



Test Monitoring Center

203 Armstrong Drive, Freeport, PA 16229, USA

www.astmtmc.org
412-365-1000

MEMORANDUM: 22-035
DATE: October 31, 2022
TO: Matthew Sangpeal, Chairman, L-42 Surveillance Panel
FROM: Dylan Beck *Dylan Beck*
SUBJECT: L-42 Rater Calibration from April 1, 2022 through September 30, 2022

Attached is a summary of L-42 rater calibration activity this period.

DJB/djb/mem22-035.djb.doc

cc: Jeff Clark

Sean Moyer

L-42 Surveillance Panel

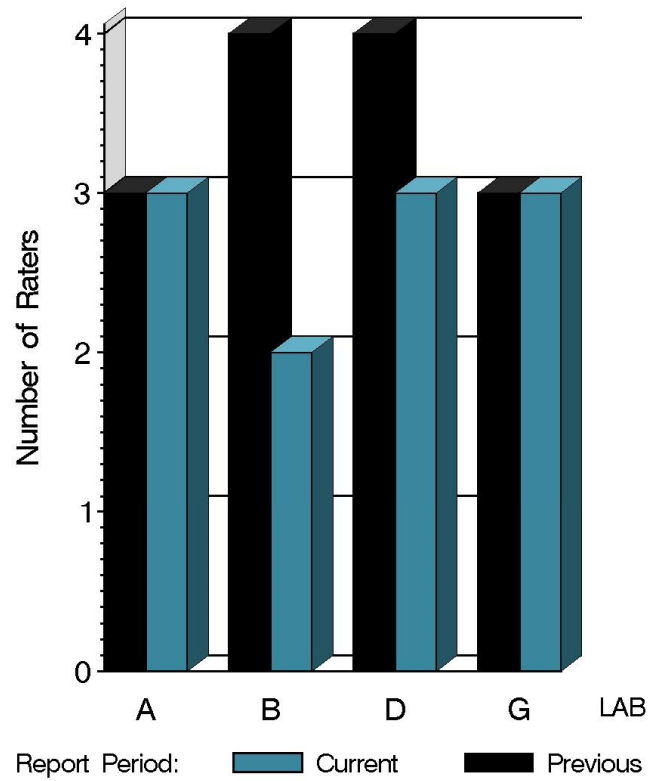
<https://www.astmtmc.org/ftp/docs/gear/l42rc/semiannualreports/l42rc-10-2022.pdf>

Distribution: email

L-42 Rater Calibration

	Reporting Data	Calibrated on 9-30-22
Number of Labs	4	4
Number of Raters	11	11

BY-LAB RATER DISTRIBUTION



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L-42 Rater Calibration

Test Distribution by Validity

		Totals	
		Last Period	This Period
Accepted for calibration	AC	15	12
Rejected (Mild)	OC	0	0
Rejected (Severe)	OC	0	2
Rejected (Multiple)	OC	0	0
Rejected (Precision)	OC	0	0
Workshop data	AG	10	9
Total		25	23

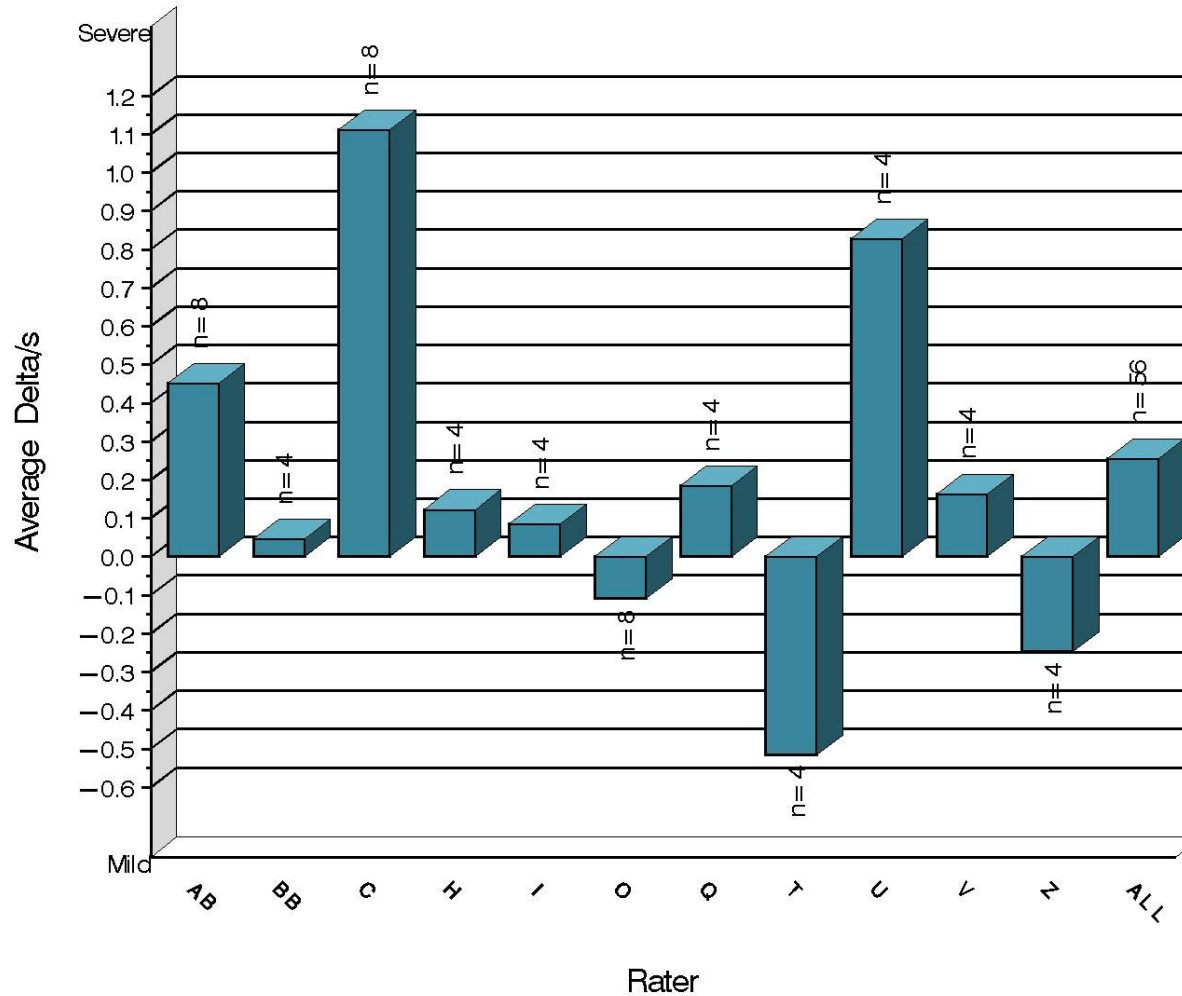
L-42 Rater Calibration

Rater	N	PSCR		RSCR	
		Avg Yi	STD*	Avg Yi	STD*
AA	8	0.452	0.681	0.939	0.833
BB	4	0.047	0.252	-0.126	0.362
C	8	1.112	1.122	0.266	1.436
H	4	0.123	0.293	0.033	0.458
I	4	0.086	0.360	0.175	0.569
O	8	-0.109	0.548	0.933	1.014
Q	4	0.185	0.525	-0.358	0.762
T	4	-0.516	0.739	-0.432	0.662
U	4	0.828	0.527	-0.012	0.634
V	4	0.164	0.688	0.207	0.258
Z	4	-0.248	0.506	-0.105	0.663
ALL	56	0.256	0.773	0.261	0.921

* Due to the small number of ratings per part, the standard deviation of the Yi values is given in place of a pooled standard deviation.

L-42 Rater Calibration

PINION SCORING
Severity as Measured by Delta/s



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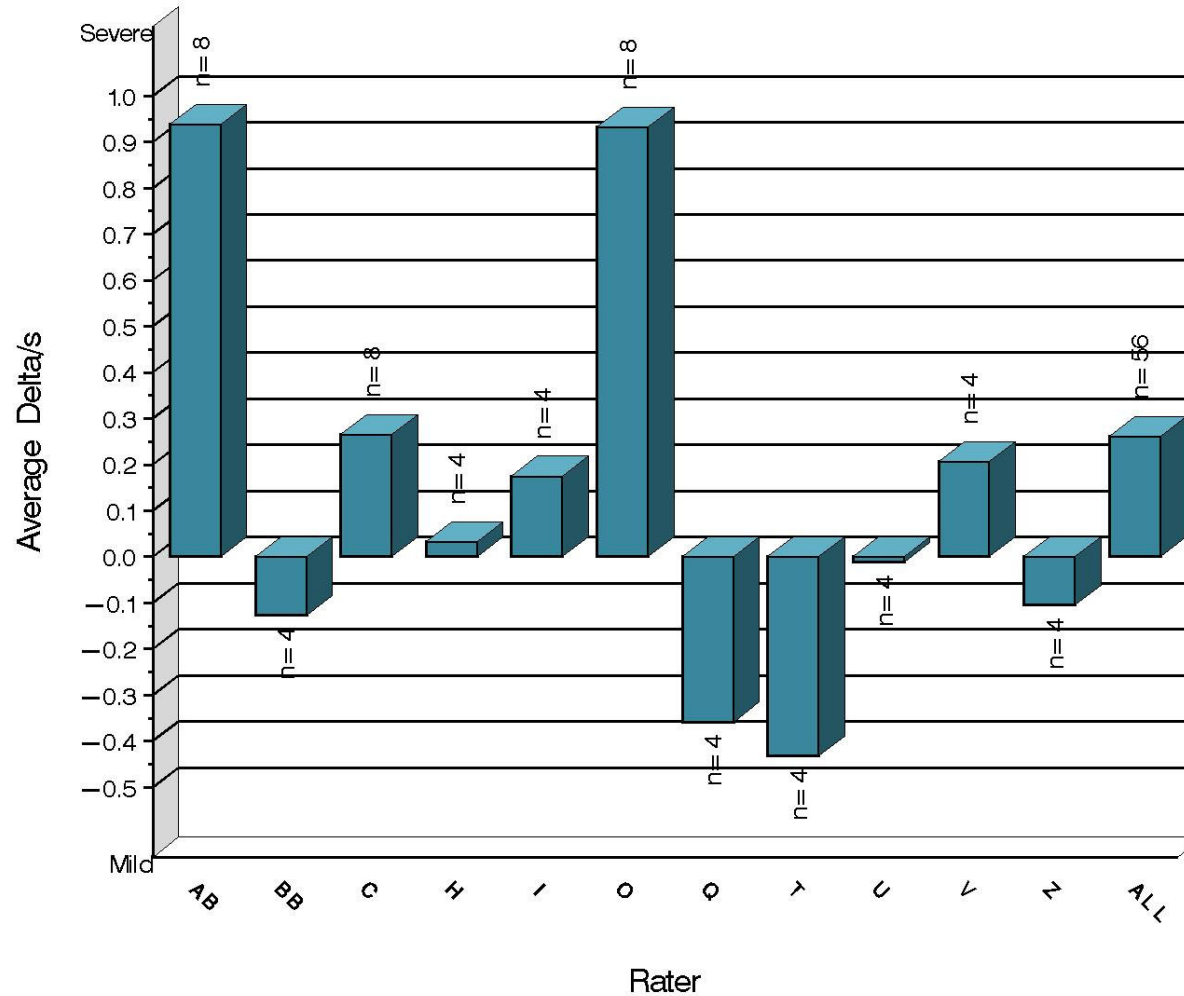


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L-42 Rater Calibration

RING SCORING
Severity as Measured by Delta/s



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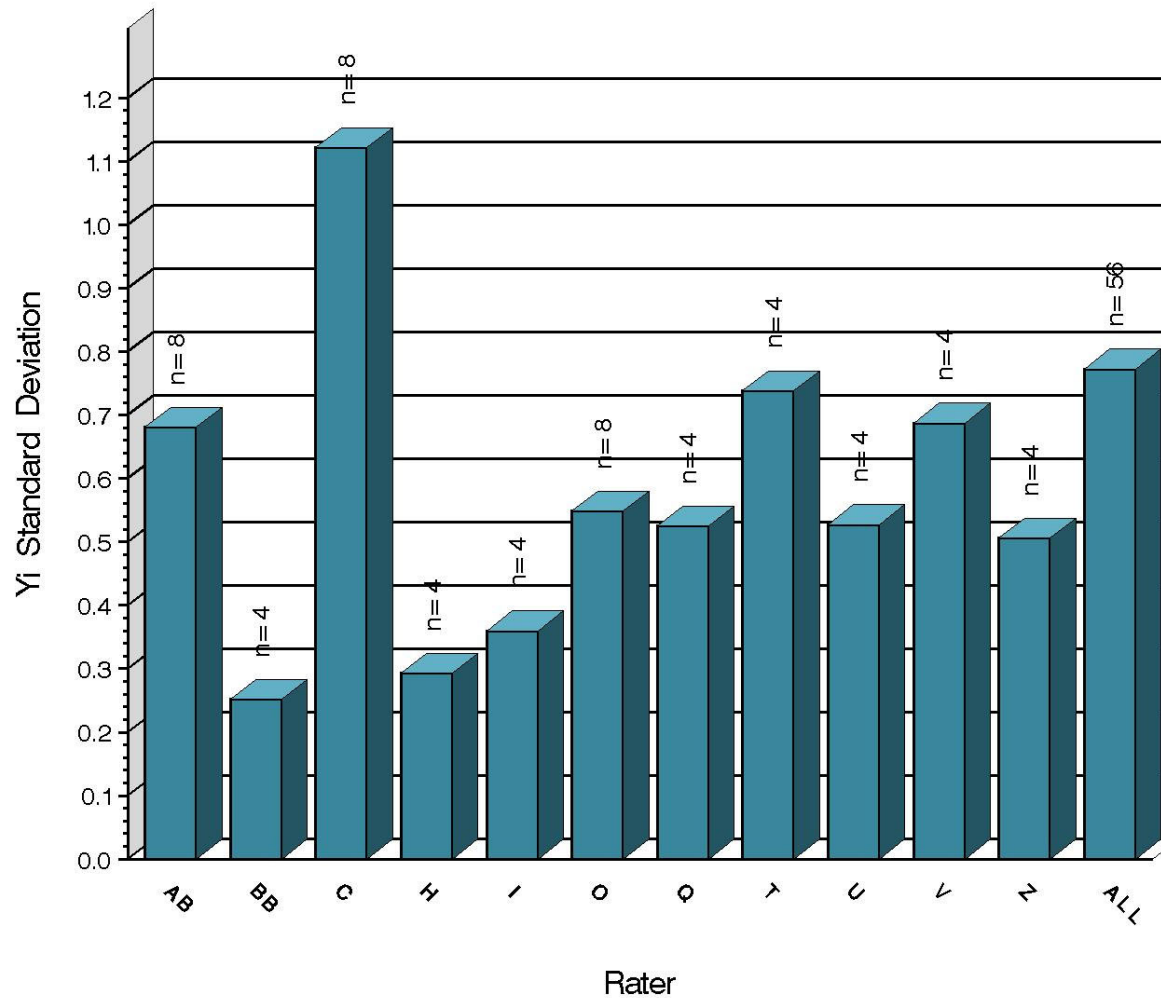
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L-42 Rater Calibration

PINION SCORING
Precision as Measured by Yi STD



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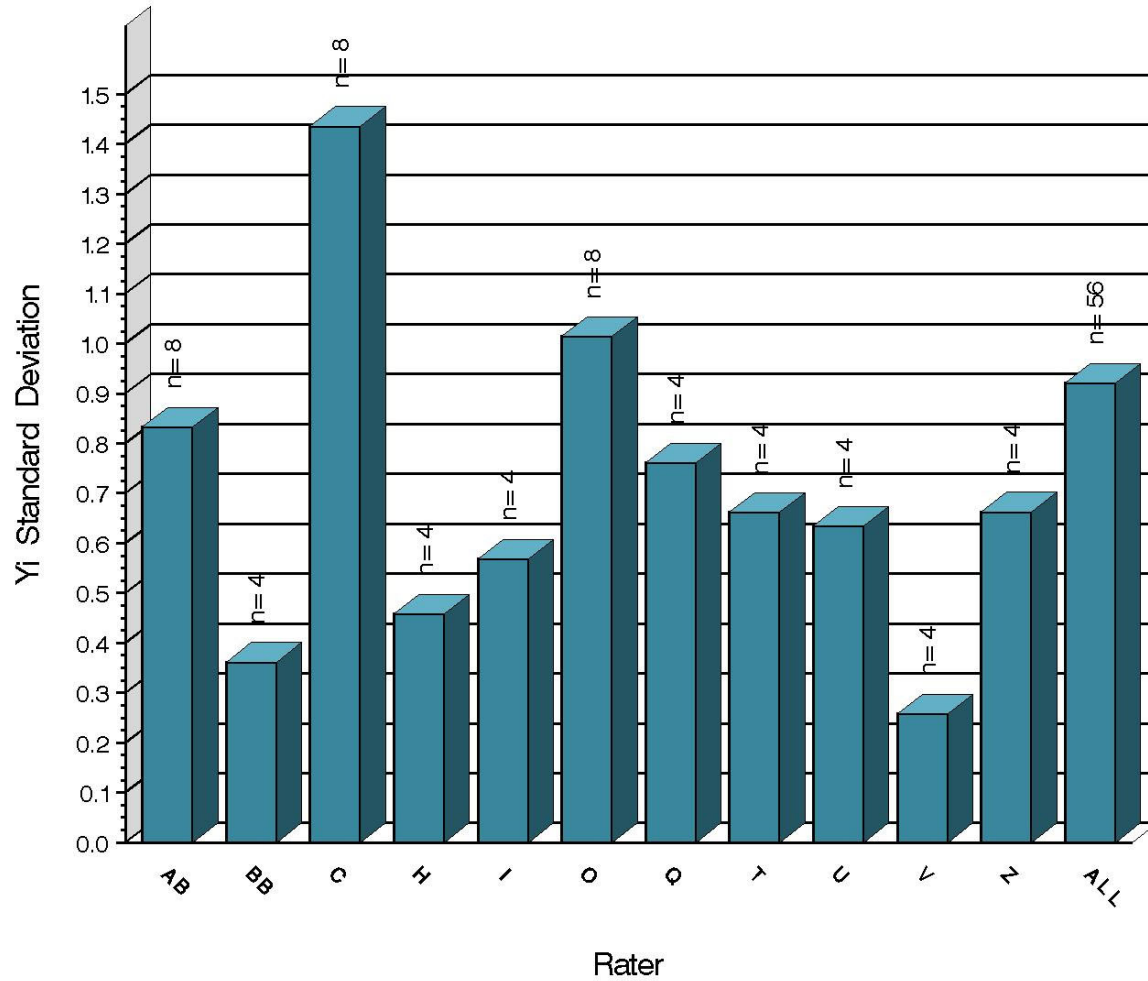
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L-42 Rater Calibration

RING SCORING
Precision as Measured by Y_i STD



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L-42 Rater Calibration

SUMMARY OF SEVERITY & PRECISION

Severity

PSCR exceeded the limit in the severe direction with one test this period. RSCR exceeded the action limit in the severe direction with two tests this period but has since returned within limits.

Precision

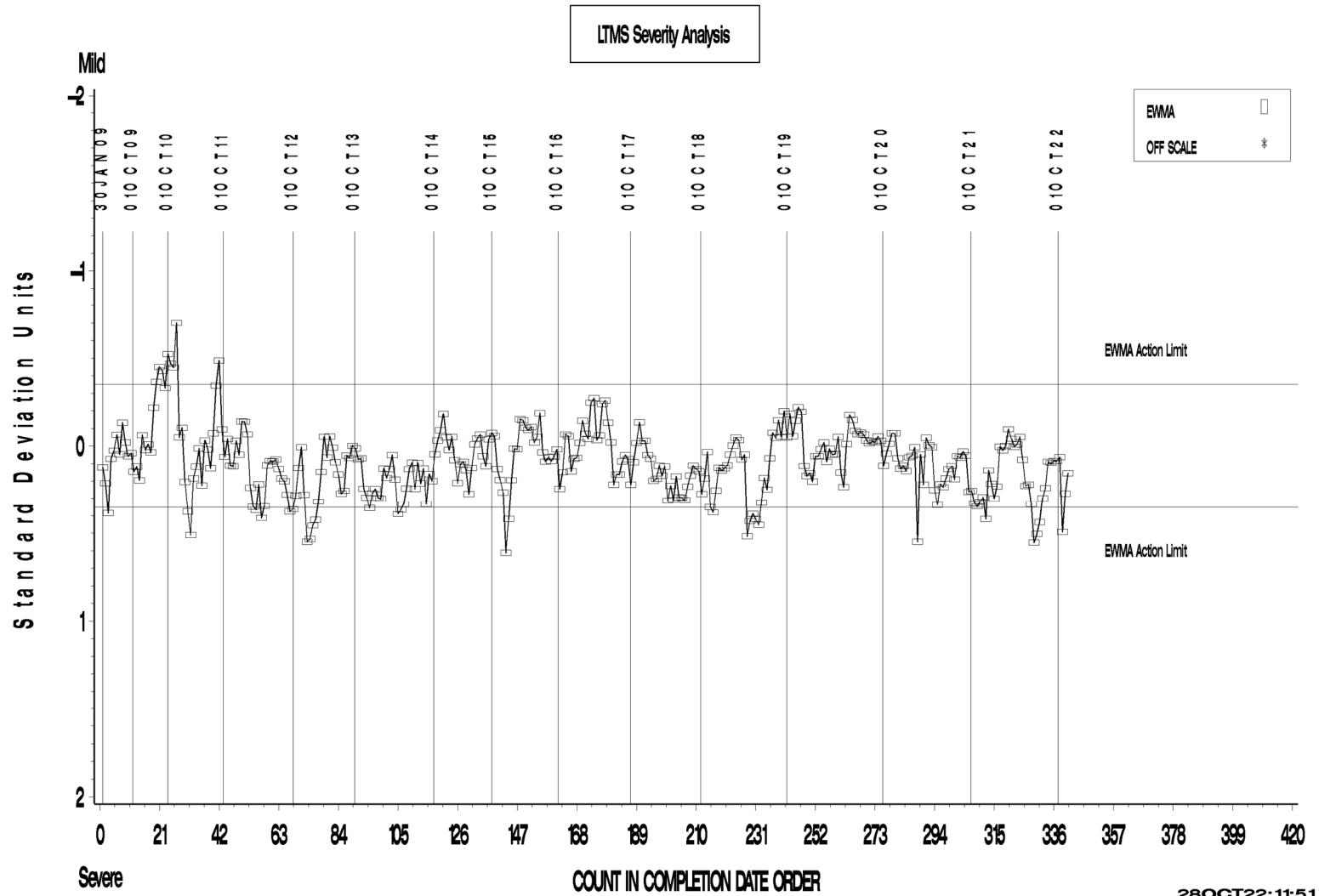
Precision for both parameters remained within acceptable limits.

Industry control charts follow.

L-42 Rater Calibration

L-42 RATER CALIBRATION INDUSTRY OPERATIONALLY VALID DATA

PINION SCORING

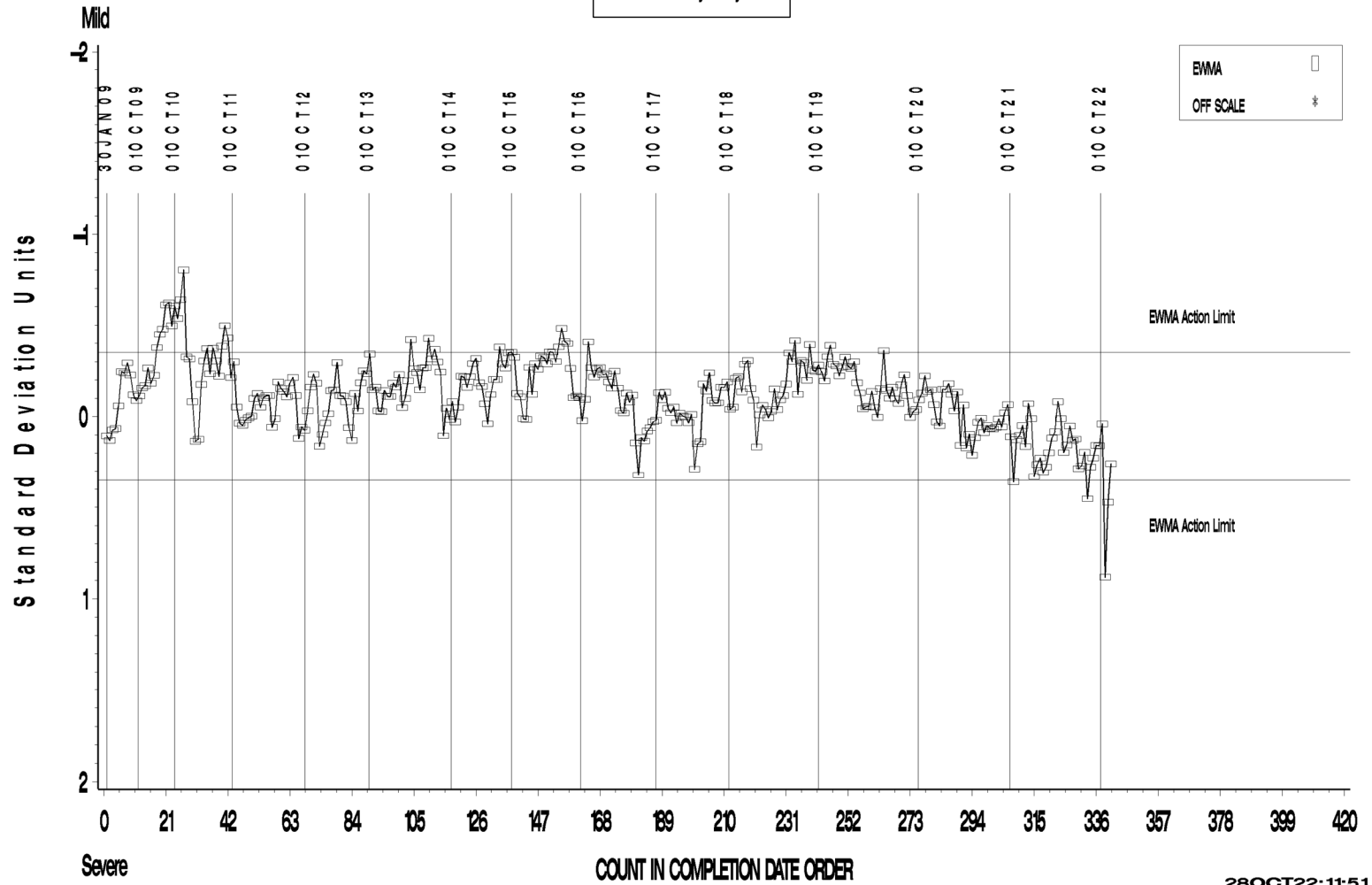


L-42 Rater Calibration

L-42 RATER CALIBRATION INDUSTRY OPERATIONALLY VALID DATA

RING SCORING

LTMS Severity Analysis



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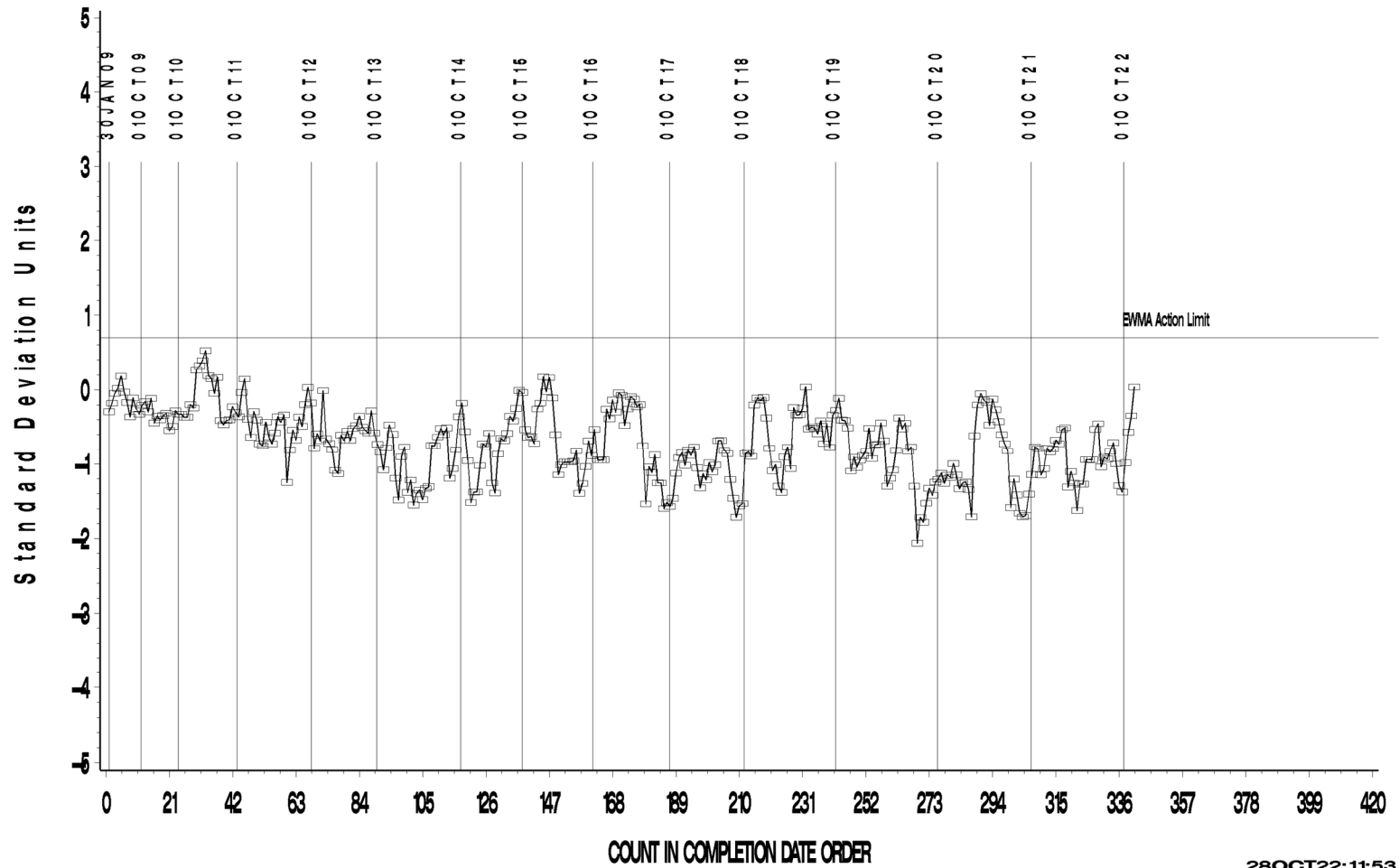
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L-42 Rater Calibration

L-42 RATER CALIBRATION INDUSTRY OPERATIONALLY VALID DATA

PINION SCORING

LTMS Precision Analysis



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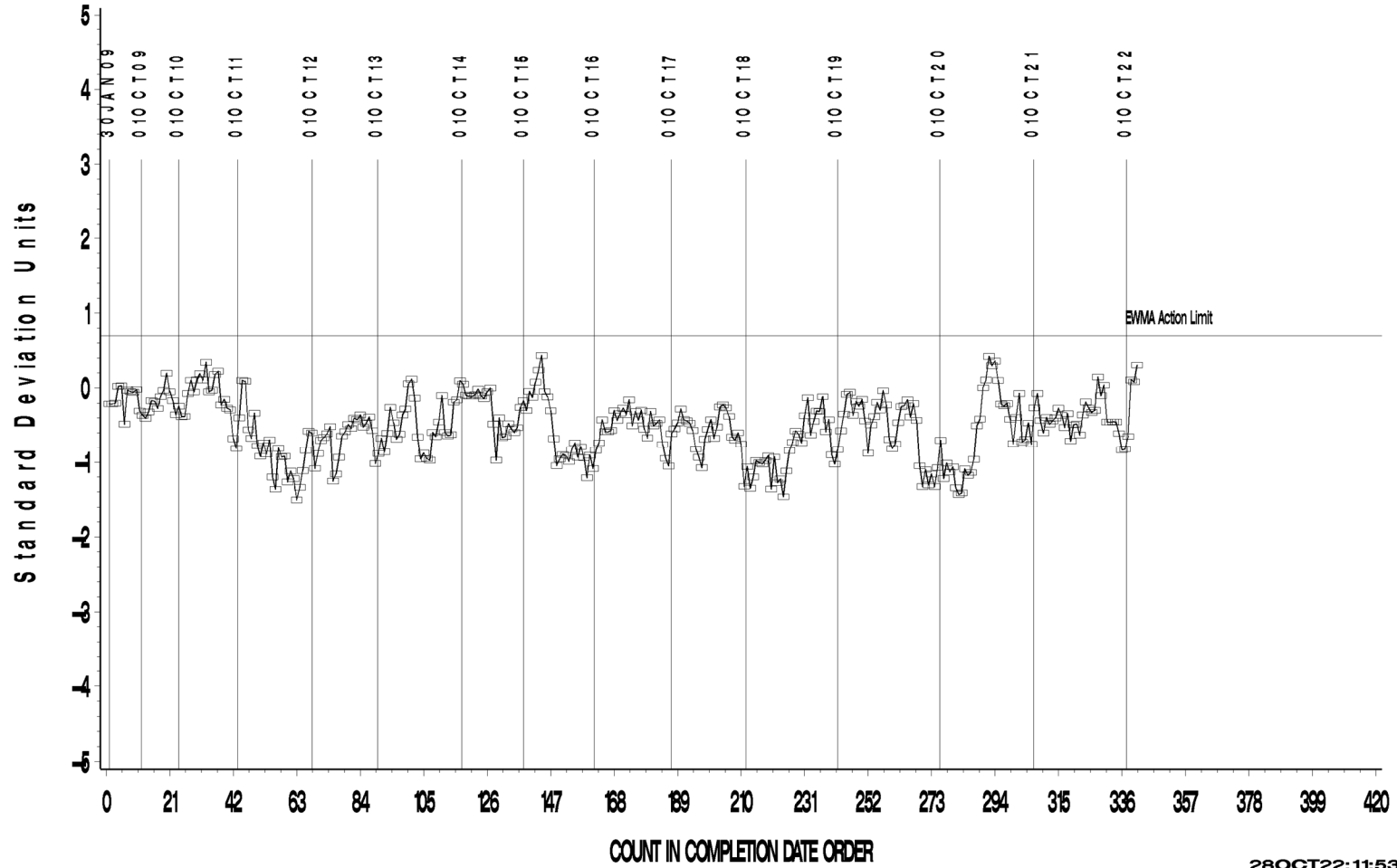
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L-42 Rater Calibration

L-42 RATER CALIBRATION INDUSTRY OPERATIONALLY VALID DATA

RING SCORING

LTMS Precision Analysis



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L-42 Rater Calibration

L-42 RATER CALIBRATION INDUSTRY OPERATIONALLY VALID DATA

PINION SCORING

CUSUM Severity Analysis



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RING SCORING

CUSUM Severity Analysis



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