Contents of the data files:

Two-photon ionization of H_2

- "H_2-2photon-cs-ADZ.txt": Stationary two-photon cross sections for ionization of H_2 (model ADZ). First column: Photon energy (eV). Second column: Cross sections in atomic units.
- "H_2-2photon-cs-ATZ.txt": Stationary two-photon cross sections for ionization of H_2 (model ATZ). First column: Photon energy (eV). Second column: Cross sections in atomic units.
- "H_2-2photon-yields-ADZ-RMT.txt": Ionization rates for ionization of H_2 (model ADZ). First column: Photon energy in atomic units. Second column: Yield in (atomic unit of time)$^{-1}$.
- "H_2-2photon-yields-ATZ-RMT.txt": Ionization rates for ionization of H_2 (model ADZ). First column: Photon energy in atomic units. Second column: Yield in (atomic unit of time)$^{-1}$.

One-photon ionization of H_2

- "H_2-beta-fixed.dat": Fixed nuclei asymmetry parameter for one-photon ionization of H_2 at equilibrium geometry. First column: Photon energy in eV. Other columns: Values of the beta parameter β_2 for ionization to individual final ionic states of H_2^+.
- "H_2-beta-averaged.dat": Vibrationally averaged asymmetry parameter for one-photon ionization of H_2. First column: Photon energy in eV. Second column: Values of the beta parameter β_2 averaged over vibronic levels.

One-photon ionization of H_2O

- "H_2O-beta-raw.txt": Asymmetry parameter for one-photon ionization of H_2O (model L). First column: Photon energies in eV. Other columns: Values of the beta parameter β_2 for ionization to individual final ionic states of H_2O^+.
- "H_2O-beta-smoothed.txt": Smoothed asymmetry parameter for one-photon ionization of H_2O (model L). First column: Photon energies in eV. Other columns: Values of the smoothed beta parameter β_2 for ionization to individual final ionic states of H_2O^+.
- "H_2O-cs-L-raw.txt": Cross sections for one-photon ionization of H_2O (model L). First column: Photon energies in eV. Other columns: Values of partial cross sections for ionization to individual final ionic states of H_2O^+.
- "H_2O-cs-L-smoothed.txt": Smoothed cross sections for one-photon ionization of H_2O (model L). First column: Photon energies in eV. Other columns: Values of smoothed partial cross sections for ionization to individual final ionic states of H_2O^+.
- "H_2O-cs-RMT.txt": Ionization rates for ionization of H_2O by a linear pulses of three different orientations. First column: Photon energy in atomic units. Other columns: Ionization rates in (atomic unit of time)$^{-1}$ for polarization in X, Y, Z.
- "H_2O-cs-S-raw.txt": Cross sections for one-photon ionization of H_2O (model S). First column: Photon energies in eV. Other columns: Values of partial cross sections for ionization to individual final ionic states of H_2O^+.
- "H_2O-cs-S-smoothed.txt": Cross sections for one-photon ionization of H_2O (model S). First column: Photon energies in eV. Other columns: Values of smoothed partial cross sections for ionization to individual final ionic states of H_2O^+.

Strong field ionization of H_2O

- "H_2O-strong-field.txt": Time-dependent electric field pulse. First column: Time in atomic units. Second column: Electric field intensity in atomic units.
- "H_2O-strong-field-spectrum.txt": Energy spectrum of the time-dependent electric field pulse. First column: Photon energy (spectral component) in eV. Second column: Real part of Fourier transform of the electric field intensity. Third column: Imaginary part of Fourier transform of the electric field intensity.
- "H_2O-strong-field-yield-HF-xy-{X,A,B}.dat": Ionization yields for ionization of H_2O into ionic states X, A, B by pulses in xy plane (model A). First column: Orientation of the pulse (degrees). Second column: Yield.
- "H_2O-strong-field-yield-HF-xz-{X,A,B}.dat": Ionization yields for ionization of H_2O into ionic states X, A, B by pulses in xz plane (model A). First column: Orientation of the pulse (degrees). Second column: Yield.
- "H_2O-strong-field-yield-HF-yz-{X,A,B}.dat": Ionization yields for ionization of H_2O into ionic states X, A, B by pulses in yz plane (model A). First column: Orientation of the pulse (degrees). Second column: Yield.
- "H_2O-strong-field-yield-CI-xy-{X,A,B}.dat": Ionization yields for ionization of H_2O into ionic states X, A, B by pulses in xy plane (model B). First column: Orientation of the pulse (degrees). Second column: Yield.
- "H_2O-strong-field-yield-CI-xz-{X,A,B}.dat": Ionization yields for ionization of H_2O into ionic states X, A, B by pulses in xz plane (model B). First column: Orientation of the pulse (degrees). Second column: Yield.
- "H_2O-strong-field-yield-CI-yz-{X,A,B}.dat": Ionization yields for ionization of H_2O into ionic states X, A, B by pulses in yz plane (model B). First column: Orientation of the pulse (degrees). Second column: Yield.