**Running an animation**

By double-clicking the name of an animation program, e.g. run\_ani\_9d8.exe, a graphical user interface opens.

Different buttons or text boxes allow setting of the following parameters:

* the frequency of the applied sound (a number corresponding to the order number in the frequency array is asked, the frequency in kHz is later shown in the animation title bar)
* the number of time steps in the animation
* the viewing direction, specified by its azimuth and elevation angles
* the insertion of instantaneous rotation axes malleus and/or incus (check box for ‘yes’)
* the insertion of the R0 ellipses for the malleus and/or incus (check box for ‘yes’)
* the number of frames per seconds for the animation
* the number of cycles the animation will be repeatedly shown
* next to the Start button, the possibility is offered to write the animation to an AVI file in the directory where the program is stored (check box for ‘yes’)

After pushing the Start button, the program first calculates the position of the malleus and incus for each time step in the cycle. When this is completed the motion animation starts. Note that the stapes motion could not be measured with the approach used and that the rest positions of the 3 ossicles are shown in grey.

Due to the complexity of the program it is required to restart the program by double-clicking the exe file name and re-enter all parameter values, when a repeated run of the animation or a new animation is wanted.