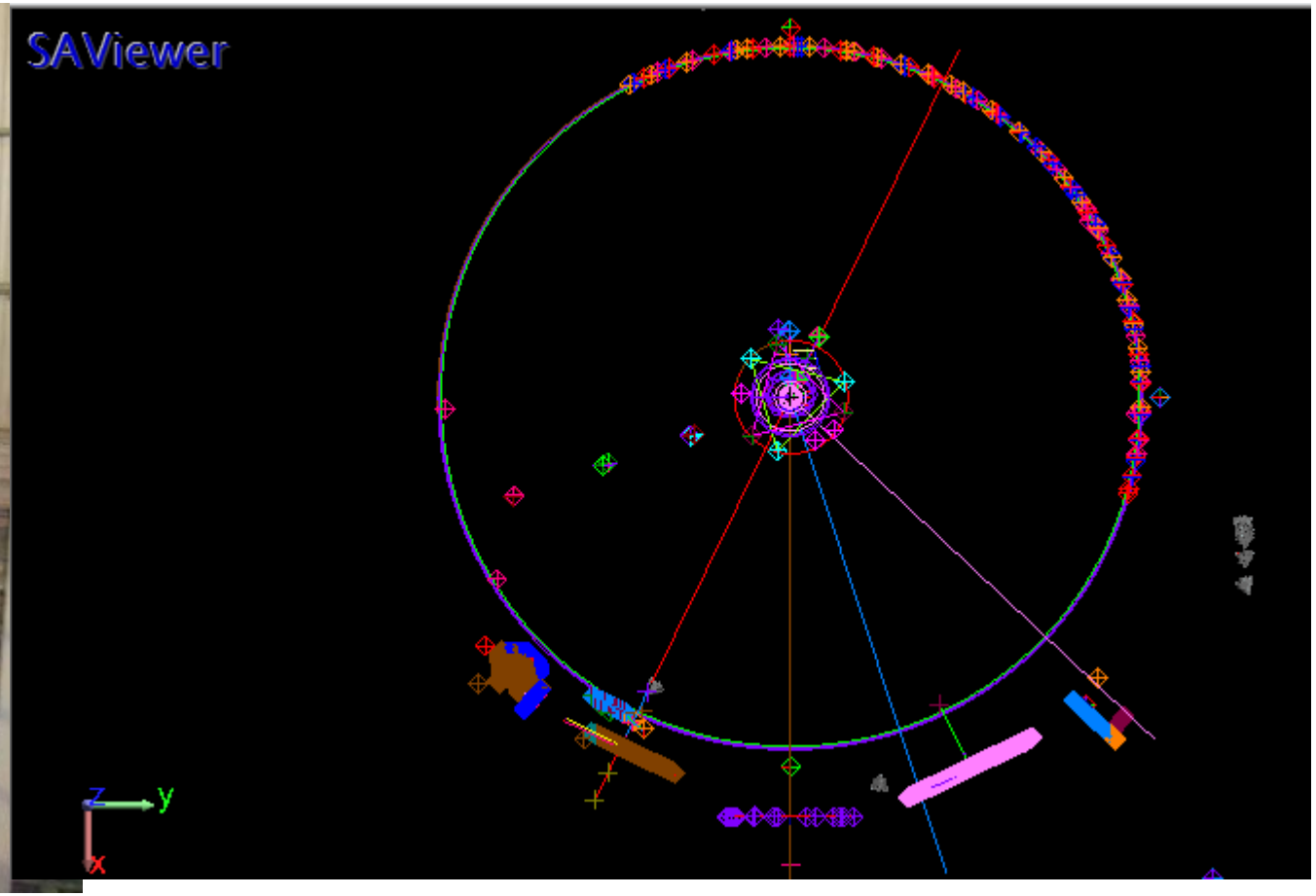
Setup of laser tracker on DX side



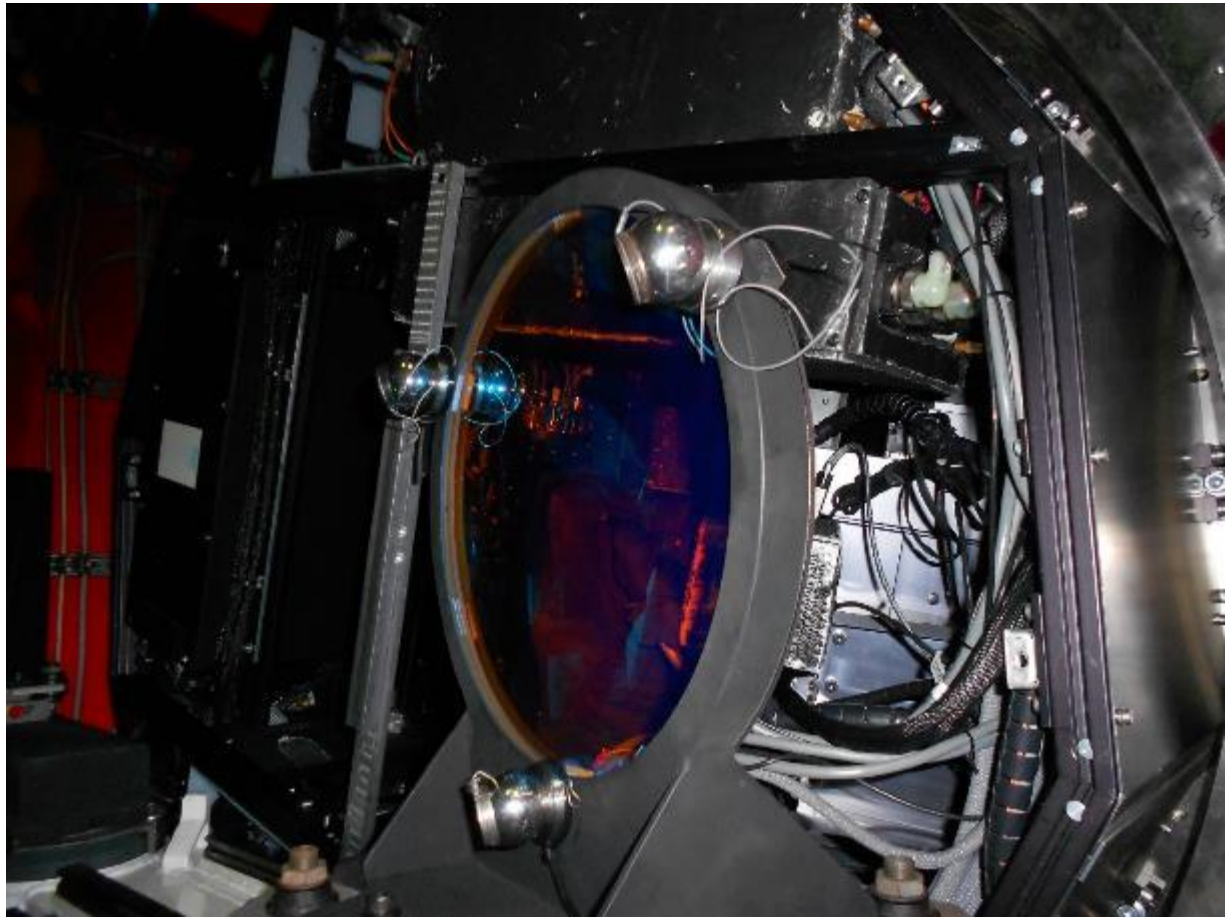
NOTE:

- X axis along M1s centers, towards SX
- Z axis along M1-M2 centers, towards M2

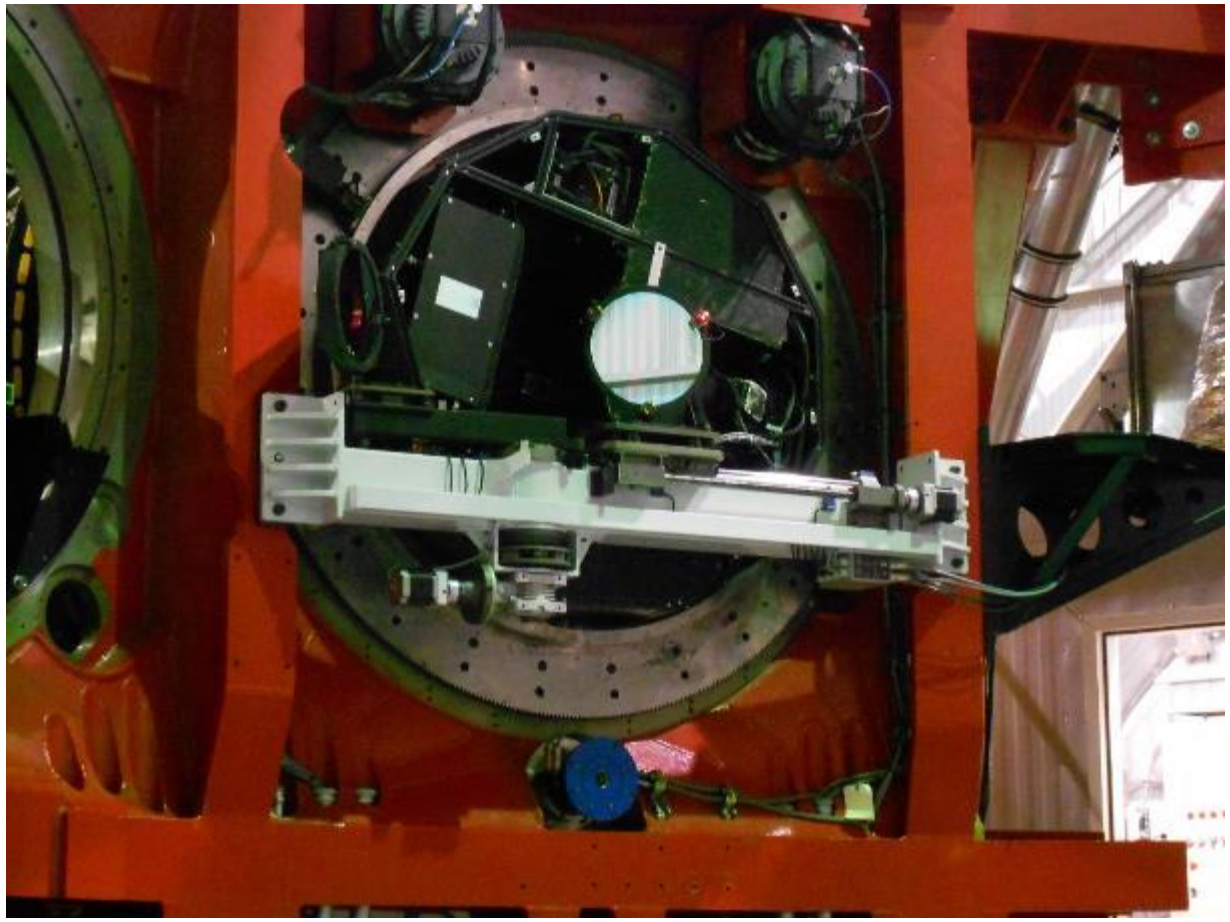
Taking right front bend gregorian rotator as reference

Corner cube and nest glued to rotator flange.
Rotator moved and circle fitted to identifiy the axis.

Nest and optic installed on dichroic mount



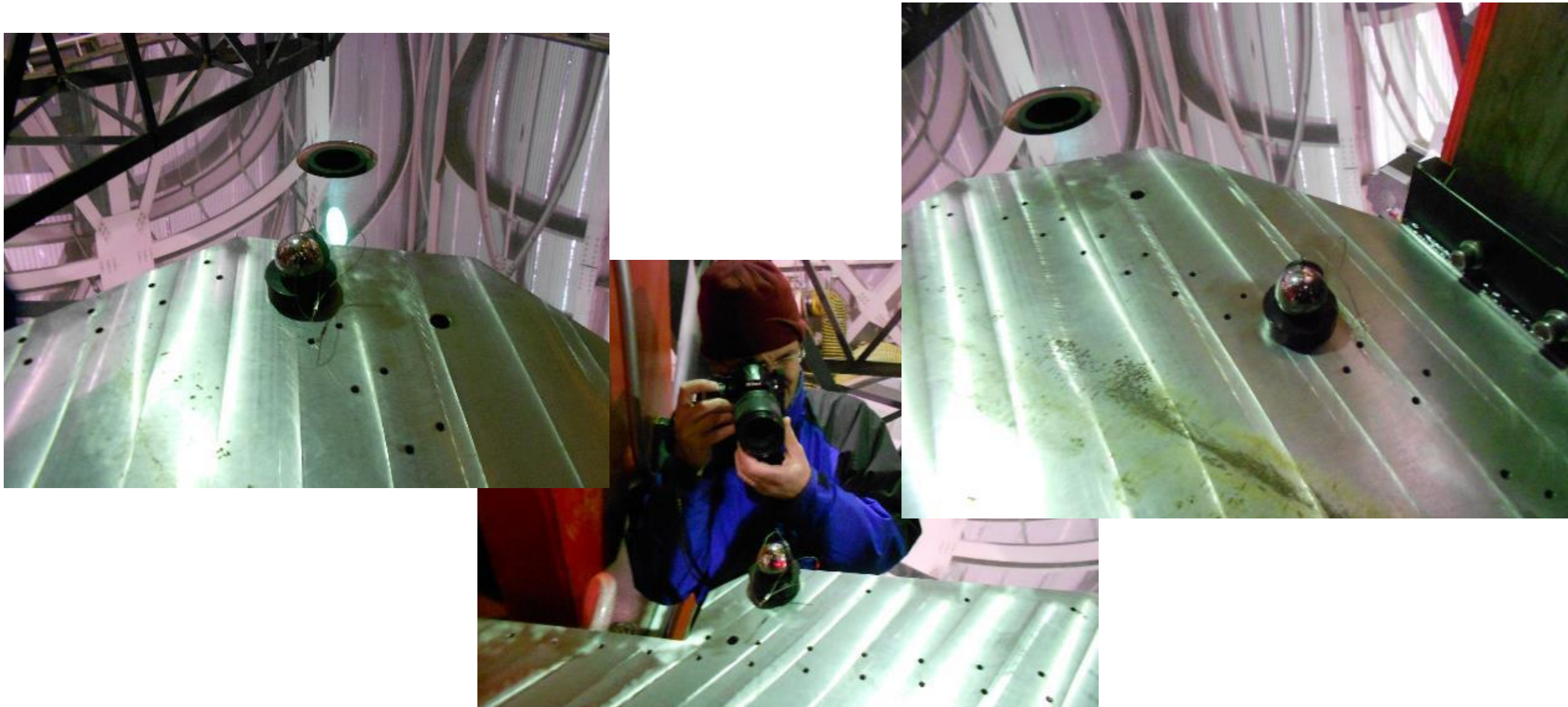
Measurements in the parked and working position



Final error on dichroic tilt: -0,0046deg (wrt 15deg)
Final error on dichroic tip: 0,0051deg

Dichroic center offset wrt rotator axis: [0,0,-1]mm

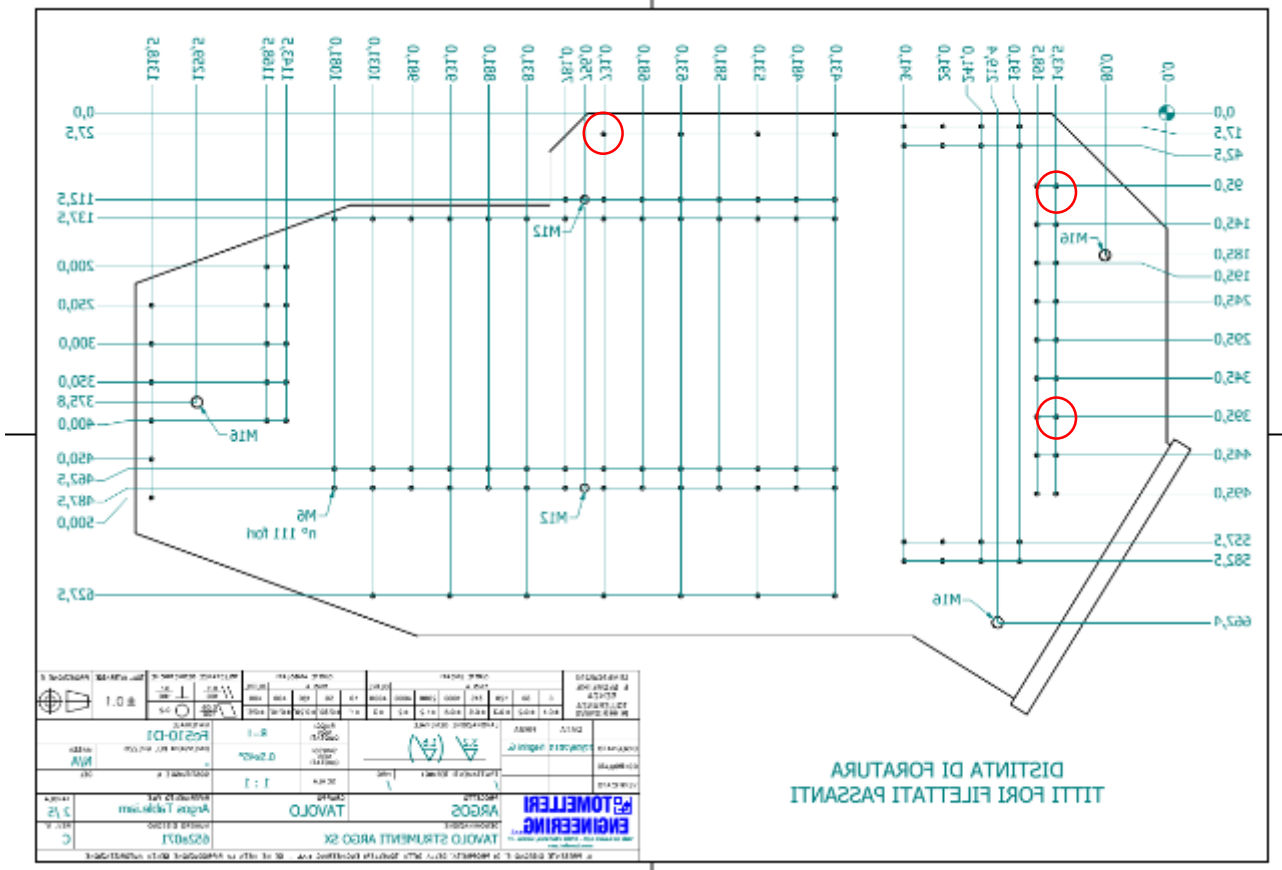
3 M6 holes position measured on DX table



Position of the M6 holes on DX table (to be compared with Matthias model)

P2: [-1217.5, -1618.0]

Table plane after repositioning to the end of the slot is 147mm below rotator axis (nominal 150mm)



P1: [-1077.2, -1043.6]

P3: [-780.5, -1079.0]

Reference: intersection point between the rotator axis and the rotator flange

Position of the M6 holes on SX table (to be compared with Matthias model)

P2: [1232.4, -1633.3]

P1: [1092.9, -1059.8]

P3: [794.8, -1095.3]

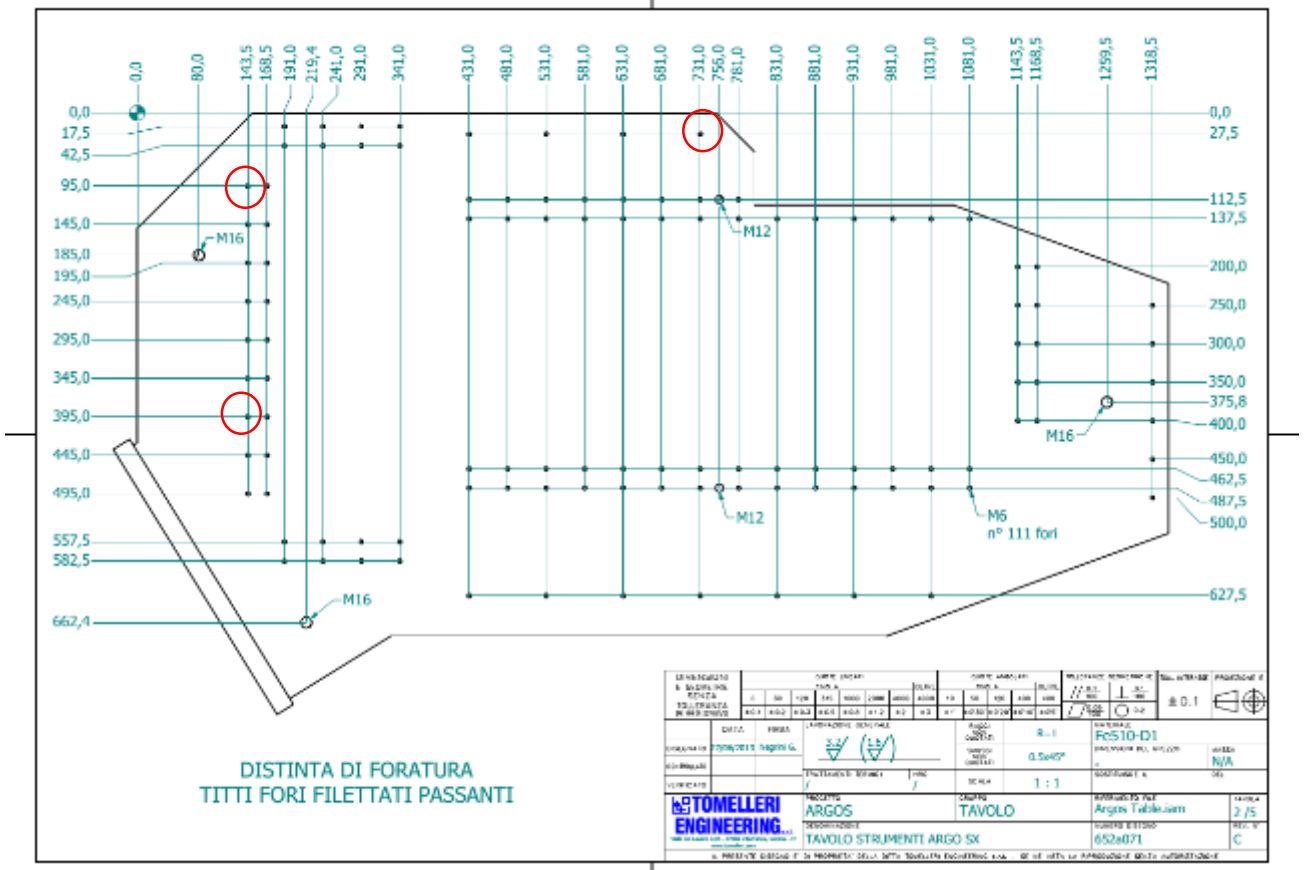
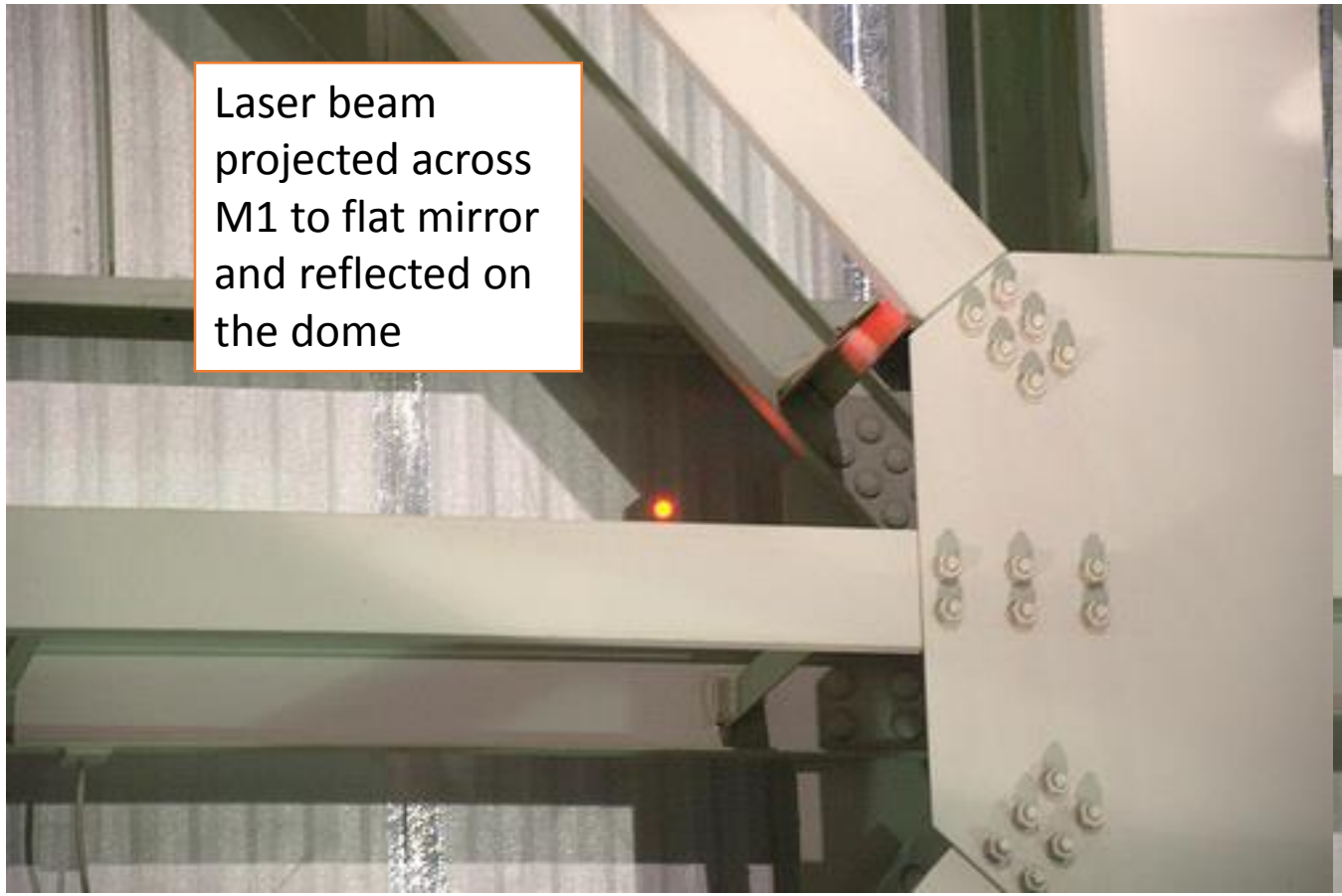


Table plane is 153mm below rotator axis (nominal 150mm)
-> To be repositioned: actually is at the end of the slot.

Reference: intersection point between the rotator axis and the rotator flange

Rotator axis visualization on DX table: flat mirror installed on front of AGW

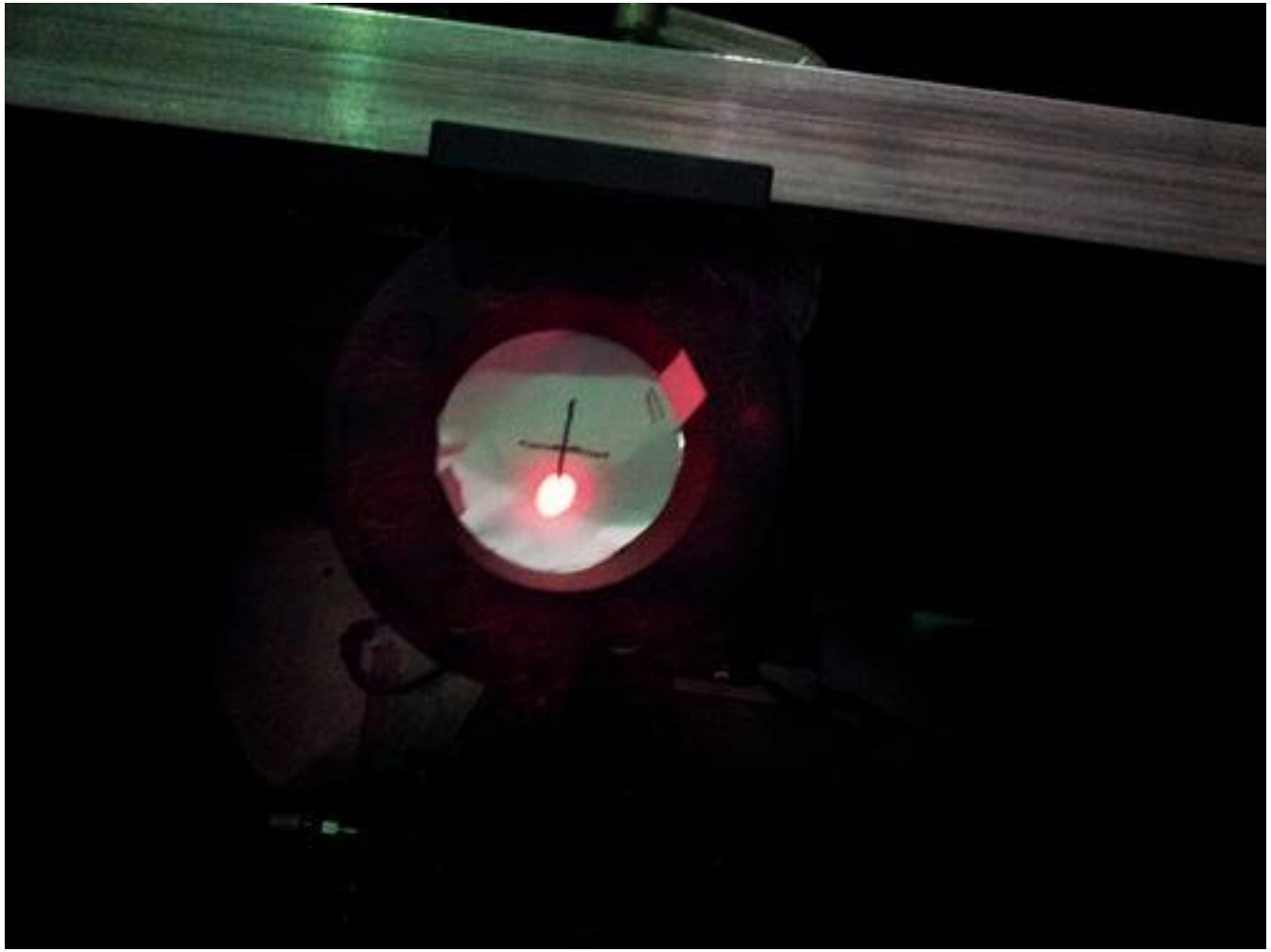
Rotator axis visualization on DX table: flat mirror aligned perpedicular to rotator axis



0deg rotator angle

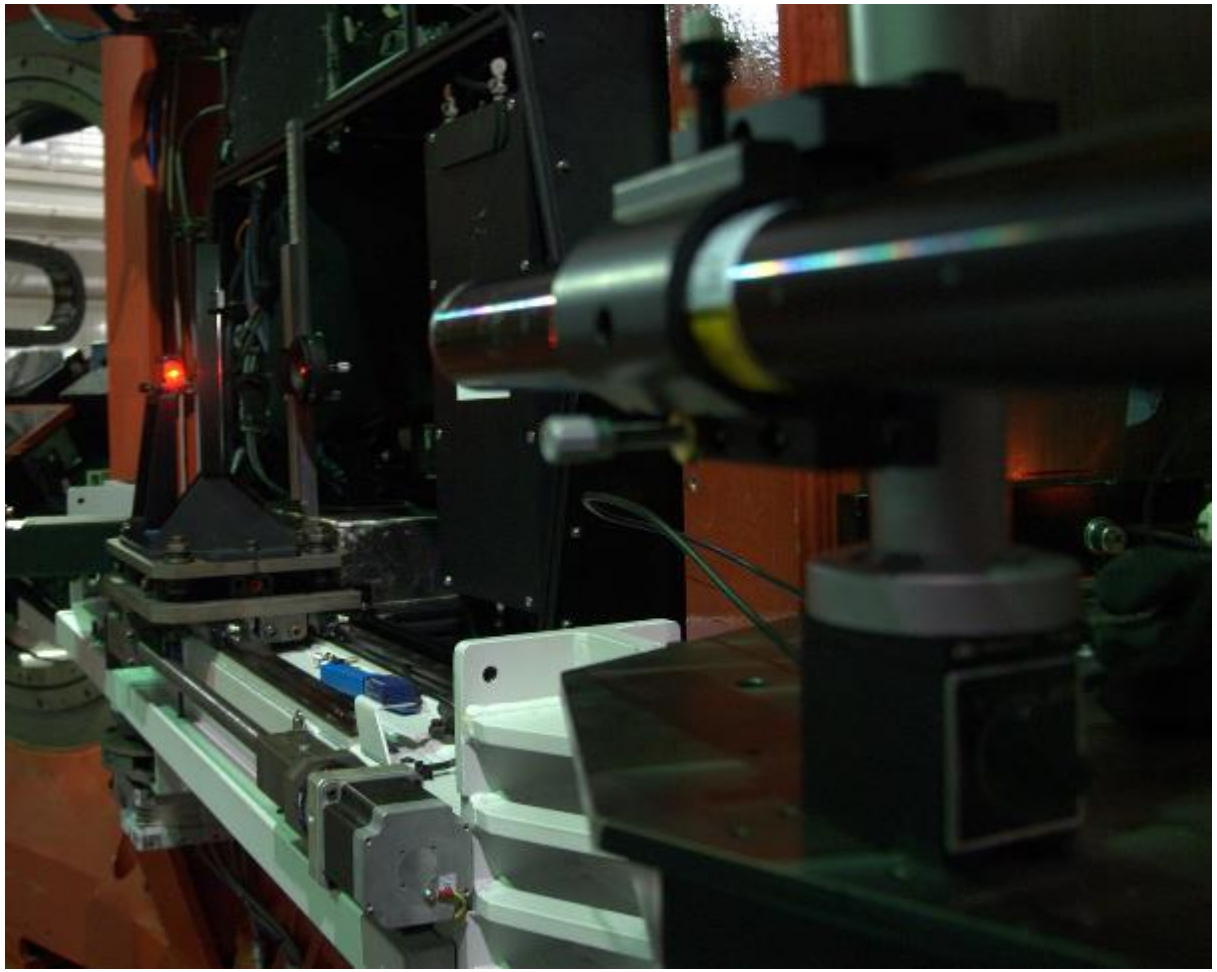
180deg rotator angle

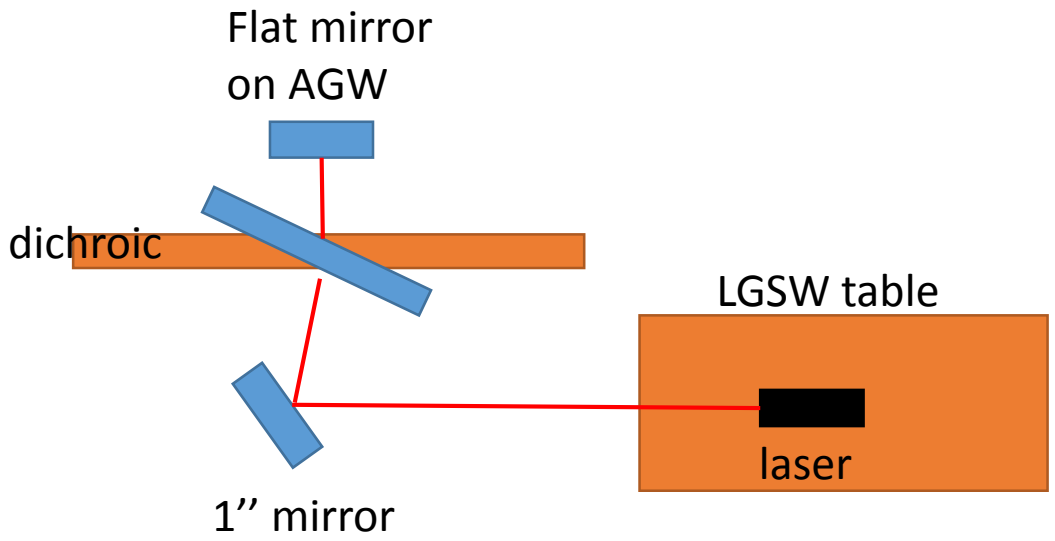
Rotator axis visualization on DX table: rotator axis visualized on the flat mirror



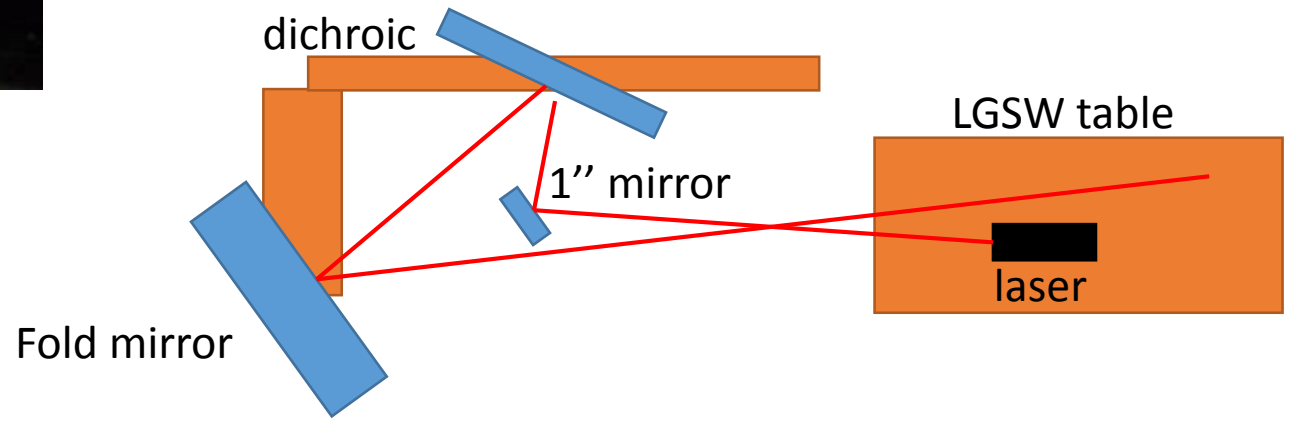
Laser beam projected across M1 and position marked at 0, 90, 180, 270deg of rotator angle
Center of 4 spots is the rotator axis (center of the cross)

Rotator axis visualization on DX table: laser beam projected from table and autocollimated through dichroic

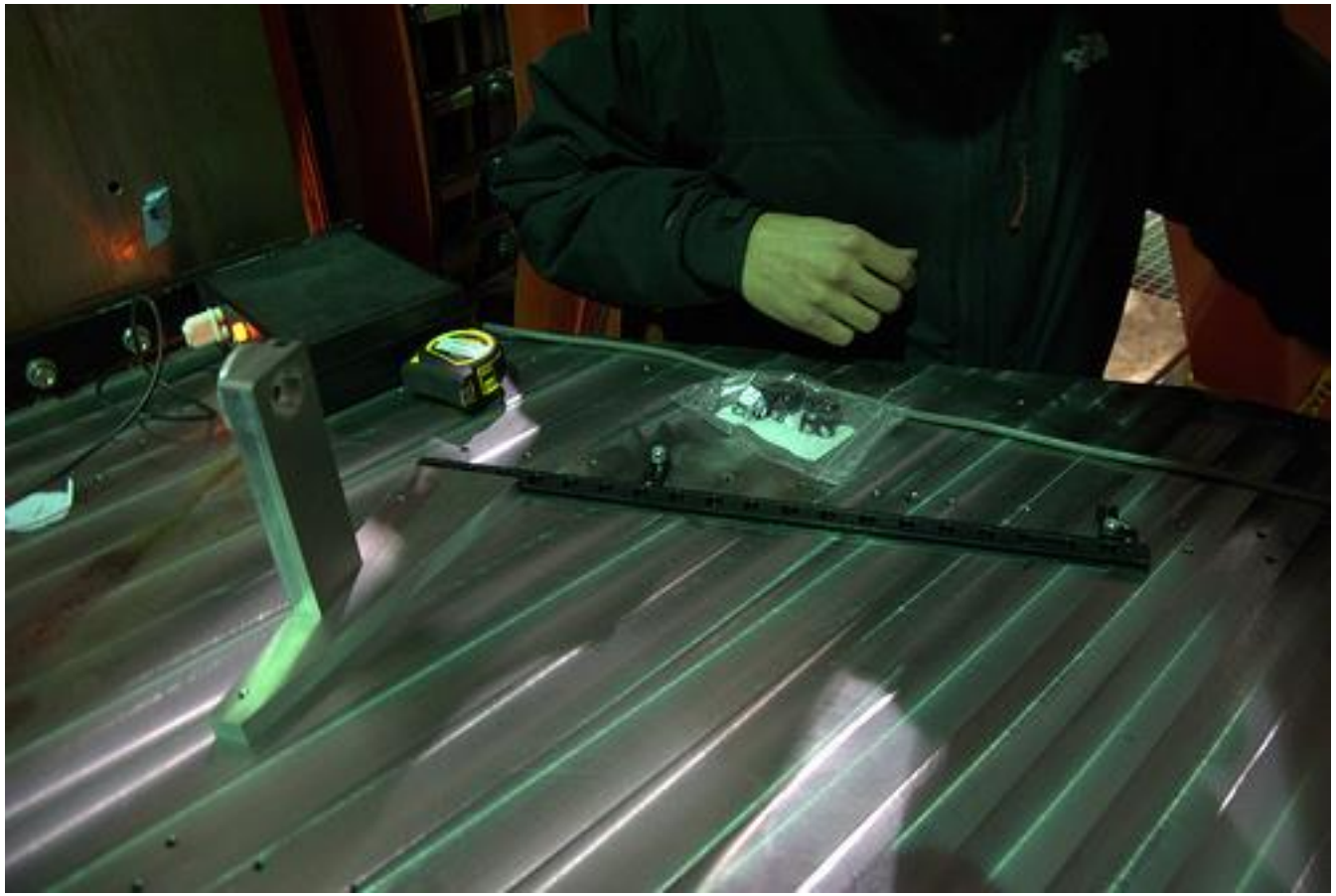




Rotator axis visualization on DX table: laser beam reflected by dichroic and fold mirror on DX table



References installed for LGSW positioning



To be done: set beam height to 150mm tilting dichroic and fold mirror