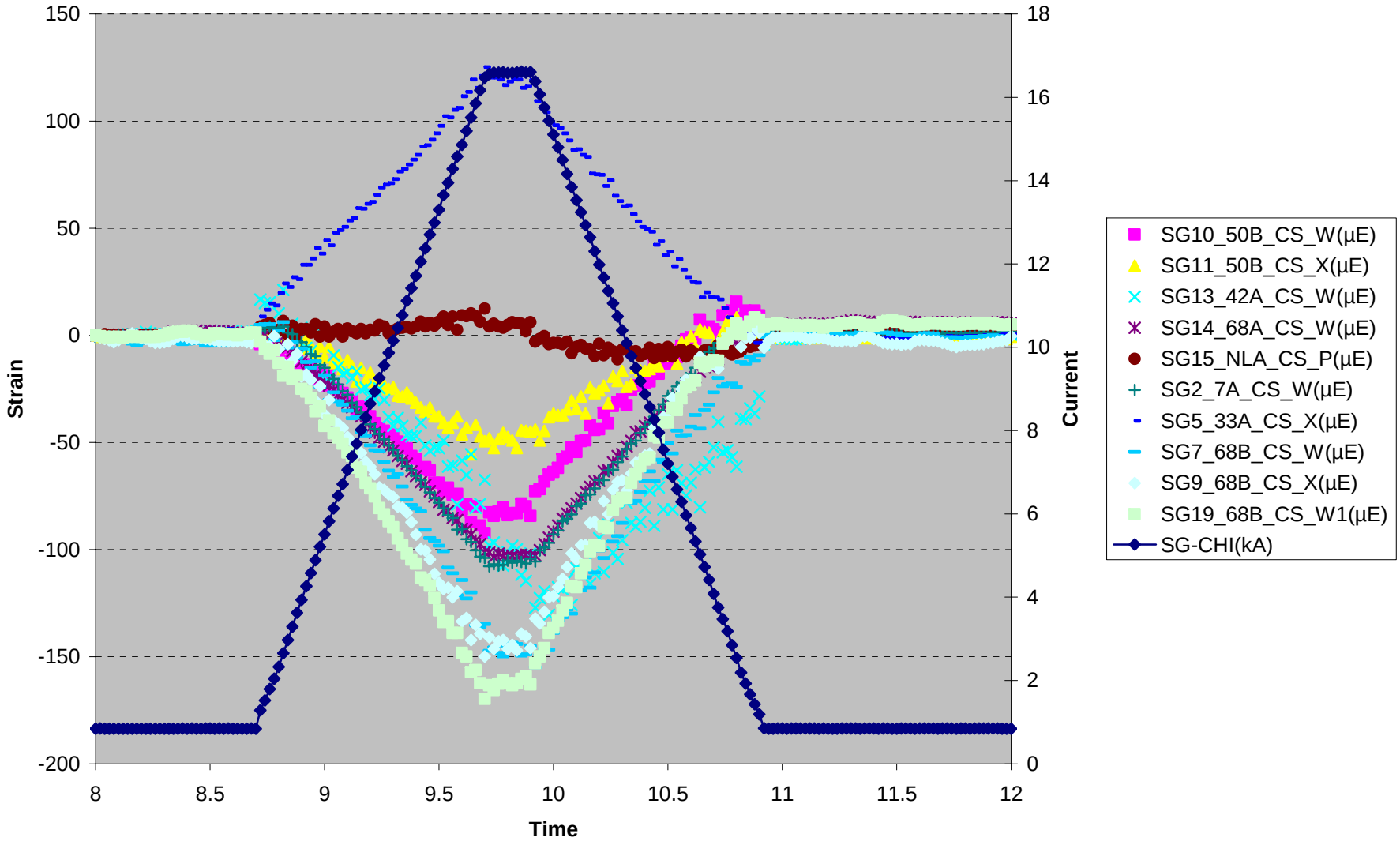
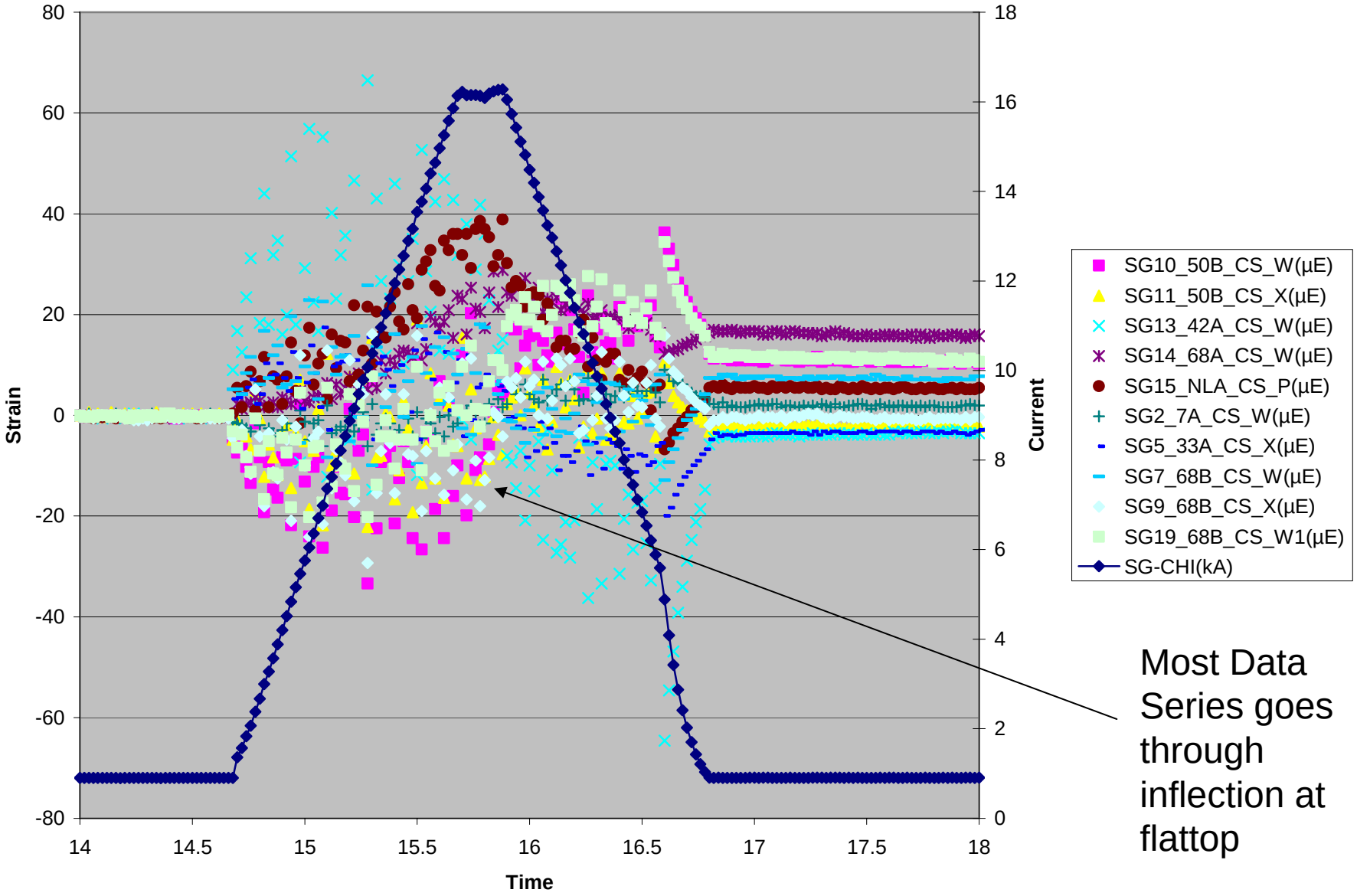
15 Kamp Cold Test (121405)

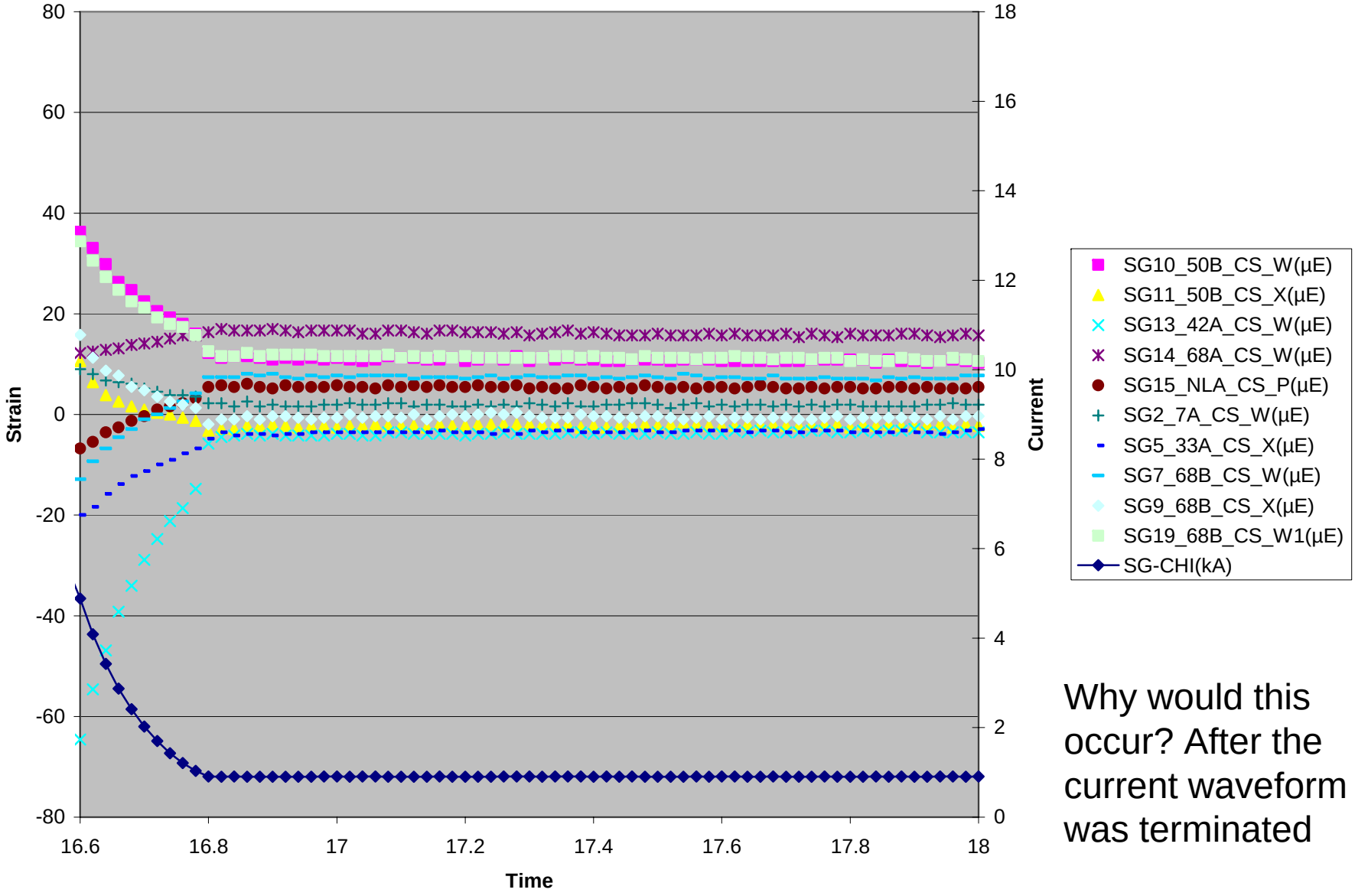


15 Kamp (warm test 121540)



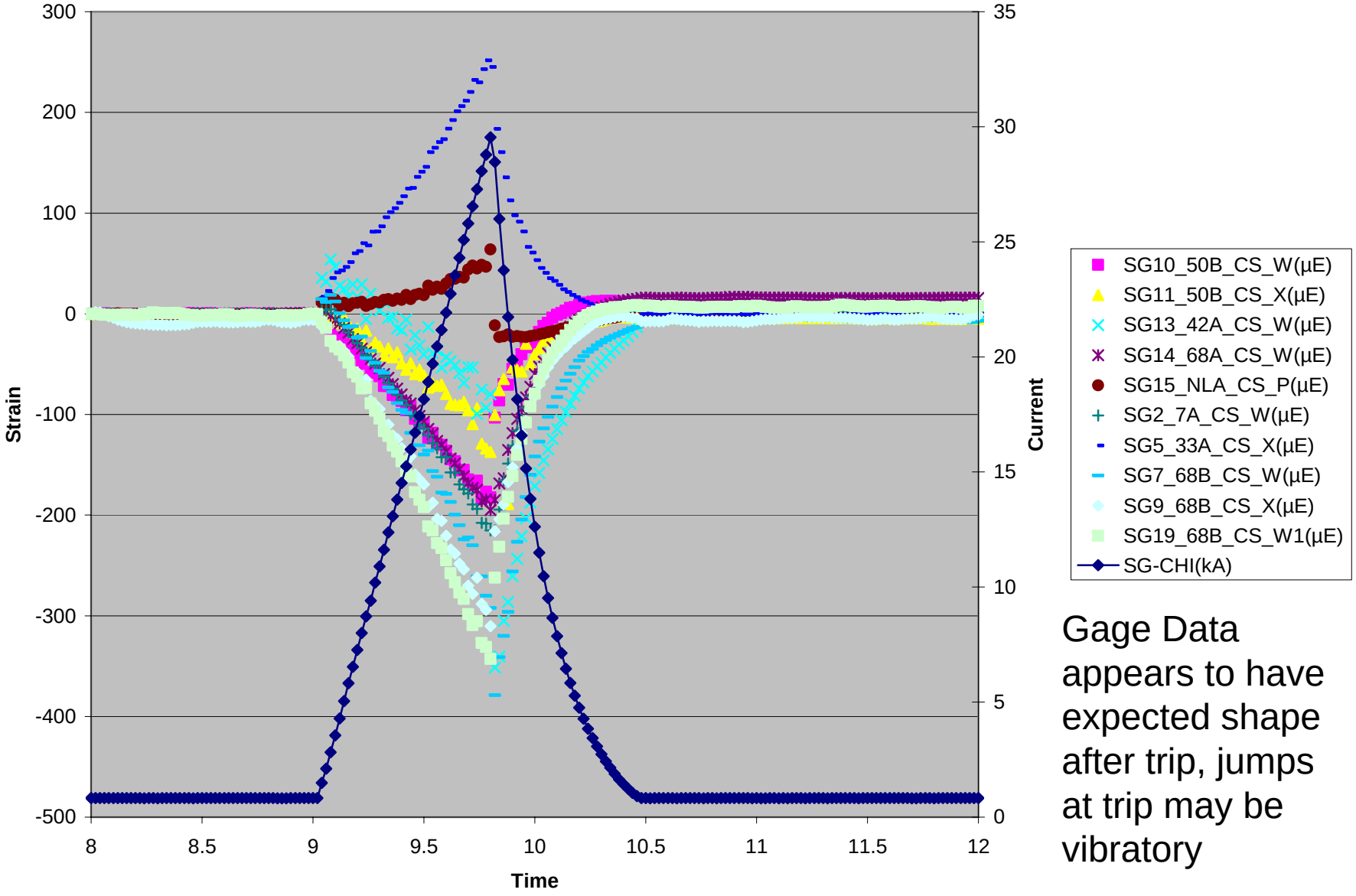
Most Data Series goes through inflection at flattop

15 kamp (warm) Case after trip ?



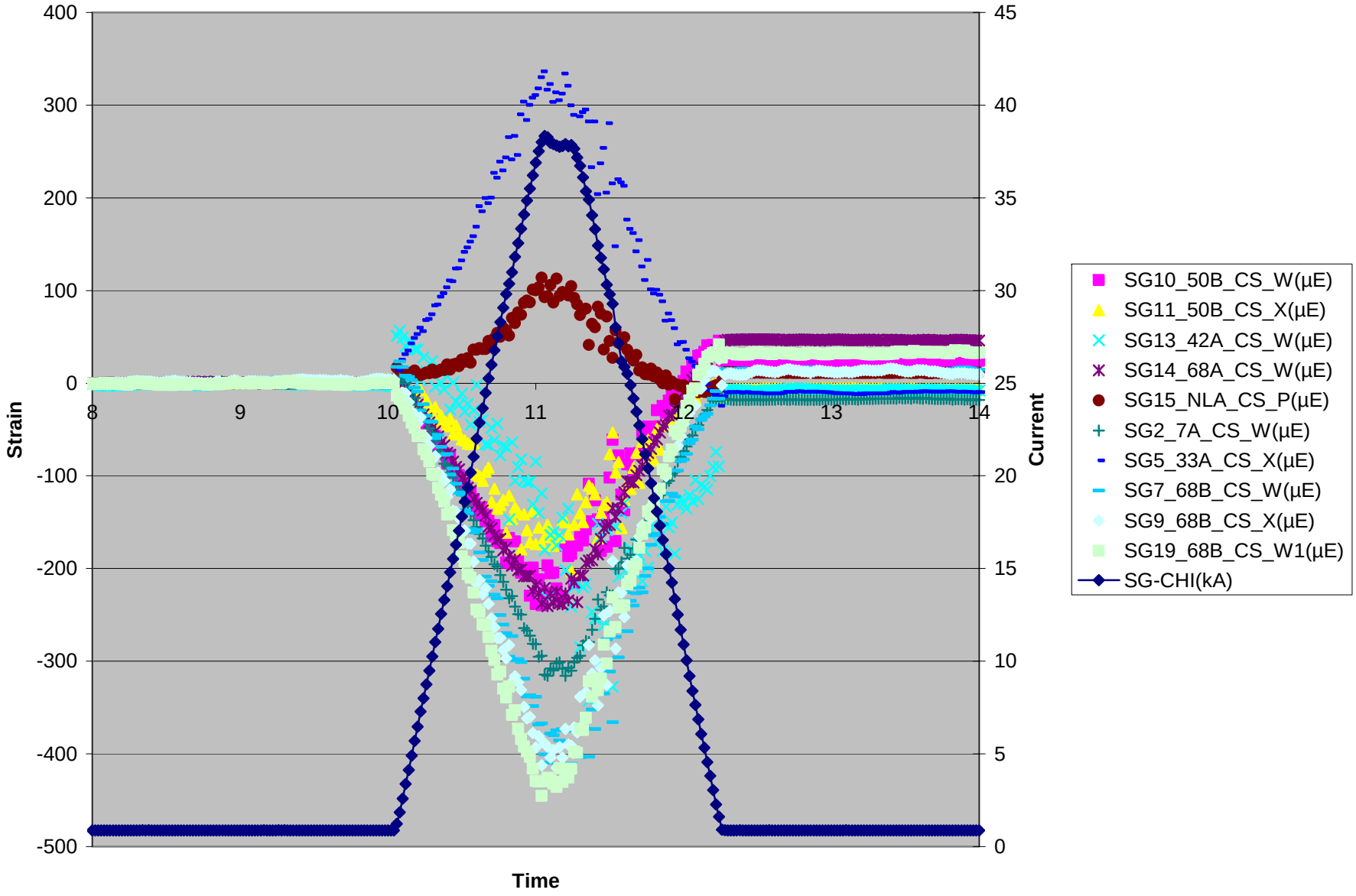
Why would this occur? After the current waveform was terminated

What about the other trips (35 Amp cold) 121412



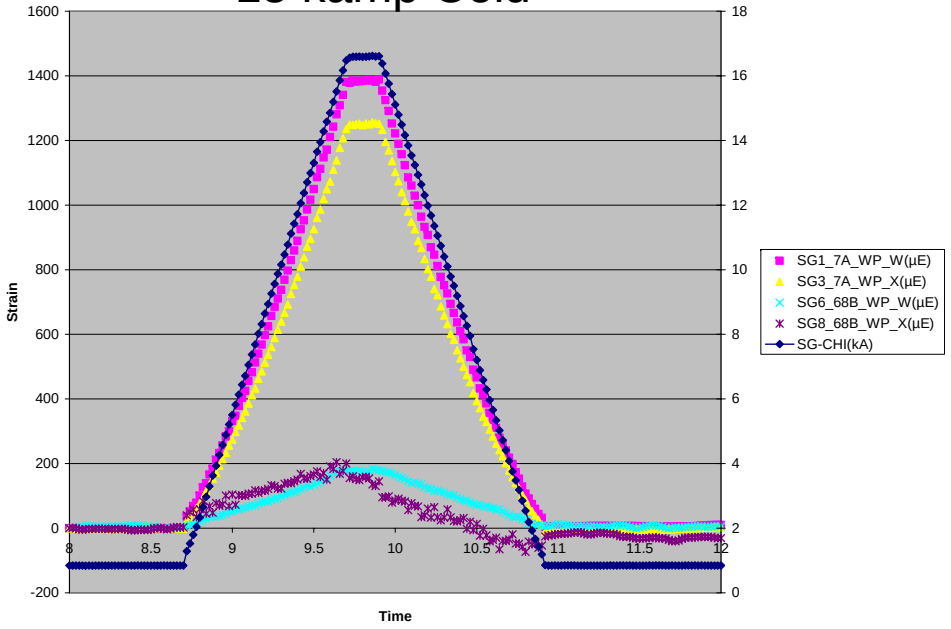
Gage Data appears to have expected shape after trip, jumps at trip may be vibratory

36.5 Kamp Case (121461)

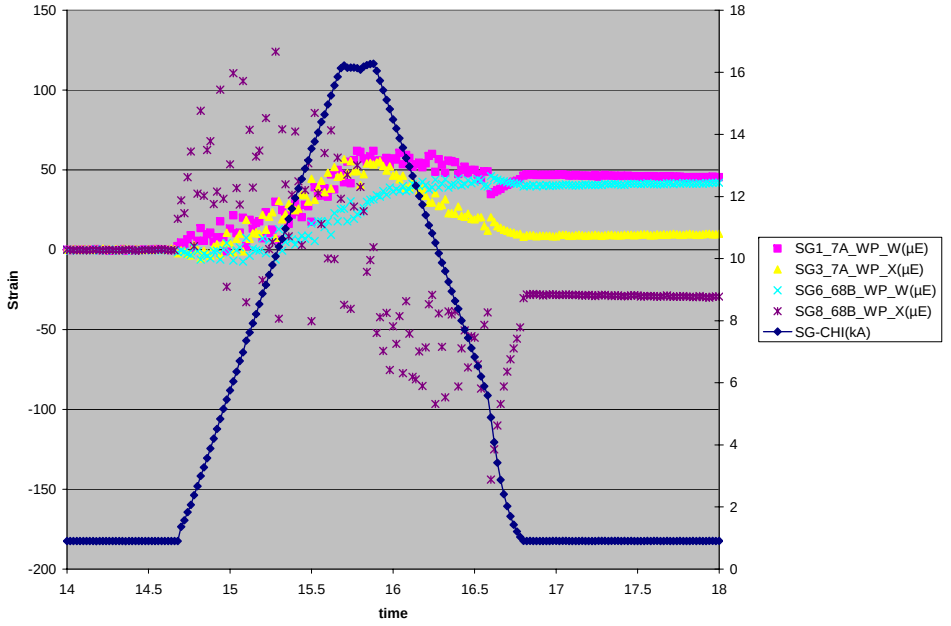


Winding Gage Plots

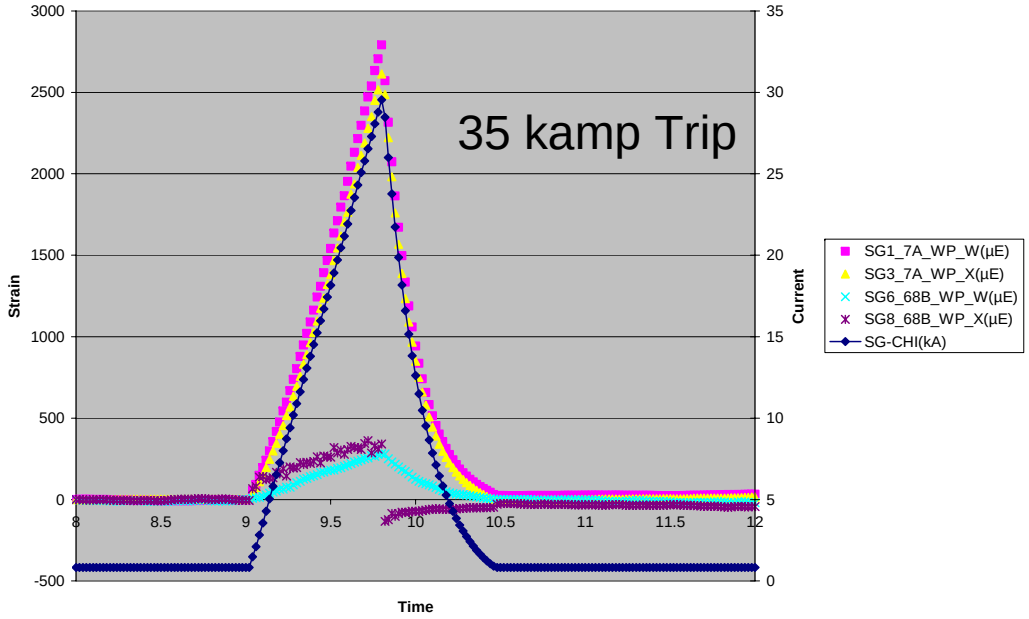
15 kamp Cold



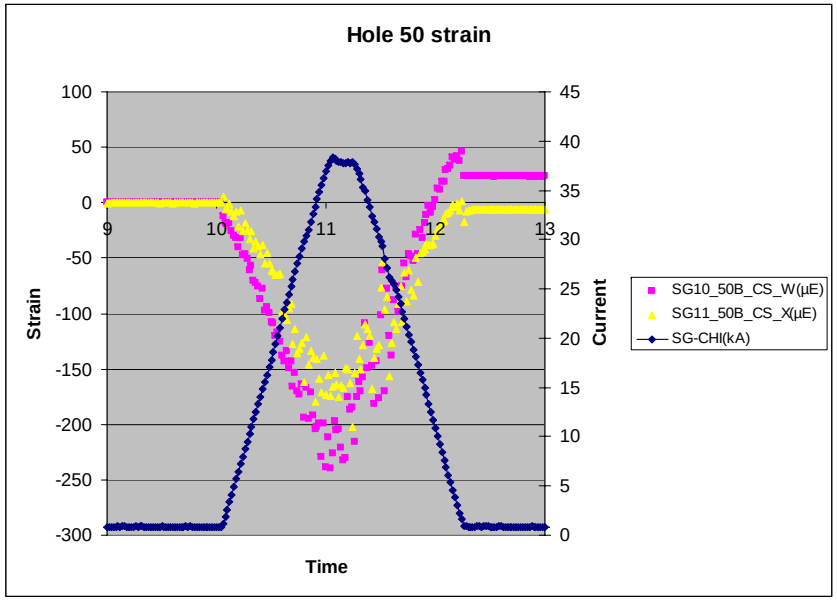
15 kamp Warm

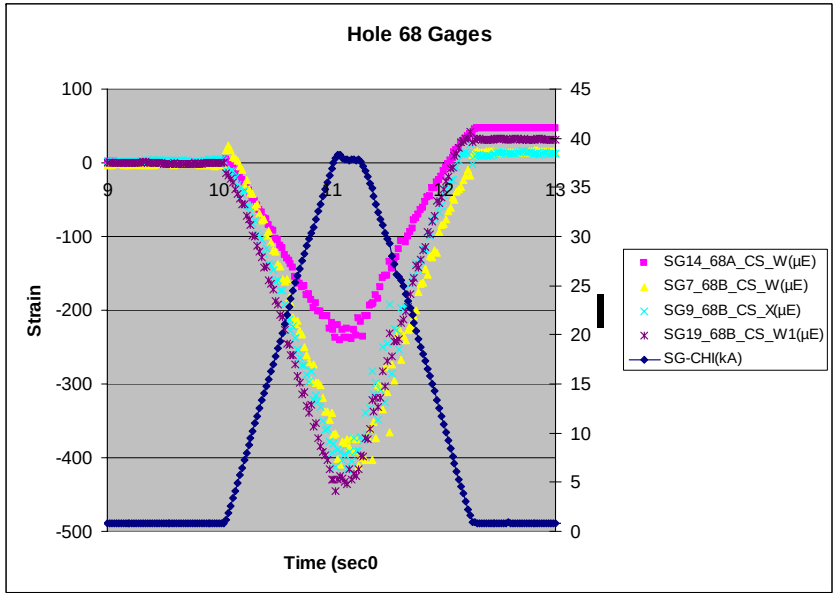


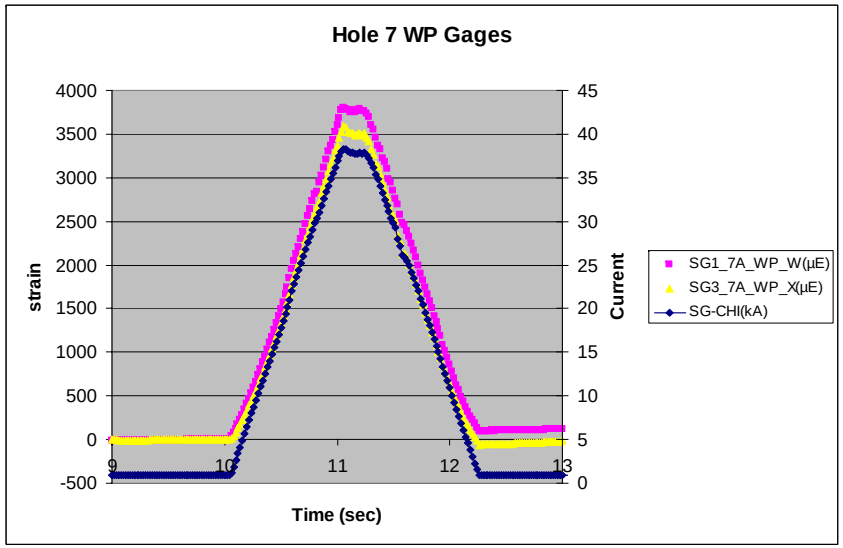
35 kamp Trip

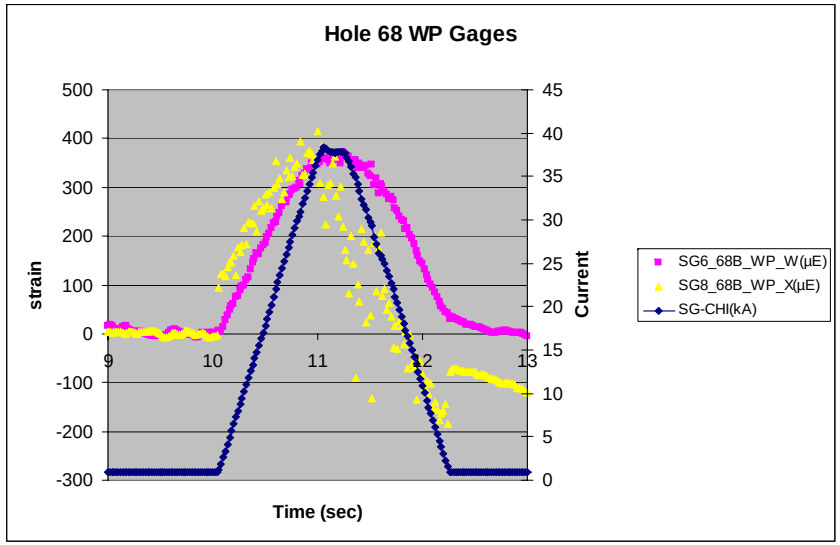


Hole strain comparison for shot 121461

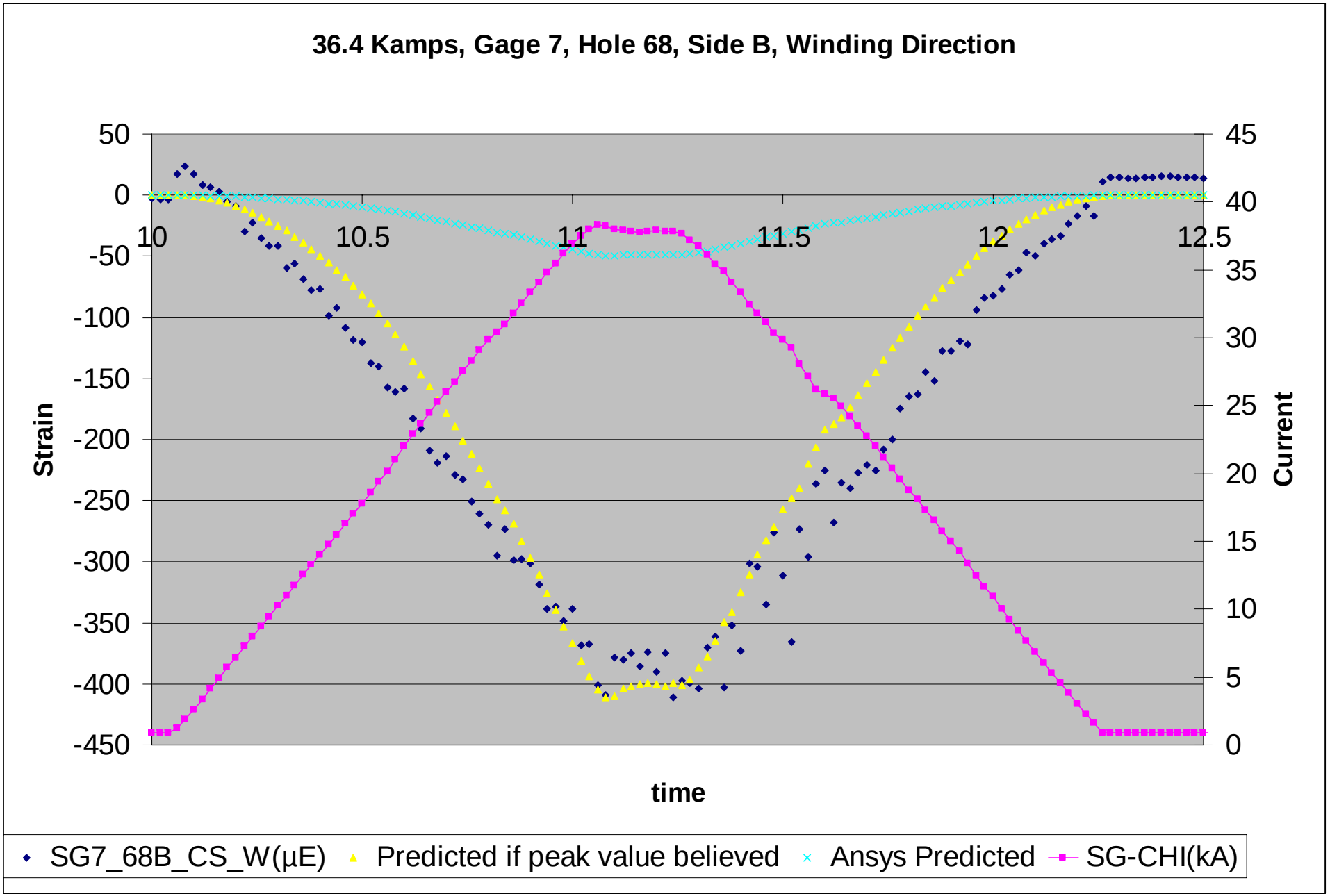








Very Little chance that strain in two directions measured on like holes would be the same


36.4 Kamps, Gage 7, Hole 68, Side B, Winding Direction
50
0
-50
-100
-150
-200
-250
-300
-350
-400
-450
Strain
10
10.5
11
11.5
12
12.5
time
45
40
35
30
25
20
15
10
5
0
Current
SG7_68B_CS_W(µE)
Predicted if peak value believed
Ansys Predicted
SG-CHI(kA)

Points

- Data does not match ANSYS in direction or magnitude except gage 15
- Strain readings in different directions at the same hole number give roughly the same delta strain.
- Turning the current off (Trip) seems to create a different strain profile for both cryogenic and room.
- Room data is all over the place and loosely follows a voltage profile for most gages.
- Cryogenic data is highly linear while the current is being controlled (voltage applied).
- Gage 15 away from the coils near the leads looks somewhat plausible even at room temperature. (Were its wires wrapped around the windings?)