

Hysteresis effects for insertion quadrupoles

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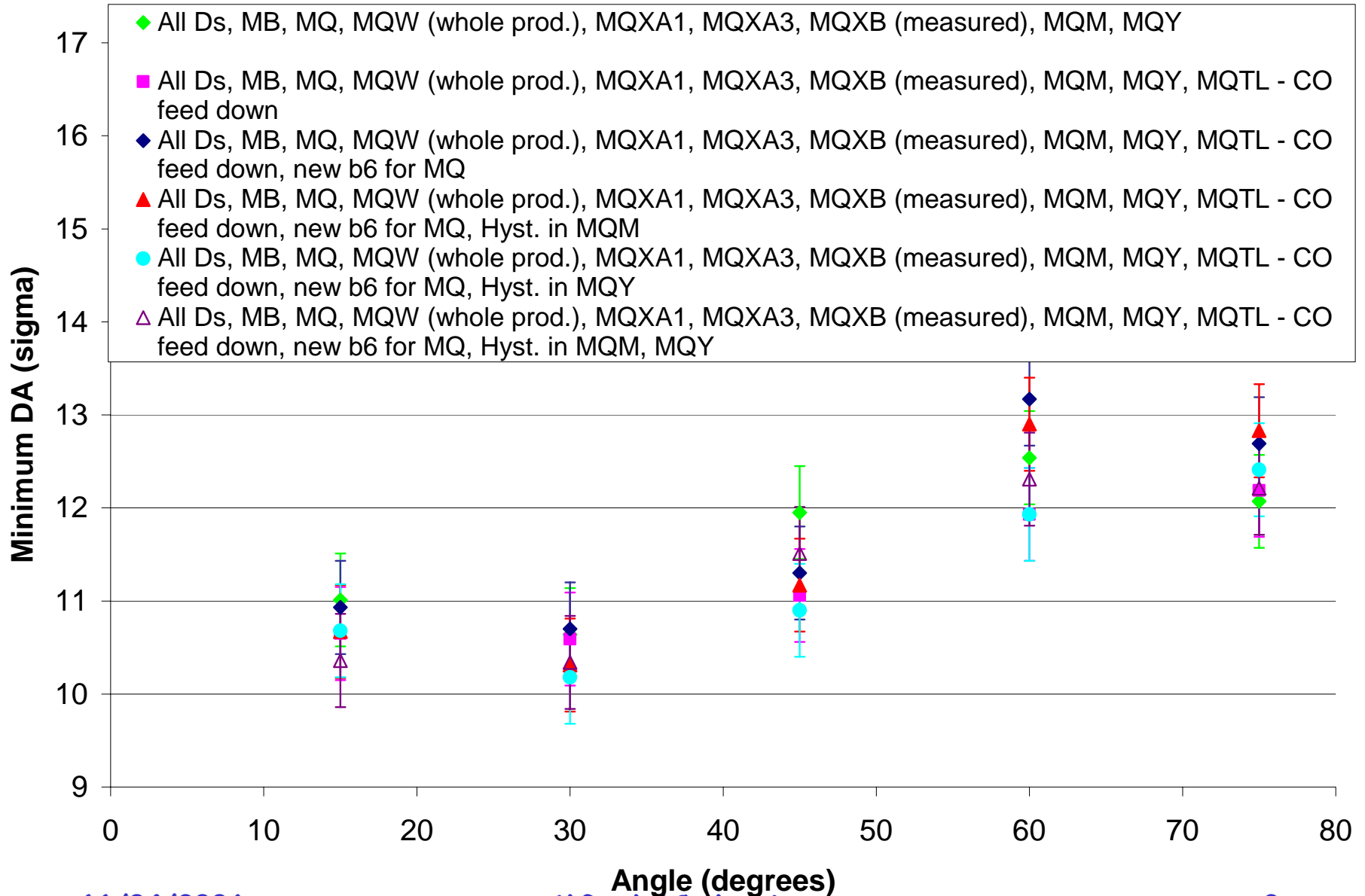
- New facts from production and measurements
- Tracking results with hysteresis effects in MQM and MQY quadrupoles

Special thanks: S. Fartoukh -> special version of the errors routines to deal with feed down errors and hysteresis

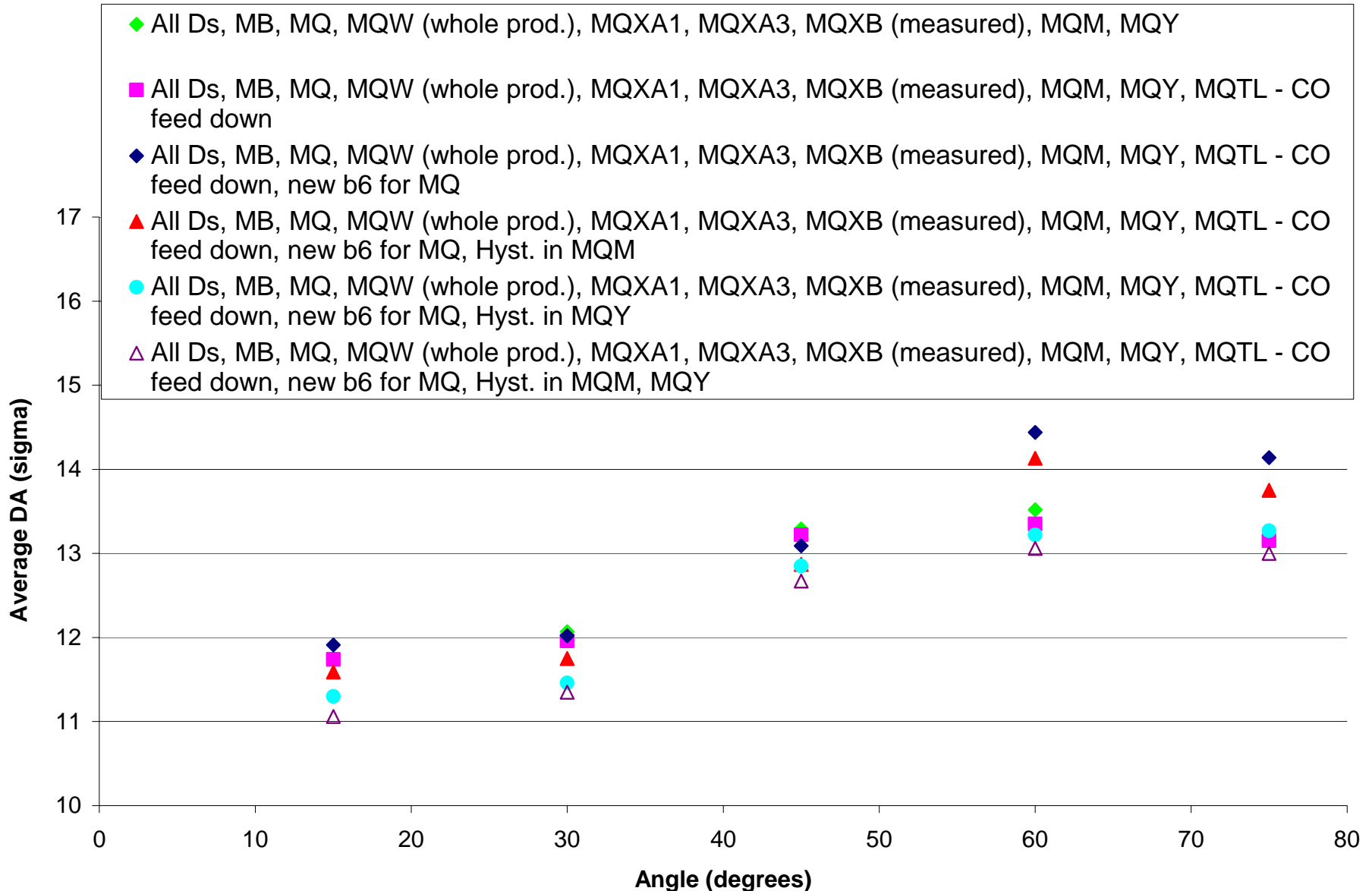
New facts from production and measurements

- MQs: average b_6 over the machine is now zero.
- Measurement results are now available concerning hysteresis effects in insertion quadrupoles.
- Therefore:
 - Refined model to take into account the new b_6 in MQs
 - Impact of hysteresis on DA

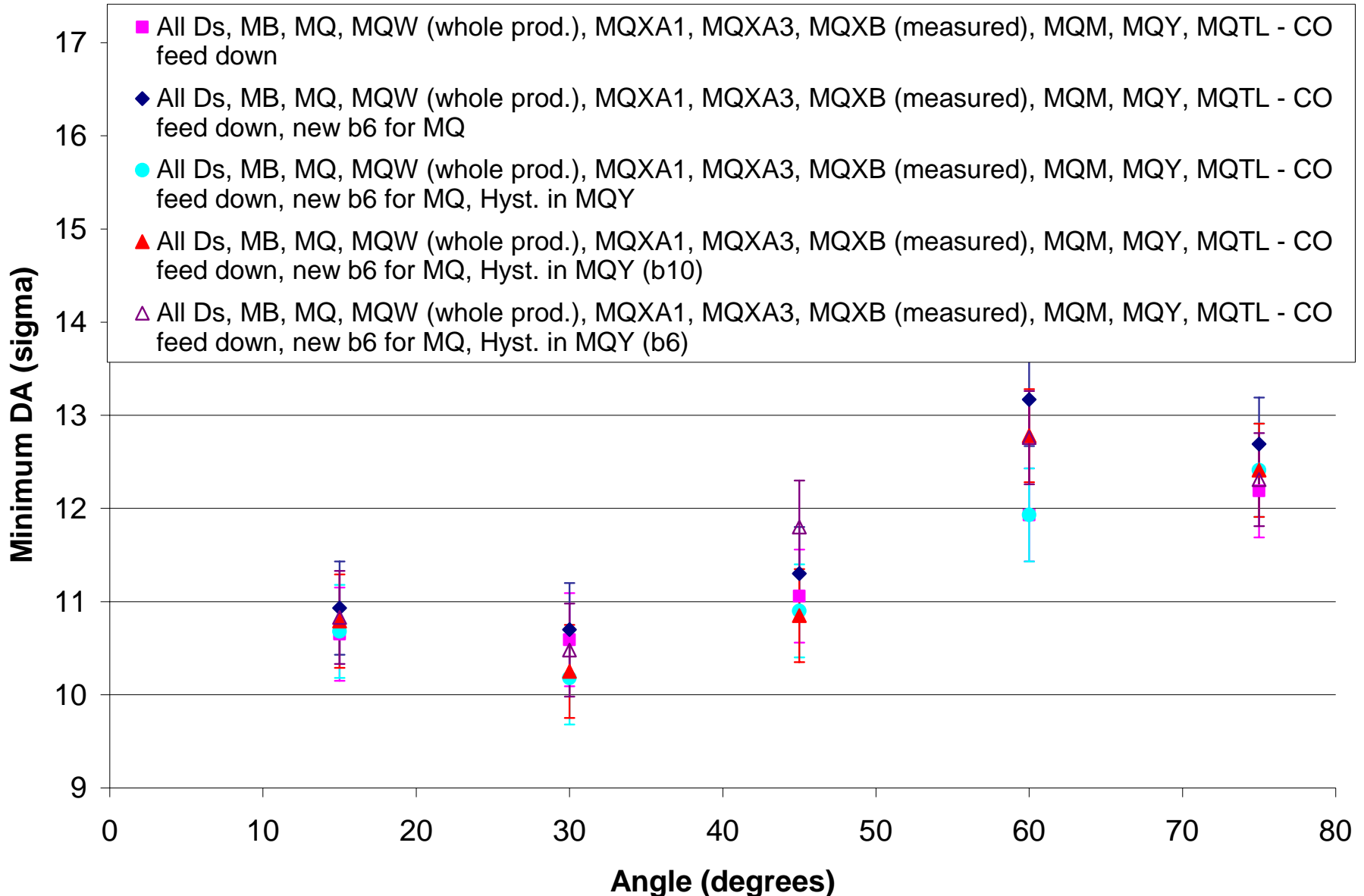
Tracking results with hysteresis effects in MQM and MQY quadrupoles - I



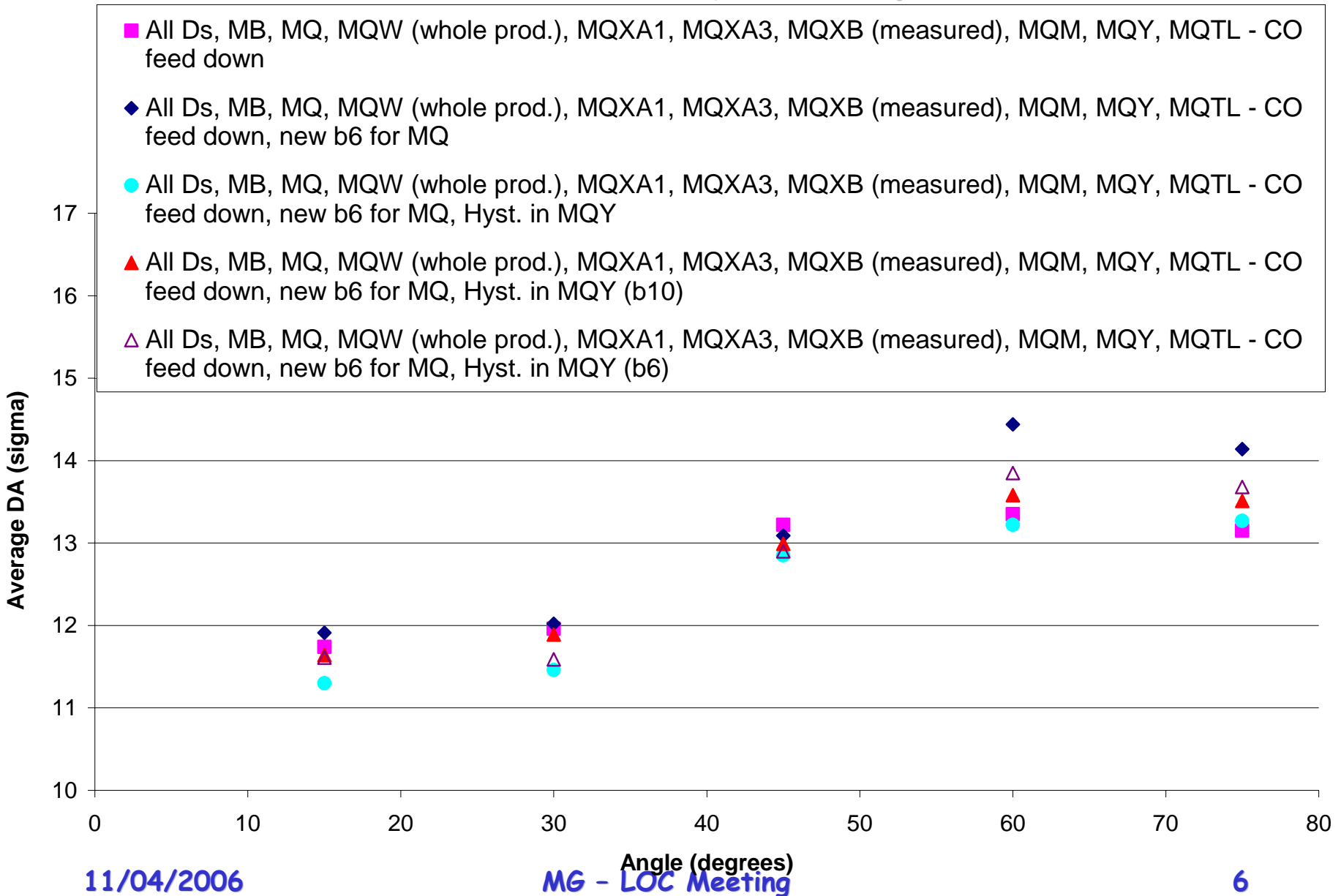
Tracking results with hysteresis effects in MQM and MQY quadrupoles - II



Tracking results with hysteresis effects in MQM and MQY quadrupoles - III



Tracking results with hysteresis effects in MQM and MQY quadrupoles - IV



- All Ds, MB, MQ, MQW (whole prod.), MQXA1, MQXA3, MQXB (measured), MQM, MQY
- All Ds, MB, MQ, MQW (whole prod.), MQXA1, MQXA3, MQXB (measured), MQM, MQY, MQTL (no outliers) feed down
- All Ds, MB, MQ, MQW (whole prod.), MQXA1, MQXA3, MQXB (measured), MQM, MQY, MQTL - CO feed down, new b6 for MQ, Hyst. in MQM
- All Ds, MB, MQ, MQW (whole prod.), MQXA1, MQXA3, MQXB (measured), MQM, MQY, MQTL - CO feed down, new b6 for MQ, Hyst. in MQY
- All Ds, MB, MQ, MQW (whole prod.), MQXA1, MQXA3, MQXB (measured), MQM, MQY, MQTL - CO feed down, new b6 for MQ, Hyst. in MQM, MQY

