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<pre> import socket import time import datetime  # My library import Morning  def time_now():     strtime=datetime.datetime.now().strftime( "%H:%M:%S" )     return strtime  def date_now():     strtime=datetime.datetime.now().strftime( "%Y%m%d-%H%M" )     return strtime  if __name__=="__main__":     mng=Morning.Morning( "/" )      # Beam position log     bplogname="/isilon/BL32XU/BLsoft/Logs/beam.log"     bplog=open(bplogname,"aw")      # Morning log file     tstr=datetime.datetime.now().strftime( "%Y-%m-%d-%H%M" )     fname="MT_%s.dat"%tstr     logf=open(fname,"w")      # FLAGS (All flags should be true)     # ALL True     DTTUNE=NEEDLE_X=NEEDLE_ZZ=COAX_Z=TUNE_ZZ=EVACUATE_NEEDLE=True     PREP_BC=WAIT=STYTUNE=COLLISCAN=True      # Each     DTTUNE=False     NEEDLE_X=False     NEEDLE_ZZ=False     COAX_Z=False     TUNE_ZZ=False     #EVACUATE_NEEDLE=False     #PREP_BC=False     #WAIT=False     #STYTUNE=False     #COLLISCAN=False      if DTTUNE==True:         # dtune         mng.changeE(12.3984)         dtune_fwhm,dtune_center=mng.dttunePeak()         logf.write( "%10s %10s %8.2f %8.2f\n"%(time_now(), "DTTUNE", dtune_fwh m,dtune_center))         logf.flush()      if NEEDLE_X==True:         # Needle X-ray center         mng.prepScan()         cx,cy,cz=mng.needleXcenter()         logf.write( "%10s %10s Gonio-Enc(XYZ)=%10.4f%10.4f%10.4f\n"%(time_now(), "N-XCEN",cx,cy,cz))         logf.flush()      if NEEDLE_ZZ==True:         # Needle ZZ X-ray center </pre>		

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<pre> curr_zz,fin_zz=mng.scanZZneedleX() d_zz=0.5*(fin_zz-curr_zz) #[um] logf.write( "%10s %10s %10d%10d Diff=%10.4f[um]\n"%(time_now(), "ZZ- ,curr_zz,fin_zz,d_zz)) logf.flush()  if COAX_Z==True:     # Coax Z center with needle capture     ini_coz,fin_coz=mng.tuneCoaxZ(2)     d_coz=0.5*(fin_coz-ini_coz) #[um]     logf.write( "%10s %10s %10d%10d Diff=%10.4f[um]\n"%(time_now(), "Coax ,ini_coz,fin_coz,d_coz))  if TUNE_ZZ==True and NEEDLE_ZZ==True:     # ZZ center &amp; Coax Z center difference     diff=d_coz-d_zz     logf.write( "Difference of movement of ZZ &amp; CoaxZ = %10.4f[um] (from coax Z) iff)     logf.flush()  if EVACUATE_NEEDLE==True:     #####     # Evacuate needle     #####     sx,sy,sz=mng.evacNeedle(15)  if PREP_BC==True:     # Scintillator set position     mng.prepBC()     # Attenuator 1000um for 12.3984 keV 0.1 mm TCS apert     mng.setAtt(1000)  if WAIT==True:     #####     # Wait for 180 sec     #####     print "Waiting for thermal equilibrium of scintillator stage"     time.sleep(60.0)  if STYTUNE==True:     # Open shutter     mng.prepScan()      # ST-Y tune     sty_curr,sty_tuned=mng.stageYtuneCapture()     d_sty=(sty_tuned-sty_curr)*1000.0 #[um]     logf.write( "%10s %10s PREV=%9.4f CURR=%9.4f Diff=%10.4f[um]\n"%(time ), "St-y", sty_curr, sty_tuned, d_sty))     logf.flush()      #def doCapAna(self,prefix,avetime=10,nrepeat=1,thicktune=True)     picy,picz=mng.doCapAna( "morning",10,1,False)      mng.saveBP(picy,picz)     logf.write( "%10s %10s code (Y,Z) = (%5d,%5d)\n"%(time_now(), "BeamCen cy,picz))      logf.flush()      # Finish (remove beam monitor)     mng.finishBC()  if COLLISCAN==True: </pre>		

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# Collimator scan
logstr=mng.colliScan()
logf.write("%s"%logstr)
logf.flush()

# Finish tuning
mng.finishExposure()

# Gonio move
if EVACUATE_NEEDLE==True:
    #####
    # Return to the original position
    #####
    mng.moveXYZmm(sx,sy,sz)

# Making dynamic table & re-link bl41xu.conf to the newest one
#mng.makeDynamic()
#print "Dynamic table for BSS has been updated!"
#print "Remember to restart BSS!"
#print "Remember to remove the tune-needle!"

mng.allFin()
logf.close()
```