



# Geometrical Measurements

HCQCXFC010-CR000001 / LMCXF01

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MAB meeting 03/02/2025

# CP HCQCXFC010-CR000001

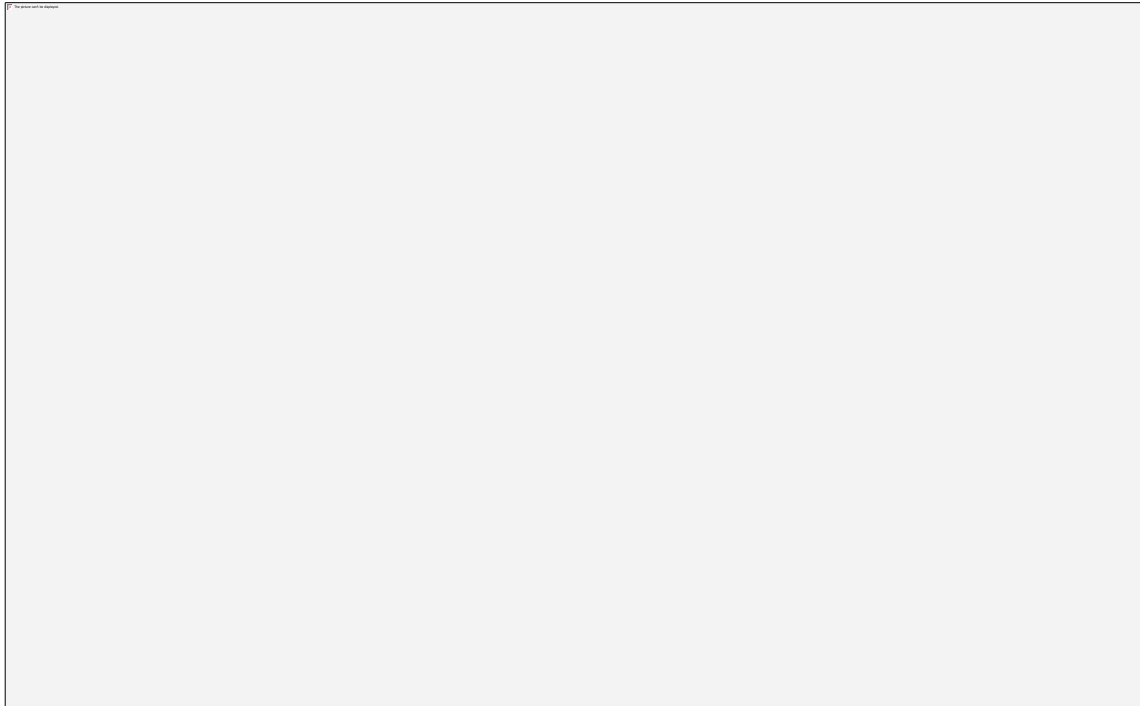
- Measurements @ construction
- Fiducialisation
- Magnetic vs. mechanical axis
- Conclusion

# CP HCQCXFC010-CR000001

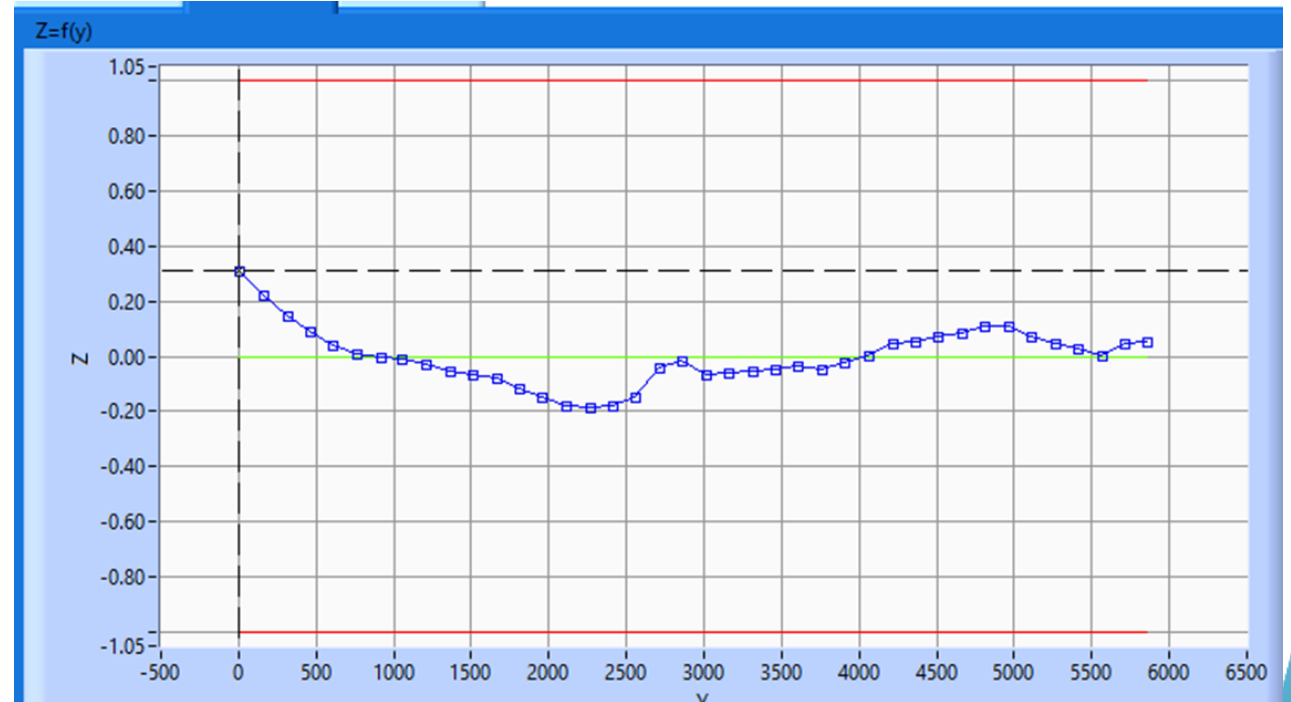
Measurements @ 180

Attention to traveller graphs from construction (conventions)

Horizontal Shape



Vertical Shape

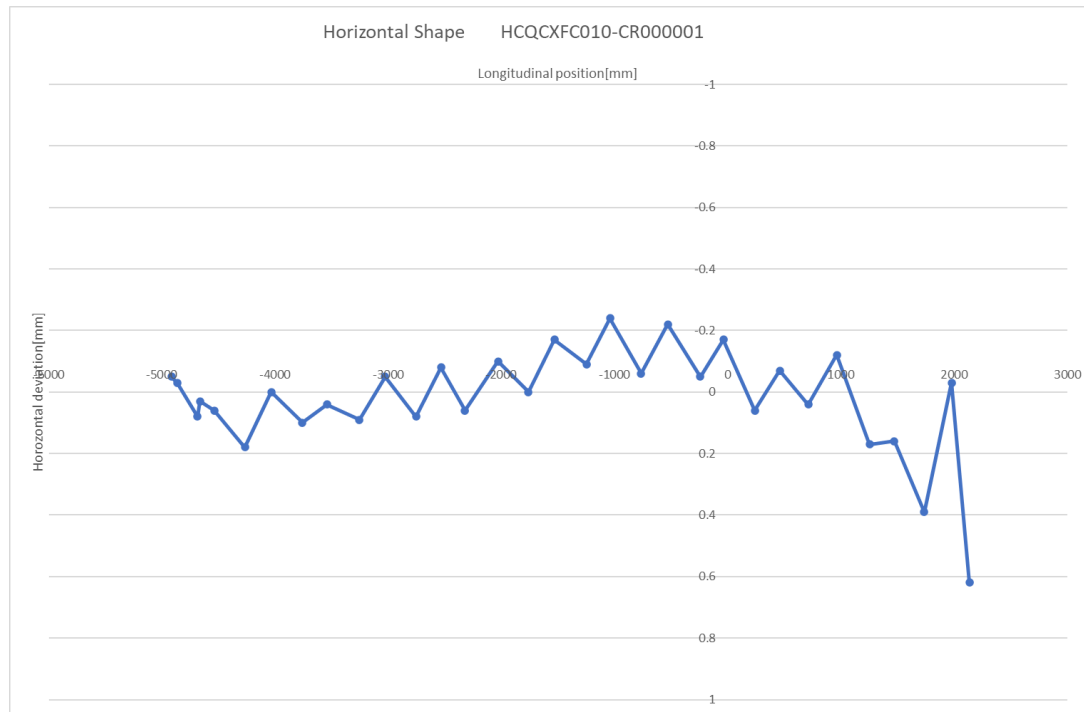


seen from CS to NCS side  
**(IP-side to NIP-side)**

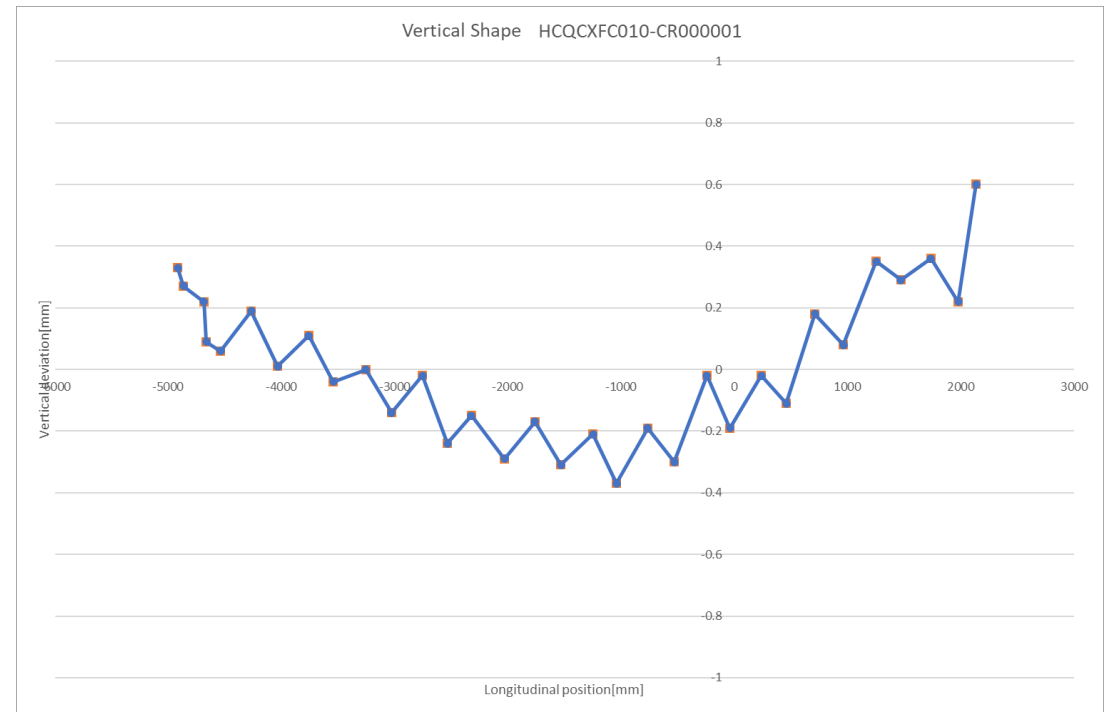
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Measurements @ Fiducialisation

## Horizontal Shape



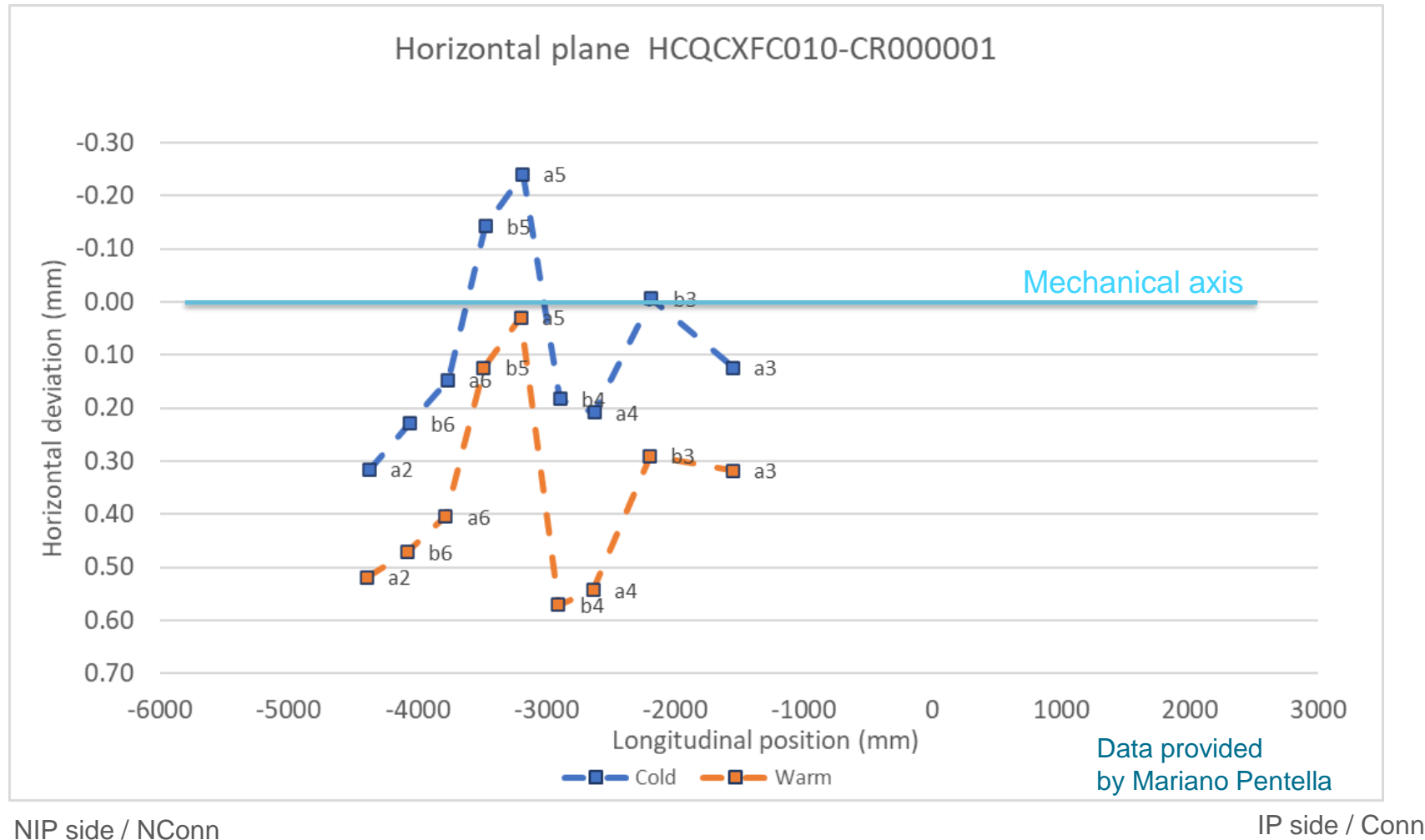
## Vertical Shape



Seen from NIP-side to IP-side

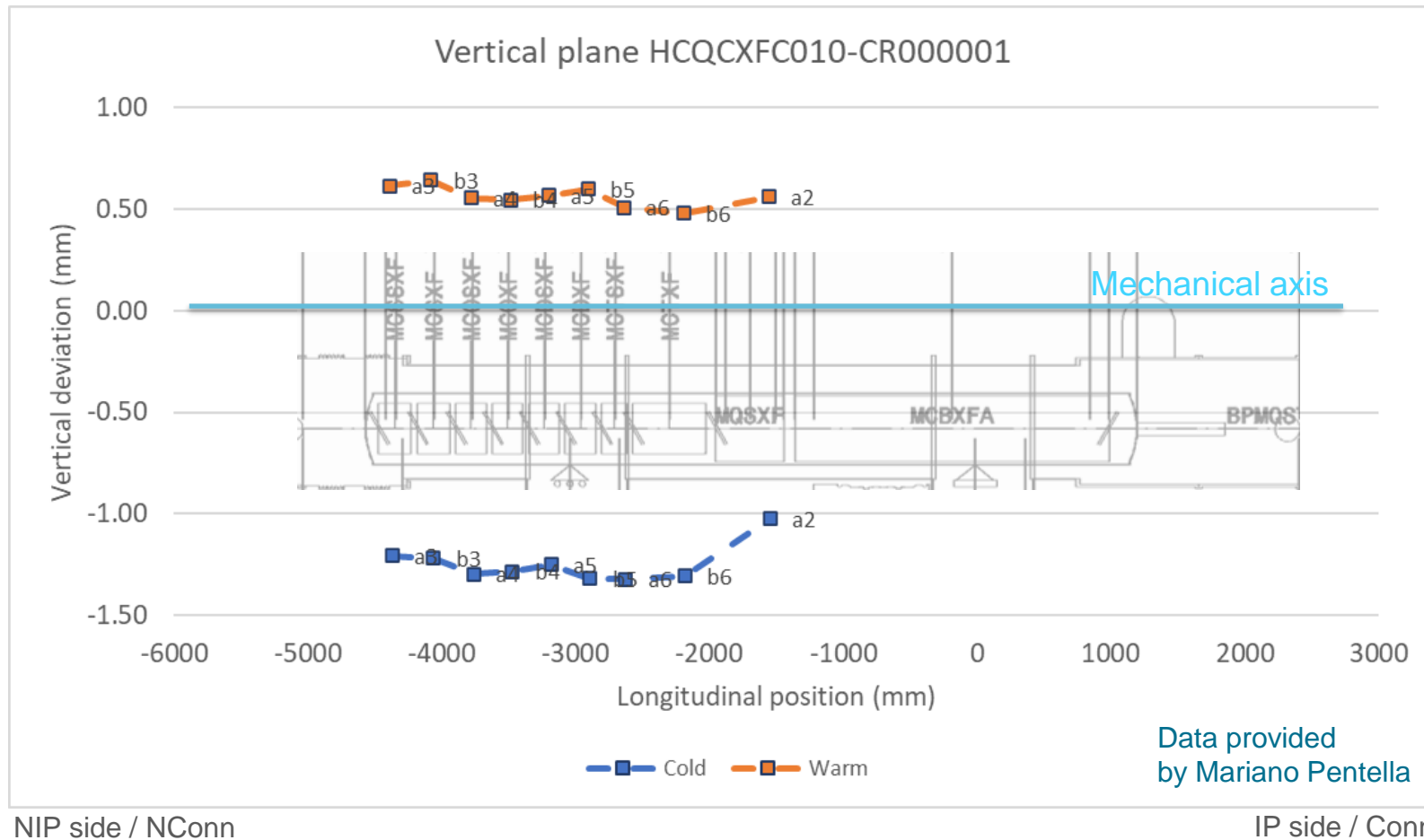
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## Magnetic measurements



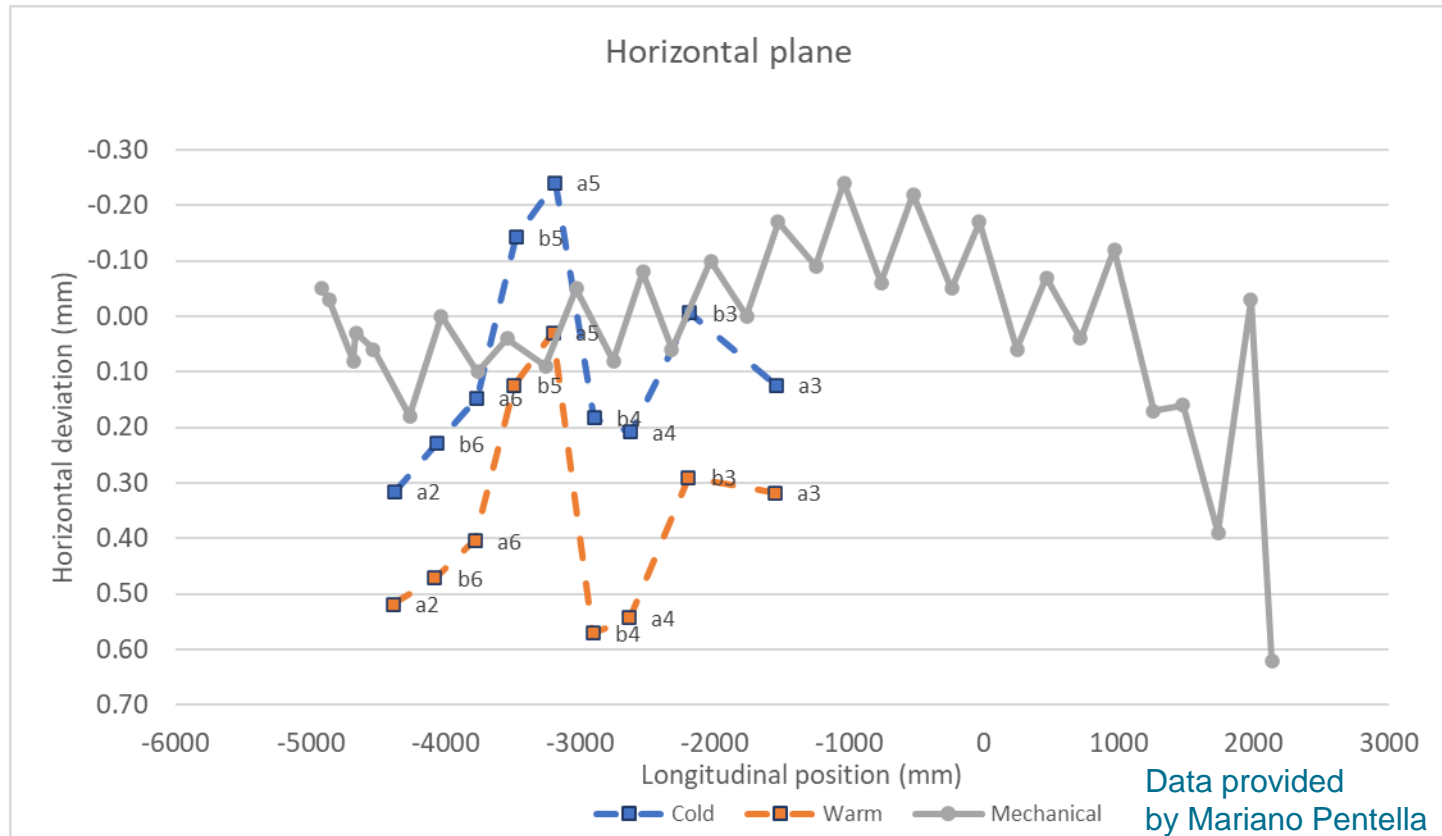
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## Magnetic measurements



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## Combined Horizontal Profile

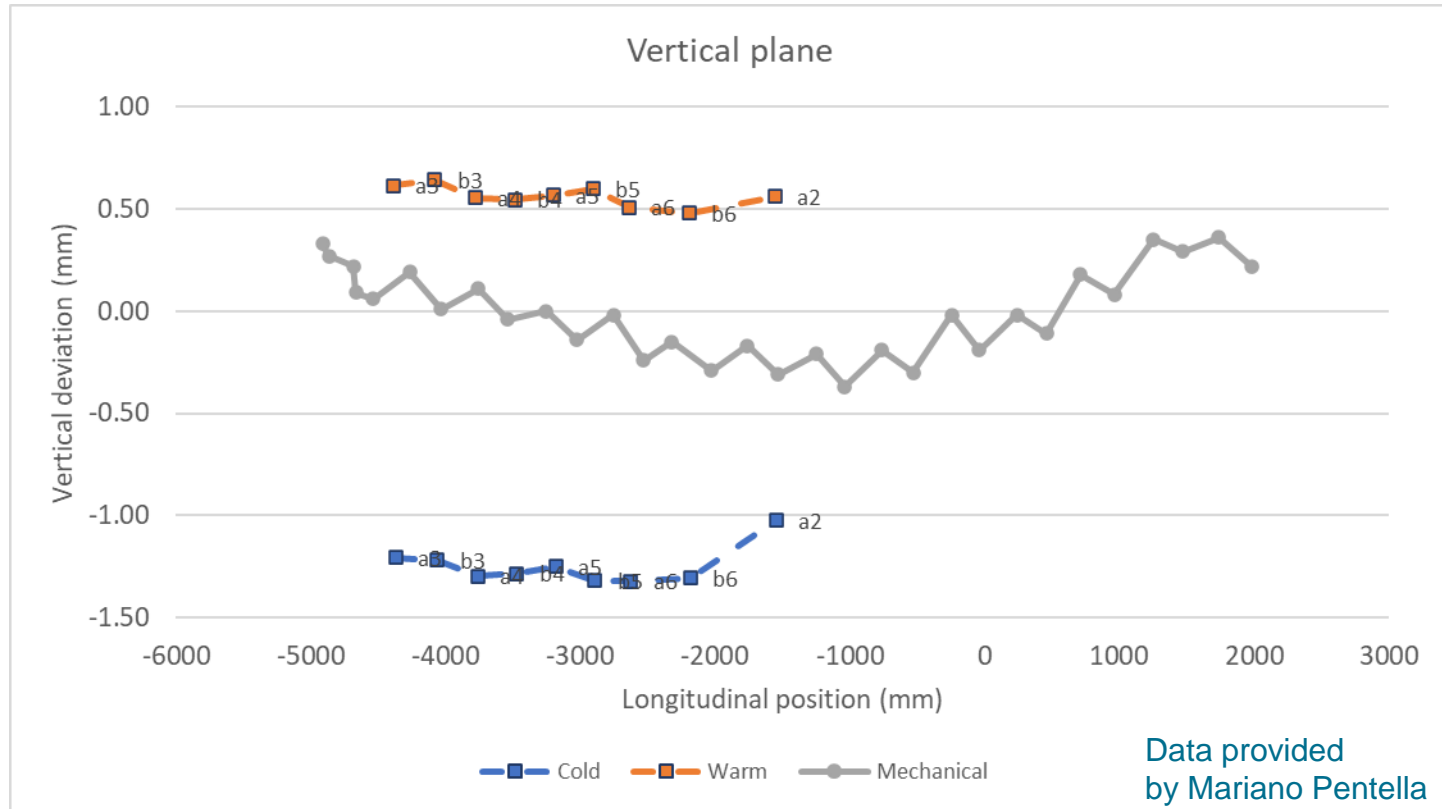


NIP side / NConn

IP side / Conn

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## Combined Vertical Profile



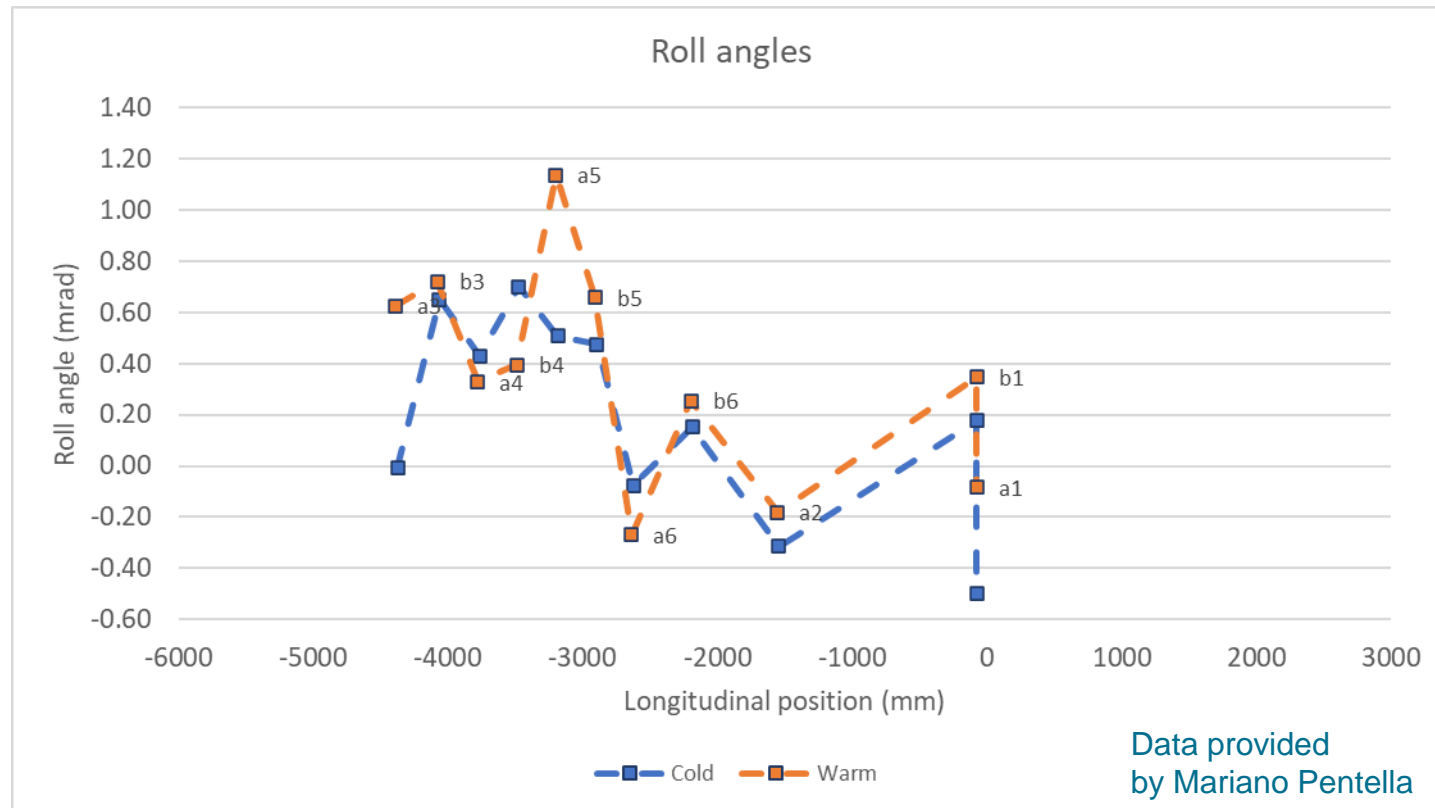
NIP side / NConn

IP side / Conn



# CP HCQCXFC010-CR000001

Measured roll angles for all magnets



# General Feedback CP HCQCXFC010-CR000001

- Attention to traveller graphs from construction (conventions)
- No FSI, Cold warm correlation only from magnetic measurements
  - Derived from magnetic axis 1.5 to 1.7mm
- Full details are in the report: <https://edms.cern.ch/document/3230369/1>
  
- Cartography of all extremities done (some light NCs)
- BPM-Beamscreen extremities only in Phase 3 (not for String)