

Table 3. Scan Table Definitions

<i>Mode #</i>	<i>Type</i>	<i>Emissions</i>	<i>Altitude range, step (km)</i>	<i>Time (sec)</i>	<i>Usage dates</i>
11200	Day	O <sub>2</sub> (0,0) P9 O <sub>2</sub> (0,1) P7 O ( <sup>1</sup> S) “ O ( <sup>1</sup> D)	90, 125, 2.5 55, 90, 2.5 90, 125, 2.5 130, 180, 5 180, 300, 20	0.8 0.8 0.8 “ 0.8	2/13/02 – 2/26/02
11300	Day	O <sub>2</sub> (0,0) P9 O <sub>2</sub> (0,1) P7 O ( <sup>1</sup> S)	70, 120, 1.25 55, 80, 1.25 100, 140, 2.5 145, 180, 5	0.8 0.8 0.8 “	2/27/02 – 3/28/02
11301	Day	O <sub>2</sub> (0,0) P9 O <sub>2</sub> (0,1) P7 O ( <sup>1</sup> S)	70, 120, 1.25 55, 80, 1.25 100, 140, 2.5 145, 180, 5	0.75 0.75 0.75 “	3/29/02 – 4/09/02
11302	Day	O <sub>2</sub> (0,0) P9 O <sub>2</sub> (0,1) P7 O ( <sup>1</sup> S)	70, 120, 1.25 55, 80, 1.25 100, 140, 2.5 145, 180, 5	0.75 0.75 0.75 “	5/05/02 – 5/27/02
12000	Day	O <sub>2</sub> (0,0) P9 O <sub>2</sub> (0,0) P15 O ( <sup>1</sup> S)	75, 120, 1.5 60, 99, 1.5 105, 130, 2.5 135, 160, 5 170, 180, 10	1.0 1.0 1.0 “ “	4/09/02 – 5/04/02 8/06/02 – 8/30/02 10/05/02 – 11/01/02 2/05/03 – 2/28/03 4/09/03 – 5/01/03 8/09/03 – 8/28/03 10/07/03 – 11/03/03 2/04/04 – 2/06/04
12100	Day	O <sub>2</sub> (0,0) P9 O <sub>2</sub> (0,0) P15 O ( <sup>1</sup> S)	70, 115, 1.25 60, 100, 1.25 100, 120, 2.5 125, 150, 5 160, 180, 10	0.75 0.75 0.75 “ “	5/28/02 – 8/05/02 9/01/02 – 10/04/02 11/02/02 – 2/04/03 3/01/03 – 4/08/03 5/02/03 – 8/08/03 8/29/03 – 10/06/03 11/04/03 – 11/07/03 11/09/03 – 11/14/03 11/21/03 12/14/03 – 12/24/03
14100	Night	O <sub>2</sub> (0,0) P9 OH (7,3) P1(3) O ( <sup>1</sup> S)	80, 100, 2.5 80, 100, 2.5 90, 125, 2.5	3.0 2.0 2.0	2/13/02 – 2/26/02
14300	Night	O <sub>2</sub> (0,0) P9 O ( <sup>1</sup> S)	80, 105, 1.25 90, 110, 2.5	3.0 3.0	2/27/02 – 4/09/02
14301	Night	O <sub>2</sub> (0,0) P9 O ( <sup>1</sup> S)	80, 105, 1.25 90, 110, 2.5	3.0 3.0	4/09/02 – 11/07/03 11/09/03 – 11/15/03 11/21/03 – 1/12/04

					2/04/04 – 2/06/04
14400	Day	O <sub>2</sub> (0,0) P9 O <sub>2</sub> (0,0) P15 O <sub>2</sub> P branch	75, 115, 1.25 65, 97.5, 1.25 75, 115, 1.25	0.75 0.75 0.75	11/08/03 11/16/03 – 11/20/03 1/13/04 – 2/03/04 3/02/04 – 3/18/04
14410	Day	O <sub>2</sub> (0,0) P9 O <sub>2</sub> (0,0) P15 O <sub>2</sub> P branch O ( <sup>1</sup> S)	80, 112.5, 1.25 70, 100, 1.25 80, 120, 1.25 148, 151, 1.5	0.75 0.75 0.75 0.75	3/19/04 – 4/05/04 5/04/04 – 8/05/04 9/02/04 – 10/07/04 11/04/04 – 11/18/04 1/19/05 – 2/03/05 3/02/05 – 4/13/05 5/03/05 – 8/04/05 8/11/05 8/16/05 9/07/05 – 9/26/05 9/28/05 – 10/05/05 11/02/05 – 11/28/05 1/17/06 – 1/31/06 3/14/06 – 4/04/06 11/21/06 – 1/15/07 11/29/07 – 12/31/07 1/03/08 – 1/08/08 1/16/08 – 1/17/08 5/24/08 – 5/27/08
14500	Night	O <sub>2</sub> (0,0) P9 O <sub>2</sub> P branch	85, 103.75, 1.25 85, 103.75, 1.25	3.0 3.0	11/08/03 11/16/03 – 11/20/03 1/13/04 – 2/03/04 3/02/04 – 3/18/04
14600 (before 1/12/04)	Day	O <sub>2</sub> (0,0) P9 O <sub>2</sub> (0,0) P15 O ( <sup>1</sup> S)	70, 115, 1.25 60, 100, 1.25 100, 120, 2.5 125, 150, 5 160, 180, 10	0.65 0.65 0.65 “ “	11/15/03 11/22/03 – 12/13/03 12/25/03 – 1/12/04
14600 (after 2/7/04)	Day	O <sub>2</sub> (0,0) P9 O <sub>2</sub> (0,0) P15 O <sub>2</sub> P branch O ( <sup>1</sup> S)	80, 113, 1.5 70, 100, 1.5 80, 119, 1.5 148, 151, 1.5	1.0 1.0 1.0 1.0	2/07/04 – 3/01/04 4/06/04 – 5/03/04 8/06/04 – 9/01/04 10/08/04 – 11/03/04 2/04/05 – 3/01/05 4/14/05 – 4/21/05 4/26/05 – 5/02/05 8/06/05 – 8/10/05 8/12/05 – 8/15/05 8/17/05 – 9/06/05 9/27/05 10/06/05 – 11/01/05 11/30/05 2/01/06 – 3/13/06 4/05/06 – 11/20/06

					1/16/07 – 11/12/07 1/18/08 – 5/23/08 5/28/08 – 7/28/08 7/30/08 – 9/08/08 9/10/08 – 9/24/08
14602	Day	O <sub>2</sub> (0,0) P9 O <sub>2</sub> (0,0) P15 O <sub>2</sub> P branch O ( <sup>1</sup> S)	80, 113, 1.5 70, 100, 1.5 80, 119, 1.5 148, 151, 1.5	0.85 0.85 0.85 0.85	11/13/07 – 11/19/07
14610	Day	O <sub>2</sub> (0,0) P9 O <sub>2</sub> (0,0) P15  O ( <sup>1</sup> S) O ( <sup>1</sup> D)	80, 115, 2.5 65, 85, 2.5 90, 100, 5 110, 160, 10 160, 300, 20	1.0 1.0 1.0 4 x 1.0 4 x 1.0	7/29/08
14611	Day	O <sub>2</sub> (0,0) P9 O <sub>2</sub> (0,0) P15  O ( <sup>1</sup> S) O ( <sup>1</sup> D)	80, 115, 2.5 65, 85, 2.5 90, 100, 5 110, 160, 10 160, 300, 20	1.0 1.0 1.0 4 x 1.0 4 x 1.0	9/09/08 9/25/08 – 11/04/08 11/06/08 – 11/17/08 1/13/09 – 5/25/09 5/28/09 – 6/14/09 6/25/09 – 11/16/09 1/15/10 – present
14612	Day	O <sub>2</sub> (0,0) P9 O <sub>2</sub> (0,0) P15  O ( <sup>1</sup> S) O ( <sup>1</sup> D)	80, 115, 2.5 65, 85, 2.5 90, 100, 5 110, 160, 10 160, 300, 20	0.85 0.85 0.85 4 x 0.85 4 x 0.85	11/05/08 11/18/08 – 1/12/09 5/25/09 – 5/27/09 6/19/09 – 6/24/09 11/17/09 – 1/14/10
14700	Night	O <sub>2</sub> (0,0) P9 O <sub>2</sub> P branch O ( <sup>1</sup> S)	86, 104.75, 1.25 86, 104.75, 1.25 96, 98.5, 1.25	2.5 2.5 2.5	2/07/04 – 2/13/04
14710	Night	O <sub>2</sub> (0,0) P9 O <sub>2</sub> P branch O ( <sup>1</sup> S)	86, 104.75, 1.25 86, 104.75, 1.25 96, 98.5, 1.25	2.5 2 x 1.0 2.5	2/14/04 – 3/01/04 4/06/04 – 5/03/04
14711	Night	O <sub>2</sub> (0,0) P9 O <sub>2</sub> P branch O ( <sup>1</sup> S)	86, 104.75, 1.25 86, 104.75, 1.25 96, 98.5, 1.25	2.5 2 x 1.0 2.5	8/06/04 – 9/01/04 10/08/04 – 11/03/04 2/04/05 – 3/01/05
14720	Night	O <sub>2</sub> (0,0) P9 O <sub>2</sub> P branch O ( <sup>1</sup> S)	86, 104.75, 1.25 86, 104.75, 1.25 96, 98.5, 1.25	2.5 2.5 2.5	3/19/04 – 4/05/04 5/04/04 – 8/05/04 9/02/04 – 10/07/04 11/04/04 – 2/03/05 3/02/05 – 3/08/05 4/21/05 – 4/25/05 6/12/07 – 6/13/07 11/20/07 – 11/28/07 12/31/07 – 1/02/08 1/09/08 – 1/15/08
14810	Day	O <sub>2</sub> (0,0) P9 O <sub>2</sub> (0,0) P15	80, 112.5, 1.25 70, 100, 1.25	0.65 0.65	11/19/04 – 1/18/05 4/21/05 – 4/25/05

		O <sub>2</sub> P branch O ( <sup>1</sup> S)	80, 120, 1.25 148, 151, 1.5	0.65 0.65	11/29/05 12/01/05 – 1/16/06 6/12/07 – 6/13/07 11/20/07 – 11/28/07 12/31/07 – 1/02/08 1/09/08 – 1/15/08
14820	Night	O <sub>2</sub> (0,0) P9 O <sub>2</sub> (0,0) P15 O <sub>2</sub> P branch O ( <sup>1</sup> S)	80, 105, 2.5 80, 105, 2.5 80, 105, 2.5 93, 99, 3.0	3.0 3.0 2 x 1.0 3.0	3/09/05 – 4/21/05 4/26/05 – 11/19/07 11/29/07 – 12/31/07 1/03/08 – 1/08/08 1/16/08 – 7/28/09 7/30/09 – 9/08/08 9/10/08 – 9/24/08
14830	Night	O <sub>2</sub> (0,0) P9 O ( <sup>1</sup> D)	80, 105, 2.5 160, 300, 20	3.0 4.0	7/29/08
14831	Night	O <sub>2</sub> (0,0) P9 O ( <sup>1</sup> D)	80, 105, 2.5 160, 300, 20	3.0 4.0	9/09/08 9/25/08 – 6/14/09 6/19/09 – present
18000	Night	O ( <sup>1</sup> D)	200, 400, 10	5.0	7/27/05
18100	Day	O ( <sup>1</sup> D)	150, 350, 10	0.75	7/27/05
18001	Night	O ( <sup>1</sup> D)	100, 300, 10	10.0	8/11/05
18101	Day	O ( <sup>1</sup> D)	100, 300, 10	0.75	8/11/05
18002	Night	O ( <sup>1</sup> D)	160, 260, 20	4.0	4/25/08 4/29/08
18102	Day	O ( <sup>1</sup> D)	160, 320, 20	4 x 1.0	4/25/08 4/29/08
18200	Day	O ( <sup>1</sup> S)	80, 122.5, 2.5 125, 150, 5 160, 180, 10 200, 300, 20	1.0 1.0 1.0 1.0	8/16/05
18300	Night	O ( <sup>1</sup> S)	80, 122.5, 2.5 125, 150, 5 160, 180, 10 200, 300, 20	10.0 10.0 10.0 10.0	8/16/05
18201	Day	O <sub>2</sub> (0,1) P11 O <sub>2</sub> (0,1) P7 O ( <sup>1</sup> S)	50, 100, 2.5 50, 100, 2.5 90, 290, 10	1.0 1.0 2 x 1.0	5/16/08 5/21/08
29111 29211 29311 29411 29511 29621 29631 29641 29651 29671	Day/ Night	O <sub>2</sub> (0,1) P11 OH (7,3) P1(3) O <sub>2</sub> (0,1) P7 O <sub>2</sub> (0,0) P15 O ( <sup>1</sup> D) O <sub>2</sub> R branch O <sub>2</sub> P branch OH (9,4) P1(2) Na D O (844.6 nm)	57.5, 122.5, 2.5 125, 150, 5  plus 160, 180, 10 200, 300, 20 for 29511, 29711, and 29681 only	2 x 0.5 2 x 0.5  2 x 0.5 2 x 0.5	1/23/03

29681		O <sup>+</sup> (732 nm)			
29711		O ( <sup>1</sup> S)			
29811		O <sub>2</sub> (0,0) P9			
29111	Day	O <sub>2</sub> (0,1) P11	57.5, 122.5, 2.5	2 x 0.5	3/08/03
29211		OH (7,3) P1(3)	125, 150, 5	2 x 0.5	
29311		O <sub>2</sub> (0,1) P7			
29411		O <sub>2</sub> (0,0) P15	plus		
29511		O ( <sup>1</sup> D)	160, 180, 10	2 x 0.5	
29711		O ( <sup>1</sup> S)	200, 300, 20	2 x 0.5	
29621	Day	O <sub>2</sub> R branch	57.5, 122.5, 2.5	2 x 0.5	3/13/03
29631		O <sub>2</sub> P branch	125, 150, 5	2 x 0.5	
29641		OH (9,4) P1(2)			
29651		Na D	plus		
29671		O (844.6 nm)	160, 180, 10	2 x 0.5	
29681		O <sup>+</sup> (732 nm)	200, 300, 20	2 x 0.5	
29811		O <sub>2</sub> (0,0) P9	for 29681		
29112	Day	O <sub>2</sub> (0,1) P11	57.5, 122.5, 2.5	2 x 0.5	9/22/03
29212		OH (7,3) P1(3)	125, 150, 5	2 x 0.5	6/05/07
29312		O <sub>2</sub> (0,1) P7			
29412		O <sub>2</sub> (0,0) P15	plus		
29512		O ( <sup>1</sup> D)	160, 180, 10	2 x 0.5	
29712		O ( <sup>1</sup> S)	200, 300, 20	2 x 0.5	
29622	Day	O <sub>2</sub> R branch	57.5, 122.5, 2.5	2 x 0.5	9/23/03
29632		O <sub>2</sub> P branch	125, 150, 5	2 x 0.5	6/06/07 – 6/12/07
29642		OH (9,4) P1(2)			
29652		Na D	plus		
29672		O (844.6 nm)	160, 180, 10	2 x 0.5	
29682		O <sup>+</sup> (732 nm)	200, 300, 20	2 x 0.5	
29812		O <sub>2</sub> (0,0) P9	for 29682		
34310	Day	O <sub>2</sub> (0,1) P7	40, 80, 5	10 x .5	4/05/02 – 4/09/02
34610		clear/clear	40, 80, 5	10 x .5	
34710		O ( <sup>1</sup> S)	40, 80, 5	10 x .5	
34810		O <sub>2</sub> (0,0) P9	40, 80, 5	10 x .5	
34111	Day	O <sub>2</sub> (0,1) P11	40, 45, 5	20 x .5	5/21/02
34211		OH (7,3) P1(3)	40, 45, 5	20 x .5	5/23/02
34311		O <sub>2</sub> (0,1) P7	40, 45, 5	20 x .5	
34411		O <sub>2</sub> (0,0) P15	40, 45, 5	20 x .5	
34511		O ( <sup>1</sup> D)	40, 45, 5	20 x .5	
34621		O <sub>2</sub> R branch	40, 45, 5	20 x .5	
34631		O <sub>2</sub> P branch	40, 45, 5	20 x .5	
34641		OH (9,4) P1(2)	40, 45, 5	20 x .5	
34651		Na D	40, 45, 5	20 x .5	
34671		O (844.6 nm)	40, 45, 5	20 x .5	
34681		O <sup>+</sup> (732 nm)	40, 45, 5	20 x .5	
34711		O ( <sup>1</sup> S)	40, 45, 5	20 x .5	
34811		O <sub>2</sub> (0,0) P9	40, 45, 5	20 x .5	
34411	Day	O <sub>2</sub> (0,0) P15	40, 45, 5	20 x .5	7/16/02 – 9/13/02
34711		O ( <sup>1</sup> S)	40, 45, 5	20 x .5	

34811		O <sub>2</sub> (0,0) P9	40, 45, 5	20 x .5	
34412	Day	O <sub>2</sub> (0,0) P15	40, 45, 5	5 x 0.5	9/20/02 – 6/06/03
34712		O (¹S)	40, 45, 5	5 x 0.5	
34812		O <sub>2</sub> (0,0) P9	40, 45, 5	5 x 0.5	
34413	Day	O <sub>2</sub> (0,0) P15	40, 45, 5	0.5	6/13/03 – 4/22/08
34713		O (¹S)	40, 45, 5	0.5	
34813		O <sub>2</sub> (0,0) P9	40, 45, 5	0.5	
34413	Day	O <sub>2</sub> (0,0) P15	40, 45, 5	0.5	4/24/08 – present
34513		O (¹D)	40, 45, 5	0.5	
34713		O (¹S)	40, 45, 5	0.5	
34813		O <sub>2</sub> (0,0) P9	40, 45, 5	0.5	
34910	Night	O <sub>2</sub> (0,0) P9, T1	85	2.0	9/27/05
34920		T2	“	“	11/30/05
34930		T3	“	“	
34940		T4	“	“	
35631	Night	O <sub>2</sub> P branch, T1	85, 115, 2.5	2 x 1.0	7/15/02
35632		T2	“	“	7/20/02
35633		T3	“	“	
35634		T4	“	“	
35635		all telescopes	“	“	
35110	Night	O <sub>2</sub> (0,1) P11	57.5, 122.5, 2.5	2 x 3.0	3/08/03
35210		OH (7,3) P1(3)	125, 150, 5	2 x 3.0	
35310		O <sub>2</sub> (0,1) P7			
35410		O <sub>2</sub> (0,0) P15	plus		
35510		O (¹D)	160, 180, 10	2 x 3.0	
35710		O (¹S)	200, 300, 20	2 x 3.0	
35620	Night	O <sub>2</sub> R branch	57.5, 122.5, 2.5	2 x 3.0	3/13/03
35630		O <sub>2</sub> P branch	125, 150, 5	2 x 3.0	
35640		OH (9,4) P1(2)			
35650		Na D	plus		
35670		O (844.6 nm)	160, 180, 10	2 x 3.0	
35680		O <sup>+</sup> (732 nm)	200, 300, 20	2 x 3.0	
35810		O <sub>2</sub> (0,0) P9	for 35680		
35111	Night	O <sub>2</sub> (0,1) P11	57.5, 122.5, 2.5	2 x 3.0	9/22/03
35211		OH (7,3) P1(3)	125, 150, 5	2 x 3.0	6/05/07
35311		O <sub>2</sub> (0,1) P7			
35411		O <sub>2</sub> (0,0) P15	plus		
35511		O (¹D)	160, 180, 10	2 x 3.0	
35711		O (¹S)	200, 300, 20	2 x 3.0	
35621	Night	O <sub>2</sub> R branch	57.5, 122.5, 2.5	2 x 3.0	9/23/03
35631		O <sub>2</sub> P branch	125, 150, 5	2 x 3.0	6/06/07 – 6/12/07
35641		OH (9,4) P1(2)			
35651		Na D	plus		
35671		O (844.6 nm)	160, 180, 10	2 x 3.0	
35681		O <sup>+</sup> (732 nm)	200, 300, 20	2 x 3.0	
35811		O <sub>2</sub> (0,0) P9	for 35681		