

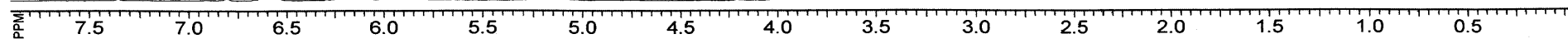
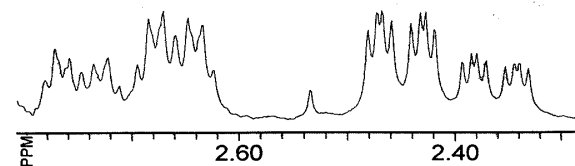
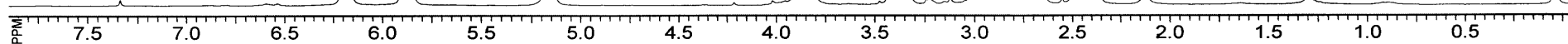
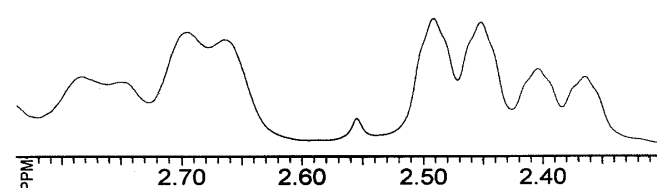
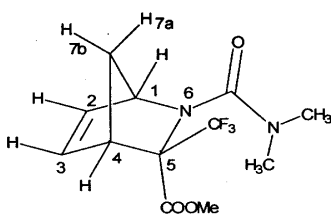
SUPPLEMENTARY MATERIALS

Aksinenko A.Yu., Kalashnikova I.P., Sokolov V.B., Carbamoylimines of Methyltrifluoropyruvate in the Diels-Alder's Azareaction with Cyclopentadiene, Biomedical Chemistry: Research and Methods, 2018, 1(3), e00016.

DOI: 10.18097/BMCRM00016

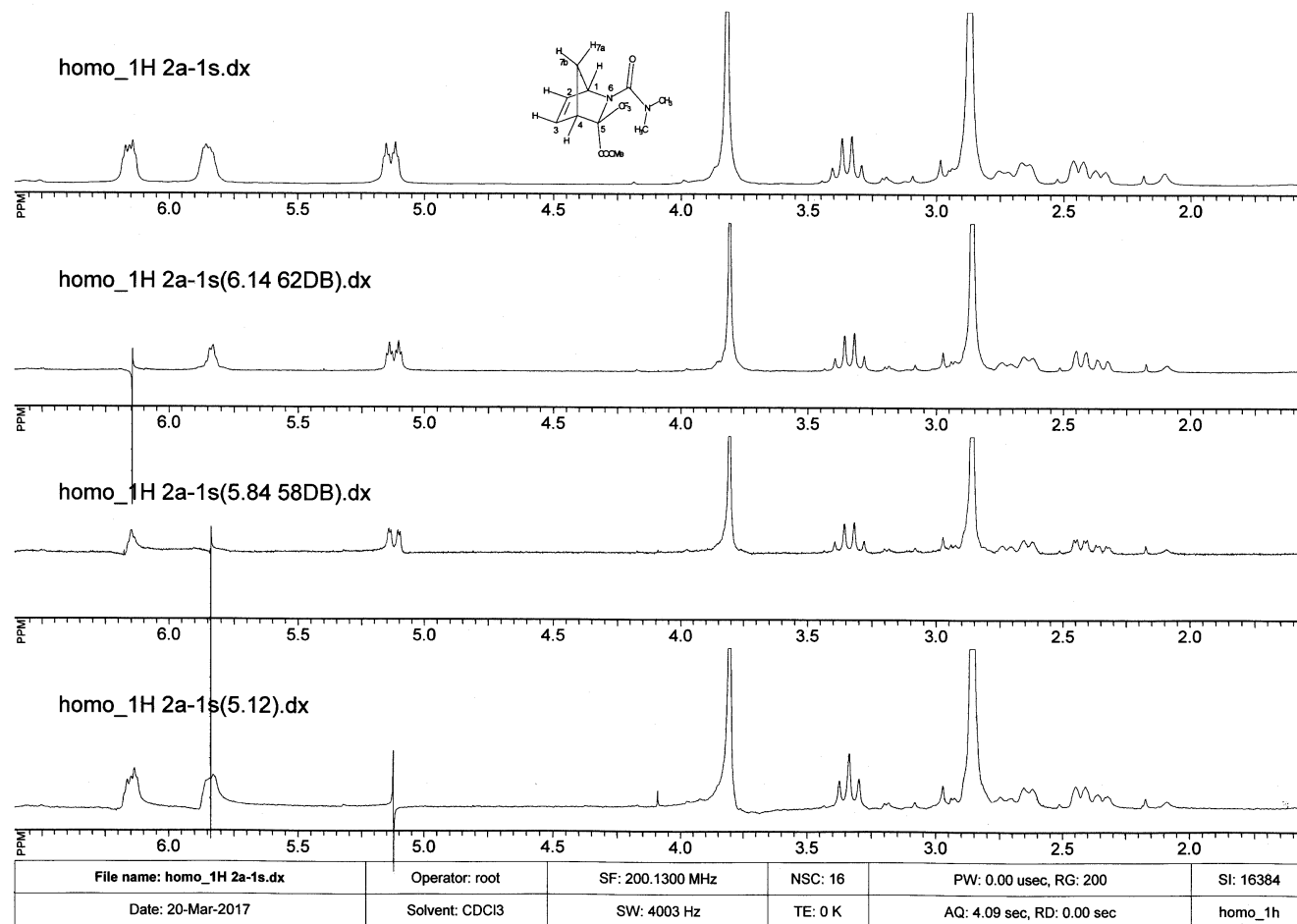
NMR spectra of compounds **2a,b** and **3a,b**

The ^1H , ^{13}C , and ^{19}F NMR spectra were recorded on Bruker DXP («Bruker Daltonics», USA) at 200.13, 50, and 188 MHz, respectively, in CDCl_3 using tetramethylsilane as an internal standard and CCl_3F as an external standard. Chemical shifts are reported in ppm units with the use of δ scale.

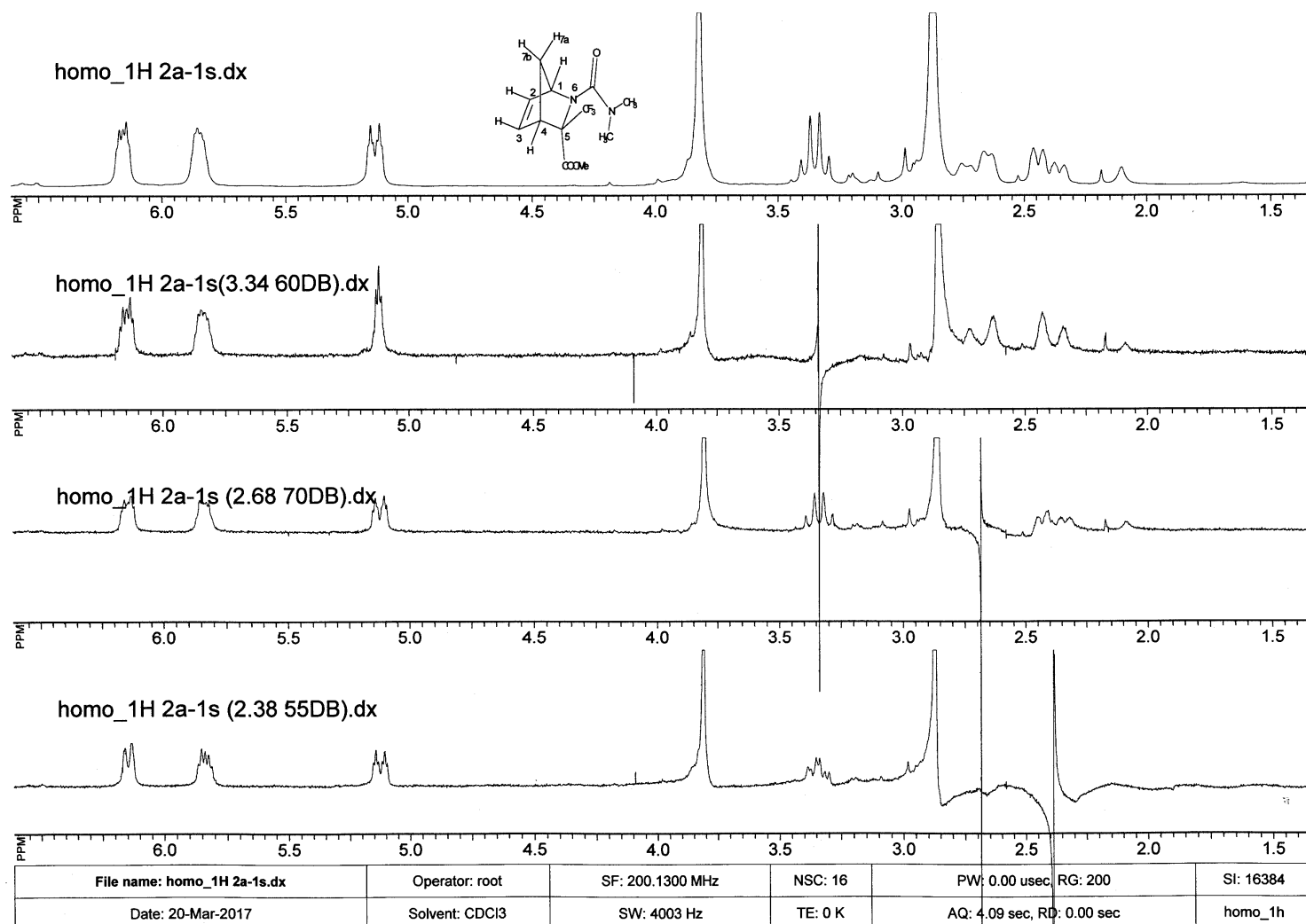


File name: 1H_2a.dx	Operator: root	SF: 200.1300 MHz	NSC: 8	PW: 0.00 usec, RG: 200	SI: 32768
Date: 18-Mar-2017	Solvent: CDCl3	SW: 4139 Hz	TE: 0 K	AQ: 1.98 sec, RD: 0.00 sec	H1

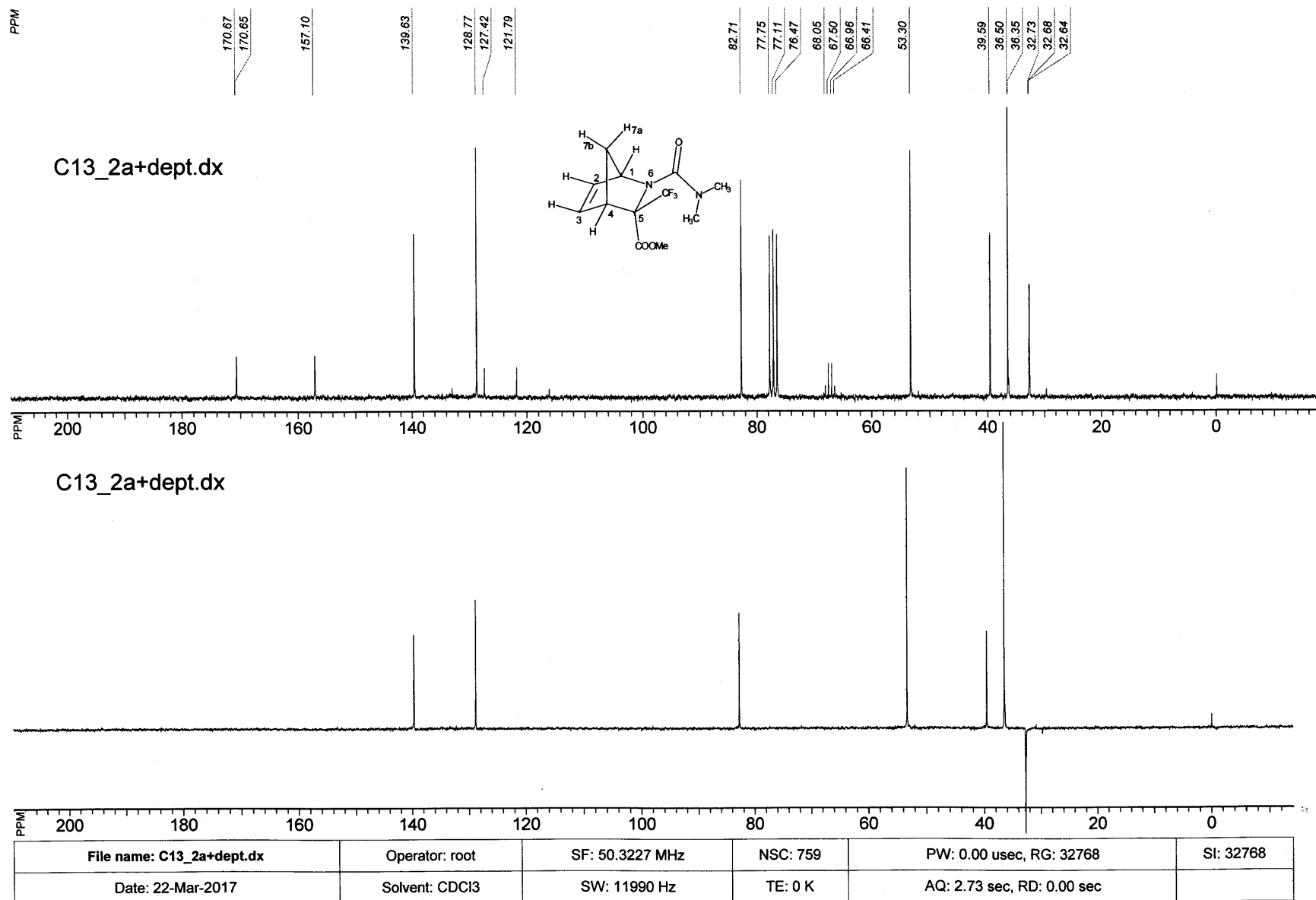
¹H NMR spectrum and the same with ¹H{¹⁹F} proton-fluorine decoupling of compound **2a**



^1H NMR spectrum of compound **2a** with homonuclear decoupling at different frequencies

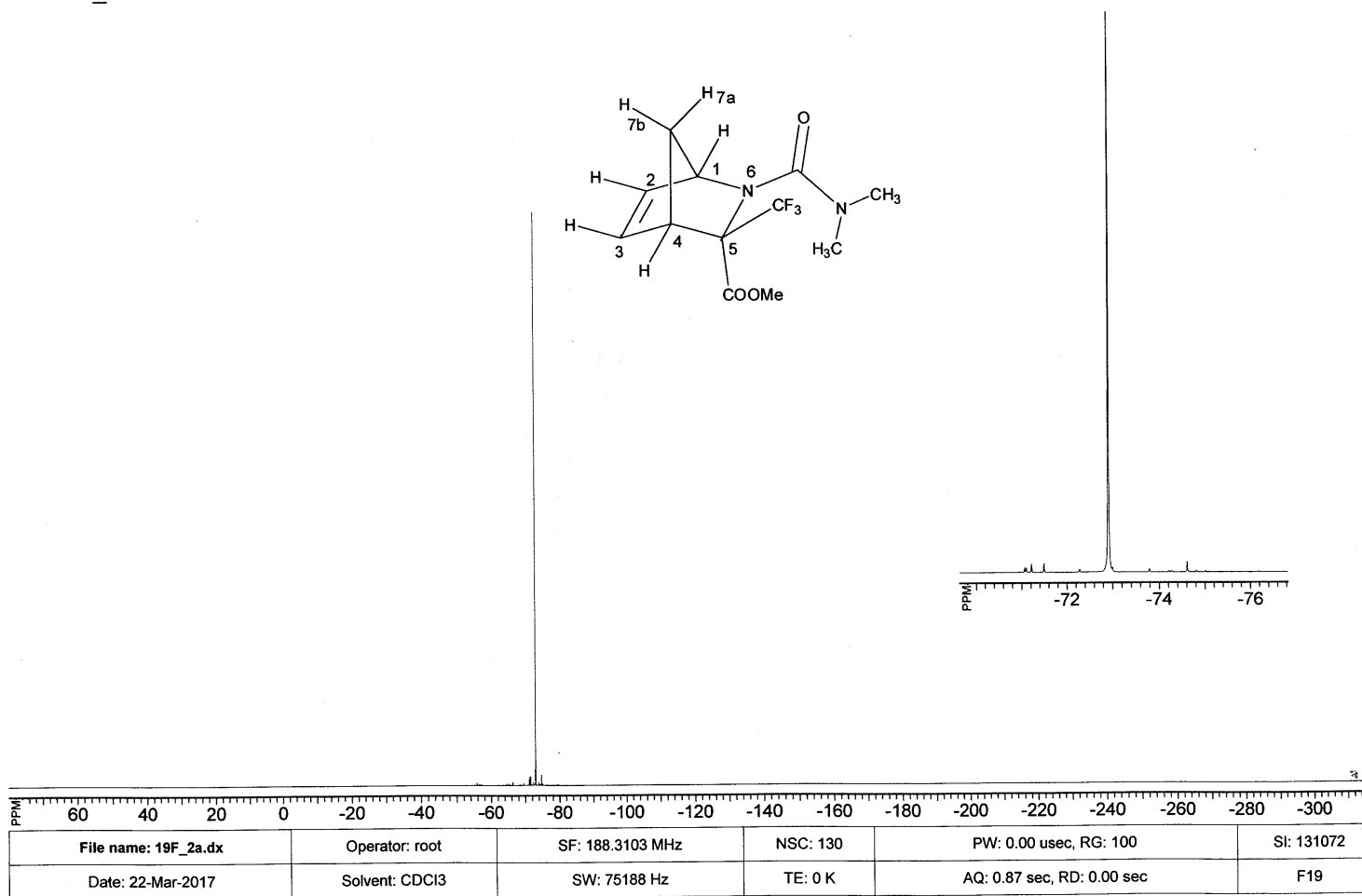


^1H NMR spectrum of compound **2a** with homonuclear decoupling at different frequencies

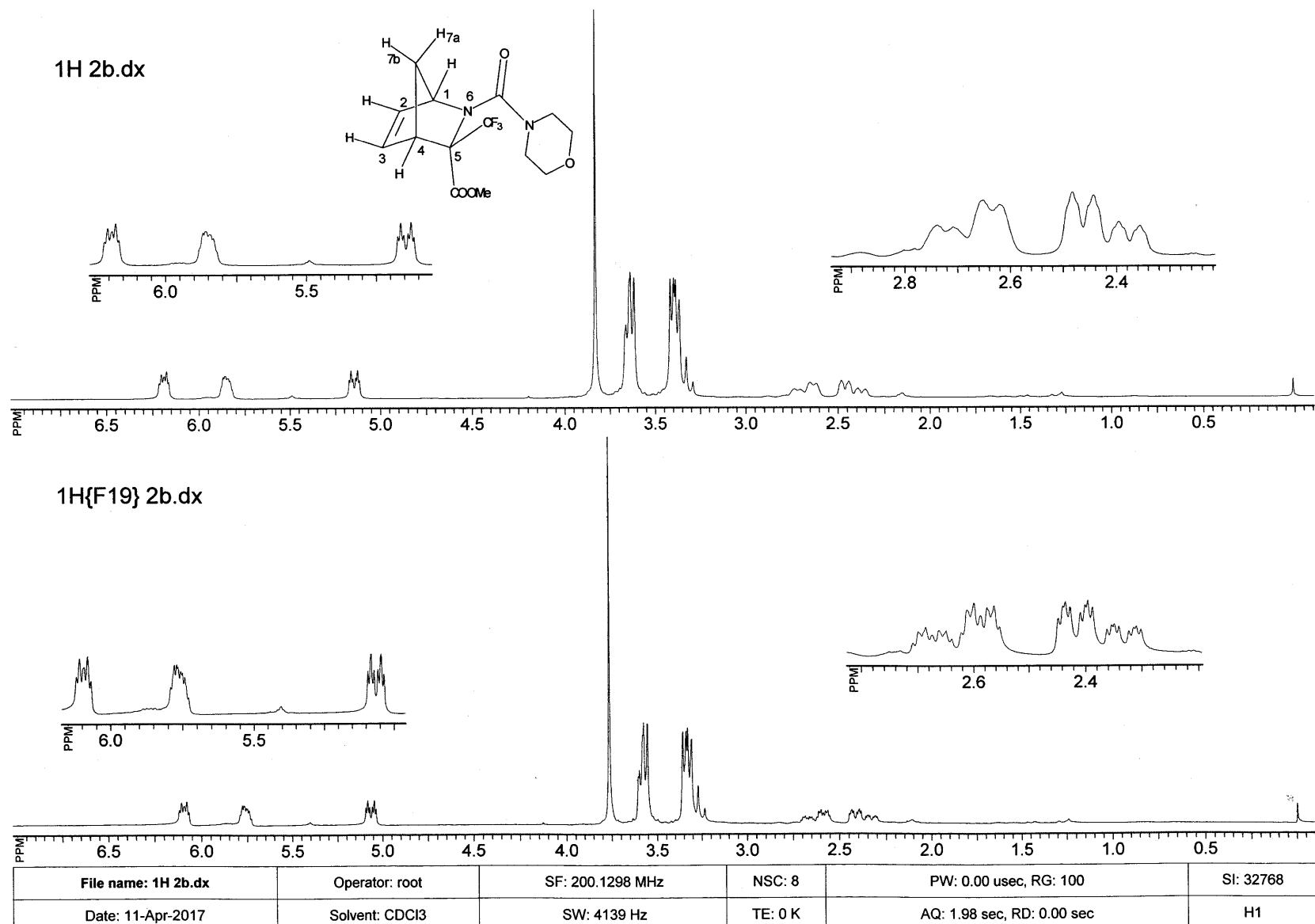


¹³C NMR spectrum and DEPT spectrum of compound 2a

19F_2a.dx

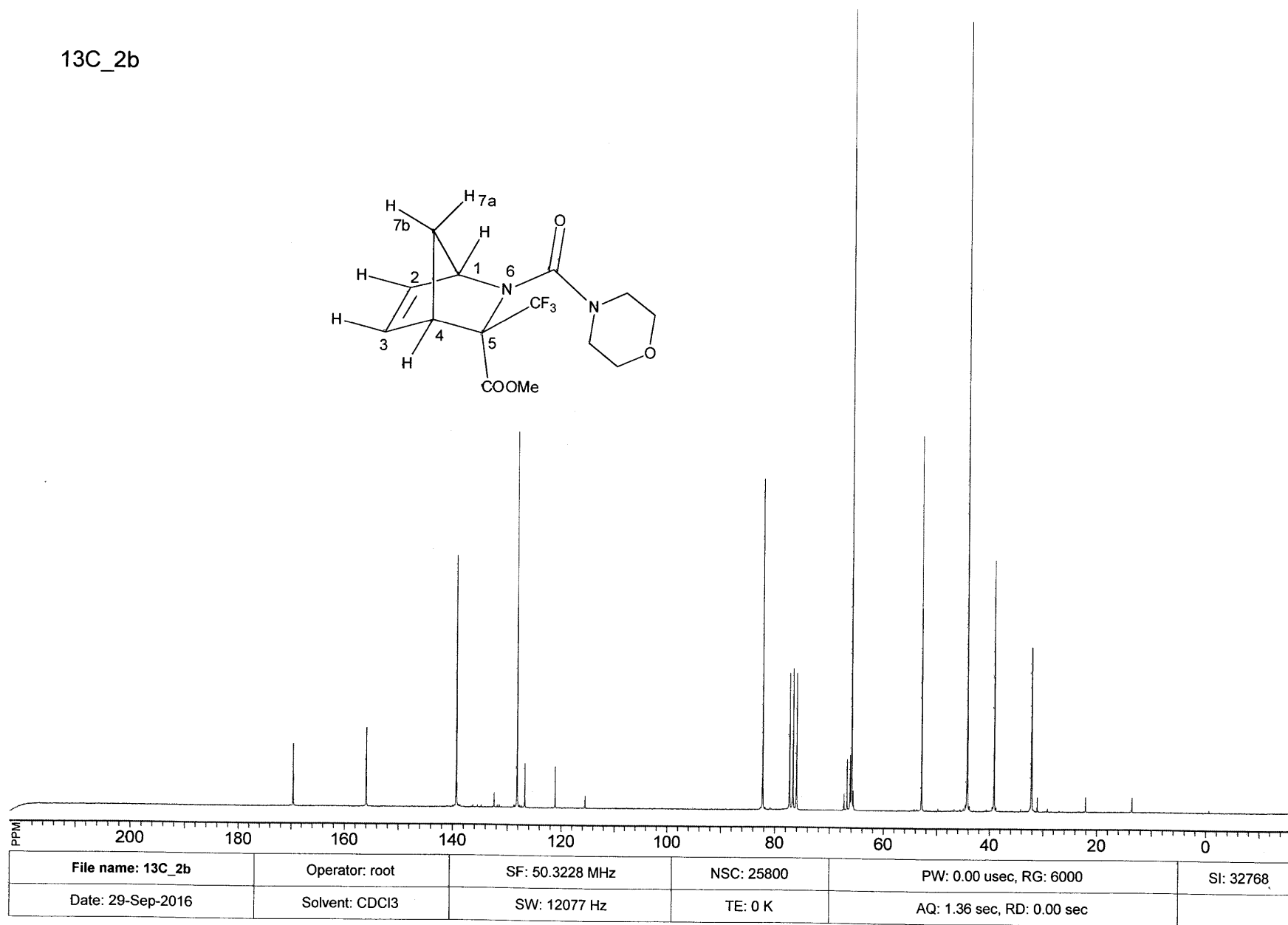
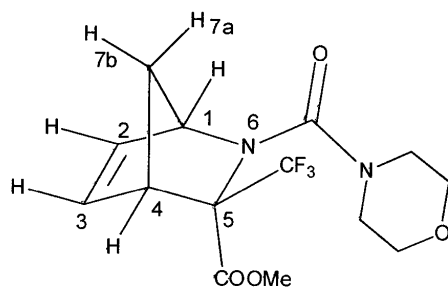


¹⁹F NMR spectrum of compound 2a



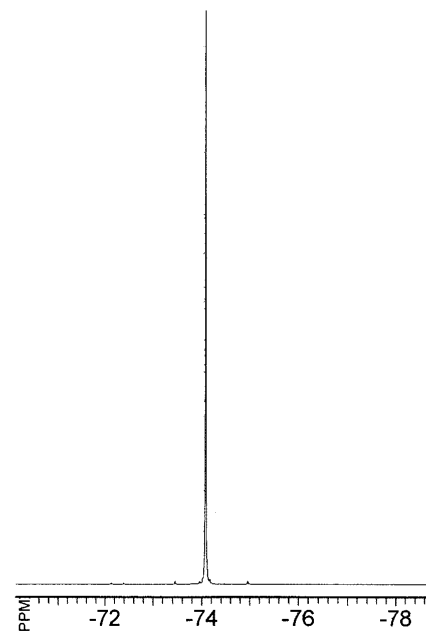
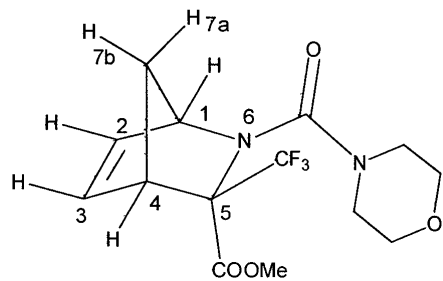
¹H NMR spectrum of compound **2b** and the same with ¹H{¹⁹F} proton-fluorine decoupling

13C_2b



¹³C NMR spectrum of compound 2b

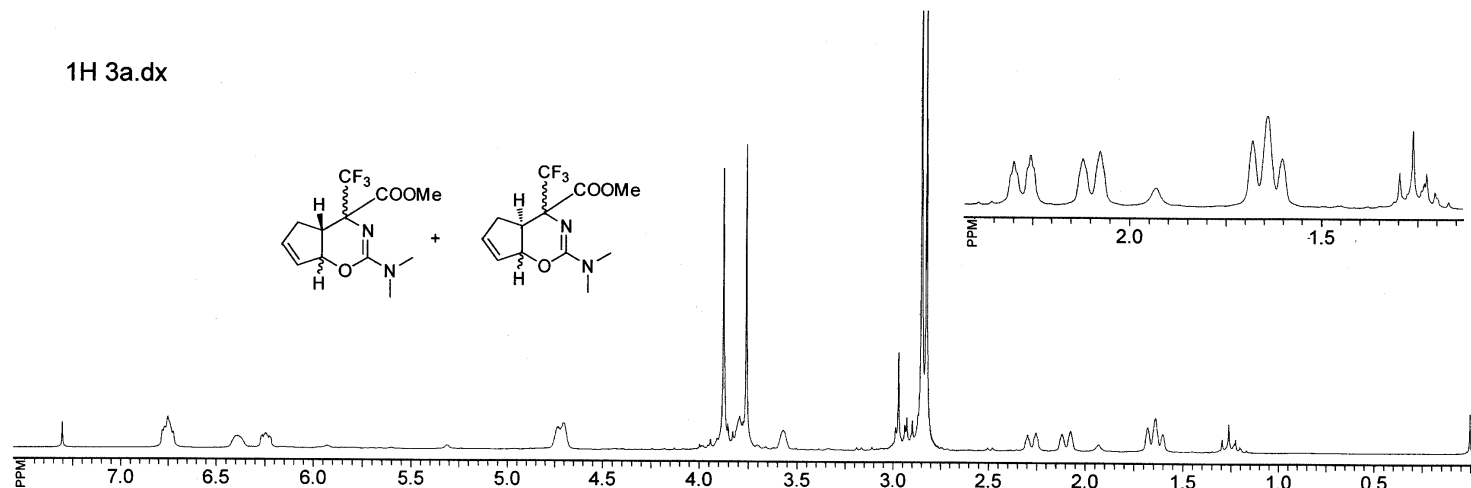
F19_2b.dx



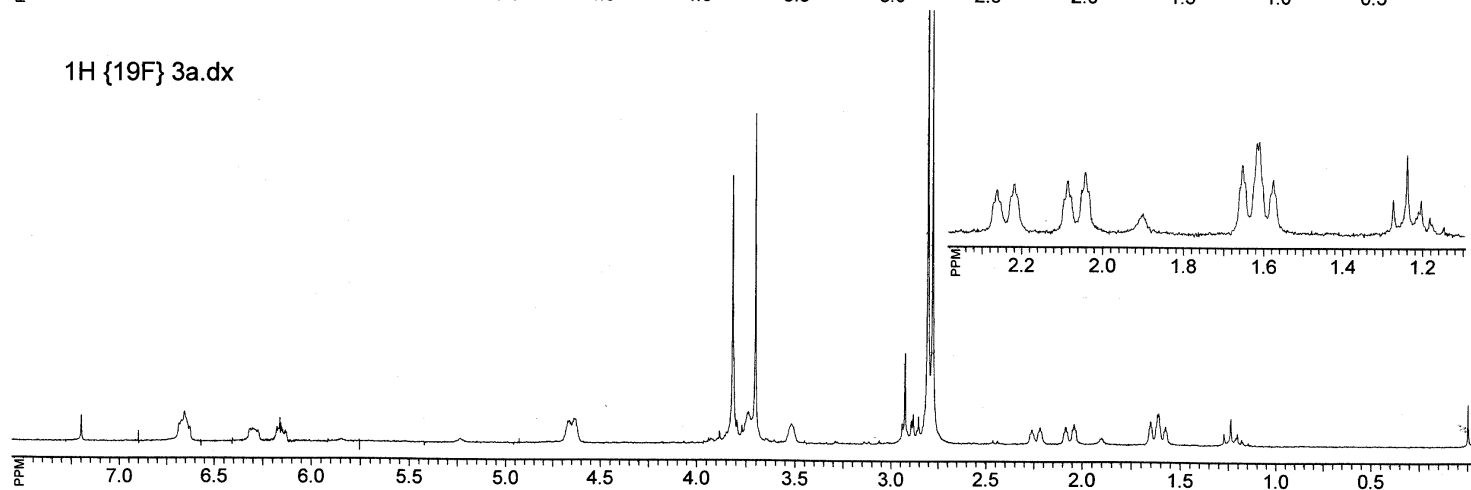
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File name: F19_2b.dx				Operator: psm				SF: 188.3103 MHz				NSC: 50		PW: 0.00 usec, RG: 100				SI: 131072	
Date: 11-Apr-2017				Solvent: CDCl3				SW: 75188 Hz				TE: 0 K		AQ: 0.87 sec, RD: 0.00 sec					

^{19}F NMR spectrum of compound **2b**

¹H 3a.dx

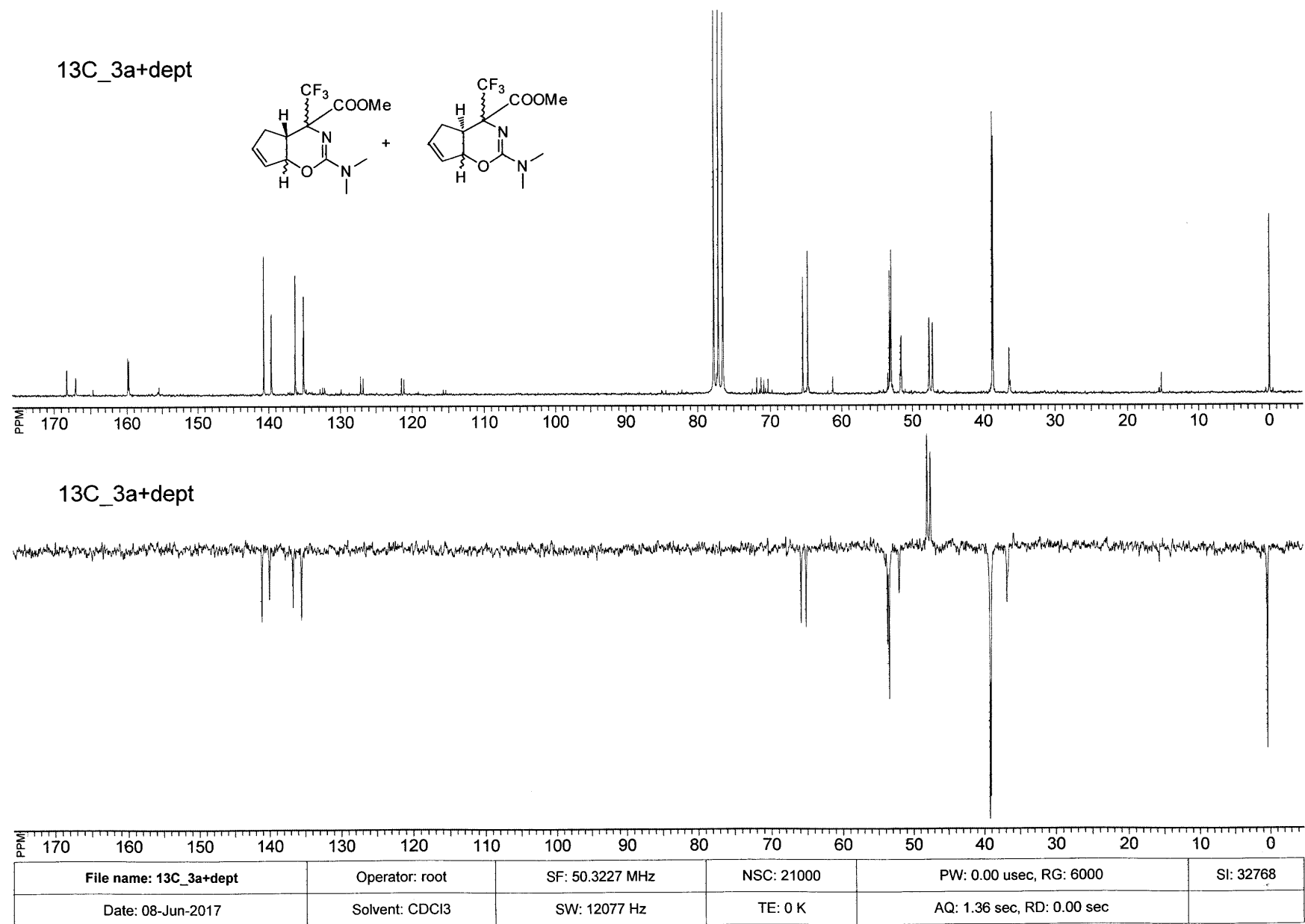


¹H {¹⁹F} 3a.dx



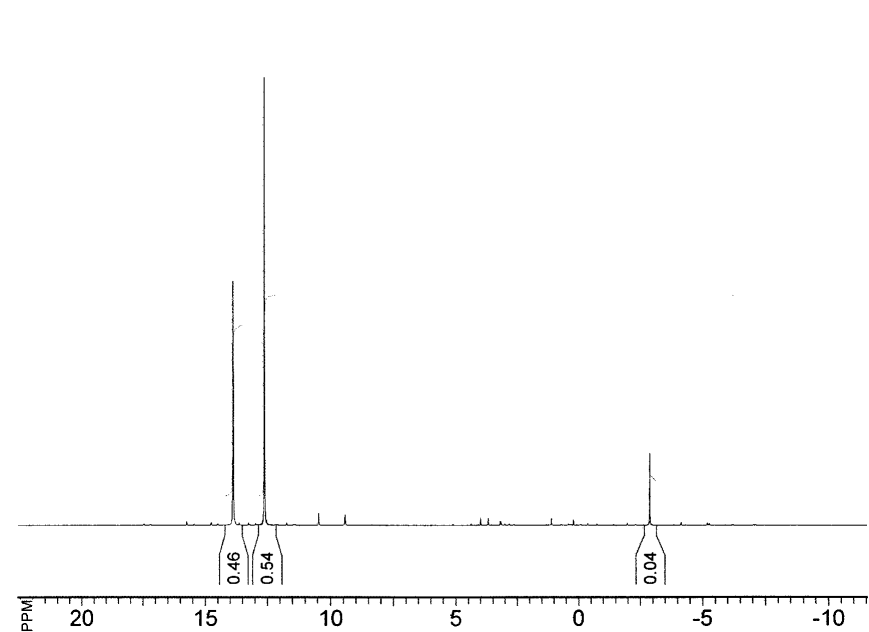
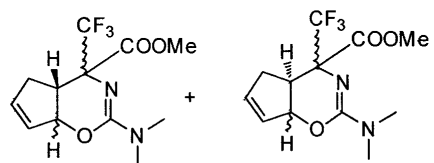
File name: 1H 3a.dx	Operator: root	SF: 200.1300 MHz	NSC: 8	PW: 0.00 usec, RG: 100	SI: 16384
Date: 19-Apr-2017	Solvent: CDCl3	SW: 4990 Hz	TE: 0 K	AQ: 1.64 sec, RD: 0.00 sec	1H

¹H NMR spectrum of compound 3a and the same with ¹H{¹⁹F} proton-fluorine decoupling



¹³C NMR spectrum and DEPT spectrum of mixture of compounds **3aA** and **3aB**

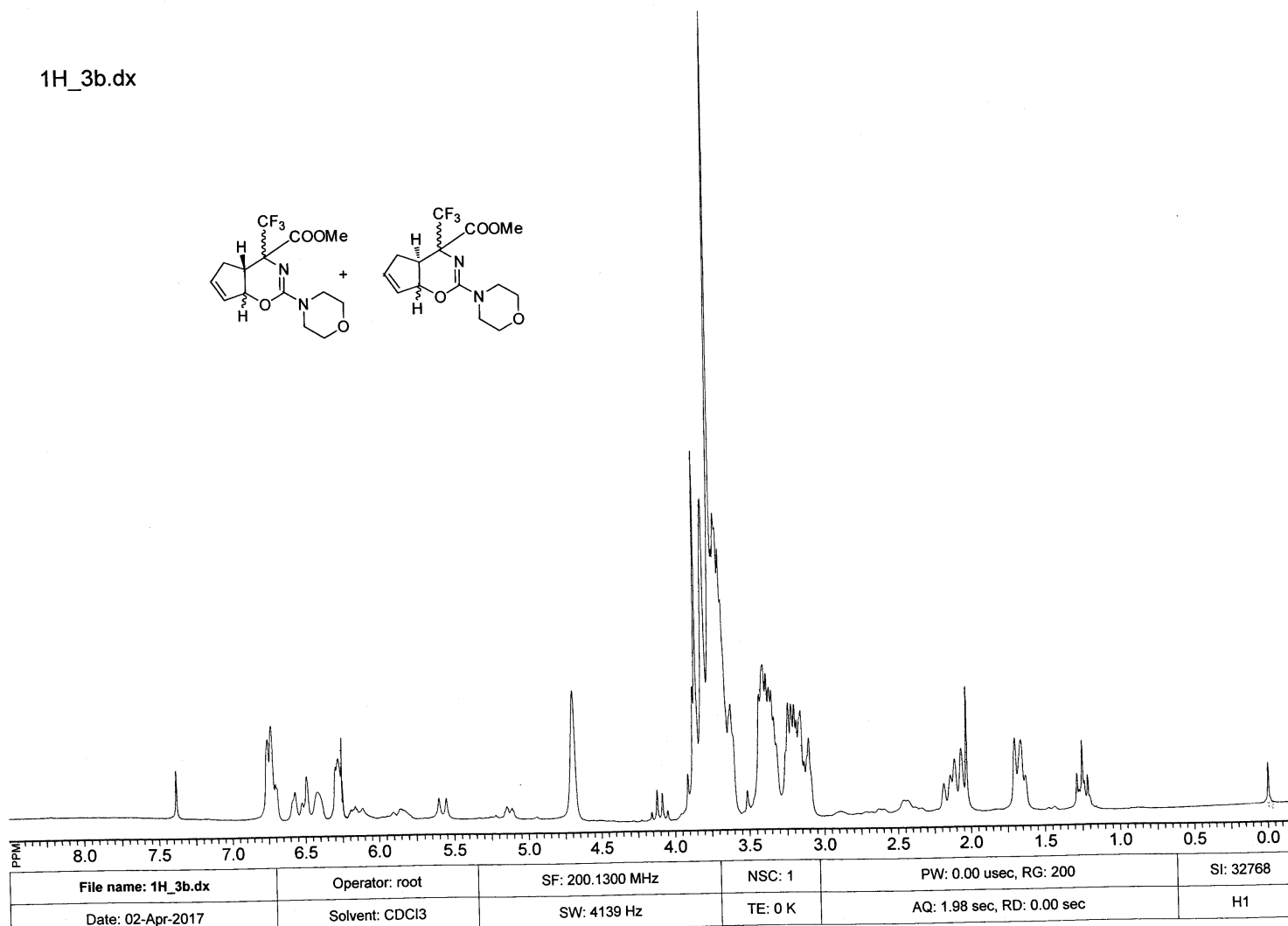
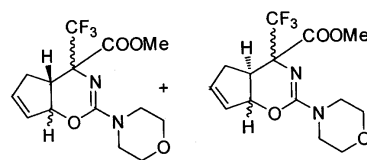
19F_3a



File name: 19F_3a	Operator: pz	SF: 188.2961 MHz	NSC: 24	PW: 0.00 usec, RG: 500	SI: 65536
Date: 17-Apr-2017	Solvent: CDCl ₃	SW: 75188 Hz	TE: 0 K	AQ: 0.44 sec, RD: 0.00 sec	

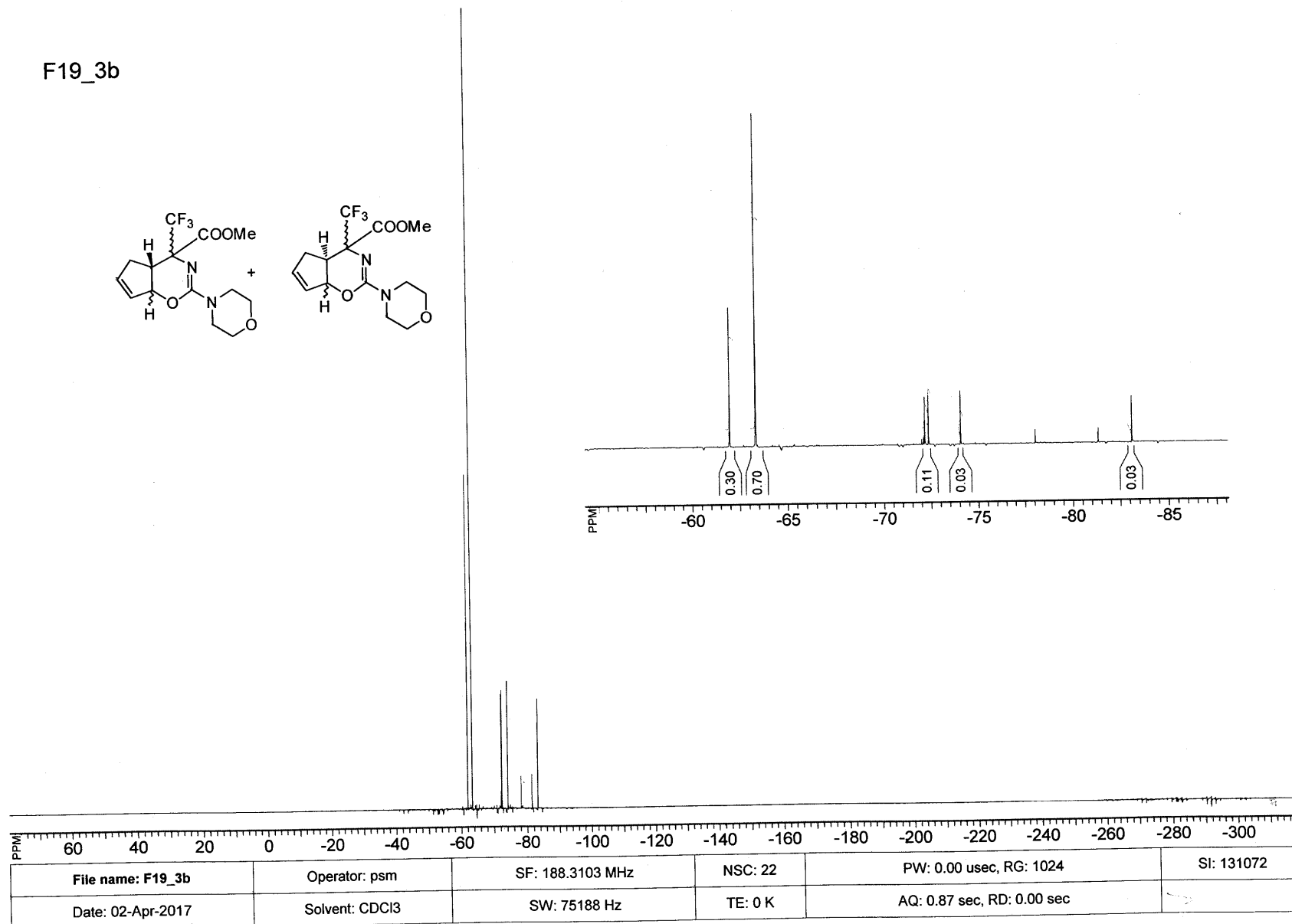
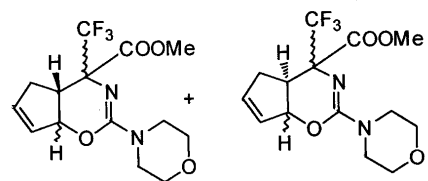
¹⁹F NMR spectrum of mixture of compounds **3aA** and **3aB**

1H_3b.dx



¹H NMR spectrum of mixture of compounds **3bA** and **3bB**

F19_3b



¹⁹F NMR spectrum of mixture of compounds **3bA** and **3bB**