

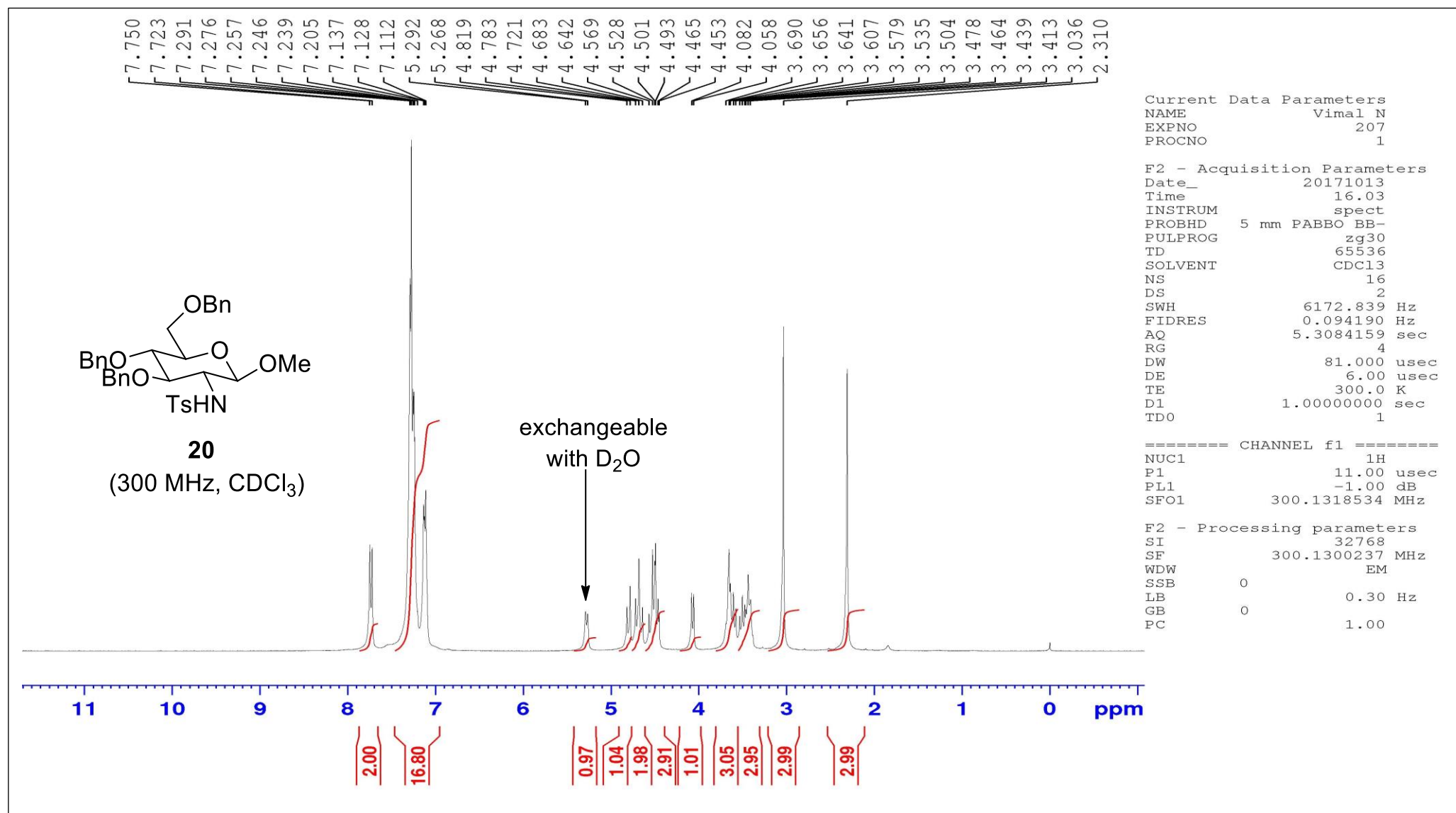
The ESI for *Org. Biomol. Chem.*, 2019, **17**, 5951–5961, originally published on 29th May 2019, was updated on 19th June 2019. The structure of compound **12** on pages 61–63 has been corrected.

**Ring Closing Metathetical (RCM) Approach to Divergent Synthesis of  
Conduramine B-2, *ent*-Conduramine F-2, Aminocyclopentitol and Trihydroxyazepane**

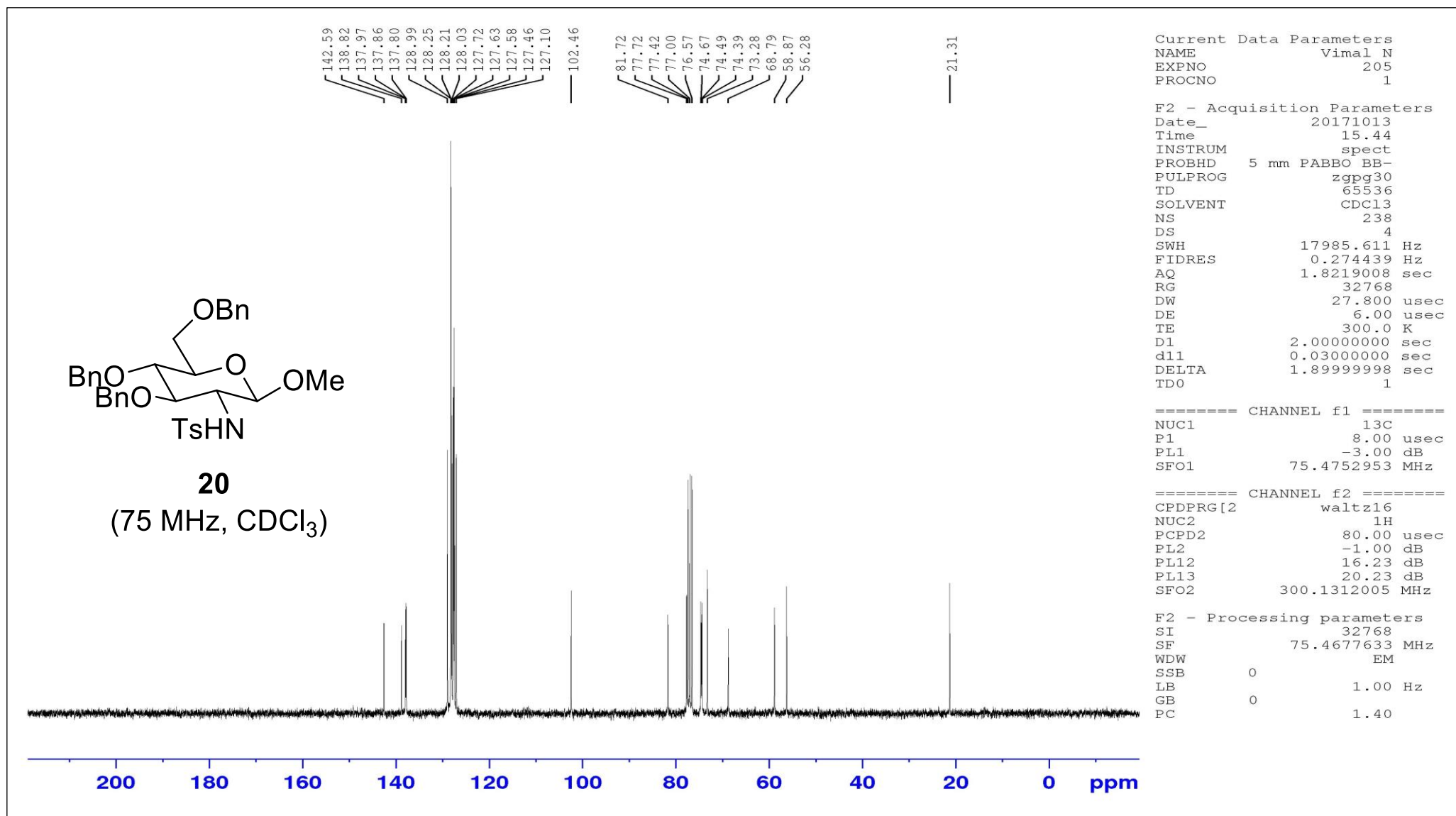
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India. ramesh@chemistry.iitd.ac.in

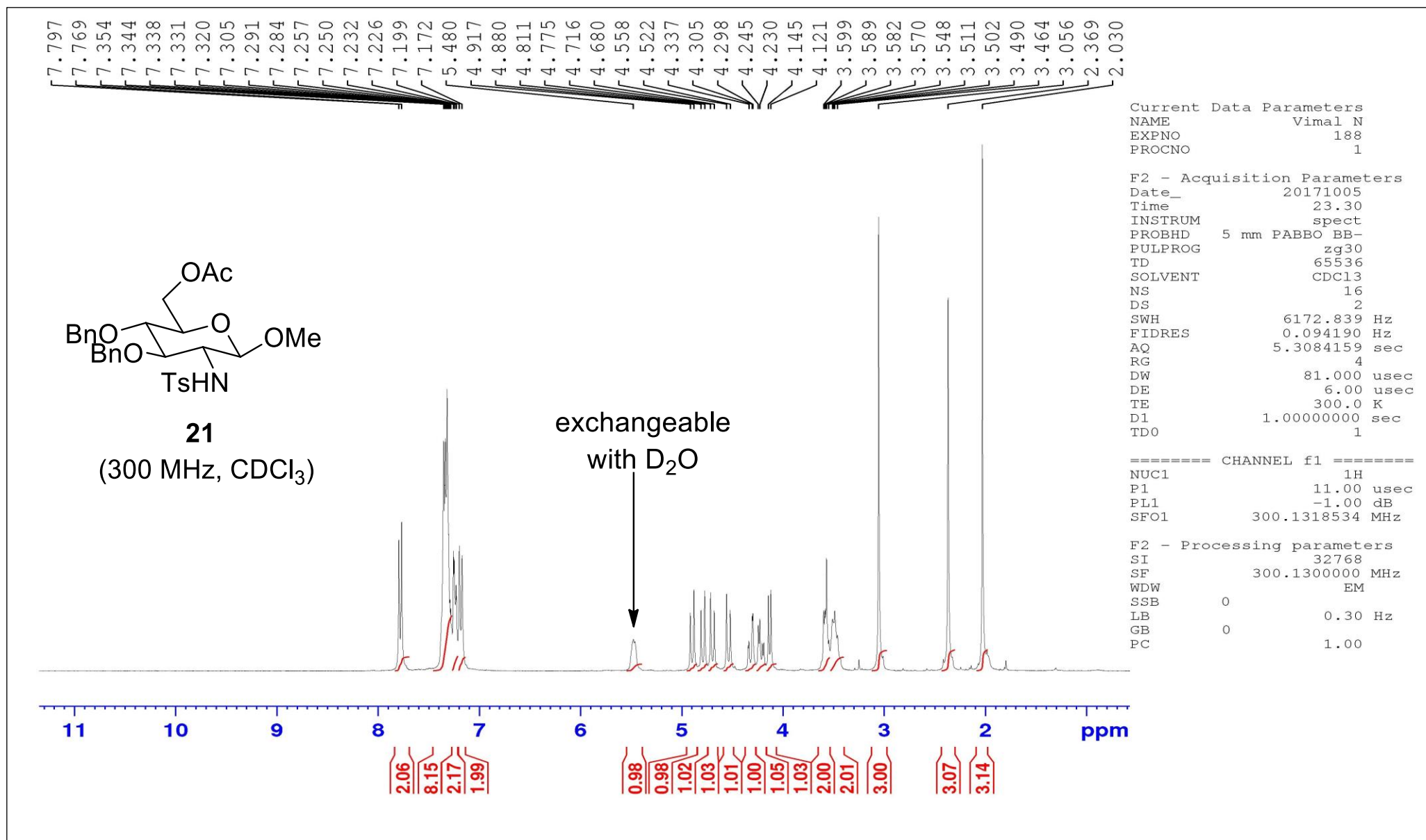
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**Figure 1.1:** <sup>1</sup>H-NMR spectrum of compound **20**.

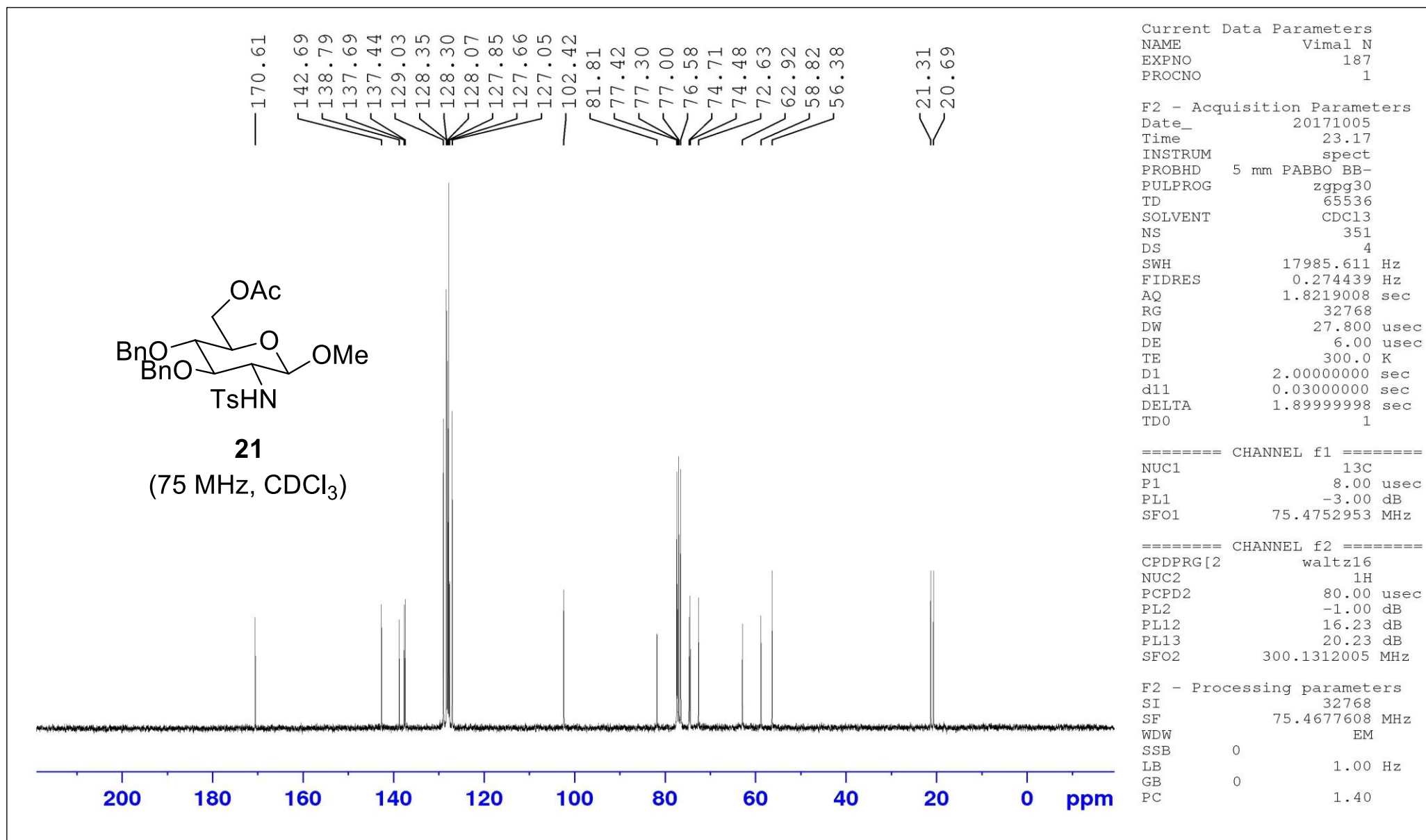


**Figure 1.2:** <sup>13</sup>C-NMR spectrum of compound **20**.



**Figure 2.1:** <sup>1</sup>H-NMR spectrum of compound **21**.





**Figure 2.2:** <sup>13</sup>C-NMR spectrum of compound **21**.

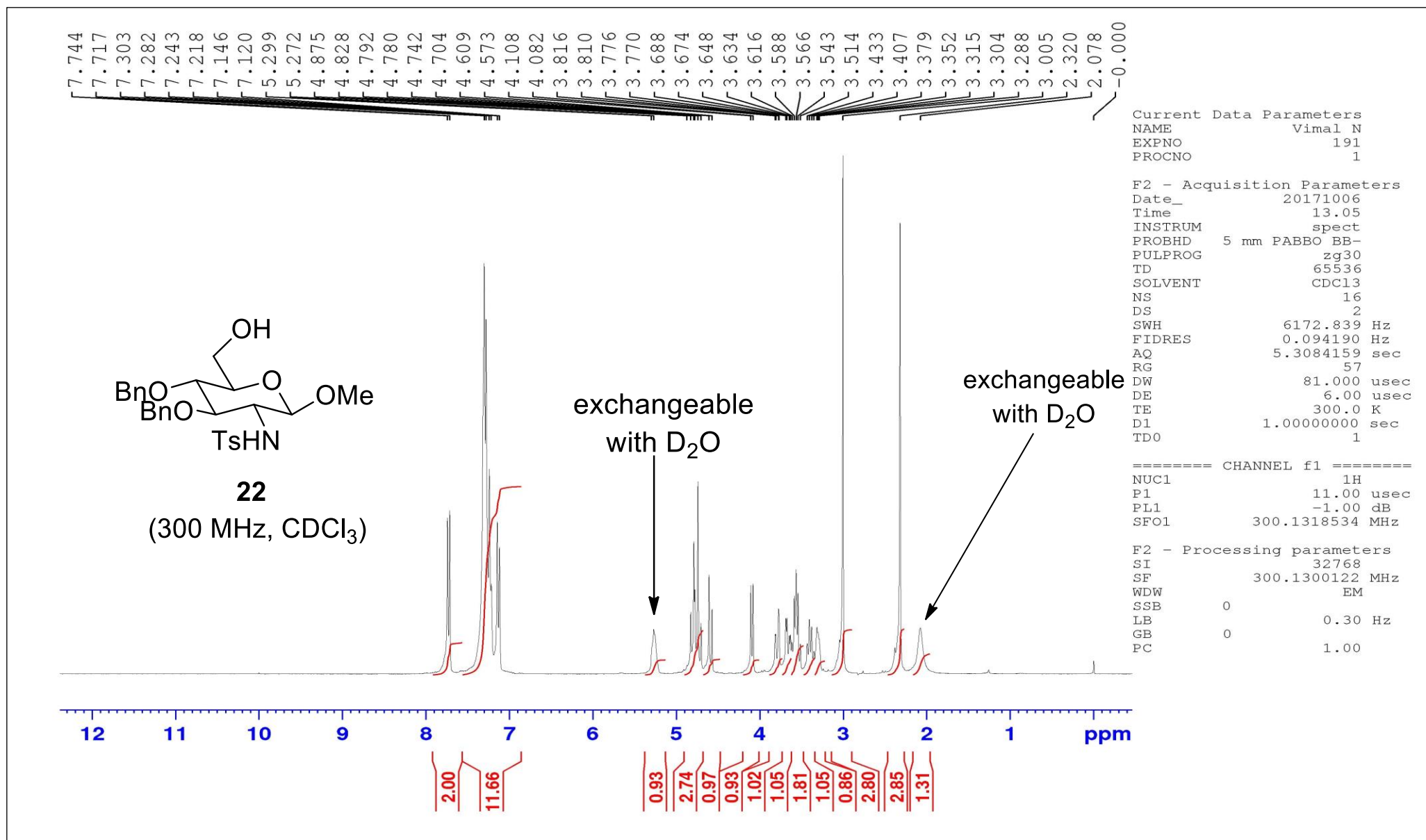


Figure 3.1: <sup>1</sup>H-NMR spectrum of compound **22**.

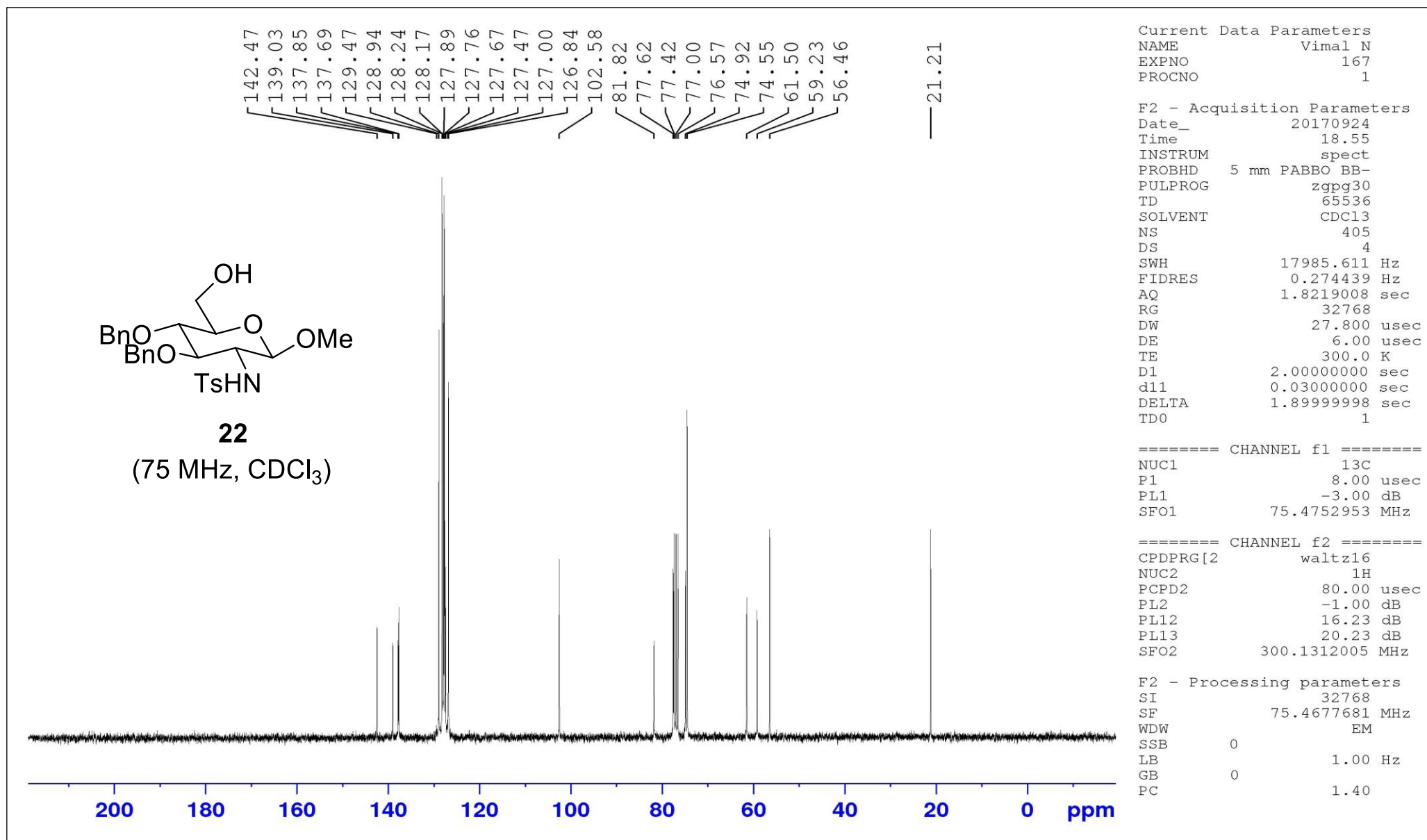


Figure 3.2: <sup>13</sup>C-NMR spectrum of compound **22**.

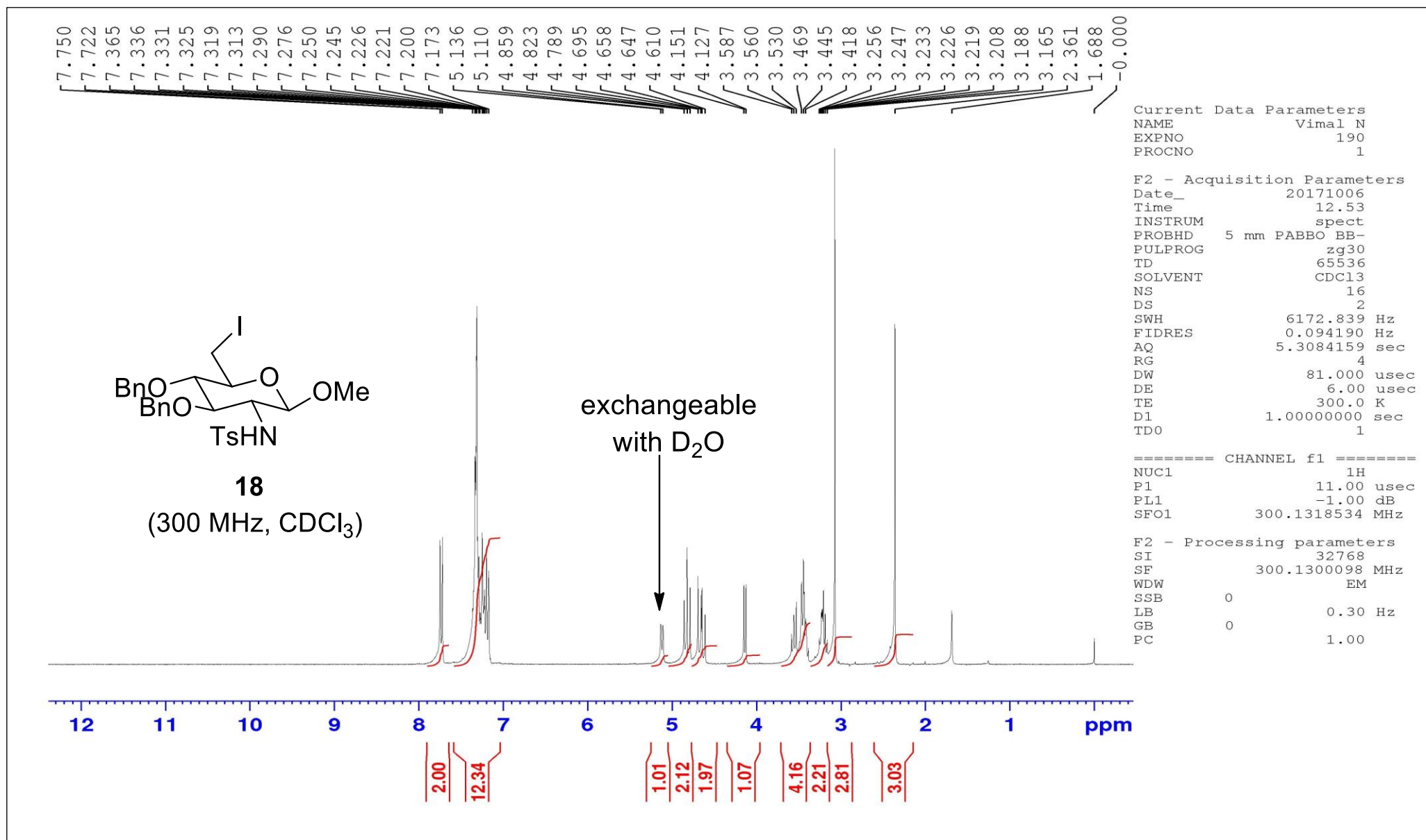
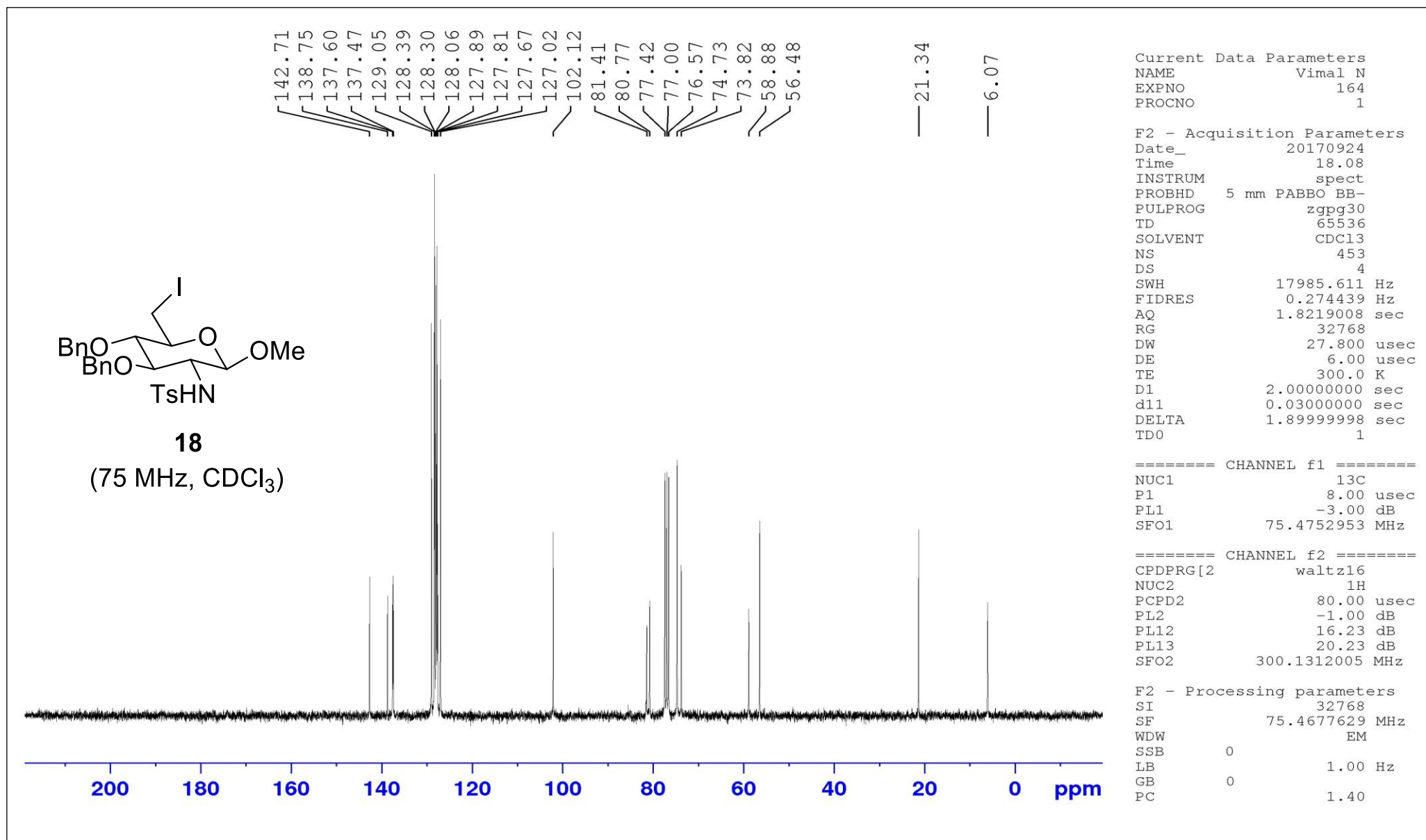
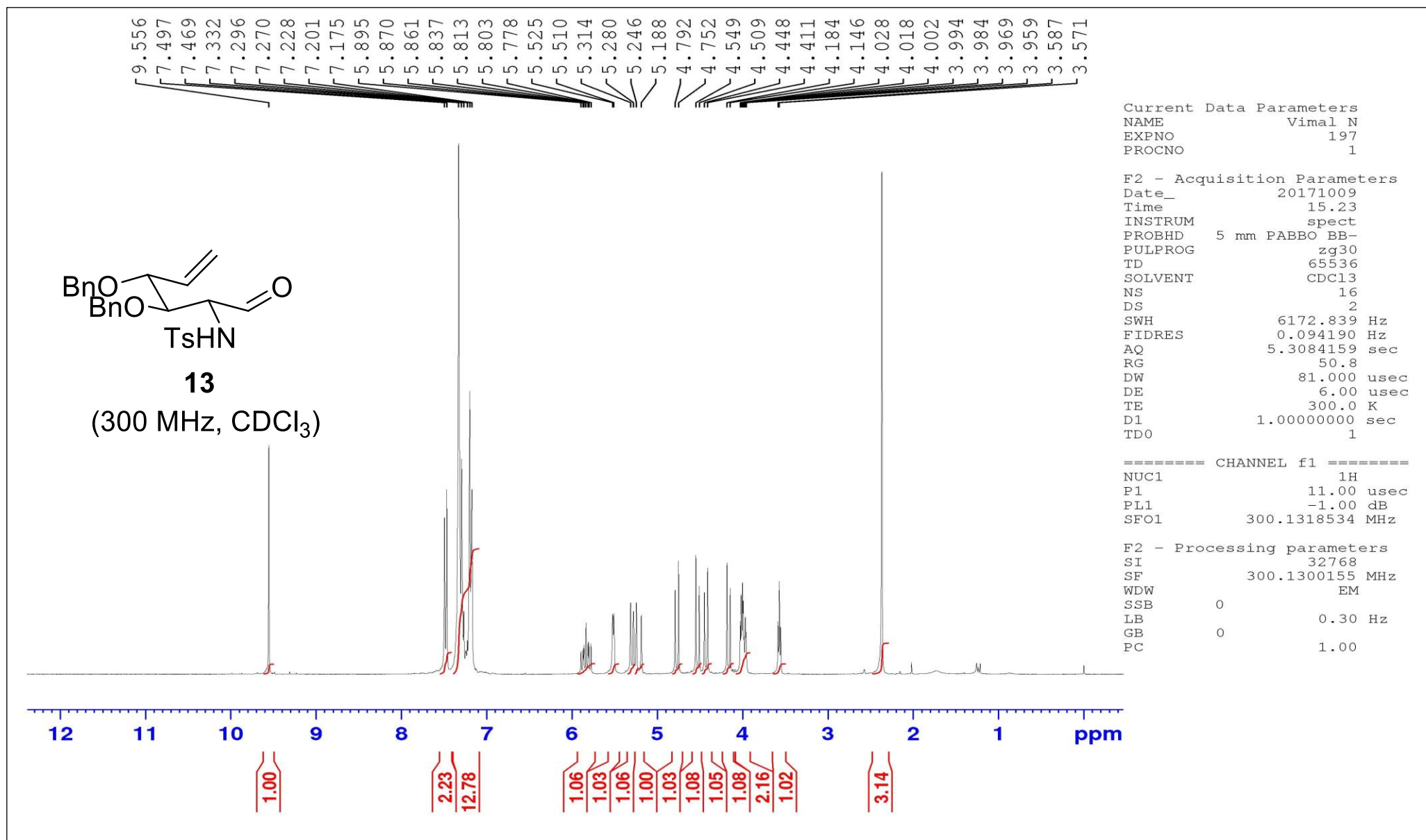


Figure 4.1: <sup>1</sup>H-NMR spectrum of compound **18**.

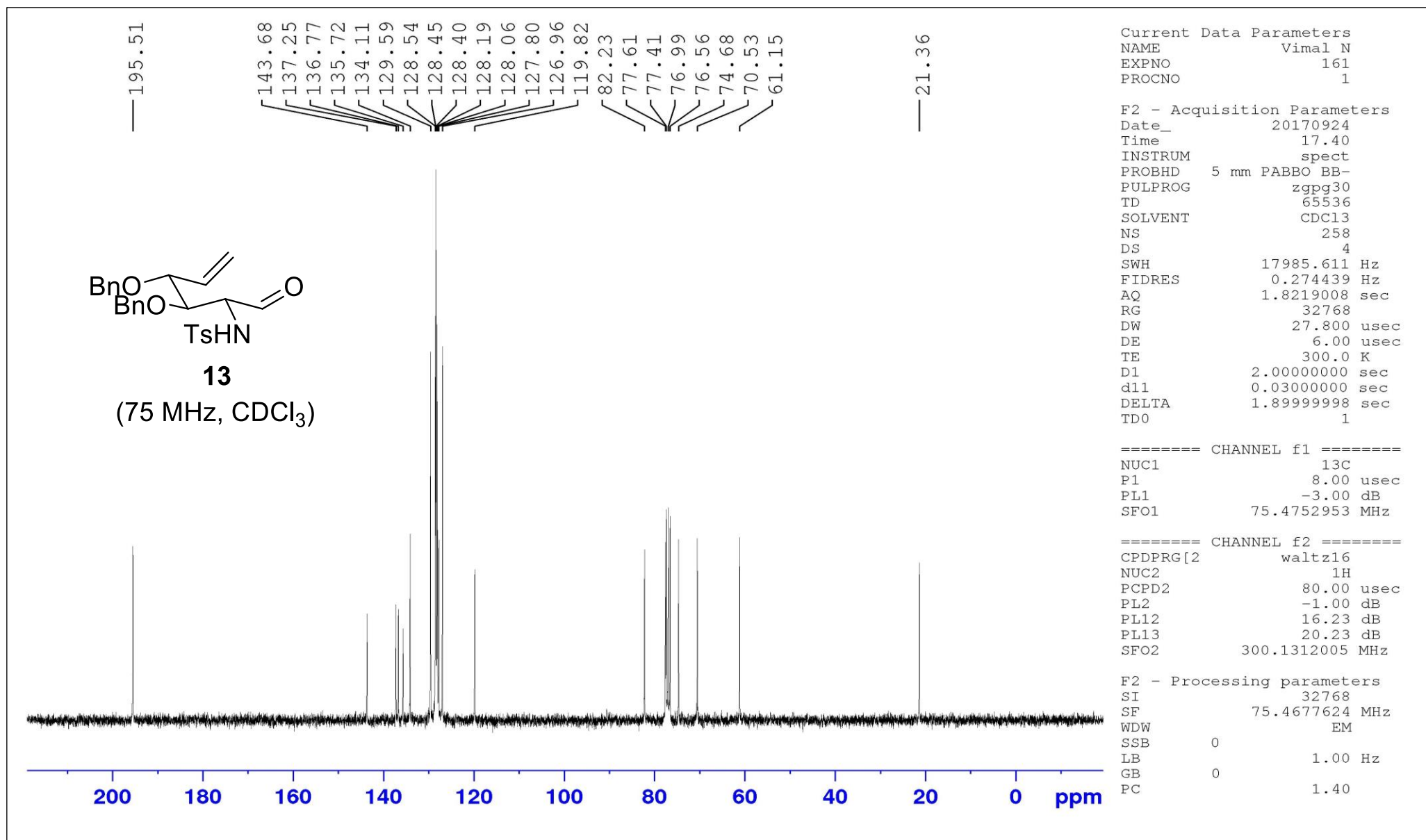


**Figure 4.2:** <sup>13</sup>C-NMR spectrum of compound **18**.



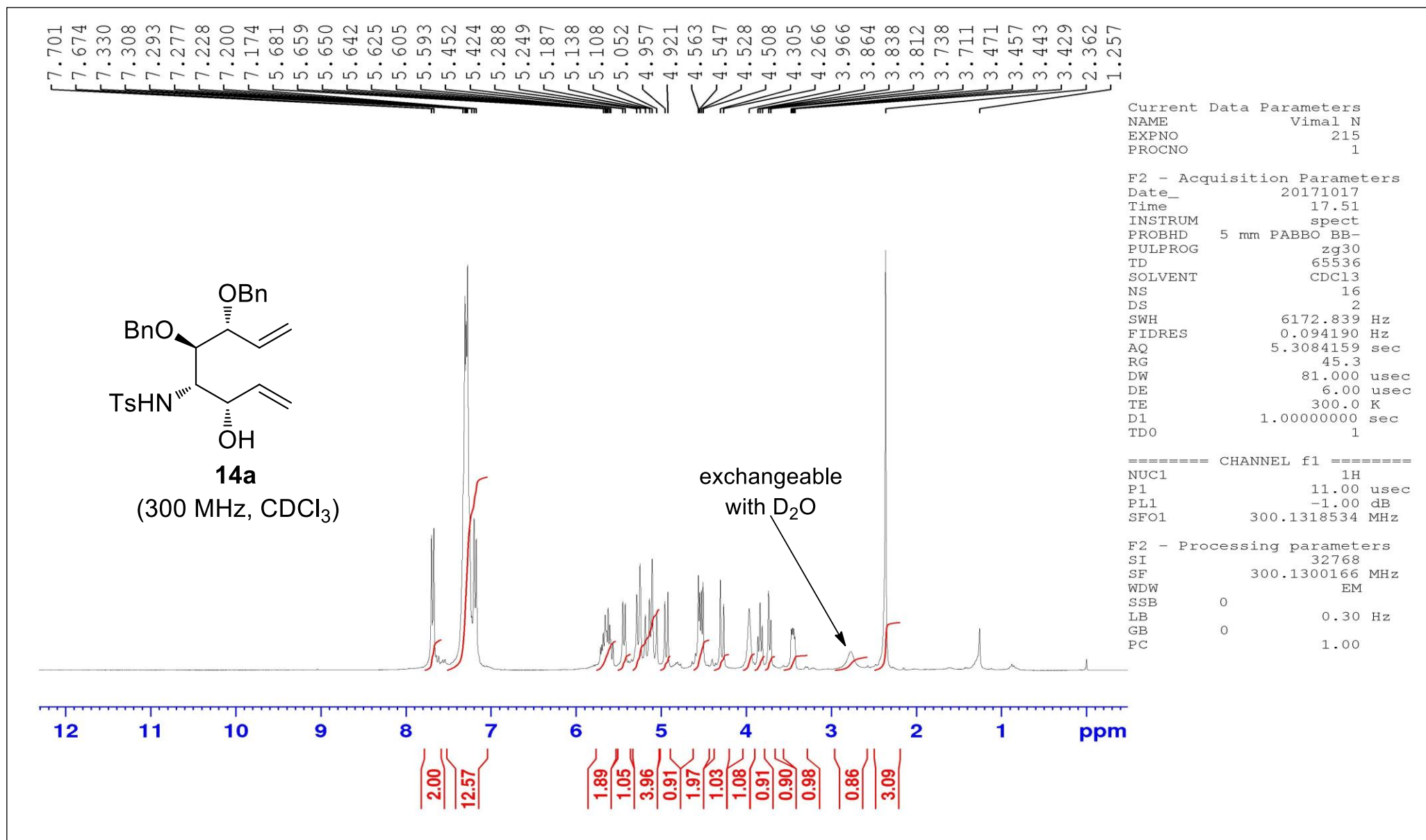


**Figure 5.1:** <sup>1</sup>H-NMR spectrum of compound **13**.



**Figure 5.2:** <sup>13</sup>C-NMR spectrum of compound **13**.





**Figure 6.1:**  $^1\text{H}$ -NMR spectrum of compound **14a**.

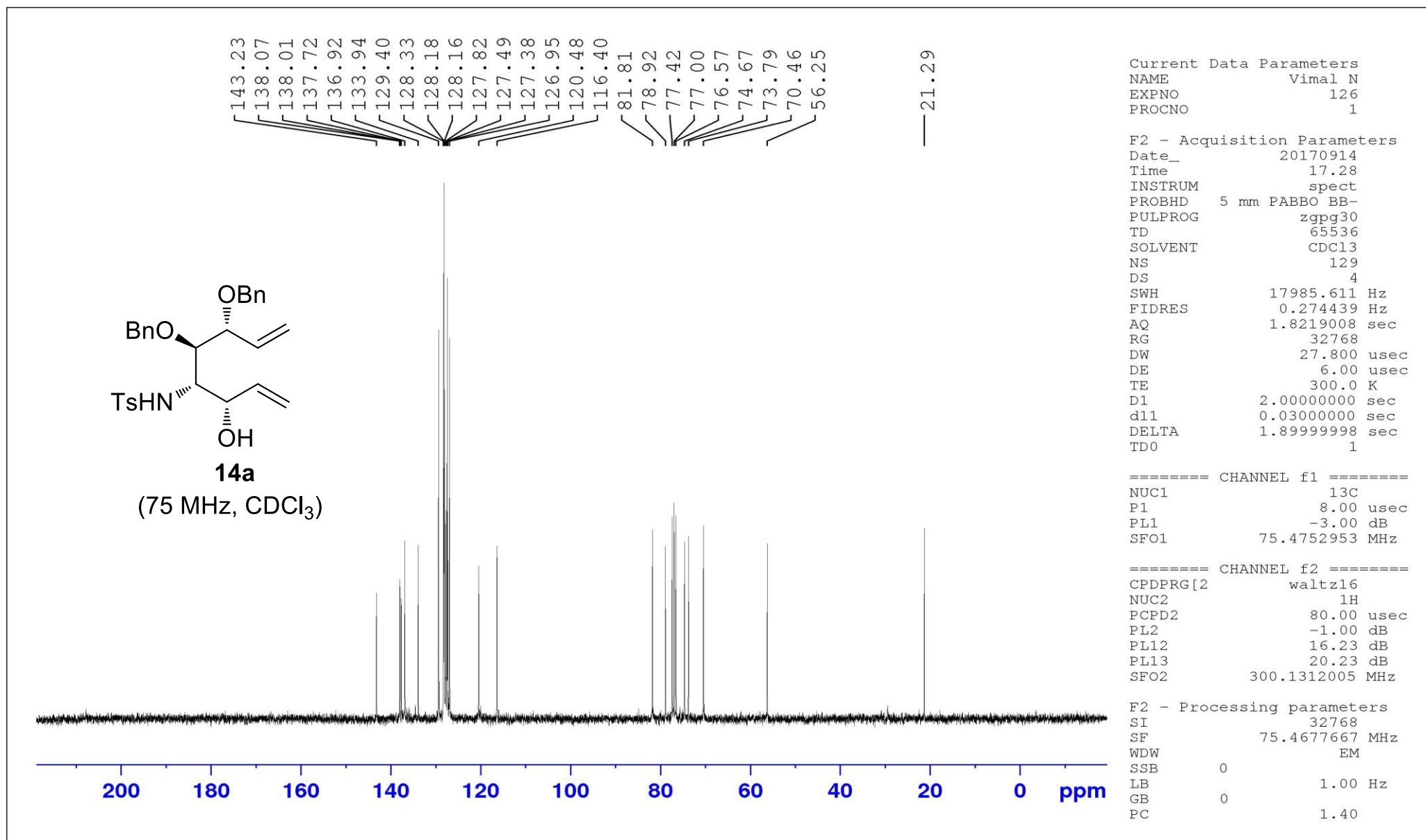
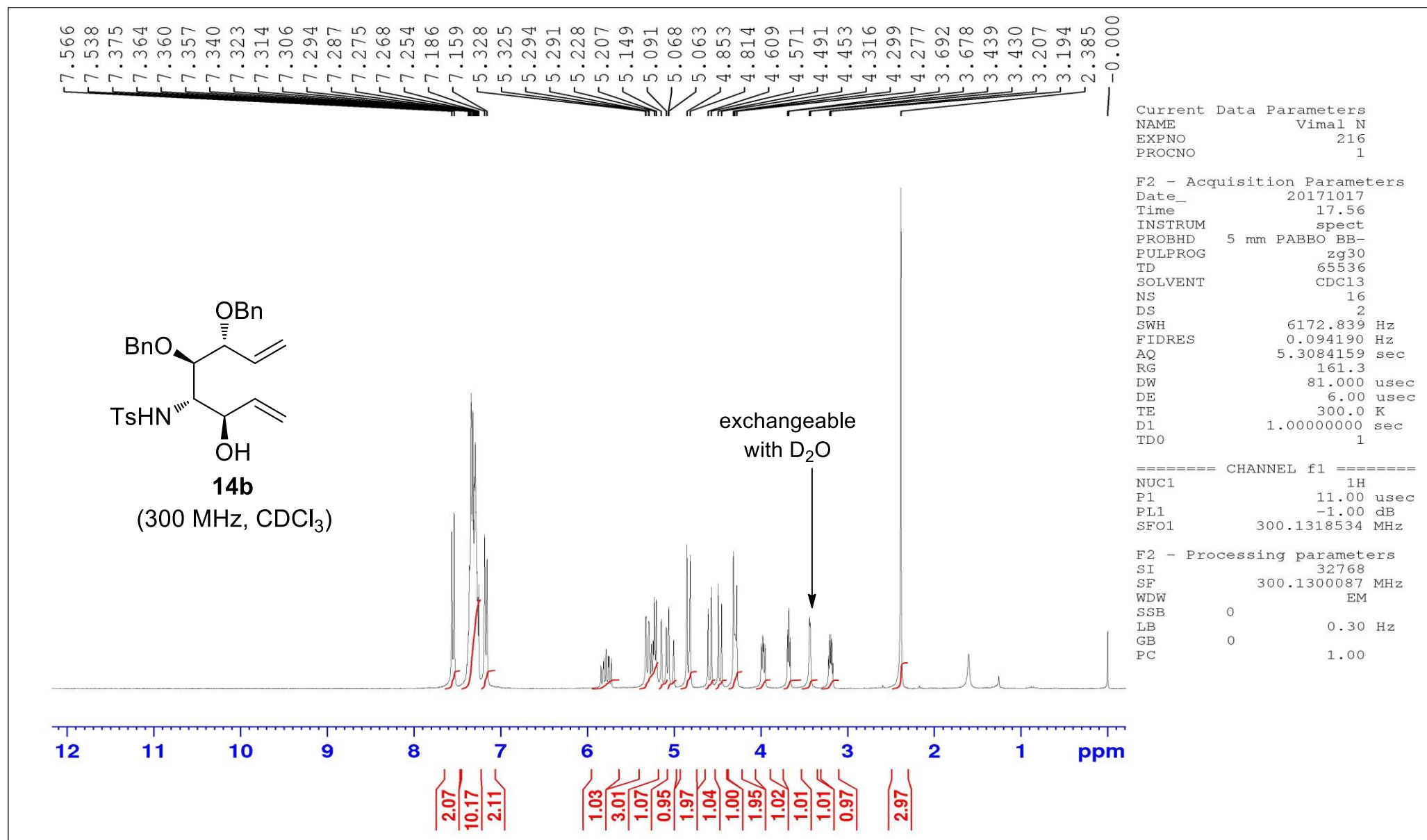


Figure 6.2: <sup>13</sup>C-NMR spectrum of compound **14a**.



**Figure 7.1:** <sup>1</sup>H-NMR spectrum of compound **14b**.

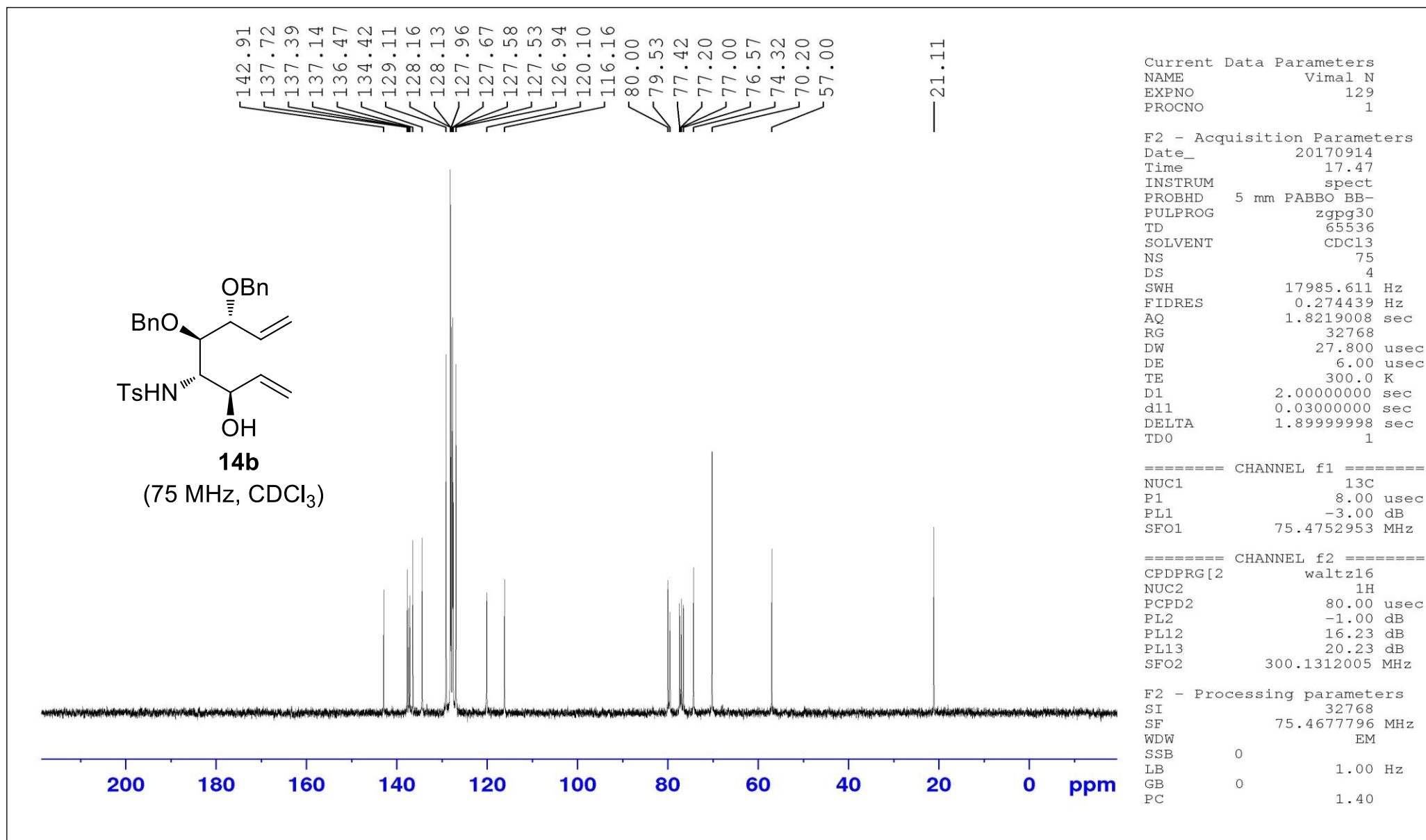
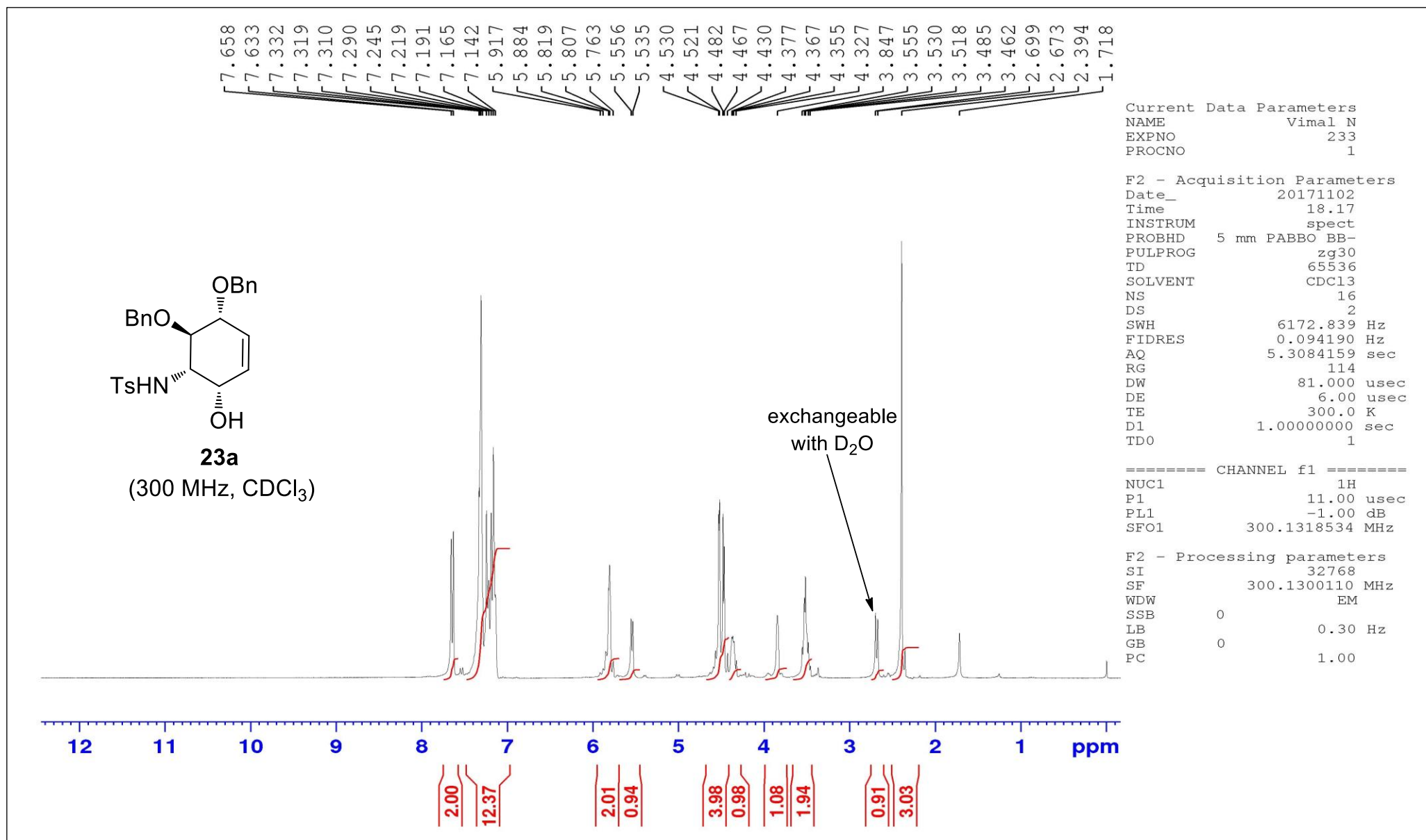


Figure 7.2: <sup>13</sup>C-NMR spectrum of compound **14b**.



**Figure 8.1:** <sup>1</sup>H-NMR spectrum of compound **23a**.



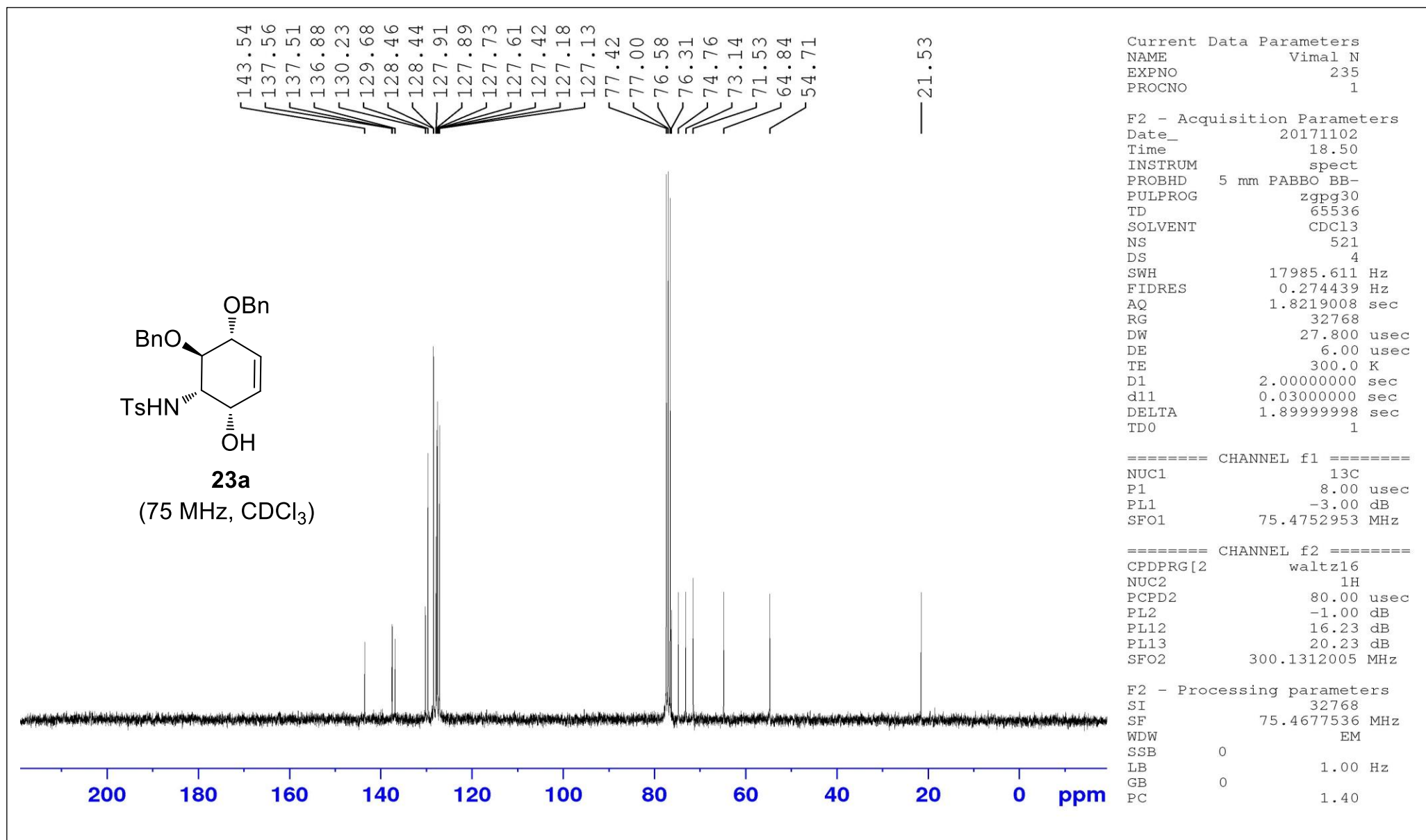
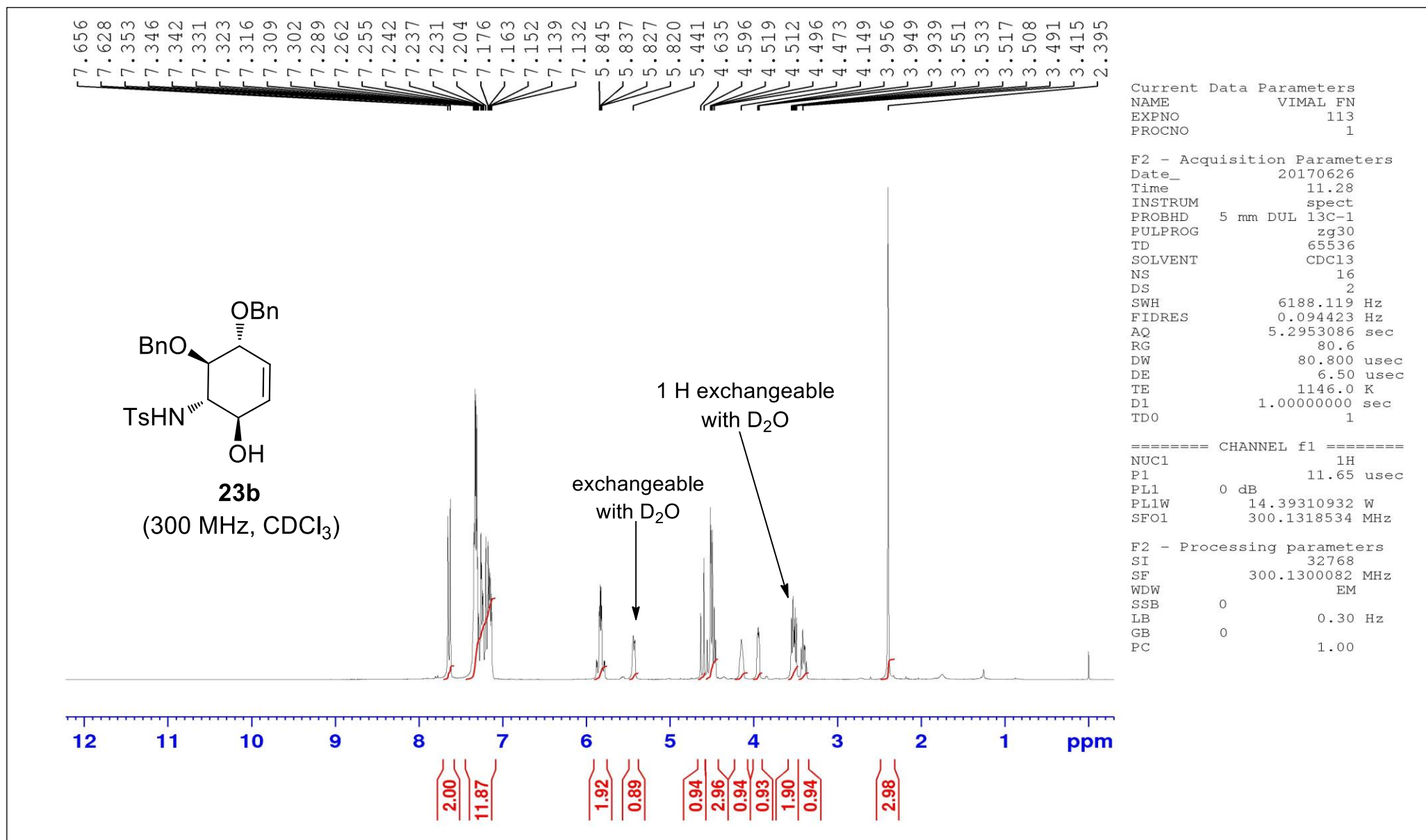


Figure 8.2: <sup>13</sup>C-NMR spectrum of compound **23a**.



**Figure 9.1:** <sup>1</sup>H-NMR spectrum of compound **23b**.



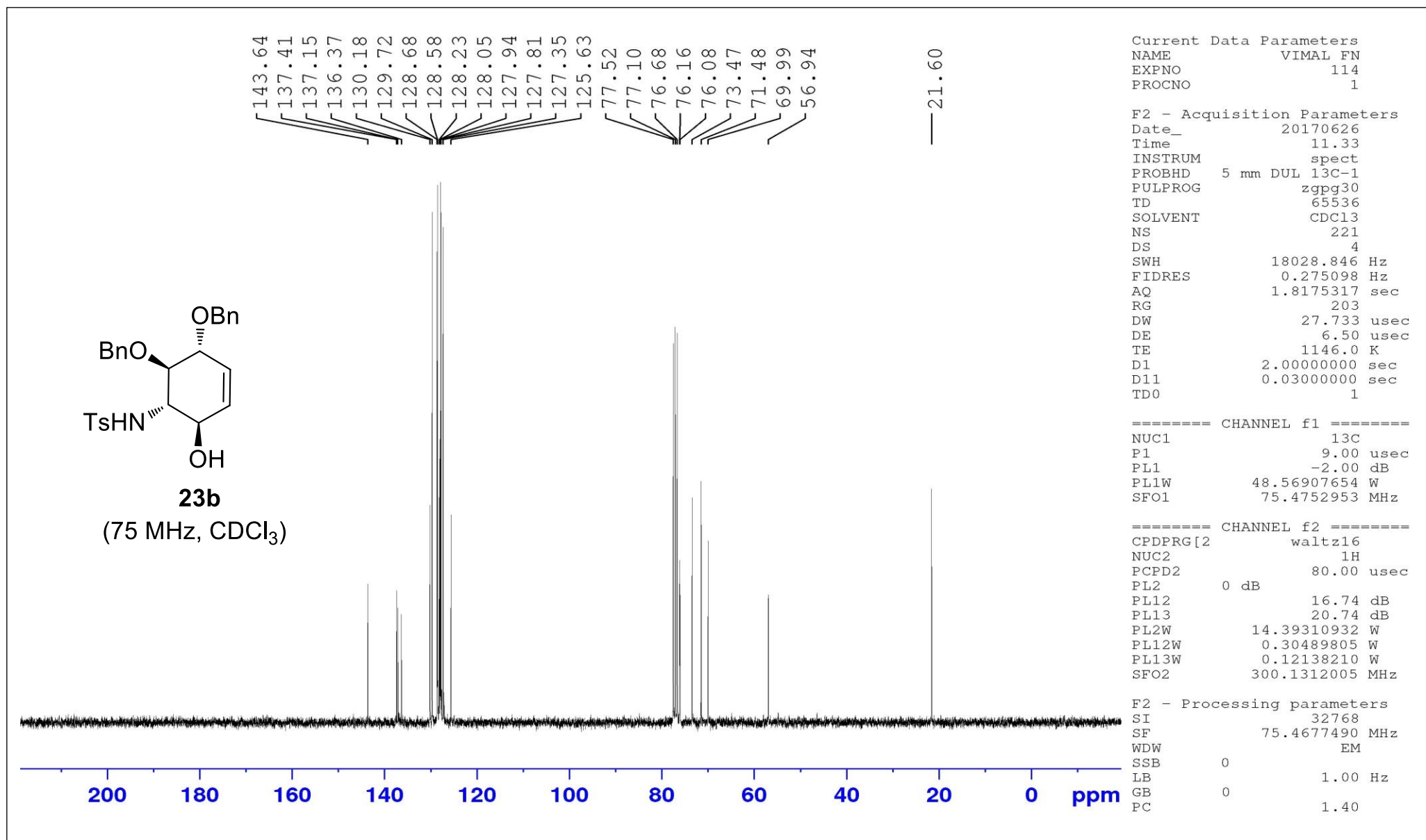
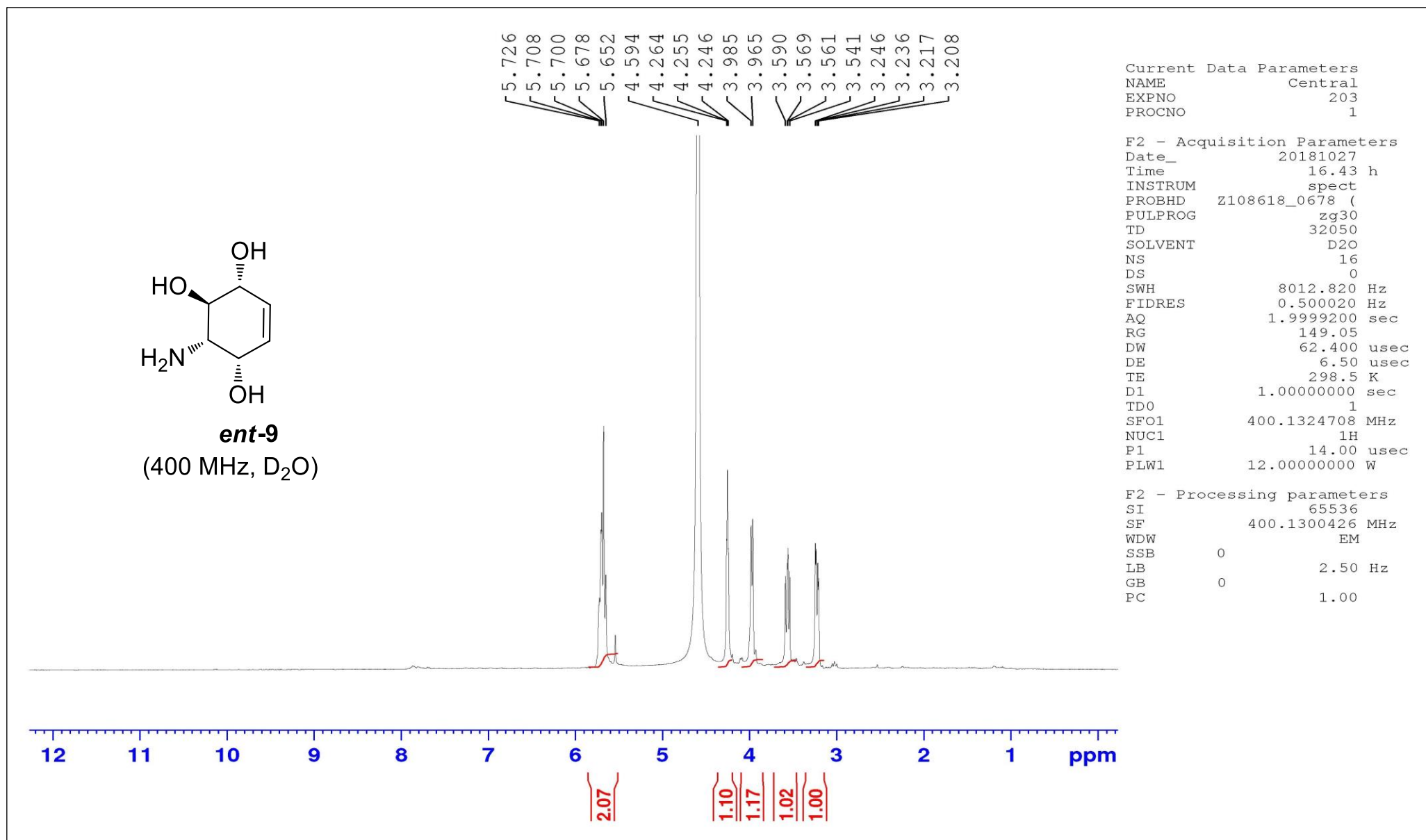
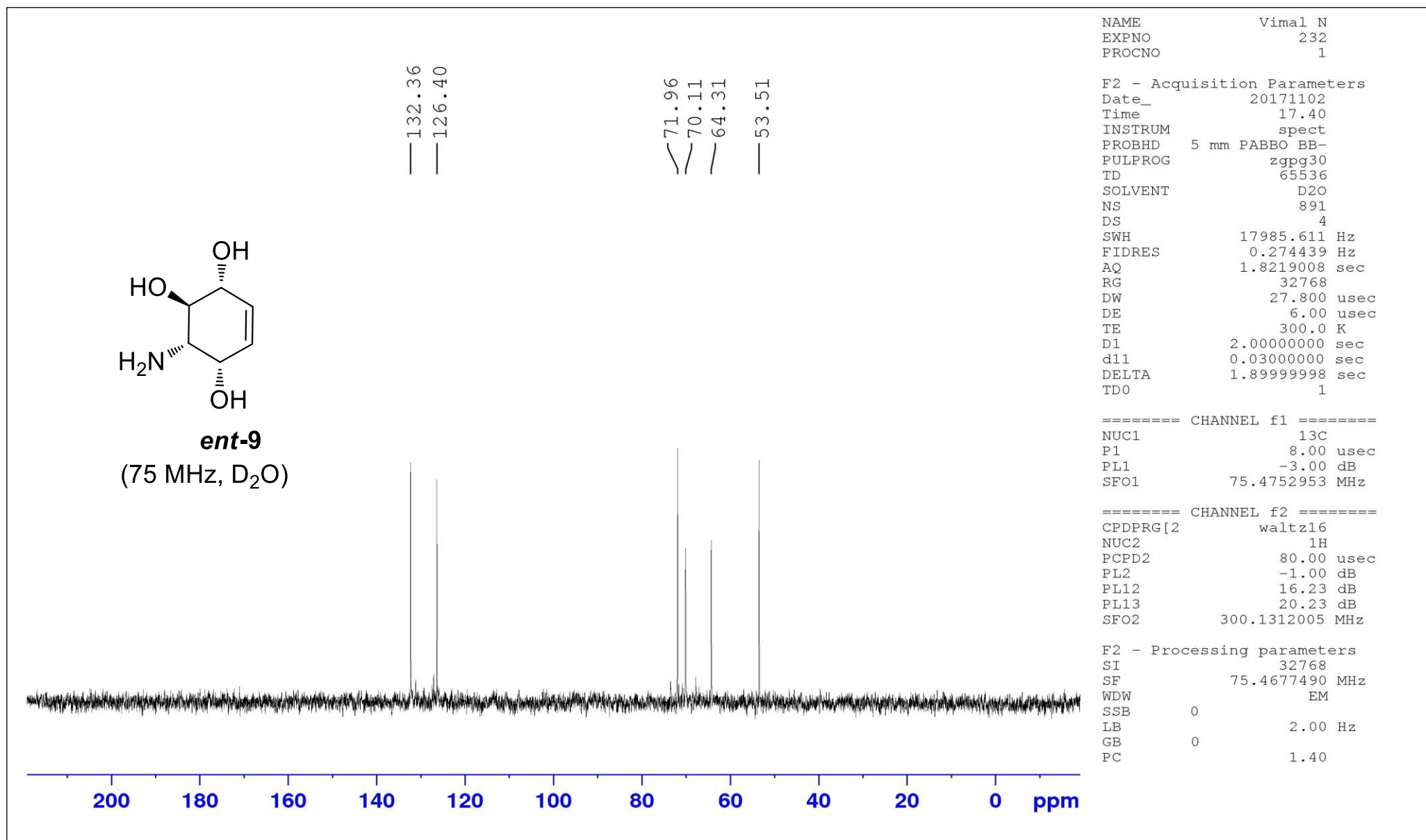


Figure 9.2: <sup>13</sup>C-NMR spectrum of compound **23b**.

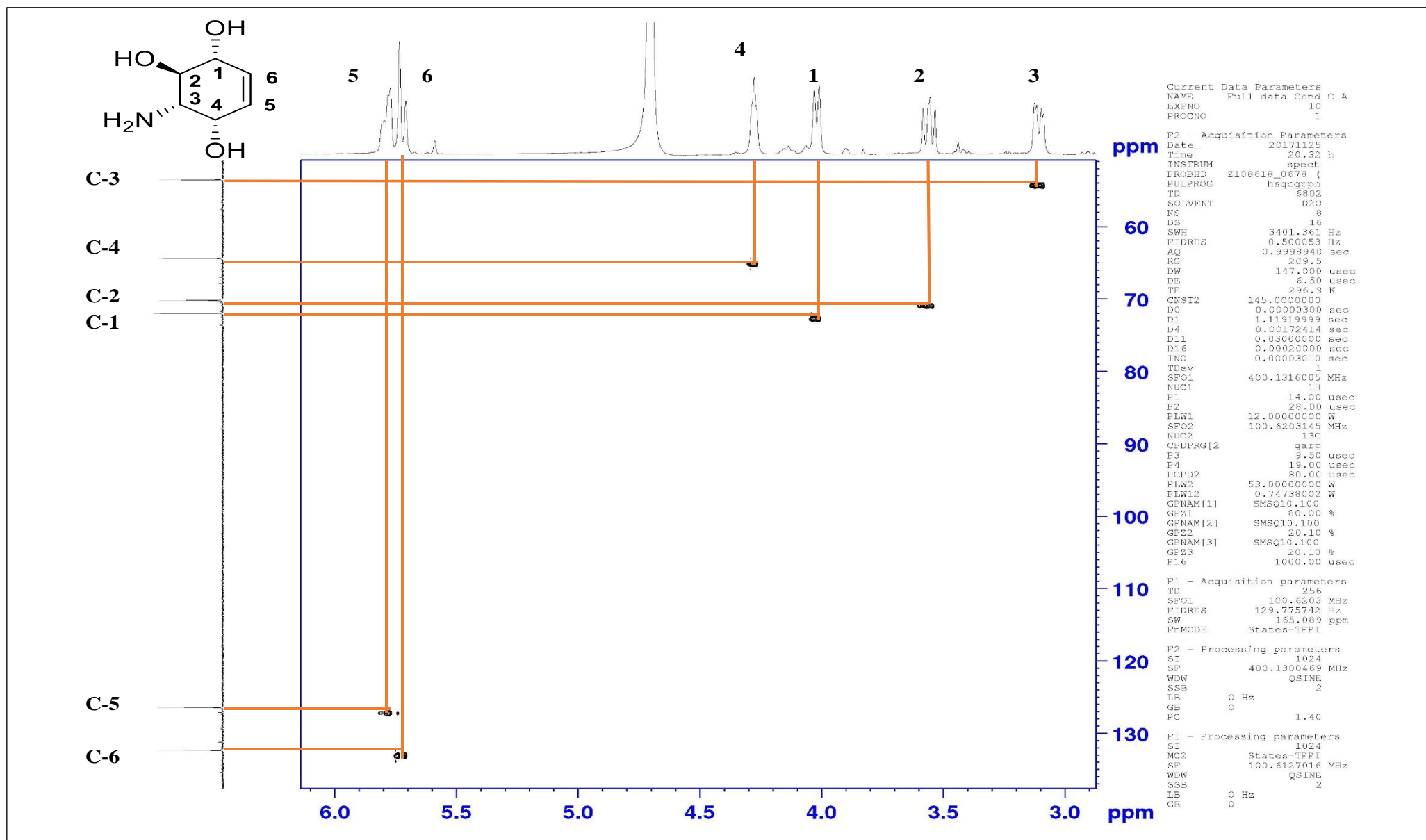


**Figure 10.1:** <sup>1</sup>H-NMR spectrum of compound **ent-9**.



**Figure 10.2:** <sup>13</sup>C-NMR spectrum of compound *ent-9*.





**Figure 10.4:**  $^1\text{H}$ - $^{13}\text{C}$  HSQC NMR spectrum of compound *ent*-9. (expanded spectrum)

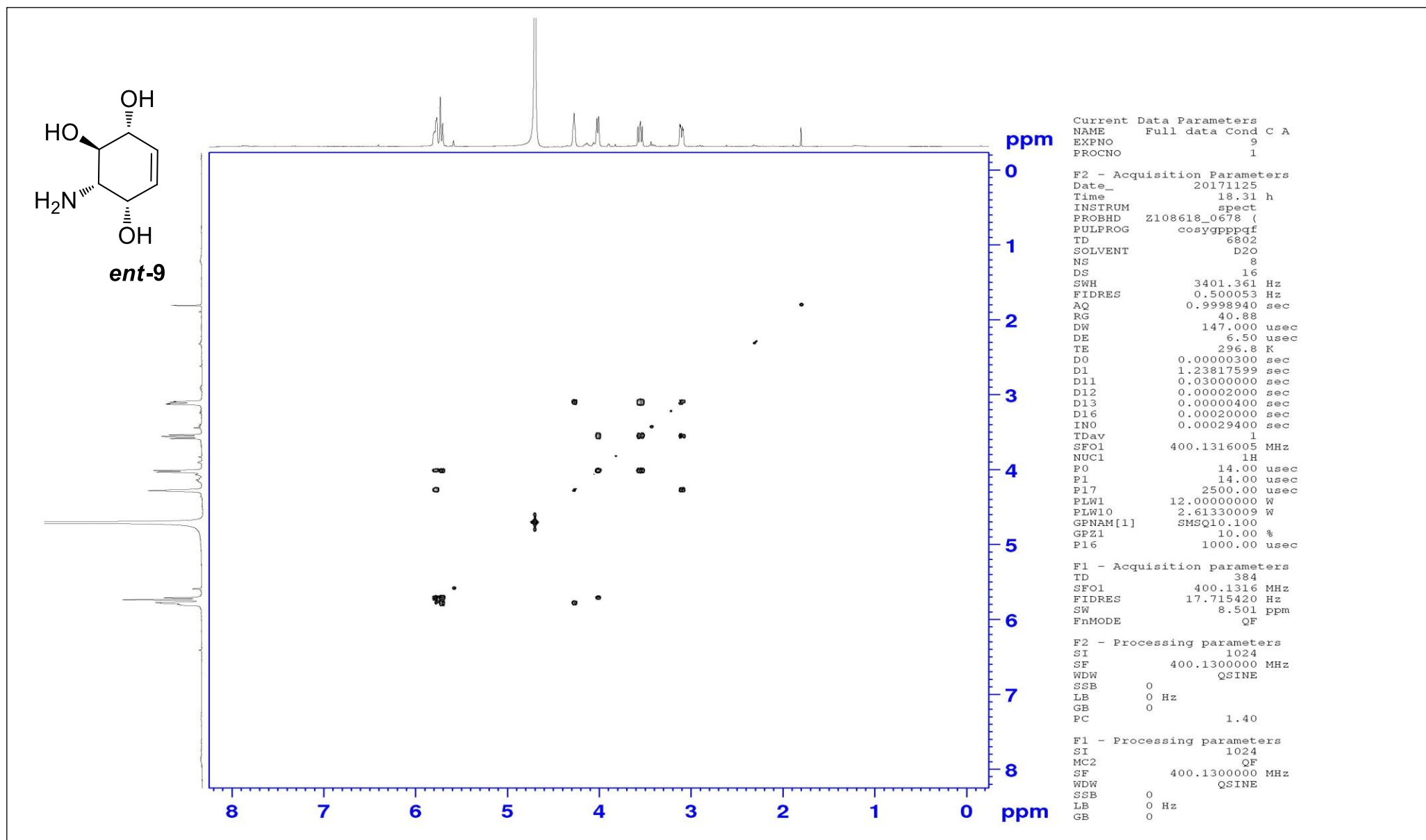


Figure 10.5:  $^1\text{H}$ - $^1\text{H}$  COSY NMR spectrum of compound *ent-9*.

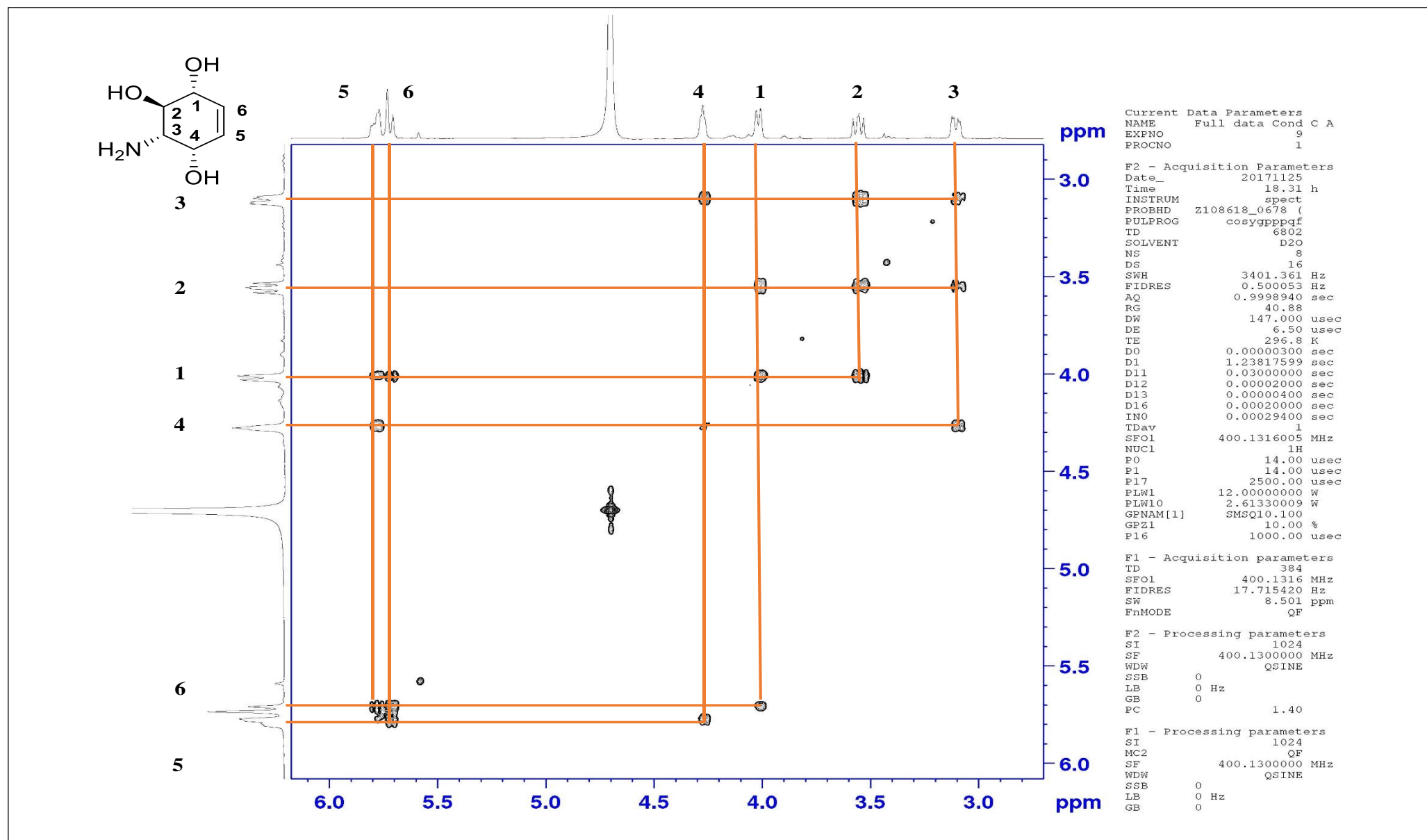
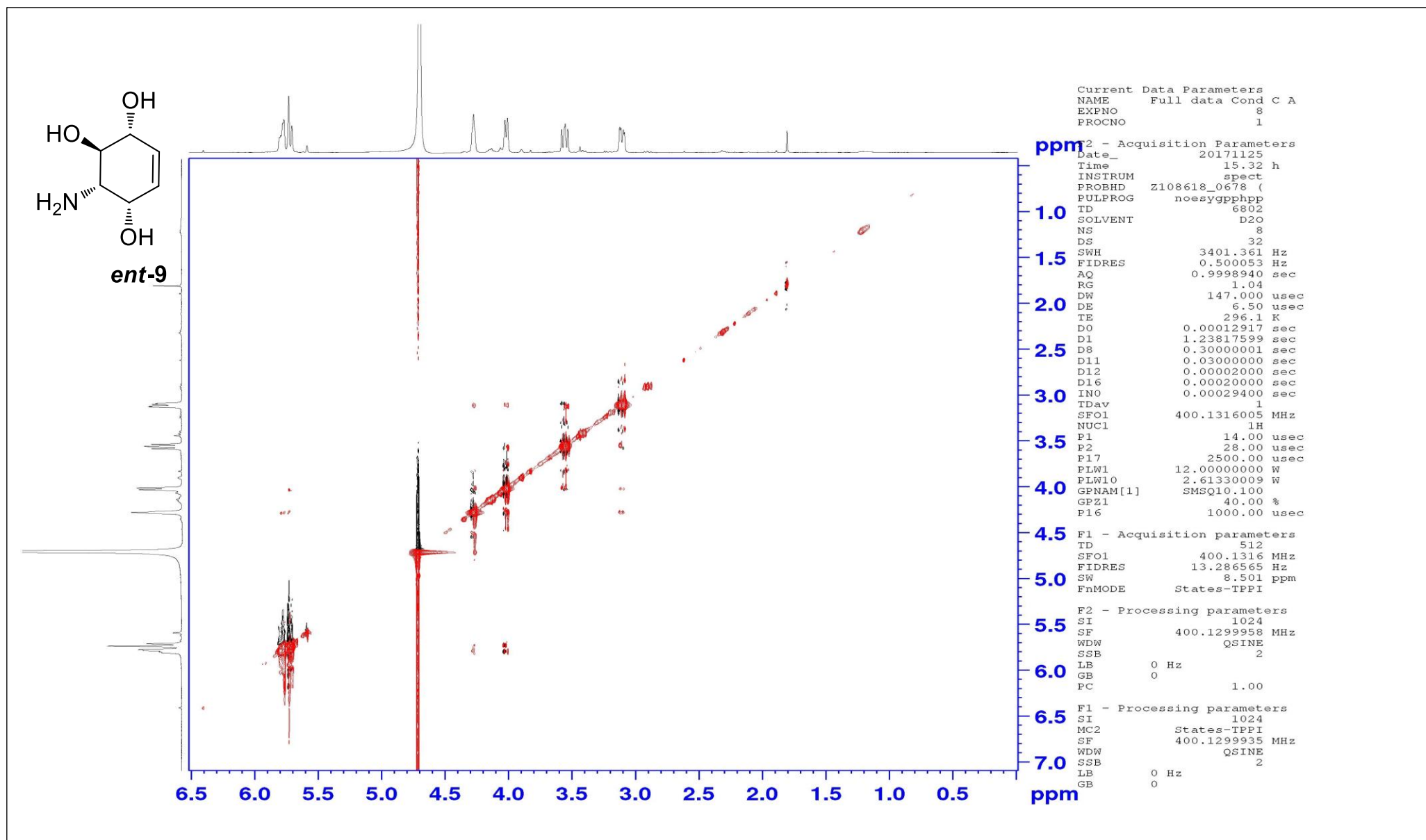
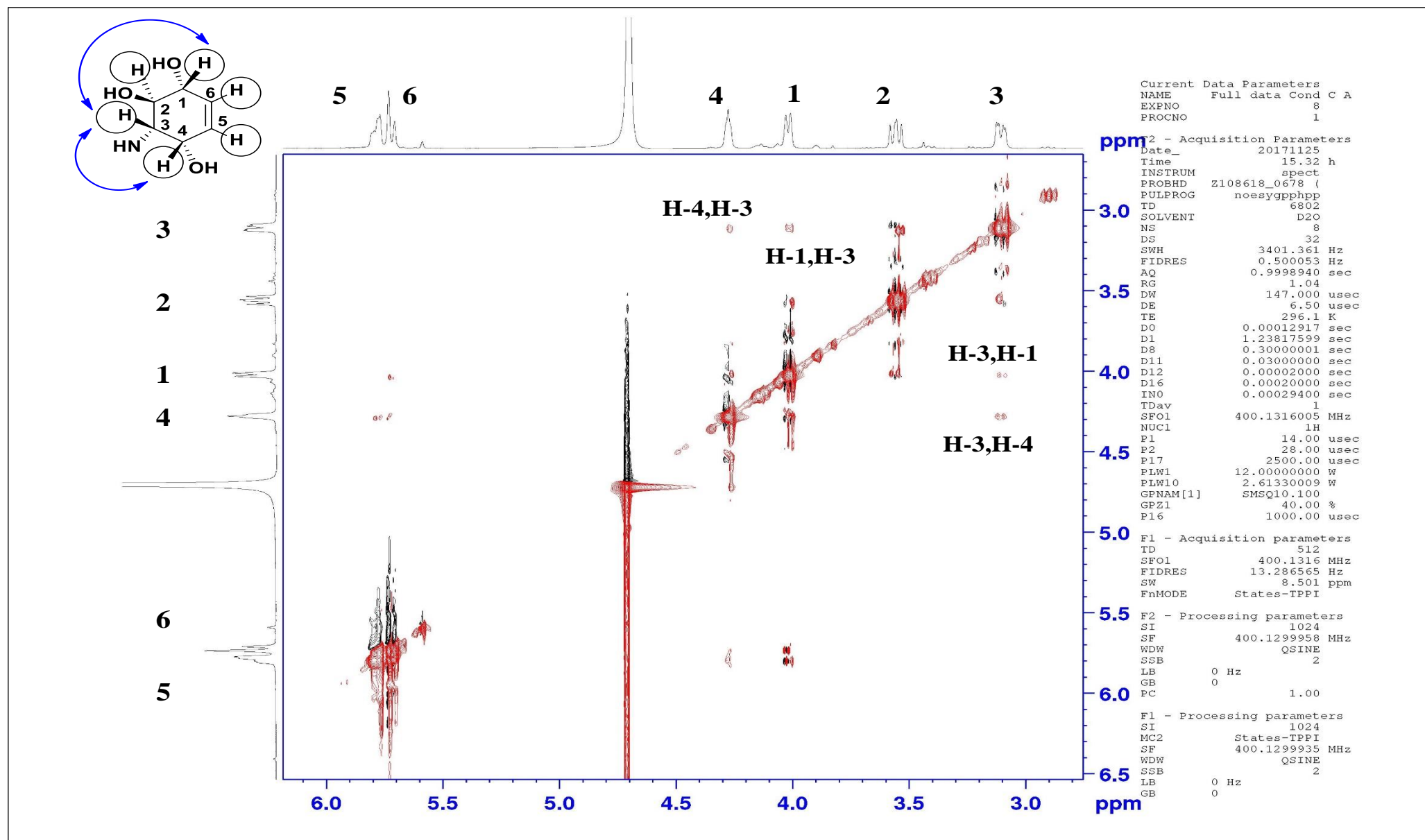


Figure 10.6: <sup>1</sup>H-<sup>1</sup>H COSY NMR spectrum of compound *ent-9*. (expanded spectrum)

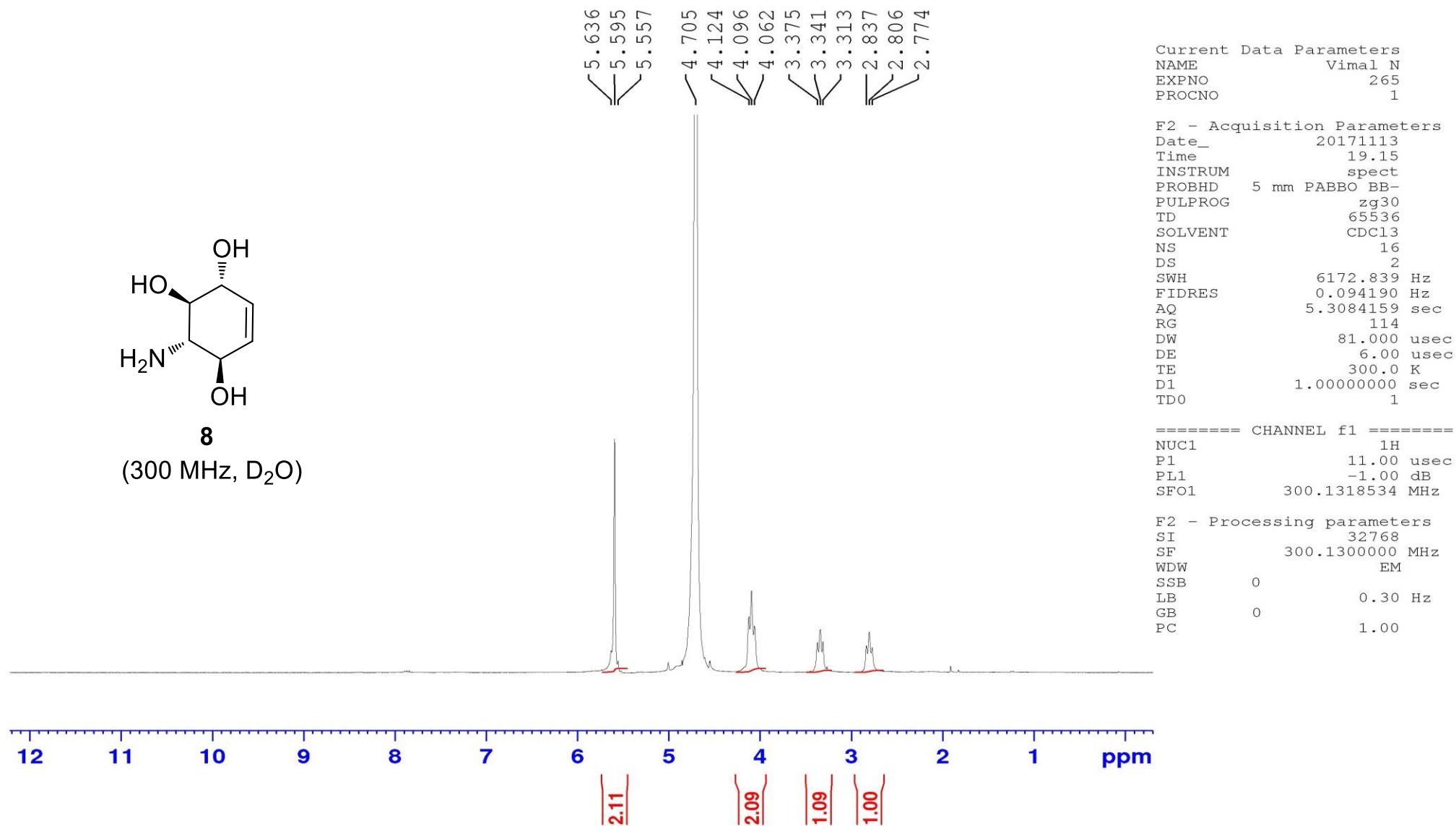
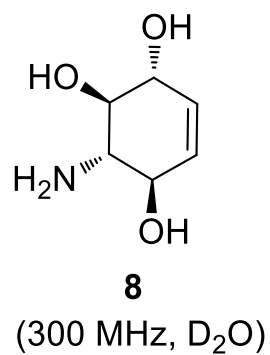




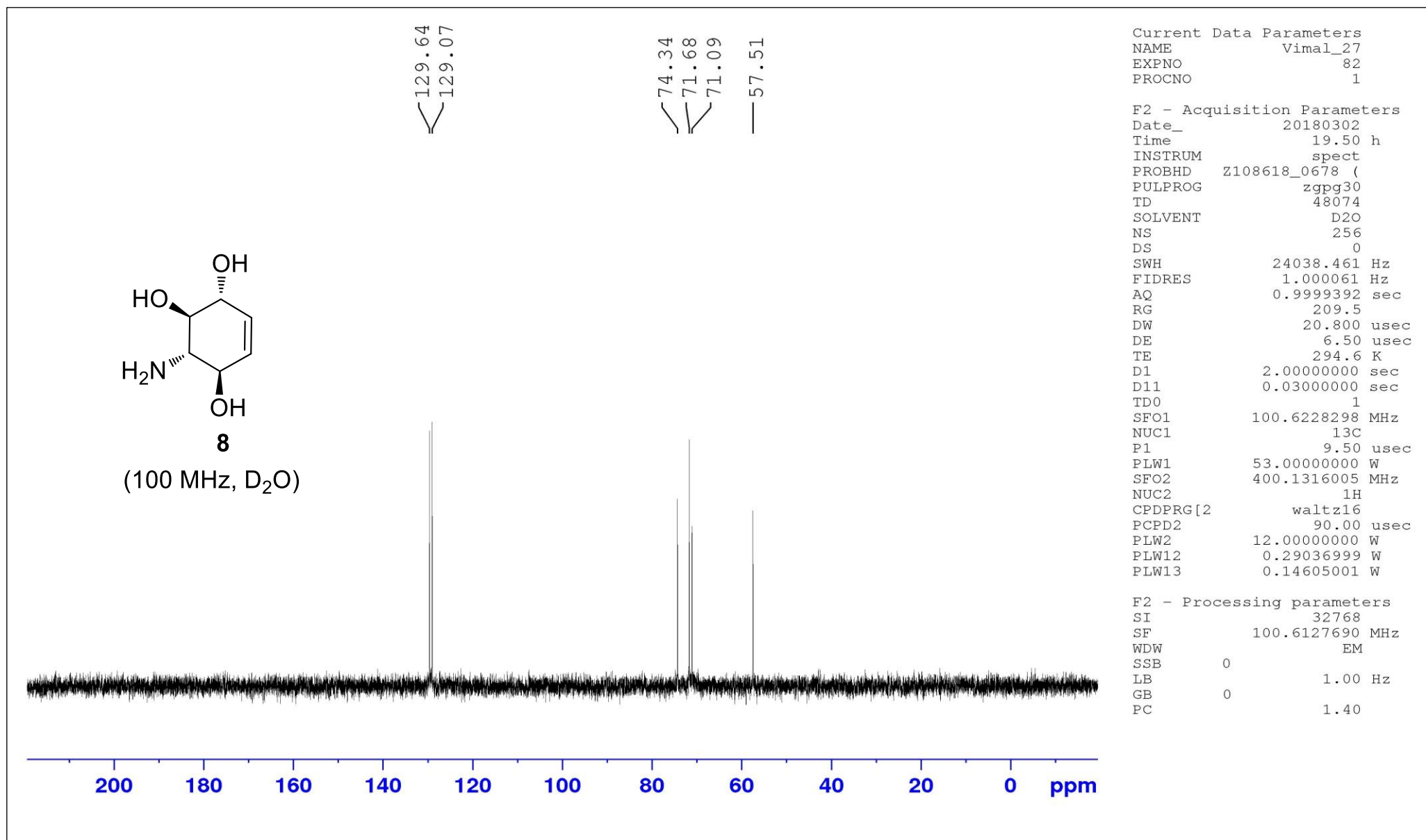
**Figure 10.7:**  $^1\text{H}$ - $^1\text{H}$  NOESY NMR spectrum of compound **ent-9**.



**Figure 10.8:**  $^1\text{H}$ - $^1\text{H}$  NOESY NMR spectrum of compound *ent*-9. (expanded spectrum)



**Figure 11.1:** <sup>1</sup>H-NMR spectrum of compound **8**.



**Figure 11.2:** <sup>13</sup>C-NMR spectrum of compound **8**.

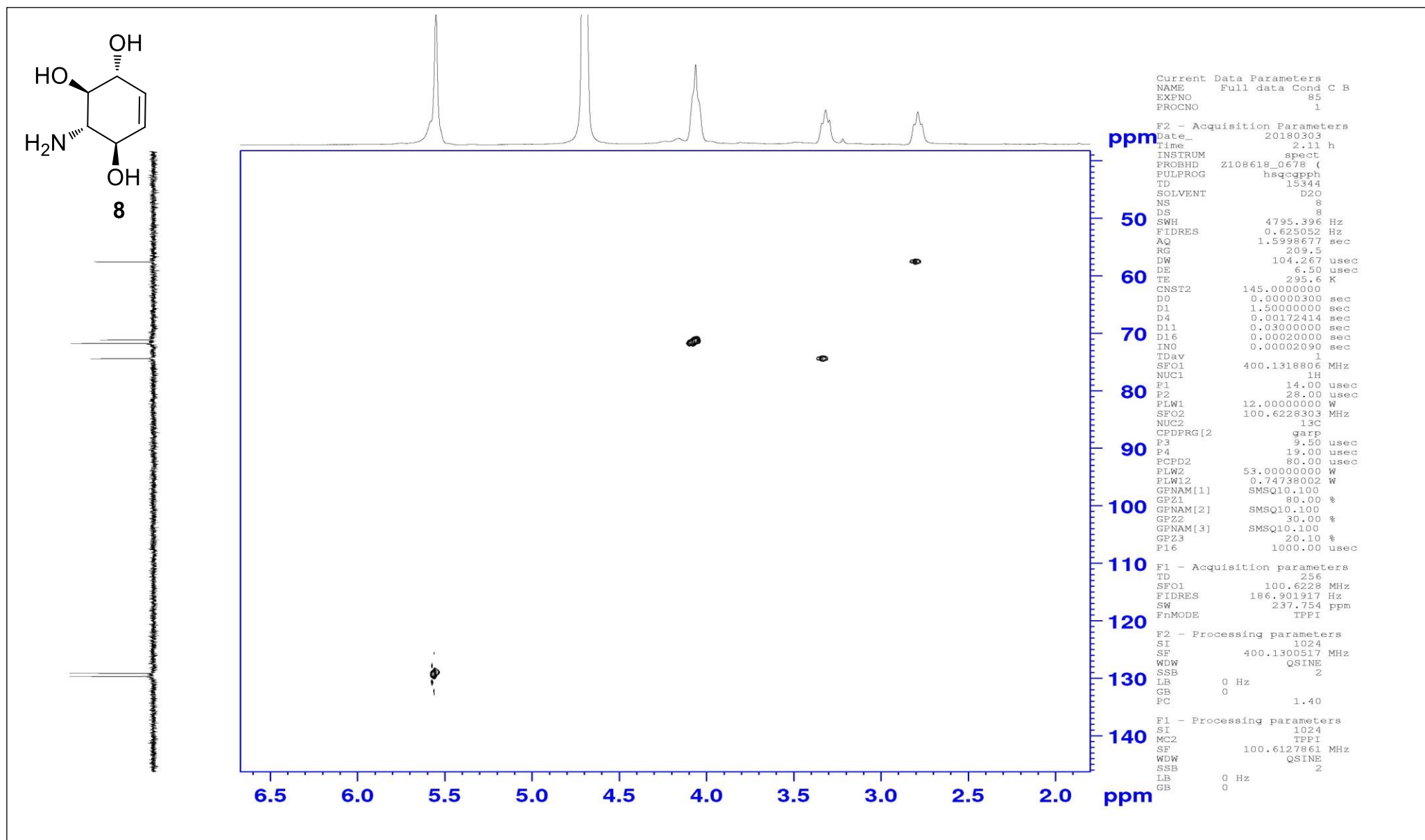


Figure 11.3:  $^1\text{H}$ - $^{13}\text{C}$  HSQC NMR spectrum of compound **8**.

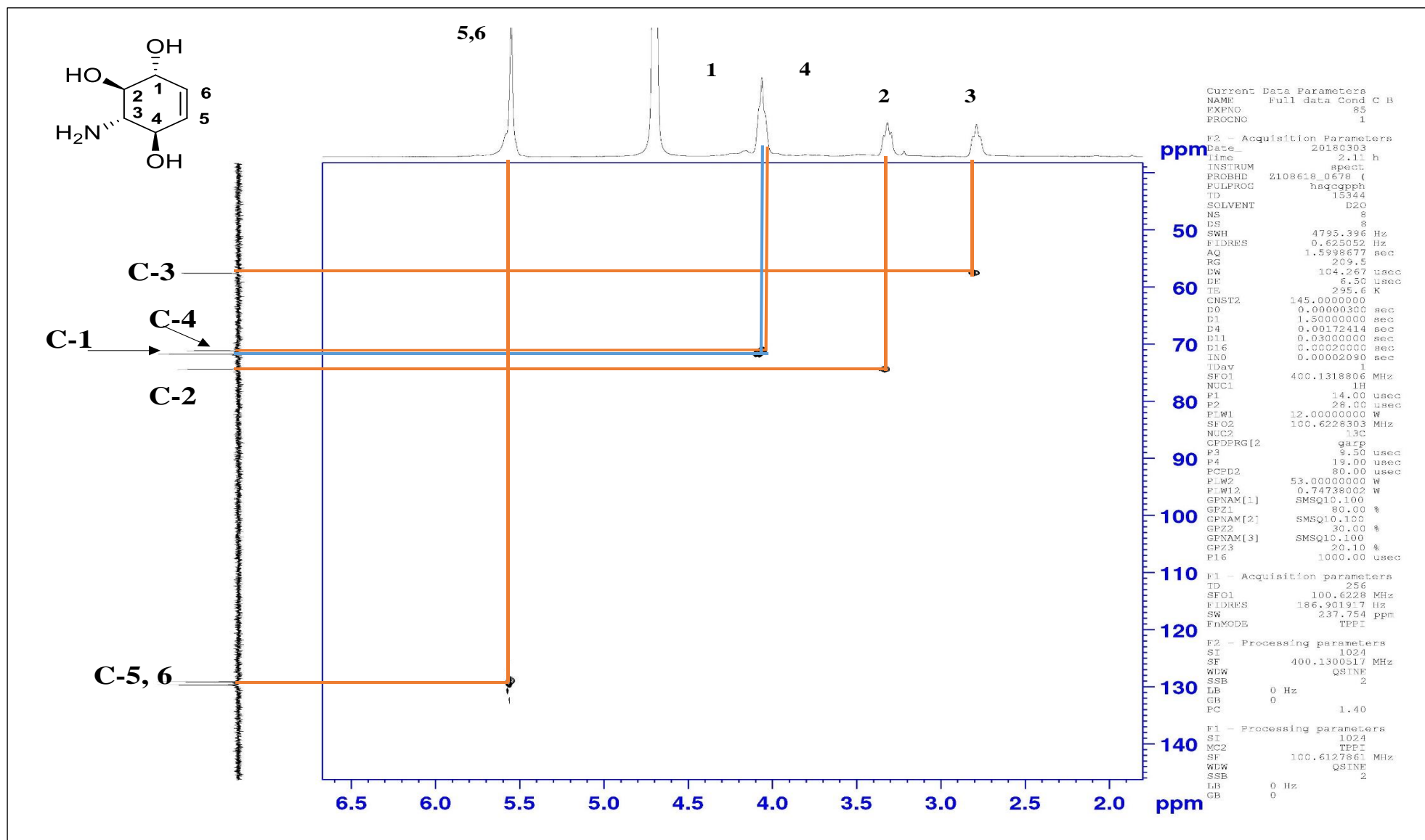


Figure 11.4:  $^1\text{H}$ - $^{13}\text{C}$  HSQC NMR spectrum of compound 8. (expanded spectrum)

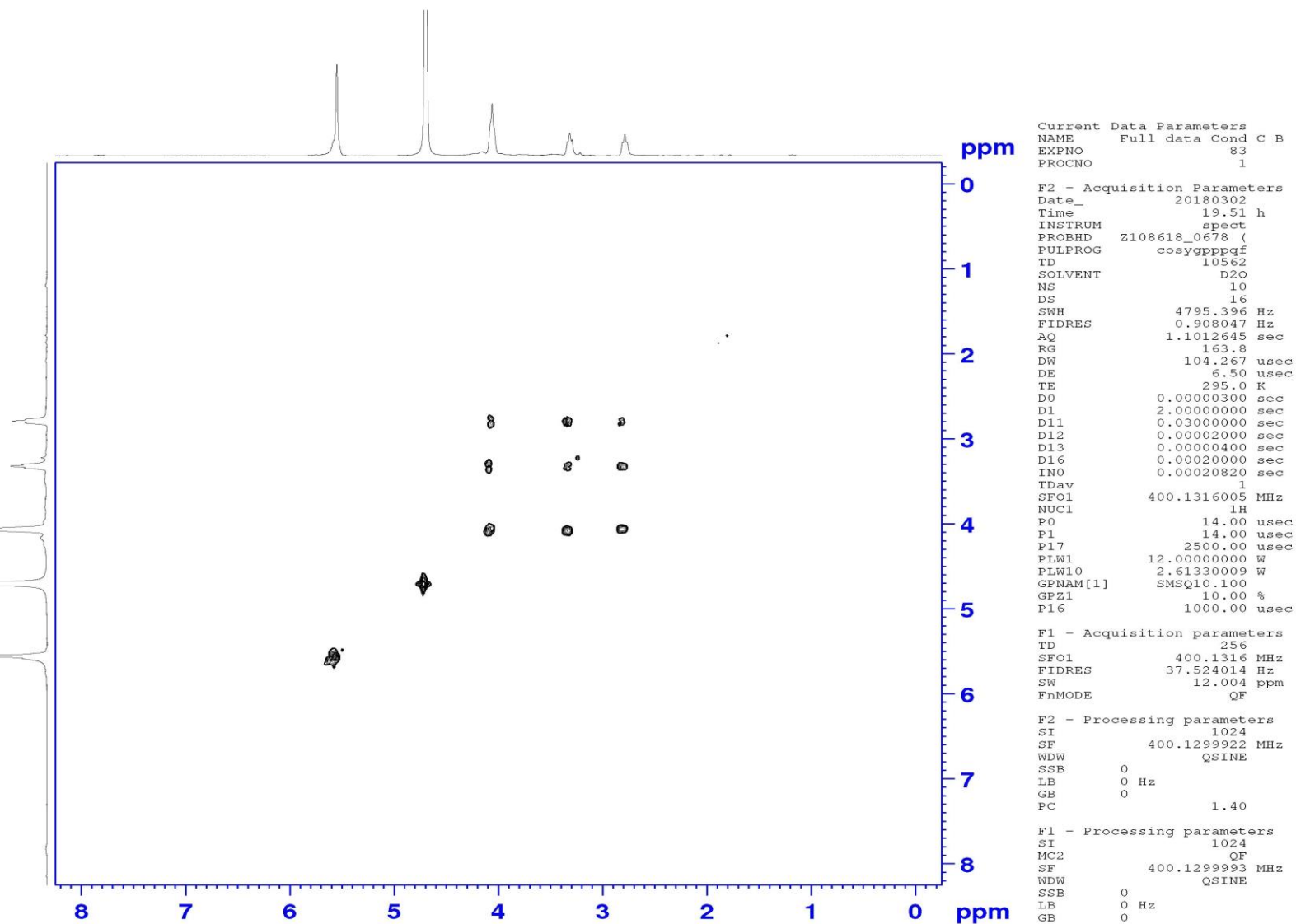
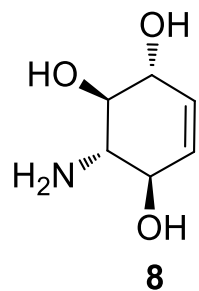
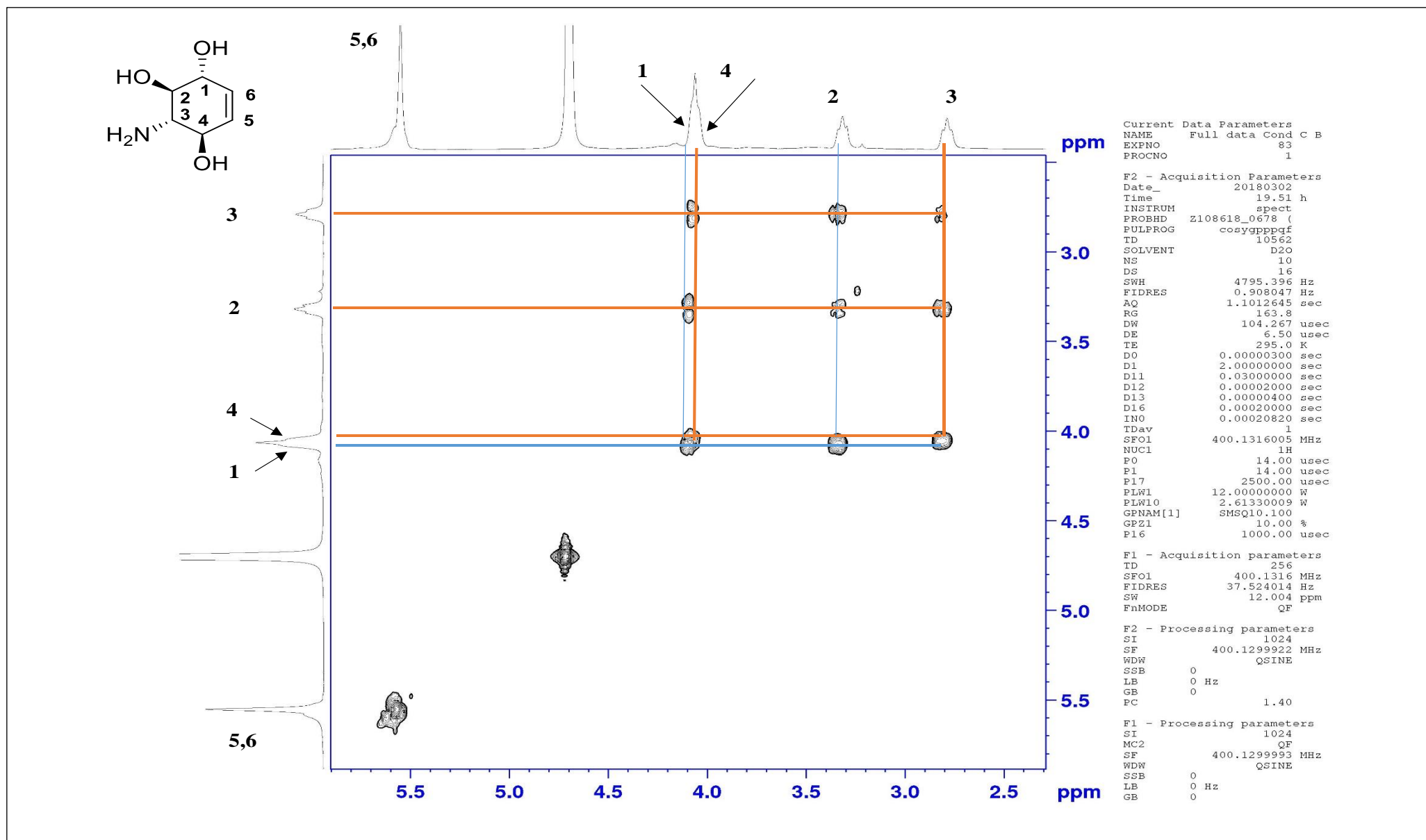
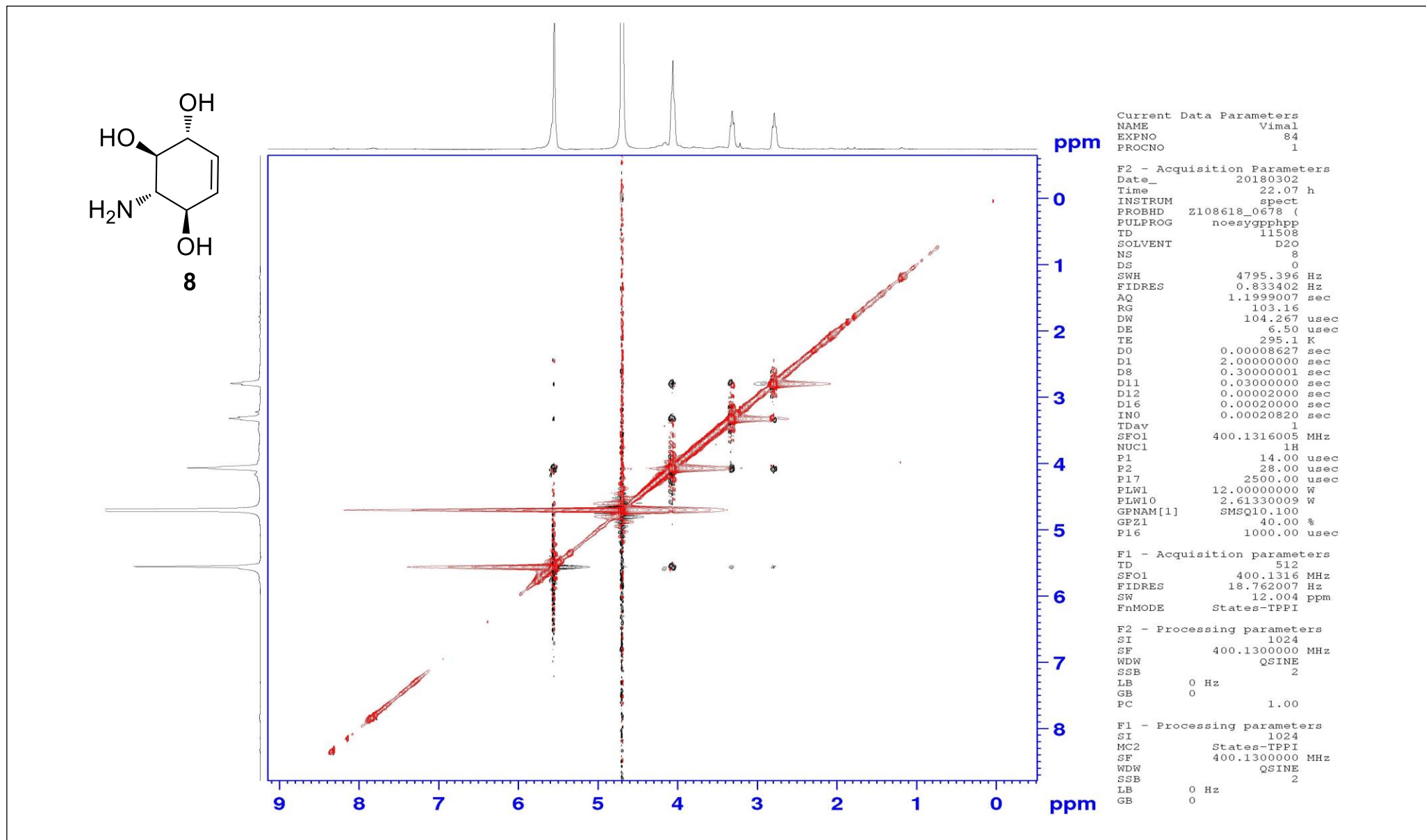


Figure 11.5:  $^1\text{H}$ - $^1\text{H}$  COSY NMR spectrum of compound 8.





**Figure 11.6:**  $^1\text{H}$ - $^1\text{H}$  COSY NMR spectrum of compound 8. (expanded spectrum)



**Figure 11.7:**  $^1\text{H}$ - $^1\text{H}$  NOESY NMR spectrum of compound **8**.

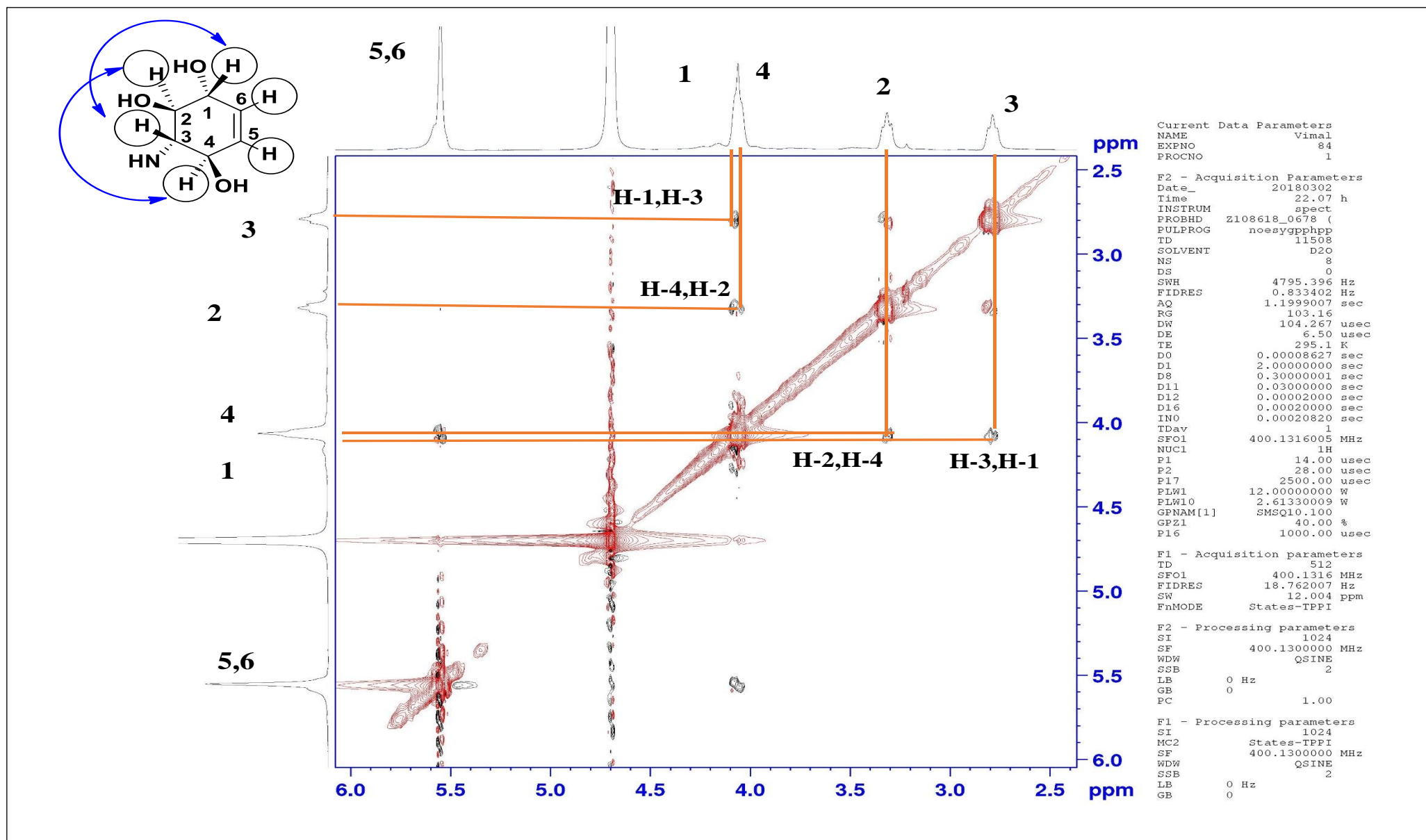
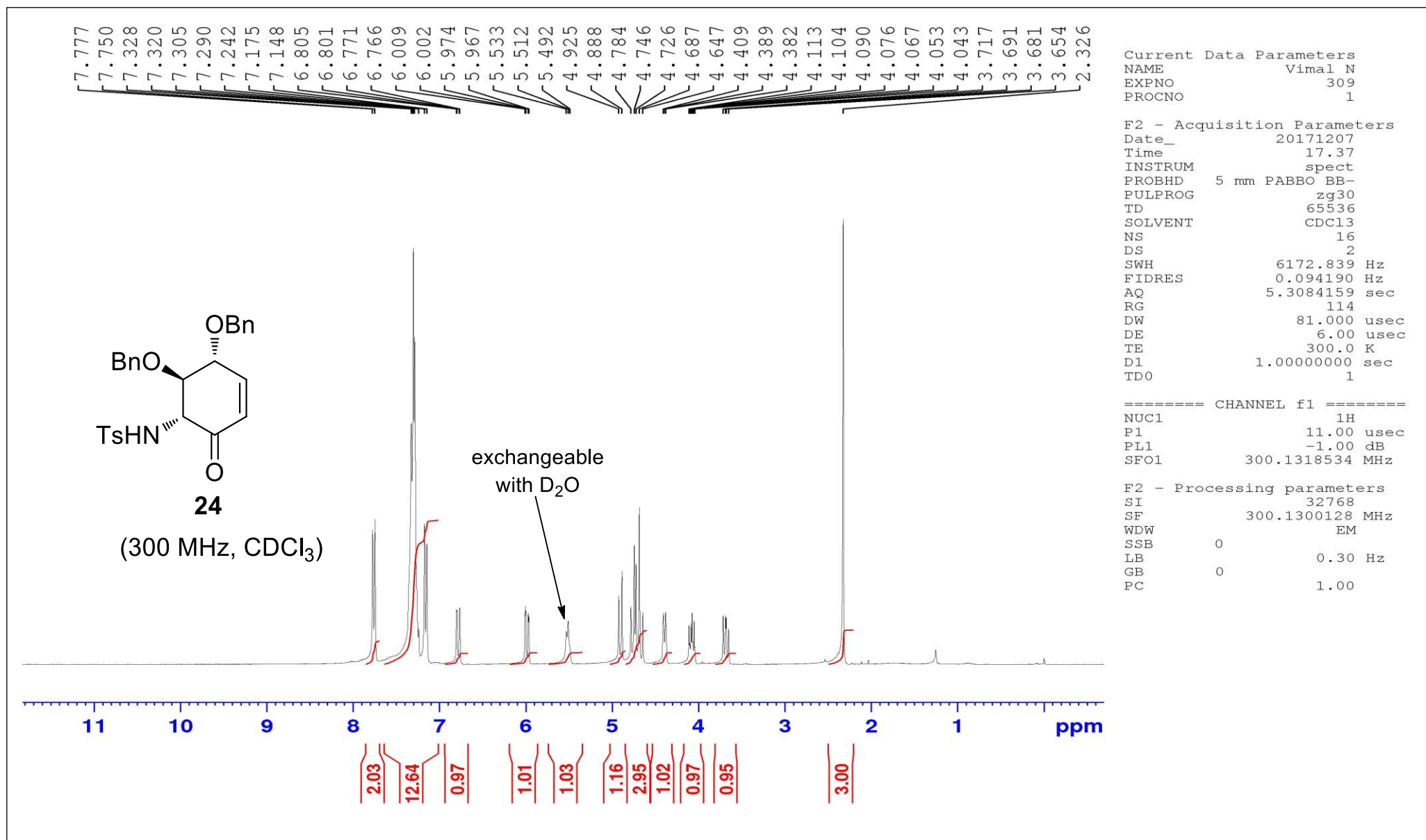


Figure 11.8:  $^1\text{H}$ - $^1\text{H}$  NOESY NMR spectrum of compound **8**. (expanded spectrum)



**Figure 12.1:** <sup>1</sup>H-NMR spectrum of compound **24**.

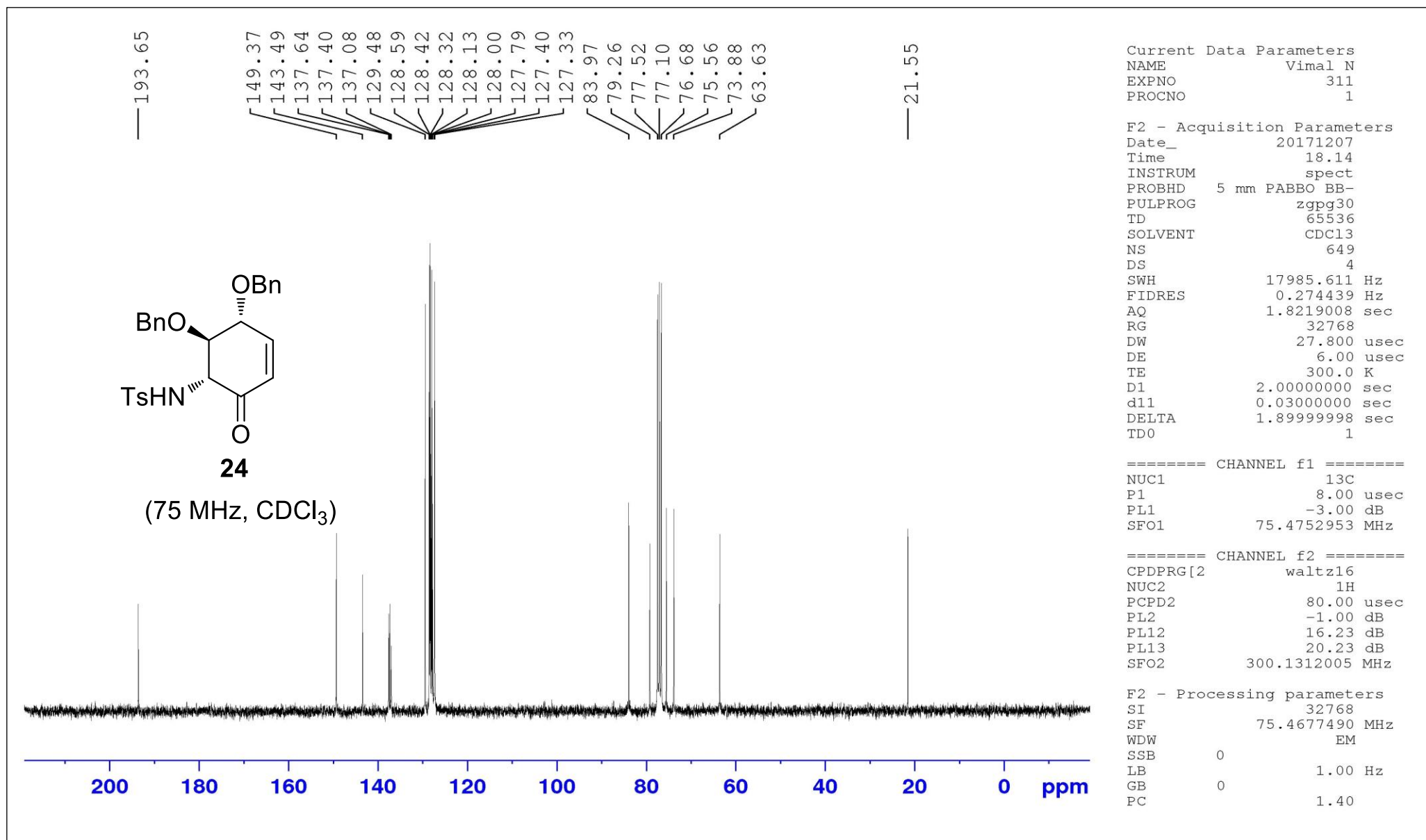
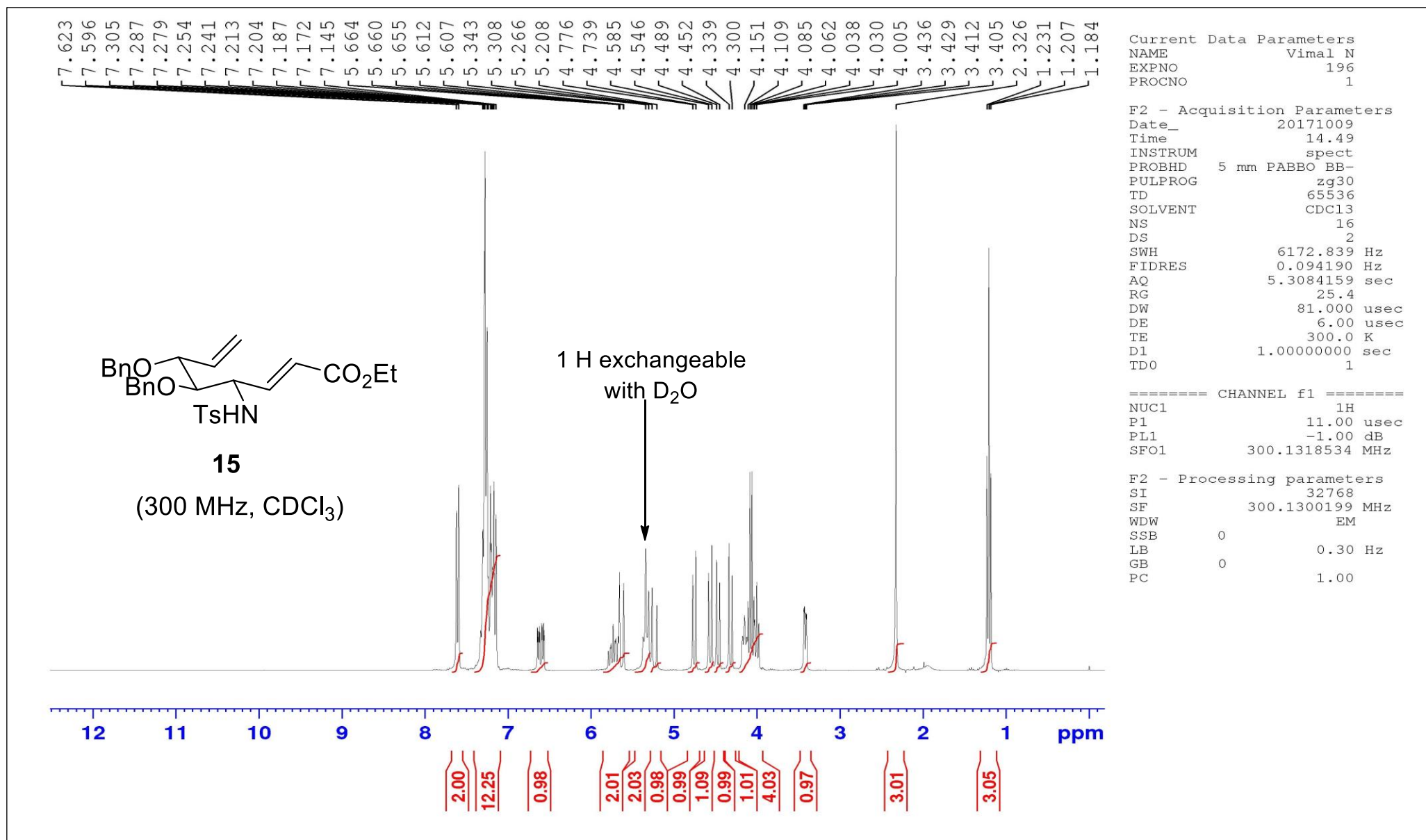
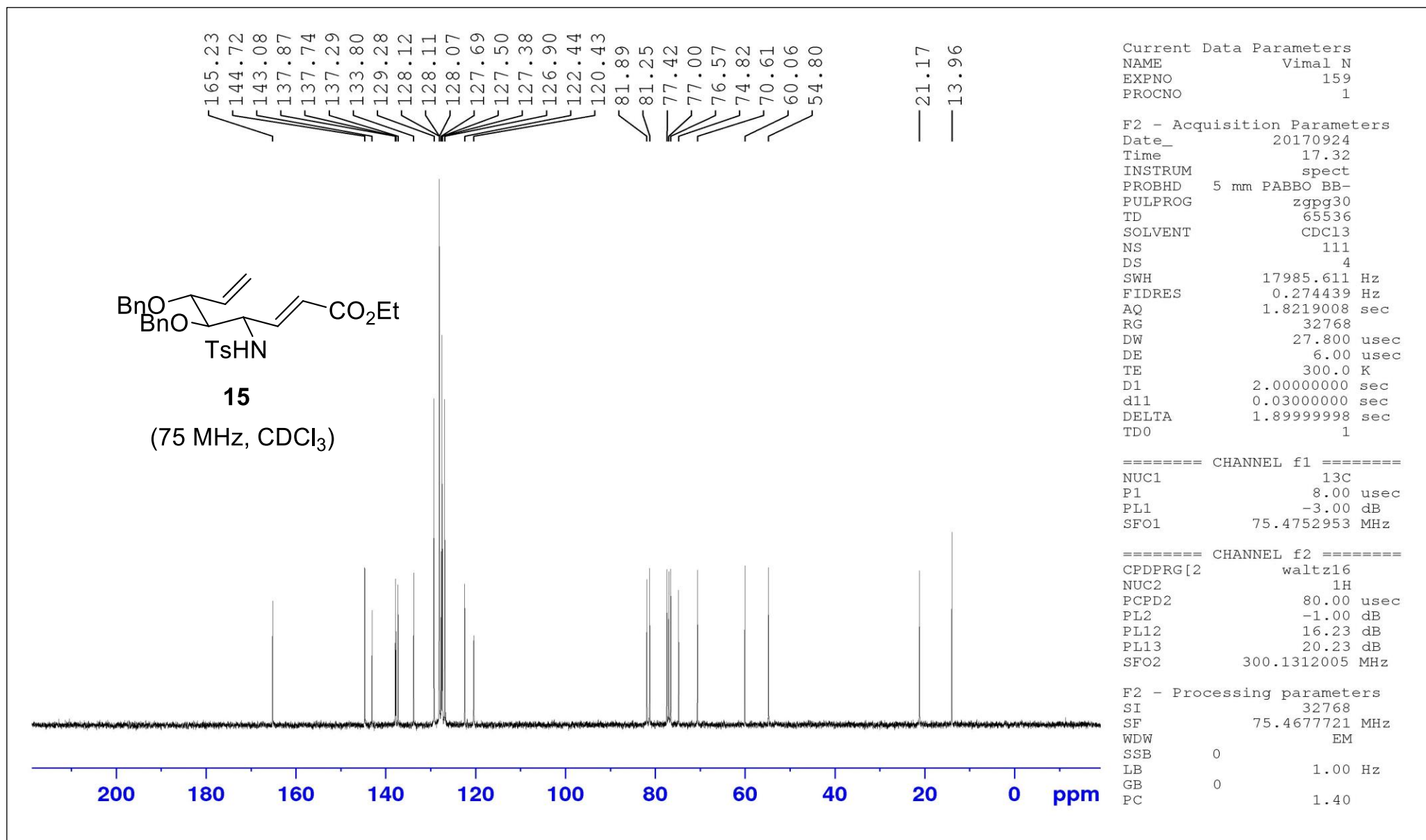


Figure 12.2: <sup>13</sup>C-NMR spectrum of compound **24**.

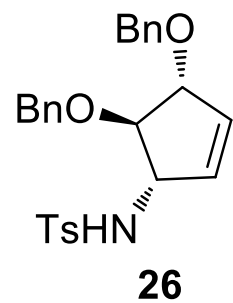


**Figure 13.1:** <sup>1</sup>H-NMR spectrum of compound **15**.

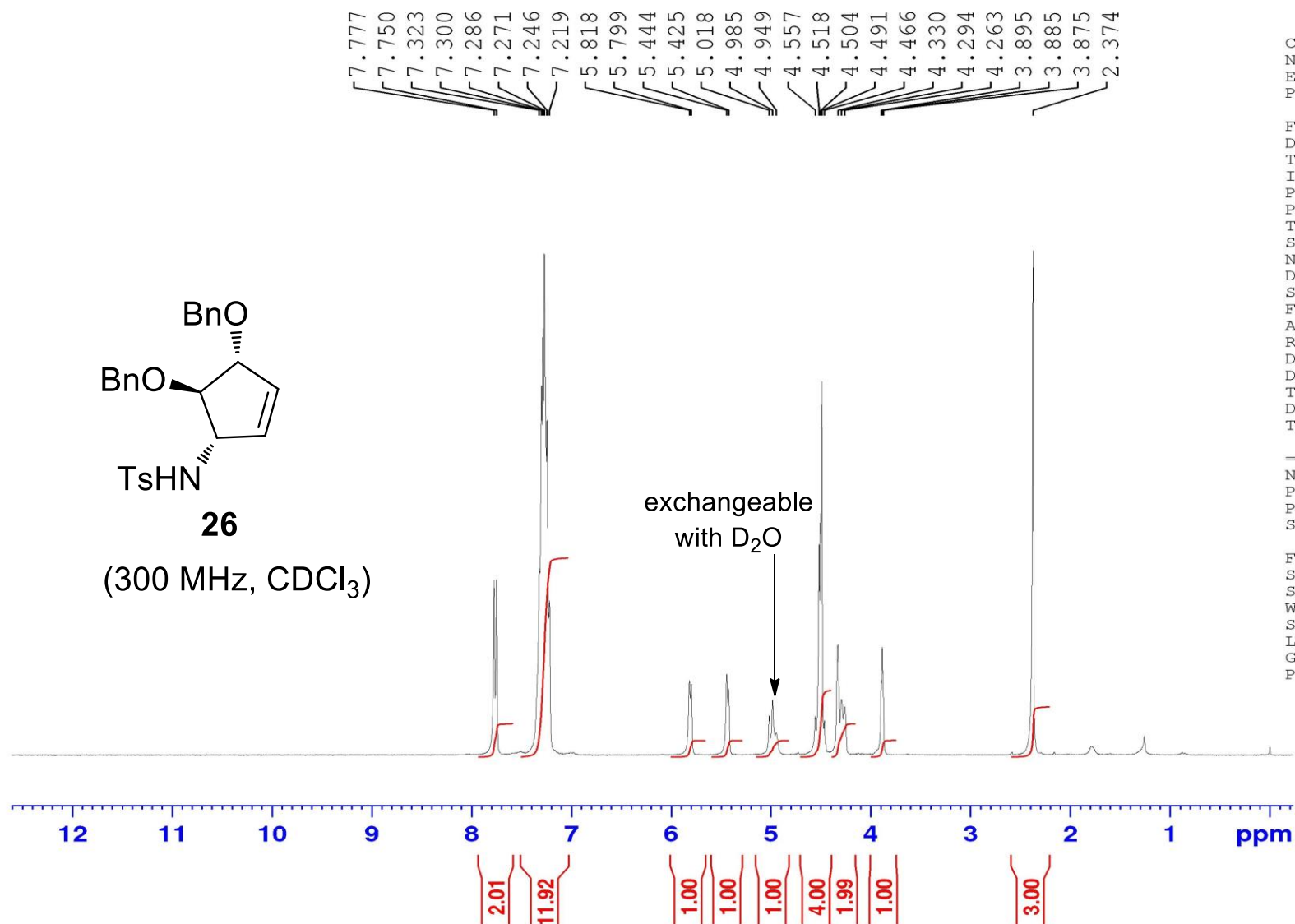




**Figure 13.2:** <sup>13</sup>C-NMR spectrum of compound **15**.



(300 MHz, CDCl<sub>3</sub>)



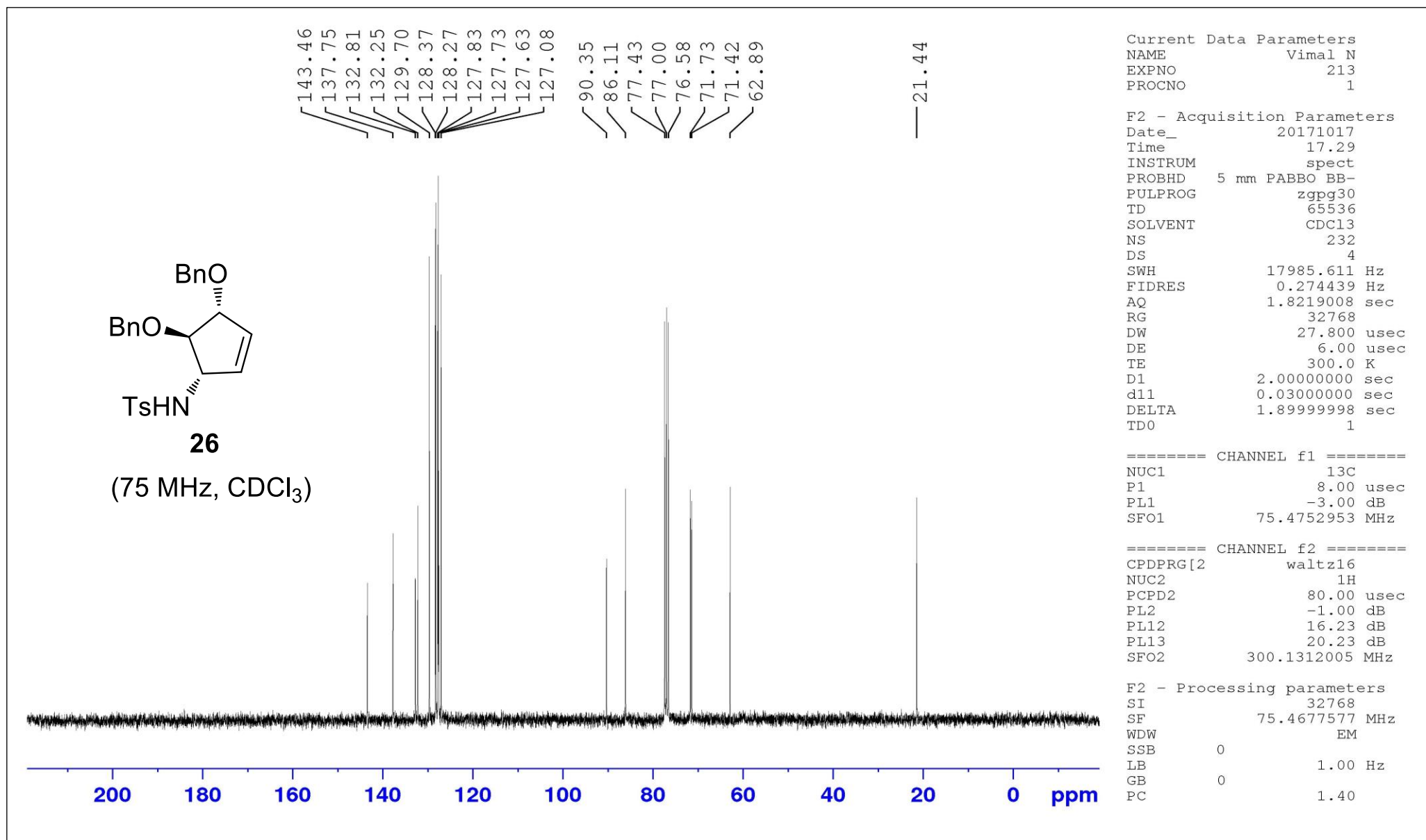
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EXPNO 214  
PROCNO 1

F2 - Acquisition Parameters  
Date\_ 20171017  
Time 17.45  
INSTRUM spect  
PROBHD 5 mm PABBO BB-  
PULPROG zg30  
TD 65536  
SOLVENT CDCl3  
NS 16  
DS 2  
SWH 6172.839 Hz  
FIDRES 0.094190 Hz  
AQ 5.3084159 sec  
RG 4  
DW 81.000 usec  
DE 6.00 usec  
TE 300.0 K  
D1 1.00000000 sec  
TD0 1

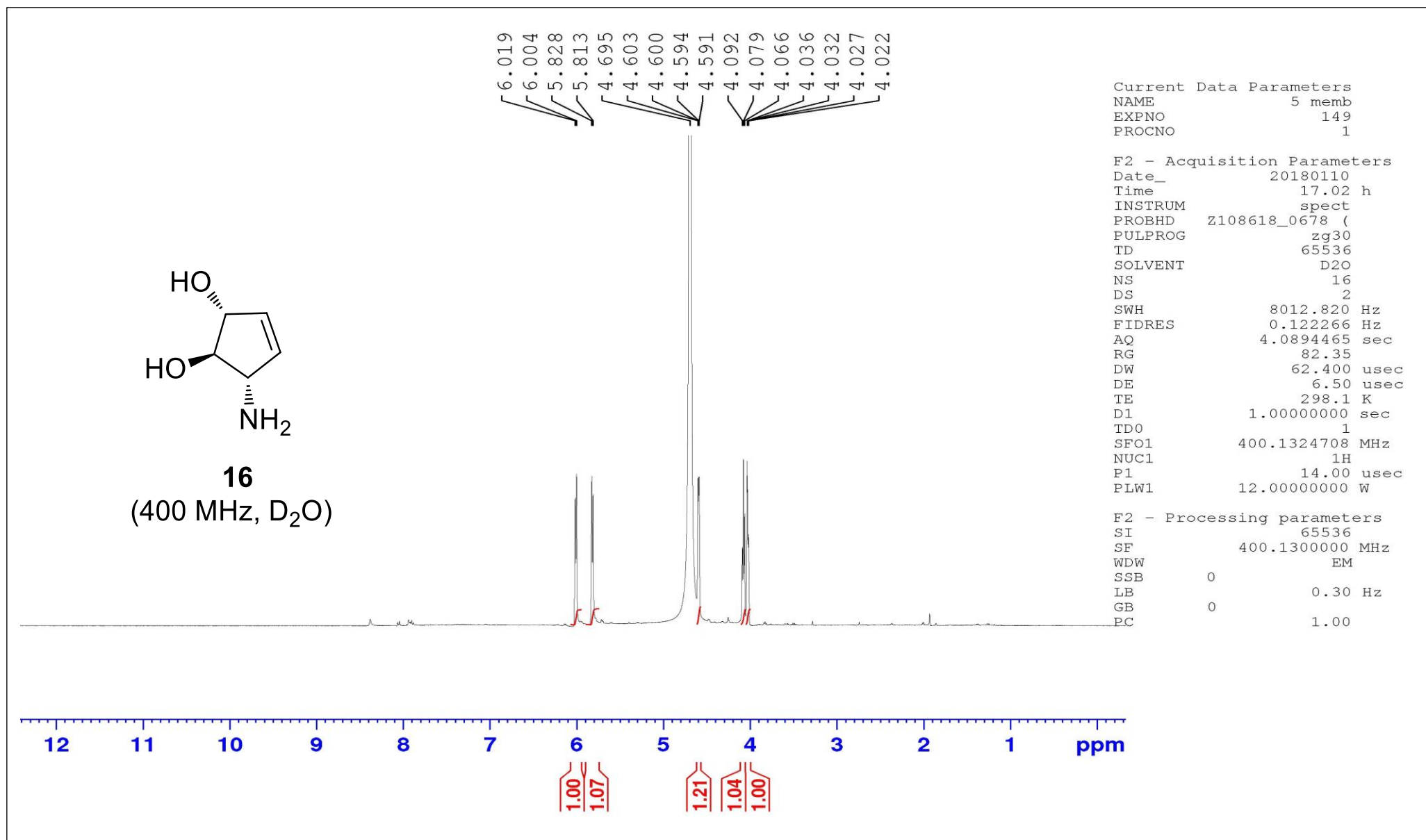
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P1 11.00 usec  
PL1 -1.00 dB  
SFO1 300.1318534 MHz

F2 - Processing parameters  
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SF 300.1300168 MHz  
WDW EM  
SSB 0  
LB 0.30 Hz  
GB 0  
PC 1.00

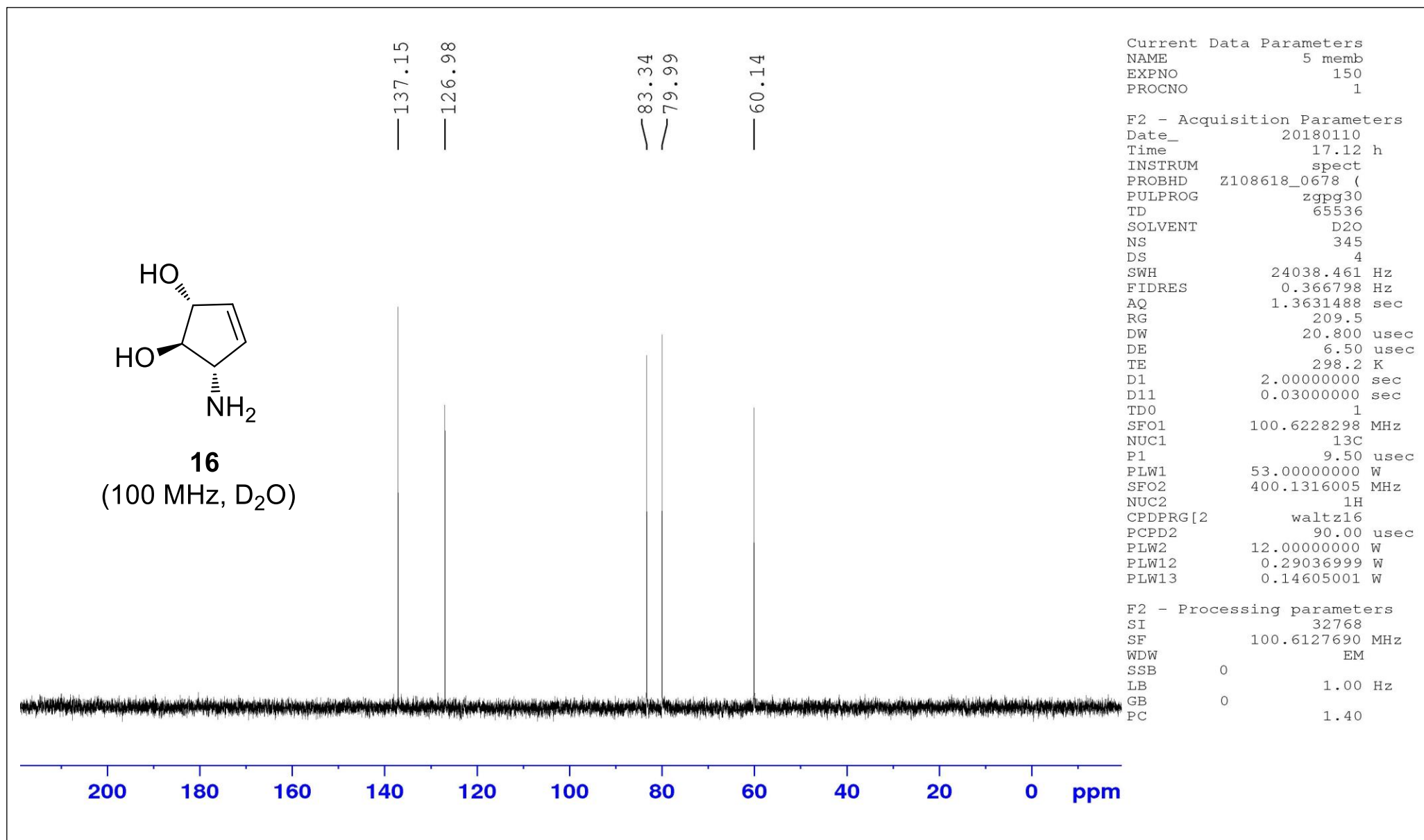
**Figure 14.1:** <sup>1</sup>H-NMR spectrum of compound **26**.



**Figure 14.2:** <sup>13</sup>C-NMR spectrum of compound **26**.



**Figure 15.1:** <sup>1</sup>H-NMR spectrum of compound **16**.



**Figure 15.2:** <sup>13</sup>C-NMR spectrum of compound **16**.

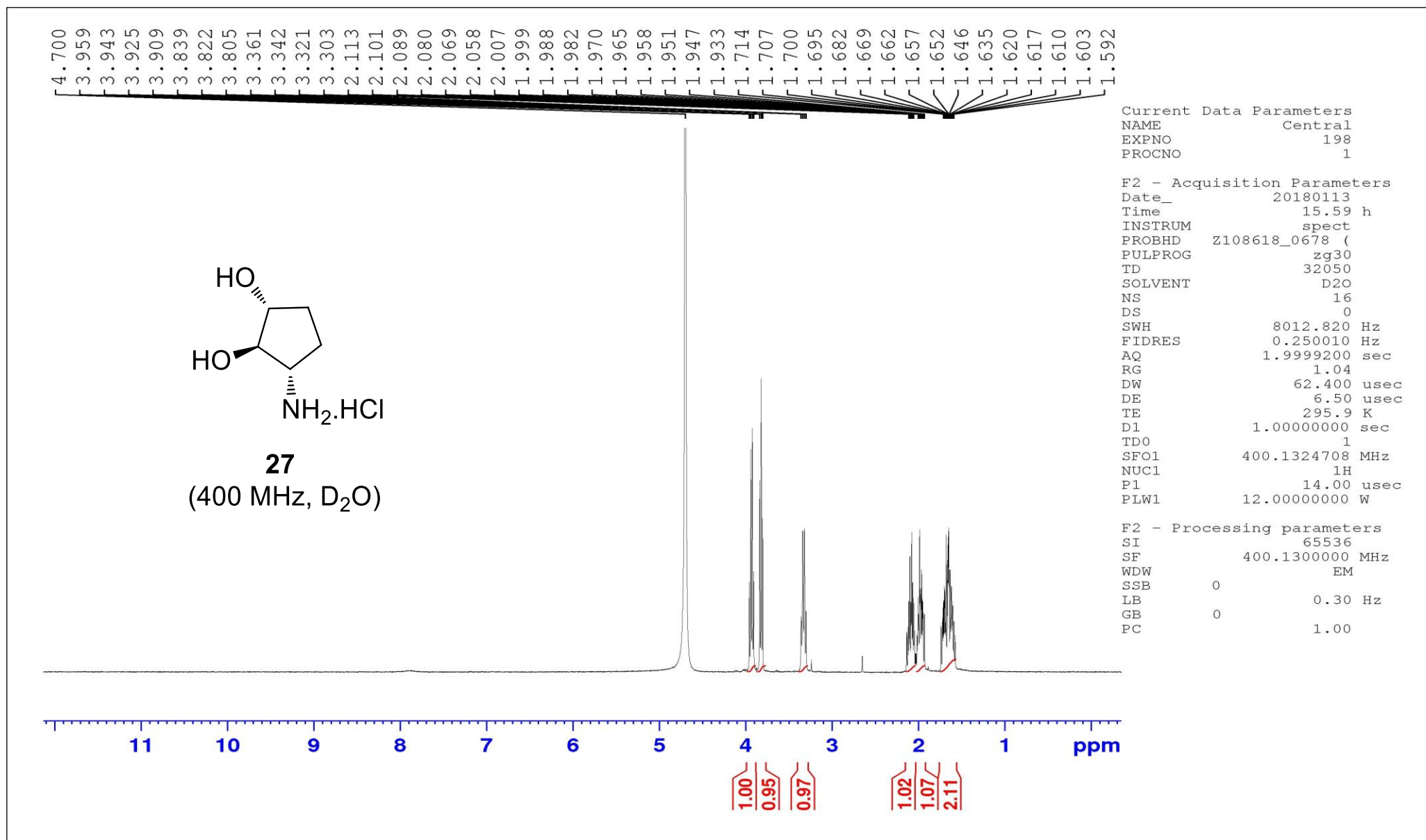
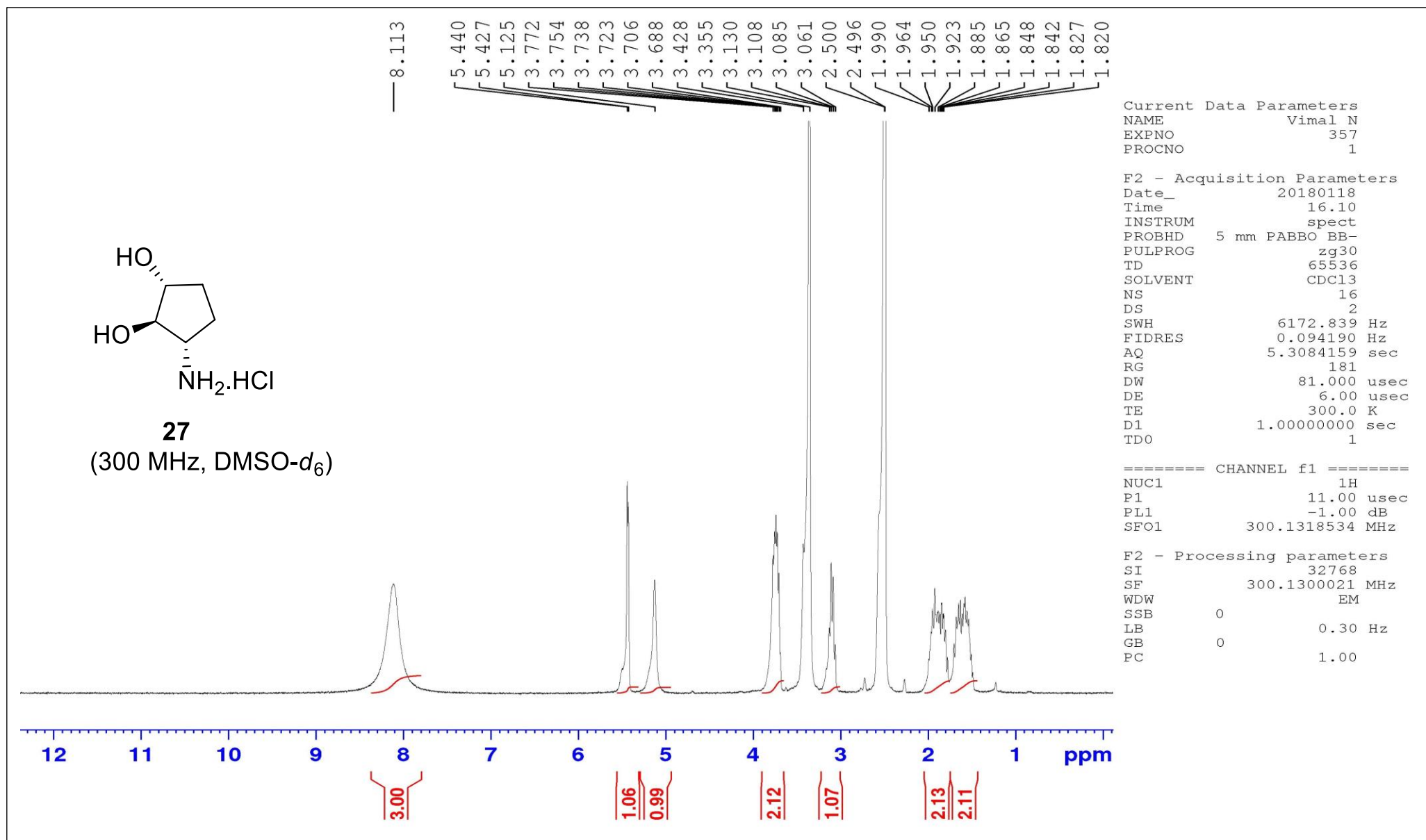
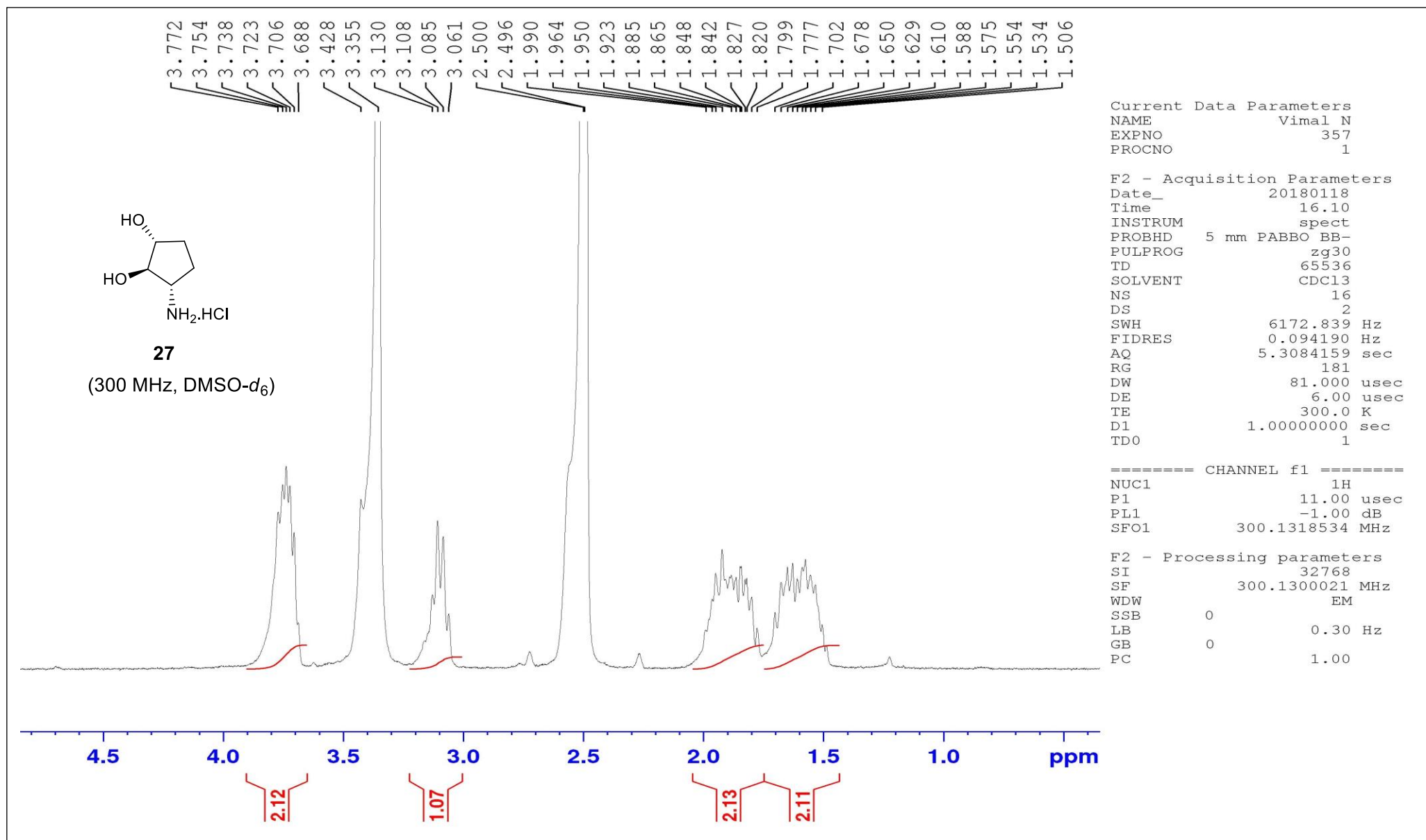


Figure 16.1: <sup>1</sup>H-NMR spectrum of compound **27**.

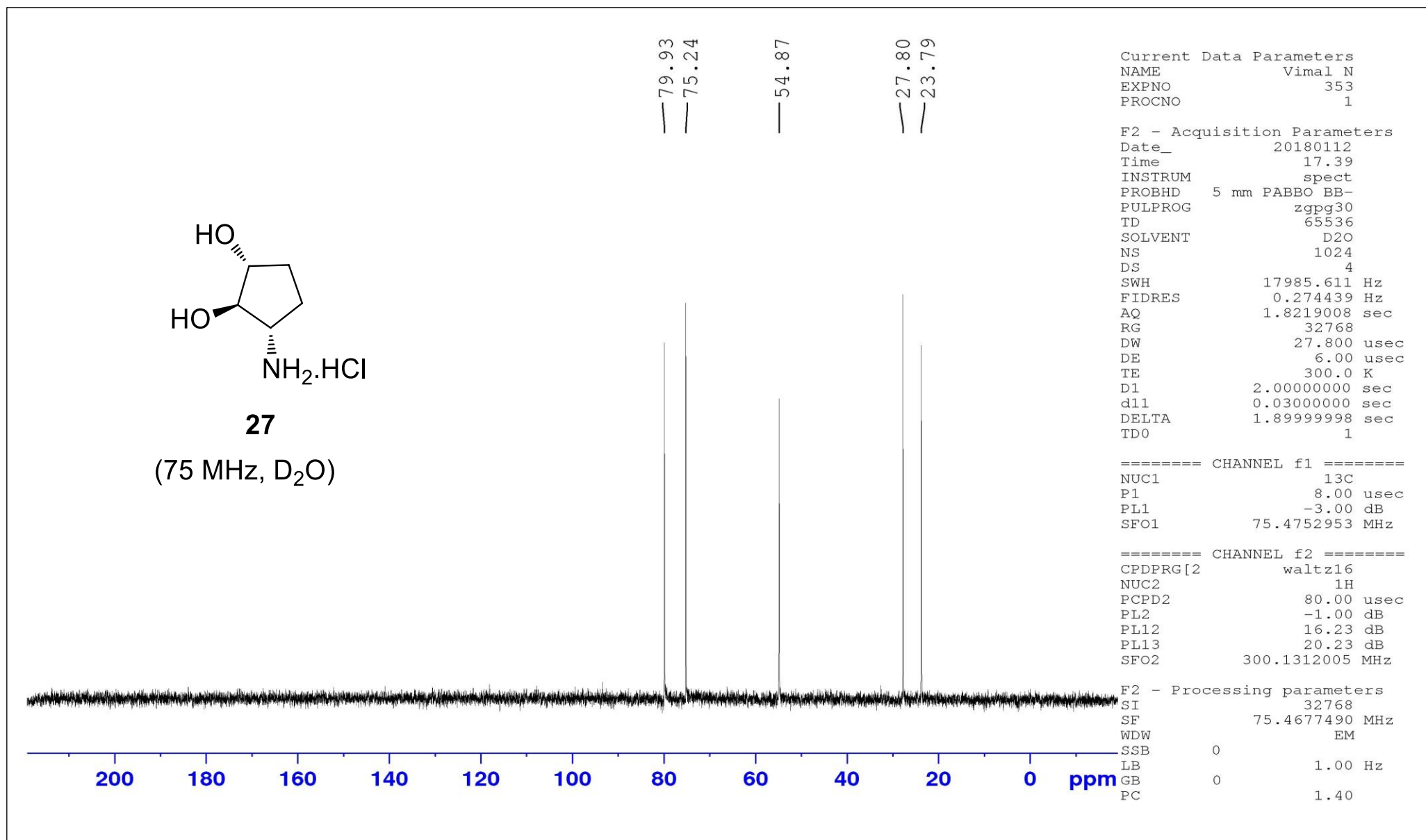




**Figure 16.2:**  $^1\text{H}$ -NMR spectrum of compound **27**.



**Figure 16.3:**  $^1\text{H}$ -NMR spectrum of compound **27**. (expanded spectrum)



**Figure 16.4:** <sup>13</sup>C-NMR spectrum of compound **27**.

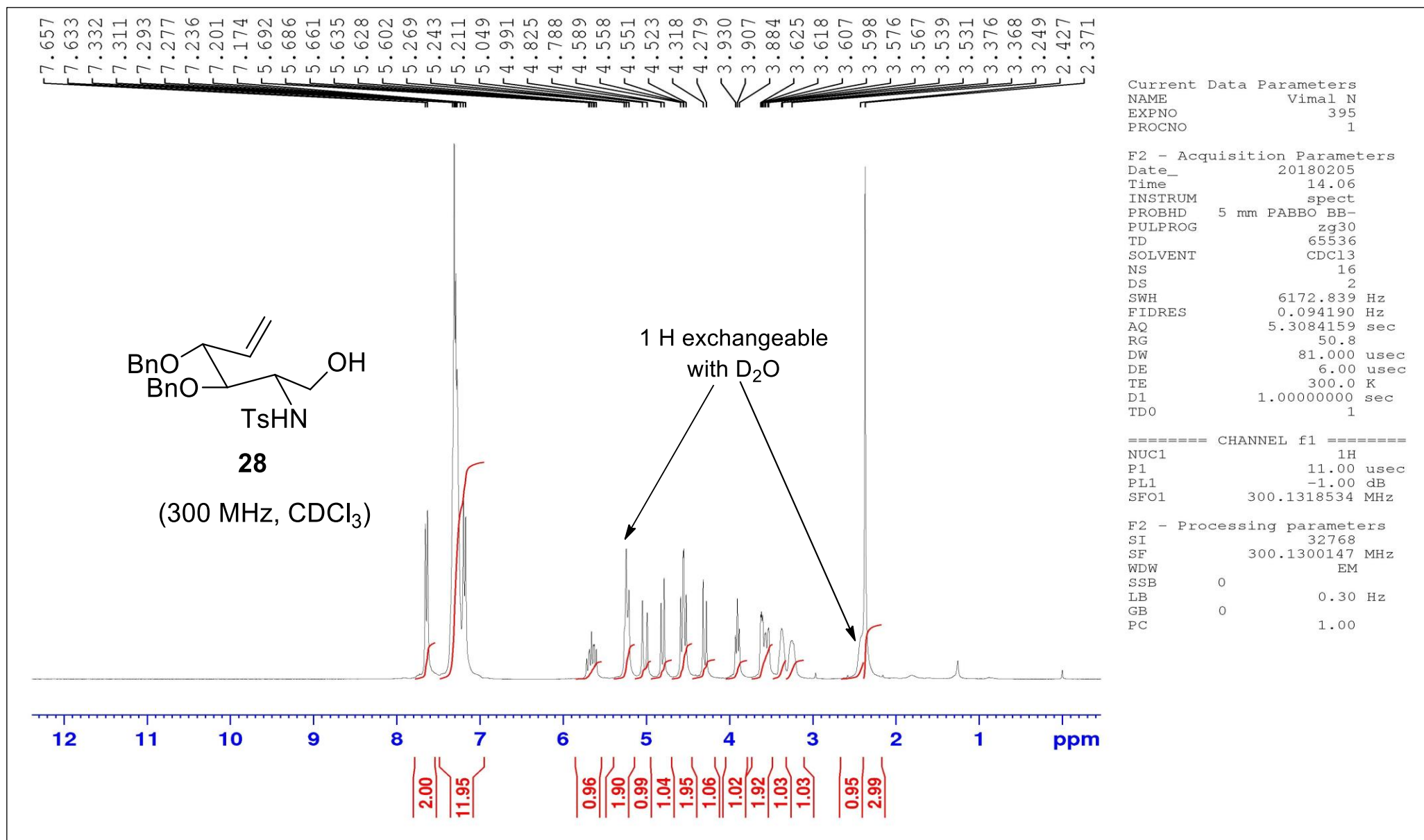


Figure 17.1: <sup>1</sup>H-NMR spectrum of compound **28**.

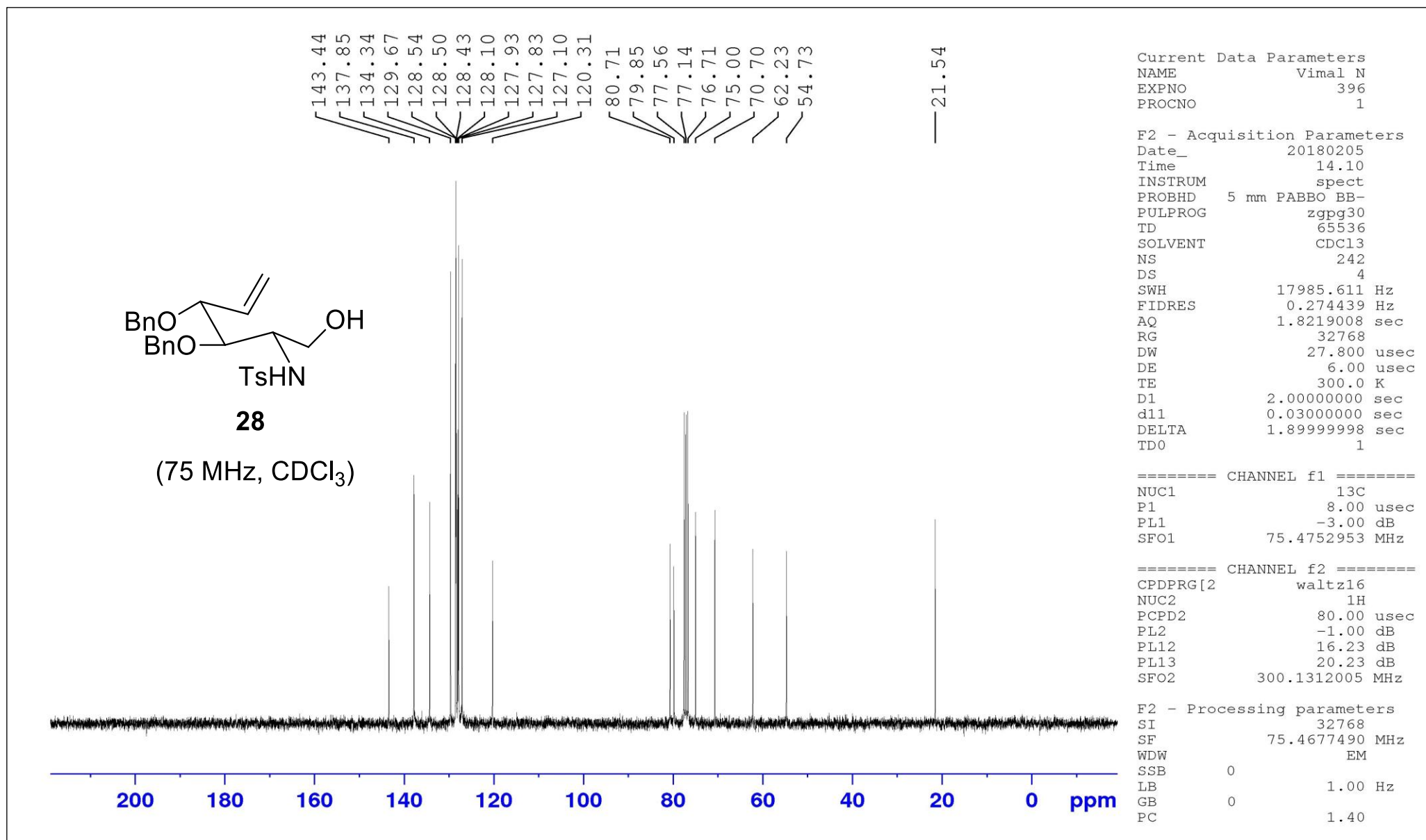
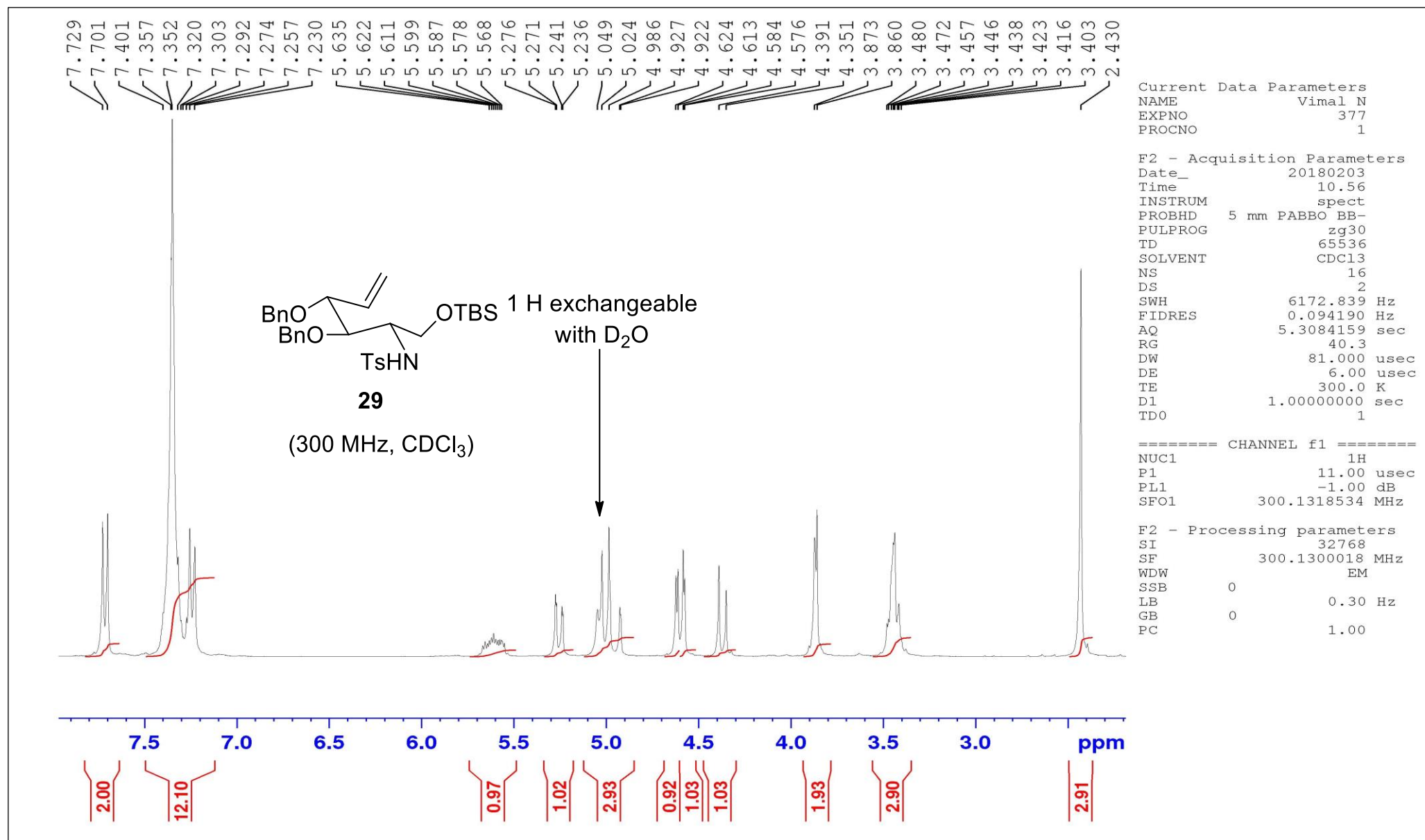


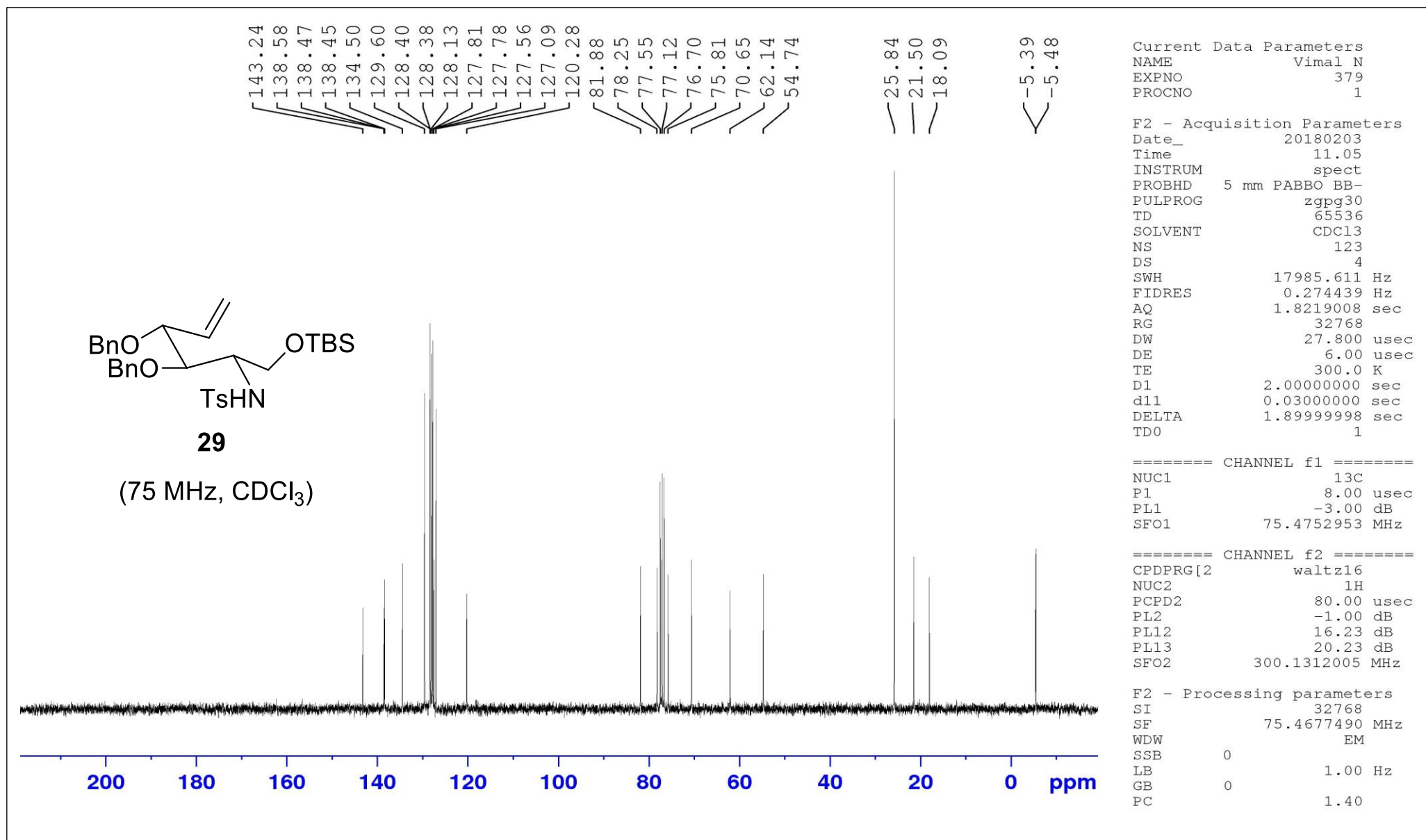
Figure 17.2: <sup>13</sup>C-NMR spectrum of compound **28**.



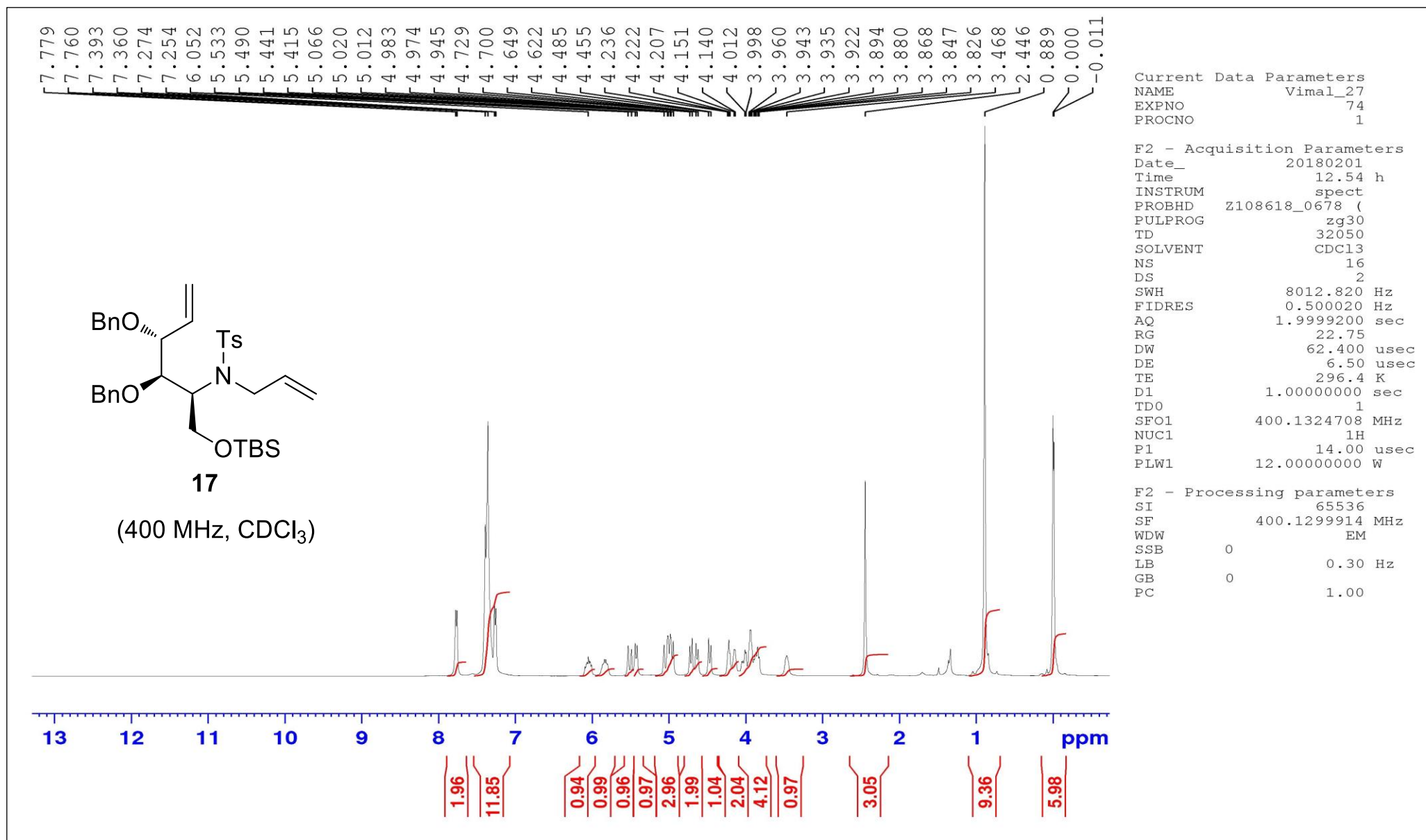




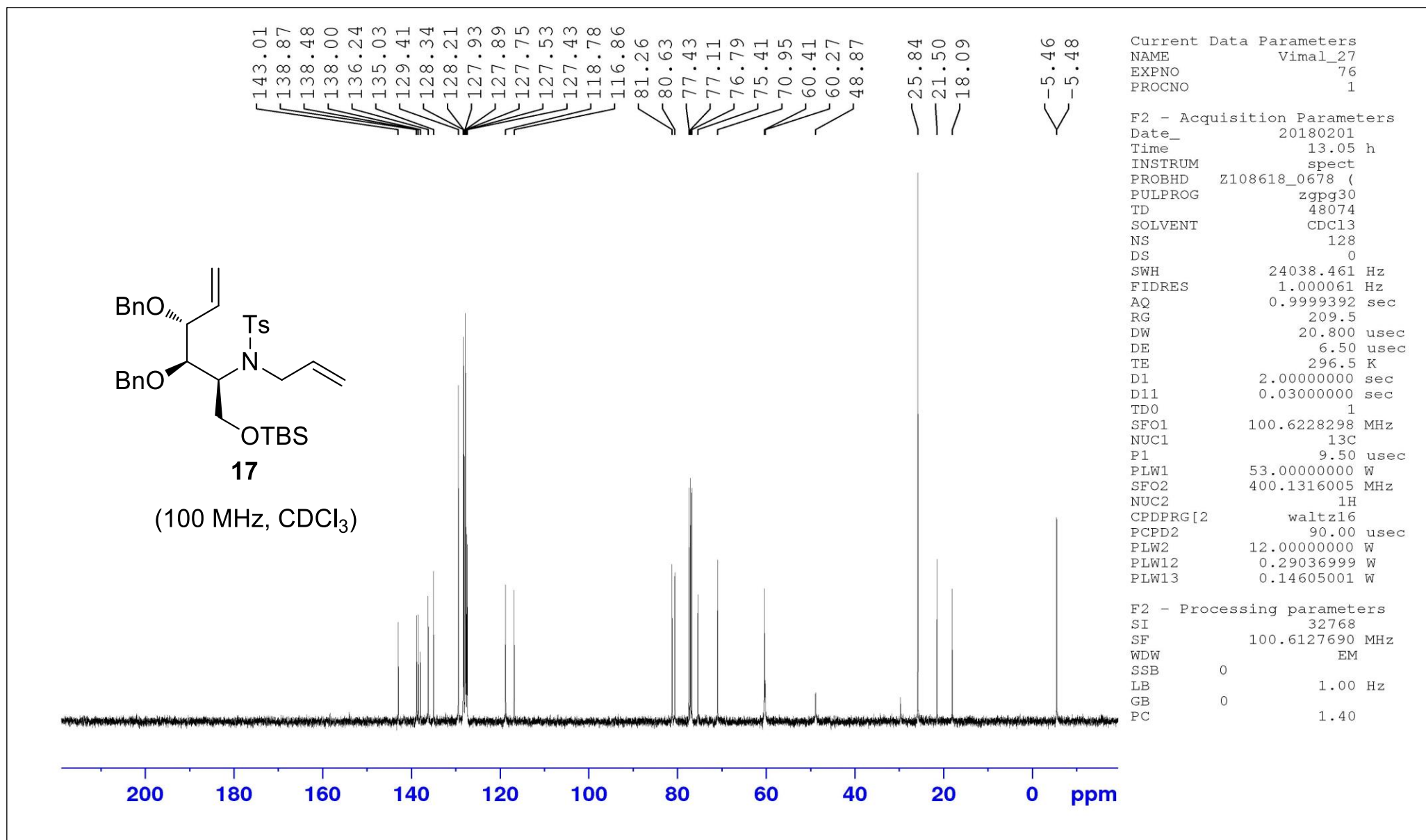
**Figure 18.2:** <sup>1</sup>H-NMR spectrum of compound **29**. (expanded spectrum)



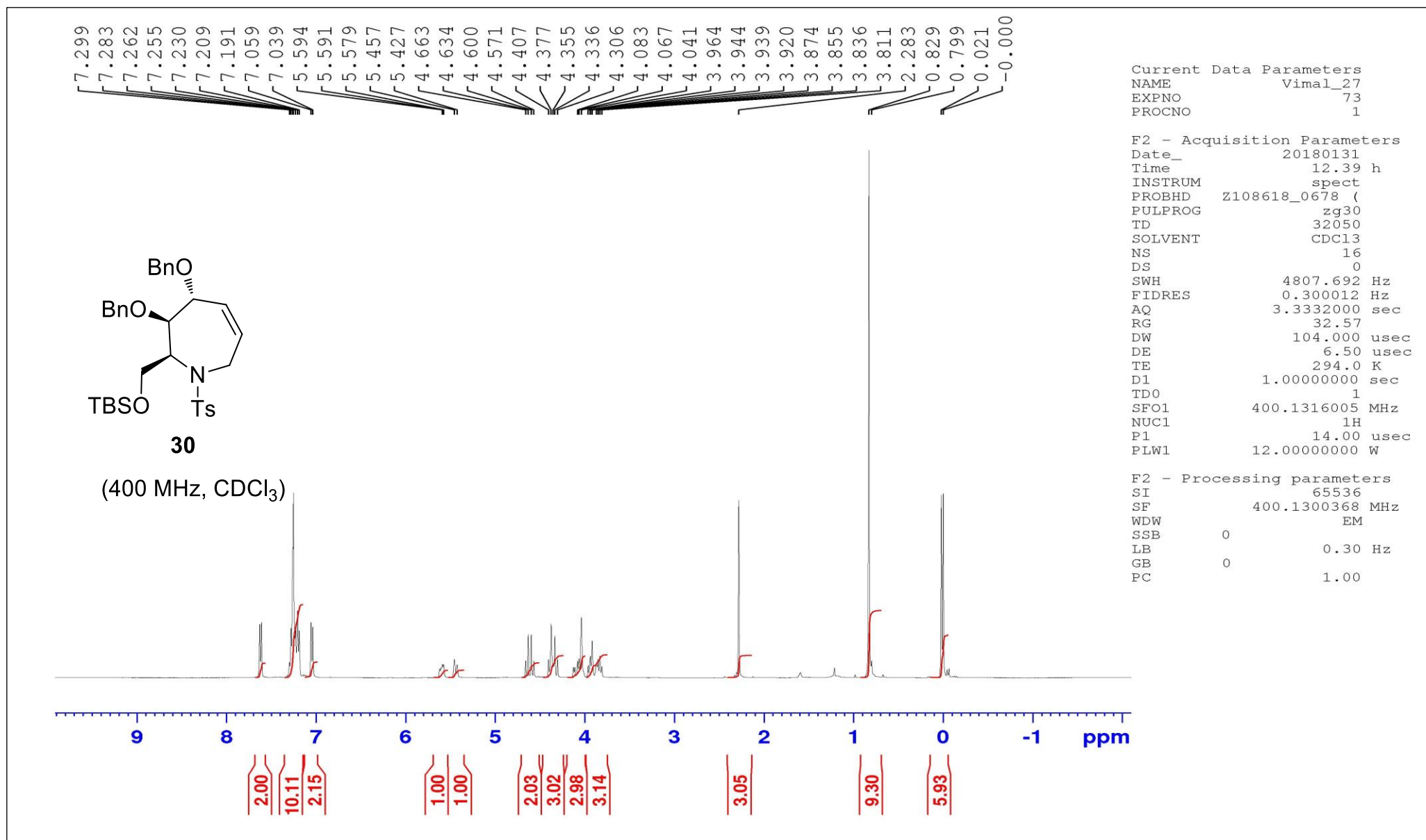
**Figure 18.3:** <sup>13</sup>C-NMR spectrum of compound **29**.



**Figure 19.1:** <sup>1</sup>H-NMR spectrum of compound **17**.



**Figure 19.2:**  $^{13}\text{C}$ -NMR spectrum of compound **17**.



**Figure 20.1:** <sup>1</sup>H-NMR spectrum of compound **30**.







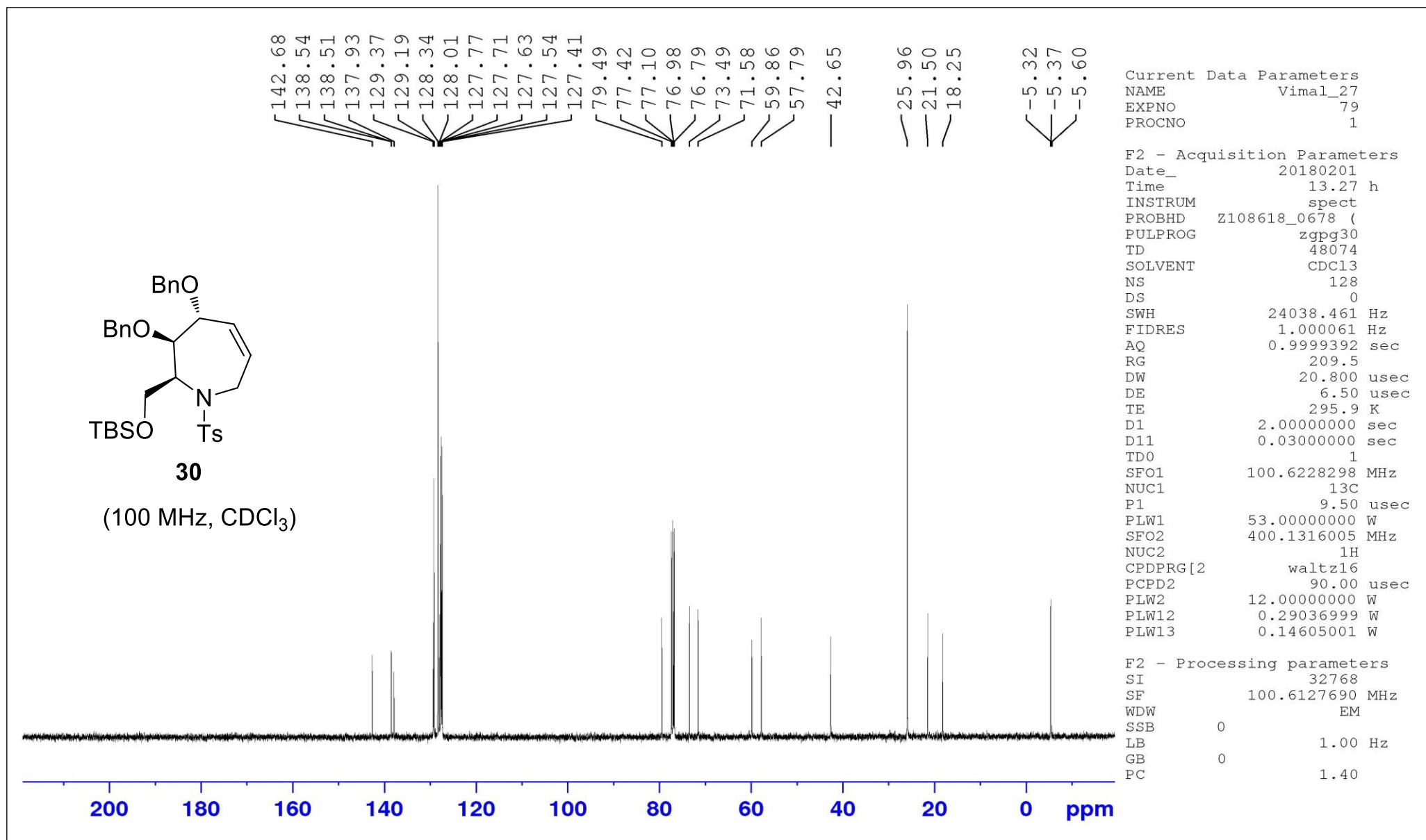
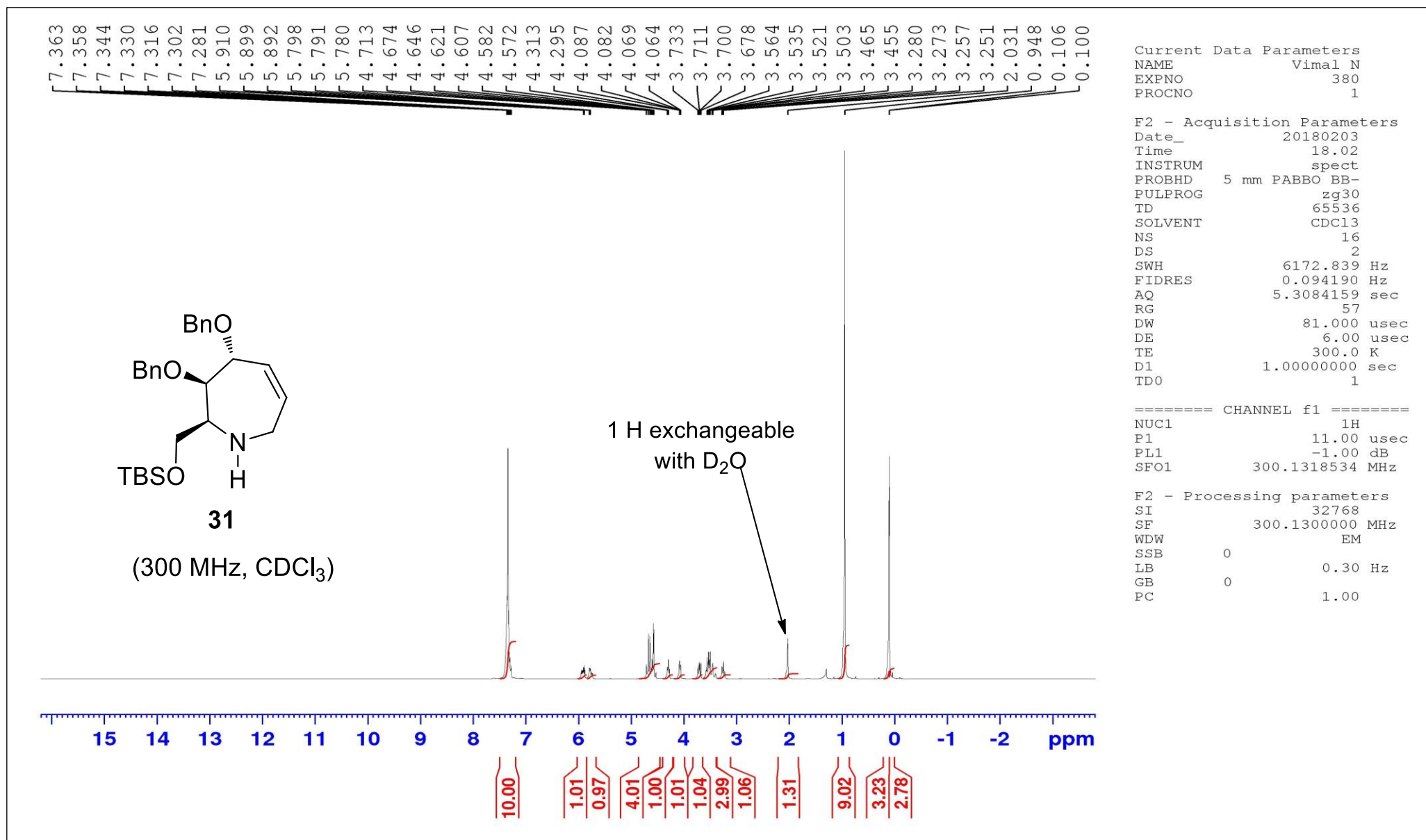
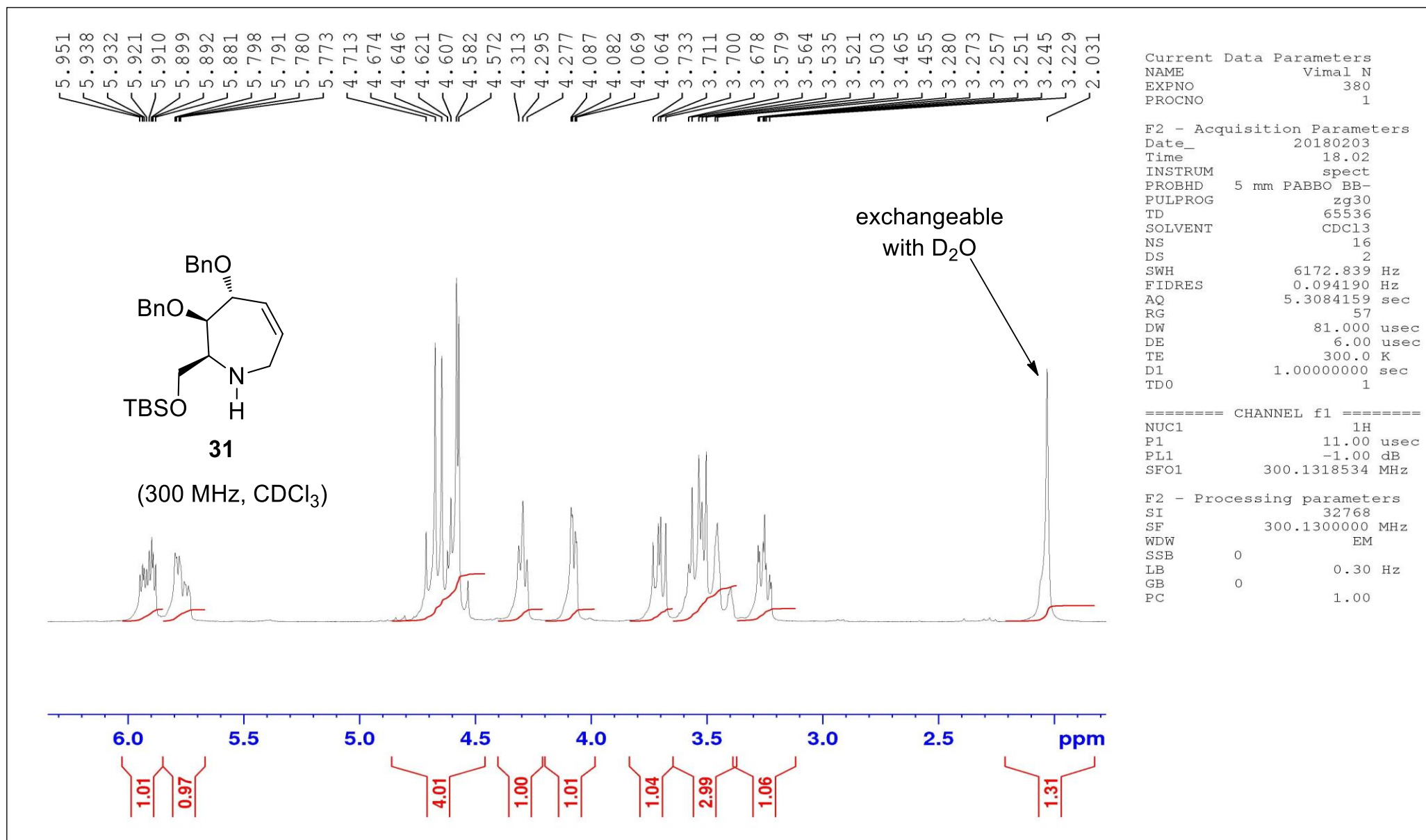


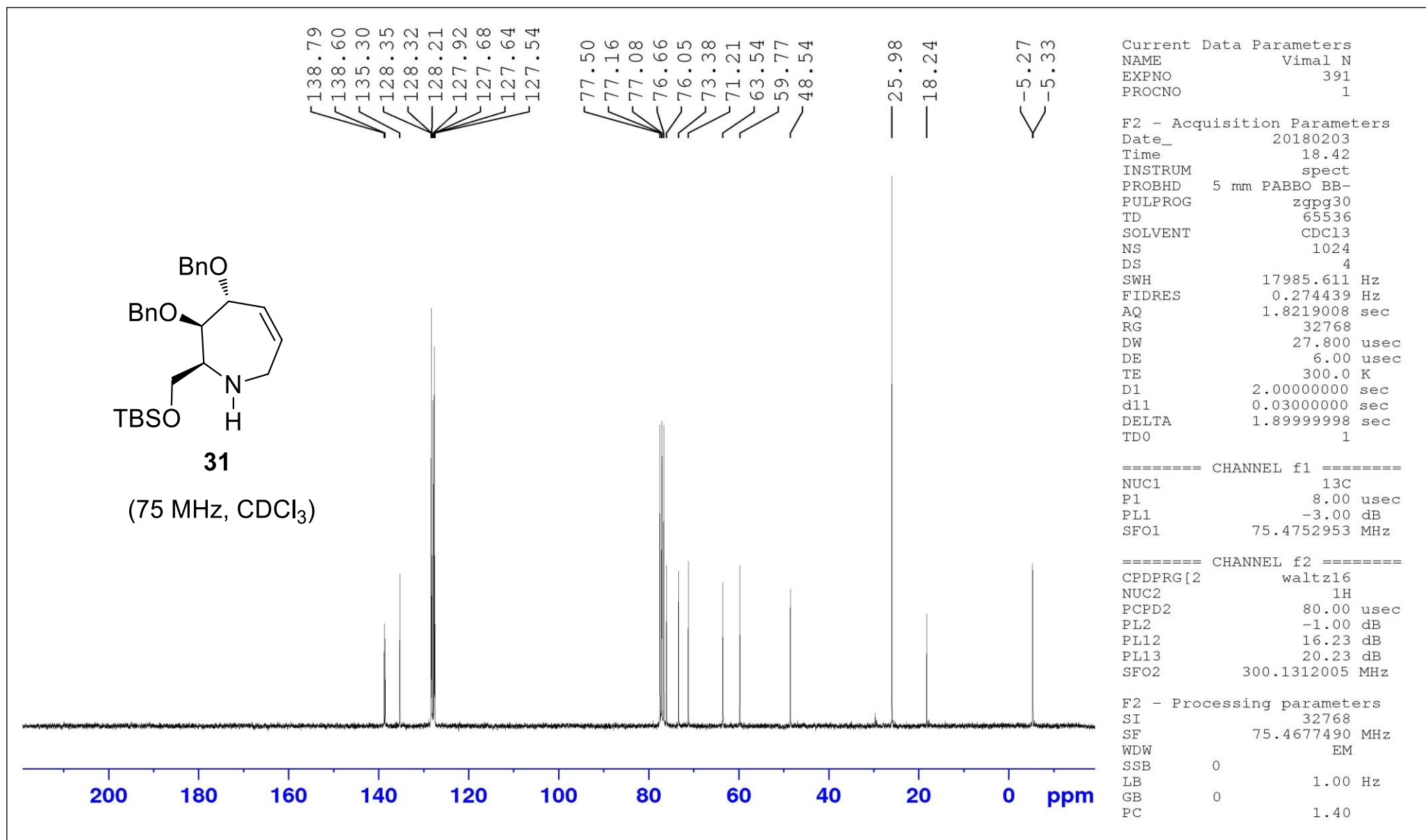
Figure 20.3: <sup>13</sup>C-NMR spectrum of compound **30**.



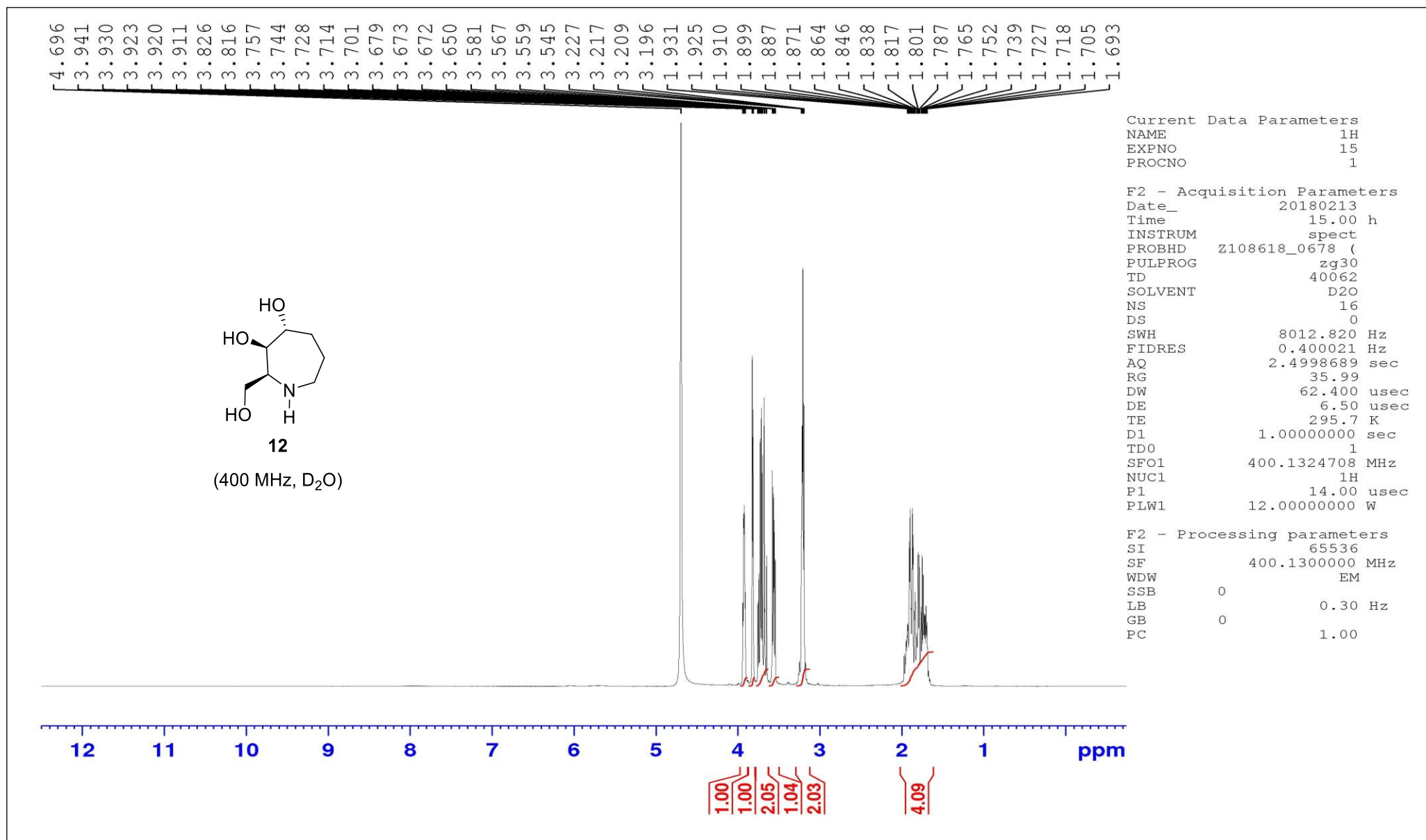
**Figure 21.1:** <sup>1</sup>H-NMR spectrum of compound **31**.



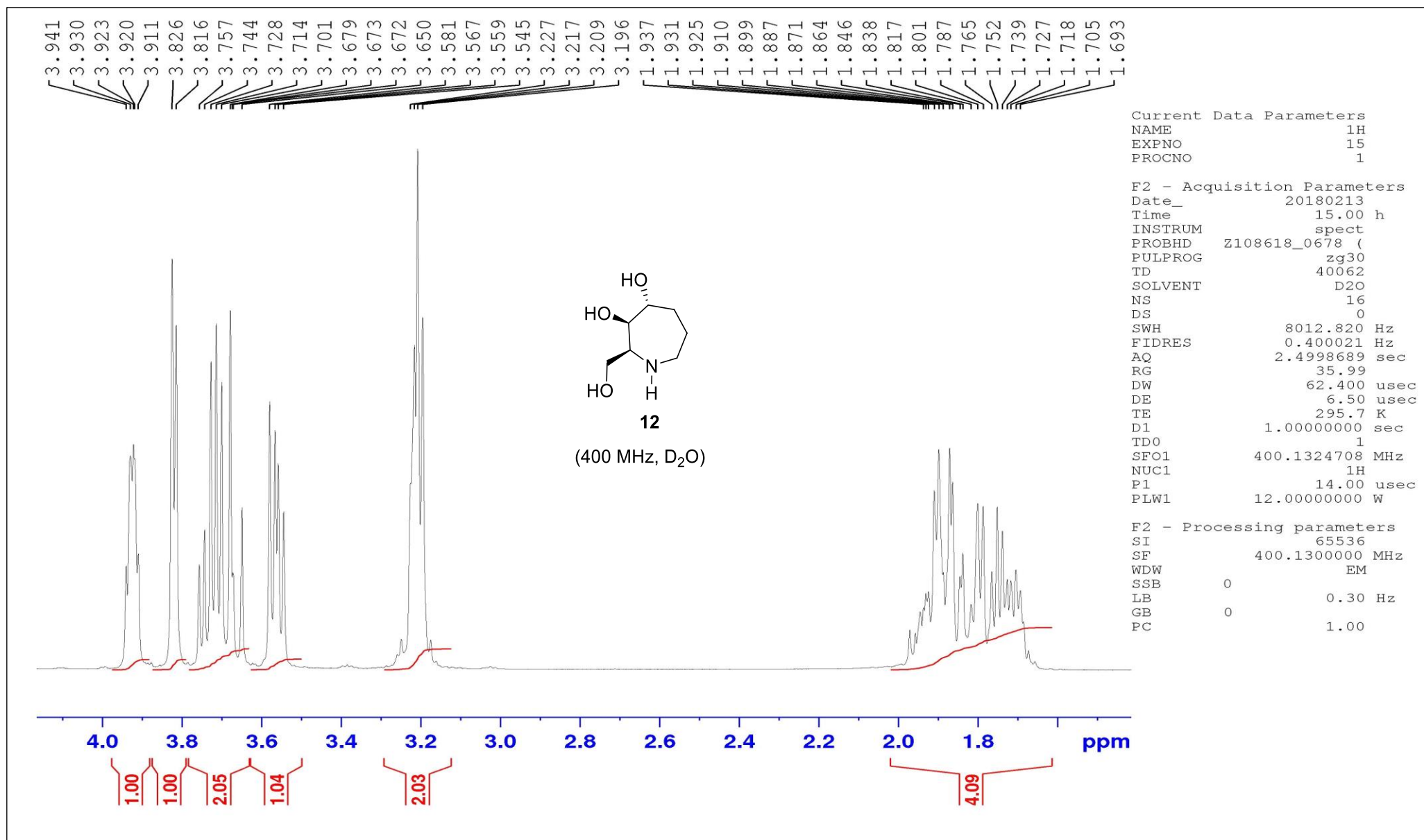
**Figure 21.2:** <sup>1</sup>H-NMR spectrum of compound **31**. (expanded spectrum)



**Figure 21.3:** <sup>13</sup>C-NMR spectrum of compound **31**.

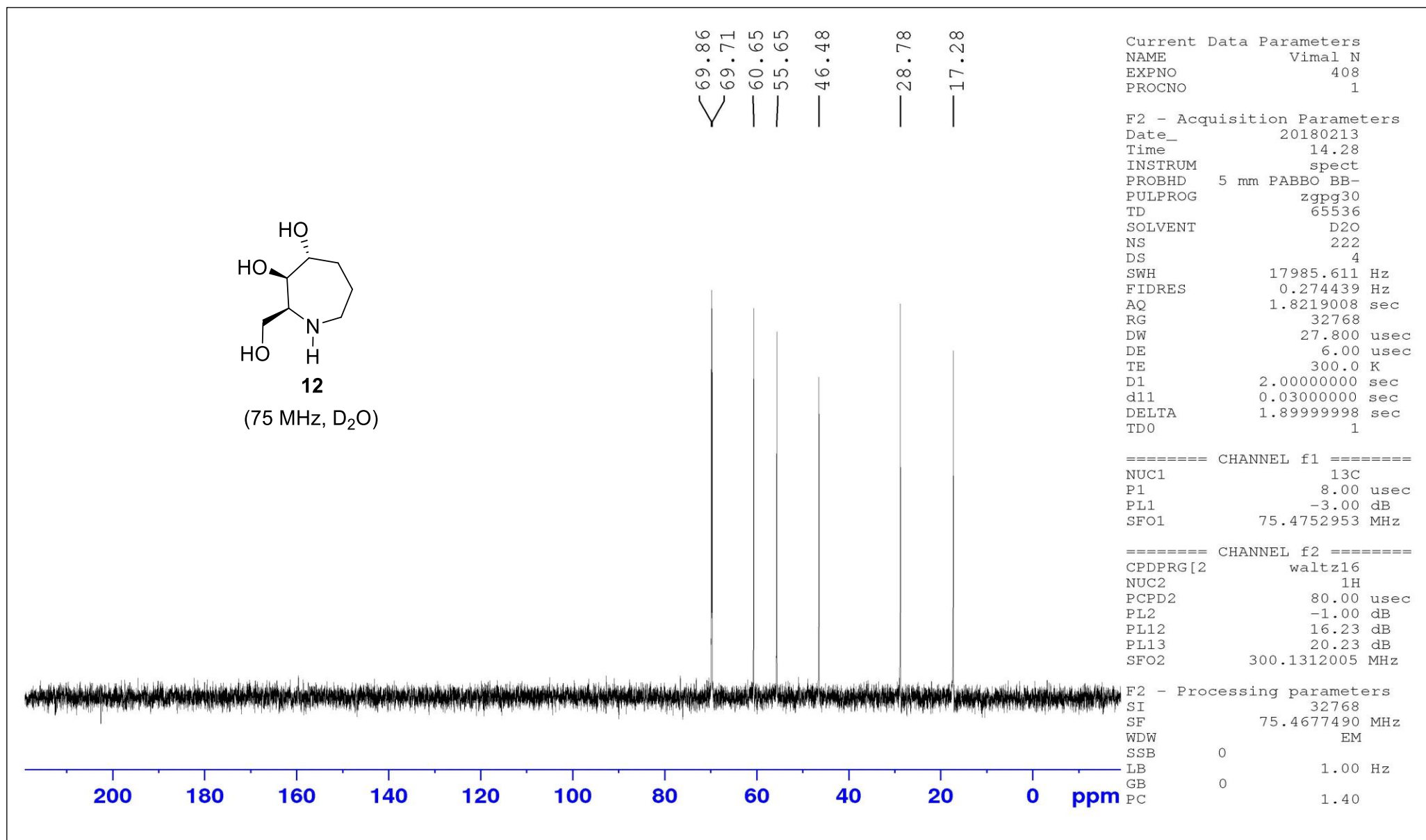


**Figure 22.1:** <sup>1</sup>H-NMR spectrum of compound **12**.



**Figure 22.2:** <sup>1</sup>H-NMR spectrum of compound **12**. (expanded spectrum)





**Figure 22.3:** <sup>13</sup>C-NMR spectrum of compound **12**.