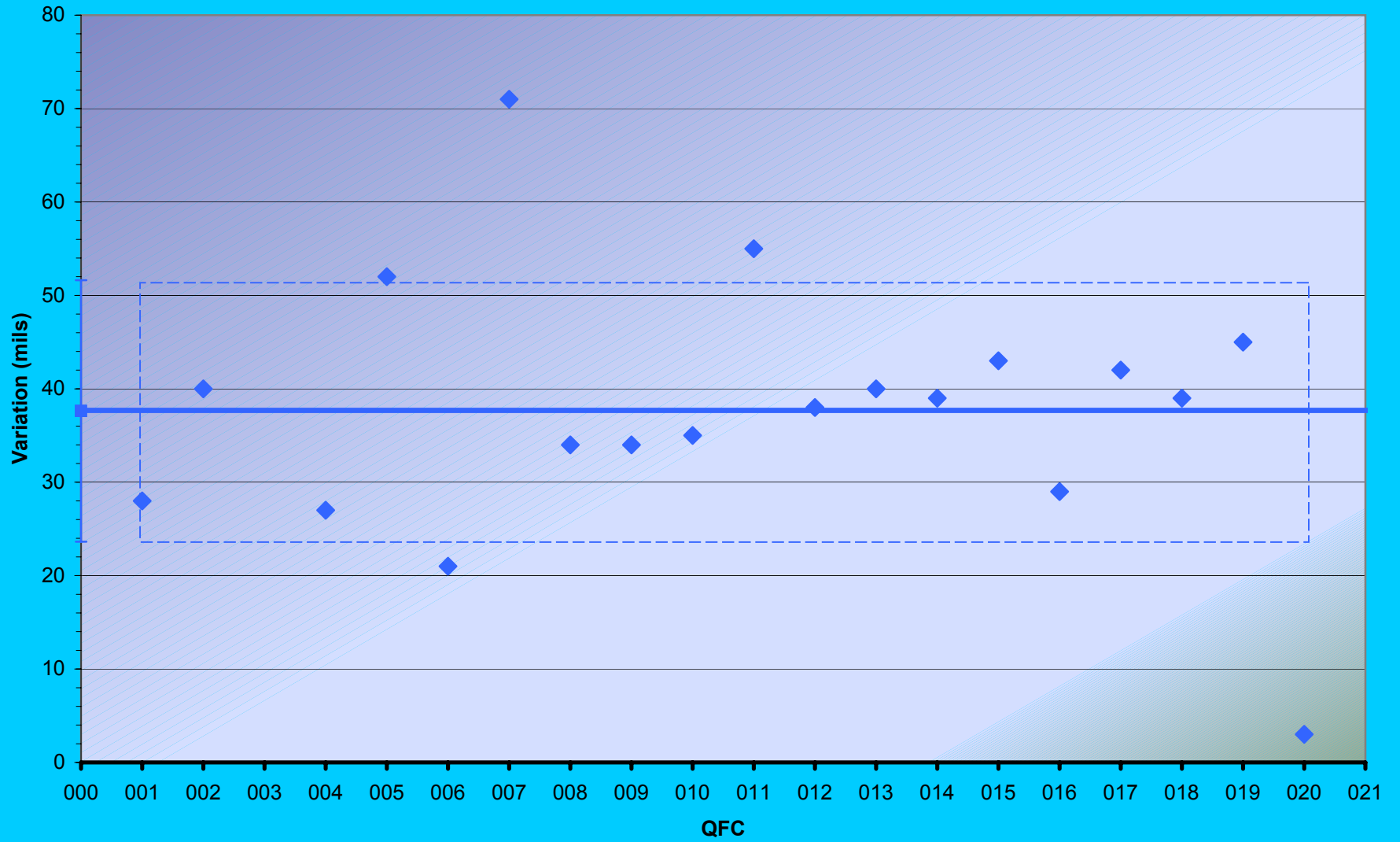


QFC Measurement Differences from Nominal Values

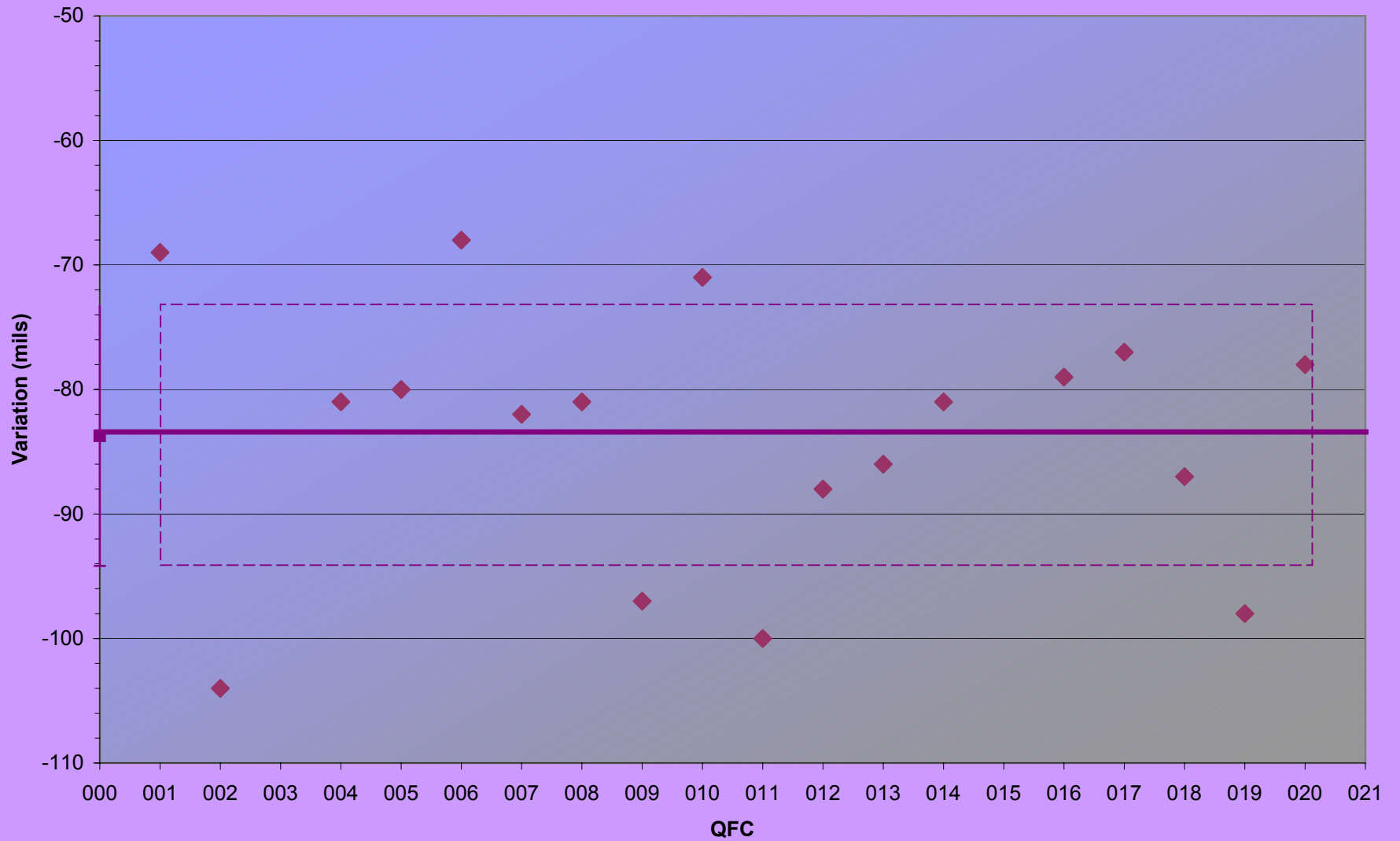
| QFC | TB5x (mils) | Length (mils) | OUT x (mils) | OUT y (mils) | OUT yaw (mrads) | OUT pitch (mrads) | IN x (mils) | IN y (mils) | IN yaw (mrads) | IN pitch (mrads) |
|---------|----------------|------------------|-----------------|-----------------|--------------------|----------------------|----------------|----------------|-------------------|---------------------|
| 001 | 28 | -69 | 16 | 31 | -7.5 | 5.7 | -2 | 12 | 8.7 | 4.1 |
| 002 | 40 | -104 | 13 | -25 | -10.7 | 6.9 | -10 | 9 | 7.9 | 2.4 |
| 003 | | | | | | | | | | |
| 004 | 27 | -81 | 7 | 13 | -6.7 | 0.5 | 7 | 11 | 7.3 | -5.2 |
| 005 | 52 | -80 | 6 | 26 | -11.6 | -6.7 | -7 | 29 | 7.3 | -5.2 |
| 006 | 21 | -68 | 4 | 11 | -6.9 | -0.9 | -2 | -1 | 5.8 | -0.1 |
| 007 | 71 | -82 | -3 | 20 | -8.4 | -2.3 | -14 | 5 | 6.3 | -3.2 |
| 008 | 34 | -81 | 4 | -2 | -9.1 | -1.9 | 12 | 8 | 7.4 | -3.3 |
| 009 | 34 | -97 | 2 | 0 | -13.2 | -0.4 | -2 | 6 | 8.0 | 1.0 |
| 010 | 35 | -71 | 4 | 1 | -8.2 | 1.4 | -16 | -22 | 5.5 | -2.6 |
| 011 | 55 | -100 | 11 | 6 | -10.8 | -0.1 | -17 | 4 | 8.6 | -3.0 |
| 012 | 38 | -88 | 3 | -28 | -8.9 | 2.4 | -1 | 1 | 6.1 | -2.9 |
| 013 | 40 | -86 | 18 | 9 | -9.2 | 0.8 | -32 | 5 | 7.0 | 0.3 |
| 014 | 39 | -81 | -1 | -3 | -8.3 | -3.1 | 12 | 2 | 8.2 | -1.8 |
| 015 | 43 | | 9 | 24 | -8.9 | -1.6 | | | | |
| 016 | 29 | -79 | 1 | -26 | -10.9 | 4.0 | 1 | 19 | 5.7 | 3.5 |
| 017 | 42 | -77 | 4 | -13 | -8.7 | 2.9 | 22 | 7 | 6.4 | 0.1 |
| 018 | 39 | -87 | 7 | -25 | -7.6 | 3.7 | -3 | 5 | 6.9 | 1.4 |
| 019 | 45 | -98 | 6 | -4 | -11.8 | 2.2 | -2 | 12 | 6.4 | -2.8 |
| 020 | 3 | -78 | 0 | 16 | -7.8 | -3.5 | -21 | 11 | 5.7 | -2.9 |
| Average | 37.6 | -83.7 | 5.8 | 1.6 | -9.2 | 0.5 | -4.2 | 6.8 | 6.9 | -1.1 |
| Std | ± 14.0 | ± 10.4 | ± 5.6 | ± 18.5 | ± 1.8 | ± 3.4 | ± 13.0 | ± 10.0 | ± 1.0 | ± 2.8 |

Note: All values manually derived from posted chamber web-pages. Caveat emptor dude.

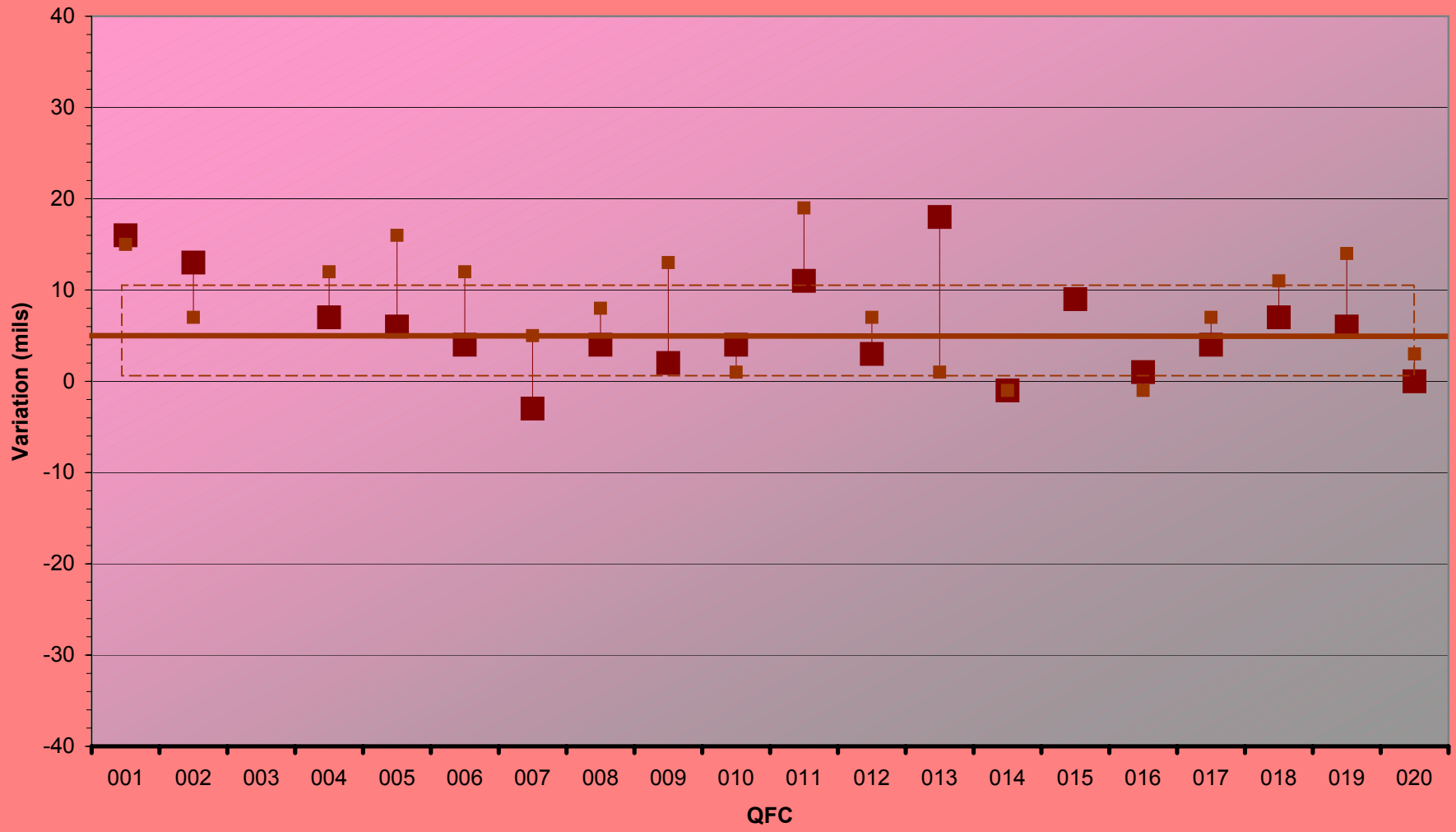
Tooling Ball 5 X-position Variations from Nominal (With Mean and Standard Deviation)



Chamber Length Differences from Nominal (With Mean and Standard Deviation)

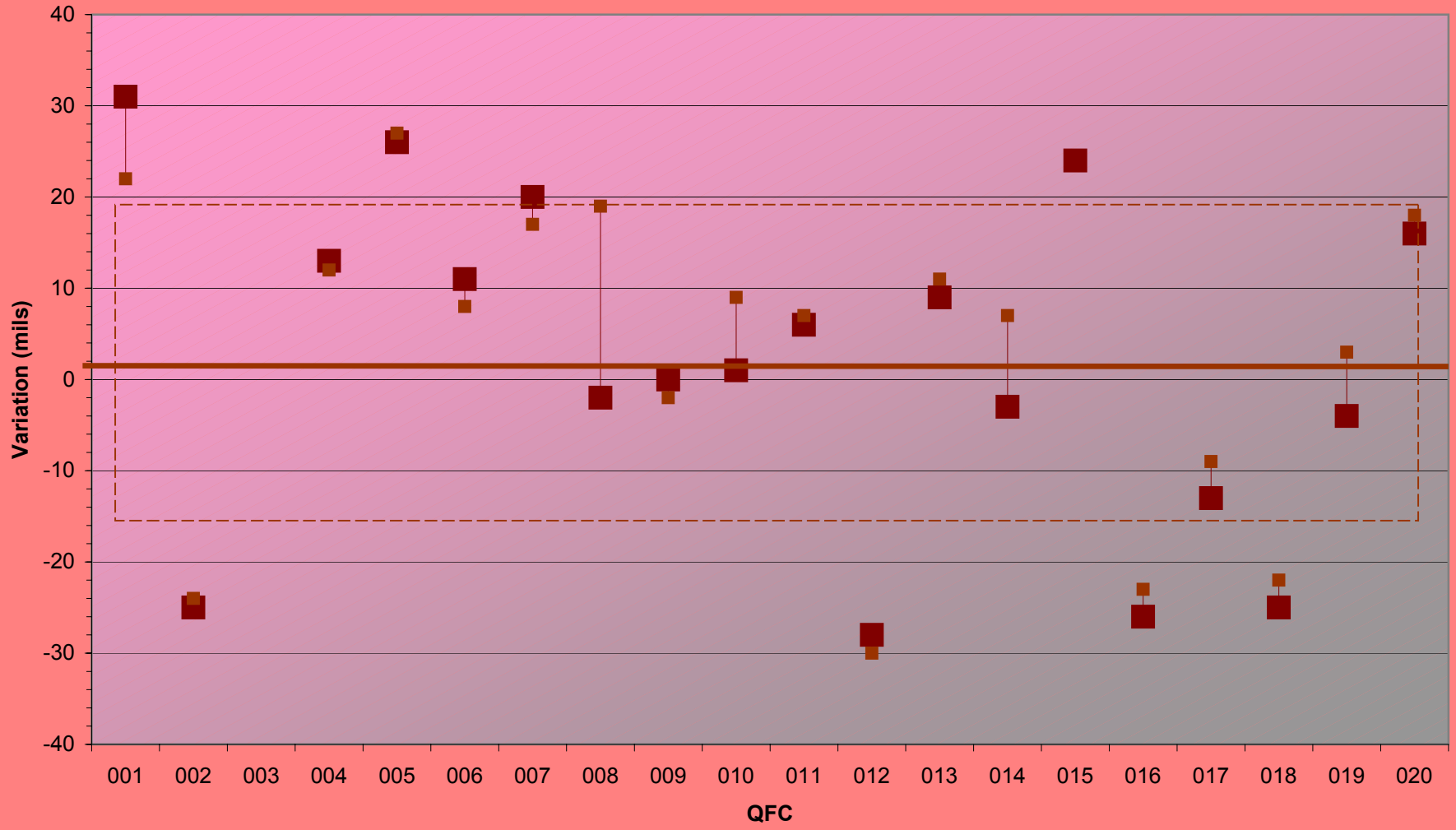


Flange OUT X-Differences from Nominal
(With Mean and Standard Deviation of Preliminary Values)



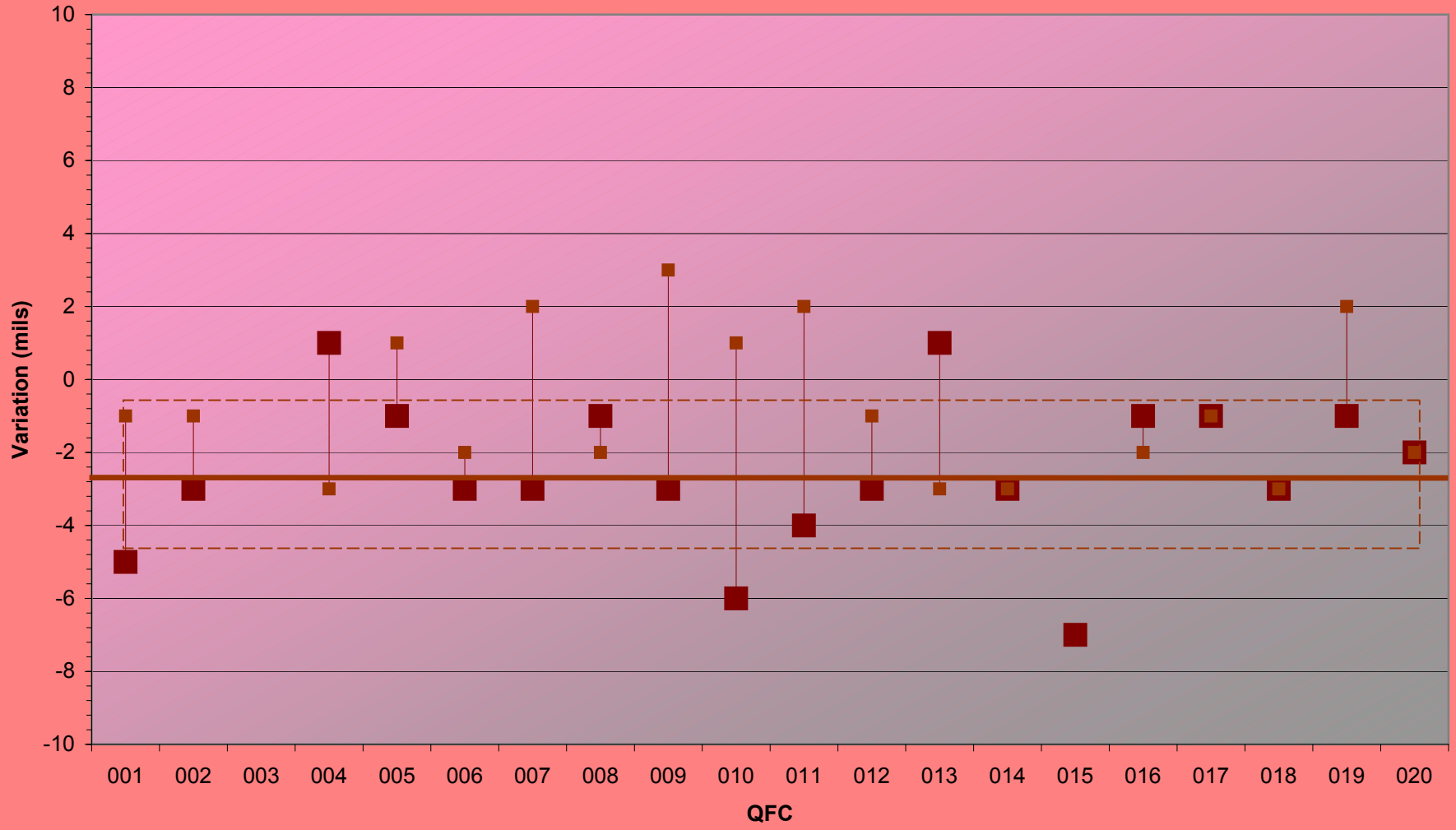
■ Preliminary Variation OUTx ■ Check OUTx

Flange OUT Y-Differences from Nominal
(With Mean and Standard Deviation of Preliminary Values)



■ Preliminary Variation OUTy ■ Check OUTy

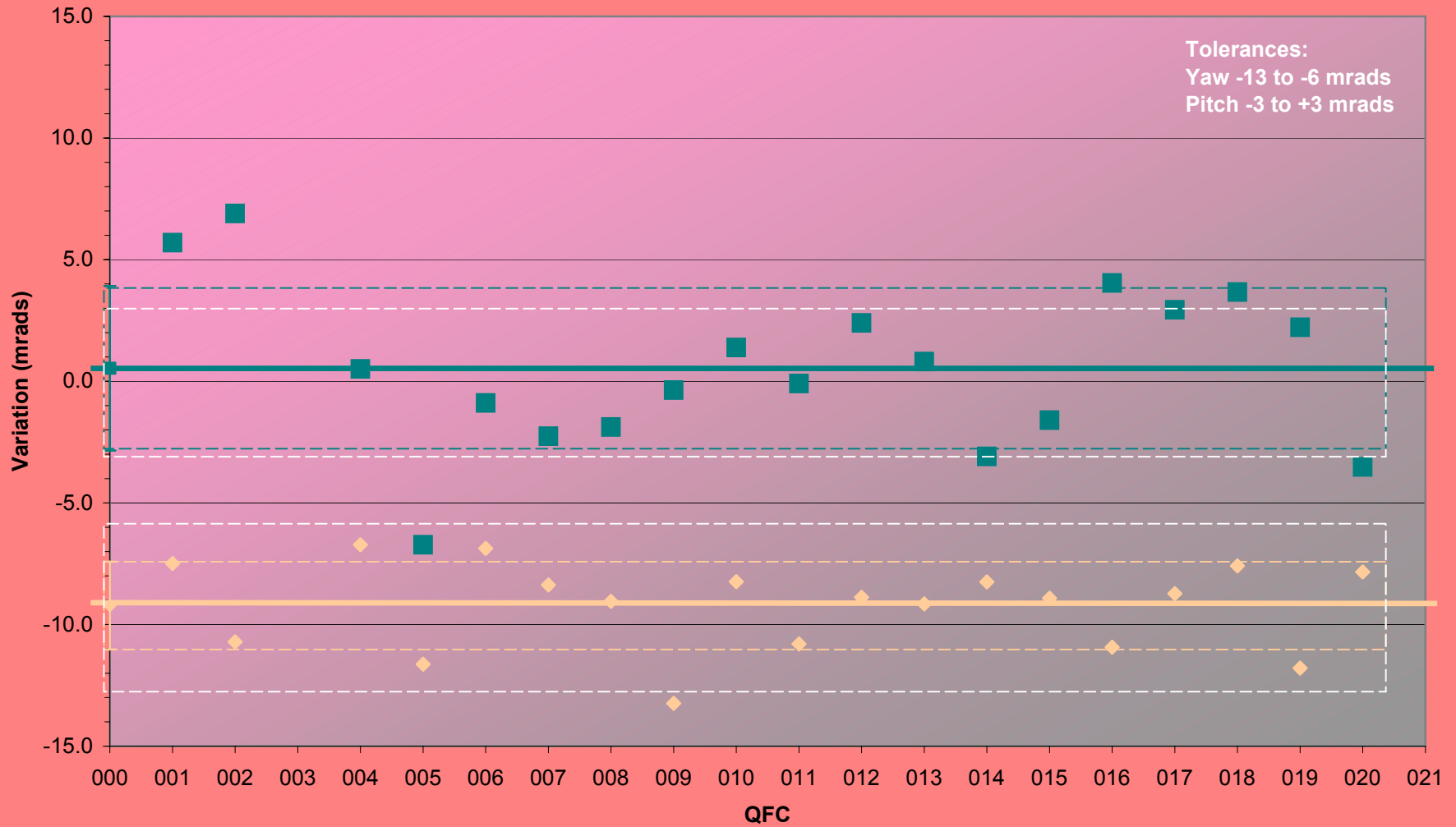
Flange OUT Diameter Differences from Nominal
(With Mean and Standard Deviation of Preliminary Values)



■ Preliminary Variation OUT Diam ■ Check OUT Diam

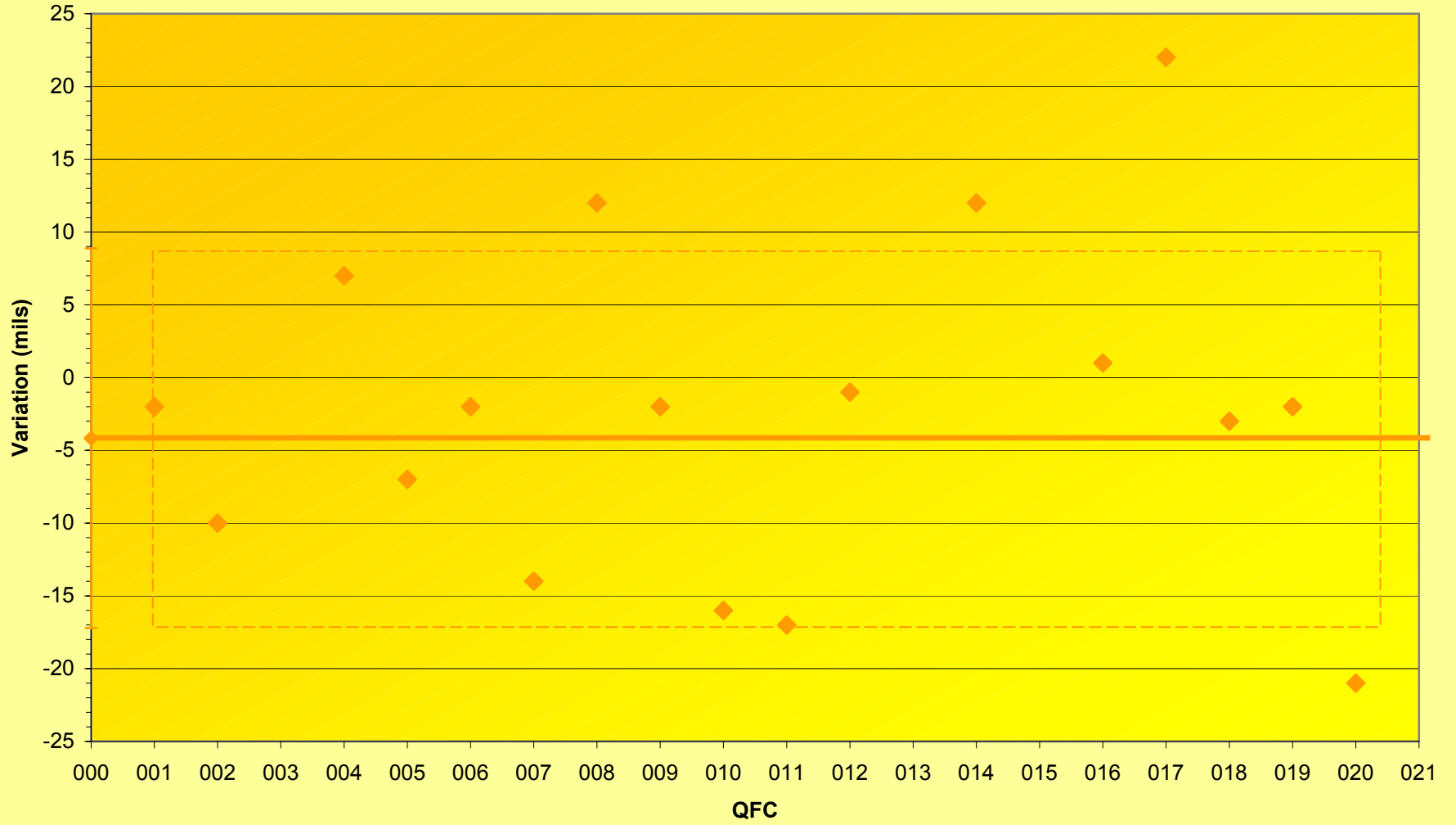
Flange OUT Yaw and Pitch Differences from Nominal

(With Means and Standard Deviations)

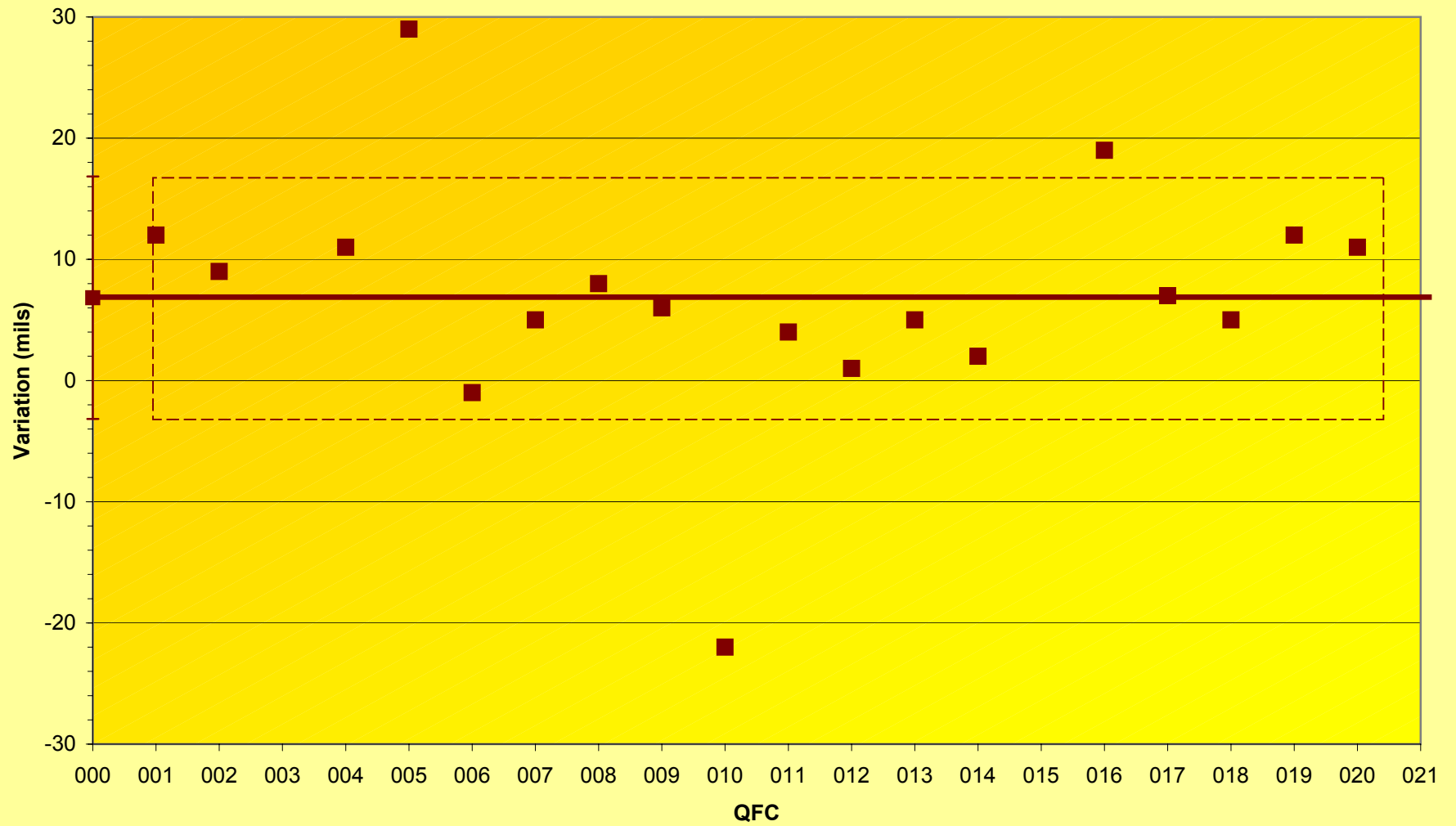


Flange IN X-Differences from Nominal

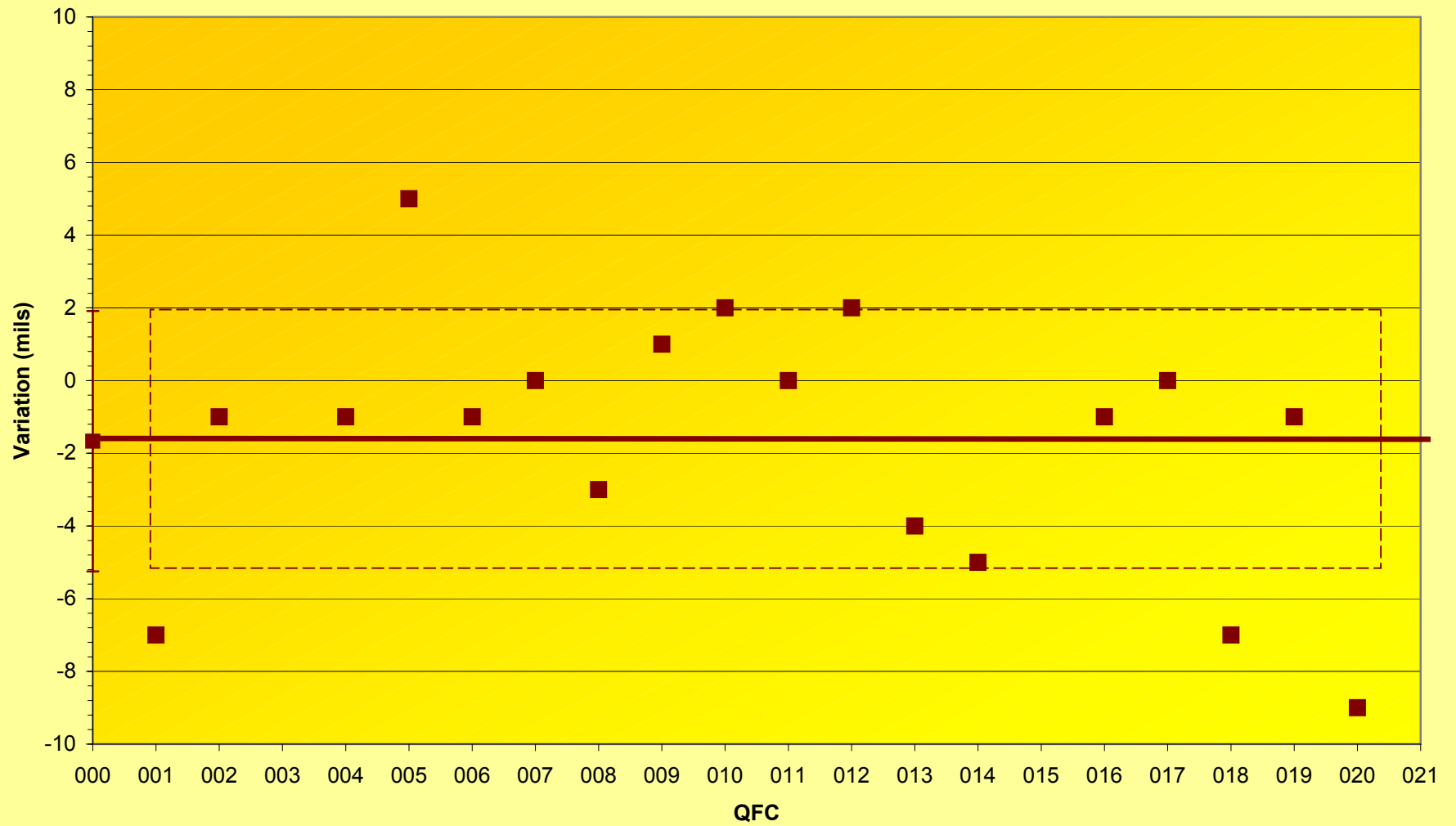
(With Mean and Standard Deviation)



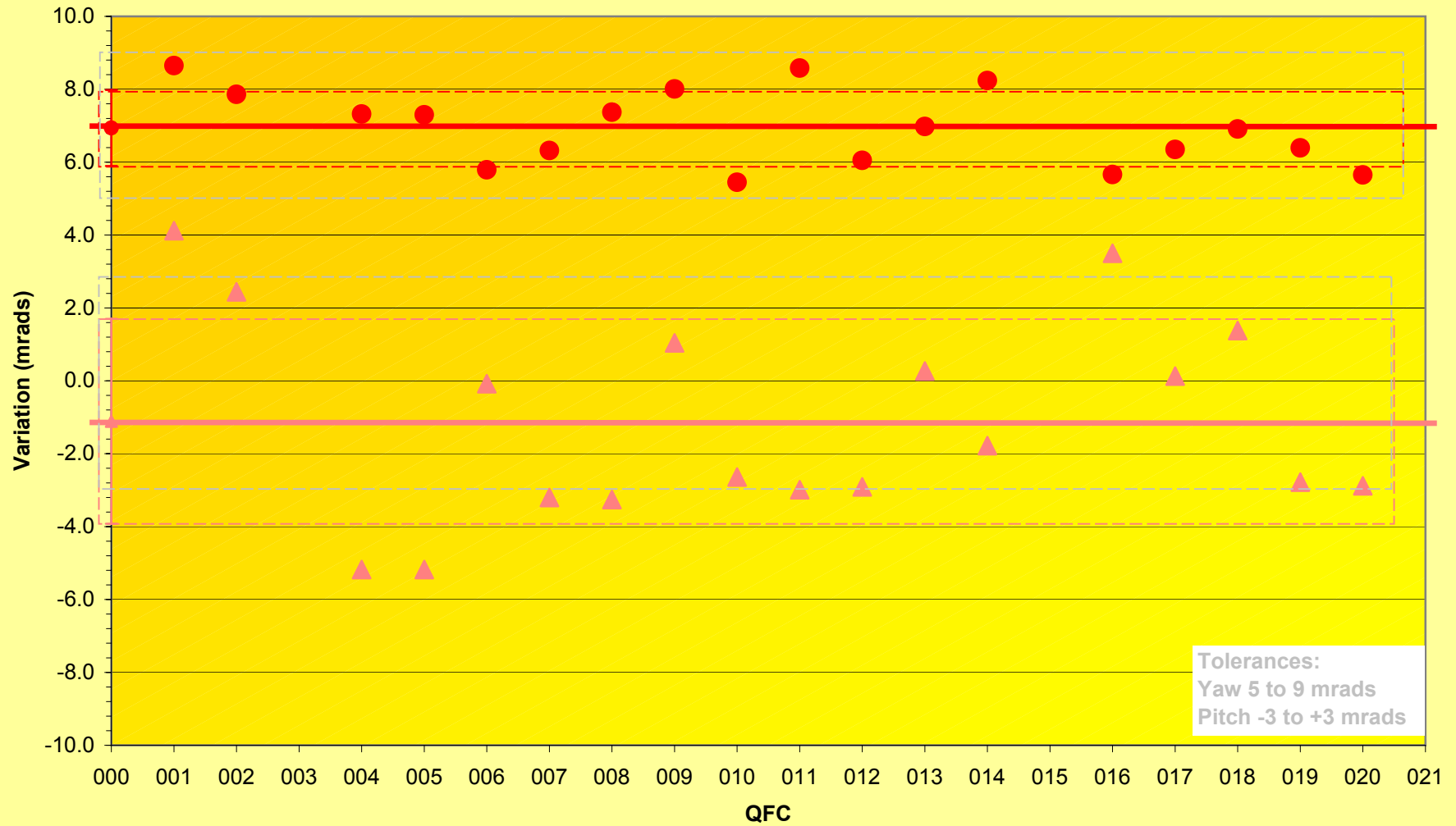
Flange IN Y-Differences from Nominal (With Mean and Standard Deviation)



Flange IN Diameter Differences from Nominal
(With Mean and Standard Deviation)

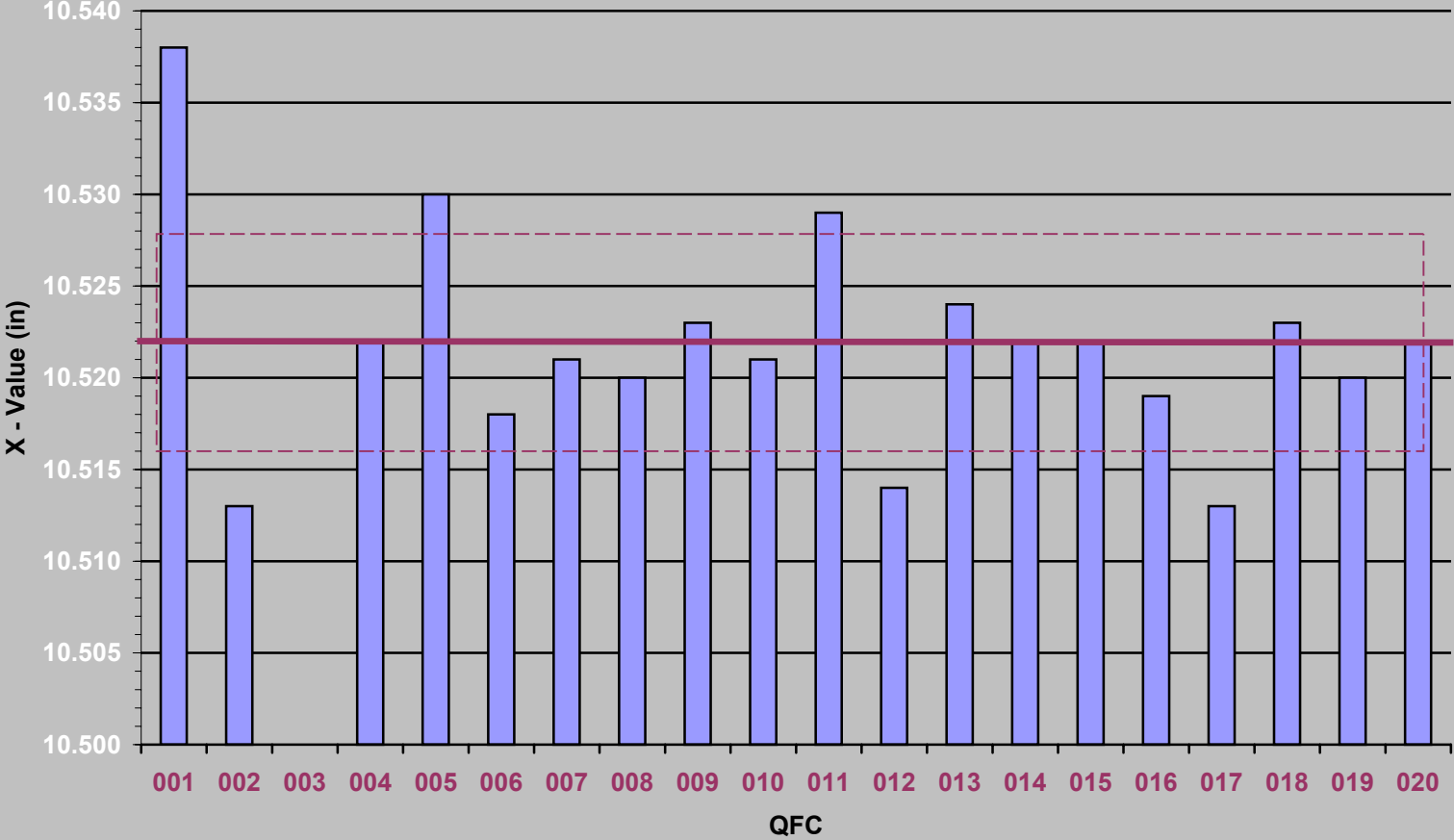


Flange IN Yaw and Pitch Differences from Nominal (With Means and Standard Deviations)



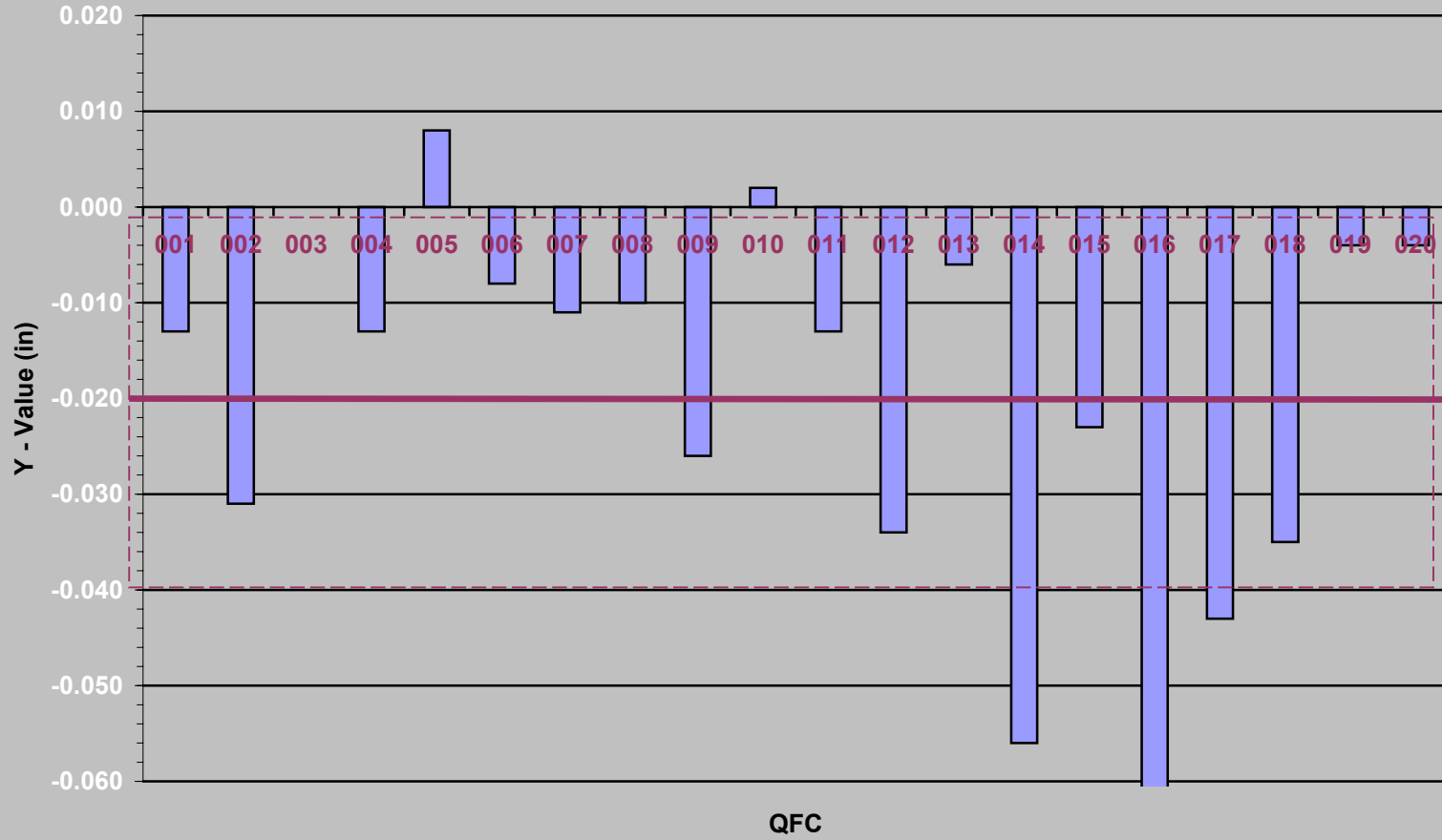
Downstream Nipple X Measurements

(With Mean and Standard Deviation)



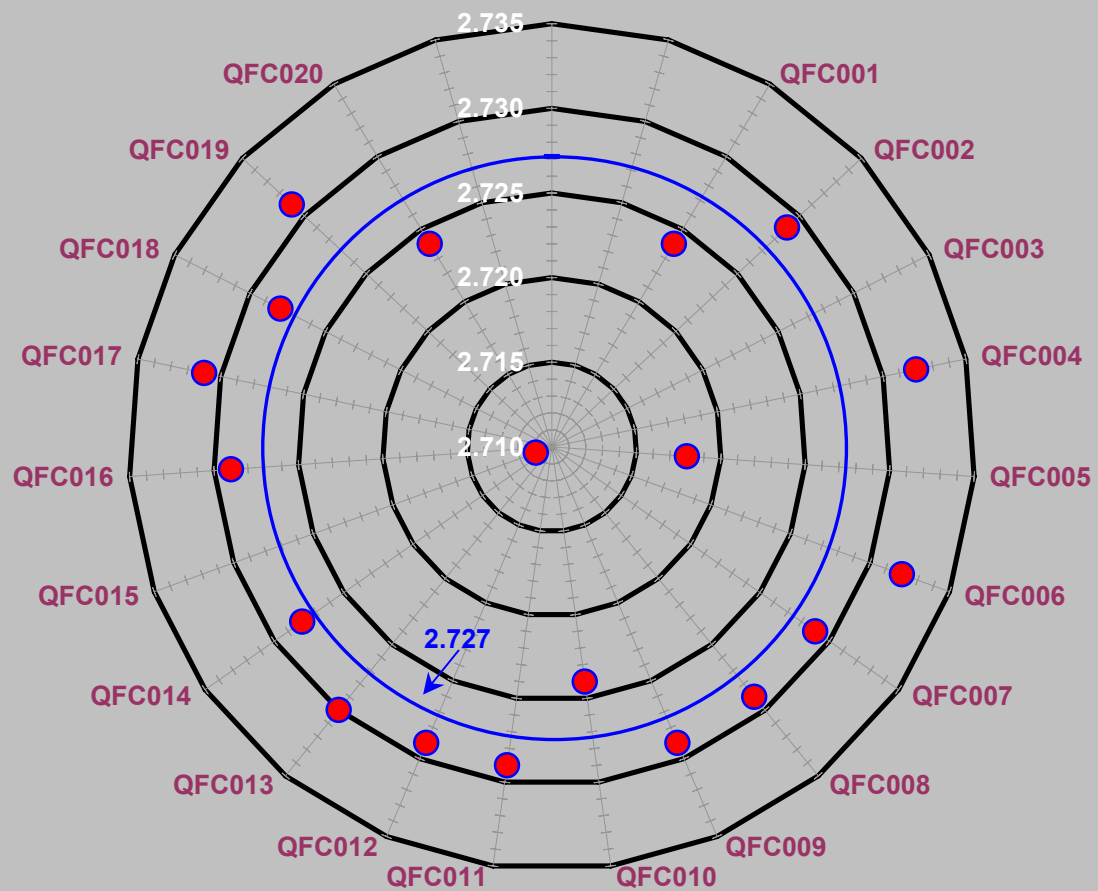
Downstream Nipple Y Measurements

(With Mean and Standard Deviation)



Downstream Nipple Diameter

(With Mean Value)



● Measured Diameter (inches) — Average Diameter