Table 5.3.9a. The 12 fine-structure $n = 3$ and 4 levels included in the calculation (90S1) and their calculated and observed energies in rydbergs (85S1) for Fe XVI. The index i is used in Table 5.3.9b for transition keys.

i	Level	Observed	Theory	i	Level	Observed	Theory
1	$3s^2S_1/2$	0.00000	0.00000	7	$4p^2P_1/2$	18.02523	18.00200
2	$3p^2P_1/2$	2.52596	2.53472	8	$4p^2P_3/2$	18.09868	18.07618
3	$3p^2P_3/2$	2.71688	2.72460	9	$4d^2D_3/2$	19.35704	19.33858
4	$3d^2D_3/2$	6.15544	6.16600	10	$4d^2D_5/2$	19.36771	19.35048
5	$3d^2D_5/2$	6.18198	6.19134	11	$4f^2F_5/2$	19.90772	19.88518
6	$4s^2S_1/2$	17.01828	16.99770	12	$4f^2F_7/2$	19.91255	19.88958

Table 5.3.9b. The effective collision strengths $\Upsilon(i,j)$ as a function of temperature T(K) for transitions among the five $n = 3$ levels and transitions from these five levels to the seven $n = 4$ levels as specified in Table 5.3.9a for Fe XVI (90S1).

Levels		$T(\times 10^6$ K)							
i	j	0.1	0.2	0.5	1.0	2.0	5.0	10.0	20.0
1	6	9.85[-2]	9.90[-2]	1.00[-1]	1.02[-1]	1.04[-1]	1.07[-1]	1.10[-1]	1.13[-1]
1	7	5.91[-3]	6.05[-3]	6.54[-3]	7.45[-3]	9.39[-3]	1.49[-2]	2.24[-2]	3.31[-2]
1	8	1.12[-2]	1.14[-2]	1.22[-2]	1.39[-2]	1.73[-2]	2.73[-2]	4.10[-2]	6.09[-2]
1	9	1.63[-2]	1.65[-2]	1.70[-2]	1.77[-2]	1.92[-2]	2.23[-2]	2.56[-2]	2.94[-2]
1	10	2.43[-2]	2.45[-2]	2.52[-2]	2.64[-2]	2.85[-2]	3.32[-2]	3.81[-2]	4.36[-2]
1	11	3.39[-2]	3.39[-2]	3.39[-2]	3.41[-2]	3.44[-2]	3.53[-2]	3.61[-2]	3.70[-2]
1	12	4.52[-2]	4.52[-2]	4.52[-2]	4.55[-2]	4.59[-2]	4.70[-2]	4.82[-2]	4.93[-2]
2	6	9.08[-3]	9.28[-3]	1.00[-2]	1.13[-2]	1.38[-2]	2.04[-2]	2.88[-2]	4.03[-2]
2	7	1.14[-1]	1.14[-1]	1.15[-1]	1.17[-1]	1.18[-1]	1.21[-1]	1.23[-1]	1.25[-1]
2	8	1.59[-2]	1.58[-2]	1.58[-2]	1.60[-2]	1.64[-2]	1.76[-2]	1.90[-2]	2.07[-2]
2	9	3.48[-2]	3.59[-2]	3.92[-2]	4.47[-2]	5.52[-2]	8.20[-2]	1.16[-1]	1.61[-1]
2	10	1.53[-2]	1.52[-2]	1.48[-2]	1.44[-2]	1.39[-2]	1.32[-2]	1.28[-2]	1.25[-2]
2	11	1.07[-1]	1.09[-1]	1.12[-1]	1.18[-1]	1.27[-1]	1.47[-1]	1.65[-1]	1.84[-1]
2	12	2.37[-2]	2.32[-2]	2.19[-2]	2.04[-2]	1.86[-2]	1.64[-2]	1.54[-2]	1.50[-2]
3	6	1.97[-2]	2.02[-2]	2.19[-2]	2.48[-2]	3.05[-2]	4.50[-2]	6.31[-2]	8.78[-2]
3	7	1.70[-2]	1.70[-2]	1.71[-2]	1.73[-2]	1.78[-2]	1.92[-2]	2.09[-2]	2.27[-2]
3	8	2.47[-1]	2.48[-1]	2.50[-1]	2.52[-1]	2.57[-1]	2.64[-1]	2.69[-1]	2.74[-1]
3	9	2.68[-2]	2.69[-2]	2.72[-2]	2.79[-2]	2.95[-2]	3.44[-2]	4.11[-2]	5.06[-2]
3	10	8.05[-2]	8.24[-2]	8.86[-2]	9.89[-2]	1.19[-1]	1.69[-1]	2.33[-1]	3.20[-1]
3	11	6.24[-2]	6.21[-2]	6.15[-2]	6.13[-2]	6.17[-2]	6.45[-2]	6.85[-2]	7.35[-2]
3	12	2.05[-1]	2.07[-1]	2.13[-1]	2.22[-1]	2.37[-1]	2.70[-1]	3.01[-1]	3.34[-1]
4	6	1.45[-2]	1.45[-2]	1.45[-2]	1.45[-2]	1.48[-2]	1.55[-2]	1.63[-2]	1.72[-2]
4	7	1.99[-2]	2.03[-2]	2.16[-2]	2.38[-2]	2.81[-2]	3.87[-2]	5.14[-2]	6.81[-2]
4	8	2.06[-2]	2.03[-2]	1.98[-2]	1.92[-2]	1.87[-2]	1.89[-2]	2.01[-2]	2.24[-2]
4	9	2.94[-1]	2.94[-1]	2.94[-1]	2.94[-1]	2.95[-1]	2.96[-1]	2.97[-1]	2.97[-1]
4	10	4.49[-2]	4.36[-2]	4.04[-2]	3.66[-2]	3.19[-2]	2.56[-2]	2.20[-2]	1.96[-2]
4	11	8.97[-1]	9.11[-1]	9.52[-1]	1.01	1.13	1.39	1.69	2.07
4	12	7.32[-2]	7.06[-2]	6.44[-2]	5.72[-2]	4.84[-2]	3.69[-2]	3.01[-2]	2.55[-2]
5	6	2.19[-2]	2.19[-2]	2.19[-2]	2.20[-2]	2.23[-2]	2.34[-2]	2.47[-2]	2.61[-2]
5	7	1.43[-2]	1.41[-2]	1.34[-2]	1.26[-2]	1.15[-2]	9.98[-3]	9.02[-3]	8.34[-3]
5	8	4.54[-2]	4.59[-2]	4.75[-2]	5.06[-2]	5.70[-2]	7.37[-2]	9.47[-2]	1.23[-1]
5	9	4.51[-2]	4.37[-2]	4.05[-2]	3.67[-2]	3.20[-2]	2.58[-2]	2.22[-2]	1.99[-2]
5	10	4.64[-1]	4.64[-1]	4.62[-1]	4.61[-1]	4.59[-1]	4.57[-1]	4.57[-1]	4.56[-1]
5	11	1.43[-1]	1.41[-1]	1.38[-1]	1.35[-1]	1.33[-1]	1.39[-1]	1.54[-1]	1.76[-1]
5	12	1.32	1.34	1.39	1.48	1.64	2.01	2.44	2.98