

S1: Supplementary material: Assigned lines for the $\tilde{A}^1B_2(0,1,2) \leftarrow \tilde{X}^1A_1(0,0,0)$ band of TiO_2 .

$N'_{\text{KaKc}} - N''_{\text{KaKc}}$	ν/cm^{-1}	O-C ^a /cm ⁻¹	$N'_{\text{KaKc}} - N''_{\text{KaKc}}$	ν/cm^{-1}	O-C ^a /cm ⁻¹
$\Delta K=0, K_a''=0$			$\Delta K=0, K_a''=2$		
1 ₀₁ -2 ₀₂	18411.1606	0.0002	4 ₂₃ -5 ₂₄	18408.6642	-0.0003
1 ₀₁ -0 ₀₀	18412.6670	0.0008	4 ₂₃ -4 ₂₂	18411.1164	-0.0003
3 ₀₃ -4 ₀₄	18410.1942	-0.0003	4 ₂₃ -3 ₂₂	18413.1818	-0.0002
3 ₀₃ -2 ₀₂	18413.6654	0.0004	5 ₂₃ -6 ₂₄	18408.3075	0.0005
5 ₀₅ -6 ₀₆	18409.1640	0.0001	5 ₂₃ -5 ₂₄	18411.5551	0.0010
5 ₀₅ -4 ₀₄	18414.5087	-0.0002	5 ₂₃ -4 ₂₂	18414.0056	-0.0007
7 ₀₇ -8 ₀₈	18408.0265	0.0004	6 ₂₅ -7 ₂₆	18407.7287	0.0014
7 ₀₇ -6 ₀₆	18415.1564	0.0004	6 ₂₅ -6 ₂₄	18410.9756	0.0002
9 ₀₉ -8 ₀₈	18415.6844	-0.0017	6 ₂₅ -5 ₂₄	18414.2226	0.0000
*11 ₀₁₁ -10 ₀₁₀	16416.1655	0.0107	7 ₂₅ -8 ₂₆	18407.5971	-0.0009
$\Delta K=0, K_a''=1$			7 ₂₅ -7 ₂₆	18412.2358	-0.0021
1 ₁₀ -2 ₁₁	18410.8413	0.0002	7 ₂₅ -6 ₂₄	18415.4840	-0.0020
1 ₁₀ -1 ₁₁	18411.9720	0.0006	8 ₂₇ -7 ₂₆	18415.1885	-0.0003
2 ₁₂ -3 ₁₃	18410.4599	-0.0003	*10 ₂₉ -9 ₂₈	18416.0345	0.0038
2 ₁₂ -2 ₁₁	18411.6902	0.0016	$\Delta K=0, K_a''=3$		
2 ₁₂ -1 ₁₁	18412.8189	-0.0001	3 ₃₀ -4 ₃₁	18407.7915	-0.0015
3 ₁₂ -4 ₁₃	18409.8882	0.0004	3 ₃₀ -3 ₃₁	18409.8123	-0.0017
3 ₁₂ -3 ₁₃	18412.3876	-0.0007	4 ₃₂ -5 ₃₃	18407.3355	-0.0002
3 ₁₂ -2 ₁₁	18413.6175	0.0008	4 ₃₂ -4 ₃₁	18409.8612	-0.0011
4 ₁₄ -5 ₁₅	18409.4817	0.0002	4 ₃₂ -3 ₃₁	18411.8833	0.0000
4 ₁₄ -4 ₁₃	18411.2084	-0.0002	5 ₃₂ -5 ₃₃	18409.9549	-0.0004
4 ₁₄ -3 ₁₃	18413.7099	0.0008	5 ₃₂ -4 ₃₁	18412.4820	0.0001
5 ₁₄ -6 ₁₅	18408.9860	0.0001	6 ₃₄ -6 ₃₃	18409.9964	0.0005
5 ₁₄ -5 ₁₅	18413.0821	-0.0003	6 ₃₄ -5 ₃₃	18413.0452	0.0014
5 ₁₄ -4 ₁₃	18414.8095	0.0000	7 ₃₄ -7 ₃₅	18410.2782	0.0005
6 ₁₆ -7 ₁₇	18408.4481	0.0010	7 ₃₄ -6 ₃₃	18413.8122	0.0010
6 ₁₆ -6 ₁₅	18410.4210	-0.0003	8 ₃₆ -7 ₃₅	18414.2470	0.0036
6 ₁₆ -5 ₁₅	18414.5171	-0.0008	9 ₃₆ -8 ₃₅	18415.4210	-0.0003
*7 ₁₆ -6 ₁₅	18415.9172	0.0235	$\Delta K=0, K_a''=4$		
8 ₁₈ -9 ₁₉	18407.3355	0.0007	*4 ₄₁ -4 ₄₀	18407.9823	-0.0043
8 ₁₈ -7 ₁₇	18415.2213	-0.0006	*5 ₄₁ -5 ₄₂	18408.0567	0.0062
10 ₁₁₀ -9 ₁₉	18415.8204	-0.0001	*5 ₄₁ -4 ₄₀	18410.5743	-0.0009
$\Delta K=0, K_a''=2$			*6 ₄₃ -6 ₄₂	18408.1354	0.0045
2 ₂₁ -3 ₂₂	18409.6041	-0.0003	*6 ₄₃ -5 ₄₂	18411.1675	0.0042
2 ₂₁ -2 ₂₀	18411.1096	-0.0007	*7 ₄₃ -7 ₄₄	18408.2527	0.0098
3 ₂₁ -4 ₂₂	18409.1339	0.0003	*7 ₄₃ -6 ₄₂	18411.7947	0.0109

$3_{21}-3_{22}$	18411.1988	-0.0001
$3_{21}-2_{20}$	18412.7047	-0.0001

^aObserved-calculated.

*Lines not included in the fitting data.

S2: Supplementary material: Assigned lines for the $\tilde{A}^1B_2(1,0,0) \leftarrow \tilde{X}^1A_1(0,0,0)$ band of TiO_2 .

$N'_{\text{KaKc}} - N''_{\text{KaKc}}$	ν/cm^{-1}	$\text{O-C}^{\text{a}}/\text{cm}^{-1}$	$N'_{\text{KaKc}} - N''_{\text{KaKc}}$	ν/cm^{-1}	$\text{O-C}^{\text{a}}/\text{cm}^{-1}$
$\Delta K=0, K_a' \neq 0$			$\Delta K=0, K_a' \neq 1$		
1 ₀₁ -2 ₀₂	18470.6002	-0.0013	7 ₁₆ -6 ₁₅	18475.6077	0.0004
1 ₀₁ -0 ₀₀	18472.1064	-0.0009	8 ₁₈ -9 ₁₉	18466.9911	-0.0002
3 ₀₃ -4 ₀₄	18469.6861	-0.0010	8 ₁₈ -7 ₁₇	18474.8799	0.0015
3 ₀₃ -2 ₀₂	18473.1569	-0.0008	9 ₁₈ -10 ₁₉	18466.6937	0.0011
5 ₀₅ -6 ₀₆	18468.7130	0.0007	9 ₁₈ -8 ₁₇	18476.5008	0.0016
5 ₀₅ -4 ₀₄	18474.0572	-0.0001	10 ₁₁₀ -11 ₁₁₁	18465.9202	0.0007
7 ₀₇ -8 ₀₈	18467.6465	0.0011	10 ₁₁₀ -9 ₁₉	18475.6022	0.0016
7 ₀₇ -6 ₀₆	18474.7765	0.0012	11 ₁₁₀ -12 ₁₁₁	18465.4580	0.0012
9 ₀₉ -10 ₁₀	18466.5335	0.0001	11 ₁₁₀ -10 ₁₉	18477.0999	0.0014
9 ₀₉ -8 ₀₈	18475.4090	0.0021	12 ₁₁₂ -13 ₁₁₃	18464.7913	-0.0007
11 ₀₁₁ -12 ₀₁₂	18465.3932	-0.0006	12 ₁₁₂ -11 ₁₁₁	18476.2537	0.0018
11 ₀₁₁ -10 ₁₀	18476.0107	0.0019	13 ₁₁₂ -14 ₁₁₃	18464.1556	-0.0012
13 ₀₁₃ -14 ₀₁₄	18464.2199	-0.0029	13 ₁₁₂ -12 ₁₁₁	18477.5459	0.0001
13 ₀₁₃ -12 ₀₁₂	18476.5885	0.0001	14 ₁₁₄ -13 ₁₁₃	18476.8448	-0.0021
*15 ₀₁₅ -16 ₀₁₆	18463.0103	0.0041	*15 ₁₁₄ -14 ₁₁₃	18477.9494	-0.0014
15 ₀₁₅ -14 ₀₁₄	18477.1353	-0.0026	*16 ₁₁₆ -17 ₁₁₇	18462.3860	0.0031
*17 ₀₁₇ -18 ₀₁₈	18461.7583	0.0023	*16 ₁₁₆ -15 ₁₁₅	18477.3863	0.0029
*17 ₀₁₇ -16 ₀₁₆	18477.6440	0.0017	*18 ₁₁₈ -17 ₁₁₇	18477.8793	-0.0002
$\Delta K=0, K_a' \neq 1$			$\Delta K=0, K_a' \neq 2$		
1 ₁₀ -2 ₁₁	18470.2334	-0.0014	2 ₂₁ -2 ₂₀	18470.3737	-0.0010
1 ₁₀ -1 ₁₁	18471.3625	-0.0026	2 ₂₁ -3 ₂₂	18468.8680	-0.0012
2 ₁₂ -3 ₁₃	18469.8661	-0.0009	3 ₂₁ -4 ₂₂	18468.4548	-0.0001
2 ₁₂ -2 ₁₁	18471.0921	-0.0033	3 ₂₁ -3 ₂₂	18470.5199	-0.0003
2 ₁₂ -1 ₁₁	18472.2249	-0.0008	3 ₂₁ -2 ₂₀	18472.0251	-0.0010
3 ₁₂ -4 ₁₃	18469.3640	-0.0003	4 ₂₃ -5 ₂₄	18468.0219	0.0007
3 ₁₂ -3 ₁₃	18471.8646	-0.0002	4 ₂₃ -4 ₂₂	18470.4734	0.0000
3 ₁₂ -2 ₁₁	18473.0925	-0.0007	4 ₂₃ -3 ₂₂	18472.5385	-0.0002
4 ₁₄ -5 ₁₅	18468.9530	0.0018	5 ₂₃ -6 ₂₄	18467.8067	0.0011
4 ₁₄ -4 ₁₃	18470.6776	-0.0007	5 ₂₃ -5 ₂₄	18471.0503	-0.0025
4 ₁₄ -3 ₁₃	18473.1786	-0.0001	5 ₂₃ -4 ₂₂	18473.5052	0.0002
5 ₁₄ -6 ₁₅	18468.5876	0.0012	6 ₂₅ -7 ₂₆	18467.2119	0.0015
5 ₁₄ -5 ₁₅	18472.6826	-0.0003	6 ₂₅ -6 ₂₄	18470.4600	0.0014
5 ₁₄ -4 ₁₃	18474.4102	0.0002	6 ₂₅ -5 ₂₄	18473.7065	0.0007
6 ₁₆ -7 ₁₇	18468.0024	0.0014	7 ₂₅ -8 ₂₆	18467.3310	0.0010
6 ₁₆ -6 ₁₅	18469.9753	0.0001	7 ₂₅ -7 ₂₆	18471.9698	0.0000
6 ₁₆ -5 ₁₅	18474.0722	0.0004	7 ₂₅ -6 ₂₄	18475.2172	-0.0008
7 ₁₆ -8 ₁₇	18467.7478	0.0010	8 ₂₇ -9 ₂₈	18466.3742	0.0014

7 ₁₆ -7 ₁₇	18473.6343	0.0013	8 ₂₇ -8 ₂₆	18470.1766	0.0019
$\Delta K=0, K_a''=2$			$\Delta K=0, K_a''=4$		
8 ₂₇ -7 ₂₆	18474.8161	0.0012	4 ₄₁ -5 ₄₂	18464.2092	-0.0014
9 ₂₇ -10 ₂₈	18466.8420	0.0000	4 ₄₁ -4 ₄₀	18466.7334	-0.0019
9 ₂₇ -9 ₂₈	18473.1133	-0.0023	5 ₄₁ -6 ₄₂	18463.8424	-0.0002
9 ₂₇ -8 ₂₆	18476.9168	-0.0007	5 ₄₁ -5 ₄₂	18466.8728	-0.0023
10 ₂₉ -11 ₂₁₀	18465.4531	0.0001	5 ₄₁ -4 ₄₀	18469.3989	-0.0008
10 ₂₉ -9 ₂₈	18475.8045	0.0011	6 ₄₃ -7 ₄₄	18463.5074	0.0011
11 ₂₉ -12 ₂₁₀	18466.1089	-0.0001	6 ₄₃ -6 ₄₂	18467.0491	0.0018
12 ₂₁₁ -13 ₂₁₂	18464.4266	-0.0013	6 ₄₃ -5 ₄₂	18470.0792	-0.0005
12 ₂₁₁ -11 ₂₁₀	18476.6477	0.0007	7 ₄₃ -8 ₄₄	18463.2258	0.0016
14 ₂₁₃ -15 ₂₁₄	18463.2996	-0.0004	7 ₄₃ -7 ₄₄	18467.2785	0.0006
14 ₂₁₃ -13 ₂₁₂	18477.3534	0.0021	7 ₄₃ -6 ₄₂	18470.8194	0.0005
*16 ₂₁₅ -17 ₂₁₆	18462.0901	-0.0018	8 ₄₅ -9 ₄₆	18462.9439	0.0014
$\Delta K=0, K_a''=3$			8 ₄₅ -8 ₄₄	18467.5059	0.0022
3 ₃₀ -4 ₃₁	18466.8460	0.0005	8 ₄₅ -7 ₄₄	18471.5581	0.0007
3 ₃₀ -3 ₃₁	18468.8660	-0.0005	9 ₄₅ -10 ₄₆	18462.8362	-0.0014
4 ₃₂ -5 ₃₃	18466.4463	-0.0011	9 ₄₅ -9 ₄₆	18467.9284	0.0011
4 ₃₂ -4 ₃₁	18468.9758	0.0018	9 ₄₅ -8 ₄₄	18472.4881	-0.0005
4 ₃₂ -3 ₃₁	18470.9938	-0.0013	10 ₄₇ -11 ₄₈	18462.5058	-0.0025
5 ₃₂ -6 ₃₃	18466.1089	0.0008	10 ₄₇ -9 ₄₆	18473.1756	-0.0005
5 ₃₂ -5 ₃₃	18469.1571	0.0010	$\Delta K=0, K_a''=5$		
5 ₃₂ -4 ₃₁	18471.6833	0.0006	5 ₅₀ -6 ₅₁	18460.9628	-0.0017
6 ₃₄ -7 ₃₅	18465.7391	0.0018	5 ₅₀ -5 ₅₁	18463.9912	-0.0026
6 ₃₄ -6 ₃₃	18469.2722	0.0014	6 ₅₂ -7 ₅₃	18460.6195	-0.0025
6 ₃₄ -5 ₃₃	18472.3186	-0.0001	6 ₅₂ -6 ₅₁	18464.1581	-0.0004
7 ₃₄ -8 ₃₅	18465.6209	0.0014	6 ₅₂ -5 ₅₁	18467.1879	0.0002
7 ₃₄ -7 ₃₅	18469.7378	0.0008	7 ₅₂ -7 ₅₃	18464.3593	0.0008
7 ₃₄ -6 ₃₃	18473.2709	0.0004	7 ₅₂ -6 ₅₁	18467.8952	0.0003
8 ₃₆ -9 ₃₇	18465.1092	0.0014	8 ₅₄ -8 ₅₃	18464.5960	0.0009
8 ₃₆ -7 ₃₅	18473.7257	0.0009	8 ₅₄ -7 ₅₃	18468.6406	0.0008
9 ₃₆ -10 ₃₇	18465.4542	-0.0030	9 ₅₄ -9 ₅₅	18464.8825	0.0003
9 ₃₆ -9 ₃₇	18470.7447	-0.0019	9 ₅₄ -8 ₅₃	18469.4366	0.0004
9 ₃₆ -8 ₃₅	18475.2441	-0.0019	$\Delta K=0, K_a''=6$		
10 ₃₈ -11 ₃₉	18464.4862	0.0010	*6 ₆₁ -6 ₆₀	18460.6365	-0.0047
10 ₃₈ -9 ₃₇	18475.1275	0.0003	7 ₆₁ -7 ₆₂	18460.8321	0.0001
12 ₃₁₀ -13 ₃₁₁	18463.7812	-0.0023	8 ₆₃ -8 ₆₂	18461.0560	-0.0006
12 ₃₁₀ -11 ₃₉	18476.4229	-0.0031	10 ₆₅ -9 ₆₄	18466.6764	0.0005
14 ₃₁₂ -13 ₃₁₁	18477.5459	-0.0008	10 ₆₅ -10 ₆₄	18461.6204	0.0018
			11 ₆₅ -11 ₆₆	18461.9669	0.0006

^aObserved-calculated. *Lines not included in the fitting data.

S3: Supplementary material: Assigned lines for the $\tilde{A}^1B_2(1,1,0) \leftarrow \tilde{X}^1A_1(0,0,0)$ band of TiO_2 .

$N'_{\text{KaKc}} - N''_{\text{KaKc}}$	ν/cm^{-1}	O-C ^a /cm ⁻¹	$N'_{\text{KaKc}} - N''_{\text{KaKc}}$	ν/cm^{-1}	O-C ^a /cm ⁻¹
$\Delta K=0, K_a''=0$			$\Delta K=0, K_a''=1$		
1 ₀₁ -2 ₀₂	18655.4472	-0.0004	9 ₁₈ -8 ₁₇	18661.2802	-0.0007
1 ₀₁ -0 ₀₀	18656.9531	-0.0003	10 ₁₁₀ -11 ₁₁₁	18650.6315	-0.0012
3 ₀₃ -4 ₀₄	18654.5182	-0.0003	10 ₁₁₀ -9 ₁₉	18660.3146	0.0008
3 ₀₃ -2 ₀₂	18657.9870	-0.0021	11 ₁₁₀ -12 ₁₁₁	18650.2084	-0.0001
5 ₀₅ -6 ₀₆	18653.5270	0.0018	11 ₁₁₀ -10 ₁₉	18661.8531	0.0028
5 ₀₅ -4 ₀₄	18658.8715	0.0014	12 ₁₁₂ -13 ₁₁₃	18649.4384	-0.0009
7 ₀₇ -8 ₀₈	18652.4280	-0.0013	12 ₁₁₂ -11 ₁₁₁	18660.9002	0.0010
7 ₀₇ -6 ₀₆	18659.5600	0.0008	14 ₁₁₄ -13 ₁₁₃	18661.4165	0.0007
9 ₀₉ -10 ₀₁₀	18651.2745	0.0011	$\Delta K=0, K_a''=2$		
9 ₀₉ -8 ₀₈	18660.1478	0.0010	2 ₂₁ -3 ₂₂	18653.8040	-0.0021
11 ₀₁₁ -12 ₀₁₂	18650.0747	-0.0007	2 ₂₁ -2 ₂₀	18655.3103	-0.0017
11 ₀₁₁ -10 ₀₁₀	18660.6905	0.0001	3 ₂₁ -4 ₂₂	18653.3760	-0.0002
13 ₀₁₃ -12 ₀₁₂	18661.1980	-0.0001	3 ₂₁ -3 ₂₂	18655.4410	-0.0004
15 ₀₁₅ -14 ₀₁₄	18661.6589	-0.0037	3 ₂₁ -2 ₂₀	18656.9465	-0.0008
$\Delta K=0, K_a''=1$			4 ₂₃ -5 ₂₄	18652.9328	0.0006
1 ₁₀ -2 ₁₁	18655.1047	-0.0006	4 ₂₃ -4 ₂₂	18655.3839	-0.0004
1 ₁₀ -1 ₁₁	18656.2366	0.0009	4 ₂₃ -3 ₂₂	18657.4499	0.0002
2 ₁₂ -3 ₁₃	18654.7300	-0.0011	5 ₂₃ -6 ₂₄	18652.6786	-0.0005
2 ₁₂ -2 ₁₁	18655.9600	0.0005	5 ₂₃ -5 ₂₄	18655.9269	0.0005
2 ₁₂ -1 ₁₁	18657.0890	-0.0008	5 ₂₃ -4 ₂₂	18658.3789	0.0004
3 ₁₂ -4 ₁₃	18654.2169	0.0020	6 ₂₅ -7 ₂₆	18652.0863	0.0010
3 ₁₂ -3 ₁₃	18656.7152	-0.0002	6 ₂₅ -6 ₂₄	18655.3338	0.0003
3 ₁₂ -2 ₁₁	18657.9412	-0.0026	6 ₂₅ -5 ₂₄	18658.5811	0.0005
4 ₁₄ -5 ₁₅	18653.7920	-0.0004	7 ₂₅ -8 ₂₆	18652.1466	0.0010
4 ₁₄ -4 ₁₃	18655.5193	-0.0002	7 ₂₅ -7 ₂₆	18656.7855	-0.0005
4 ₁₄ -3 ₁₃	18658.0178	-0.0021	7 ₂₅ -6 ₂₄	18660.0337	-0.0005
5 ₁₄ -6 ₁₅	18653.4094	0.0012	8 ₂₇ -9 ₂₈	18651.2069	0.0008
5 ₁₄ -5 ₁₅	18657.5064	0.0016	8 ₂₇ -8 ₂₆	18655.0093	0.0013
5 ₁₄ -4 ₁₃	18659.2311	-0.0008	8 ₂₇ -7 ₂₆	18659.6495	0.0016
6 ₁₆ -7 ₁₇	18652.8102	0.0004	9 ₂₇ -10 ₂₈	18651.6130	0.0016
6 ₁₆ -6 ₁₅	18654.7854	0.0014	9 ₂₇ -8 ₂₆	18661.6862	-0.0007
6 ₁₆ -5 ₁₅	18658.8827	0.0021	10 ₂₉ -11 ₂₁₀	18650.2407	-0.0002
7 ₁₆ -8 ₁₇	18652.5458	0.0008	10 ₂₉ -9 ₂₈	18660.5903	-0.0009
7 ₁₆ -7 ₁₇	18658.4315	0.0002	11 ₂₉ -12 ₂₁₀	18650.8580	0.0002
7 ₁₆ -6 ₁₅	18660.4067	0.0006	12 ₂₁₁ -11 ₂₁₀	18661.3830	0.0000
8 ₁₈ -9 ₁₉	18651.7579	-0.0001	$\Delta K=0, K_a''=3$		

8 ₁₈ -7 ₁₇	18659.6476	0.0026	3 ₃₀ -4 ₃₁	18651.8906	-0.0025
9 ₁₈ -10 ₁₉	18651.4759	0.0015	3 ₃₀ -3 ₃₁	18653.9133	-0.0008
$\Delta K=0, K_a''=3$			$\Delta K=0, K_a''=4$		
4 ₃₂ -5 ₃₃	18651.4785	0.0002	4 ₄₁ -5 ₄₂	18649.4119	-0.0012
4 ₃₂ -4 ₃₁	18654.0056	0.0007	4 ₄₁ -4 ₄₀	18651.9362	-0.0016
4 ₃₂ -3 ₃₁	18656.0254	-0.0006	5 ₄₁ -5 ₄₂	18652.0567	0.0007
5 ₃₂ -6 ₃₃	18651.1122	-0.0012	5 ₄₁ -4 ₄₀	18654.5800	-0.0007
5 ₃₂ -5 ₃₃	18654.1621	0.0007	6 ₄₃ -6 ₄₂	18652.2014	0.0017
5 ₃₂ -4 ₃₁	18656.6878	-0.0002	6 ₄₃ -5 ₄₂	18655.2355	0.0006
6 ₃₄ -7 ₃₅	18650.7230	0.0003	7 ₄₃ -7 ₄₄	18652.3980	-0.0009
6 ₃₄ -6 ₃₃	18654.2570	0.0009	7 ₄₃ -6 ₄₂	18655.9417	0.0018
6 ₃₄ -5 ₃₃	18657.3040	-0.0001	8 ₄₅ -8 ₄₄	18652.5940	0.0013
7 ₃₄ -8 ₃₅	18650.5520	0.0006	8 ₄₅ -7 ₄₄	18656.6483	0.0018
7 ₃₄ -7 ₃₅	18654.6688	0.0000	10 ₄₇ -9 ₄₆	18658.1840	-0.0008
7 ₃₄ -6 ₃₃	18658.2017	-0.0006	11 ₄₇ -10 ₄₆	18659.4550	0.0001
8 ₃₆ -9 ₃₇	18650.0380	0.0012	$\Delta K=0, K_a''=5$		
8 ₃₆ -8 ₃₅	18654.5368	0.0005	5 ₅₀ -5 ₅₁	18649.3941	0.0006
8 ₃₆ -7 ₃₅	18658.6530	-0.0007	7 ₅₂ -6 ₅₁	18653.2384	-0.0003
9 ₃₆ -10 ₃₇	18650.2891	-0.0020	8 ₅₄ -8 ₅₃	18649.9046	0.0010
9 ₃₆ -9 ₃₇	18655.5780	-0.0025	9 ₅₄ -9 ₅₅	18650.1484	0.0002
9 ₃₆ -8 ₃₅	18660.0784	-0.0015	10 ₅₆ -9 ₅₅	18655.4805	-0.0007
10 ₃₈ -11 ₃₉	18649.3544	0.0001	12 ₅₈ -11 ₅₇	18657.1724	-0.0012
10 ₃₈ -9 ₃₇	18659.9965	0.0002			
12 ₃₁₀ -11 ₃₉	18661.2370	0.0000			

^aObserved-calculated.