

Brevisamide: An unprecedented monocyclic ether alkaloid from the dinoflagellate *Karenia brevis* that provides a potential model for ladder-frame initiation— Supporting Information

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Instrumentation used

NMR spectra were acquired on a Bruker Avance 500 MHz spectrometer. Low-resolution mass spectra were acquired on a Waters ZQ instrument using electrospray ionization and interfaced to an Agilent 1100 HPLC system. High-resolution mass spectra were acquired on a Waters QToF Ultima spectrometer using electrospray ionization. UV-vis spectra were acquired on a Beckman DU640B Spectrophotometer. Infrared spectra were acquired on a Nicolet 6700 FT-IR (Thermo Scientific, Inc.) using OMNIC acquisition software. Optical rotation measurements were made on an Autopol III polarimeter (Rudolph Research Analytical) at ambient temperature.

NMR spectra of brevisamide

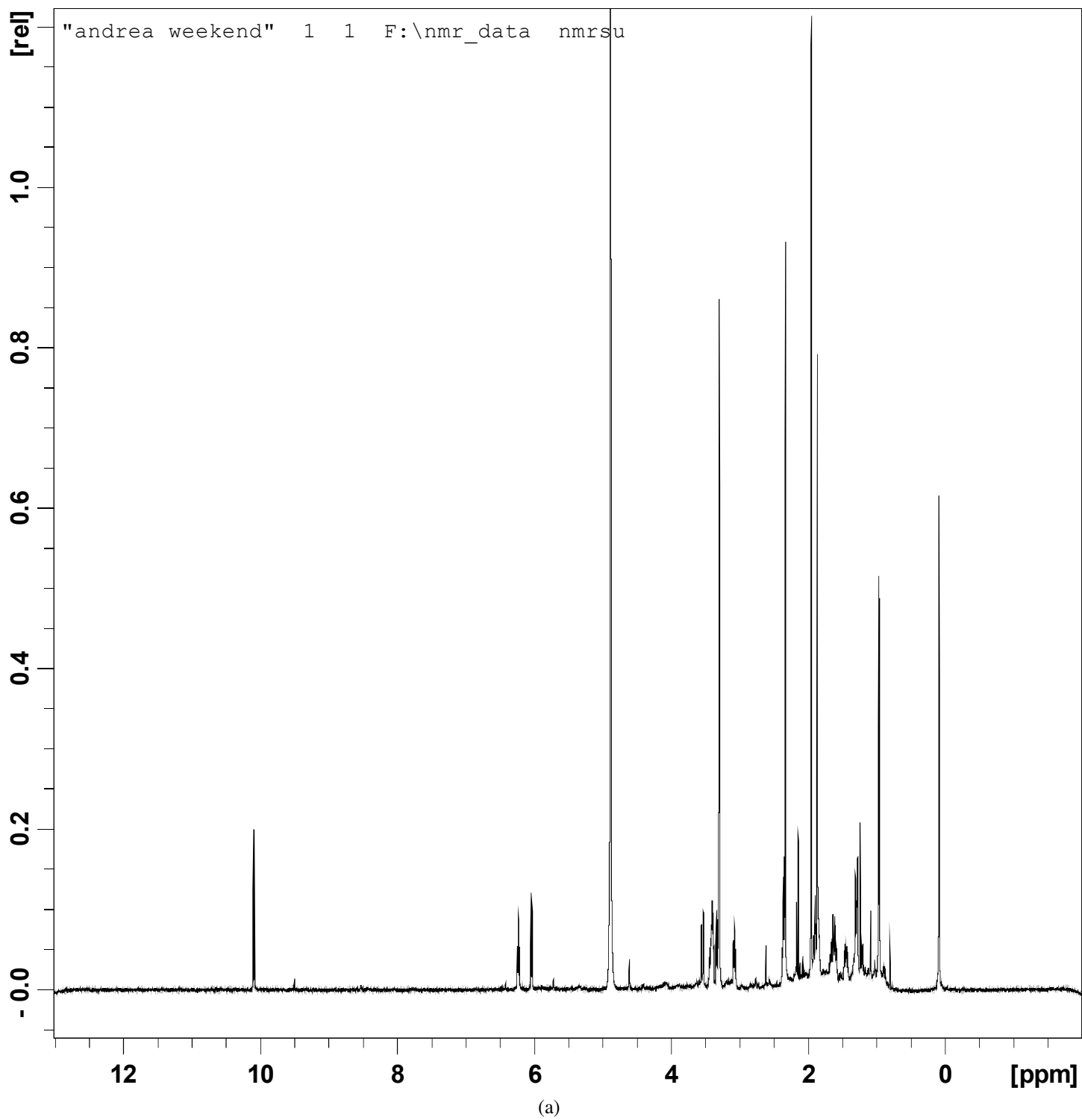


Figure S1. ^1H NMR spectrum of brevisamide (1). a- Full spectrum. b-f- Details from various regions.

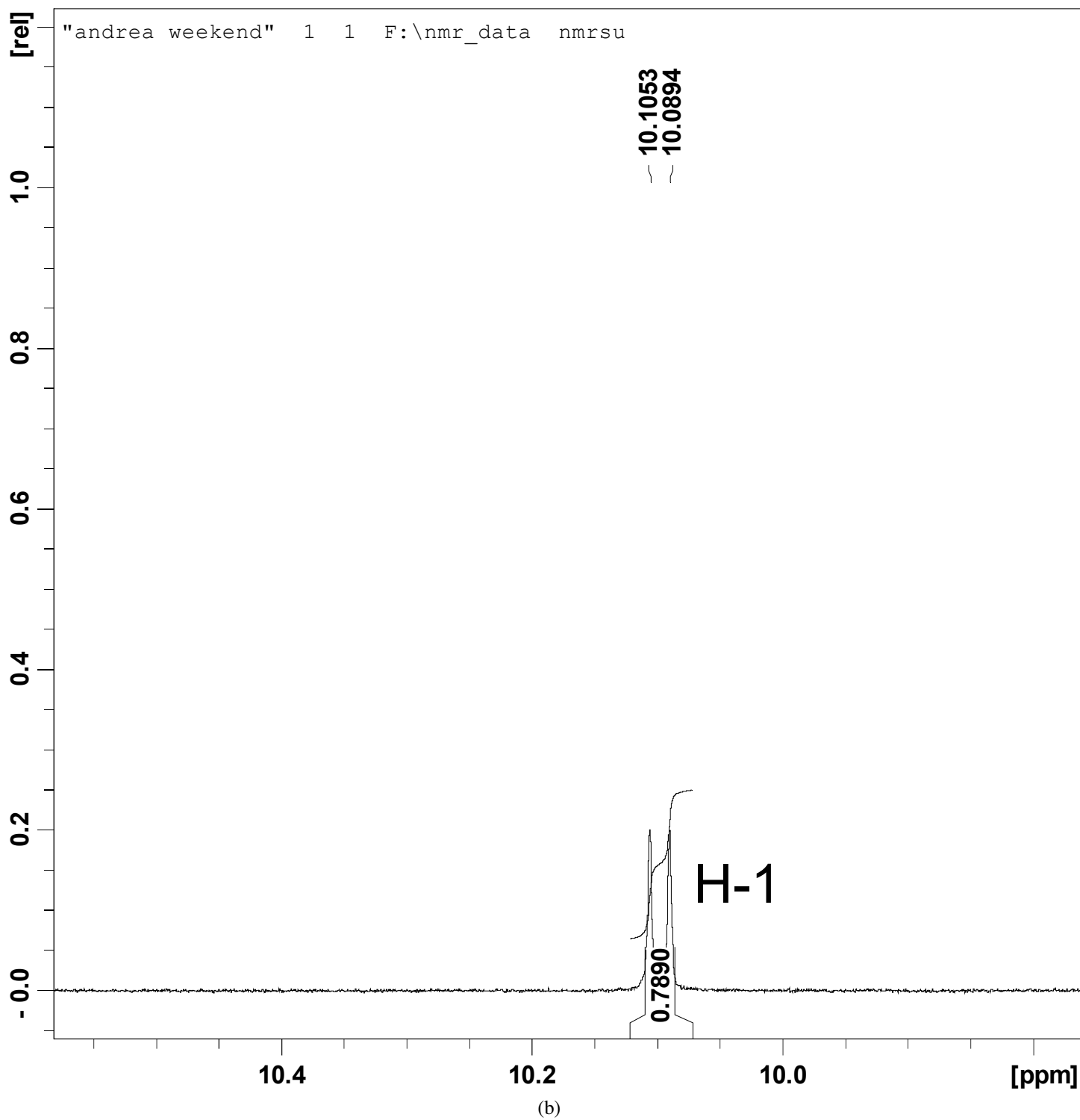
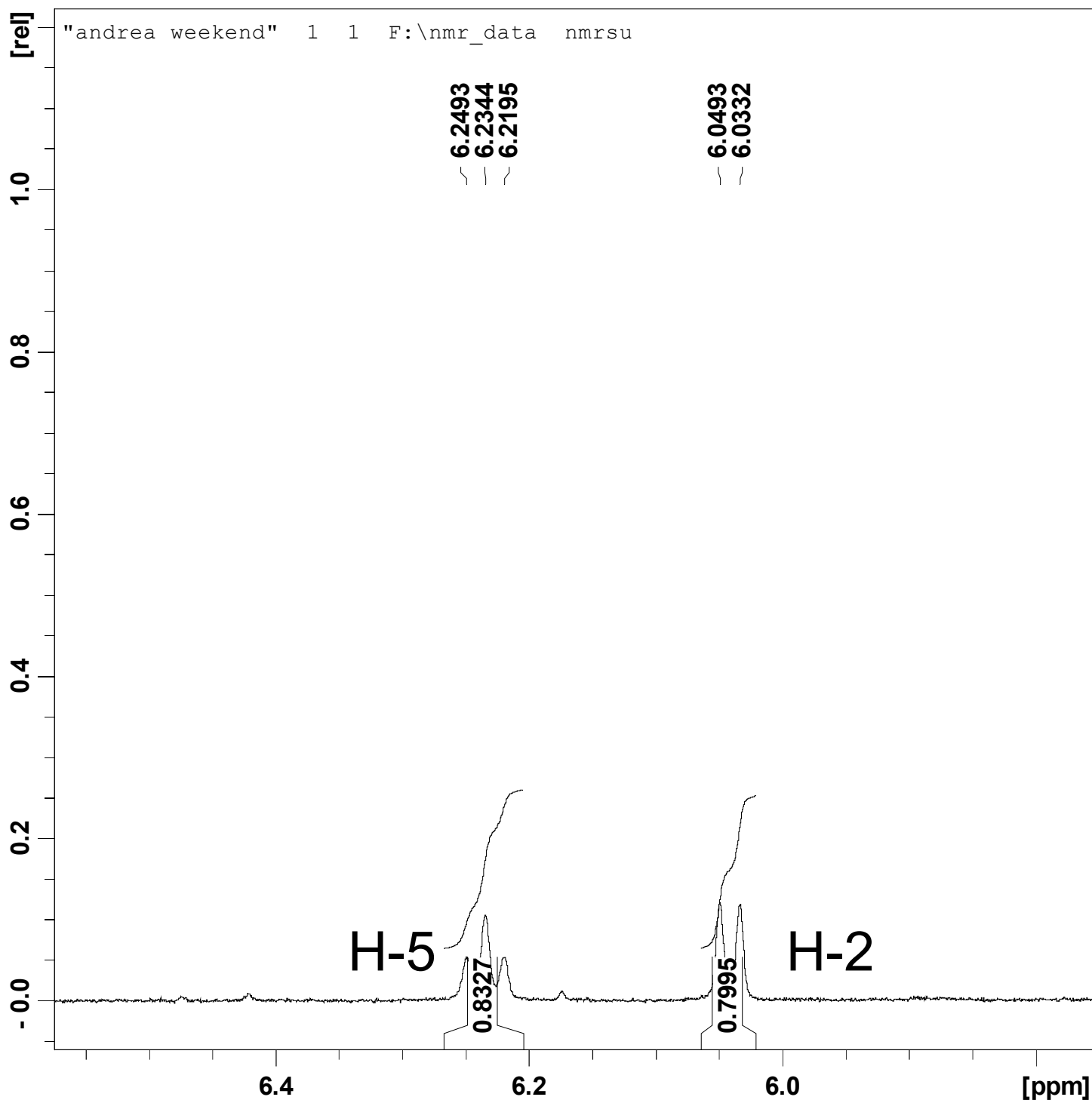


Figure S1 continued.



(c)

Figure S1 continued.

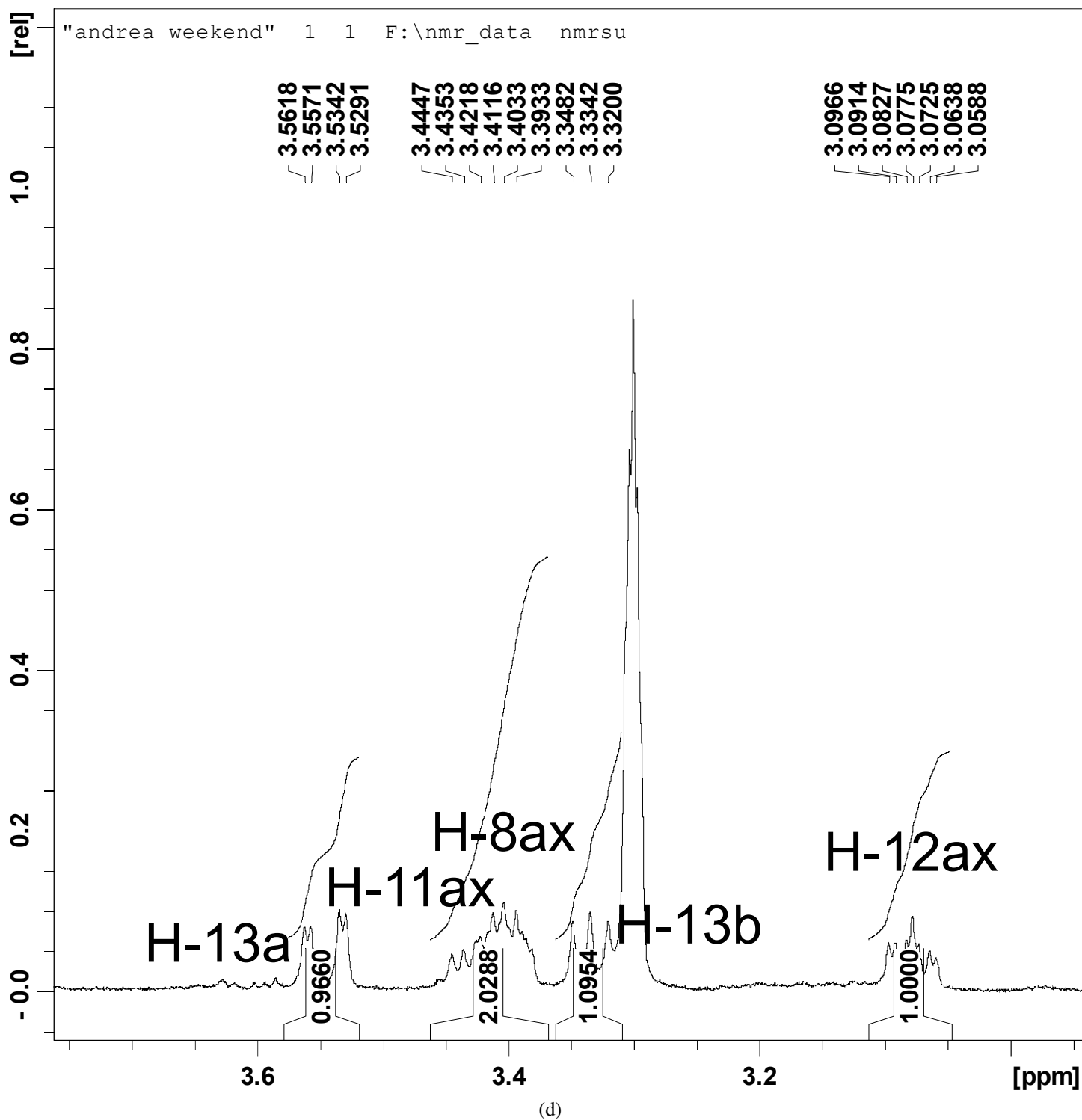
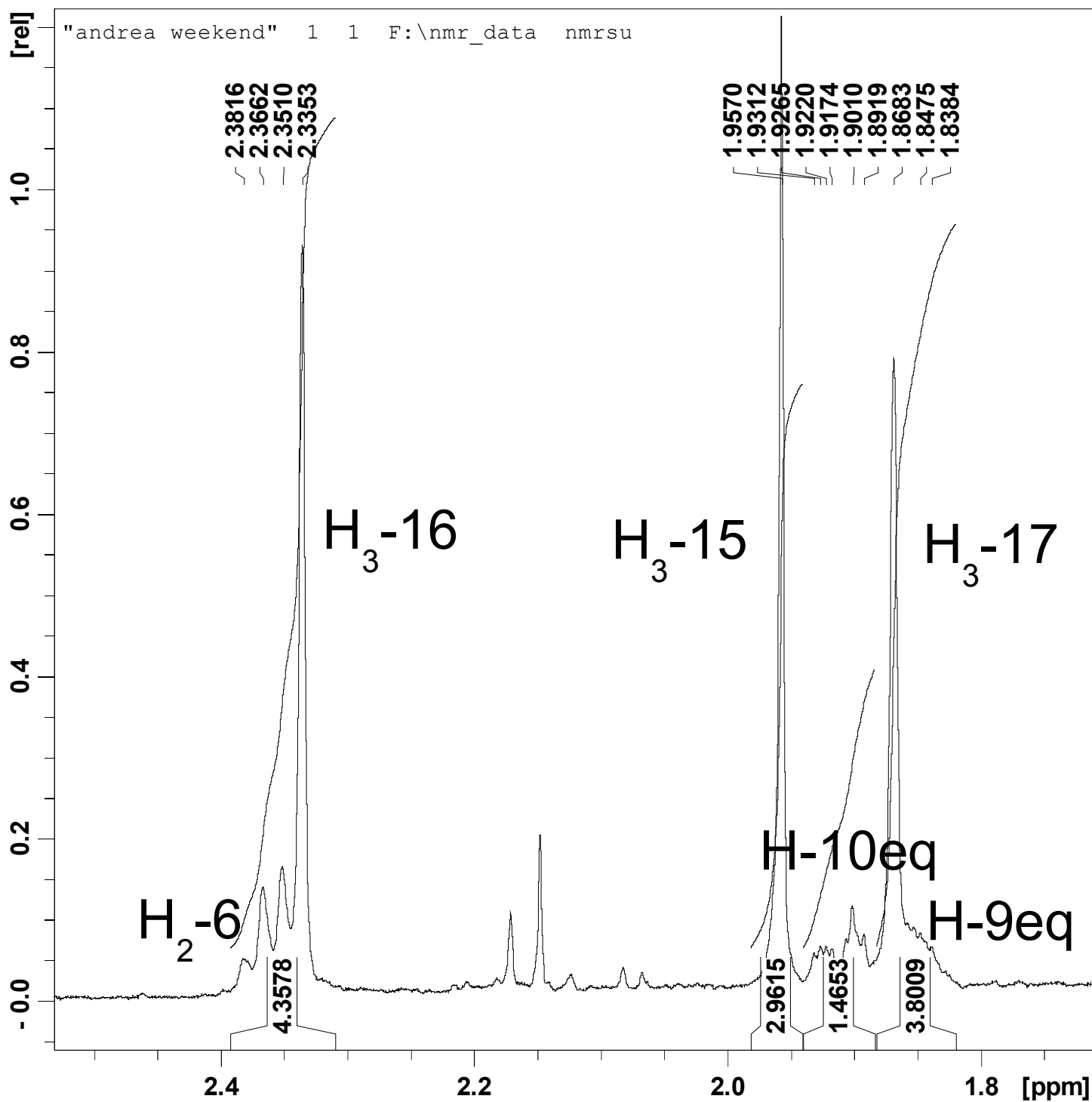


Figure S1 continued.



(e)

Figure S1 continued.

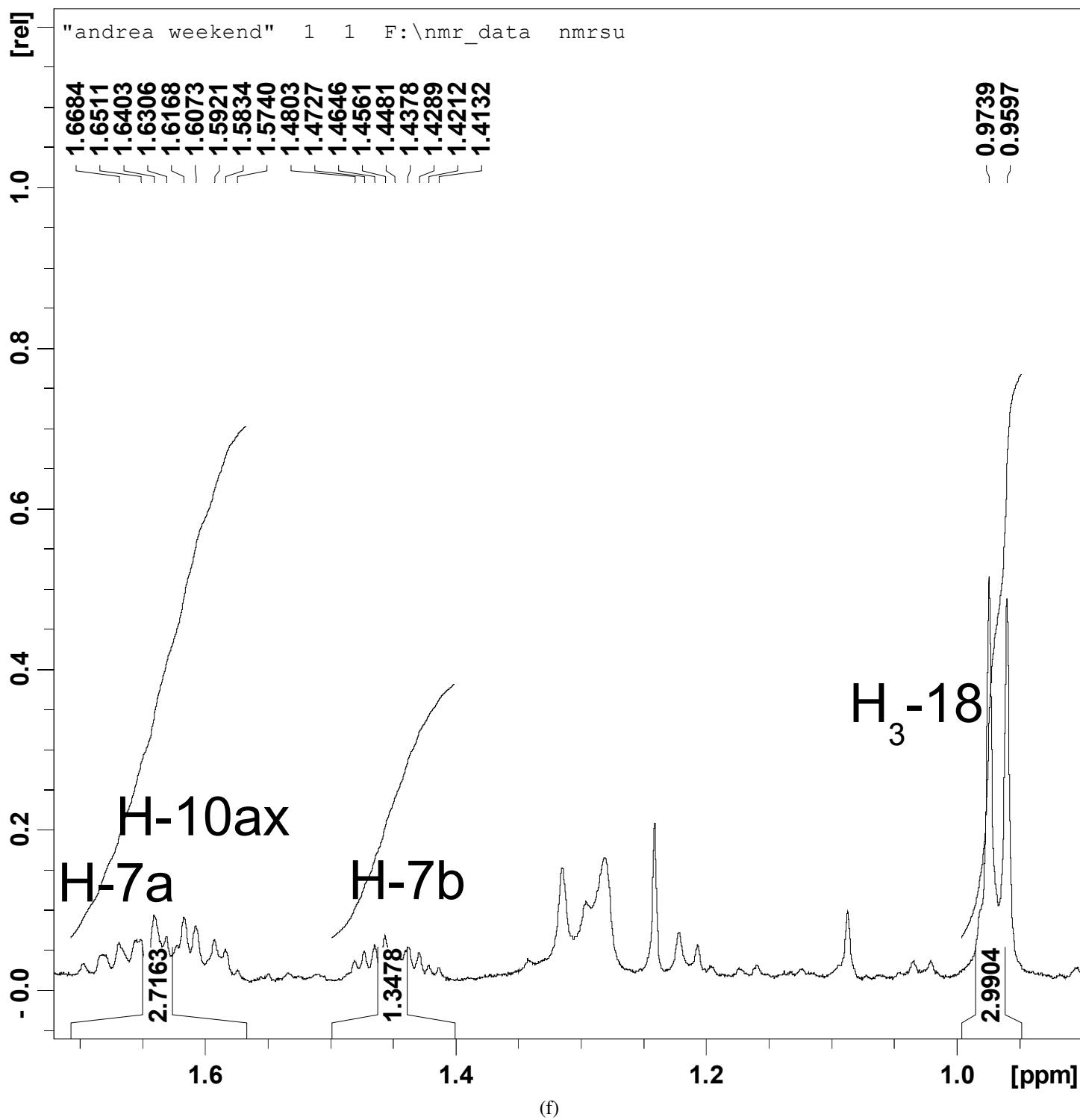


Figure S1 continued.

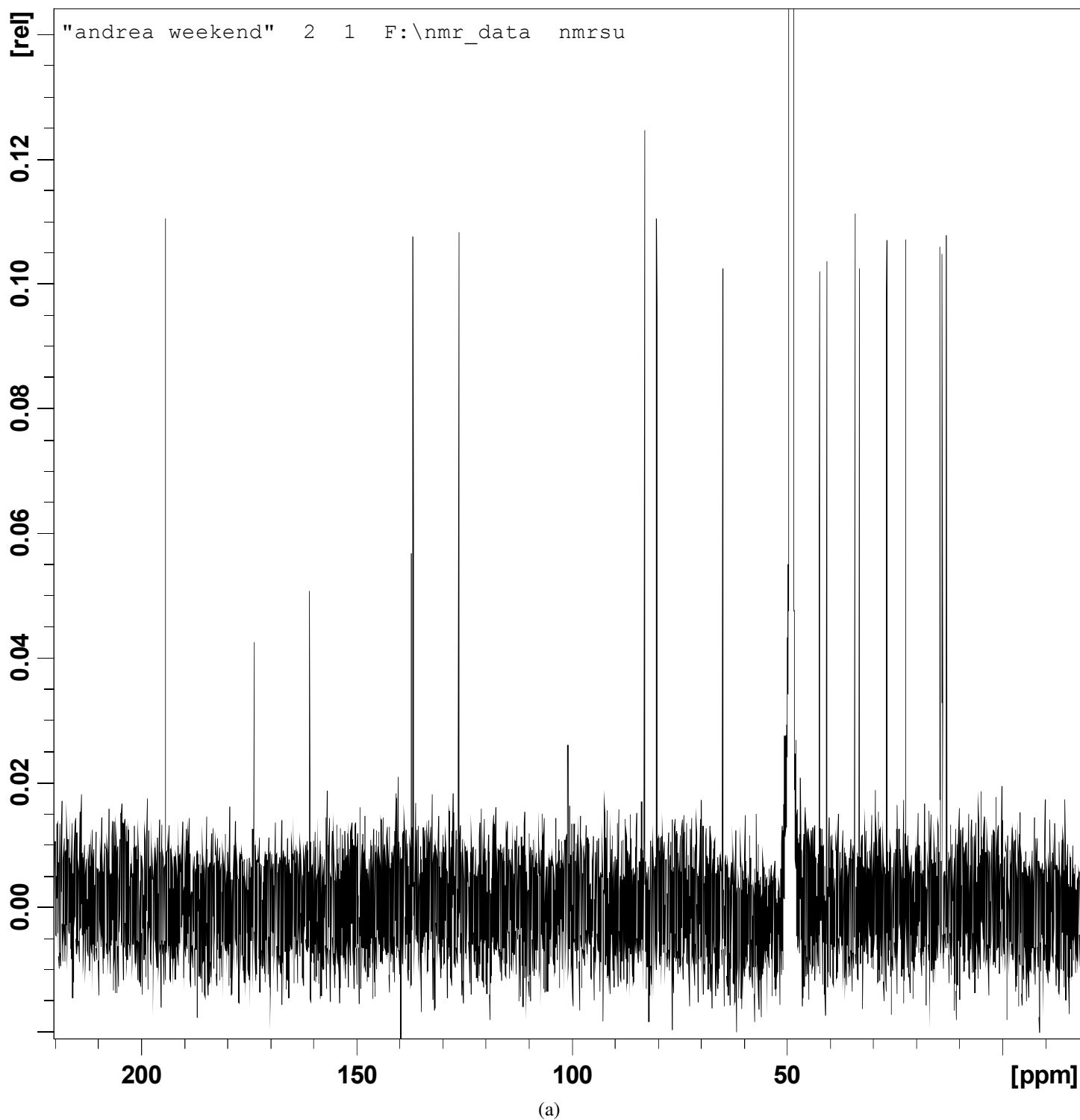


Figure S2. ¹³C NMR spectrum of brevisamide (**1**). a- Full spectrum. b-g- Details from various regions.

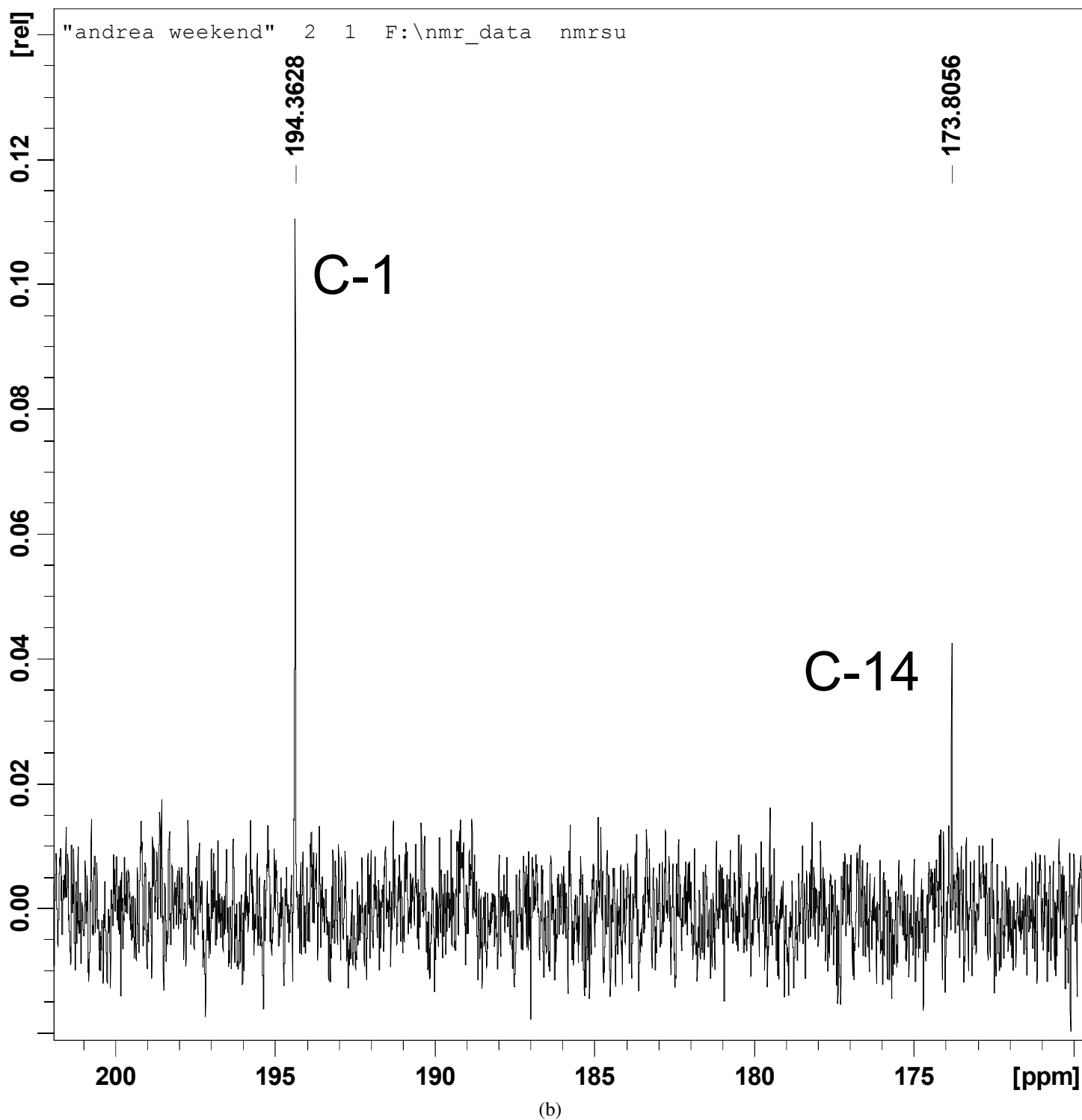


Figure S2 continued.

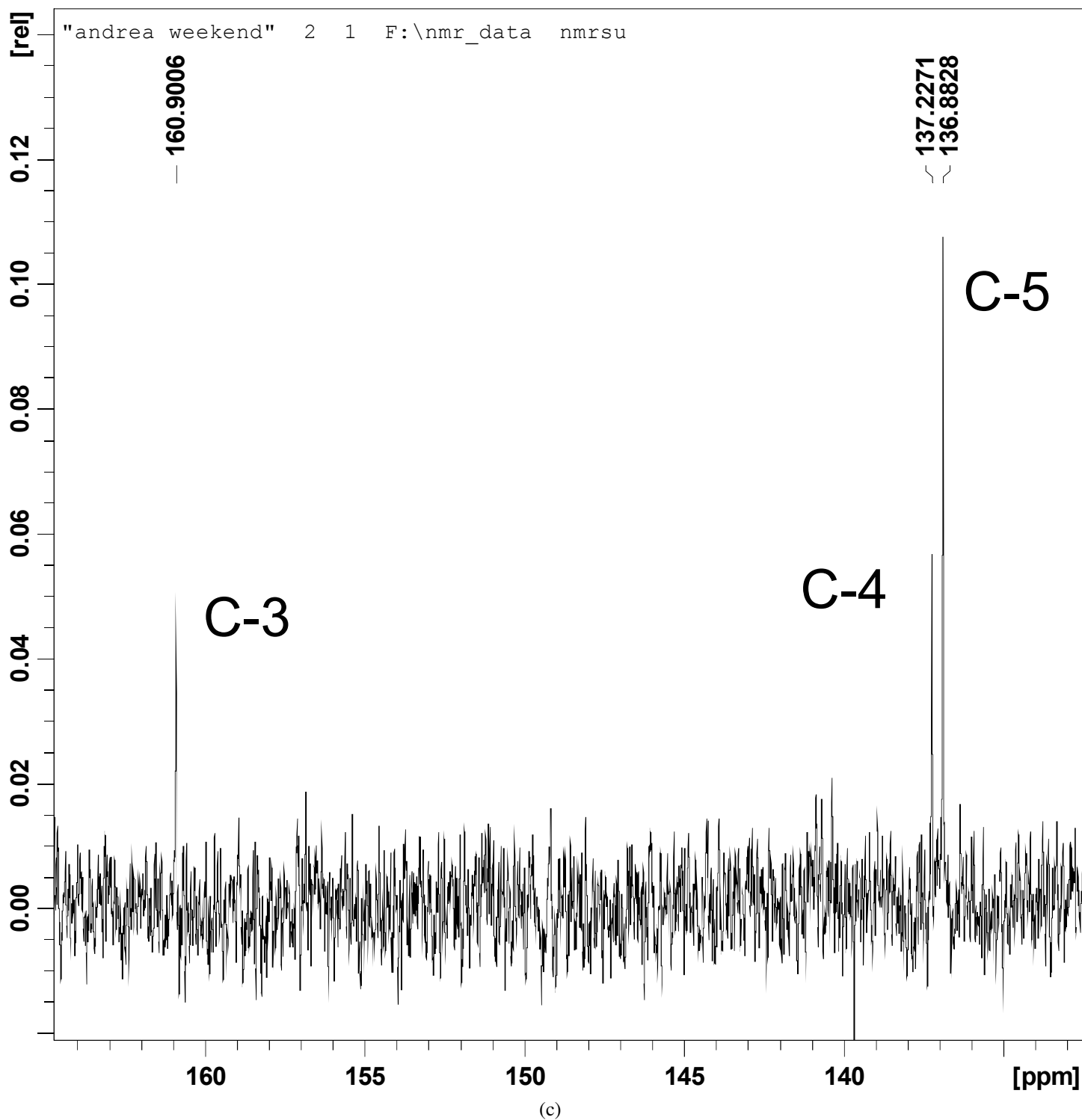


Figure S2 continued.

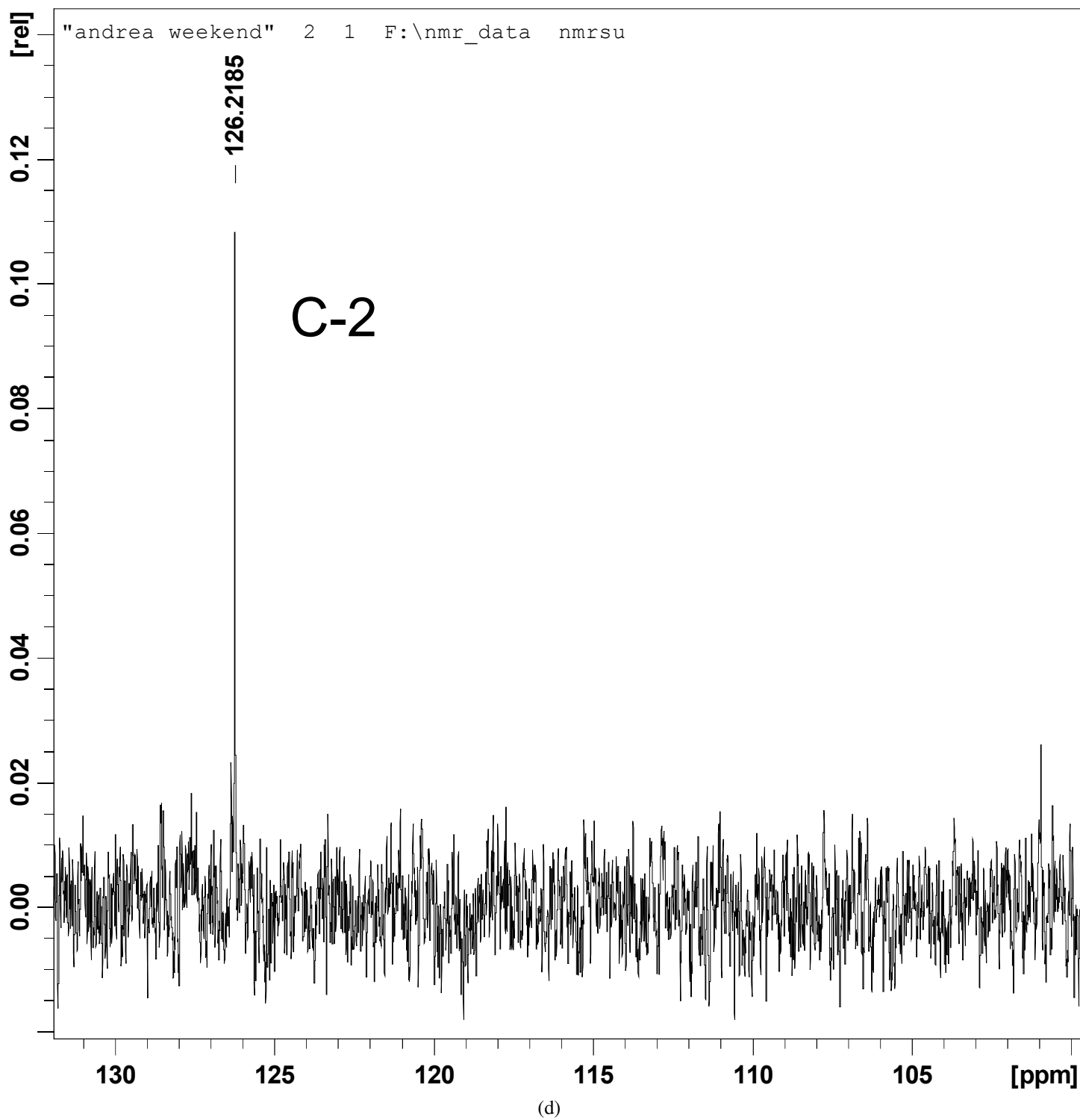


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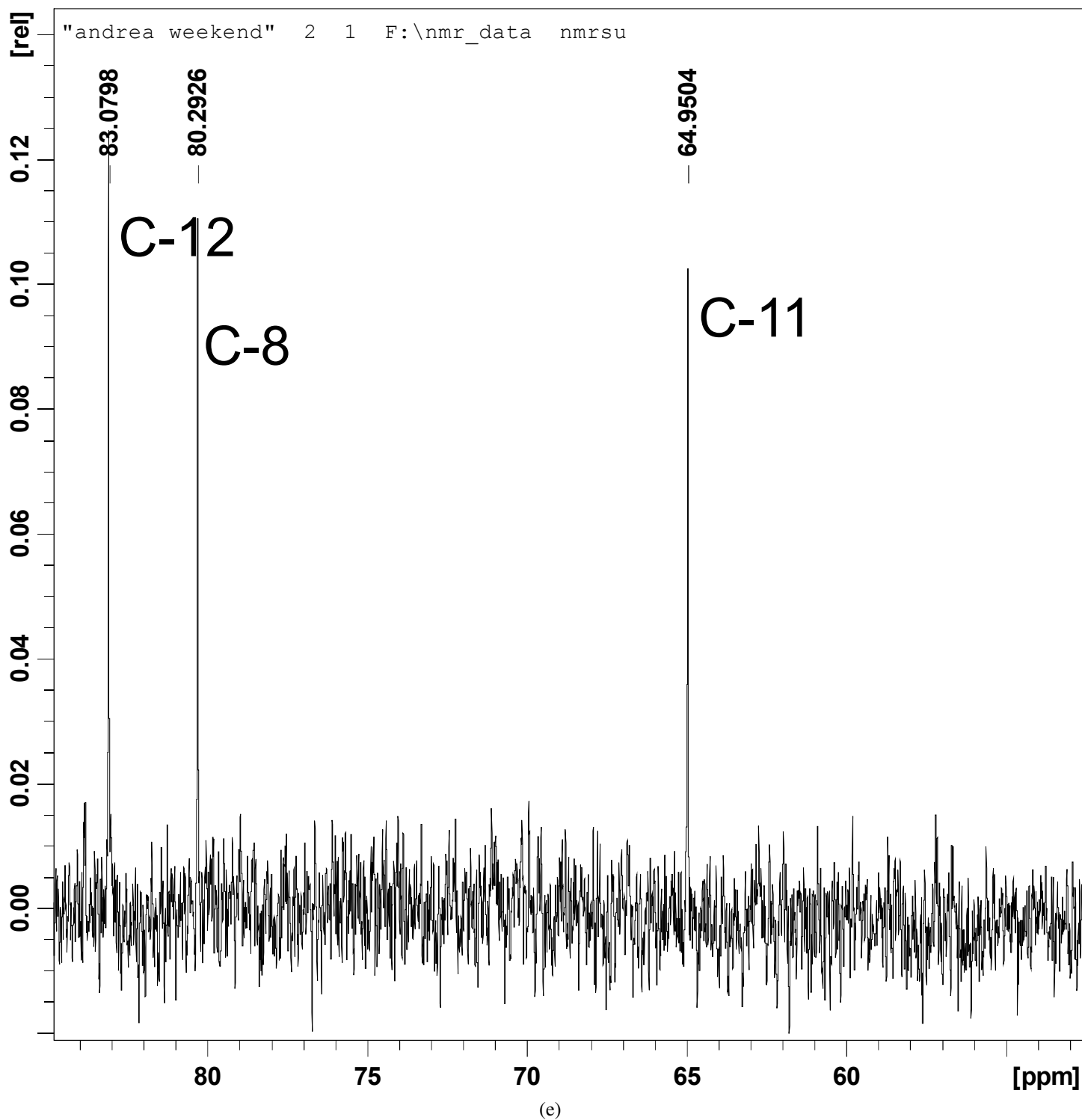


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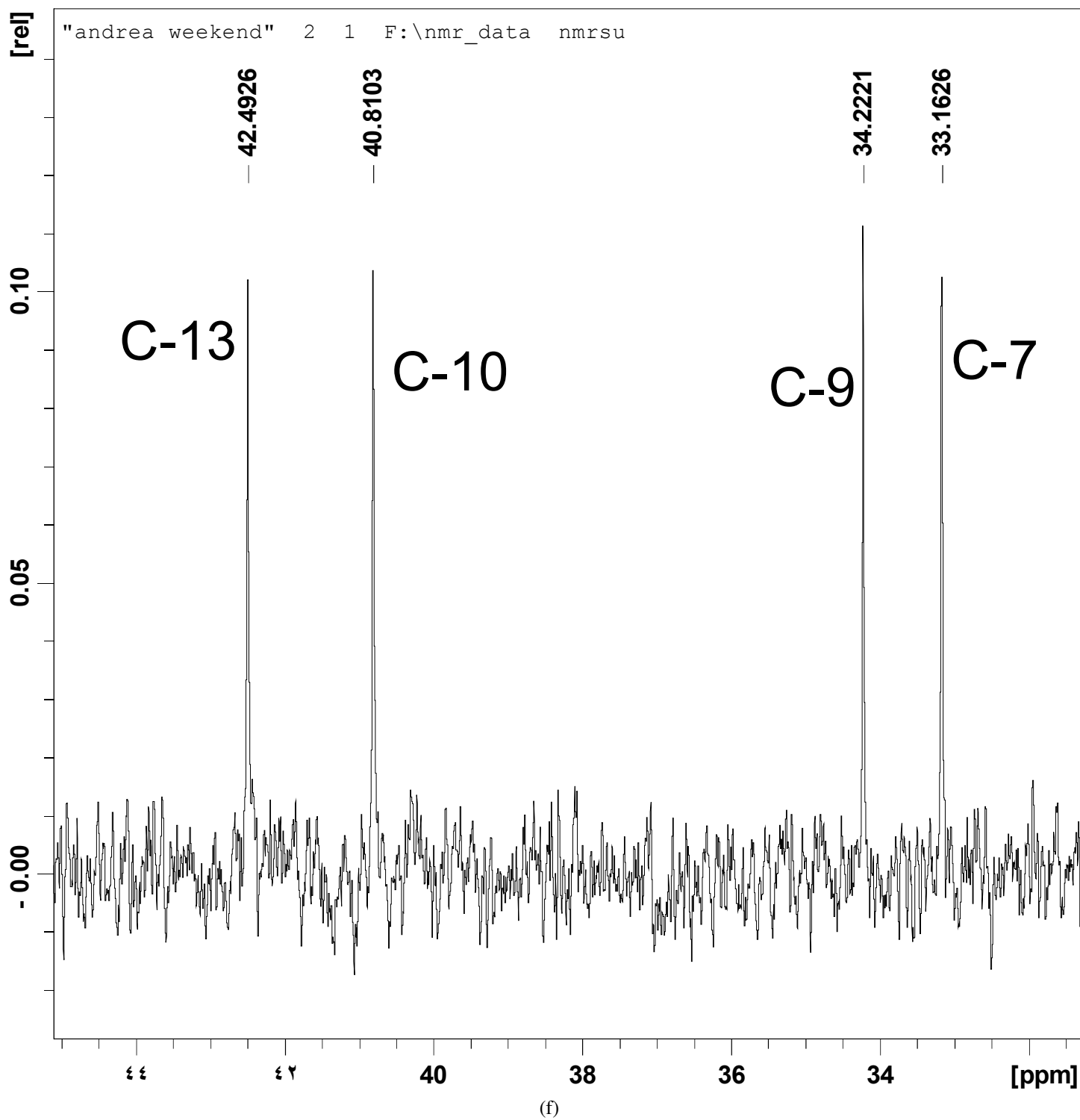


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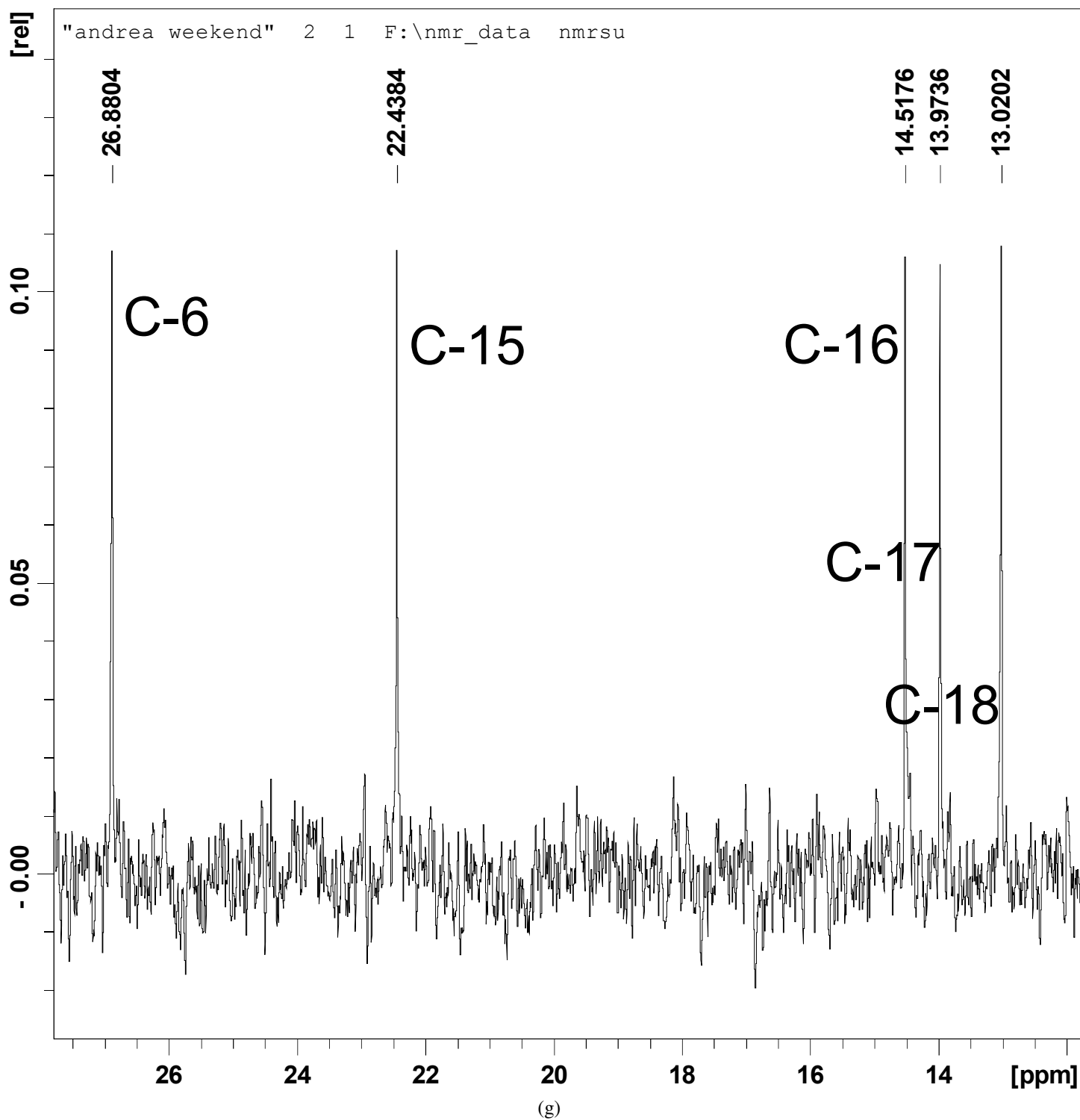


Figure S2 continued.

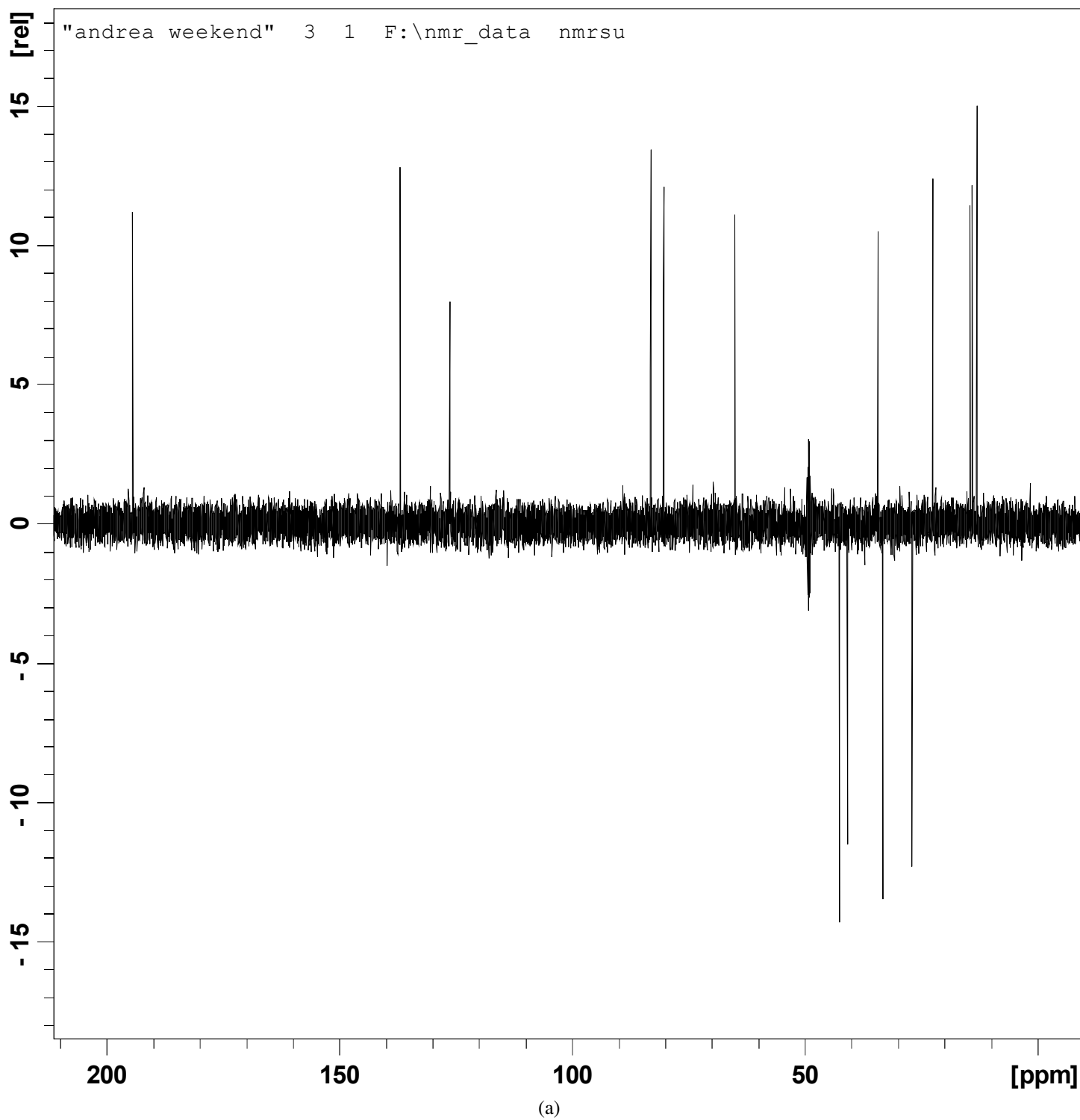
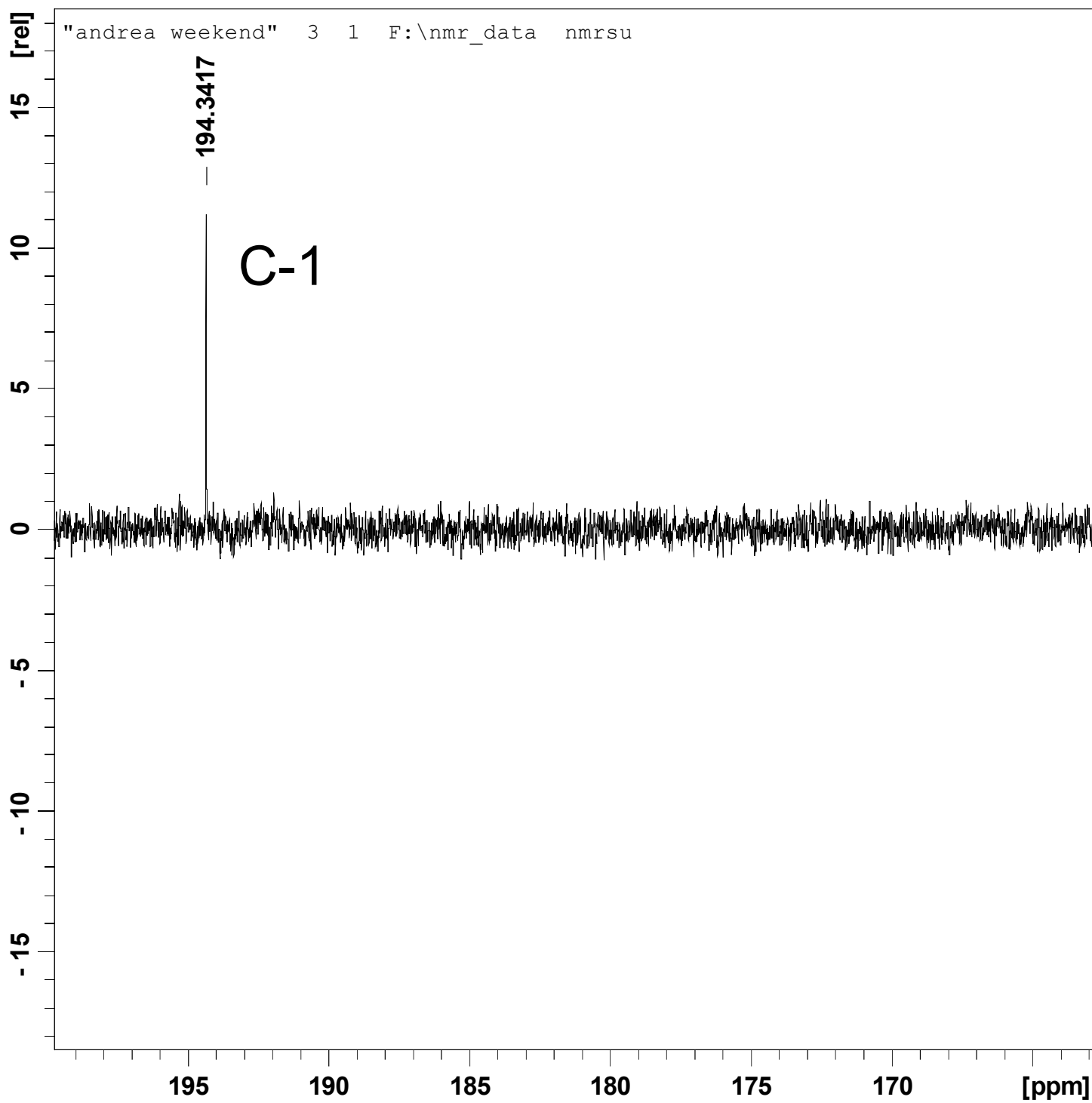
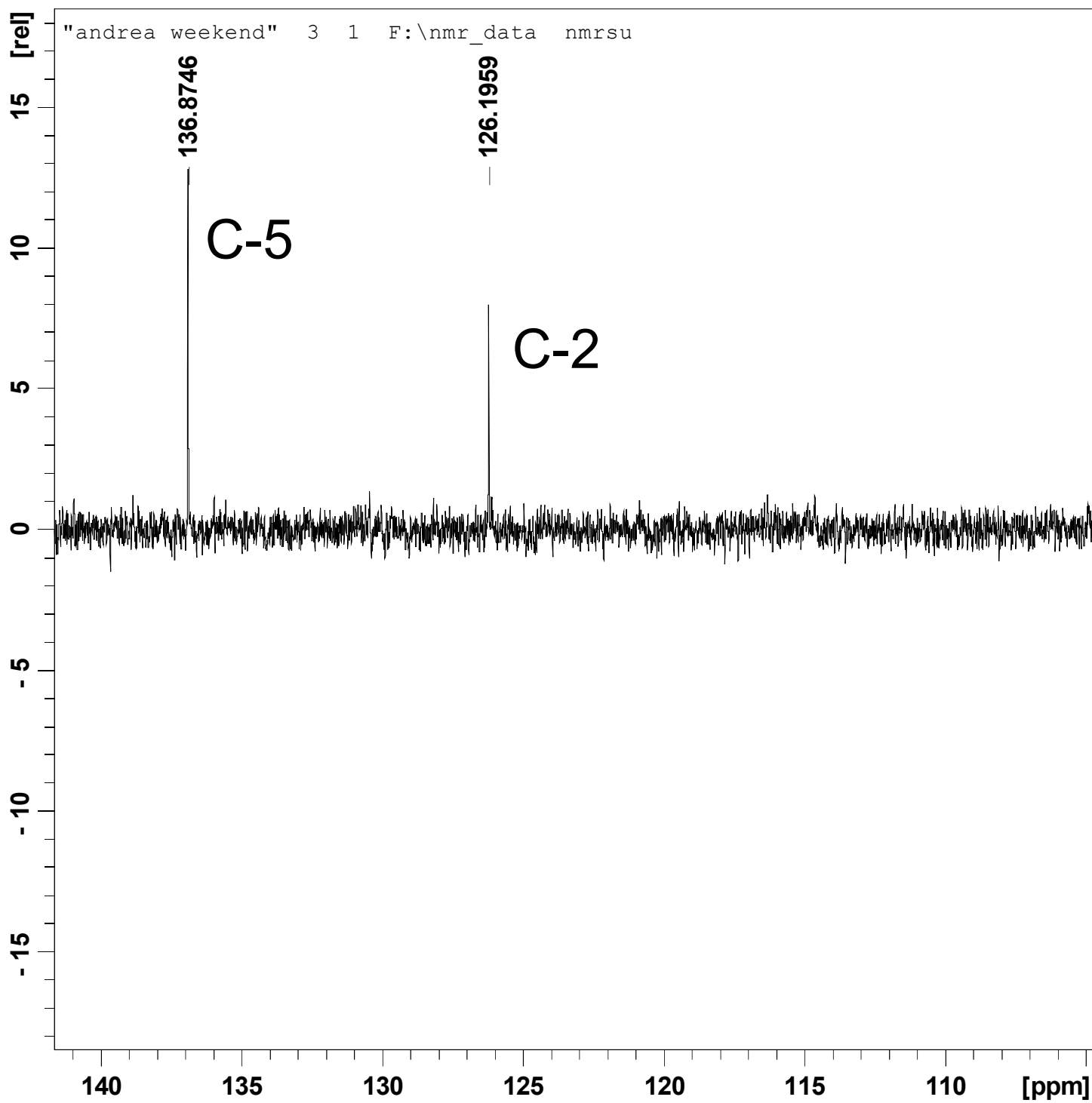


Figure S3. DEPT spectrum of brevisamide (**1**). a- Full spectrum. b-f- Details from various regions.



(b)

Figure S3 continued.



(c)

Figure S3 continued.

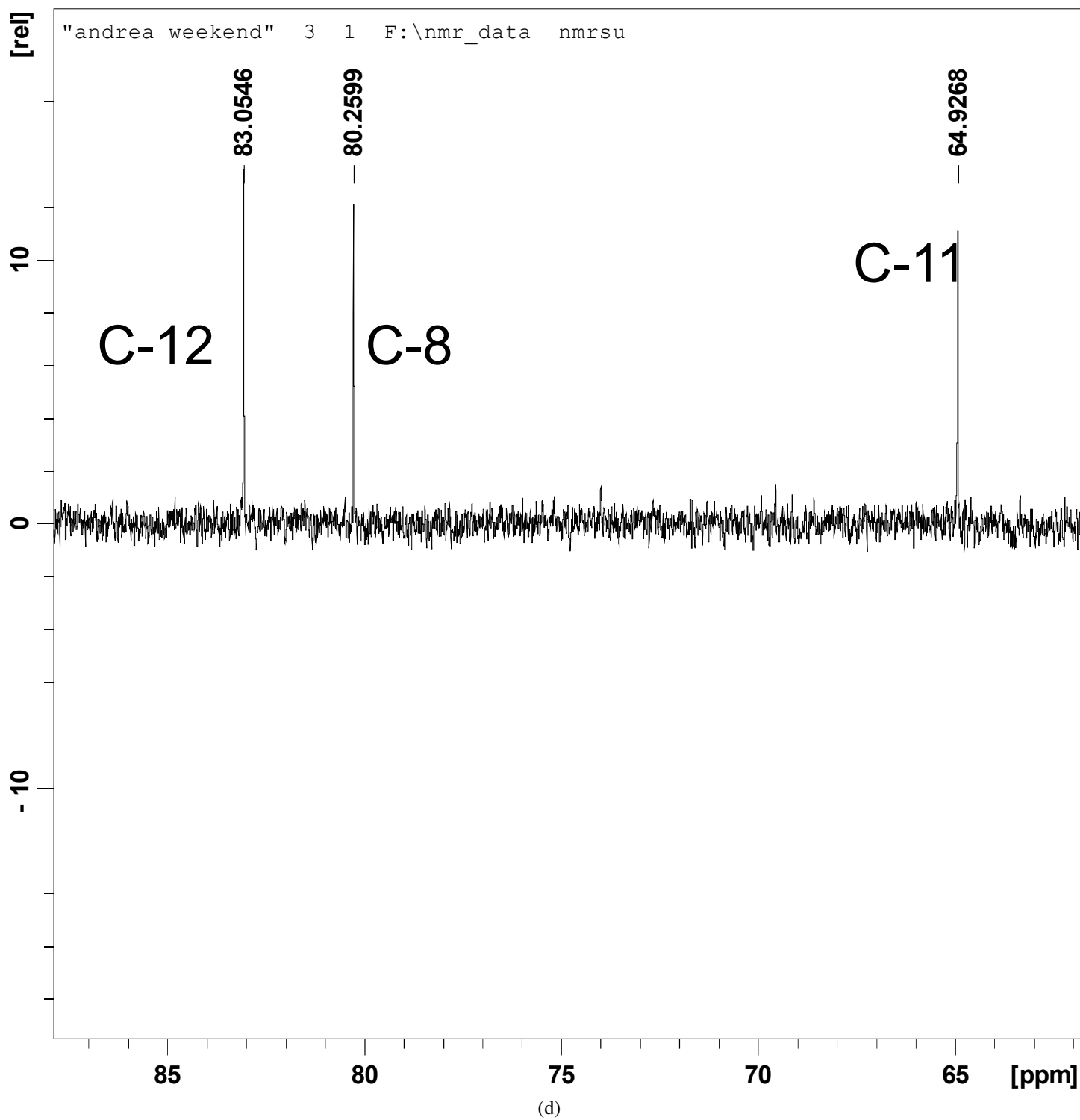


Figure S3 continued.

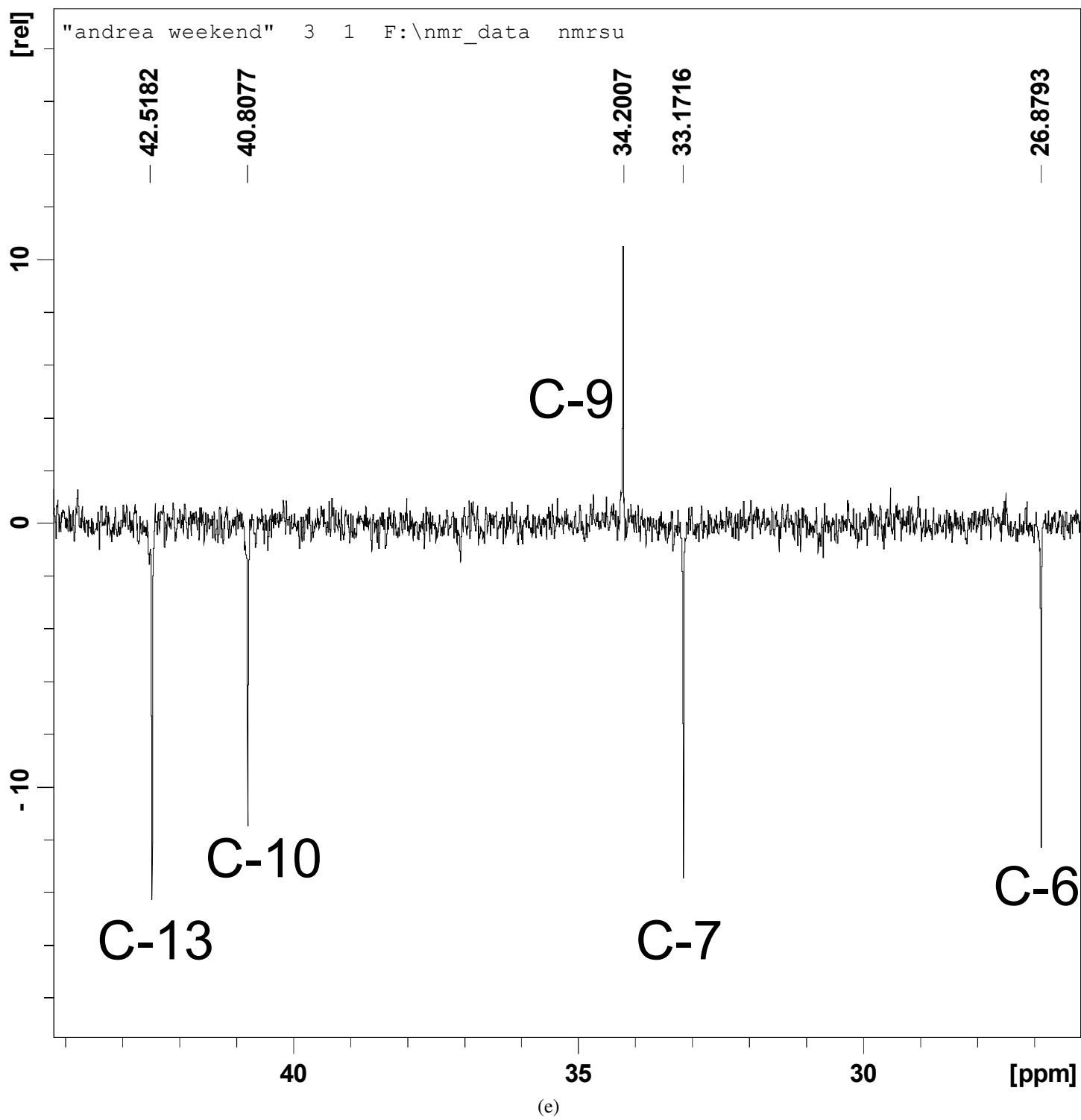


Figure S3 continued.

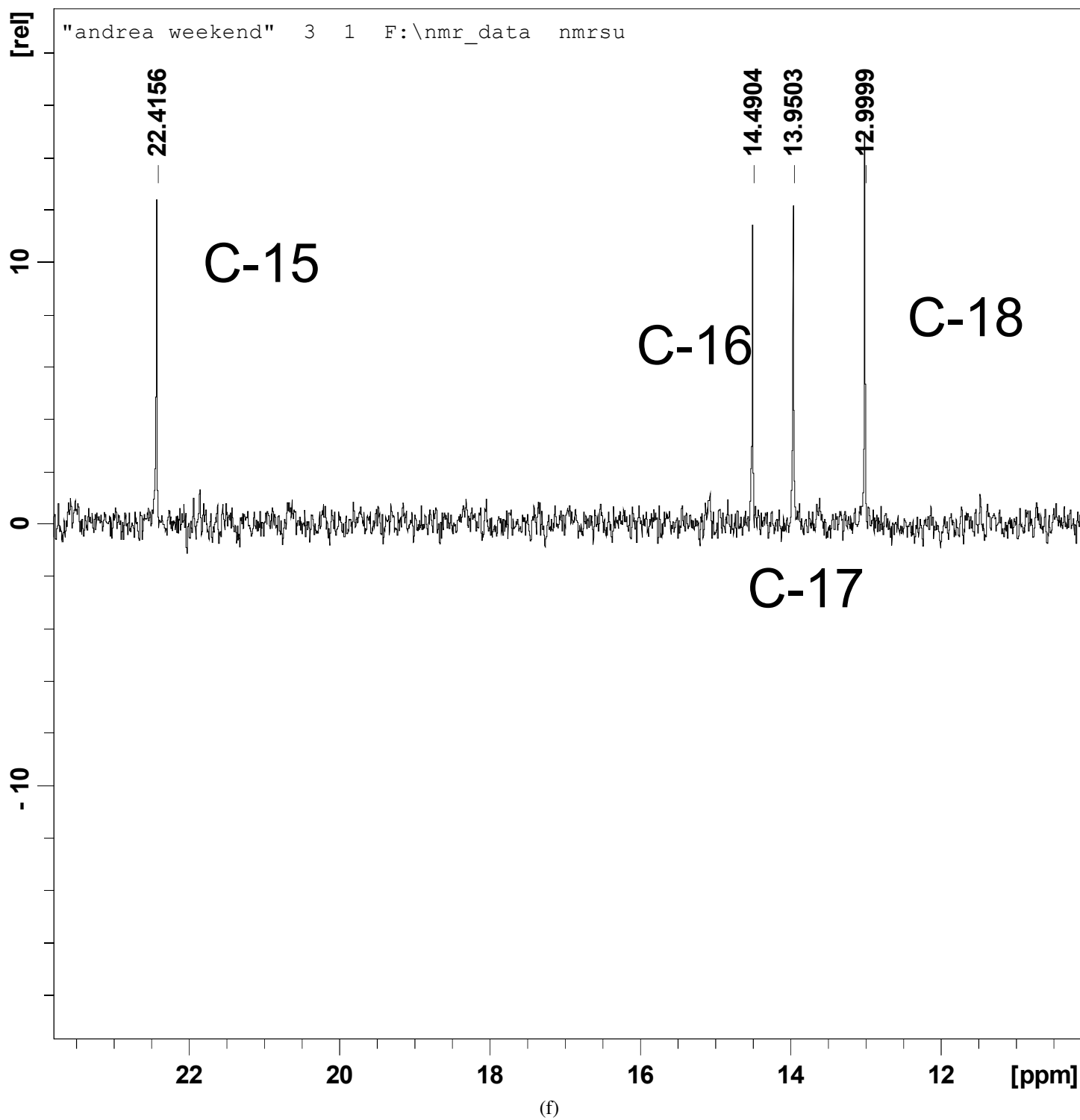


Figure S3 continued.

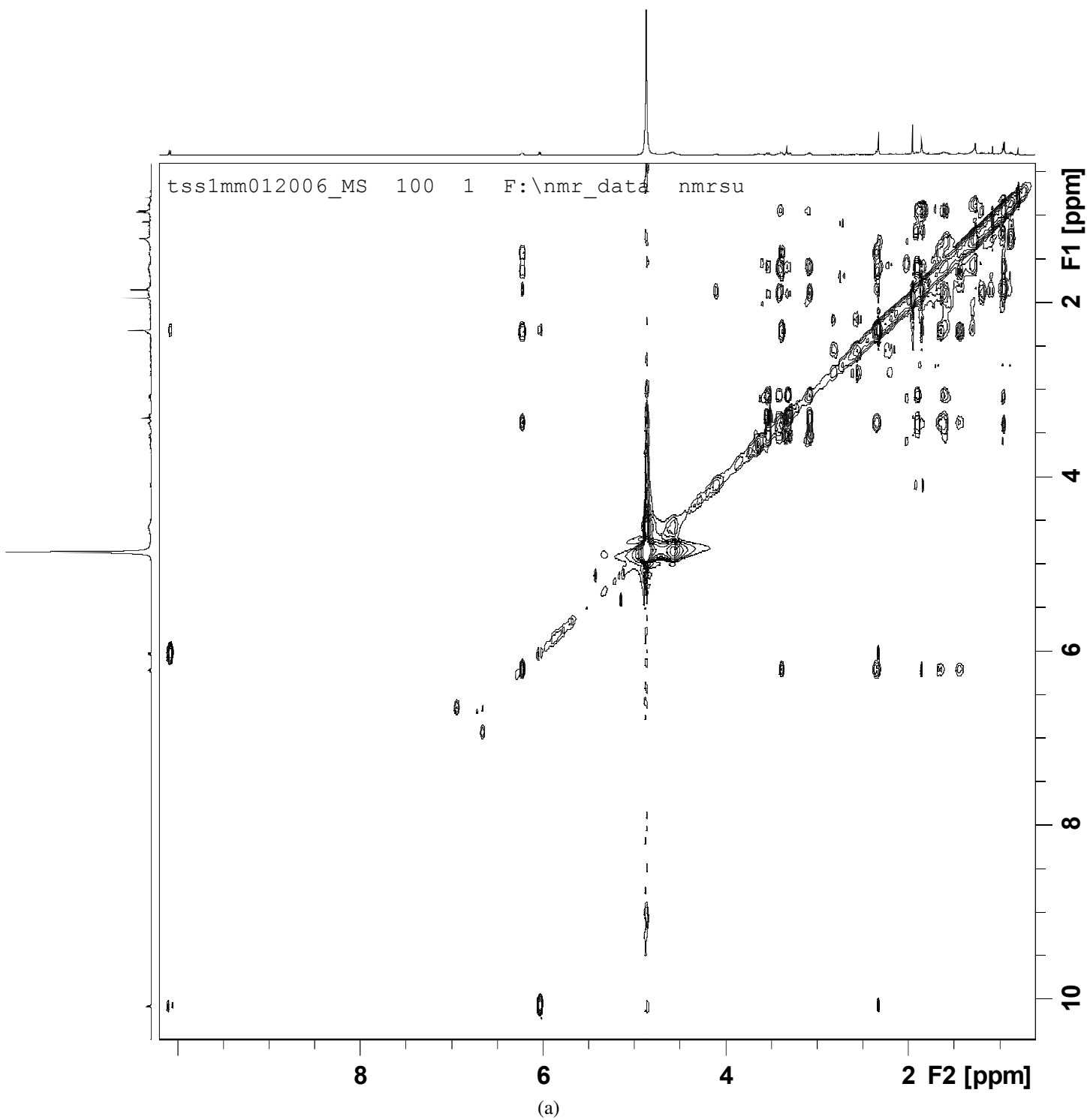


Figure S4. TOCSY spectrum of brevisamide (**1**). a- Full spectrum. b-d- Details from various regions.

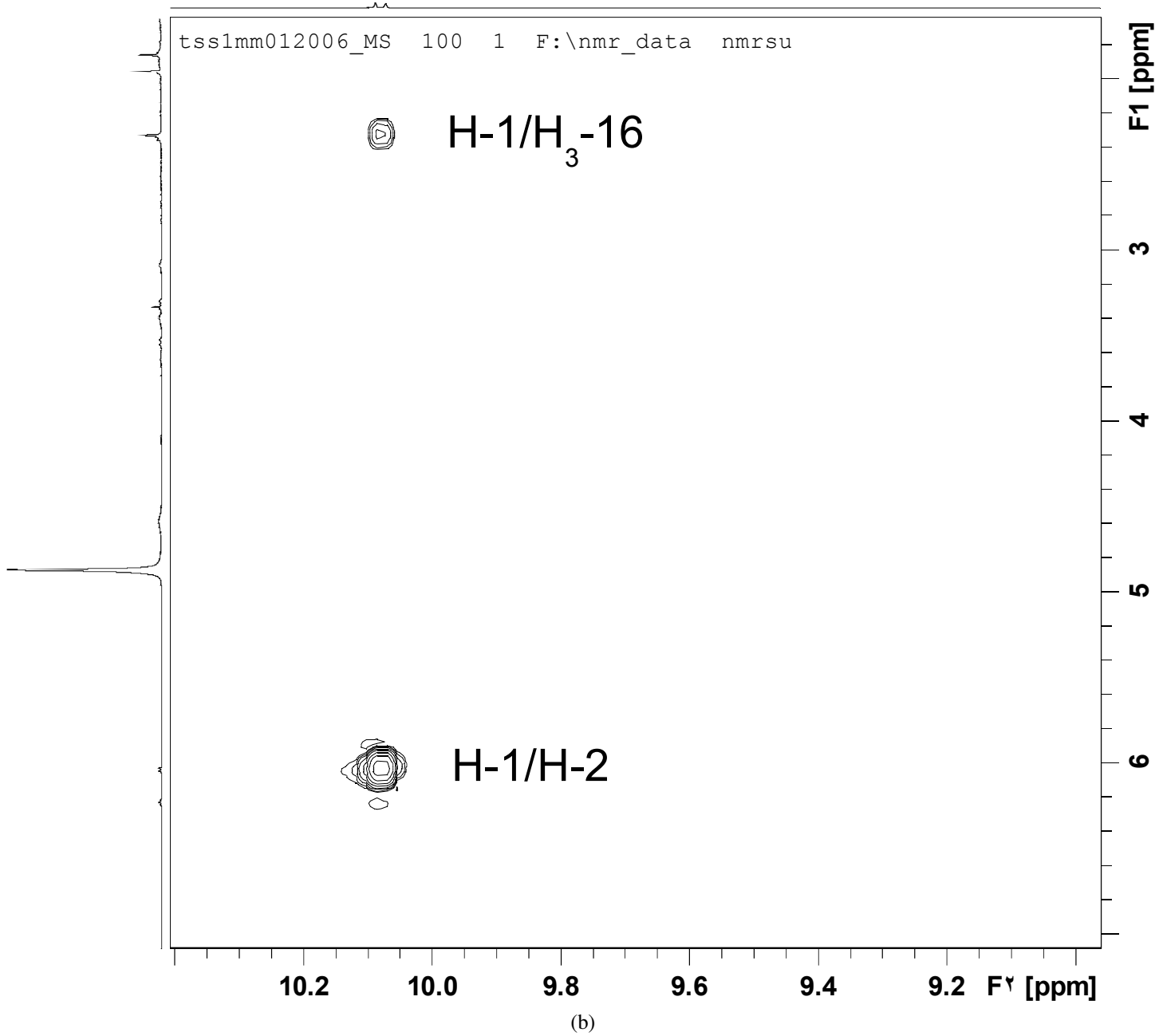
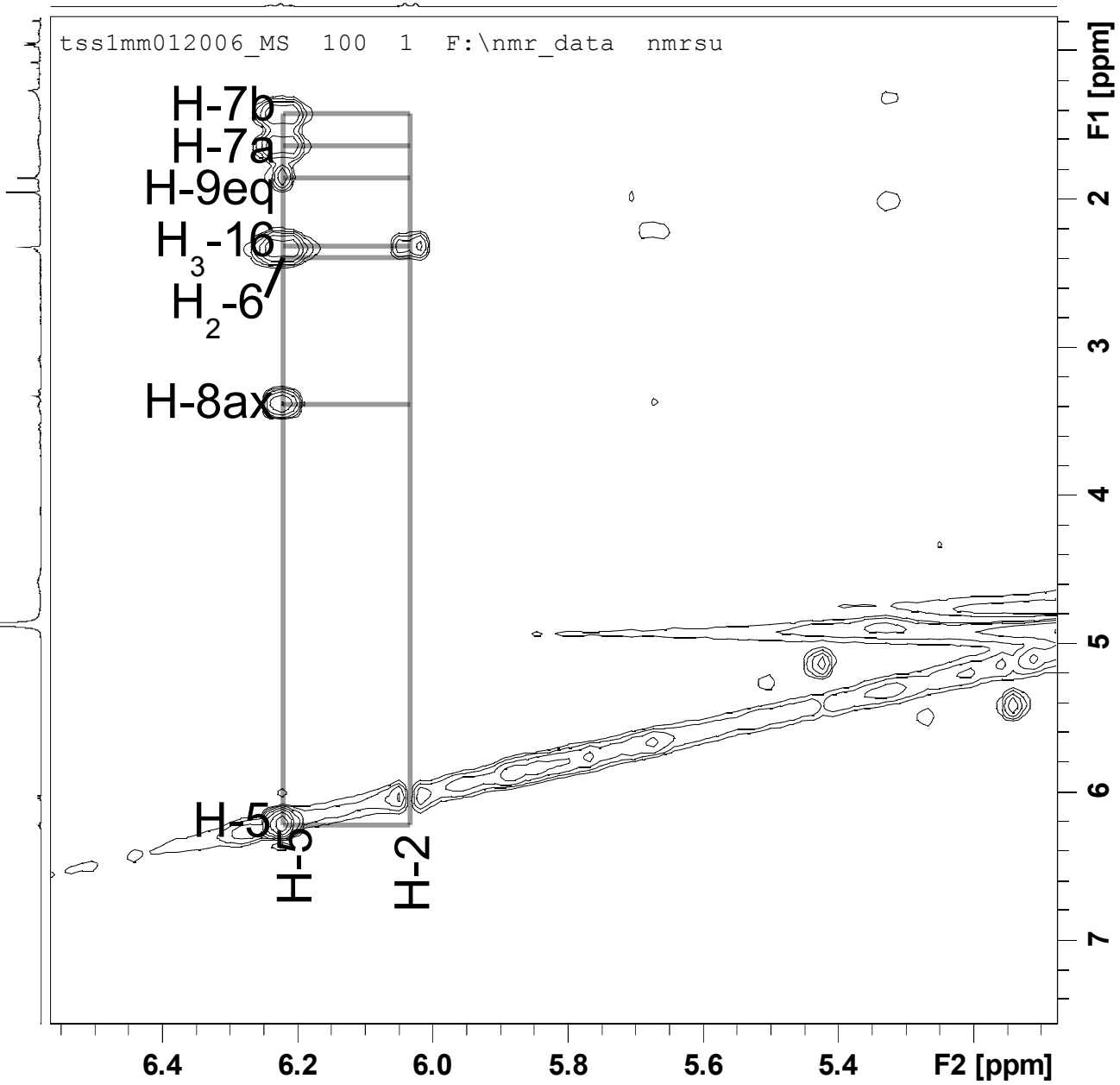


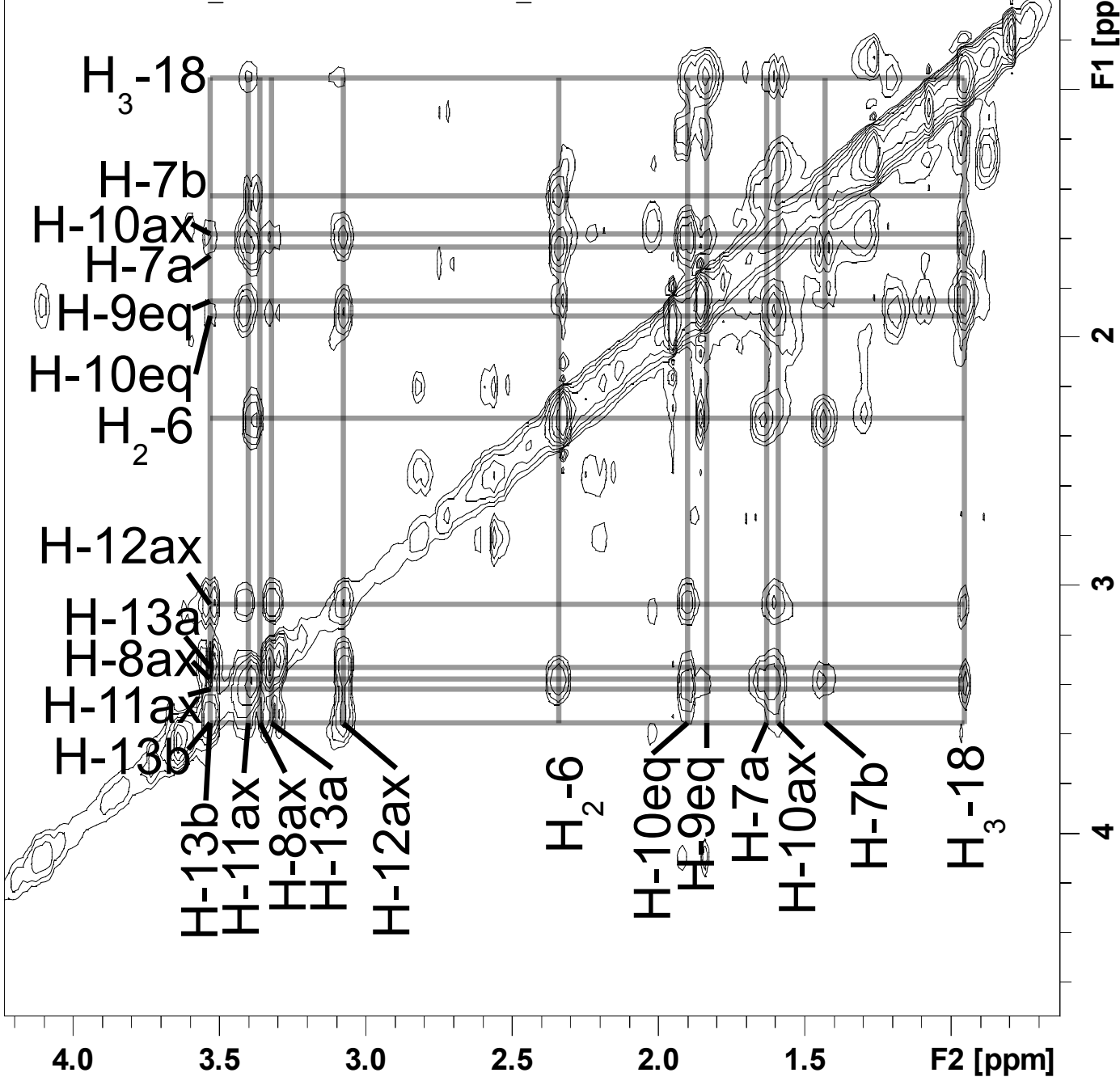
Figure S4 continued.



(c)

Figure S4 continued.

tss1mm012006_MS 100 1 F:\nmr_data nmrsu



(d)

Figure S4 continued.

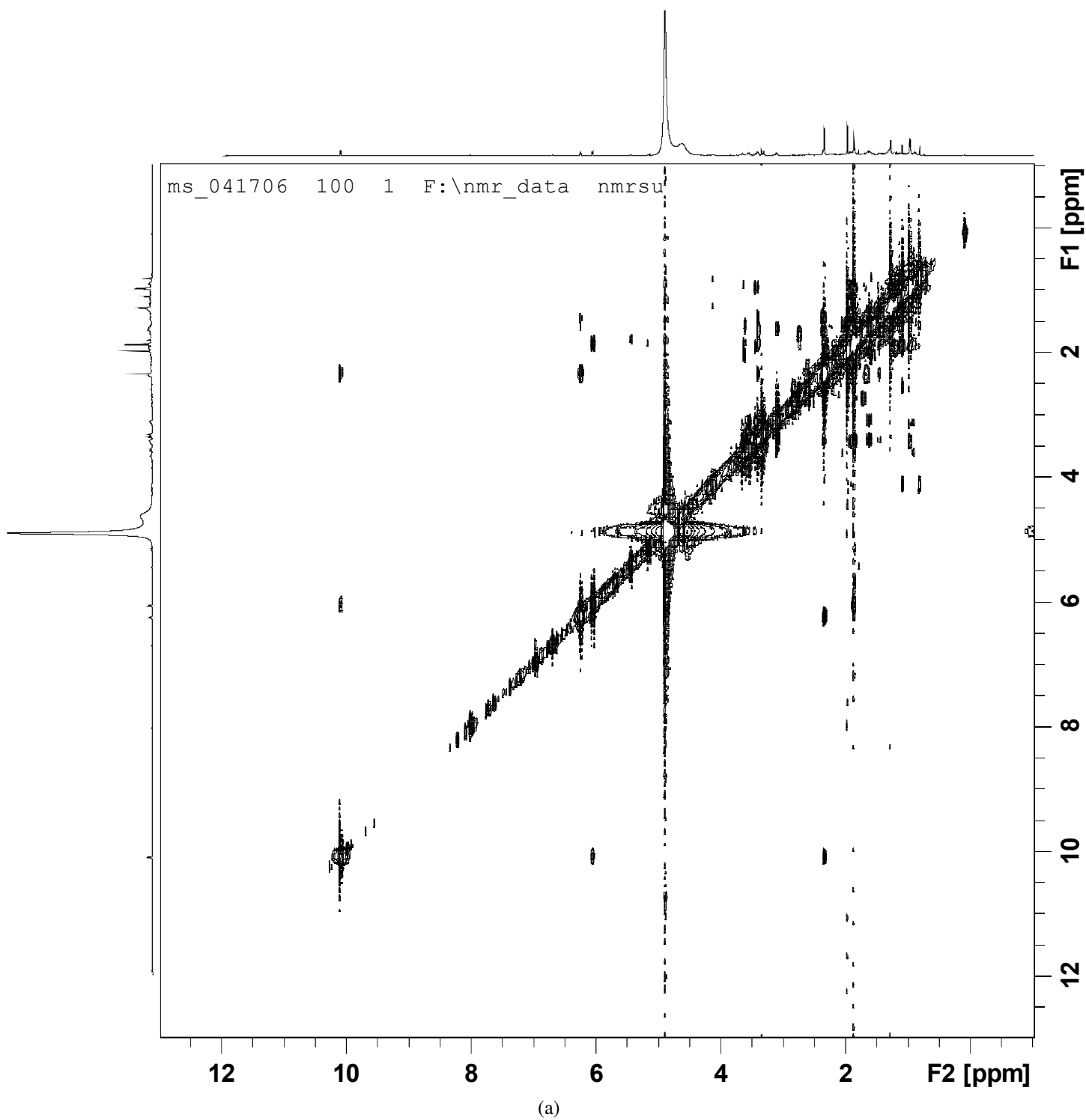
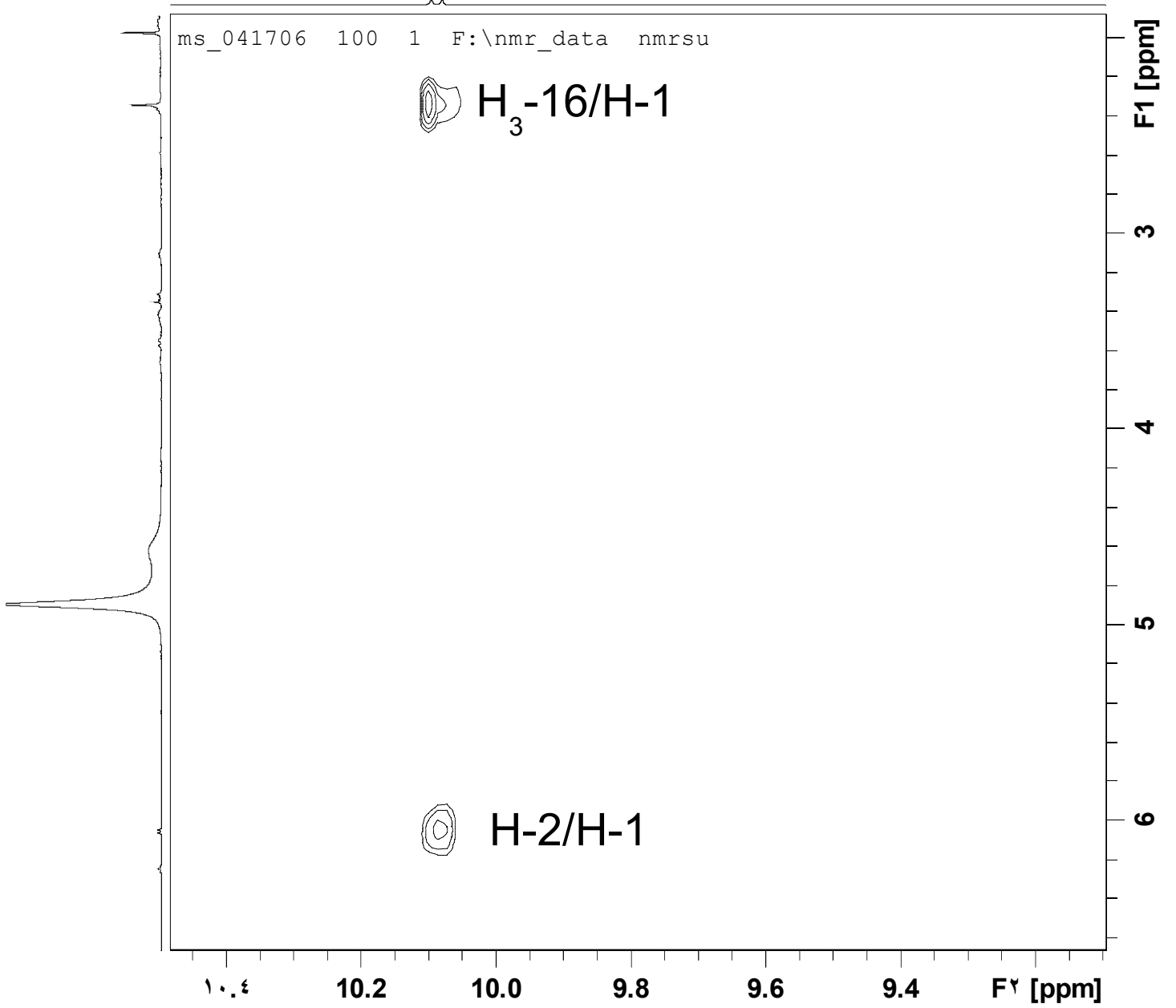
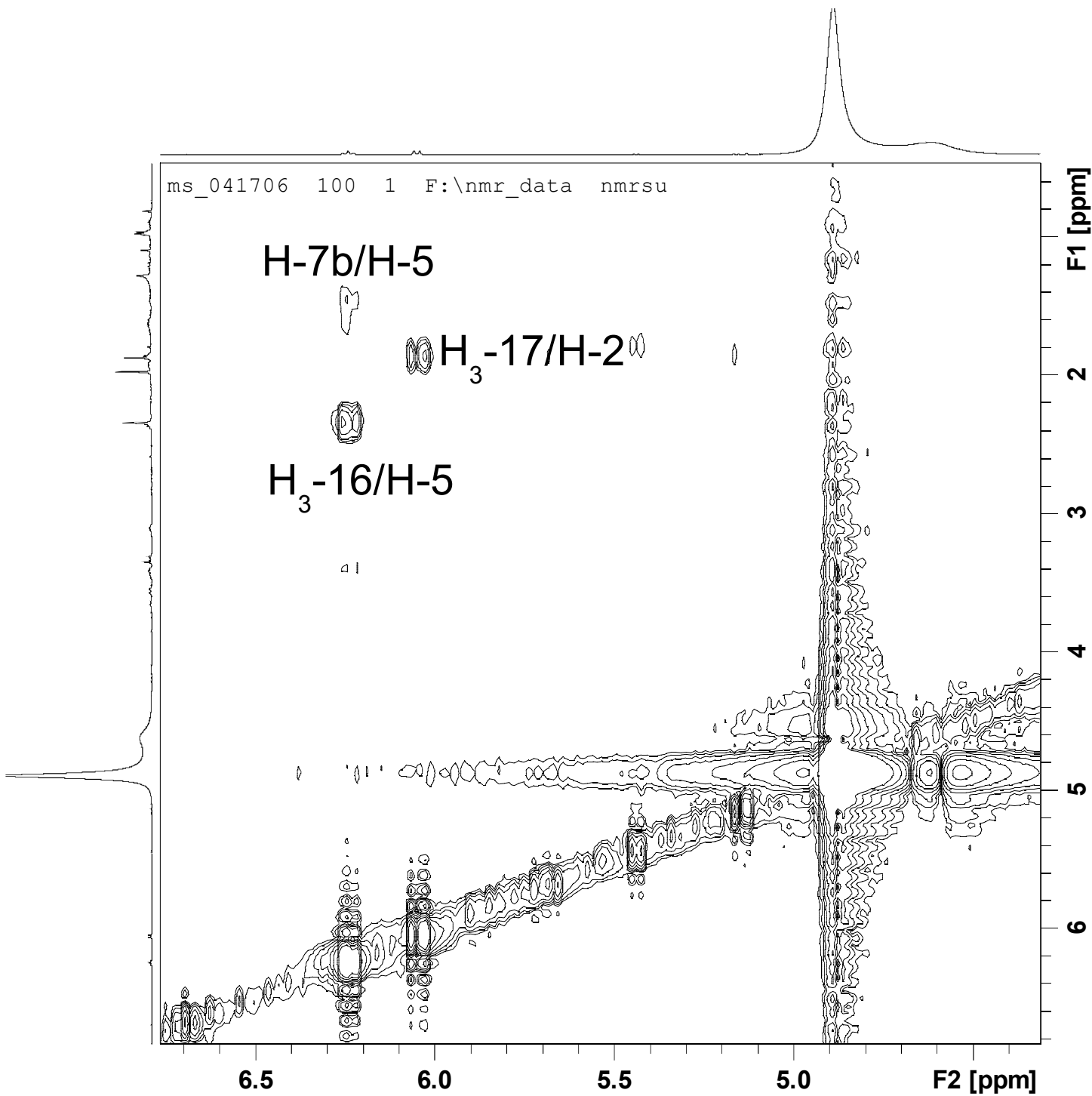


Figure S5. NOESY spectrum of brevisamide (**1**). a- Full spectrum. b-d- Details from various regions.



(b)

Figure S5 continued.



(c)

Figure S5 continued.

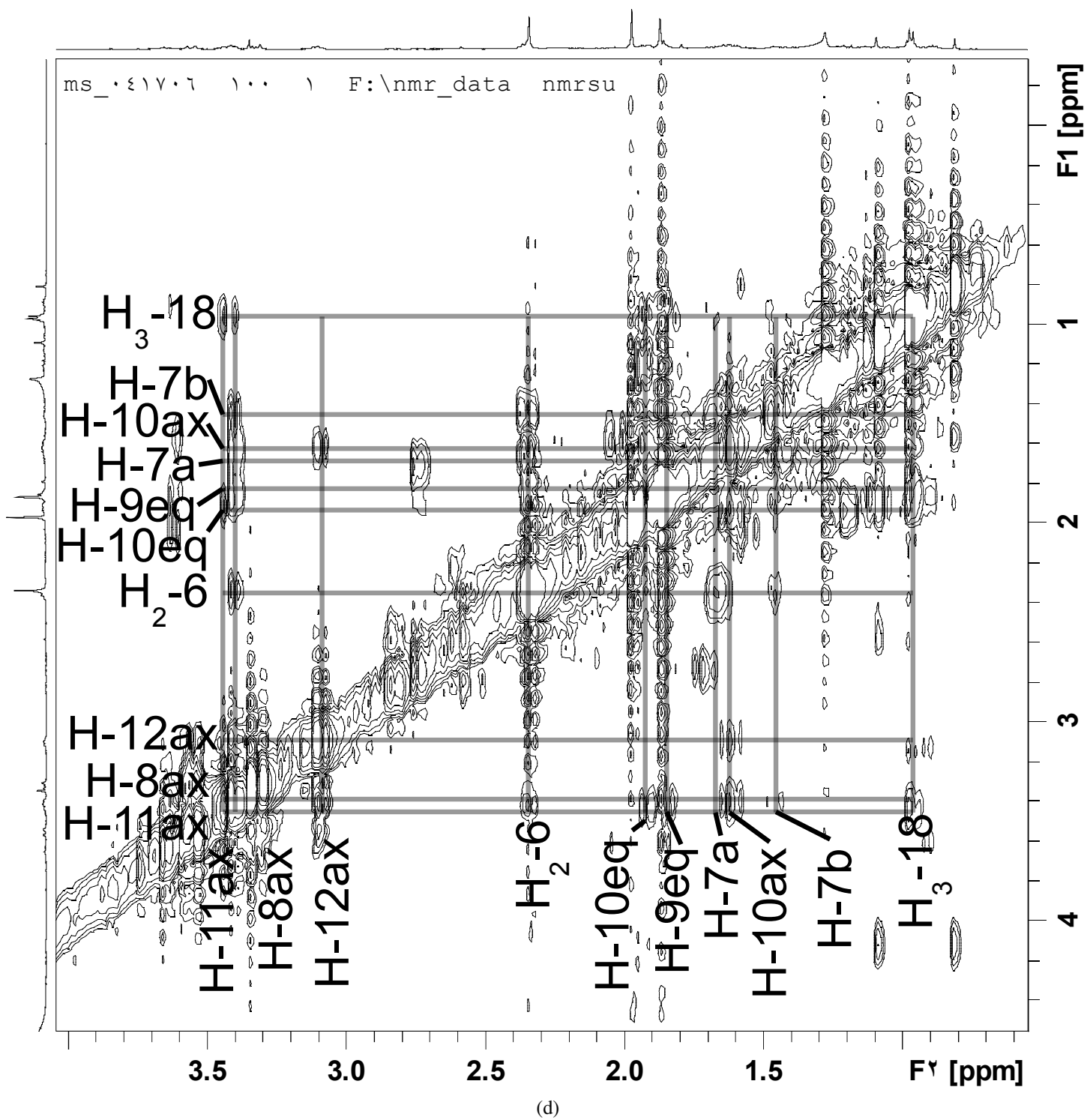


Figure S5 continued.