O_2 dissociation calculations 2

XUV/IR + IR simulation by Xiao-Min Tong

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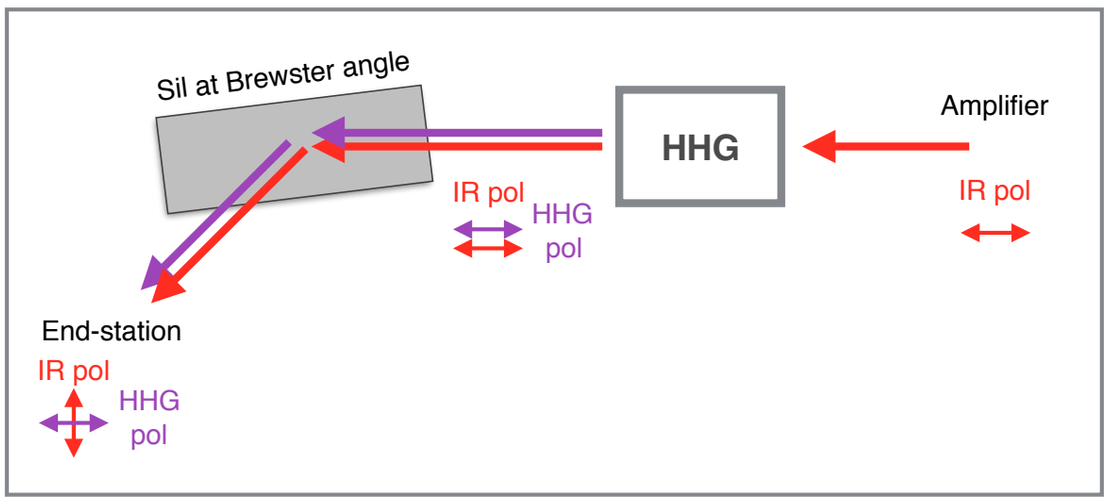
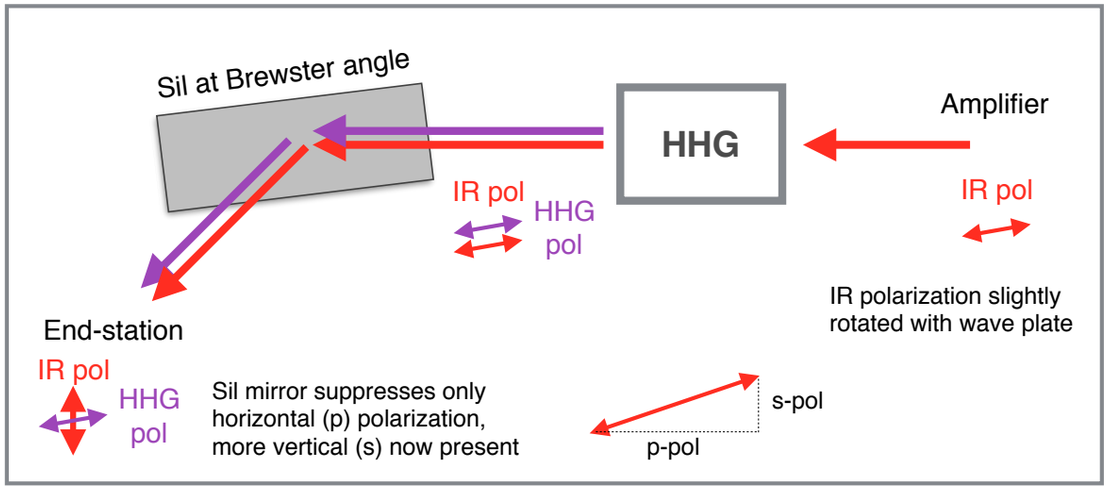
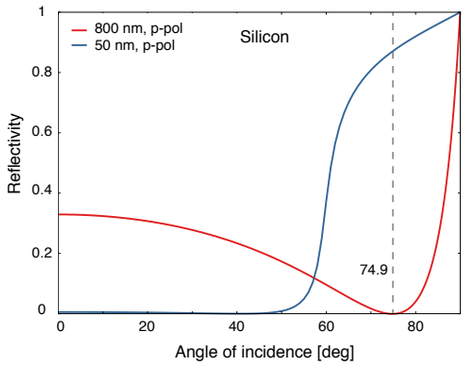
Experimental conditions

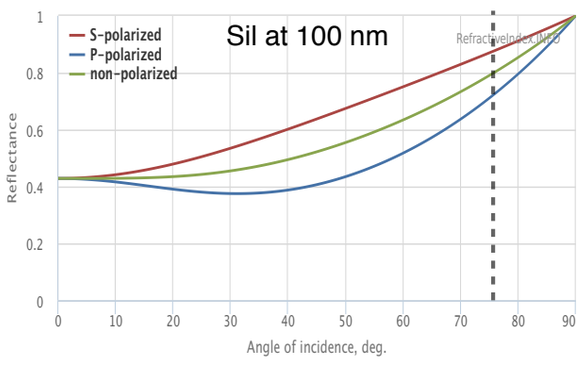
Low IR intensity



high IR intensity

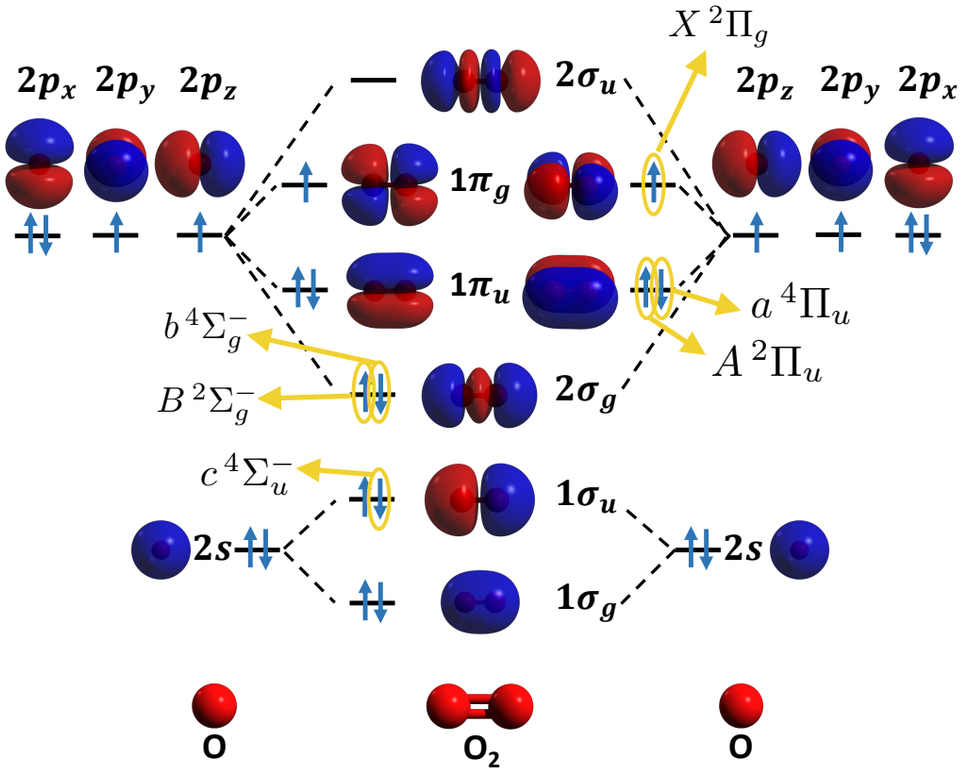


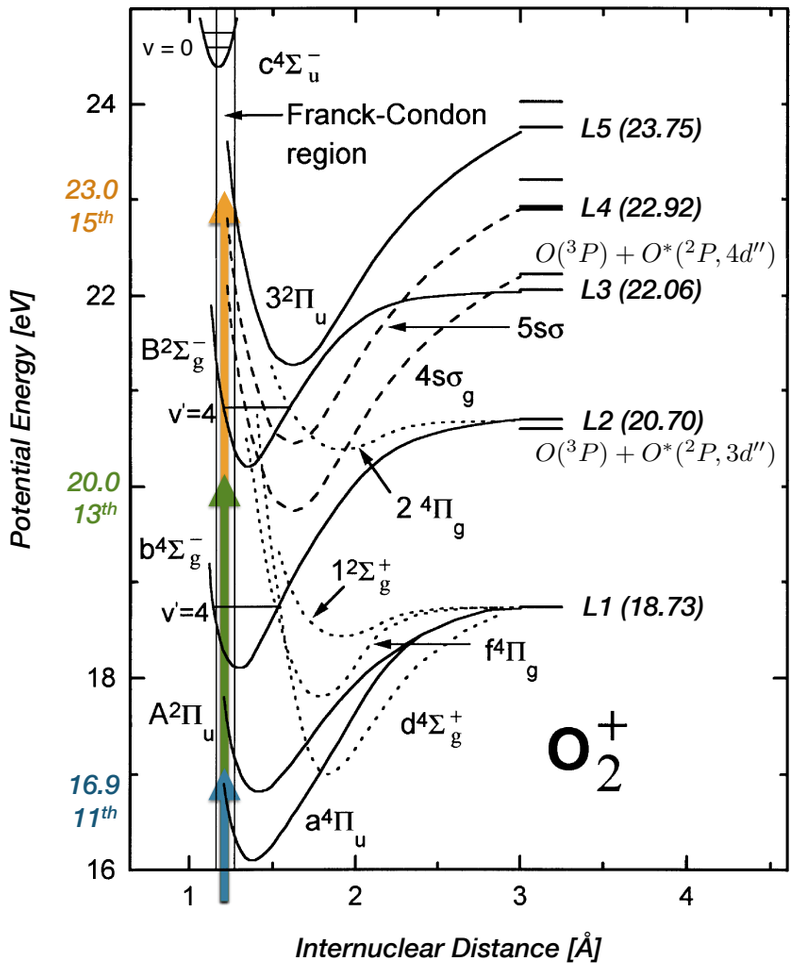




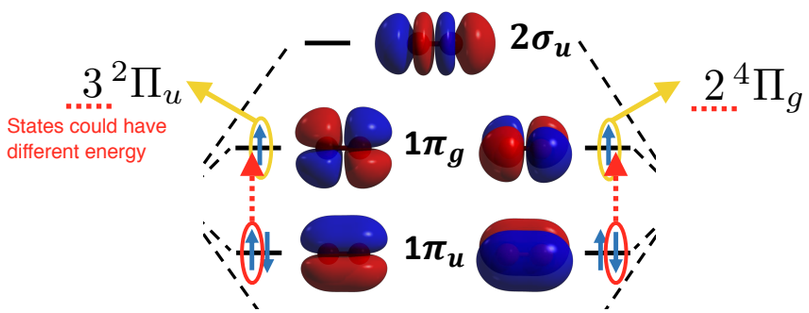
Molecular Orbital Assignments

One electron ionization





One elec. ionization + excitation



Calculated IR orientations

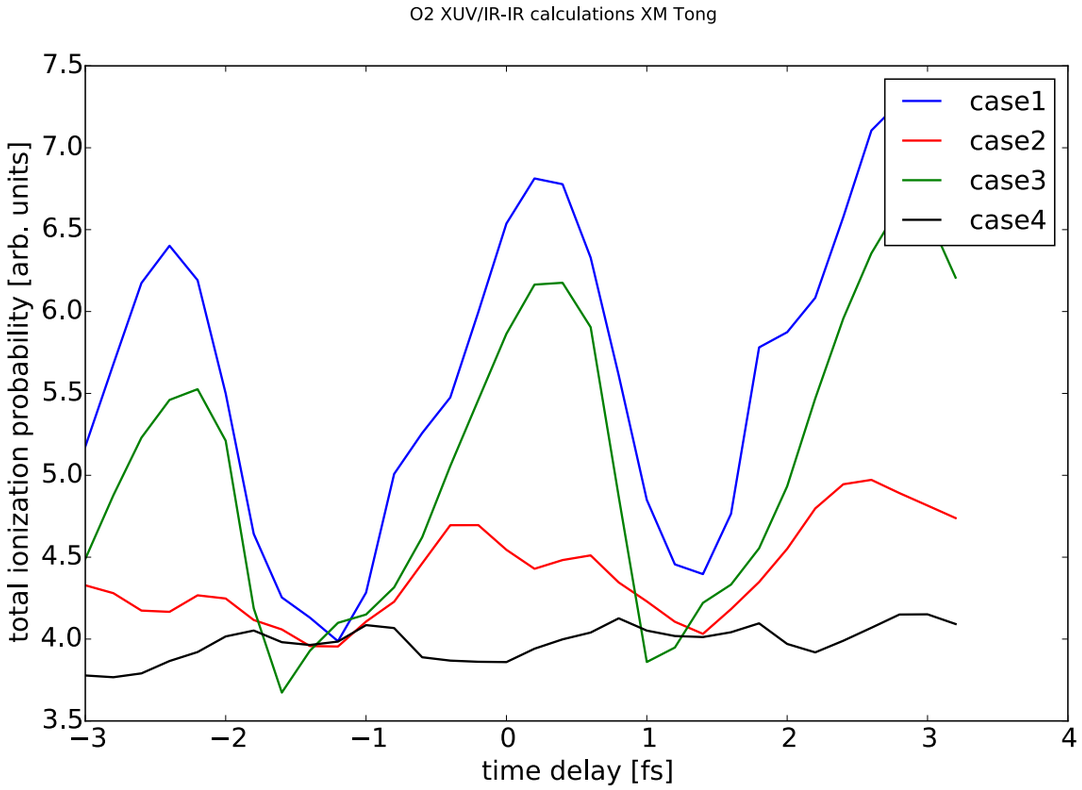
O_2 in VUV+IR @IR field

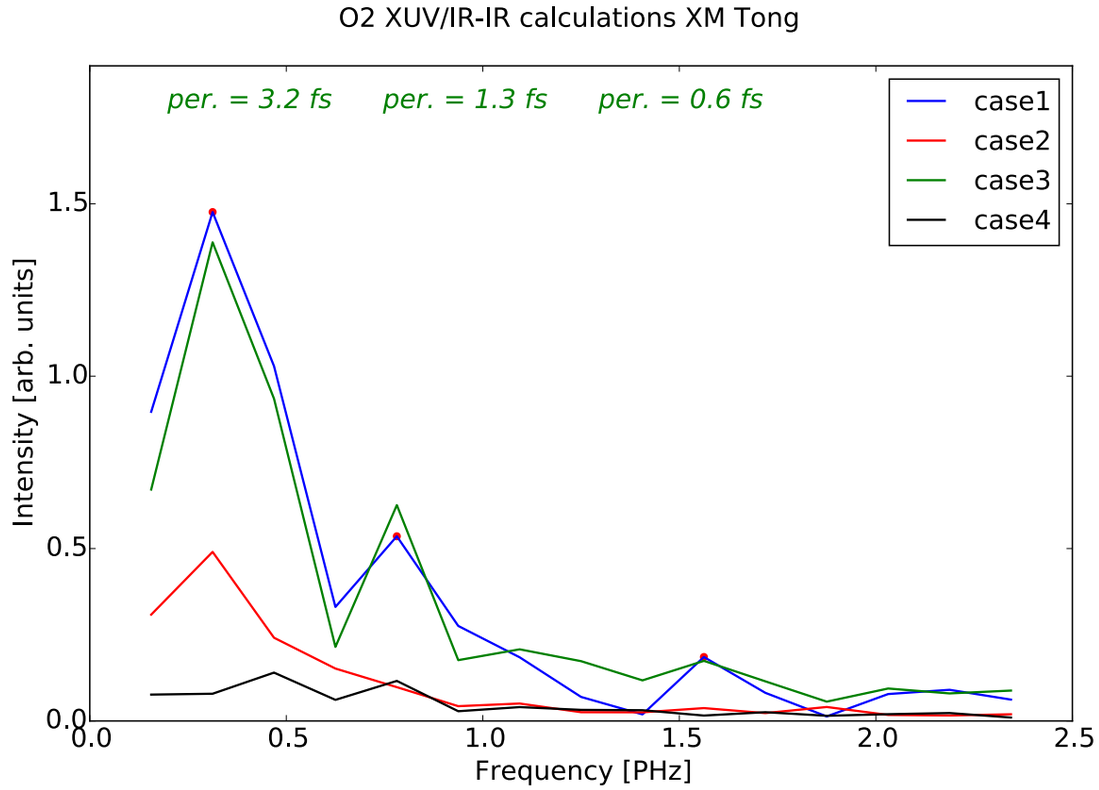
Alignment of VUV+IR, IR and molecular axis

	VUV+IR axis	IR	molecular
Case 1	z	z	z
Case 2	z	z	x
Case 3	z	x	z
Case 4	z	x	y

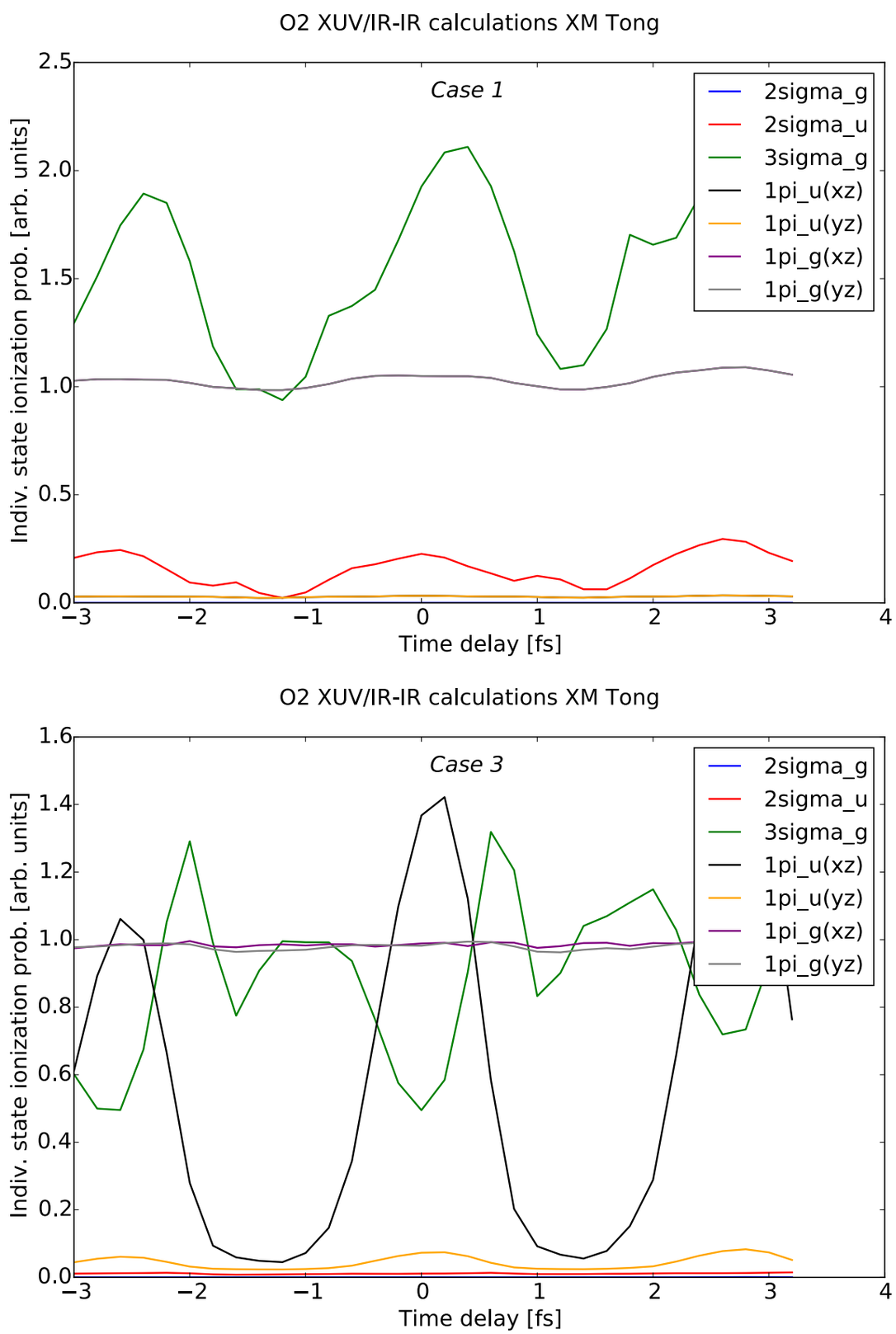
?

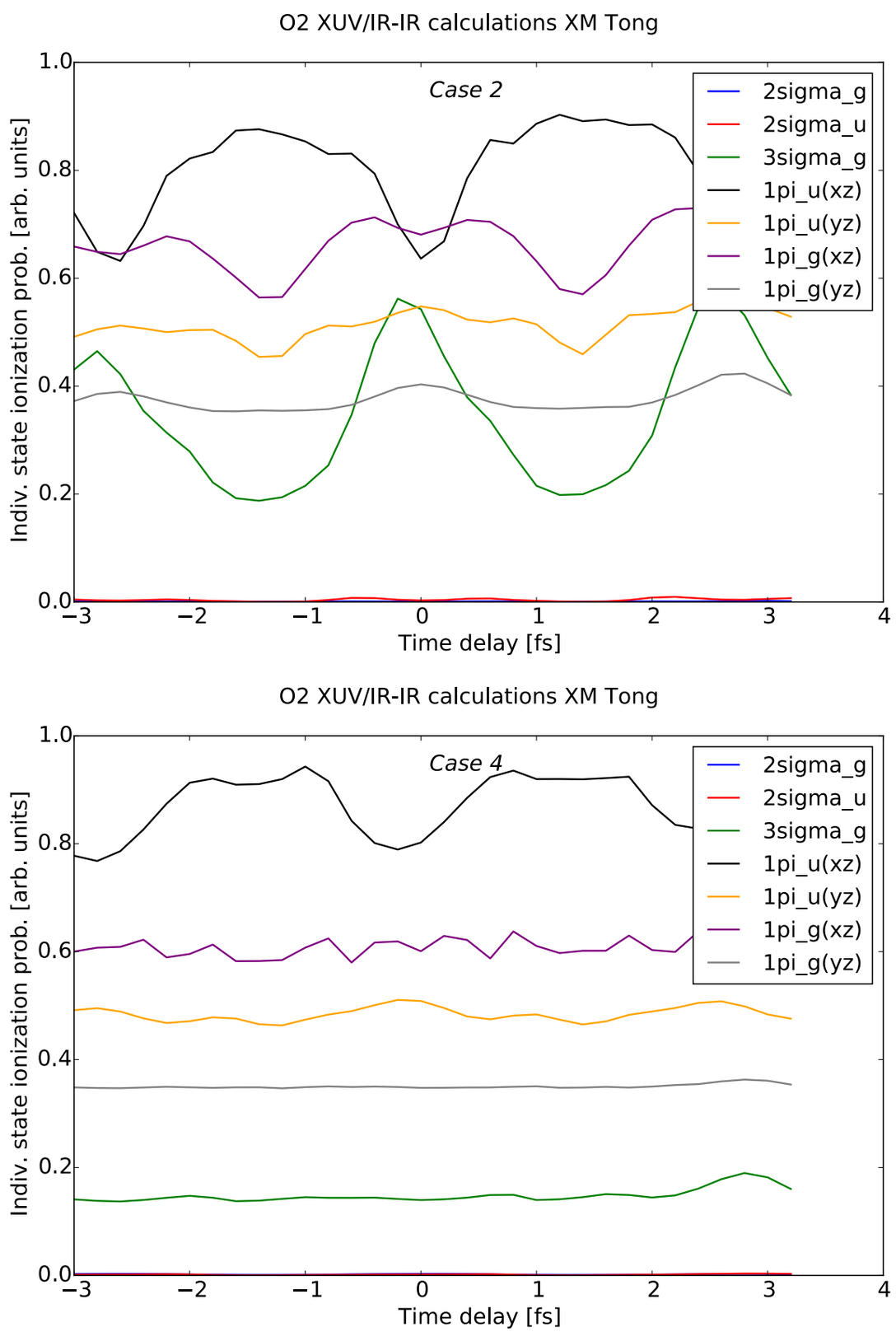
Total Ionization Probability



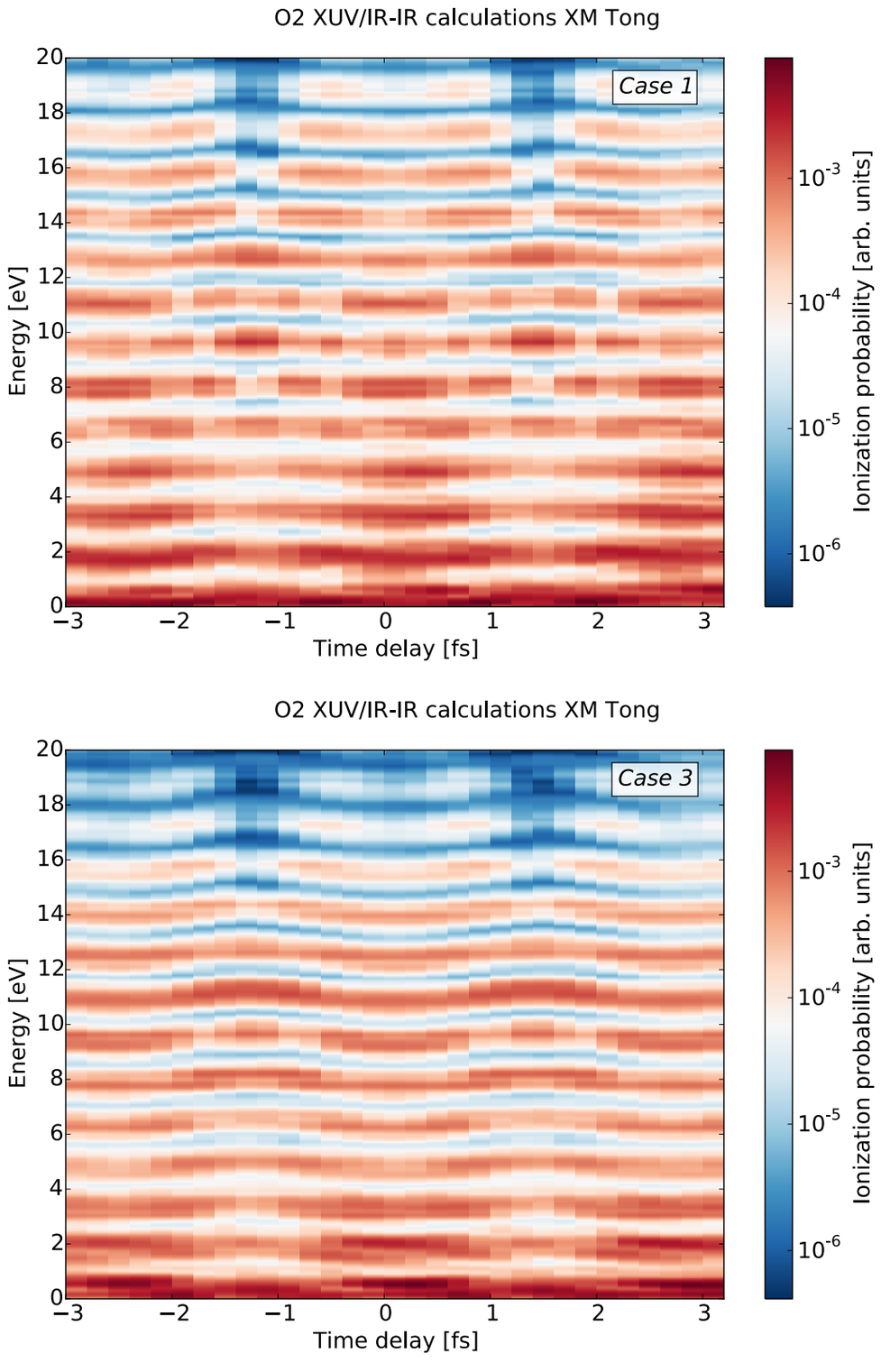


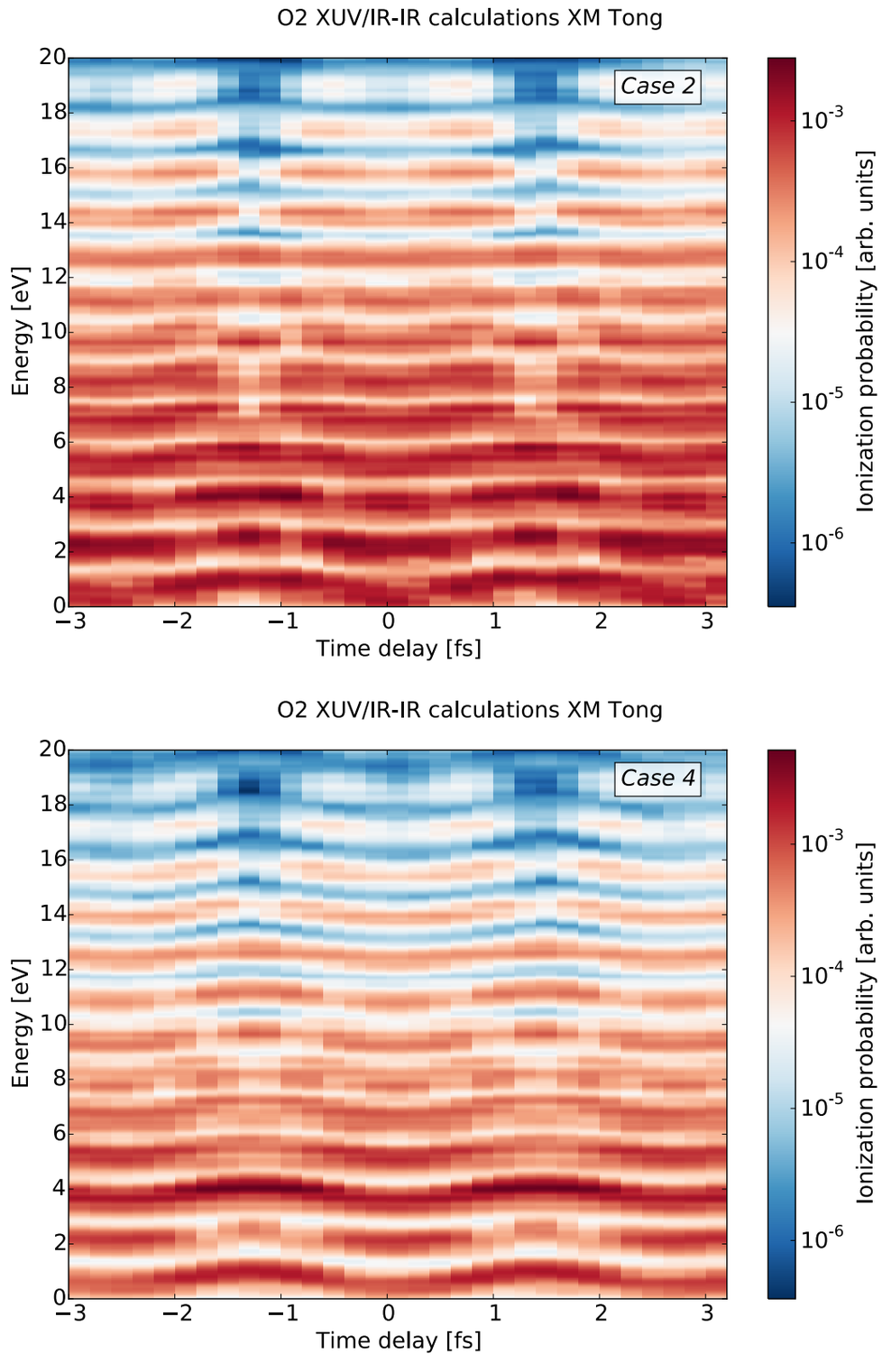
State selected ionization probabilities



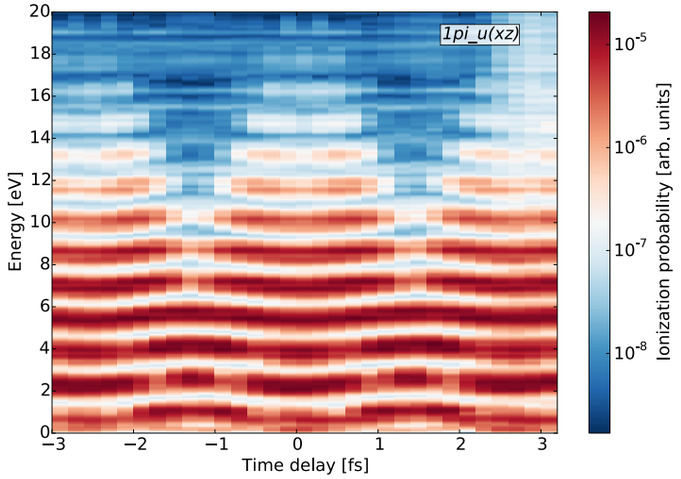


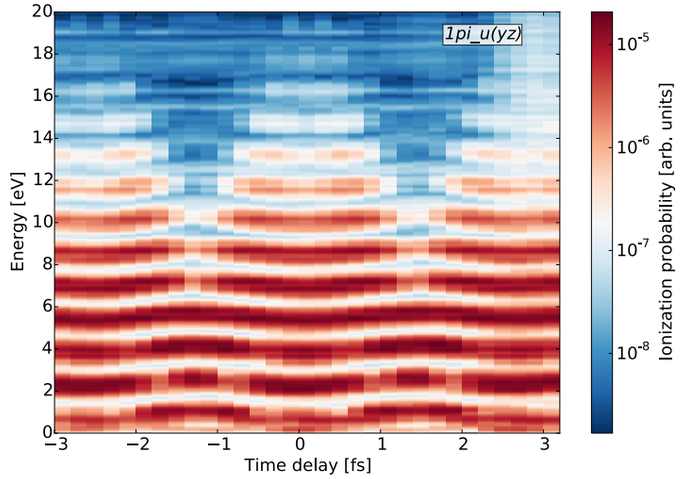
ATI total plots

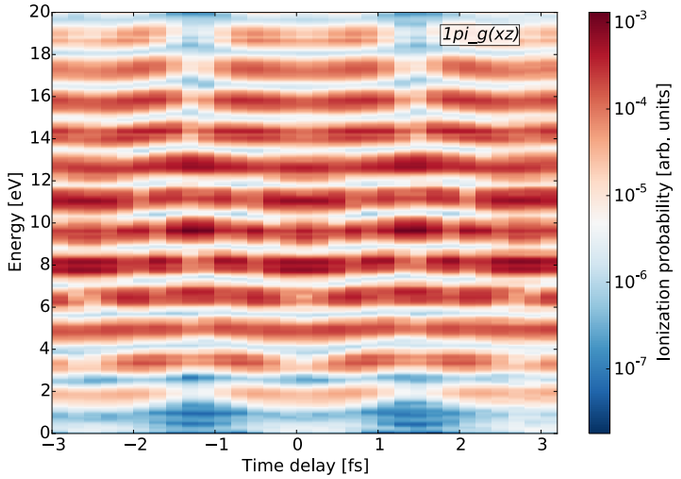


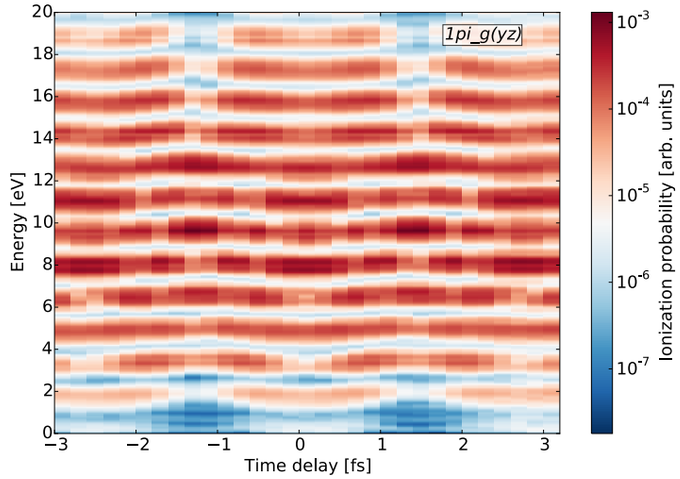


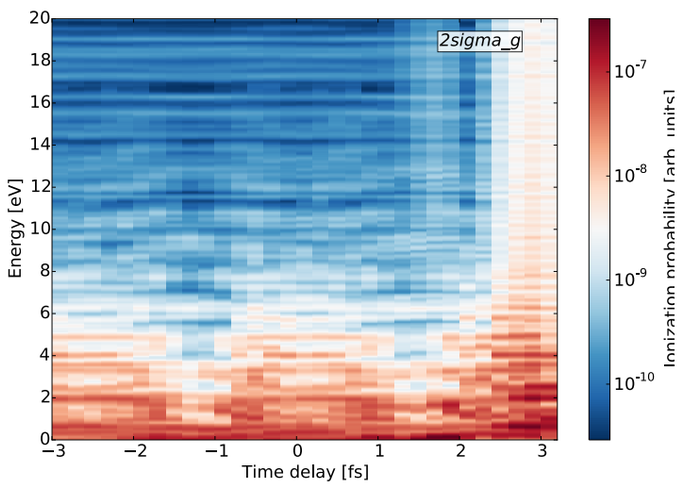
State selected plots: Case 1

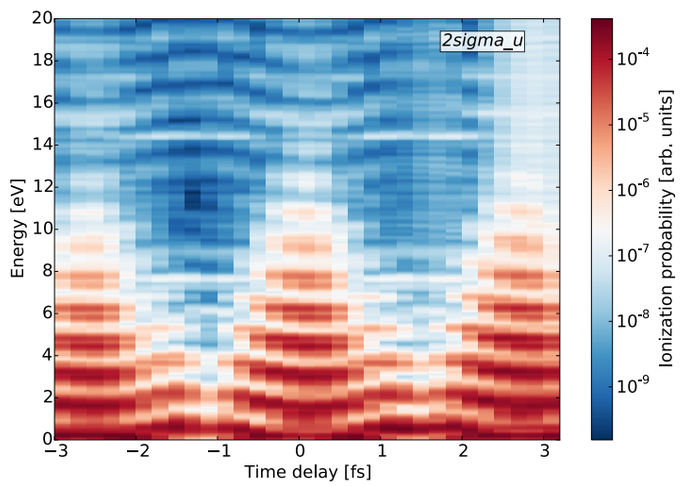


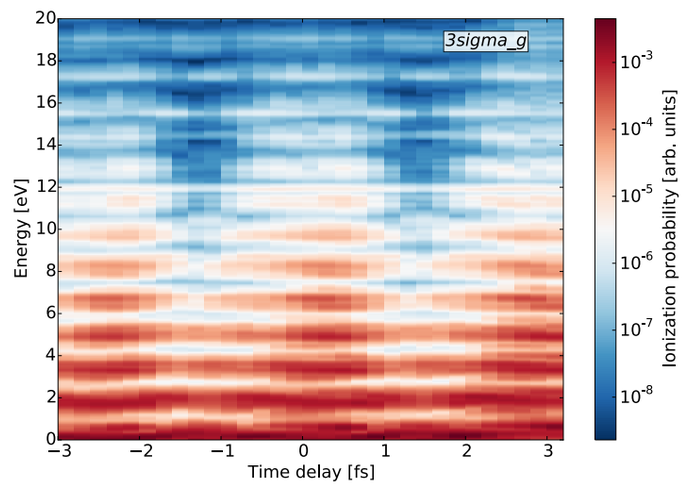




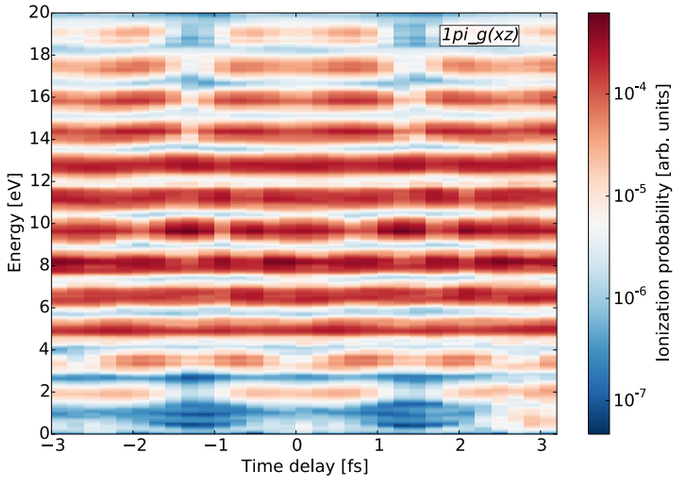


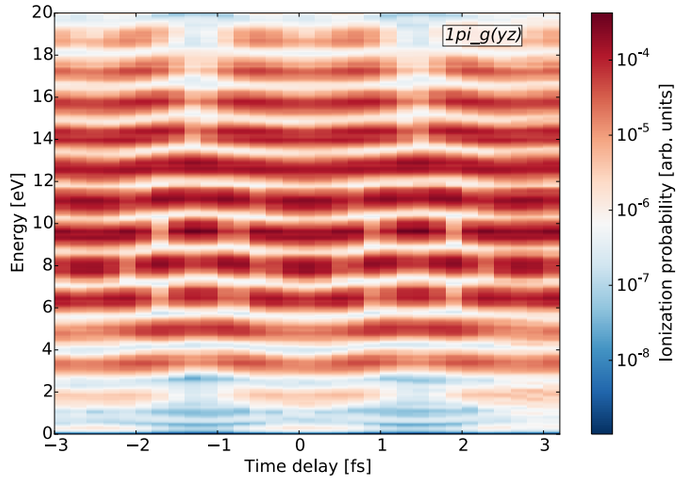


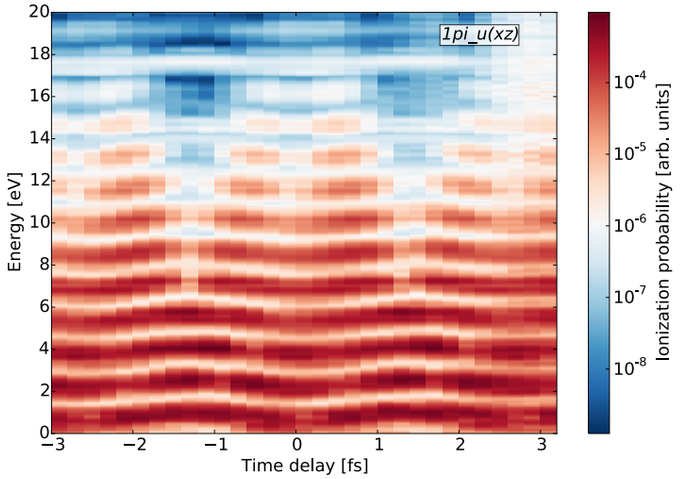


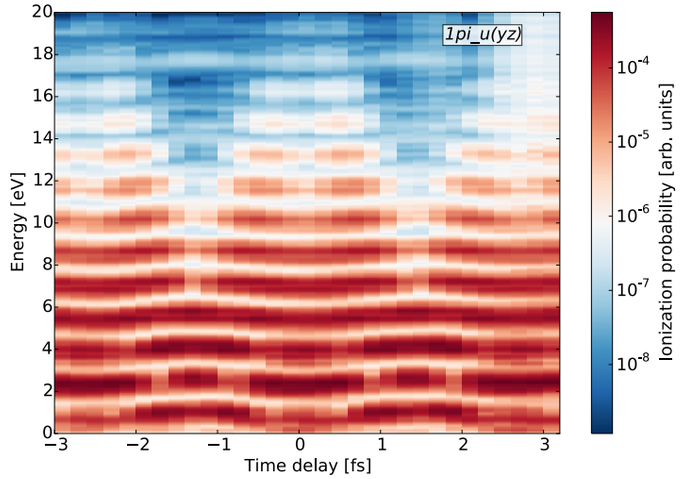


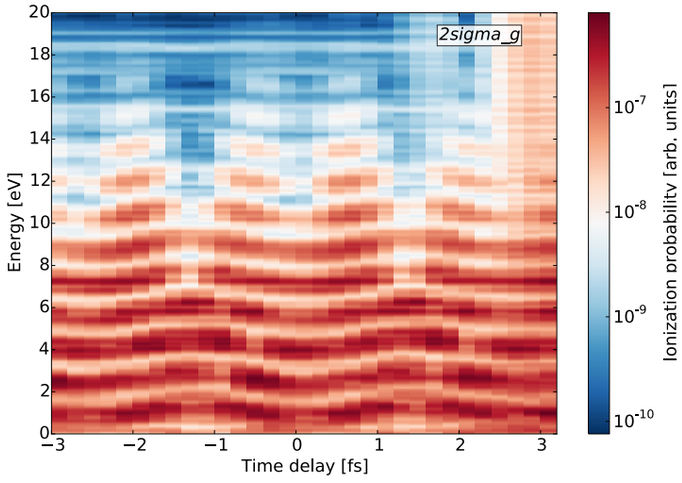
State selected plots: Case 2

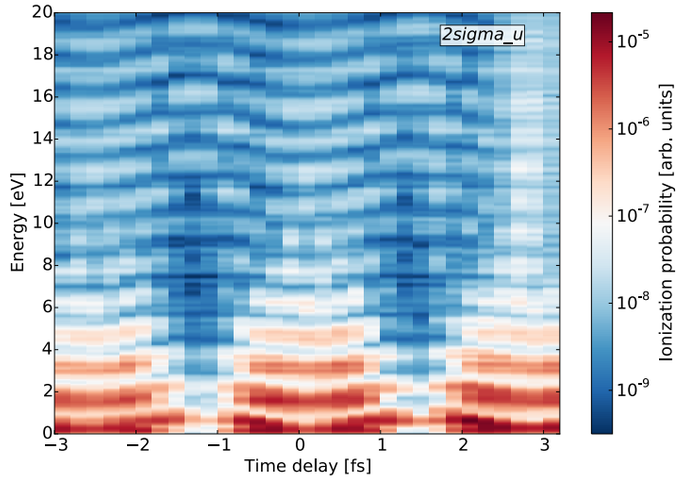


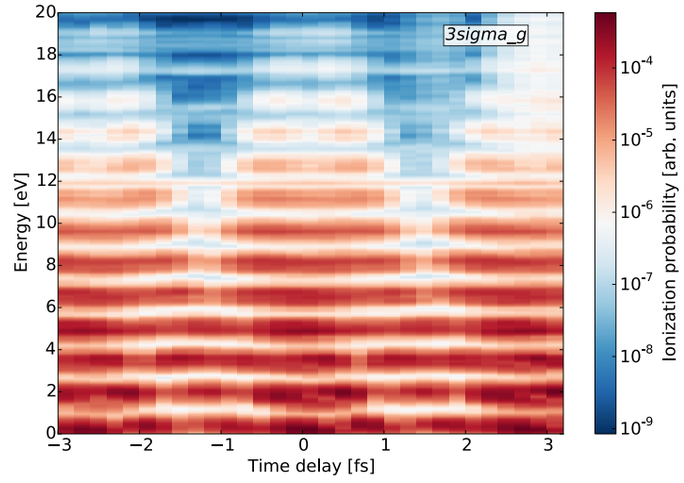




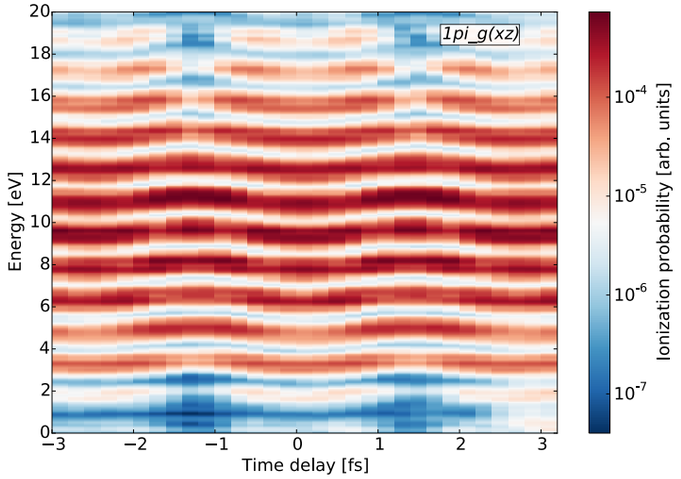


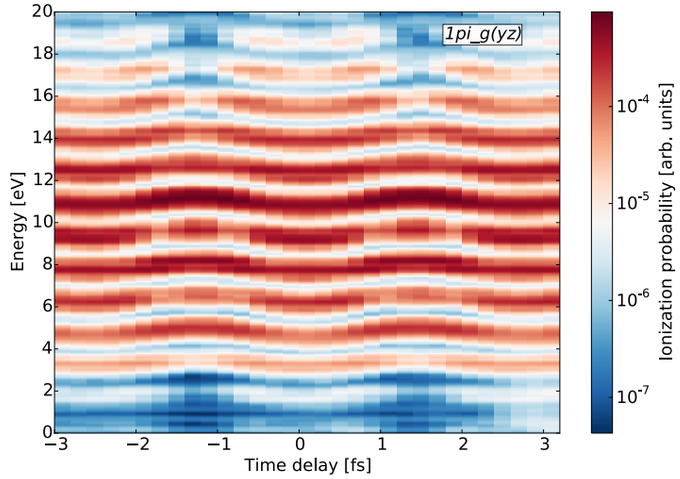


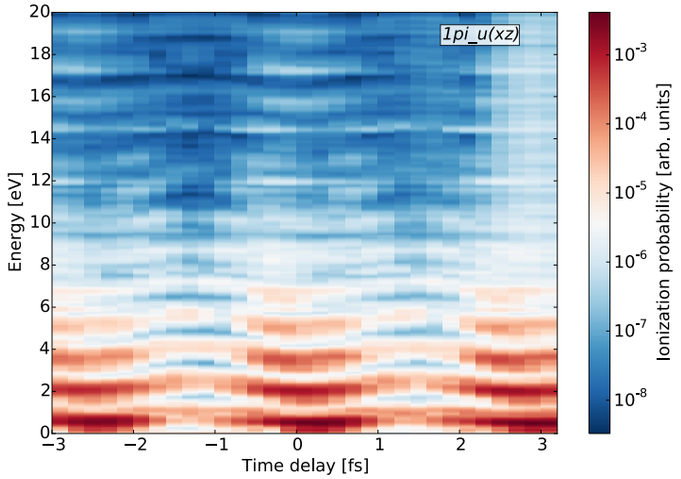


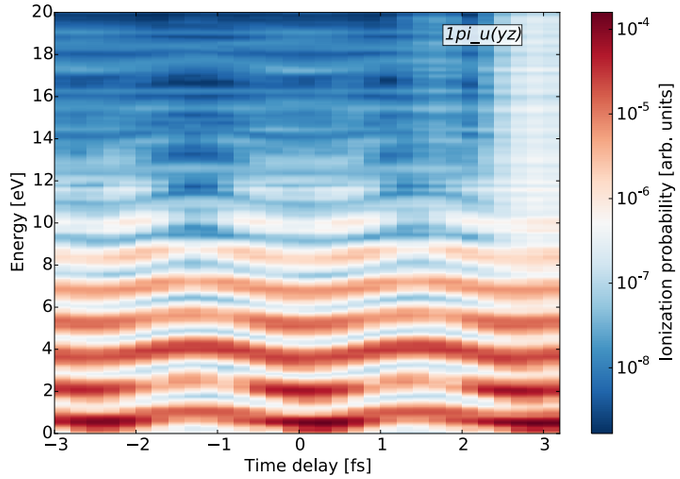


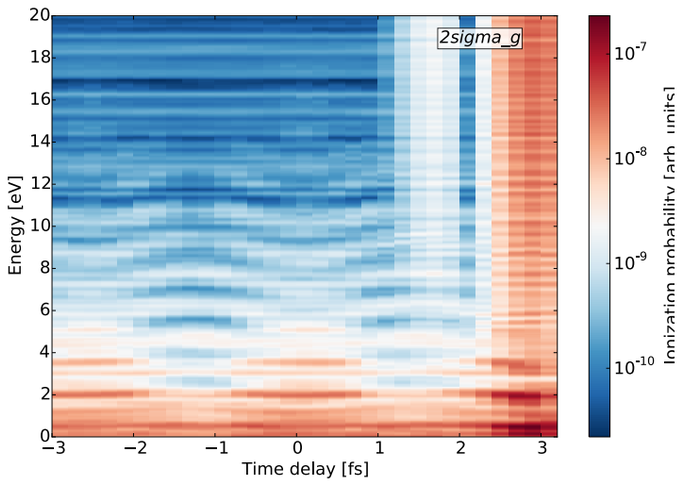
State selected plots: Case 3

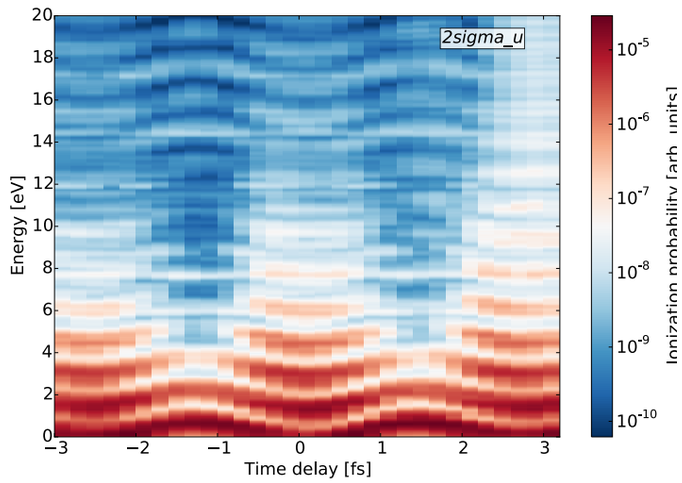


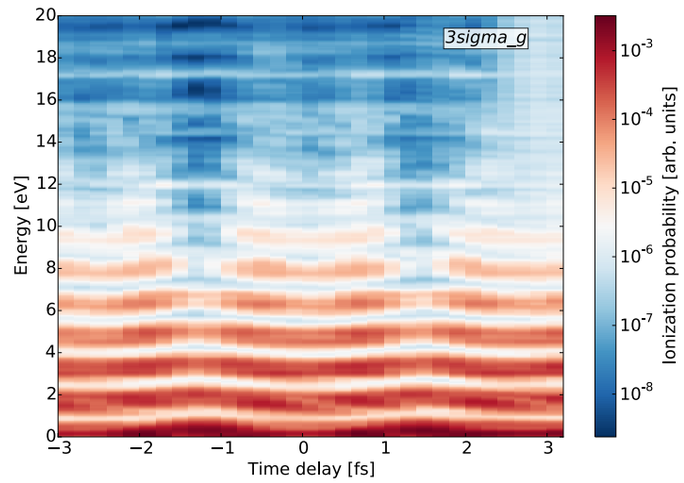












State selected plots: Case 4