Observed Wavenumbers of the ansorption bands at 106.55nm and at 104.84nm of O_2, cm^{-1}

$^3\Pi_u^- \leftarrow X\ ^3\Sigma_g^-$ bands at 104.84nm

N	J	R_{11}	J	R_{12}	J	R_{13}	J	Q_{11}	J	Q_{12}	J	Q_{13}
1	2	95303.3	1	95291.5B	0	95289.3B	2	95293.9	1	95285.5		
3	4	95316.2B	3	95299.0	2	95289.3B	4	95300.6	3	95287.3B	2	95279.6
5	6	95330.8B	5	95307.5	4	95290.1B	6	95309.3	5	95288.1	4	95274.9
7	8	95345.8	7	95314.3	6	95292.9B	8	95316.2B	7	95291.5B	6	95272.1
9	10	95357.4	9		8	95296.5B	10		9	95294.8	8	95267.5
11	12		11		10		12		11		10	95263.6B

N	J	P_{11}	J	P_{12}	J	P_{13}	J	R_{21}	J	R_{22}	J	R_{23}
1	2	95287.3B	1	95282.4			2	95381.2	1		0	95364.9B
3	4	95289.3B	3	95277.6	2	95273.0B	4	95394.6	3	95374.7	2	95367.0B
5	6	95290.1B	5	95273.0B	4	95263.6B	6	95410.9	5	95387.0	4	95368.7B
7	8	95293.9B	7	95270.0	6	95252.6	8	95428.7B	7	95400.8	6	95373.6B
9	10	95296.5B	9	95265.6	8	95244.4	10		9		8	95380.1B
11	12		11	95261.6	10	95236.1						

N	J	Q_{21}	J	Q_{22}	J	Q_{23}	J	P_{21}	J	P_{22}	J	P_{23}
1	2	95369.6	1	95360.5			2	95363.1				
3	4	95376.6	3	95364.9	2	95355.3	4	95367.0B	3		2	95348.4
5	6	95389.2	5	95367.0B	4	95350.7	6	95368.7B	5		4	95340.9
7	8	95402.4	7	95371.6	6	95352.1	8	95373.6B	7		6	95330.8B
9	10		9		8		10	95380.2B	9		8	95324.5

N	J	R_{31}	J	R_{32}	J	R_{33}	J	Q_{31}	J	Q_{32}	J	Q_{33}
1	2	95493.3B	1	95481.5			2	95483.5				
3	4	95508.4	3	95490.2	2	95479.2B	4	95492.4	3	95477.0	2	95469.0
5	6	95525.2	5	95500.9B	4	95482.5B	6	95502.7	5	95480.7	4	95466.4
7	8	95544.3	7	95511.1	6	95488.2B	8	95513.0	7	95486.0	6	95465.4
9	10	95561.2	9	95524.5	8	95495.1B	10	95526.5	9	95493.3B	8	95464.2B
11	12	95581.9	11	95536.7	10	95500.9B	12	95539.2				
13	14		13	95552.5	12		14	95554.6				

N	J	P_{31}	J	P_{32}	J	P_{33}
3	4	95479.2B	3			
5	6	95482.5B	5	95464.2B	4	95453.0
7	8	95488.2B	7		6	95445.4
9	10	95495.1B	9	95462.3	8	95439.1
11	12	95500.9B	11		10	95434.8
13	14		13		12	95428.7B

$^3\Pi_u^- \leftarrow X\ ^3\Sigma_g^-$ bands at 106.55nm

N	J	R_{11}	J	R_{12}	J	R_{13}	J	Q_{11}	J	Q_{12}	J	Q_{13}
1	2	93777.4	1	93766.4	0		2	93768.7	1	93761.1B	0	93762.2B
3	4	93790.1B	3	93773.4	2		4	93775.4	3	93761.1B	2	93754.3
5	6	93803.3	5	93780.7	4		6	93782.7	5	93762.2B	4	93749.5
7	8	93816.9B	7	93788.1	6		8	93790.1B	7	93764.0	6	93745.1
9	10	93831.1	9	93796.3	8	93768.5B	10	93798.5	9	93766.0	8	93741.3
11	12	93846.2B	11	93805.1	10	93770.9B	12	93807.3	11	93768.5B	10	
13	14		13	93814.6	12	93774.3B	14	93816.9B	13	93772.3	12	
15	16	93877.9	15	93824.8	14	93778.4B	16	93826.9	15	93776.3	14	
17	18		17		16		18	93838.1				
19	20		19		18		20	93849.7				

N	J	P_{11}	J	P_{12}	J	P_{13}	J	R_{21}	J	R_{22}	J	R_{23}
1	2	93762.6	1	93757.8	0		2	93869.7B	1		0	93856.2
3	4		3	93752.4	2		4	93883.4	3		2	93855.5
5	6		5	93747.6	4	93737.3	6	93897.9	5		4	93857.6B
7	8		7	93743.1	6	93726.8	8	93913.4	7		6	93860.5B
9	10	93768.5B	9	93739.3	8	93716.9	10	93929.7	9		8	93864.6B
11	12	93770.9B	11	93735.9	10	93707.6	12	93946.5	11		10	93869.4B
13	14	93774.3B	13	93733.4	12	93698.9	14	93965.4B	13	93917.0	12	93875.5B
15	16	93778.4B	15	93731.5	14	93690.9	16		15		14	93881.9B
17	18		17	93730.1	16	93683.5	18		17		16	93889.9B

N	J	Q_{21}	J	Q_{22}	J	Q_{23}	J	P_{21}	J	P_{22}	J	P_{23}
1	2	93860.5B	1		0		2	93854.5				
3	4	93867.9	3		2	93846.3B	4	93855.5B				
5	6	93876.3	5		4	93842.2	6	93857.6B	5		4	93829.5
7	8	93885.7	7		6	93838.9	8	93860.5B	7		6	93820.0
9	10	93895.8	9		8	93836.7	10	93864.6B	9		8	93811.6
11	12	93906.9	11		10	93835.2	12	93869.4B	11		10	93804.1
13	14	93919.0B	13	93873.2	12		14	93875.5B				
15	16	93932.2	15	93879.9	14		16	93881.9B				
17	18		17	93887.9	16		18	93889.9B				

N	J	R_{31}	J	R_{32}	J	R_{33}	J	Q_{31}	J	Q_{32}	J	Q_{33}
1	2	93967.2	1	93955.8B	0		2	93957.7B				
3	4	93981.7	3	93963.8	2	93953.1B	4	93965.7B	3	93951.0	2	93943.4
5	6	93997.5B	5	93973.0	4	93955.8B	6	93975.2	5	93954.0	4	93939.8
7	8	94014.4	7	93983.8	6	93960.0B	8	93985.6	7	93957.7B	6	93937.1B
9	10	94032.7	9	93995.5	8	93965.7B	10	93997.3B	9	93963.5B	8	93937.1B
11	12	94052.3	11	94008.7	10	93952.3B	12	94010.3	11	93970.3	10	93937.1B
13	14	94072.9B	13	94023.3	12	93980.2B	14	94025.2	13	93978.3	12	93938.7
15	16		15	94038.8	14	93989.5B	16		15	93987.6	14	93941.7
17	18		17	94055.3	16	94000.1B	18		17	93998.1	16	93945.7
19	20		19	94072.9B	18	94011.8B						

$^3\Pi_u^- \leftarrow X\ ^3\Sigma_g^-$ bands at 106.55nm

N	J	P_{31}	J	P_{32}	J	P_{33}
3	4	93953.1B	3	93941.6		
5	6	93955.8B	5		4	93927.0
7	8	93960.0B	7	93935.4	6	93918.2
9	10	93965.7B	9		8	93911.0
11	12	93972.3B	11		10	93905.0
13	14	93980.2B	13		12	93900.3
15	16	93989.3B				
17	18	94000.1B				
19	20	94011.8B				

References:

Identification of Two $^3\Pi_u \leftarrow X\ ^3\Pi_g^-$ *Transitions of* $^{16}O_2$ *near 93850 and 95360* cm^{-1} , K. Ito, K.P. Huber, K. Yoshino, M. Ogawa, and Y. Morioka, J. Molec. Spectrosc. **171**, 1-12 (1995).