



Test Monitoring Center

203 Armstrong Drive, Freeport, PA 16229, USA

www.astmtmc.org
412-365-1000

MEMORANDUM: 22-016
DATE: June 13, 2022
TO: Matthew Sangpeal, Chairman, L-42 Surveillance Panel
FROM: Dylan Beck *Dylan Beck*
SUBJECT: L-42 Rater Calibration from October 1, 2021 through March 31, 2022

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

DJB/djb/mem22-016.djb.doc

cc: Frank Farber

Jeff Clark

L-42 Surveillance Panel

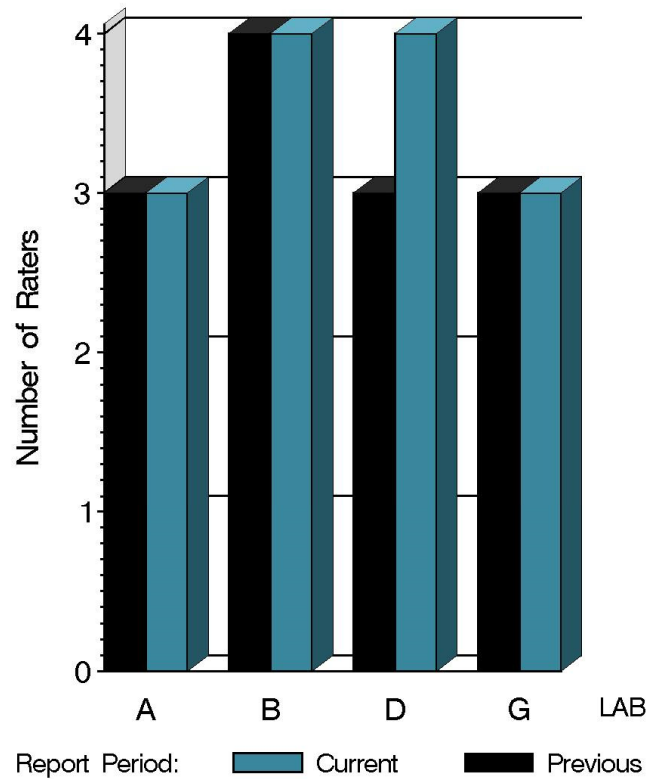
<https://www.astmtmc.org/ftp/docs/gear/l42rc/semiannualreports/l42rc-04-2022.pdf>

Distribution: email

L-42 Rater Calibration

	Reporting Data	Calibrated on 3-31-22
Number of Labs	4	4
Number of Raters	14	14

BY-LAB RATER DISTRIBUTION



10:17:56 25MAY2022



L-42 Rater Calibration

Test Distribution by Validity

		Totals	
		Last Period	This Period
Accepted for calibration	AC	15	15
Rejected (Mild)	OC	0	0
Rejected (Severe)	OC	0	2
Rejected (Multiple)	OC	0	0
Rejected (Precision)	OC	0	0
Workshop data	AG	10	10
Total		25	27

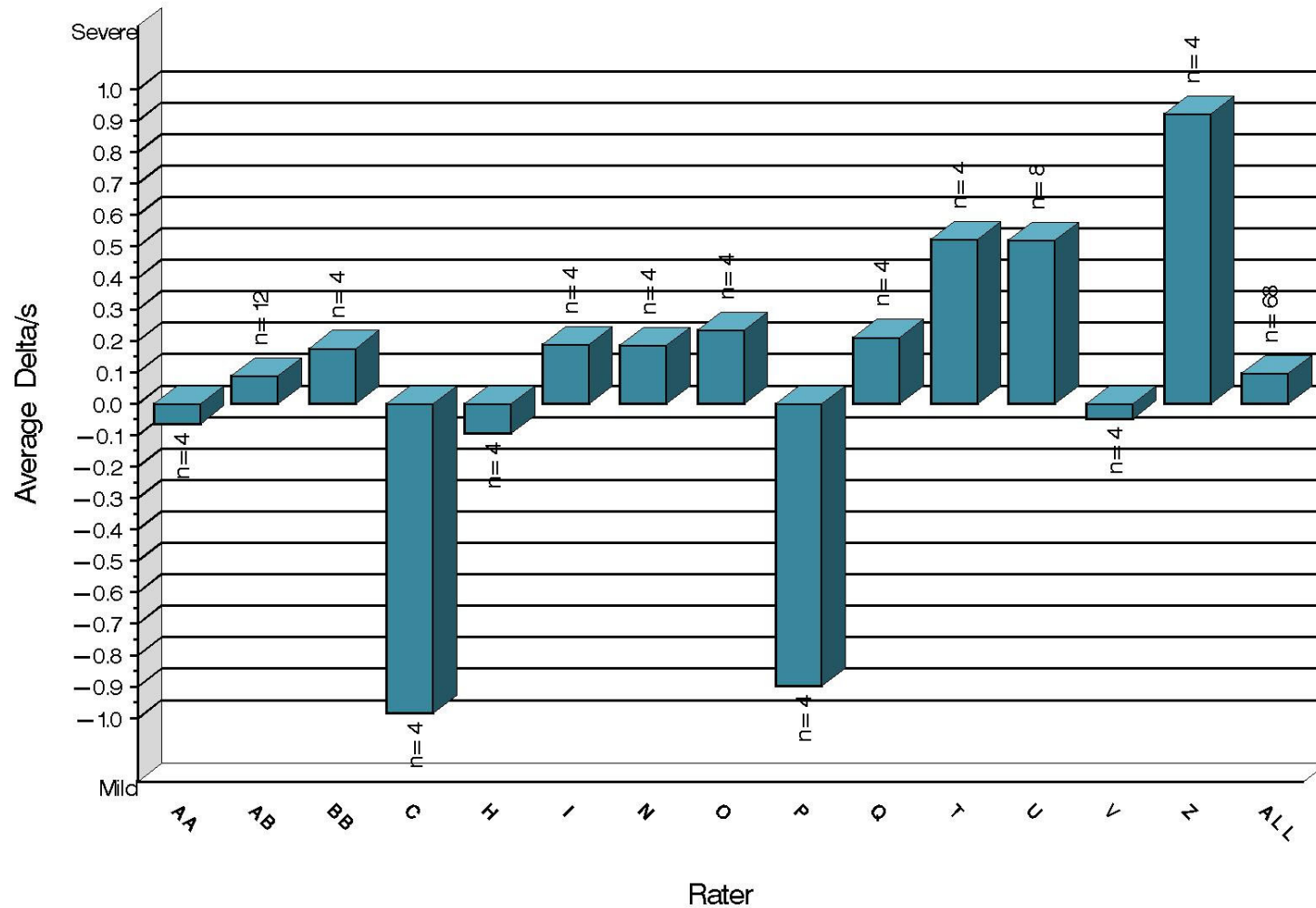
L-42 Rater Calibration

Rater	N	PSCR		RSCR	
		Avg Yi	STD*	Avg Yi	STD*
AA	4	-0.064	0.895	-0.736	1.175
AB	12	0.087	0.813	0.708	1.155
BB	4	0.175	0.334	-0.203	0.670
C	4	-0.985	0.500	-1.015	0.732
H	4	-0.094	0.092	0.149	0.289
I	4	0.189	0.185	-0.056	0.461
N	4	0.185	0.585	-0.165	1.026
O	4	0.233	0.804	0.810	1.900
P	4	-0.900	0.934	0.081	0.468
Q	4	0.211	0.239	0.007	0.452
T	4	0.523	0.614	0.344	0.746
U	8	0.518	0.857	0.276	1.401
V	4	-0.048	0.532	-0.008	0.582
Z	4	0.922	0.968	0.627	0.550
ALL	68	0.097	0.779	0.148	1.035

* 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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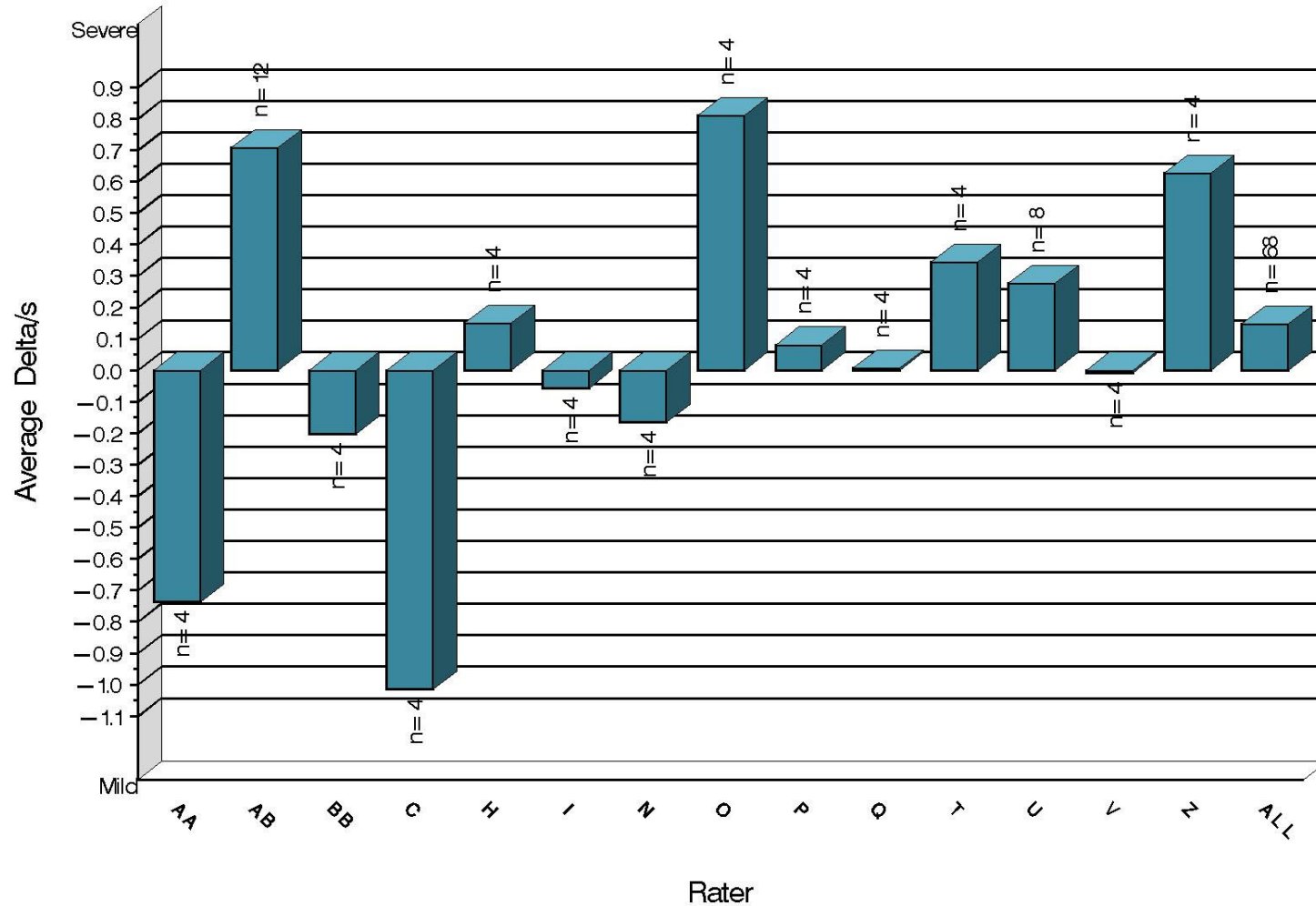


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L-42 Rater Calibration

RING SCORING
Severity as Measured by Delta/s



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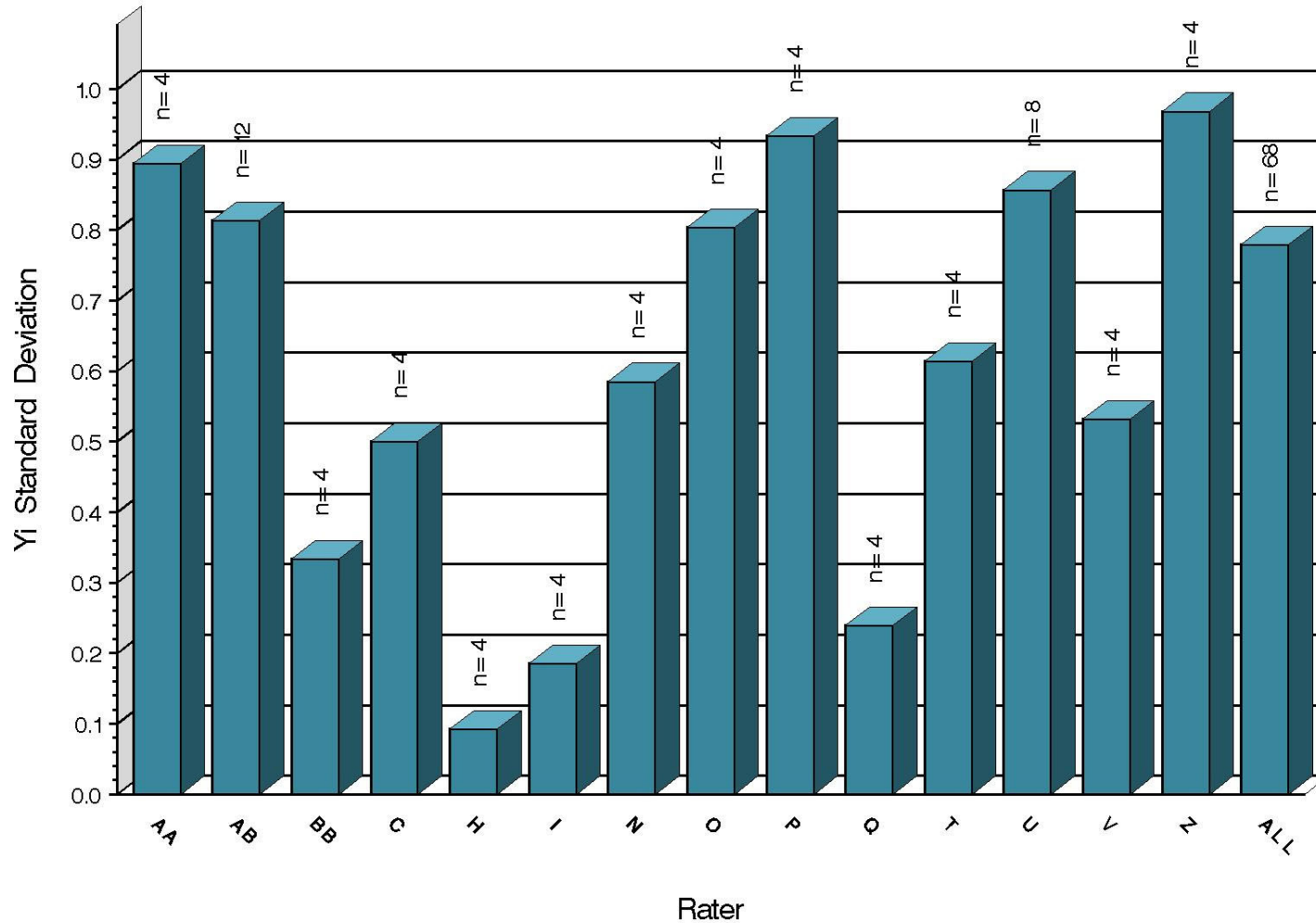


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L-42 Rater Calibration

PINION SCORING
Precision as Measured by Yi STD



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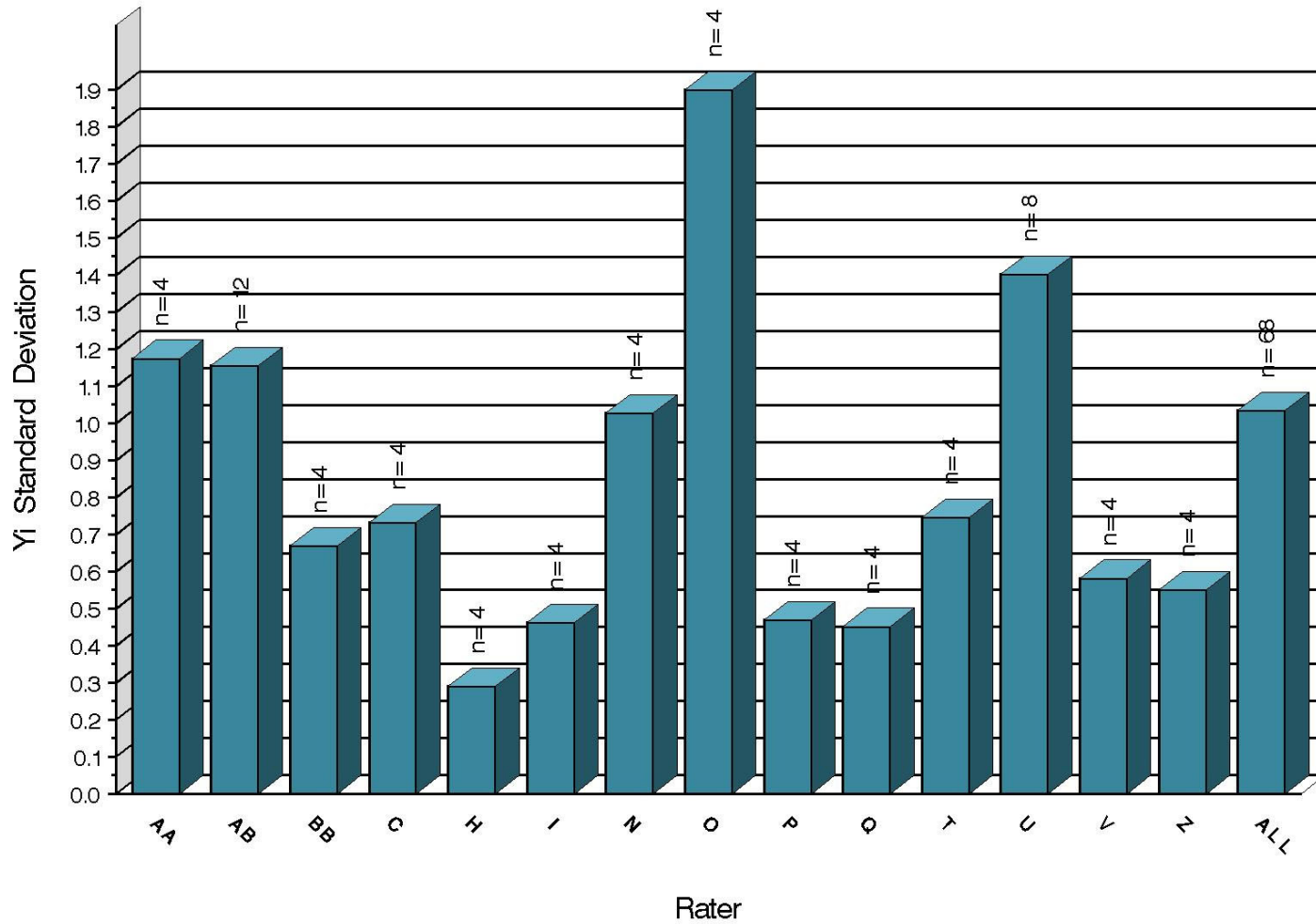


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L-42 Rater Calibration

SUMMARY OF SEVERITY & PRECISION

Severity

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

Precision

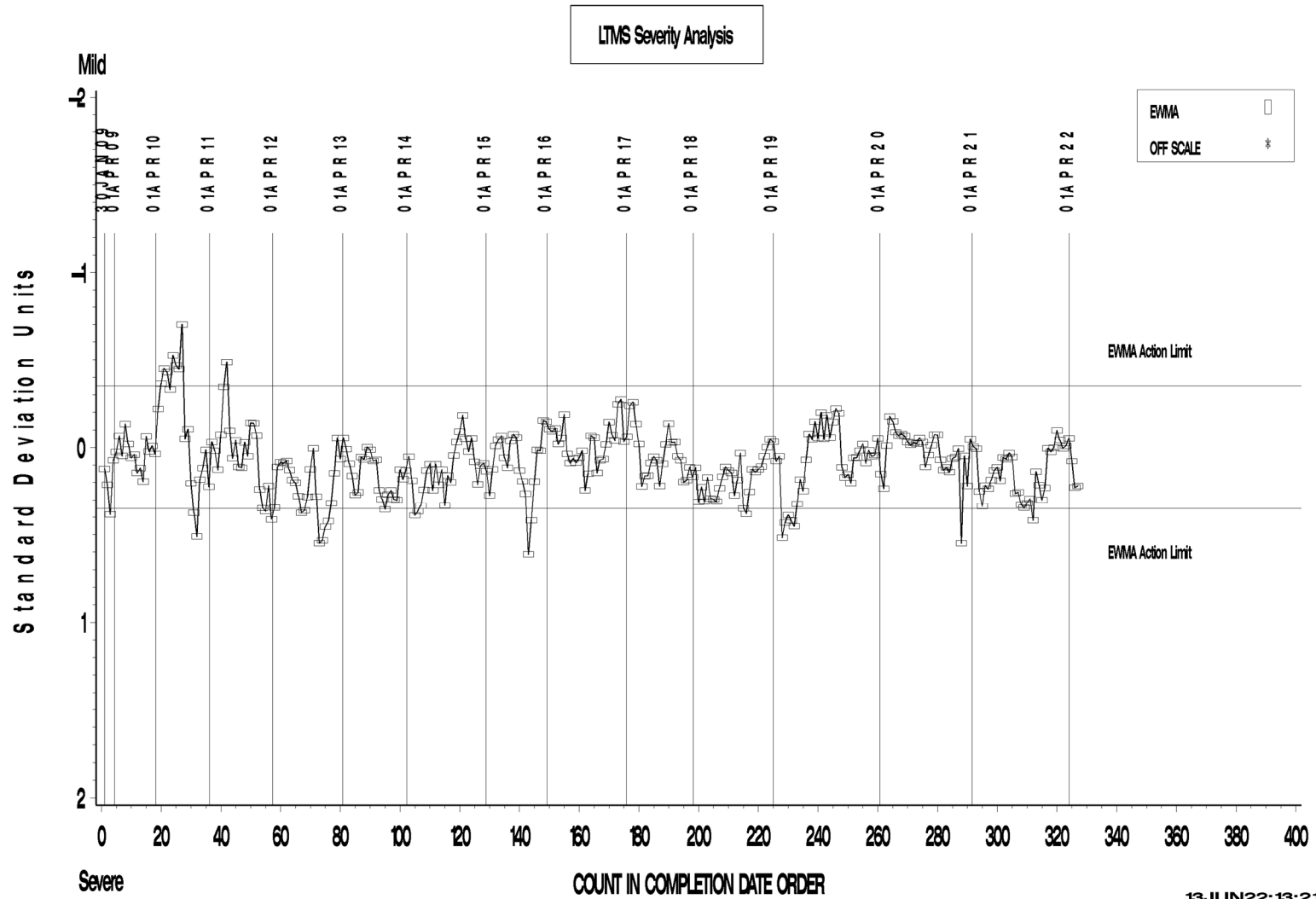
Precision for both parameters remained within acceptable limits.

Industry control charts follow.

L-42 Rater Calibration

L-42 RATER CALIBRATION INDUSTRY OPERATIONALLY VALID DATA

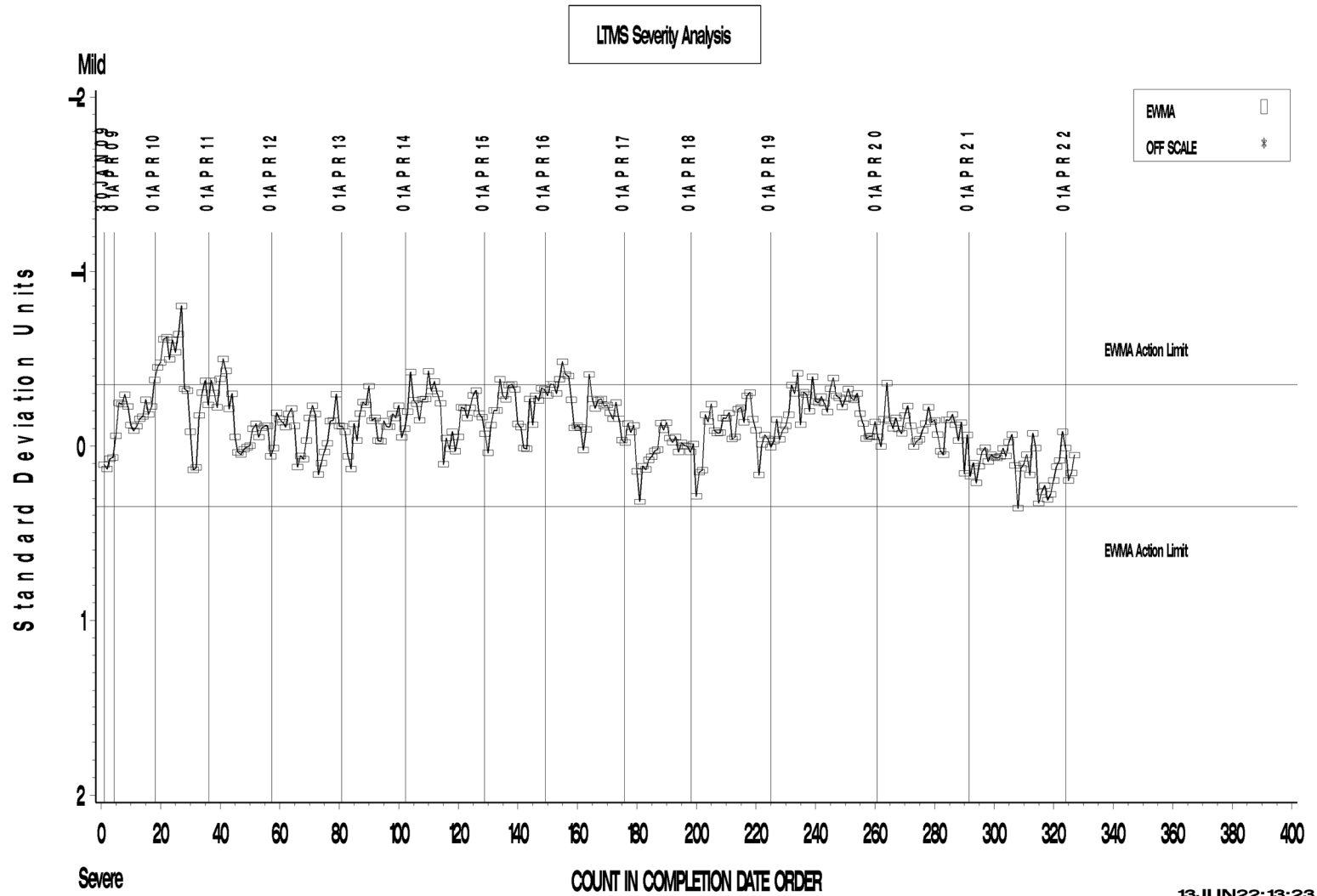
PINION SCORING



L-42 Rater Calibration

L-42 RATER CALIBRATION INDUSTRY OPERATIONALLY VALID DATA

RING SCORING



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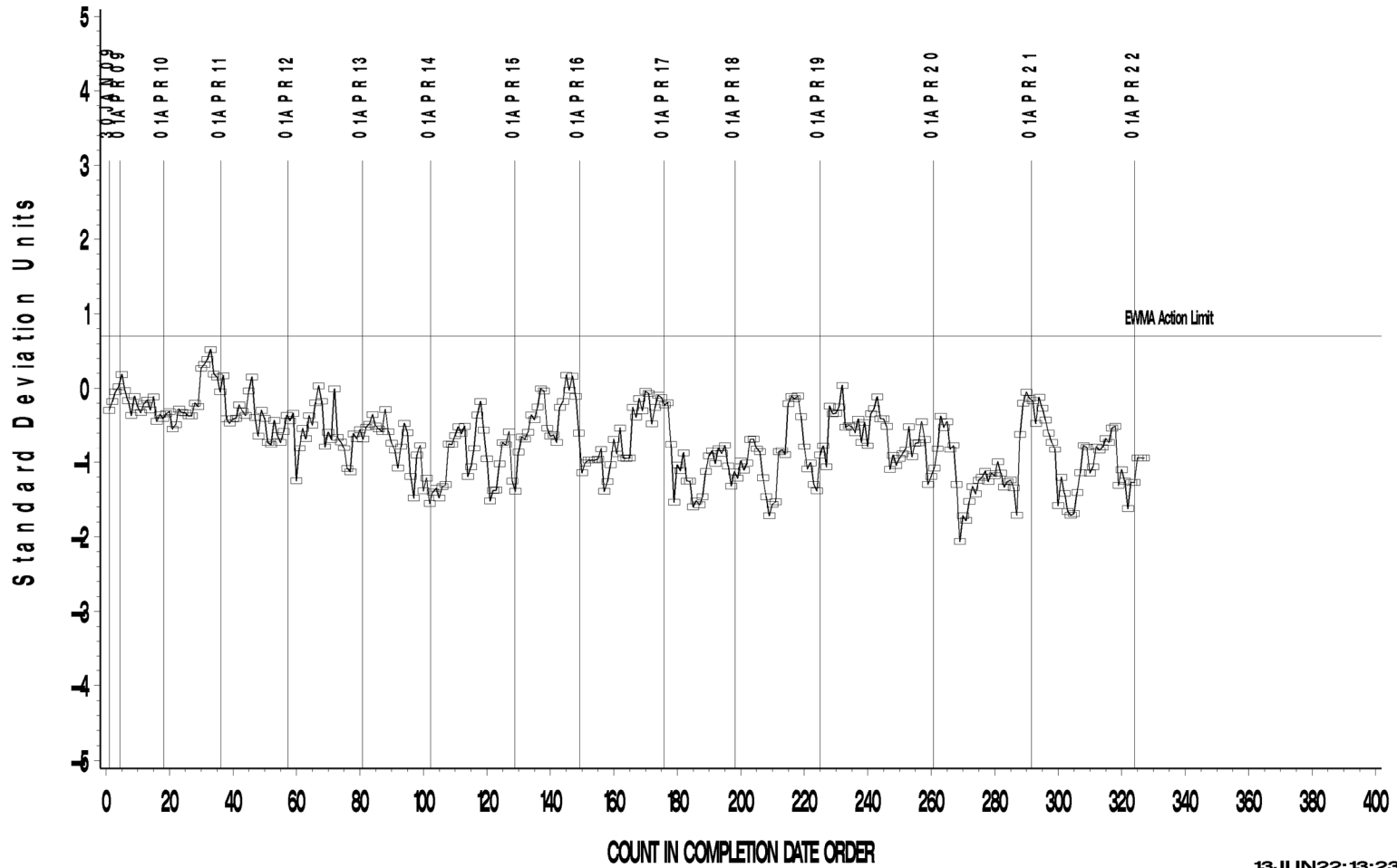
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L-42 Rater Calibration

L-42 RATER CALIBRATION INDUSTRY OPERATIONALLY VALID DATA

PINION SCORING

LTMS Precision Analysis



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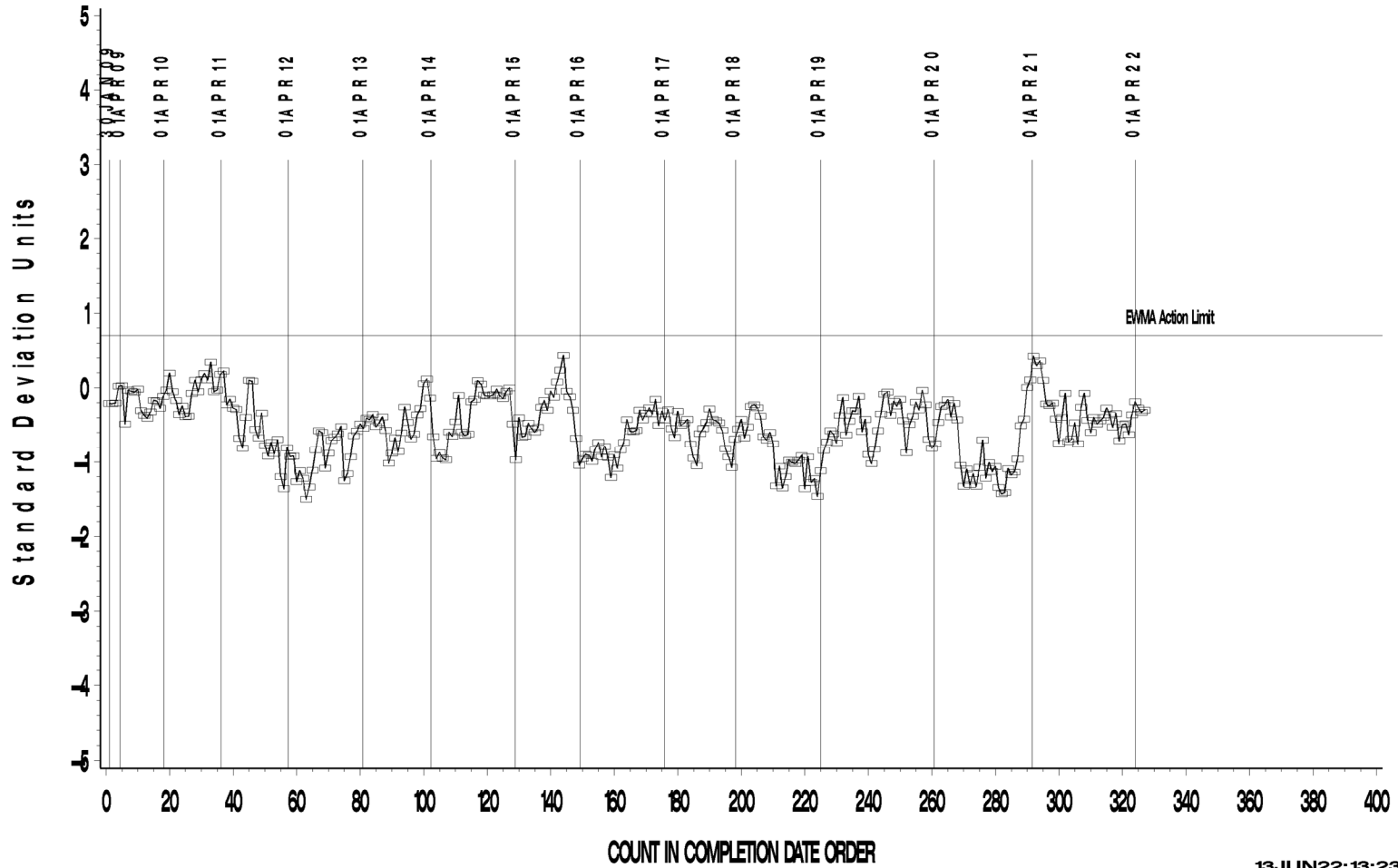
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L-42 Rater Calibration

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LTMS Precision Analysis



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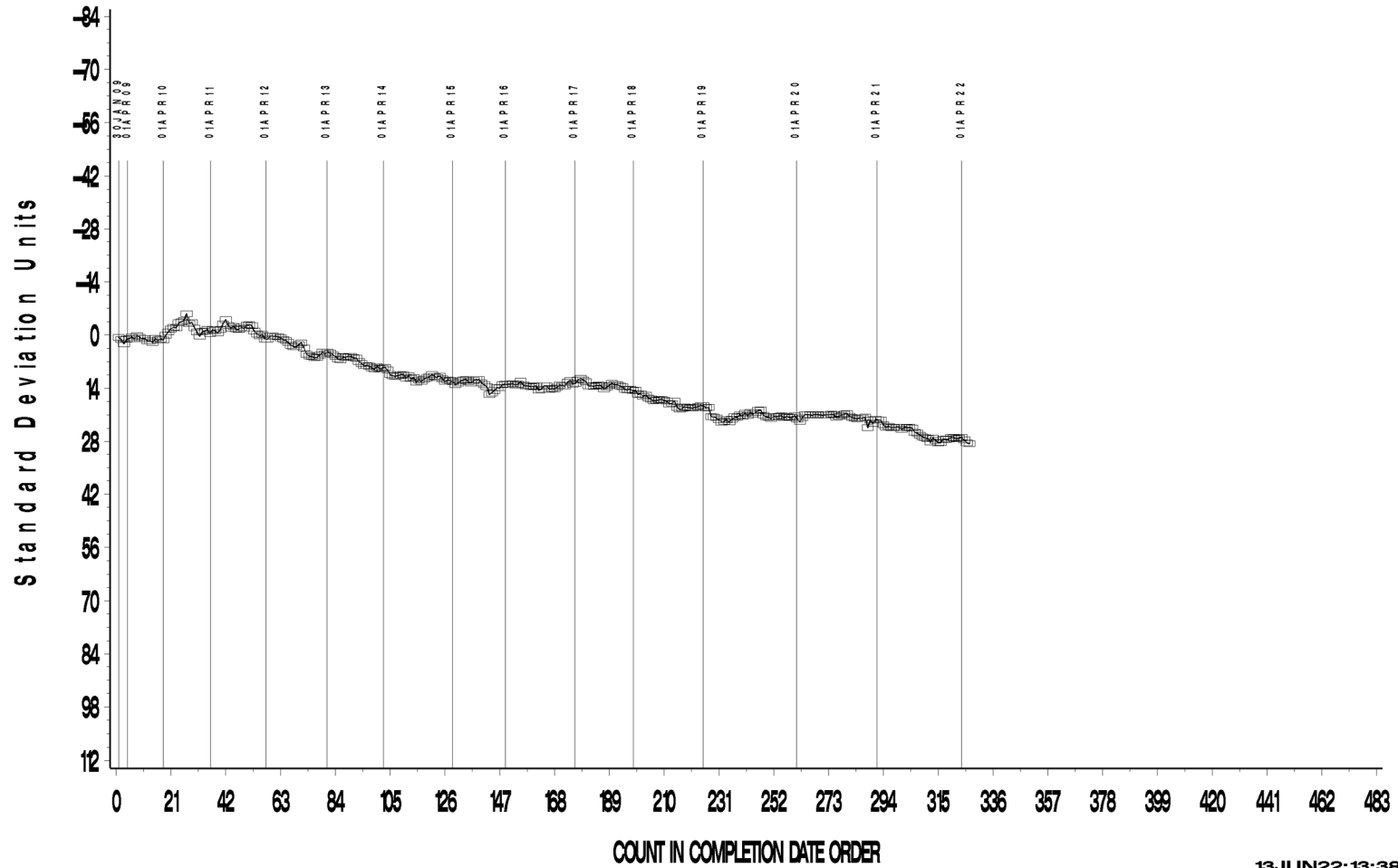
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L-42 Rater Calibration

L-42 RATER CALIBRATION INDUSTRY OPERATIONALLY VALID DATA

PINION SCORING

CUSUM Severity Analysis



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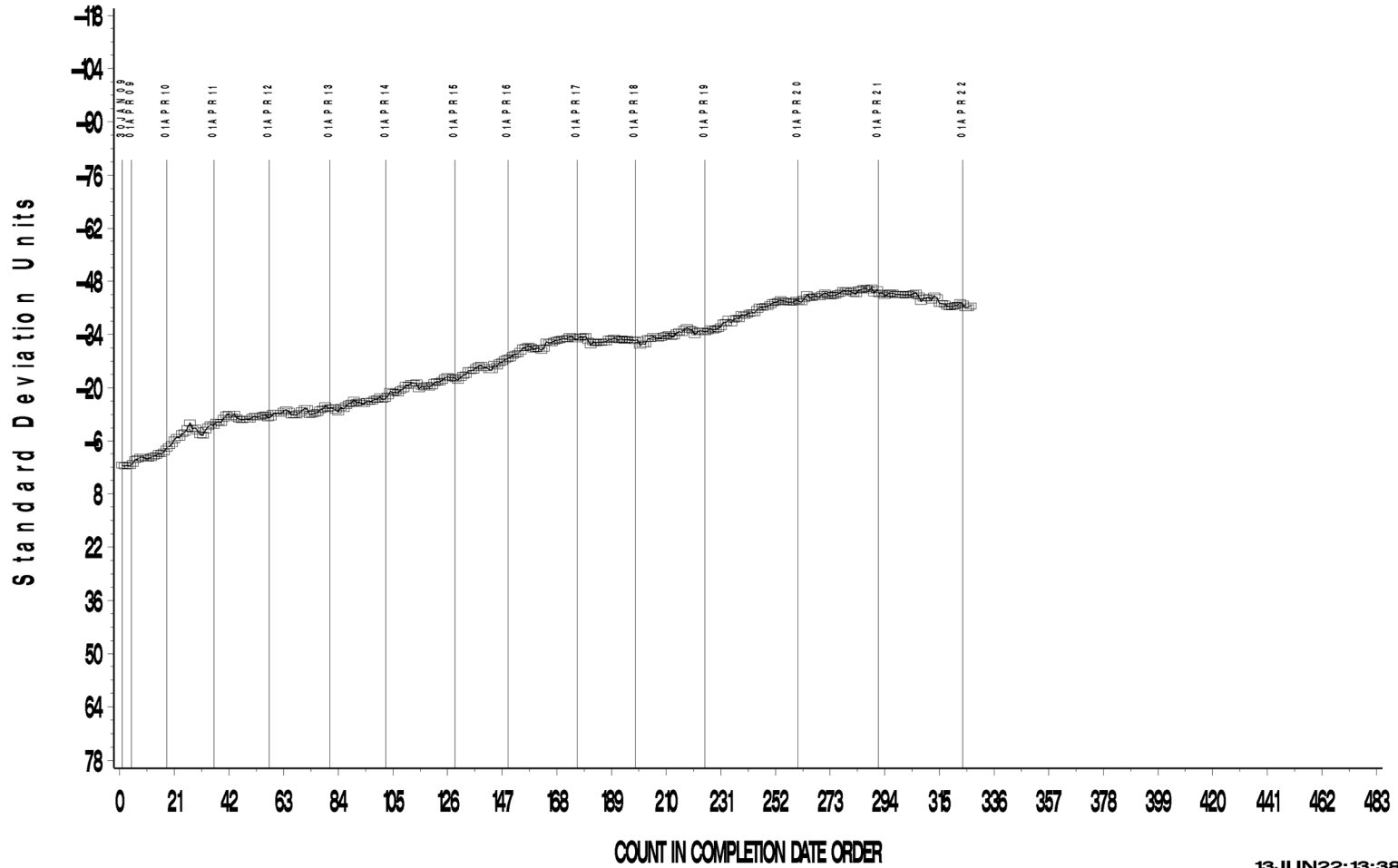
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L-42 Rater Calibration

L-42 RATER CALIBRATION INDUSTRY OPERATIONALLY VALID DATA

RING SCORING

CUSUM Severity Analysis



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