Structure RF Meeting – 8/17/04

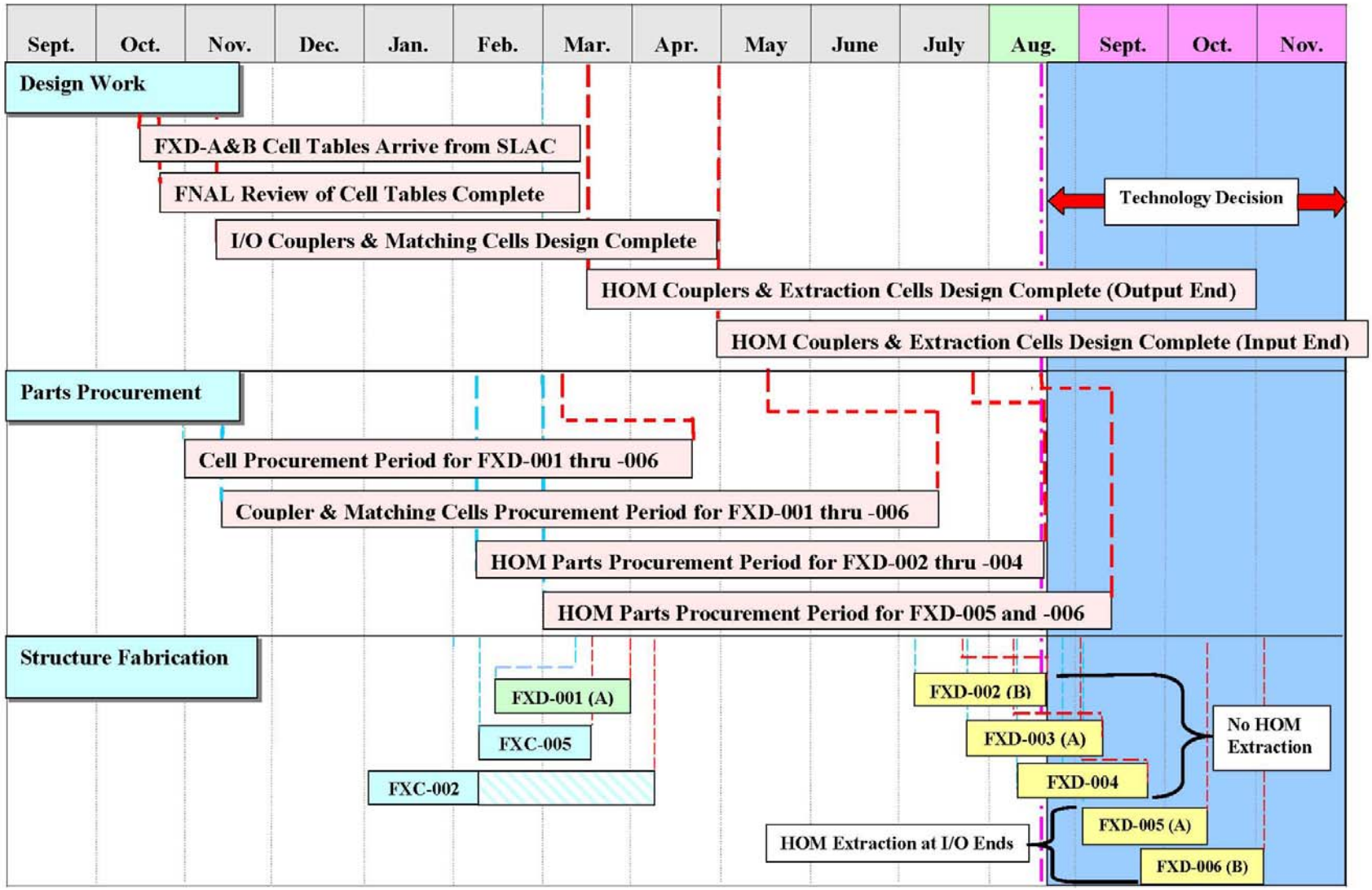
- 1) Status, schedules, plans (Harry)
- 2) FXD-003 tuning results (Timer)
- 3) FXE Couplers design status (Ivan & Timer)
- 4) Standard bead-pull measurements of HOM in FXC-001 (Gennady)

Agenda item #1

- Status, schedules, plans (Harry)

FXD Structure Fabrication Plan

H. Carter — FNAL TD LC R&D — 8/17/04

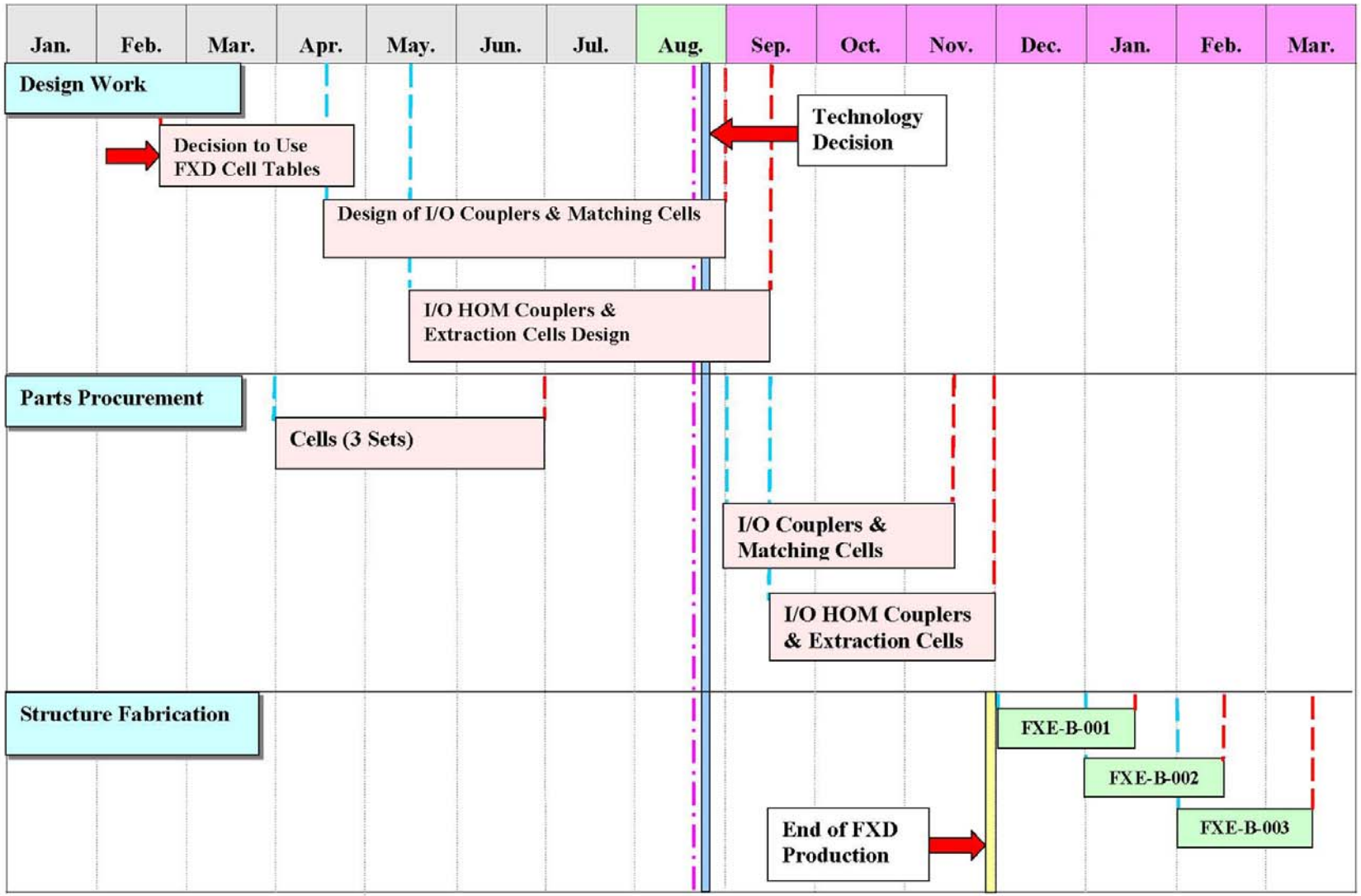


FXE Structure Fabrication Plan

H. Carter

FNAL TD LC R&D

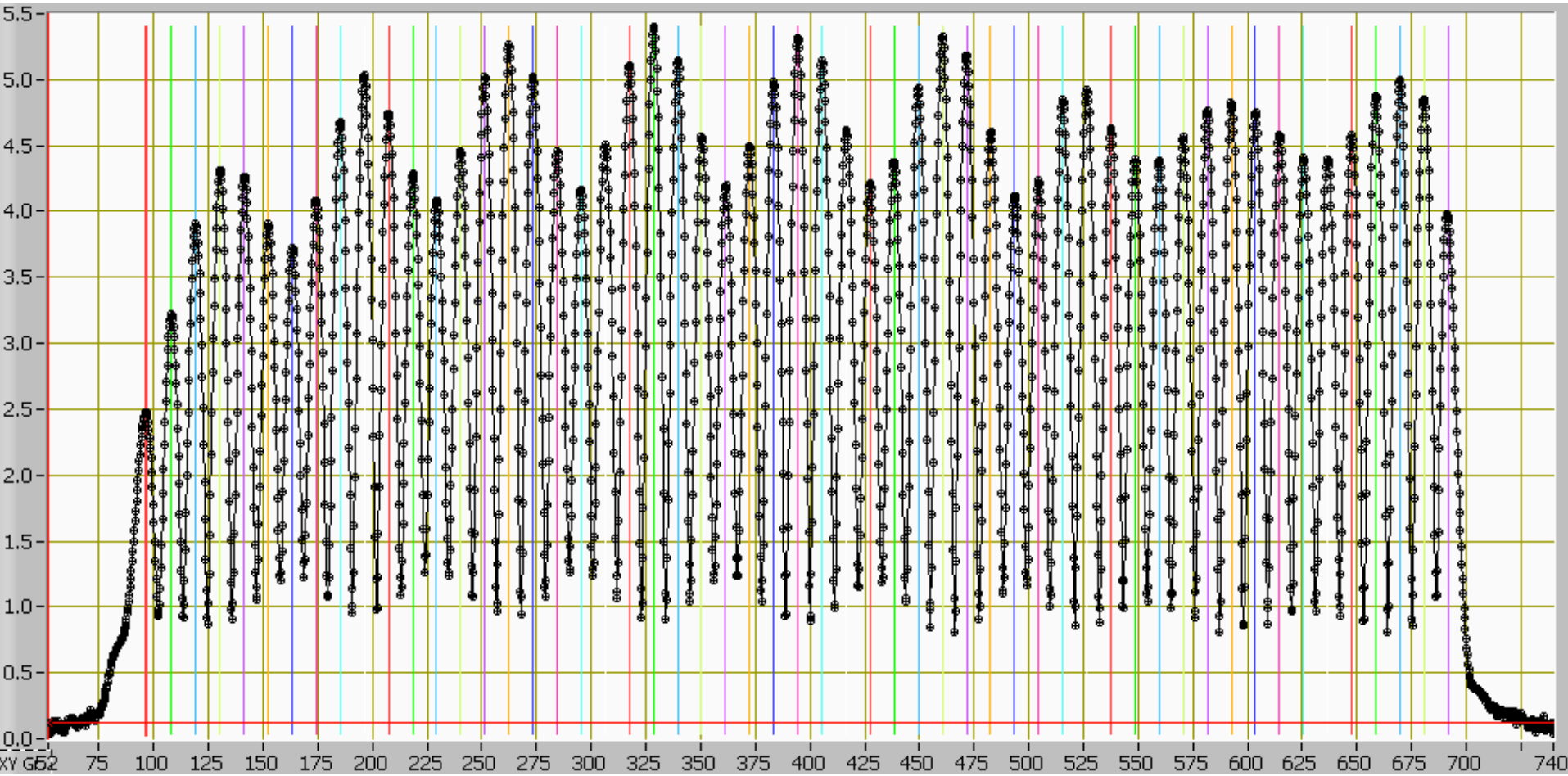
8/18/04



Agenda item #2

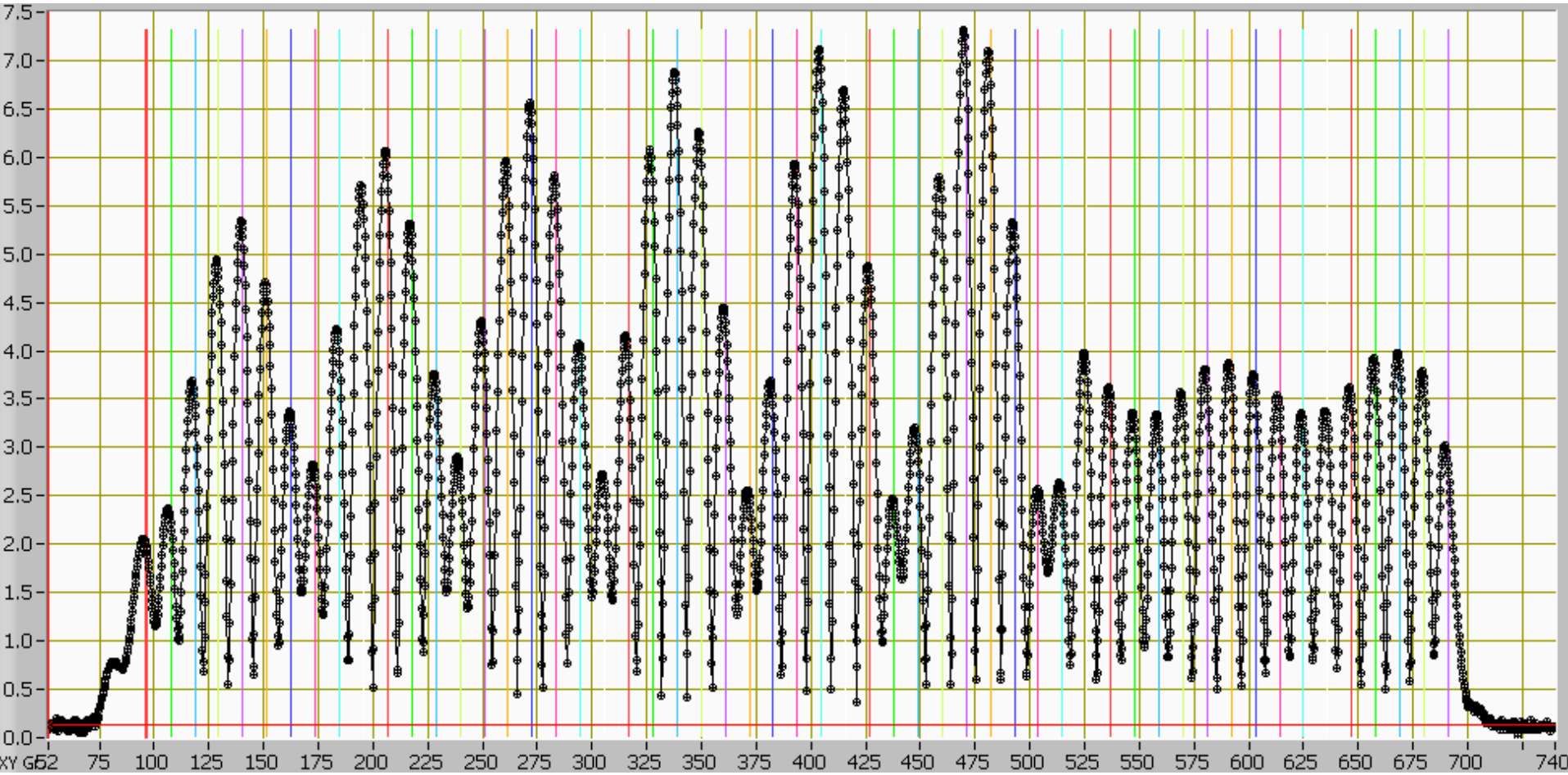
- FXD-003 tuning results (Timer)

FXDA003. Amplitude after brazed structure pretuning.

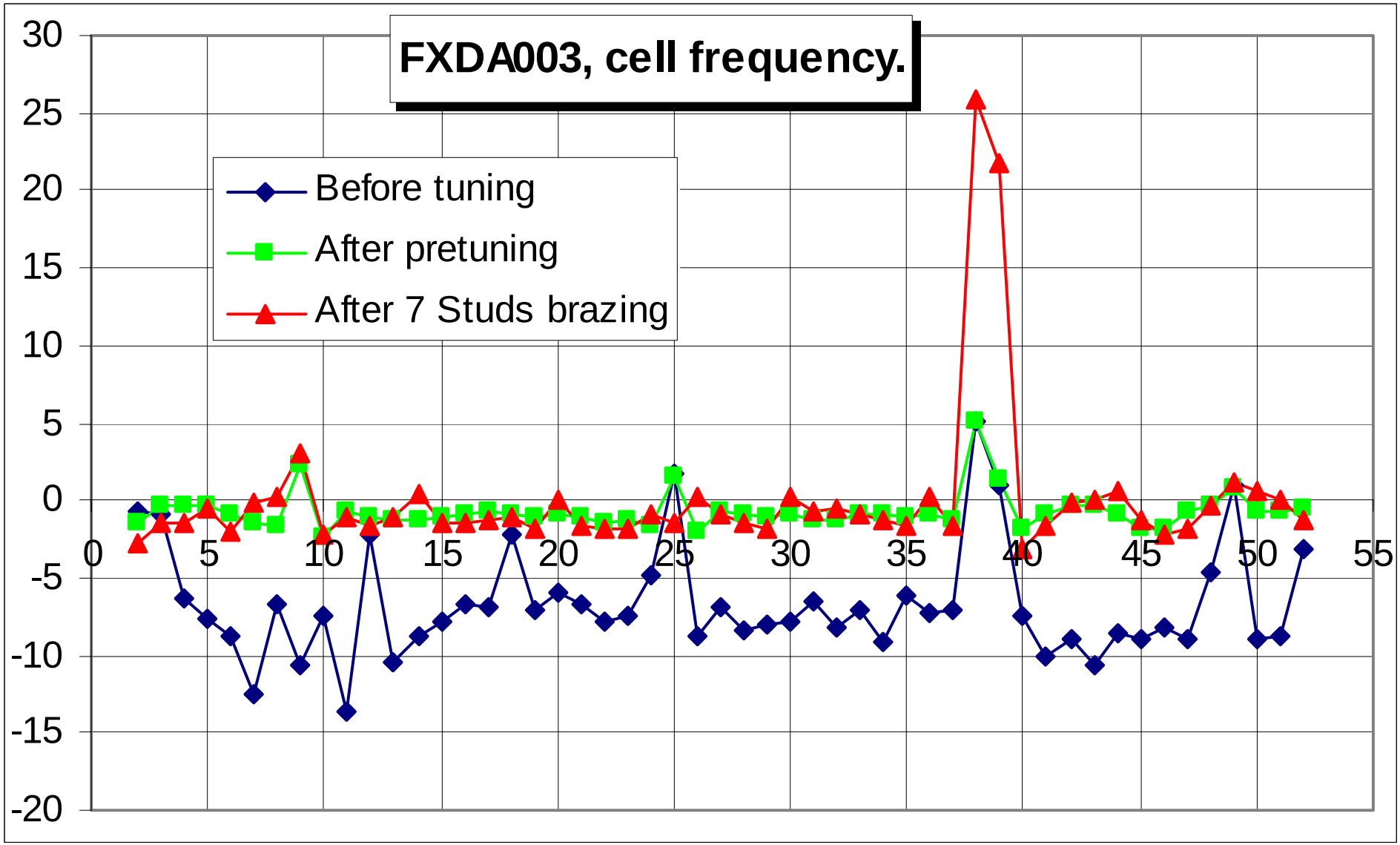


FXDA003. Amplitude after 7 Tuning Studs brazing.

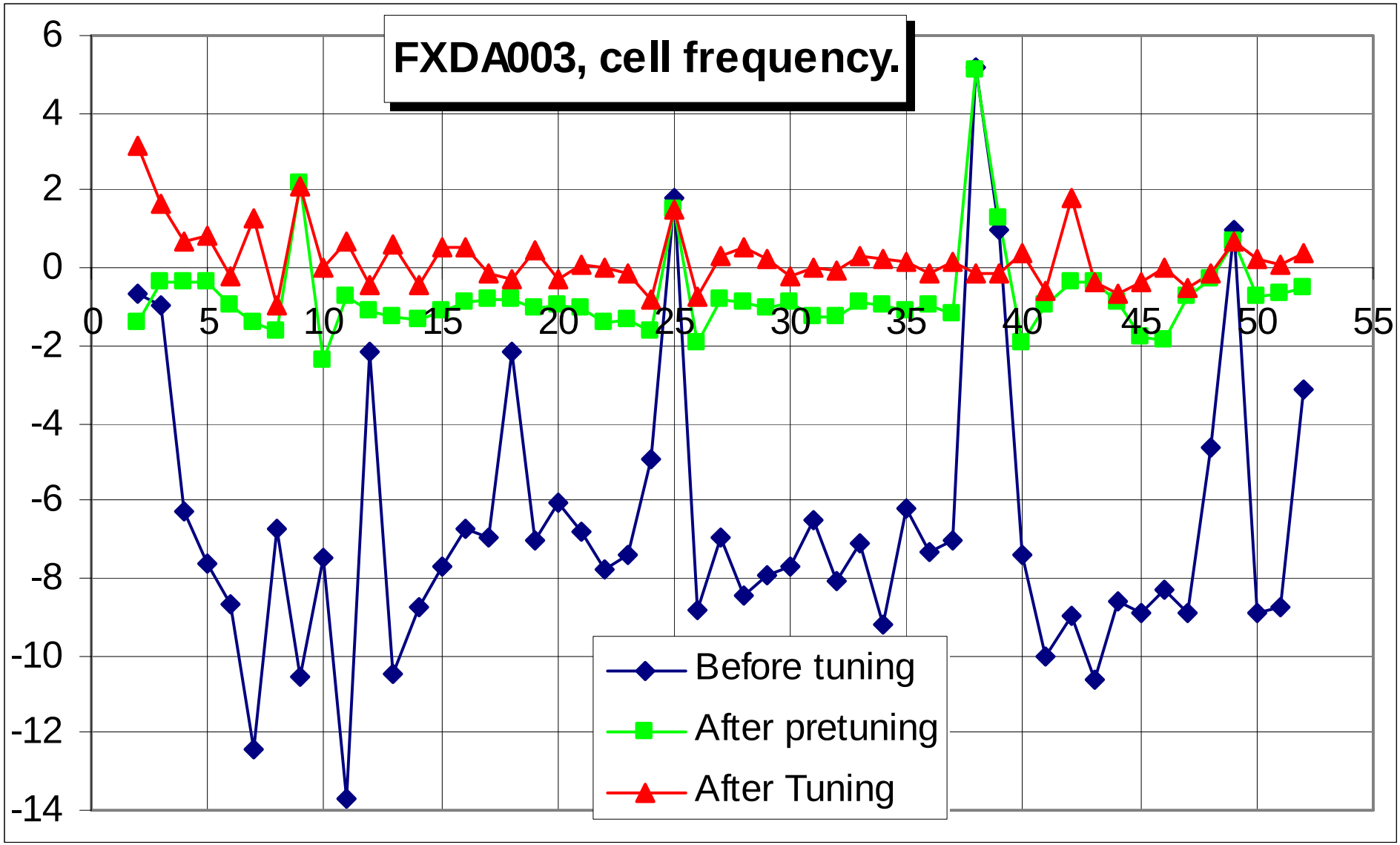
(Disk#38 four studs; Disk#39 three studs)



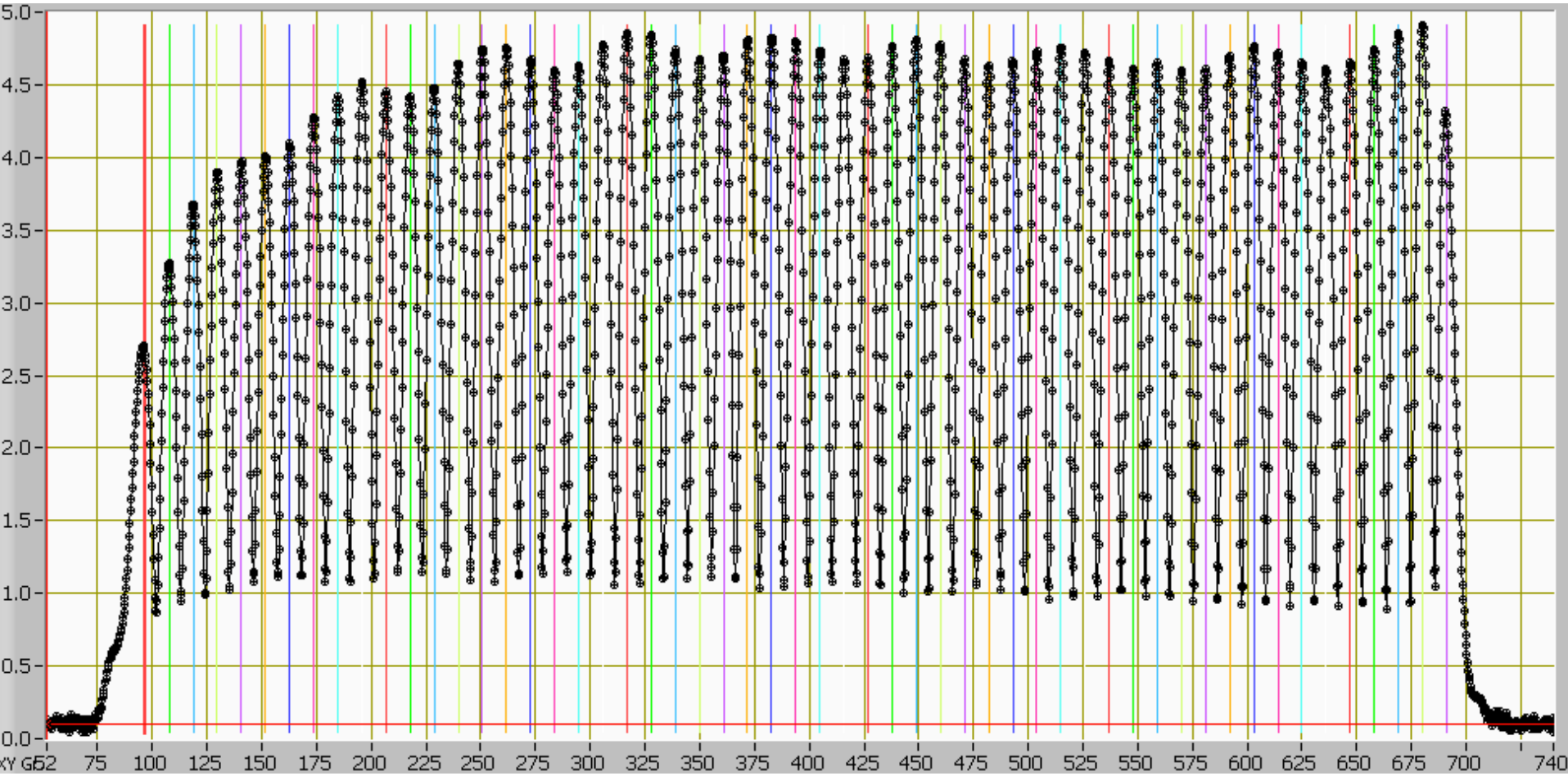
FXDA003. Cell frequency before, after pretuning and 7 Studs brazing.



FXDA003. Cell frequency before, after pretuning and final.

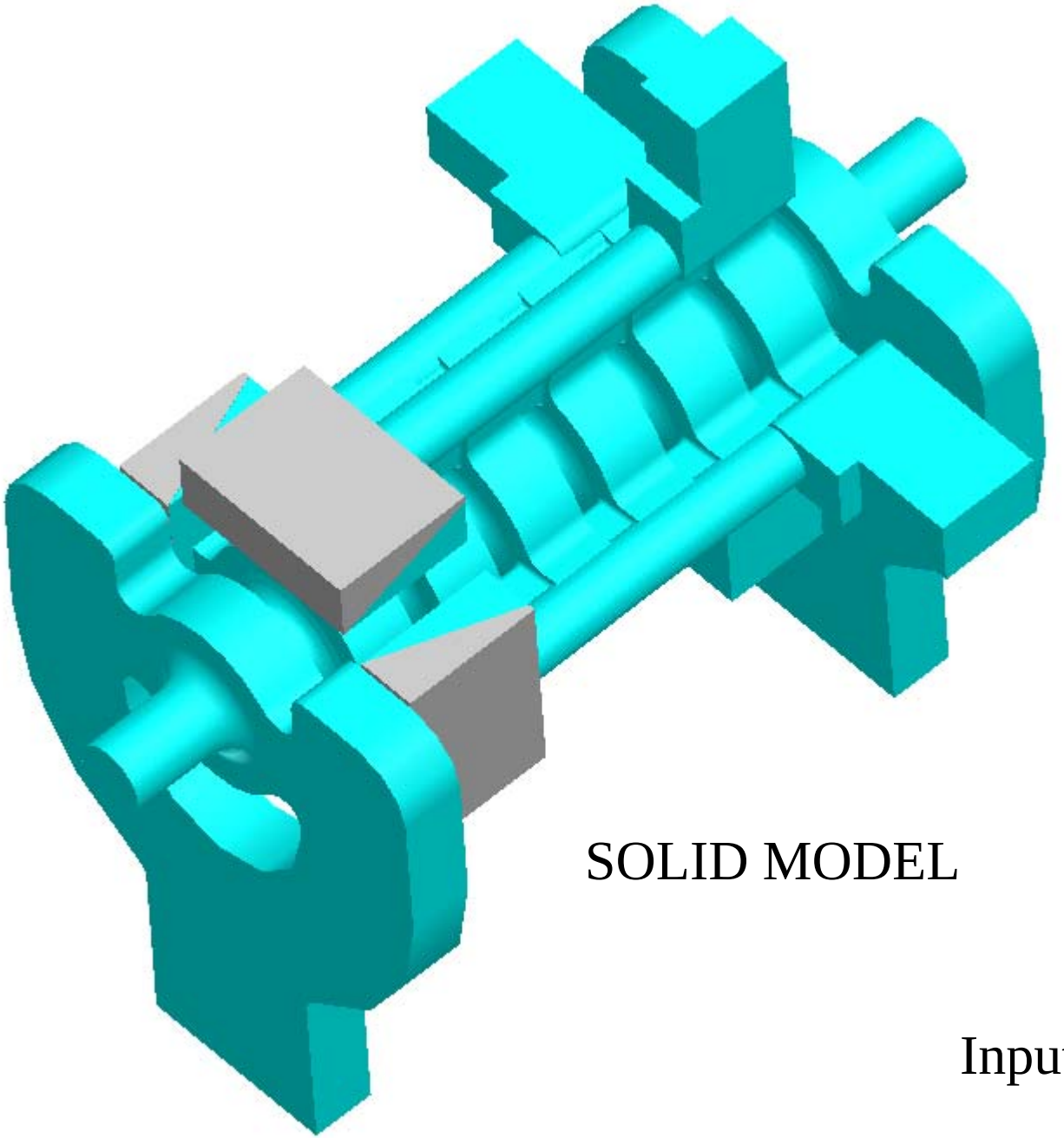


FXDA003. Amplitude after final tuning.



Agenda item #3

- FXE Couplers design status (Timer, Ivan)



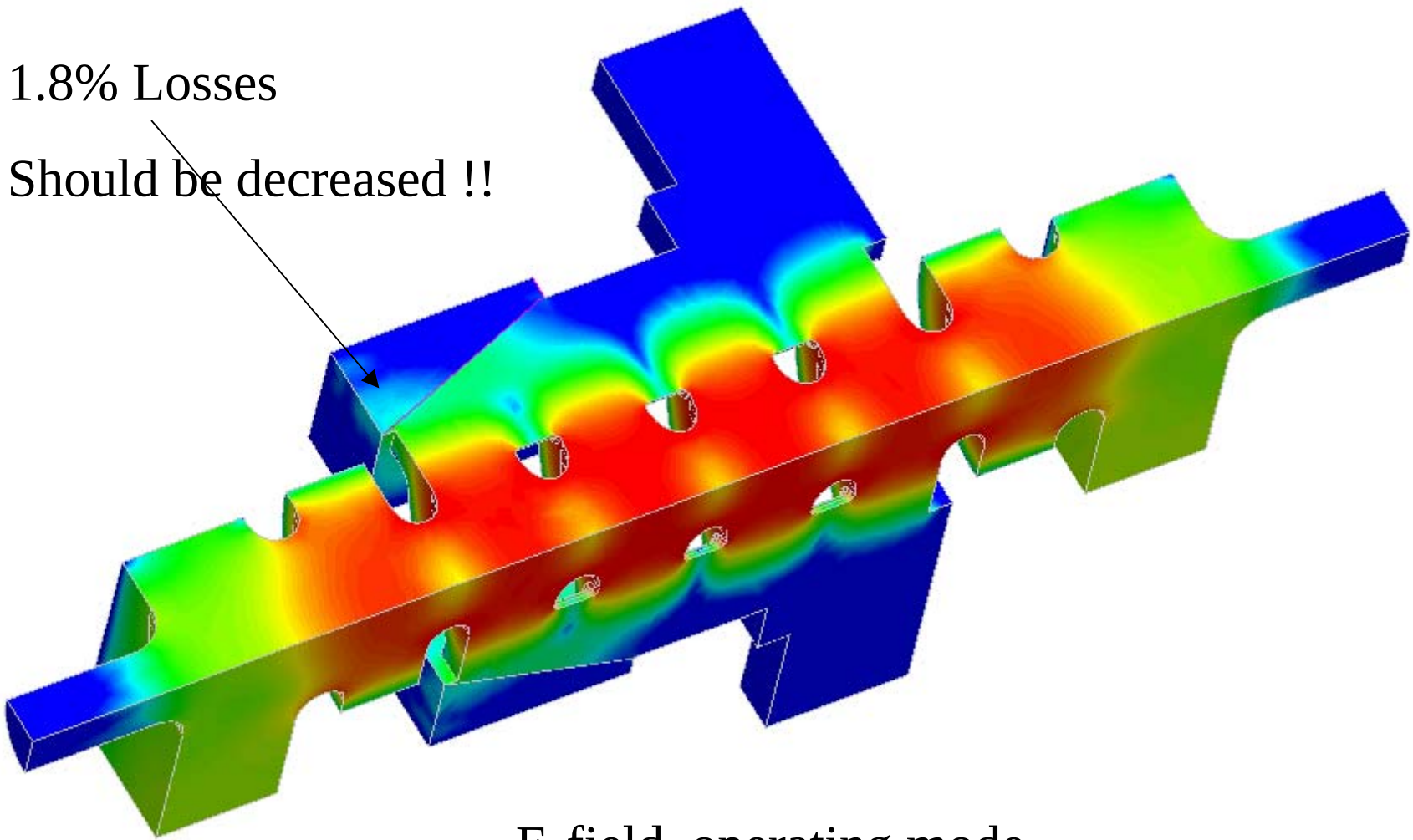
SOLID MODEL

Input Coupler

Input Coupler

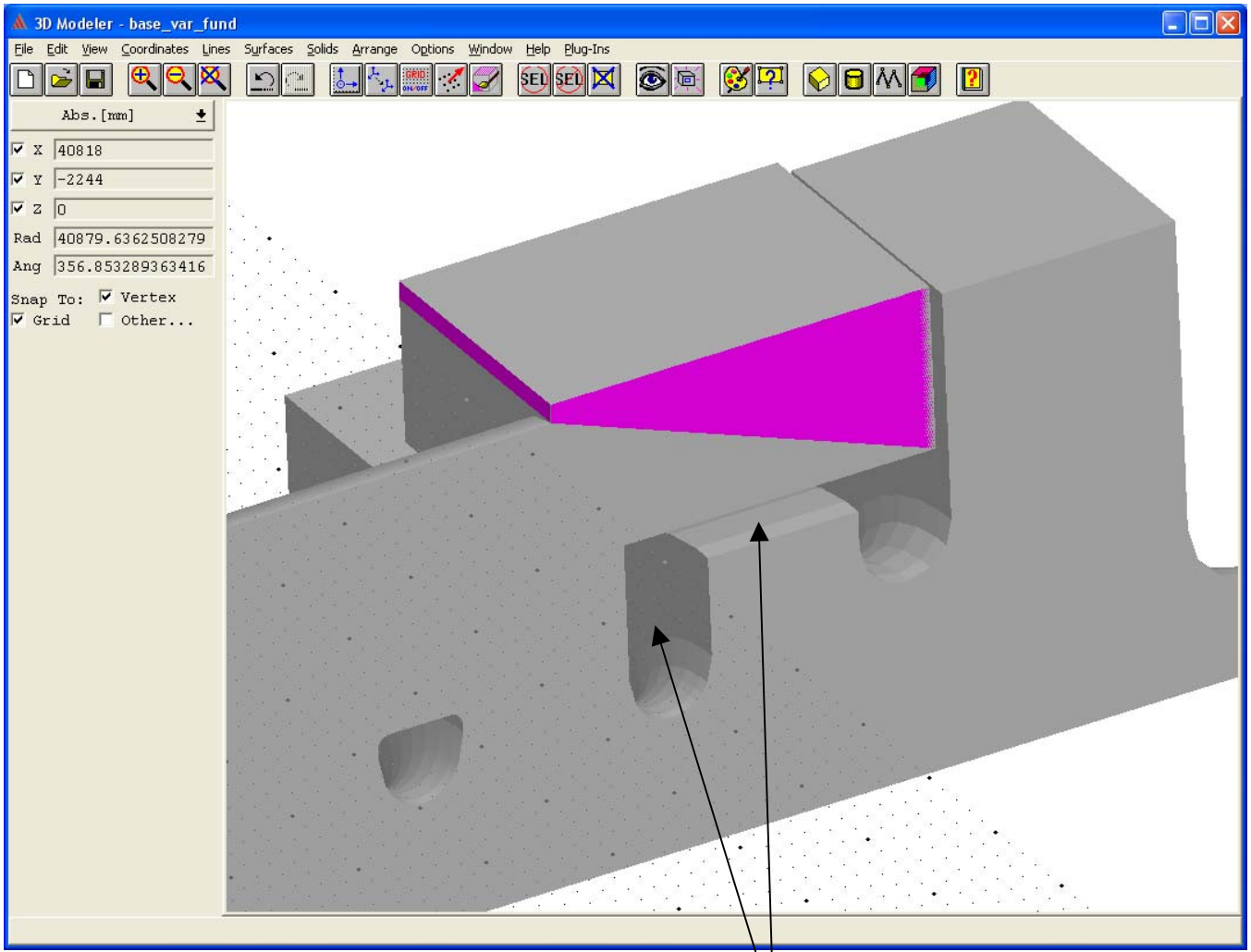
1.8% Losses

Should be decreased !!



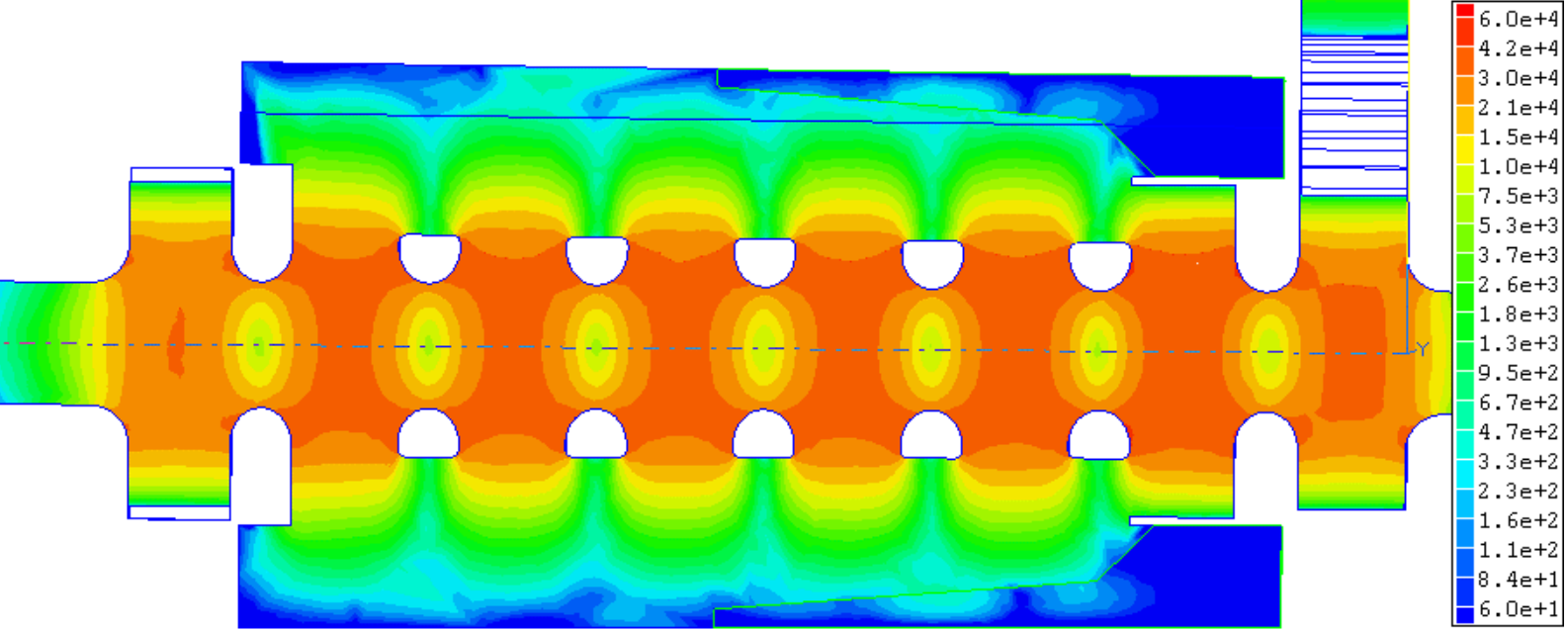
E-field, operating mode

Input Coupler

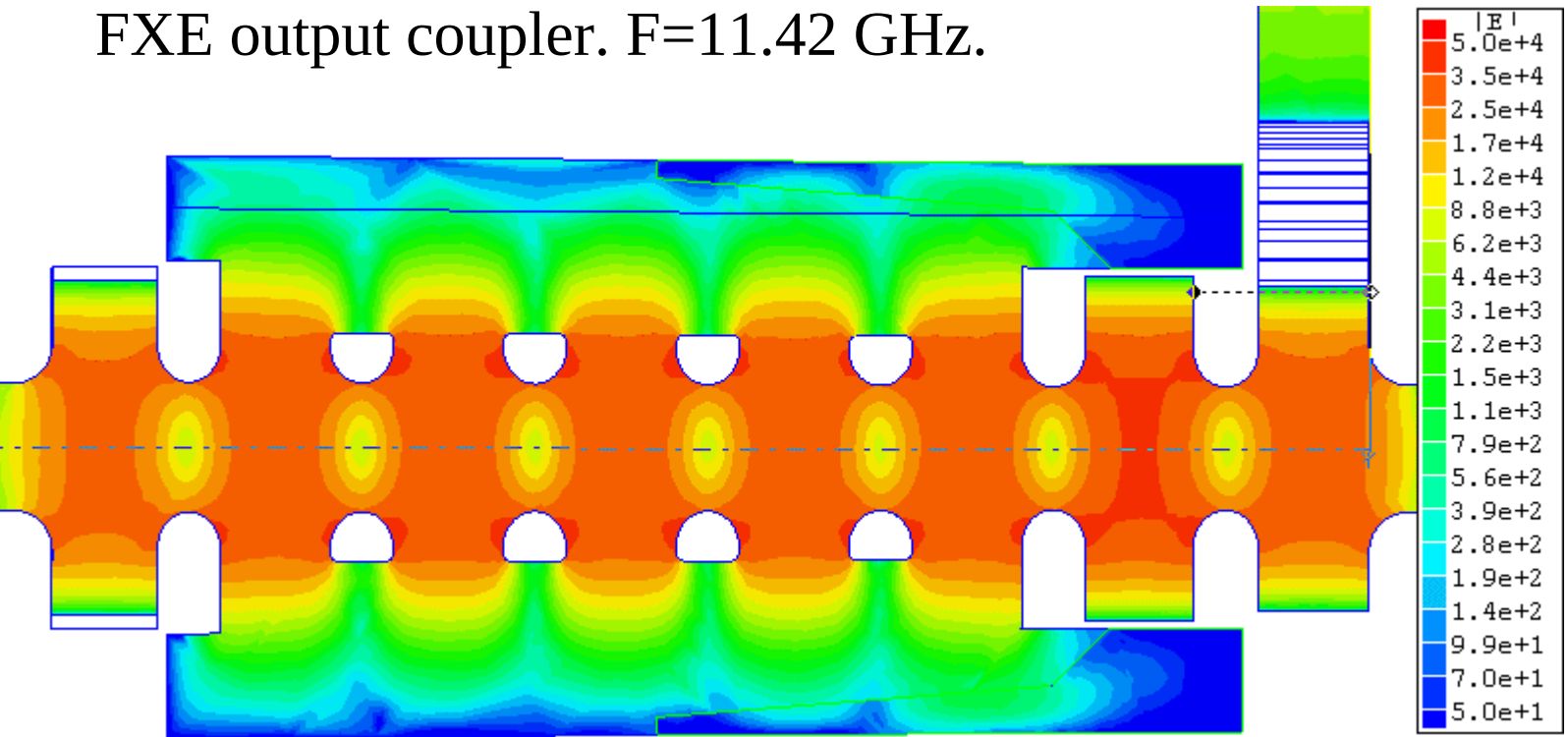


Possible solution – to avoid coupling between SiC and 1 cell

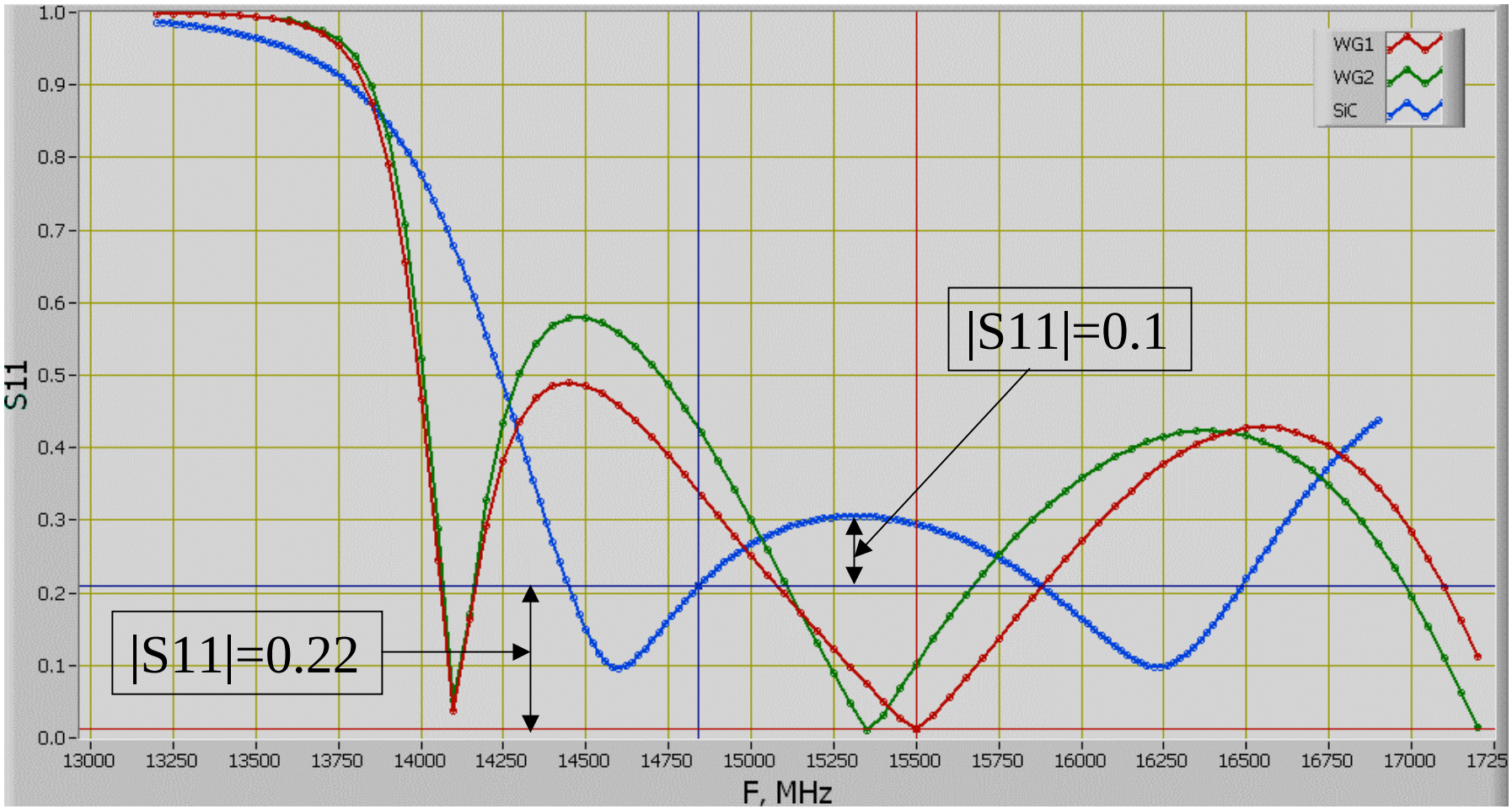
new absorber geometry should be matched



FXE output coupler. F=11.42 GHz.



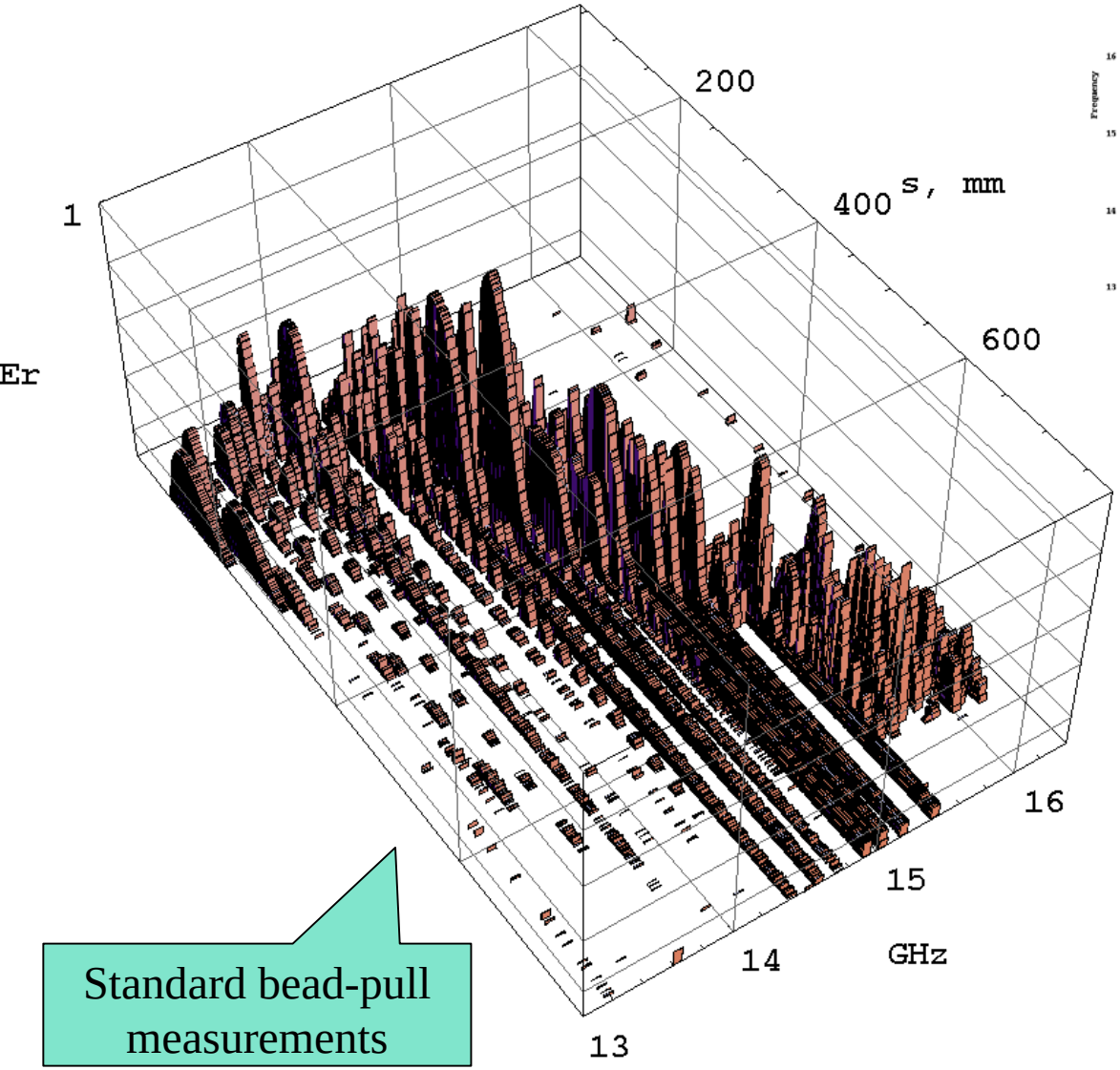
FXE output coupler. S11 in 1st dipole band. Reflection from SiC, absorber less than from waveguide HOM extractor.

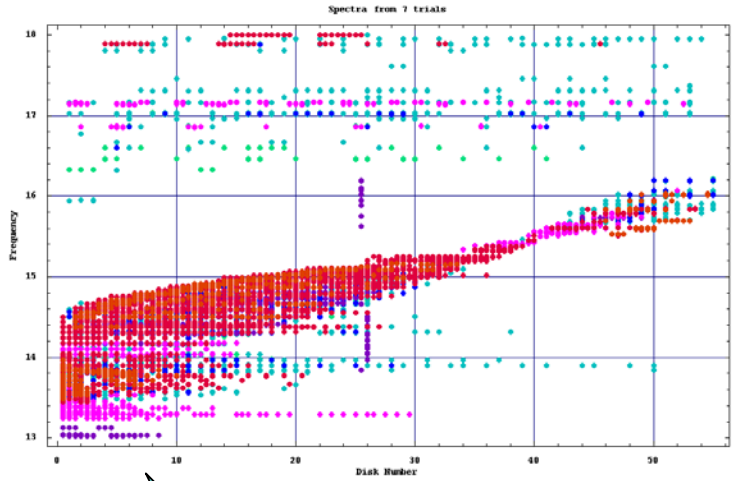


Agenda item #4

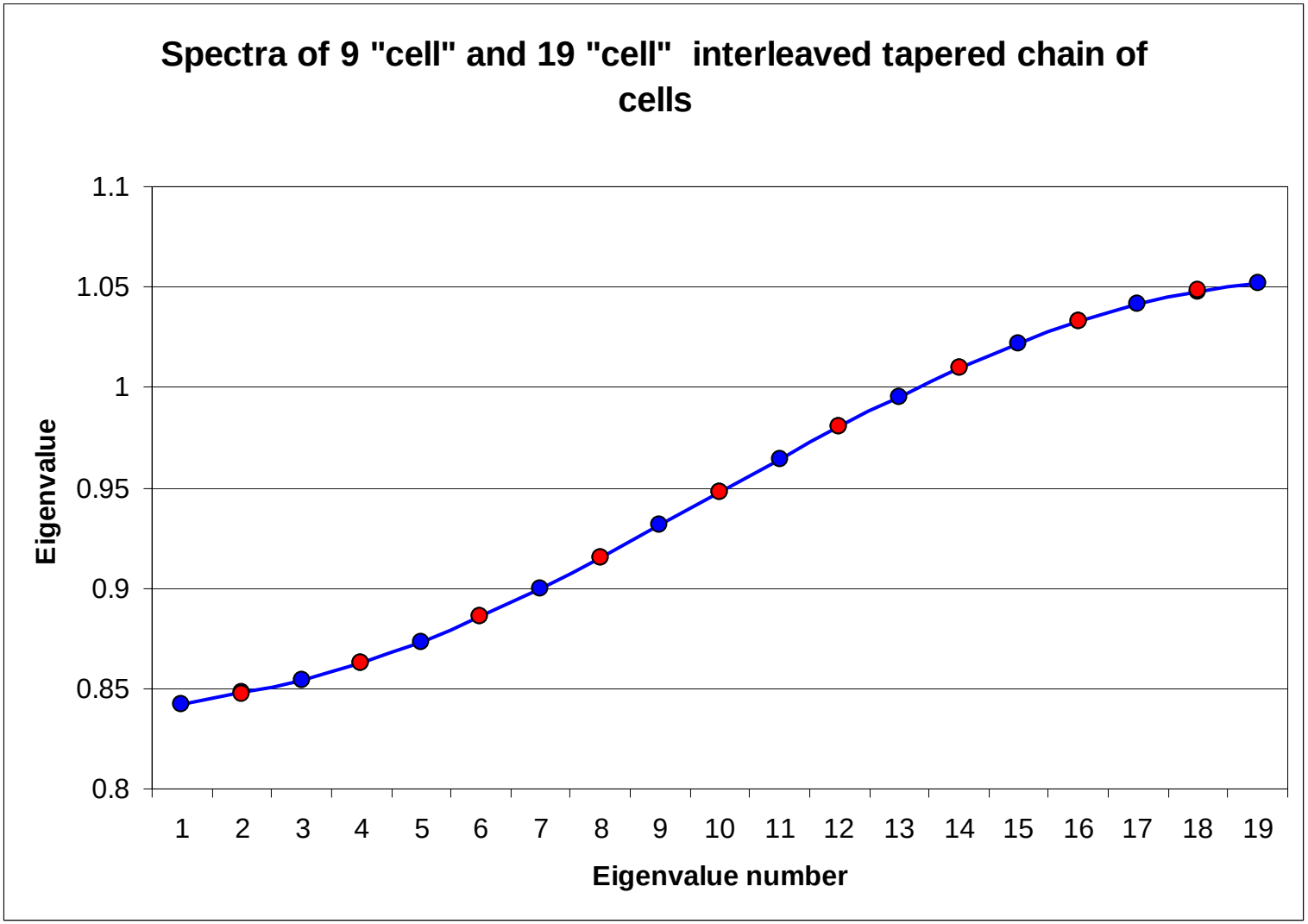
- Standard bead-pull measurements of HOM in FXC-001 (Gennady)

HOM in FXC-001





"Spectral" bead-pull measurements

Standard bead-pull measurements

Seven disk stack. It is right thing to do.