

Innovative track geometry data analysis for turnouts

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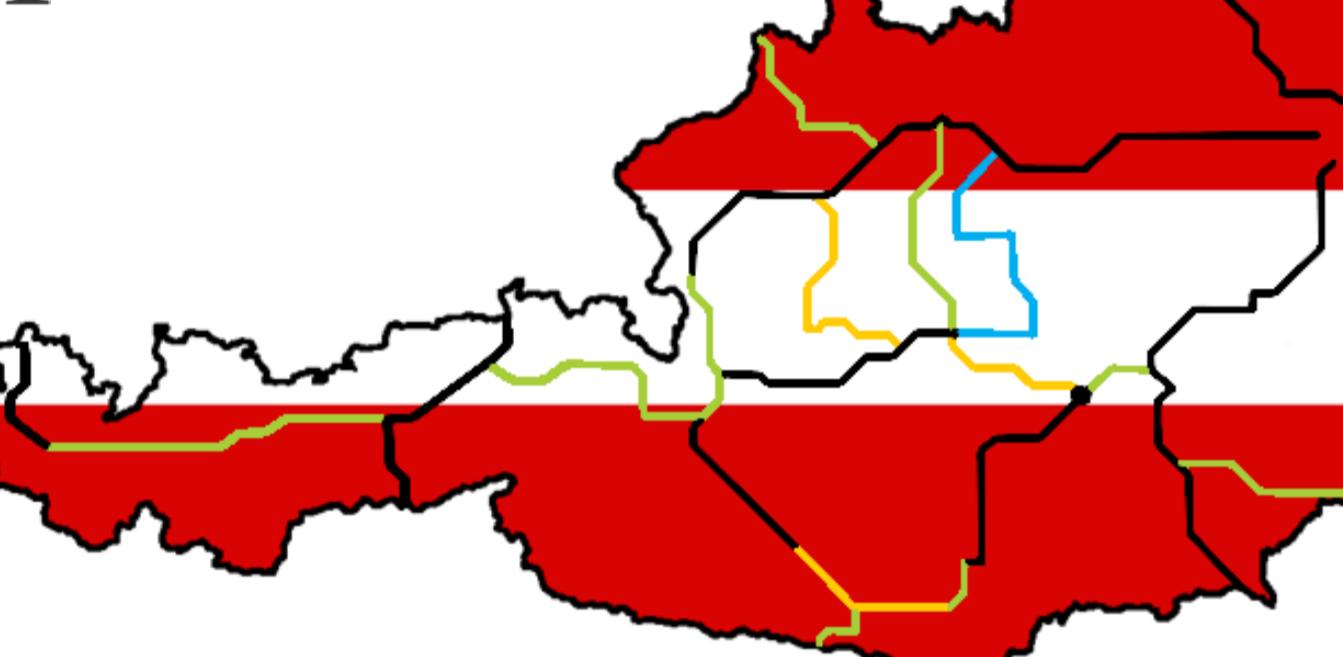
Track measurement car EM250 of the Austrian Federal Railways:

designed for the open track

3 – 4 times per year

core network

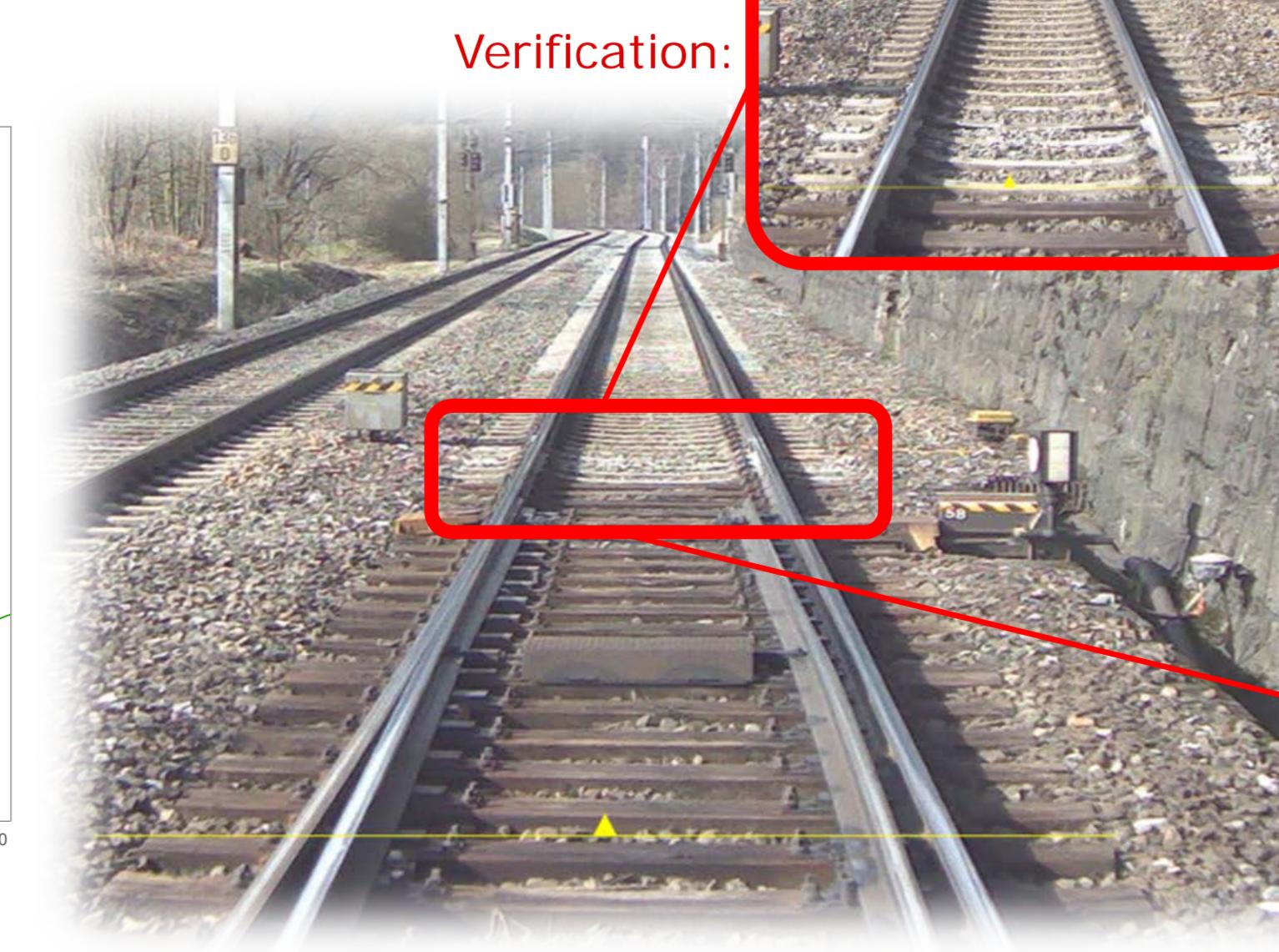
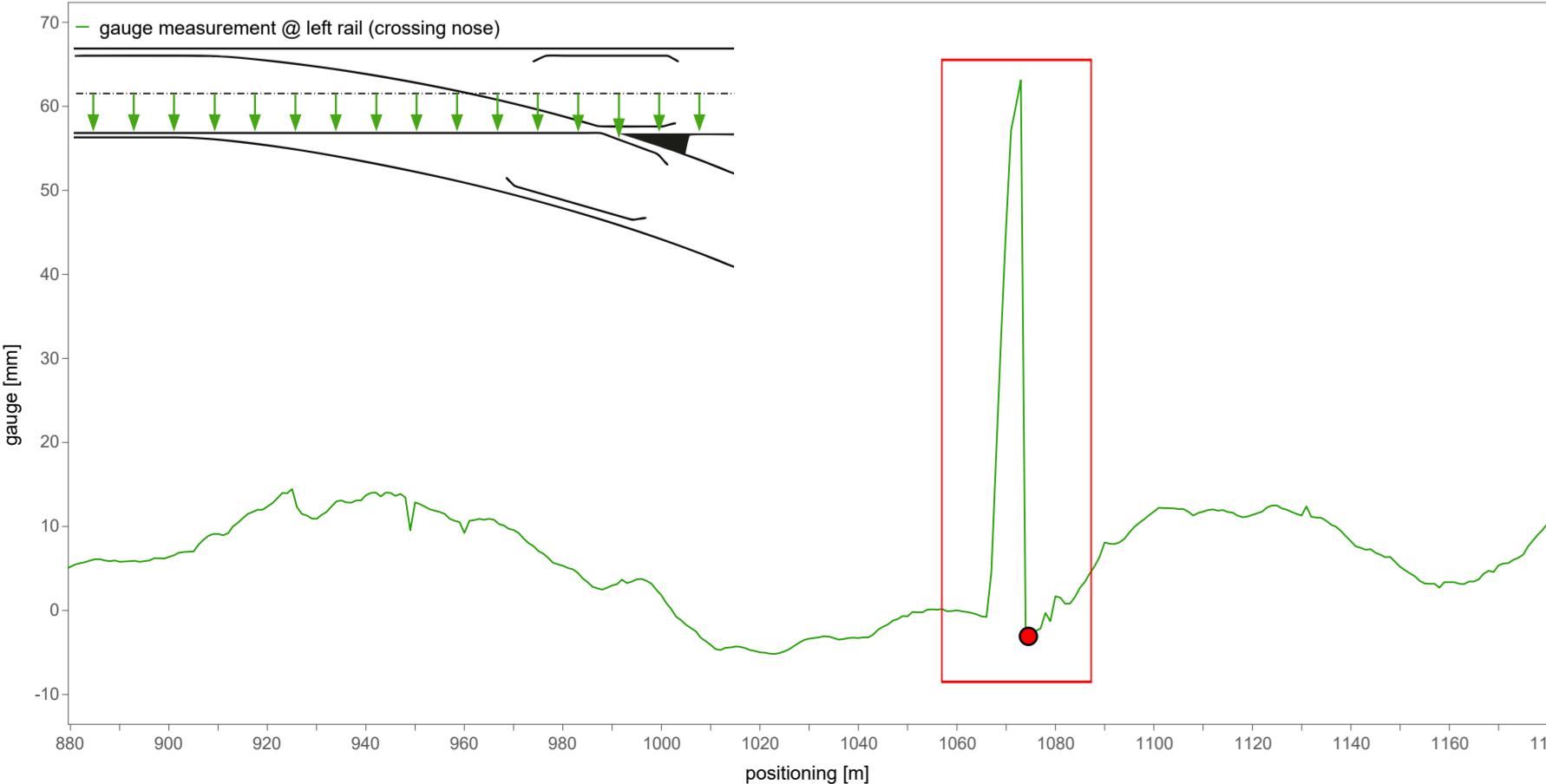
since 2001



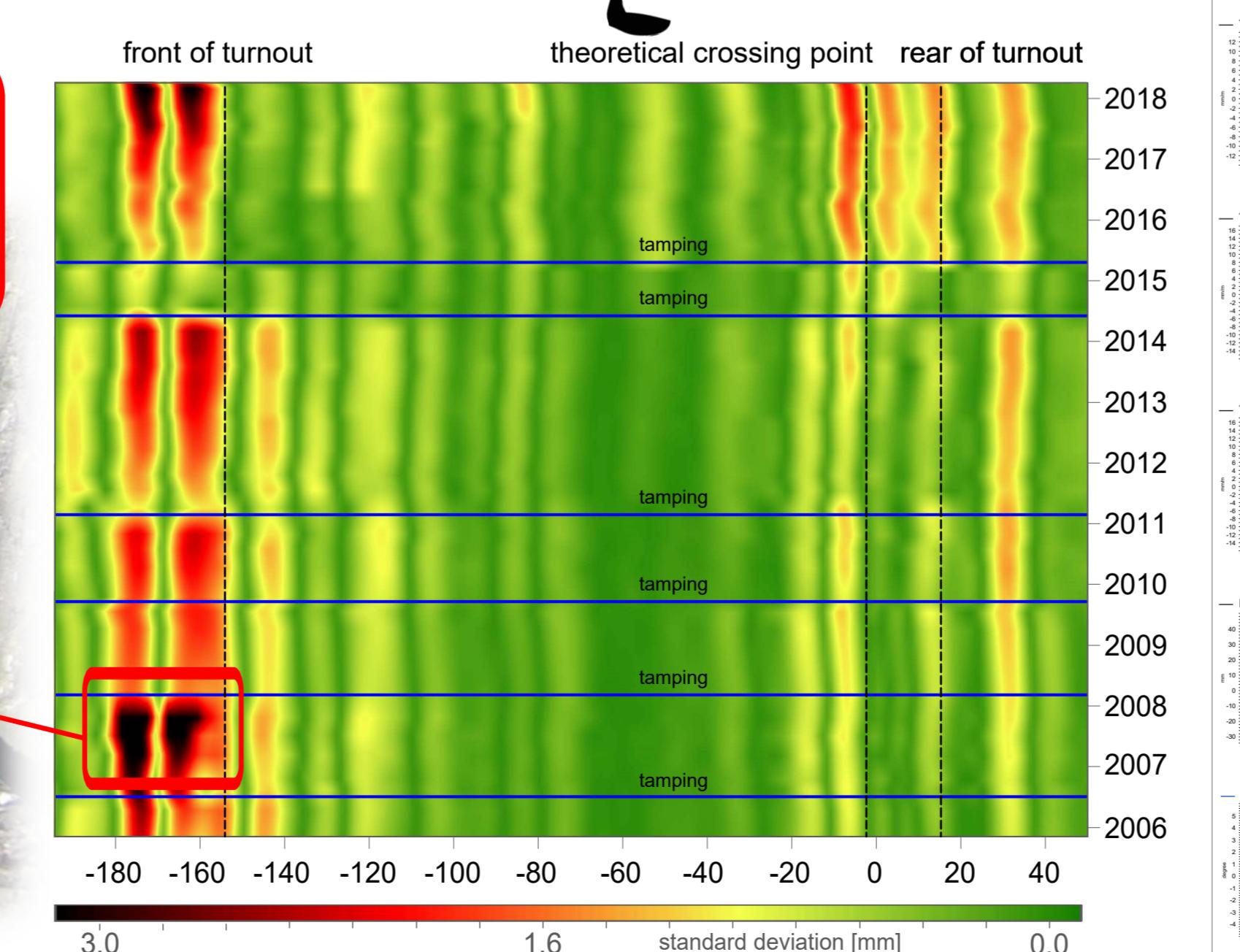
Available data:

- half gauge right / left unfiltered
- half gauge right / left filtered
- longitudinal level right / left
- rail surface scan right / left
- acceleration right / left
- alignment right / left
- rail cant right / left
- gauge filtered
- base gauge
- rail profile scan
- superelevation
- twist 3m / 9m / 16m

Reference signal: half gauge measurement

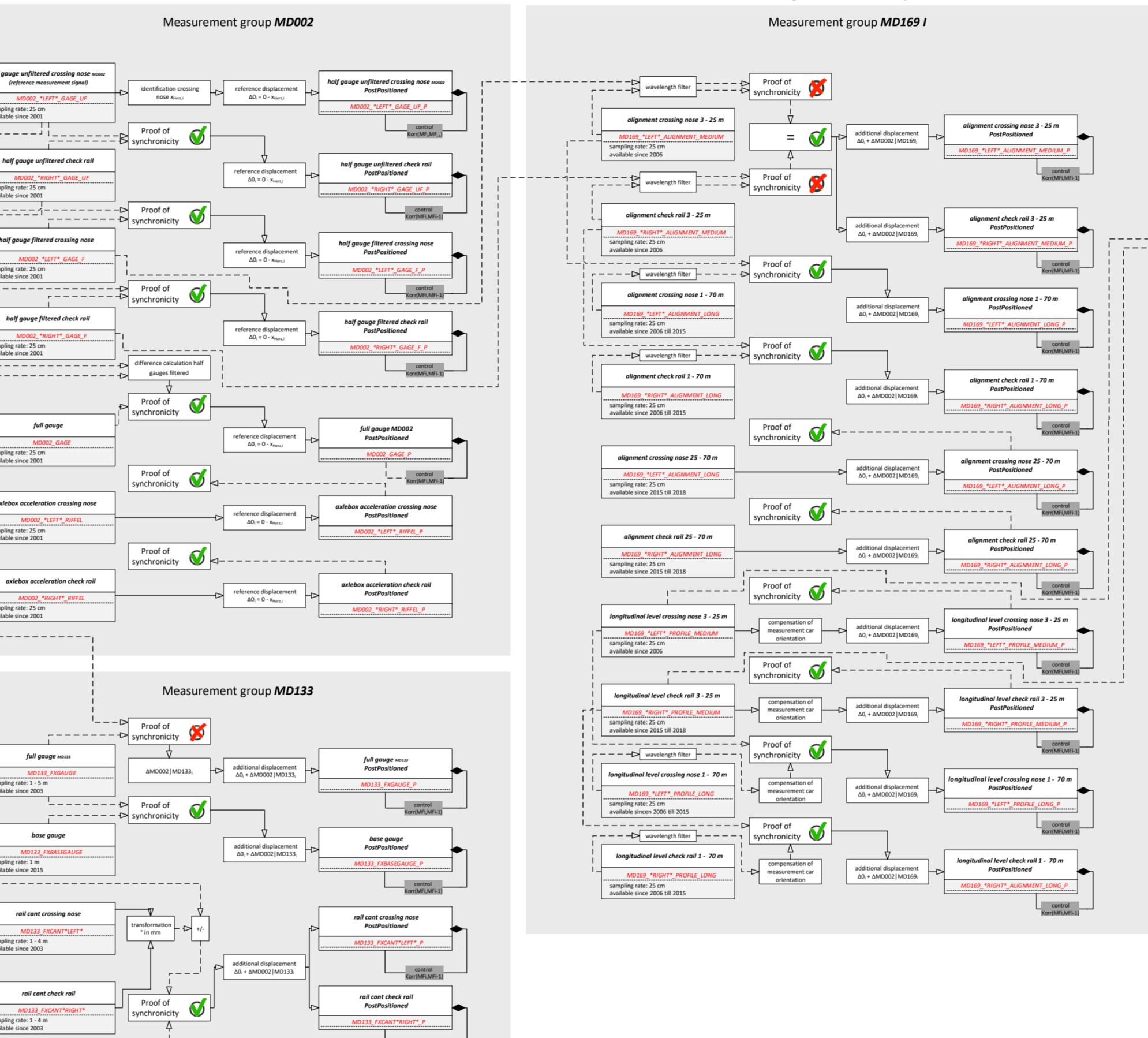


Verification:

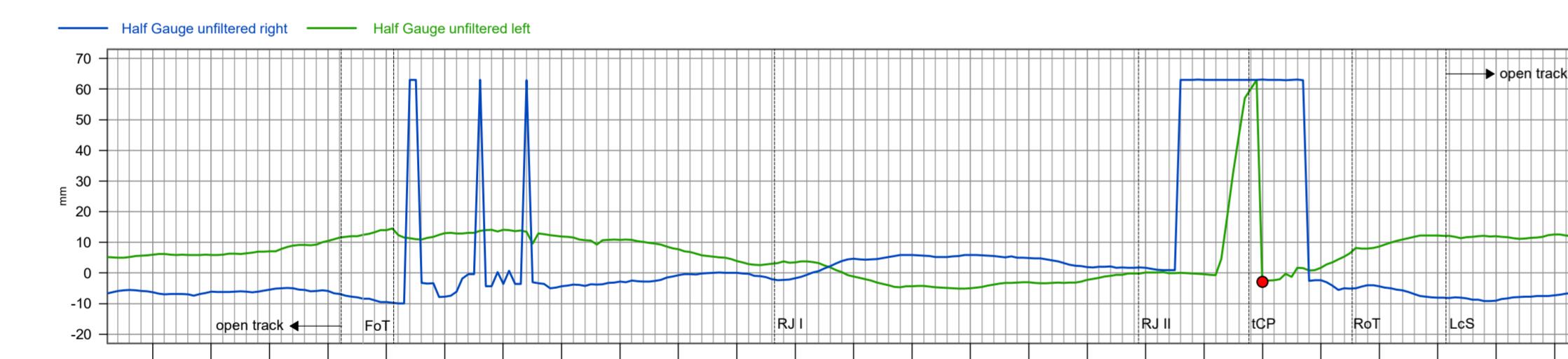


front of turnout theoretical crossing point rear of turnout

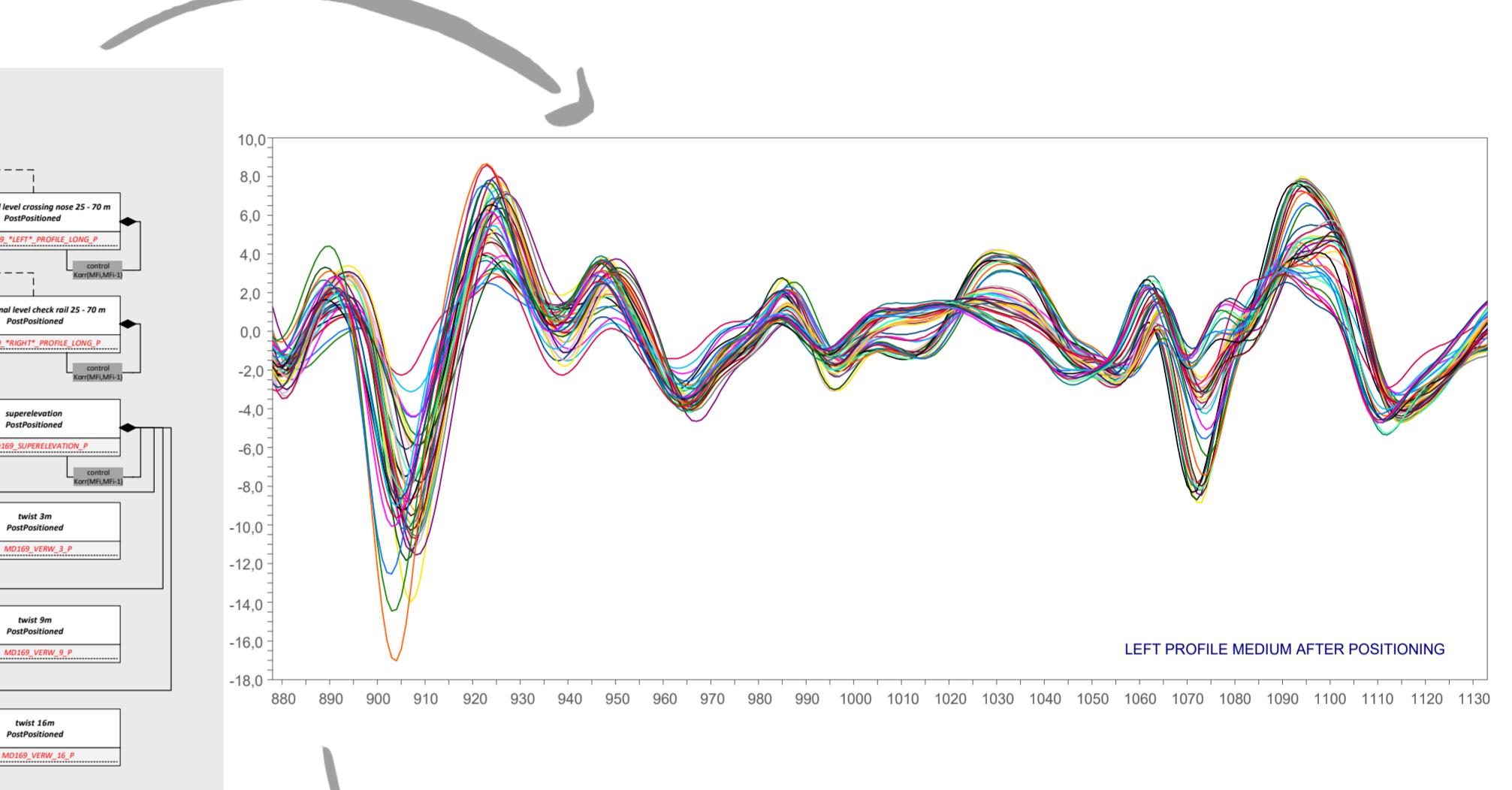
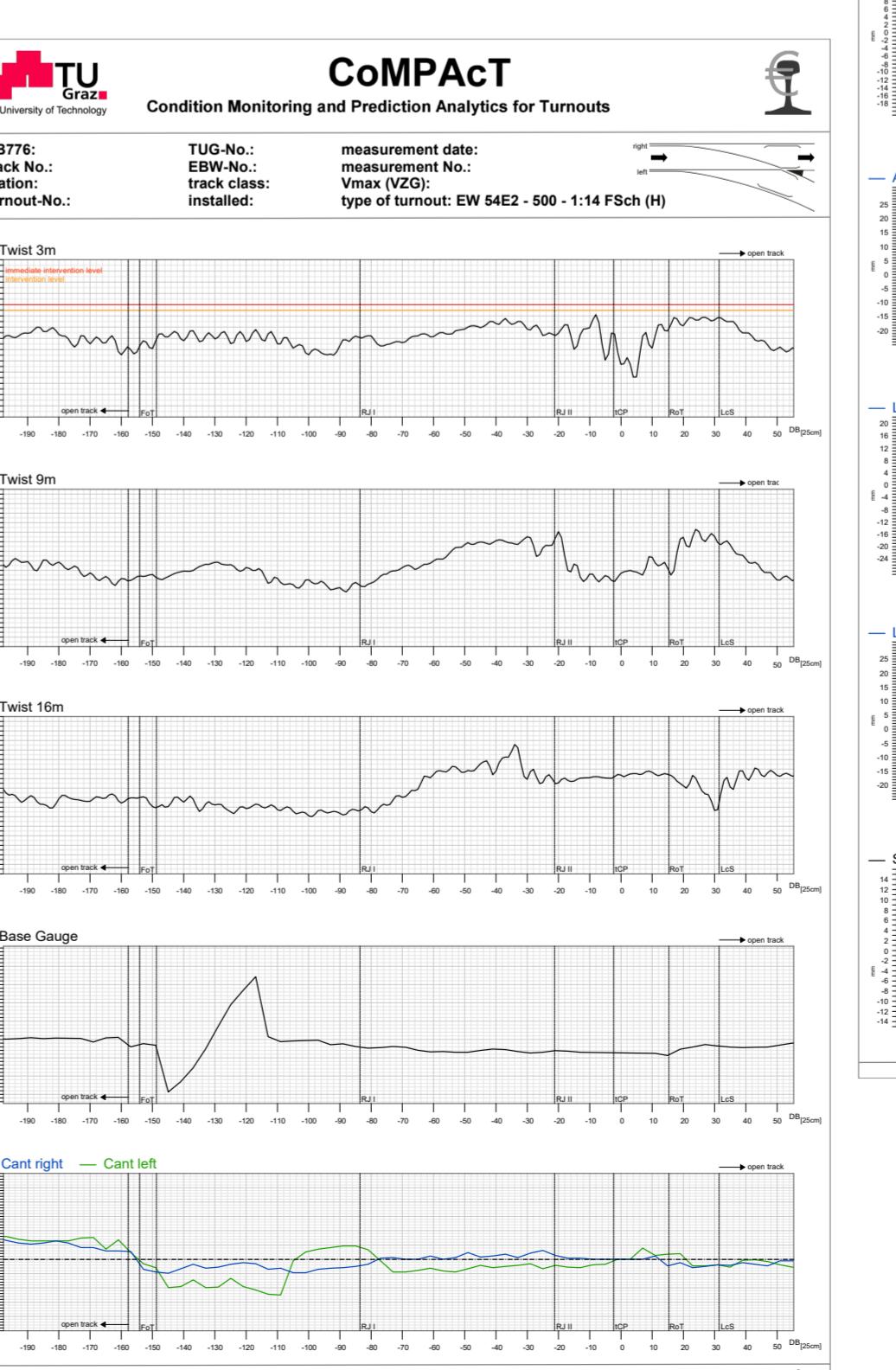
CoMPAct
Condition Monitoring and Prediction Analytics for Turnouts



Identification of an unique point in different signals possible, but there is the necessity for repositioning due to variable position deviations between different measurements.



Data Analysis:



Exact positioning with a limited error of one data break.

