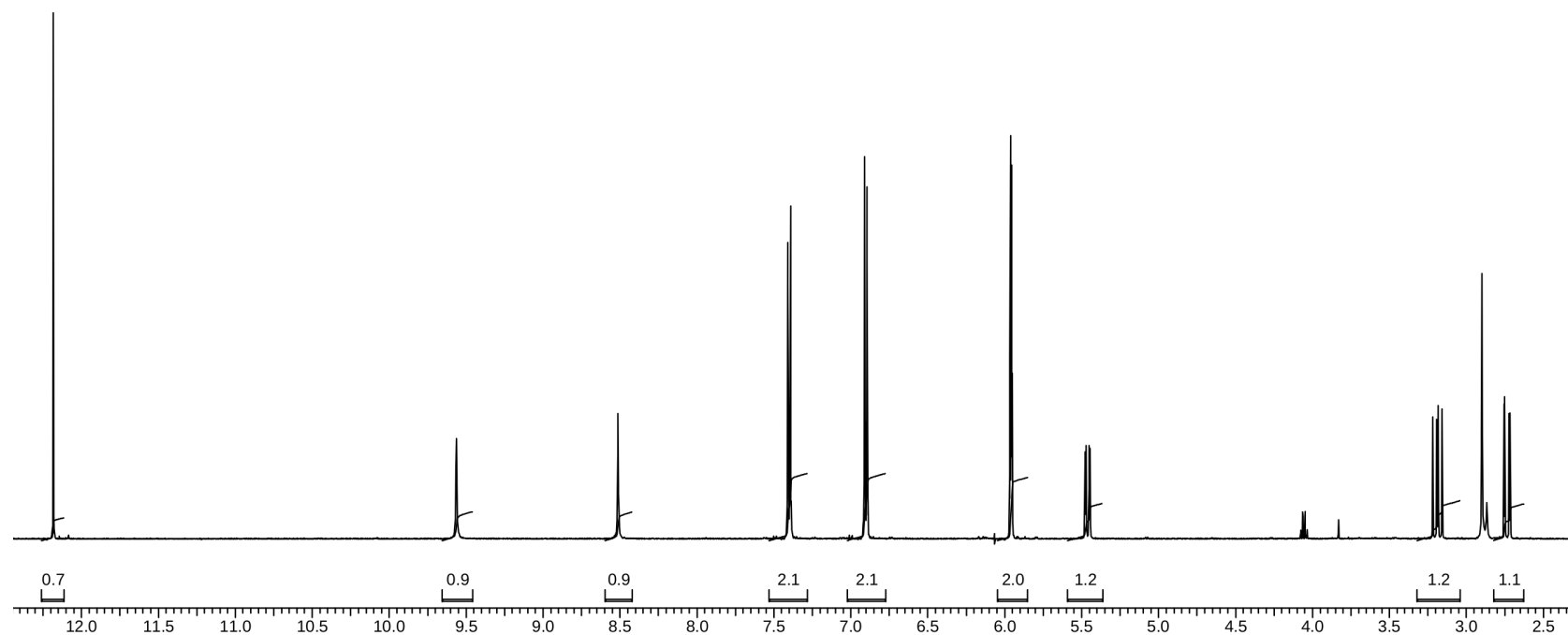
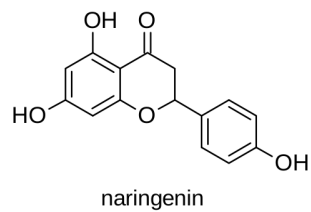


C8953  
NMR structural analysis - seminar  
2D NMR spectra, COSY

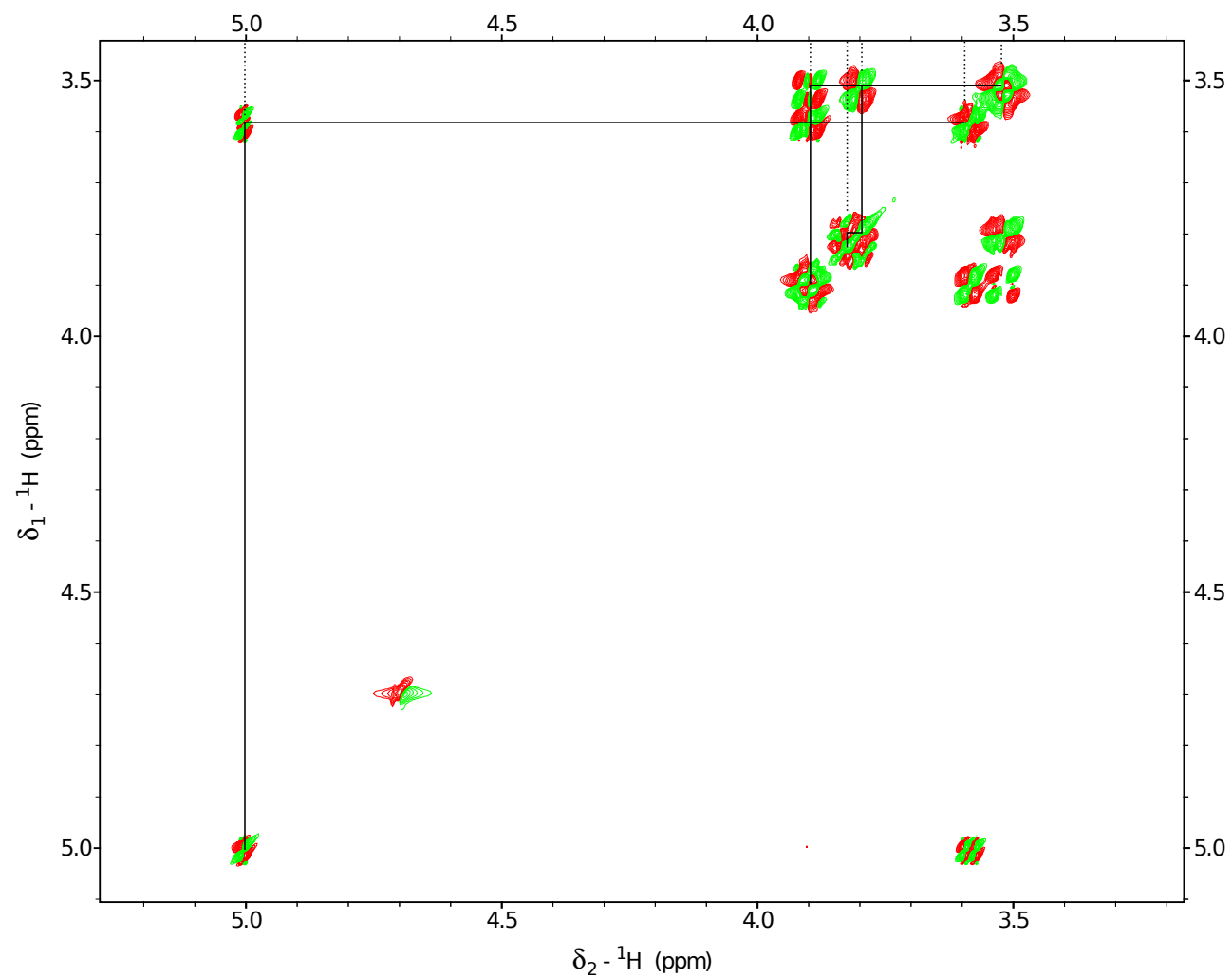
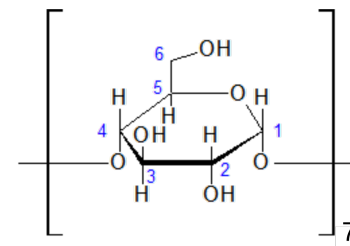
**Jan Novotny**  
176003@mail.muni.cz

March 15, 2023

# $^1\text{H}$ NMR spectrum of naringenin in $\text{d}_6$ -acetone

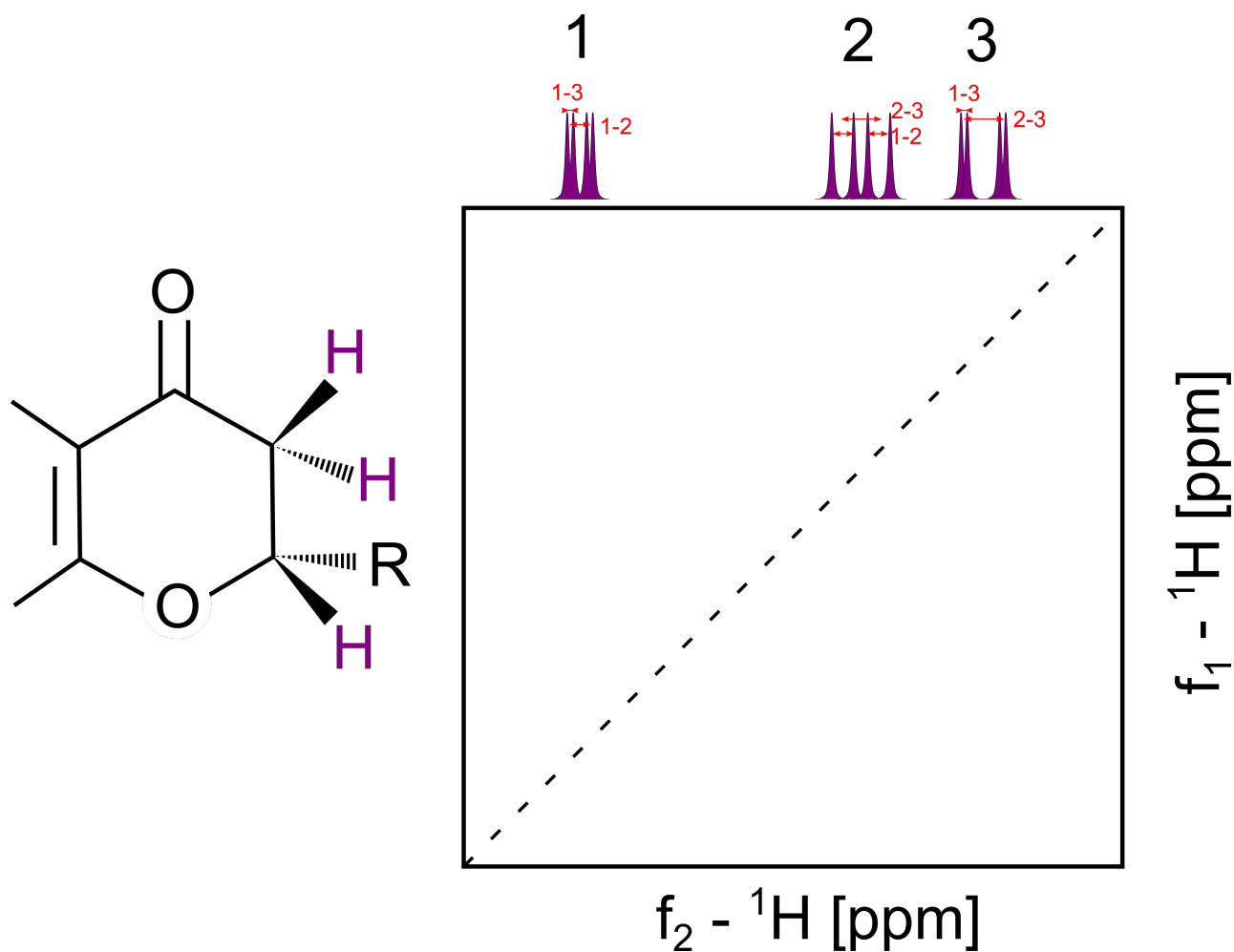


# COSY : $\beta$ -cyclodextrine

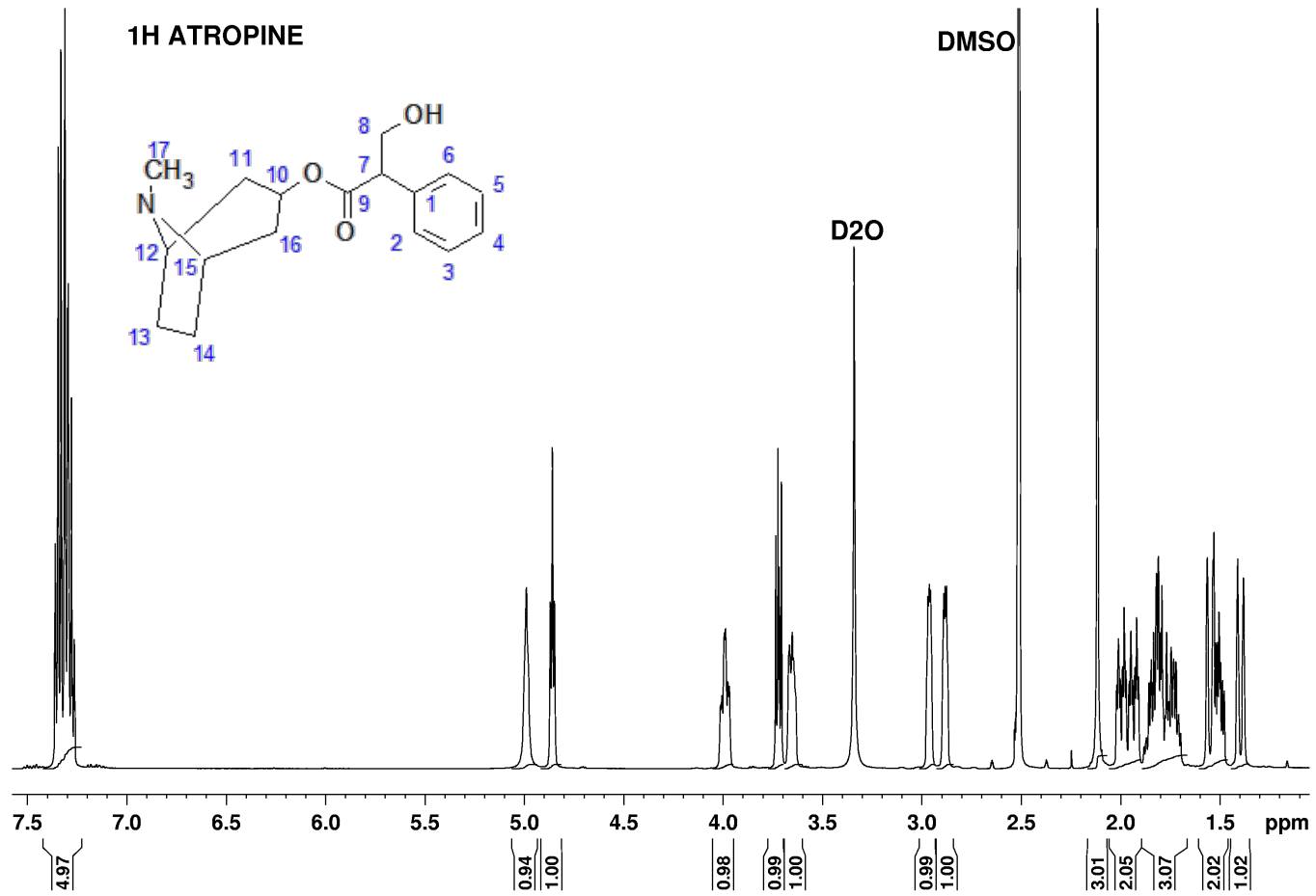


# Phase sensitive COSY

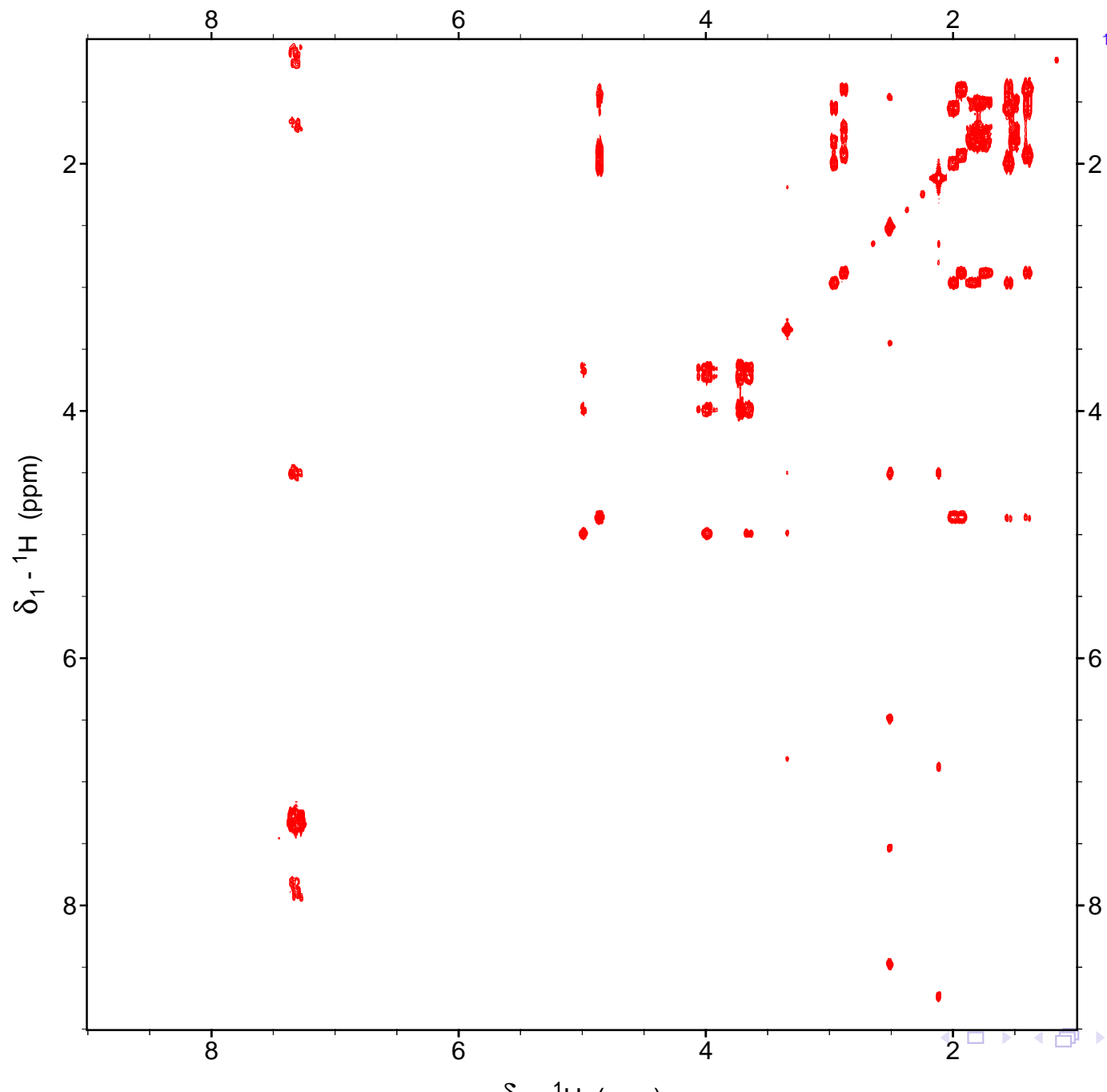
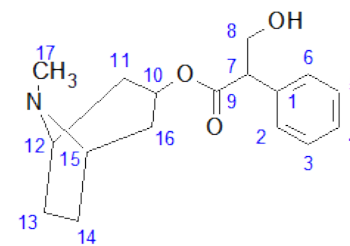
- ▶ direct vs. indirect dimension
- ▶ active coupling - antiphase crosspeak, passive coupling - in-phase



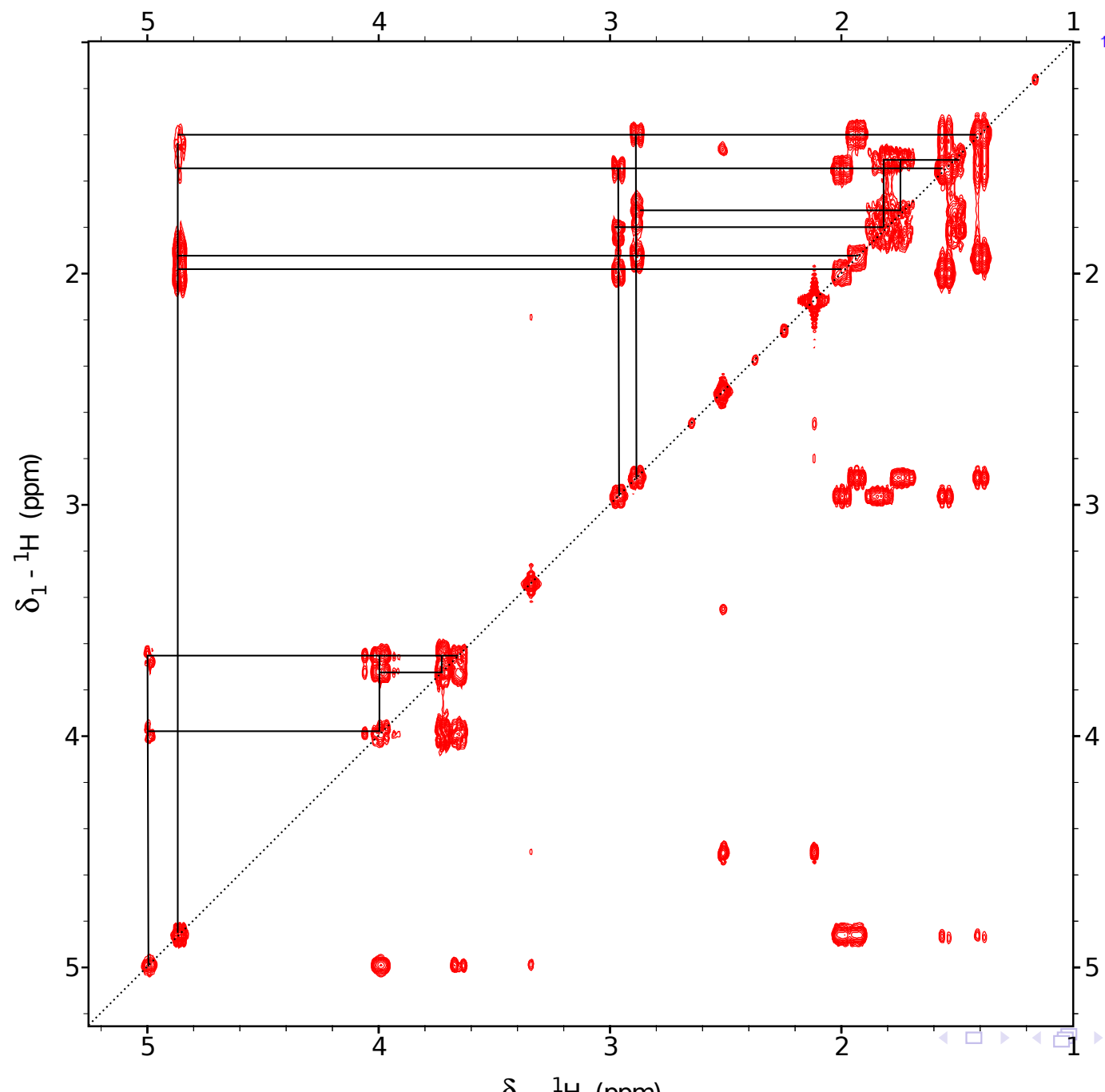
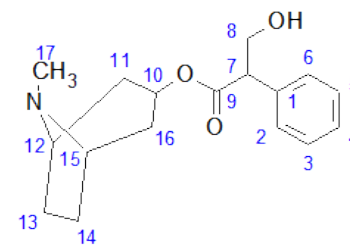
# 1D $^1\text{H}$ of Atropine in DMSO



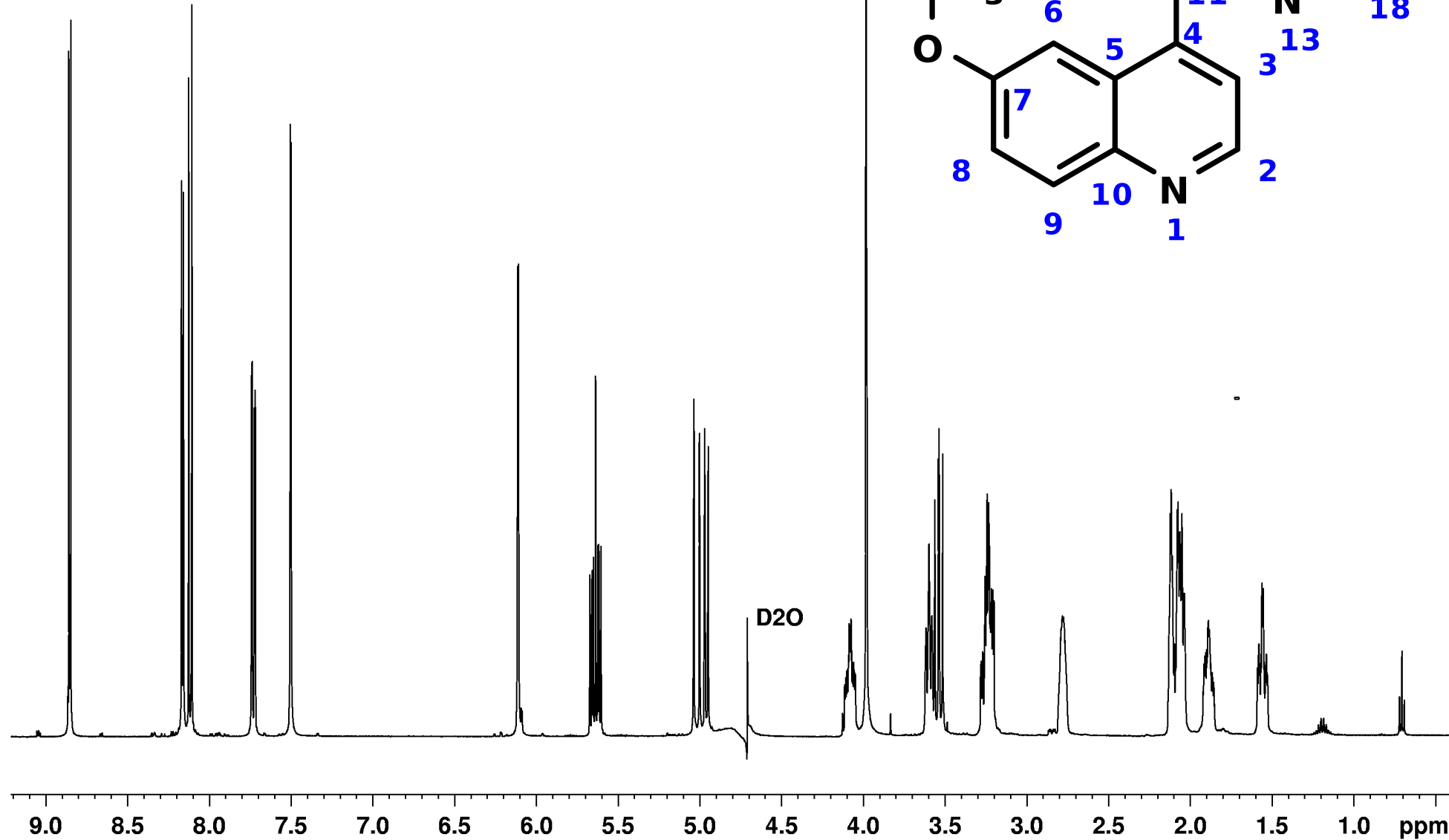
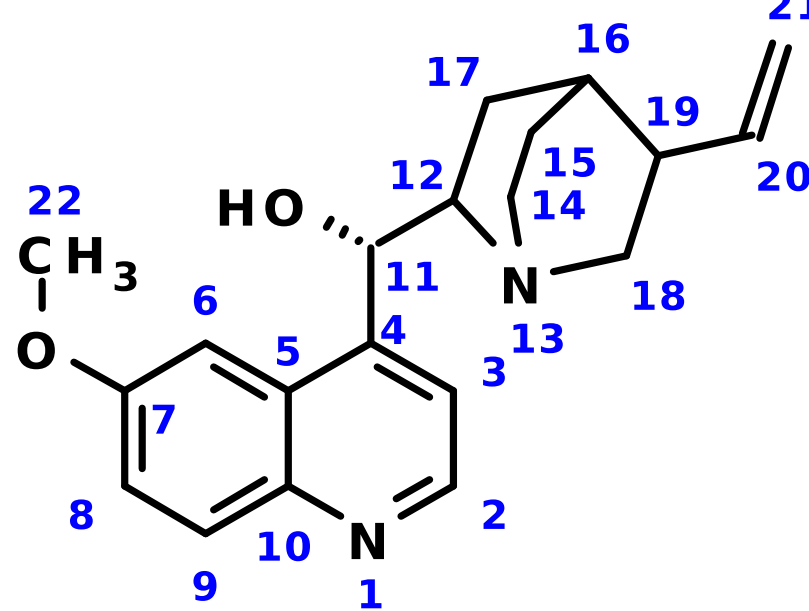
# COSY : Atropine



# COSY : Atropine

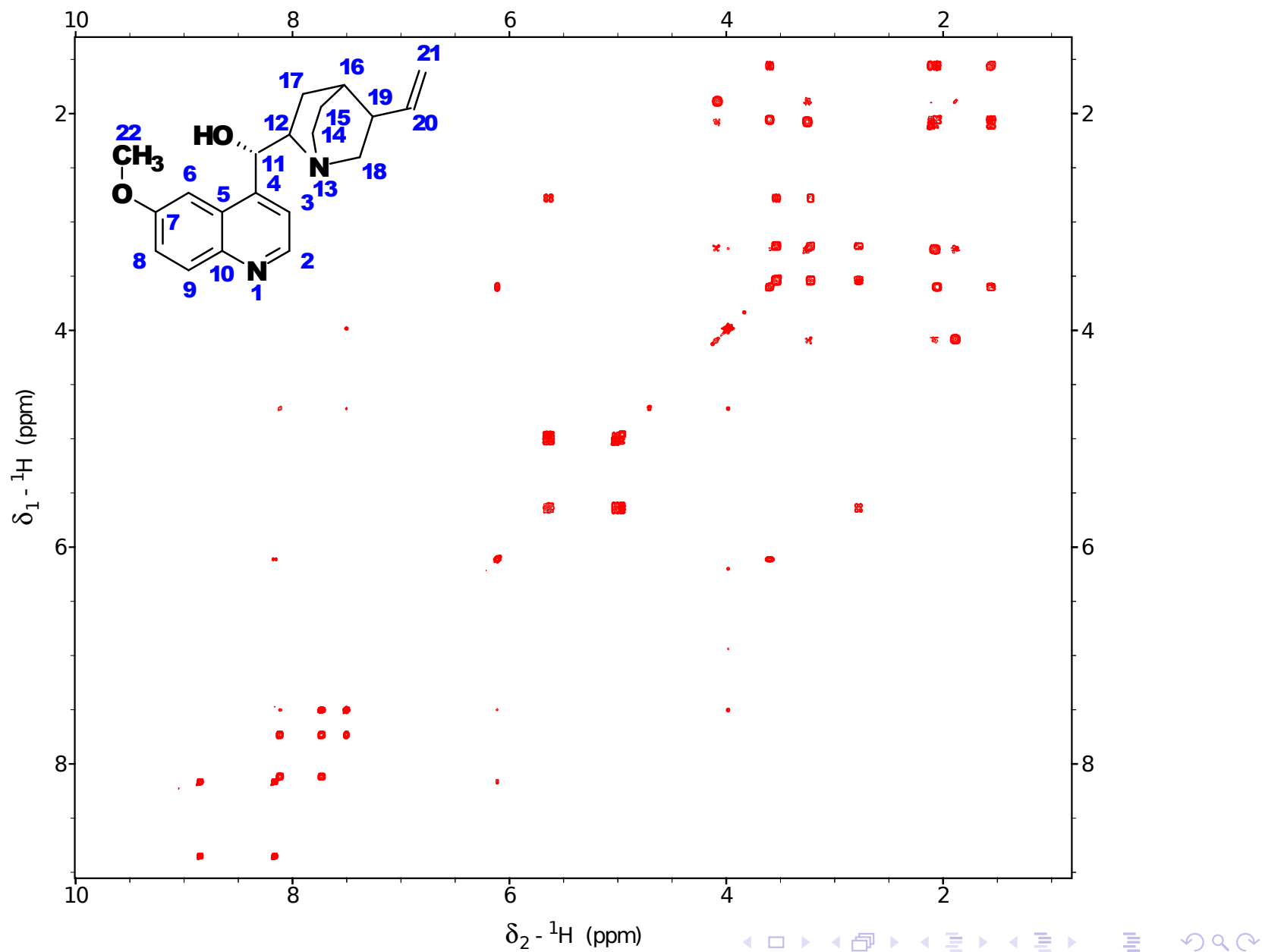


# 1H QUININE

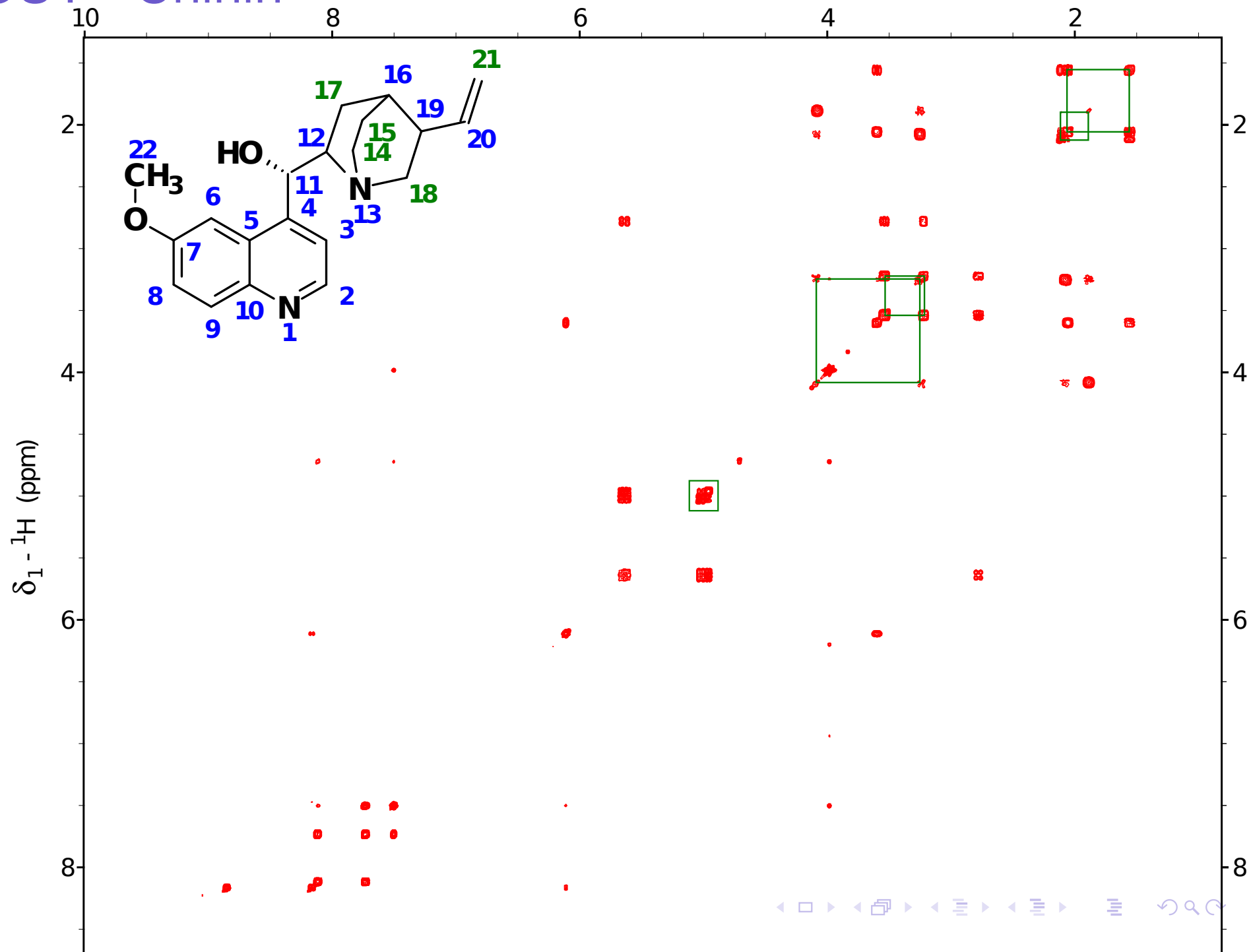




# COSY - Chinin



# COSY - Chinin



# Next topic

$^1\text{H}$ - $^1\text{H}$  through space correlations (NOESY, ROESY)