Obtaining 1D-INADEQUATE Spectra

A 1D-INADEQUATE spectrum will show carbon-carbon coupling constants. Note that this experiment filters the "main" ^{13}C peaks away, so only the sidebands due to adjacent ^{13}C atoms appear. The procedure is therefore *slow.* A concentrated sample (which will provide a 4-scan carbon spectrum) is essential; count on acquiring for a full day.

1. Acquire a normal ^{13}C spectrum:

   ```
   rpar C13CPD all
   atma
   getprosol
   ns=4, ds=0
   ```

2. Save this to a new experiment number (`iexpno`) and convert it to an INADEQUATE parameter set.

`pulprog` =	inadgpsp1d	
`d4` =	7.6 ms	$\frac{1}{4}J_{CC}$
`cnst3` =	33	J_{CC} — used to calculate `d4`?
`ns` =	something huge	999,999?
`ds` =	0? 1?	

   Type `gpz` and set

`gpz1` =	40	gradient power (% of full)
`gpnam1` =	SMSQ10.100	
`gpz2` =	40	
`gpnam2` =	SMSQ10.100	

3. `zg` as usual.
   Let this run for a bit, then check it:

   ```
   tr efp
   ```
   (transfer data to working memory, then efp)

   Most likely there will be nothing to see.
   Let it run a few more hours and check again. Let run overnight and check again.