

z_i	k_1 ($\times 10^{-7} \text{ s}^{-1}$)	k_2 (#radicals $\mu\text{m}^{-3} \text{ s}^{-1}$)
0	4.0984	3.1972
10	4.0936	3.2907
20	4.0936	3.3911
30	4.0902	3.4916
40	4.0936	3.6013
50	4.0960	3.7135
60	4.0936	3.8250
70	4.1012	3.9495
80	4.0963	4.0657
90	4.1018	4.1961
100	4.0936	4.3164
110	4.0936	4.4492
120	4.0959	4.5887
130	4.1015	4.7367
140	4.0936	4.8735
150	4.0870	5.0160
160	4.0936	5.1796
170	4.0976	5.3452
180	4.0906	5.5017
190	4.0864	5.6668
200	4.1005	5.8632
210	4.0984	6.0429
220	3.9975	6.0781
230	4.0696	6.3811
240	4.0727	6.5859
250	4.0996	6.8372
260	4.2025	7.2290
270	4.1000	7.2747
280	4.0716	7.4520
290	4.0727	7.6896
300	4.1000	7.9860
310	4.0870	8.2131
320	4.0991	8.4992
330	4.0991	8.7699
340	4.1000	9.0519
350	4.1512	9.4582
360	4.1512	9.7615
370	4.1512	10.0753
380	4.1512	10.4000
390	4.1512	10.7360
400	4.1512	11.0838
410	4.1512	11.4438
420	4.1512	11.8166
430	4.1512	12.2027
440	4.1512	12.6026
450	4.1512	13.0169
460	4.1000	13.2803
470	4.1000	13.7197
480	4.1000	14.1752
490	4.1000	14.6476
500	4.1256	15.2321
510	4.1256	15.7435

520	4.1256	16.2740
530	4.1000	16.7203
540	4.1128	17.3425
550	4.1020	17.8877
560	4.1073	18.5249
570	4.1069	19.1612
580	4.1048	19.8141
590	4.1025	20.4919
600	4.1014	21.2027
610	4.1013	21.9474
620	4.1018	22.7255
630	4.1018	23.5333
640	4.1083	24.4133
650	4.1065	25.2804
660	4.1010	26.1586
670	4.0923	27.0541
680	4.0536	27.7810
690	4.0601	28.8534
700	4.0608	29.9330
710	4.0606	31.0530
720	4.0820	32.3981
730	4.0938	33.7292
740	4.0920	35.0093
750	4.0953	36.3949
760	4.0967	37.8310
770	4.0845	39.2065
780	4.0811	40.7352
790	4.0820	42.3850
800	4.0853	44.1448
810	4.0843	45.9491
820	4.0857	47.8764
830	4.0734	49.7418
840	4.0734	51.8622
850	4.0730	54.0960
860	4.0780	56.5315
870	4.0920	59.2425
880	4.0877	61.8454
890	4.0699	64.3898
900	4.0707	67.3951
910	4.0718	70.5957
920	4.0720	73.9930
930	4.0724	77.6206
940	4.0726	81.4979
950	4.0716	85.6242
960	4.0784	90.2238
970	4.1324	96.3066
980	4.1087	100.9632
990	4.0888	106.0972

Table S1: Unweighted values of parameters k_1 and k_2 in steps of $10\mu\text{m}$ through the full depth of the sample – from *ode15s*.