	10750 ⁺³⁹⁰ ₋₄₈₀	8980 ⁺³²⁰ ₋₄₀₀
D63	9540 ⁺¹⁸⁰ ₋₁₆₀	9340 ⁺¹⁸⁰ ₋₁₆₀	7820 ⁺¹⁵⁰ ₋₁₃₀
D64	9260 ⁺⁴³⁰ ₋₃₆₀	8940 ⁺⁴²⁰ ₋₃₅₀	7490 ⁺³⁵⁰ ₋₂₉₀
D65	15860 ⁺²⁴⁰ ₋₄₁₀	18370 ⁺²⁸⁰ ₋₄₈₀	15210 ⁺²³⁰ ₋₄₀₀
D66	12550 ⁺⁴³⁰ ₋₃₆₀	13640 ⁺⁴⁷⁰ ₋₃₉₀	11340 ⁺³⁹⁰ ₋₃₃₀
D67	13170 ± 150	14520 ⁺¹⁷⁰ ₋₁₆₀	12060 ⁺¹⁴⁰ ₋₁₃₀
D68	9760 ⁺²²⁰ ₋₂₇₀	9660 ⁺²²⁰ ₋₂₇₀	8080 ⁺¹⁸⁰ ₋₂₂₀
D69	12960 ⁺⁴¹⁰ ₋₃₃₀	14220 ⁺⁴⁵⁰ ₋₄₂₀	11820 ⁺³⁸⁰ ₋₃₅₀
D70	11620 ⁺²⁷⁰ ₋₂₇₀	12310 ⁺³²⁰ ₋₂₉₀	10250 ⁺³²⁰ ₋₂₄₀
D71	7760 ⁺⁵¹⁰ ₋₆₈₀	6820 ⁺⁴⁵⁰ ₋₆₀₀	5740 ± 380
D72	14470 ⁺¹⁵⁰ ₋₁₆₀	16390 ⁺¹⁷⁰ ₋₁₈₀	13590 ⁺¹⁴⁰ ₋₁₅₀
D73	12830 ⁺³⁰⁰ ₋₂₀₀	14040 ⁺³²⁰ ₋₂₂₀	11670 ⁺²⁷⁰ ₋₁₈₀
D74	10600 ⁺⁷⁰ ₋₆₀	10850 ± 70	9060 ± 60
D75	15350 ⁺²³⁰ ₋₂₀₀	17640 ⁺²⁶⁰ ₋₂₃₀	14620 ⁺²²⁰ ₋₁₉₀
D76	11720 ⁺¹²⁰ ₋₉₀	12450 ⁺¹³⁰ ₋₁₀₀	10370 ⁺¹¹⁰ ₋₈₀
D77	11370 ⁺¹⁵⁰ ₋₁₆₀	11950 ⁺¹⁶⁰ ₋₁₇₀	9960 ⁺¹³⁰ ₋₁₄₀
D78	15680 ⁺¹⁴⁰ ₋₁₉₀	18110 ⁺¹⁷⁰ ₋₂₂₀	15000 ⁺¹⁴⁰ ₋₁₈₀
D79	16350 ⁺³⁹⁰ ₋₃₈₀	19070 ± 450	15790 ± 370
D80	16310 ⁺²³⁰ ₋₂₂₀	19020 ⁺²⁷⁰ ₋₂₅₀	15750 ⁺²²⁰ ₋₂₁₀
D81	14540 ⁺¹⁹⁸⁰ ₋₂₇₅₀	12460 ⁺²¹⁰ ₋₂₂₀	13680 ± 1860
D82	14040 ⁺¹²⁰ ₋₁₇₀	15780 ⁺¹⁴⁰ ₋₁₉₀	13090 ⁺¹²⁰ ₋₁₆₀
D83	12020 ⁺⁴⁶⁰ ₋₅₇₀	16170 ⁺²⁵⁰ ₋₂₉₀	10720 ± 410
D84	11720 ⁺²⁸⁰ ₋₃₆₀	12460 ⁺³⁰⁰ ₋₃₈₀	10380 ⁺²⁵⁰ ₋₃₁₀
D85	8170 ⁺³¹⁰ ₋₃₇₀	7390 ⁺²⁸⁰ ₋₃₃₀	6220 ⁺²³⁰ ₋₂₈₀
D86	8620 ⁺³¹⁰ ₋₃₈₀	8040 ⁺²⁹⁰ ₋₃₅₀	6750 ⁺²⁴⁰ ₋₃₀₀
D87	12050 ⁺⁷⁰ ₋₁₀₀	12930 ⁺⁷⁰ ₋₁₁₀	10760 ⁺⁶⁰ ₋₉₀
D88	16920 ⁺²²⁰ ₋₂₀₀	19890 ⁺²⁶⁰ ₋₂₃₀	16460 ⁺²²⁰ ₋₁₉₀
D89	15630 ⁺²⁶⁰ ₋₂₇₀	18050 ⁺³⁰⁰ ₋₃₂₀	14950 ⁺²⁴⁰ ₋₂₆₀
D90	12040 ⁺⁶³⁰ ₋₆₄₀	12910 ⁺⁶⁷⁰ ₋₆₉₀	10740 ⁺⁵⁶⁰ ₋₅₇₀
D91	11240 ± 50	11770 ± 50	9810 ± 40
D92	11100 ⁺³⁶⁰ ₋₃₈₀	12500 ⁺²⁴⁰ ₋₂₃₀	9650 ± 320
D93	11920 ⁺³⁰⁰ ₋₂₇₀	12740 ⁺³²⁰ ₋₂₉₀	10600 ⁺²⁶⁰ ₋₂₄₀
D94	15870 ⁺⁹⁰ ₋₁₀₀	18390 ⁺¹⁰⁰ ₋₁₁₀	15230 ⁺⁸⁰ ₋₉₀
D95	12840 ⁺²⁷⁰ ₋₂₈₀	14060 ⁺²⁹⁰ ₋₃₀₀	11680 ⁺²⁴⁰ ₋₂₅₀
D96	13840 ⁺²⁸⁰ ₋₃₄₀	15480 ⁺³¹⁰ ₋₃₈₀	12850 ⁺²⁶⁰ ₋₃₁₀
D97	15500 ⁺¹⁹⁰ ₋₂₂₀	17860 ⁺²¹⁰ ₋₂₆₀	14800 ⁺¹⁸⁰ ₋₂₁₀
D98	16460 ⁺¹⁶⁰ ₋₂₂₀	19230 ⁺¹⁹⁰ ₋₂₆₀	15920 ⁺¹⁶⁰ ₋₂₁₀
D99	13730 ⁺¹⁹⁰ ₋₁₈₀	15330 ⁺²¹⁰ ₋₂₀₀	12730 ⁺¹⁸⁰ ₋₁₇₀
D100	16420 ⁺²¹⁰ ₋₁₉₀	19160 ⁺²⁵⁰ ₋₂₂₀	15870 ⁺²⁰⁰ ₋₁₈₀
D101	12120 ⁺¹²⁷⁰ ₋₁₅₀₀	13370 ± 130	10840 ± 1140
D102	12330 ⁺⁷⁰ ₋₁₁₀	13320 ⁺⁸⁰ ₋₁₂₀	11080 ⁺⁶⁰ ₋₁₀₀
D103	15470 ⁺¹⁹⁰ ₋₁₅₀	17820 ⁺²²⁰ ₋₁₈₀	14760 ⁺¹⁸⁰ ₋₁₅₀
D104	12210 ± 160	13160 ⁺¹⁸⁰ ₋₁₇₀	10950 ⁺¹⁵⁰ ₋₁₄₀
D105	14320 ± 270	16180 ± 310	13420 ⁺²³⁰ ₋₂₆₀
D106	14330 ⁺⁵⁹⁰ ₋₅₅₀	12360 ⁺¹⁵⁰ ₋₁₃₀	13430 ± 560
D107	20100 ⁺³⁹⁰ ₋₄₉₀	24430 ⁺⁴⁷⁰ ₋₆₀₀	20180 ⁺³⁹⁰ ₋₄₉₀
D108	11480 ⁺⁸⁰ ₋₇₀	12110 ± 80	10090 ⁺⁷⁰ ₋₆₀
D109	11600 ⁺²⁴⁰ ₋₁₉₀	12280 ⁺²⁵⁰ ₋₂₀₀	10230 ⁺²¹⁰ ₋₁₇₀

Table D.5. Adopted electron temperatures for the nebular sample. The information in this table is derived from the values in Table D.4 and the T_e relations from Garnett (1992) and Méndez-Delgado et al. (2023).

Reference number	$T_e([\text{N II}])$ [K]	$T_e([\text{O III}])$ [K]	$T_0(\text{O}^{2+})$ [K]
D110	15600 ⁺¹¹⁰ ₋₁₅₀	18010 ⁺¹²⁰ ₋₁₇₀	14920 ⁺¹⁰⁰ ₋₁₄₀
D111	13330 ⁺⁶⁰ ₋₇₀	14760 ⁺⁷⁰ ₋₈₀	12260 ± 60
D112	15020 ⁺¹⁹⁰ ₋₁₄₀	17180 ⁺²²⁰ ₋₁₅₀	14240 ⁺¹⁸⁰ ₋₁₃₀
D113	14390 ⁺⁹⁰ ₋₁₂₀	16270 ⁺¹⁰⁰ ₋₁₃₀	13490 ⁺⁸⁰ ₋₁₁₀
D114	13920 ± 110	15600 ± 130	12950 ⁺¹⁰⁰ ₋₁₁₀
D115	10340 ⁺²¹⁰ ₋₂₃₀	9900 ± 70	8750 ± 180
D116	9800 ± 350	9120 ⁺¹²⁰ ₋₁₃₀	8120 ± 290
D117	9830 ⁺⁷⁰ ₋₁₁₀	9160 ⁺¹²⁰ ₋₁₁₀	8160 ± 60
D118	10510 ⁺³⁰⁰ ₋₃₇₀	11330 ⁺¹⁵⁰ ₋₁₃₀	8950 ± 250
D119	10180 ⁺⁵⁰⁰ ₋₄₆₀	9530 ⁺¹⁷⁰ ₋₁₉₀	8570 ± 420
D120	8140 ⁺¹⁸⁰ ₋₁₇₀	7620 ± 210	6180 ± 130
D121	7570 ⁺¹⁸⁰ ₋₁₃₀	7380 ⁺¹⁷⁰ ₋₁₅₀	5520 ± 130
D122	7790 ⁺³³⁰ ₋₄₀₀	7250 ⁺⁵¹⁰ ₋₅₇₀	5770 ± 250
D123	7540 ⁺³⁸⁰ ₋₃₉₀	6500 ⁺³²⁰ ₋₃₃₀	5480 ± 270
D124	9360 ⁺⁸⁰⁰ ₋₇₆₀	9010 ⁺²³⁰ ₋₃₆₀	7620 ± 650
D125	7380 ⁺³⁷⁰ ₋₄₉₀	6270 ⁺³¹⁰ ₋₄₁₀	5290 ± 270
D126	7630 ⁺³⁵⁰ ₋₃₆₀	6620 ± 310	5590 ± 260
D127	10600 ⁺³¹⁰ ₋₄₁₀	10860 ⁺³²⁰ ₋₄₂₀	9060 ⁺²⁶⁰ ₋₃₅₀
D128	8420 ⁺¹⁵⁰ ₋₂₃₀	7760 ⁺⁶⁰ ₋₇₀	6510 ± 110
D129	9350 ⁺¹⁸⁰ ₋₁₉₀	9080 ⁺¹⁸⁰ ₋₁₉₀	7600 ⁺¹⁵⁰ ₋₁₆₀
D130	11360 ⁺²²⁰ ₋₂₁₀	11940 ⁺²³⁰ ₋₂₂₀	9950 ⁺¹⁹⁰ ₋₁₈₀
D131	10520 ⁺¹³⁰ ₋₁₂₀	10740 ± 130	8970 ± 110
D132	10760 ⁺²³⁰ ₋₂₀₀	11080 ⁺²³⁰ ₋₂₁₀	9250 ⁺¹⁹⁰ ₋₁₇₀
D133	10540 ⁺¹⁷⁰ ₋₂₁₀	10770 ⁺¹⁸⁰ ₋₂₂₀	8990 ⁺¹⁵⁰ ₋₁₈₀
D134	9990 ⁺¹²¹⁰ ₋₁₆₃₀	10670 ⁺⁷⁰ ₋₈₀	8350 ± 1010
D135	10820 ± 260	10570 ⁺¹³⁰ ₋₁₅₀	9320 ± 230
D136	9500 ⁺³⁷⁰ ₋₃₉₀	9760 ⁺⁷⁰ ₋₈₀	7780 ± 300
D137	10740 ⁺¹⁵⁰ ₋₂₁₀	11060 ⁺¹⁵⁰ ₋₂₁₀	9230 ⁺¹³⁰ ₋₁₈₀
D138	8870 ⁺⁷¹⁰ ₋₇₅₀	8990 ⁺³³⁰ ₋₂₂₀	7040 ± 560
D139	8130 ⁺⁴¹⁰ ₋₄₈₀	7280 ⁺³⁷⁰ ₋₄₃₀	6170 ⁺³¹⁰ ₋₃₇₀
D140	8590 ⁺³²⁰ ₋₃₄₀	8420 ⁺²³⁰ ₋₂₇₀	6710 ± 250
D141	10960 ⁺⁶¹⁰ ₋₈₆₀	9650 ⁺²¹⁰ ₋₁₅₀	9480 ± 530
D142	7920 ⁺⁷²⁰ ₋₆₉₀	7040 ⁺⁶⁴⁰ ₋₆₂₀	5920 ± 540
D143	7930 ⁺⁵⁰⁰ ₋₅₈₀	7050 ⁺⁴⁴⁰ ₋₅₁₀	5930 ± 370
D144	8780 ⁺¹⁶⁰ ₋₁₉₀	8260 ⁺¹⁵⁰ ₋₁₈₀	6930 ⁺¹³⁰ ₋₁₅₀
D145	12060 ⁺¹¹⁰ ₋₁₄₀	12940 ⁺¹²⁰ ₋₁₅₀	10770 ⁺¹⁰⁰ ₋₁₃₀
D146	8900 ± 70	8430 ± 70	7080 ⁺⁵⁰ ₋₆₀
D147	7020 ⁺³⁷⁰ ₋₃₀₀	5750 ⁺³⁰⁰ ₋₂₅₀	4870 ± 250
D148	7230 ⁺²⁸⁰ ₋₂₉₀	6050 ± 240	5110 ± 200
D149	11030 ⁺¹³⁰ ₋₁₁₀	11480 ⁺¹³⁰ ₋₁₂₀	9570 ⁺¹¹⁰ ₋₁₀₀
D150	6300 ⁺⁴⁰⁰ ₋₄₂₀	4730 ⁺³⁰⁰ ₋₃₂₀	4030 ± 250
D151	7640 ⁺⁴⁶⁰ ₋₈₂₀	6640 ⁺⁴⁰⁰ ₋₇₁₀	5600 ± 340
D152	8460 ⁺³⁹⁰ ₋₅₁₀	7810 ⁺³⁶⁰ ₋₄₇₀	6550 ± 310
D153	12310 ⁺¹⁵⁰ ₋₂₃₀	13300 ⁺¹⁶⁰ ₋₂₅₀	11060 ⁺¹⁴⁰ ₋₂₀₀
D154	12310 ⁺¹⁸⁰ ₋₁₇₀	13290 ⁺¹⁹⁰ ₋₁₈₀	11060 ⁺¹⁶⁰ ₋₁₅₀
D155	6830 ⁺⁴¹⁰ ₋₄₆₀	5480 ⁺³³⁰ ₋₃₇₀	4650 ± 280
D156	10610 ⁺¹¹⁰ ₋₁₃₀₀	11360 ⁺¹¹⁰ ₋₁₅₀	9070 ± 950
D157	8420 ⁺³⁴⁰ ₋₃₃₀	8560 ⁺¹⁰⁰ ₋₁₁₀	6510 ± 270
D158	8220 ⁺³⁹⁰ ₋₄₃₀	8940 ⁺⁴⁸⁰ ₋₅₃₀	6270 ± 300
D159	12510 ⁺¹⁴⁰ ₋₁₂₀	13590 ⁺¹⁵⁰ ₋₁₃₀	11300 ⁺¹³⁰ ₋₁₁₀
D160	7300 ⁺⁴¹⁰ ₋₅₈₀	6150 ⁺³⁵⁰ ₋₄₈₀	5200 ± 290
D161	7180 ⁺⁴¹⁰ ₋₃₈₀	5980 ⁺³⁴⁰ ₋₃₂₀	5060 ± 290
D162	7350 ⁺⁴³⁰ ₋₅₂₀	6220 ⁺³⁷⁰ ₋₄₄₀	5260 ± 310
D163	8030 ⁺³⁷⁰ ₋₄₁₀	7190 ⁺⁴⁶⁰ ₋₃₇₀	6050 ± 390
D164	7410 ⁺³¹⁰ ₋₃₇₀	6310 ⁺²⁶⁰ ₋₃₂₀	5330 ± 220

Table D.5. Adopted electron temperatures for the nebular sample. The information in this table is derived from the values in Table D.4 and the T_e relations from Garnett (1992) and Méndez-Delgado et al. (2023).

Reference number	$T_e([\text{N II}])$ [K]	$T_e([\text{O III}])$ [K]	$T_0(\text{O}^{2+})$ [K]
D165	9450 ⁺³⁸⁰ ₋₃₂₀	9760 ⁺⁷⁰ ₋₉₀	7720 ± 310
D166	9210 ⁺²³⁰ ₋₂₅₀	9280 ⁺⁷⁰ ₋₆₀	7430 ± 190
D167	9400 ⁺³³⁰ ₋₃₅₀	9560 ⁺⁸⁰ ₋₆₀	7660 ± 270
D168	10520 ⁺⁴²⁰ ₋₅₀₀	9190 ⁺¹⁴⁰ ₋₁₆₀	8970 ± 360
D169	8620 ⁺³⁸⁰ ₋₅₄₀	9680 ⁺¹³⁰ ₋₁₅₀	6740 ± 300
D170	40020 ⁺¹³³⁵⁰ ₋₅₉₃₀	9440 ± 430	43480 ± 14510
D171	9180 ⁺²¹⁰ ₋₂₅₀	8830 ⁺²⁰⁰ ₋₂₄₀	7400 ⁺¹⁷⁰ ₋₂₀₀
D172	9730 ⁺²⁵⁰ ₋₃₂₀	9410 ⁺⁷⁰ ₋₆₀	8040 ± 210
D173	10220 ⁺¹⁹⁰ ₋₁₇₀	9580 ⁺⁸⁰ ₋₁₀₀	8620 ± 160
D174	8370 ⁺³⁵⁰ ₋₄₀₀	8520 ⁺¹⁵⁰ ₋₁₁₀	6450 ± 270
D175	8500 ⁺⁵³⁰ ₋₅₅₀	9170 ⁺¹⁸⁰ ₋₂₀₀	6610 ± 410
D176	8800 ⁺²⁰⁰ ₋₁₄₀	8730 ⁺⁵⁰ ₋₆₀	6960 ± 160
D177	9090 ⁺³⁴⁰ ₋₃₅₀	8450 ⁺²⁸⁰ ₋₁₈₀	7290 ± 270
D178	9660 ⁺¹⁰⁰ ₋₇₀	9510 ⁺¹⁰⁰ ₋₇₀	7960 ⁺⁹⁰ ₋₆₀
D179	9410 ± 80	9150 ± 80	7670 ± 70
D180	12250 ⁺¹⁴⁰ ₋₁₈₀	13210 ⁺¹⁵⁰ ₋₂₀₀	10990 ⁺¹³⁰ ₋₁₇₀
D181	12620 ⁺²⁸⁰ ₋₃₃₀	13750 ⁺³⁰⁰ ₋₃₆₀	11430 ⁺²⁵⁰ ₋₃₀₀
D182	11050 ⁺⁹¹⁰ ₋₇₁₀	12740 ⁺¹⁶⁰ ₋₁₉₀	9580 ± 790
D183	12650 ⁺¹³⁰ ₋₁₆₀	13790 ⁺¹⁵⁰ ₋₁₇₀	11470 ⁺¹²⁰ ₋₁₄₀
D184	9240 ⁺²⁵⁰ ₋₃₄₀	11190 ⁺²⁴⁰ ₋₂₂₀	7480 ± 200
D185	9680 ⁺³⁸⁰ ₋₄₀₀	9520 ⁺³³⁰ ₋₄₅₀	7990 ± 310
D186	7530 ⁺¹⁶⁰ ₋₁₇₀	12440 ⁺³⁴⁰ ₋₃₀₀	5480 ± 120
D187	8090 ⁺²¹⁰ ₋₃₂₀	7950 ⁺⁵⁷⁰ ₋₇₅₀	6130 ± 160
D188	9280 ⁺¹⁷⁰ ₋₁₆₀	8340 ± 160	7520 ± 140
D189	9100 ⁺⁷⁴⁰ ₋₈₉₀	7660 ⁺³⁷⁰ ₋₄₉₀	7310 ± 590
D190	8050 ⁺³³⁰ ₋₂₃₀	8940 ⁺⁹⁷⁰ ₋₈₇₀	6080 ± 250
D191	7840 ⁺²²⁰ ₋₂₀₀	6920 ⁺¹⁹⁰ ₋₁₈₀	5830 ± 160
D192	7690 ⁺³¹⁰ ₋₃₉₀	6720 ⁺²⁷⁰ ₋₃₄₀	5660 ± 230
D193	8500 ⁺⁸¹⁰ ₋₅₆₀	7880 ⁺⁷⁵⁰ ₋₅₂₀	6610 ± 630
D194	9640 ⁺⁵⁶⁰ ₋₅₇₀	8250 ⁺⁴⁰⁰ ₋₃₅₀	7930 ± 460
D195	11010 ⁺⁴⁰⁰ ₋₄₆₀	11260 ⁺²³⁰ ₋₁₉₀	9540 ± 350
D196	9670 ⁺²⁴⁰ ₋₃₉₀	9060 ± 180	7970 ± 200
D197	10620 ⁺¹¹²⁰ ₋₇₃₀	10910 ⁺¹¹⁵⁰ ₋₇₅₀	9090 ± 960
D198	10720 ⁺⁷⁰⁰ ₋₆₅₀	10710 ⁺³⁶⁰ ₋₃₄₀	9200 ± 600
D199	8340 ⁺¹⁴⁰ ₋₁₅₀	7310 ⁺³⁴⁰ ₋₂₉₀	6420 ± 110
D200	8930 ⁺²⁶⁰ ₋₂₄₀	8360 ⁺¹⁴⁰ ₋₁₆₀	7110 ± 200
D201	8720 ⁺¹⁷⁰ ₋₂₃₀	8110 ⁺¹⁷⁰ ₋₁₈₀	6860 ± 130
D202	8120 ⁺⁹⁴⁰ ₋₁₂₂₀	7320 ⁺⁸⁵⁰ ₋₁₁₀₀	6160 ± 710
D203	7440 ⁺²⁹⁰ ₋₂₁₀	6360 ⁺²⁵⁰ ₋₁₈₀	5370 ± 210
D204	10670 ⁺⁷³⁰ ₋₇₁₀	10900 ⁺⁷⁴⁰ ₋₇₂₀	9140 ⁺⁶²⁰ ₋₆₁₀
D205	10490 ⁺⁴⁹⁰ ₋₅₃₀	9850 ⁺²⁵⁰ ₋₂₇₀	8930 ± 410
D206	8420 ⁺²³⁰ ₋₂₇₀	8150 ⁺¹⁵⁰ ₋₂₁₀	6510 ± 180
D207	9210 ⁺³⁴⁰ ₋₃₀₀	8800 ± 130	7440 ± 270
D208	7750 ⁺²⁹⁰ ₋₃₄₀	7780 ± 500	5730 ± 220
D209	6710 ⁺¹⁷⁰ ₋₂₀₀	5310 ⁺¹⁴⁰ ₋₁₅₀	4510 ± 120
D210	6960 ⁺¹⁵⁰ ₋₂₀₀	5660 ⁺¹²⁰ ₋₁₇₀	4800 ± 100
D211	7310 ⁺³⁵⁰ ₋₃₂₀	6170 ⁺³⁰⁰ ₋₂₇₀	5210 ± 250
D212	6580 ⁺⁷⁰ ₋₈₀	5120 ⁺⁵⁰ ₋₆₀	4360 ± 40
D213	6740 ⁺¹⁴⁰ ₋₂₅₀	5350 ⁺¹¹⁰ ₋₂₀₀	4540 ± 90
D214	6020 ⁺¹¹⁰ ₋₁₃₀	4320 ⁺⁸⁰ ₋₉₀	3700 ± 70
D215	5640 ⁺³⁰⁰ ₋₃₇₀	3780 ⁺²⁰⁰ ₋₂₅₀	3260 ± 170
D216	6430 ⁺³⁵⁰ ₋₅₈₀	4900 ⁺⁴⁴⁰ ₋₄₈₀	4180 ± 360
D217	8970 ⁺²³⁰ ₋₂₄₀	21620 ⁺¹⁸⁰⁰ ₋₃₁₇₀	7150 ± 190
D218	6280 ⁺³⁷⁰ ₋₄₁₀	4700 ⁺²⁸⁰ ₋₃₂₀	4010 ± 120
D219	6550 ⁺⁴¹⁰ ₋₅₇₀	5090 ⁺³²⁰ ₋₄₄₀	4330 ± 270

Table D.5. Adopted electron temperatures for the nebular sample. The information in this table is derived from the values in Table D.4 and the T_e relations from Garnett (1992) and Méndez-Delgado et al. (2023).

Reference number	$T_e([\text{N II}])$ [K]	$T_e([\text{O III}])$ [K]	$T_0(\text{O}^{2+})$ [K]
D220	8900^{+200}_{-210}	7960^{+80}_{-100}	7070 ± 160
D221	8240^{+130}_{-140}	7800^{+250}_{-270}	6300 ± 100
D222	9980^{+190}_{-230}	8420^{+60}_{-50}	8340 ± 150
D223	8530^{+150}_{-90}	8010^{+50}_{-40}	6640 ± 120
D224	9930^{+190}_{-210}	8410 ± 60	8280 ± 160
D225	8490^{+110}_{-120}	8100^{+90}_{-70}	6600 ± 80
D226	9800^{+200}_{-140}	8510 ± 60	8130 ± 170
D227	10140^{+190}_{-210}	8530^{+50}_{-80}	8520 ± 160
D228	9910^{+200}_{-170}	8400 ± 50	8250 ± 170
D229	9930^{+220}_{-160}	8340^{+50}_{-60}	8280 ± 180
D230	8220^{+160}_{-260}	7470^{+140}_{-240}	6280 ± 120
D231	9550^{+220}_{-260}	8340^{+60}_{-80}	7840 ± 180
D232	9980^{+240}_{-250}	8370 ± 50	8340 ± 200
D233	9580^{+400}_{-420}	8160^{+200}_{-220}	7870 ± 330
D234	8380^{+100}_{-110}	8030^{+70}_{-80}	6460 ± 80
D235	9520^{+170}_{-140}	9310^{+170}_{-140}	7800^{+140}_{-120}
D236	8810^{+160}_{-210}	8450^{+30}_{-40}	6970 ± 130
D237	11270^{+620}_{-600}	9020^{+140}_{-160}	9850 ± 540
D238	8650^{+250}_{-350}	8210^{+130}_{-120}	6780 ± 200
D239	9830^{+120}_{-150}	9770^{+120}_{-150}	8160 ± 100
D240	10590^{+260}_{-280}	9990^{+260}_{-380}	9050 ± 220
D241	8200 ± 90	7440 ± 80	6250 ± 70
D242	9310^{+430}_{-420}	9080^{+290}_{-380}	7550 ± 350
D243	11030^{+790}_{-1240}	11470^{+820}_{-1290}	9560^{+690}_{-1070}
D244	8100^{+150}_{-230}	7290^{+130}_{-200}	6130 ± 110
D245	7470^{+250}_{-240}	6400 ± 210	5400 ± 180
D246	8320^{+410}_{-460}	7620^{+380}_{-420}	6400 ± 320
D247	9510^{+340}_{-350}	9220^{+330}_{-410}	7780 ± 280
D248	7790^{+130}_{-220}	6860^{+120}_{-190}	5780 ± 100
D249	9290^{+210}_{-200}	8920^{+130}_{-90}	7530 ± 170
D250	10100^{+520}_{-550}	10150^{+530}_{-550}	8480^{+440}_{-460}
D251	10700^{+820}_{-740}	10990^{+840}_{-760}	9170^{+710}_{-640}
D252	12480^{+1970}_{-1990}	12120^{+100}_{-110}	11260 ± 1770
D253	12300^{+210}_{-240}	13290^{+230}_{-260}	11060^{+190}_{-220}
D254	12340^{+60}_{-70}	13340^{+60}_{-80}	11090^{+50}_{-70}
D255	12760 ± 140	13950 ± 150	11590 ± 130
D256	12060^{+1710}_{-1930}	10920 ± 70	10770 ± 1520
D257	10880^{+1020}_{-1070}	10690^{+70}_{-60}	9380 ± 880
D258	11270^{+430}_{-380}	11820^{+450}_{-390}	9850^{+370}_{-330}
D259	13700^{+120}_{-130}	15280^{+130}_{-150}	12680^{+110}_{-120}
D260	10010 ± 100	10010 ± 100	8370 ± 80
D261	9990 ± 100	9990 ± 100	8350 ± 80
D262	11170^{+420}_{-560}	10100^{+120}_{-140}	9720 ± 370
D263	13380^{+600}_{-690}	14830^{+660}_{-760}	12310^{+550}_{-630}
D264	14170^{+260}_{-310}	15950^{+300}_{-350}	13240^{+250}_{-290}
D265	13550^{+340}_{-300}	15070^{+380}_{-340}	12510^{+320}_{-280}
D266	10790^{+1330}_{-1110}	11570^{+130}_{-120}	9290 ± 1140
D267	13060^{+310}_{-390}	14370^{+340}_{-420}	11940^{+280}_{-350}
D268	12400^{+100}_{-110}	13430^{+110}_{-120}	11170^{+90}_{-100}
D269	12580^{+290}_{-280}	13690^{+320}_{-300}	11380^{+270}_{-250}
D270	11440^{+490}_{-440}	12060^{+510}_{-460}	10050^{+430}_{-380}
D271	13960^{+210}_{-190}	15660^{+240}_{-210}	12990^{+200}_{-180}
D272	10900^{+860}_{-720}	11290^{+890}_{-740}	9420^{+740}_{-620}
D273	13330^{+490}_{-450}	14760^{+550}_{-500}	12260^{+450}_{-420}
D274	10840^{+860}_{-830}	11190^{+890}_{-850}	9340^{+740}_{-710}

Table D.5. Adopted electron temperatures for the nebular sample. The information in this table is derived from the values in Table D.4 and the T_e relations from Garnett (1992) and Méndez-Delgado et al. (2023).

Reference number	$T_e([\text{N II}])$ [K]	$T_e([\text{O III}])$ [K]	$T_0(\text{O}^{2+})$ [K]
D275	13920 ⁺⁹⁰ ₋₁₂₀	15600 ⁺¹⁰⁰ ₋₁₃₀	12950 ⁺⁹⁰ ₋₁₁₀
D276	13240 ⁺¹³⁰ ₋₁₇₀	14640 ⁺¹⁵⁰ ₋₁₈₀	12160 ⁺¹²⁰ ₋₁₅₀
D277	12650 ⁺¹⁷⁰ ₋₁₆₀	13780 ⁺¹⁸⁰ ₋₁₇₀	11460 ⁺¹⁵⁰ ₋₁₄₀
D278	11990 ± 90	12840 ⁺¹⁰⁰ ₋₉₀	10690 ± 80
D279	11580 ⁺³⁸⁰ ₋₃₅₀	12250 ⁺⁴⁰⁰ ₋₃₇₀	10200 ⁺³³⁰ ₋₃₁₀
D280	11800 ⁺¹⁰⁰ ₋₁₄₀	12570 ⁺¹¹⁰ ₋₁₅₀	10470 ⁺⁹⁰ ₋₁₃₀
D281	11170 ⁺⁵⁷⁰ ₋₇₈₀	11670 ⁺⁵⁹⁰ ₋₈₂₀	9720 ⁺⁵⁰⁰ ₋₆₈₀
D282	9660 ⁺⁶⁹⁰ ₋₈₂₀	8440 ⁺⁵⁸⁰ ₋₅₆₀	7960 ± 570
D283	13350 ⁺¹⁵²⁰ ₋₁₄₈₀	16010 ⁺³⁹⁰ ₋₃₆₀	12280 ± 1400
D284	10740 ⁺¹¹⁴⁰ ₋₂₁₂₀	11280 ⁺¹²⁰ ₋₁₆₀	9230 ± 980
D285	8380 ⁺²²⁰ ₋₃₃₀	8110 ⁺³⁸⁰ ₋₃₉₀	6460 ± 170
D286	8110 ⁺⁴¹⁰ ₋₄₅₀	8730 ⁺³⁰⁰ ₋₃₁₀	6150 ± 310
D287	8990 ⁺⁴⁷⁰ ₋₄₂₀	8650 ⁺¹¹⁰ ₋₁₅₀	7180 ± 380
D288	8890 ⁺²⁵⁰ ₋₃₂₀	8210 ⁺²³⁰ ₋₁₅₀	7060 ± 200
D289	9110 ⁺⁸⁶⁰ ₋₁₀₀₀	8510 ± 240	7310 ± 690
D290	10740 ⁺¹⁰⁰ ₋₁₂₀	11050 ⁺¹¹⁰ ₋₁₂₀	9220 ⁺⁹⁰ ₋₁₀₀
D291	8540 ⁺⁸⁴⁰ ₋₉₄₀	8220 ± 300	6650 ± 660
D292	8660 ⁺⁷³⁰ ₋₅₆₀	8790 ⁺²³⁰ ₋₃₁₀	6790 ± 570
D293	8980 ⁺¹⁰⁸⁰ ₋₉₇₀	7990 ± 300	7160 ± 860
D294	8780 ⁺³²⁰ ₋₄₇₀	8260 ⁺³¹⁰ ₋₄₄₀	6930 ⁺²⁶⁰ ₋₃₇₀
D295	8710 ⁺¹⁰³⁰ ₋₁₁₄₀	7870 ⁺³⁶⁰ ₋₅₂₀	6850 ± 810
D296	10220 ⁺¹⁴⁰ ₋₂₁₀	10310 ⁺¹⁴⁰ ₋₂₁₀	8610 ⁺¹²⁰ ₋₁₇₀
D297	10700 ± 80	11000 ± 80	9180 ± 70
D298	6990 ⁺⁵⁷⁰ ₋₆₅₀	5710 ⁺⁴⁷⁰ ₋₅₃₀	4840 ± 390
D299	9740 ⁺²³⁰ ₋₂₇₀	9630 ⁺²³⁰ ₋₂₆₀	8050 ⁺¹⁹⁰ ₋₂₂₀
D300	6200 ⁺⁴⁵⁰ ₋₅₀₀	4580 ⁺³³⁰ ₋₃₇₀	3910 ± 280
D301	7810 ⁺²⁷⁰ ₋₃₈₀	6890 ⁺²⁴⁰ ₋₃₃₀	5800 ± 200
D302	7330 ⁺³⁸⁰ ₋₃₄₀	6200 ⁺³²⁰ ₋₂₉₀	5240 ± 270
D303	9650 ± 330	9490 ⁺³³⁰ ₋₃₂₀	7950 ⁺²⁸⁰ ₋₂₇₀
D304	8060 ⁺⁴¹⁰ ₋₄₃₀	7250 ⁺³⁷⁰ ₋₃₉₀	6090 ± 310
D305	8150 ⁺²⁷⁰ ₋₃₁₀	7360 ⁺²⁵⁰ ₋₂₈₀	6190 ± 210
D306	8740 ⁺⁶²⁰ ₋₄₇₀	8210 ⁺⁵⁸⁰ ₋₄₄₀	6880 ± 490
D307	7820 ⁺⁴⁹⁰ ₋₆₂₀	6900 ⁺⁴³⁰ ₋₅₅₀	5810 ± 360
D308	6590 ⁺⁴³⁰ ₋₃₇₀	5140 ⁺³³⁰ ₋₂₉₀	4370 ± 280
D309	6920 ⁺²²⁰ ₋₃₀₀	5610 ⁺¹⁸⁰ ₋₂₄₀	4750 ± 150
D310	9330 ⁺⁵⁸⁰ ₋₆₃₀	9050 ⁺⁵⁶⁰ ₋₆₁₀	7580 ⁺⁴⁷⁰ ₋₅₁₀
D311	8180 ⁺³⁴⁰ ₋₄₀₀	7410 ⁺³¹⁰ ₋₃₆₀	6230 ± 260
D312	12030 ⁺¹⁷¹⁰ ₋₁₈₉₀	12740 ⁺²⁵⁰ ₋₁₆₀	10740 ± 1520
D313	11080 ⁺²⁹⁰ ₋₃₂₀	10180 ± 60	9620 ± 250
D314	11250 ⁺¹³⁰ ₋₂₁₀	11720 ⁺¹⁴⁰ ₋₂₂₀	9820 ⁺¹²⁰ ₋₁₉₀
D315	10060 ⁺⁶³⁰ ₋₆₈₀	10860 ⁺¹⁹⁰ ₋₁₇₀	8420 ± 530
D316	10580 ⁺⁴³⁰ ₋₄₁₀	10820 ⁺⁴⁴⁰ ₋₄₂₀	9040 ⁺³⁷⁰ ₋₃₅₀
D317	10720 ⁺⁴⁰⁰ ₋₄₉₀	10190 ⁺⁵⁰ ₋₆₀	9200 ± 350
D318	9530 ⁺¹⁵⁰ ₋₂₀₀	9330 ⁺¹⁴⁰ ₋₂₀₀	7810 ⁺¹²⁰ ₋₁₆₀
D319	13730 ⁺¹⁰⁰ ₋₉₀	15510 ⁺⁹⁰ ₋₁₀₀	12720 ± 90
D320	11870 ⁺⁶⁸⁰ ₋₈₄₀	15570 ⁺³⁶⁰ ₋₃₉₀	10550 ± 610
D321	7770 ⁺⁴⁴⁰ ₋₄₈₀	6820 ⁺³⁹⁰ ₋₄₂₀	5750 ± 330
D322	7970 ⁺³⁴⁰ ₋₄₁₀	9390 ⁺⁴⁵⁰ ₋₂₈₀	5990 ± 260
D323	7040 ⁺⁴⁸⁰ ₋₅₈₀	5780 ⁺⁴⁰⁰ ₋₄₈₀	4890 ± 340
D324	8260 ⁺³⁰⁰ ₋₄₉₀	8370 ⁺³⁵⁰ ₋₄₆₀	6320 ± 380
D325	7270 ⁺³⁸⁰ ₋₄₅₀	6110 ⁺³²⁰ ₋₃₈₀	5160 ± 270
D326	7080 ⁺⁴³⁰ ₋₄₉₀	5780 ⁺³⁷⁰ ₋₄₀₀	4940 ⁺³²⁰ ₋₃₄₀
D327	8520 ⁺³³⁰ ₋₅₆₀	8810 ⁺⁵¹⁰ ₋₃₁₀	6630 ± 410
D328	8850 ⁺¹⁸⁰ ₋₁₉₀	9880 ⁺³⁰⁰ ₋₃₀₀	7010 ± 140
D329	7800 ⁺³⁹⁰ ₋₃₈₀	10800 ⁺³⁹⁰ ₋₄₂₀	5790 ± 290

Table D.5. Adopted electron temperatures for the nebular sample. The information in this table is derived from the values in Table D.4 and the T_e relations from Garnett (1992) and Méndez-Delgado et al. (2023).

Reference number	T_e ([N II]) [K]	T_e ([O III]) [K]	T_0 (O ²⁺) [K]
D330	7680 ⁺³⁷⁰ ₋₃₄₀	6700 ⁺³²⁰ ₋₃₀₀	5650 ± 270
D331	8160 ⁺⁵⁹⁰ ₋₇₈₀	7330 ⁺⁵³⁰ ₋₇₀₀	6210 ⁺⁴⁵⁰ ₋₆₀₀
D332	10120 ⁺¹⁰⁵⁰ ₋₁₀₇₀	10180 ⁺¹⁰⁵⁰ ₋₁₀₈₀	8500 ⁺⁸⁸⁰ ₋₉₀₀
D333	7290 ⁺³⁰⁰ ₋₃₉₀	6140 ⁺²⁵⁰ ₋₃₃₀	5190 ± 210
D334	11430 ⁺¹³⁴⁰ ₋₁₃₆₀	11550 ⁺¹⁸⁰ ₋₂₃₀	10030 ± 1170
D335	11970 ⁺⁴⁶⁰ ₋₅₇₀	11320 ⁺¹⁰⁰ ₋₈₀	10660 ± 410
D336	14330 ⁺²³⁷⁰ ₋₁₈₇₀	11770 ⁺²⁸⁰ ₋₁₉₀	13430 ± 2220
D337	12790 ⁺¹⁵⁰ ₋₁₁₀	13980 ⁺¹⁶⁰ ₋₁₂₀	11620 ⁺¹³⁰ ₋₁₀₀
D338	12650 ⁺⁴³⁰ ₋₃₈₀	13790 ⁺⁴⁷⁰ ₋₄₁₀	11470 ⁺³⁹⁰ ₋₃₄₀
D339	12160 ⁺⁴¹⁰ ₋₆₄₀	13090 ⁺⁴⁴⁰ ₋₆₉₀	10890 ⁺³⁷⁰ ₋₅₈₀
D340	11200 ⁺⁴⁴⁰ ₋₃₂₀	11720 ⁺⁴⁶⁰ ₋₃₃₀	9770 ⁺³⁸⁰ ₋₂₈₀
D341	15590 ⁺²⁸⁰⁰ ₋₃₂₈₀	12510 ⁺²⁸⁰ ₋₃₇₀	14900 ± 2670
D342	12200 ⁺²⁰⁰ ₋₂₃₀	13140 ⁺²¹⁰ ₋₂₅₀	10930 ⁺¹⁷⁰ ₋₂₁₀
D343	12100 ± 60	13000 ⁺⁶⁰ ₋₇₀	10820 ⁺⁵⁰ ₋₆₀
D344	17290 ⁺¹⁰⁰ ₋₁₆₀	20420 ⁺¹²⁰ ₋₁₈₀	16890 ⁺¹⁰⁰ ₋₁₅₀
D345	16950 ⁺¹⁰⁰ ₋₁₂₀	19930 ⁺¹²⁰ ₋₁₄₀	16490 ⁺¹⁰⁰ ₋₁₂₀
D346	17100 ⁺²⁷⁰ ₋₂₁₀	20140 ⁺³¹⁰ ₋₂₄₀	16670 ⁺²⁶⁰ ₋₂₀₀
D347	18000 ⁺²⁵⁰ ₋₂₅₀	21420 ⁺³⁵⁰ ₋₃₀₀	17720 ⁺²⁹⁰ ₋₂₅₀
D348	17630 ⁺²⁹⁰ ₋₂₃₀	20900 ⁺³⁴⁰ ₋₂₇₀	17290 ⁺²⁸⁰ ₋₂₃₀
D349	17650 ⁺⁴⁴⁰ ₋₃₉₀	20940 ⁺⁵²⁰ ₋₄₃₀	17320 ⁺⁴³⁰ ₋₃₆₀
D350	18520 ⁺⁴²⁰ ₋₂₇₀	22180 ⁺⁵¹⁰ ₋₃₂₀	18330 ⁺⁴²⁰ ₋₂₆₀
D351	17170 ⁺²⁴⁰ ₋₃₆₄₀	20250 ⁺²⁸⁰ ₋₂₆₀	16750 ⁺²⁶⁰ ₋₂₃₀
D352	24120 ⁺³⁶⁹⁰ ₋₂₆₀	21300 ⁺²⁵⁰ ₋₃₁₀	24880 ± 3750
D353	17350 ⁺²⁰⁰ ₋₁₆₀	20500 ⁺²⁴⁰ ₋₁₉₀	16960 ⁺²⁶⁰ ₋₂₀₀
D354	17320 ⁺¹⁶⁰ ₋₁₄₀	20460 ⁺¹⁹⁰ ₋₁₆₀	16920 ⁺¹⁶⁰ ₋₁₄₀
D355	16460 ⁺³²⁰ ₋₃₆₀	19230 ⁺³⁸⁰ ₋₄₂₀	15920 ⁺³¹⁰ ₋₃₅₀
D356	11890 ⁺¹⁰⁰ ₋₁₁₀	12700 ⁺¹¹⁰ ₋₁₂₀	10570 ⁺⁹⁰ ₋₁₀₀
D357	12100 ⁺¹⁴⁰ ₋₁₁₀	13000 ⁺¹⁵⁰ ₋₁₂₀	10820 ⁺¹²⁰ ₋₁₀₀
D358	16270 ⁺¹⁴⁰ ₋₁₉₀	18960 ⁺¹⁶⁰ ₋₂₃₀	15700 ⁺¹⁴⁰ ₋₁₉₀
D359	13710 ⁺¹⁷⁰ ₋₁₄₀	15290 ⁺¹⁸⁰ ₋₁₆₀	12690 ⁺¹⁵⁰ ₋₁₃₀
D360	15860 ⁺¹⁷⁰ ₋₂₃₀	18380 ⁺¹⁹⁰ ₋₂₆₀	15220 ⁺¹⁶⁰ ₋₂₂₀
D361	14810 ⁺⁸⁰ ₋₁₁₀	16870 ⁺⁹⁰ ₋₁₃₀	13990 ⁺⁸⁰ ₋₁₁₀
D362	15260 ⁺²¹⁰ ₋₂₅₀	17510 ⁺²⁴⁰ ₋₂₈₀	14510 ⁺²⁰⁰ ₋₂₄₀
D363	19000 ⁺¹⁴³⁰ ₋₁₇₄₀	20140 ± 280	18890 ± 1420
D364	18200 ⁺⁴⁰⁰ ₋₄₁₀	21710 ⁺⁴⁸⁰ ₋₄₉₀	17950 ± 400
D365	13460 ⁺²⁹⁰ ₋₂₆₀	14940 ⁺³²⁰ ₋₂₈₀	12410 ⁺²⁷⁰ ₋₂₄₀
D366	12670 ⁺¹²⁰ ₋₁₅₀	13820 ⁺¹³⁰ ₋₁₆₀	11490 ⁺¹¹⁰ ₋₁₄₀
D367	14220 ⁺²³⁰ ₋₂₅₀	16030 ⁺²⁶⁰ ₋₂₈₀	13300 ⁺²¹⁰ ₋₂₃₀
D368	13380 ⁺⁴⁸⁰ ₋₆₄₀	14840 ⁺⁵³⁰ ₋₇₀₀	12320 ⁺⁴⁴⁰ ₋₅₈₀
D369	15440 ± 180	17770 ⁺²¹⁰ ₋₂₀₀	14730 ± 170
D370	16420 ⁺³⁹⁰ ₋₃₈₀	19160 ⁺⁴⁶⁰ ₋₄₄₀	15870 ⁺³⁸⁰ ₋₃₆₀
D371	16940 ⁺²⁵⁰ ₋₂₂₀	19910 ⁺²⁹⁰ ₋₂₆₀	16470 ⁺²⁴⁰ ₋₂₂₀
D372	13330 ⁺¹⁵⁰ ₋₉₀	14760 ⁺¹⁷⁰ ₋₁₀₀	12250 ⁺¹⁴⁰ ₋₈₀
D373	12840 ⁺¹³⁰ ₋₁₂₀	14060 ⁺¹⁵⁰ ₋₁₃₀	11680 ⁺¹²⁰ ₋₁₁₀
D374	25510 ⁺²⁴³⁰ ₋₂₁₁₀	19010 ⁺⁴⁸⁰ ₋₄₇₀	26500 ± 2530
D375	25450 ⁺²⁸⁷⁰ ₋₂₁₆₀	18970 ⁺³⁴⁰ ₋₄₈₀	26430 ± 2980
D376	14220 ⁺¹⁰⁰ ₋₆₀	16030 ⁺¹¹⁰ ₋₇₀	13300 ⁺⁹⁰ ₋₅₀
D377	12070 ⁺²⁶⁰ ₋₃₈₀	12950 ⁺²⁸⁰ ₋₄₀₀	10780 ⁺²³⁰ ₋₃₄₀
D378	17430 ⁺³¹⁰ ₋₄₂₀	20620 ⁺³⁷⁰ ₋₅₀₀	17050 ⁺³¹⁰ ₋₄₁₀
D379	14610 ⁺²⁴⁰ ₋₂₂₀	16580 ⁺²⁷⁰ ₋₂₅₀	13750 ⁺²³⁰ ₋₂₀₀
D380	12340 ⁺³⁰⁰ ₋₃₃₀	13340 ⁺³²⁰ ₋₃₆₀	11090 ⁺²⁷⁰ ₋₃₀₀
D381	15140 ⁺¹⁶⁰ ₋₁₈₀	17340 ⁺¹⁹⁰ ₋₂₀₀	14370 ⁺¹⁶⁰ ₋₁₇₀
D382	14160 ⁺¹⁶⁰ ₋₁₄₀	15940 ⁺¹⁸⁰ ₋₁₅₀	13230 ⁺¹⁵⁰ ₋₁₃₀
D383	12770 ⁺¹⁹⁰ ₋₁₈₀	13960 ± 200	11600 ⁺¹⁷⁰ ₋₁₆₀

Table D.5. Adopted electron temperatures for the nebular sample. The information in this table is derived from the values in Table D.4 and the T_e relations from Garnett (1992) and Méndez-Delgado et al. (2023).

Reference number	T_e ([N II]) [K]	T_e ([O III]) [K]	T_0 (O ²⁺) [K]
D384	10580 ⁺¹⁸⁰ ₋₂₁₀	10830 ⁺¹⁹⁰ ₋₂₂₀	9040 ⁺¹⁶⁰ ₋₁₈₀
D385	11070 ⁺¹⁸⁰ ₋₁₅₀	11530 ⁺¹⁹⁰ ₋₁₆₀	9610 ⁺¹⁶⁰ ₋₁₃₀
D386	14830 ⁺¹⁷⁰ ₋₁₂₀	16900 ⁺¹⁹⁰ ₋₁₄₀	14010 ⁺¹⁶⁰ ₋₁₁₀
D387	15040 ⁺²⁷⁰ ₋₃₈₀	17200 ⁺³¹⁰ ₋₄₃₀	14260 ⁺²⁶⁰ ₋₃₆₀
D388	11620 ⁺²³⁰ ₋₂₁₀	12320 ⁺²⁴⁰ ₋₂₂₀	10260 ⁺²⁰⁰ ₋₁₈₀
D389	12950 ± 90	14210 ± 100	11810 ⁺⁸⁰ ₋₉₀
D390	15520 ⁺⁷⁸⁰ ₋₆₃₀	15730 ⁺²⁵⁰ ₋₃₀₀	14820 ± 750
D391	11920 ⁺³¹⁰ ₋₂₁₀	12750 ⁺³⁴⁰ ₋₂₃₀	10610 ⁺²⁸⁰ ₋₁₉₀
D392	13630 ⁺¹⁴²⁰ ₋₁₆₇₀	15090 ⁺³⁵⁰ ₋₄₆₀	12610 ± 1310
D393	16730 ⁺¹⁰⁰ ₋₁₂₀	19610 ⁺¹²⁰ ₋₁₄₀	16230 ⁺¹⁰⁰ ₋₁₂₀
D394	11480 ⁺⁴⁸⁰ ₋₄₉₀	12110 ± 510	10090 ± 430
D395	13090 ⁺⁹⁰ ₋₁₃₀	14410 ⁺¹⁰⁰ ₋₁₅₀	11970 ⁺⁸⁰ ₋₁₂₀
D396	12620 ⁺⁶⁰ ₋₇₀	13740 ⁺⁶⁰ ₋₇₀	11420 ⁺⁵⁰ ₋₆₀
D397	12370 ⁺¹⁹⁰ ₋₁₆₀	13390 ⁺²⁰⁰ ₋₁₇₀	11130 ⁺¹⁷⁰ ₋₁₄₀
D398	10880 ⁺¹⁷⁰ ₋₃₀₀	11250 ⁺¹⁷⁰ ₋₃₁₀	9380 ⁺¹⁵⁰ ₋₂₆₀
D399	13150 ⁺⁶⁸⁰ ₋₈₀₀	12530 ⁺³¹⁰ ₋₂₂₀	12050 ± 630
D400	10770 ⁺⁸⁴⁰ ₋₇₃₀	12420 ⁺⁶⁰ ₋₄₀	9260 ± 730
D401	12080 ⁺³²⁰ ₋₄₀₀	12520 ⁺²²⁰ ₋₂₀₀	10790 ± 280
D402	11930 ⁺²³⁰ ₋₂₇₀	12810 ⁺¹⁸⁰ ₋₂₄₀	10620 ± 200
D403	13120 ⁺³⁵⁰ ₋₂₁₀	13880 ⁺²²⁰ ₋₁₈₀	12010 ± 360
D404	11430 ⁺¹⁵⁰ ₋₁₁₀	12050 ⁺¹⁵⁰ ₋₁₂₀	10040 ⁺¹⁸⁰ ₋₁₃₀
D405	11960 ⁺⁹⁰ ₋₂₉₀	12800 ⁺⁹⁰ ₋₃₀₀	10650 ⁺⁸⁰ ₋₂₅₀
D406	11790 ⁺³⁵⁰ ₋₁₄₁₀	12550 ⁺³⁷⁰ ₋₁₄₀	10450 ⁺³¹⁰ ₋₃₁₀
D407	11110 ⁺⁸⁴⁰ ₋₈₄₀	12060 ⁺⁹⁰ ₋₈₀	9660 ± 1230
D408	11550 ± 80	12190 ⁺⁹⁰ ₋₈₀	10180 ± 70
D409	11400 ⁺¹³⁰ ₋₈₀	12000 ⁺¹⁴⁰ ₋₉₀	10000 ⁺¹¹⁰ ₋₇₀
D410	11990 ⁺¹¹⁴⁰ ₋₈₁₀	11970 ⁺⁹⁰ ₋₁₁₀	10690 ± 1020
D411	11920 ⁺³³⁰ ₋₃₄₀	12180 ± 100	10610 ± 290
D412	11140 ⁺⁹⁶⁰ ₋₁₁₂₀	11920 ⁺¹¹⁰ ₋₉₀	9690 ± 830
D413	10930 ⁺²⁴⁰ ₋₁₆₀	11330 ⁺²⁵⁰ ₋₁₇₀	9450 ⁺²¹⁰ ₋₁₄₀
D414	12450 ⁺²¹⁰ ₋₂₄₀	13500 ⁺²³⁰ ₋₂₇₀	11230 ⁺¹⁹⁰ ₋₂₂₀
D415	13260 ⁺²⁵⁰ ₋₁₈₀	14660 ⁺²⁸⁰ ₋₂₀₀	12180 ⁺²³⁰ ₋₁₇₀
D416	13240 ⁺²⁴⁰ ₋₂₈₀	14620 ⁺²⁶⁰ ₋₃₁₀	12150 ⁺²²⁰ ₋₂₅₀
D417	13720 ⁺¹¹⁰ ₋₁₄₀	15320 ⁺¹³⁰ ₋₁₅₀	12720 ⁺¹¹⁰ ₋₁₃₀
D418	13500 ⁺¹⁴⁰ ₋₁₂₀	15000 ⁺¹⁶⁰ ₋₁₃₀	12450 ⁺¹³⁰ ₋₁₁₀
D419	13550 ⁺²⁹⁰ ₋₂₇₀	15070 ⁺³²⁰ ₋₃₀₀	12510 ⁺²⁷⁰ ₋₂₅₀
D420	13540 ⁺¹⁰⁰ ₋₁₄₀	15060 ⁺¹²⁰ ₋₁₆₀	12500 ⁺¹⁰⁰ ₋₁₃₀
D421	13530 ⁺¹²⁰ ₋₁₈₀	15050 ⁺¹⁴⁰ ₋₂₀₀	12490 ⁺¹¹⁰ ₋₁₆₀
D422	10910 ⁺¹⁷⁰ ₋₂₈₀	11300 ⁺¹⁸⁰ ₋₂₉₀	9420 ⁺¹⁵⁰ ₋₂₄₀
D423	17010 ⁺¹⁵⁰ ₋₂₄₀	20020 ⁺¹⁸⁰ ₋₂₉₀	16560 ⁺¹⁵⁰ ₋₂₄₀
D424	16720 ⁺²⁵⁰ ₋₂₂₀	19600 ⁺²⁹⁰ ₋₂₆₀	16230 ⁺²⁴⁰ ₋₂₁₀
D425	9360 ⁺²⁹⁰ ₋₃₄₀	11790 ⁺³⁰ ₋₆₀	7610 ± 240
D426	11650 ⁺¹³⁰ ₋₈₀	12360 ⁺¹⁴⁰ ₋₉₀	10290 ⁺¹¹⁰ ₋₇₀
D427	11510 ⁺⁶⁰ ₋₅₀	12160 ⁺⁶⁰ ₋₅₀	10130 ⁺⁵⁰ ₋₄₀
D428	12110 ⁺¹³⁰ ₋₁₄₀	13020 ⁺¹⁴⁰ ₋₁₅₀	10830 ⁺¹²⁰ ₋₁₃₀
D429	13030 ⁺²¹⁰ ₋₁₇₀	14330 ⁺²⁴⁰ ₋₁₉₀	11910 ⁺²⁰⁰ ₋₁₆₀
D430	11940 ⁺⁸⁸⁰ ₋₁₀₉₀	13810 ⁺¹⁴⁰ ₋₁₂₀	10630 ± 780
D431	14140 ⁺¹²⁰ ₋₁₃₀	15920 ± 140	13210 ± 120
D432	14000 ⁺¹⁵⁰ ₋₁₄₀	15720 ⁺¹⁷⁰ ₋₁₆₀	13040 ⁺¹⁴⁰ ₋₁₃₀
D433	14520 ⁺²²⁰ ₋₂₅₀	16450 ⁺²⁵⁰ ₋₂₈₀	13650 ⁺²¹⁰ ₋₂₃₀
D434	14160 ⁺¹⁵⁰ ₋₁₇₀	15940 ⁺¹⁷⁰ ₋₁₉₀	13230 ⁺¹⁴⁰ ₋₁₅₀
D435	13950 ⁺¹⁸⁰ ₋₁₃₀	15640 ⁺²¹⁰ ₋₁₅₀	12980 ⁺¹⁷⁰ ₋₁₂₀
D436	14030 ⁺¹⁸⁰ ₋₂₁₀	15760 ⁺²⁰⁰ ₋₂₄₀	13080 ⁺¹⁷⁰ ₋₂₀₀
D437	24970 ⁺³⁶²⁰ ₋₃₀₄₀	14430 ⁺¹³⁰ ₋₁₄₀	25870 ± 3750
D438	15430 ⁺¹⁸⁰ ₋₁₇₀	17760 ± 200	14720 ⁺¹⁷⁰ ₋₁₆₀

Table D.5. Adopted electron temperatures for the nebular sample. The information in this table is derived from the values in Table D.4 and the T_e relations from Garnett (1992) and Méndez-Delgado et al. (2023).

Reference number	$T_e(\text{[N II]})$ [K]	$T_e(\text{[O III]})$ [K]	$T_0(\text{O}^{2+})$ [K]
D439	15230^{+220}_{-330}	17480^{+260}_{-380}	14480^{+210}_{-310}
D440	14640^{+190}_{-200}	16630^{+220}_{-230}	13790^{+180}_{-190}
D441	11670 ± 140	12380 ± 150	10310^{+130}_{-120}
D442	10440^{+170}_{-250}	10620^{+170}_{-260}	8870^{+140}_{-220}
D443	11080^{+1120}_{-1170}	9630^{+820}_{-670}	9620 ± 970
D444	10850^{+170}_{-120}	11220^{+180}_{-130}	9360^{+150}_{-110}
D445	11430^{+420}_{-390}	12050^{+440}_{-410}	10040^{+370}_{-340}
D446	12460^{+280}_{-270}	13510^{+310}_{-290}	11240^{+260}_{-240}
D447	12150^{+740}_{-580}	13070^{+800}_{-620}	10880^{+660}_{-520}
D448	14170^{+680}_{-820}	15960^{+770}_{-920}	13240^{+630}_{-770}
D449	12770 ± 110	13960 ± 120	11600 ± 100
D450	12550^{+130}_{-190}	13650^{+140}_{-200}	11350^{+120}_{-170}
D451	14860^{+270}_{-240}	16950^{+310}_{-270}	14050^{+250}_{-230}
D452	13620^{+540}_{-330}	15170^{+600}_{-370}	12590^{+500}_{-300}

Table D.6. Ionic abundances derived from the nebular sample. All values are in $12+\log(X/H)$ units. * indicates Fe^{2+} abundance determinations based on $[\text{Fe III}]\lambda 4658$ with flux errors smaller than 10%. ** indicates O^+ abundance determinations based on $[\text{O II}]\lambda 7319, 7330$ auroral lines.

Reference number	Fe^{2+}	N^+	O^+	O^{2+}		O^{2+}
				$[\text{O III}]\text{-CELs } t^2 = 0$	$[\text{O III}]\text{-CELs } t^2 > 0$	O II-RLs
D1	$5.57^{+0.10}_{-0.09}$	6.35 ± 0.03	$7.61^{+0.05}_{-0.04}$	$8.04^{+0.04}_{-0.03}$	8.30 ± 0.04	-
D2	$5.29^{+0.12}_{-0.11}$	5.85 ± 0.03	$7.08^{+0.04}_{-0.03}$	7.99 ± 0.03	8.23 ± 0.03	-
D3	$4.90^{+0.13}_{-0.12}$	5.63 ± 0.02	$7.09 \pm 0.04^{**}$	7.73 ± 0.02	7.96 ± 0.02	-
D4	$5.41^{+0.13}_{-0.14}$	5.77 ± 0.04	$7.25^{+0.08}_{-0.07}$	$7.74^{+0.04}_{-0.03}$	7.97 ± 0.04	-
D5	$5.38^{+0.06}_{-0.05}$	6.27 ± 0.02	$7.12^{+0.03}_{-0.02}$	$8.00^{+0.02}_{-0.01}$	8.24 ± 0.02	-
D6	$5.39^{+0.07}_{-0.06}$	6.30 ± 0.02	7.21 ± 0.03	8.02 ± 0.02	8.26 ± 0.03	-
D7	$5.51^{+0.11}_{-0.09}$	6.10 ± 0.02	7.56 ± 0.03	8.11 ± 0.03	8.37 ± 0.03	-
D8	5.64 ± 0.14	6.46 ± 0.05	$7.64^{+0.09}_{-0.07}$	$8.00^{+0.07}_{-0.05}$	$8.27^{+0.07}_{-0.06}$	-
D9	$5.37^{+0.18}_{-0.16}$	6.14 ± 0.03	$7.57^{+0.08}_{-0.07}$	$7.96^{+0.04}_{-0.03}$	8.22 ± 0.04	-
D10	$5.02^{+0.13}_{-0.11}$	5.89 ± 0.02	$7.39^{+0.05}_{-0.04}$	7.99 ± 0.02	8.24 ± 0.02	-
D11	4.97 ± 0.11	$5.70^{+0.03}_{-0.02}$	$7.22 \pm 0.04^{**}$	7.93 ± 0.02	$8.17^{+0.03}_{-0.02}$	-
D12	$5.07^{+0.12}_{-0.11}$	6.07 ± 0.02	$7.49^{+0.04}_{-0.05}$	8.03 ± 0.02	$8.28^{+0.03}_{-0.02}$	-
D13	$5.76^{+0.22}_{-0.16}$	$6.67^{+0.10}_{-0.07}$	$7.96^{+0.30}_{-0.15}$	$8.03^{+0.14}_{-0.09}$	$8.31^{+0.16}_{-0.10}$	-
D14	$5.39^{+0.14}_{-0.13}$	$6.00^{+0.04}_{-0.03}$	$7.45^{+0.08}_{-0.06}$	7.89 ± 0.03	8.12 ± 0.03	-
D15	$5.56^{+0.17}_{-0.16}$	6.22 ± 0.04	$7.73^{+0.11}_{-0.08}$	$8.03^{+0.05}_{-0.04}$	8.29 ± 0.05	-
D16	$5.57^{+0.17}_{-0.15}$	$6.42^{+0.05}_{-0.04}$	$7.53^{+0.07}_{-0.06}$	$7.80^{+0.06}_{-0.05}$	$8.04^{+0.07}_{-0.06}$	-
D17	$5.78^{+0.14}_{-0.12}$	$6.32^{+0.05}_{-0.04}$	$7.51^{+0.07}_{-0.06}$	$8.07^{+0.05}_{-0.04}$	$8.32^{+0.06}_{-0.05}$	-
D18	$5.84^{+0.20}_{-0.14}$	$6.82^{+0.10}_{-0.07}$	$8.00^{+0.18}_{-0.12}$	$8.14^{+0.16}_{-0.10}$	$8.43^{+0.17}_{-0.11}$	-
D19	$4.92^{+0.14}_{-0.12}$	5.58 ± 0.03	6.49 ± 0.04	7.55 ± 0.03	7.74 ± 0.03	-
D20	$4.96^{+0.12}_{-0.11}$	5.55 ± 0.03	6.51 ± 0.04	7.53 ± 0.03	7.71 ± 0.03	-
D21	$5.07^{+0.17}_{-0.15}$	5.73 ± 0.03	$7.25^{+0.06}_{-0.05}$	7.82 ± 0.02	$8.04^{+0.03}_{-0.02}$	-
D22	$4.92^{+0.17}_{-0.15}$	$5.05^{+0.07}_{-0.06}$	$6.59^{+0.09}_{-0.08}$	7.09 ± 0.03	7.29 ± 0.04	-
D23	$5.64^{+0.18}_{-0.15}$	$6.47^{+0.05}_{-0.04}$	$7.57^{+0.08}_{-0.06}$	$8.07^{+0.06}_{-0.05}$	$8.32^{+0.07}_{-0.06}$	-
D24	$5.70^{+0.17}_{-0.14}$	$6.22^{+0.05}_{-0.04}$	$7.71^{+0.11}_{-0.09}$	$8.02^{+0.06}_{-0.04}$	$8.27^{+0.06}_{-0.05}$	-
D25	$5.44^{+0.14}_{-0.13}$	5.79 ± 0.04	7.13 ± 0.04	7.77 ± 0.03	$7.99^{+0.04}_{-0.03}$	-
D26	$5.92^{+0.27}_{-0.18}$	$6.73^{+0.16}_{-0.10}$	$7.98^{+0.25}_{-0.15}$	$8.03^{+0.20}_{-0.13}$	$8.31^{+0.23}_{-0.12}$	-
D27	$5.14^{+0.11}_{-0.09}$	5.87 ± 0.02	$7.46^{+0.06}_{-0.05}$	$7.98^{+0.03}_{-0.02}$	8.22 ± 0.03	-
D28	$4.71^{+0.15}_{-0.14}$	5.36 ± 0.02	6.81 ± 0.01	7.80 ± 0.01	8.02 ± 0.01	-
D29	$5.41^{+0.13}_{-0.14}$	5.98 ± 0.03	7.38 ± 0.04	7.94 ± 0.03	$8.19^{+0.04}_{-0.03}$	-
D30	$5.58^{+0.18}_{-0.17}$	$6.19^{+0.05}_{-0.04}$	$7.51^{+0.07}_{-0.05}$	$7.99^{+0.06}_{-0.04}$	$8.24^{+0.06}_{-0.05}$	-
D31	$5.54^{+0.18}_{-0.17}$	$6.27^{+0.05}_{-0.04}$	$7.50^{+0.07}_{-0.06}$	$7.98^{+0.05}_{-0.04}$	$8.21^{+0.06}_{-0.05}$	-
D32	$5.51^{+0.14}_{-0.13}$	$6.47^{+0.04}_{-0.03}$	$7.89^{+0.10}_{-0.07}$	$8.14^{+0.05}_{-0.04}$	8.43 ± 0.05	-
D33	$5.86^{+0.31}_{-0.48}$	$7.03^{+0.13}_{-0.10}$	$7.94^{+0.27}_{-0.14}$	$7.93^{+0.20}_{-0.13}$	$8.22^{+0.25}_{-0.14}$	-
D34	$5.86^{+0.30}_{-0.15}$	$6.69^{+0.14}_{-0.09}$	$7.87^{+0.43}_{-0.18}$	$7.88^{+0.19}_{-0.11}$	$8.14^{+0.22}_{-0.13}$	-
D35	$5.16^{+0.16}_{-0.14}$	5.85 ± 0.04	$7.30^{+0.08}_{-0.07}$	7.93 ± 0.03	8.17 ± 0.04	-
D36	$5.48^{+0.14}_{-0.12}$	6.07 ± 0.03	$7.57^{+0.04}_{-0.03}$	7.96 ± 0.03	$8.21^{+0.04}_{-0.03}$	-
D37	$5.84^{+0.32}_{-0.20}$	$6.86^{+0.16}_{-0.10}$	$8.04^{+0.43}_{-0.21}$	$7.95^{+0.25}_{-0.13}$	$8.23^{+0.27}_{-0.14}$	-
D38	$5.22^{+0.15}_{-0.14}$	5.77 ± 0.02	7.34 ± 0.03	7.70 ± 0.02	7.92 ± 0.02	-
D39	$5.23^{+0.14}_{-0.13}$	5.89 ± 0.03	$7.20^{+0.04}_{-0.03}$	8.03 ± 0.03	8.27 ± 0.03	-
D40	5.30 ± 0.09	$5.97^{+0.02}_{-0.01}$	7.38 ± 0.02	$7.77^{+0.02}_{-0.01}$	8.00 ± 0.02	-
D41	$4.61^{+0.12}_{-0.11}$	5.02 ± 0.03	$6.52^{+0.03}_{-0.02}$	$7.34^{+0.02}_{-0.01}$	7.52 ± 0.02	-
D42	$5.58^{+0.18}_{-0.15}$	6.45 ± 0.04	$7.81^{+0.10}_{-0.08}$	$8.05^{+0.05}_{-0.04}$	$8.32^{+0.05}_{-0.04}$	-
D43	$5.75^{+0.25}_{-0.18}$	$6.65^{+0.12}_{-0.08}$	$7.93^{+0.33}_{-0.17}$	$8.03^{+0.17}_{-0.10}$	$8.31^{+0.20}_{-0.12}$	-
D44	$5.47^{+0.18}_{-0.16}$	$6.37^{+0.05}_{-0.04}$	$7.80^{+0.12}_{-0.08}$	$8.03^{+0.06}_{-0.05}$	$8.30^{+0.07}_{-0.05}$	-
D45	$6.02^{+0.42}_{-0.21}$	$7.02^{+0.27}_{-0.12}$	$8.04^{+0.76}_{-0.24}$	$8.04^{+0.37}_{-0.17}$	$8.33^{+0.43}_{-0.19}$	-
D46	$5.68^{+0.14}_{-0.12}$	6.33 ± 0.04	7.73 ± 0.06	$8.13^{+0.05}_{-0.04}$	$8.41^{+0.06}_{-0.05}$	-
D47	$5.80^{+0.25}_{-0.17}$	$7.00^{+0.13}_{-0.09}$	$7.89^{+0.26}_{-0.14}$	$7.95^{+0.19}_{-0.11}$	$8.26^{+0.21}_{-0.13}$	-
D48	$5.83^{+0.07}_{-0.06}$	6.96 ± 0.04	$8.05^{+0.10}_{-0.08}$	$8.02^{+0.05}_{-0.04}$	$8.31^{+0.06}_{-0.05}$	-
D49	$5.74^{+0.16}_{-0.14}$	$6.48^{+0.05}_{-0.04}$	$7.94^{+0.09}_{-0.07}$	$8.18^{+0.07}_{-0.05}$	$8.46^{+0.07}_{-0.06}$	-
D50	5.51 ± 0.17	6.13 ± 0.04	$7.41^{+0.06}_{-0.05}$	$7.95^{+0.05}_{-0.04}$	8.19 ± 0.05	-
D51	$5.67^{+0.18}_{-0.15}$	$6.66^{+0.05}_{-0.04}$	$7.82^{+0.09}_{-0.06}$	$8.03^{+0.07}_{-0.05}$	$8.31^{+0.07}_{-0.06}$	-
D52	$5.51^{+0.13}_{-0.12}$	6.15 ± 0.04	$7.40^{+0.07}_{-0.05}$	$7.80^{+0.05}_{-0.04}$	$8.03^{+0.06}_{-0.05}$	-
D53	$5.18^{+0.14}_{-0.12}$	-	7.21 ± 0.01	7.87 ± 0.01	8.10 ± 0.01	-
D54	4.70 ± 0.15	-	6.85 ± 0.01	7.71 ± 0.01	7.91 ± 0.01	-

Table D.6. Ionic abundances derived from the nebular sample. All values are in $12+\log(X/H)$ units. * indicates Fe^{2+} abundance determinations based on $[\text{Fe III}]\lambda 4658$ with flux errors smaller than 10%. ** indicates O^+ abundance determinations based on $[\text{O II}]\lambda 7319, 7330$ auroral lines.

Reference number	Fe^{2+}	N^+	O^+	O^{2+} [O III]-CELs $t^2 = 0$	O^{2+} [O III]-CELs $t^2 > 0$	O^{2+} O II-RLs
D55	$5.90^{+0.16}_{-0.12}$	$6.89^{+0.08}_{-0.05}$	$7.81^{+0.13}_{-0.09}$	$7.89^{+0.10}_{-0.07}$	$8.16^{+0.13}_{-0.08}$	-
D56	$5.06^{+0.10}_{-0.09}$	-	7.24 ± 0.01	7.92 ± 0.01	8.15 ± 0.01	-
D57	$5.51^{+0.21}_{-0.17}$	$6.45^{+0.07}_{-0.06}$	$7.88^{+0.19}_{-0.12}$ **	$8.10^{+0.09}_{-0.08}$	$8.37^{+0.12}_{-0.08}$	-
D58	$5.54^{+0.11}_{-0.09}$	$6.21^{+0.02}_{-0.03}$	$7.75^{+0.06}_{-0.05}$ **	8.13 ± 0.03	8.40 ± 0.03	-
D59	$5.17^{+0.08}_{-0.07}$	5.82 ± 0.01	$7.25^{+0.02}_{-0.01}$	8.03 ± 0.01	8.28 ± 0.01	-
D60	$5.62^{+0.18}_{-0.14}$	6.40 ± 0.04	$7.79^{+0.07}_{-0.05}$	$7.93^{+0.05}_{-0.04}$	$8.20^{+0.06}_{-0.05}$	-
D61	$5.69^{+0.15}_{-0.13}$	$6.55^{+0.05}_{-0.04}$	$7.76^{+0.08}_{-0.06}$	$8.06^{+0.06}_{-0.05}$	$8.33^{+0.08}_{-0.06}$	-
D62	$5.93^{+0.11}_{-0.09}$	6.58 ± 0.05	$7.82^{+0.08}_{-0.06}$	$8.12^{+0.07}_{-0.05}$	$8.40^{+0.07}_{-0.06}$	-
D63	$5.57^{+0.10}_{-0.07}$	$6.83^{+0.03}_{-0.02}$	$8.13^{+0.07}_{-0.05}$ **	8.24 ± 0.03	8.54 ± 0.03	-
D64	$5.63^{+0.16}_{-0.14}$	$7.01^{+0.06}_{-0.05}$	$8.27^{+0.15}_{-0.11}$ **	$8.21^{+0.08}_{-0.06}$	$8.54^{+0.09}_{-0.08}$	-
D65	4.94 ± 0.07	5.66 ± 0.02	$6.82^{+0.05}_{-0.04}$ **	7.31 ± 0.02	$7.50^{+0.03}_{-0.02}$	-
D66	5.41 ± 0.16	5.95 ± 0.04	$7.21^{+0.06}_{-0.04}$	7.93 ± 0.04	$8.16^{+0.05}_{-0.04}$	-
D67	$5.38^{+0.09}_{-0.08}$	6.07 ± 0.02	7.33 ± 0.02	7.75 ± 0.01	$7.97^{+0.01}_{-0.02}$	-
D68	$5.54^{+0.09}_{-0.08}$	6.46 ± 0.03	$7.94^{+0.09}_{-0.07}$ **	8.22 ± 0.04	$8.51^{+0.05}_{-0.04}$	-
D69	$5.55^{+0.14}_{-0.13}$	6.13 ± 0.03	$7.52^{+0.05}_{-0.04}$	$7.67^{+0.04}_{-0.03}$	7.90 ± 0.04	-
D70	$5.53^{+0.12}_{-0.11}$	6.09 ± 0.03	$7.61^{+0.05}_{-0.04}$	7.99 ± 0.03	8.24 ± 0.04	-
D71	$5.82^{+0.26}_{-0.17}$	$7.63^{+0.12}_{-0.09}$	$8.43^{+0.42}_{-0.19}$ **	$7.86^{+0.21}_{-0.19}$	$8.25^{+0.19}_{-0.12}$	-
D72	4.90 ± 0.06	5.46 ± 0.01	$7.00^{+0.02}_{-0.01}$	7.67 ± 0.01	7.88 ± 0.01	-
D73	$5.56^{+0.10}_{-0.08}$	-	7.56 ± 0.03	$7.81^{+0.03}_{-0.02}$	$8.04^{+0.03}_{-0.02}$	-
D74	5.04 ± 0.15	-	$7.59^{+0.02}_{-0.01}$	8.11 ± 0.01	8.38 ± 0.01	-
D75	$4.61^{+0.13}_{-0.12}$	5.26 ± 0.02	6.75 ± 0.02	7.51 ± 0.01	$7.71^{+0.02}_{-0.01}$	-
D76	$5.22^{+0.07}_{-0.06}$	6.01 ± 0.01	7.18 ± 0.02	8.10 ± 0.01	8.35 ± 0.01	-
D77	$5.58^{+0.08}_{-0.07}$	6.22 ± 0.02	7.66 ± 0.03	8.05 ± 0.02	8.31 ± 0.02	-
D78	$4.71^{+0.09}_{-0.08}$	-	6.42 ± 0.02	7.39 ± 0.01	7.59 ± 0.01	-
D79	$4.88^{+0.14}_{-0.12}$	5.53 ± 0.04	$6.54^{+0.04}_{-0.03}$	7.53 ± 0.02	$7.71^{+0.03}_{-0.02}$	-
D80	$4.93^{+0.05}_{-0.04}$ *	-	6.52 ± 0.02	7.54 ± 0.01	$7.72^{+0.02}_{-0.01}$	-
D81	$5.22^{+0.27}_{-0.14}$	$6.10^{+0.18}_{-0.12}$	$7.21^{+0.34}_{-0.15}$	$7.95^{+0.03}_{-0.02}$	$7.83^{+0.22}_{-0.12}$	-
D82	$5.11^{+0.07}_{-0.06}$	5.58 ± 0.02	6.77 ± 0.02	7.84 ± 0.01	8.05 ± 0.01	-
D83	$5.20^{+0.06}_{-0.05}$ *	$5.90^{+0.05}_{-0.04}$	$7.05^{+0.08}_{-0.06}$	7.76 ± 0.02	$8.26^{+0.06}_{-0.05}$	-
D84	$5.00^{+0.10}_{-0.09}$	6.22 ± 0.03	$7.36^{+0.05}_{-0.04}$	$7.98^{+0.04}_{-0.03}$	8.23 ± 0.04	-
D85	$6.20^{+0.08}_{-0.07}$ *	-	$8.31^{+0.11}_{-0.08}$	$8.16^{+0.10}_{-0.07}$	$8.52^{+0.10}_{-0.08}$	$8.14^{+0.07}_{-0.06}$
D86	$6.03^{+0.08}_{-0.06}$ *	$7.43^{+0.06}_{-0.05}$	$8.24^{+0.10}_{-0.07}$	$8.03^{+0.09}_{-0.06}$	$8.36^{+0.09}_{-0.08}$	-
D87	$5.08^{+0.09}_{-0.07}$	-	7.07 ± 0.02	8.08 ± 0.01	8.32 ± 0.01	-
D88	$4.69^{+0.08}_{-0.07}$	-	6.34 ± 0.02	7.05 ± 0.01	7.23 ± 0.01	-
D89	$4.92^{+0.10}_{-0.09}$	-	$6.59^{+0.03}_{-0.02}$	7.07 ± 0.02	7.26 ± 0.02	-
D90	$5.36^{+0.14}_{-0.12}$	$6.29^{+0.06}_{-0.04}$	$7.50^{+0.16}_{-0.10}$ **	$7.77^{+0.08}_{-0.06}$	$8.01^{+0.09}_{-0.06}$	-
D91	$5.31^{+0.06}_{-0.04}$ *	5.94 ± 0.01	7.60 ± 0.01	8.09 ± 0.01	8.35 ± 0.01	-
D92	$5.49^{+0.07}_{-0.05}$ *	6.61 ± 0.04	$7.59^{+0.06}_{-0.05}$	$7.88^{+0.03}_{-0.02}$	8.25 ± 0.05	-
D93	5.37 ± 0.06 *	6.17 ± 0.03	7.46 ± 0.04	7.88 ± 0.03	8.13 ± 0.03	-
D94	$5.11^{+0.08}_{-0.07}$	-	6.66 ± 0.01	7.50 ± 0.01	7.70 ± 0.01	-
D95	$5.50^{+0.11}_{-0.09}$	-	$7.52^{+0.04}_{-0.03}$	$7.71^{+0.03}_{-0.02}$	7.94 ± 0.03	-
D96	5.07 ± 0.16	-	6.80 ± 0.04	$7.83^{+0.03}_{-0.02}$	8.05 ± 0.03	-
D97	$4.81^{+0.06}_{-0.05}$	5.11 ± 0.02	6.65 ± 0.02	7.57 ± 0.01	7.77 ± 0.01	-
D98	4.79 ± 0.12	-	6.28 ± 0.02	7.41 ± 0.01	7.60 ± 0.01	-
D99	$4.97^{+0.13}_{-0.11}$	5.54 ± 0.03	$7.07^{+0.05}_{-0.04}$ **	7.75 ± 0.02	7.97 ± 0.02	-
D100	4.57 ± 0.04 *	4.75 ± 0.03	$6.23^{+0.02}_{-0.01}$	7.41 ± 0.01	7.60 ± 0.01	-
D101	$5.35^{+0.21}_{-0.11}$ *	$6.22^{+0.15}_{-0.09}$	$7.18^{+0.26}_{-0.13}$	7.99 ± 0.01	$8.27^{+0.19}_{-0.11}$	-
D102	$5.24^{+0.06}_{-0.04}$ *	-	$7.26^{+0.02}_{-0.01}$	7.98 ± 0.01	8.21 ± 0.01	-
D103	$4.75^{+0.04}_{-0.03}$ *	5.11 ± 0.02	6.57 ± 0.02	7.54 ± 0.01	7.74 ± 0.01	-
D104	$5.36^{+0.07}_{-0.06}$	5.81 ± 0.02	7.44 ± 0.02	7.97 ± 0.02	8.21 ± 0.02	-
D105	$5.35^{+0.16}_{-0.15}$	5.69 ± 0.02	7.16 ± 0.03	7.63 ± 0.02	7.83 ± 0.02	-
D106	$5.16^{+0.07}_{-0.06}$ *	$5.93^{+0.04}_{-0.03}$	$7.14^{+0.07}_{-0.05}$	8.01 ± 0.01	$7.91^{+0.06}_{-0.04}$	-
D107	$4.86^{+0.18}_{-0.17}$	-	$6.27^{+0.04}_{-0.03}$	$6.81^{+0.02}_{-0.01}$	6.97 ± 0.02	-
D108	$5.28^{+0.06}_{-0.05}$ *	5.88 ± 0.01	7.72 ± 0.01	8.03 ± 0.01	8.29 ± 0.01	-
D109	$5.48^{+0.09}_{-0.07}$	6.31 ± 0.02	7.58 ± 0.03	$7.90^{+0.02}_{-0.03}$	8.15 ± 0.03	-

Table D.6. Ionic abundances derived from the nebular sample. All values are in $12+\log(X/H)$ units. * indicates Fe^{2+} abundance determinations based on $[\text{Fe III}]\lambda 4658$ with flux errors smaller than 10%. ** indicates O^+ abundance determinations based on $[\text{O II}]\lambda 7319$, 7330 auroral lines.

Reference number	Fe^{2+}	N^+	O^+	O^{2+}	O^{2+}	O^{2+}
				$[\text{O III}]\text{-CELs } t^2 = 0$	$[\text{O III}]\text{-CELs } t^2 > 0$	
D110	$5.02 \pm 0.03^*$	5.39 ± 0.01	6.79 ± 0.01	7.53 ± 0.01	7.72 ± 0.01	-
D111	$4.84 \pm 0.02^*$	5.54 ± 0.01	7.06 ± 0.01	7.92 ± 0.01	8.14 ± 0.01	-
D112	4.83 ± 0.07	$5.15^{+0.02}_{-0.01}$	6.69 ± 0.02	7.64 ± 0.01	7.84 ± 0.01	-
D113	$4.85^{+0.04}_{-0.03}$	5.41 ± 0.01	6.99 ± 0.01	7.75 ± 0.01	7.95 ± 0.01	-
D114	$5.03^{+0.05}_{-0.03}$	5.51 ± 0.01	7.04 ± 0.01	7.76 ± 0.01	7.98 ± 0.01	-
D115	$5.25^{+0.04}_{-0.03}$	6.33 ± 0.02	7.62 ± 0.04	8.27 ± 0.01	$8.46^{+0.04}_{-0.03}$	8.42 ± 0.05
D116	$5.21^{+0.07}_{-0.06}$	$6.65^{+0.05}_{-0.04}$	$8.05^{+0.08}_{-0.06}$	$8.19^{+0.03}_{-0.02}$	$8.38^{+0.07}_{-0.06}$	8.32 ± 0.09
D117	$5.04^{+0.05}_{-0.04}$	6.62 ± 0.01	7.97 ± 0.02	8.17 ± 0.02	8.37 ± 0.01	8.37 ± 0.03
D118	$4.44^{+0.06}_{-0.05}$	6.04 ± 0.04	$7.31^{+0.07}_{-0.06}$	8.22 ± 0.02	$8.57^{+0.05}_{-0.04}$	8.56 ± 0.04
D119	$5.05^{+0.08}_{-0.07}$	$6.25^{+0.06}_{-0.05}$	$7.67^{+0.10}_{-0.08}$	$8.27^{+0.04}_{-0.03}$	$8.44^{+0.10}_{-0.07}$	$8.45^{+0.07}_{-0.08}$
D120	5.60 ± 0.08	$7.42^{+0.04}_{-0.03}$	$8.33^{+0.08}_{-0.05}$	$8.01^{+0.06}_{-0.05}$	$8.43^{+0.06}_{-0.05}$	-
D121	$5.55^{+0.08}_{-0.07}$	$7.48^{+0.04}_{-0.03}$	$8.44^{+0.06}_{-0.05}$	8.05 ± 0.04	$8.69^{+0.07}_{-0.06}$	-
D122	$5.56^{+0.14}_{-0.09}$	$7.40^{+0.07}_{-0.06}$	$8.22^{+0.12}_{-0.09}$	$8.08^{+0.20}_{-0.11}$	$8.57^{+0.12}_{-0.08}$	-
D123	$5.91^{+0.15}_{-0.11}$	$7.58^{+0.08}_{-0.07}$	$8.38^{+0.14}_{-0.11}$	$7.84^{+0.13}_{-0.09}$	$8.23^{+0.14}_{-0.10}$	-
D124	$5.60^{+0.19}_{-0.13}$	$7.05^{+0.12}_{-0.08}$	$8.19^{+0.23}_{-0.12}$	$7.87^{+0.06}_{-0.05}$	$8.17^{+0.18}_{-0.13}$	-
D125	$6.03^{+0.13}_{-0.11}$	$7.62^{+0.10}_{-0.07}$	$8.51^{+0.17}_{-0.12}$	$8.11^{+0.14}_{-0.11}$	$8.50^{+0.16}_{-0.11}$	-
D126	$6.22^{+0.14}_{-0.10}$	$7.41^{+0.07}_{-0.06}$	$8.32^{+0.14}_{-0.09}$	$8.04^{+0.11}_{-0.08}$	$8.42^{+0.13}_{-0.10}$	-
D127	$5.65^{+0.10}_{-0.08}$	6.95 ± 0.04	$7.95^{+0.07}_{-0.06}$	$7.54^{+0.05}_{-0.04}$	$7.81^{+0.06}_{-0.05}$	-
D128	$5.51^{+0.05}_{-0.04}$	7.12 ± 0.03	$8.12^{+0.05}_{-0.04}$	8.38 ± 0.02	8.73 ± 0.04	-
D129	$5.01^{+0.14}_{-0.12}$	7.02 ± 0.03	8.15 ± 0.04	$7.90^{+0.04}_{-0.03}$	8.21 ± 0.04	-
D130	$5.96^{+0.09}_{-0.08}$	6.46 ± 0.03	7.79 ± 0.03	7.97 ± 0.03	8.23 ± 0.03	-
D131	$5.16^{+0.11}_{-0.10}$	$6.62^{+0.03}_{-0.04}$	7.91 ± 0.03	8.09 ± 0.02	8.36 ± 0.02	-
D132	$5.29^{+0.06}_{-0.05}$	6.65 ± 0.04	$7.95^{+0.04}_{-0.03}$	7.83 ± 0.03	8.10 ± 0.03	-
D133	5.14 ± 0.11	$6.46^{+0.04}_{-0.03}$	7.78 ± 0.04	$8.00^{+0.03}_{-0.02}$	8.27 ± 0.03	-
D134	$5.13^{+0.33}_{-0.15}$	$6.51^{+0.22}_{-0.12}$	$7.88^{+0.41}_{-0.18}$	8.07 ± 0.01	$8.45^{+0.32}_{-0.15}$	-
D135	5.07 ± 0.07	6.34 ± 0.03	$7.61^{+0.05}_{-0.04}$	8.07 ± 0.02	8.26 ± 0.04	-
D136	$5.55^{+0.09}_{-0.06}$	$6.93^{+0.06}_{-0.05}$	$8.06^{+0.09}_{-0.07}$	8.01 ± 0.01	$8.39^{+0.08}_{-0.06}$	-
D137	$5.37^{+0.12}_{-0.11}$	$6.81^{+0.04}_{-0.03}$	7.98 ± 0.03	$8.05^{+0.03}_{-0.02}$	$8.32^{+0.03}_{-0.02}$	-
D138	$5.55^{+0.21}_{-0.13}$	$7.25^{+0.12}_{-0.09}$	$8.29^{+0.22}_{-0.13}$	7.79 ± 0.05	$8.23^{+0.19}_{-0.12}$	-
D139	$5.86^{+0.13}_{-0.11}$	7.54 ± 0.07	$8.45^{+0.14}_{-0.10}$	$7.81^{+0.12}_{-0.09}$	$8.14^{+0.16}_{-0.10}$	-
D140	$5.44^{+0.11}_{-0.08}$	$7.33^{+0.06}_{-0.05}$	$8.32^{+0.10}_{-0.07}$	$7.76^{+0.06}_{-0.05}$	$8.19^{+0.09}_{-0.07}$	-
D141	$5.38^{+0.14}_{-0.10}$	$6.82^{+0.08}_{-0.07}$	$8.00^{+0.14}_{-0.11}$	7.78 ± 0.03	$7.81^{+0.10}_{-0.07}$	-
D142	$5.39^{+0.25}_{-0.15}$	$7.34^{+0.16}_{-0.10}$	$8.28^{+0.29}_{-0.16}$	$8.19^{+0.24}_{-0.14}$	$8.57^{+0.32}_{-0.15}$	-
D143	$5.82^{+0.17}_{-0.12}$	$7.55^{+0.10}_{-0.08}$	$8.43^{+0.20}_{-0.11}$	$7.87^{+0.19}_{-0.12}$	$8.23^{+0.21}_{-0.12}$	-
D144	$5.83^{+0.08}_{-0.07}$	$7.06^{+0.05}_{-0.04}$	8.12 ± 0.04	$8.15^{+0.04}_{-0.03}$	8.48 ± 0.04	-
D145	$5.50^{+0.05}_{-0.03}$	6.39 ± 0.03	7.74 ± 0.02	7.65 ± 0.01	7.89 ± 0.02	-
D146	4.88 ± 0.10	6.93 ± 0.04	8.15 ± 0.02	$8.21^{+0.02}_{-0.01}$	8.53 ± 0.02	-
D147	$6.32^{+0.13}_{-0.10}$	$7.76^{+0.08}_{-0.06}$	$8.53^{+0.15}_{-0.10}$	$7.87^{+0.12}_{-0.10}$	$8.29^{+0.18}_{-0.11}$	-
D148	$6.04^{+0.11}_{-0.08}$	$7.62^{+0.07}_{-0.05}$	$8.42^{+0.11}_{-0.08}$	$8.16^{+0.10}_{-0.07}$	$8.59^{+0.12}_{-0.10}$	-
D149	$4.83^{+0.11}_{-0.10}$	6.48 ± 0.03	7.88 ± 0.02	$7.75^{+0.02}_{-0.01}$	8.01 ± 0.02	-
D150	$6.25^{+0.20}_{-0.13}$	$7.94^{+0.13}_{-0.09}$	$8.50^{+0.25}_{-0.15}$	$7.95^{+0.24}_{-0.15}$	$8.41^{+0.28}_{-0.16}$	-
D151	$5.37^{+0.25}_{-0.13}$	$7.56^{+0.14}_{-0.11}$	$8.40^{+0.31}_{-0.15}$	$8.11^{+0.23}_{-0.12}$	$8.50^{+0.17}_{-0.12}$	-
D152	$6.00^{+0.14}_{-0.10}$	$7.46^{+0.08}_{-0.06}$	$8.43^{+0.13}_{-0.09}$	$7.42^{+0.12}_{-0.09}$	$7.76^{+0.11}_{-0.08}$	-
D153	$4.92^{+0.11}_{-0.09}$	-	$7.58^{+0.03}_{-0.02}$	7.59 ± 0.02	7.83 ± 0.02	-
D154	5.07 ± 0.09	$6.17^{+0.03}_{-0.02}$	$7.62^{+0.03}_{-0.02}$	7.43 ± 0.02	7.66 ± 0.02	-
D155	$6.46^{+0.21}_{-0.13}$	$7.79^{+0.12}_{-0.08}$	$8.56^{+0.21}_{-0.13}$	$8.06^{+0.20}_{-0.12}$	$8.53^{+0.21}_{-0.14}$	-
D156	$5.36^{+0.22}_{-0.13}$	$6.51^{+0.17}_{-0.10}$	$7.88^{+0.29}_{-0.15}$	7.94 ± 0.02	$8.26^{+0.23}_{-0.12}$	-
D157	$5.54^{+0.10}_{-0.08}$	$7.21^{+0.06}_{-0.05}$	$8.26^{+0.10}_{-0.08}$	8.20 ± 0.02	8.72 ± 0.09	-
D158	$6.00^{+0.11}_{-0.08}$	$7.40^{+0.08}_{-0.06}$	$8.35^{+0.14}_{-0.09}$	$7.64^{+0.10}_{-0.09}$	$8.31^{+0.11}_{-0.09}$	-
D159	4.61 ± 0.11	6.07 ± 0.02	7.48 ± 0.02	7.76 ± 0.01	7.99 ± 0.02	-
D160	$5.92^{+0.18}_{-0.12}$	$7.60^{+0.12}_{-0.09}$	$8.48^{+0.20}_{-0.12}$	$7.84^{+0.19}_{-0.13}$	$8.25^{+0.20}_{-0.13}$	-
D161	$5.75^{+0.15}_{-0.11}$	$7.63^{+0.10}_{-0.07}$	$8.44^{+0.18}_{-0.11}$	$8.11^{+0.15}_{-0.10}$	$8.53^{+0.19}_{-0.12}$	-
D162	$5.99^{+0.17}_{-0.11}$	$7.65^{+0.10}_{-0.09}$	$8.52^{+0.21}_{-0.12}$	$7.89^{+0.18}_{-0.12}$	$8.28^{+0.20}_{-0.12}$	-
D163	$5.81^{+0.15}_{-0.11}$	$7.51^{+0.09}_{-0.07}$	$8.48^{+0.16}_{-0.11}$	$7.82^{+0.14}_{-0.09}$	$8.18^{+0.17}_{-0.12}$	-
D164	$5.97^{+0.11}_{-0.09}$	$7.64^{+0.07}_{-0.06}$	$8.38^{+0.14}_{-0.09}$	$7.84^{+0.12}_{-0.09}$	$8.24^{+0.13}_{-0.09}$	-

Table D.6. Ionic abundances derived from the nebular sample. All values are in $12+\log(X/H)$ units. * indicates Fe^{2+} abundance determinations based on $[\text{Fe III}]\lambda 4658$ with flux errors smaller than 10%. ** indicates O^+ abundance determinations based on $[\text{O II}]\lambda 7319, 7330$ auroral lines.

Reference number	Fe^{2+}	N^+	O^+	O^{2+}		
				$[\text{O III}]\text{-CELs } t^2 = 0$	$[\text{O III}]\text{-CELs } t^2 > 0$	$\text{O II}\text{-RLs}$
D165	$5.56^{+0.07}_{-0.06}*$	6.94 ± 0.05	$8.08^{+0.09}_{-0.07}$	8.01 ± 0.01	$8.40^{+0.08}_{-0.07}$	-
D166	$5.59^{+0.06}_{-0.05}*$	6.97 ± 0.04	$8.10^{+0.06}_{-0.05}$	8.17 ± 0.01	8.57 ± 0.05	-
D167	$5.45^{+0.07}_{-0.06}*$	$6.75^{+0.05}_{-0.04}$	$7.87^{+0.07}_{-0.06}$	8.19 ± 0.01	$8.56^{+0.07}_{-0.06}$	-
D168	$5.41^{+0.09}_{-0.07}$	$6.50^{+0.06}_{-0.05}$	$7.68^{+0.14}_{-0.11}**$	8.29 ± 0.03	$8.33^{+0.07}_{-0.06}$	8.50 ± 0.11
D169	$5.34^{+0.16}_{-0.12}$	$7.24^{+0.09}_{-0.06}$	$8.32^{+0.14}_{-0.09}$	7.72 ± 0.02	$8.37^{+0.10}_{-0.08}$	-
D170	$5.08^{+0.21}_{-0.07}*$	$6.14^{+0.18}_{-0.05}$	$6.70^{+0.23}_{-0.08}$	$7.91^{+0.07}_{-0.06}$	$6.86^{+0.67}_{-0.10}$	-
D171	$5.49^{+0.10}_{-0.09}$	$7.22^{+0.03}_{-0.04}$	8.12 ± 0.05	7.78 ± 0.04	$8.10^{+0.05}_{-0.04}$	-
D172	$5.51^{+0.05}_{-0.04}*$	6.76 ± 0.04	$7.90^{+0.06}_{-0.05}$	8.23 ± 0.01	$8.49^{+0.05}_{-0.04}$	-
D173	$5.50^{+0.04}_{-0.03}*$	6.69 ± 0.02	7.72 ± 0.03	$8.19^{+0.01}_{-0.02}$	8.36 ± 0.03	8.29 ± 0.13
D174	$5.44^{+0.10}_{-0.08}*$	$7.26^{+0.07}_{-0.05}$	$8.32^{+0.12}_{-0.08}$	8.05 ± 0.03	$8.58^{+0.12}_{-0.08}$	-
D175	$5.68^{+0.14}_{-0.09}*$	$7.29^{+0.10}_{-0.07}$	$8.28^{+0.17}_{-0.11}$	7.89 ± 0.03	$8.49^{+0.16}_{-0.11}$	-
D176	$5.68^{+0.04}_{-0.03}*$	$7.03^{+0.04}_{-0.03}$	$8.03^{+0.05}_{-0.04}$	8.29 ± 0.01	8.71 ± 0.05	-
D177	$5.57^{+0.08}_{-0.07}*$	$6.89^{+0.06}_{-0.05}$	$7.77^{+0.09}_{-0.07}$	$8.30^{+0.05}_{-0.04}$	$8.57^{+0.08}_{-0.07}$	8.68 ± 0.12
D178	$5.28^{+0.05}_{-0.04}*$	6.88 ± 0.03	8.02 ± 0.02	8.17 ± 0.02	8.47 ± 0.02	-
D179	$5.20^{+0.05}_{-0.04}*$	6.79 ± 0.03	7.92 ± 0.02	$8.23^{+0.02}_{-0.01}$	8.54 ± 0.02	-
D180	5.16 ± 0.15	$5.89^{+0.06}_{-0.07}$	7.34 ± 0.03	$8.01^{+0.02}_{-0.01}$	8.25 ± 0.02	-
D181	5.27 ± 0.10	6.19 ± 0.04	$7.65^{+0.05}_{-0.04}$	7.71 ± 0.03	$7.94^{+0.04}_{-0.03}$	-
D182	$5.30^{+0.12}_{-0.09}*$	$6.12^{+0.09}_{-0.07}$	$7.47^{+0.15}_{-0.10}$	$8.04^{+0.02}_{-0.01}$	$8.44^{+0.15}_{-0.10}$	-
D183	$5.17 \pm 0.03*$	5.78 ± 0.04	7.11 ± 0.02	$7.93^{+0.01}_{-0.02}$	8.16 ± 0.02	$8.05^{+0.14}_{-0.15}$
D184	$5.80^{+0.07}_{-0.06}*$	$7.21^{+0.05}_{-0.04}$	8.15 ± 0.07	7.40 ± 0.03	$8.05^{+0.06}_{-0.05}$	-
D185	$5.21^{+0.10}_{-0.08}$	$7.04^{+0.06}_{-0.05}$	$7.99^{+0.11}_{-0.08}$	$7.96^{+0.08}_{-0.06}$	$8.26^{+0.09}_{-0.07}$	-
D186	$6.06^{+0.06}_{-0.04}*$	$7.80^{+0.04}_{-0.03}$	8.35 ± 0.06	6.68 ± 0.04	$8.14^{+0.07}_{-0.05}$	-
D187	$6.28^{+0.13}_{-0.10}$	$7.57^{+0.05}_{-0.04}$	$8.38^{+0.08}_{-0.07}$	$7.94^{+0.20}_{-0.14}$	8.47 ± 0.06	-
D188	$5.27 \pm 0.04*$	$6.90^{+0.03}_{-0.02}$	$7.87^{+0.04}_{-0.03}$	$8.29^{+0.04}_{-0.03}$	8.48 ± 0.03	8.50 ± 0.07
D189	$5.44^{+0.27}_{-0.18}$	$7.07^{+0.14}_{-0.09}$	$8.28^{+0.23}_{-0.13}$	$8.15^{+0.12}_{-0.10}$	$8.25^{+0.21}_{-0.13}$	-
D190	$5.67^{+0.13}_{-0.12}$	7.37 ± 0.06	$8.49^{+0.10}_{-0.07}$	$7.54^{+0.12}_{-0.13}$	$8.28^{+0.10}_{-0.08}$	-
D191	5.28 ± 0.14	7.52 ± 0.04	$8.58^{+0.07}_{-0.06}$	8.10 ± 0.06	$8.47^{+0.08}_{-0.06}$	-
D192	$5.47^{+0.14}_{-0.10}$	$7.45^{+0.08}_{-0.07}$	$8.38^{+0.14}_{-0.09}$	$8.05^{+0.11}_{-0.08}$	$8.44^{+0.11}_{-0.09}$	-
D193	$5.48^{+0.21}_{-0.16}$	$7.27^{+0.15}_{-0.11}$	$8.06^{+0.23}_{-0.14}$	$8.19^{+0.19}_{-0.11}$	$8.54^{+0.29}_{-0.15}$	-
D194	$5.09^{+0.14}_{-0.11}$	$6.80^{+0.09}_{-0.07}$	$7.95^{+0.13}_{-0.09}$	$8.11^{+0.09}_{-0.08}$	$8.17^{+0.13}_{-0.09}$	-
D195	$5.23^{+0.07}_{-0.06}*$	$6.39^{+0.06}_{-0.05}$	$7.76^{+0.09}_{-0.06}$	$8.09^{+0.04}_{-0.03}$	$8.33^{+0.07}_{-0.05}$	-
D196	$5.41^{+0.09}_{-0.08}$	6.57 ± 0.05	$7.73^{+0.07}_{-0.06}$	8.28 ± 0.04	$8.50^{+0.06}_{-0.04}$	-
D197	$4.93^{+0.19}_{-0.13}$	$6.56^{+0.12}_{-0.08}$	$7.71^{+0.20}_{-0.12}$	$7.87^{+0.15}_{-0.10}$	$8.16^{+0.25}_{-0.14}$	-
D198	$4.40^{+0.13}_{-0.09}$	$6.14^{+0.09}_{-0.07}$	$7.45^{+0.13}_{-0.10}$	$8.13^{+0.06}_{-0.05}$	$8.36^{+0.13}_{-0.09}$	8.33 ± 0.09
D199	$5.15^{+0.06}_{-0.04}*$	7.18 ± 0.02	8.24 ± 0.04	$8.04^{+0.08}_{-0.07}$	8.30 ± 0.04	8.34 ± 0.09
D200	5.23 ± 0.12	6.71 ± 0.05	$7.96^{+0.07}_{-0.06}$	8.28 ± 0.04	$8.57^{+0.07}_{-0.06}$	-
D201	$5.41^{+0.08}_{-0.05}*$	6.90 ± 0.03	7.89 ± 0.05	8.21 ± 0.04	8.53 ± 0.04	8.43 ± 0.07
D202	$5.56^{+0.36}_{-0.18}$	$7.38^{+0.27}_{-0.14}$	$8.47^{+0.53}_{-0.20}$	$7.90^{+0.43}_{-0.18}$	$8.26^{+0.43}_{-0.18}$	-
D203	$5.62^{+0.13}_{-0.11}$	$7.46^{+0.07}_{-0.06}$	$8.64^{+0.10}_{-0.07}$	$7.63^{+0.08}_{-0.07}$	$8.02^{+0.13}_{-0.09}$	-
D204	$5.52^{+0.21}_{-0.16}$	$7.08^{+0.09}_{-0.07}$	$8.01^{+0.17}_{-0.10}$	$7.05^{+0.12}_{-0.08}$	$7.32^{+0.13}_{-0.09}$	-
D205	$4.65^{+0.17}_{-0.15}$	6.38 ± 0.07	$7.71^{+0.10}_{-0.09}$	8.22 ± 0.05	$8.37^{+0.10}_{-0.07}$	-
D206	$5.34^{+0.14}_{-0.12}$	$7.15^{+0.05}_{-0.04}$	8.34 ± 0.07	$8.11^{+0.05}_{-0.04}$	$8.55^{+0.07}_{-0.06}$	-
D207	$5.33^{+0.10}_{-0.07}$	$6.75^{+0.06}_{-0.05}$	$7.93^{+0.08}_{-0.07}$	8.31 ± 0.03	$8.62^{+0.08}_{-0.07}$	-
D208	$5.59^{+0.12}_{-0.09}$	$7.35^{+0.07}_{-0.05}$	$8.38^{+0.11}_{-0.09}$	$7.98^{+0.15}_{-0.10}$	$8.62^{+0.10}_{-0.08}$	-
D209	$6.41^{+0.08}_{-0.06}*$	$7.92^{+0.05}_{-0.04}$	$8.49^{+0.09}_{-0.07}$	$7.92^{+0.08}_{-0.07}$	$8.36^{+0.09}_{-0.07}$	-
D210	6.01 ± 0.10	$7.88^{+0.04}_{-0.03}$	$8.47^{+0.07}_{-0.06}$	$8.14^{+0.07}_{-0.05}$	$8.58^{+0.06}_{-0.05}$	-
D211	$6.01^{+0.18}_{-0.15}$	$7.83^{+0.08}_{-0.06}$	$8.38^{+0.15}_{-0.10}$	$8.04^{+0.11}_{-0.09}$	$8.43^{+0.15}_{-0.10}$	-
D212	6.01 ± 0.06	7.96 ± 0.02	$8.46^{+0.04}_{-0.03}$	8.16 ± 0.03	8.62 ± 0.03	-
D213	$5.87^{+0.16}_{-0.14}$	$7.97^{+0.05}_{-0.04}$	$8.50^{+0.09}_{-0.07}$	$7.94^{+0.08}_{-0.07}$	8.39 ± 0.06	-
D214	$6.23^{+0.07}_{-0.06}$	8.07 ± 0.04	$8.50^{+0.07}_{-0.06}$	$8.22^{+0.07}_{-0.06}$	$8.73^{+0.07}_{-0.06}$	-
D215	$6.68^{+0.20}_{-0.13}$	$8.06^{+0.12}_{-0.09}$	$8.45^{+0.27}_{-0.14}$	$8.64^{+0.27}_{-0.17}$	$9.19^{+0.31}_{-0.17}$	-
D216	$6.54^{+0.29}_{-0.15}$	$7.91^{+0.20}_{-0.12}$	$8.45^{+0.38}_{-0.18}$	$7.96^{+0.35}_{-0.18}$	$8.39^{+0.41}_{-0.18}$	-
D217	5.76 ± 0.12	$7.58^{+0.04}_{-0.03}$	$7.98^{+0.06}_{-0.05}$	$6.23^{+0.11}_{-0.09}$	$7.67^{+0.06}_{-0.05}$	-
D218	$6.41^{+0.16}_{-0.10}$	$8.05^{+0.08}_{-0.07}$	$8.66^{+0.17}_{-0.10}$	$8.32^{+0.15}_{-0.11}$	$8.80^{+0.12}_{-0.09}$	-

Table D.6. Ionic abundances derived from the nebular sample. All values are in $12+\log(X/H)$ units. * indicates Fe^{2+} abundance determinations based on $[\text{Fe III}]\lambda 4658$ with flux errors smaller than 10%. ** indicates O^+ abundance determinations based on $[\text{O II}]\lambda 7319, 7330$ auroral lines.

Reference number	Fe^{2+}	N^+	O^+	O^{2+}		O^{2+}
				$[\text{O III}]\text{-CELs } t^2 = 0$	$[\text{O III}]\text{-CELs } t^2 > 0$	O II-RLs
D219	$6.24^{+0.28}_{-0.18}$	$7.95^{+0.15}_{-0.09}$	$8.49^{+0.27}_{-0.15}$	$7.88^{+0.28}_{-0.14}$	$8.36^{+0.26}_{-0.14}$	-
D220	$5.22 \pm 0.05^*$	6.83 ± 0.03	$7.78^{+0.05}_{-0.04}$	8.45 ± 0.02	8.67 ± 0.04	$8.70^{+0.07}_{-0.08}$
D221	$5.29^{+0.06}_{-0.04}$	$7.59^{+0.02}_{-0.03}$	8.47 ± 0.04	$7.73^{+0.07}_{-0.06}$	8.15 ± 0.04	-
D222	$5.50^{+0.04}_{-0.03}$	6.99 ± 0.03	7.86 ± 0.06	8.33 ± 0.01	8.35 ± 0.03	8.48 ± 0.03
D223	$5.69^{+0.03}_{-0.02}$	7.33 ± 0.02	$8.13^{+0.04}_{-0.03}$	7.96 ± 0.01	8.32 ± 0.04	8.27 ± 0.03
D224	$5.55 \pm 0.03^*$	6.97 ± 0.03	$7.81^{+0.06}_{-0.04}$	8.35 ± 0.01	8.38 ± 0.03	8.52 ± 0.01
D225	$5.68 \pm 0.03^*$	7.27 ± 0.02	8.16 ± 0.03	8.04 ± 0.02	8.44 ± 0.03	8.40 ± 0.04
D226	$5.23 \pm 0.03^*$	6.85 ± 0.02	7.75 ± 0.05	8.36 ± 0.01	$8.44^{+0.04}_{-0.03}$	8.61 ± 0.01
D227	$5.50 \pm 0.03^*$	6.90 ± 0.03	$7.74^{+0.06}_{-0.05}$	8.35 ± 0.01	8.35 ± 0.03	8.54 ± 0.03
D228	$5.15 \pm 0.03^*$	$6.84^{+0.03}_{-0.02}$	7.69 ± 0.06	8.38 ± 0.01	$8.41^{+0.04}_{-0.03}$	8.63 ± 0.02
D229	$5.46 \pm 0.03^*$	6.97 ± 0.02	$7.80^{+0.06}_{-0.05}$	8.36 ± 0.01	8.37 ± 0.04	8.54 ± 0.02
D230	$5.54^{+0.06}_{-0.05}$	$7.38^{+0.04}_{-0.03}$	8.22 ± 0.06	$7.38^{+0.05}_{-0.04}$	7.73 ± 0.04	-
D231	$5.49 \pm 0.04^*$	$6.89^{+0.04}_{-0.03}$	$7.81^{+0.08}_{-0.07}$	8.38 ± 0.02	8.49 ± 0.04	$8.55^{+0.05}_{-0.06}$
D232	$5.37 \pm 0.04^*$	$6.91^{+0.04}_{-0.03}$	$7.79^{+0.06}_{-0.05}$	8.40 ± 0.01	$8.41^{+0.05}_{-0.04}$	8.64 ± 0.03
D233	$5.60^{+0.08}_{-0.07}$	$7.03^{+0.06}_{-0.04}$	$7.92^{+0.10}_{-0.08}$	8.35 ± 0.05	$8.43^{+0.09}_{-0.07}$	$8.52^{+0.07}_{-0.06}$
D234	$5.60^{+0.03}_{-0.02}$	7.53 ± 0.02	8.33 ± 0.04	7.88 ± 0.02	8.31 ± 0.03	8.25 ± 0.06
D235	$5.40 \pm 0.03^*$	6.74 ± 0.02	7.79 ± 0.04	8.21 ± 0.03	8.51 ± 0.03	8.47 ± 0.07
D236	$5.53^{+0.04}_{-0.03}$	$7.04^{+0.04}_{-0.03}$	8.04 ± 0.05	8.36 ± 0.01	$8.72^{+0.04}_{-0.03}$	8.67 ± 0.03
D237	$4.86^{+0.10}_{-0.08}$	$6.47^{+0.07}_{-0.05}$	$7.31^{+0.12}_{-0.09}$	8.43 ± 0.03	$8.29^{+0.09}_{-0.07}$	$8.74^{+0.10}_{-0.11}$
D238	$5.19^{+0.08}_{-0.06}$	$6.75^{+0.06}_{-0.05}$	$7.71^{+0.08}_{-0.07}$	8.41 ± 0.03	$8.77^{+0.07}_{-0.05}$	$8.59^{+0.07}_{-0.08}$
D239	$5.43 \pm 0.04^*$	7.29 ± 0.02	8.20 ± 0.03	7.35 ± 0.02	7.65 ± 0.02	-
D240	$4.99^{+0.08}_{-0.07}$	6.80 ± 0.03	$7.83^{+0.05}_{-0.04}$	$7.98^{+0.05}_{-0.04}$	8.13 ± 0.04	-
D241	$5.78 \pm 0.03^*$	$7.57^{+0.02}_{-0.01}$	8.45 ± 0.03	7.68 ± 0.02	$8.04^{+0.03}_{-0.02}$	-
D242	$5.47^{+0.09}_{-0.07}$	$7.28^{+0.06}_{-0.05}$	$8.24^{+0.12}_{-0.09}$	$7.66^{+0.06}_{-0.05}$	$7.99^{+0.09}_{-0.07}$	-
D243	$4.91^{+0.21}_{-0.16}$	$5.95^{+0.31}_{-0.17}$	$7.61^{+0.21}_{-0.13}$	$7.78^{+0.14}_{-0.09}$	$8.03^{+0.18}_{-0.11}$	-
D244	$5.46^{+0.15}_{-0.13}$	7.55 ± 0.03	$8.40^{+0.06}_{-0.05}$	$6.84^{+0.05}_{-0.04}$	$7.20^{+0.05}_{-0.04}$	-
D245	5.64 ± 0.13	$7.57^{+0.05}_{-0.04}$	$8.33^{+0.10}_{-0.08}$	$8.25^{+0.08}_{-0.07}$	$8.64^{+0.10}_{-0.08}$	-
D246	$6.09^{+0.18}_{-0.14}$	$7.51^{+0.09}_{-0.07}$	$8.18^{+0.15}_{-0.10}$	$6.01^{+0.19}_{-0.16}$	$6.35^{+0.21}_{-0.16}$	-
D247	$5.72^{+0.07}_{-0.06}$	$7.20^{+0.05}_{-0.04}$	$8.19^{+0.09}_{-0.08}$	$7.75^{+0.07}_{-0.06}$	$8.03^{+0.07}_{-0.06}$	$8.12^{+0.15}_{-0.14}$
D248	5.64 ± 0.10	7.70 ± 0.03	$8.46^{+0.06}_{-0.05}$	$6.64^{+0.07}_{-0.05}$	7.02 ± 0.06	-
D249	$5.03^{+0.05}_{-0.04}$	7.30 ± 0.03	$8.28^{+0.05}_{-0.04}$	7.83 ± 0.02	8.12 ± 0.04	8.05 ± 0.13
D250	$5.88^{+0.16}_{-0.13}$	$6.71^{+0.07}_{-0.06}$	$7.90^{+0.11}_{-0.08}$	$7.99^{+0.09}_{-0.07}$	$8.27^{+0.11}_{-0.08}$	-
D251	$5.67^{+0.23}_{-0.18}$	$6.78^{+0.09}_{-0.07}$	$7.83^{+0.15}_{-0.11}$	$7.79^{+0.13}_{-0.08}$	$8.06^{+0.15}_{-0.09}$	-
D252	$5.22^{+0.29}_{-0.15}$	$6.10^{+0.21}_{-0.10}$	$7.35^{+0.43}_{-0.16}$	8.07 ± 0.01	$8.16^{+0.38}_{-0.15}$	-
D253	$5.17^{+0.07}_{-0.06}$	5.95 ± 0.03	$7.35^{+0.04}_{-0.03}$	7.97 ± 0.03	8.20 ± 0.03	$8.80^{+0.13}_{-0.15}$
D254	$5.02^{+0.05}_{-0.03}$	5.76 ± 0.01	7.22 ± 0.01	7.91 ± 0.01	8.14 ± 0.01	8.24 ± 0.05
D255	$5.37^{+0.14}_{-0.11}$	6.02 ± 0.02	7.36 ± 0.02	7.89 ± 0.01	8.12 ± 0.01	-
D256	$4.78^{+0.33}_{-0.15}$	$5.89^{+0.20}_{-0.12}$	$7.27^{+0.38}_{-0.15}$	8.20 ± 0.01	$8.22^{+0.25}_{-0.15}$	-
D257	$4.97^{+0.19}_{-0.12}$	$6.07^{+0.14}_{-0.09}$	$7.50^{+0.23}_{-0.13}$	8.19 ± 0.01	$8.38^{+0.17}_{-0.11}$	-
D258	$5.69^{+0.13}_{-0.11}$	6.49 ± 0.04	$7.87^{+0.07}_{-0.06}$	$7.88^{+0.05}_{-0.04}$	$8.14^{+0.06}_{-0.05}$	-
D259	$5.22^{+0.08}_{-0.07}$	-	7.02 ± 0.02	7.72 ± 0.01	7.94 ± 0.01	-
D260	$5.70^{+0.06}_{-0.04}$	-	7.84 ± 0.02	8.15 ± 0.01	8.44 ± 0.02	-
D261	$5.70^{+0.05}_{-0.04}$	-	7.84 ± 0.02	$8.15^{+0.02}_{-0.01}$	8.44 ± 0.02	-
D262	$5.44^{+0.04}_{-0.03}$	$6.49^{+0.05}_{-0.04}$	$7.77^{+0.08}_{-0.07}$	8.13 ± 0.02	$8.20^{+0.06}_{-0.05}$	-
D263	$5.01^{+0.13}_{-0.12}$	$5.65^{+0.03}_{-0.04}$	$7.15^{+0.11}_{-0.09}$	$7.71^{+0.05}_{-0.03}$	$7.93^{+0.07}_{-0.05}$	-
D264	$5.10^{+0.07}_{-0.05}$	5.60 ± 0.02	$7.11 \pm 0.05^{**}$	$7.65^{+0.03}_{-0.02}$	$7.86^{+0.03}_{-0.02}$	-
D265	$5.17^{+0.19}_{-0.15}$	$5.73^{+0.04}_{-0.03}$	$7.17^{+0.04}_{-0.03}$	7.71 ± 0.03	7.93 ± 0.03	-
D266	$5.27^{+0.23}_{-0.13}$	$6.30^{+0.16}_{-0.10}$	$7.68^{+0.26}_{-0.14}$	$8.05^{+0.01}_{-0.02}$	$8.37^{+0.27}_{-0.14}$	-
D267	$4.95^{+0.08}_{-0.07}$	$5.78^{+0.03}_{-0.02}$	$7.16^{+0.07}_{-0.06}$	7.81 ± 0.03	$8.03^{+0.04}_{-0.03}$	-
D268	$5.16^{+0.06}_{-0.04}$	-	7.21 ± 0.02	7.93 ± 0.01	8.17 ± 0.01	-
D269	$5.38^{+0.14}_{-0.13}$	-	$7.27^{+0.04}_{-0.03}$	7.95 ± 0.03	8.18 ± 0.03	-
D270	$5.85^{+0.13}_{-0.12}$	$6.31^{+0.05}_{-0.04}$	$7.66^{+0.08}_{-0.06}$	$7.87^{+0.06}_{-0.05}$	$8.12^{+0.07}_{-0.05}$	-
D271	$5.35^{+0.06}_{-0.05}$	5.52 ± 0.02	7.13 ± 0.02	$7.72^{+0.02}_{-0.01}$	7.93 ± 0.02	-
D272	$5.54^{+0.17}_{-0.11}$	$6.47^{+0.10}_{-0.06}$	$7.75^{+0.28}_{-0.13}$	$8.00^{+0.12}_{-0.08}$	$8.27^{+0.15}_{-0.10}$	-
D273	$4.69^{+0.18}_{-0.15}$	$5.82^{+0.04}_{-0.03}$	$7.27^{+0.09}_{-0.07}$	7.81 ± 0.04	$8.03^{+0.05}_{-0.04}$	-

Table D.6. Ionic abundances derived from the nebular sample. All values are in $12+\log(X/H)$ units. * indicates Fe^{2+} abundance determinations based on $[\text{Fe III}]\lambda 4658$ with flux errors smaller than 10%. ** indicates O^+ abundance determinations based on $[\text{O II}]\lambda 7319$, 7330 auroral lines.

Reference number	Fe^{2+}	N^+	O^+	O^{2+}	O^{2+}	O^{2+}
				$[\text{O III}]\text{-CELs } t^2 = 0$	$[\text{O III}]\text{-CELs } t^2 > 0$	O II-RLs
D274	$5.42^{+0.17}_{-0.12}$	$6.24^{+0.09}_{-0.07}$	$7.80^{+0.27}_{-0.14}$ **	$8.07^{+0.13}_{-0.09}$	$8.34^{+0.15}_{-0.09}$	-
D275	$4.48^{+0.06}_{-0.05}$	-	$6.65^{+0.02}_{-0.01}$	7.83 ± 0.01	8.05 ± 0.01	-
D276	4.63 ± 0.07	-	6.95 ± 0.02	7.85 ± 0.01	8.07 ± 0.01	-
D277	$4.94^{+0.06}_{-0.03}$ *	-	$7.28^{+0.03}_{-0.02}$	$7.79^{+0.02}_{-0.01}$	8.02 ± 0.02	-
D278	$5.23^{+0.07}_{-0.06}$	5.89 ± 0.01	$7.42^{+0.02}_{-0.01}$	7.94 ± 0.01	8.18 ± 0.01	-
D279	$5.69^{+0.12}_{-0.11}$	6.31 ± 0.03	7.68 ± 0.05	7.88 ± 0.04	$8.13^{+0.05}_{-0.04}$	-
D280	$5.04^{+0.08}_{-0.07}$	-	7.38 ± 0.02	$8.02^{+0.02}_{-0.01}$	$8.26^{+0.02}_{-0.01}$	-
D281	$5.90^{+0.13}_{-0.10}$	$6.56^{+0.08}_{-0.06}$	$7.83^{+0.13}_{-0.10}$	$7.98^{+0.10}_{-0.07}$	$8.25^{+0.11}_{-0.08}$	-
D282	$5.71^{+0.17}_{-0.11}$	$6.76^{+0.10}_{-0.08}$	$7.75^{+0.21}_{-0.12}$	$8.30^{+0.14}_{-0.10}$	$8.41^{+0.15}_{-0.11}$	-
D283	$4.32^{+0.18}_{-0.10}$ *	$5.26^{+0.14}_{-0.09}$	$6.49^{+0.24}_{-0.12}$	7.74 ± 0.03	$8.04^{+0.20}_{-0.12}$	$8.03^{+0.11}_{-0.12}$
D284	$5.32^{+0.33}_{-0.15}$	$6.34^{+0.25}_{-0.12}$	$7.80^{+0.43}_{-0.19}$	7.98 ± 0.02	$8.27^{+0.25}_{-0.12}$	-
D285	$5.45^{+0.09}_{-0.07}$	$7.12^{+0.05}_{-0.04}$	$8.08^{+0.07}_{-0.06}$	$8.05^{+0.10}_{-0.07}$	$8.49^{+0.06}_{-0.05}$	-
D286	$5.33^{+0.14}_{-0.12}$	$7.01^{+0.08}_{-0.06}$	$8.00^{+0.17}_{-0.09}$	$7.94^{+0.06}_{-0.05}$	$8.62^{+0.14}_{-0.09}$	-
D287	$5.74^{+0.11}_{-0.08}$ *	$7.01^{+0.07}_{-0.06}$	$8.16^{+0.13}_{-0.09}$	8.07 ± 0.03	$8.41^{+0.12}_{-0.08}$	-
D288	$5.60^{+0.07}_{-0.05}$ *	6.94 ± 0.04	$7.92^{+0.07}_{-0.08}$	8.15 ± 0.04	$8.44^{+0.06}_{-0.05}$	8.49 ± 0.12
D289	$5.83^{+0.28}_{-0.15}$	$6.99^{+0.17}_{-0.10}$	$8.13^{+0.28}_{-0.16}$	$8.14^{+0.06}_{-0.04}$	$8.40^{+0.27}_{-0.14}$	-
D290	$5.32^{+0.07}_{-0.06}$	6.37 ± 0.06	7.82 ± 0.03	$7.98^{+0.02}_{-0.01}$	8.25 ± 0.02	-
D291	$5.61^{+0.28}_{-0.15}$	$7.01^{+0.17}_{-0.11}$	$8.16^{+0.29}_{-0.17}$	$8.20^{+0.08}_{-0.06}$	$8.61^{+0.30}_{-0.15}$	-
D292	$5.83^{+0.24}_{-0.16}$	$7.17^{+0.12}_{-0.09}$	$8.38^{+0.22}_{-0.12}$	$7.98^{+0.06}_{-0.05}$	$8.46^{+0.23}_{-0.14}$	-
D293	$5.31^{+0.38}_{-0.19}$	$6.83^{+0.21}_{-0.11}$	$8.10^{+0.40}_{-0.18}$	$8.29^{+0.09}_{-0.07}$	$8.51^{+0.36}_{-0.18}$	-
D294	$5.14^{+0.16}_{-0.15}$	7.02 ± 0.06	$8.17^{+0.11}_{-0.09}$	$8.11^{+0.10}_{-0.07}$	$8.44^{+0.11}_{-0.08}$	8.36 ± 0.16
D295	$5.33^{+0.33}_{-0.18}$	$6.95^{+0.22}_{-0.12}$	$8.05^{+0.41}_{-0.17}$	$8.24^{+0.10}_{-0.09}$	$8.49^{+0.40}_{-0.16}$	$8.46^{+0.16}_{-0.18}$
D296	$5.41^{+0.05}_{-0.04}$ *	6.40 ± 0.03	7.71 ± 0.03	8.22 ± 0.03	8.50 ± 0.03	8.78 ± 0.09
D297	5.28 ± 0.02 *	6.26 ± 0.01	7.42 ± 0.02	8.17 ± 0.01	8.44 ± 0.01	8.43 ± 0.09
D298	$6.19^{+0.25}_{-0.15}$	$7.57^{+0.19}_{-0.10}$	$8.44^{+0.33}_{-0.16}$	$8.05^{+0.29}_{-0.15}$	$8.49^{+0.33}_{-0.17}$	-
D299	$5.39^{+0.11}_{-0.10}$	7.03 ± 0.03	$7.98^{+0.06}_{-0.04}$	7.99 ± 0.04	$8.29^{+0.05}_{-0.04}$	-
D300	$6.65^{+0.29}_{-0.15}$	$7.95^{+0.16}_{-0.10}$	$8.55^{+0.33}_{-0.16}$	$8.14^{+0.28}_{-0.16}$	$8.64^{+0.38}_{-0.18}$	-
D301	$5.84^{+0.13}_{-0.10}$	$7.61^{+0.07}_{-0.05}$	$8.26^{+0.12}_{-0.08}$	$7.57^{+0.10}_{-0.08}$	$7.95^{+0.09}_{-0.07}$	-
D302	$5.89^{+0.16}_{-0.11}$	$7.71^{+0.07}_{-0.06}$	$8.44^{+0.13}_{-0.10}$	$7.80^{+0.14}_{-0.09}$	$8.22^{+0.17}_{-0.12}$	-
D303	$5.75^{+0.09}_{-0.07}$ *	$7.25^{+0.05}_{-0.04}$	$8.03^{+0.07}_{-0.06}$	$7.79^{+0.06}_{-0.05}$	$8.09^{+0.07}_{-0.05}$	-
D304	$5.50^{+0.18}_{-0.16}$	$7.45^{+0.08}_{-0.06}$	$8.30^{+0.16}_{-0.10}$	$8.03^{+0.13}_{-0.08}$	$8.38^{+0.15}_{-0.10}$	-
D305	$5.47^{+0.17}_{-0.15}$	$7.50^{+0.05}_{-0.04}$	$8.17^{+0.09}_{-0.07}$	7.59 ± 0.07	$7.95^{+0.09}_{-0.07}$	-
D306	$5.47^{+0.18}_{-0.13}$	$7.24^{+0.08}_{-0.07}$	$8.19^{+0.15}_{-0.11}$	$7.70^{+0.13}_{-0.09}$	$8.03^{+0.18}_{-0.12}$	-
D307	$6.07^{+0.18}_{-0.11}$	$7.58^{+0.12}_{-0.08}$	$8.31^{+0.24}_{-0.13}$	$7.87^{+0.19}_{-0.12}$	$8.26^{+0.18}_{-0.12}$	-
D308	$5.87^{+0.25}_{-0.17}$	$7.85^{+0.11}_{-0.08}$	$8.39^{+0.21}_{-0.14}$	$7.82^{+0.20}_{-0.11}$	$8.28^{+0.28}_{-0.15}$	-
D309	$5.90^{+0.17}_{-0.12}$	7.83 ± 0.06	$8.68^{+0.11}_{-0.08}$	$8.21^{+0.11}_{-0.08}$	$8.64^{+0.10}_{-0.08}$	-
D310	$5.60^{+0.15}_{-0.10}$	$7.31^{+0.09}_{-0.06}$	$8.15^{+0.17}_{-0.11}$	$7.64^{+0.12}_{-0.09}$	$7.95^{+0.15}_{-0.10}$	-
D311	$5.68^{+0.13}_{-0.11}$	$7.47^{+0.07}_{-0.05}$	$8.24^{+0.11}_{-0.09}$	$7.60^{+0.11}_{-0.07}$	$7.95^{+0.11}_{-0.08}$	-
D312	$5.21^{+0.29}_{-0.14}$ *	$5.76^{+0.22}_{-0.12}$	$7.18^{+0.38}_{-0.18}$	$8.00^{+0.03}_{-0.02}$	$8.22^{+0.32}_{-0.15}$	-
D313	5.38 ± 0.04 *	6.31 ± 0.03	$7.56^{+0.05}_{-0.04}$	8.17 ± 0.01	$8.25^{+0.04}_{-0.03}$	8.31 ± 0.09
D314	$5.28^{+0.03}_{-0.02}$ *	6.17 ± 0.02	7.61 ± 0.03	8.03 ± 0.02	$8.28^{+0.03}_{-0.02}$	$8.66^{+0.13}_{-0.14}$
D315	$5.52^{+0.12}_{-0.08}$ *	$6.37^{+0.09}_{-0.06}$	$7.83^{+0.14}_{-0.10}$	$8.10^{+0.03}_{-0.02}$	$8.50^{+0.12}_{-0.09}$	$8.49^{+0.14}_{-0.15}$
D316	$5.90^{+0.09}_{-0.07}$	$6.60^{+0.05}_{-0.04}$	$8.01^{+0.08}_{-0.07}$	7.92 ± 0.05	$8.18^{+0.08}_{-0.05}$	-
D317	$5.26^{+0.07}_{-0.06}$ *	$6.36^{+0.05}_{-0.04}$	$7.62^{+0.08}_{-0.07}$	8.21 ± 0.01	$8.36^{+0.07}_{-0.06}$	-
D318	$5.62^{+0.07}_{-0.06}$ *	6.51 ± 0.02	$7.85^{+0.04}_{-0.03}$	8.24 ± 0.03	$8.54^{+0.04}_{-0.03}$	-
D319	4.64 ± 0.02 *	5.42 ± 0.01	7.12 ± 0.01	7.96 ± 0.01	8.19 ± 0.01	8.37 ± 0.06
D320	$5.04^{+0.10}_{-0.07}$ *	$5.64^{+0.08}_{-0.06}$	$7.22^{+0.13}_{-0.09}$	7.74 ± 0.03	$8.22^{+0.10}_{-0.07}$	8.18 ± 0.10
D321	$5.54^{+0.23}_{-0.18}$	$7.48^{+0.10}_{-0.07}$	$8.43^{+0.18}_{-0.13}$	$8.01^{+0.15}_{-0.09}$	$8.38^{+0.16}_{-0.12}$	-
D322	$5.62^{+0.18}_{-0.13}$	$7.39^{+0.07}_{-0.06}$	$8.48^{+0.13}_{-0.09}$	$7.75^{+0.09}_{-0.06}$	$8.62^{+0.12}_{-0.09}$	-
D323	$5.75^{+0.24}_{-0.17}$	$7.67^{+0.13}_{-0.09}$	$8.59^{+0.26}_{-0.15}$	$8.54^{+0.24}_{-0.14}$	$8.96^{+0.26}_{-0.15}$	-
D324	$5.67^{+0.17}_{-0.12}$	$7.23^{+0.08}_{-0.07}$	$8.22^{+0.16}_{-0.11}$	$8.01^{+0.10}_{-0.07}$	$8.56^{+0.16}_{-0.11}$	-
D325	$5.90^{+0.18}_{-0.12}$	$7.69^{+0.10}_{-0.07}$	$8.43^{+0.19}_{-0.11}$	$8.04^{+0.17}_{-0.10}$	$8.45^{+0.17}_{-0.11}$	-
D326	$6.05^{+0.20}_{-0.13}$	$7.75^{+0.12}_{-0.09}$	$8.38^{+0.24}_{-0.13}$	$7.74^{+0.21}_{-0.12}$	$8.13^{+0.26}_{-0.14}$	-
D327	$5.82^{+0.13}_{-0.10}$	$7.23^{+0.10}_{-0.08}$	$8.33^{+0.18}_{-0.12}$	$7.91^{+0.10}_{-0.08}$	$8.44^{+0.17}_{-0.10}$	-
D328	$5.89^{+0.07}_{-0.06}$ *	7.18 ± 0.03	$8.25^{+0.05}_{-0.04}$	$7.76^{+0.05}_{-0.04}$	8.36 ± 0.04	-

Table D.6. Ionic abundances derived from the nebular sample. All values are in $12+\log(X/H)$ units. * indicates Fe^{2+} abundance determinations based on $[\text{Fe III}]\lambda 4658$ with flux errors smaller than 10%. ** indicates O^+ abundance determinations based on $[\text{O II}]\lambda 7319, 7330$ auroral lines.

Reference number	Fe^{2+}	N^+	O^+	O^{2+} [O III]-CELs $t^2 = 0$	O^{2+} [O III]-CELs $t^2 > 0$	O^{2+} O II-RLs
D329	$5.87^{+0.12}_{-0.10}$	$7.53^{+0.08}_{-0.06}$	$8.43^{+0.14}_{-0.10}$	$7.42^{+0.06}_{-0.05}$	$8.56^{+0.14}_{-0.10}$	-
D330	$6.04^{+0.16}_{-0.12}$	$7.57^{+0.08}_{-0.06}$	$8.52^{+0.14}_{-0.09}$	$8.20^{+0.11}_{-0.08}$	$8.58^{+0.13}_{-0.10}$	-
D331	$5.87^{+0.27}_{-0.20}$	$7.27^{+0.14}_{-0.10}$	$8.13^{+0.28}_{-0.14}$	$8.06^{+0.21}_{-0.12}$	$8.41^{+0.29}_{-0.14}$	-
D332	$5.75^{+0.27}_{-0.17}$	$6.90^{+0.14}_{-0.10}$	$7.88^{+0.29}_{-0.14}$	$7.85^{+0.22}_{-0.12}$	$8.13^{+0.27}_{-0.13}$	-
D333	$5.89^{+0.16}_{-0.11}$	$7.75^{+0.08}_{-0.06}$	$8.47^{+0.13}_{-0.10}$	$8.15^{+0.13}_{-0.09}$	$8.56^{+0.13}_{-0.08}$	-
D334	$4.84^{+0.21*}_{-0.13}$	$5.90^{+0.15}_{-0.09}$	$7.40^{+0.30}_{-0.15}$	8.07 ± 0.03	$8.27^{+0.22}_{-0.14}$	$8.31^{+0.08}_{-0.07}$
D335	$4.70^{+0.07*}_{-0.06}$	5.78 ± 0.04	$7.14^{+0.08}_{-0.06}$	8.10 ± 0.01	$8.18^{+0.05}_{-0.04}$	8.29 ± 0.05
D336	$4.58^{+0.27}_{-0.15}$	$5.65^{+0.20}_{-0.10}$	$6.97^{+0.32}_{-0.15}$	8.05 ± 0.03	$7.88^{+0.29}_{-0.14}$	$8.27^{+0.12}_{-0.11}$
D337	$5.16^{+0.05}_{-0.04}$	5.66 ± 0.01	7.24 ± 0.02	7.84 ± 0.01	8.07 ± 0.01	-
D338	$5.20^{+0.13}_{-0.12}$	5.76 ± 0.04	$7.29^{+0.06}_{-0.04}$	$7.84^{+0.04}_{-0.03}$	$8.07^{+0.05}_{-0.04}$	-
D339	$5.37^{+0.13}_{-0.10}$	$5.98^{+0.06}_{-0.05}$	$7.40^{+0.08}_{-0.06}$	$7.86^{+0.06}_{-0.05}$	8.10 ± 0.06	-
D340	$5.54^{+0.11}_{-0.09}$	6.18 ± 0.04	$7.62^{+0.07}_{-0.05}$	$7.92^{+0.05}_{-0.04}$	$8.18^{+0.06}_{-0.05}$	-
D341	$4.96^{+0.32}_{-0.17}$	$5.89^{+0.26}_{-0.11}$	$7.31^{+0.48}_{-0.17}$	$7.84^{+0.04}_{-0.03}$	$7.63^{+0.32}_{-0.15}$	-
D342	$5.21^{+0.06}_{-0.05}$	5.73 ± 0.03	7.20 ± 0.03	8.02 ± 0.03	8.26 ± 0.03	-
D343	$5.06 \pm 0.02^*$	5.67 ± 0.01	7.14 ± 0.01	8.01 ± 0.01	8.25 ± 0.01	$7.93^{+0.15}_{-0.17}$
D344	$4.49^{+0.04*}_{-0.03}$	4.64 ± 0.06	$6.09^{+0.02}_{-0.01}$	7.21 ± 0.01	7.38 ± 0.01	-
D345	$4.62^{+0.05*}_{-0.03}$	-	6.15 ± 0.01	7.25 ± 0.01	7.43 ± 0.01	-
D346	$4.61^{+0.09}_{-0.10}$	-	6.17 ± 0.02	7.27 ± 0.01	7.45 ± 0.01	-
D347	$4.45^{+0.11}_{-0.10}$	-	6.17 ± 0.02	7.17 ± 0.01	7.35 ± 0.01	-
D348	4.69 ± 0.09	-	6.25 ± 0.02	7.22 ± 0.01	$7.40^{+0.02}_{-0.01}$	-
D349	$4.63^{+0.14}_{-0.15}$	-	6.32 ± 0.03	7.18 ± 0.02	$7.35^{+0.03}_{-0.02}$	-
D350	4.67 ± 0.14	-	6.13 ± 0.03	7.09 ± 0.02	$7.26^{+0.02}_{-0.03}$	-
D351	4.56 ± 0.06	-	6.18 ± 0.02	7.25 ± 0.01	$7.42^{+0.02}_{-0.01}$	-
D352	$4.23^{+0.13*}_{-0.09}$	$4.55^{+0.11}_{-0.08}$	$5.74^{+0.22}_{-0.10}$	7.17 ± 0.01	$7.05^{+0.15}_{-0.07}$	-
D353	4.53 ± 0.06	4.75 ± 0.02	6.14 ± 0.02	7.22 ± 0.01	7.40 ± 0.01	-
D354	$4.54^{+0.05*}_{-0.04}$	4.75 ± 0.02	6.13 ± 0.01	7.21 ± 0.01	7.39 ± 0.01	-
D355	$4.66^{+0.11}_{-0.10}$	4.77 ± 0.07	6.20 ± 0.03	7.07 ± 0.02	7.25 ± 0.02	-
D356	$5.46^{+0.06*}_{-0.05}$	-	7.55 ± 0.02	7.95 ± 0.01	8.19 ± 0.01	-
D357	$5.51^{+0.06*}_{-0.04}$	-	7.45 ± 0.02	7.88 ± 0.01	8.12 ± 0.01	-
D358	$4.61^{+0.15}_{-0.17}$	-	6.55 ± 0.02	7.39 ± 0.01	7.58 ± 0.01	-
D359	$5.22^{+0.07}_{-0.06}$	-	7.02 ± 0.02	7.72 ± 0.01	7.93 ± 0.01	-
D360	4.94 ± 0.07	$5.19^{+0.03}_{-0.02}$	6.68 ± 0.02	7.39 ± 0.01	7.58 ± 0.01	-
D361	$4.95^{+0.09}_{-0.07}$	5.47 ± 0.01	6.99 ± 0.01	7.44 ± 0.01	7.64 ± 0.01	-
D362	$4.64^{+0.08}_{-0.07}$	-	$6.49^{+0.03}_{-0.02}$	7.71 ± 0.02	7.91 ± 0.02	-
D363	$4.57^{+0.09*}_{-0.07}$	$5.23^{+0.07}_{-0.05}$	$6.12^{+0.11}_{-0.08}$	7.38 ± 0.01	$7.44^{+0.08}_{-0.06}$	-
D364	4.65 ± 0.09	$4.56^{+0.06}_{-0.05}$	5.92 ± 0.03	6.88 ± 0.02	7.05 ± 0.02	-
D365	$5.22^{+0.07}_{-0.06}$	5.94 ± 0.02	$7.25^{+0.06*}_{-0.05}$	7.83 ± 0.02	8.05 ± 0.03	-
D366	$5.01^{+0.06}_{-0.05}$	-	$7.22 \pm 0.03^{**}$	8.03 ± 0.01	$8.26^{+0.02}_{-0.01}$	-
D367	$5.09^{+0.11}_{-0.12}$	-	7.01 ± 0.03	7.68 ± 0.02	7.89 ± 0.02	-
D368	$5.29^{+0.06*}_{-0.05}$	5.87 ± 0.10	$7.05^{+0.10}_{-0.09}$	7.83 ± 0.05	$8.05^{+0.06}_{-0.05}$	-
D369	4.82 ± 0.07	-	6.69 ± 0.02	7.49 ± 0.01	7.68 ± 0.01	-
D370	4.60 ± 0.06	4.94 ± 0.03	6.27 ± 0.03	7.60 ± 0.02	7.79 ± 0.03	-
D371	$4.63^{+0.08}_{-0.07}$	-	6.25 ± 0.02	7.37 ± 0.01	7.55 ± 0.01	-
D372	$5.26^{+0.07}_{-0.06}$	-	7.16 ± 0.02	7.86 ± 0.01	8.07 ± 0.01	-
D373	$4.89^{+0.09}_{-0.07}$	-	7.30 ± 0.02	7.87 ± 0.01	8.10 ± 0.01	-
D374	$4.42^{+0.08*}_{-0.06}$	$5.20^{+0.06}_{-0.05}$	$5.63^{+0.10}_{-0.06}$	$7.40^{+0.03}_{-0.02}$	$7.14^{+0.08}_{-0.05}$	-
D375	$4.43^{+0.09*}_{-0.06}$	$5.20^{+0.07}_{-0.05}$	$5.64^{+0.10}_{-0.07}$	7.41 ± 0.02	$7.14^{+0.09}_{-0.06}$	-
D376	$5.20 \pm 0.02^*$	6.10 ± 0.03	6.84 ± 0.01	7.74 ± 0.01	7.95 ± 0.01	-
D377	$4.76^{+0.14}_{-0.11}$	$5.66^{+0.03}_{-0.02}$	$7.21 \pm 0.07^{**}$	$8.09^{+0.04}_{-0.03}$	8.33 ± 0.04	-
D378	4.81 ± 0.05	5.29 ± 0.03	$6.33^{+0.04}_{-0.03}$	7.63 ± 0.02	$7.81^{+0.03}_{-0.02}$	-
D379	$5.08^{+0.10}_{-0.09}$	-	$7.03^{+0.03}_{-0.02}$	7.58 ± 0.02	7.79 ± 0.02	-
D380	$5.28^{+0.05*}_{-0.04}$	6.14 ± 0.03	$7.16^{+0.06}_{-0.04}$	$7.97^{+0.04}_{-0.03}$	8.20 ± 0.04	-
D381	$5.01^{+0.08}_{-0.07}$	-	6.83 ± 0.02	7.58 ± 0.01	7.78 ± 0.01	-
D382	5.17 ± 0.09	-	6.93 ± 0.02	7.71 ± 0.01	7.91 ± 0.01	-
D383	$4.76^{+0.07}_{-0.06}$	$5.96^{+0.02}_{-0.01}$	7.20 ± 0.02	7.90 ± 0.02	8.12 ± 0.02	-

Table D.6. Ionic abundances derived from the nebular sample. All values are in $12+\log(X/H)$ units. * indicates Fe^{2+} abundance determinations based on $[\text{Fe III}]\lambda 4658$ with flux errors smaller than 10%. ** indicates O^+ abundance determinations based on $[\text{O II}]\lambda 7319, 7330$ auroral lines.

Reference number	Fe^{2+}	N^+	O^+	O^{2+}		O^{2+}
				$[\text{O III}]\text{-CELs } t^2 = 0$	$[\text{O III}]\text{-CELs } t^2 > 0$	O II-RLs
D384	$5.60^{+0.07}_{-0.06}$	$6.41^{+0.03}_{-0.02}$	7.64 ± 0.04	8.13 ± 0.03	8.40 ± 0.03	-
D385	$5.61^{+0.08}_{-0.07}$	6.50 ± 0.02	$7.74^{+0.03}_{-0.02}$	8.04 ± 0.02	$8.30^{+0.03}_{-0.02}$	-
D386	$5.11^{+0.05*}_{-0.04}$	-	$6.78^{+0.02}_{-0.01}$	7.63 ± 0.01	7.83 ± 0.01	-
D387	$4.58^{+0.06}_{-0.05}$	$4.93^{+0.03}_{-0.02}$	$6.15^{+0.04}_{-0.03}$	7.75 ± 0.02	$7.95^{+0.03}_{-0.02}$	-
D388	$5.48^{+0.08}_{-0.07}$	6.30 ± 0.02	7.57 ± 0.03	7.89 ± 0.02	8.14 ± 0.03	-
D389	$5.09^{+0.06*}_{-0.04}$	5.73 ± 0.01	7.31 ± 0.01	7.82 ± 0.01	8.05 ± 0.01	-
D390	$4.99^{+0.06*}_{-0.05}$	$5.79^{+0.04}_{-0.03}$	$6.72^{+0.07}_{-0.05}$	7.83 ± 0.02	$7.89^{+0.07}_{-0.05}$	-
D391	$5.01^{+0.11}_{-0.09}$	5.85 ± 0.02	$7.44^{+0.07**}_{-0.05}$	7.99 ± 0.03	8.24 ± 0.03	-
D392	$5.10^{+0.18}_{-0.12}$	$6.15^{+0.16}_{-0.10}$	$7.04^{+0.25}_{-0.12}$	7.75 ± 0.03	$7.97^{+0.17}_{-0.10}$	-
D393	$4.96^{+0.07}_{-0.06}$	5.67 ± 0.08	$6.69 \pm 0.03**$	7.50 ± 0.01	7.68 ± 0.01	-
D394	$5.57^{+0.08}_{-0.07}$	$6.22^{+0.05}_{-0.04}$	$7.54^{+0.14**}_{-0.09}$	$7.96^{+0.06}_{-0.05}$	$8.21^{+0.07}_{-0.06}$	-
D395	$5.23^{+0.07}_{-0.05}$	-	$7.22^{+0.02}_{-0.01}$	7.80 ± 0.01	8.03 ± 0.01	-
D396	$5.24 \pm 0.01*$	$6.17^{+0.01}_{-0.02}$	7.17 ± 0.01	7.93 ± 0.01	8.16 ± 0.01	-
D397	$5.37^{+0.08}_{-0.07}$	-	$7.19^{+0.03}_{-0.02}$	7.96 ± 0.02	8.19 ± 0.02	-
D398	$5.43^{+0.09}_{-0.08}$	$6.55^{+0.03}_{-0.02}$	7.75 ± 0.04	7.87 ± 0.03	8.14 ± 0.03	-
D399	$5.24^{+0.10}_{-0.09}$	$6.38^{+0.06}_{-0.04}$	$7.35^{+0.09}_{-0.07}$	7.95 ± 0.03	$8.00^{+0.08}_{-0.06}$	-
D400	$5.48^{+0.13*}_{-0.09}$	$6.41^{+0.10}_{-0.07}$	$7.32^{+0.17}_{-0.11}$	8.04 ± 0.01	$8.46^{+0.15}_{-0.10}$	-
D401	$4.82^{+0.05*}_{-0.04}$	5.95 ± 0.03	$7.49^{+0.05}_{-0.04}$	7.84 ± 0.02	$8.04^{+0.04}_{-0.03}$	7.99 ± 0.05
D402	$4.88^{+0.04*}_{-0.03}$	5.69 ± 0.02	7.30 ± 0.04	7.90 ± 0.02	8.15 ± 0.03	$8.22^{+0.03}_{-0.02}$
D403	$4.99^{+0.04*}_{-0.03}$	5.41 ± 0.03	$6.87^{+0.07}_{-0.06}$	7.99 ± 0.02	8.16 ± 0.04	8.17 ± 0.02
D404	$4.38^{+0.09}_{-0.08}$	6.14 ± 0.03	$7.73^{+0.06}_{-0.07}$	7.79 ± 0.02	$8.05^{+0.03}_{-0.02}$	-
D405	4.89 ± 0.06	5.62 ± 0.09	$7.16^{+0.02}_{-0.01}$	7.93 ± 0.01	8.17 ± 0.01	8.29 ± 0.07
D406	$4.99^{+0.12}_{-0.10}$	$6.10^{+0.14}_{-0.13}$	$7.51^{+0.05}_{-0.04}$	$7.77^{+0.04}_{-0.03}$	8.01 ± 0.04	-
D407	$5.00^{+0.20}_{-0.13}$	$6.06^{+0.14}_{-0.08}$	$7.55^{+0.23}_{-0.13}$	7.88 ± 0.02	$8.20^{+0.23}_{-0.15}$	8.14 ± 0.12
D408	5.10 ± 0.05	6.07 ± 0.01	7.67 ± 0.01	7.85 ± 0.01	8.10 ± 0.01	-
D409	$4.98^{+0.07}_{-0.06}$	-	7.56 ± 0.02	7.89 ± 0.01	8.15 ± 0.01	-
D410	$4.96^{+0.13*}_{-0.09}$	$5.84^{+0.10}_{-0.07}$	$7.48^{+0.17}_{-0.11}$	7.89 ± 0.01	$8.05^{+0.17}_{-0.11}$	-
D411	$4.88^{+0.05*}_{-0.04}$	6.03 ± 0.03	$7.63^{+0.05}_{-0.04}$	7.84 ± 0.01	8.03 ± 0.04	$8.20^{+0.12}_{-0.11}$
D412	$4.96^{+0.18}_{-0.11}$	$5.89^{+0.11}_{-0.08}$	$7.50^{+0.21}_{-0.12}$	7.93 ± 0.01	$8.23^{+0.15}_{-0.10}$	8.34 ± 0.13
D413	$5.66^{+0.05*}_{-0.04}$	6.18 ± 0.03	$7.65^{+0.04}_{-0.03}$	8.09 ± 0.03	8.36 ± 0.03	-
D414	$5.34^{+0.05*}_{-0.04}$	$5.84^{+0.02}_{-0.03}$	7.31 ± 0.03	$7.93^{+0.03}_{-0.02}$	$8.16^{+0.03}_{-0.02}$	-
D415	$5.08^{+0.07}_{-0.06}$	5.78 ± 0.02	$7.00^{+0.03}_{-0.02}$	7.87 ± 0.02	8.09 ± 0.02	$8.36^{+0.15}_{-0.14}$
D416	5.25 ± 0.09	5.79 ± 0.03	7.03 ± 0.03	7.85 ± 0.02	$8.08^{+0.03}_{-0.02}$	-
D417	5.11 ± 0.07	5.66 ± 0.01	6.97 ± 0.02	7.83 ± 0.01	8.04 ± 0.01	-
D418	5.02 ± 0.07	5.69 ± 0.01	7.02 ± 0.02	7.83 ± 0.01	8.05 ± 0.01	-
D419	$4.86^{+0.08}_{-0.10}$	-	6.80 ± 0.03	7.91 ± 0.02	8.13 ± 0.03	-
D420	4.80 ± 0.06	5.52 ± 0.01	6.75 ± 0.02	7.89 ± 0.01	8.11 ± 0.01	-
D421	$4.88 \pm 0.04*$	5.63 ± 0.01	6.82 ± 0.02	7.90 ± 0.01	8.12 ± 0.01	-
D422	$5.59^{+0.06*}_{-0.04}$	$6.23^{+0.03}_{-0.02}$	7.73 ± 0.04	8.06 ± 0.03	8.33 ± 0.03	-
D423	4.44 ± 0.09	4.74 ± 0.02	$6.25^{+0.02}_{-0.01}$	7.45 ± 0.01	7.63 ± 0.01	-
D424	$4.53 \pm 0.04*$	4.76 ± 0.02	6.27 ± 0.02	7.48 ± 0.01	7.66 ± 0.01	7.72 ± 0.12
D425	$5.99^{+0.08*}_{-0.06}$	6.30 ± 0.04	$8.10^{+0.08}_{-0.06}$	8.11 ± 0.01	$8.80^{+0.06}_{-0.05}$	-
D426	$5.34 \pm 0.02*$	6.00 ± 0.01	7.27 ± 0.02	7.89 ± 0.01	$8.14^{+0.02}_{-0.01}$	-
D427	$5.39^{+0.02*}_{-0.01}$	5.91 ± 0.01	7.37 ± 0.01	8.00 ± 0.01	8.25 ± 0.01	-
D428	$5.37^{+0.05}_{-0.06}$	6.18 ± 0.01	7.37 ± 0.02	8.02 ± 0.01	8.26 ± 0.02	-
D429	$5.38^{+0.08}_{-0.07}$	5.80 ± 0.02	$7.34^{+0.03}_{-0.02}$	7.82 ± 0.02	8.05 ± 0.02	-
D430	$5.33^{+0.14*}_{-0.09}$	$6.21^{+0.10}_{-0.07}$	$7.38^{+0.17}_{-0.11}$	7.93 ± 0.01	$8.26^{+0.13}_{-0.09}$	-
D431	5.22 ± 0.05	5.42 ± 0.02	$6.91^{+0.02}_{-0.01}$	7.74 ± 0.01	7.95 ± 0.01	-
D432	$5.00^{+0.04*}_{-0.03}$	5.44 ± 0.01	$6.88^{+0.02}_{-0.01}$	7.75 ± 0.01	7.96 ± 0.01	-
D433	4.95 ± 0.09	$5.32^{+0.03}_{-0.02}$	$6.86^{+0.03}_{-0.02}$	7.69 ± 0.02	7.89 ± 0.02	-
D434	4.94 ± 0.06	$5.33^{+0.07}_{-0.02}$	6.85 ± 0.02	7.72 ± 0.01	7.92 ± 0.01	-
D435	$4.96 \pm 0.04*$	5.42 ± 0.02	6.81 ± 0.02	7.75 ± 0.01	7.97 ± 0.01	$7.92^{+0.17}_{-0.15}$
D436	$4.95^{+0.08}_{-0.06}$	5.44 ± 0.02	6.82 ± 0.02	$7.74^{+0.02}_{-0.01}$	7.95 ± 0.02	-
D437	$4.49^{+0.12*}_{-0.07}$	$5.31^{+0.10}_{-0.07}$	$6.03^{+0.16}_{-0.09}$	7.89 ± 0.01	$7.37^{+0.14}_{-0.07}$	-
D438	$4.73^{+0.05}_{-0.04}$	5.11 ± 0.01	6.73 ± 0.02	7.43 ± 0.01	7.62 ± 0.01	-

Table D.6. Ionic abundances derived from the nebular sample. All values are in $12+\log(X/H)$ units. * indicates Fe^{2+} abundance determinations based on $[\text{Fe III}]\lambda 4658$ with flux errors smaller than 10%. ** indicates O^+ abundance determinations based on $[\text{O II}]\lambda\lambda 7319, 7330$ auroral lines.

Reference number	Fe^{2+}	N^+	O^+	O^{2+}		O^{2+}
				$[\text{O III}]\text{-CELs } t^2 = 0$	$[\text{O III}]\text{-CELs } t^2 > 0$	O II-RLs
D439	$4.97^{+0.08}_{-0.07}$	$5.28^{+0.03}_{-0.02}$	6.91 ± 0.03	7.40 ± 0.02	7.60 ± 0.02	-
D440	$4.96^{+0.10}_{-0.09}$	5.55 ± 0.02	7.21 ± 0.02	7.49 ± 0.01	7.70 ± 0.01	-
D441	$5.08^{+0.12}_{-0.13}$	6.04 ± 0.02	7.29 ± 0.02	8.12 ± 0.02	8.37 ± 0.02	-
D442	$6.03^{+0.06*}_{-0.05}$	6.85 ± 0.02	8.26 ± 0.04	7.82 ± 0.03	8.10 ± 0.03	-
D443	$5.42^{+0.24}_{-0.17}$	$6.52^{+0.14}_{-0.09}$	$7.81^{+0.26}_{-0.14}$	$8.06^{+0.14}_{-0.10}$	$8.06^{+0.23}_{-0.12}$	-
D444	5.37 ± 0.10	6.13 ± 0.02	7.46 ± 0.03	8.18 ± 0.02	8.44 ± 0.02	-
D445	$5.68^{+0.10}_{-0.08}$	6.53 ± 0.04	$7.84^{+0.06}_{-0.05}$	$7.87^{+0.05}_{-0.04}$	$8.12^{+0.06}_{-0.05}$	-
D446	$5.58^{+0.09}_{-0.07}$	6.15 ± 0.02	$7.64^{+0.04}_{-0.03}$	7.84 ± 0.03	8.08 ± 0.03	-
D447	$5.84^{+0.13}_{-0.10}$	$6.50^{+0.06}_{-0.05}$	$7.64^{+0.10}_{-0.08}$	$7.82^{+0.07}_{-0.06}$	$8.06^{+0.09}_{-0.06}$	-
D448	$5.83^{+0.13}_{-0.12}$	$6.16^{+0.07}_{-0.06}$	$7.32^{+0.08}_{-0.07}$	$7.65^{+0.06}_{-0.05}$	$7.85^{+0.07}_{-0.06}$	-
D449	$4.93^{+0.14}_{-0.13}$	$5.70^{+0.01}_{-0.02}$	$7.18^{+0.02}_{-0.01}$	8.01 ± 0.01	8.24 ± 0.01	-
D450	$5.25^{+0.13}_{-0.11}$	5.94 ± 0.02	7.42 ± 0.02	$7.83^{+0.02}_{-0.01}$	8.06 ± 0.02	-
D451	$4.95^{+0.04*}_{-0.03}$	$5.43^{+0.05}_{-0.04}$	6.75 ± 0.03	7.68 ± 0.02	7.89 ± 0.02	-
D452	$5.10^{+0.13}_{-0.11}$	6.04 ± 0.04	$6.83^{+0.07}_{-0.06}$	$7.84^{+0.05}_{-0.04}$	$8.05^{+0.05}_{-0.04}$	-

Table D.7. Numerical values of the ICFs adopted in this work for N (Amayo et al. 2021) and Fe (Rodríguez & Rubin 2005). These are on a logarithmic scale, so that $12+\log(X/H) = \log(ICF(X)) + 12 + \log(X^{i+}/H^+)$.

Reference number	$\log(ICF(N)) (t^2 = 0)$	$\log(ICF(N)) (t^2 > 0)$	$\log(ICF(Fe)) (t^2 = 0)$	$\log(ICF(Fe)) (t^2 > 0)$
D1	0.64	0.84	0.49	0.65
D2	1.04	1.26	0.83	1.04
D3	0.81	1.01	0.63	0.80
D4	0.68	0.88	0.52	0.69
D5	1.02	1.24	0.82	1.02
D6	0.95	1.17	0.75	0.95
D7	0.74	0.95	0.57	0.75
D8	0.58	0.80	0.44	0.62
D9	0.60	0.84	0.46	0.65
D10	0.78	1.00	0.61	0.79
D11	0.87	1.07	0.68	0.85
D12	0.73	0.93	0.56	0.73
D13	0.40	0.57	0.28	0.43
D14	0.64	0.83	0.49	0.65
D15	0.53	0.75	0.40	0.58
D16	0.52	0.71	0.39	0.54
D17	0.74	0.95	0.57	0.75
D18	0.46	0.64	0.34	0.49
D19	1.18	1.40	0.97	1.18
D20	1.13	1.31	0.92	1.09
D21	0.76	0.95	0.59	0.75
D22	0.70	0.88	0.54	0.69
D23	0.70	0.89	0.53	0.70
D24	0.55	0.76	0.41	0.59
D25	0.81	1.02	0.63	0.82
D26	0.40	0.54	0.28	0.40
D27	0.71	0.92	0.54	0.73
D28	1.12	1.31	0.91	1.09
D29	0.74	0.97	0.57	0.77
D30	0.66	0.88	0.51	0.69
D31	0.68	0.90	0.52	0.71
D32	0.51	0.72	0.38	0.56
D33	0.39	0.52	0.26	0.39
D34	0.39	0.51	0.26	0.37
D35	0.81	1.04	0.63	0.83
D36	0.61	0.82	0.46	0.64
D37	0.35	0.46	0.23	0.33
D38	0.58	0.76	0.44	0.59
D39	0.97	1.21	0.77	0.99
D40	0.60	0.80	0.46	0.62
D41	0.97	1.15	0.77	0.93
D42	0.51	0.72	0.38	0.55
D43	0.44	0.60	0.31	0.46
D44	0.51	0.70	0.37	0.53
D45	0.39	0.52	0.26	0.39
D46	0.62	0.86	0.47	0.67
D47	0.41	0.59	0.29	0.45
D48	0.37	0.51	0.24	0.38
D49	0.49	0.72	0.36	0.56
D50	0.71	0.94	0.55	0.74
D51	0.48	0.68	0.35	0.52
D52	0.62	0.82	0.47	0.63
D53	0.84	1.04	0.65	0.83
D54	1.01	1.19	0.80	0.97
D55	0.42	0.58	0.29	0.44
D56	0.85	1.05	0.66	0.84
D57	0.49	0.71	0.36	0.54
D58	0.59	0.81	0.45	0.62
D59	0.94	1.16	0.74	0.94
D60	0.44	0.63	0.32	0.48

Table D.7. Numerical values of the ICFs adopted in this work for N (Amayo et al. 2021) and Fe (Rodríguez & Rubin 2005). These are on a logarithmic scale, so that $12+\log(X/H) = \log(\text{ICF}(X)) + 12 + \log(X^{i+}/H^+)$.

Reference number	$\log(\text{ICF}(\text{N})) (t^2 = 0)$	$\log(\text{ICF}(\text{N})) (t^2 > 0)$	$\log(\text{ICF}(\text{Fe})) (t^2 = 0)$	$\log(\text{ICF}(\text{Fe})) (t^2 > 0)$
D61	0.54	0.73	0.41	0.56
D62	0.54	0.74	0.40	0.57
D63	0.43	0.62	0.31	0.47
D64	0.35	0.53	0.23	0.40
D65	0.69	0.84	0.53	0.65
D66	0.88	1.07	0.69	0.86
D67	0.63	0.82	0.48	0.64
D68	0.52	0.76	0.39	0.58
D69	0.45	0.60	0.32	0.46
D70	0.60	0.80	0.45	0.62
D71	0.14	0.31	0.10	0.19
D72	0.84	1.03	0.65	0.82
D73	0.50	0.68	0.37	0.52
D74	0.71	0.94	0.55	0.74
D75	0.92	1.09	0.72	0.88
D76	1.05	1.28	0.84	1.06
D77	0.60	0.81	0.46	0.63
D78	1.11	1.27	0.90	1.05
D79	1.12	1.26	0.91	1.04
D80	1.14	1.30	0.93	1.08
D81	0.91	0.72	0.71	0.56
D82	1.20	1.39	0.98	1.17
D83	0.87	1.33	0.68	1.11
D84	0.80	1.00	0.62	0.79
D85	0.32	0.49	0.20	0.36
D86	0.30	0.45	0.18	0.32
D87	1.14	1.36	0.93	1.13
D88	0.88	1.03	0.69	0.82
D89	0.67	0.83	0.51	0.65
D90	0.52	0.70	0.39	0.54
D91	0.68	0.91	0.52	0.71
D92	0.54	0.82	0.41	0.64
D93	0.64	0.83	0.49	0.65
D94	1.00	1.16	0.79	0.95
D95	0.48	0.63	0.35	0.48
D96	1.18	1.35	0.96	1.13
D97	1.05	1.23	0.84	1.01
D98	1.25	1.42	1.03	1.19
D99	0.85	1.05	0.66	0.84
D100	1.28	1.41	1.06	1.19
D101	0.97	1.21	0.77	0.99
D102	0.88	1.09	0.69	0.88
D103	1.09	1.27	0.87	1.05
D104	0.73	0.93	0.56	0.73
D105	0.67	0.85	0.51	0.67
D106	1.00	0.91	0.79	0.71
D107	0.73	0.86	0.56	0.67
D108	0.55	0.75	0.41	0.58
D109	0.56	0.76	0.42	0.58
D110	0.91	1.07	0.71	0.86
D111	1.01	1.21	0.80	0.99
D112	1.09	1.28	0.87	1.06
D113	0.92	1.10	0.73	0.89
D114	0.89	1.08	0.69	0.86
D115	0.82	1.01	0.64	0.80
D116	0.44	0.56	0.31	0.43
D117	0.47	0.61	0.35	0.46
D118	1.05	1.37	0.84	1.15
D119	0.78	0.96	0.60	0.76
D120	0.25	0.43	0.15	0.31

Table D.7. Numerical values of the ICFs adopted in this work for N (Amayo et al. 2021) and Fe (Rodríguez & Rubin 2005). These are on a logarithmic scale, so that $12+\log(X/H) = \log(\text{ICF}(X)) + 12 + \log(X^{i+}/H^+)$.

Reference number	$\log(\text{ICF}(\text{N})) (t^2 = 0)$	$\log(\text{ICF}(\text{N})) (t^2 > 0)$	$\log(\text{ICF}(\text{Fe})) (t^2 = 0)$	$\log(\text{ICF}(\text{Fe})) (t^2 > 0)$
D121	0.22	0.50	0.13	0.37
D122	0.32	0.57	0.20	0.43
D123	0.16	0.32	0.11	0.20
D124	0.25	0.37	0.15	0.25
D125	0.22	0.38	0.14	0.25
D126	0.27	0.43	0.16	0.30
D127	0.21	0.33	0.13	0.20
D128	0.52	0.79	0.39	0.61
D129	0.28	0.41	0.17	0.28
D130	0.47	0.65	0.34	0.49
D131	0.47	0.66	0.34	0.50
D132	0.33	0.45	0.21	0.33
D133	0.49	0.69	0.36	0.53
D134	0.47	0.75	0.34	0.58
D135	0.68	0.81	0.52	0.63
D136	0.36	0.55	0.24	0.42
D137	0.41	0.57	0.29	0.43
D138	0.17	0.37	0.11	0.24
D139	0.12	0.25	0.10	0.15
D140	0.15	0.33	0.10	0.21
D141	0.29	0.31	0.18	0.19
D142	0.34	0.56	0.22	0.42
D143	0.15	0.31	0.11	0.19
D144	0.39	0.58	0.27	0.44
D145	0.34	0.45	0.22	0.32
D146	0.41	0.60	0.28	0.46
D147	0.11	0.28	0.09	0.17
D148	0.28	0.46	0.17	0.33
D149	0.32	0.44	0.20	0.31
D150	0.15	0.33	0.10	0.20
D151	0.27	0.43	0.16	0.31
D152	0.03	0.11	0.08	0.09
D153	0.38	0.51	0.26	0.38
D154	0.30	0.40	0.19	0.28
D155	0.17	0.38	0.11	0.25
D156	0.40	0.59	0.27	0.45
D157	0.35	0.65	0.23	0.50
D158	0.09	0.35	0.09	0.23
D159	0.53	0.70	0.39	0.54
D160	0.11	0.28	0.09	0.17
D161	0.24	0.43	0.15	0.31
D162	0.12	0.28	0.10	0.17
D163	0.11	0.25	0.09	0.15
D164	0.16	0.32	0.11	0.20
D165	0.35	0.57	0.23	0.43
D166	0.41	0.66	0.29	0.51
D167	0.55	0.84	0.42	0.65
D168	0.79	0.84	0.61	0.65
D169	0.13	0.40	0.10	0.27
D170	1.42	0.03	1.20	0.08
D171	0.24	0.37	0.15	0.25
D172	0.56	0.77	0.42	0.60
D173	0.66	0.80	0.51	0.62
D174	0.27	0.53	0.16	0.39
D175	0.22	0.48	0.13	0.35
D176	0.52	0.85	0.38	0.66
D177	0.70	0.92	0.54	0.73
D178	0.45	0.66	0.32	0.50
D179	0.55	0.79	0.41	0.61
D180	0.85	1.06	0.66	0.85

Table D.7. Numerical values of the ICFs adopted in this work for N (Amayo et al. 2021) and Fe (Rodríguez & Rubin 2005). These are on a logarithmic scale, so that $12+\log(X/H) = \log(\text{ICF}(X)) + 12 + \log(X^{i+}/H^+)$.

Reference number	$\log(\text{ICF}(\text{N})) (t^2 = 0)$	$\log(\text{ICF}(\text{N})) (t^2 > 0)$	$\log(\text{ICF}(\text{Fe})) (t^2 = 0)$	$\log(\text{ICF}(\text{Fe})) (t^2 > 0)$
D181	0.41	0.54	0.28	0.40
D182	0.76	1.16	0.58	0.94
D183	0.98	1.16	0.78	0.94
D184	0.08	0.34	0.09	0.22
D185	0.37	0.52	0.24	0.39
D186	0.01	0.30	0.10	0.18
D187	0.20	0.42	0.12	0.30
D188	0.64	0.79	0.49	0.61
D189	0.33	0.35	0.20	0.23
D190	0.04	0.29	0.08	0.18
D191	0.18	0.33	0.12	0.21
D192	0.24	0.41	0.15	0.28
D193	0.44	0.62	0.31	0.47
D194	0.45	0.50	0.32	0.37
D195	0.56	0.73	0.42	0.56
D196	0.76	0.94	0.58	0.74
D197	0.48	0.70	0.35	0.53
D198	0.83	1.13	0.65	0.91
D199	0.31	0.41	0.19	0.28
D200	0.56	0.78	0.42	0.60
D201	0.56	0.80	0.42	0.62
D202	0.15	0.30	0.11	0.18
D203	0.03	0.12	0.08	0.10
D204	0.04	0.10	0.08	0.09
D205	0.70	0.85	0.54	0.66
D206	0.29	0.48	0.17	0.36
D207	0.61	0.88	0.46	0.69
D208	0.21	0.48	0.13	0.35
D209	0.14	0.32	0.10	0.20
D210	0.25	0.43	0.15	0.30
D211	0.23	0.41	0.14	0.28
D212	0.26	0.46	0.16	0.33
D213	0.15	0.33	0.10	0.21
D214	0.27	0.51	0.16	0.37
D215	0.47	1.12	0.34	0.90
D216	0.17	0.36	0.11	0.23
D217	0.01	0.25	0.10	0.15
D218	0.24	0.43	0.14	0.30
D219	0.13	0.33	0.10	0.21
D220	0.84	1.08	0.65	0.87
D221	0.09	0.25	0.09	0.15
D222	0.68	0.70	0.52	0.54
D223	0.31	0.47	0.19	0.34
D224	0.72	0.74	0.56	0.57
D225	0.33	0.52	0.21	0.39
D226	0.78	0.86	0.60	0.67
D227	0.79	0.80	0.61	0.62
D228	0.87	0.89	0.68	0.70
D229	0.74	0.76	0.57	0.58
D230	0.06	0.18	0.08	0.12
D231	0.75	0.84	0.58	0.66
D232	0.78	0.81	0.61	0.63
D233	0.65	0.69	0.49	0.53
D234	0.19	0.37	0.12	0.25
D235	0.62	0.88	0.47	0.69
D236	0.56	0.85	0.42	0.66
D237	1.22	0.57	1.00	0.43
D238	0.86	1.14	0.67	0.93
D239	0.06	0.15	0.08	0.11
D240	0.45	0.55	0.32	0.41

Table D.7. Numerical values of the ICFs adopted in this work for N (Amayo et al. 2021) and Fe (Rodríguez & Rubin 2005). These are on a logarithmic scale, so that $12+\log(X/H) = \log(\text{ICF}(X)) + 12 + \log(X^{i+}/H^+)$.

Reference number	$\log(\text{ICF}(\text{N})) (t^2 = 0)$	$\log(\text{ICF}(\text{N})) (t^2 > 0)$	$\log(\text{ICF}(\text{Fe})) (t^2 = 0)$	$\log(\text{ICF}(\text{Fe})) (t^2 > 0)$
D241	0.08	0.21	0.08	0.13
D242	0.14	0.28	0.10	0.17
D243	0.47	0.65	0.34	0.50
D244	0.01	0.02	0.09	0.08
D245	0.34	0.54	0.22	0.40
D246	0.01	0.01	0.13	0.11
D247	0.19	0.32	0.12	0.20
D248	0.01	0.01	0.11	0.08
D249	0.19	0.32	0.12	0.20
D250	0.41	0.59	0.29	0.44
D251	0.36	0.51	0.24	0.38
D252	0.89	1.10	0.70	0.89
D253	0.80	1.00	0.62	0.79
D254	0.85	1.06	0.67	0.85
D255	0.73	0.93	0.56	0.73
D256	1.07	0.99	0.86	0.78
D257	0.86	0.99	0.67	0.78
D258	0.38	0.52	0.25	0.39
D259	0.88	1.06	0.68	0.85
D260	0.56	0.79	0.42	0.61
D261	0.56	0.79	0.42	0.61
D262	0.60	0.65	0.45	0.49
D263	0.75	0.98	0.58	0.77
D264	0.73	0.92	0.56	0.72
D265	0.72	0.92	0.56	0.72
D266	0.60	0.77	0.45	0.59
D267	0.83	1.02	0.64	0.81
D268	0.89	1.09	0.69	0.88
D269	0.86	1.03	0.67	0.82
D270	0.49	0.70	0.36	0.53
D271	0.76	0.96	0.59	0.76
D272	0.50	0.78	0.37	0.61
D273	0.72	0.94	0.56	0.74
D274	0.53	0.70	0.40	0.54
D275	1.29	1.48	1.07	1.26
D276	1.04	1.24	0.84	1.02
D277	0.71	0.89	0.54	0.70
D278	0.70	0.91	0.54	0.71
D279	0.49	0.65	0.36	0.50
D280	0.81	1.03	0.63	0.83
D281	0.45	0.63	0.32	0.48
D282	0.78	0.87	0.60	0.68
D283	1.33	2.90	1.11	2.60
D284	0.47	0.67	0.34	0.51
D285	0.37	0.63	0.24	0.48
D286	0.35	0.82	0.23	0.63
D287	0.34	0.50	0.22	0.37
D288	0.51	0.70	0.37	0.54
D289	0.39	0.52	0.26	0.39
D290	0.46	0.64	0.33	0.48
D291	0.39	0.70	0.27	0.54
D292	0.22	0.43	0.14	0.30
D293	0.51	0.65	0.38	0.49
D294	0.36	0.52	0.23	0.39
D295	0.48	0.63	0.35	0.48
D296	0.70	0.94	0.54	0.74
D297	0.91	1.16	0.71	0.95
D298	0.21	0.40	0.13	0.28
D299	0.38	0.54	0.26	0.40
D300	0.21	0.42	0.13	0.30

Table D.7. Numerical values of the ICFs adopted in this work for N (Amayo et al. 2021) and Fe (Rodríguez & Rubin 2005). These are on a logarithmic scale, so that $12+\log(X/H) = \log(\text{ICF}(X)) + 12 + \log(X^{i+}/H^+)$.

Reference number	$\log(\text{ICF}(\text{N})) (t^2 = 0)$	$\log(\text{ICF}(\text{N})) (t^2 > 0)$	$\log(\text{ICF}(\text{Fe})) (t^2 = 0)$	$\log(\text{ICF}(\text{Fe})) (t^2 > 0)$
D301	0.10	0.25	0.09	0.15
D302	0.12	0.29	0.09	0.17
D303	0.28	0.41	0.17	0.28
D304	0.27	0.43	0.16	0.30
D305	0.14	0.29	0.10	0.18
D306	0.18	0.32	0.12	0.20
D307	0.20	0.35	0.13	0.23
D308	0.14	0.34	0.10	0.22
D309	0.19	0.37	0.12	0.24
D310	0.17	0.30	0.11	0.18
D311	0.12	0.26	0.10	0.16
D312	0.99	1.27	0.78	1.05
D313	0.79	0.87	0.61	0.68
D314	0.63	0.84	0.48	0.65
D315	0.52	0.86	0.38	0.68
D316	0.34	0.47	0.22	0.34
D317	0.77	0.88	0.59	0.68
D318	0.60	0.86	0.46	0.67
D319	1.00	1.19	0.79	0.97
D320	0.72	1.14	0.55	0.92
D321	0.20	0.36	0.13	0.23
D322	0.09	0.45	0.09	0.32
D323	0.36	0.64	0.23	0.49
D324	0.29	0.56	0.18	0.42
D325	0.22	0.38	0.13	0.26
D326	0.11	0.29	0.09	0.17
D327	0.21	0.41	0.13	0.29
D328	0.17	0.43	0.11	0.30
D329	0.03	0.44	0.08	0.32
D330	0.25	0.42	0.15	0.30
D331	0.36	0.53	0.23	0.39
D332	0.37	0.51	0.25	0.38
D333	0.25	0.43	0.15	0.30
D334	0.85	1.13	0.67	0.92
D335	1.09	1.18	0.87	0.96
D336	1.22	0.50	1.00	0.37
D337	0.78	0.97	0.61	0.77
D338	0.75	0.96	0.58	0.76
D339	0.66	0.85	0.51	0.67
D340	0.55	0.73	0.41	0.57
D341	0.73	0.38	0.56	0.26
D342	0.96	1.17	0.76	0.95
D343	1.01	1.22	0.80	1.00
D344	1.24	1.38	1.02	1.16
D345	1.22	1.38	1.00	1.16
D346	1.20	1.36	0.98	1.14
D347	1.15	1.28	0.93	1.06
D348	1.11	1.27	0.90	1.05
D349	0.99	1.18	0.79	0.97
D350	1.12	1.24	0.91	1.02
D351	1.18	1.35	0.97	1.13
D352	1.54	0.66	1.32	0.50
D353	1.21	1.38	0.99	1.16
D354	1.20	1.36	0.99	1.14
D355	1.02	1.18	0.81	0.96
D356	0.61	0.81	0.46	0.63
D357	0.65	0.83	0.49	0.65
D358	0.99	1.15	0.79	0.94
D359	0.86	1.07	0.68	0.86
D360	0.88	1.04	0.69	0.83

Table D.7. Numerical values of the ICFs adopted in this work for N (Amayo et al. 2021) and Fe (Rodríguez & Rubin 2005). These are on a logarithmic scale, so that $12+\log(X/H) = \log(\text{ICF}(X)) + 12 + \log(X^{i+}/H^+)$.

Reference number	$\log(\text{ICF}(\text{N})) (t^2 = 0)$	$\log(\text{ICF}(\text{N})) (t^2 > 0)$	$\log(\text{ICF}(\text{Fe})) (t^2 = 0)$	$\log(\text{ICF}(\text{Fe})) (t^2 > 0)$
D361	0.66	0.82	0.50	0.64
D362	1.33	1.49	1.11	1.27
D363	1.38	1.39	1.15	1.17
D364	1.11	1.26	0.90	1.04
D365	0.76	0.97	0.59	0.76
D366	0.97	1.16	0.77	0.94
D367	0.83	1.03	0.65	0.82
D368	0.91	1.11	0.72	0.89
D369	0.95	1.12	0.75	0.91
D370	1.41	1.54	1.19	1.31
D371	1.22	1.41	1.01	1.19
D372	0.86	1.06	0.67	0.85
D373	0.75	0.96	0.58	0.76
D374	1.83	0.40	1.60	0.28
D375	1.74	0.41	1.50	0.28
D376	1.04	1.22	0.83	1.00
D377	1.02	1.27	0.81	1.05
D378	1.39	1.55	1.16	1.33
D379	0.74	0.92	0.57	0.72
D380	0.95	1.14	0.75	0.93
D381	0.91	1.09	0.72	0.88
D382	0.93	1.12	0.73	0.91
D383	0.87	1.06	0.68	0.85
D384	0.68	0.91	0.52	0.72
D385	0.54	0.75	0.41	0.58
D386	0.99	1.17	0.79	0.95
D387	1.66	1.88	1.43	1.64
D388	0.55	0.76	0.42	0.58
D389	0.71	0.90	0.54	0.71
D390	1.23	1.31	1.01	1.09
D391	0.74	0.93	0.57	0.73
D392	0.90	1.05	0.70	0.84
D393	0.97	1.13	0.77	0.92
D394	0.62	0.83	0.47	0.65
D395	0.76	0.96	0.59	0.76
D396	0.92	1.12	0.73	0.91
D397	0.93	1.15	0.73	0.94
D398	0.44	0.61	0.31	0.46
D399	0.76	0.80	0.59	0.62
D400	0.88	1.20	0.69	0.98
D401	0.58	0.74	0.44	0.57
D402	0.78	1.00	0.60	0.80
D403	1.24	1.38	1.02	1.16
D404	0.41	0.56	0.29	0.42
D405	0.93	1.16	0.73	0.94
D406	0.51	0.70	0.38	0.54
D407	0.57	0.80	0.43	0.62
D408	0.47	0.64	0.34	0.49
D409	0.56	0.76	0.42	0.59
D410	0.62	0.80	0.47	0.62
D411	0.49	0.61	0.36	0.46
D412	0.64	0.92	0.49	0.72
D413	0.65	0.86	0.50	0.68
D414	0.79	1.00	0.61	0.80
D415	1.01	1.19	0.80	0.98
D416	0.98	1.19	0.77	0.97
D417	1.01	1.19	0.80	0.97
D418	0.96	1.16	0.76	0.94
D419	1.23	1.42	1.01	1.19
D420	1.25	1.43	1.03	1.21

Table D.7. Numerical values of the ICFs adopted in this work for N (Amayo et al. 2021) and Fe (Rodríguez & Rubin 2005). These are on a logarithmic scale, so that $12+\log(X/H) = \log(\text{ICF}(X)) + 12 + \log(X^{i+}/H^+)$.

Reference number	$\log(\text{ICF}(\text{N})) (t^2 = 0)$	$\log(\text{ICF}(\text{N})) (t^2 > 0)$	$\log(\text{ICF}(\text{Fe})) (t^2 = 0)$	$\log(\text{ICF}(\text{Fe})) (t^2 > 0)$
D421	1.21	1.39	0.99	1.16
D422	0.57	0.79	0.43	0.61
D423	1.31	1.45	1.08	1.22
D424	1.34	1.47	1.12	1.25
D425	0.39	0.88	0.26	0.69
D426	0.81	1.01	0.63	0.80
D427	0.80	1.02	0.62	0.82
D428	0.84	1.06	0.65	0.85
D429	0.68	0.87	0.52	0.68
D430	0.73	1.01	0.56	0.81
D431	0.98	1.17	0.78	0.95
D432	1.02	1.19	0.81	0.97
D433	0.98	1.16	0.78	0.94
D434	1.01	1.20	0.81	0.98
D435	1.08	1.28	0.86	1.06
D436	1.06	1.25	0.85	1.03
D437	1.89	0.23	1.65	0.14
D438	0.86	1.04	0.67	0.83
D439	0.69	0.86	0.53	0.67
D440	0.53	0.69	0.40	0.53
D441	0.98	1.21	0.78	0.99
D442	0.20	0.32	0.12	0.20
D443	0.51	0.49	0.38	0.36
D444	0.88	1.11	0.69	0.90
D445	0.39	0.53	0.27	0.39
D446	0.49	0.65	0.36	0.49
D447	0.47	0.62	0.34	0.47
D448	0.55	0.71	0.42	0.55
D449	0.99	1.19	0.79	0.97
D450	0.63	0.82	0.48	0.64
D451	1.09	1.25	0.88	1.03
D452	1.14	1.35	0.93	1.12

Table D.8. Total abundances derived from the nebular sample. All values are in $12+\log(X/H)$ units.

Reference number	Fe $t^2 = 0$	Fe $t^2 > 0$	N $t^2 = 0$	N $t^2 > 0$	O $t^2 = 0$	O $t^2 > 0$
D1	6.05 ± 0.10	$6.22^{+0.10}_{-0.09}$	6.99 ± 0.03	7.21 ± 0.03	8.18 ± 0.03	$8.39^{+0.04}_{-0.03}$
D2	$6.13^{+0.12}_{-0.11}$	6.34 ± 0.10	6.90 ± 0.03	7.11 ± 0.03	8.04 ± 0.02	8.26 ± 0.03
D3	$5.54^{+0.12}_{-0.13}$	$5.71^{+0.12}_{-0.10}$	$6.46^{+0.05}_{-0.04}$	6.66 ± 0.04	7.82 ± 0.02	8.01 ± 0.02
D4	$5.94^{+0.14}_{-0.13}$	6.10 ± 0.13	6.46 ± 0.04	$6.66^{+0.09}_{-0.06}$	7.86 ± 0.03	$8.04^{+0.04}_{-0.03}$
D5	$6.19^{+0.05}_{-0.06}$	6.39 ± 0.06	7.29 ± 0.02	7.50 ± 0.02	8.05 ± 0.01	8.27 ± 0.02
D6	$6.15^{+0.07}_{-0.06}$	$6.35^{+0.06}_{-0.07}$	7.26 ± 0.02	7.48 ± 0.02	8.08 ± 0.02	8.30 ± 0.02
D7	$6.07^{+0.11}_{-0.10}$	$6.27^{+0.10}_{-0.09}$	6.83 ± 0.02	7.06 ± 0.02	8.21 ± 0.02	$8.43^{+0.02}_{-0.03}$
D8	$6.08^{+0.14}_{-0.13}$	$6.24^{+0.16}_{-0.14}$	7.05 ± 0.05	7.26 ± 0.05	8.16 ± 0.05	$8.36^{+0.06}_{-0.05}$
D9	$5.84^{+0.16}_{-0.17}$	$6.01^{+0.17}_{-0.15}$	$6.75^{+0.09}_{-0.08}$	$6.96^{+0.09}_{-0.06}$	$8.11^{+0.04}_{-0.03}$	8.30 ± 0.03
D10	$5.62^{+0.12}_{-0.11}$	$5.81^{+0.11}_{-0.11}$	$6.67^{+0.05}_{-0.04}$	$6.89^{+0.05}_{-0.04}$	8.09 ± 0.02	8.29 ± 0.02
D11	$5.66^{+0.12}_{-0.11}$	$5.85^{+0.12}_{-0.11}$	6.58 ± 0.02	$6.79^{+0.05}_{-0.04}$	8.01 ± 0.02	8.22 ± 0.02
D12	$5.63^{+0.11}_{-0.10}$	$5.81^{+0.11}_{-0.10}$	$6.80^{+0.05}_{-0.04}$	$7.02^{+0.05}_{-0.04}$	8.14 ± 0.02	8.35 ± 0.02
D13	6.05 ± 0.20	$6.17^{+0.19}_{-0.17}$	$7.07^{+0.14}_{-0.14}$	$7.22^{+0.13}_{-0.13}$	$8.30^{+0.11}_{-0.12}$	$8.48^{+0.12}_{-0.11}$
D14	$5.89^{+0.14}_{-0.13}$	$6.05^{+0.14}_{-0.13}$	$6.64^{+0.07}_{-0.06}$	$6.84^{+0.08}_{-0.06}$	8.02 ± 0.03	8.21 ± 0.03
D15	5.96 ± 0.16	$6.12^{+0.17}_{-0.15}$	$6.78^{+0.12}_{-0.08}$	$6.97^{+0.13}_{-0.08}$	8.21 ± 0.04	8.40 ± 0.04
D16	$5.94^{+0.17}_{-0.15}$	6.11 ± 0.15	6.93 ± 0.05	$7.12^{+0.09}_{-0.06}$	7.98 ± 0.04	8.16 ± 0.05
D17	6.36 ± 0.13	6.55 ± 0.12	$7.06^{+0.05}_{-0.04}$	7.29 ± 0.04	8.17 ± 0.04	8.39 ± 0.05
D18	$6.15^{+0.17}_{-0.18}$	6.32 ± 0.17	$7.27^{+0.23}_{-0.12}$	$7.46^{+0.09}_{-0.10}$	8.38 ± 0.10	$8.57^{+0.10}_{-0.11}$
D19	5.88 ± 0.13	6.05 ± 0.13	6.77 ± 0.03	6.93 ± 0.03	7.59 ± 0.03	7.76 ± 0.03
D20	5.89 ± 0.12	$6.06^{+0.10}_{-0.11}$	6.69 ± 0.03	6.86 ± 0.03	$7.57^{+0.02}_{-0.03}$	7.74 ± 0.03
D21	$5.66^{+0.17}_{-0.15}$	5.83 ± 0.14	$6.49^{+0.06}_{-0.05}$	$6.68^{+0.06}_{-0.04}$	7.92 ± 0.02	8.11 ± 0.02
D22	5.46 ± 0.15	$5.61^{+0.13}_{-0.14}$	$5.75^{+0.07}_{-0.06}$	5.93 ± 0.07	7.21 ± 0.03	$7.37^{+0.03}_{-0.04}$
D23	6.16 ± 0.18	$6.34^{+0.18}_{-0.17}$	7.16 ± 0.04	$7.37^{+0.05}_{-0.04}$	$8.19^{+0.04}_{-0.05}$	$8.39^{+0.05}_{-0.06}$
D24	$6.11^{+0.15}_{-0.14}$	$6.29^{+0.14}_{-0.15}$	$6.76^{+0.14}_{-0.08}$	$6.97^{+0.13}_{-0.08}$	$8.19^{+0.04}_{-0.05}$	8.38 ± 0.05
D25	$6.07^{+0.13}_{-0.14}$	6.23 ± 0.13	6.60 ± 0.04	$6.79^{+0.04}_{-0.03}$	7.86 ± 0.02	8.05 ± 0.03
D26	$6.19^{+0.22}_{-0.23}$	$6.35^{+0.24}_{-0.22}$	$7.13^{+0.12}_{-0.14}$	$7.29^{+0.32}_{-0.14}$	8.31 ± 0.13	$8.47^{+0.13}_{-0.14}$
D27	5.68 ± 0.10	5.87 ± 0.09	$6.58^{+0.06}_{-0.05}$	$6.80^{+0.06}_{-0.05}$	$8.09^{+0.02}_{-0.03}$	8.29 ± 0.03
D28	5.62 ± 0.15	5.80 ± 0.15	6.49 ± 0.02	6.67 ± 0.02	7.84 ± 0.01	8.04 ± 0.01
D29	5.98 ± 0.14	$6.16^{+0.13}_{-0.14}$	6.73 ± 0.03	6.94 ± 0.03	8.05 ± 0.03	8.25 ± 0.03
D30	$6.09^{+0.17}_{-0.18}$	$6.27^{+0.16}_{-0.17}$	6.86 ± 0.04	7.09 ± 0.04	8.11 ± 0.04	8.31 ± 0.04
D31	$6.05^{+0.17}_{-0.18}$	$6.22^{+0.18}_{-0.17}$	6.94 ± 0.04	7.16 ± 0.04	8.10 ± 0.04	8.29 ± 0.05
D32	$5.88^{+0.15}_{-0.14}$	6.08 ± 0.13	$6.97^{+0.11}_{-0.07}$	$7.19^{+0.10}_{-0.07}$	8.33 ± 0.04	8.54 ± 0.04
D33	$6.08^{+0.28}_{-0.23}$	6.25 ± 0.27	$7.40^{+0.36}_{-0.14}$	$7.54^{+0.35}_{-0.15}$	8.23 ± 0.14	$8.41^{+0.16}_{-0.15}$
D34	$6.13^{+0.20}_{-0.24}$	$6.25^{+0.21}_{-0.22}$	$7.03^{+0.60}_{-0.20}$	$7.20^{+0.57}_{-0.18}$	$8.18^{+0.16}_{-0.17}$	$8.34^{+0.14}_{-0.15}$
D35	$5.79^{+0.14}_{-0.13}$	$5.93^{+0.18}_{-0.15}$	$6.66^{+0.09}_{-0.06}$	$6.86^{+0.08}_{-0.06}$	8.02 ± 0.03	8.23 ± 0.03
D36	$5.95^{+0.13}_{-0.14}$	6.09 ± 0.12	6.68 ± 0.03	6.88 ± 0.03	8.11 ± 0.02	8.30 ± 0.03
D37	$6.07^{+0.26}_{-0.27}$	$6.14^{+0.28}_{-0.26}$	$7.15^{+0.58}_{-0.18}$	$7.25^{+0.63}_{-0.20}$	$8.30^{+0.20}_{-0.21}$	$8.46^{+0.19}_{-0.20}$
D38	$5.66^{+0.15}_{-0.16}$	$5.82^{+0.14}_{-0.13}$	6.36 ± 0.02	6.53 ± 0.02	7.86 ± 0.01	8.02 ± 0.02
D39	6.00 ± 0.14	6.21 ± 0.13	6.86 ± 0.03	7.07 ± 0.03	8.09 ± 0.03	8.30 ± 0.03
D40	5.76 ± 0.09	5.91 ± 0.08	6.57 ± 0.01	$6.76^{+0.01}_{-0.02}$	7.92 ± 0.01	8.09 ± 0.01
D41	$5.38^{+0.12}_{-0.11}$	5.53 ± 0.10	5.99 ± 0.03	6.15 ± 0.03	7.40 ± 0.01	$7.56^{+0.01}_{-0.02}$
D42	5.96 ± 0.17	$6.14^{+0.15}_{-0.17}$	$6.96^{+0.11}_{-0.07}$	$7.16^{+0.10}_{-0.07}$	8.25 ± 0.04	8.44 ± 0.04
D43	$6.04^{+0.21}_{-0.22}$	6.20 ± 0.20	$7.04^{+0.41}_{-0.16}$	$7.23^{+0.48}_{-0.17}$	$8.28^{+0.14}_{-0.12}$	8.46 ± 0.13
D44	$5.83^{+0.19}_{-0.18}$	$5.98^{+0.18}_{-0.17}$	$6.86^{+0.14}_{-0.08}$	$7.05^{+0.13}_{-0.08}$	8.23 ± 0.05	8.42 ± 0.05
D45	$6.05^{+0.76}_{-0.97}$	$6.19^{+0.85}_{-1.19}$	$7.17^{+0.86}_{-1.12}$	$7.36^{+0.71}_{-1.02}$	$8.32^{+0.31}_{-0.27}$	8.52 ± 0.26
D46	$6.15^{+0.13}_{-0.14}$	$6.34^{+0.12}_{-0.11}$	6.94 ± 0.04	7.18 ± 0.04	8.27 ± 0.04	8.49 ± 0.05
D47	$6.08^{+0.20}_{-0.22}$	$6.25^{+0.23}_{-0.22}$	$7.41^{+0.30}_{-0.14}$	$7.57^{+0.29}_{-0.13}$	$8.22^{+0.12}_{-0.13}$	$8.41^{+0.14}_{-0.13}$
D48	6.07 ± 0.07	$6.21^{+0.07}_{-0.06}$	$7.33^{+0.10}_{-0.07}$	$7.47^{+0.12}_{-0.07}$	$8.33^{+0.06}_{-0.05}$	8.50 ± 0.05
D49	6.12 ± 0.15	$6.28^{+0.14}_{-0.15}$	6.99 ± 0.05	7.19 ± 0.05	$8.38^{+0.04}_{-0.05}$	$8.57^{+0.06}_{-0.05}$
D50	$6.07^{+0.16}_{-0.17}$	$6.27^{+0.16}_{-0.18}$	6.85 ± 0.04	7.08 ± 0.04	$8.06^{+0.03}_{-0.04}$	8.26 ± 0.04
D51	$6.03^{+0.16}_{-0.17}$	$6.19^{+0.17}_{-0.16}$	7.15 ± 0.05	$7.35^{+0.05}_{-0.04}$	$8.24^{+0.04}_{-0.05}$	8.44 ± 0.05
D52	$5.98^{+0.13}_{-0.12}$	6.13 ± 0.12	6.77 ± 0.04	$6.95^{+0.03}_{-0.04}$	7.95 ± 0.04	$8.12^{+0.05}_{-0.04}$
D53	$5.84^{+0.12}_{-0.13}$	$5.99^{+0.14}_{-0.13}$	-	-	7.96 ± 0.01	8.15 ± 0.01
D54	5.50 ± 0.16	$5.66^{+0.14}_{-0.15}$	-	-	7.76 ± 0.01	7.95 ± 0.01
D55	$6.19^{+0.15}_{-0.14}$	6.33 ± 0.14	$7.32^{+0.16}_{-0.09}$	$7.48^{+0.08}_{-0.07}$	$8.15^{+0.06}_{-0.07}$	$8.32^{+0.07}_{-0.08}$

Table D.8. Total abundances derived from the nebular sample. All values are in $12+\log(X/H)$ units.

Reference number	Fe $t^2 = 0$	Fe $t^2 > 0$	N $t^2 = 0$	N $t^2 > 0$	O $t^2 = 0$	O $t^2 > 0$
D56	5.73 ± 0.09	$5.91^{+0.09}_{-0.08}$	-	-	8.00 ± 0.01	8.20 ± 0.01
D57	$5.86^{+0.20}_{-0.18}$	6.05 ± 0.17	$6.94^{+0.26}_{-0.12}$	$7.13^{+0.20}_{-0.11}$	8.30 ± 0.08	$8.49^{+0.09}_{-0.07}$
D58	5.99 ± 0.10	$6.17^{+0.10}_{-0.09}$	$6.80^{+0.07}_{-0.05}$	$7.02^{+0.06}_{-0.05}$	8.28 ± 0.03	8.49 ± 0.03
D59	5.91 ± 0.08	$6.12^{+0.07}_{-0.08}$	6.76 ± 0.01	6.97 ± 0.01	8.10 ± 0.01	8.32 ± 0.01
D60	5.93 ± 0.16	$6.10^{+0.15}_{-0.16}$	$6.85^{+0.08}_{-0.05}$	7.02 ± 0.04	8.17 ± 0.04	8.34 ± 0.04
D61	$6.08^{+0.16}_{-0.15}$	6.26 ± 0.14	$7.09^{+0.04}_{-0.05}$	$7.29^{+0.04}_{-0.05}$	8.24 ± 0.04	8.43 ± 0.05
D62	$6.33^{+0.11}_{-0.10}$	$6.52^{+0.09}_{-0.11}$	$7.13^{+0.04}_{-0.05}$	7.34 ± 0.05	8.30 ± 0.04	8.50 ± 0.05
D63	5.87 ± 0.08	$6.05^{+0.07}_{-0.08}$	$7.26^{+0.07}_{-0.05}$	7.46 ± 0.06	8.49 ± 0.03	8.68 ± 0.03
D64	5.86 ± 0.15	$6.00^{+0.13}_{-0.14}$	$7.37^{+0.19}_{-0.10}$	$7.52^{+0.18}_{-0.10}$	$8.55^{+0.08}_{-0.07}$	8.72 ± 0.07
D65	5.47 ± 0.07	5.60 ± 0.07	$6.34^{+0.05}_{-0.04}$	$6.50^{+0.06}_{-0.04}$	7.43 ± 0.02	7.58 ± 0.02
D66	6.11 ± 0.17	$6.27^{+0.16}_{-0.14}$	6.84 ± 0.04	7.03 ± 0.04	8.01 ± 0.03	8.21 ± 0.04
D67	$5.85^{+0.09}_{-0.08}$	6.01 ± 0.08	6.70 ± 0.02	6.88 ± 0.02	7.89 ± 0.01	8.06 ± 0.01
D68	5.93 ± 0.08	$6.12^{+0.09}_{-0.07}$	$6.98^{+0.09}_{-0.07}$	$7.20^{+0.09}_{-0.06}$	8.40 ± 0.04	8.62 ± 0.04
D69	5.88 ± 0.14	$6.01^{+0.12}_{-0.13}$	6.58 ± 0.03	6.73 ± 0.03	7.90 ± 0.03	8.05 ± 0.03
D70	$5.98^{+0.12}_{-0.11}$	6.15 ± 0.11	6.69 ± 0.03	6.90 ± 0.03	$8.14^{+0.03}_{-0.02}$	8.33 ± 0.03
D71	$5.91^{+0.22}_{-0.20}$	6.00 ± 0.21	$7.74^{+0.58}_{-0.19}$	$7.92^{+0.49}_{-0.17}$	$8.54^{+0.23}_{-0.24}$	$8.65^{+0.17}_{-0.18}$
D72	$5.56^{+0.05}_{-0.06}$	$5.71^{+0.05}_{-0.06}$	6.30 ± 0.01	6.48 ± 0.01	7.76 ± 0.01	7.93 ± 0.01
D73	5.93 ± 0.09	$6.06^{+0.10}_{-0.09}$	-	-	8.00 ± 0.02	8.16 ± 0.02
D74	5.58 ± 0.15	$5.80^{+0.13}_{-0.14}$	-	-	8.23 ± 0.01	8.45 ± 0.01
D75	5.33 ± 0.12	$5.50^{+0.12}_{-0.11}$	6.18 ± 0.02	6.36 ± 0.02	7.58 ± 0.01	7.75 ± 0.01
D76	6.07 ± 0.07	$6.28^{+0.06}_{-0.07}$	7.06 ± 0.01	7.28 ± 0.01	8.15 ± 0.01	8.38 ± 0.01
D77	6.04 ± 0.07	$6.22^{+0.07}_{-0.08}$	$6.83^{+0.01}_{-0.02}$	7.04 ± 0.01	8.20 ± 0.01	$8.39^{+0.02}_{-0.01}$
D78	$5.60^{+0.09}_{-0.08}$	5.77 ± 0.08	-	-	7.44 ± 0.01	7.62 ± 0.01
D79	$5.78^{+0.14}_{-0.12}$	5.93 ± 0.14	6.65 ± 0.04	6.81 ± 0.04	7.57 ± 0.02	7.74 ± 0.02
D80	$5.86^{+0.04}_{-0.05}$	6.01 ± 0.04	-	-	7.58 ± 0.01	7.75 ± 0.01
D81	$5.93^{+0.18}_{-0.21}$	$5.86^{+0.17}_{-0.20}$	$6.99^{+0.43}_{-0.17}$	$6.88^{+0.45}_{-0.17}$	8.02 ± 0.04	$7.94^{+0.14}_{-0.15}$
D82	$6.09^{+0.06}_{-0.07}$	6.28 ± 0.06	6.78 ± 0.02	6.96 ± 0.02	7.88 ± 0.01	8.07 ± 0.01
D83	5.88 ± 0.06	6.29 ± 0.06	6.77 ± 0.04	7.20 ± 0.04	7.84 ± 0.02	$8.28^{+0.06}_{-0.03}$
D84	5.62 ± 0.10	5.81 ± 0.09	7.02 ± 0.03	7.24 ± 0.03	8.07 ± 0.03	$8.29^{+0.03}_{-0.04}$
D85	6.40 ± 0.07	6.56 ± 0.07	-	-	$8.55^{+0.06}_{-0.07}$	$8.73^{+0.06}_{-0.07}$
D86	6.20 ± 0.07	$6.34^{+0.08}_{-0.07}$	7.72 ± 0.06	$7.87^{+0.11}_{-0.07}$	8.44 ± 0.06	8.61 ± 0.06
D87	$6.01^{+0.09}_{-0.08}$	6.22 ± 0.08	-	-	8.12 ± 0.01	8.35 ± 0.01
D88	$5.38^{+0.07}_{-0.08}$	5.51 ± 0.08	-	-	7.13 ± 0.01	7.29 ± 0.01
D89	5.44 ± 0.10	$5.58^{+0.09}_{-0.10}$	-	-	7.19 ± 0.01	7.34 ± 0.02
D90	5.75 ± 0.13	5.89 ± 0.13	$6.82^{+0.18}_{-0.10}$	$6.99^{+0.17}_{-0.10}$	7.96 ± 0.06	8.13 ± 0.06
D91	5.83 ± 0.05	6.02 ± 0.05	6.62 ± 0.01	6.85 ± 0.01	8.21 ± 0.01	8.42 ± 0.01
D92	$5.89^{+0.06}_{-0.05}$	6.14 ± 0.06	7.15 ± 0.04	$7.44^{+0.07}_{-0.06}$	$8.06^{+0.03}_{-0.02}$	8.33 ± 0.04
D93	5.86 ± 0.06	6.03 ± 0.06	6.81 ± 0.03	7.02 ± 0.03	8.02 ± 0.02	8.21 ± 0.03
D94	$5.90^{+0.08}_{-0.07}$	6.06 ± 0.08	-	-	7.56 ± 0.01	7.73 ± 0.01
D95	5.85 ± 0.10	5.99 ± 0.09	-	-	7.93 ± 0.02	8.08 ± 0.02
D96	$6.01^{+0.15}_{-0.17}$	6.17 ± 0.17	-	-	7.87 ± 0.02	8.07 ± 0.03
D97	5.66 ± 0.05	$5.83^{+0.05}_{-0.06}$	6.16 ± 0.02	6.33 ± 0.02	7.62 ± 0.01	7.80 ± 0.01
D98	$5.81^{+0.12}_{-0.11}$	$5.97^{+0.12}_{-0.13}$	-	-	7.44 ± 0.01	7.62 ± 0.01
D99	5.63 ± 0.12	5.81 ± 0.12	6.39 ± 0.03	6.59 ± 0.03	7.83 ± 0.02	8.02 ± 0.02
D100	5.64 ± 0.04	5.80 ± 0.04	6.04 ± 0.03	6.20 ± 0.03	7.44 ± 0.01	7.62 ± 0.01
D101	$6.09^{+0.17}_{-0.15}$	6.34 ± 0.14	$7.19^{+0.35}_{-0.14}$	$7.44^{+0.32}_{-0.14}$	8.05 ± 0.03	$8.30^{+0.15}_{-0.14}$
D102	5.93 ± 0.05	6.12 ± 0.04	-	-	8.05 ± 0.01	8.26 ± 0.01
D103	5.65 ± 0.04	5.82 ± 0.04	6.22 ± 0.02	6.39 ± 0.02	7.59 ± 0.01	7.77 ± 0.01
D104	$5.92^{+0.07}_{-0.08}$	$6.08^{+0.09}_{-0.08}$	6.54 ± 0.02	6.74 ± 0.02	8.09 ± 0.01	8.28 ± 0.02
D105	$5.86^{+0.17}_{-0.16}$	6.00 ± 0.15	6.37 ± 0.02	6.54 ± 0.02	7.75 ± 0.02	7.92 ± 0.02
D106	5.97 ± 0.07	$5.87^{+0.06}_{-0.07}$	6.95 ± 0.04	6.84 ± 0.04	8.06 ± 0.01	$7.98^{+0.05}_{-0.04}$
D107	$5.43^{+0.17}_{-0.19}$	$5.52^{+0.18}_{-0.17}$	-	-	6.92 ± 0.01	$7.05^{+0.01}_{-0.02}$
D108	$5.70^{+0.05}_{-0.06}$	$5.85^{+0.05}_{-0.06}$	6.43 ± 0.01	6.63 ± 0.01	8.21 ± 0.01	8.39 ± 0.01
D109	$5.90^{+0.07}_{-0.08}$	$6.07^{+0.07}_{-0.08}$	6.86 ± 0.02	7.06 ± 0.02	8.07 ± 0.02	8.25 ± 0.02
D110	5.73 ± 0.03	5.89 ± 0.03	6.30 ± 0.01	6.47 ± 0.01	7.60 ± 0.01	7.77 ± 0.01
D111	5.64 ± 0.02	5.82 ± 0.02	6.55 ± 0.01	6.74 ± 0.01	7.97 ± 0.01	8.17 ± 0.01

Table D.8. Total abundances derived from the nebular sample. All values are in $12+\log(X/H)$ units.

Reference number	Fe $t^2 = 0$	Fe $t^2 > 0$	N $t^2 = 0$	N $t^2 > 0$	O $t^2 = 0$	O $t^2 > 0$
D112	5.71 ± 0.07	5.88 ± 0.07	$6.24^{+0.01}_{-0.02}$	$6.41^{+0.01}_{-0.02}$	7.69 ± 0.01	7.87 ± 0.01
D113	5.57 ± 0.04	5.74 ± 0.04	6.33 ± 0.01	6.51 ± 0.01	7.82 ± 0.01	8.00 ± 0.01
D114	5.72 ± 0.04	5.89 ± 0.04	6.39 ± 0.01	6.58 ± 0.01	7.84 ± 0.01	8.02 ± 0.01
D115	$5.88^{+0.03}_{-0.04}$	6.04 ± 0.03	7.15 ± 0.02	7.33 ± 0.02	8.36 ± 0.01	8.52 ± 0.03
D116	5.53 ± 0.06	5.65 ± 0.06	7.09 ± 0.04	$7.22^{+0.04}_{-0.05}$	$8.43^{+0.03}_{-0.04}$	8.55 ± 0.05
D117	5.39 ± 0.03	5.50 ± 0.02	7.10 ± 0.01	7.22 ± 0.01	$8.38^{+0.01}_{-0.02}$	8.51 ± 0.01
D118	5.28 ± 0.06	5.57 ± 0.06	$7.10^{+0.03}_{-0.04}$	$7.40^{+0.03}_{-0.04}$	8.27 ± 0.02	8.59 ± 0.04
D119	$5.67^{+0.07}_{-0.08}$	$5.79^{+0.07}_{-0.08}$	$7.03^{+0.05}_{-0.06}$	$7.18^{+0.06}_{-0.05}$	8.37 ± 0.03	8.51 ± 0.08
D120	$5.75^{+0.08}_{-0.07}$	5.89 ± 0.07	$7.67^{+0.04}_{-0.03}$	7.85 ± 0.04	8.50 ± 0.04	8.68 ± 0.04
D121	5.69 ± 0.07	5.94 ± 0.07	7.71 ± 0.04	7.99 ± 0.04	$8.59^{+0.03}_{-0.04}$	8.88 ± 0.04
D122	$5.76^{+0.12}_{-0.11}$	6.01 ± 0.11	$7.73^{+0.07}_{-0.06}$	$7.99^{+0.15}_{-0.10}$	8.46 ± 0.09	$8.73^{+0.08}_{-0.07}$
D123	$6.01^{+0.13}_{-0.14}$	$6.10^{+0.14}_{-0.13}$	$7.74^{+0.18}_{-0.10}$	$7.90^{+0.21}_{-0.10}$	8.49 ± 0.10	8.61 ± 0.09
D124	5.75 ± 0.16	$5.84^{+0.15}_{-0.13}$	$7.29^{+0.31}_{-0.12}$	$7.42^{+0.25}_{-0.13}$	$8.36^{+0.13}_{-0.12}$	$8.48^{+0.12}_{-0.11}$
D125	6.17 ± 0.13	6.29 ± 0.14	$7.84^{+0.23}_{-0.11}$	$8.02^{+0.20}_{-0.12}$	8.65 ± 0.11	$8.80^{+0.10}_{-0.09}$
D126	$6.38^{+0.10}_{-0.12}$	6.51 ± 0.11	$7.66^{+0.15}_{-0.09}$	$7.83^{+0.14}_{-0.09}$	8.50 ± 0.08	8.67 ± 0.08
D127	5.78 ± 0.09	5.85 ± 0.09	7.17 ± 0.04	7.28 ± 0.04	8.10 ± 0.05	8.19 ± 0.04
D128	$5.89^{+0.05}_{-0.04}$	$6.12^{+0.05}_{-0.04}$	7.64 ± 0.03	7.91 ± 0.03	8.57 ± 0.02	8.82 ± 0.03
D129	$5.18^{+0.14}_{-0.13}$	$5.31^{+0.10}_{-0.12}$	$7.30^{+0.03}_{-0.04}$	7.43 ± 0.03	8.34 ± 0.03	8.49 ± 0.03
D130	6.29 ± 0.09	$6.45^{+0.09}_{-0.10}$	6.92 ± 0.03	7.10 ± 0.03	8.19 ± 0.02	8.36 ± 0.02
D131	$5.51^{+0.10}_{-0.09}$	5.67 ± 0.10	$7.09^{+0.04}_{-0.03}$	7.29 ± 0.03	$8.31^{+0.01}_{-0.02}$	8.49 ± 0.02
D132	5.49 ± 0.06	5.61 ± 0.05	$6.98^{+0.05}_{-0.04}$	7.10 ± 0.04	$8.19^{+0.03}_{-0.02}$	$8.33^{+0.02}_{-0.03}$
D133	5.50 ± 0.11	5.67 ± 0.10	$6.95^{+0.03}_{-0.04}$	$7.15^{+0.04}_{-0.03}$	8.20 ± 0.02	$8.39^{+0.03}_{-0.02}$
D134	$5.48^{+0.23}_{-0.24}$	$5.66^{+0.68}_{-0.19}$	$6.94^{+0.55}_{-0.18}$	$7.20^{+0.39}_{-0.20}$	8.29 ± 0.11	$8.55^{+0.23}_{-0.21}$
D135	5.58 ± 0.07	5.71 ± 0.06	7.01 ± 0.03	$7.17^{+0.04}_{-0.03}$	8.20 ± 0.02	8.35 ± 0.03
D136	5.79 ± 0.08	5.97 ± 0.08	7.29 ± 0.06	7.50 ± 0.05	$8.33^{+0.05}_{-0.04}$	8.56 ± 0.06
D137	$5.66^{+0.12}_{-0.11}$	$5.78^{+0.12}_{-0.11}$	$7.22^{+0.04}_{-0.03}$	7.38 ± 0.03	8.32 ± 0.02	8.48 ± 0.02
D138	$5.67^{+0.18}_{-0.17}$	$5.78^{+0.14}_{-0.16}$	$7.45^{+0.29}_{-0.13}$	$7.59^{+0.30}_{-0.13}$	$8.42^{+0.13}_{-0.14}$	8.55 ± 0.13
D139	$5.95^{+0.14}_{-0.13}$	$6.03^{+0.12}_{-0.13}$	$7.66^{+0.16}_{-0.09}$	$7.77^{+0.18}_{-0.10}$	8.53 ± 0.10	8.63 ± 0.10
D140	$5.55^{+0.10}_{-0.09}$	$5.66^{+0.09}_{-0.10}$	$7.48^{+0.12}_{-0.08}$	7.66 ± 0.05	8.42 ± 0.07	8.55 ± 0.06
D141	$5.56^{+0.11}_{-0.12}$	5.56 ± 0.11	$7.12^{+0.07}_{-0.08}$	$7.12^{+0.18}_{-0.10}$	$8.21^{+0.07}_{-0.08}$	$8.21^{+0.08}_{-0.09}$
D142	$5.62^{+0.18}_{-0.21}$	$5.79^{+0.19}_{-0.20}$	$7.66^{+0.40}_{-0.14}$	$7.91^{+0.43}_{-0.15}$	$8.53^{+0.16}_{-0.14}$	$8.75^{+0.17}_{-0.18}$
D143	$5.93^{+0.12}_{-0.14}$	$6.00^{+0.14}_{-0.15}$	$7.68^{+0.22}_{-0.11}$	$7.84^{+0.23}_{-0.12}$	$8.53^{+0.13}_{-0.12}$	8.64 ± 0.12
D144	$6.10^{+0.07}_{-0.08}$	6.27 ± 0.07	$7.46^{+0.04}_{-0.05}$	7.64 ± 0.04	8.44 ± 0.03	8.63 ± 0.03
D145	5.72 ± 0.04	5.83 ± 0.04	6.74 ± 0.03	6.85 ± 0.03	8.00 ± 0.01	8.12 ± 0.01
D146	$5.16^{+0.10}_{-0.09}$	$5.33^{+0.10}_{-0.11}$	7.33 ± 0.04	7.53 ± 0.04	8.48 ± 0.01	8.68 ± 0.01
D147	6.41 ± 0.11	6.48 ± 0.11	$7.87^{+0.17}_{-0.10}$	$8.04^{+0.08}_{-0.07}$	8.62 ± 0.10	$8.73^{+0.09}_{-0.10}$
D148	$6.21^{+0.09}_{-0.10}$	6.38 ± 0.09	7.90 ± 0.06	$8.09^{+0.14}_{-0.08}$	$8.61^{+0.06}_{-0.07}$	8.82 ± 0.07
D149	$5.03^{+0.11}_{-0.10}$	5.15 ± 0.10	6.81 ± 0.03	6.92 ± 0.03	8.12 ± 0.01	8.25 ± 0.01
D150	$6.36^{+0.14}_{-0.16}$	$6.48^{+0.15}_{-0.17}$	$8.09^{+0.35}_{-0.14}$	$8.27^{+0.33}_{-0.14}$	$8.61^{+0.15}_{-0.16}$	$8.77^{+0.13}_{-0.15}$
D151	5.53 ± 0.18	5.69 ± 0.18	$7.82^{+0.39}_{-0.15}$	$7.97^{+0.37}_{-0.14}$	8.59 ± 0.15	$8.76^{+0.11}_{-0.12}$
D152	$6.08^{+0.11}_{-0.12}$	$6.10^{+0.12}_{-0.11}$	$7.49^{+0.16}_{-0.09}$	7.57 ± 0.07	8.47 ± 0.10	$8.52^{+0.08}_{-0.10}$
D153	5.19 ± 0.10	5.29 ± 0.10	-	-	7.89 ± 0.02	8.03 ± 0.02
D154	5.26 ± 0.09	$5.34^{+0.09}_{-0.08}$	$6.47^{+0.03}_{-0.02}$	$6.57^{+0.03}_{-0.02}$	7.83 ± 0.02	7.94 ± 0.02
D155	$6.57^{+0.17}_{-0.18}$	$6.71^{+0.17}_{-0.15}$	$7.96^{+0.27}_{-0.12}$	$8.17^{+0.27}_{-0.12}$	8.67 ± 0.14	8.83 ± 0.12
D156	5.65 ± 0.18	$5.82^{+0.17}_{-0.18}$	$6.91^{+0.44}_{-0.15}$	$7.11^{+0.43}_{-0.16}$	8.21 ± 0.10	8.41 ± 0.14
D157	$5.77^{+0.09}_{-0.08}$	$6.05^{+0.09}_{-0.08}$	$7.57^{+0.06}_{-0.05}$	$7.88^{+0.07}_{-0.05}$	$8.53^{+0.04}_{-0.05}$	8.85 ± 0.07
D158	$6.09^{+0.09}_{-0.10}$	6.24 ± 0.10	$7.50^{+0.16}_{-0.09}$	$7.77^{+0.15}_{-0.09}$	$8.43^{+0.09}_{-0.10}$	8.64 ± 0.07
D159	$5.00^{+0.11}_{-0.12}$	5.15 ± 0.11	6.60 ± 0.02	6.78 ± 0.02	7.94 ± 0.01	8.11 ± 0.01
D160	6.04 ± 0.15	$6.10^{+0.15}_{-0.14}$	$7.72^{+0.27}_{-0.11}$	$7.88^{+0.29}_{-0.12}$	$8.58^{+0.13}_{-0.14}$	8.68 ± 0.13
D161	$5.91^{+0.12}_{-0.13}$	$6.05^{+0.14}_{-0.13}$	$7.88^{+0.24}_{-0.11}$	$8.05^{+0.21}_{-0.11}$	$8.61^{+0.09}_{-0.11}$	8.78 ± 0.11
D162	$6.09^{+0.15}_{-0.14}$	$6.13^{+0.14}_{-0.15}$	$7.77^{+0.27}_{-0.12}$	$7.90^{+0.27}_{-0.12}$	$8.62^{+0.14}_{-0.13}$	$8.72^{+0.13}_{-0.12}$
D163	$5.91^{+0.14}_{-0.13}$	$5.97^{+0.11}_{-0.12}$	$7.62^{+0.20}_{-0.10}$	$7.76^{+0.19}_{-0.10}$	8.57 ± 0.11	8.66 ± 0.10
D164	6.07 ± 0.10	6.16 ± 0.10	$7.80^{+0.15}_{-0.10}$	$7.95^{+0.15}_{-0.09}$	8.49 ± 0.09	8.62 ± 0.08
D165	5.79 ± 0.07	$5.98^{+0.06}_{-0.07}$	7.29 ± 0.05	7.50 ± 0.05	8.35 ± 0.04	8.56 ± 0.06
D166	5.87 ± 0.06	6.10 ± 0.06	7.38 ± 0.04	7.63 ± 0.03	$8.44^{+0.02}_{-0.03}$	$8.70^{+0.03}_{-0.04}$
D167	5.86 ± 0.06	6.12 ± 0.06	$7.30^{+0.04}_{-0.05}$	$7.61^{+0.05}_{-0.04}$	$8.36^{+0.03}_{-0.02}$	$8.65^{+0.06}_{-0.05}$

Table D.8. Total abundances derived from the nebular sample. All values are in $12+\log(X/H)$ units.

Reference number	Fe $t^2 = 0$	Fe $t^2 > 0$	N $t^2 = 0$	N $t^2 > 0$	O $t^2 = 0$	O $t^2 > 0$
D168	$6.01^{+0.07}_{-0.08}$	$6.06^{+0.08}_{-0.07}$	$7.28^{+0.18}_{-0.10}$	$7.33^{+0.19}_{-0.09}$	8.38 ± 0.03	8.41 ± 0.06
D169	$5.44^{+0.13}_{-0.14}$	$5.65^{+0.13}_{-0.15}$	$7.37^{+0.08}_{-0.07}$	$7.66^{+0.08}_{-0.07}$	8.41 ± 0.10	8.64 ± 0.07
D170	$6.18^{+0.14}_{-0.13}$	$6.18^{+0.14}_{-0.13}$	$7.45^{+0.23}_{-0.11}$	$7.45^{+0.23}_{-0.11}$	$7.93^{+0.07}_{-0.06}$	$7.93^{+0.07}_{-0.06}$
D171	$5.64^{+0.09}_{-0.10}$	5.74 ± 0.10	7.46 ± 0.03	$7.60^{+0.03}_{-0.04}$	8.28 ± 0.04	8.41 ± 0.03
D172	5.93 ± 0.05	6.11 ± 0.05	7.32 ± 0.04	7.53 ± 0.04	8.39 ± 0.02	8.59 ± 0.04
D173	$6.01^{+0.03}_{-0.04}$	6.12 ± 0.04	7.36 ± 0.02	$7.50^{+0.03}_{-0.02}$	8.31 ± 0.01	8.45 ± 0.03
D174	$5.60^{+0.08}_{-0.09}$	$5.81^{+0.10}_{-0.09}$	$7.53^{+0.13}_{-0.09}$	7.77 ± 0.07	8.50 ± 0.07	$8.76^{+0.08}_{-0.07}$
D175	5.82 ± 0.11	$6.04^{+0.13}_{-0.12}$	$7.51^{+0.20}_{-0.10}$	$7.78^{+0.22}_{-0.11}$	8.43 ± 0.10	8.71 ± 0.10
D176	6.06 ± 0.03	6.34 ± 0.04	$7.55^{+0.04}_{-0.03}$	7.88 ± 0.03	8.48 ± 0.02	8.79 ± 0.04
D177	$6.12^{+0.08}_{-0.07}$	6.32 ± 0.07	7.61 ± 0.05	$7.84^{+0.06}_{-0.05}$	8.41 ± 0.04	8.63 ± 0.06
D178	$5.60^{+0.05}_{-0.04}$	5.78 ± 0.04	7.33 ± 0.03	7.54 ± 0.03	8.40 ± 0.01	8.60 ± 0.01
D179	5.61 ± 0.04	5.81 ± 0.04	7.34 ± 0.03	7.58 ± 0.03	8.40 ± 0.01	8.63 ± 0.01
D180	$5.82^{+0.15}_{-0.16}$	$6.03^{+0.13}_{-0.15}$	6.74 ± 0.06	$6.94^{+0.06}_{-0.07}$	8.10 ± 0.01	8.30 ± 0.02
D181	$5.55^{+0.10}_{-0.11}$	5.67 ± 0.10	6.60 ± 0.04	$6.72^{+0.05}_{-0.04}$	7.99 ± 0.03	8.12 ± 0.03
D182	5.88 ± 0.10	$6.17^{+0.12}_{-0.09}$	6.87 ± 0.08	$7.21^{+0.07}_{-0.08}$	8.14 ± 0.03	8.48 ± 0.12
D183	5.94 ± 0.03	6.14 ± 0.03	6.76 ± 0.04	6.96 ± 0.04	7.99 ± 0.01	$8.20^{+0.01}_{-0.02}$
D184	5.89 ± 0.07	6.03 ± 0.06	7.30 ± 0.04	$7.55^{+0.05}_{-0.04}$	8.22 ± 0.06	8.40 ± 0.05
D185	$5.46^{+0.08}_{-0.09}$	$5.61^{+0.09}_{-0.08}$	$7.41^{+0.11}_{-0.08}$	$7.56^{+0.11}_{-0.07}$	8.28 ± 0.06	$8.45^{+0.06}_{-0.07}$
D186	6.16 ± 0.05	6.25 ± 0.05	$7.80^{+0.04}_{-0.03}$	$8.09^{+0.07}_{-0.05}$	8.35 ± 0.06	8.56 ± 0.04
D187	6.40 ± 0.12	$6.57^{+0.12}_{-0.11}$	7.77 ± 0.04	$8.00^{+0.06}_{-0.06}$	$8.52^{+0.06}_{-0.07}$	8.73 ± 0.05
D188	5.75 ± 0.04	5.88 ± 0.04	7.53 ± 0.03	$7.69^{+0.02}_{-0.03}$	$8.43^{+0.02}_{-0.03}$	8.57 ± 0.03
D189	$5.64^{+0.22}_{-0.24}$	5.68 ± 0.23	$7.38^{+0.32}_{-0.12}$	$7.41^{+0.34}_{-0.15}$	$8.52^{+0.12}_{-0.11}$	8.58 ± 0.14
D190	$5.75^{+0.14}_{-0.13}$	$5.86^{+0.12}_{-0.14}$	7.42 ± 0.06	$7.67^{+0.07}_{-0.06}$	$8.54^{+0.07}_{-0.08}$	8.70 ± 0.06
D191	$5.40^{+0.14}_{-0.15}$	$5.50^{+0.14}_{-0.13}$	7.69 ± 0.04	$7.86^{+0.05}_{-0.04}$	8.70 ± 0.05	$8.83^{+0.04}_{-0.05}$
D192	$5.63^{+0.11}_{-0.12}$	$5.75^{+0.11}_{-0.12}$	7.71 ± 0.07	$7.86^{+0.08}_{-0.07}$	$8.55^{+0.07}_{-0.09}$	8.71 ± 0.07
D193	$5.79^{+0.18}_{-0.17}$	$5.98^{+0.17}_{-0.18}$	$7.71^{+0.12}_{-0.13}$	$7.93^{+0.14}_{-0.12}$	8.43 ± 0.12	$8.68^{+0.18}_{-0.17}$
D194	5.43 ± 0.12	5.47 ± 0.12	$7.26^{+0.08}_{-0.07}$	7.28 ± 0.08	$8.34^{+0.06}_{-0.07}$	8.37 ± 0.09
D195	$5.65^{+0.06}_{-0.07}$	$5.81^{+0.06}_{-0.07}$	$6.95^{+0.06}_{-0.05}$	$7.15^{+0.05}_{-0.06}$	8.26 ± 0.03	$8.44^{+0.04}_{-0.05}$
D196	$5.97^{+0.09}_{-0.08}$	6.15 ± 0.08	7.31 ± 0.05	7.50 ± 0.05	8.39 ± 0.04	$8.57^{+0.04}_{-0.05}$
D197	5.26 ± 0.16	$5.41^{+0.18}_{-0.16}$	$7.01^{+0.25}_{-0.12}$	$7.22^{+0.32}_{-0.13}$	$8.10^{+0.10}_{-0.09}$	$8.29^{+0.17}_{-0.14}$
D198	5.07 ± 0.11	$5.24^{+0.10}_{-0.11}$	7.00 ± 0.08	$7.18^{+0.09}_{-0.08}$	8.22 ± 0.05	8.40 ± 0.10
D199	$5.33^{+0.06}_{-0.05}$	$5.44^{+0.05}_{-0.06}$	7.48 ± 0.02	$7.59^{+0.02}_{-0.03}$	8.45 ± 0.04	8.58 ± 0.03
D200	$5.65^{+0.11}_{-0.12}$	$5.85^{+0.12}_{-0.13}$	7.26 ± 0.05	$7.50^{+0.05}_{-0.04}$	8.45 ± 0.03	8.67 ± 0.05
D201	5.82 ± 0.06	6.05 ± 0.06	7.46 ± 0.03	7.72 ± 0.03	8.38 ± 0.03	8.62 ± 0.03
D202	5.65 ± 0.28	$5.74^{+0.28}_{-0.26}$	$7.42^{+0.67}_{-0.20}$	$7.59^{+0.62}_{-0.20}$	$8.56^{+0.31}_{-0.30}$	$8.68^{+0.24}_{-0.25}$
D203	$5.70^{+0.11}_{-0.12}$	$5.71^{+0.11}_{-0.12}$	7.49 ± 0.06	$7.58^{+0.06}_{-0.07}$	$8.68^{+0.07}_{-0.08}$	8.73 ± 0.07
D204	5.61 ± 0.18	5.61 ± 0.17	$7.13^{+0.18}_{-0.11}$	$7.18^{+0.19}_{-0.10}$	8.06 ± 0.12	8.09 ± 0.11
D205	$5.18^{+0.17}_{-0.16}$	$5.31^{+0.17}_{-0.16}$	7.08 ± 0.07	7.22 ± 0.06	8.34 ± 0.04	8.46 ± 0.07
D206	5.52 ± 0.12	$5.70^{+0.14}_{-0.13}$	7.44 ± 0.05	7.64 ± 0.05	8.54 ± 0.05	$8.75^{+0.05}_{-0.04}$
D207	5.79 ± 0.08	6.00 ± 0.09	$7.35^{+0.06}_{-0.05}$	$7.61^{+0.05}_{-0.06}$	8.46 ± 0.03	8.70 ± 0.06
D208	$5.74^{+0.10}_{-0.09}$	$5.98^{+0.09}_{-0.10}$	$7.56^{+0.06}_{-0.07}$	$7.85^{+0.14}_{-0.08}$	$8.53^{+0.08}_{-0.09}$	8.83 ± 0.06
D209	6.51 ± 0.07	6.60 ± 0.07	$8.06^{+0.09}_{-0.06}$	$8.25^{+0.09}_{-0.07}$	8.59 ± 0.06	8.74 ± 0.05
D210	$6.15^{+0.11}_{-0.10}$	$6.32^{+0.09}_{-0.10}$	$8.12^{+0.07}_{-0.06}$	$8.31^{+0.07}_{-0.06}$	8.63 ± 0.05	8.83 ± 0.04
D211	$6.17^{+0.18}_{-0.16}$	6.30 ± 0.15	$8.06^{+0.17}_{-0.10}$	$8.24^{+0.19}_{-0.10}$	8.55 ± 0.09	8.70 ± 0.09
D212	$6.16^{+0.07}_{-0.06}$	$6.33^{+0.06}_{-0.05}$	$8.21^{+0.04}_{-0.03}$	8.41 ± 0.03	8.64 ± 0.02	8.84 ± 0.02
D213	$5.96^{+0.16}_{-0.15}$	6.08 ± 0.15	$8.11^{+0.09}_{-0.07}$	$8.30^{+0.05}_{-0.04}$	8.61 ± 0.06	8.75 ± 0.05
D214	$6.39^{+0.07}_{-0.06}$	6.60 ± 0.06	$8.33^{+0.06}_{-0.05}$	$8.57^{+0.06}_{-0.05}$	$8.68^{+0.05}_{-0.04}$	8.93 ± 0.05
D215	$7.04^{+0.16}_{-0.19}$	7.38 ± 0.16	$8.52^{+0.35}_{-0.14}$	$8.94^{+0.40}_{-0.14}$	$8.87^{+0.14}_{-0.15}$	$9.24^{+0.21}_{-0.20}$
D216	$6.64^{+0.23}_{-0.21}$	$6.77^{+0.20}_{-0.21}$	$8.04^{+0.50}_{-0.17}$	$8.22^{+0.45}_{-0.17}$	8.57 ± 0.22	8.72 ± 0.20
D217	5.87 ± 0.12	$5.92^{+0.12}_{-0.11}$	$7.59^{+0.12}_{-0.05}$	$7.84^{+0.06}_{-0.05}$	$7.99^{+0.05}_{-0.06}$	8.15 ± 0.04
D218	$6.56^{+0.13}_{-0.12}$	$6.73^{+0.12}_{-0.13}$	$8.30^{+0.20}_{-0.11}$	$8.49^{+0.19}_{-0.10}$	8.83 ± 0.10	$9.04^{+0.08}_{-0.07}$
D219	$6.33^{+0.23}_{-0.26}$	$6.43^{+0.23}_{-0.24}$	$8.07^{+0.36}_{-0.14}$	$8.26^{+0.34}_{-0.14}$	8.58 ± 0.17	$8.73^{+0.16}_{-0.15}$
D220	5.87 ± 0.05	$6.04^{+0.05}_{-0.06}$	7.67 ± 0.03	7.86 ± 0.03	8.53 ± 0.02	8.72 ± 0.04
D221	5.37 ± 0.05	5.44 ± 0.05	7.68 ± 0.03	7.84 ± 0.03	$8.54^{+0.03}_{-0.04}$	8.64 ± 0.03
D222	6.01 ± 0.03	$6.03^{+0.07}_{-0.05}$	$7.66^{+0.07}_{-0.05}$	$7.68^{+0.07}_{-0.05}$	8.46 ± 0.02	8.47 ± 0.03
D223	5.88 ± 0.03	6.04 ± 0.03	7.64 ± 0.02	7.80 ± 0.02	8.36 ± 0.02	8.54 ± 0.03

Table D.8. Total abundances derived from the nebular sample. All values are in $12+\log(X/H)$ units.

Reference number	Fe $t^2 = 0$	Fe $t^2 > 0$	N $t^2 = 0$	N $t^2 > 0$	O $t^2 = 0$	O $t^2 > 0$
D224	6.11 ± 0.03	6.12 ± 0.03	7.71 ± 0.05	$7.72^{+0.06}_{-0.05}$	8.46 ± 0.01	8.49 ± 0.03
D225	5.89 ± 0.03	6.07 ± 0.03	7.60 ± 0.02	7.80 ± 0.02	8.40 ± 0.02	8.62 ± 0.02
D226	5.83 ± 0.03	$5.89^{+0.06}_{-0.04}$	$7.63^{+0.06}_{-0.04}$	$7.71^{+0.06}_{-0.04}$	8.45 ± 0.01	8.52 ± 0.03
D227	$6.11^{+0.07}_{-0.05}$	6.10 ± 0.03	$7.69^{+0.07}_{-0.05}$	$7.68^{+0.07}_{-0.05}$	$8.45^{+0.02}_{-0.01}$	8.45 ± 0.03
D228	$5.82^{+0.07}_{-0.05}$	$5.84^{+0.07}_{-0.05}$	$7.71^{+0.07}_{-0.05}$	$7.73^{+0.06}_{-0.05}$	8.46 ± 0.01	8.49 ± 0.03
D229	6.04 ± 0.03	6.04 ± 0.03	$7.72^{+0.06}_{-0.05}$	$7.73^{+0.06}_{-0.05}$	$8.47^{+0.01}_{-0.02}$	8.48 ± 0.03
D230	5.63 ± 0.05	5.66 ± 0.05	$7.44^{+0.04}_{-0.03}$	7.56 ± 0.04	8.28 ± 0.05	8.34 ± 0.04
D231	$6.08^{+0.09}_{-0.07}$	6.16 ± 0.04	$7.64^{+0.08}_{-0.06}$	$7.74^{+0.09}_{-0.06}$	8.48 ± 0.02	8.58 ± 0.04
D232	5.99 ± 0.04	5.99 ± 0.04	7.71 ± 0.03	$7.71^{+0.08}_{-0.06}$	8.50 ± 0.01	$8.50^{+0.03}_{-0.04}$
D233	6.09 ± 0.07	6.14 ± 0.07	$7.68^{+0.12}_{-0.08}$	$7.74^{+0.05}_{-0.06}$	8.49 ± 0.04	$8.55^{+0.06}_{-0.07}$
D234	5.72 ± 0.03	$5.85^{+0.03}_{-0.02}$	$7.72^{+0.05}_{-0.04}$	$7.91^{+0.04}_{-0.03}$	8.46 ± 0.03	8.62 ± 0.03
D235	5.88 ± 0.03	6.10 ± 0.03	$7.37^{+0.02}_{-0.03}$	$7.63^{+0.02}_{-0.03}$	8.35 ± 0.02	8.58 ± 0.03
D236	5.95 ± 0.03	6.19 ± 0.04	7.60 ± 0.03	$7.89^{+0.06}_{-0.05}$	8.53 ± 0.02	8.80 ± 0.03
D237	5.88 ± 0.09	5.88 ± 0.09	$7.71^{+0.14}_{-0.09}$	$7.71^{+0.14}_{-0.09}$	8.46 ± 0.03	8.46 ± 0.03
D238	5.86 ± 0.07	6.16 ± 0.08	$7.61^{+0.06}_{-0.05}$	7.95 ± 0.05	8.49 ± 0.03	8.81 ± 0.06
D239	5.51 ± 0.04	5.54 ± 0.04	7.34 ± 0.02	7.44 ± 0.02	8.25 ± 0.03	$8.31^{+0.02}_{-0.03}$
D240	$5.32^{+0.08}_{-0.07}$	5.41 ± 0.07	7.26 ± 0.03	7.35 ± 0.03	8.21 ± 0.03	8.31 ± 0.03
D241	5.86 ± 0.03	5.91 ± 0.03	$7.65^{+0.02}_{-0.01}$	$7.78^{+0.02}_{-0.01}$	8.52 ± 0.02	8.59 ± 0.02
D242	$5.58^{+0.08}_{-0.09}$	$5.63^{+0.08}_{-0.09}$	$7.43^{+0.13}_{-0.08}$	$7.55^{+0.14}_{-0.08}$	$8.34^{+0.07}_{-0.08}$	8.43 ± 0.07
D243	$5.24^{+0.17}_{-0.18}$	$5.37^{+0.17}_{-0.19}$	$6.41^{+0.22}_{-0.21}$	$6.53^{+0.24}_{-0.23}$	$8.00^{+0.11}_{-0.10}$	$8.18^{+0.11}_{-0.10}$
D244	$5.54^{+0.15}_{-0.13}$	5.55 ± 0.13	7.56 ± 0.03	$7.57^{+0.04}_{-0.03}$	$8.41^{+0.06}_{-0.05}$	8.42 ± 0.05
D245	$5.85^{+0.14}_{-0.13}$	$6.05^{+0.14}_{-0.13}$	$7.92^{+0.11}_{-0.07}$	$8.11^{+0.10}_{-0.07}$	8.60 ± 0.05	$8.82^{+0.06}_{-0.07}$
D246	$6.22^{+0.16}_{-0.17}$	$6.19^{+0.16}_{-0.15}$	$7.52^{+0.16}_{-0.10}$	7.51 ± 0.08	8.18 ± 0.12	$8.18^{+0.13}_{-0.12}$
D247	5.84 ± 0.06	5.91 ± 0.06	7.39 ± 0.05	$7.52^{+0.06}_{-0.05}$	$8.33^{+0.06}_{-0.07}$	$8.42^{+0.05}_{-0.06}$
D248	5.75 ± 0.10	5.72 ± 0.11	7.71 ± 0.03	7.71 ± 0.03	8.46 ± 0.05	8.47 ± 0.05
D249	5.15 ± 0.04	5.23 ± 0.04	7.50 ± 0.03	7.63 ± 0.03	8.41 ± 0.03	8.51 ± 0.03
D250	6.17 ± 0.15	$6.34^{+0.13}_{-0.14}$	7.13 ± 0.06	$7.29^{+0.14}_{-0.08}$	8.25 ± 0.06	8.43 ± 0.07
D251	$5.90^{+0.22}_{-0.21}$	$6.06^{+0.20}_{-0.19}$	7.15 ± 0.08	$7.29^{+0.18}_{-0.10}$	$8.11^{+0.08}_{-0.09}$	$8.26^{+0.09}_{-0.08}$
D252	$5.91^{+0.24}_{-0.21}$	$5.98^{+0.22}_{-0.24}$	$6.92^{+0.55}_{-0.18}$	$7.04^{+0.67}_{-0.18}$	8.14 ± 0.05	8.22 ± 0.23
D253	5.79 ± 0.06	5.96 ± 0.06	6.74 ± 0.03	6.94 ± 0.03	8.06 ± 0.02	$8.26^{+0.03}_{-0.02}$
D254	5.69 ± 0.04	$5.88^{+0.03}_{-0.04}$	6.61 ± 0.01	6.82 ± 0.01	7.99 ± 0.01	8.19 ± 0.01
D255	5.93 ± 0.12	$6.10^{+0.12}_{-0.13}$	6.75 ± 0.02	6.95 ± 0.02	8.01 ± 0.01	8.19 ± 0.01
D256	$5.66^{+0.22}_{-0.24}$	$5.67^{+0.24}_{-0.23}$	$6.92^{+0.49}_{-0.17}$	$6.93^{+0.59}_{-0.17}$	8.25 ± 0.03	$8.27^{+0.18}_{-0.19}$
D257	5.64 ± 0.15	$5.81^{+0.15}_{-0.17}$	$6.91^{+0.25}_{-0.12}$	$7.08^{+0.29}_{-0.12}$	8.27 ± 0.03	8.45 ± 0.13
D258	5.95 ± 0.12	6.08 ± 0.12	6.88 ± 0.04	7.01 ± 0.04	$8.18^{+0.03}_{-0.04}$	8.32 ± 0.04
D259	5.90 ± 0.08	6.07 ± 0.07	-	-	7.80 ± 0.01	7.99 ± 0.01
D260	6.12 ± 0.05	6.31 ± 0.05	-	-	8.32 ± 0.01	8.54 ± 0.01
D261	$6.12^{+0.05}_{-0.04}$	$6.30^{+0.05}_{-0.04}$	-	-	8.33 ± 0.01	$8.54^{+0.01}_{-0.02}$
D262	5.88 ± 0.07	5.92 ± 0.06	7.08 ± 0.04	$7.14^{+0.09}_{-0.07}$	8.29 ± 0.03	$8.33^{+0.05}_{-0.04}$
D263	5.59 ± 0.12	$5.75^{+0.13}_{-0.14}$	$6.40^{+0.14}_{-0.08}$	$6.59^{+0.15}_{-0.09}$	$7.82^{+0.04}_{-0.05}$	8.00 ± 0.05
D264	5.67 ± 0.06	$5.81^{+0.06}_{-0.05}$	$6.32^{+0.06}_{-0.04}$	$6.50^{+0.06}_{-0.04}$	7.76 ± 0.02	7.93 ± 0.02
D265	$5.73^{+0.18}_{-0.17}$	$5.91^{+0.15}_{-0.17}$	6.45 ± 0.04	6.65 ± 0.03	7.82 ± 0.02	8.00 ± 0.03
D266	5.71 ± 0.18	5.95 ± 0.18	$6.87^{+0.31}_{-0.14}$	$7.16^{+0.40}_{-0.14}$	$8.20^{+0.07}_{-0.06}$	$8.45^{+0.18}_{-0.19}$
D267	$5.59^{+0.08}_{-0.07}$	$5.76^{+0.08}_{-0.09}$	$6.60^{+0.08}_{-0.05}$	$6.79^{+0.07}_{-0.06}$	7.90 ± 0.03	8.08 ± 0.03
D268	$5.85^{+0.04}_{-0.05}$	6.04 ± 0.04	-	-	8.01 ± 0.01	8.21 ± 0.01
D269	$6.05^{+0.13}_{-0.14}$	$6.23^{+0.12}_{-0.14}$	-	-	8.03 ± 0.02	8.23 ± 0.03
D270	$6.21^{+0.12}_{-0.13}$	$6.35^{+0.13}_{-0.14}$	$6.80^{+0.04}_{-0.05}$	6.98 ± 0.05	$8.08^{+0.04}_{-0.05}$	8.25 ± 0.05
D271	5.94 ± 0.05	$6.10^{+0.06}_{-0.05}$	6.29 ± 0.02	6.48 ± 0.02	7.82 ± 0.01	8.00 ± 0.01
D272	$5.92^{+0.34}_{-0.14}$	6.06 ± 0.14	$6.98^{+0.36}_{-0.15}$	$7.16^{+0.34}_{-0.13}$	8.20 ± 0.10	8.38 ± 0.11
D273	$5.25^{+0.17}_{-0.16}$	$5.42^{+0.15}_{-0.16}$	$6.55^{+0.10}_{-0.07}$	$6.73^{+0.09}_{-0.07}$	$7.92^{+0.03}_{-0.04}$	8.10 ± 0.04
D274	$5.80^{+0.15}_{-0.14}$	$5.98^{+0.14}_{-0.16}$	$6.75^{+0.40}_{-0.14}$	$6.95^{+0.35}_{-0.15}$	$8.25^{+0.11}_{-0.09}$	$8.45^{+0.11}_{-0.10}$
D275	5.55 ± 0.05	5.73 ± 0.05	-	-	7.86 ± 0.01	8.06 ± 0.01
D276	5.46 ± 0.07	5.65 ± 0.07	-	-	7.90 ± 0.01	8.10 ± 0.01
D277	5.48 ± 0.04	5.65 ± 0.04	-	-	7.91 ± 0.01	$8.10^{+0.01}_{-0.02}$
D278	5.77 ± 0.07	5.95 ± 0.06	6.60 ± 0.01	6.81 ± 0.01	8.05 ± 0.01	8.25 ± 0.01
D279	$6.04^{+0.11}_{-0.12}$	$6.19^{+0.11}_{-0.13}$	6.79 ± 0.03	6.97 ± 0.04	$8.09^{+0.04}_{-0.03}$	8.27 ± 0.04

Table D.8. Total abundances derived from the nebular sample. All values are in $12+\log(X/H)$ units.

Reference number	Fe $t^2 = 0$	Fe $t^2 > 0$	N $t^2 = 0$	N $t^2 > 0$	O $t^2 = 0$	O $t^2 > 0$
D280	5.67 ± 0.07	5.85 ± 0.07	-	-	8.11 ± 0.01	8.32 ± 0.01
D281	$6.23^{+0.11}_{-0.10}$	$6.38^{+0.12}_{-0.11}$	$7.02^{+0.06}_{-0.07}$	7.20 ± 0.07	$8.22^{+0.06}_{-0.07}$	8.39 ± 0.07
D282	$6.29^{+0.12}_{-0.15}$	6.36 ± 0.13	$7.50^{+0.25}_{-0.12}$	$7.58^{+0.26}_{-0.11}$	8.41 ± 0.11	8.49 ± 0.11
D283	5.45 ± 0.14	5.70 ± 0.14	$6.61^{+0.33}_{-0.12}$	$6.86^{+0.27}_{-0.13}$	$7.76^{+0.02}_{-0.03}$	8.05 ± 0.15
D284	5.64 ± 0.25	5.83 ± 0.27	$6.74^{+0.57}_{-0.19}$	$6.96^{+0.52}_{-0.18}$	$8.20^{+0.13}_{-0.12}$	$8.39^{+0.15}_{-0.16}$
D285	5.69 ± 0.07	5.93 ± 0.07	7.49 ± 0.04	$7.75^{+0.04}_{-0.05}$	8.37 ± 0.05	$8.64^{+0.05}_{-0.04}$
D286	5.56 ± 0.13	5.91 ± 0.13	$7.38^{+0.19}_{-0.11}$	7.78 ± 0.07	$8.27^{+0.08}_{-0.07}$	$8.71^{+0.10}_{-0.09}$
D287	$5.95^{+0.10}_{-0.09}$	6.11 ± 0.10	$7.35^{+0.13}_{-0.09}$	$7.52^{+0.14}_{-0.09}$	8.42 ± 0.06	8.61 ± 0.07
D288	5.97 ± 0.06	6.14 ± 0.06	7.44 ± 0.04	7.65 ± 0.04	$8.35^{+0.04}_{-0.03}$	$8.55^{+0.04}_{-0.05}$
D289	$6.07^{+0.24}_{-0.22}$	6.20 ± 0.21	$7.36^{+0.45}_{-0.15}$	$7.49^{+0.42}_{-0.14}$	8.43 ± 0.12	$8.58^{+0.15}_{-0.14}$
D290	$5.64^{+0.07}_{-0.06}$	5.81 ± 0.06	6.82 ± 0.06	$7.00^{+0.05}_{-0.06}$	$8.21^{+0.01}_{-0.02}$	8.38 ± 0.01
D291	$5.88^{+0.21}_{-0.22}$	$6.08^{+0.20}_{-0.22}$	$7.40^{+0.44}_{-0.16}$	$7.62^{+0.44}_{-0.16}$	$8.48^{+0.11}_{-0.12}$	$8.73^{+0.18}_{-0.19}$
D292	$5.97^{+0.19}_{-0.20}$	$6.12^{+0.22}_{-0.20}$	$7.38^{+0.27}_{-0.12}$	$7.59^{+0.28}_{-0.12}$	$8.52^{+0.13}_{-0.12}$	8.71 ± 0.12
D293	$5.64^{+0.26}_{-0.23}$	$5.79^{+0.24}_{-0.26}$	$7.26^{+0.52}_{-0.18}$	$7.46^{+0.54}_{-0.16}$	$8.50^{+0.13}_{-0.12}$	8.64 ± 0.21
D294	$5.37^{+0.16}_{-0.15}$	5.55 ± 0.16	7.38 ± 0.06	$7.54^{+0.06}_{-0.07}$	$8.44^{+0.07}_{-0.06}$	8.63 ± 0.07
D295	5.68 ± 0.26	5.81 ± 0.25	$7.38^{+0.55}_{-0.18}$	$7.50^{+0.66}_{-0.19}$	8.45 ± 0.14	$8.63^{+0.23}_{-0.24}$
D296	5.94 ± 0.05	6.15 ± 0.05	7.09 ± 0.03	7.34 ± 0.03	8.34 ± 0.02	8.56 ± 0.03
D297	6.00 ± 0.02	6.21 ± 0.02	7.18 ± 0.01	7.41 ± 0.01	8.24 ± 0.01	8.48 ± 0.01
D298	$6.35^{+0.20}_{-0.18}$	6.47 ± 0.20	$7.78^{+0.55}_{-0.15}$	$7.94^{+0.38}_{-0.14}$	8.60 ± 0.17	8.77 ± 0.17
D299	5.65 ± 0.10	5.81 ± 0.10	$7.42^{+0.05}_{-0.05}$	7.58 ± 0.03	8.29 ± 0.03	$8.46^{+0.03}_{-0.04}$
D300	$6.77^{+0.21}_{-0.22}$	$6.96^{+0.19}_{-0.18}$	$8.12^{+0.15}_{-0.13}$	$8.38^{+0.43}_{-0.16}$	$8.69^{+0.18}_{-0.19}$	8.90 ± 0.19
D301	$5.92^{+0.12}_{-0.11}$	$5.99^{+0.13}_{-0.14}$	$7.70^{+0.13}_{-0.08}$	7.86 ± 0.06	$8.34^{+0.09}_{-0.08}$	8.44 ± 0.07
D302	$6.00^{+0.12}_{-0.14}$	$6.06^{+0.14}_{-0.15}$	7.83 ± 0.07	$8.01^{+0.16}_{-0.10}$	8.54 ± 0.09	$8.64^{+0.09}_{-0.10}$
D303	$5.92^{+0.08}_{-0.07}$	$6.04^{+0.08}_{-0.07}$	7.53 ± 0.04	7.65 ± 0.04	$8.23^{+0.04}_{-0.05}$	8.36 ± 0.04
D304	5.64 ± 0.17	$5.76^{+0.20}_{-0.16}$	$7.72^{+0.18}_{-0.09}$	$7.87^{+0.17}_{-0.10}$	$8.49^{+0.10}_{-0.09}$	8.64 ± 0.09
D305	$5.56^{+0.17}_{-0.15}$	$5.65^{+0.17}_{-0.16}$	$7.64^{+0.10}_{-0.07}$	$7.79^{+0.09}_{-0.06}$	8.27 ± 0.06	$8.37^{+0.05}_{-0.06}$
D306	$5.58^{+0.17}_{-0.16}$	$5.67^{+0.16}_{-0.15}$	$7.41^{+0.19}_{-0.10}$	7.55 ± 0.09	$8.31^{+0.10}_{-0.09}$	$8.42^{+0.10}_{-0.09}$
D307	$6.18^{+0.15}_{-0.14}$	$6.28^{+0.15}_{-0.16}$	$7.77^{+0.29}_{-0.12}$	$7.95^{+0.36}_{-0.13}$	$8.44^{+0.14}_{-0.13}$	$8.59^{+0.12}_{-0.11}$
D308	5.97 ± 0.21	$6.09^{+0.22}_{-0.19}$	$7.99^{+0.25}_{-0.12}$	$8.19^{+0.25}_{-0.12}$	$8.50^{+0.13}_{-0.14}$	$8.64^{+0.13}_{-0.14}$
D309	6.01 ± 0.14	6.14 ± 0.14	8.02 ± 0.06	$8.20^{+0.13}_{-0.09}$	8.80 ± 0.07	8.96 ± 0.07
D310	$5.70^{+0.14}_{-0.13}$	5.79 ± 0.13	$7.48^{+0.21}_{-0.10}$	$7.62^{+0.19}_{-0.10}$	8.27 ± 0.10	$8.37^{+0.10}_{-0.09}$
D311	$5.79^{+0.11}_{-0.12}$	5.83 ± 0.13	$7.59^{+0.06}_{-0.07}$	$7.73^{+0.14}_{-0.09}$	$8.32^{+0.09}_{-0.08}$	8.42 ± 0.08
D312	$5.96^{+0.24}_{-0.21}$	$6.14^{+0.19}_{-0.21}$	$6.69^{+0.52}_{-0.18}$	$6.87^{+0.56}_{-0.17}$	8.06 ± 0.04	$8.25^{+0.22}_{-0.20}$
D313	5.99 ± 0.04	6.06 ± 0.04	7.09 ± 0.03	7.18 ± 0.03	8.26 ± 0.01	8.33 ± 0.03
D314	5.76 ± 0.03	5.93 ± 0.02	6.80 ± 0.02	7.01 ± 0.02	8.17 ± 0.02	8.36 ± 0.02
D315	5.90 ± 0.10	$6.18^{+0.11}_{-0.10}$	6.89 ± 0.08	$7.24^{+0.17}_{-0.09}$	$8.29^{+0.04}_{-0.05}$	$8.58^{+0.10}_{-0.09}$
D316	$6.12^{+0.09}_{-0.07}$	$6.23^{+0.08}_{-0.09}$	6.95 ± 0.05	$7.07^{+0.09}_{-0.07}$	8.27 ± 0.05	8.40 ± 0.05
D317	5.86 ± 0.06	$5.97^{+0.07}_{-0.06}$	7.13 ± 0.04	7.26 ± 0.04	8.31 ± 0.02	8.43 ± 0.06
D318	6.07 ± 0.06	$6.28^{+0.07}_{-0.06}$	7.11 ± 0.02	7.36 ± 0.02	8.39 ± 0.02	8.62 ± 0.03
D319	5.43 ± 0.02	5.61 ± 0.02	6.42 ± 0.01	6.62 ± 0.01	8.02 ± 0.01	8.22 ± 0.01
D320	$5.59^{+0.09}_{-0.08}$	5.95 ± 0.08	$6.36^{+0.14}_{-0.09}$	6.77 ± 0.07	7.86 ± 0.03	$8.26^{+0.08}_{-0.07}$
D321	$5.68^{+0.18}_{-0.20}$	5.79 ± 0.19	$7.68^{+0.22}_{-0.10}$	$7.83^{+0.10}_{-0.08}$	8.57 ± 0.11	8.71 ± 0.09
D322	5.70 ± 0.15	$5.94^{+0.14}_{-0.13}$	$7.47^{+0.19}_{-0.08}$	$7.83^{+0.17}_{-0.09}$	$8.55^{+0.10}_{-0.09}$	8.86 ± 0.08
D323	$5.99^{+0.20}_{-0.22}$	$6.21^{+0.22}_{-0.23}$	$8.04^{+0.33}_{-0.14}$	$8.28^{+0.28}_{-0.14}$	$8.87^{+0.13}_{-0.14}$	$9.11^{+0.16}_{-0.14}$
D324	$5.85^{+0.15}_{-0.14}$	$6.10^{+0.14}_{-0.15}$	$7.52^{+0.19}_{-0.10}$	$7.80^{+0.21}_{-0.10}$	8.43 ± 0.09	8.73 ± 0.11
D325	$6.04^{+0.16}_{-0.14}$	6.18 ± 0.14	$7.92^{+0.19}_{-0.11}$	$8.07^{+0.22}_{-0.11}$	$8.58^{+0.11}_{-0.12}$	8.74 ± 0.10
D326	6.14 ± 0.17	6.20 ± 0.17	$7.88^{+0.28}_{-0.13}$	$8.04^{+0.29}_{-0.13}$	$8.47^{+0.15}_{-0.16}$	8.56 ± 0.14
D327	5.94 ± 0.12	$6.12^{+0.13}_{-0.14}$	$7.44^{+0.24}_{-0.12}$	$7.66^{+0.22}_{-0.11}$	$8.47^{+0.12}_{-0.11}$	$8.70^{+0.10}_{-0.09}$
D328	6.00 ± 0.07	6.19 ± 0.06	7.35 ± 0.03	7.60 ± 0.03	$8.38^{+0.03}_{-0.04}$	8.61 ± 0.03
D329	5.96 ± 0.11	$6.20^{+0.10}_{-0.11}$	$7.57^{+0.15}_{-0.09}$	$7.99^{+0.16}_{-0.09}$	$8.47^{+0.11}_{-0.12}$	$8.80^{+0.08}_{-0.09}$
D330	6.19 ± 0.14	6.33 ± 0.13	$7.82^{+0.14}_{-0.10}$	$7.98^{+0.15}_{-0.09}$	$8.69^{+0.09}_{-0.08}$	$8.85^{+0.09}_{-0.08}$
D331	$6.10^{+0.22}_{-0.24}$	$6.28^{+0.26}_{-0.24}$	$7.62^{+0.36}_{-0.14}$	$7.79^{+0.32}_{-0.14}$	$8.39^{+0.13}_{-0.14}$	8.59 ± 0.16
D332	$5.98^{+0.22}_{-0.23}$	$6.11^{+0.24}_{-0.25}$	$7.26^{+0.41}_{-0.15}$	$7.37^{+0.35}_{-0.15}$	$8.17^{+0.13}_{-0.14}$	$8.32^{+0.15}_{-0.14}$
D333	$6.04^{+0.12}_{-0.13}$	6.21 ± 0.12	$7.99^{+0.15}_{-0.09}$	$8.17^{+0.14}_{-0.09}$	$8.64^{+0.09}_{-0.08}$	$8.81^{+0.07}_{-0.08}$
D334	5.50 ± 0.17	$5.66^{+0.16}_{-0.17}$	$6.71^{+0.40}_{-0.15}$	$6.90^{+0.37}_{-0.13}$	8.16 ± 0.04	$8.32^{+0.18}_{-0.15}$
D335	5.58 ± 0.06	5.64 ± 0.07	$6.87^{+0.08}_{-0.07}$	6.94 ± 0.04	8.15 ± 0.01	$8.22^{+0.04}_{-0.05}$

Table D.8. Total abundances derived from the nebular sample. All values are in $12+\log(X/H)$ units.

Reference number	Fe $t^2 = 0$	Fe $t^2 > 0$	N $t^2 = 0$	N $t^2 > 0$	O $t^2 = 0$	O $t^2 > 0$
D336	$5.57^{+0.20}_{-0.18}$	$5.57^{+0.20}_{-0.18}$	$6.84^{+0.45}_{-0.16}$	$6.84^{+0.45}_{-0.16}$	8.08 ± 0.03	8.08 ± 0.03
D337	$5.75^{+0.05}_{-0.04}$	$5.93^{+0.04}_{-0.05}$	6.44 ± 0.01	6.64 ± 0.01	7.93 ± 0.01	8.13 ± 0.01
D338	$5.76^{+0.13}_{-0.12}$	5.96 ± 0.12	6.50 ± 0.04	6.70 ± 0.04	$7.95^{+0.04}_{-0.03}$	8.14 ± 0.04
D339	5.88 ± 0.12	$6.05^{+0.11}_{-0.10}$	$6.64^{+0.05}_{-0.06}$	$6.85^{+0.05}_{-0.06}$	7.99 ± 0.04	$8.18^{+0.05}_{-0.06}$
D340	5.95 ± 0.10	6.13 ± 0.10	6.72 ± 0.04	6.93 ± 0.04	8.09 ± 0.04	8.29 ± 0.04
D341	$5.52^{+0.22}_{-0.24}$	$5.52^{+0.22}_{-0.24}$	$6.54^{+0.55}_{-0.19}$	$6.54^{+0.55}_{-0.19}$	$7.95^{+0.08}_{-0.07}$	$7.95^{+0.08}_{-0.07}$
D342	5.99 ± 0.06	6.19 ± 0.05	6.71 ± 0.03	6.92 ± 0.03	8.08 ± 0.02	$8.29^{+0.02}_{-0.03}$
D343	5.86 ± 0.02	6.07 ± 0.02	6.68 ± 0.01	6.89 ± 0.01	8.06 ± 0.01	8.28 ± 0.01
D344	5.50 ± 0.03	5.66 ± 0.04	5.88 ± 0.06	6.03 ± 0.06	7.24 ± 0.01	7.41 ± 0.01
D345	5.62 ± 0.04	5.77 ± 0.04	-	-	7.28 ± 0.01	7.45 ± 0.01
D346	$5.62^{+0.09}_{-0.10}$	$5.76^{+0.08}_{-0.09}$	-	-	7.30 ± 0.01	7.47 ± 0.01
D347	5.37 ± 0.10	5.53 ± 0.10	-	-	7.21 ± 0.01	7.38 ± 0.01
D348	$5.59^{+0.08}_{-0.09}$	$5.73^{+0.08}_{-0.09}$	-	-	7.27 ± 0.01	7.43 ± 0.01
D349	$5.43^{+0.15}_{-0.14}$	5.56 ± 0.15	-	-	7.24 ± 0.02	7.39 ± 0.02
D350	$5.55^{+0.14}_{-0.12}$	$5.68^{+0.16}_{-0.14}$	-	-	7.13 ± 0.02	7.29 ± 0.02
D351	5.53 ± 0.06	5.68 ± 0.06	-	-	7.28 ± 0.01	7.45 ± 0.01
D352	$5.51^{+0.23}_{-0.11}$	$5.51^{+0.23}_{-0.11}$	$6.06^{+0.24}_{-0.11}$	$6.06^{+0.24}_{-0.11}$	7.18 ± 0.01	7.18 ± 0.01
D353	$5.51^{+0.06}_{-0.05}$	5.67 ± 0.06	5.95 ± 0.02	6.11 ± 0.02	7.25 ± 0.01	7.42 ± 0.01
D354	5.53 ± 0.04	5.68 ± 0.04	5.96 ± 0.02	6.11 ± 0.02	7.25 ± 0.01	7.41 ± 0.01
D355	5.47 ± 0.10	$5.60^{+0.11}_{-0.09}$	5.78 ± 0.07	5.95 ± 0.06	7.12 ± 0.02	7.29 ± 0.02
D356	5.92 ± 0.05	6.10 ± 0.05	-	-	8.09 ± 0.01	8.28 ± 0.01
D357	6.01 ± 0.05	6.18 ± 0.05	-	-	8.02 ± 0.01	8.21 ± 0.01
D358	$5.40^{+0.16}_{-0.17}$	$5.55^{+0.17}_{-0.16}$	-	-	7.45 ± 0.01	7.62 ± 0.01
D359	5.89 ± 0.07	6.07 ± 0.07	-	-	7.80 ± 0.01	7.98 ± 0.01
D360	$5.63^{+0.06}_{-0.07}$	5.79 ± 0.07	$6.07^{+0.02}_{-0.03}$	6.24 ± 0.02	7.47 ± 0.01	7.63 ± 0.01
D361	5.45 ± 0.08	5.59 ± 0.08	6.13 ± 0.01	6.30 ± 0.01	7.57 ± 0.01	7.73 ± 0.01
D362	$5.75^{+0.08}_{-0.07}$	$5.92^{+0.07}_{-0.08}$	-	-	$7.73^{+0.02}_{-0.01}$	7.92 ± 0.02
D363	$5.71^{+0.07}_{-0.08}$	$5.77^{+0.08}_{-0.07}$	6.60 ± 0.06	6.66 ± 0.06	7.40 ± 0.01	7.46 ± 0.07
D364	5.53 ± 0.09	5.67 ± 0.08	5.65 ± 0.05	$5.80^{+0.04}_{-0.05}$	6.93 ± 0.02	7.08 ± 0.02
D365	$5.82^{+0.06}_{-0.07}$	5.99 ± 0.06	$6.71^{+0.06}_{-0.04}$	$6.90^{+0.06}_{-0.05}$	7.94 ± 0.02	8.12 ± 0.02
D366	$5.77^{+0.06}_{-0.05}$	$5.96^{+0.05}_{-0.04}$	-	-	8.09 ± 0.01	8.30 ± 0.01
D367	$5.74^{+0.12}_{-0.11}$	5.91 ± 0.11	-	-	7.76 ± 0.01	7.94 ± 0.02
D368	6.03 ± 0.05	6.20 ± 0.05	$6.80^{+0.09}_{-0.10}$	7.00 ± 0.10	7.90 ± 0.04	8.09 ± 0.05
D369	5.57 ± 0.07	5.73 ± 0.07	-	-	7.55 ± 0.01	7.72 ± 0.01
D370	5.80 ± 0.06	5.96 ± 0.06	$6.36^{+0.02}_{-0.03}$	6.53 ± 0.03	7.62 ± 0.02	7.80 ± 0.03
D371	5.65 ± 0.07	5.80 ± 0.07	-	-	7.40 ± 0.01	7.57 ± 0.01
D372	$5.92^{+0.07}_{-0.06}$	6.10 ± 0.07	-	-	7.94 ± 0.01	8.12 ± 0.01
D373	$5.47^{+0.09}_{-0.08}$	$5.63^{+0.08}_{-0.07}$	-	-	7.97 ± 0.01	8.16 ± 0.01
D374	6.01 ± 0.07	6.01 ± 0.07	$7.03^{+0.10}_{-0.07}$	$7.03^{+0.10}_{-0.07}$	7.41 ± 0.02	7.41 ± 0.02
D375	$6.02^{+0.08}_{-0.07}$	$6.02^{+0.08}_{-0.07}$	$7.04^{+0.10}_{-0.08}$	$7.04^{+0.10}_{-0.08}$	7.42 ± 0.02	7.42 ± 0.02
D376	6.03 ± 0.02	6.20 ± 0.02	7.14 ± 0.03	7.32 ± 0.03	7.79 ± 0.01	7.98 ± 0.01
D377	5.57 ± 0.13	$5.80^{+0.12}_{-0.11}$	$6.68^{+0.08}_{-0.06}$	$6.90^{+0.08}_{-0.06}$	8.14 ± 0.03	8.36 ± 0.04
D378	$5.98^{+0.05}_{-0.04}$	6.14 ± 0.05	6.68 ± 0.03	6.85 ± 0.03	7.66 ± 0.02	7.83 ± 0.02
D379	5.66 ± 0.09	$5.80^{+0.10}_{-0.09}$	-	-	7.69 ± 0.01	7.86 ± 0.02
D380	6.04 ± 0.04	$6.23^{+0.04}_{-0.05}$	7.10 ± 0.03	7.30 ± 0.03	8.03 ± 0.03	8.24 ± 0.04
D381	$5.73^{+0.07}_{-0.08}$	5.89 ± 0.07	-	-	7.66 ± 0.01	7.83 ± 0.01
D382	$5.91^{+0.08}_{-0.09}$	6.07 ± 0.08	-	-	7.77 ± 0.01	7.96 ± 0.01
D383	5.44 ± 0.07	5.62 ± 0.07	$6.83^{+0.01}_{-0.02}$	$7.03^{+0.02}_{-0.01}$	7.97 ± 0.01	8.17 ± 0.02
D384	$6.12^{+0.06}_{-0.07}$	$6.32^{+0.06}_{-0.07}$	7.09 ± 0.02	$7.33^{+0.02}_{-0.03}$	8.25 ± 0.02	$8.47^{+0.02}_{-0.03}$
D385	$6.01^{+0.07}_{-0.08}$	$6.18^{+0.08}_{-0.07}$	$7.04^{+0.02}_{-0.01}$	7.25 ± 0.02	$8.21^{+0.02}_{-0.01}$	8.40 ± 0.02
D386	5.90 ± 0.05	6.06 ± 0.05	-	-	7.68 ± 0.01	7.87 ± 0.01
D387	6.02 ± 0.06	6.21 ± 0.05	$6.61^{+0.02}_{-0.03}$	$6.79^{+0.02}_{-0.03}$	7.76 ± 0.02	$7.96^{+0.03}_{-0.02}$
D388	5.90 ± 0.08	6.05 ± 0.08	6.86 ± 0.02	7.06 ± 0.02	8.06 ± 0.02	8.25 ± 0.03
D389	$5.63^{+0.05}_{-0.04}$	$5.79^{+0.05}_{-0.04}$	6.43 ± 0.01	6.63 ± 0.01	7.94 ± 0.01	8.12 ± 0.01
D390	$6.00^{+0.05}_{-0.06}$	6.06 ± 0.06	7.02 ± 0.04	7.08 ± 0.04	7.86 ± 0.02	7.92 ± 0.05
D391	$5.59^{+0.09}_{-0.10}$	$5.76^{+0.09}_{-0.10}$	$6.59^{+0.07}_{-0.06}$	$6.80^{+0.07}_{-0.05}$	$8.10^{+0.03}_{-0.02}$	8.30 ± 0.03
D392	$5.79^{+0.15}_{-0.14}$	5.97 ± 0.16	$7.03^{+0.32}_{-0.13}$	$7.22^{+0.32}_{-0.12}$	7.83 ± 0.04	$8.02^{+0.11}_{-0.12}$

Table D.8. Total abundances derived from the nebular sample. All values are in $12+\log(X/H)$ units.

Reference number	Fe $t^2 = 0$	Fe $t^2 > 0$	N $t^2 = 0$	N $t^2 > 0$	O $t^2 = 0$	O $t^2 > 0$
D393	$5.73^{+0.06}_{-0.07}$	$5.88^{+0.07}_{-0.06}$	6.64 ± 0.07	$6.81^{+0.07}_{-0.08}$	7.57 ± 0.01	7.73 ± 0.01
D394	$6.06^{+0.07}_{-0.08}$	6.22 ± 0.07	$6.85^{+0.15}_{-0.09}$	$7.06^{+0.12}_{-0.09}$	8.10 ± 0.05	8.29 ± 0.06
D395	5.82 ± 0.06	5.99 ± 0.06	-	-	7.91 ± 0.01	8.09 ± 0.01
D396	5.96 ± 0.01	6.15 ± 0.01	$7.08^{+0.01}_{-0.02}$	7.29 ± 0.02	8.00 ± 0.01	8.20 ± 0.01
D397	6.10 ± 0.08	$6.29^{+0.08}_{-0.07}$	-	-	8.02 ± 0.01	8.23 ± 0.02
D398	5.75 ± 0.09	5.89 ± 0.09	6.99 ± 0.02	7.16 ± 0.03	$8.12^{+0.02}_{-0.03}$	8.29 ± 0.03
D399	$5.85^{+0.10}_{-0.08}$	$5.89^{+0.09}_{-0.10}$	7.16 ± 0.05	$7.20^{+0.12}_{-0.07}$	8.05 ± 0.03	8.09 ± 0.06
D400	6.17 ± 0.11	$6.51^{+0.11}_{-0.10}$	$7.30^{+0.20}_{-0.10}$	$7.66^{+0.18}_{-0.10}$	8.12 ± 0.02	8.48 ± 0.12
D401	5.26 ± 0.04	5.38 ± 0.04	6.53 ± 0.03	6.68 ± 0.03	8.00 ± 0.02	8.15 ± 0.03
D402	5.48 ± 0.03	5.67 ± 0.03	6.48 ± 0.02	6.70 ± 0.02	8.00 ± 0.02	8.21 ± 0.03
D403	$6.00^{+0.08}_{-0.06}$	6.16 ± 0.04	$6.64^{+0.08}_{-0.06}$	$6.81^{+0.08}_{-0.06}$	8.02 ± 0.02	8.19 ± 0.04
D404	4.66 ± 0.09	4.79 ± 0.10	$6.56^{+0.08}_{-0.05}$	$6.70^{+0.06}_{-0.05}$	8.06 ± 0.03	8.22 ± 0.03
D405	5.62 ± 0.06	5.82 ± 0.06	$6.55^{+0.08}_{-0.09}$	6.76 ± 0.09	8.00 ± 0.01	8.21 ± 0.01
D406	$5.37^{+0.12}_{-0.11}$	5.52 ± 0.11	$6.61^{+0.14}_{-0.13}$	6.80 ± 0.14	$7.96^{+0.02}_{-0.03}$	8.13 ± 0.03
D407	$5.43^{+0.16}_{-0.04}$	$5.62^{+0.17}_{-0.16}$	$6.62^{+0.26}_{-0.12}$	$6.88^{+0.31}_{-0.13}$	8.05 ± 0.06	8.29 ± 0.15
D408	$5.45^{+0.05}_{-0.06}$	5.59 ± 0.05	6.54 ± 0.01	6.71 ± 0.01	8.07 ± 0.01	8.24 ± 0.01
D409	$5.41^{+0.07}_{-0.12}$	5.57 ± 0.07	-	-	8.06 ± 0.01	8.25 ± 0.01
D410	$5.45^{+0.10}_{-0.10}$	$5.54^{+0.10}_{-0.11}$	$6.46^{+0.20}_{-0.11}$	$6.58^{+0.08}_{-0.09}$	8.03 ± 0.04	8.15 ± 0.11
D411	5.23 ± 0.04	$5.35^{+0.05}_{-0.04}$	6.52 ± 0.03	6.65 ± 0.03	8.05 ± 0.02	8.18 ± 0.03
D412	5.46 ± 0.15	$5.67^{+0.13}_{-0.14}$	$6.54^{+0.24}_{-0.12}$	6.79 ± 0.10	8.07 ± 0.04	$8.30^{+0.12}_{-0.10}$
D413	6.16 ± 0.05	6.34 ± 0.05	6.83 ± 0.03	$7.05^{+0.02}_{-0.03}$	8.23 ± 0.02	8.44 ± 0.03
D414	5.96 ± 0.05	6.13 ± 0.04	6.64 ± 0.02	6.84 ± 0.02	8.02 ± 0.02	8.22 ± 0.02
D415	5.89 ± 0.07	6.07 ± 0.07	6.79 ± 0.02	6.98 ± 0.02	$7.92^{+0.02}_{-0.01}$	8.12 ± 0.02
D416	6.02 ± 0.09	$6.19^{+0.08}_{-0.09}$	6.77 ± 0.03	6.96 ± 0.03	7.92 ± 0.02	8.11 ± 0.02
D417	5.91 ± 0.07	6.08 ± 0.07	6.66 ± 0.01	$6.85^{+0.01}_{-0.02}$	7.88 ± 0.01	8.07 ± 0.01
D418	5.78 ± 0.07	5.96 ± 0.06	6.65 ± 0.01	6.84 ± 0.01	7.89 ± 0.01	8.09 ± 0.01
D419	$5.86^{+0.09}_{-0.08}$	6.06 ± 0.09	-	-	7.94 ± 0.02	8.15 ± 0.03
D420	5.84 ± 0.06	6.02 ± 0.06	6.78 ± 0.01	6.97 ± 0.01	7.92 ± 0.01	8.13 ± 0.01
D421	5.87 ± 0.04	6.06 ± 0.04	6.84 ± 0.01	7.03 ± 0.01	7.93 ± 0.01	8.14 ± 0.01
D422	6.01 ± 0.05	6.18 ± 0.05	6.79 ± 0.02	7.01 ± 0.02	$8.23^{+0.02}_{-0.03}$	8.42 ± 0.03
D423	$5.53^{+0.09}_{-0.10}$	$5.70^{+0.08}_{-0.09}$	6.05 ± 0.02	6.21 ± 0.02	7.48 ± 0.01	7.65 ± 0.01
D424	5.63 ± 0.04	5.79 ± 0.04	6.08 ± 0.02	6.24 ± 0.02	7.51 ± 0.01	7.68 ± 0.01
D425	6.24 ± 0.07	6.67 ± 0.07	6.68 ± 0.04	7.16 ± 0.04	$8.41^{+0.04}_{-0.03}$	8.88 ± 0.05
D426	$5.96^{+0.02}_{-0.03}$	$6.15^{+0.02}_{-0.03}$	6.80 ± 0.01	7.02 ± 0.01	7.98 ± 0.01	8.20 ± 0.01
D427	6.01 ± 0.01	6.21 ± 0.01	6.71 ± 0.01	6.93 ± 0.01	8.09 ± 0.01	8.30 ± 0.01
D428	6.02 ± 0.06	$6.20^{+0.05}_{-0.06}$	7.01 ± 0.01	7.22 ± 0.01	8.11 ± 0.01	8.31 ± 0.01
D429	$5.90^{+0.07}_{-0.08}$	$6.06^{+0.08}_{-0.07}$	6.48 ± 0.02	6.67 ± 0.02	7.95 ± 0.01	$8.12^{+0.02}_{-0.01}$
D430	$5.91^{+0.11}_{-0.12}$	6.14 ± 0.11	$6.95^{+0.21}_{-0.11}$	$7.22^{+0.09}_{-0.08}$	8.04 ± 0.03	$8.31^{+0.09}_{-0.10}$
D431	$5.99^{+0.04}_{-0.05}$	$6.16^{+0.04}_{-0.05}$	6.40 ± 0.02	$6.58^{+0.01}_{-0.02}$	7.80 ± 0.01	7.99 ± 0.01
D432	5.80 ± 0.04	5.98 ± 0.03	6.45 ± 0.01	6.64 ± 0.01	7.80 ± 0.01	7.99 ± 0.01
D433	5.73 ± 0.09	5.89 ± 0.08	6.30 ± 0.03	6.49 ± 0.03	$7.75^{+0.01}_{-0.02}$	7.93 ± 0.02
D434	5.74 ± 0.06	5.92 ± 0.06	$6.33^{+0.02}_{-0.01}$	6.52 ± 0.01	7.77 ± 0.01	7.96 ± 0.01
D435	5.83 ± 0.04	6.01 ± 0.04	6.51 ± 0.02	6.70 ± 0.02	7.80 ± 0.01	8.00 ± 0.01
D436	5.80 ± 0.07	$5.98^{+0.06}_{-0.07}$	6.50 ± 0.02	6.69 ± 0.02	7.79 ± 0.01	7.99 ± 0.02
D437	$6.16^{+0.10}_{-0.09}$	$6.16^{+0.10}_{-0.09}$	$7.22^{+0.17}_{-0.09}$	$7.22^{+0.17}_{-0.09}$	7.89 ± 0.01	7.89 ± 0.01
D438	$5.41^{+0.04}_{-0.05}$	5.56 ± 0.04	5.97 ± 0.01	6.14 ± 0.01	7.51 ± 0.01	7.68 ± 0.01
D439	$5.50^{+0.08}_{-0.07}$	$5.64^{+0.07}_{-0.08}$	5.97 ± 0.02	6.14 ± 0.03	$7.52^{+0.02}_{-0.01}$	7.68 ± 0.02
D440	5.35 ± 0.09	$5.48^{+0.09}_{-0.11}$	6.08 ± 0.02	6.24 ± 0.02	7.67 ± 0.01	7.82 ± 0.01
D441	5.86 ± 0.13	$6.08^{+0.13}_{-0.12}$	7.02 ± 0.02	7.24 ± 0.02	8.18 ± 0.01	8.40 ± 0.02
D442	6.16 ± 0.06	6.23 ± 0.06	7.05 ± 0.02	7.16 ± 0.02	8.39 ± 0.03	8.48 ± 0.03
D443	$5.78^{+0.22}_{-0.20}$	5.79 ± 0.24	$7.03^{+0.35}_{-0.14}$	$7.03^{+0.31}_{-0.13}$	$8.26^{+0.10}_{-0.11}$	$8.26^{+0.13}_{-0.12}$
D444	$6.05^{+0.10}_{-0.09}$	6.28 ± 0.10	7.01 ± 0.02	7.25 ± 0.02	8.25 ± 0.02	8.49 ± 0.02
D445	5.95 ± 0.09	$6.07^{+0.09}_{-0.08}$	6.93 ± 0.04	7.06 ± 0.04	$8.16^{+0.03}_{-0.04}$	8.31 ± 0.04
D446	$5.94^{+0.07}_{-0.08}$	6.07 ± 0.08	$6.64^{+0.03}_{-0.02}$	$6.80^{+0.03}_{-0.02}$	$8.05^{+0.03}_{-0.02}$	$8.21^{+0.02}_{-0.03}$
D447	$6.18^{+0.13}_{-0.12}$	6.30 ± 0.12	$6.97^{+0.06}_{-0.05}$	7.13 ± 0.06	$8.04^{+0.05}_{-0.06}$	8.20 ± 0.06
D448	$6.26^{+0.12}_{-0.13}$	$6.36^{+0.12}_{-0.13}$	6.72 ± 0.06	$6.87^{+0.06}_{-0.05}$	$7.82^{+0.04}_{-0.05}$	7.97 ± 0.05

Table D.8. Total abundances derived from the nebular sample. All values are in $12+\log(X/H)$ units.

Reference number	Fe	Fe	N	N	O	O
	$t^2 = 0$	$t^2 > 0$	$t^2 = 0$	$t^2 > 0$	$t^2 = 0$	$t^2 > 0$
D449	$5.71^{+0.15}_{-0.14}$	$5.89^{+0.15}_{-0.17}$	$6.69^{+0.02}_{-0.01}$	6.89 ± 0.01	8.07 ± 0.01	8.28 ± 0.01
D450	$5.72^{+0.13}_{-0.12}$	5.89 ± 0.11	6.56 ± 0.02	6.76 ± 0.02	7.97 ± 0.01	8.15 ± 0.01
D451	5.81 ± 0.03	5.98 ± 0.03	6.51 ± 0.05	$6.68^{+0.05}_{-0.04}$	7.73 ± 0.02	7.92 ± 0.02
D452	$6.03^{+0.13}_{-0.11}$	$6.20^{+0.10}_{-0.11}$	$7.18^{+0.09}_{-0.06}$	$7.37^{+0.08}_{-0.06}$	7.88 ± 0.04	8.08 ± 0.04

Table D.9. Observed $H\alpha/H\beta$ fluxes prior to reddening correction in a subsample of the references presented in Table D.2 where these values are reported. We also show the theoretical value calculated with PyNeb (Luridiana et al. 2015), using the atomic data from Storey & Hummer (1995) and the Adopted n_e and $T_e([O\ III])$ (t^2 has no influence on this RL-ratio) from Tables D.3 and D.5, respectively.

Reference number	Observed $H\alpha/H\beta$	Dust-free theoretical $H\alpha/H\beta$
D28	3.04 ± 0.03	2.78
D38	3.01 ± 0.03	2.79
D40	2.85 ± 0.03	2.80
D41	2.86 ± 0.03	2.75
D53	2.79 ± 0.03	2.80
D54	2.80 ± 0.03	2.78
D56	3.07 ± 0.03	2.81
D59	3.03 ± 0.03	2.82
D60	2.98 ± 0.03	2.84
D67	3.08 ± 0.03	2.79
D69	3.22 ± 0.03	2.80
D70	3.73 ± 0.04	2.82
D72	3.50 ± 0.07	2.78
D75	3.06 ± 0.06	2.77
D76	3.92 ± 0.08	2.82
D77	3.38 ± 0.07	2.83
D79	3.53 ± 0.07	2.75
D81	3.20 ± 0.06	2.82
D82	2.79 ± 0.06	2.78
D86	5.11 ± 0.26	2.91
D90	3.01 ± 0.03	2.82
D92	4.16 ± 0.04	2.82
D93	3.09 ± 0.03	2.82
D96	2.92 ± 0.06	2.78
D99	1.98 ± 0.04	2.79
D101	0.30 ± 0.01	2.81
D106	4.05 ± 0.04	2.82
D115	5.02 ± 0.05	2.86
D116	3.48 ± 0.17	2.88
D117	3.54 ± 0.11	2.88
D118	3.29 ± 0.10	2.84
D119	3.44 ± 0.17	2.87
D122	3.32 ± 0.20	2.94
D135	3.66 ± 0.11	2.85
D168	4.23 ± 0.25	2.88
D173	2.85 ± 0.09	2.87
D177	3.77 ± 0.26	2.90
D183	2.81 ± 0.08	2.80
D187	3.98 ± 0.12	2.92
D188	4.14 ± 0.12	2.90
D192	3.76 ± 0.41	2.96
D193	4.60 ± 0.78	2.91
D194	3.18 ± 0.29	2.91
D197	3.02 ± 0.27	2.85
D198	3.15 ± 0.35	2.85
D199	3.99 ± 0.12	2.94
D201	3.89 ± 0.12	2.91
D220	6.81 ± 0.27	2.91
D221	3.75 ± 0.15	2.92
D222	4.31 ± 0.13	2.89
D223	3.19 ± 0.10	2.91
D224	4.30 ± 0.13	2.89
D225	2.68 ± 0.08	2.90
D226	4.20 ± 0.13	2.88
D227	4.32 ± 0.13	2.88
D228	4.29 ± 0.13	2.89
D229	4.33 ± 0.13	2.89
D230	2.78 ± 0.14	2.93
D231	4.35 ± 0.17	2.89

Table D.9. Observed $H\alpha/H\beta$ fluxes prior to reddening correction in a subsample of the references presented in Table D.2 where these values are reported. We also show the theoretical value calculated with PyNeb (Luridiana et al. 2015), using the atomic data from Storey & Hummer (1995) and the Adopted n_e and $T_e([O\ III])$ (r^2 has no influence on this RL-ratio) from Tables D.3 and D.5, respectively.

Reference number	Observed $H\alpha/H\beta$	Dust-free theoretical $H\alpha/H\beta$
D232	4.65 ± 0.23	2.89
D233	3.44 ± 0.14	2.90
D234	4.45 ± 0.13	2.90
D235	11.61 ± 0.46	2.87
D236	7.69 ± 0.38	2.89
D237	16.39 ± 0.82	2.88
D238	3.58 ± 0.29	2.90
D239	13.79 ± 0.41	2.86
D240	15.38 ± 0.46	2.86
D241	9.75 ± 0.20	2.92
D242	8.40 ± 0.08	2.88
D243	5.56 ± 0.17	2.84
D244	7.47 ± 0.15	2.94
D245	10.85 ± 0.33	2.97
D246	9.08 ± 0.82	2.92
D247	4.91 ± 0.39	2.88
D248	3.52 ± 0.07	2.96
D249	4.59 ± 0.18	2.89
D250	3.55 ± 0.07	2.86
D251	3.62 ± 0.04	2.85
D252	3.65 ± 0.07	2.83
D253	3.04 ± 0.18	2.81
D255	3.15 ± 0.03	2.80
D256	3.24 ± 0.06	2.85
D257	3.25 ± 0.07	2.85
D258	3.78 ± 0.04	2.83
D262	3.48 ± 0.07	2.86
D263	2.95 ± 0.06	2.79
D264	3.01 ± 0.06	2.78
D265	2.90 ± 0.03	2.79
D266	3.18 ± 0.06	2.84
D267	2.92 ± 0.06	2.80
D270	4.08 ± 0.04	2.83
D271	3.51 ± 0.04	2.78
D272	3.17 ± 0.03	2.84
D273	3.34 ± 0.07	2.79
D274	3.49 ± 0.03	2.84
D278	3.11 ± 0.06	2.82
D279	3.59 ± 0.04	2.82
D282	3.29 ± 0.10	2.90
D283	2.81 ± 0.14	2.78
D285	3.60 ± 0.11	2.91
D286	3.19 ± 0.06	2.90
D288	3.58 ± 0.11	2.91
D294	3.19 ± 0.26	2.91
D295	3.05 ± 0.24	2.92
D296	4.05 ± 0.24	2.86
D312	2.92 ± 0.12	2.82
D315	3.46 ± 0.10	2.85
D316	3.07 ± 0.09	2.85
D320	3.40 ± 0.17	2.78
D334	4.23 ± 0.25	2.84
D336	4.62 ± 0.05	2.83
D338	4.55 ± 0.05	2.80
D339	3.33 ± 0.07	2.81
D340	4.46 ± 0.04	2.83
D341	3.22 ± 0.06	2.82
D342	3.28 ± 0.16	2.81
D346	3.28 ± 0.07	2.74

Table D.9. Observed $H\alpha/H\beta$ fluxes prior to reddening correction in a subsample of the references presented in Table D.2 where these values are reported. We also show the theoretical value calculated with PyNeb (Luridiana et al. 2015), using the atomic data from Storey & Hummer (1995) and the Adopted n_e and $T_e([O\ III])$ (t^2 has no influence on this RL-ratio) from Tables D.3 and D.5, respectively.

Reference number	Observed $H\alpha/H\beta$	Dust-free theoretical $H\alpha/H\beta$
D347	3.34 ± 0.07	2.74
D348	3.54 ± 0.07	2.74
D349	3.39 ± 0.07	2.74
D350	3.42 ± 0.07	2.73
D351	3.26 ± 0.07	2.74
D360	2.90 ± 0.03	2.76
D361	3.11 ± 0.03	2.77
D364	3.12 ± 0.06	2.74
D365	3.21 ± 0.03	2.79
D366	3.47 ± 0.03	2.80
D368	2.79 ± 0.03	2.79
D376	2.78 ± 0.03	2.78
D377	3.03 ± 0.03	2.81
D380	3.14 ± 0.19	2.80
D391	3.24 ± 0.03	2.82
D392	2.79 ± 0.03	2.79
D393	3.08 ± 0.03	2.75
D394	3.11 ± 0.03	2.83
D400	2.66 ± 0.03	2.82
D401	3.27 ± 0.10	2.82
D402	2.95 ± 0.09	2.81
D403	4.26 ± 0.13	2.80
D404	3.34 ± 0.13	2.83
D405	3.15 ± 0.03	2.82
D406	3.39 ± 0.03	2.82
D407	3.31 ± 0.03	2.83
D413	4.08 ± 0.20	2.84
D414	3.38 ± 0.17	2.81
D415	2.81 ± 0.03	2.79
D416	2.81 ± 0.06	2.79
D419	3.21 ± 0.03	2.79
D435	3.54 ± 0.04	2.78
D436	3.48 ± 0.03	2.78
D440	3.40 ± 0.07	2.77
D441	3.47 ± 0.07	2.82
D444	3.52 ± 0.07	2.84
D447	3.70 ± 0.07	2.81
D448	3.32 ± 0.07	2.78
D449	3.34 ± 0.07	2.80
D450	3.61 ± 0.04	2.81
D452	3.00 ± 0.30	2.78