



- relative positions measured by beam-halo tracks
- - - relative positions measured by photogrammetry (PG)
- relative positions measured by hardware system
- chamber position
- ⊙ frame position

Fits can be performed at the ring level, the disk level, or the whole endcap (using transfer line data) by changing settings in the configuration file.

Hardware alignment input can come from a CSCAlignmentRcd, converted by us into constraints in the configuration file with a script. Weight in combined fit is determined by measurement uncertainties.