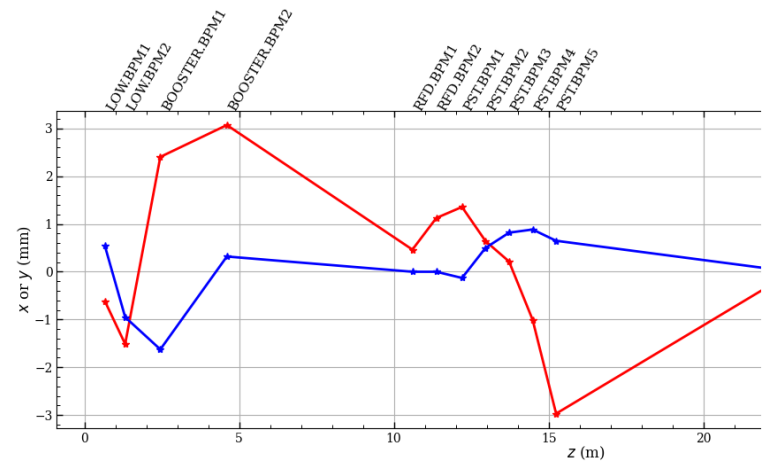
Results of the Trajectory studies

KW49-50

- Achievements:
  - Aligning algorithm works correctly
  - Steering free algorithm works correctly
  - Added possibility to save&restore magnets settings to the trajectory tool

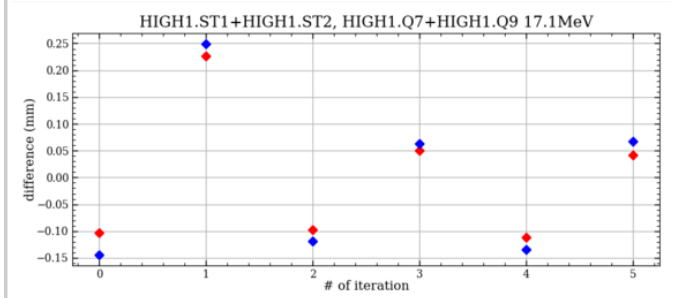


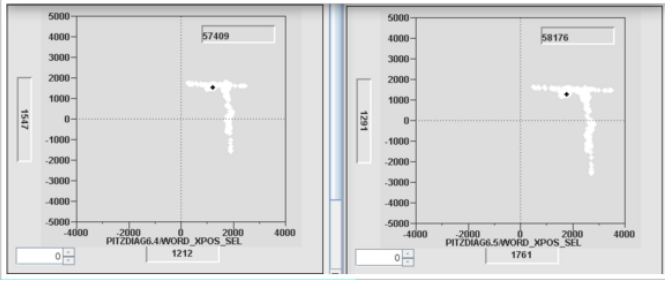
- Challenges:
  - Beam alignment can not be done without the change of the LOW section steerers
  - The same for the steering free idea
  - 07.12 and 08.12 most of the time worked without booster → too many spark ILs
  - Every time one has to adjust timings of BPMs
  - Strange trajectory bump in PST section

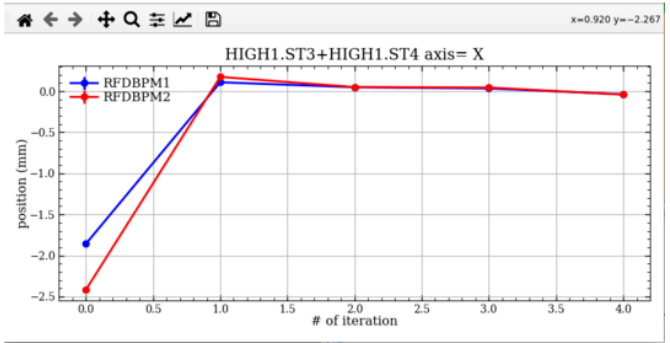
- Possible improvements:
  - Add solenoid and dipoles to the trajectory tool. Fix issue with broken degaussing flags
  - Mapping of the booster to know its response for the different beam positions/angle

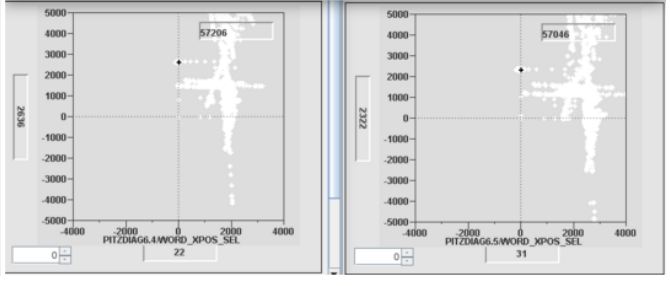
Results of the Trajectory studies

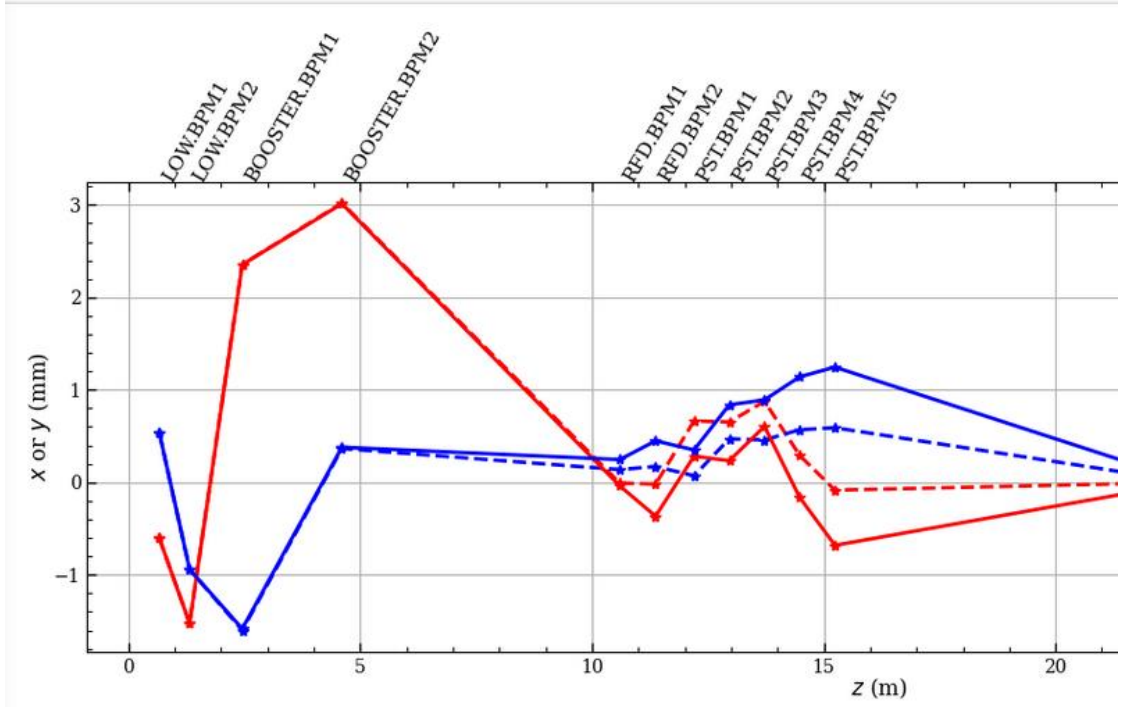
KW49-50

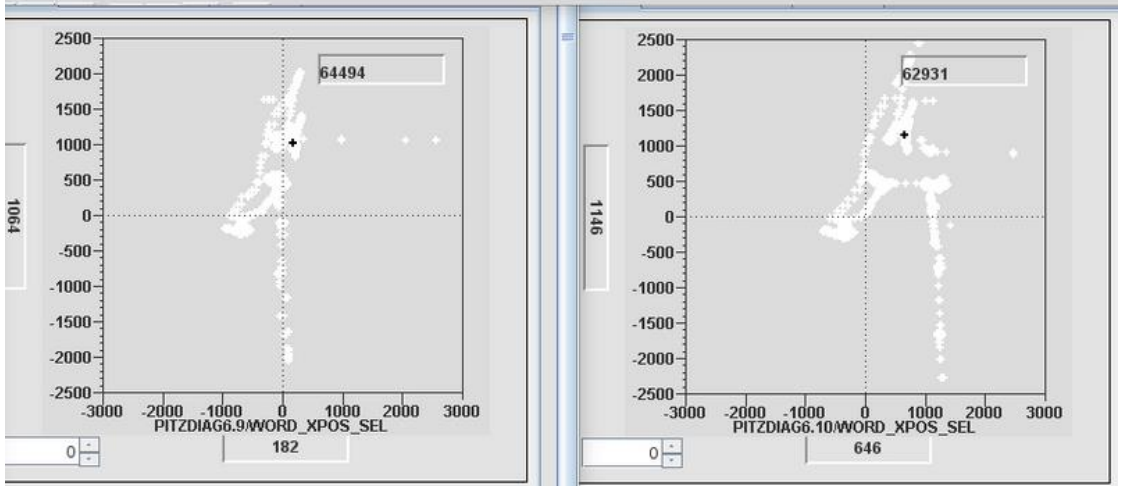












HIGH1.Q6 0A --> 1.330A
HIGH1.Q7 0A --> -1.10A