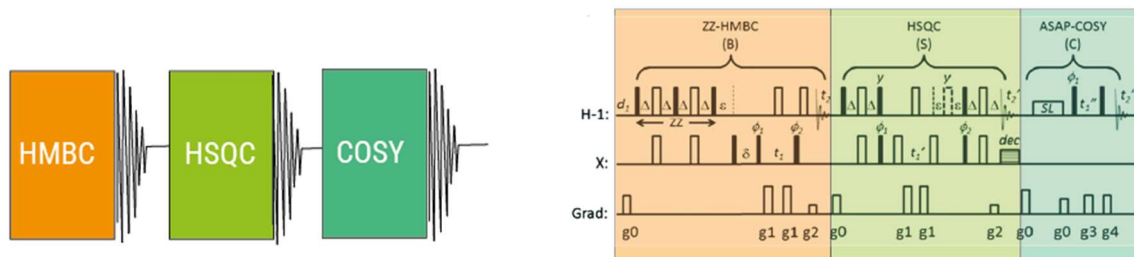
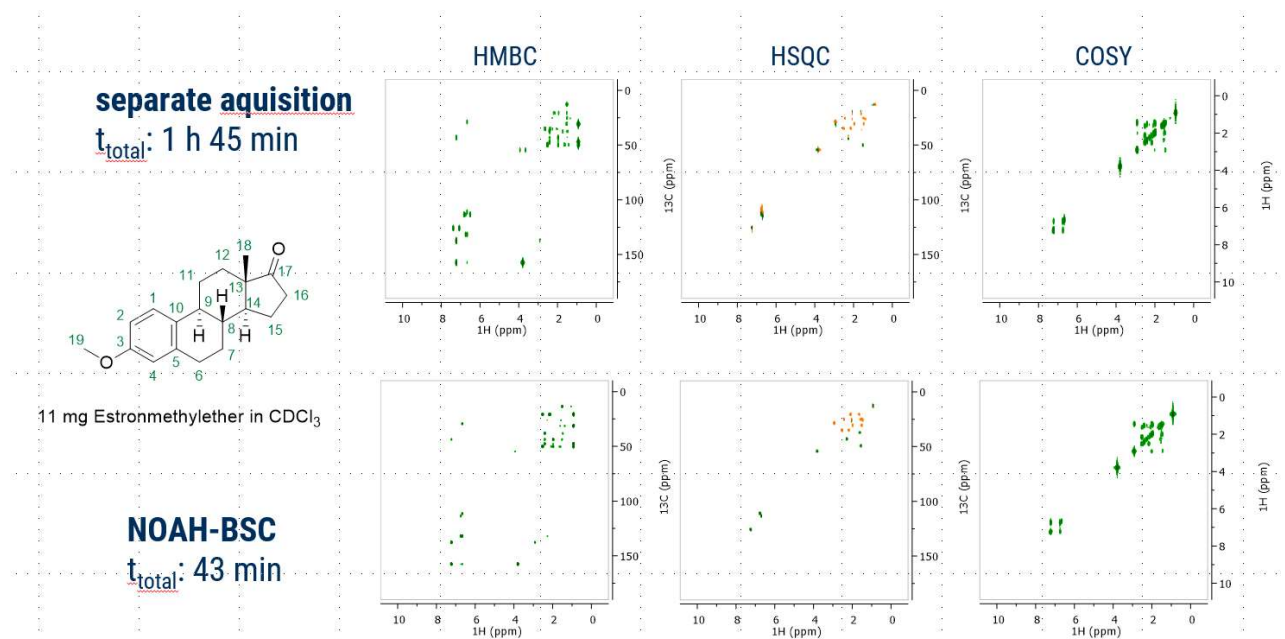


NOAH-Experiments (NMR by Ordered Acquisition using ^1H detection)



Why use NOAH-Experiments in routine measurements?

- Shortening of spectrometer measurement time by half
- Sensitivity enhancement
- Nearly no phase correction necessary



What does the experiment name mean?

Abbreviations:

B – HMBC;

S (Se, Sp) – HSQC-DEPT;

C (Cc) – (Clip-) COSY;

N – NOESY;

Sc – Clip-HSQC

Example: NOAH3-BSpCc = HMBC + HSQC-DEPT + COSY

Sample concentration?

15-20 mg/ 0.55 mL solvent (MW < 700 g/mol).

How can I open the NMR spectra and extract single experiments?

Topspin:

- 1) Installation of the au program (only necessary once)
 - a. Download the actual au programs [here](https://upload.uni-jena.de/data/62fe2961dda498.38005427/AU_NOAH.zip):
https://upload.uni-jena.de/data/62fe2961dda498.38005427/AU_NOAH.zip
 - b. Copy the folder content to the clipboard.
 - c. Paste in the folder <TS>/exp/stan/nmr/au/user.
found in (windows):
X:\Bruker\exp\TopSpin\stan\nmr\au\src\user
found in (linux):
/opt/Bruker/Topspin X.X/exp/stan/nmr/au/user
- 2) Open the NOAH experiment
- 3) Start the au program using by typing **splitx_au** in the command line
- 4) The single 2D experiments are stored under EXPNO001, EXPNO002, EXPNO003,...

Example:

The figure consists of four screenshots of the Bruker TopSpin software interface, arranged in a 2x2 grid, illustrating the steps to open a dataset and view individual experiments.

- Top-left screenshot:** Shows the 'Process' window with the 'SPECTRUM' panel. The search results list includes '12 - noah3-BspCc - PSP-565 / #'. A green arrow points to the '2. Open the dataset' text.
- Top-right screenshot:** Shows the 'Process' window with the 'SPECTRUM' panel. The search results list includes '12 - noah3-BspCc - PSP-565 / #'. A green arrow points to the 'splitx_au' command in the 'Command Line' panel. A green arrow also points to the '1. Start the au program' text.
- Bottom-left screenshot:** Shows the 'Process' window with the 'SPECTRUM' panel. The search results list includes '12001 - noah3-BspCc - PSP-565 / #'. A green arrow points to the '3. The single experiments appearing under individual EXPNOs.' text.
- Bottom-right screenshot:** Shows the 'Process' window with the 'SPECTRUM' panel. The search results list includes '12001 - noah3-BspCc - PSP-565 / #'. A 2D NMR spectrum is displayed, showing a peak at 4.07 ppm. The text 'col: 4.07 ppm / 1626.91 Hz Index = 1566 - 1569' and 'row: 251.6 ppm / 25316.5 Hz Index = 1024 - 1025 Value = 2591' is visible.