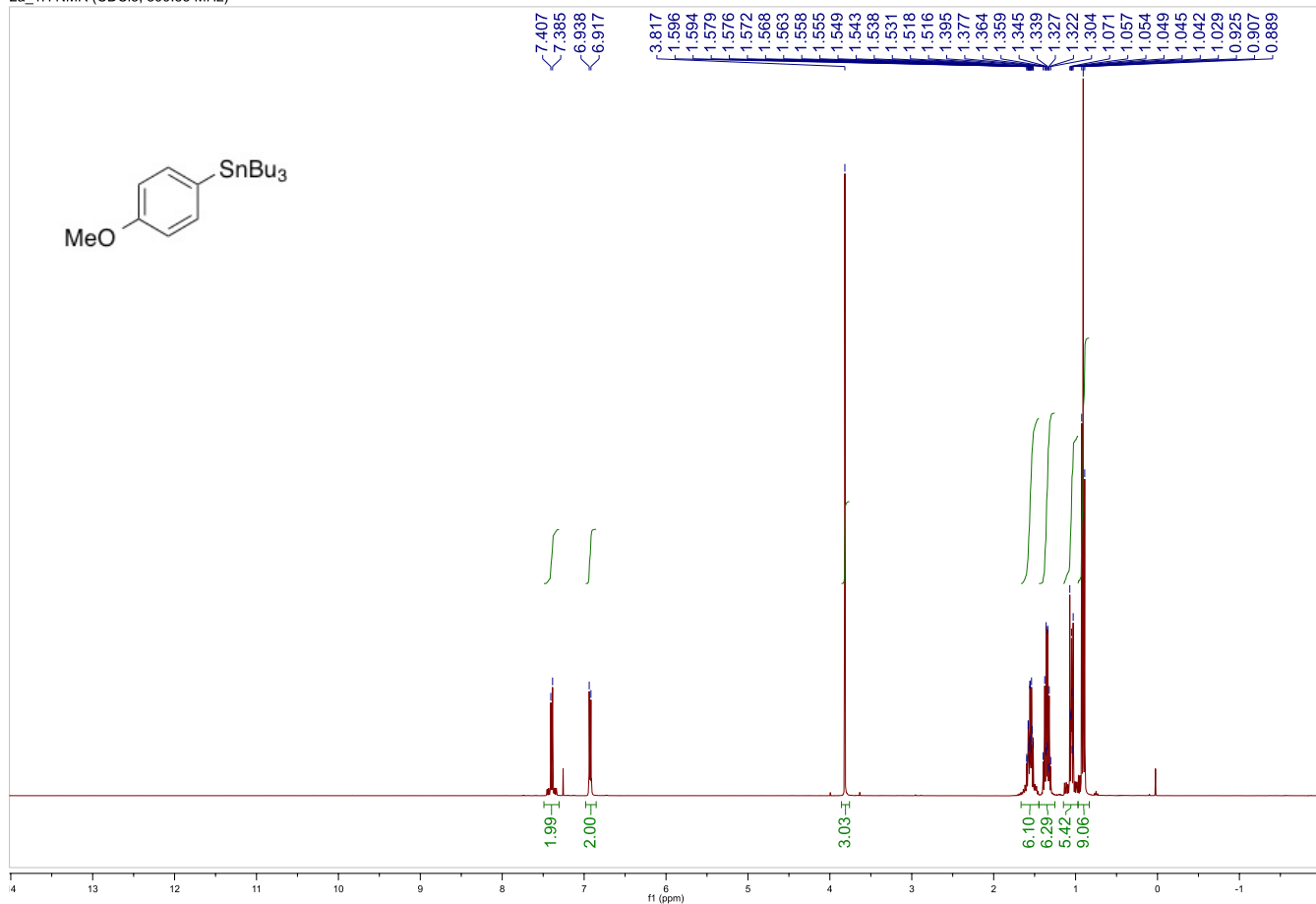
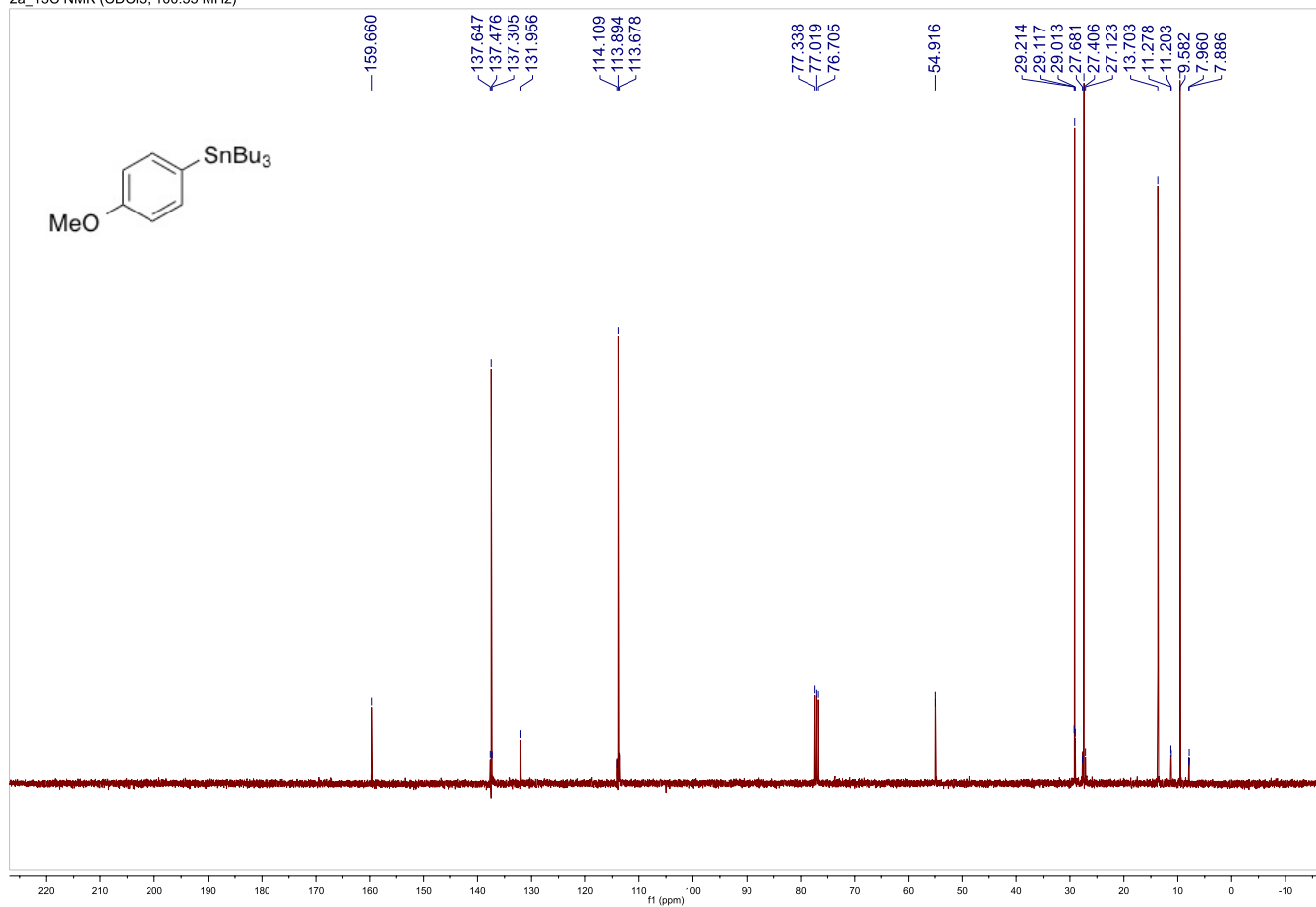


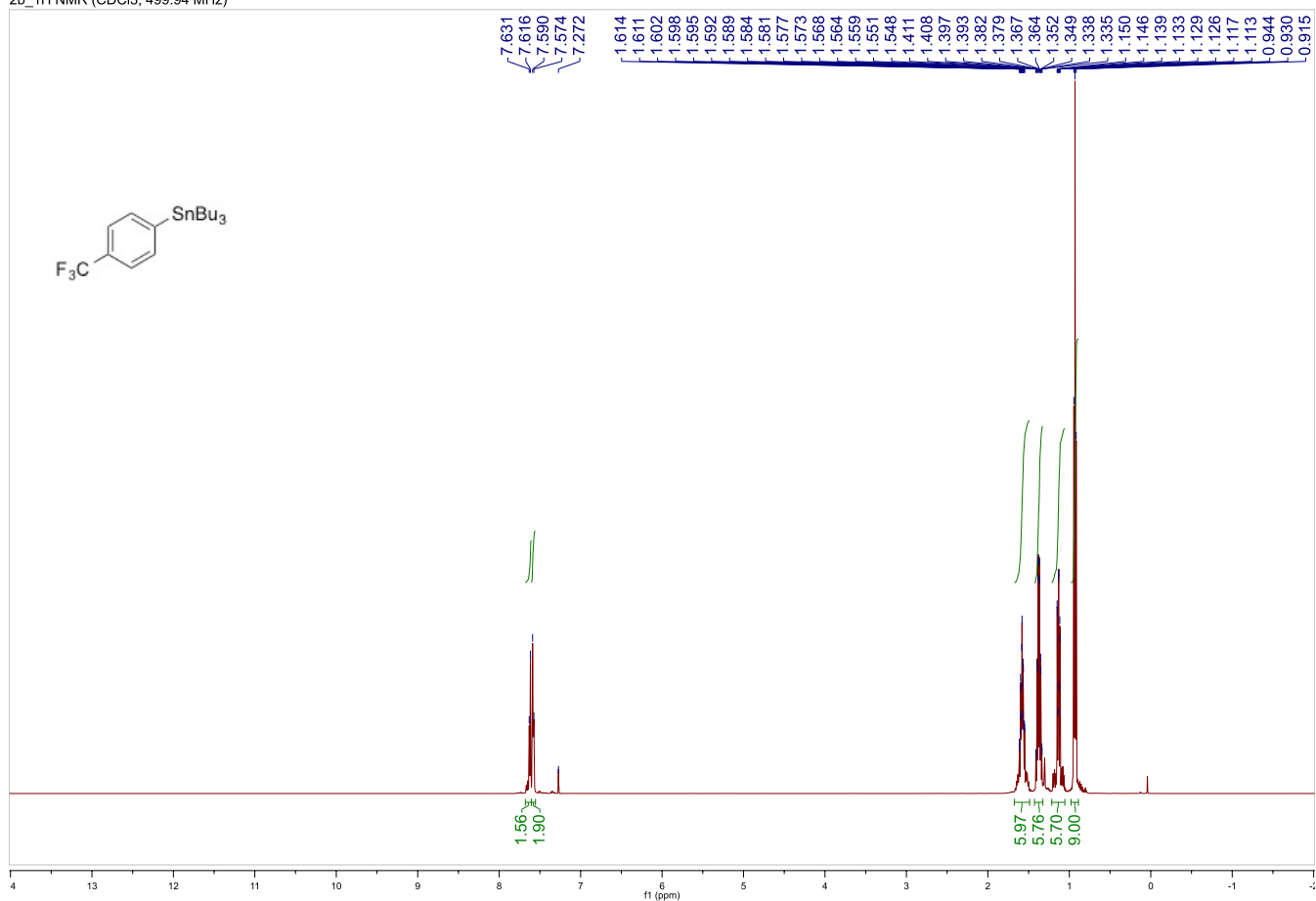
2a_1H NMR (CDCl₃, 399.83 MHz)



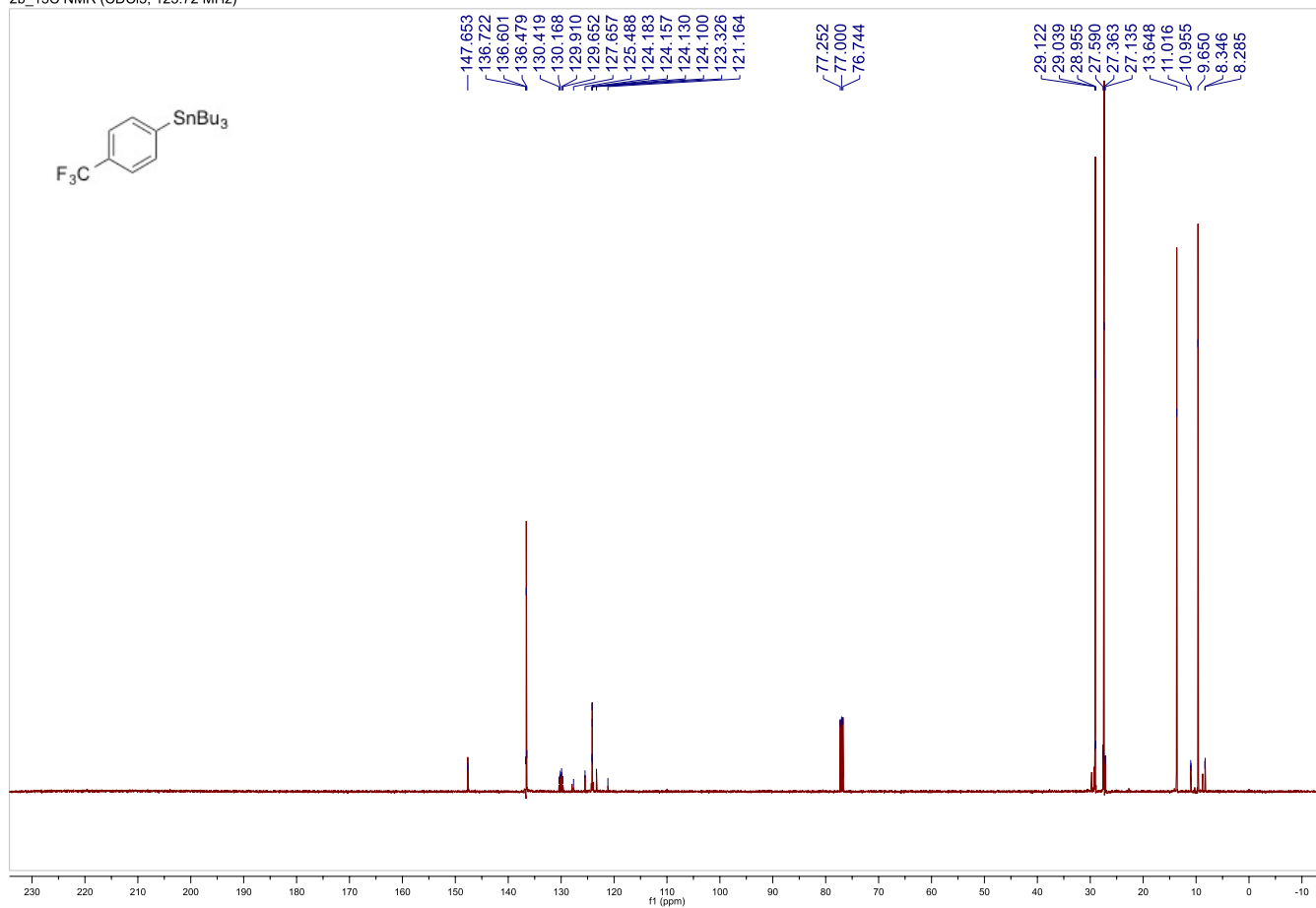
2a_13C NMR (CDCl₃, 100.55 MHz)



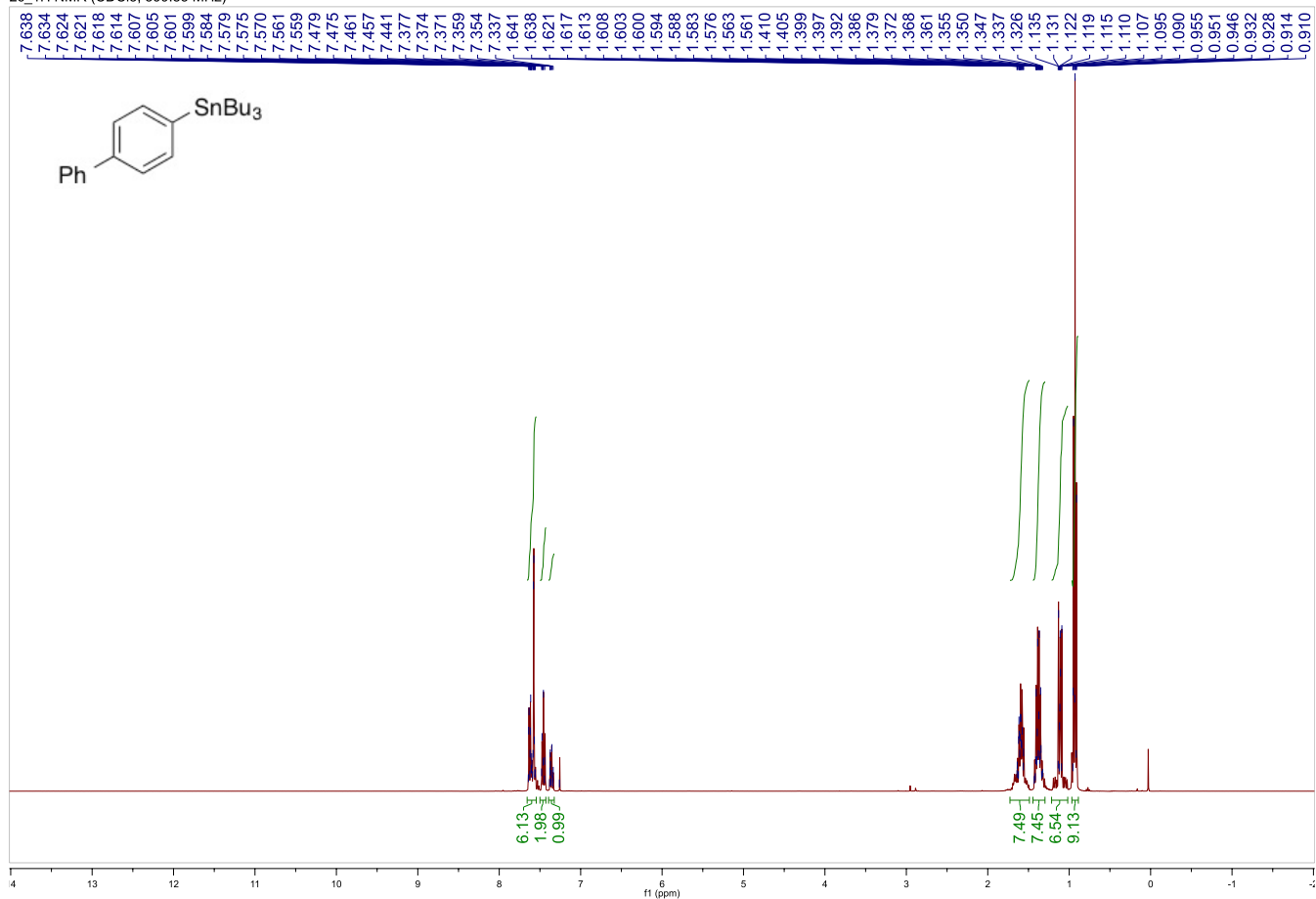
2b_1H NMR (CDCl3, 499.94 MHz)



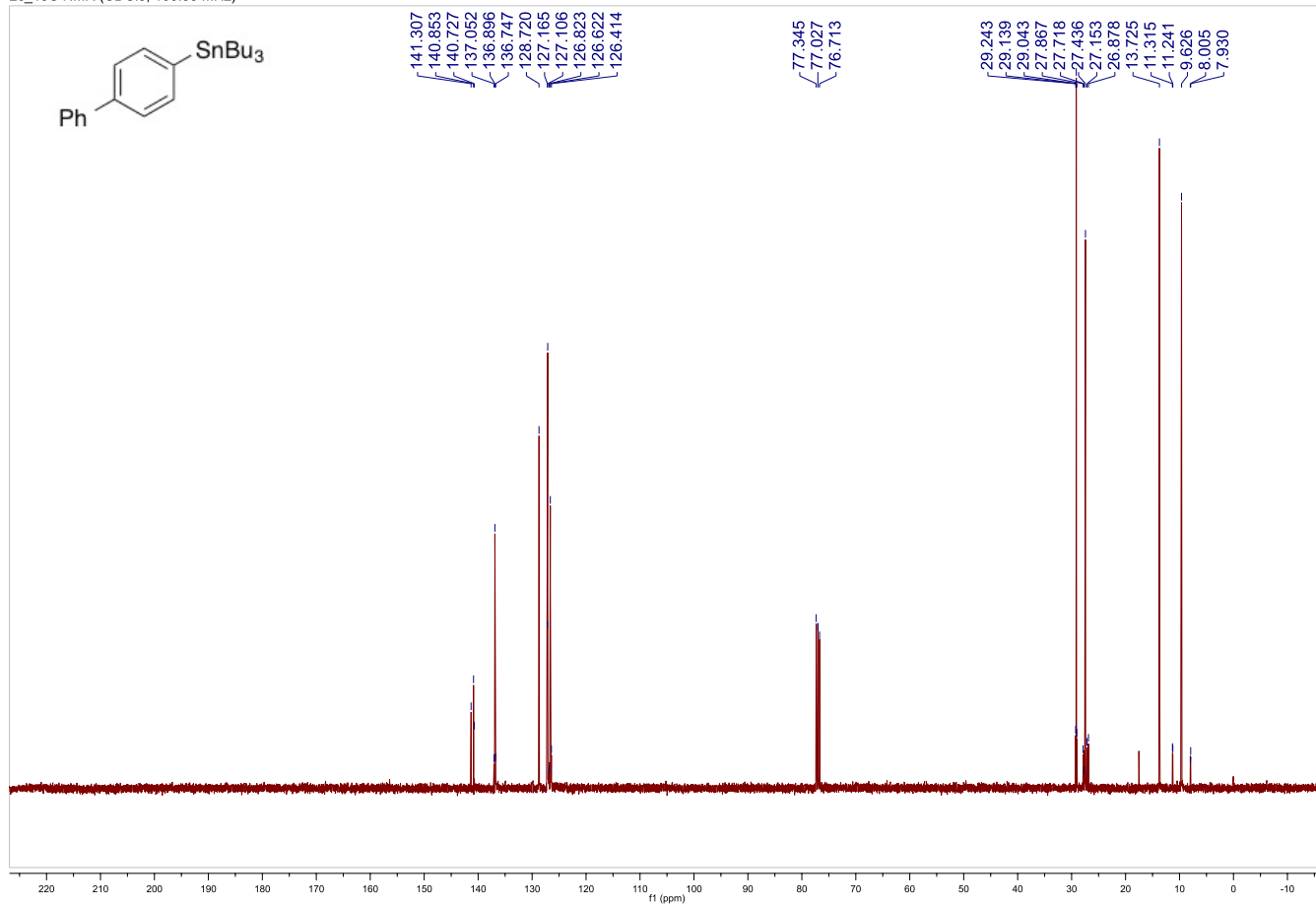
2b_13C NMR (CDCl3, 125.72 MHz)



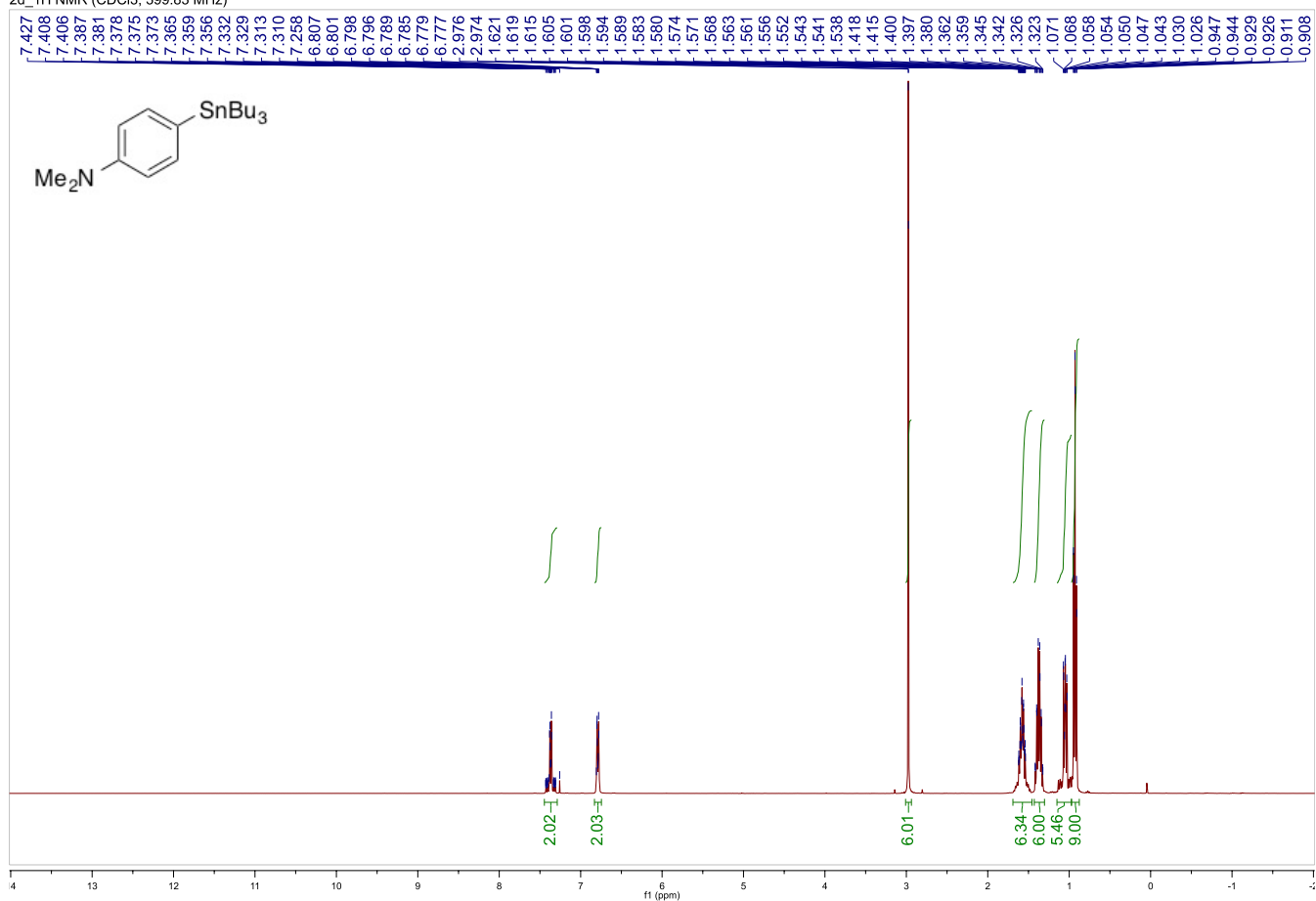
2c_ 1H NMR (CDCl3, 399.83 MHz)



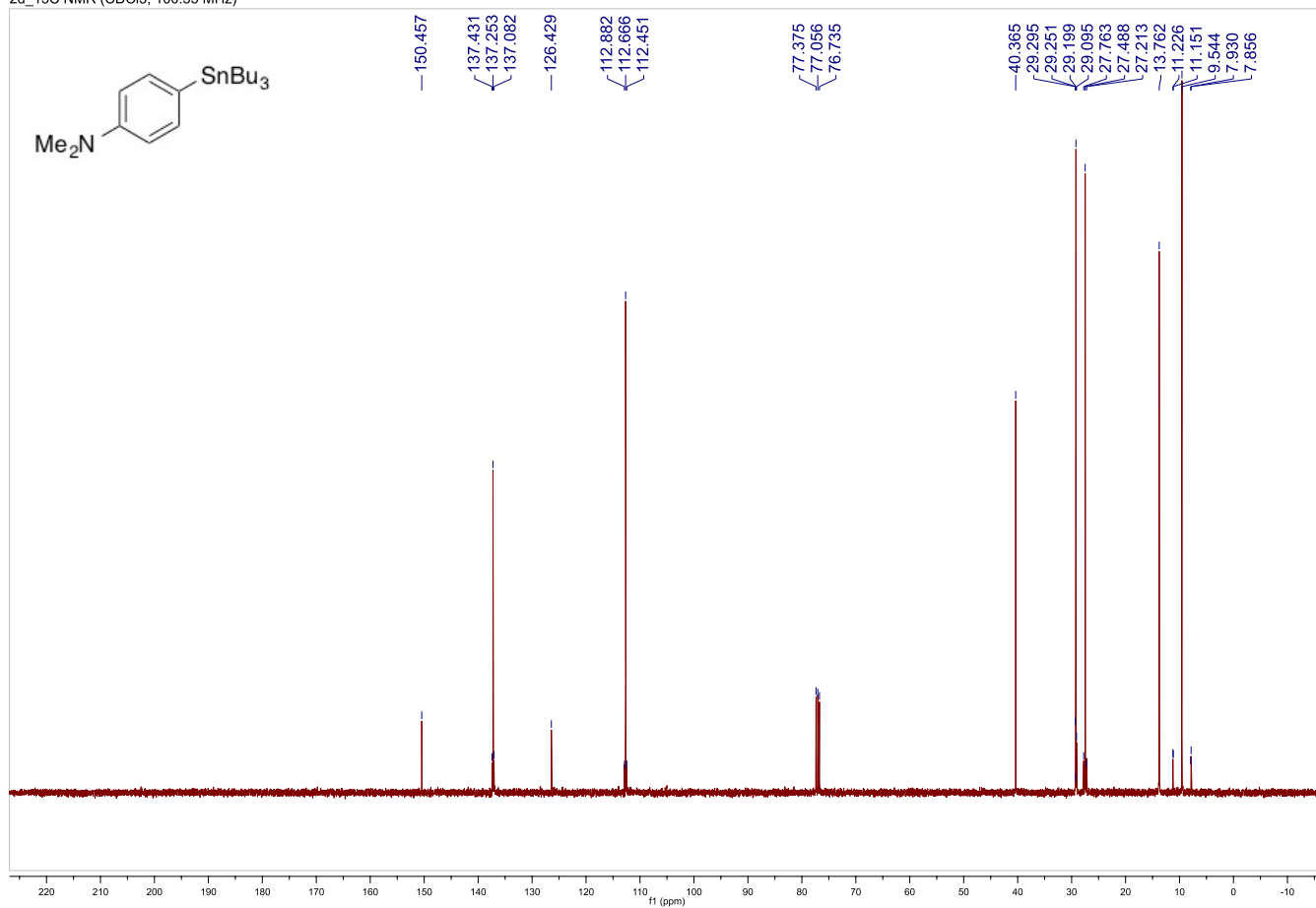
2c_ 13C NMR (CDCl3, 100.55 MHz)



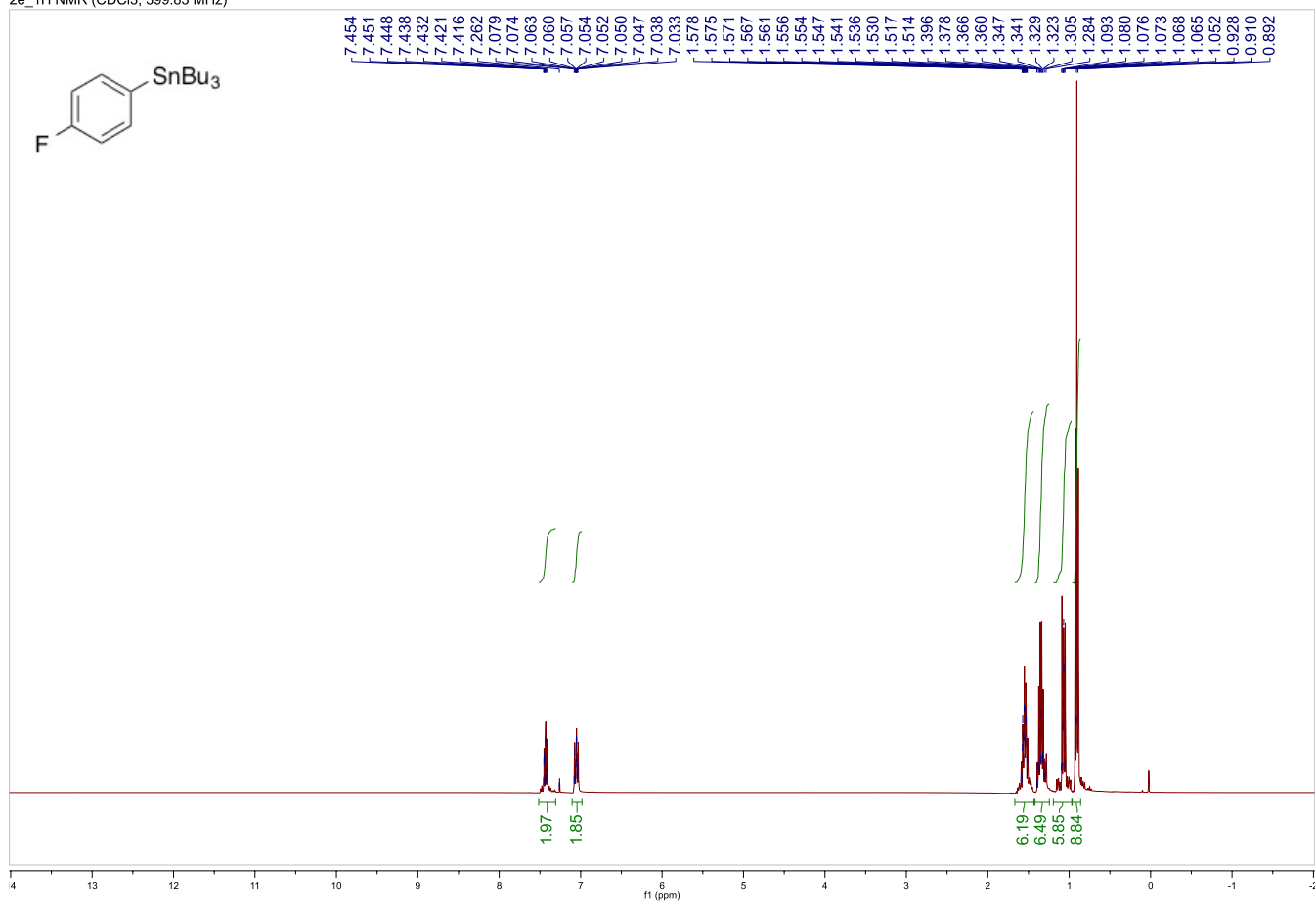
2d_1H NMR (CDCl3, 399.83 MHz)



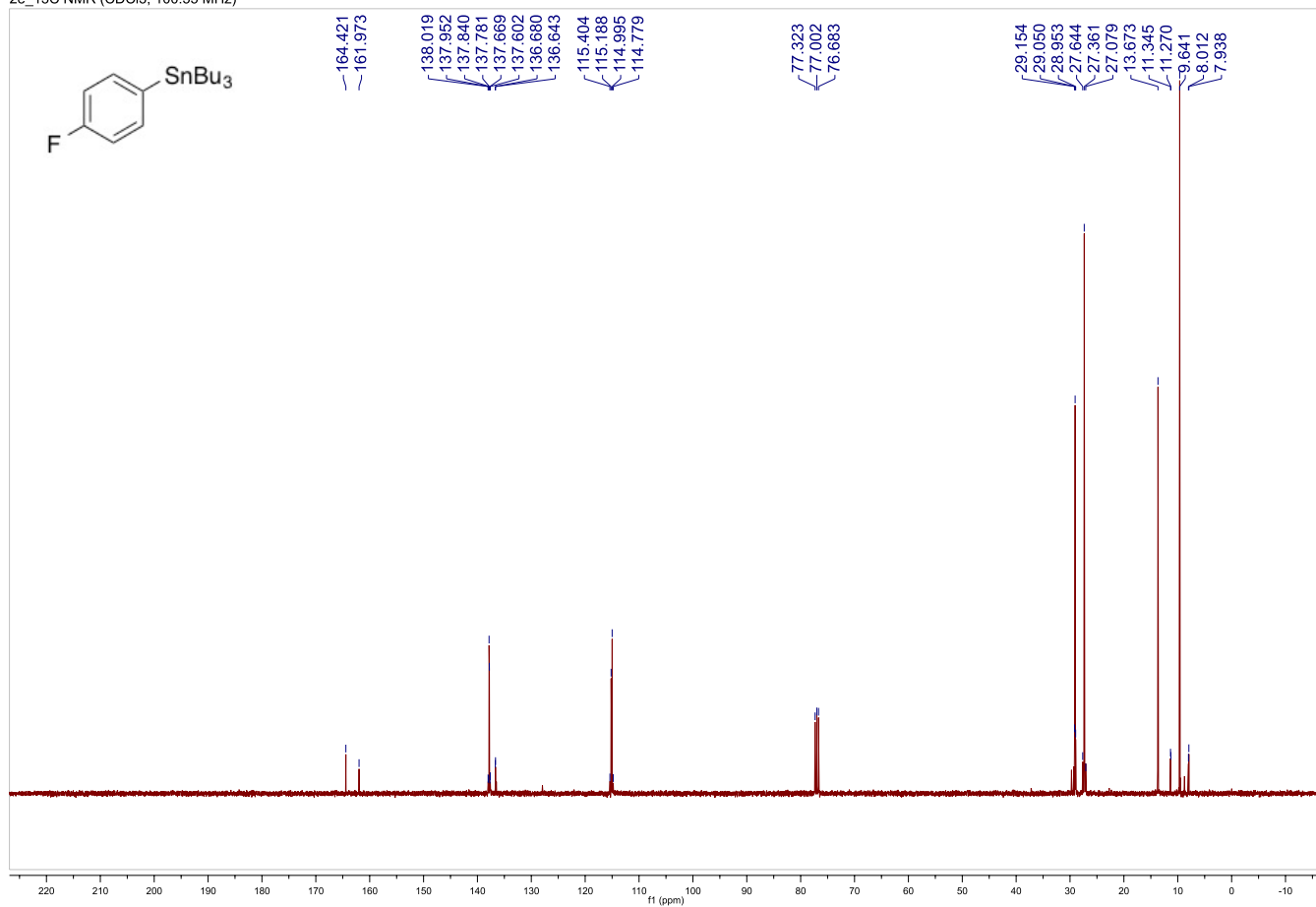
2d_13C NMR (CDCl3, 100.55 MHz)



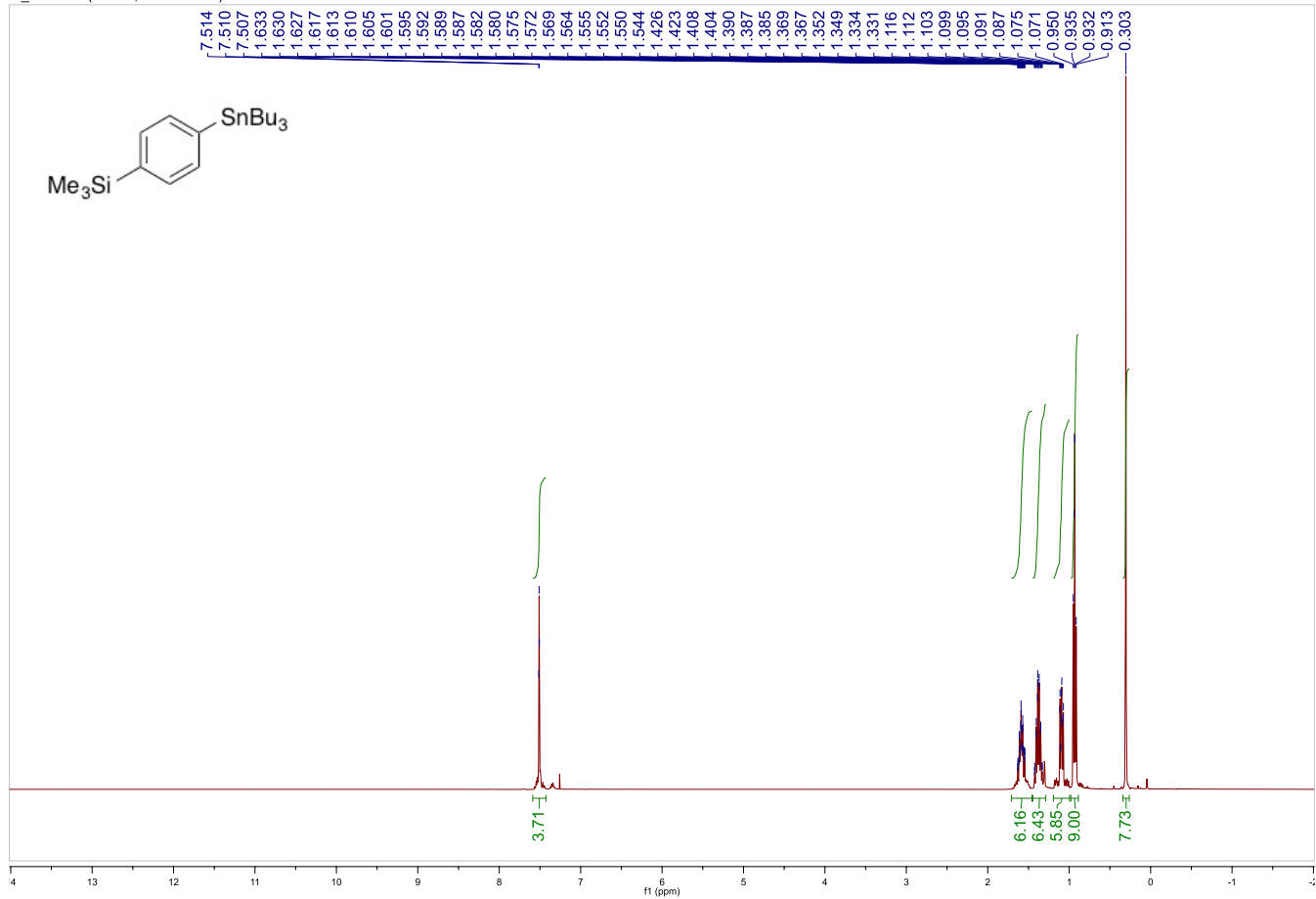
2e_1H NMR (CDCl3, 399.83 MHz)



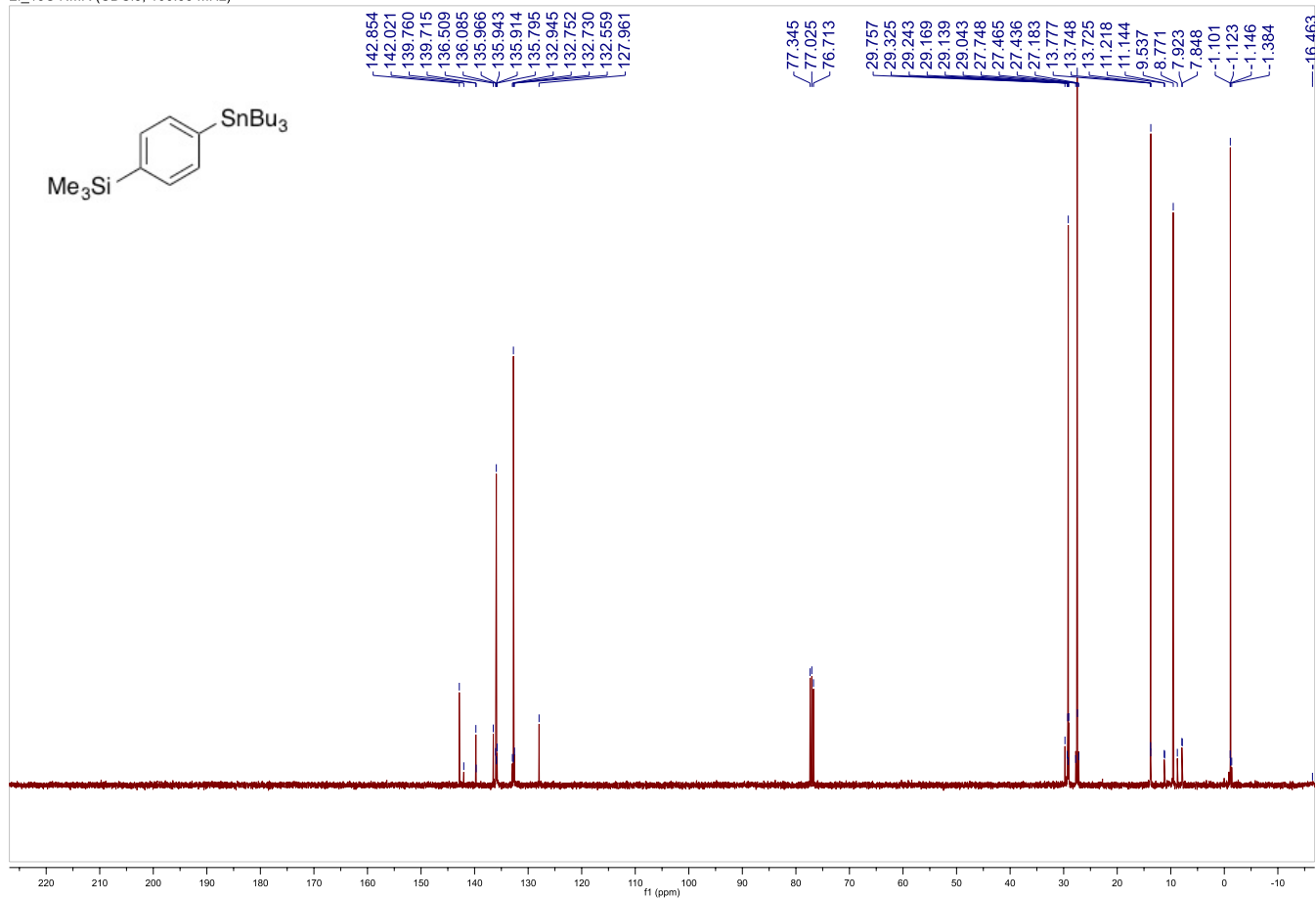
2e_13C NMR (CDCl3, 100.55 MHz)

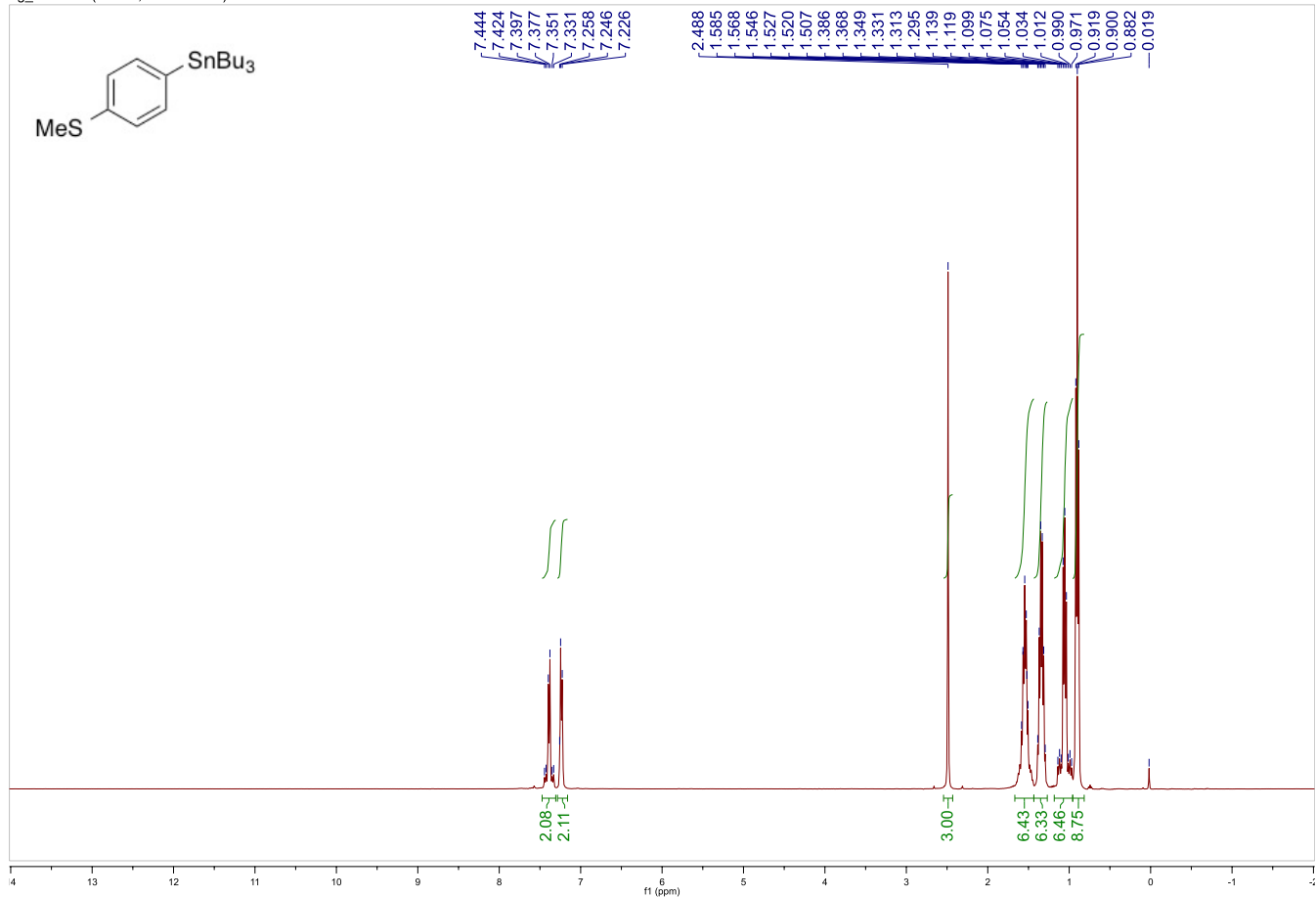
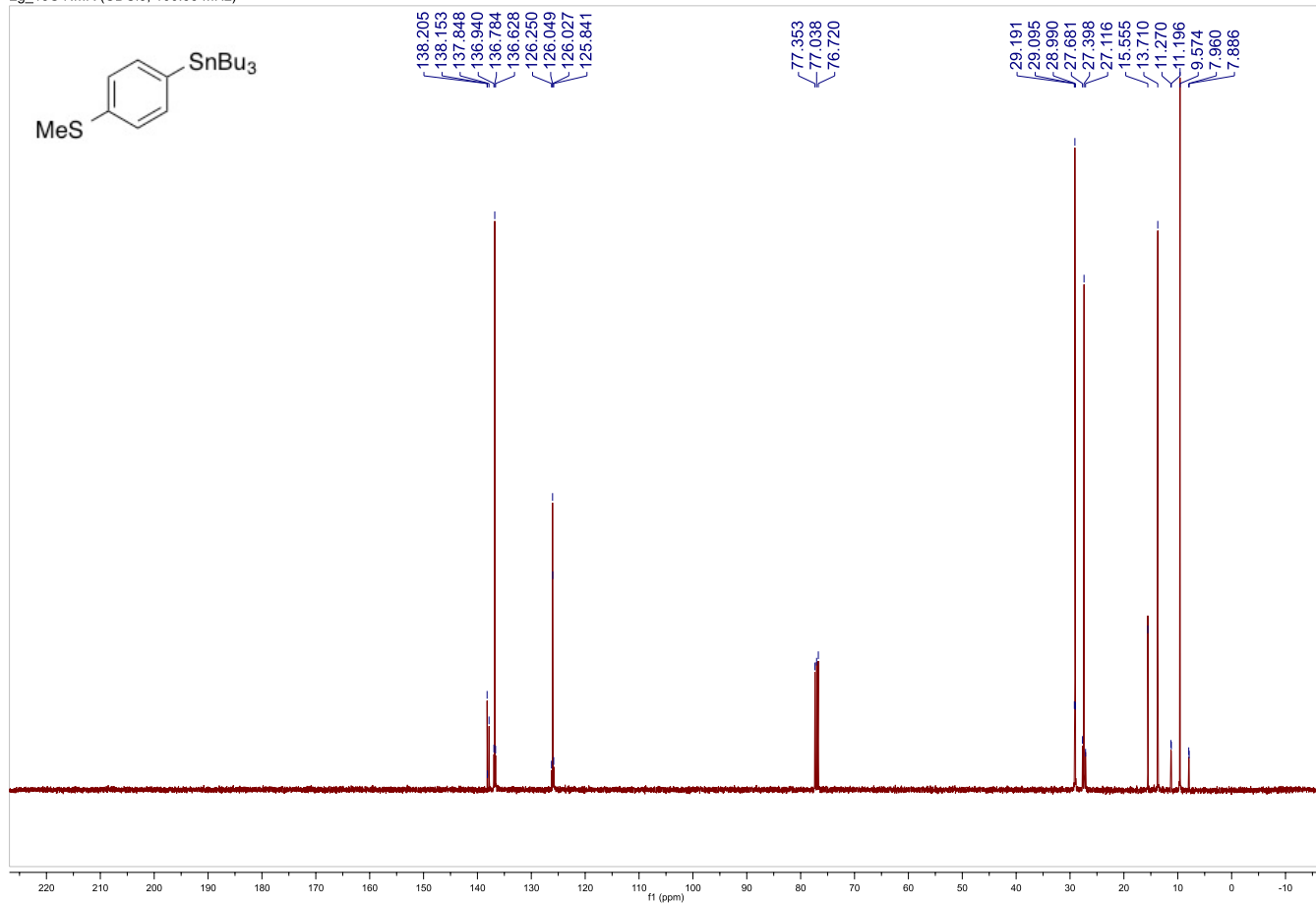


2f_1H NMR (CDCl₃, 399.83 MHz)

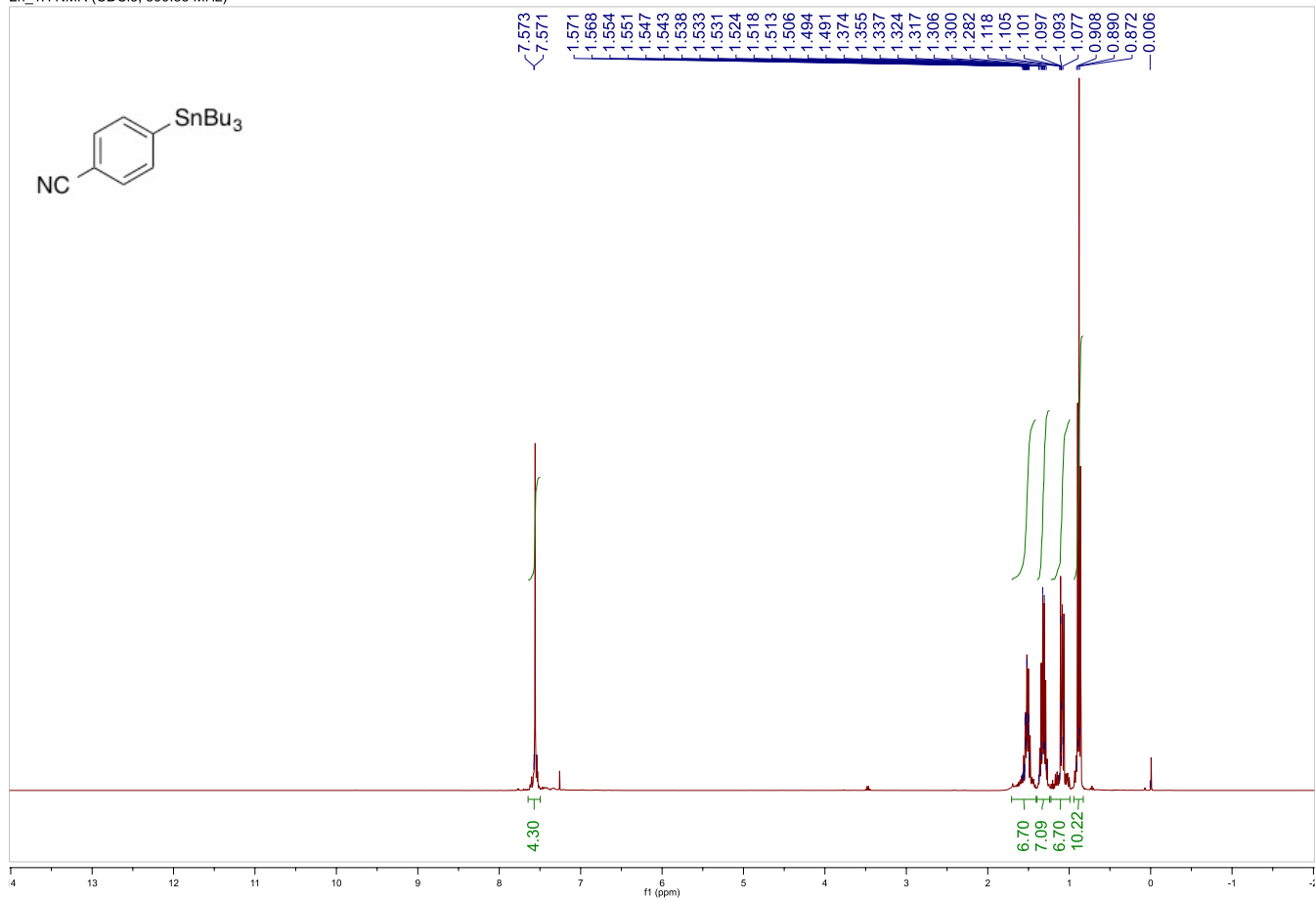


2f_13C NMR (CDCl3, 100.55 MHz)

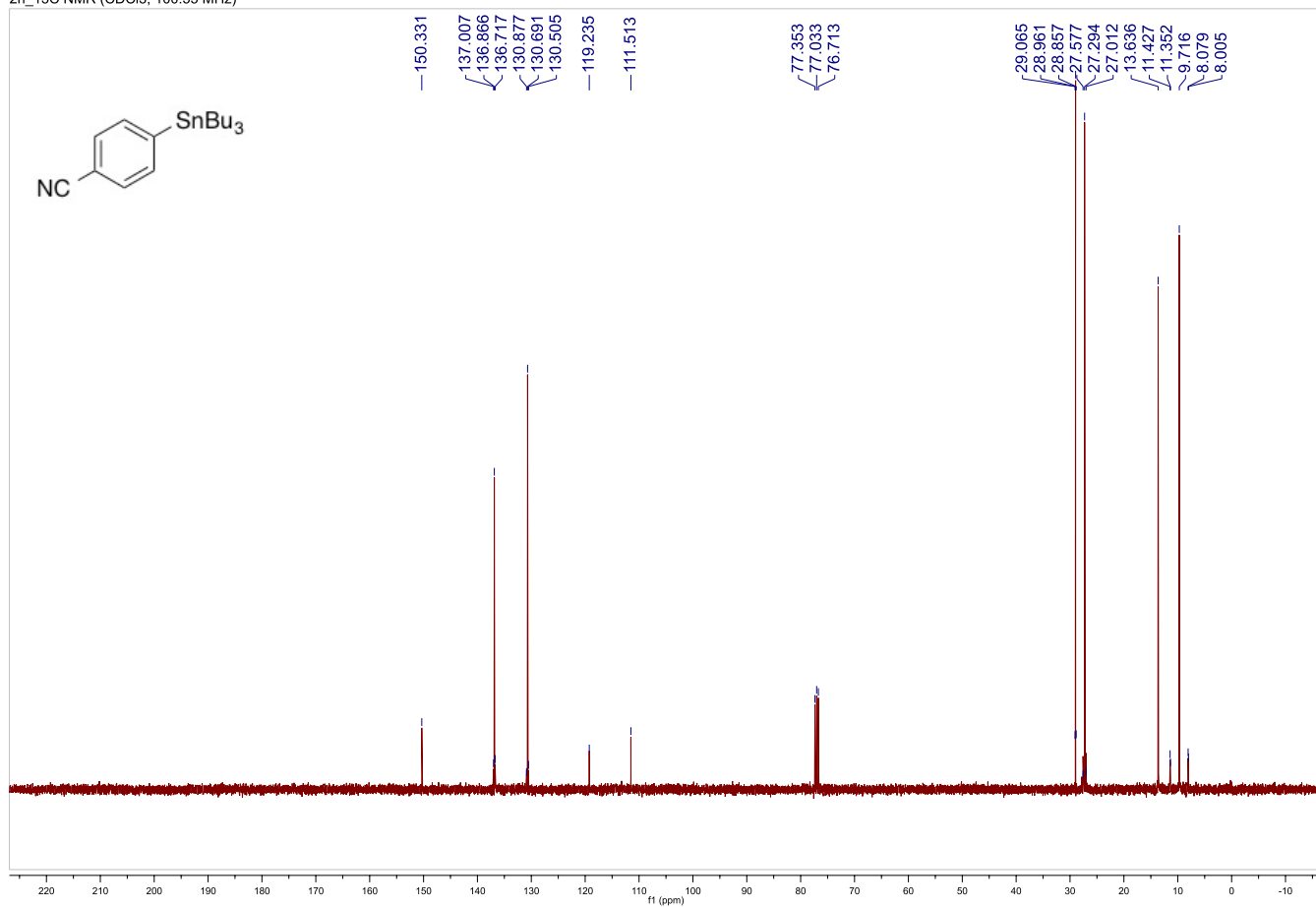


2g_1H NMR (CDCl₃, 399.83 MHz)2g_13C NMR (CDCl₃, 100.55 MHz)

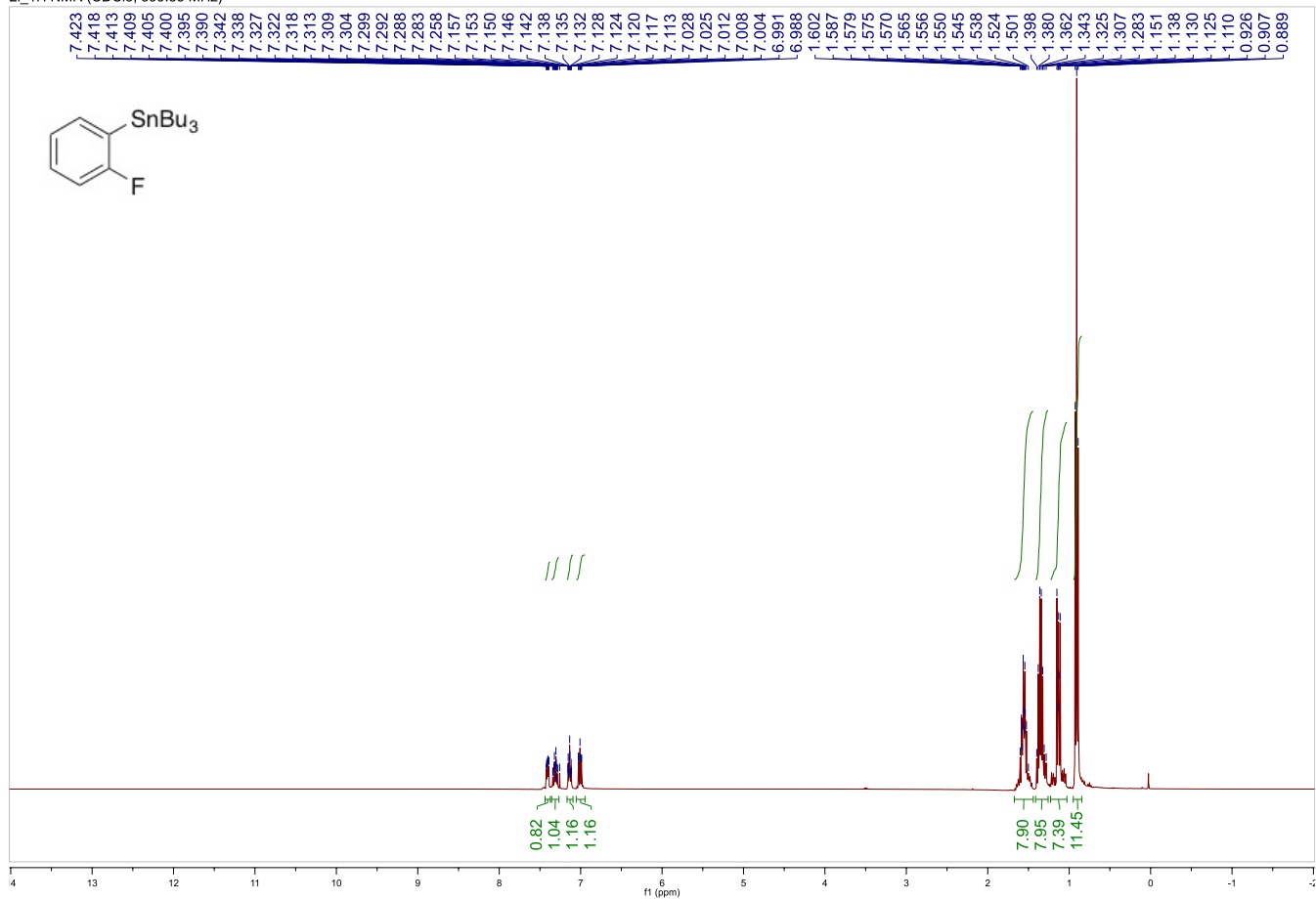
2h_1H NMR (CDCl3, 399.83 MHz)



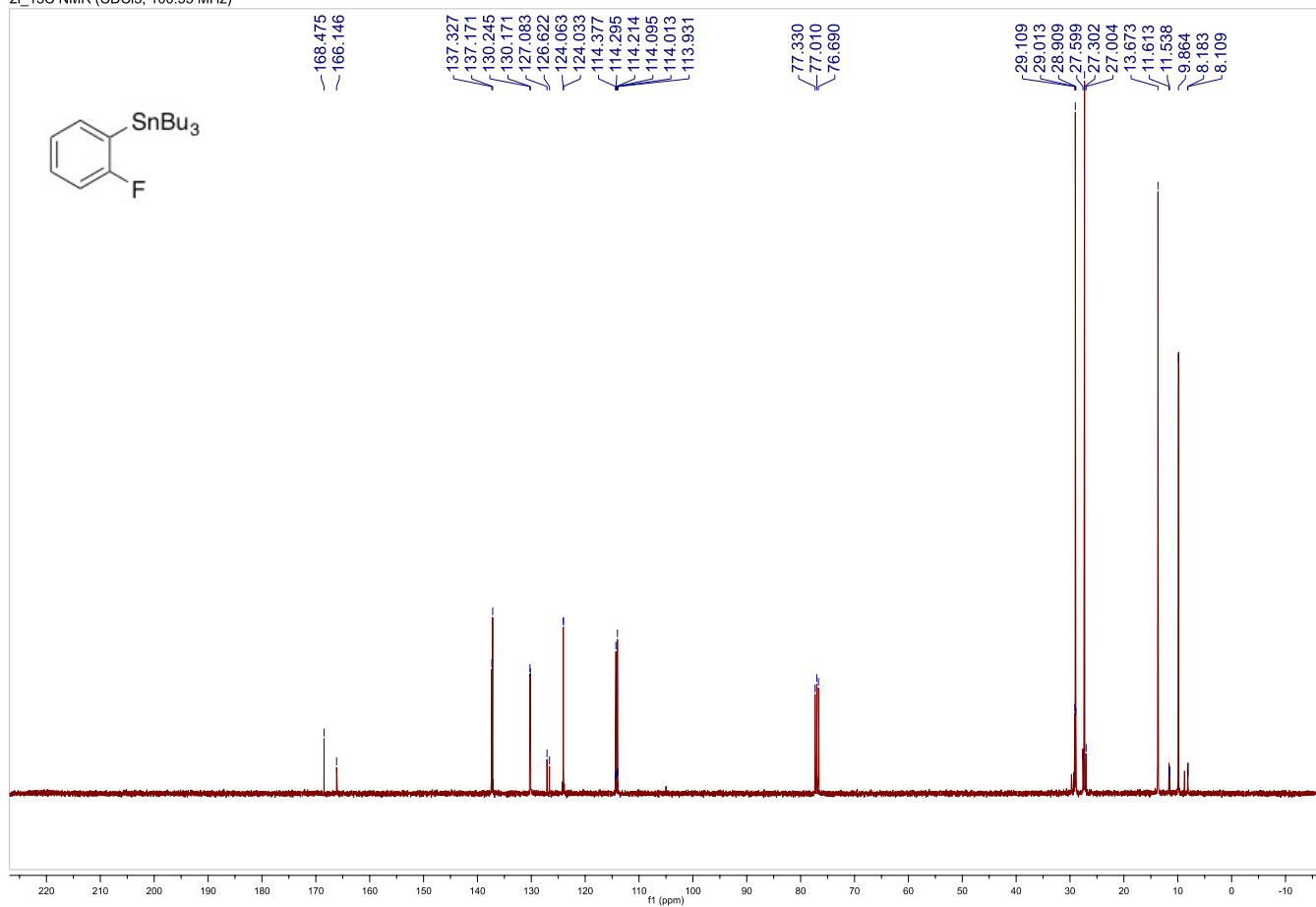
2h_13C NMR (CDCl3, 100.55 MHz)

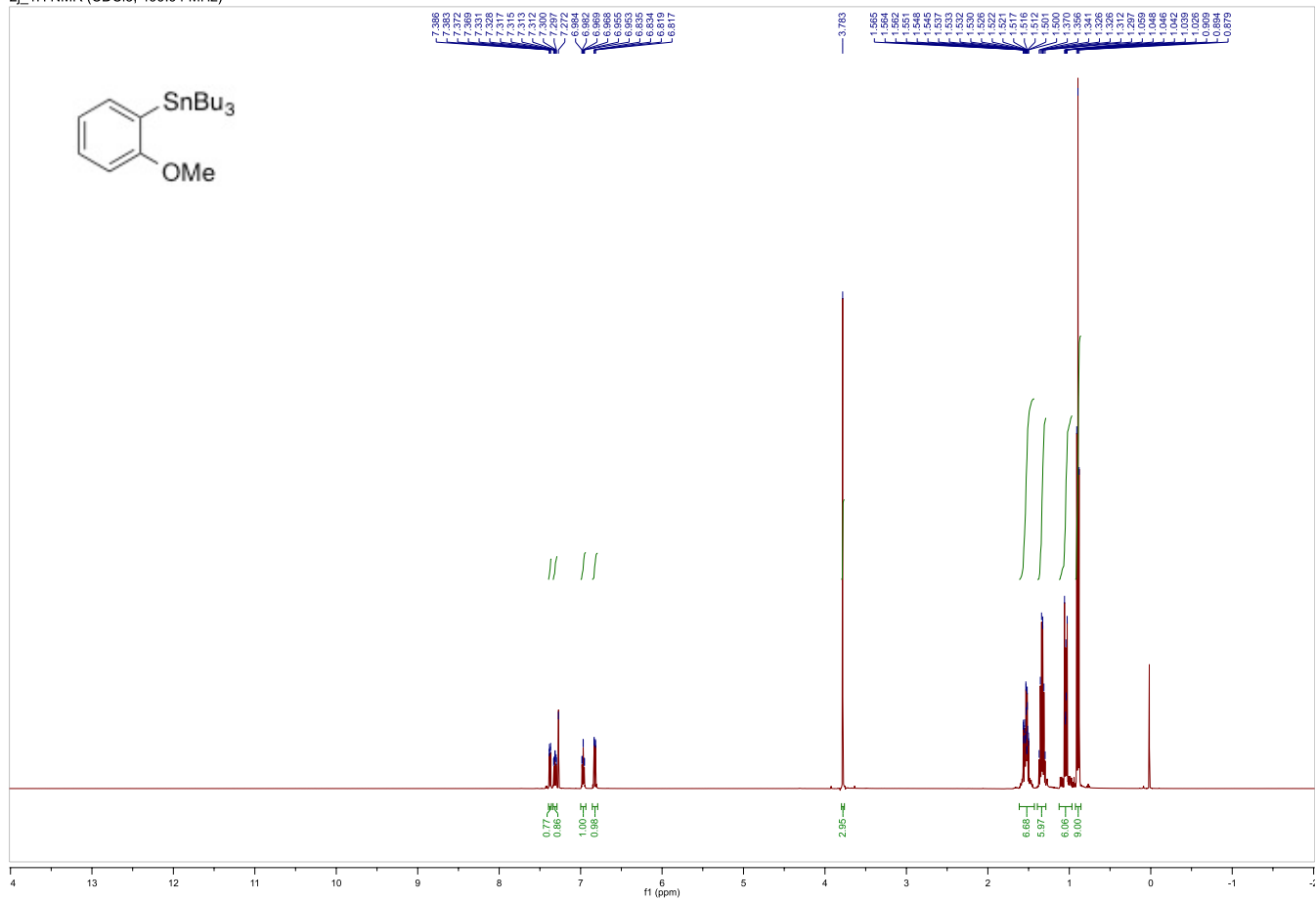
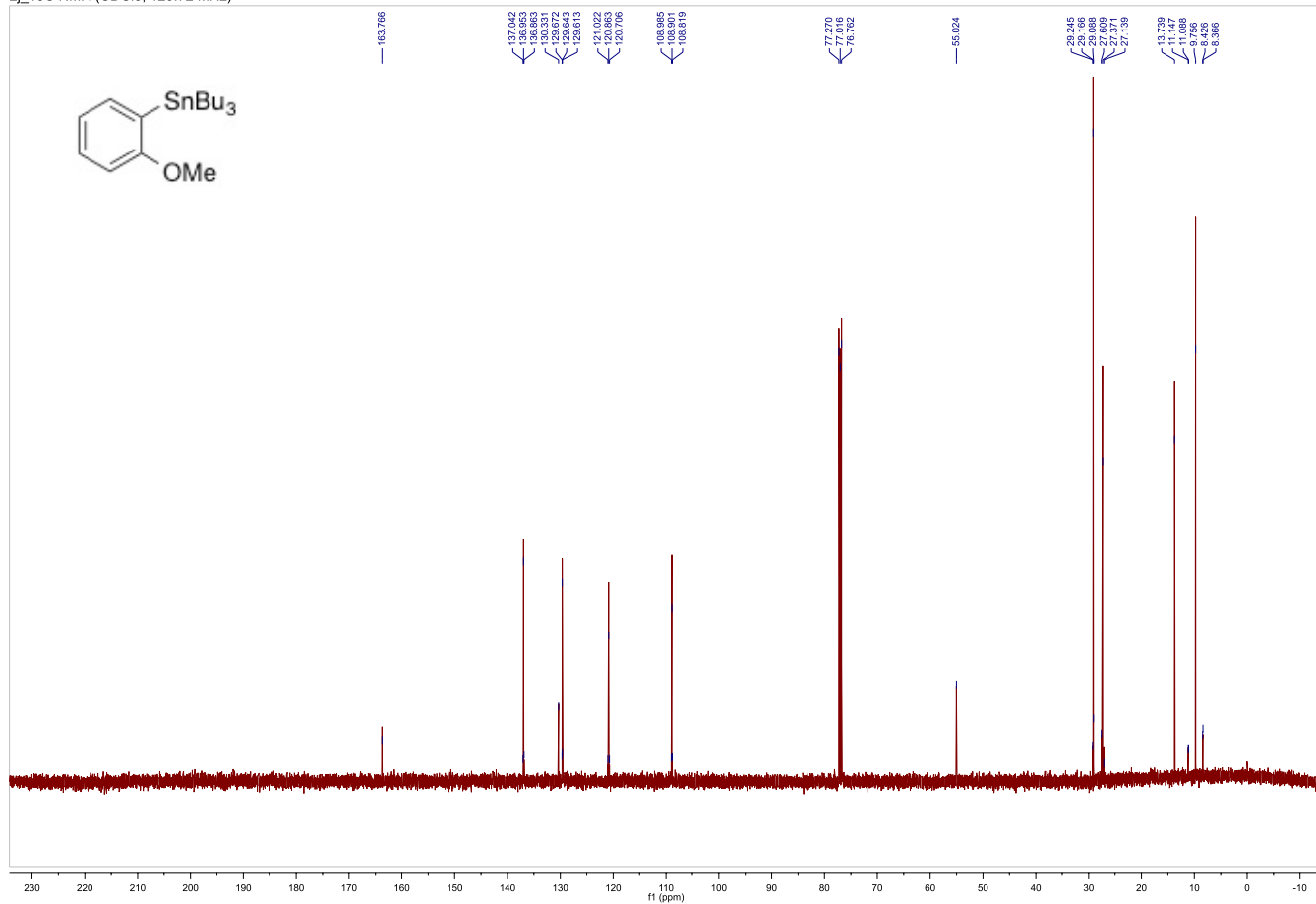


2i_1H NMR (CDCl3, 399.83 MHz)

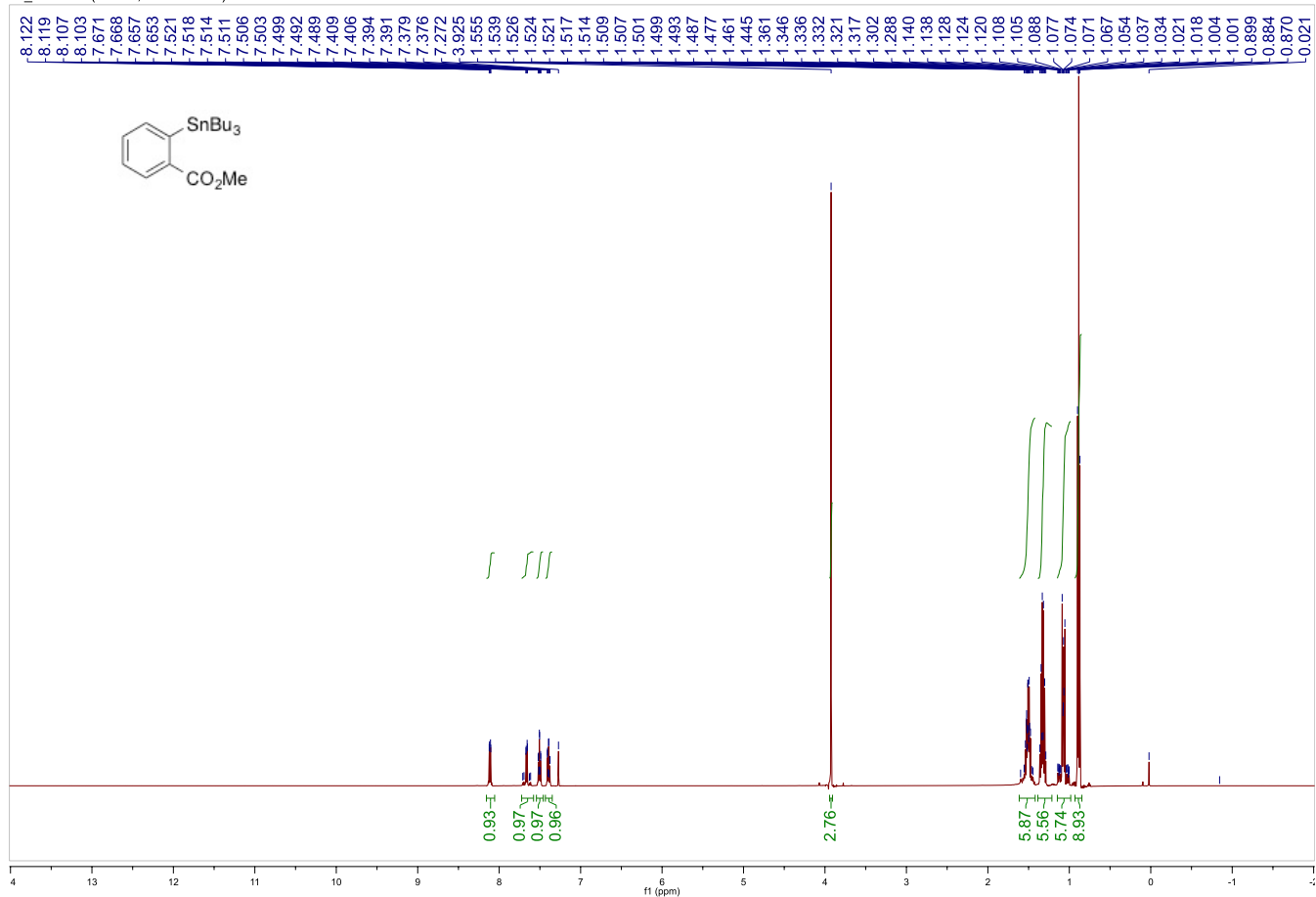


2i_13C NMR (CDCl3, 100.55 MHz)

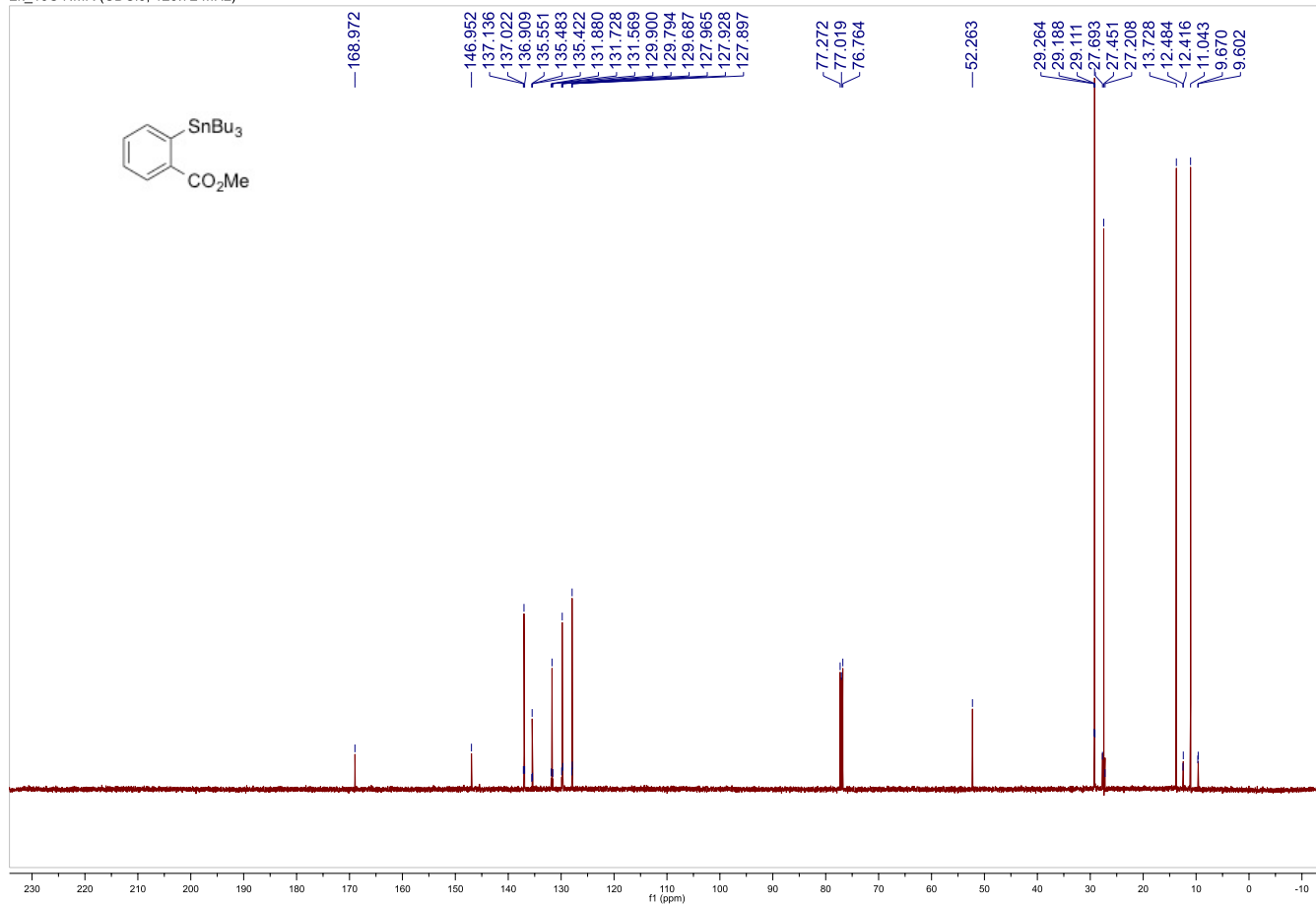


2j_1H NMR (CDCl₃, 499.94 MHz)2j_13C NMR (CDCl₃, 125.72 MHz)

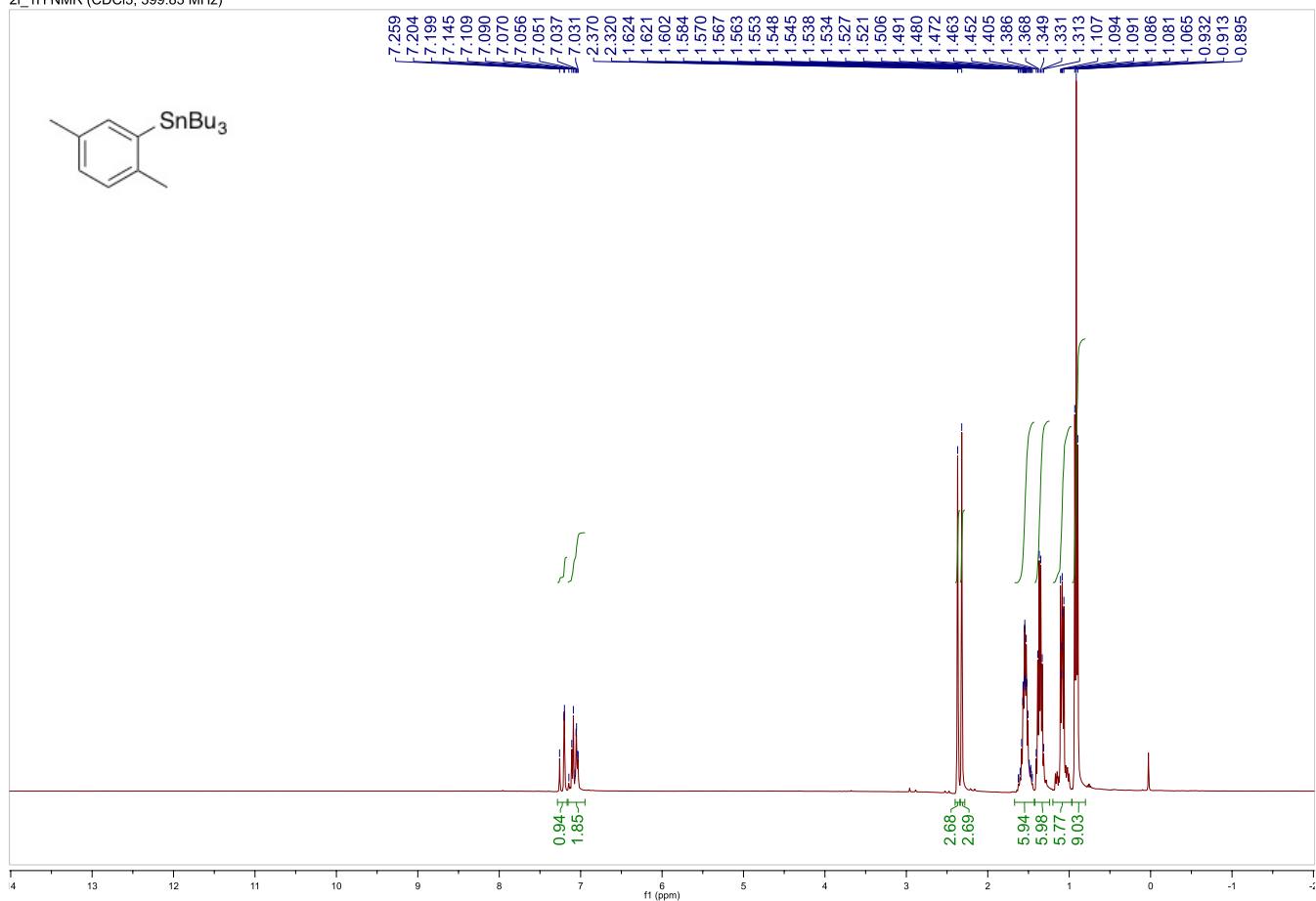
2k_1H NMR (CDCl₃, 499.94 MHz)



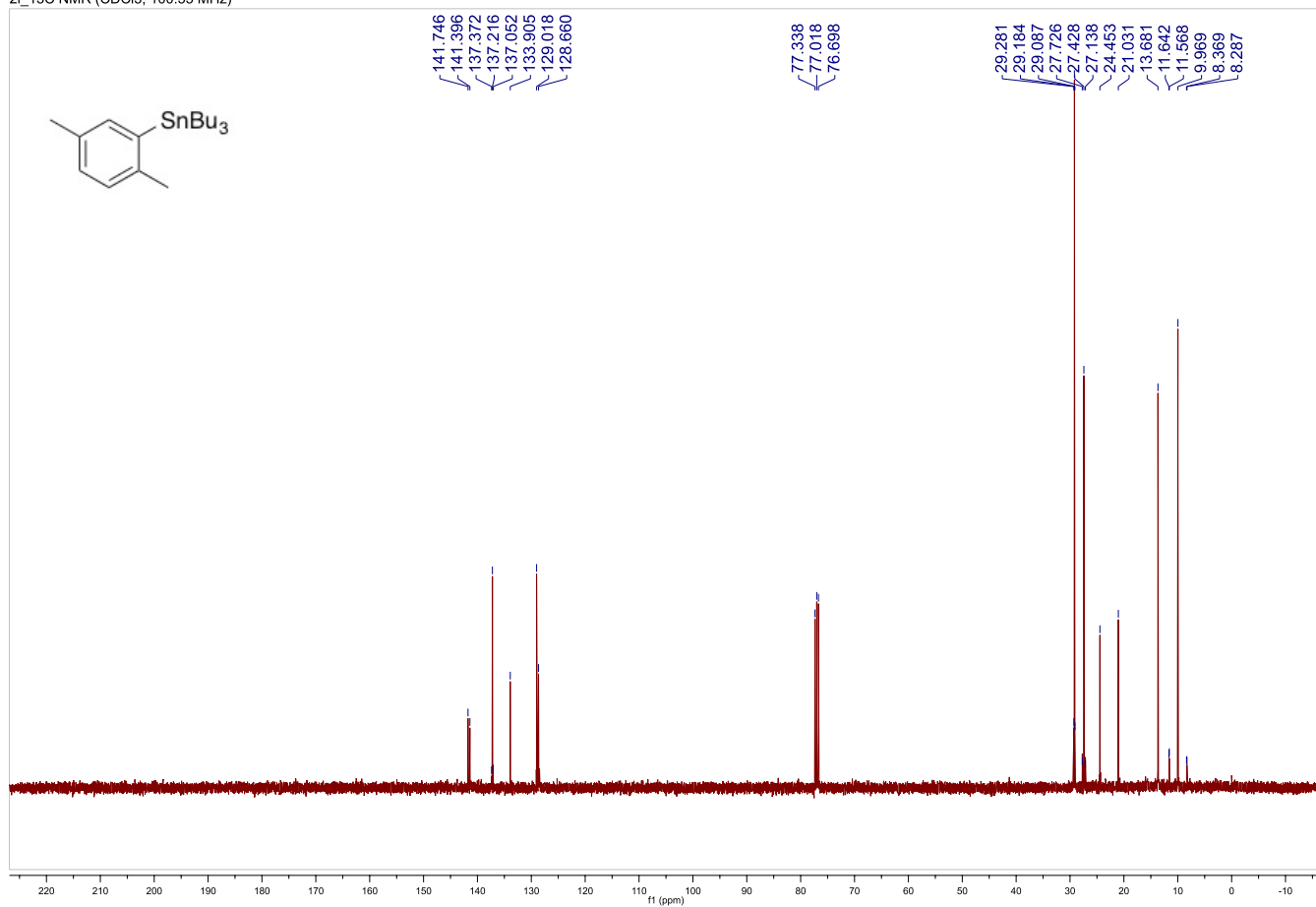
2k_13C NMR (CDCl₃, 125.72 MHz)



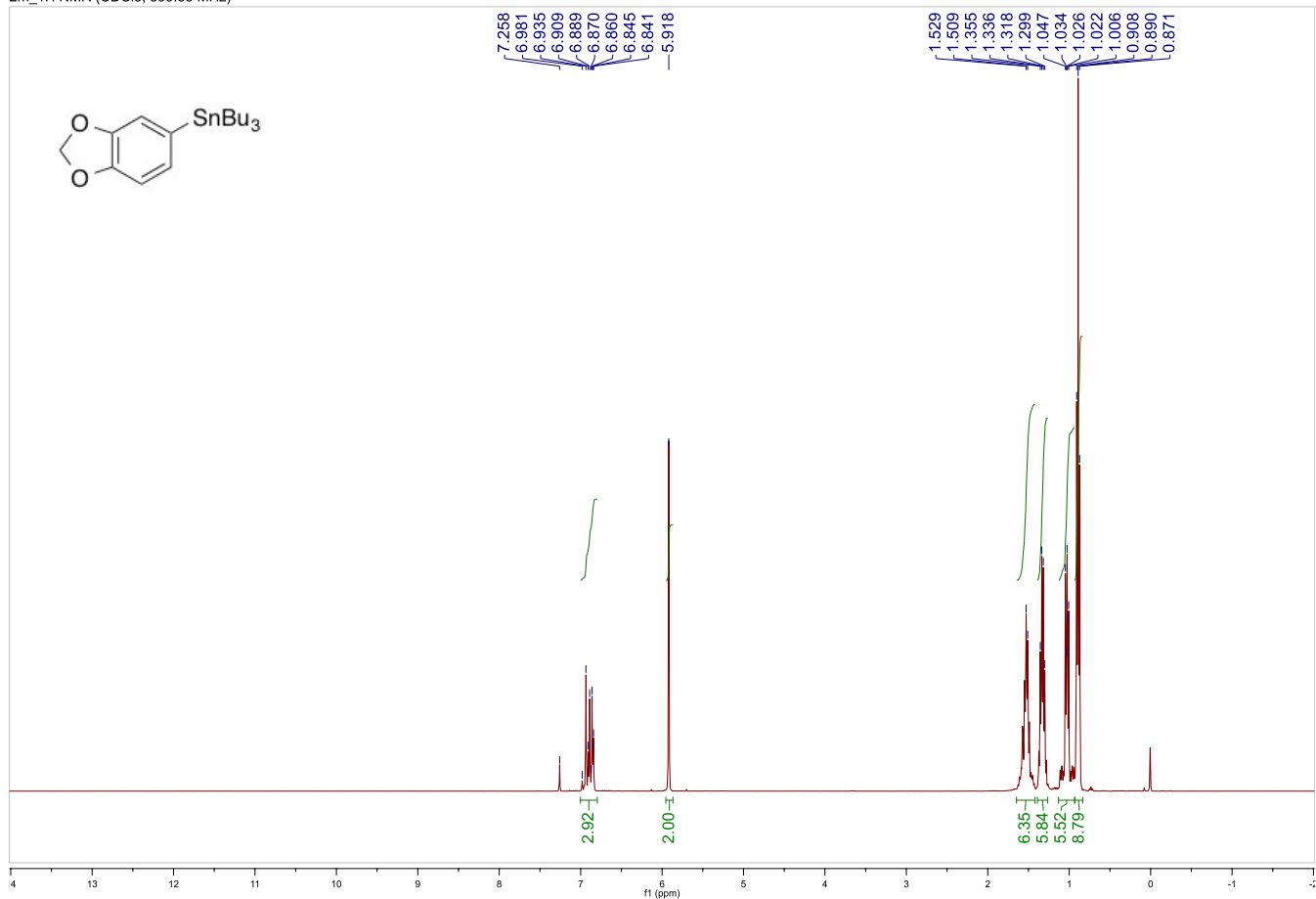
2l_1H NMR (CDCl3, 399.83 MHz)



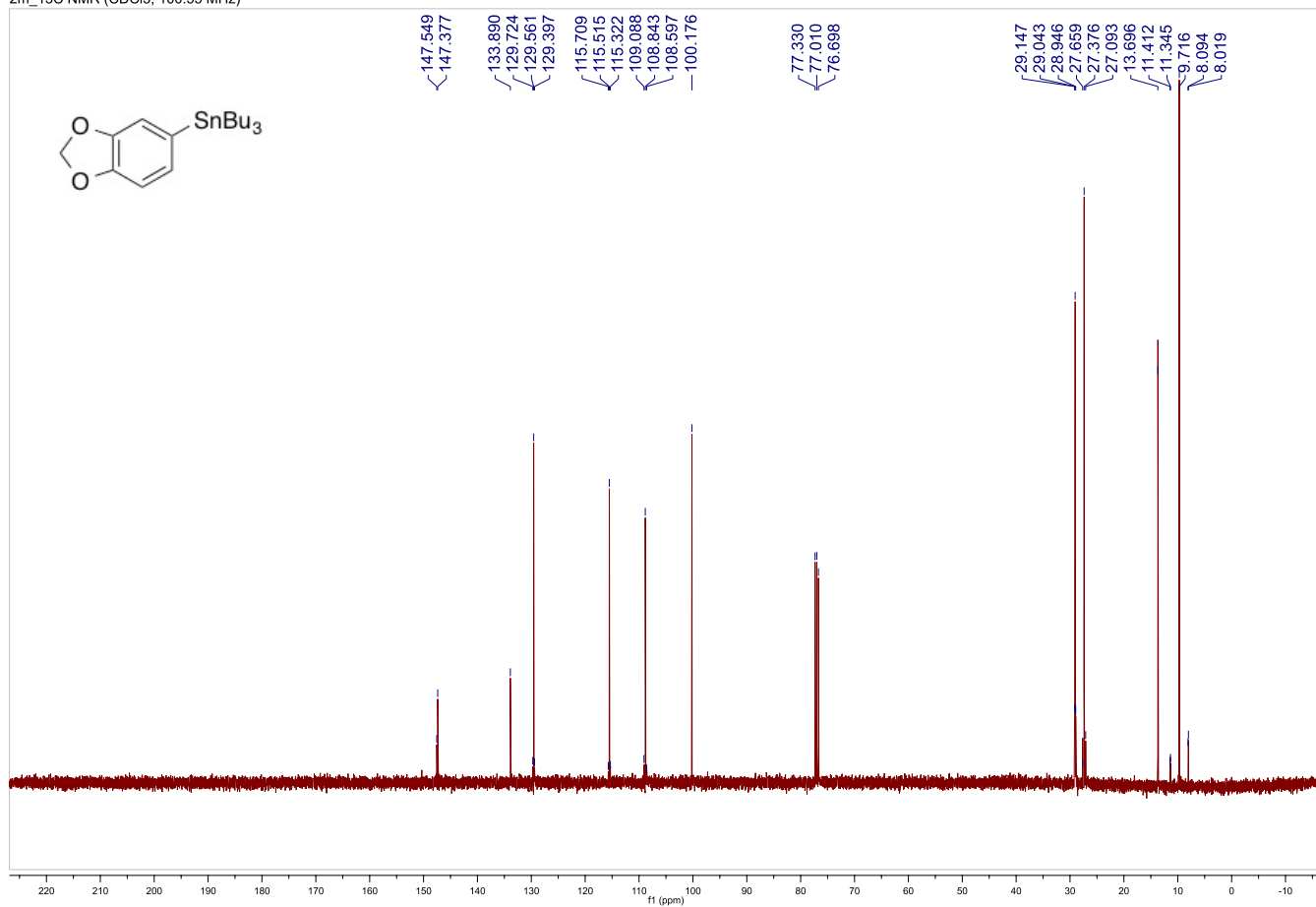
2l_13C NMR (CDCl3, 100.55 MHz)



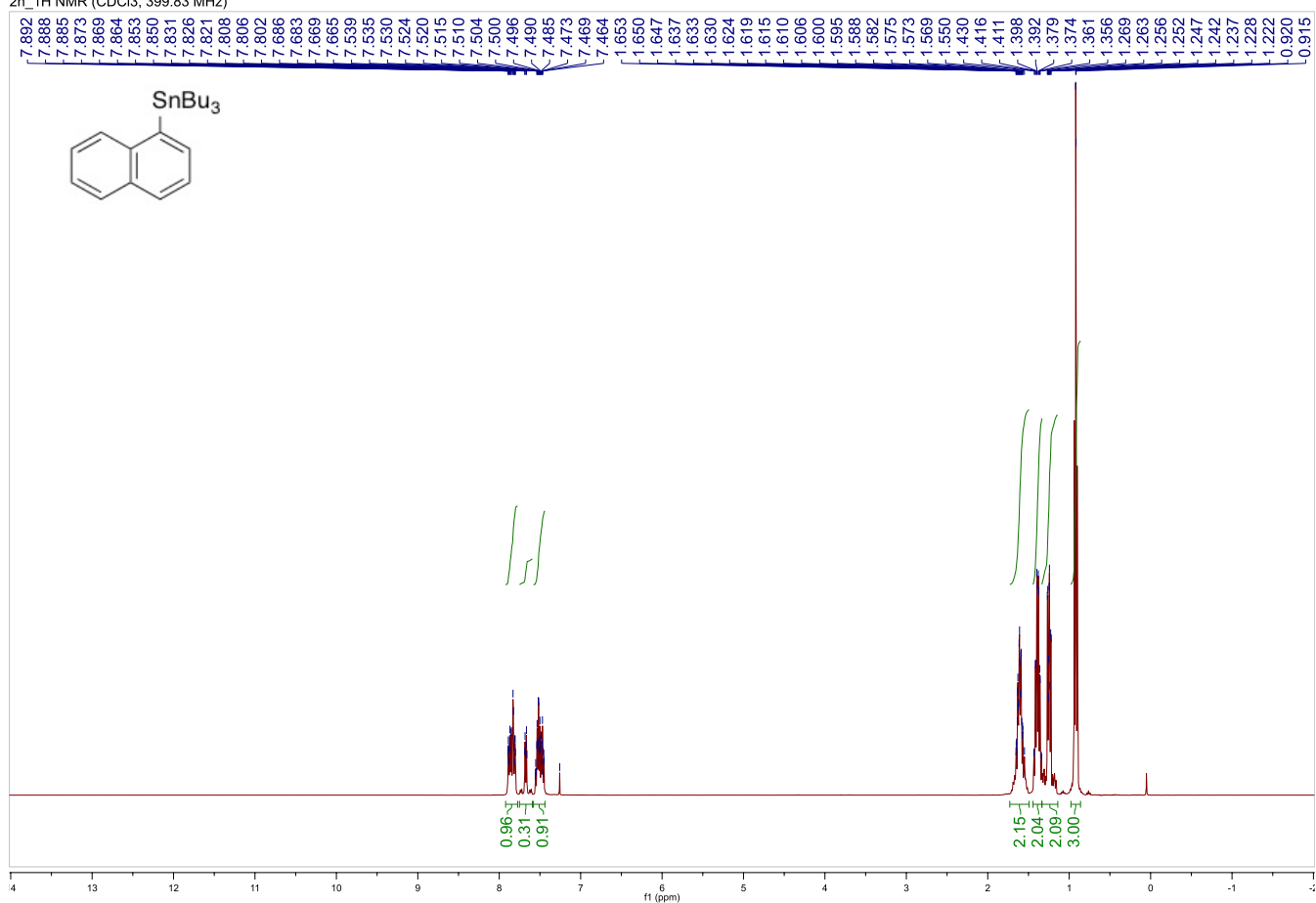
2m_ 1H NMR (CDCl3, 399.83 MHz)



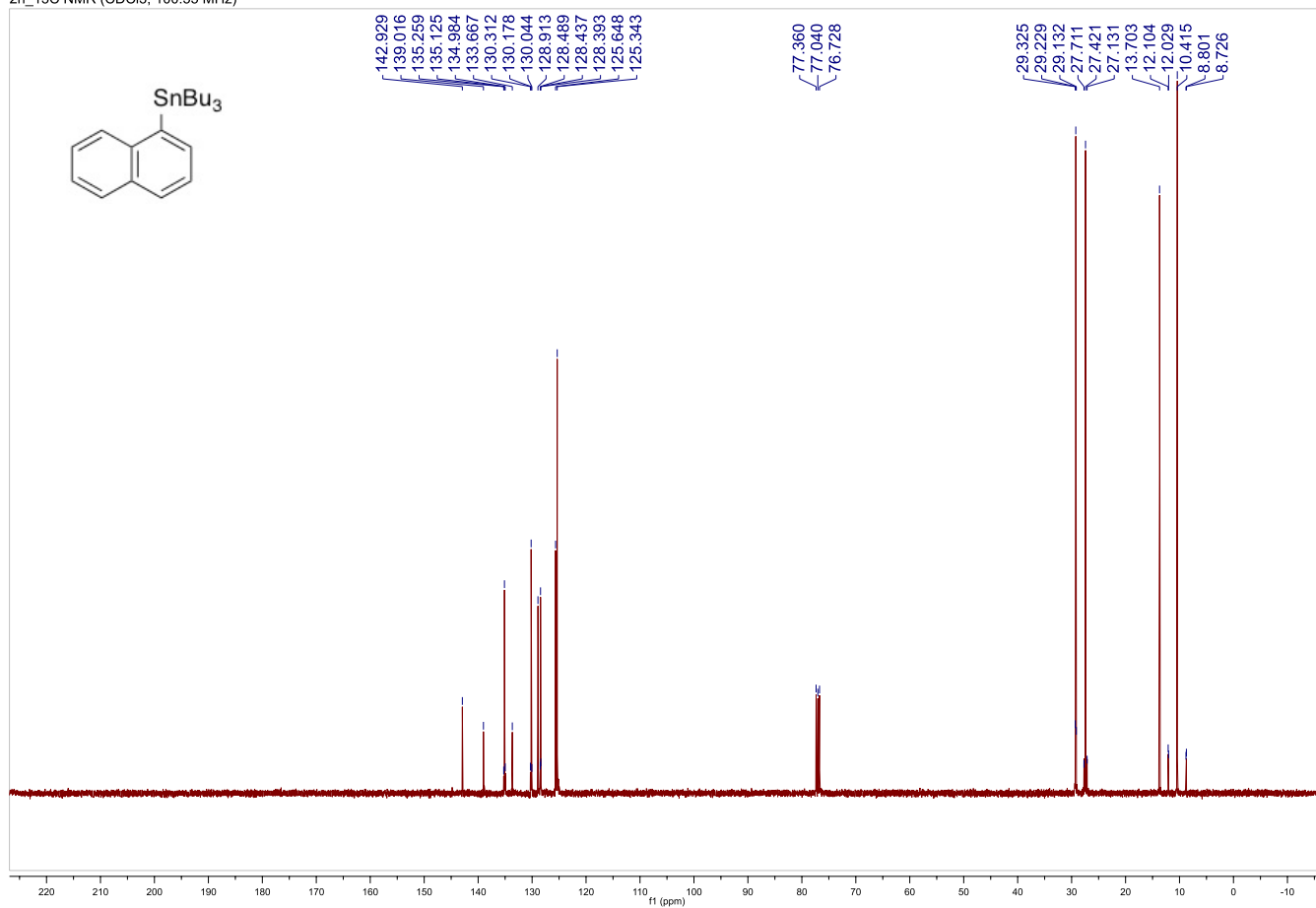
2m_ 13C NMR (CDCl3, 100.55 MHz)



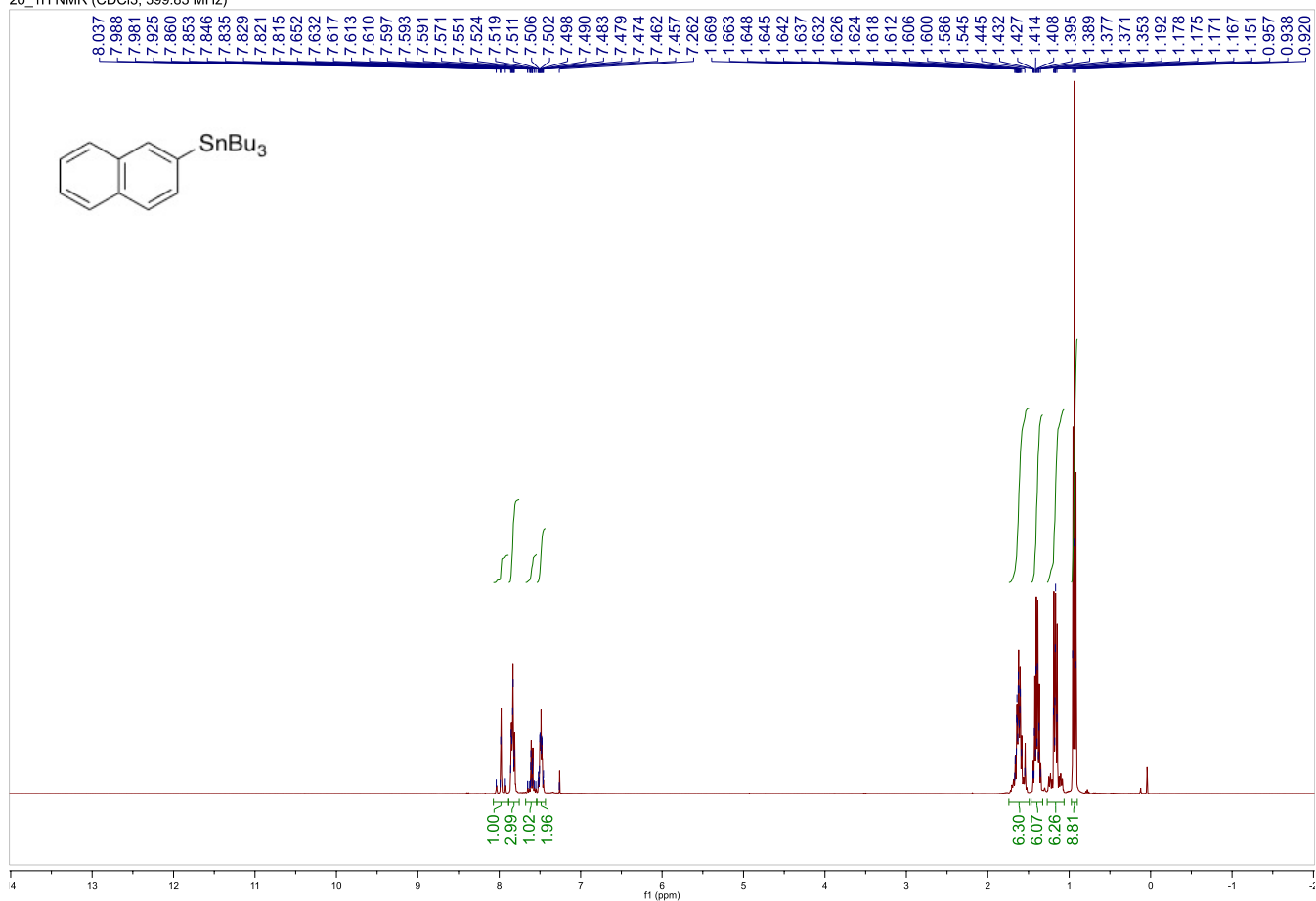
2n_1H NMR (CDCl3, 399.83 MHz)



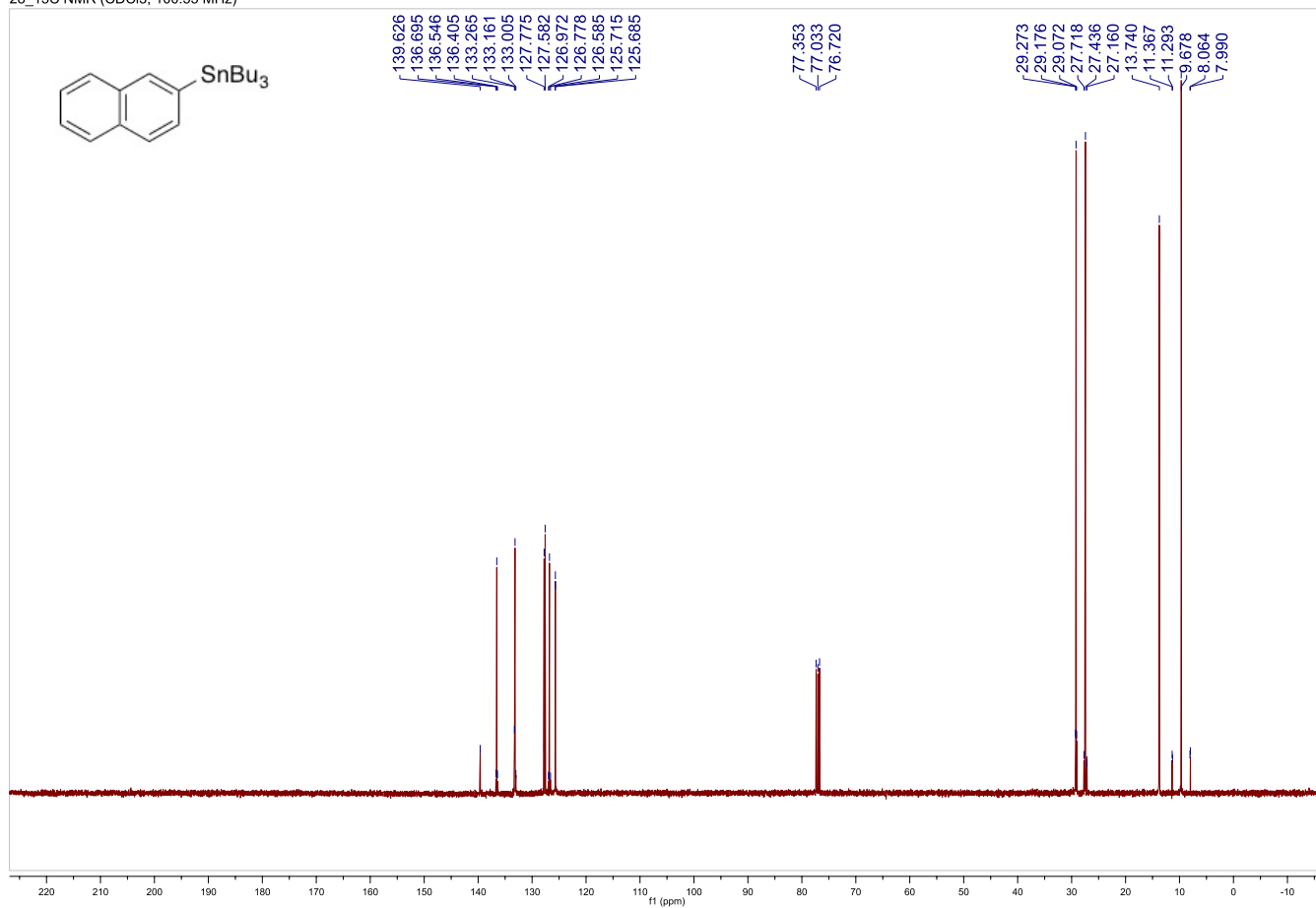
2n_13C NMR (CDCl3, 100.55 MHz)



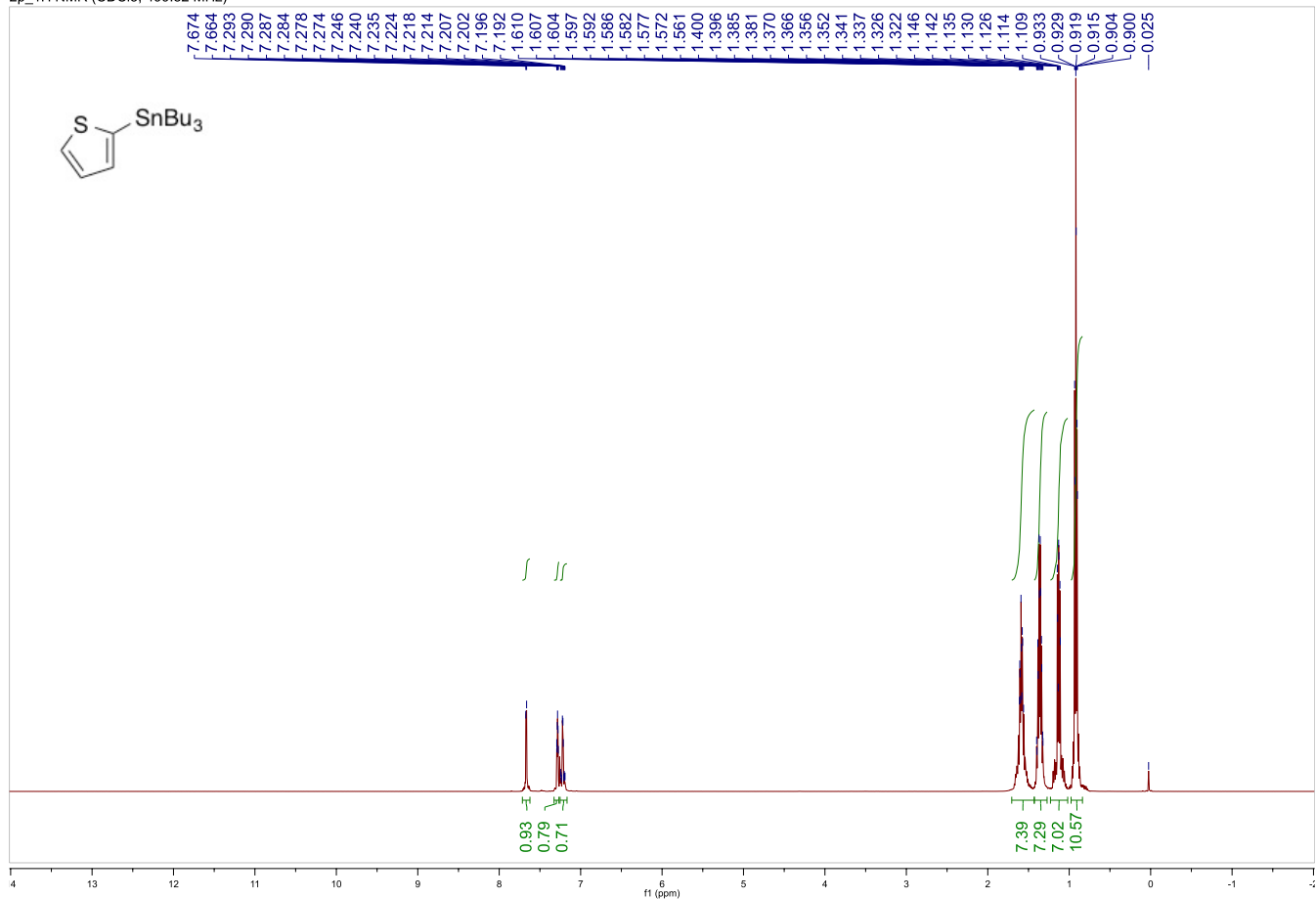
2o_1H NMR (CDCl3, 399.83 MHz)



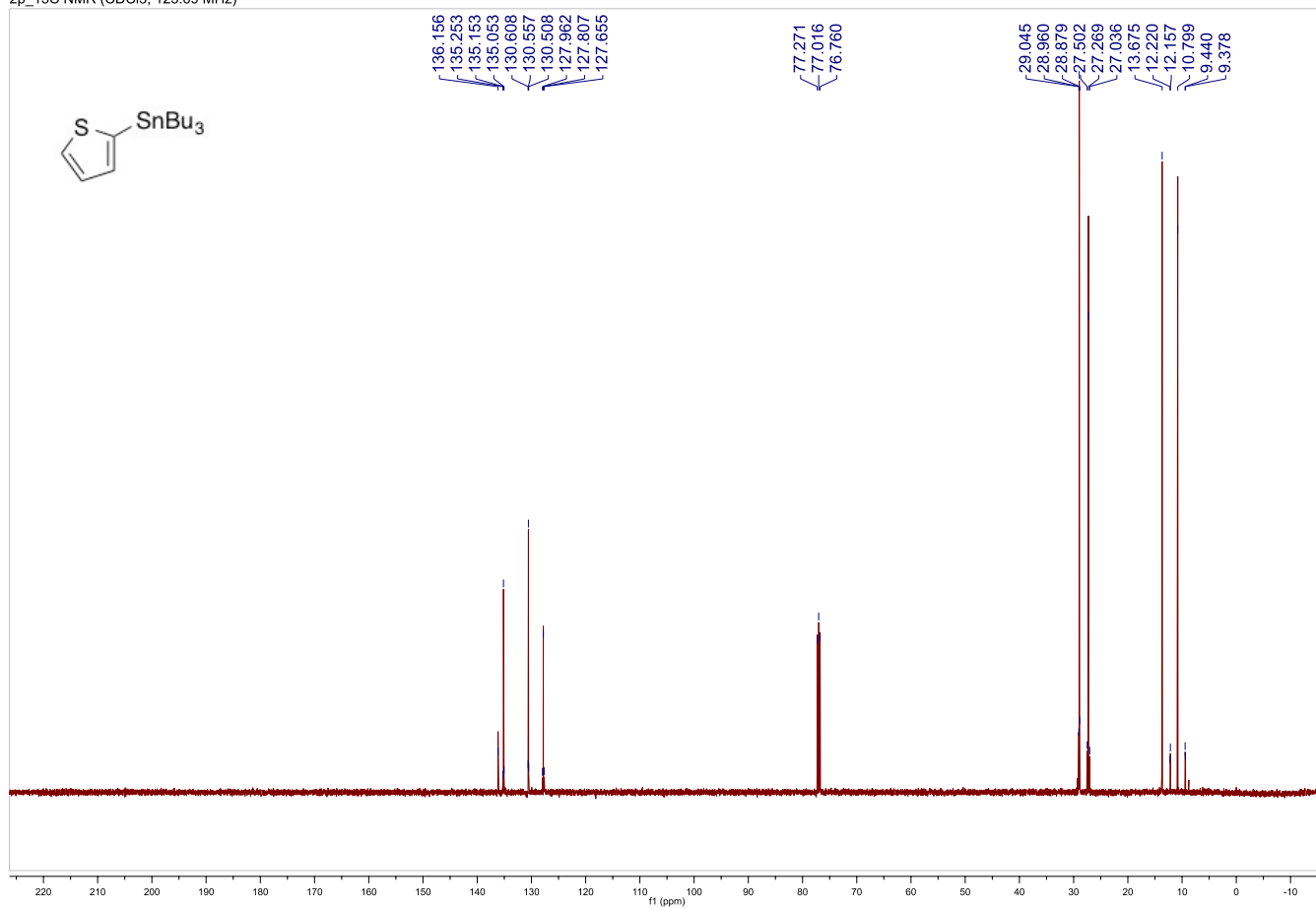
2o_13C NMR (CDCl3, 100.55 MHz)



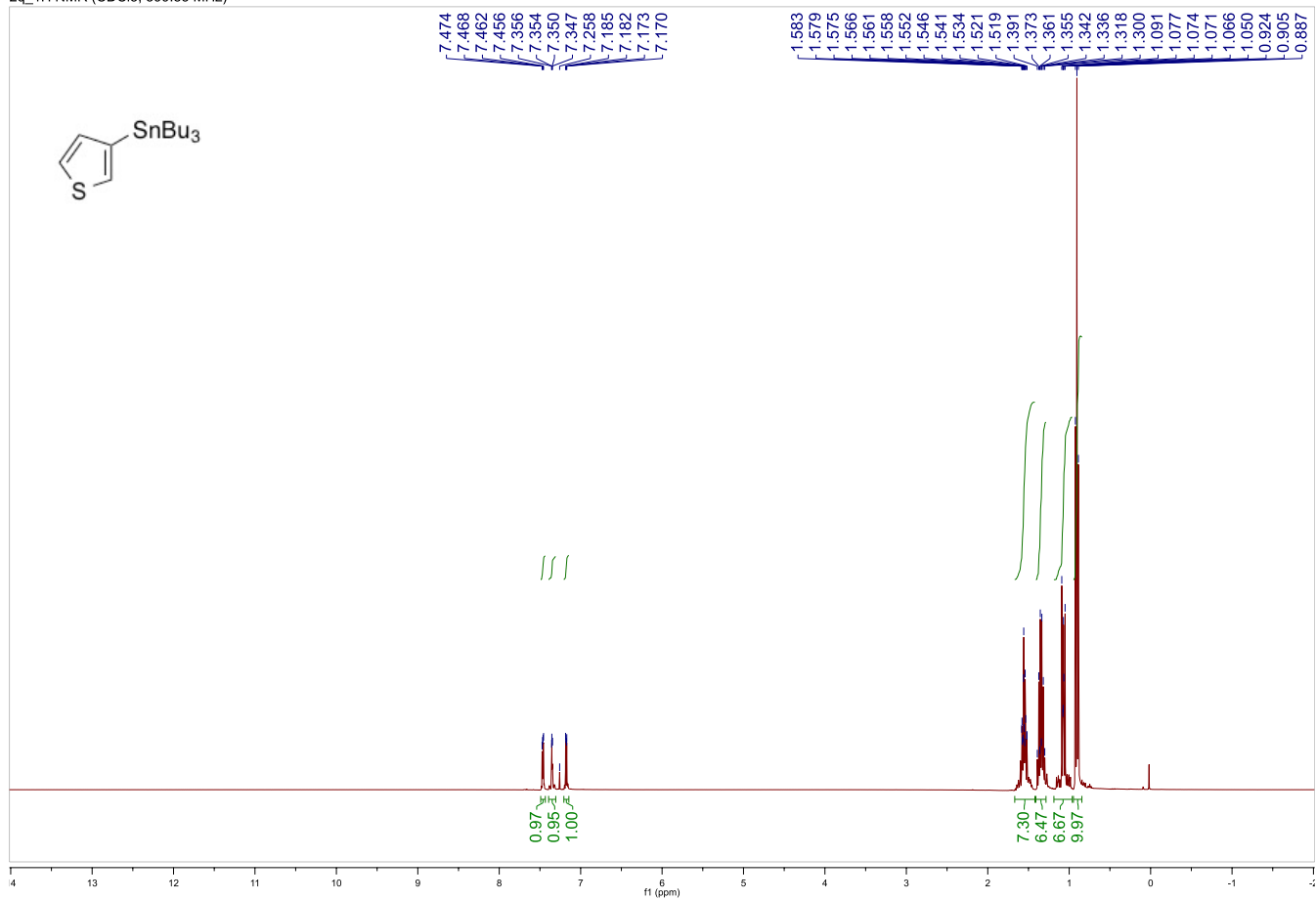
2p_1H NMR (CDCl3, 499.82 MHz)



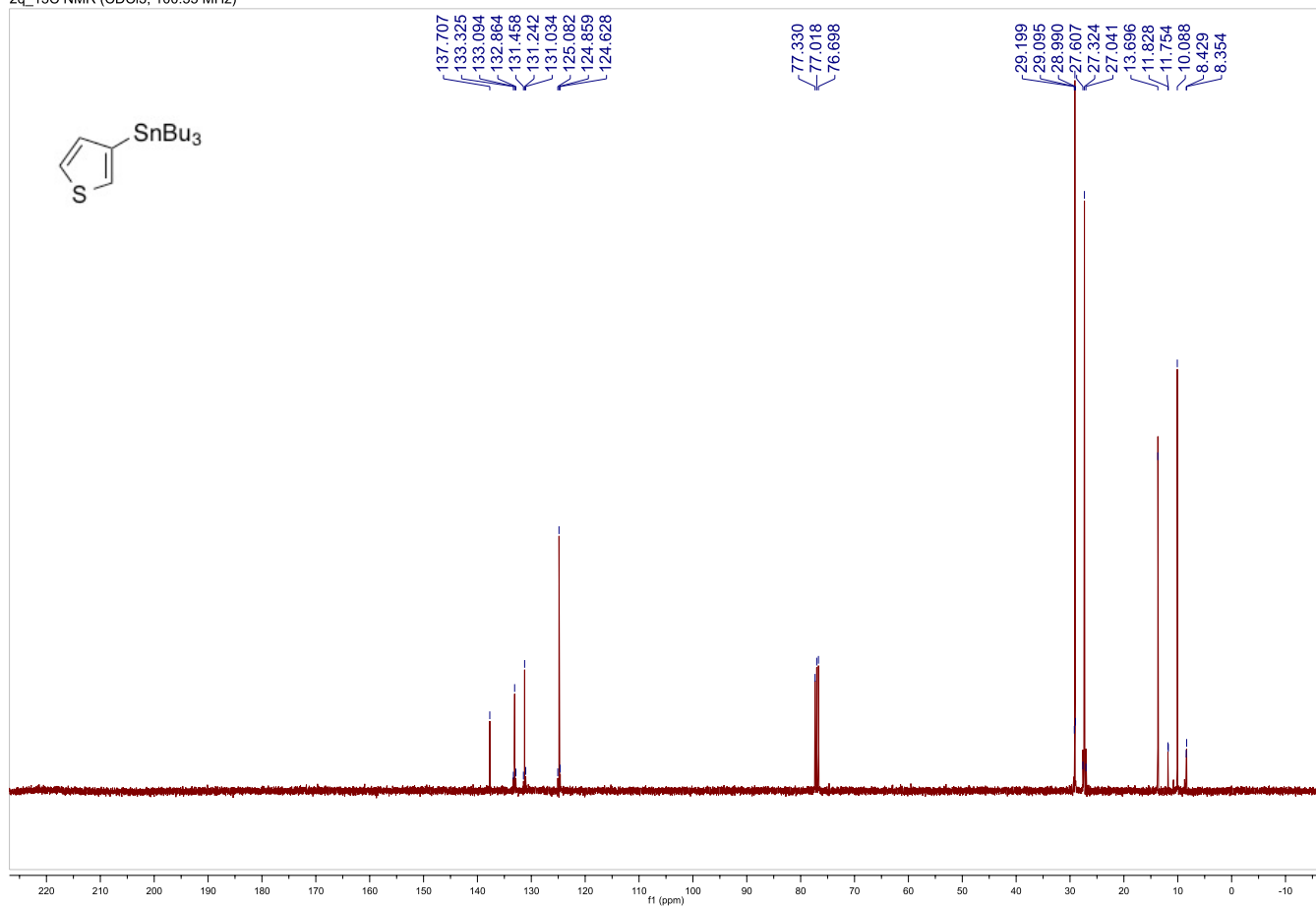
2p_13C NMR (CDCl3, 125.69 MHz)



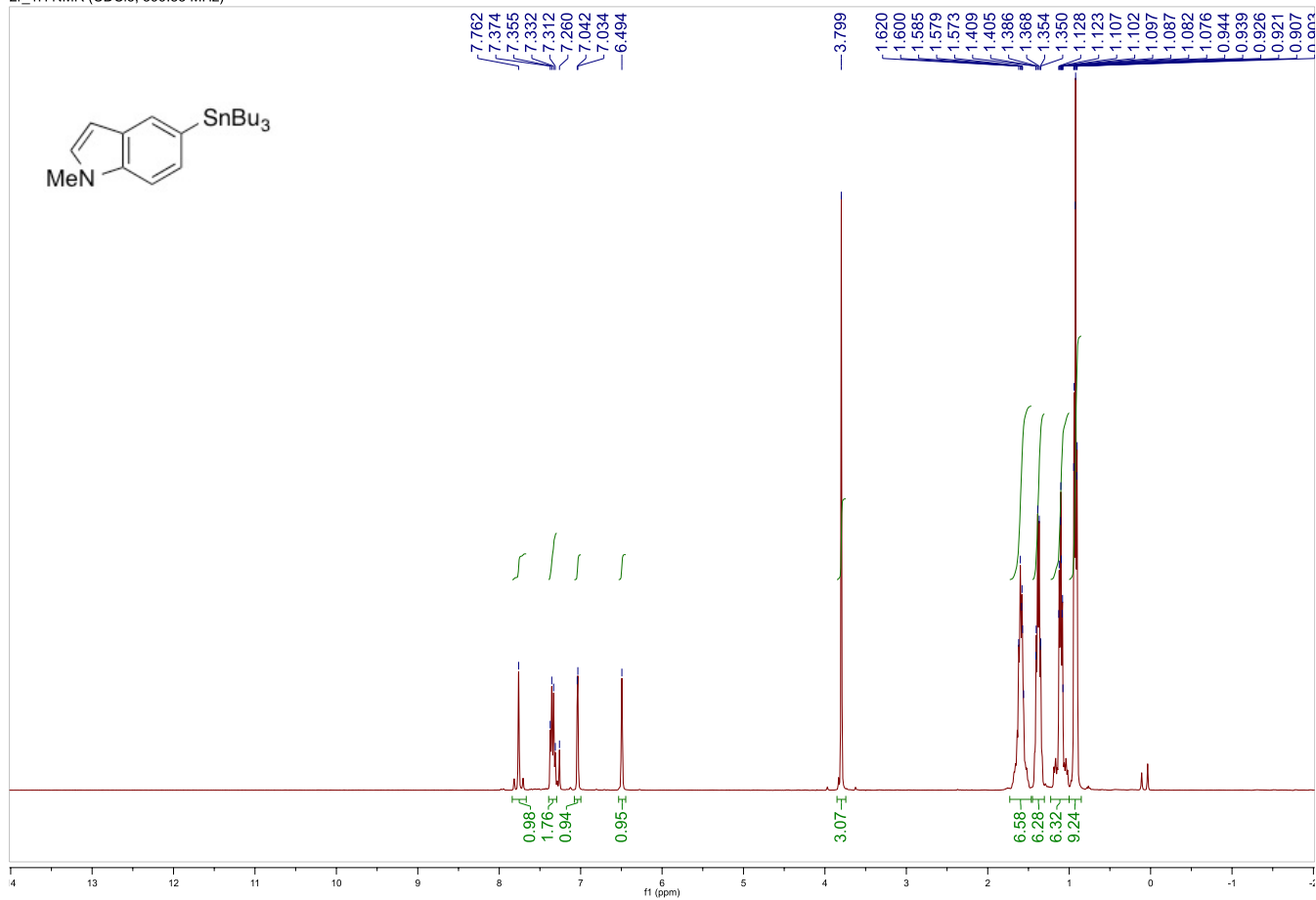
2q_1H NMR (CDCl3, 399.83 MHz)



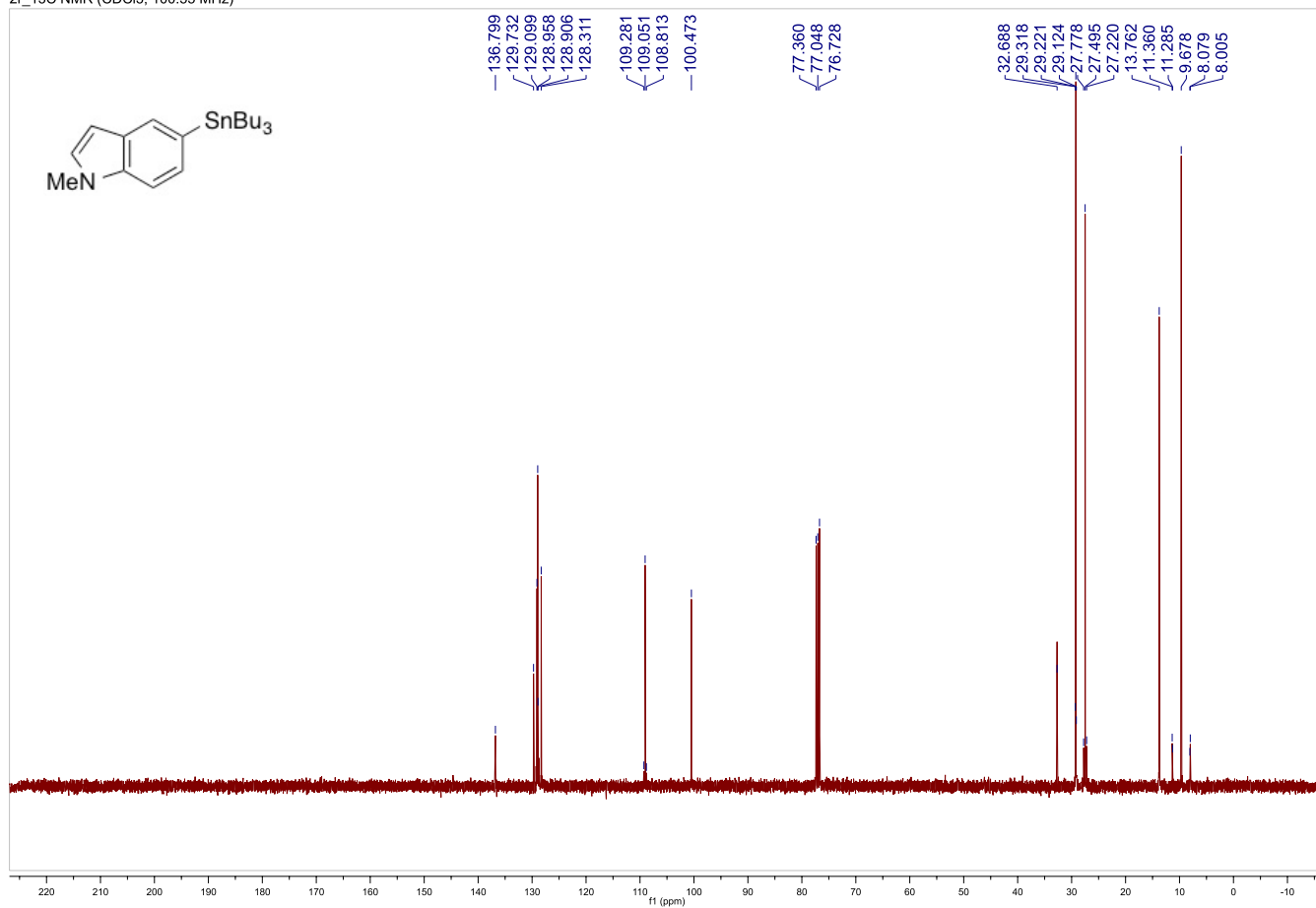
2q_13C NMR (CDCl3, 100.55 MHz)



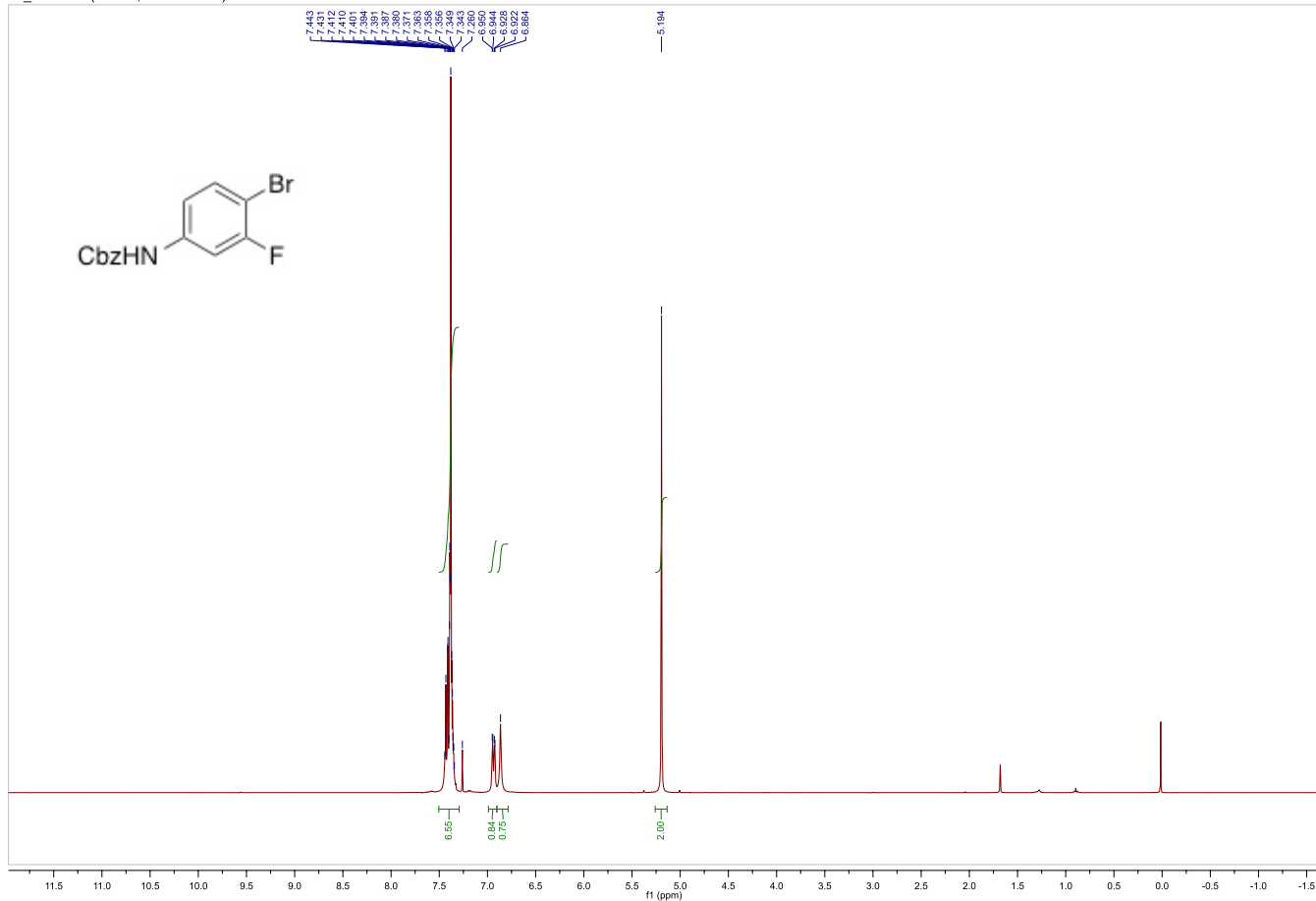
2r_1H NMR (CDCl3, 399.83 MHz)



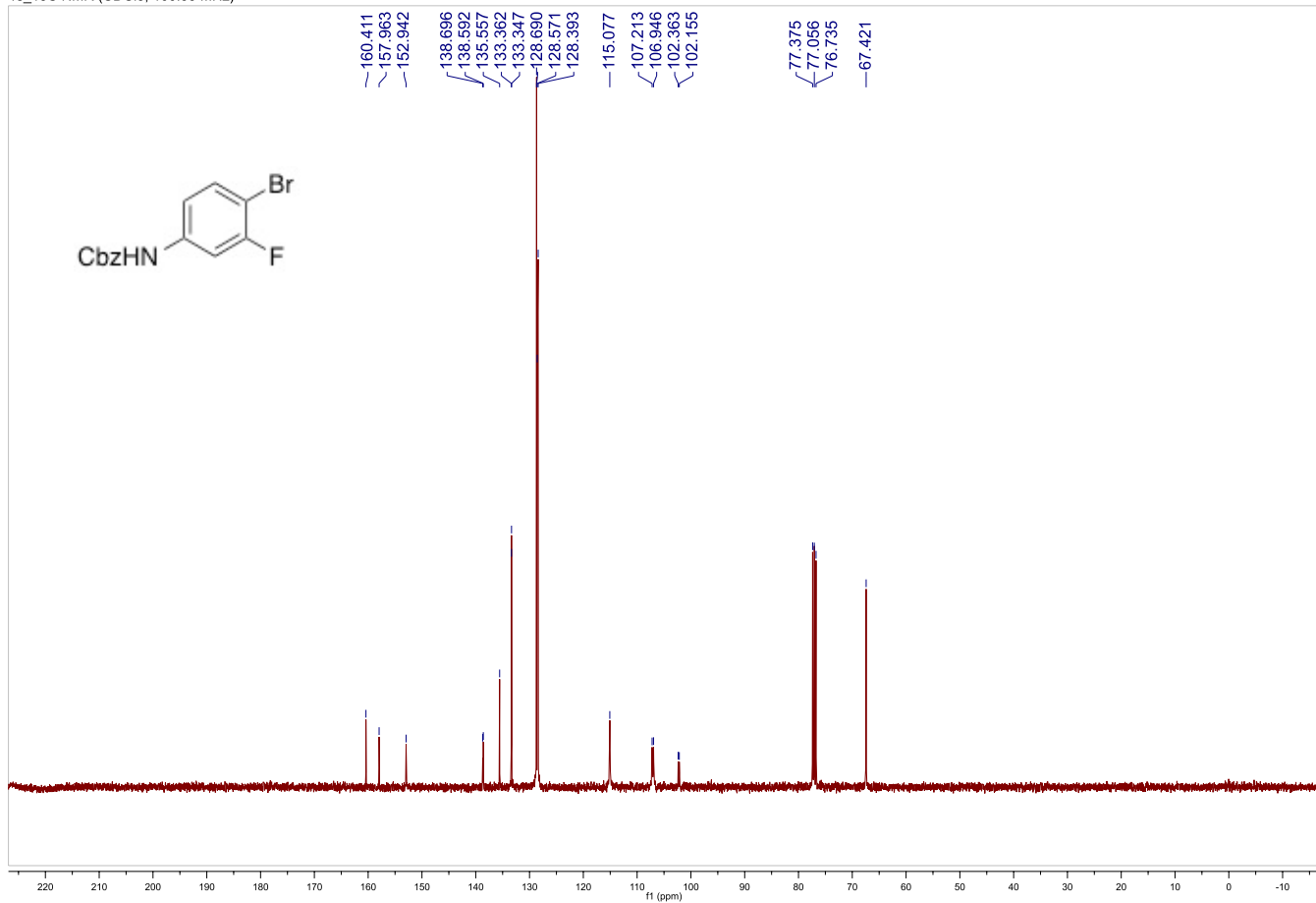
2r_13C NMR (CDCl3, 100.55 MHz)



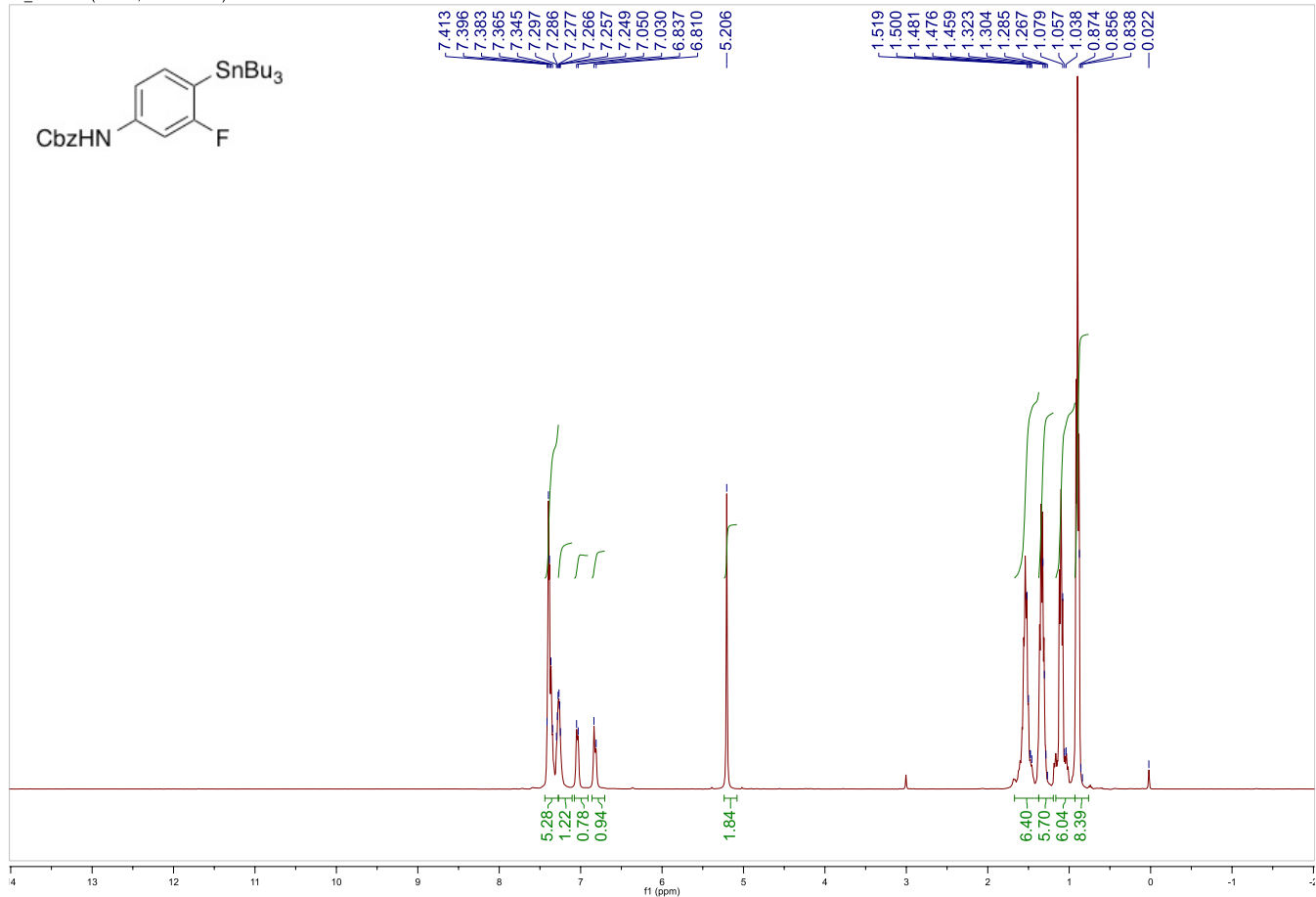
1s_1H NMR (CDCl3, 399.83 MHz)



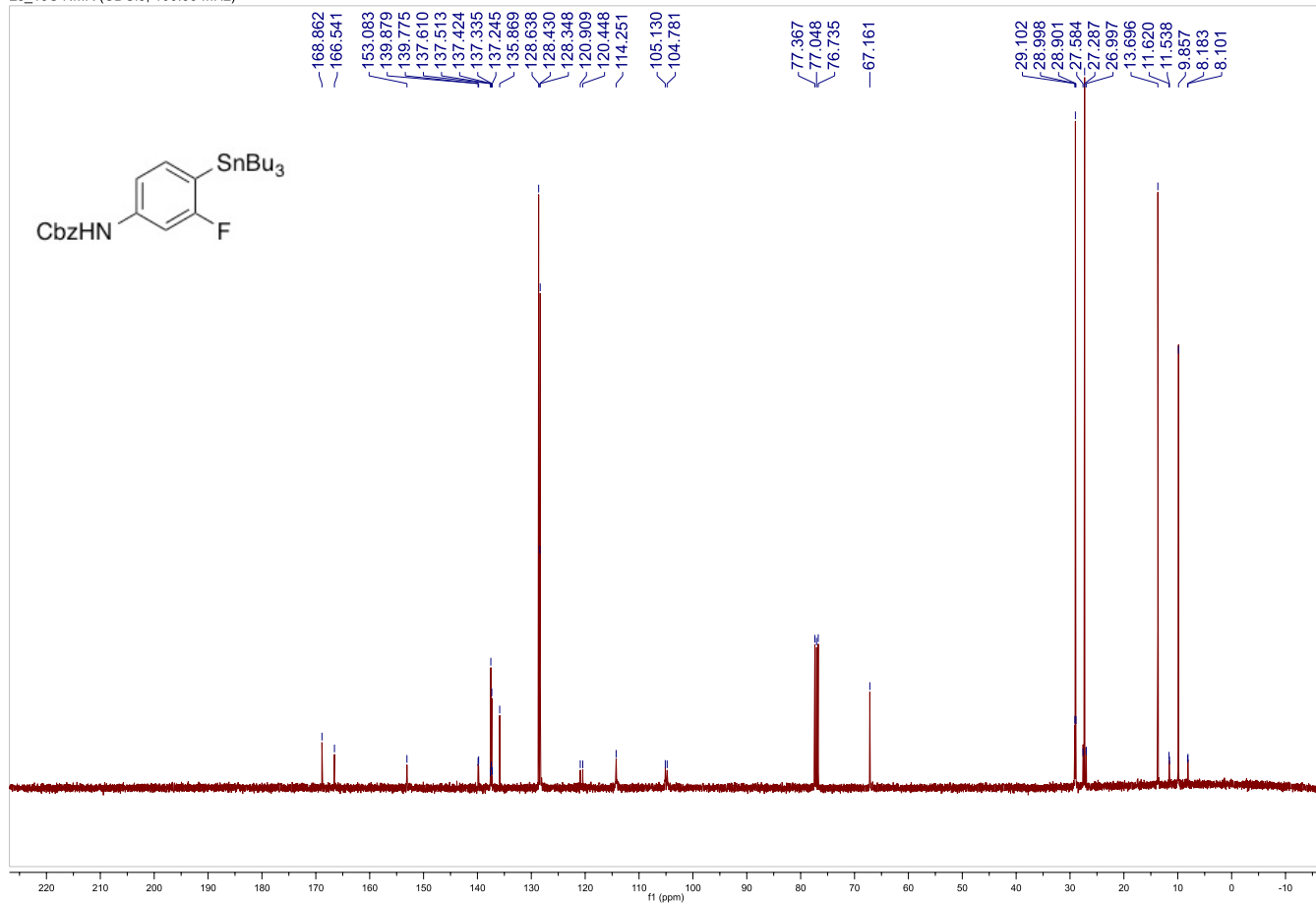
1s_13C NMR (CDCl3, 100.55 MHz)



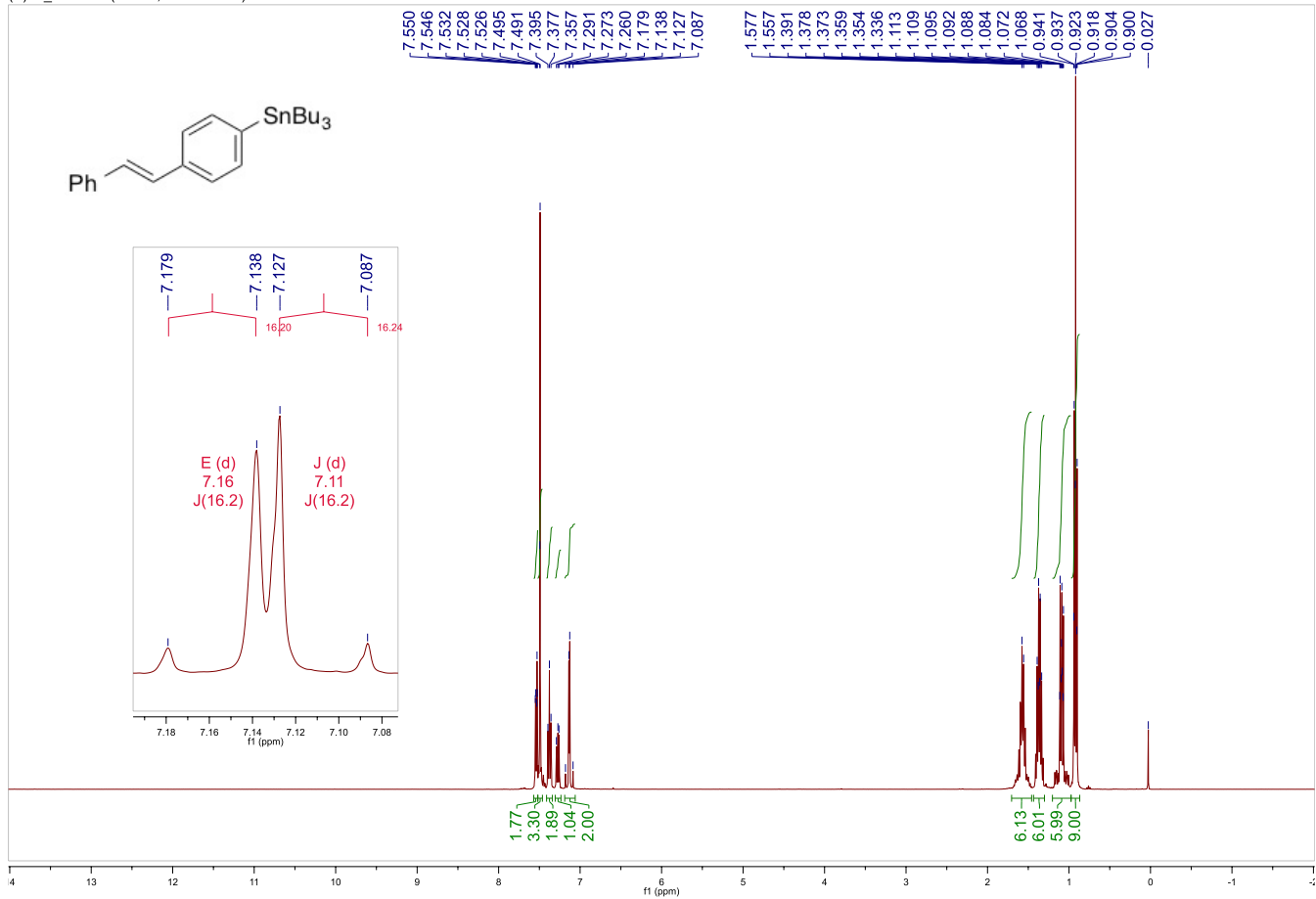
2s_1H NMR (CDCl3, 399.83 MHz)



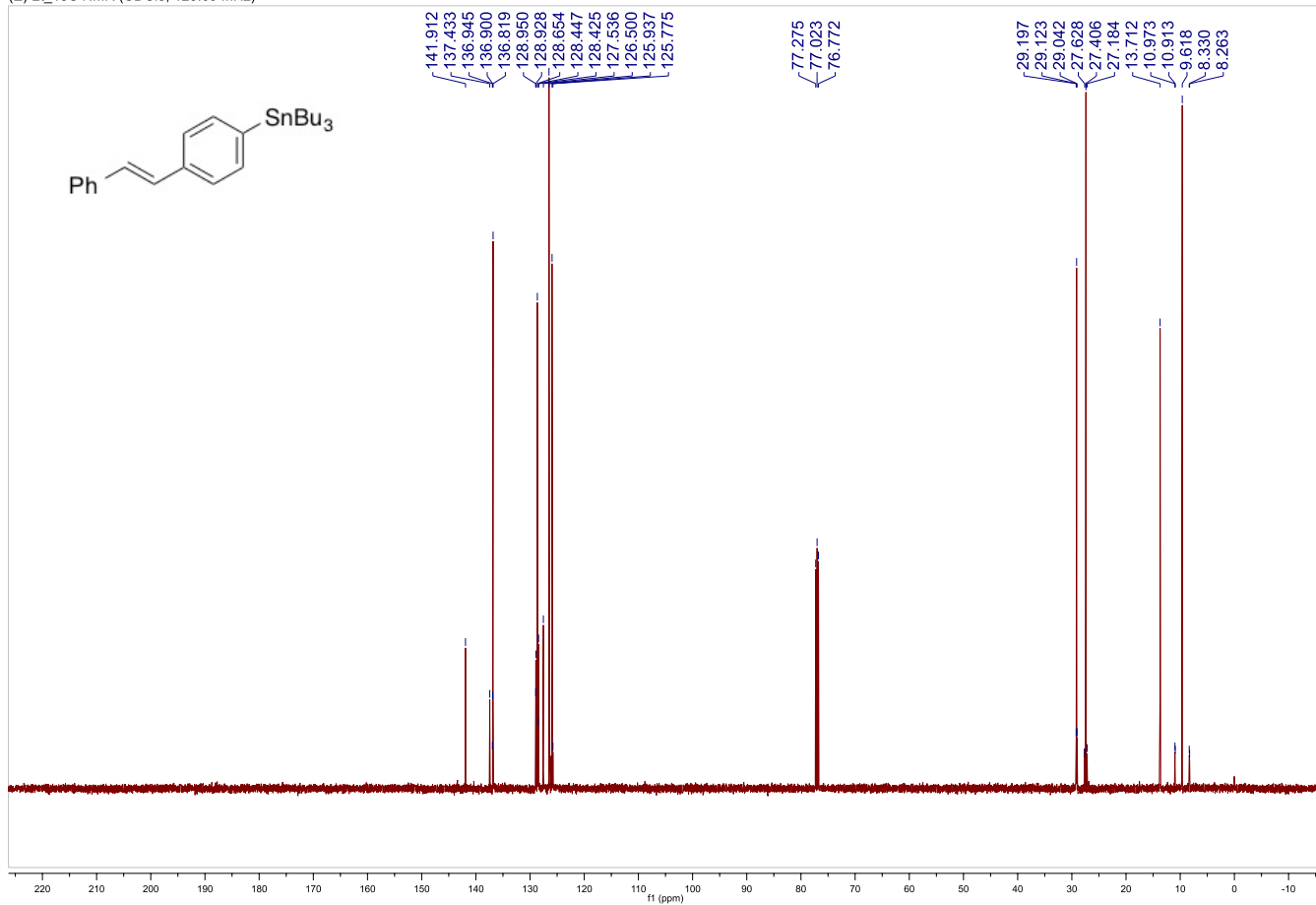
2s_13C NMR (CDCl3, 100.55 MHz)



(E)-2t_ 1H NMR (CDCl3, 399.83 MHz)



(E)-2t_ 13C NMR (CDCl3, 125.69 MHz)



¹H NMR spectrum (CDCl₃) of (E)-1-(4-(tributylstannyl)phenyl)ethyne.

Chemical structure: C#CC1=CC=C(C=C1)C2=CC=CC=C2[Sn](CCCC)(CCCC)CCCC

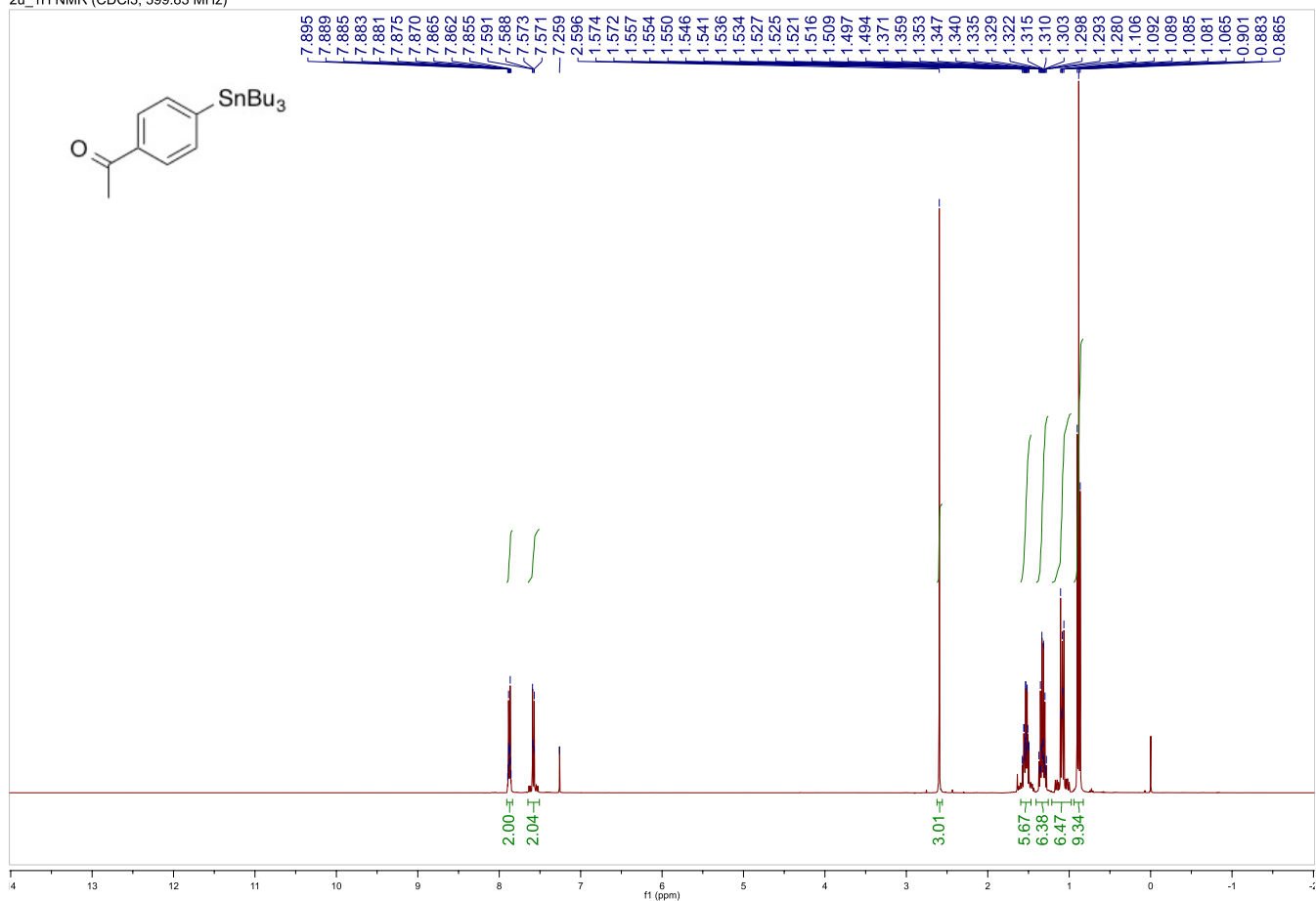
Peak list (ppm): 1.619, 1.608, 1.605, 1.602, 1.599, 1.588, 1.583, 1.573, 1.569, 1.567, 1.427, 1.417, 1.414, 1.411, 1.402, 1.387, 1.372, 1.358, 1.343, 1.110, 1.104, 1.099, 1.087, 1.093, 1.090, 1.088, 1.077, 1.071, 0.954, 0.940, 0.934, 0.925, 6.624, 7.238, 7.243, 7.248, 7.252, 7.264, 7.267, 7.268, 7.270, 7.275, 7.279, 7.293, 7.296, 7.321, 7.323, 7.331, 7.336, 7.340, 7.368, 7.371, 7.382, 7.384, 7.387.

Integration values: 6.12, 6.19, 5.48, 9.00 (for aliphatic protons); 1.62, 1.76, 4.41, 1.82 (for aromatic and alkyne protons).

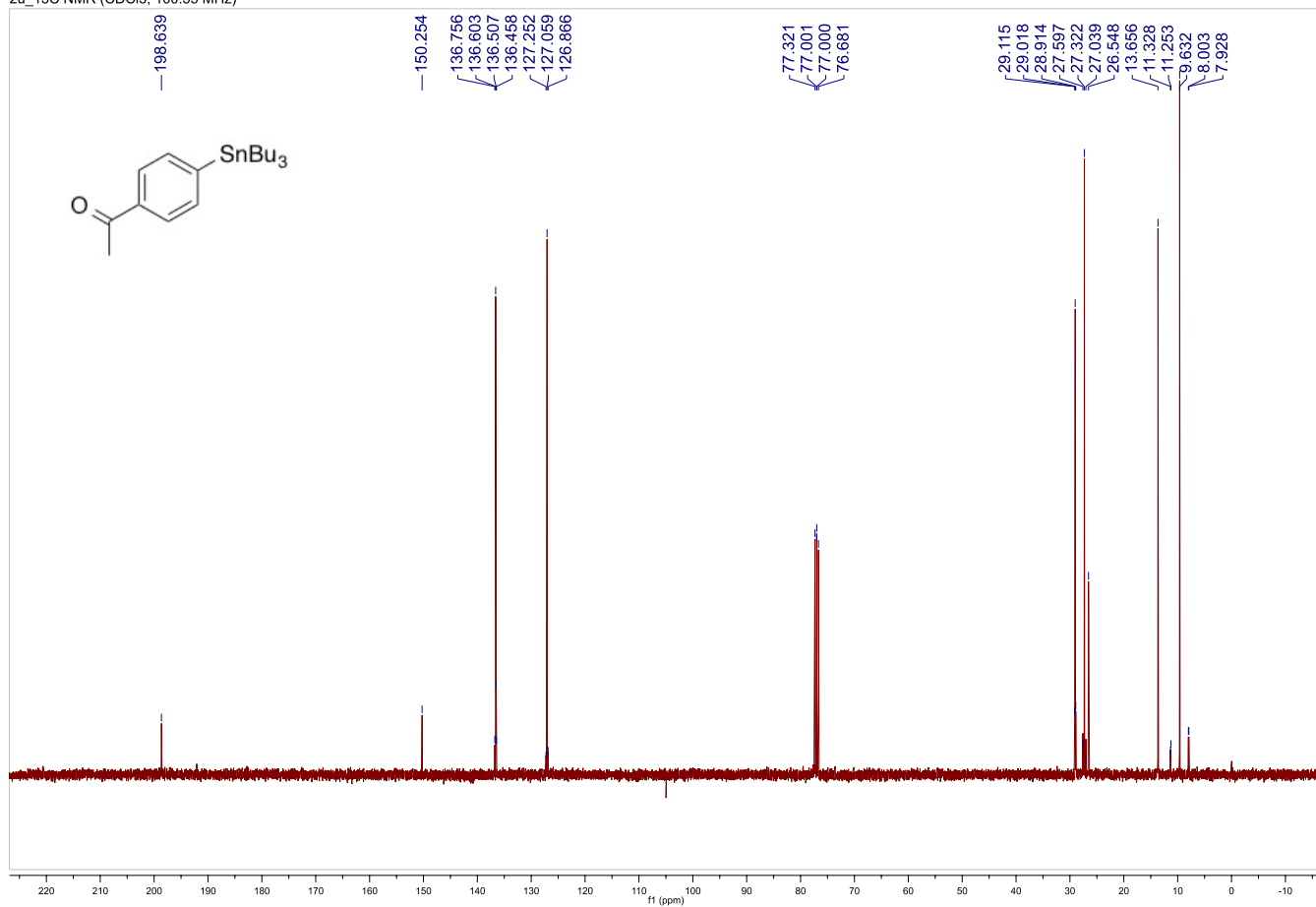
Inset: Zoomed-in view of the alkyne proton peak at 6.624 ppm.

Figure S10. ^{13}C NMR spectrum of **1** in CDCl_3 . The chemical structure of **1** is shown in the top left corner. The spectrum displays peaks corresponding to the carbon atoms in the molecule, with chemical shifts ranging from approximately 140 ppm to 10 ppm. The x-axis is labeled δ (ppm) and ranges from 230 to -10. The y-axis represents intensity. The peaks are labeled with their corresponding chemical shifts: 141.146, 137.466, 136.746, 136.457, 136.306, 136.154, 130.457, 130.434, 130.403, 130.077, 128.856, 128.461, 128.256, 128.234, 128.173, 128.143, 128.059, 127.005, 77.328, 77.010, 76.691, 29.200, 29.101, 29.002, 27.637, 27.387, 27.356, 27.083, 13.708, 13.670, 13.594, 11.288, 11.212, 9.596, 7.980, and 7.904.

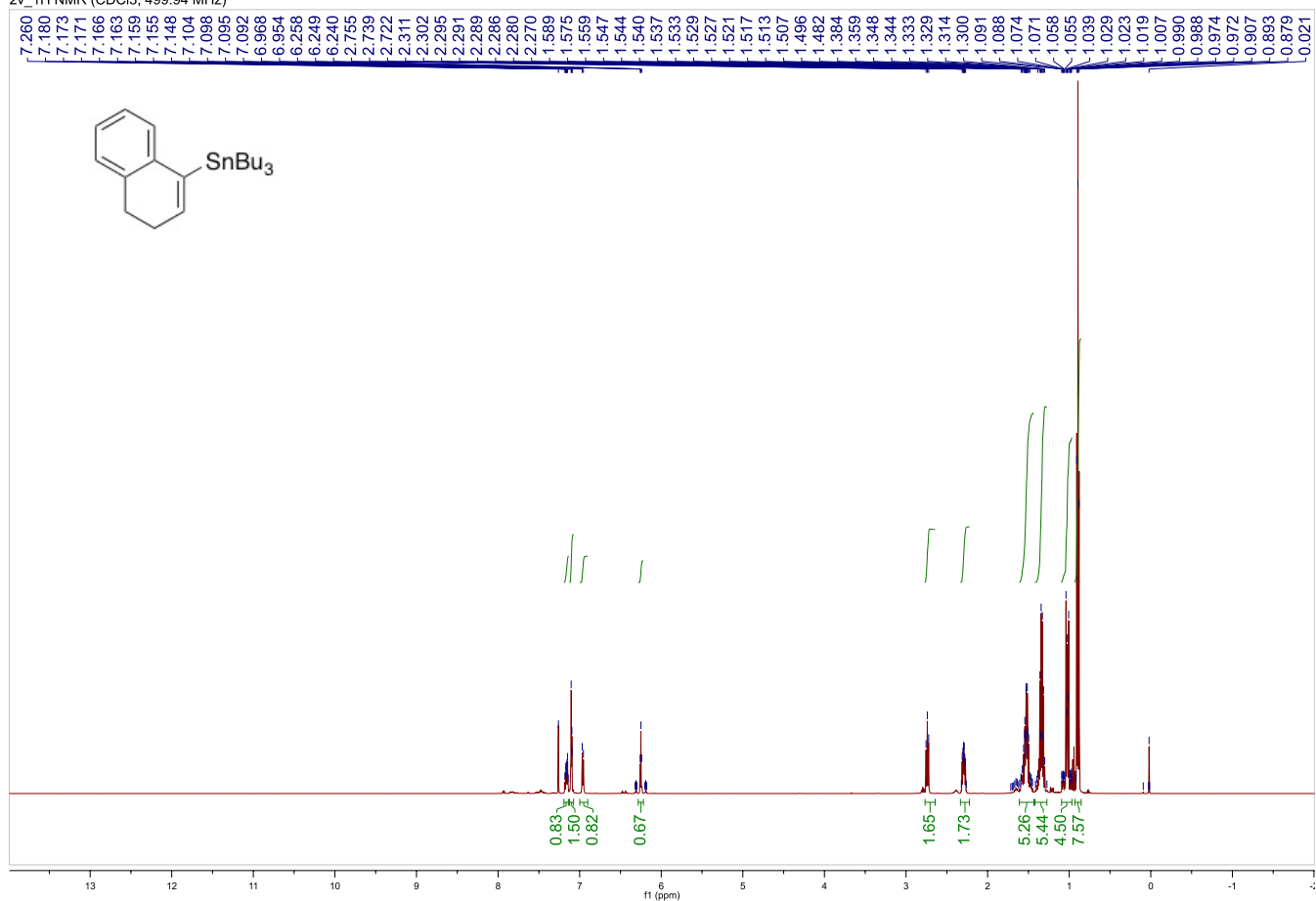
2u_1H NMR (CDCl3, 399.83 MHz)



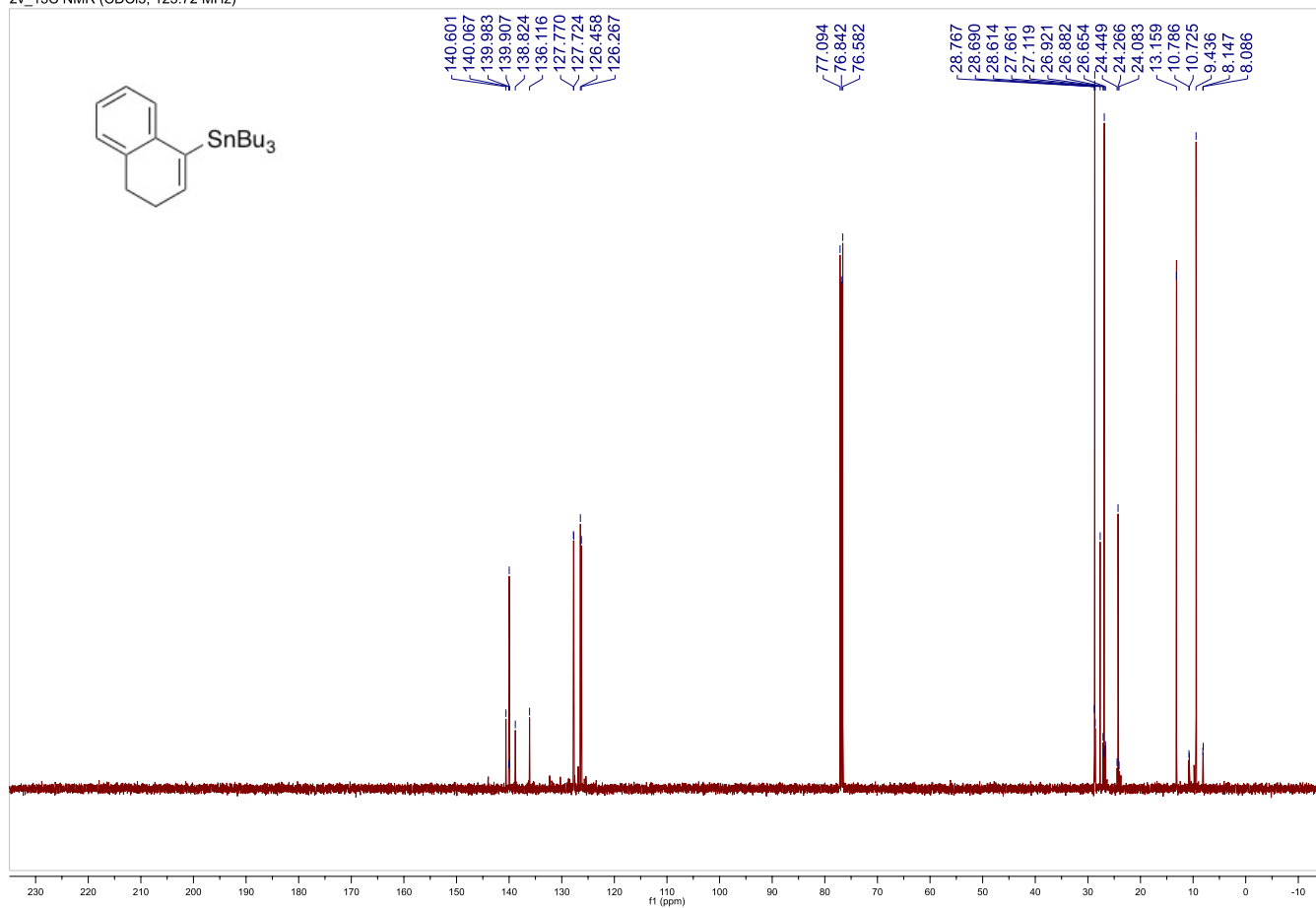
2u_13C NMR (CDCl3, 100.55 MHz)



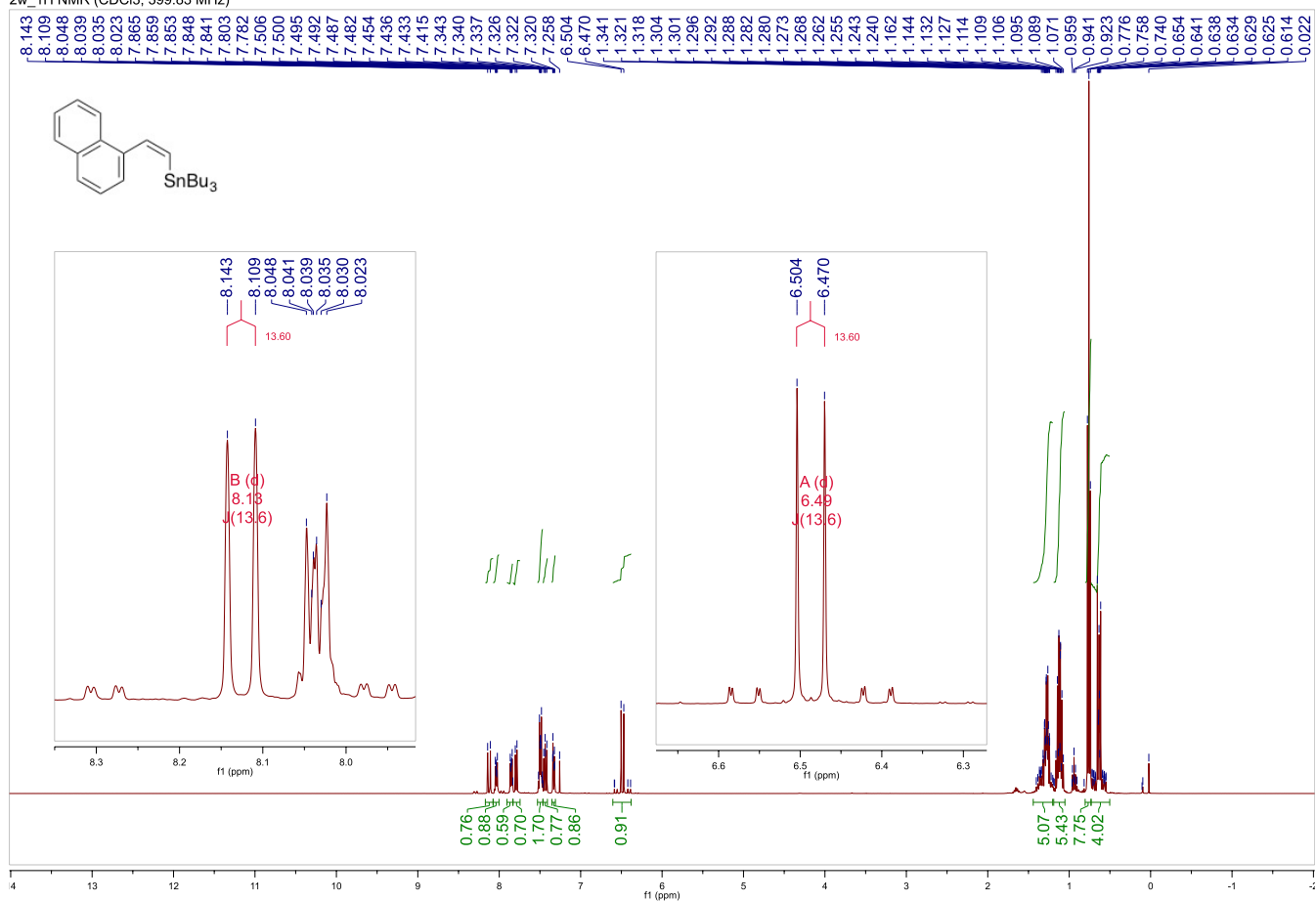
2v_ 1H NMR (CDCl3, 499.94 MHz)



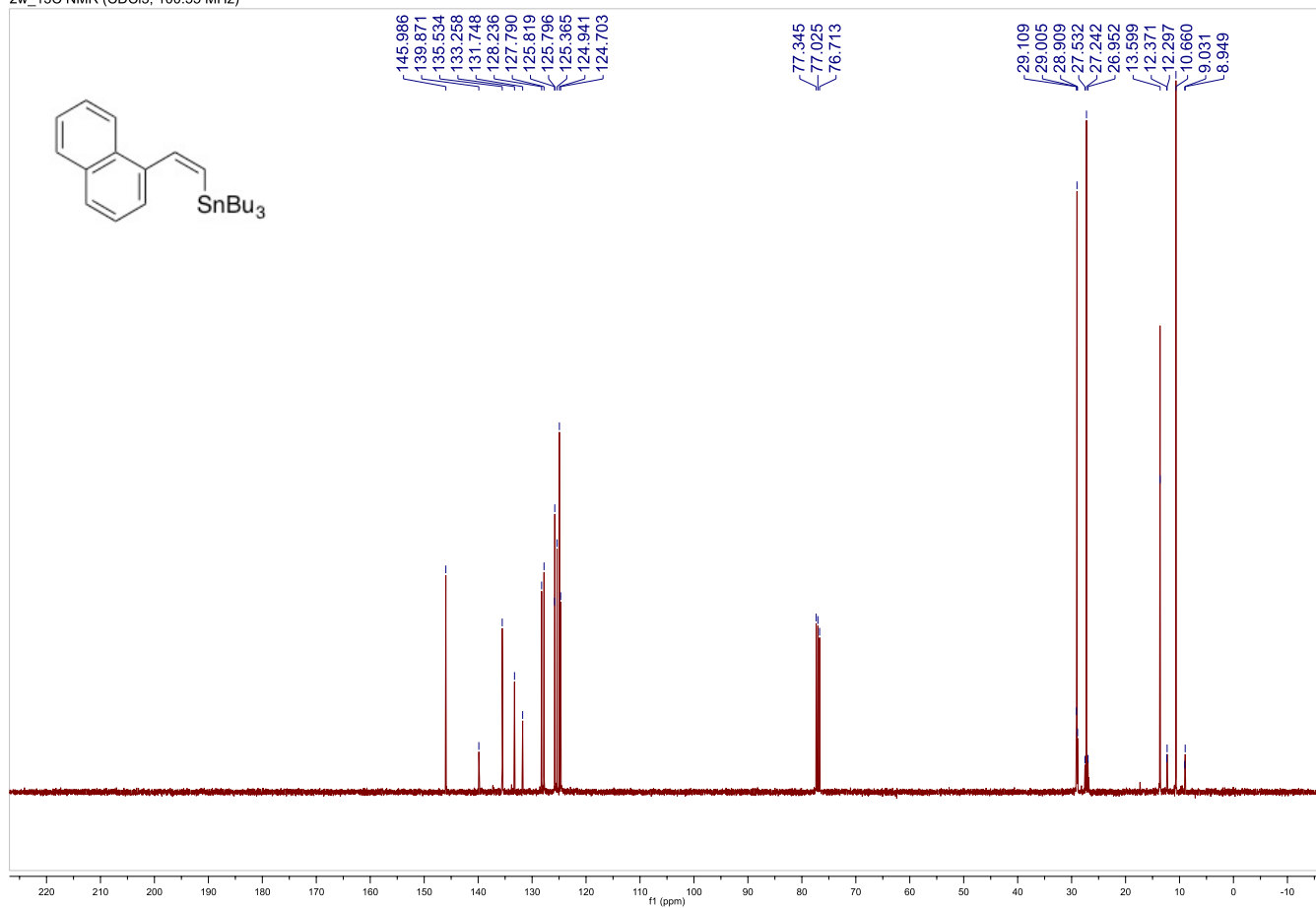
2v_ 13C NMR (CDCl3, 125.72 MHz)



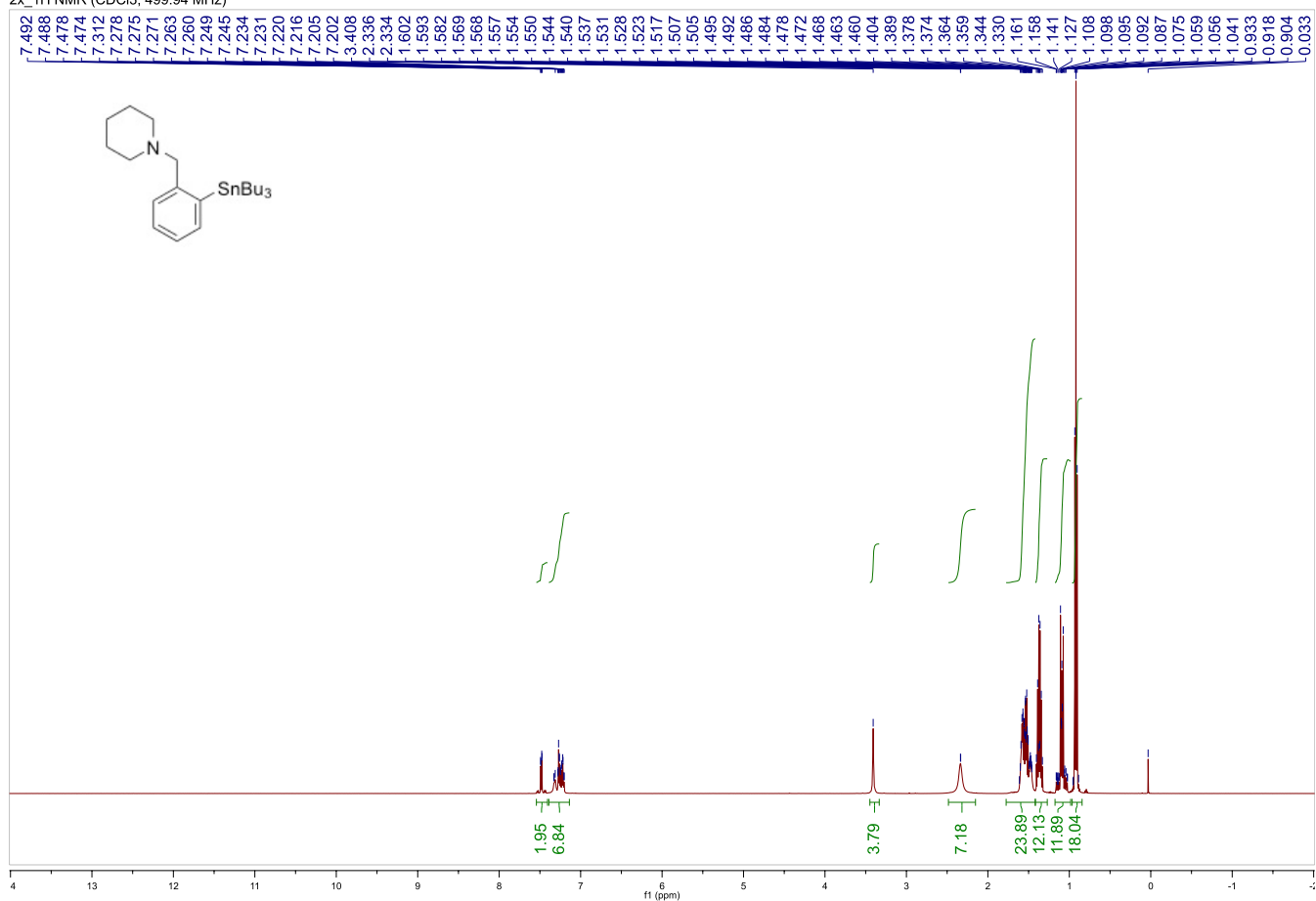
2w_ 1H NMR (CDCl3, 399.83 MHz)



2w_ 13C NMR (CDCl3, 100.55 MHz)



2x_1H NMR (CDCl3, 499.94 MHz)



2x_13C NMR (CDCl3, 125.72 MHz)

