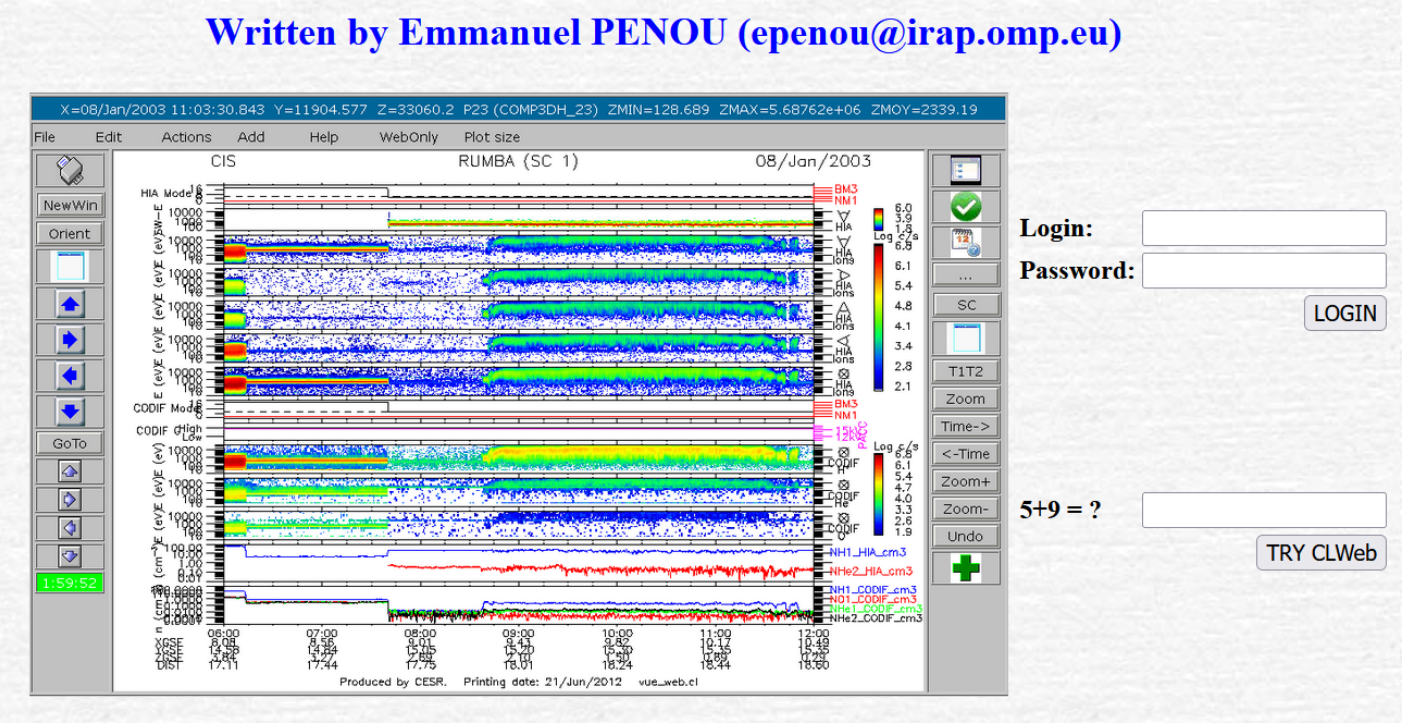
A simple way to plot PAS distribution using CL (emmanuel.penou@irap.omp.eu)
Lesson 1

Step 1: Ask for a login on CL (mail to emmanuel.penou@irap.omp.eu). You will have a full access to the PAS public data (all data except the last 90 days).

Step 2: Connect on Clweb (doodle Clweb)



http://clweb.irap.omp.eu ▾ Traduire cette page

Clweb page

CLWeb is a web version of cl (software data). Documentation and Webservice description are available. ... The Cl software has been originally created for the ...

Clweb Beta (penou:0) noname.cl

Please select one or more predefined panel (Shift key can ...

Mozilla Firefox

OX clweb Beta (penou:0) noname.cl: plot_time=0.00 sec ...

Introduction

If you need a permanent account, please send me an email ...

Check

clweb Beta (penou:0) noname.cl: plot_time=0.00 sec ...

CLWeb_poster

Cl can plot a composition of panels of the following types:.

Webservice documentation

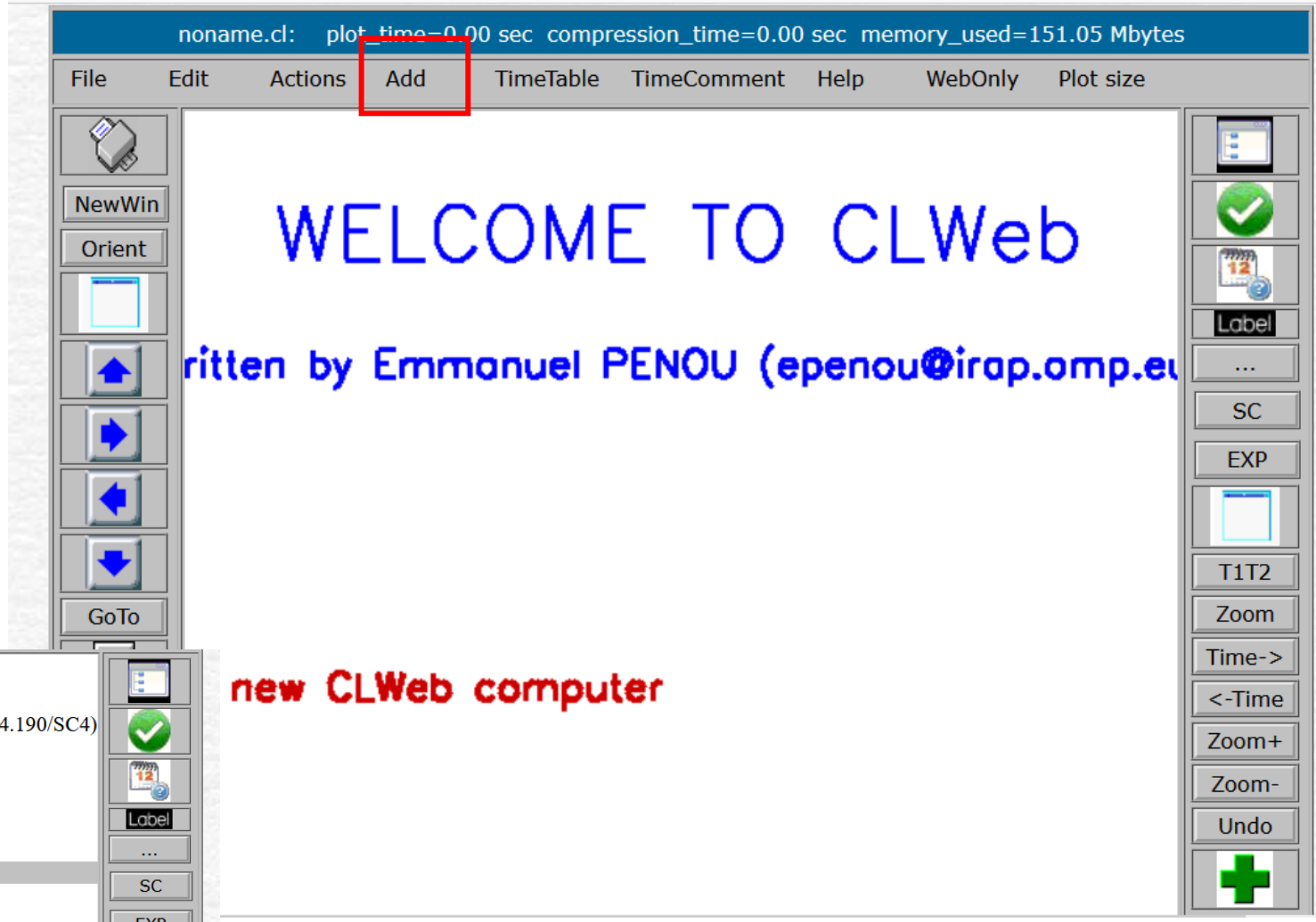
- to get a CEF file: getParameter.php?parameterID ...

Autres résultats sur omp.eu »

Prepared by P.Louarn and IRAP group, 01/2022

Step 3: After login, you get this:

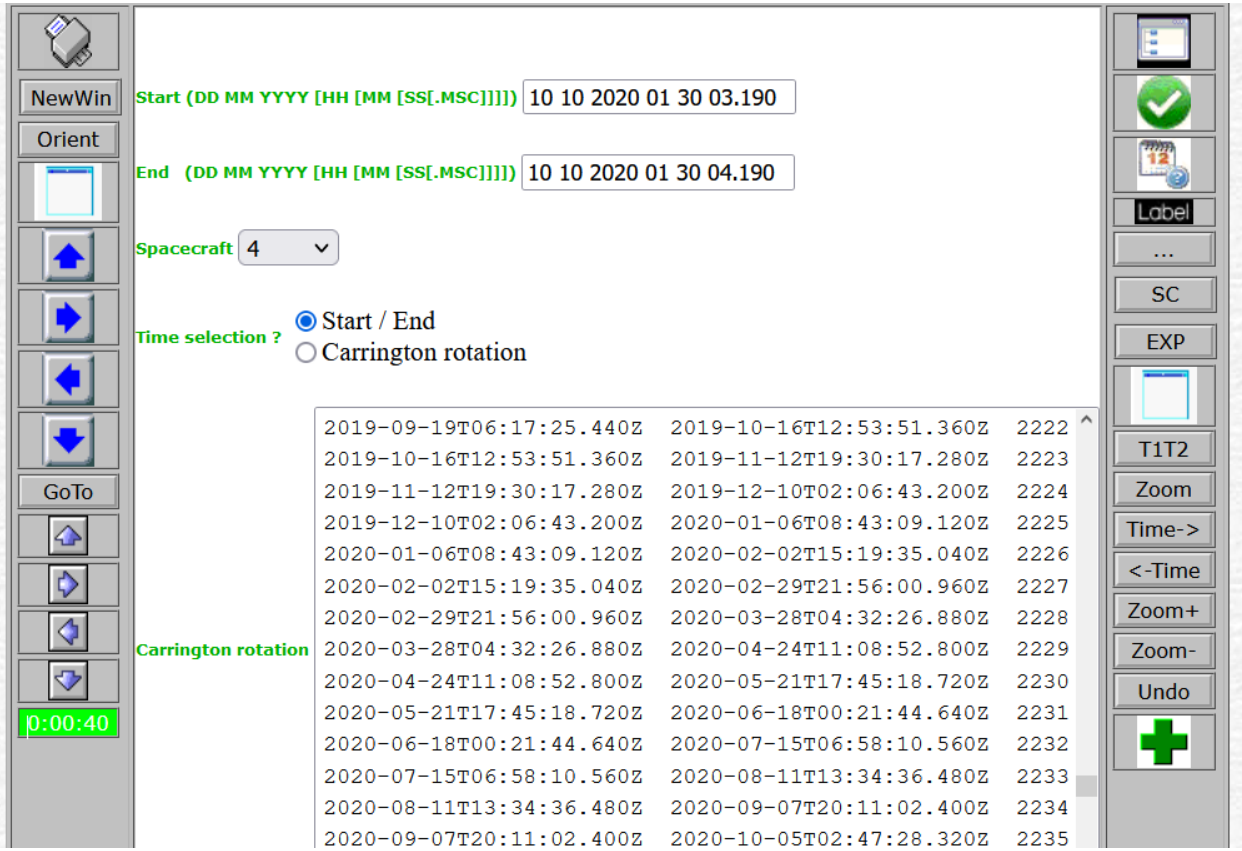
The simplest way to get a view of 3D VDF is: (1) put the mouse on **Add** (top menu). You get a list of projects. You go to **Solar-Orbiter** and get another menu. You go to **PAS,** get a new menu, go to '**Science**' and there select **'Solar-Pas-science-fc3D-unique'**. At this stage, you get this:



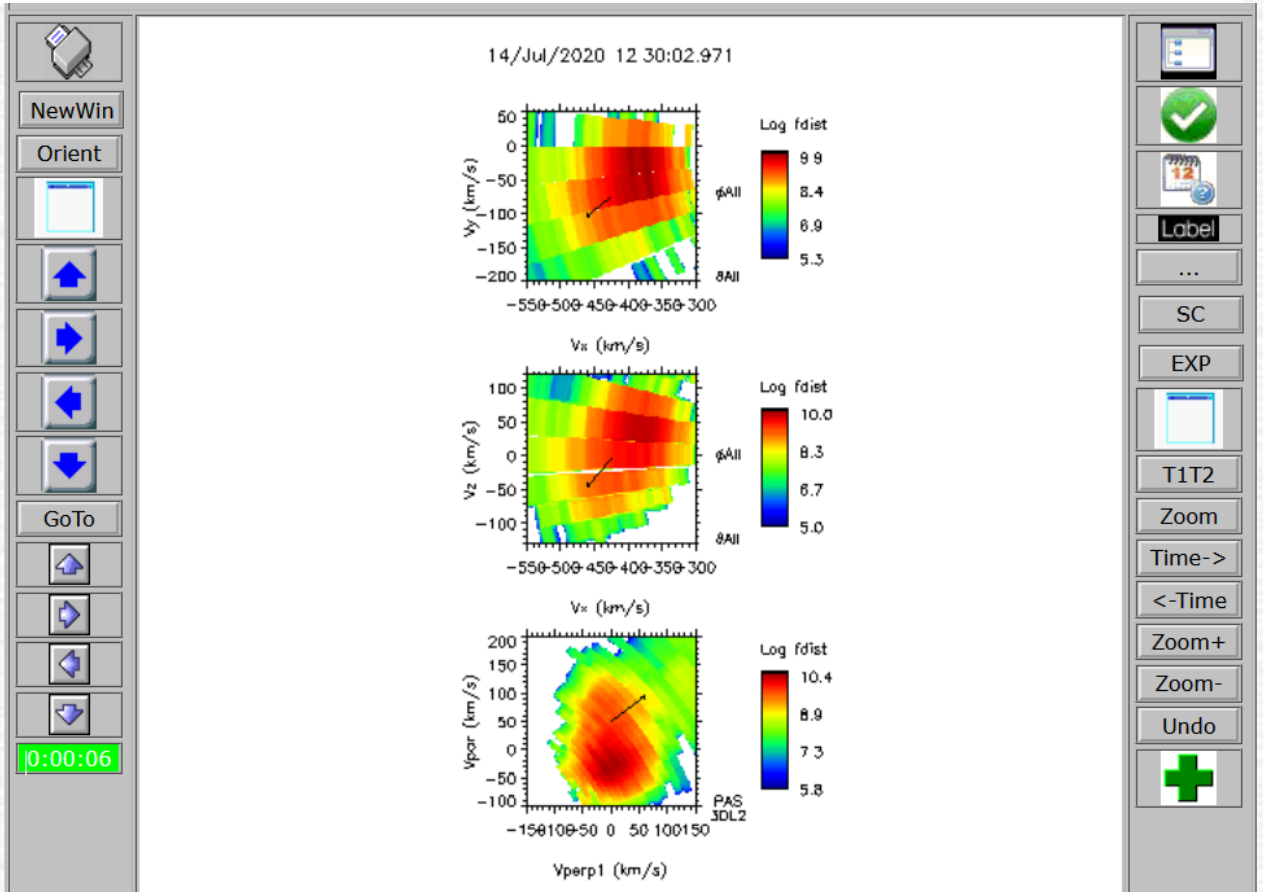
If you click 'Ok', you will have the 3D plot at the default time.

If you click 'Select value' then 'ok' you can define directly the time you are interested in.

Step 4: What you get after ‘Select value’ then ‘ok’ (step 3). Here, you can enter the time (start and end). Have in mind that the distribution you will get is the first measured during the interval you select. After ‘Ok’, and a few seconds (10-20), you should get this:



This is our default plot for VDF.



These are slices in the phase space (see Louarn et al, A.A., 2021). The two first from the top are Vx, Vy and Vx, Vz slices, where x,y,z are the instrument axis. Most of the time, ‘x’ is ‘-R’, ‘y’ is –T ans ‘z’ is N (RTN frame). The arrows give the projection of B. The bottom plot is the same in Vper/Vpara. The arrow is here the bulk flow

Step 5: Save the plot. Click on the printer logo and select the type of plot (ps, pdf, …) you want.

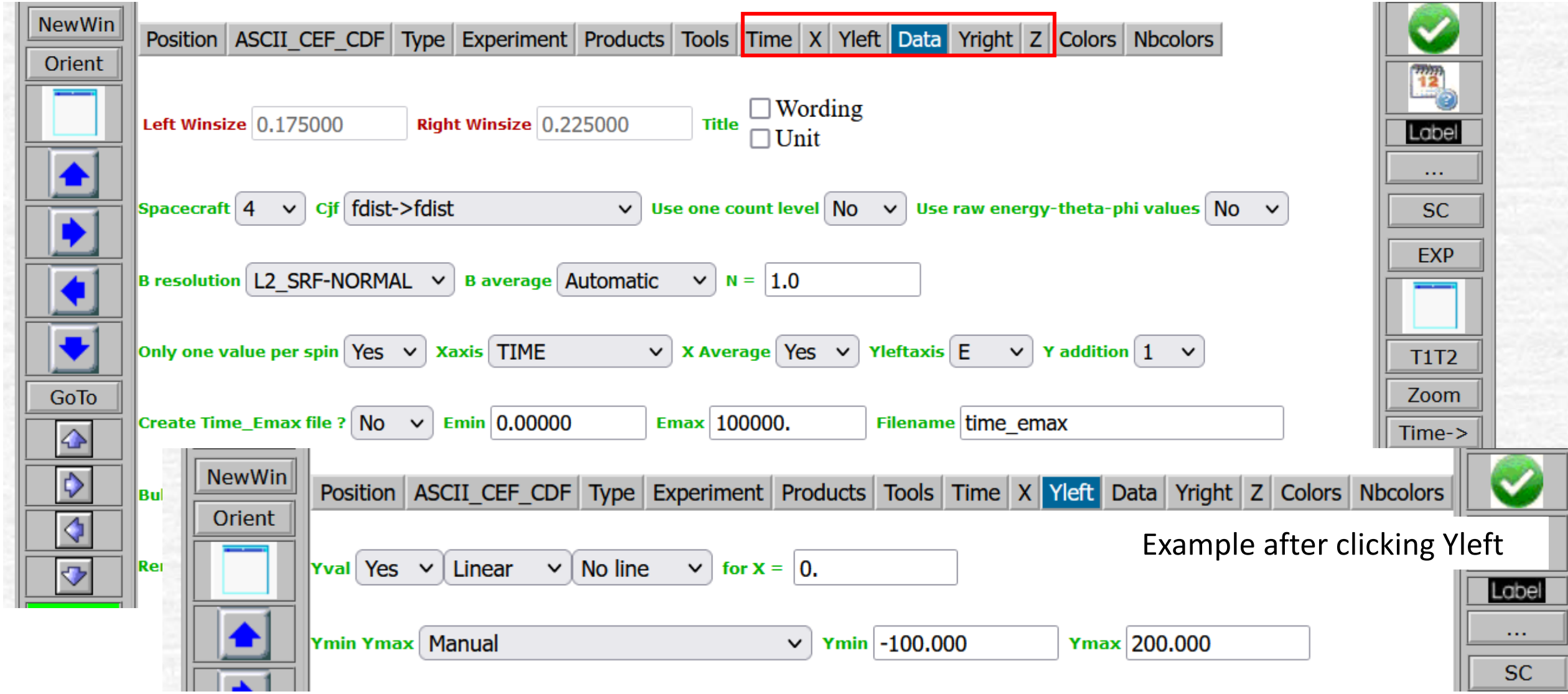
Step 6: Changing time. Click on T1T2. You get a new window, put the time you want and click ‘Ok’.

You can also click on ‘Time->’ (or the reverse) and you get the next (or last) measured VDF.

Step 7: For specialist, there are many ways to do what you want with the menu… but this requires some more practice !

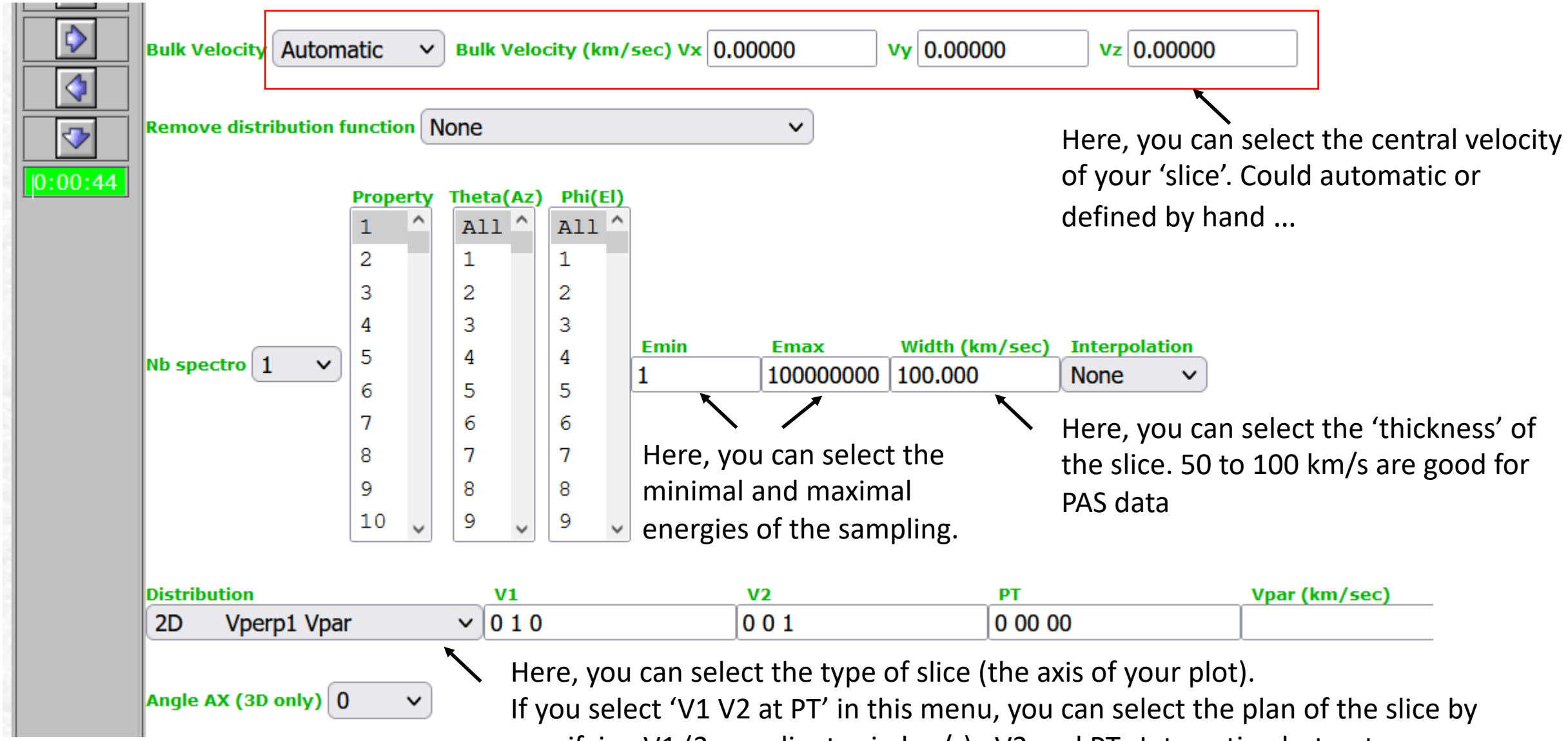
You can start by clicking in the centre of one of the plots. You get a blue frame around the selected plot and then, you clik on ‘ … ‘ (menu on the right).

Step 8: Start the ‘fun’ . After selecting the plot and clicking ‘….’, you get much more complex menu where you can define or parametrize what you want. Personnaly, I use Time, X, Yleft and Z to define the sampling time or to adapt the range in x, y or the levels (z min and z max) in the plot. Before you do something, select ‘manual’ otherwise the plot stay in automatic range.



Example after clicking Yleft

Step 8 continue'd: Something important in the 'data' menu: When you click 'Data', you get a long and rather complex menu. Part of the menu contains this, I explain a little the most important…



Here, you can select the central velocity of your 'slice'. Could automatic or defined by hand …

Here, you can select the minimal and maximal energies of the sampling.

Here, you can select the 'thickness' of the slice. 50 to 100 km/s are good for PAS data

Here, you can select the type of slice (the axis of your plot).
If you select 'V1 V2 at PT' in this menu, you can select the plan of the slice by specifying V1 (3 coordinates in km/s) , V2 and PT. Interesting but not so easy…

End of first lesson and enjoy….