



Test Monitoring Center

203 Armstrong Drive, Freeport, PA 16229, USA

www.astmtmc.org
412-365-1000

MEMORANDUM: 22-048

DATE: November 29, 2023

TO: Don Bell, Chairman, OSCT Surveillance Panel

FROM: Dylan Beck *Dylan Beck*

SUBJECT: OSCT Reference oil testing from April 1, 2023 through September 30, 2023

Attached is a summary of reference oil testing activity this period.

DJB/djb/mem22-048.djb.doc

cc: Jeff Clark

Sean Moyer

OSCT Surveillance Panel

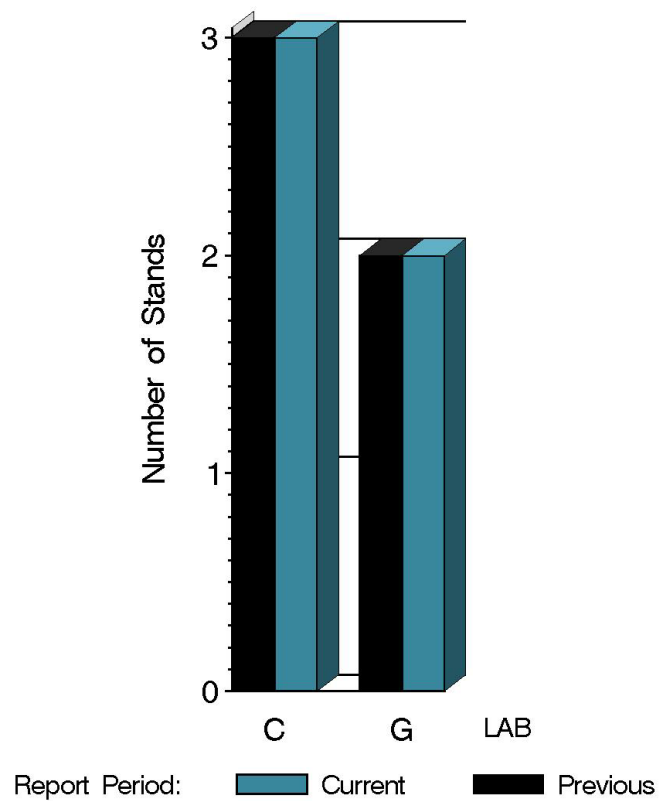
<https://www.astmtmc.org/ftp/docs/gear/osct/semiannualreports/osct-10-2023.pdf>

Distribution: email

OSCT (D5662)

	Reporting Data	Calibrated on 9-30-2023
Number of Labs	2	2
Number of Stands	5	5

BY-LAB STAND
DISTRIBUTION



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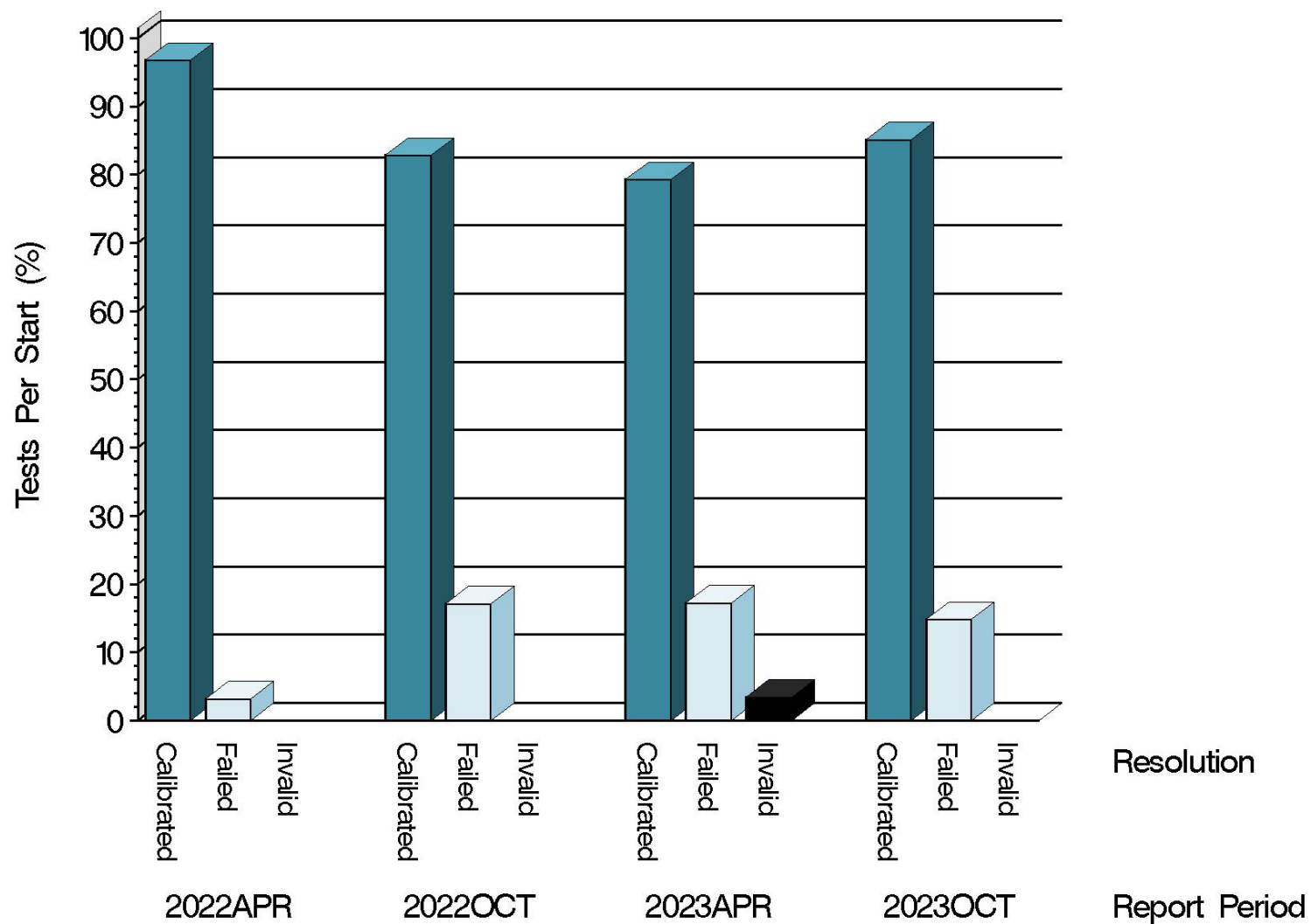
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Test Distribution by Elastomer and Validity

					Totals	
		FL	NI	PA	Last Period	This Period
Accepted for calibration	AC	11	2	10	23	23
Rejected (low result)	OC	0	0	3	2	3
Rejected (high result)	OC	0	1	0	0	1
Rejected (high and low)	OC	0	0	0	3	0
Op. invalid	LC	0	0	0	1	0
Aborted	XC	0	0	0	0	0
Elastomer approval run	NI	9	2	1	9	12
Invalid information run	MI	0	0	0	2	0
Op. invalid approval run	LI	0	0	0	0	0
Total		20	5	14	40	39

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CALIBRATION ATTEMPT SUMMARY



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CAUSES FOR LOST TESTS

		Elastomer			Loss Rate						
Lab	Cause	FL	NI	PA	LI	MI	LC	XC	Lost	Starts	%
	No tests lost this period									39	0%
	Lost	0	0	0	0	0	0	0			
	Starts	20	5	14	39	39	39	39			
	%	0%	0%	0%	0%	0%	0%	0%			



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Average Δ/s by Lab

Elastomer	Lab	N	PELA	PVCA	SAHA
FL	C	6	-1.059	-0.626	-0.060
	G	5	-0.569	-0.397	-0.537
	Industry	11	-0.836	-0.522	-0.277
	Shift*	11	-6.393	-0.286	-0.385
NI	C	2	1.302	0.854	-0.642
	G	1	-0.243	1.696	-0.596
	Industry	3	0.787	1.134	-0.627
	Shift*	3	4.085	0.572	-0.730
PA	C	10	-1.903	-0.169	0.565
	G	3	-0.751	-0.629	1.015
	Industry	13	-1.637	-0.275	0.669
	Shift*	13	-34.394	-0.524	1.705

*computed using historic pooled s



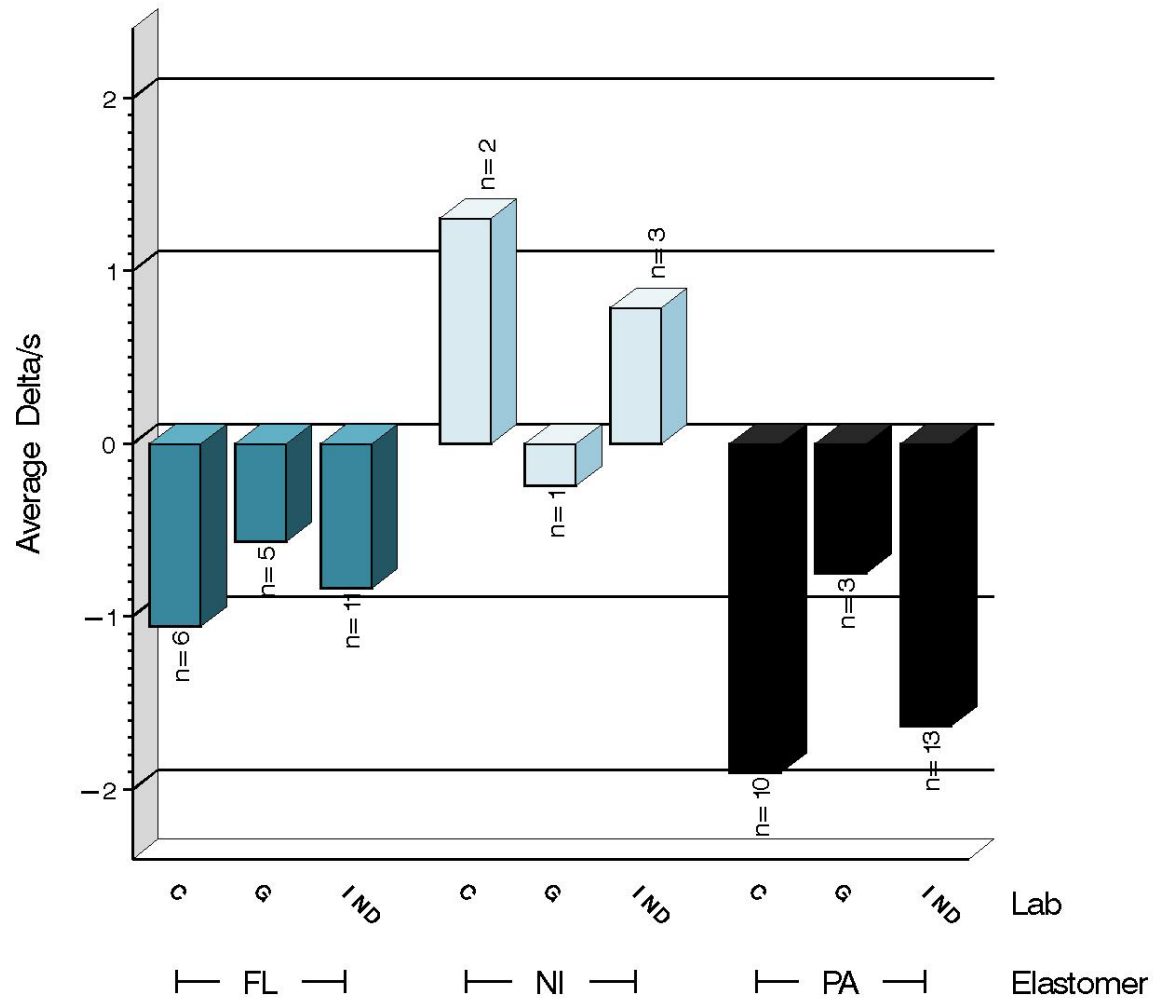
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%ELONGATION SEVERITY
DELTA/S BY LAB



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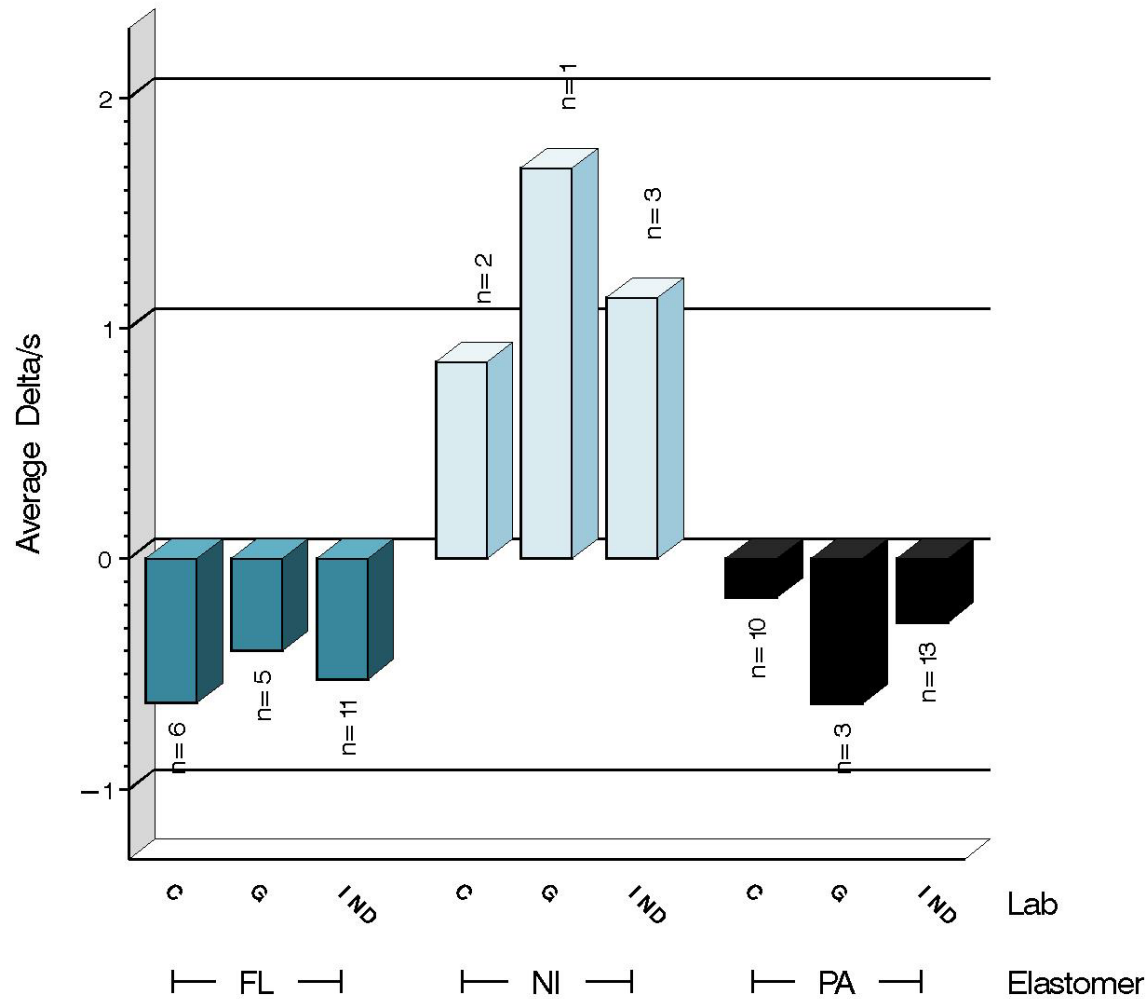
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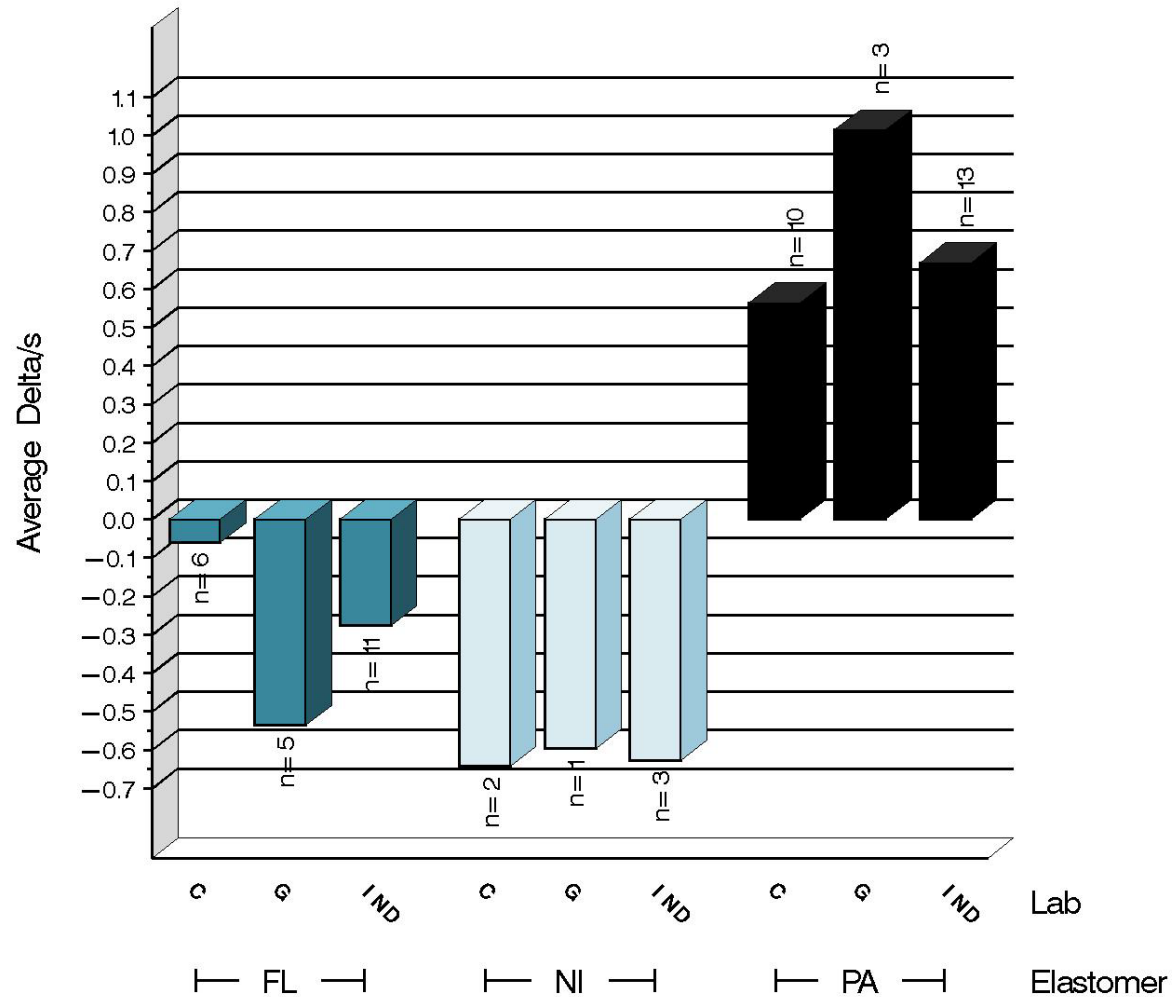
%VOLUME CHANGE SEVERITY
DELTA/S BY LAB



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S.A. HARDNESS SEVERITY
DELTA/S BY LAB



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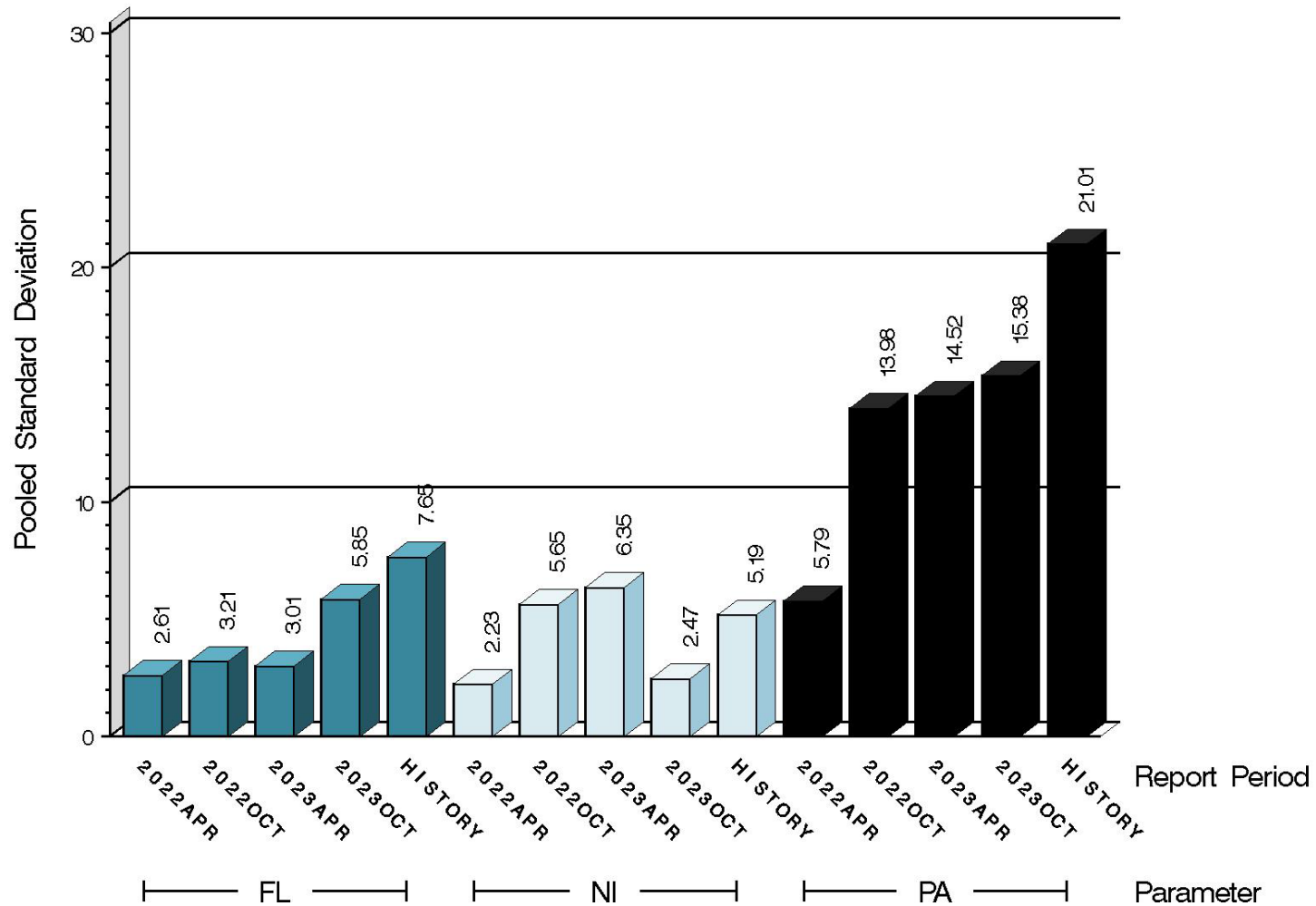
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%ELONGATION PRECISION
POOLED STANDARD DEVIATION
BY SIX-MONTH ASTM REPORT PERIOD



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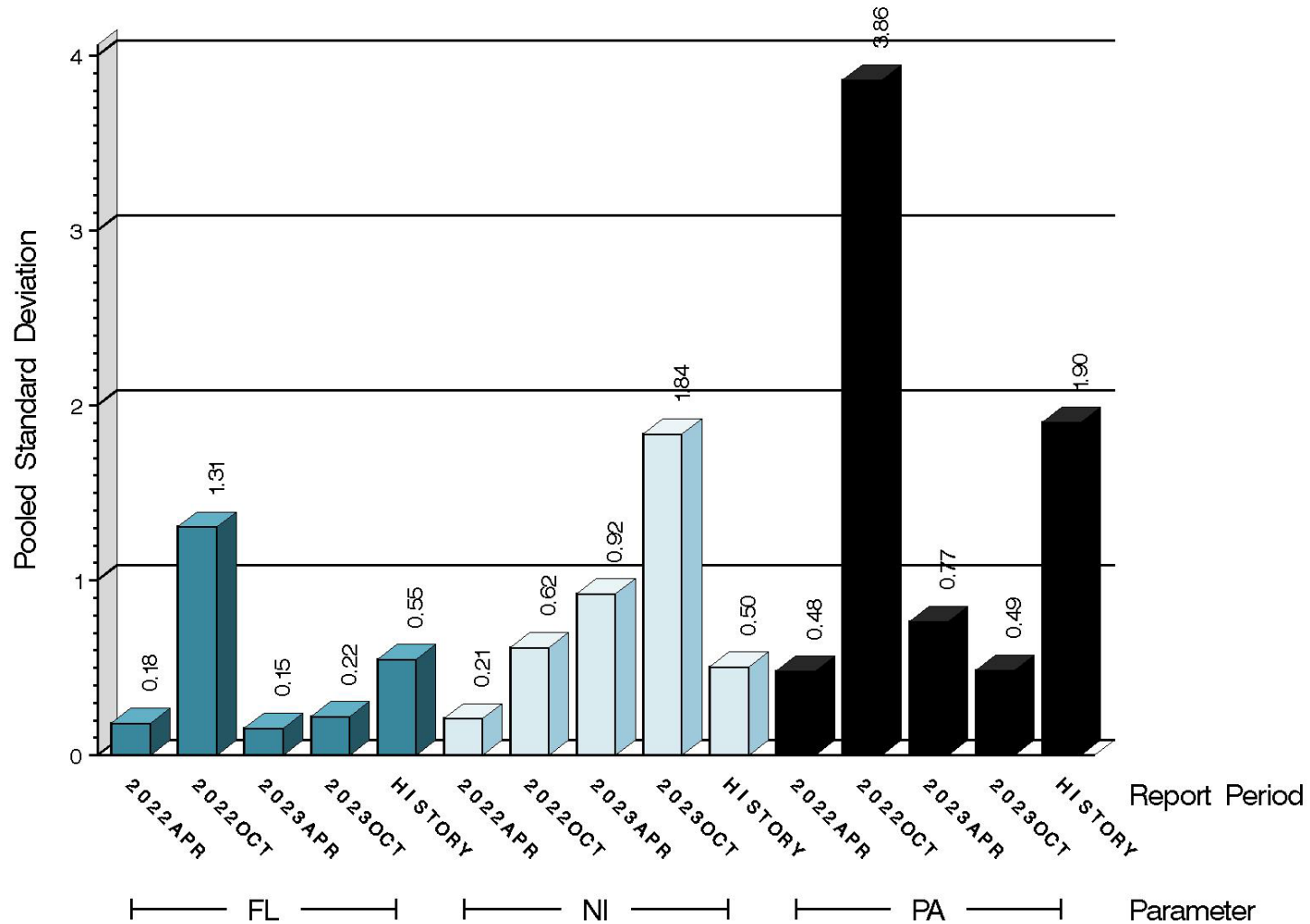
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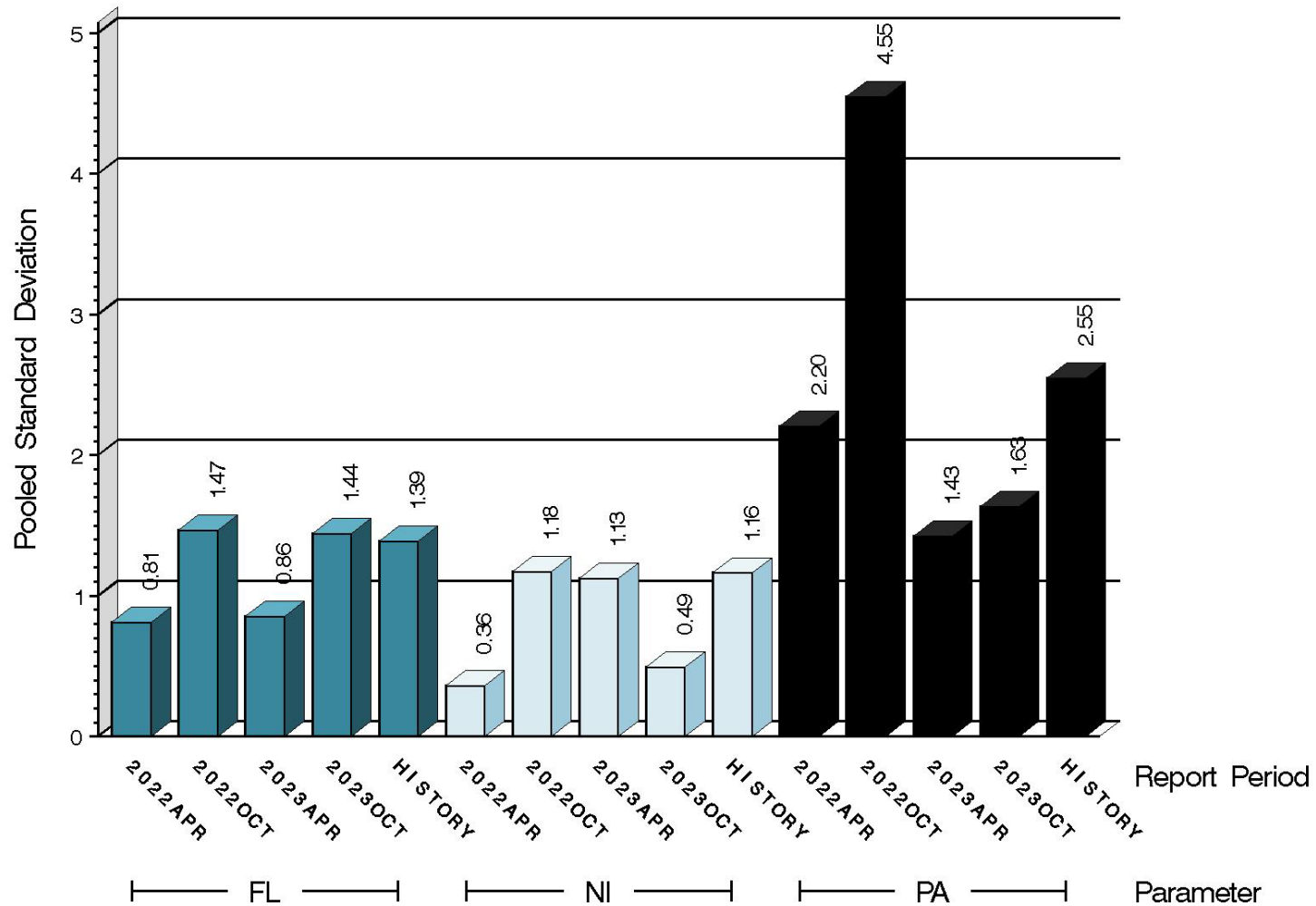
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SUMMARY OF SEVERITY & PRECISION

Severity

The combined-elastomer industry charts show that SAHA and PELA exceeded the limits in the severe direction this period. PELA and SAHA are both currently back within limits.

FL PELA, NI PELA, PA PELA, NI PVCA, NI SAHA, and PA SAHA all exceeded the limits this period.

Precision

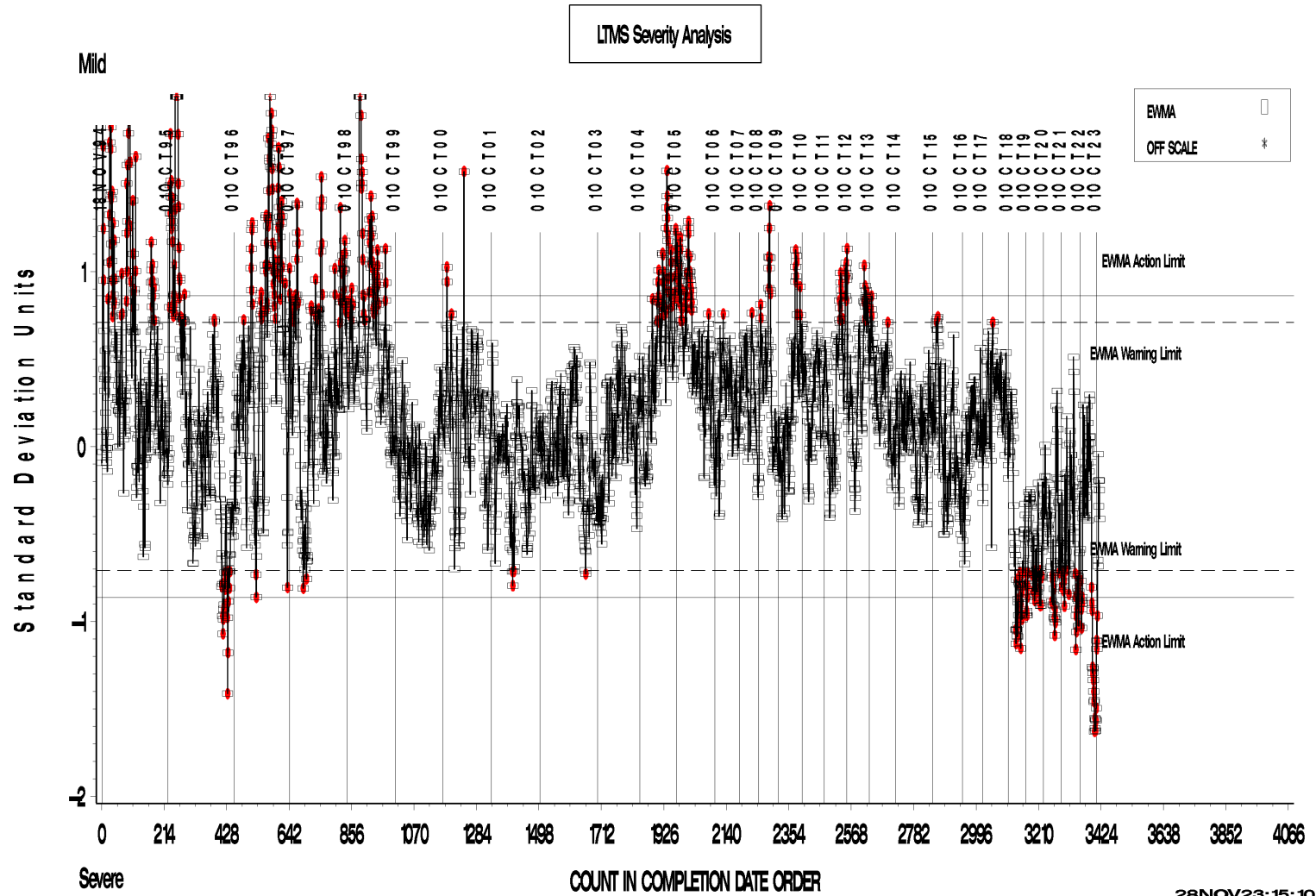
The combined-elastomer industry charts show that PELA exceeded the action limit during this period but is now within the limits. SAHA ended the period exceeding the action limit.

Industry control charts follow.

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REF. ELONGATION CHANGE AVG.



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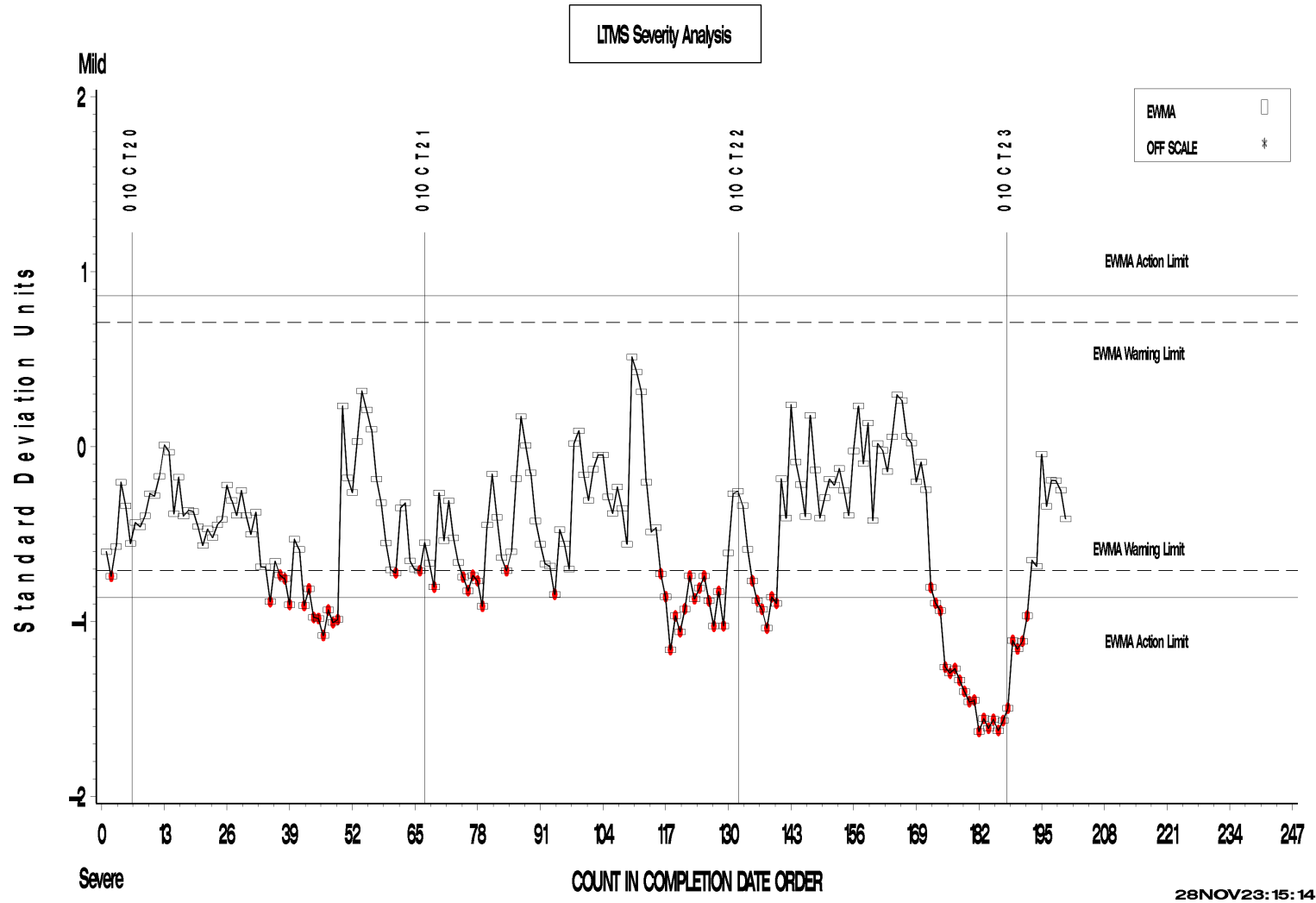
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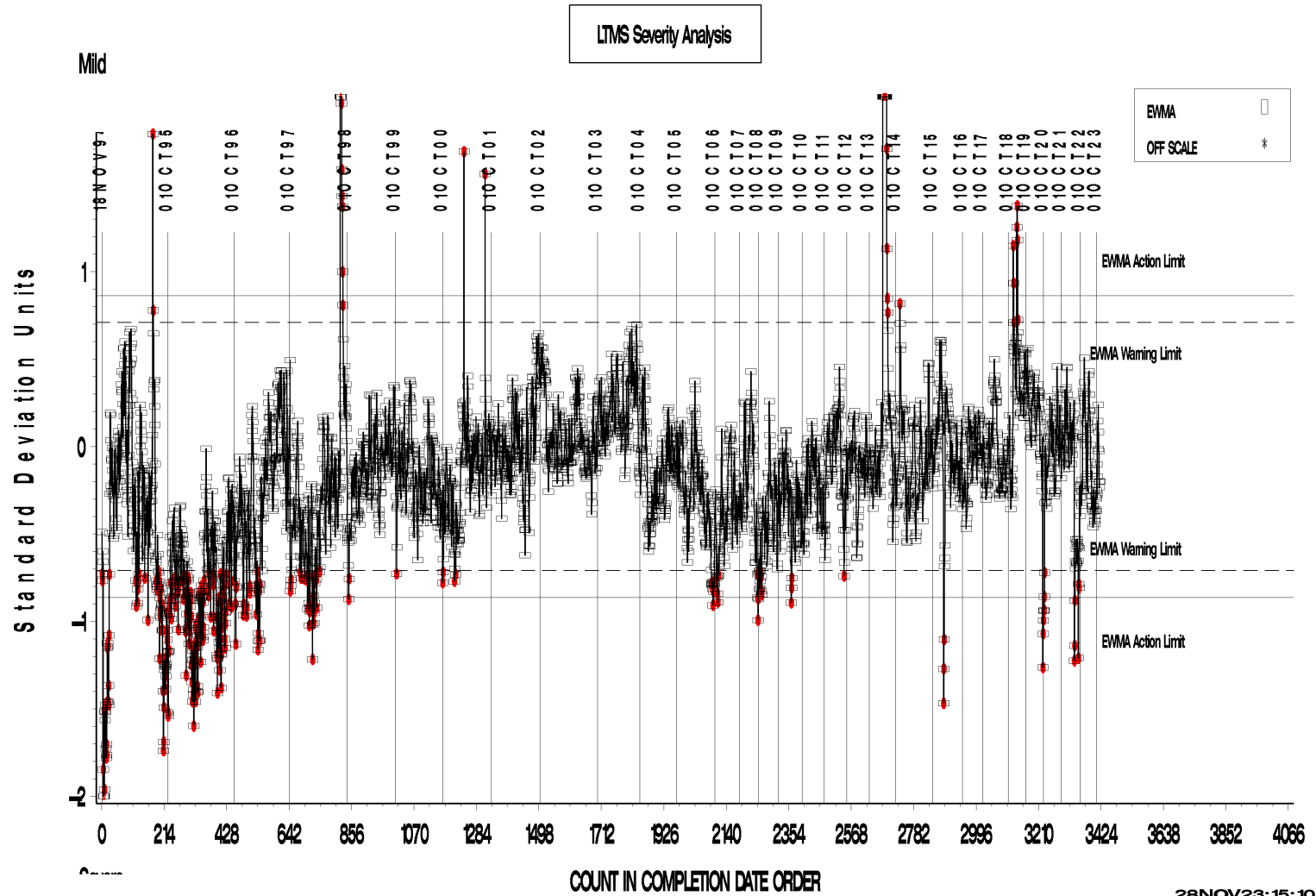
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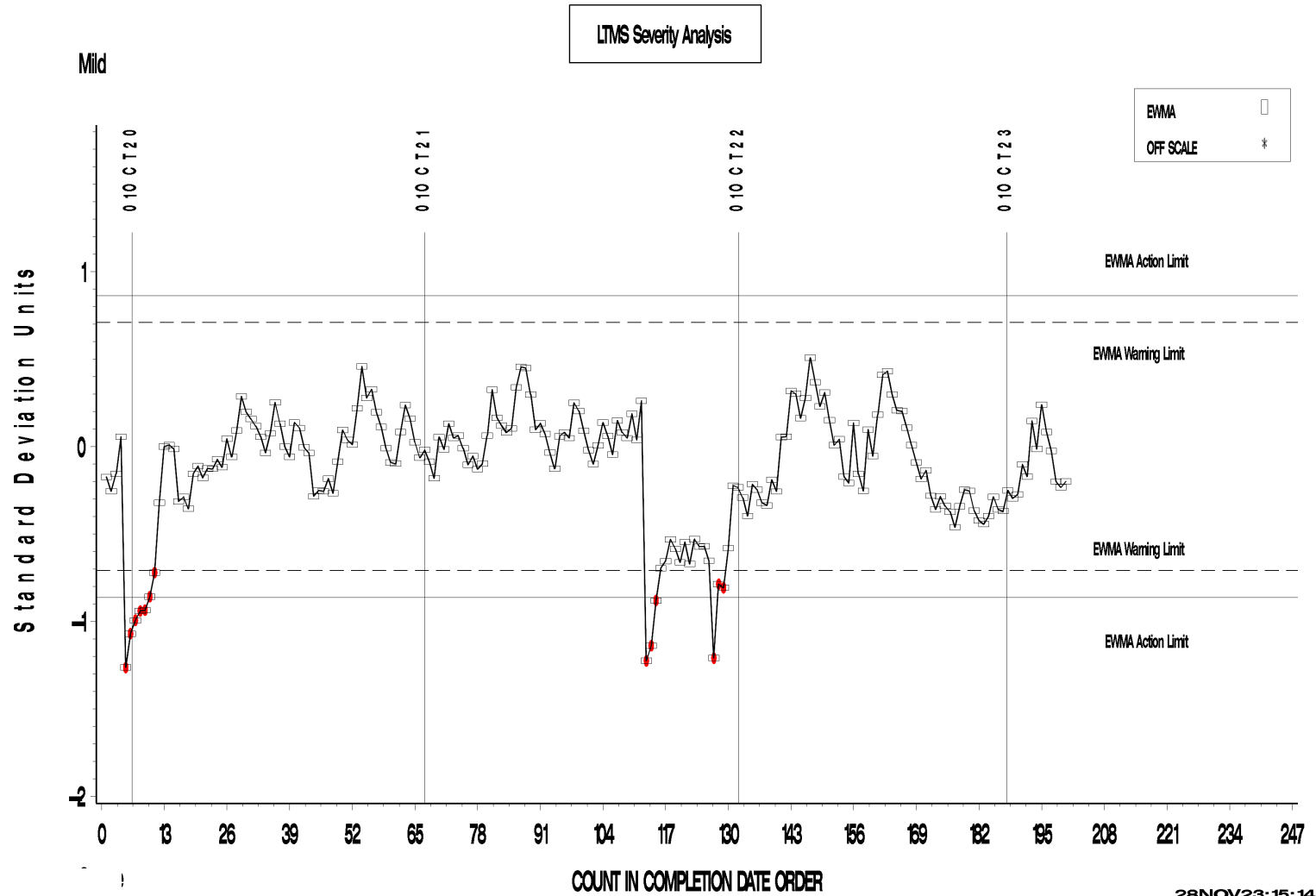
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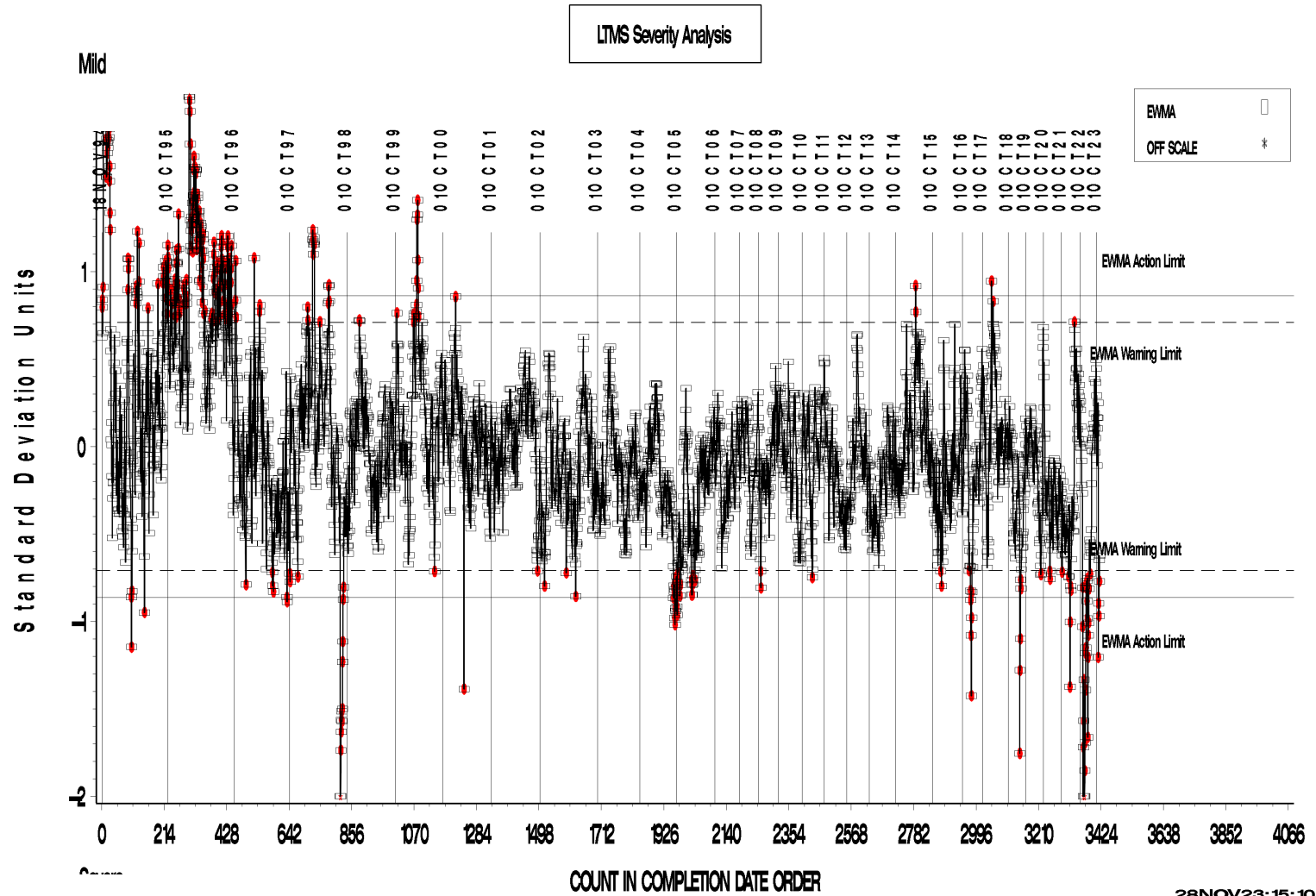
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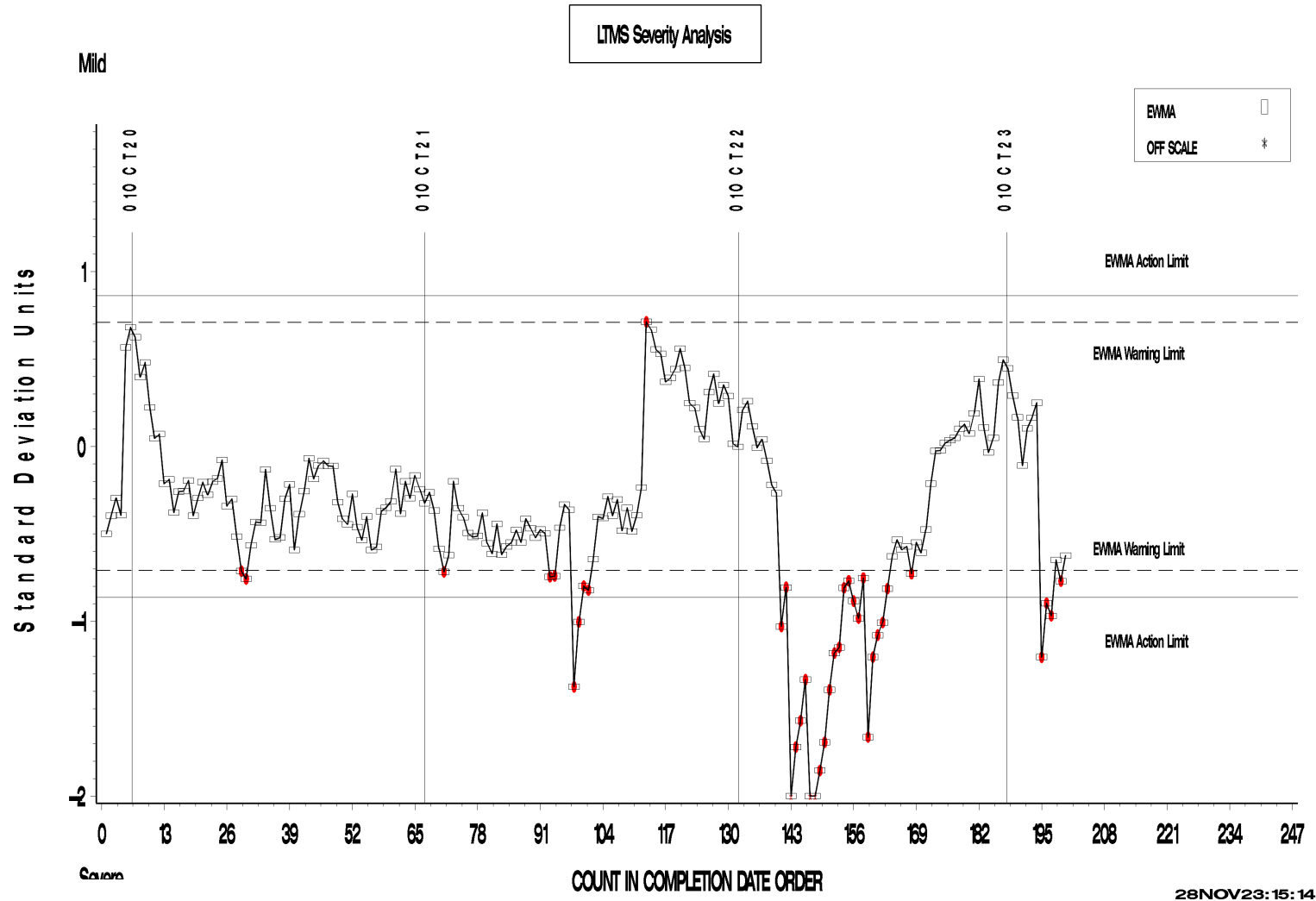
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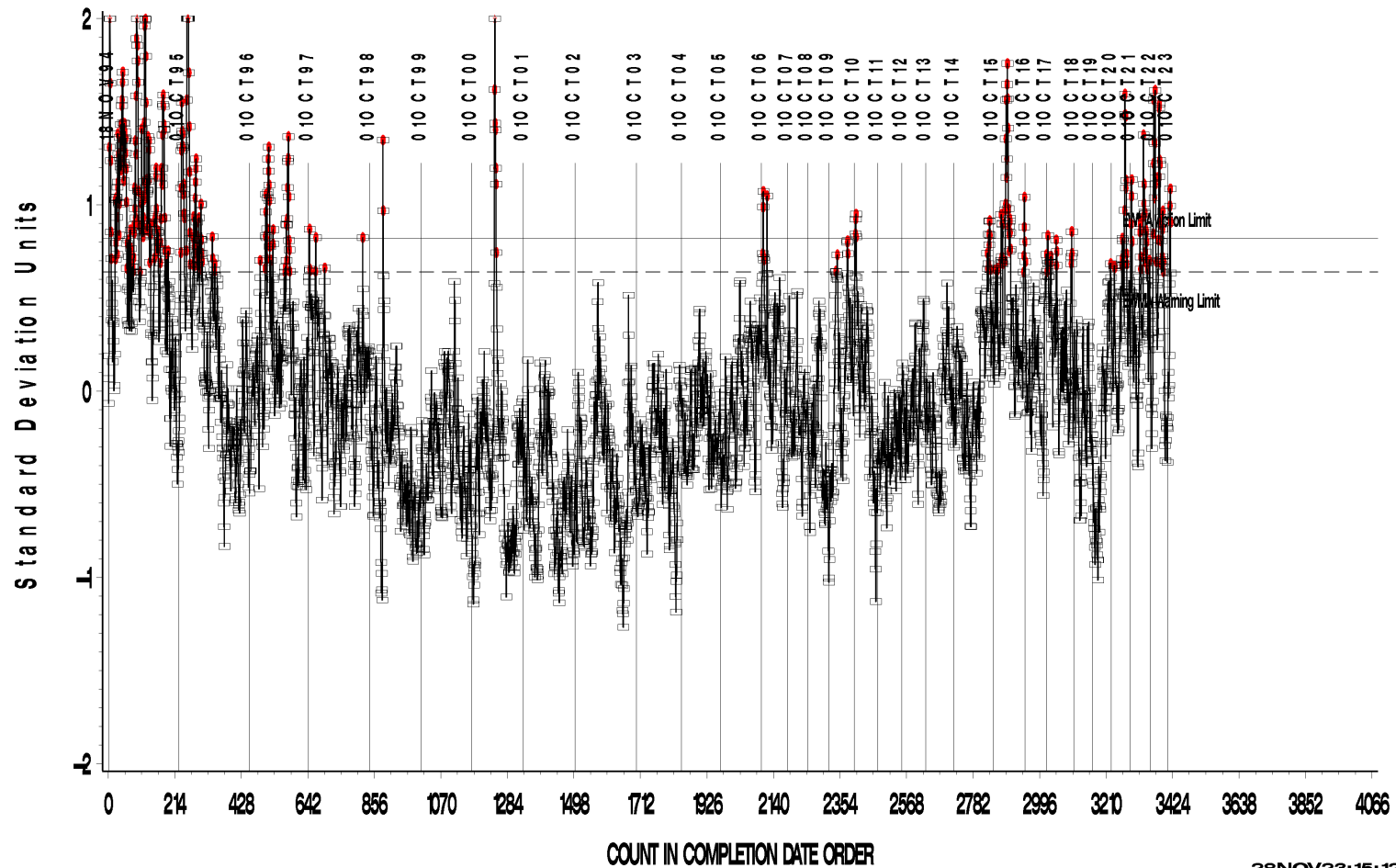
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LTMS Precision Analysis



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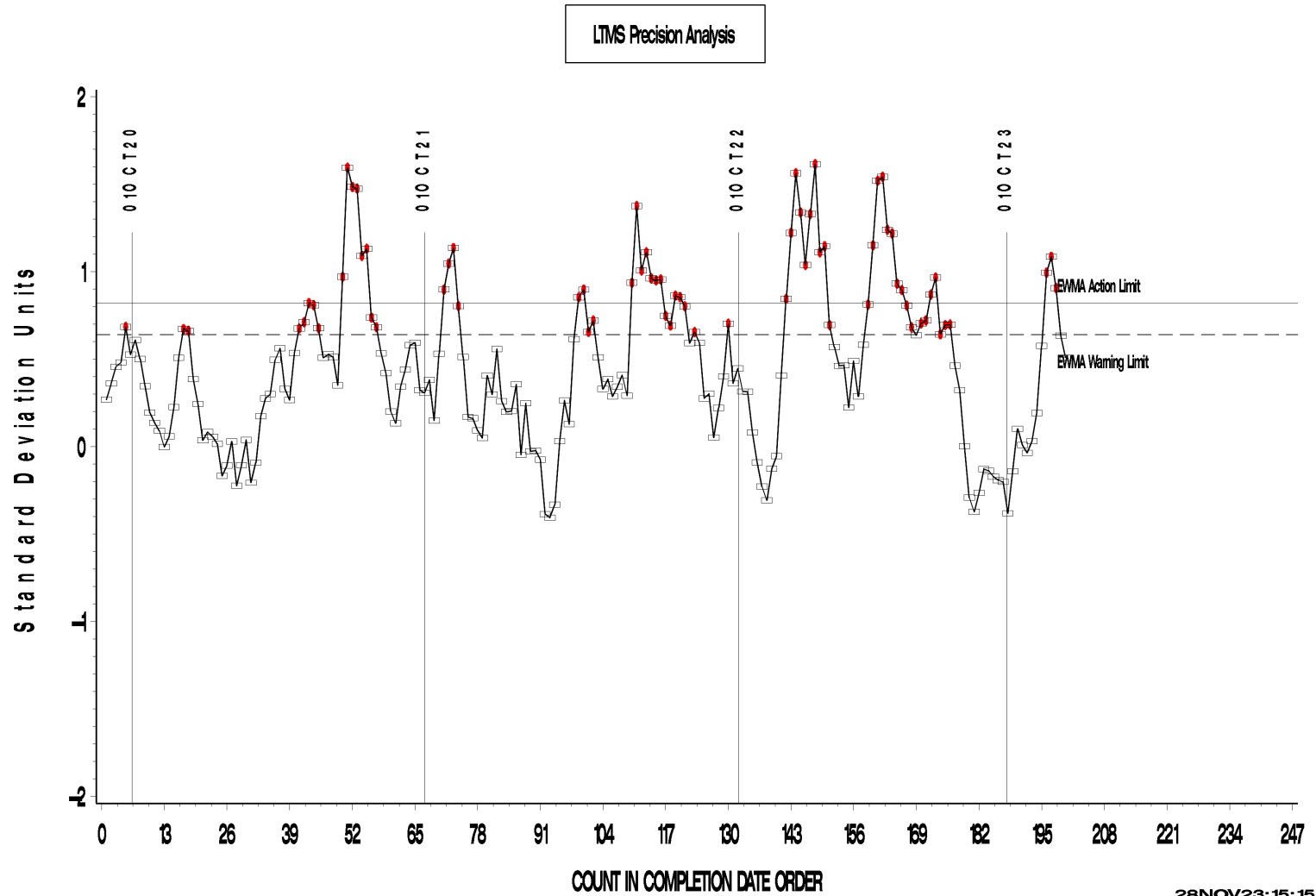
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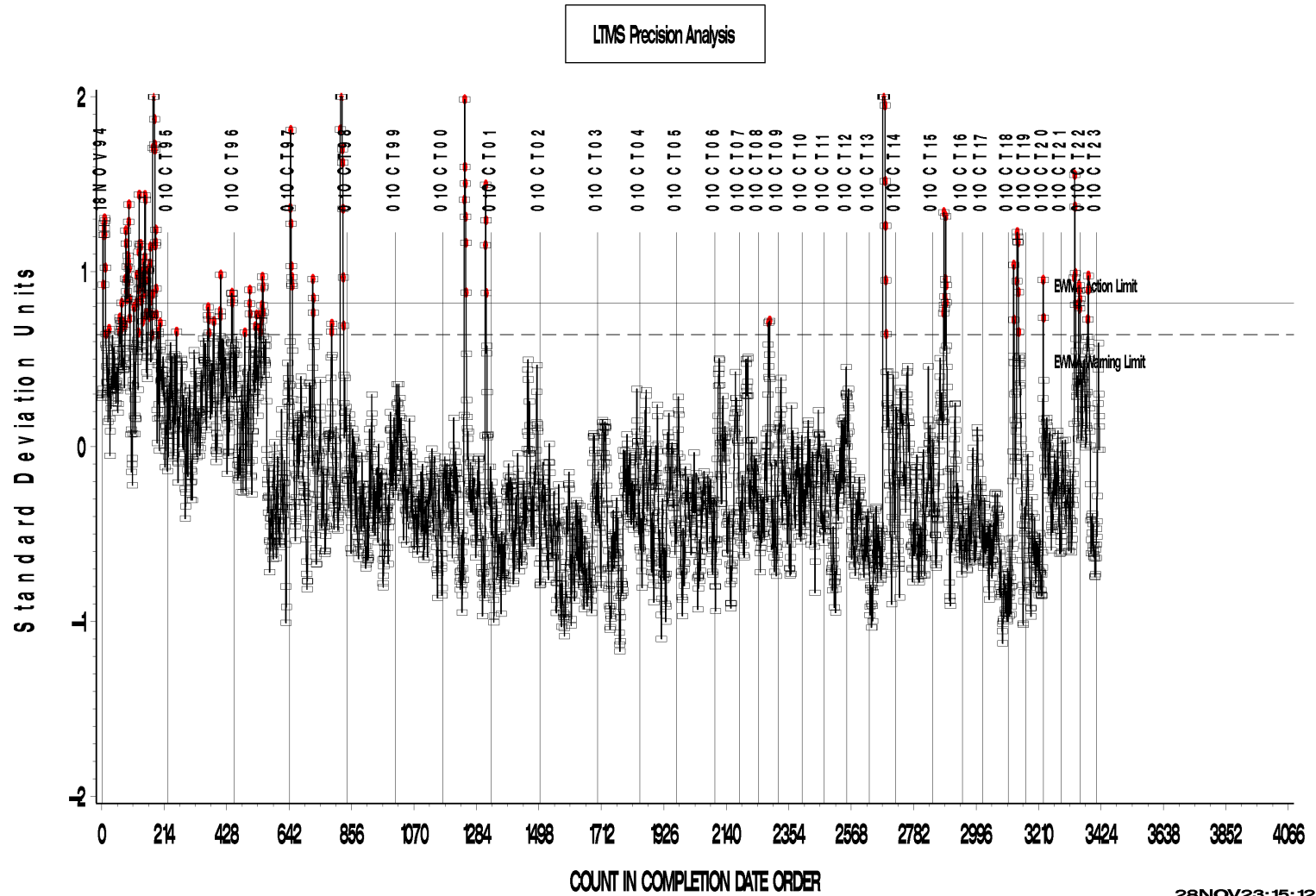
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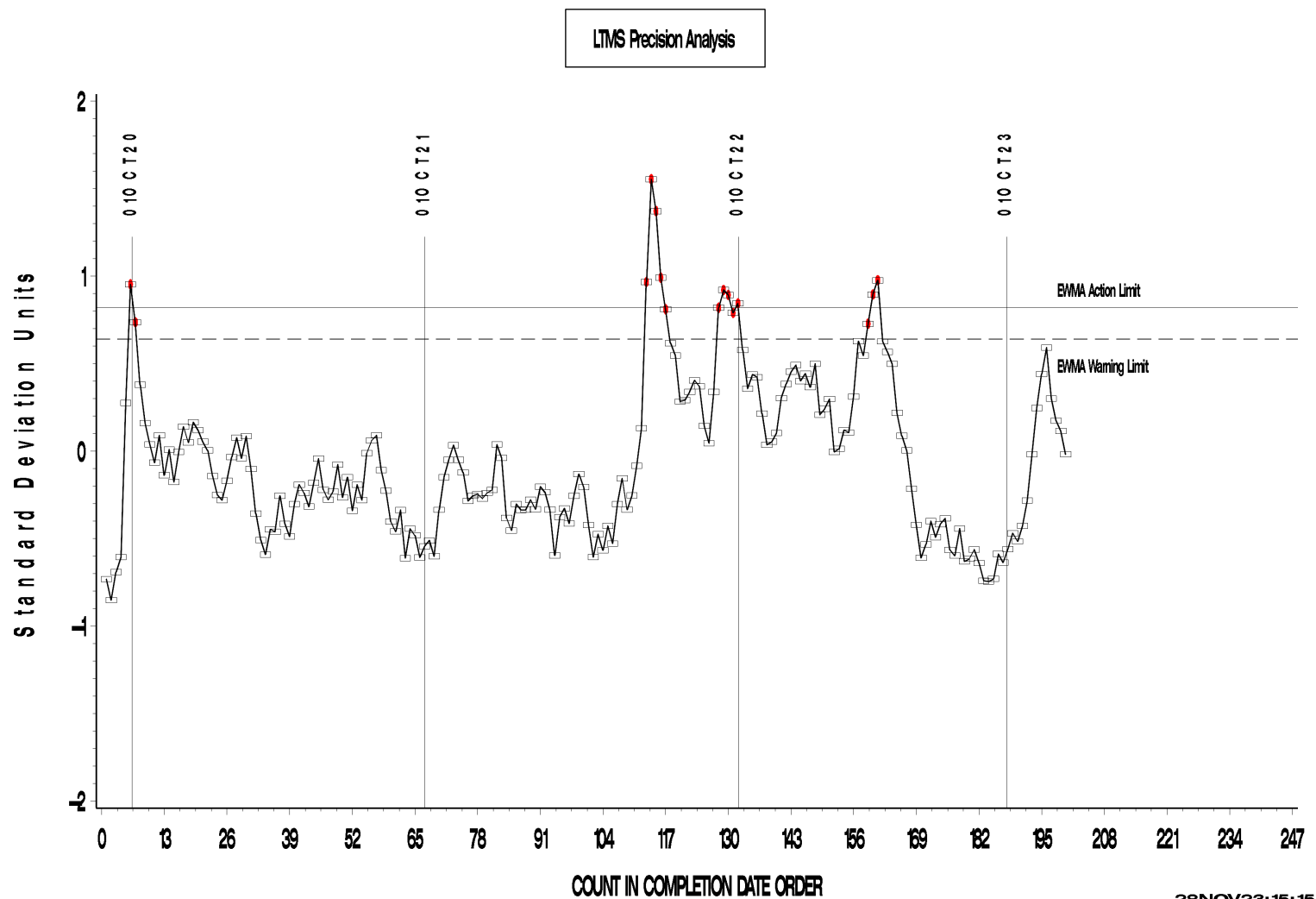
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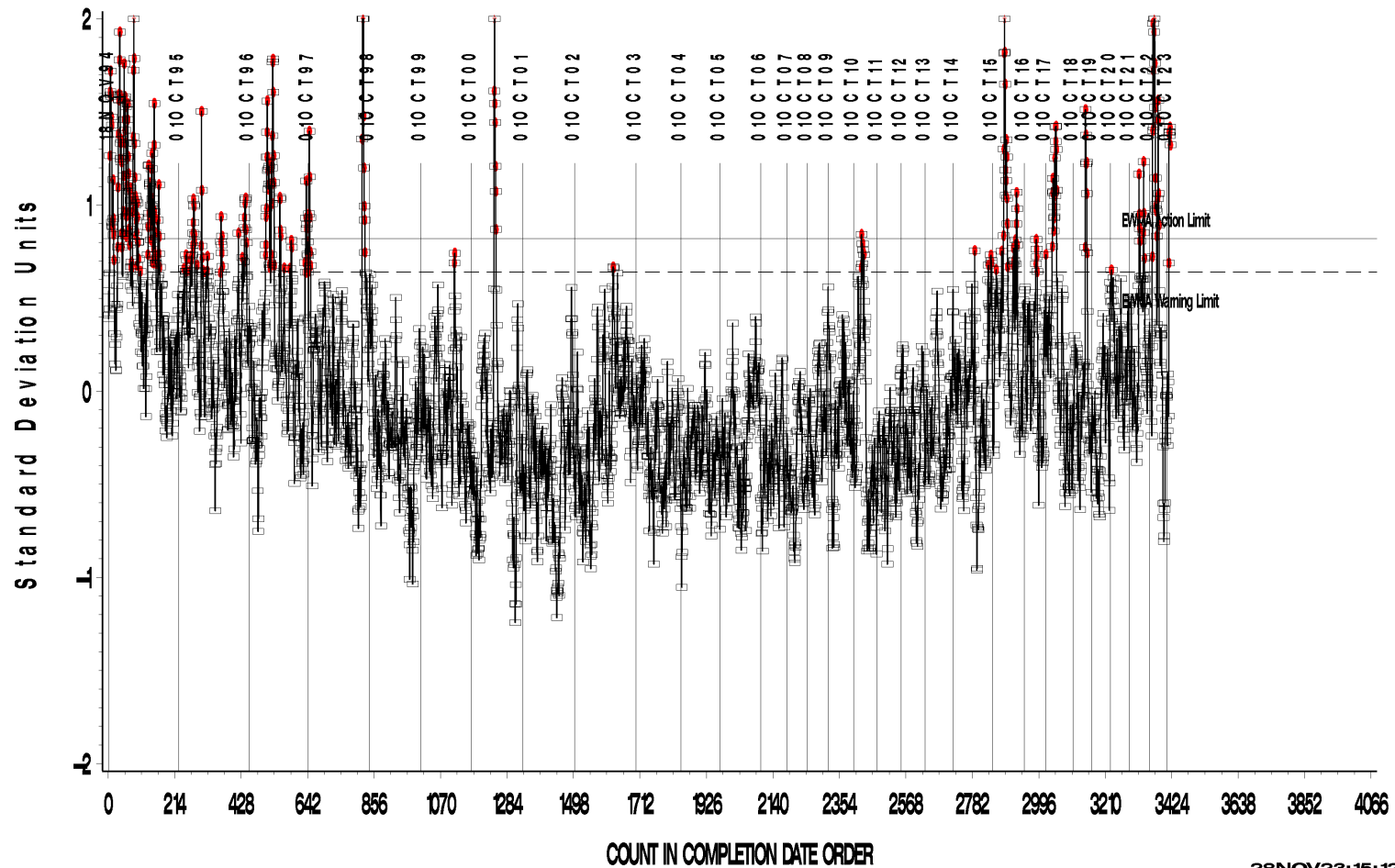
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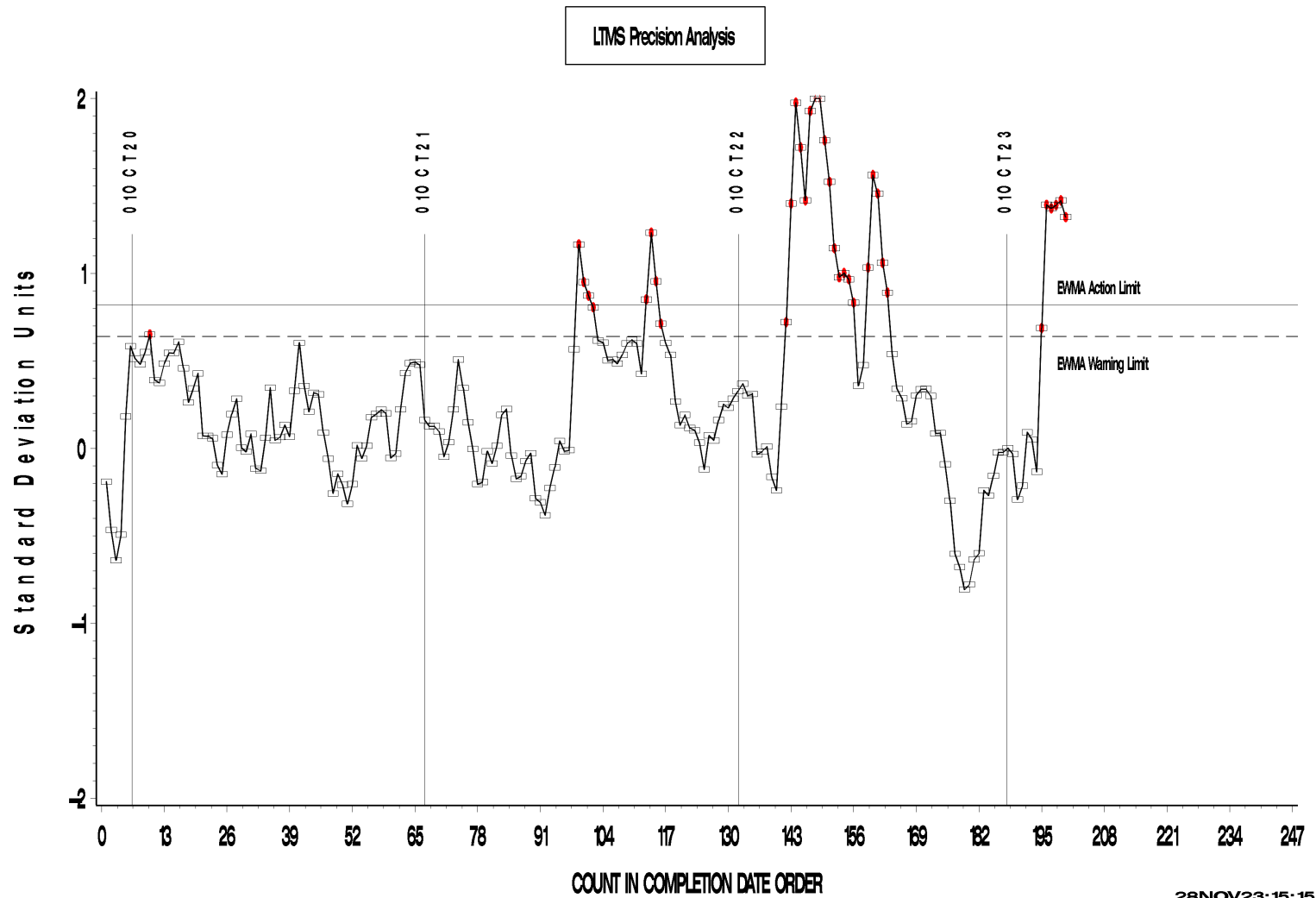
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CUSUM Severity Analysis



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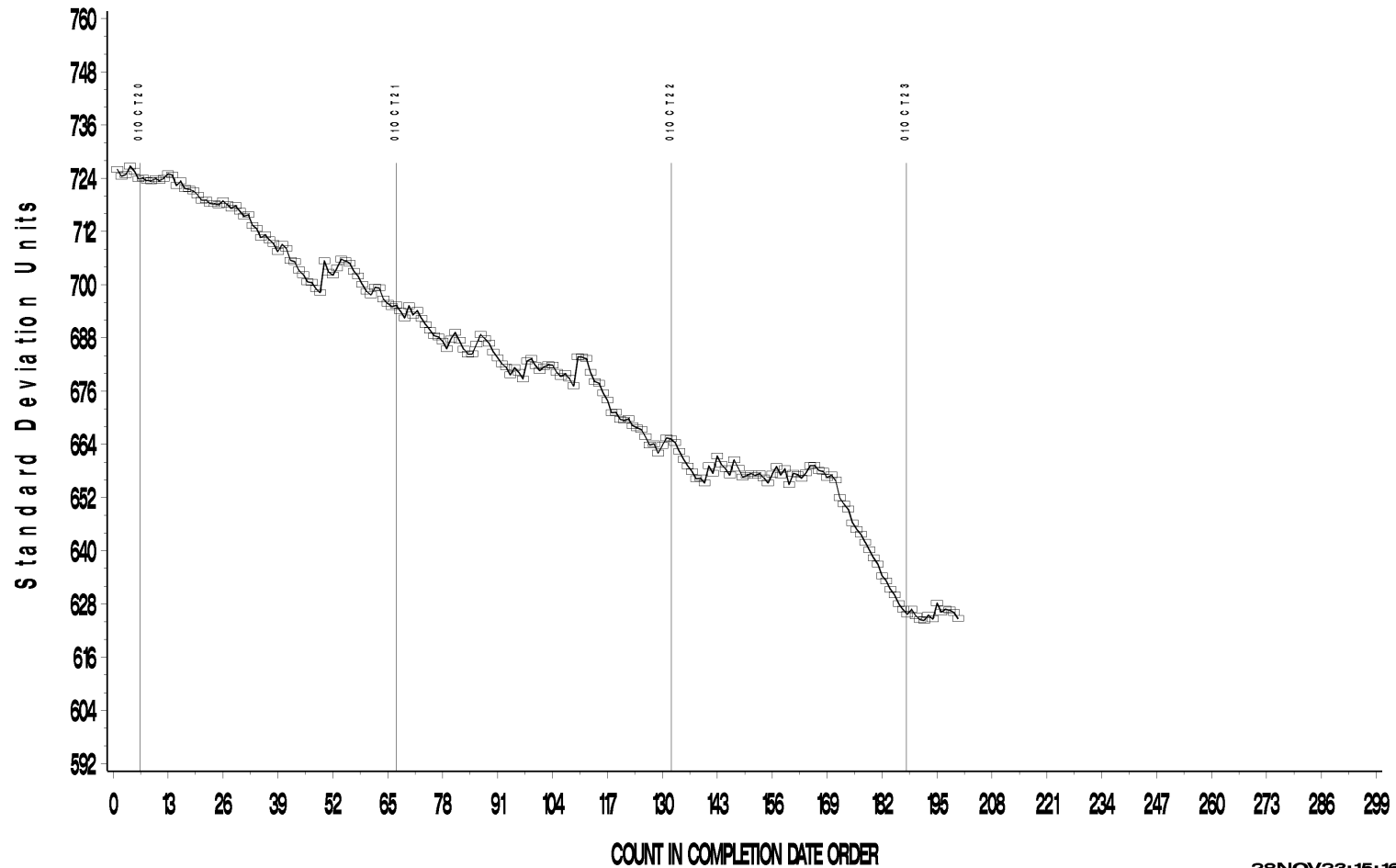
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CUSUM Severity Analysis



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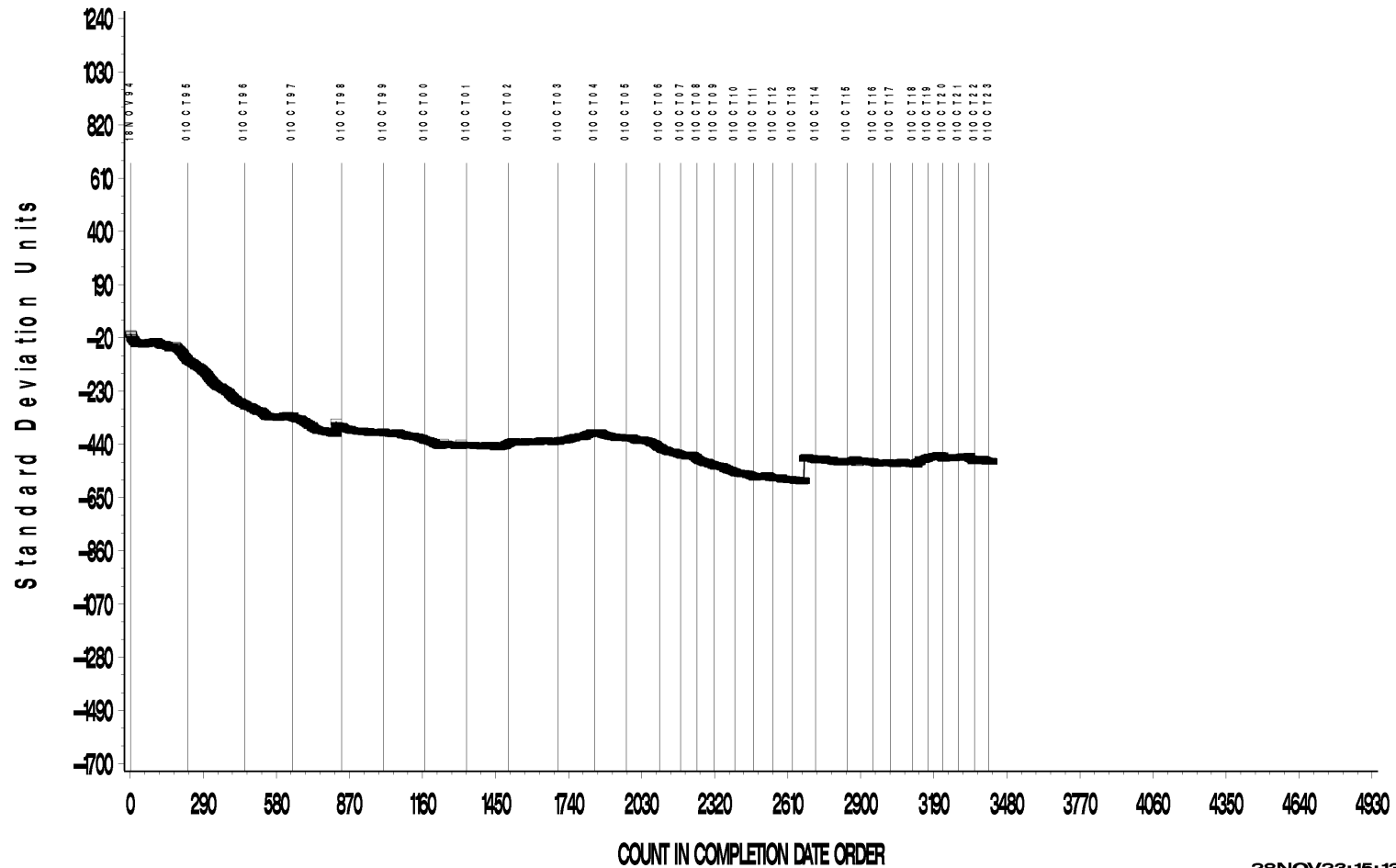
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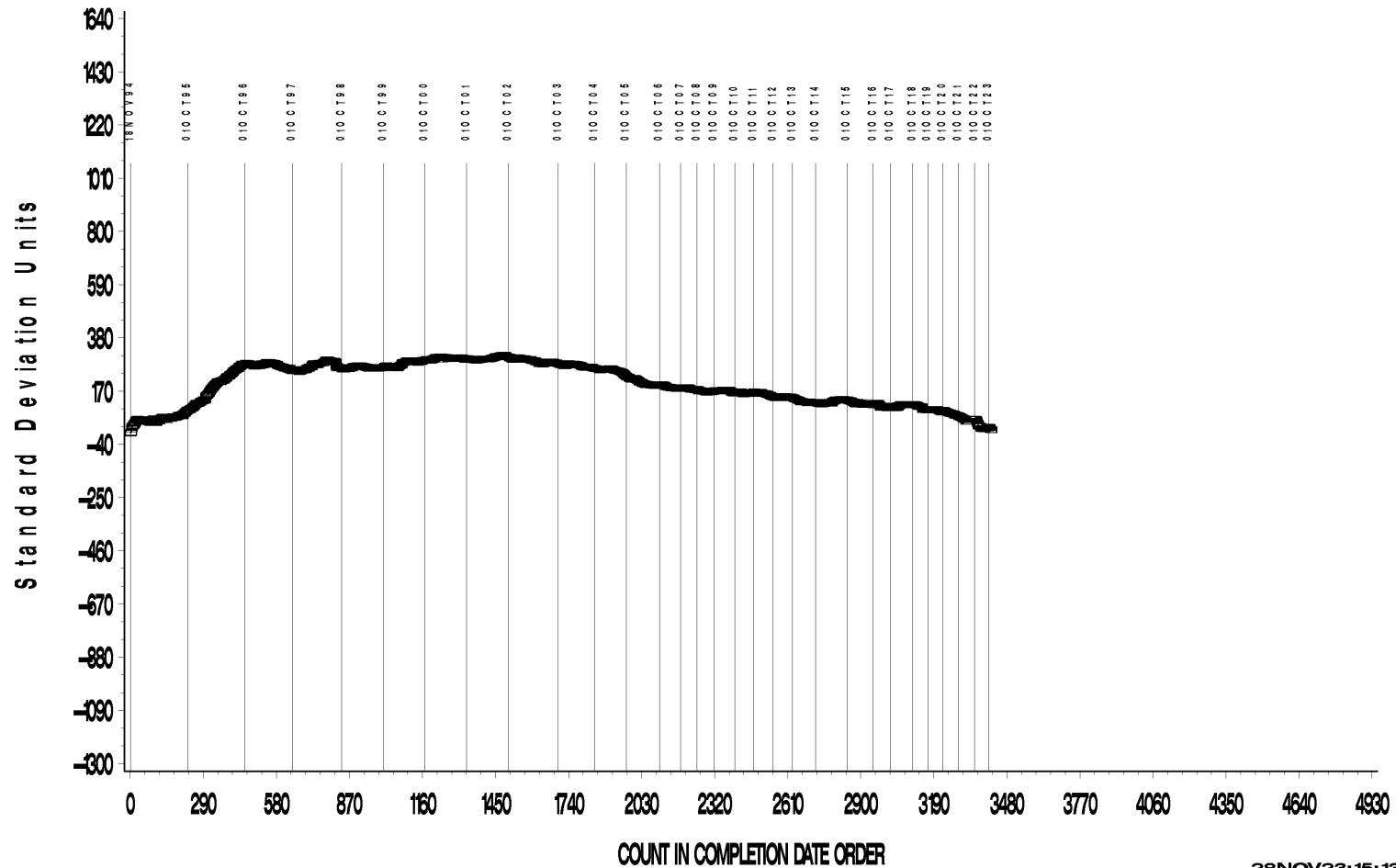
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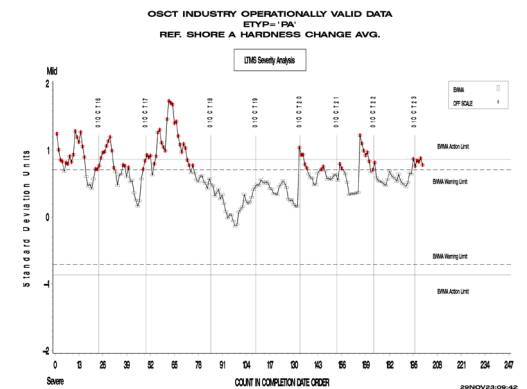
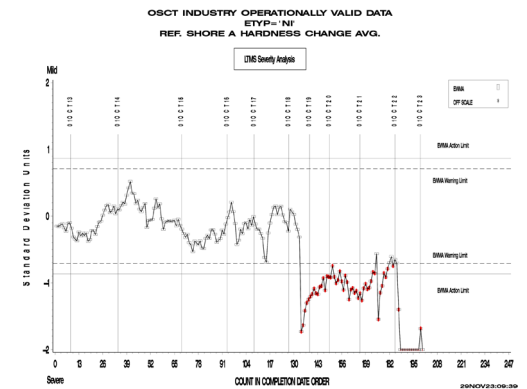
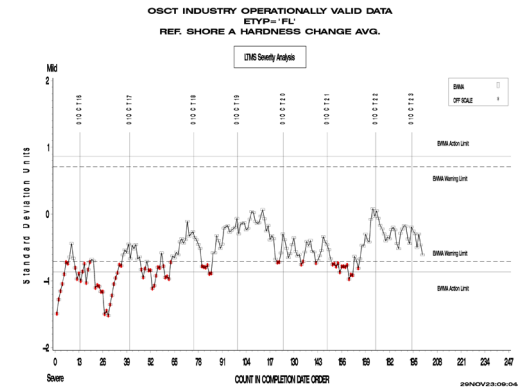
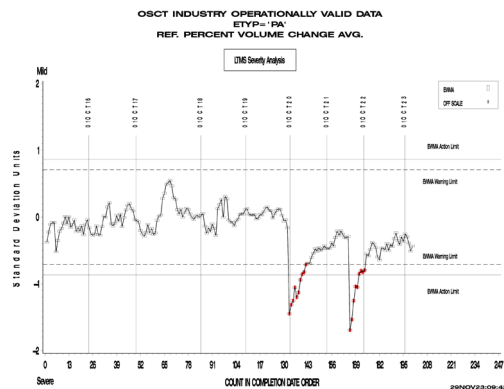
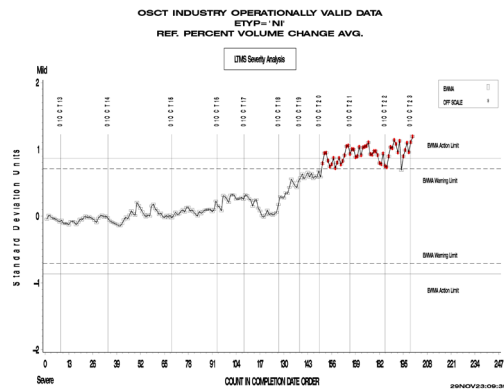
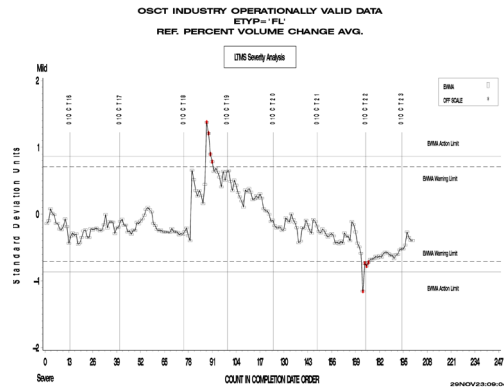
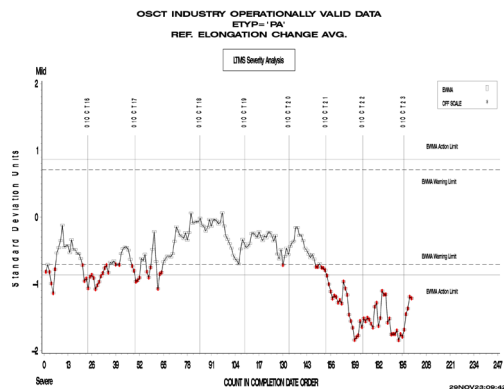
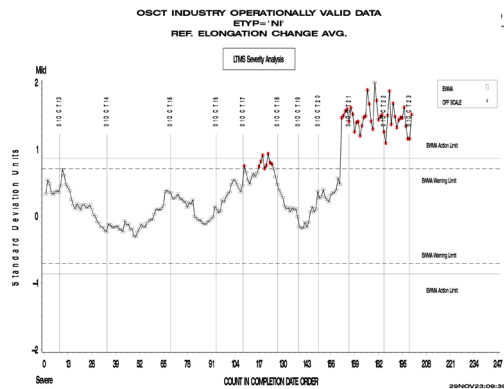
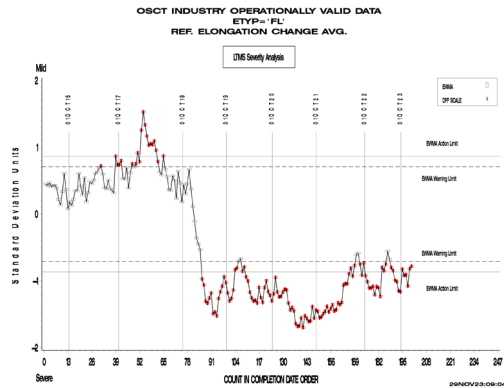
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TIMELINE ADDITIONS

Effective Date	Information Letter	Event
August 9, 2023	23-1	Addition of reference to Instron Machine Setting document



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LAB VISITS

No lab visits were conducted during this period.

INFORMATION LETTERS

Information letter 23-1 was issued during this reporting period. This information letter added the information on the Instron machine settings for testing elongation of elastomers to the test method. The suggested settings for the machine are in an external document hosted on the TMC website.



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STATUS OF REFERENCE OIL SUPPLY

Oil	Cans @ Labs	@ TMC	
		Cans	Gallons
155-1	8	67	13.5
160-1	2	0	0.0
168	13	0	0.0
169	31	603	119.6
170	29	104	20.8
171	34	44	8.9
Total	117	818	162.7

Oil 168 is depleted. Oil 170 has been introduced as a replacement. Oil 171 is the same additive package as oil 160-1 in a different base oil and has been introduced as a replacement.



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