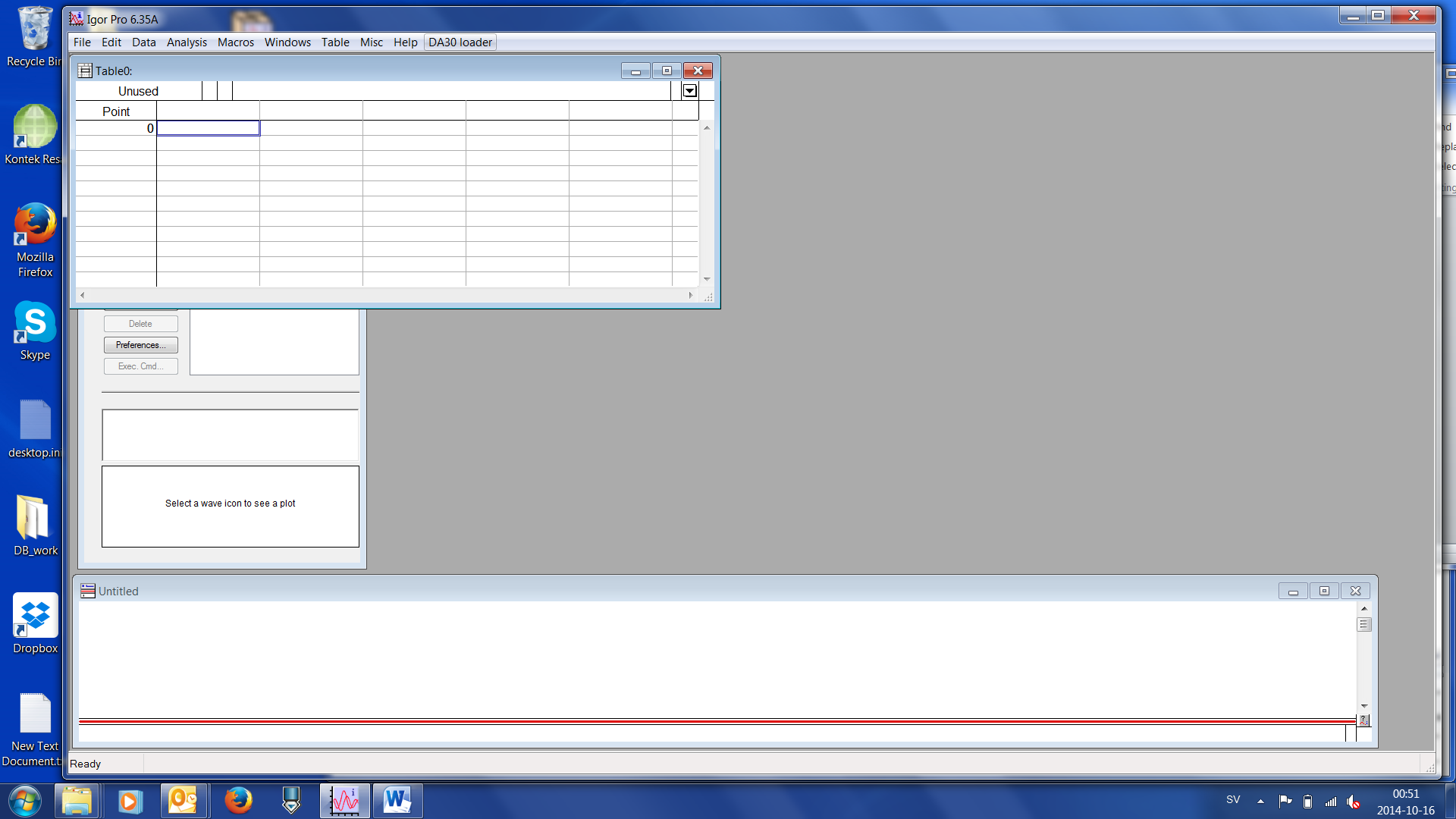
This is the tutorial on how to install and operate the ChunkLoader for DA30.

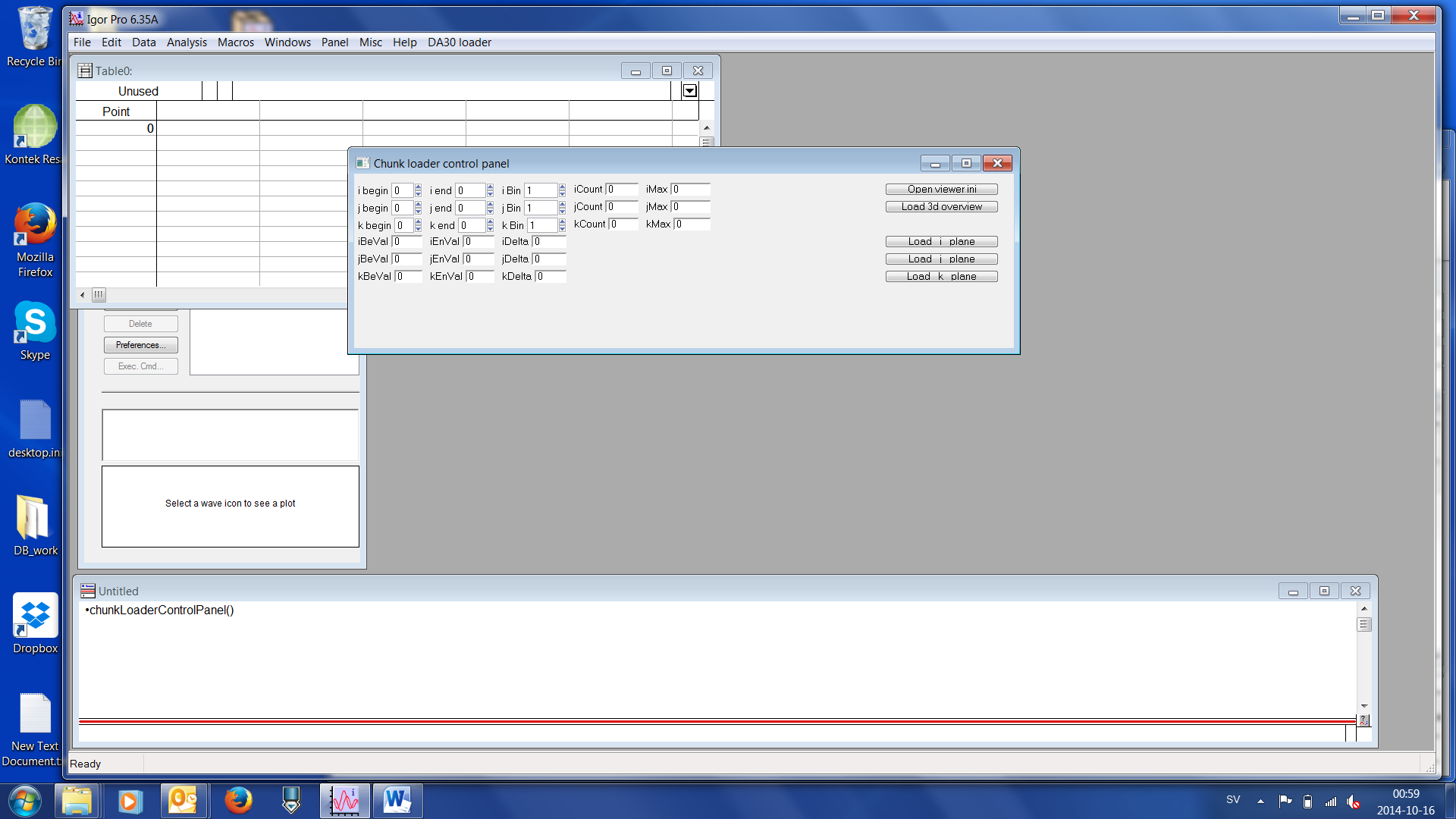
1. First of all, make sure you are using the latest version (attached). I refer to the igor manual on how to install.
2. Install the ChunkLoader by adding the *DA30\_Procedures* folder and the *DA30\_proc* file to the local Wavemetrics folder. If the ChunkLoader already is installed proceed with the next step.
   1. Libraries/Documents/Wavemetrics/Igor Pro 6 User Files/*DA30\_Procedures*
   2. Libraries/Documents/Wavemetrics/Igor Pro 6 User Files/Igor Procedures/*DA30\_Proc*

The *DA30\_Procedures* folder and the *DA30\_Proc* file are distributed by VG Scienta upon request.

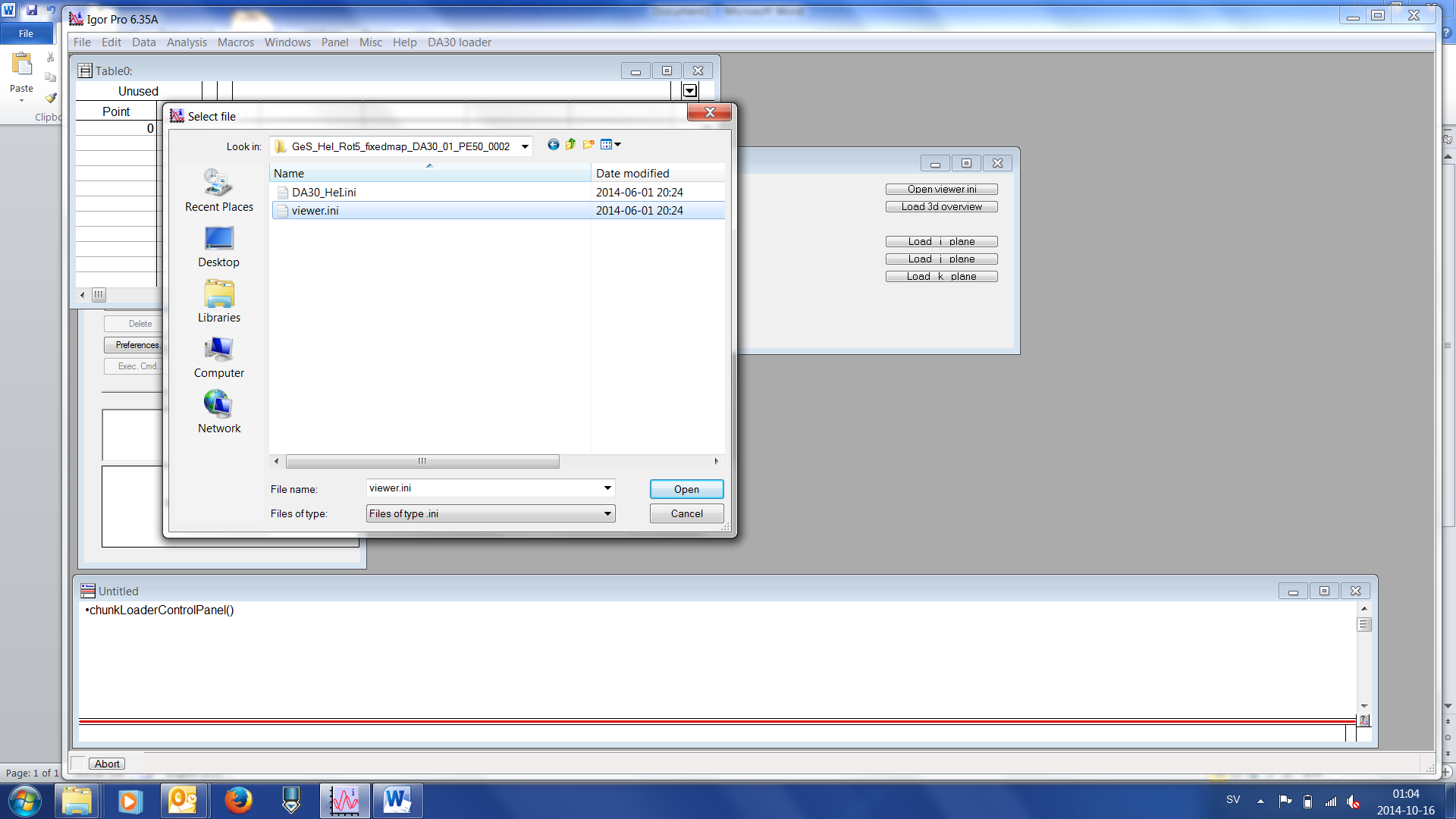
1. If correctly installed you should have the DA30 loader menu available.



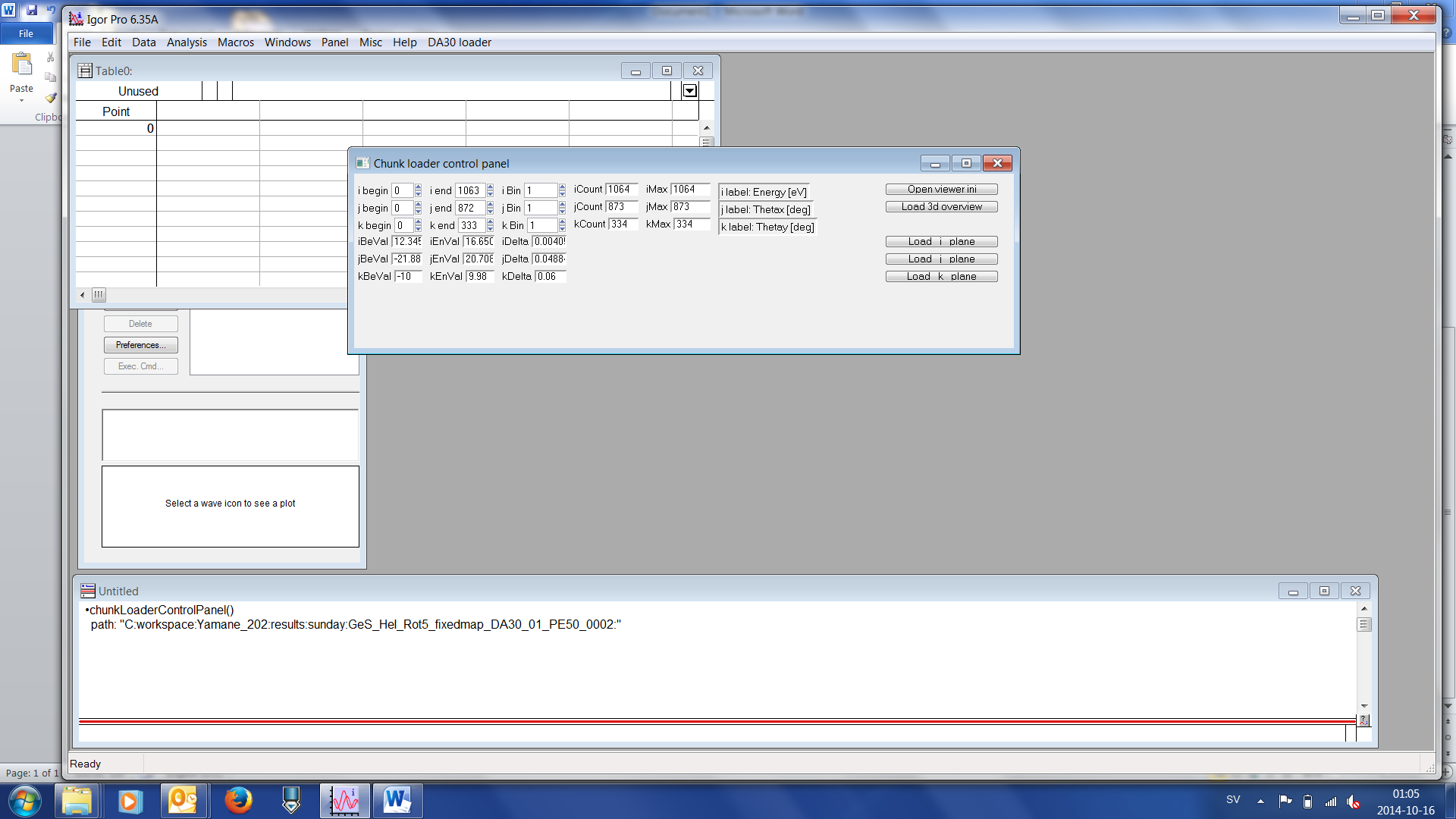
1. Click on the DA30 loader menu and select chunkLoaderContro



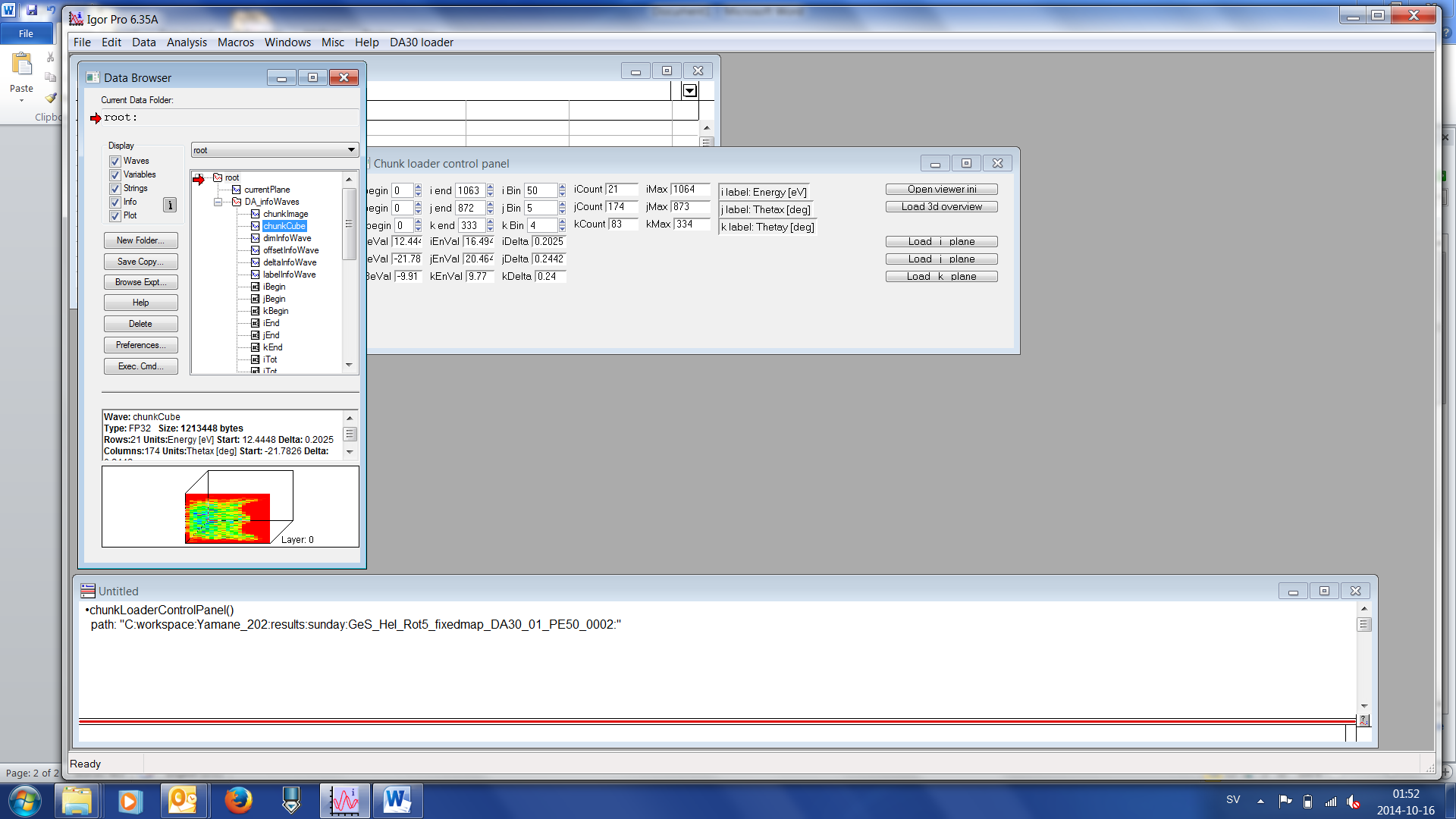
1. Use windows or other software to extract the compressed folder which contains the measurement you want to read. (The simple igor loader have no inbuilt functionality to handle compressed archives)
2. Return to igor. Push the “open viewer ini” button. Browse and select the viewer.ini file of the extracted folder which contains the measurement.



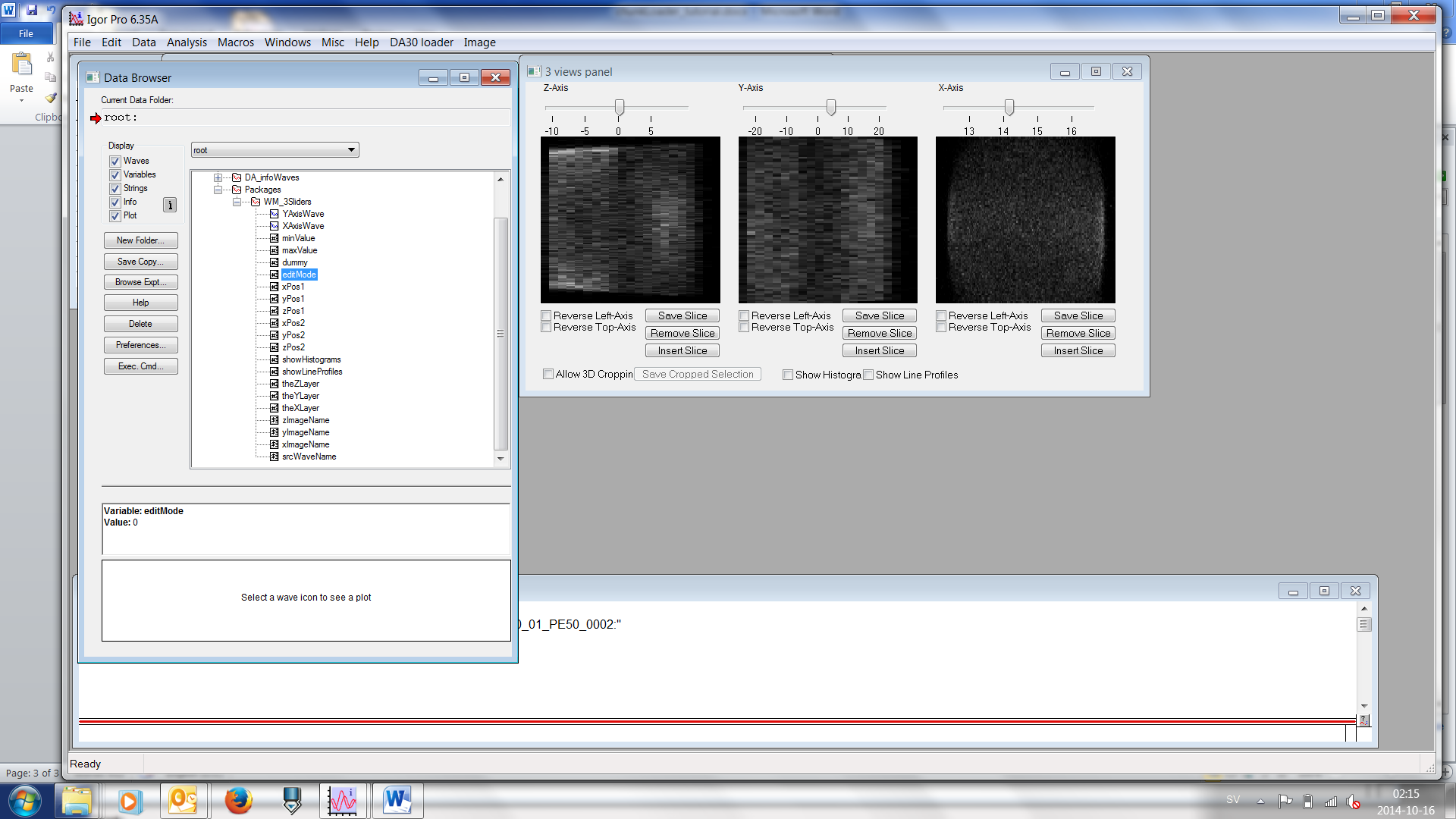
1. Now the information about scales and number of voxels will be loaded and displayed in the chunk loader control panel.



1. The chunk loader control panel has nine different values that could be changed; for each of the three dimensions there are three integer values that could be changed. In the example above the first dimension, “i”, is associated with kinetic energy. The number of channels in this dimension is 1064. By changing the “begin” and “end” index for this dimension a subset of the data can be selected. Furthermore, by adjusting the “bin” value the number of output channels can be reduced. A “bin” value of N means that N neighboring channels will be summed in to one channel on a sparser output data space.
2. Note that only indexes can be changed. The resulting energy and angular positions can only be observed as information in the panel. The labels for the information numbers are not very clear. For example, the iBeVal label means that the “i” dimension (which is usually associated with energy) has the begin value of the number presented, and iEnVal means the end value for the same dimension. There is also information on the step size of the output presented as delta values for each dimension. Furthermore, igor can usually not load the whole 3-d matrix into memory. Therefor it is good practice to look at the “Count” numbers presented. If a 3d load is performed the total number of voxels will be iCount\*jCount\*kCount.
3. After setting the begin and the end indexes for each dimension, and possibly also increased some bin values, it is possible to load either a 3D matrix or an image by pushing one of the load buttons on the right hand side of the panel. The load can be relatively time consuming. When loading an image plane the integration depth of the integrated dimension is set by the begin value and the end value, i.e. the bin of the integrated dimension is automatically set to the maximum number of channels restricted by the begin value and the end value of the integrated dimension.
4. If a 3D load was performed the output data is stored in the chunkCube 3D-wave in the root:DA\_infoWaves data folder. This data will be overwritten if a new load request is issued. If you want to save this 3D-wave before loading something else the wave has to be moved, duplicated or renamed. Warning! If renaming or moving files in and from the root:DA\_infoWaves data folder it is a good idea to close the “chunk image control panel” and re-open it before attempting another load. (Some additional menu and functionality could be useful.) If an image plane was loaded the output result is stored in the chunkImage wave in the root:DA\_infoWaves data folder.



1. If a 3D wave is not too large it can be viewed using the built in 3D wave display. Load the “image” package by selecting Analysis/Packages/Image processing. In the image menu, select 3D wave display. Browse to select the chunkCube (or such a copy)



1. Note that the 3D wave display stores its information in its own data folder and that the 3D matrix is copied twice and subsequently rearranged for the two additional dimensions.