

# Appendix B

## Fluorescence efficiencies

Emission	$g$ [ $10^{-13} \frac{\text{erg}}{\text{s}}$ ]	Reference
C <sub>2</sub> ( $\Delta v = 0$ )	4.47	Cochran et al. 1992 [Cochran <i>et al.</i> , 1992]
C <sub>2</sub> ( $\Delta v = 1$ )	2.40	Cochran et al. 1992 [Cochran <i>et al.</i> , 1992]
C <sub>3</sub>	3.80	Cochran et al. 1992 [Cochran <i>et al.</i> , 1992]

Table B.1: Fluorescence efficiencies (g-factors) used. The values correspond to  $r_h=1$  AU and scale proportional to  $r_h^{-2}$ .

$r_h$ [AU]	$g$ [ $10^{-15} \frac{\text{erg}}{\text{s}}$ ]	date
-3.34	6.52	18./19.08.1996
-3.34	6.52	23./24.08.1996
-3.10	6.35	13./14.09.1996
-2.85	6.20	02./03.10.1996
-2.85	6.20	03./04.10.1996
2.89	6.21	30.9./1.10.1997
3.63	6.65	06./07.12.1997
3.63	6.65	07./08.12.1997
3.78	6.74	19./20.12.1997
4.13	6.77	21./22.01.1998
4.74	5.95	17./18.03.1998
4.74	5.95	21./22.03.1998

Table B.2: Fluorescence efficiencies (g-factors) used for the NH<sub>2</sub> (0-10-0) emission band (normalized to 1 AU). Computed g-factors from Kawakita and Watanabe [2002] have been interpolated to the heliocentric distances of the observations. The values correspond to  $r_h=1$  AU and scale proportional to  $r_h^{-2}$ .

$r_h$ [AU]	$\dot{r}_h$ [km/s]	g [ $10^{-13} \frac{\text{erg}}{\text{s}^{-1}}$ ]	date
-4.60	-17.5	3.6	26./27.04.1996
-3.98	-18.4	3.7	24./25.06.1996
-3.34	-19.5	3.6	18./19.08.1996
-3.34	-19.5	3.6	23./24.08.1996
-3.10	-20.0	3.6	13./14.09.1996
-2.85	-20.4	3.85	02./03.10.1996
-2.85	-20.4	3.85	03./04.10.1996
3.51	19.2	3.08	23./24.11.1997
3.63	19.0	3.08	06./07.12.1997
3.63	19.0	3.08	07./08.12.1997
3.78	18.7	3.08	19./20.12.1997
4.13	18.1	3.21	21./22.01.1998
4.13	18.1	3.21	21./22.01.1998
4.13	18.1	3.21	22./23.01.1998
4.74	17.3	3.4	17./18.03.1998
4.74	17.3	3.4	21./22.03.1998
5.00	16.9	3.4	17./18.04.1998
6.00	15.6	3.73	05./06.08.1998
6.00	15.6	3.73	06./07.08.1998
7.00	14.7	3.73	23./24.11.1998
7.00	14.7	3.73	24./25.11.1998
7.40	14.3	3.73	13./14.01.1999
7.40	14.3	3.73	14./15.01.1999
7.90	13.9	3.73	14./15.03.1999
9.80	12.6	3.73	12./13.11.1999
10.81	12.1	3.73	05./06.04.2000
12.9	11.1	3.73	20./21.01.2001
12.9	11.1	3.73	24./25.01.2001

Table B.3: Fluorescence efficiencies (g-factors) used for the CN (0,0) emission band (normalized to 1 AU). Up to  $r_h = 5$  AU, the values were taken from model calculations made by Schleicher [Schleicher, 1983] to take into account the Swings effect. Beyond this distance, only the scaling with solar flux has been taken into account. Therefore the normalized values in this table remain constant.