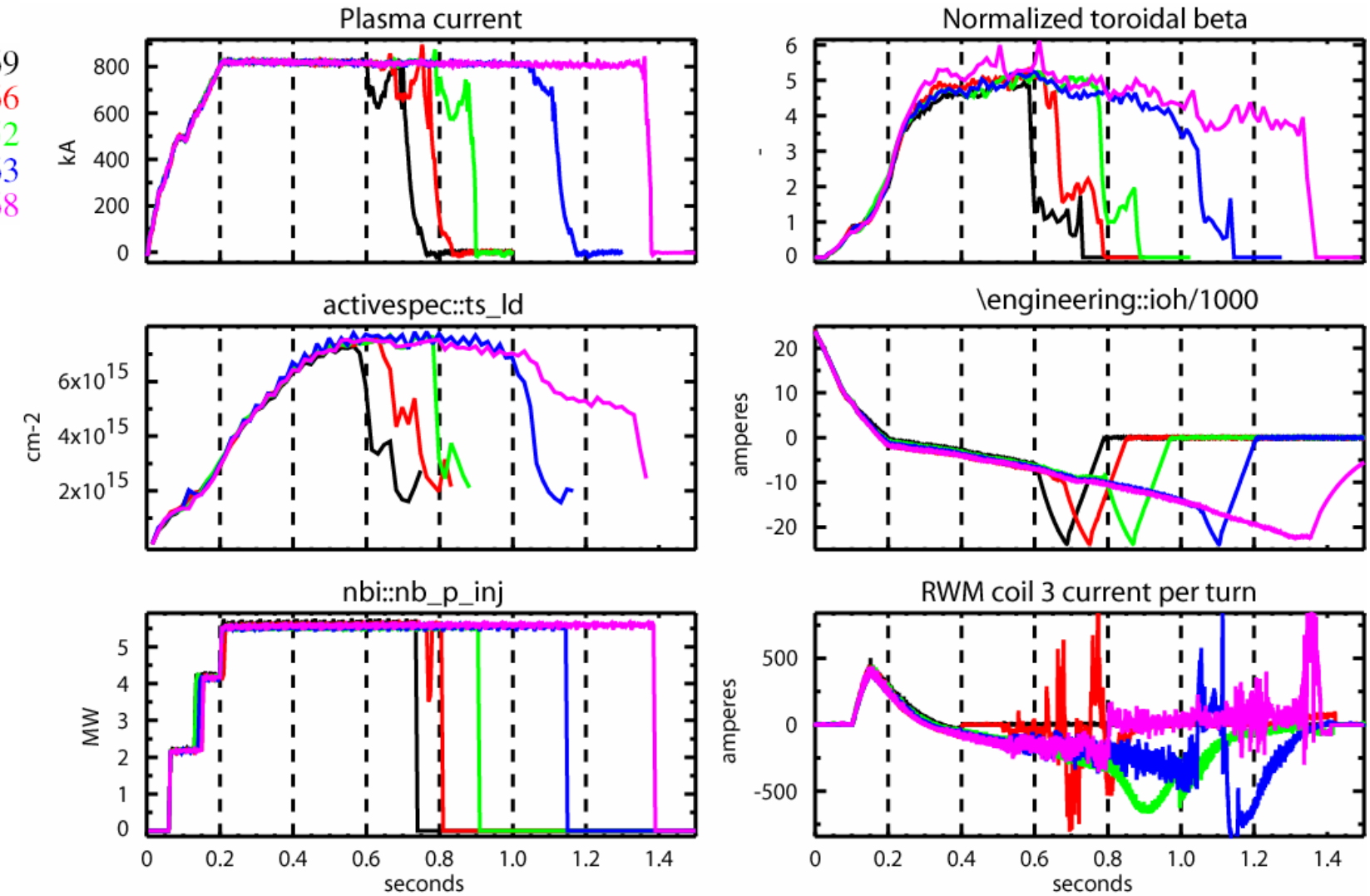
XP614 - Comparison of error field correction techniques at high beta-N

120669
120666
120652
120663
120668



- OHxTF t=0.1-0.4s, no sensor-based feedback
- OHxTF t=0.1-0.4s, feedback on after t=0.5s
- OHxTF t=0.1-end of shot, no feedback

- OHxTF t=0.1-end, feedback on after t=0.5s
- OHxTF t=0.1-0.8s, feedback on after t=0.5s

➔**120663 & 120668 imply late OHxTF is not optimized, and may be due to non-linearity of OHxTF field late in shot**

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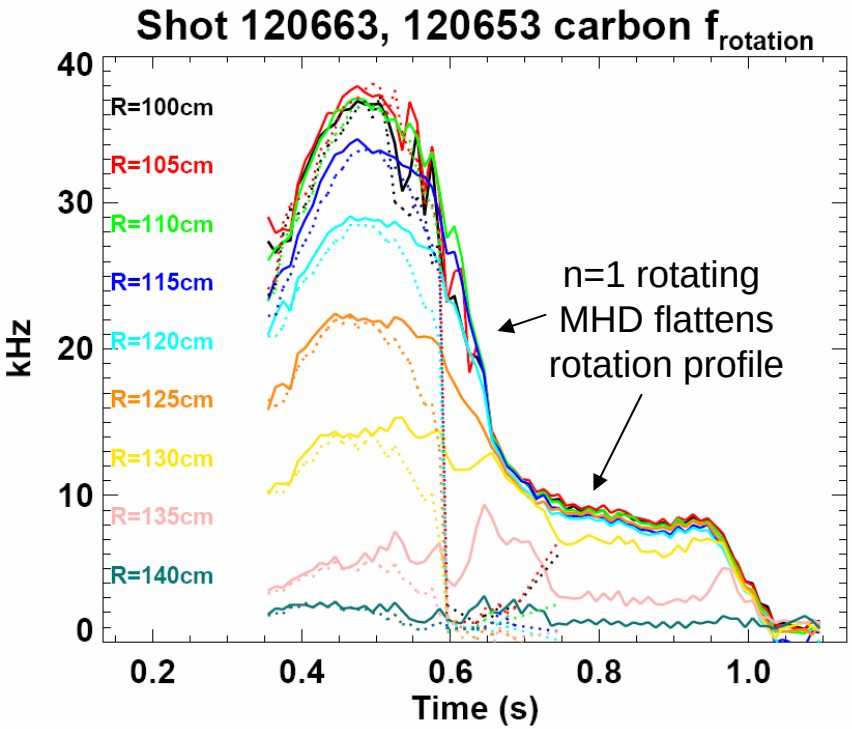
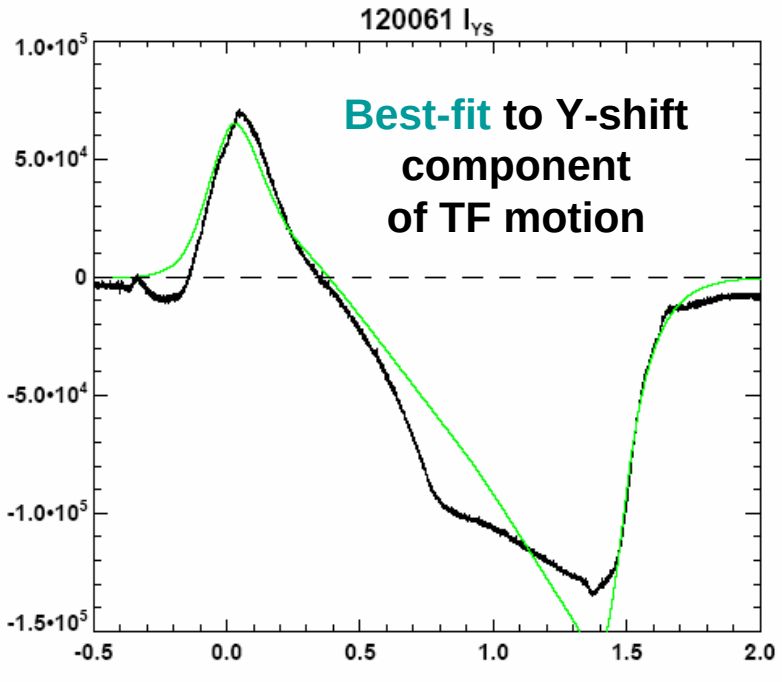
- Feedback phase & gain were optimized.
- Non-optimized feedback phase (120653) slows rotation and induces disruption shortly after feedback turns on at 500ms



- Measured OHxTF error field (black) has "break-in-slope" near 800ms which present PCS algorithm (green) cannot match - leading to poorer compensation late in shot?



- Algorithm was designed using "short pulse" waveforms which can be fit much better.