



## Test Monitoring Center

203 Armstrong Drive, Freeport, PA 16229, USA

www.astmtmc.org  
412-365-1000

MEMORANDUM: 23-008  
DATE: April 19, 2023  
TO: Matthew Sangpeal, Chairman, L-42 Surveillance Panel  
FROM: Dylan Beck *Dylan Beck*  
SUBJECT: L-42 Rater Calibration from October 1, 2022 through March 30, 2023

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

DJB/djb/mem23-008.djb.doc

cc: Jeff Clark

Sean Moyer

L-42 Surveillance Panel

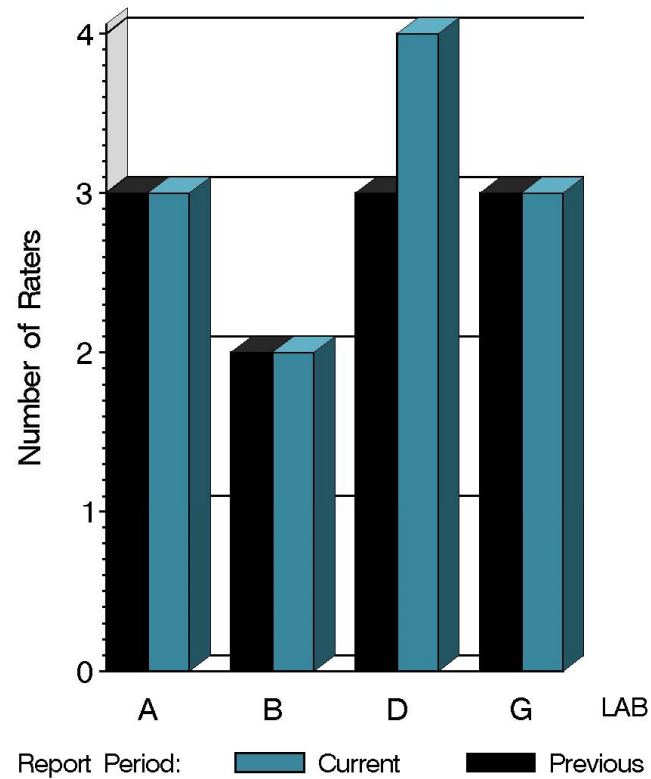
<https://www.astmtmc.org/ftp/docs/gear/l42rc/semiannualreports/l42rc-04-2023.pdf>

Distribution: email

# L-42 Rater Calibration

	Reporting Data	Calibrated on 3-31-23
Number of Labs	4	4
Number of Raters	12	12

BY-LAB RATER DISTRIBUTION



13:27:59 11APR2023



# L-42 Rater Calibration

## Test Distribution by Validity

		Totals	
		Last Period	This Period
Accepted for calibration	AC	12	14
Rejected (Mild)	OC	0	1
Rejected (Severe)	OC	2	1
Rejected (Multiple)	OC	0	0
Rejected (Precision)	OC	0	0
Workshop data	AG	9	9
Total		23	25

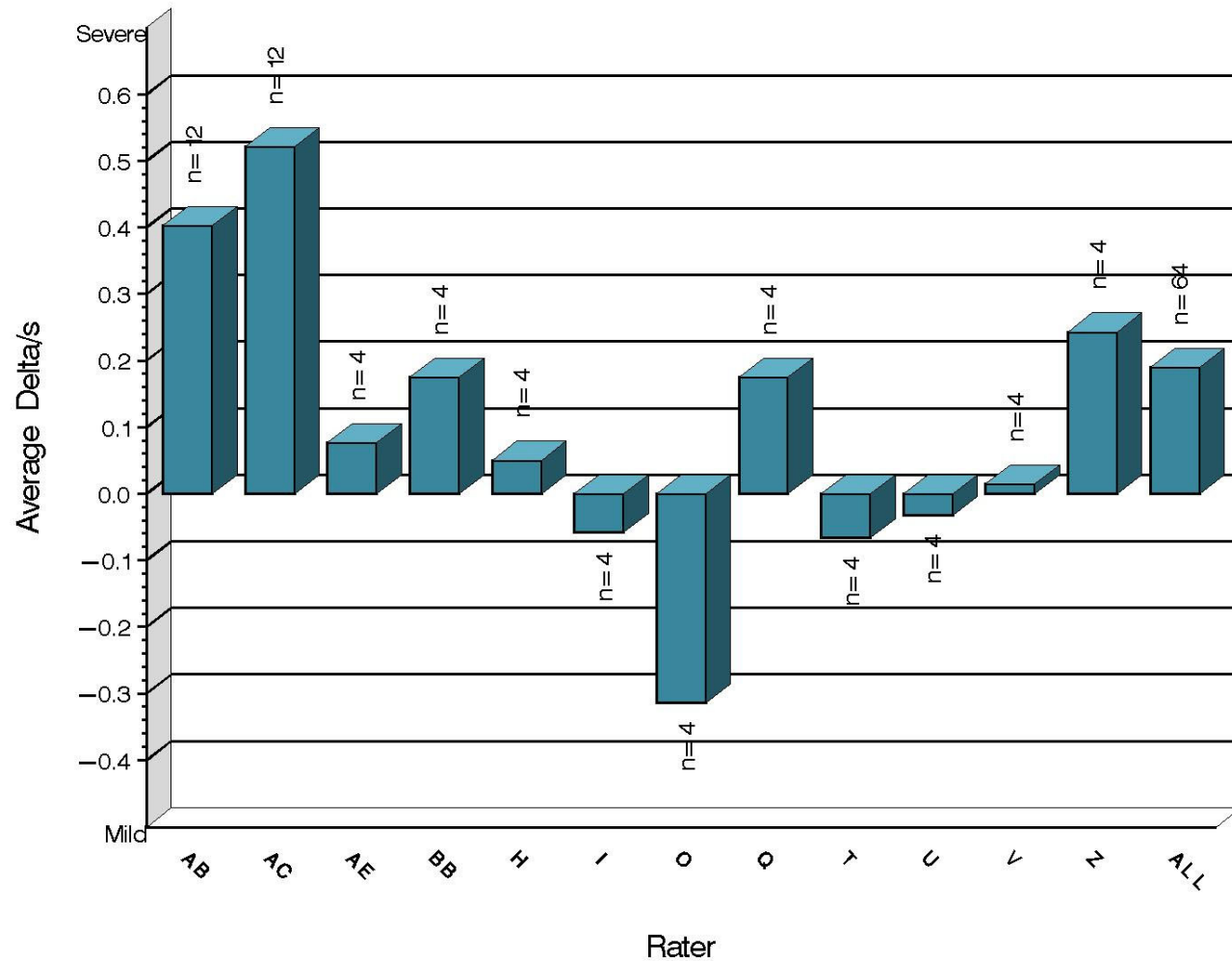
# L-42 Rater Calibration

Rater	N	PSCR		RSCR	
		Avg Yi	STD*	Avg Yi	STD*
AB	12	0.402	1.755	0.981	3.253
AC	12	0.521	1.098	-0.168	0.975
AE	4	0.077	.370	-0.385	0.564
BB	4	0.175	0.227	-0.098	0.168
H	4	0.050	0.087	0.152	0.186
I	8	-0.059	0.688	-0.532	0.422
O	4	-0.314	1.802	-0.596	-0.596
Q	4	0.175	0.313	-0.366	0.785
T	4	-0.066	1.407	-0.428	1.107
U	4	-0.032	1.106	-0.438	0.850
V	4	0.014	0.389	-0.265	0.478
Z	4	0.243	0.772	0.138	0.325
ALL	64	0.190	1.090	-0.024	1.601

\* 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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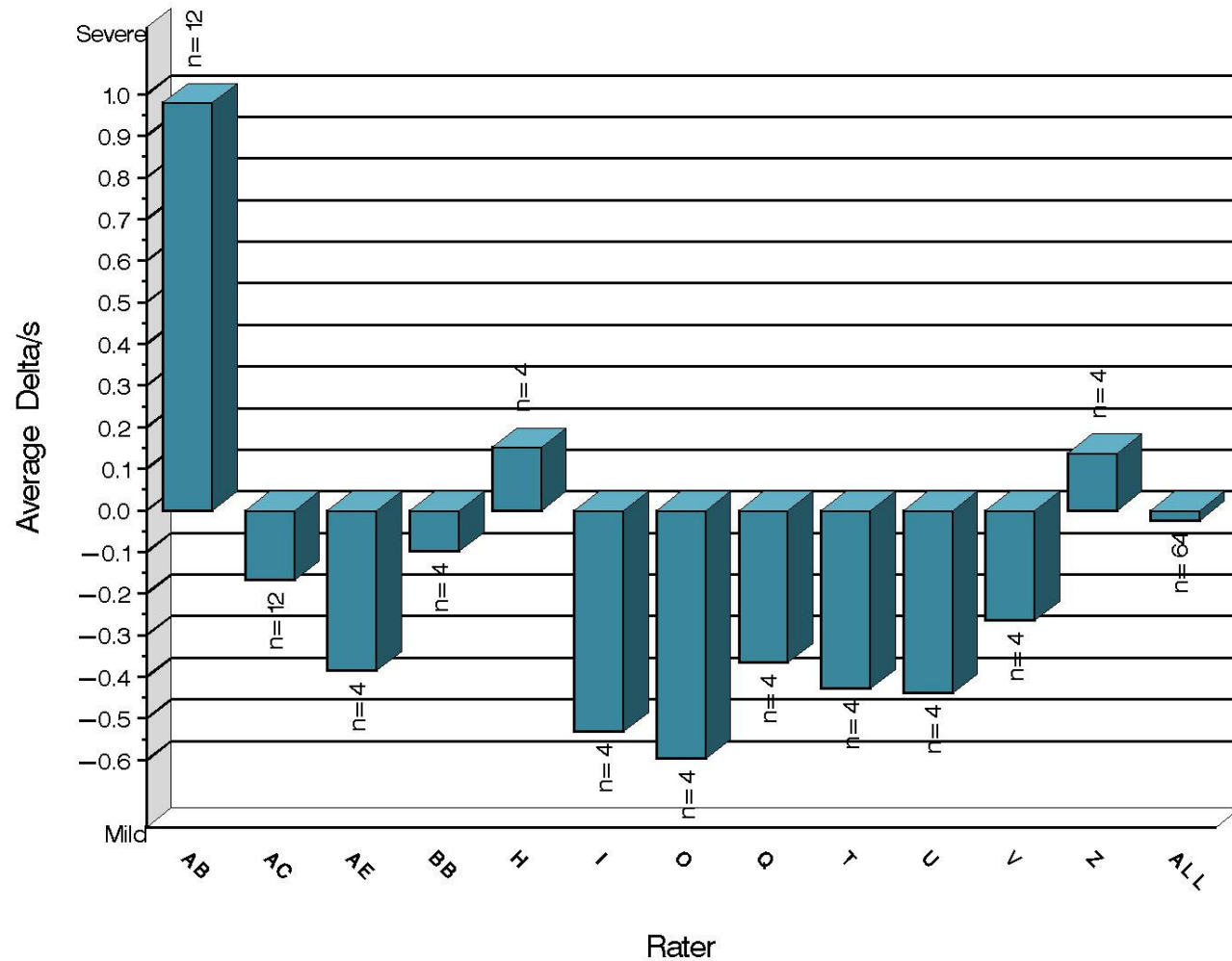
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# L-42 Rater Calibration

RING SCORING  
Severity as Measured by Delta/s



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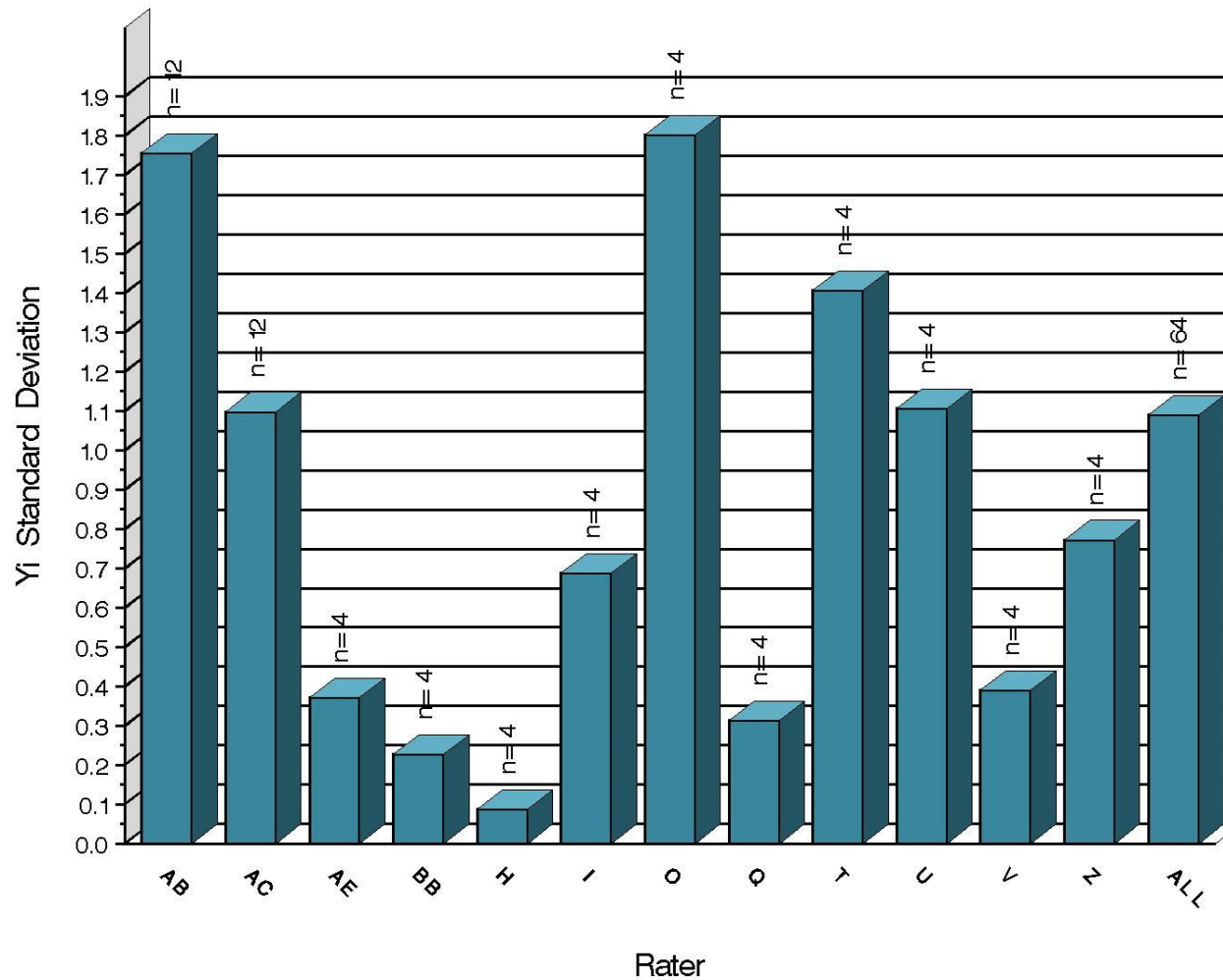


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# L-42 Rater Calibration

PINION SCORING  
Precision as Measured by Yi STD



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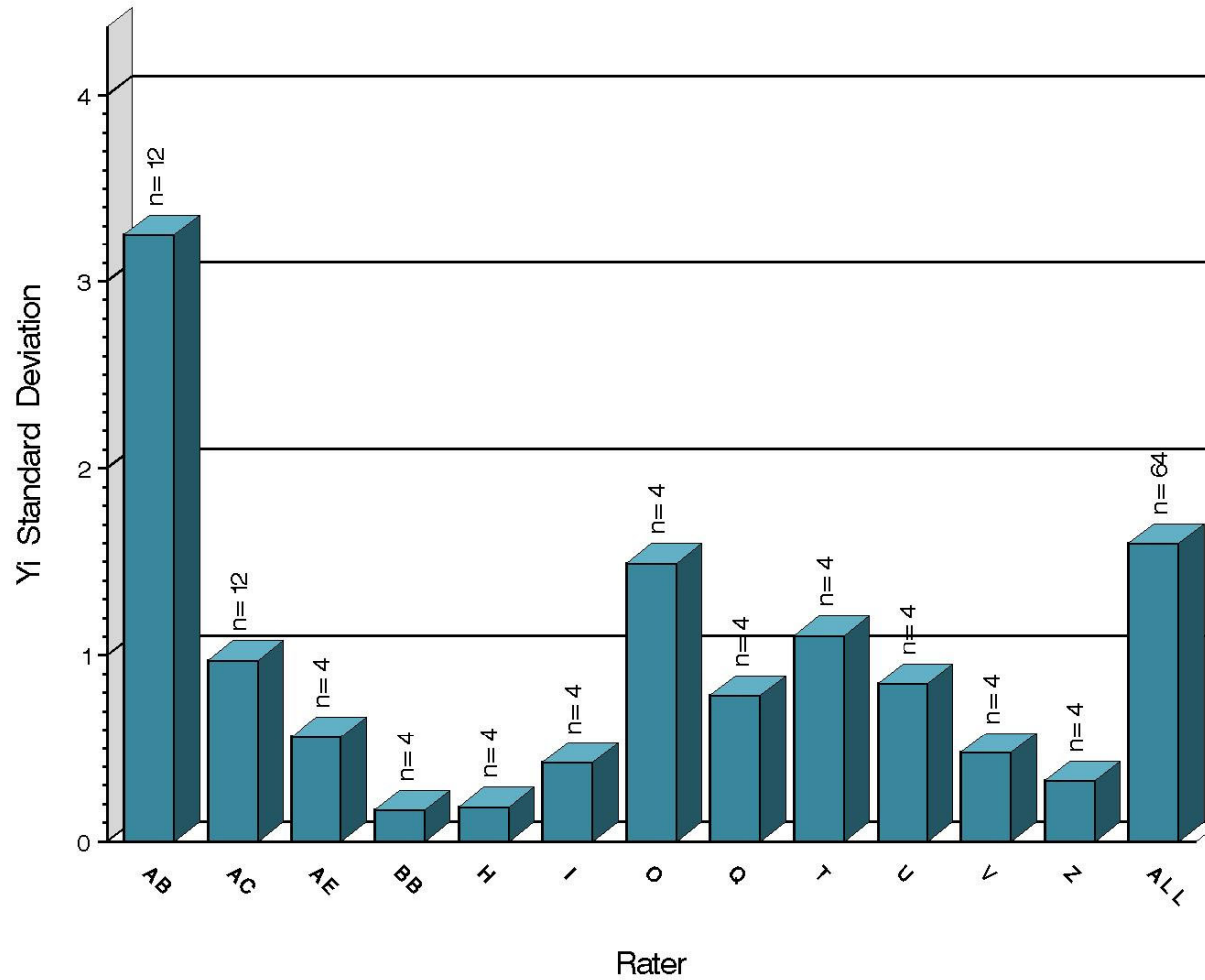
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# L-42 Rater Calibration

RING SCORING  
Precision as Measured by Yi 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 remained within the limits during this reporting period.

### Precision

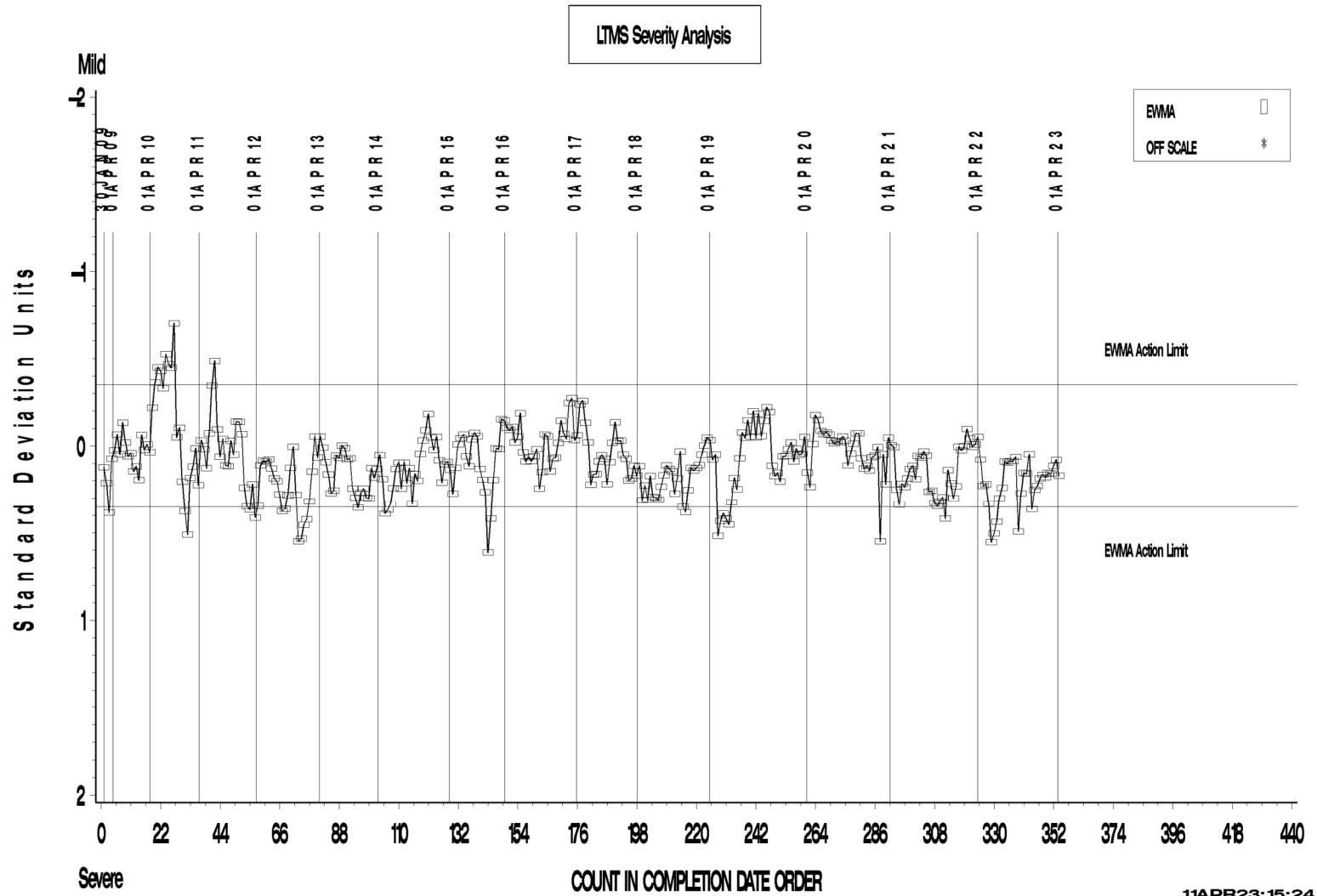
Precision for both parameters remained within acceptable limits.

Industry control charts follow.

# L-42 Rater Calibration

L-42 RATER CALIBRATION INDUSTRY OPERATIONALLY VALID DATA

## PINION SCORING

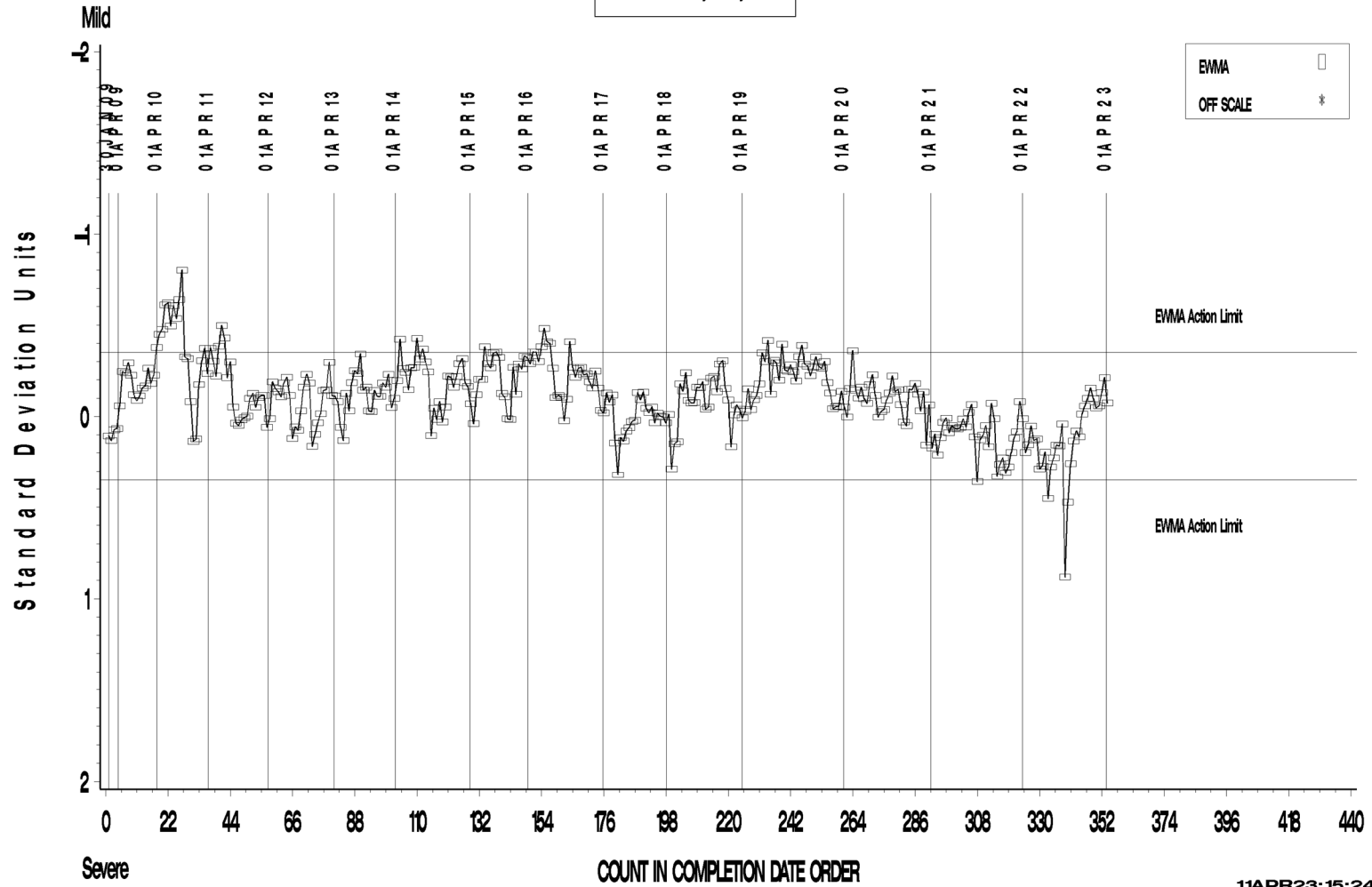


# L-42 Rater Calibration

L-42 RATER CALIBRATION INDUSTRY OPERATIONALLY VALID DATA

## RING SCORING

LTMS Severity Analysis



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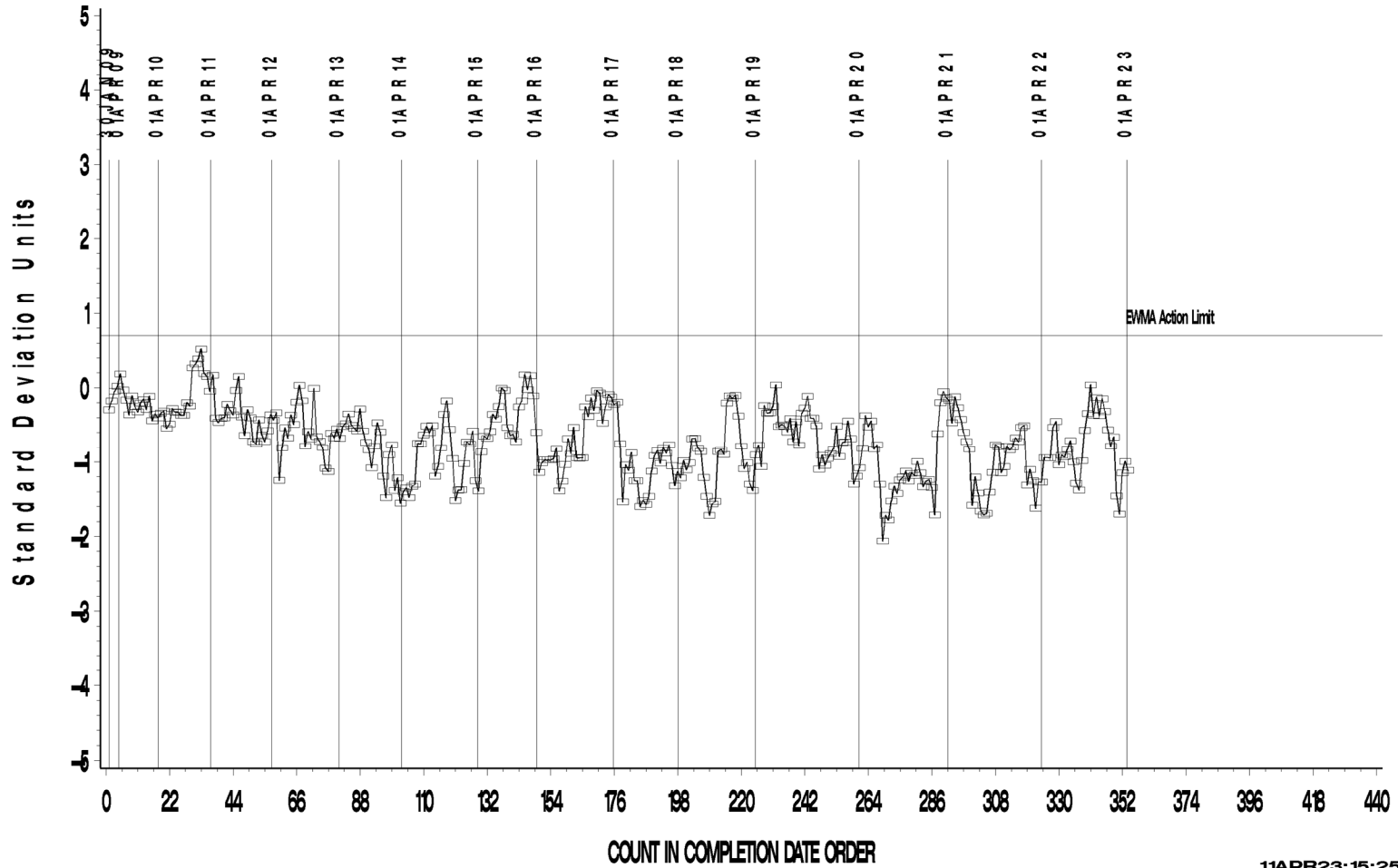
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# L-42 Rater Calibration

L-42 RATER CALIBRATION INDUSTRY OPERATIONALLY VALID DATA

## PINION SCORING

LTMS Precision Analysis



11APR23:15:25



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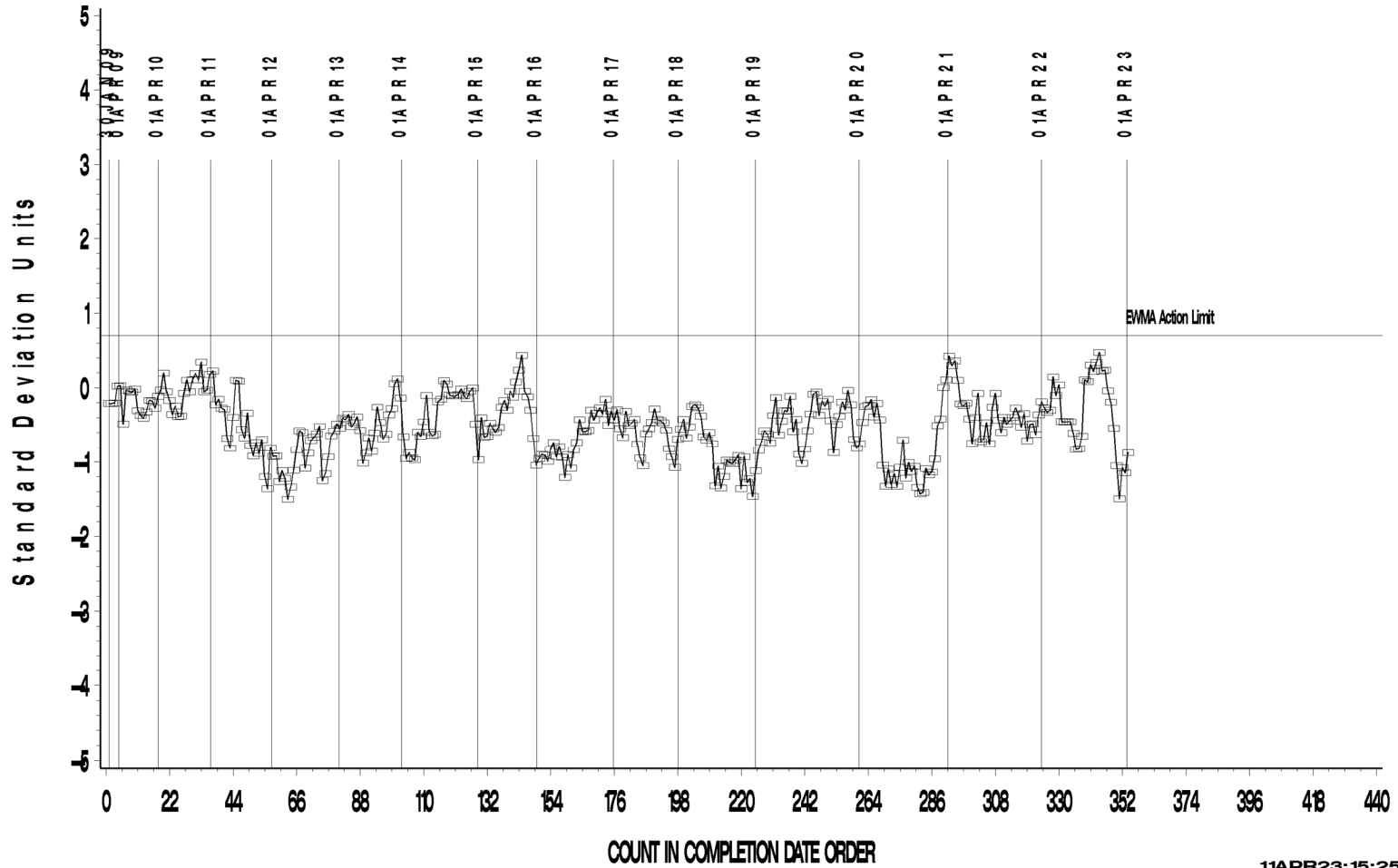
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# L-42 Rater Calibration

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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# L-42 Rater Calibration

L-42 RATER CALIBRATION INDUSTRY OPERATIONALLY VALID DATA

## RING SCORING

CUSUM Severity Analysis



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