

## Supporting Information

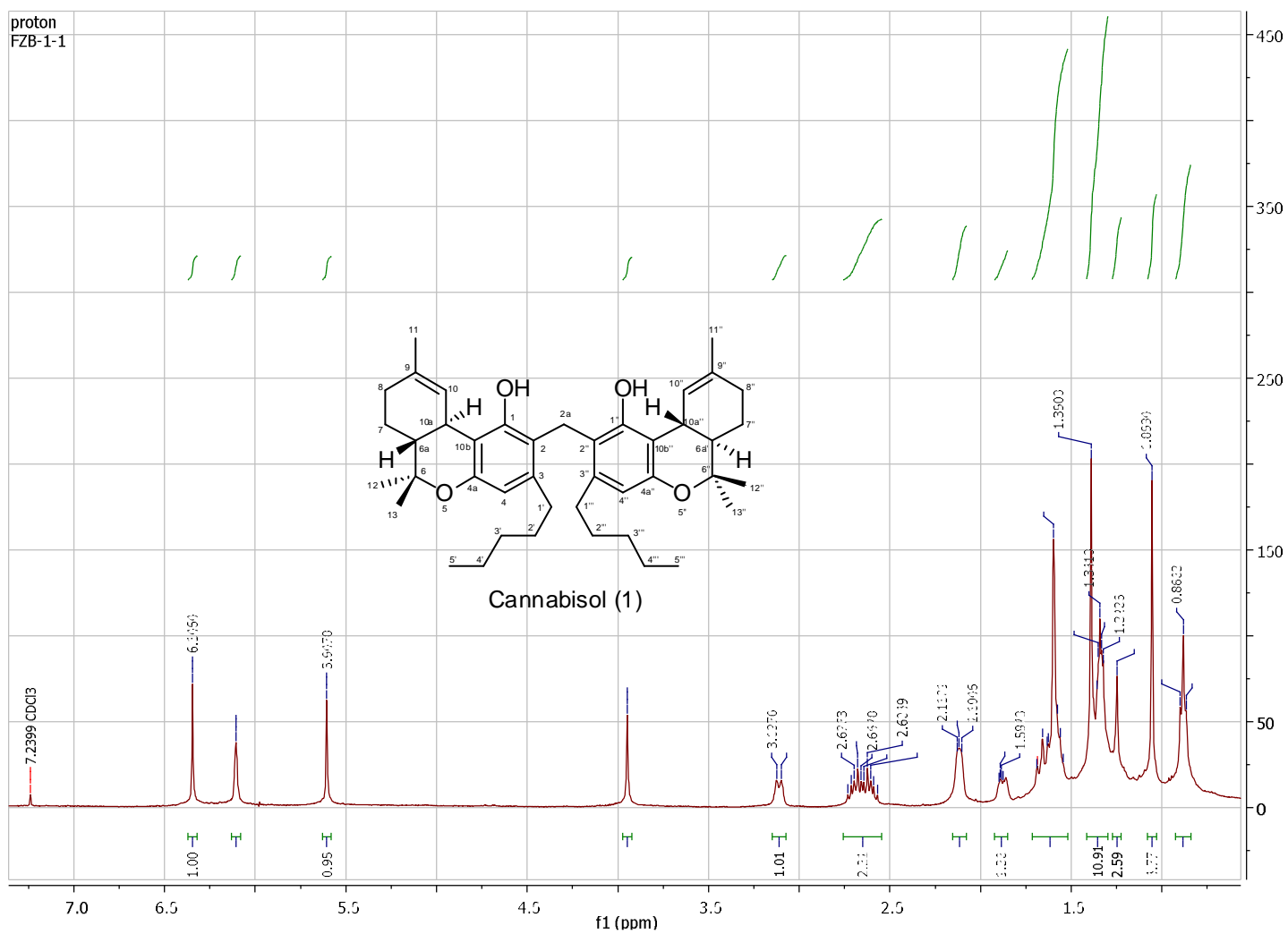
# Cannabisol, a Novel $\Delta^9$ -THC Dimer Possessing a Unique Methylene Bridge, Isolated from *Cannabis sativa*

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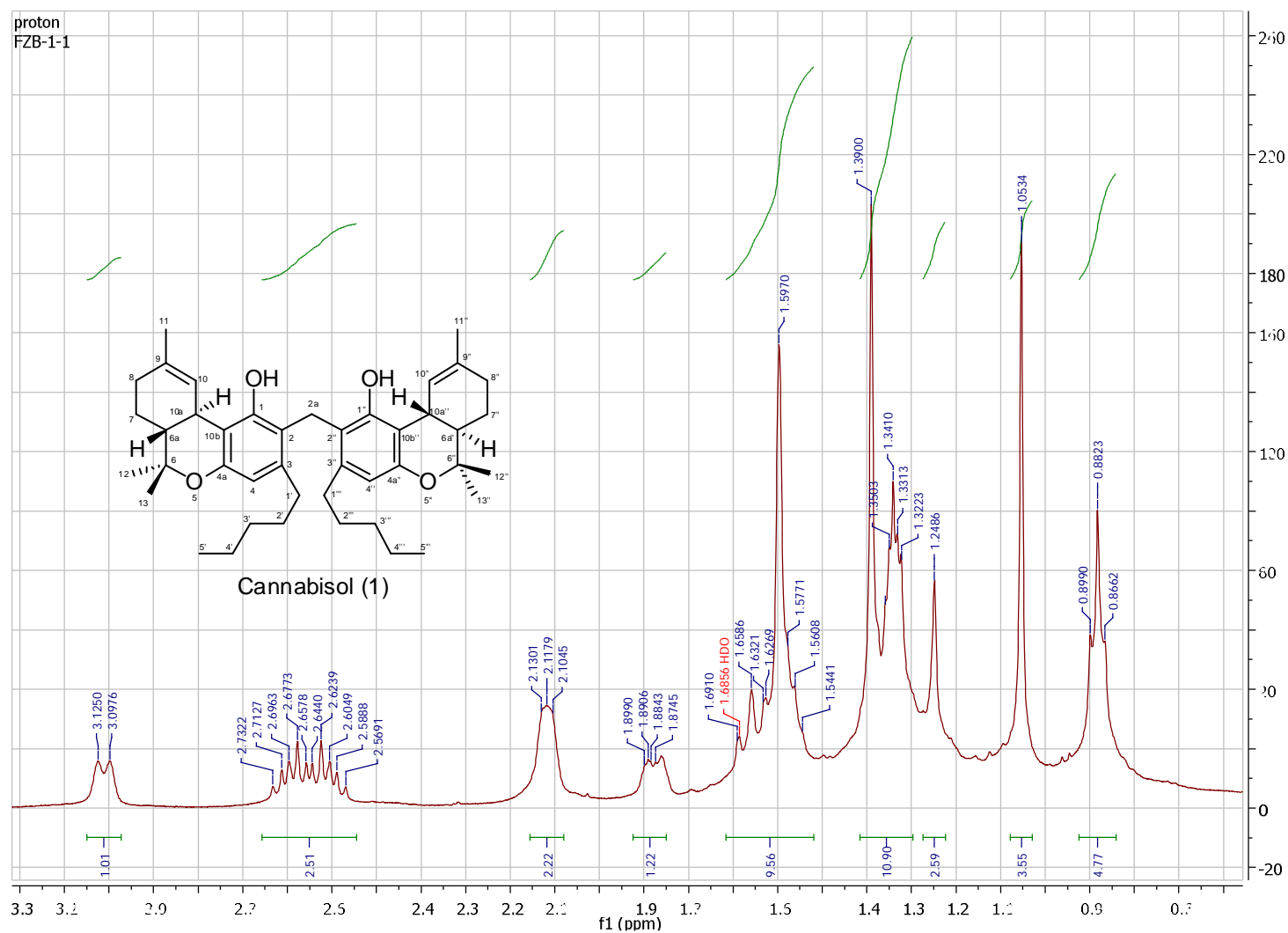
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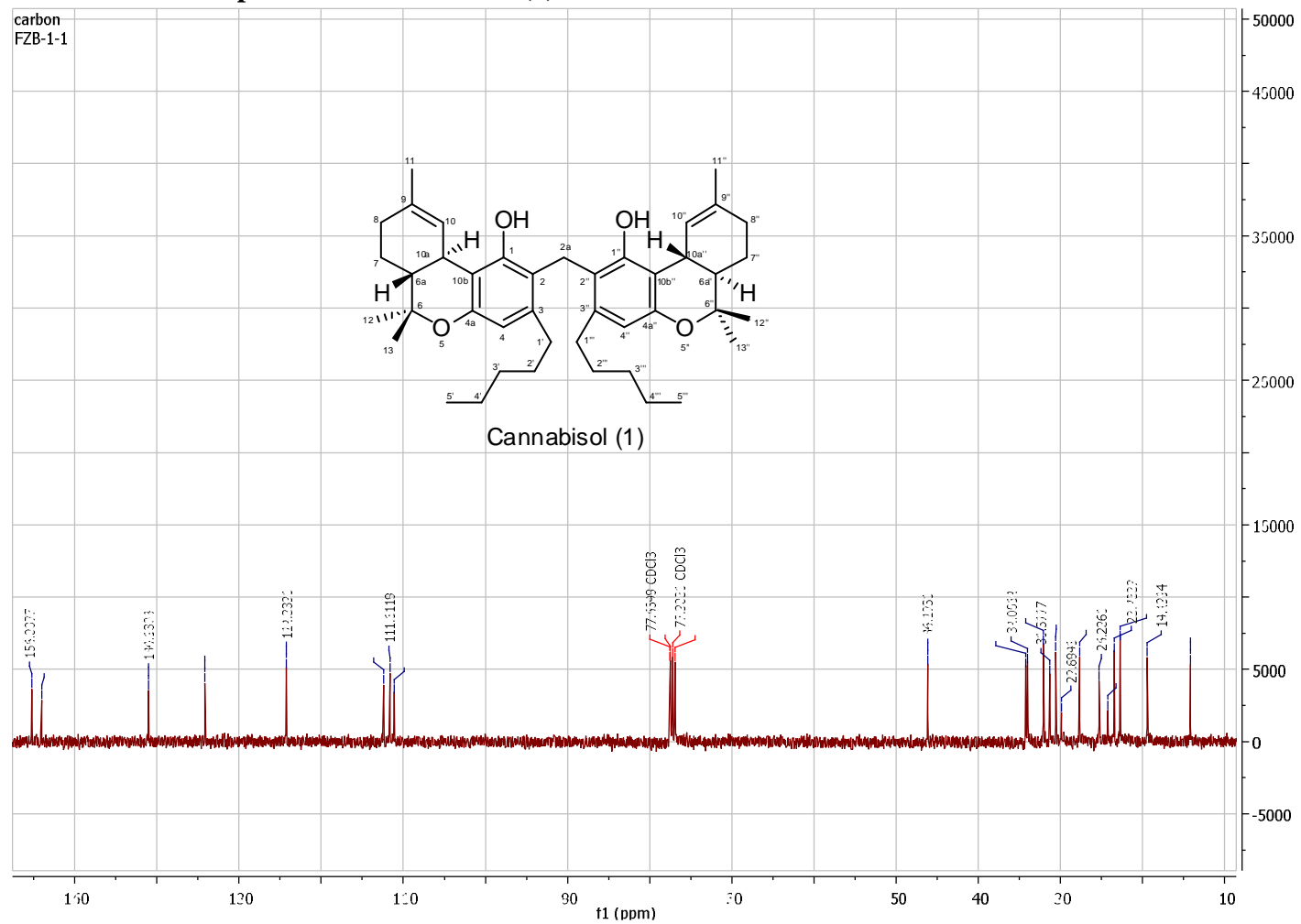
# S1. <sup>1</sup>H NMR spectrum of cannabisol (1).



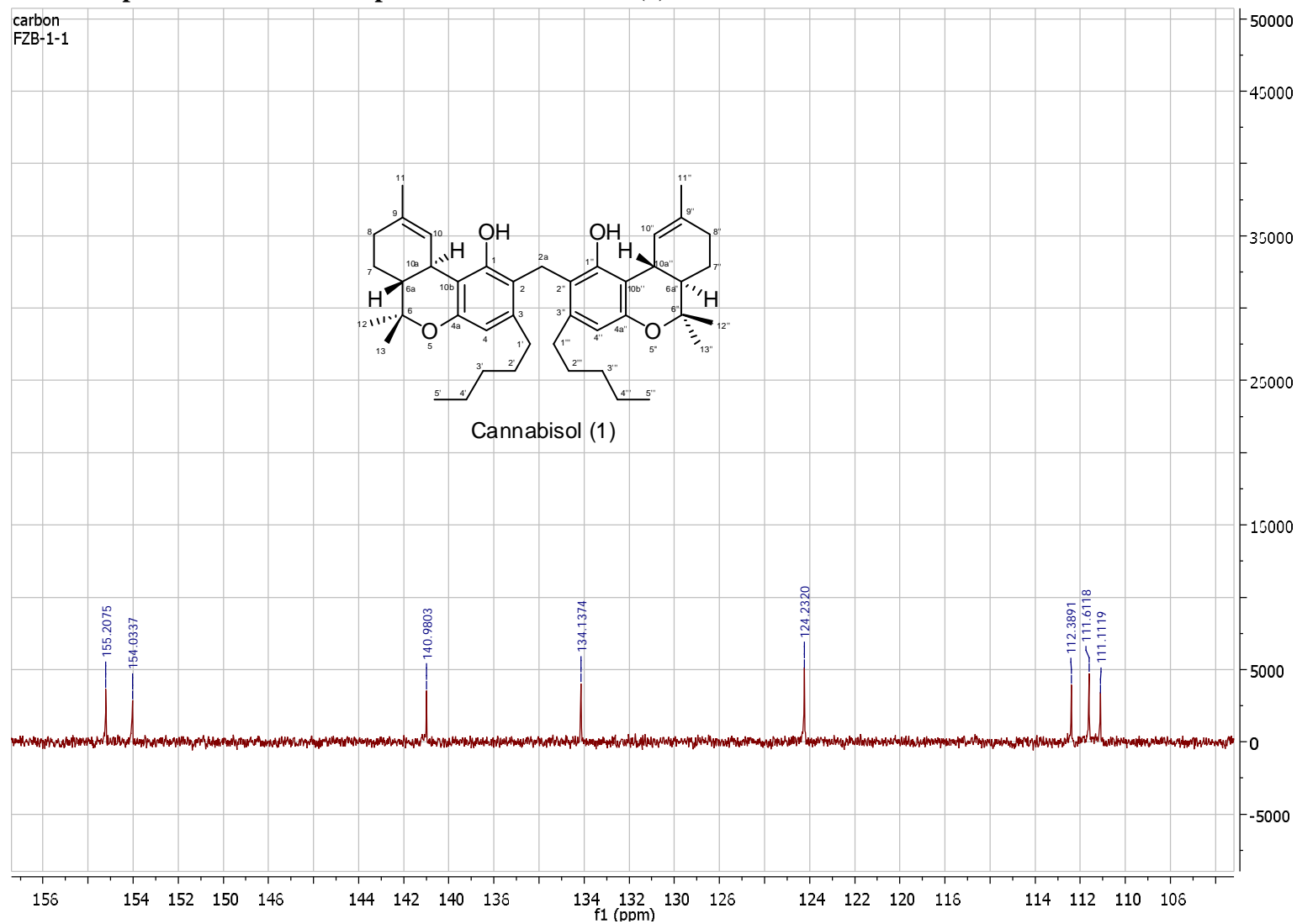
### S1a. Expansion of $^1\text{H}$ NMR spectrum of cannabisol (1).



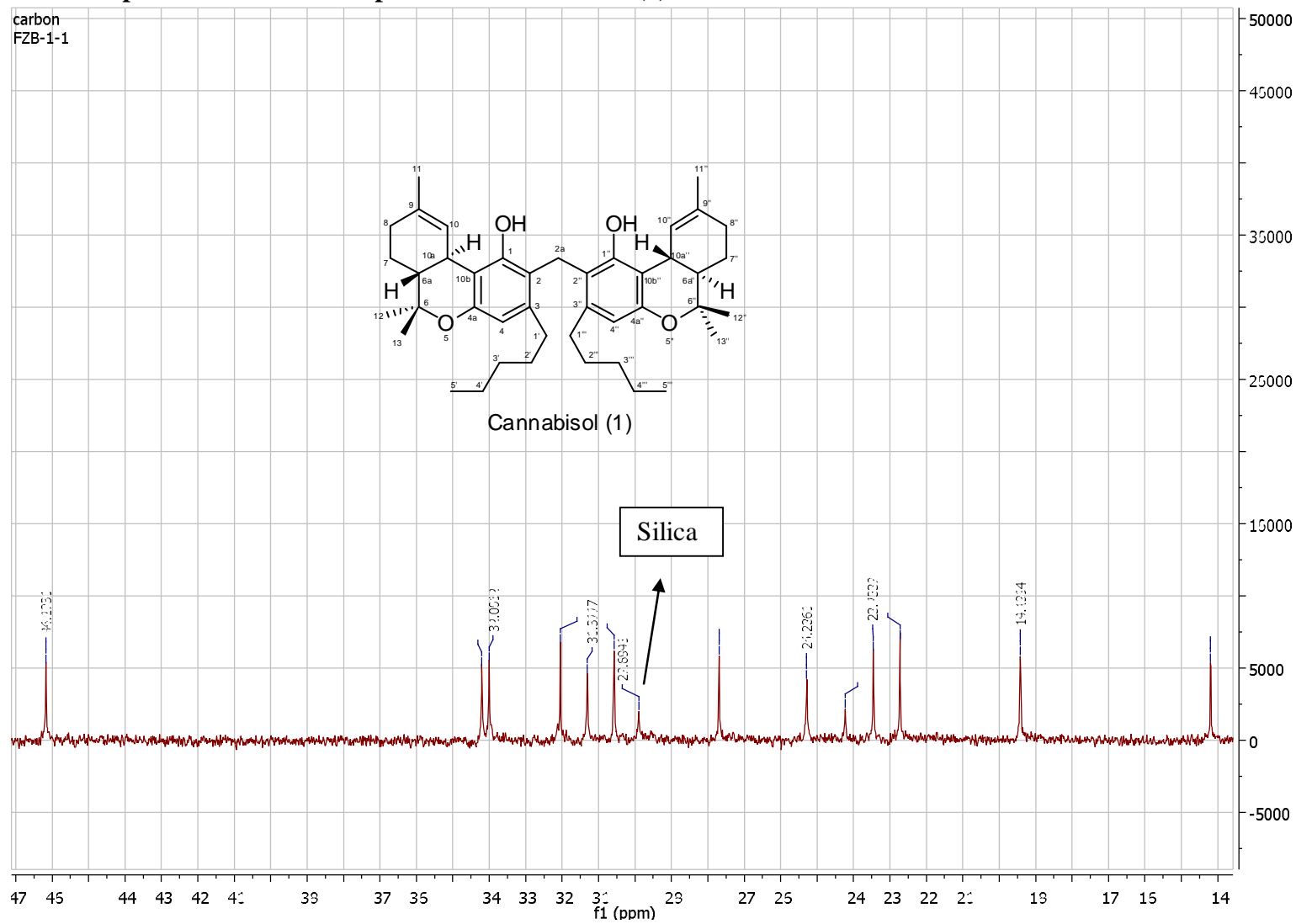
## S2. <sup>13</sup>C NMR spectrum of cannabisol (1).



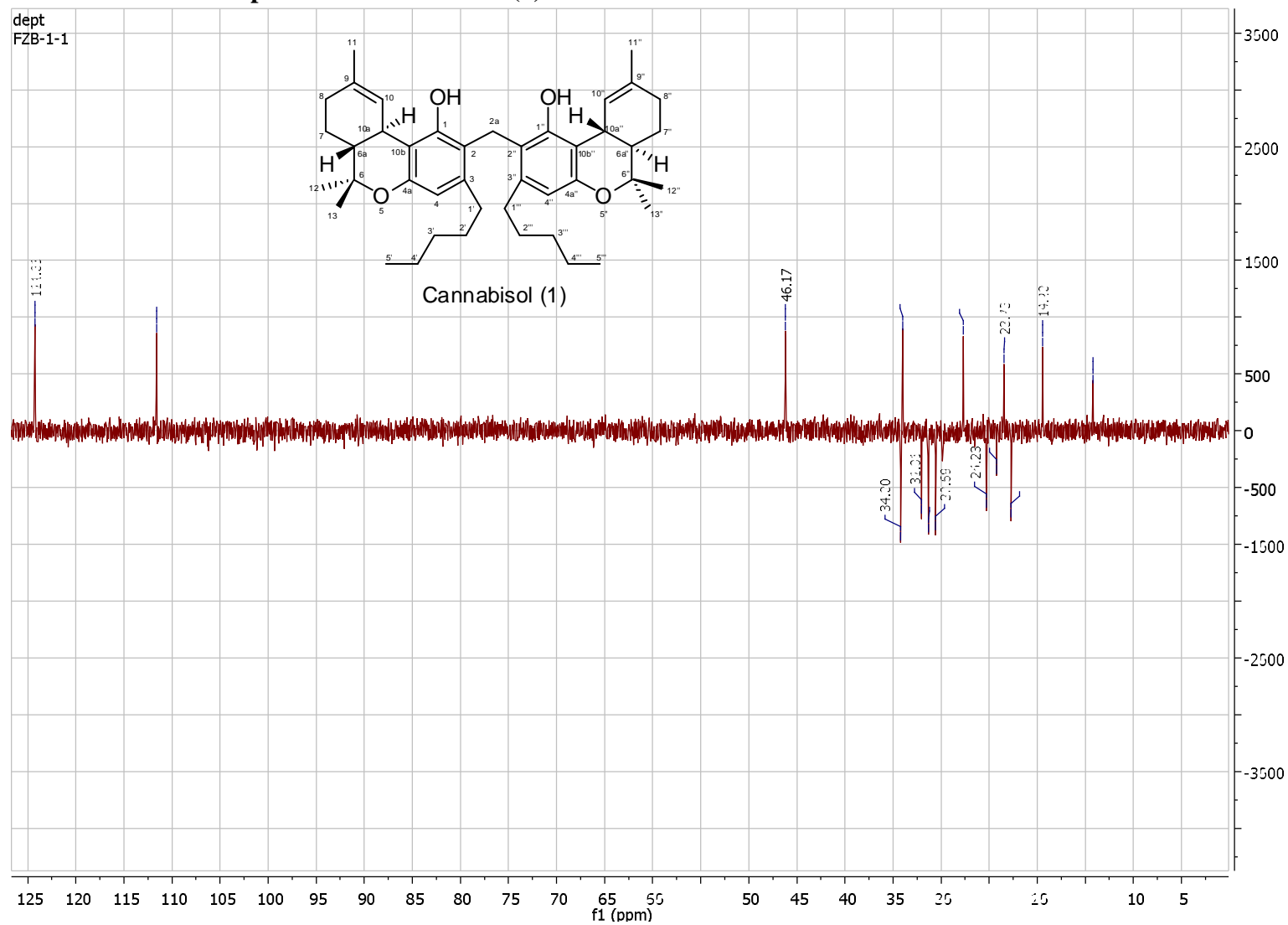
## S2a. Expansion of $^{13}\text{C}$ NMR spectrum of cannabisol (1).



## S2b. Expansion of $^{13}\text{C}$ NMR spectrum of cannabisol (1).

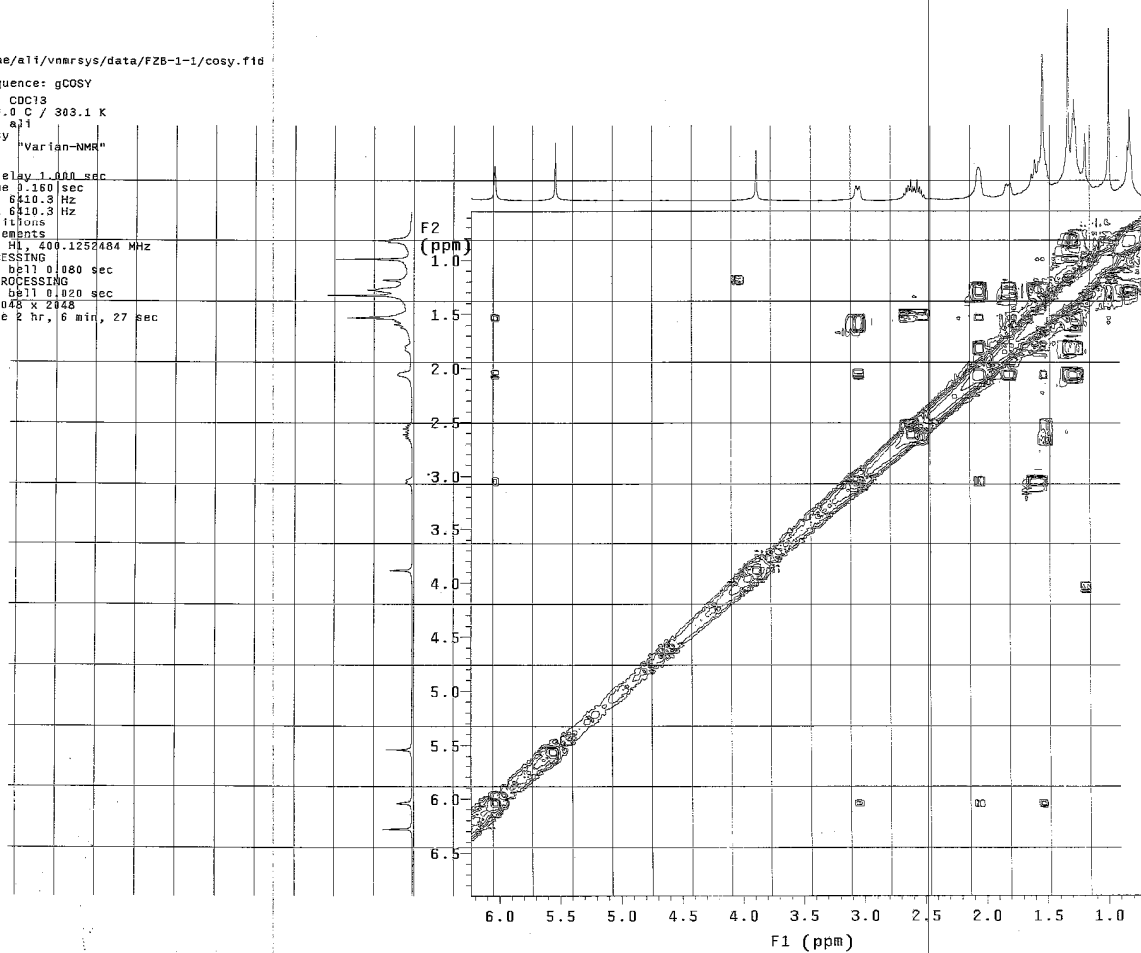


### S3. DEPT NMR spectrum of cannabisol (1).



#### S4. COSY spectrum of cannabisol (1).

FZB-1-1  
File: home/alif/vnmrsys/data/FZB-1-1/cosy.fid  
Pulse Sequence: gCOSY  
Solvent: CDCl3  
Temp. 30.0 C / 303.1 K  
Operator: aj1  
File: cosy  
INOVA-600 "Varian-NMR"  
Relax. delay 1.000 sec  
Acq. time 0.160 sec  
Width 6410.3 Hz  
2D Width 6410.3 Hz  
50 repetitions  
128 increments  
OBSERVE H1, 400.1252484 MHz  
DATA PROCESSING  
Sq. sine bell 0.080 sec  
F1 DATA PROCESSING  
Sq. sine bell 0.020 sec  
FT size 2048 X 2048  
Total time 2 hr, 6 min, 27 sec



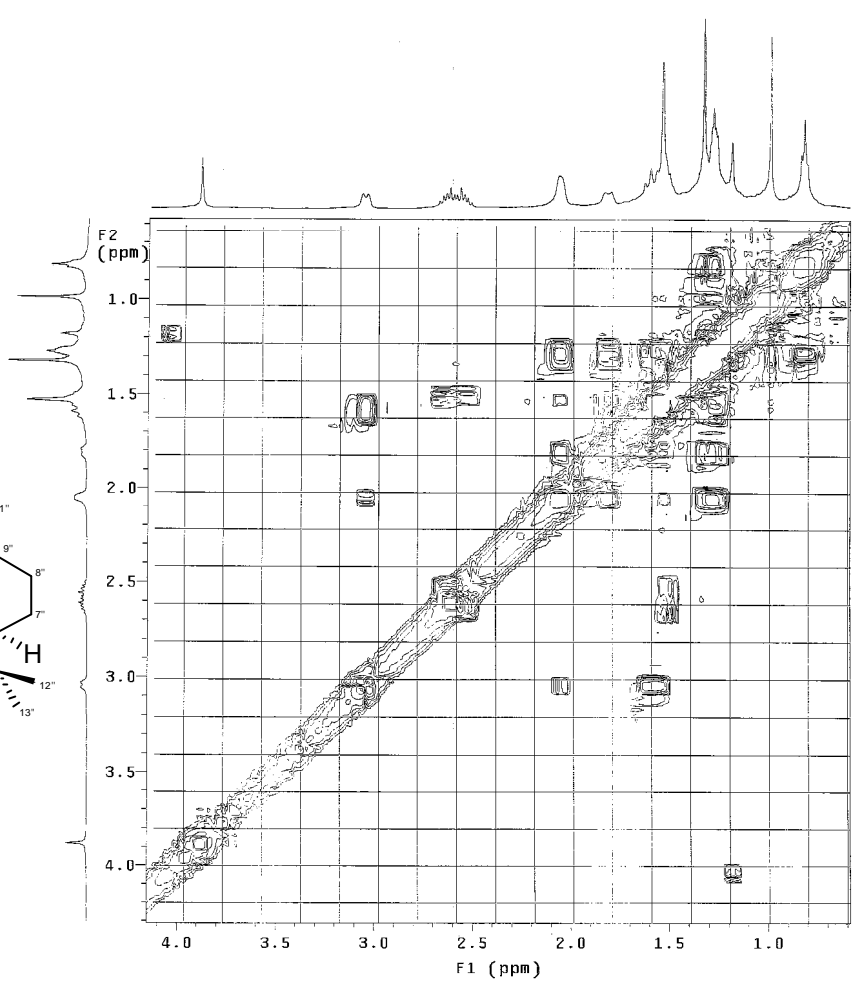
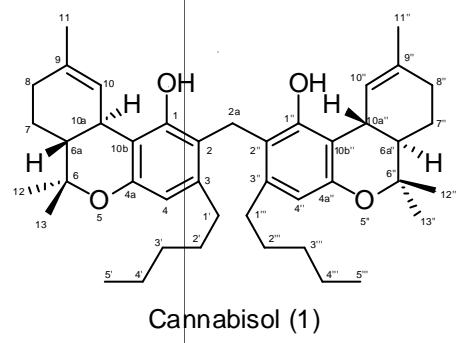


S4a. Expansion of COSY spectrum of cannabisol (1).

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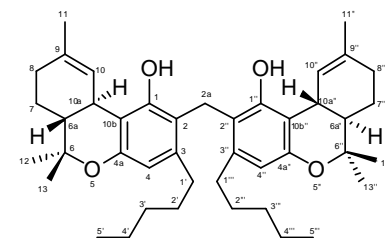
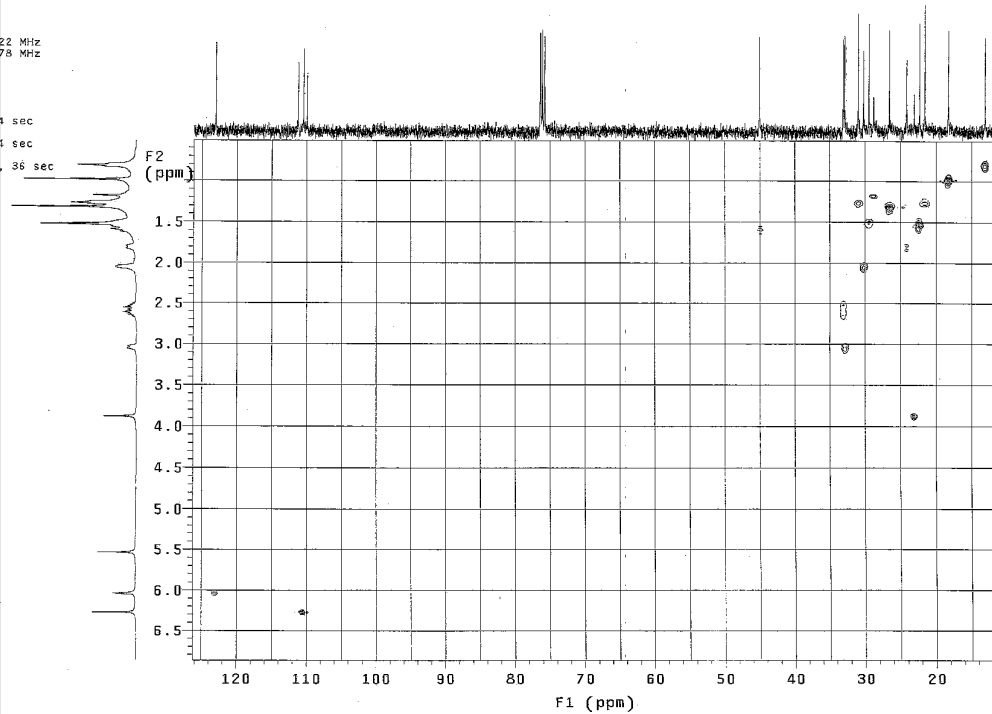
FZB-1-1
File: home/ali/vnmrsys/data/FZB-1-1/cosy.fid
Pulse Sequence: gCOSY
Solvent: CDC13
Temp: 30.0 C / 303.1 K
Operator: ali
File: cosy
INOVA-500 "Varian-NMR"

Relax. delay 1.000 sec
Acq. time 0.160 sec
Width 6410.3 Hz
2D Width 6410.3 Hz
50 repetitions
128 increments
OBSERVE H1, 400.1252484 MHz
DATA PROCESSING
Sq. sine bell 0.080 sec
F1 DATA PROCESSING
Sq. sine bell 0.020 sec
F1 size 2048 x 2048
Total time 2 hr, 6 min, 27 sec
    
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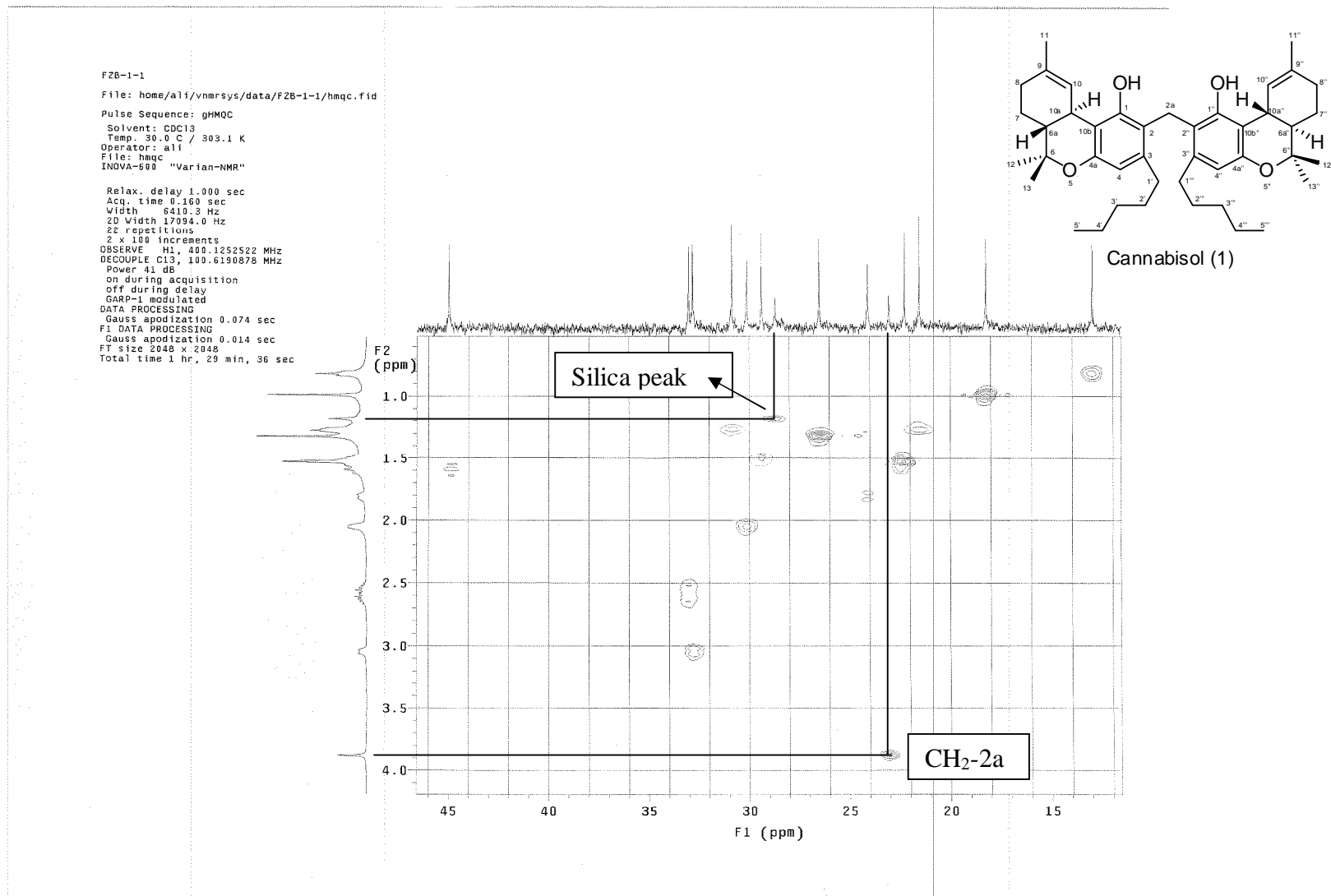
S5. HMQC spectrum of cannabisol (1).

F2B-1-1  
 File: home/ali/vnarsys/data/F2B-1-1/hmqc.fid  
 Pulse Sequence: gHMQC  
 Solvent: CDCl3  
 Temp: 30.0 C / 303.1 K  
 Operator: ali  
 File: hmqc  
 INOVA-600 "Varian-NMR"  
 Relax. delay 1.000 sec  
 Acq. time 0.160 sec  
 Width 6410.3 Hz  
 ZD Width 17084.0 Hz  
 Z2 repetitions  
 2 x 100 increments  
 OBSERVE F1 400.125252 MHz  
 DECOUPLE C13 100.6189278 MHz  
 Power 41 dB  
 on during acquisition  
 off during delay  
 GARP-1 modulated  
 DATA PROCESSING  
 Gauss apodization 0.074 sec  
 F1 DATA PROCESSING  
 Gauss apodization 0.015 sec  
 FT size 2048 x 2048  
 Total time 1 hr, 28 min, 36 sec

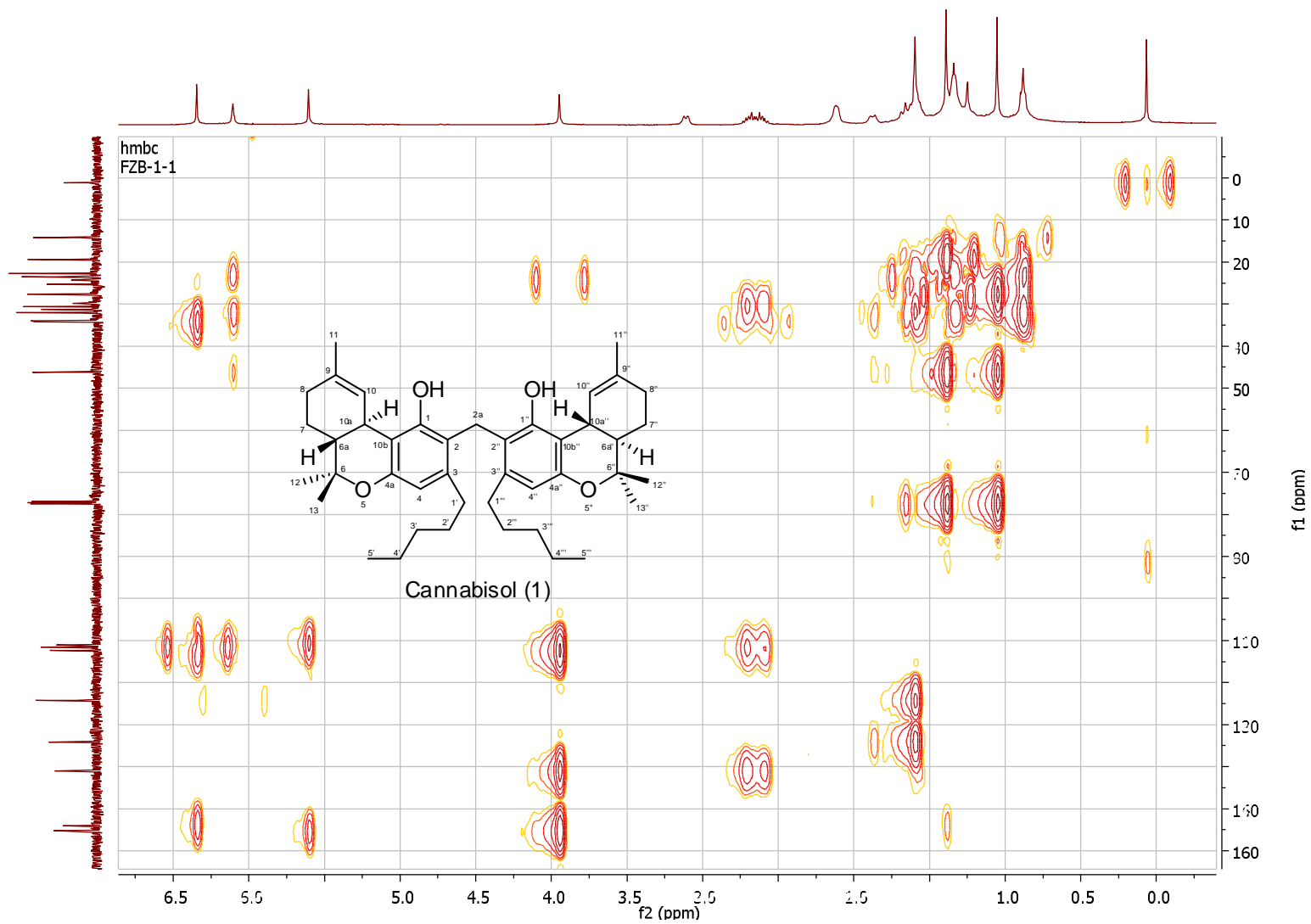


Cannabisol (1)

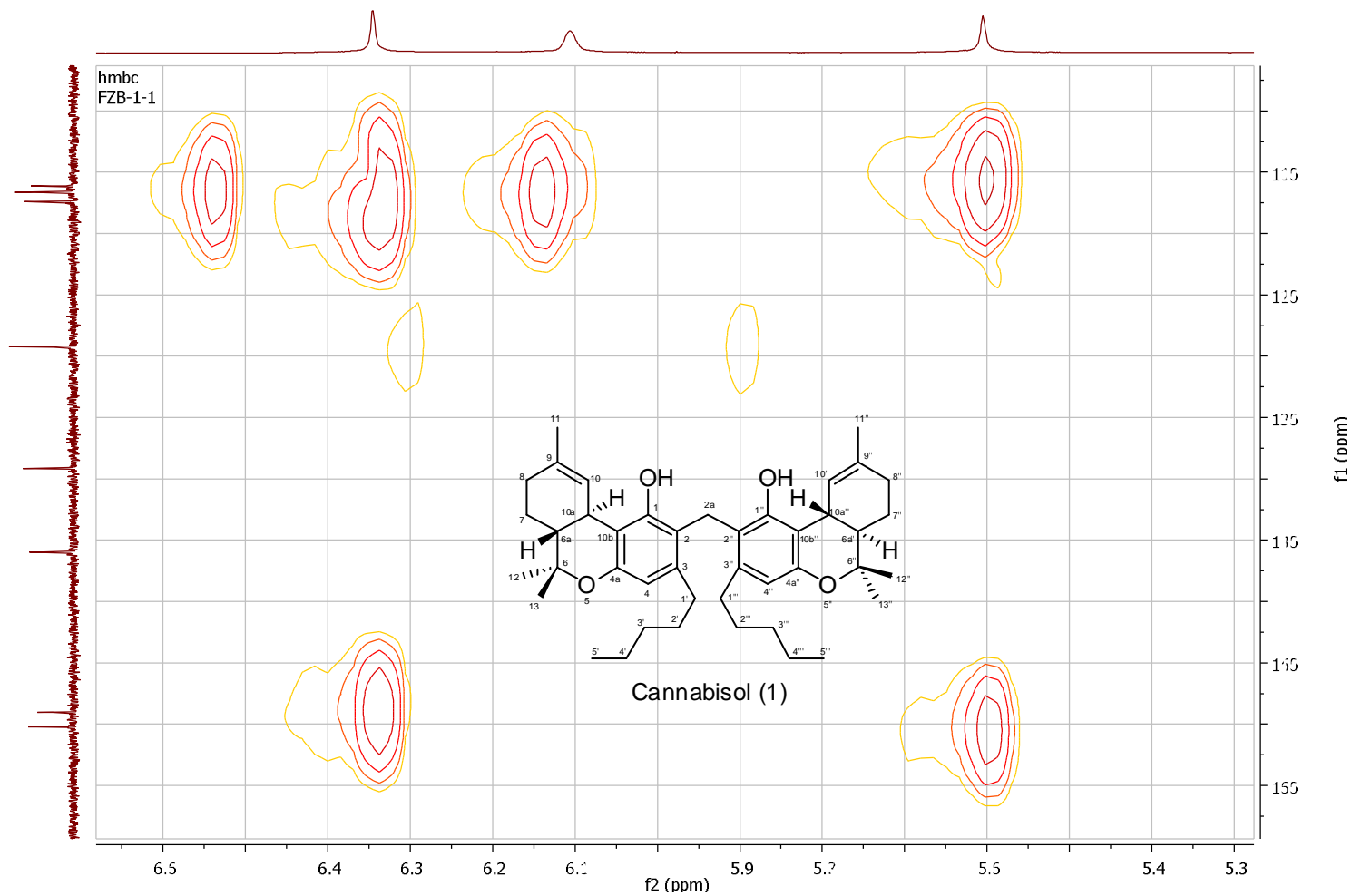
**S5a. Expansion of HMQC spectrum of cannabisol (1).**



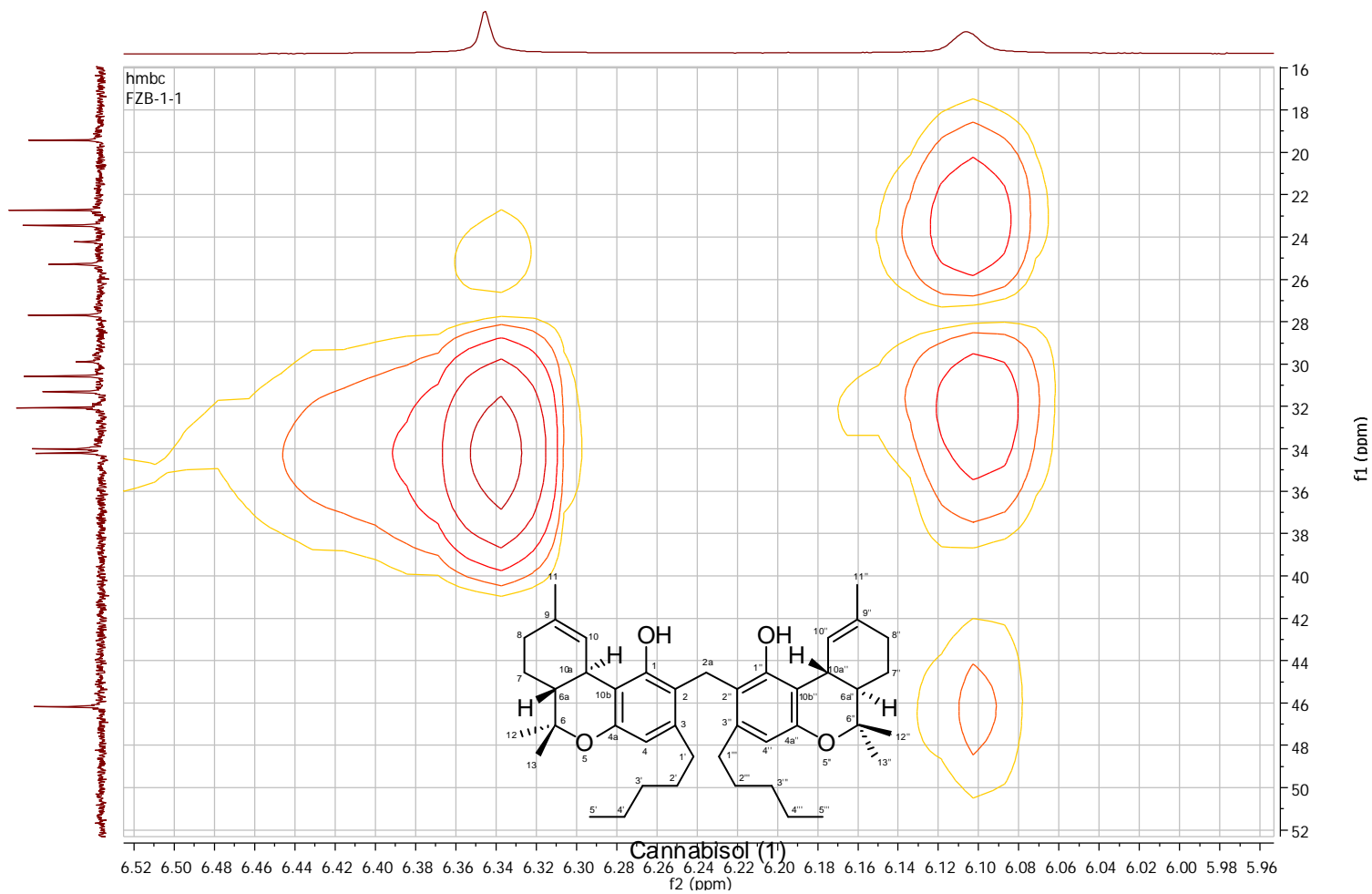
S6. HMBC spectrum of cannabisol (1).



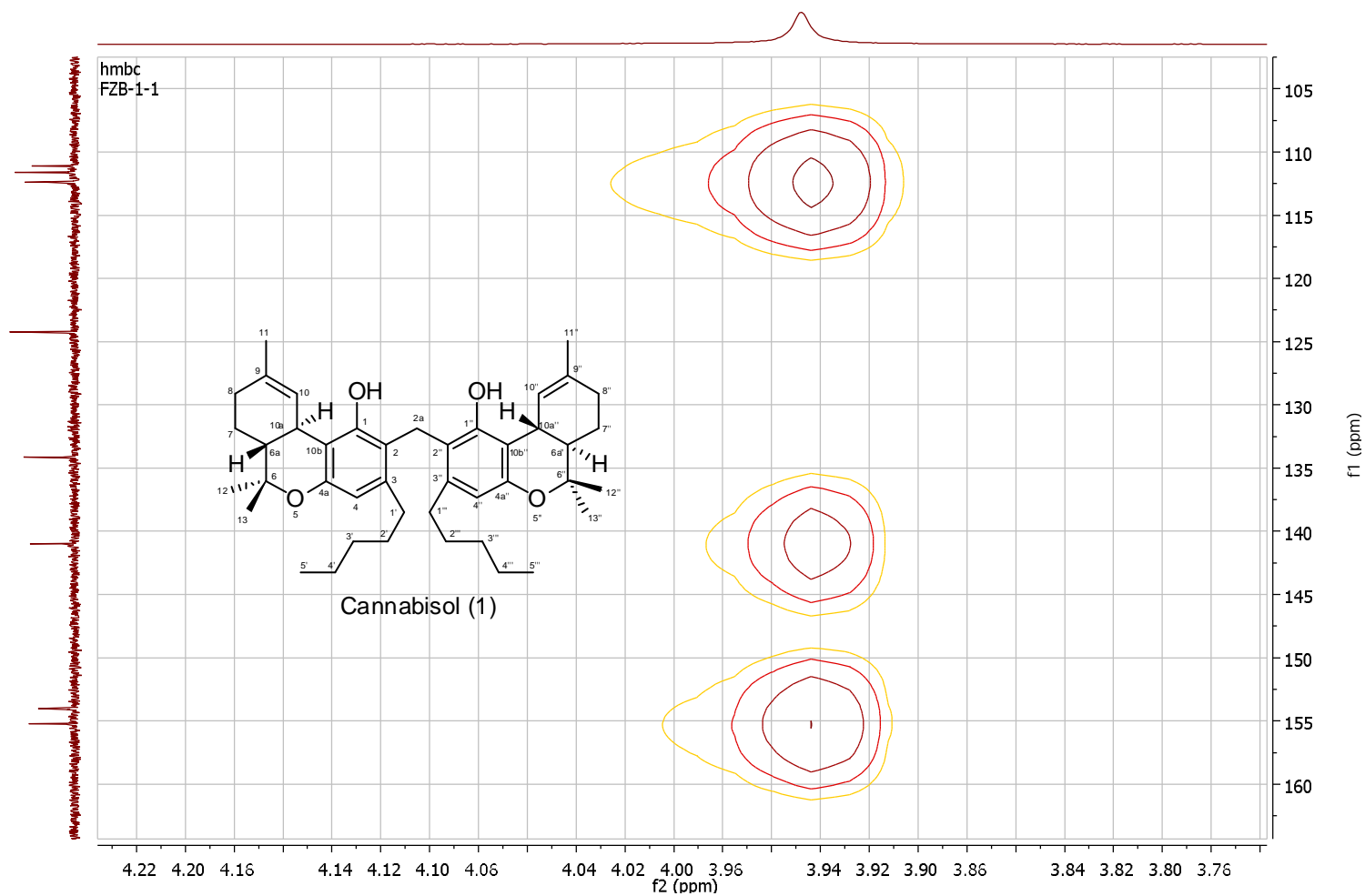
S6a. Expansion of HMBC spectrum of cannabisol (1).



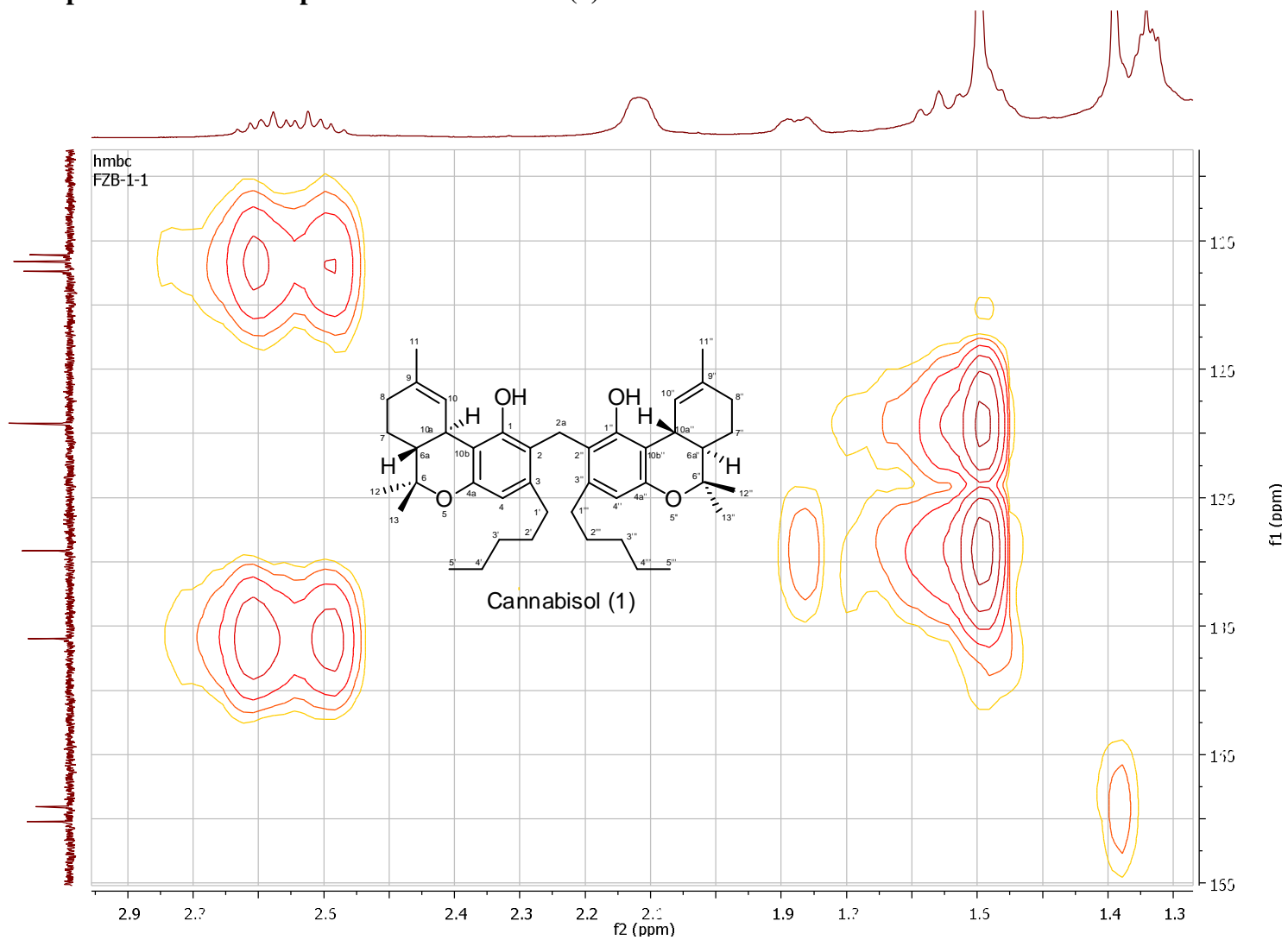
S6b. Expansion of HMBC spectrum of cannabisol (1).



S6c. Expansion of HMBC spectrum of cannabisol (1).

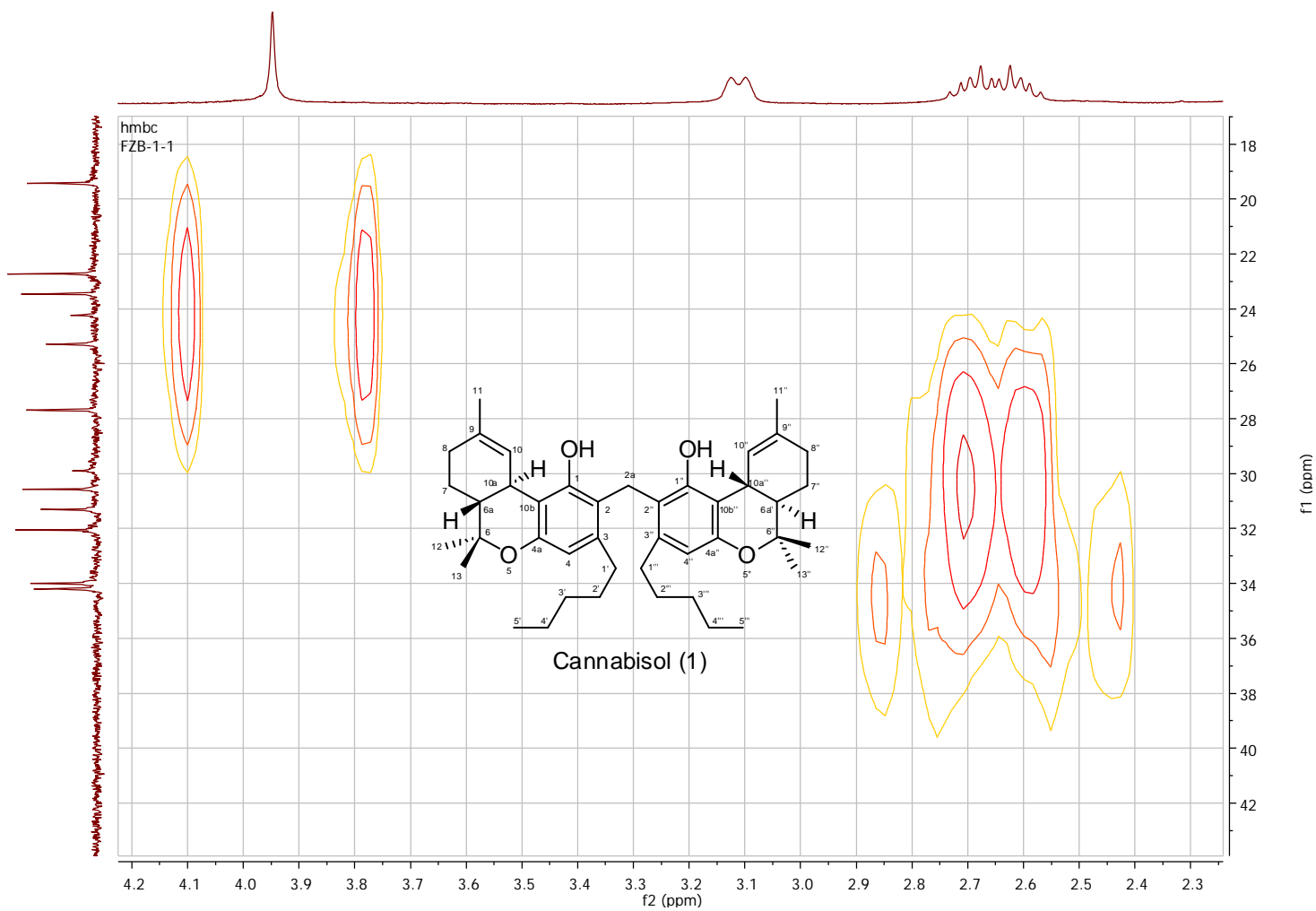


S6d. Expansion of HMBC spectrum of cannabisol (1).

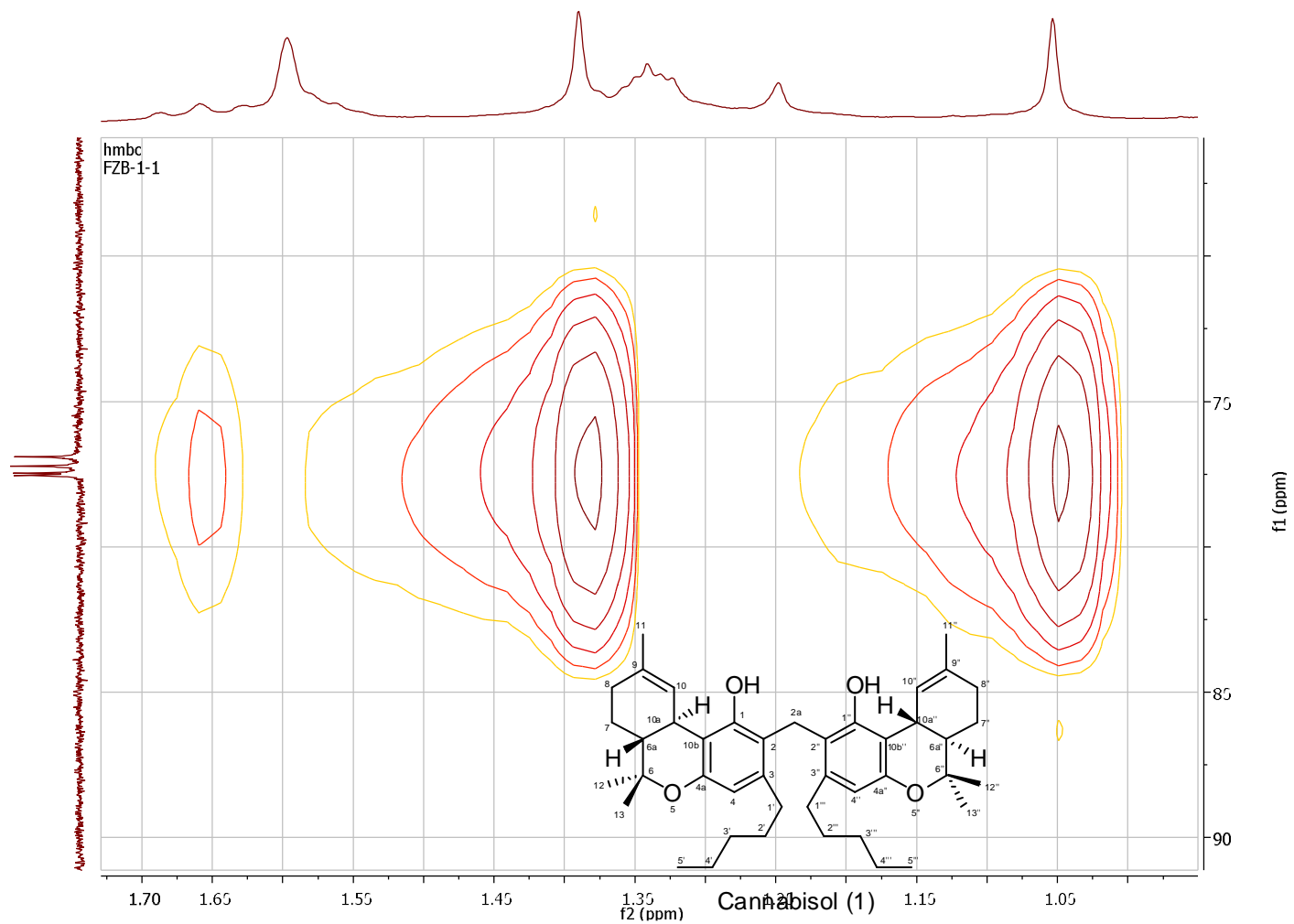




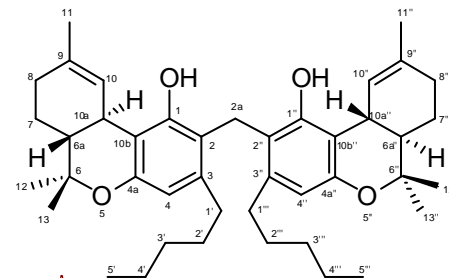
S6e. Expansion of HMBC spectrum of cannabisol (1).



S6f. Expansion of HMBC spectrum of cannabisol (1).



S6g. Expansion of HMBC spectrum of cannabisol (1).



Cannabisol (1)

