To perform the spectrum acquisition – start TOPSPIN/XWINNMR

- means “type return”

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<th>Step</th>
<th>Command</th>
<th>Comment/Effect</th>
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| 1    | edc+↓  | Generates a new experiment directory  
Complete with the following information:  
NAME = name of your experiment set  
(e.g. SR500_13.5.13), advice regarding the name, avoid to use spaces  
(badly recognized by some servers)  
EXPNO = 1  
PROCNO = 1  
DIR (for TOPSPIN < 3) = /opt  
(for TOPSPIN ≥ 3) = /opt/data/#USER/nmr/  
USER (for TOPSPIN < 3) = #USER  
Replace #USER by your GASPAR user  
No need to complete anything else |
| 2    | rpar ref+↓ | Read parameter containing “ref” and everything that comes after.  
Allow retrieving reference methods for this machine.  
Choose the correct method based on the experiment you want to perform. |
| 3    | lock+↓  | Open lock GUI  
Select the desired solvent to lock on.  
The lock display can be opened with the lockdisp+↓ command or by double clicking on the small lock display on the bottom tool bar. |
| 4    | Getprosol+↓ | Read pulse intensity and pulse length for the specifically used probe and the selected solvent.  
Wait for “getprosol finished message” |
| 5    | wobb+↓ + a+↓  
or  
atma+↓ | For manual machines (nmr1508, nmr1512l, nmr492r, nmr3209l & r, nmr3204, nmr3404r, nmr2407l & r)  
Wait for the wobb window (a curve with a red central line) then go under the probe to correctly set the tuning and matching – until the curve is centered on the red line and as deep as possible.  
For semi-automatic machines (nmr1512l, nmr1510, nmr1516, nmr5313 + automates)  
Automatic tuning and matching of the probe  
Important to have the best sensitivity and avoiding some artifacts  
Available on nmr5313, nmr1512r and both nmr4313 robots. |
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| 6   | shim the sample or topshim<sup>+</sup>     | For manual machines (nmr1512, nmr492r, nmr3209l & r, nmr3204, nmr3404r, nmr2407l & r)  
Using the small keyboard (BSMS) – with the key z<sup>1</sup> and z<sup>2</sup> – try to move the lock signal (on the lockdisp) as high as possible  
For semi-automatic machines (nmr1512, nmr1508, nmr1510, nmr1516, nmr5313 + automates)  
Automatic shimming of the magnetic field (correction of the field inhomogeneity). |
| 7   | ns<sup>+</sup>     | Define the number of scans, should be equal to 1 or multiple of 8 |
| 8   | rga<sup>+</sup>     | Receiver gain adjustment – check signal amplification to avoid saturation |
| 9   | zg<sup>+</sup>     | Start the acquisition, means “zero-go” which tells the machine to blank the memory and start the pulses and signal reading.  
Wait until “finished” indication.  
If you want to have a look at the spectrum before the end, you can type tr, to transfer the present acquisition state to the memory |
| 10  | ef<sup>+</sup>     | This command is combining the em and ft commands  
em : stands for exponential multiplication and allows to improve the signal to noise ratio  
ft : make the Fourier transform  
efp command is not useful since it recall a previous phase that probably not exists. |
| 11  | apk<sup>+</sup>     | Automatic phase correction. |

2. To retrieve data on your computer

2.1 Windows:

1. First, click on the Computer shortcut from your desktop or from the Start Menu. In the toolbar you will find several buttons, including one called Map network drive.

2. Click on it and the Map Network Drive window will open. Firstly, leave the automatically assigned drive letter and then type the folder you want to connect to. In our case `\nmr.epfl.ch\isic`

3. Click on Finish then double click on the new icon.

4. If necessary, in the login window, type the user “intranet\GASPAR_USER” and your GASPAR password (replace GASPAR_USER by your specific one).

The new NMR data are accessible under the following path :  
`/your_group/user_name/machine_name` (replace machine_name by the name of the NMR where you did the acquisition and the user_name by your specific name).
2.2 MAC:

1. First, click on a free zone of your Desktop then press "CMD + K"

2. In the opened window, type the following address: smb://nmr.epfl.ch/isic. (You can press on the small "+" to add this address to your list).

3. Click on Connect.

4. In the login window, type the gaspar user and your gaspar password

The new NMR data are accessible under the following path:
/your_group/user_name/machine_name (replace machine_name by the name of the NMR where you did the acquisition and the user_name by your specific name).

2.3 Using SFTP software:

You can always log into the server using FileZilla (free to download) or other FTP software.

As host use: nmr.epfl.ch, user = #USER, password = #GASPAR port = 22, then in the right window, go to spectro, then choose the machine.