A Program of ASTM International

Test Monitoring Center

@ Carnegie Mellon University
6555 Penn Avenue, Pittsburgh, PA 15206, USA

http://astmtmc.cmu.edu
412-365-1000

MEMORANDUM: 19-008

DATE: April 17, 2019

TO: Rob Slocum, Chairman, L-37 Surveillance Panel

FROM: Dylan Beck

SUBJECT: L-37 Rater Calibration from October 1, 2018 through March 31, 2019

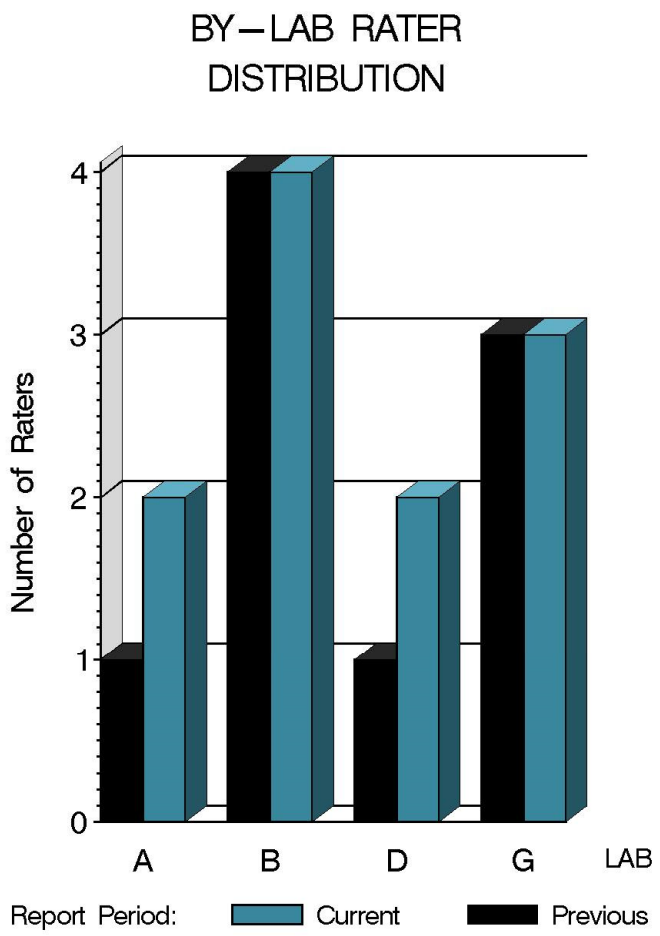
Attached is a summary of L-37 rater calibration activity this period.

DJB/djb/mem19-008.djb.doc
cc: Frank Farber
Jeff Clark
L-37 Surveillance Panel
http://www.astmtmc.cmu.edu/ftp/docs/gear/l37rc/semiannualreports/l37rc-04-2019.pdf

Distribution: email

L-37 Rater Calibration

	Reporting Data	Calibrated on 3-31-19
Number of Labs	4	4
Number of Raters	11	11



L-37 Rater Calibration

Test Distribution by Validity

		Totals	
		Last Period	This Period
Accepted for calibration	AC	11	12
Rejected (Mild)	OC	3	1
Rejected (Severe)	OC	3	3
Rejected (Multiple)	OC	0	0
Rejected (Precision)	OC	0	1
Invalid*	LC	0	1
Workshop data	AG	15	15
Total		32	33

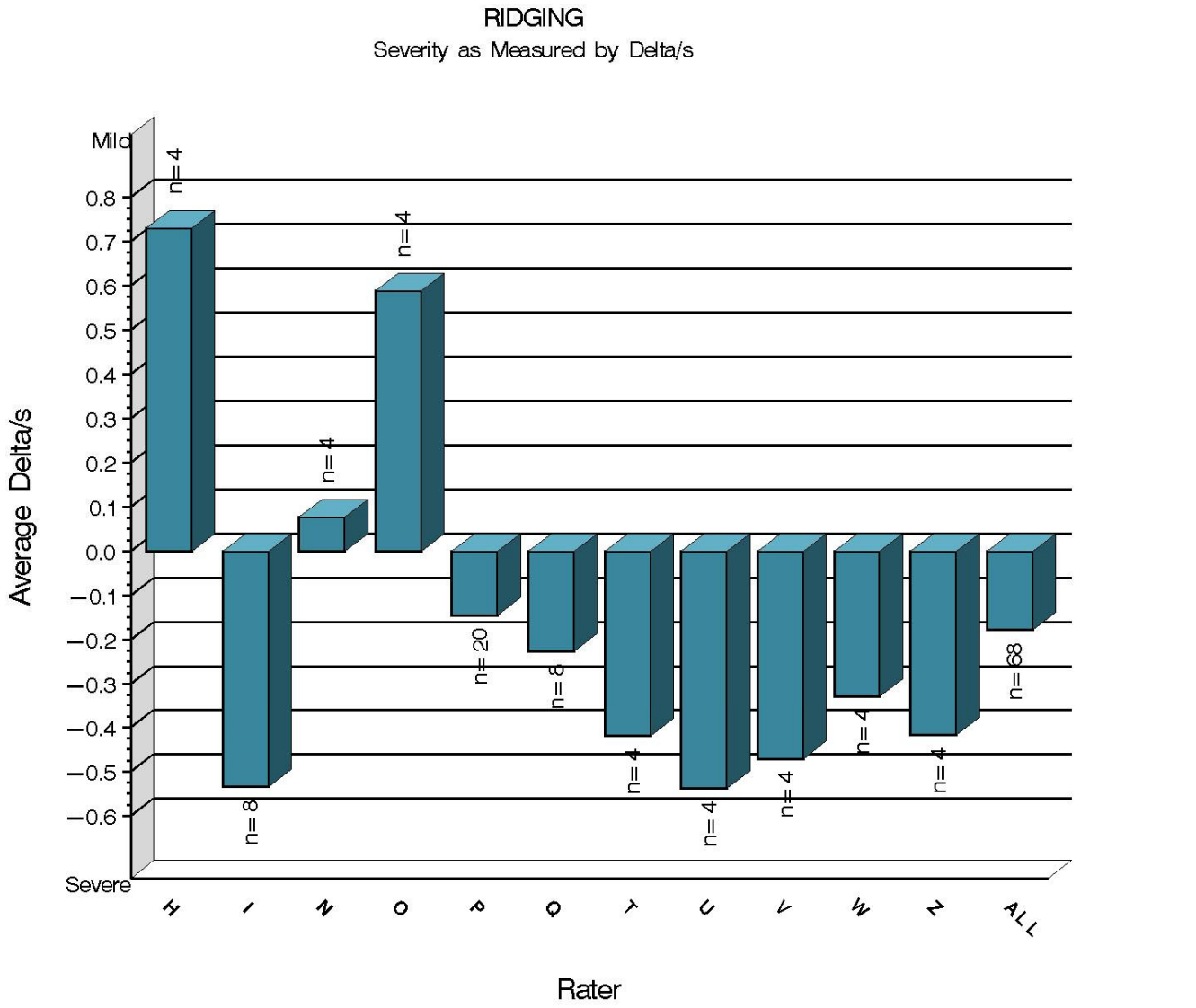
* Invalid test due to damage found on pinion tooth. Pinion removed from RC inventory.

L-37 Rater Calibration

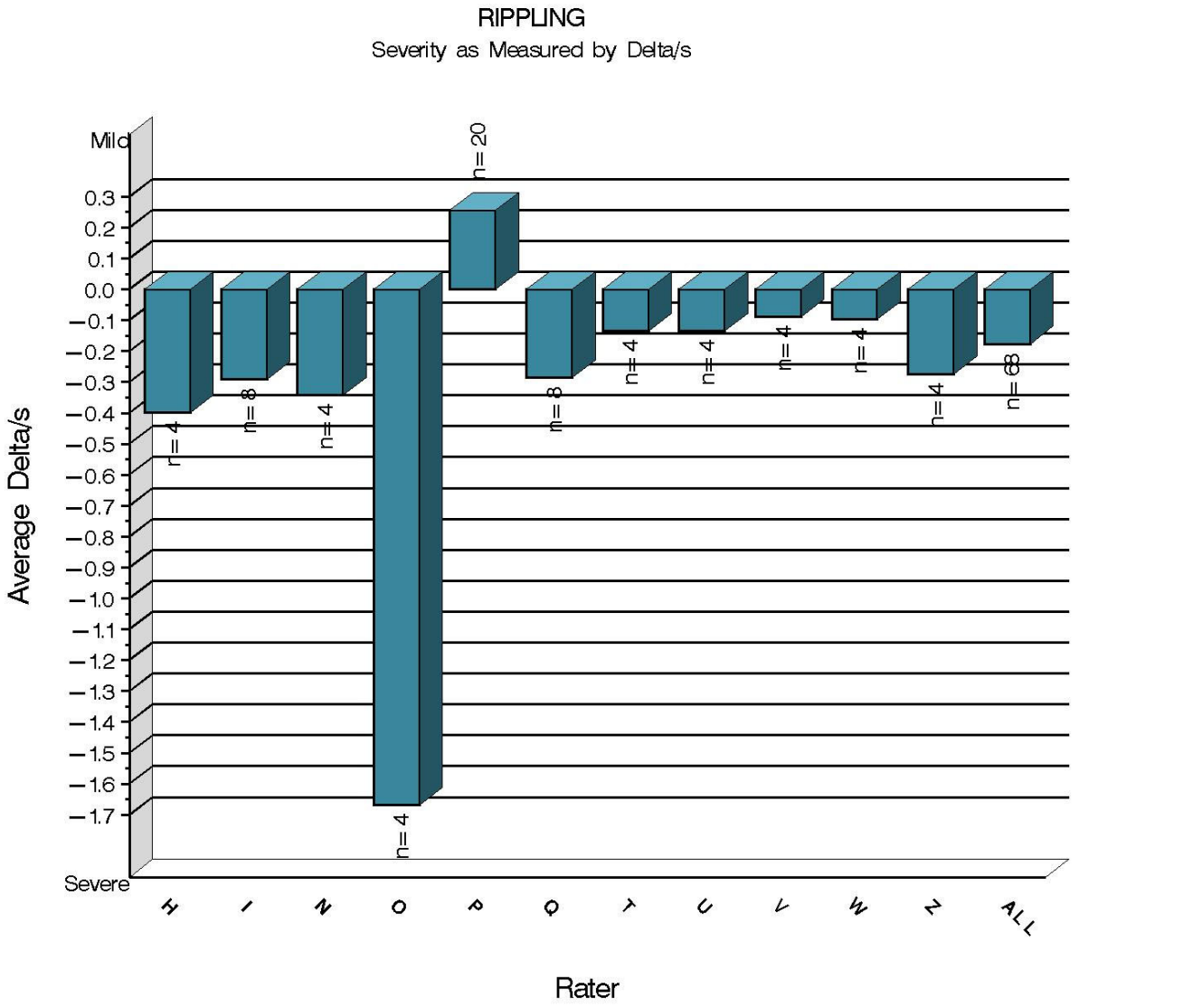
		RIDG		RIPP		SPIT		WEAR	
Rater	N	Avg Yi	STD*	Avg Yi	STD*	Avg Yi	STD*	Avg Yi	STD*
H	4	0.730	0.768	-0.398	1.127	0.646	1.407	0.144	0.747
I	8	-0.534	1.303	-0.291	1.179	0.085	0.344	0.082	0.694
N	4	0.077	0.872	-0.342	1.920	0.089	0.179	0.045	0.826
O	4	0.587	0.671	-1.668	1.112	-0.208	0.240	-0.776	0.336
P	20	-0.145	1.000	0.257	0.704	-0.055	0.364	0.847	1.707
Q	8	-0.226	0.747	-0.287	0.963	0.037	0.359	0.219	1.203
T	4	-0.420	0.442	-0.135	0.509	-0.258	0.620	-0.692	0.278
U	4	-0.539	0.561	-0.134	0.747	-0.030	0.509	0.168	0.747
V	4	-0.472	0.730	-0.088	0.937	0.063	0.279	-0.181	0.608
W	4	-0.329	0.175	-0.097	1.306	-0.354	1.142	-0.647	0.643
Z	4	-0.418	0.808	-0.274	1.144	-0.323	0.491	-0.391	0.581
ALL	68	-0.178	0.895	-0.177	1.034	-0.024	0.552	0.147	1.212

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

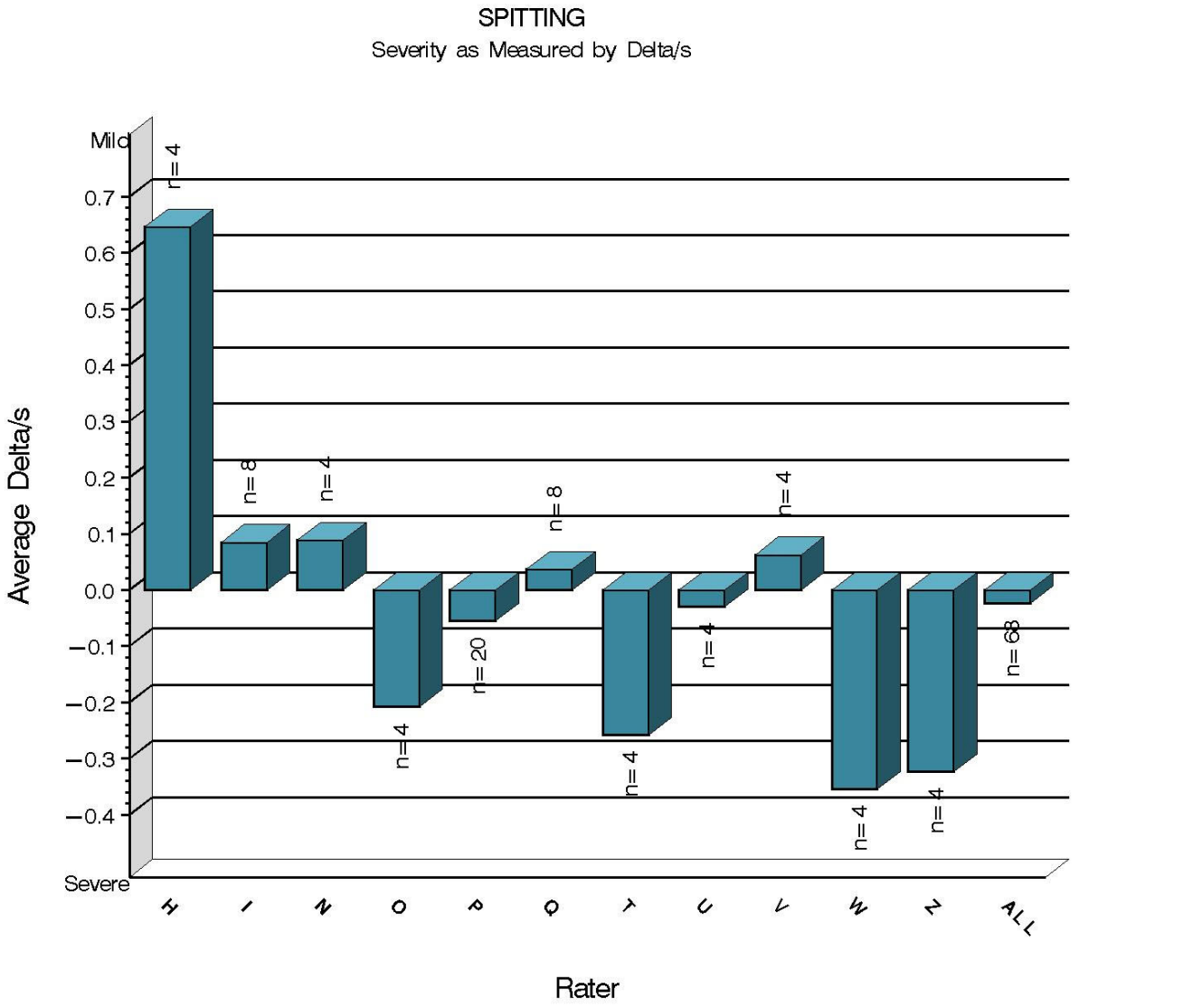
L-37 Rater Calibration



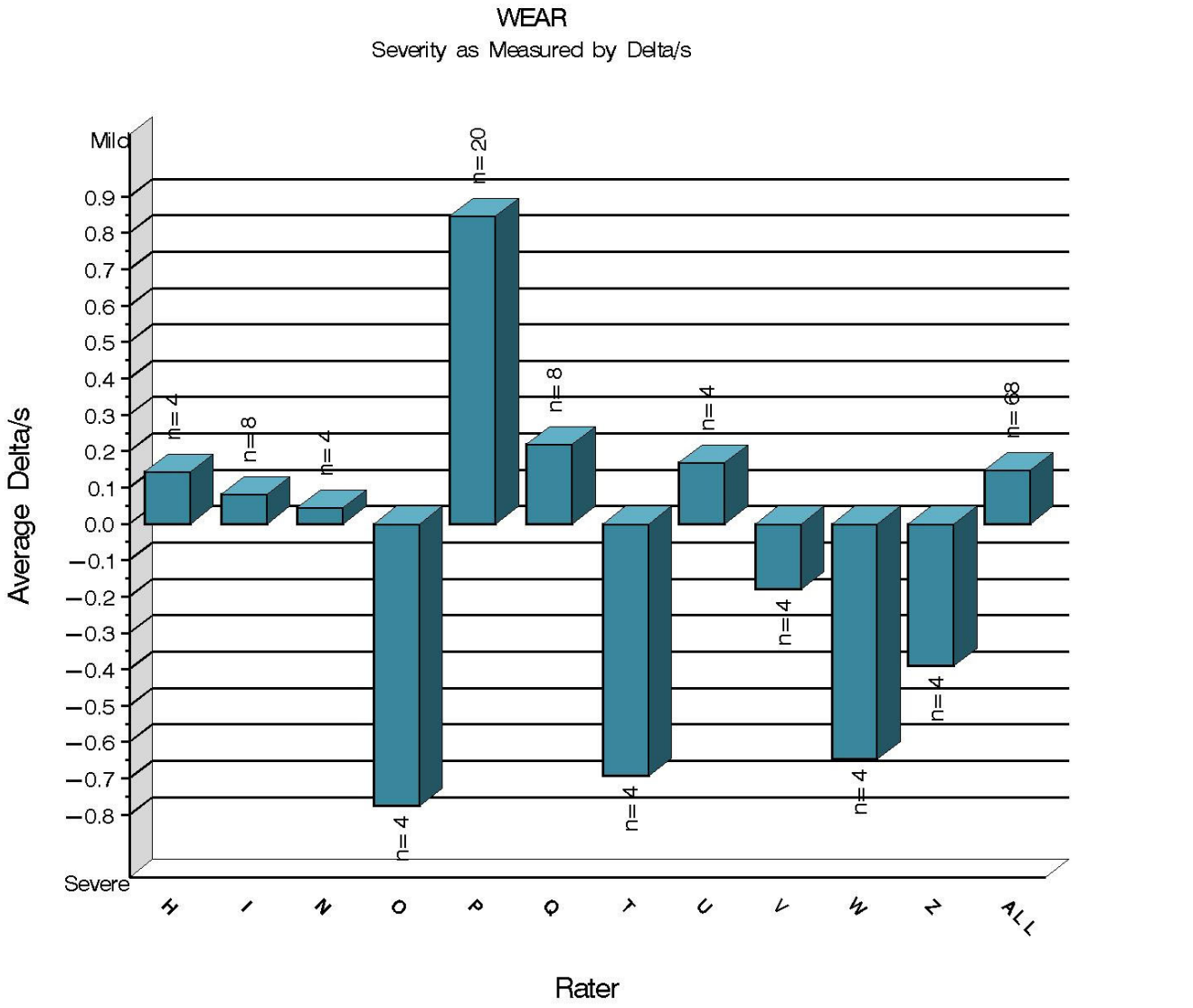
L-37 Rater Calibration



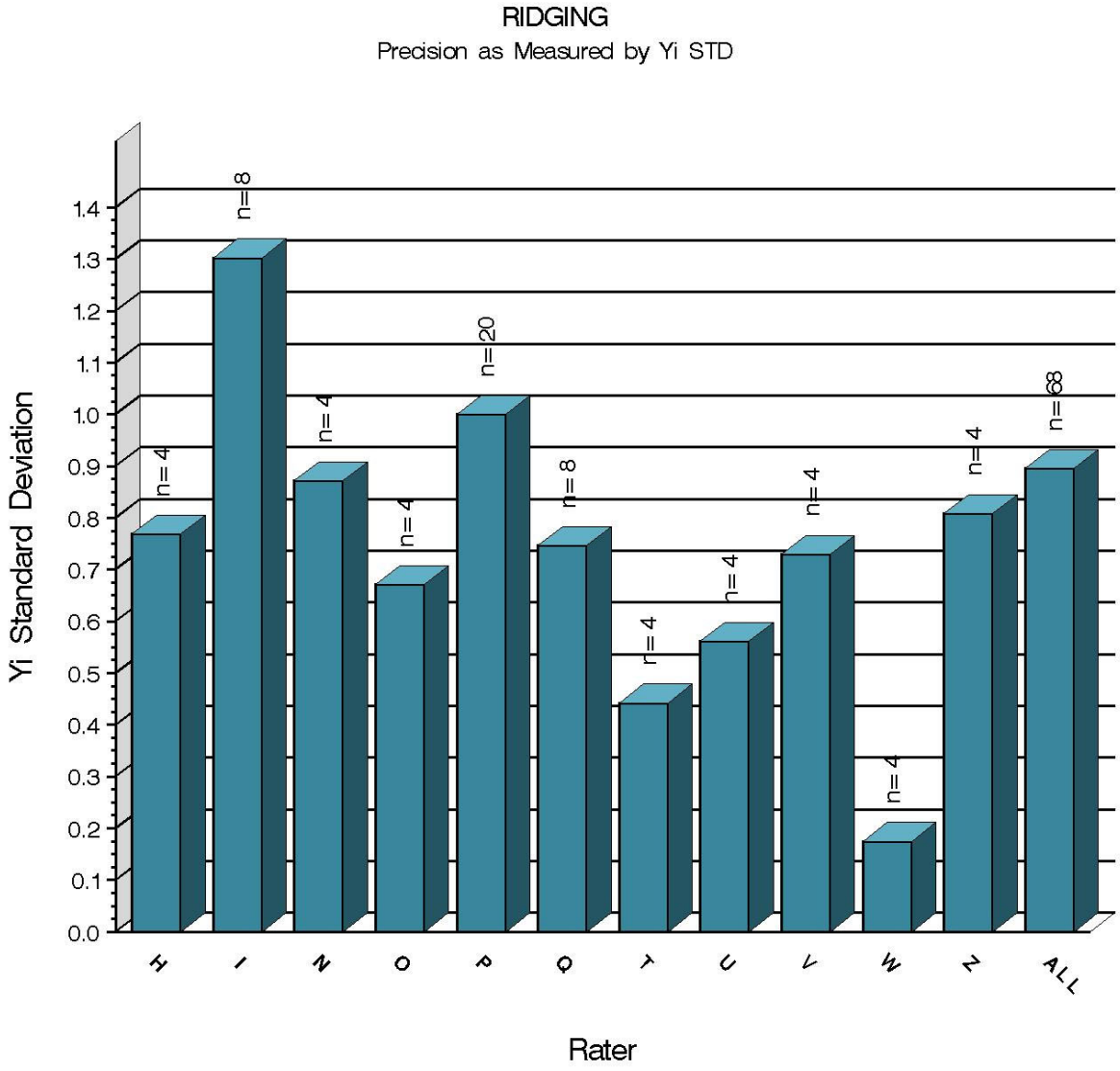
L-37 Rater Calibration



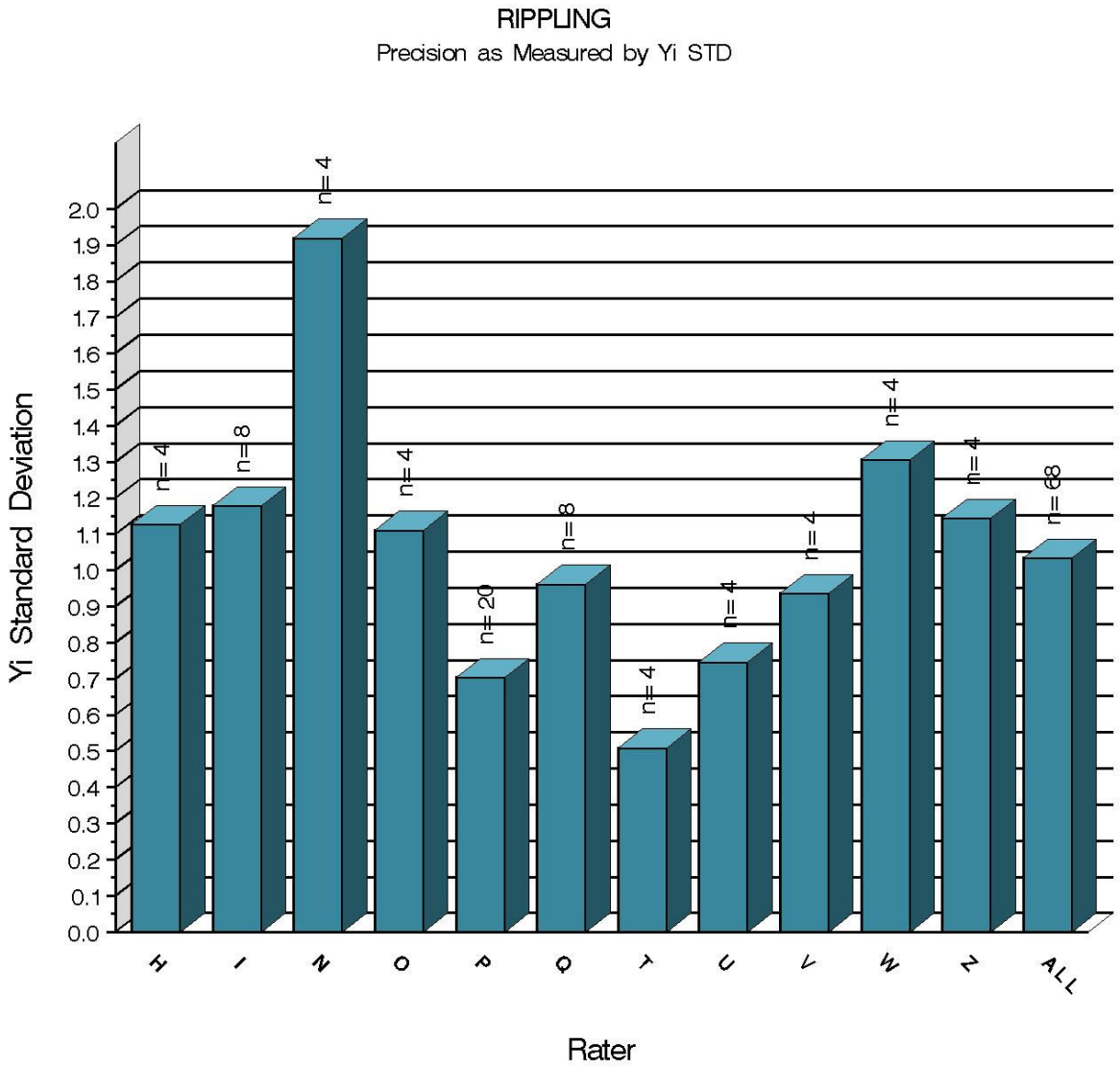
L-37 Rater Calibration



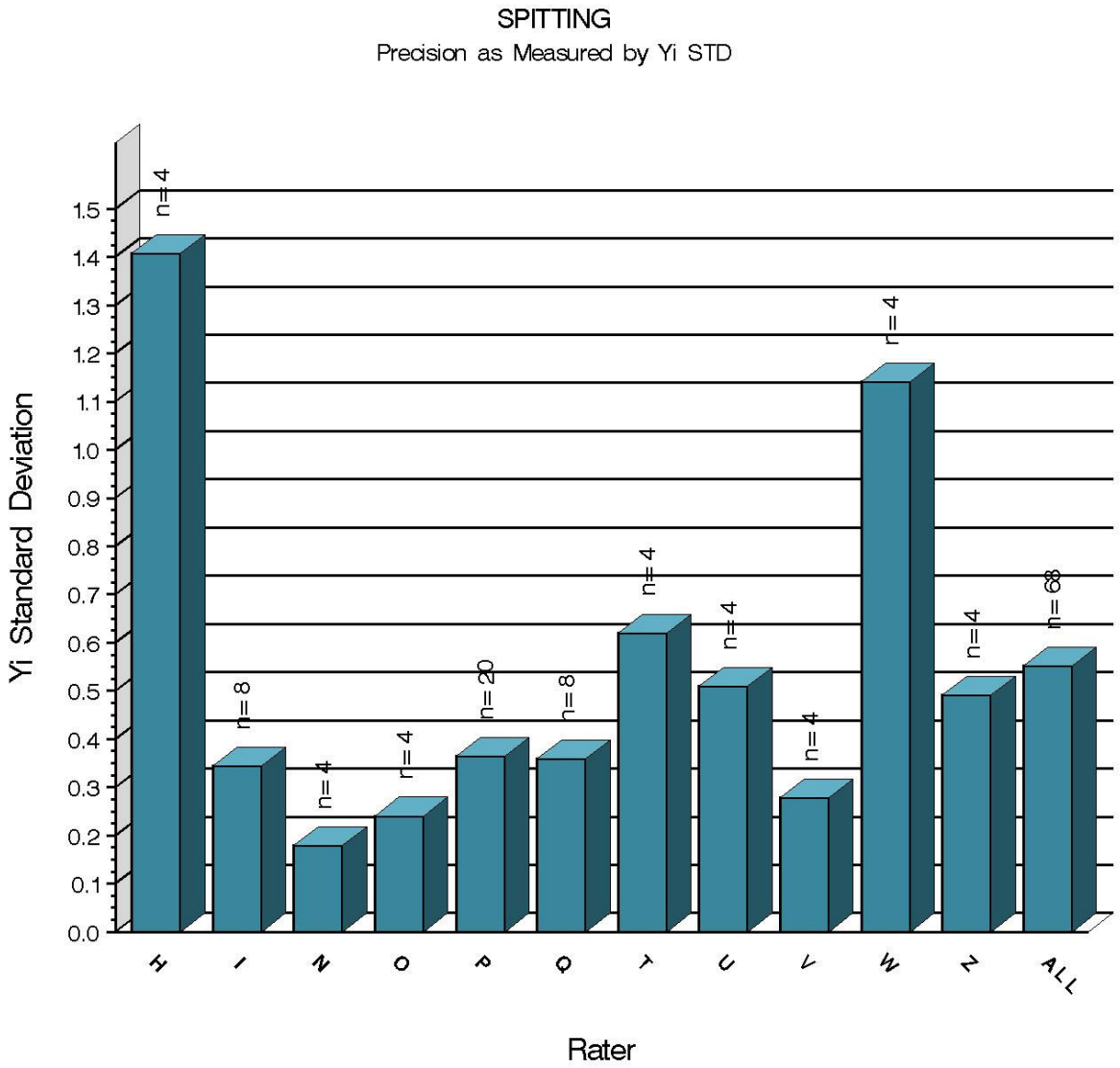
L-37 Rater Calibration



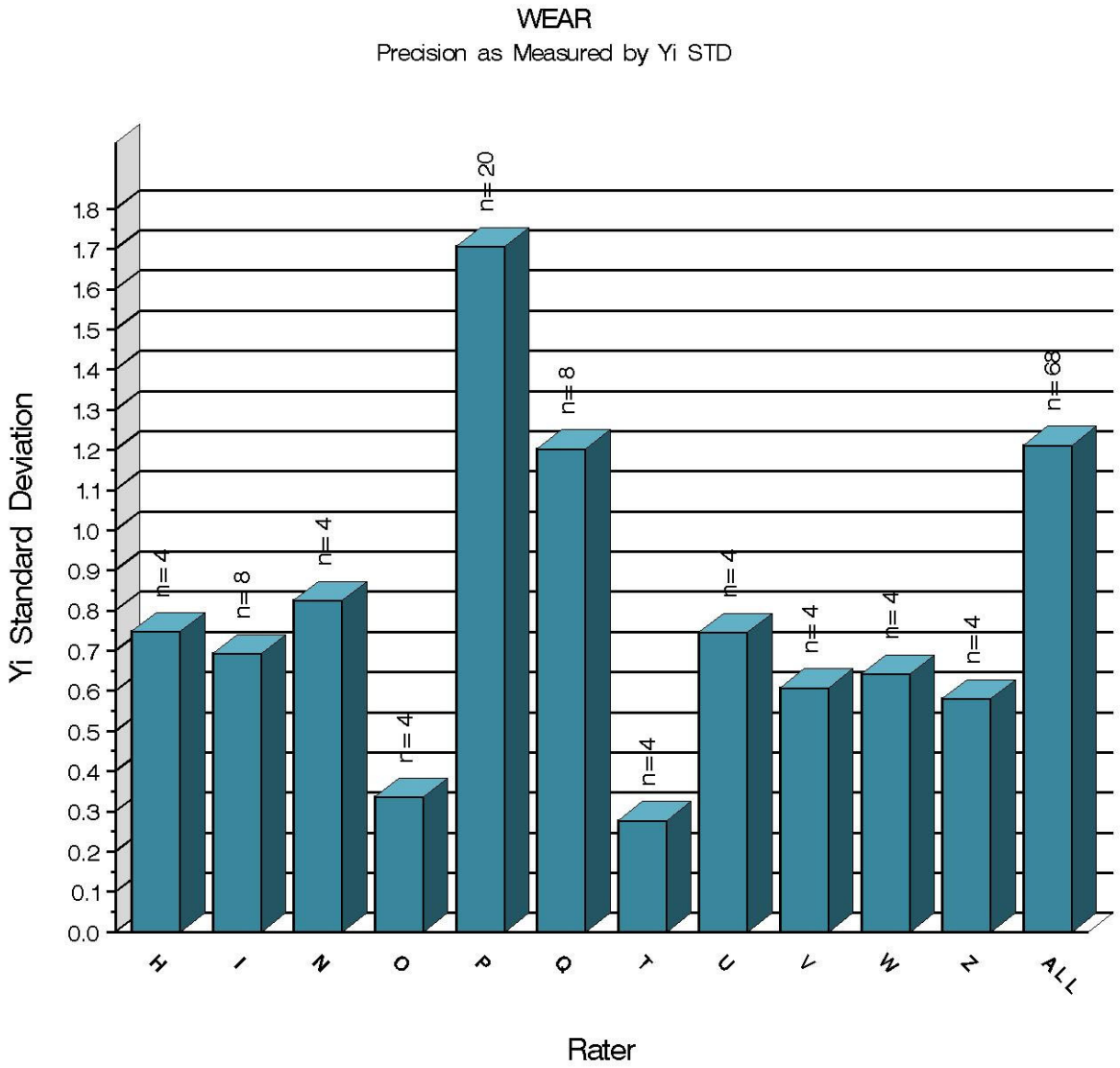
L-37 Rater Calibration



L-37 Rater Calibration



L-37 Rater Calibration



8:58:06 15APR2019

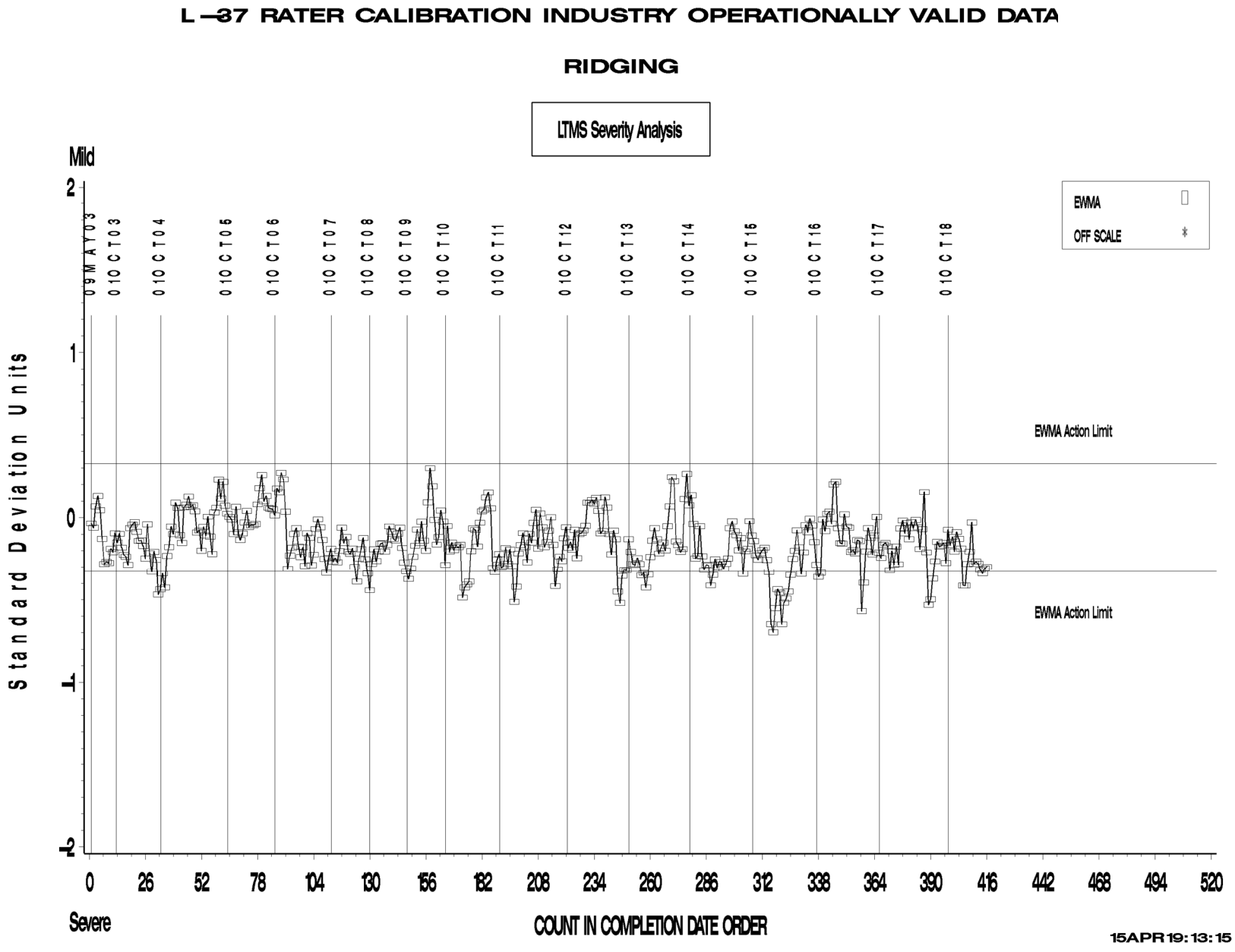
L-37 Rater Calibration

SUMMARY OF SEVERITY & PRECISION

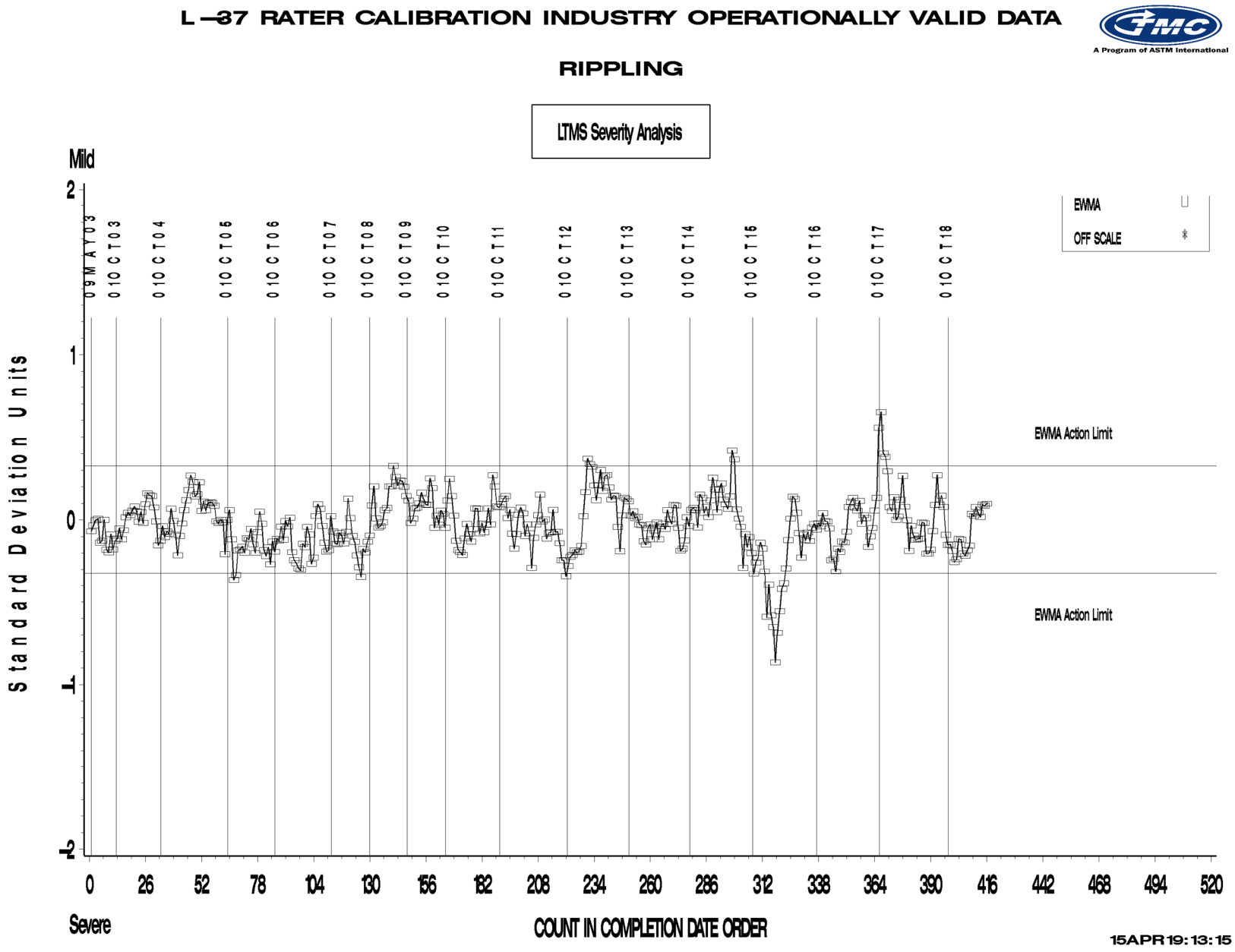
Severity
WEAR and RIDG both exceeded the action limit this period, both have since returned to within limits. All other parameters remained within limits throughout the period.
Precision
Industry precision for all parameters remained within limits throughout the period.

Industry rater control charts follow.

L-37 Rater Calibration



L-37 Rater Calibration

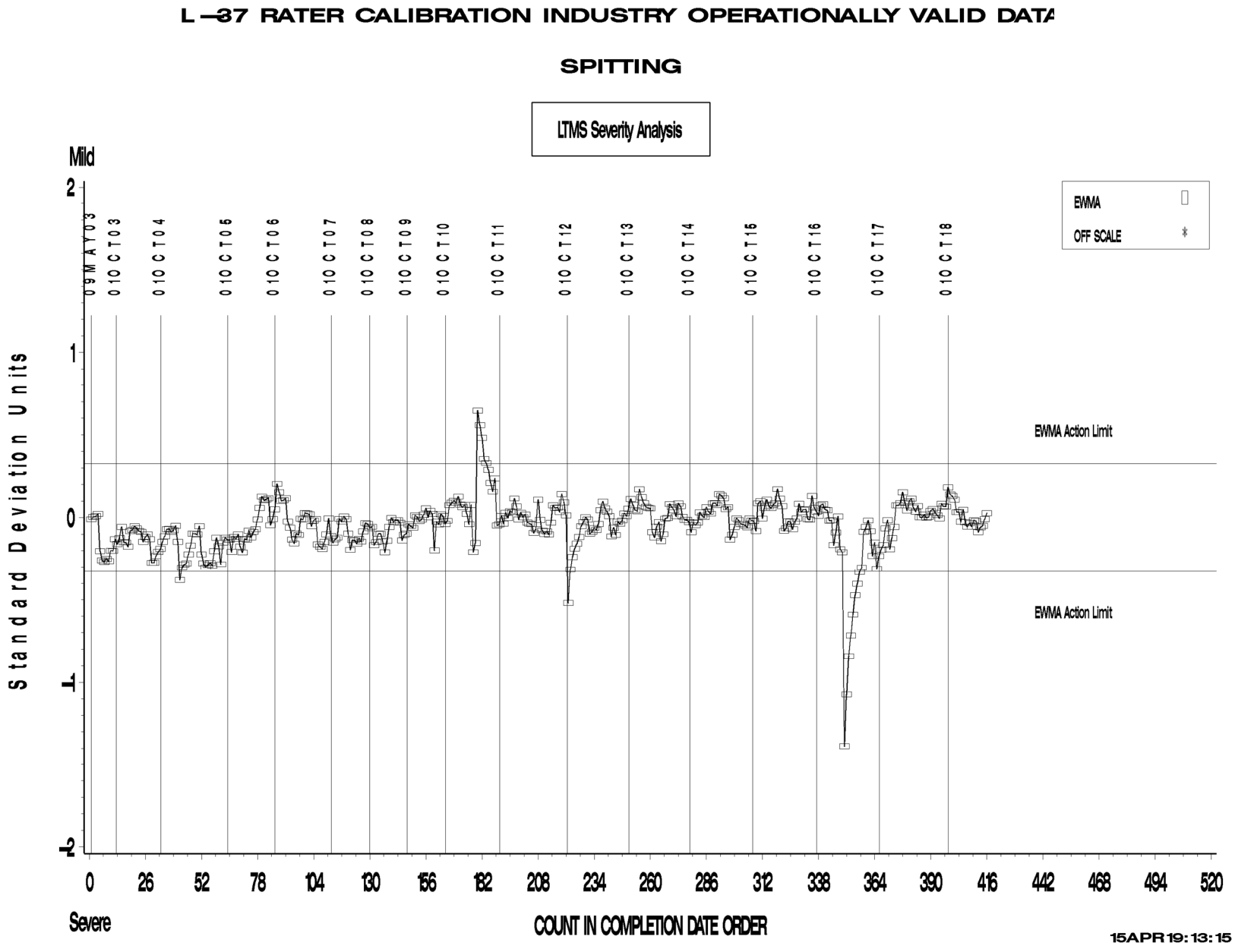


Test Monitoring Center

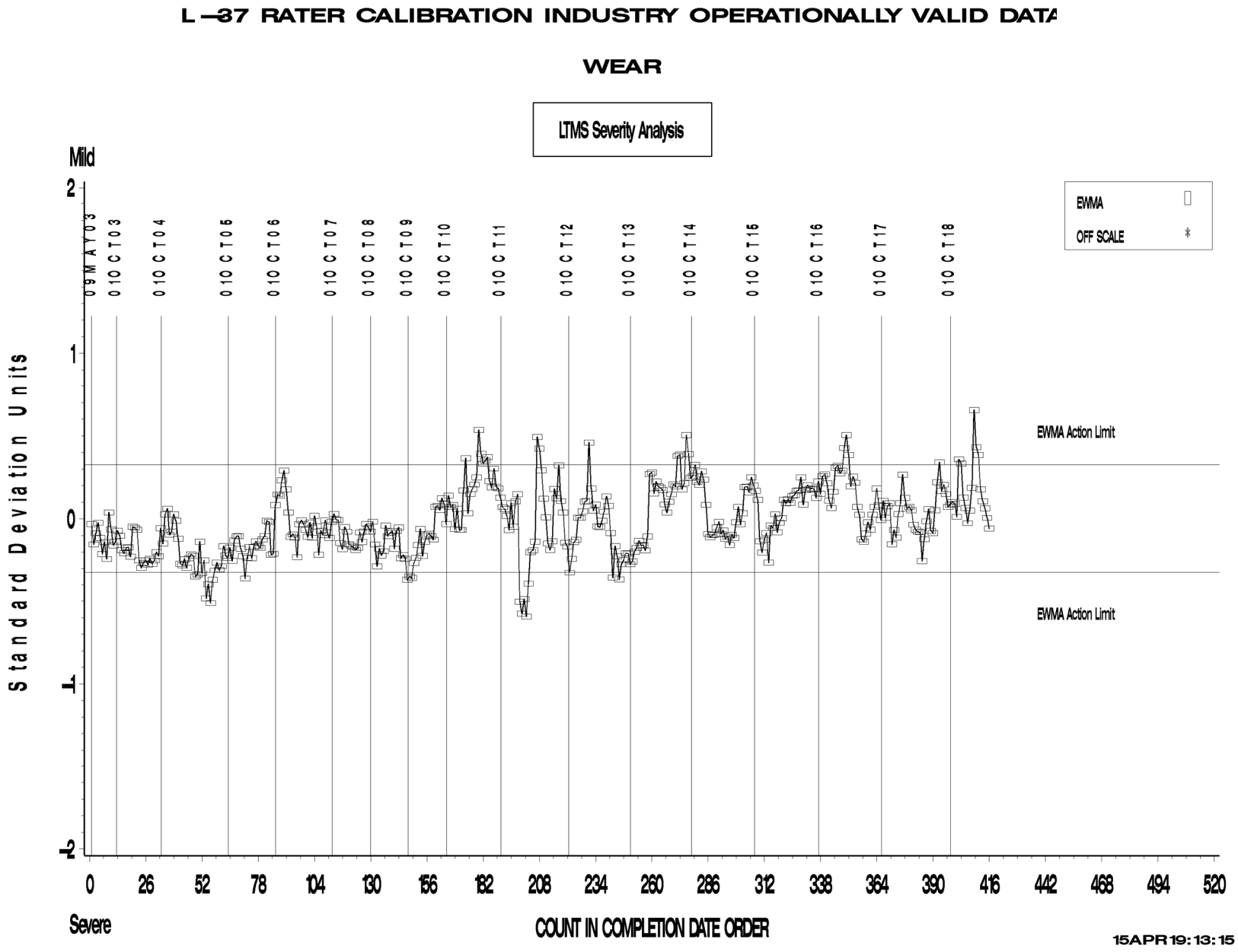
http://astmtmc.cmu.edu

A Program of ASTM International

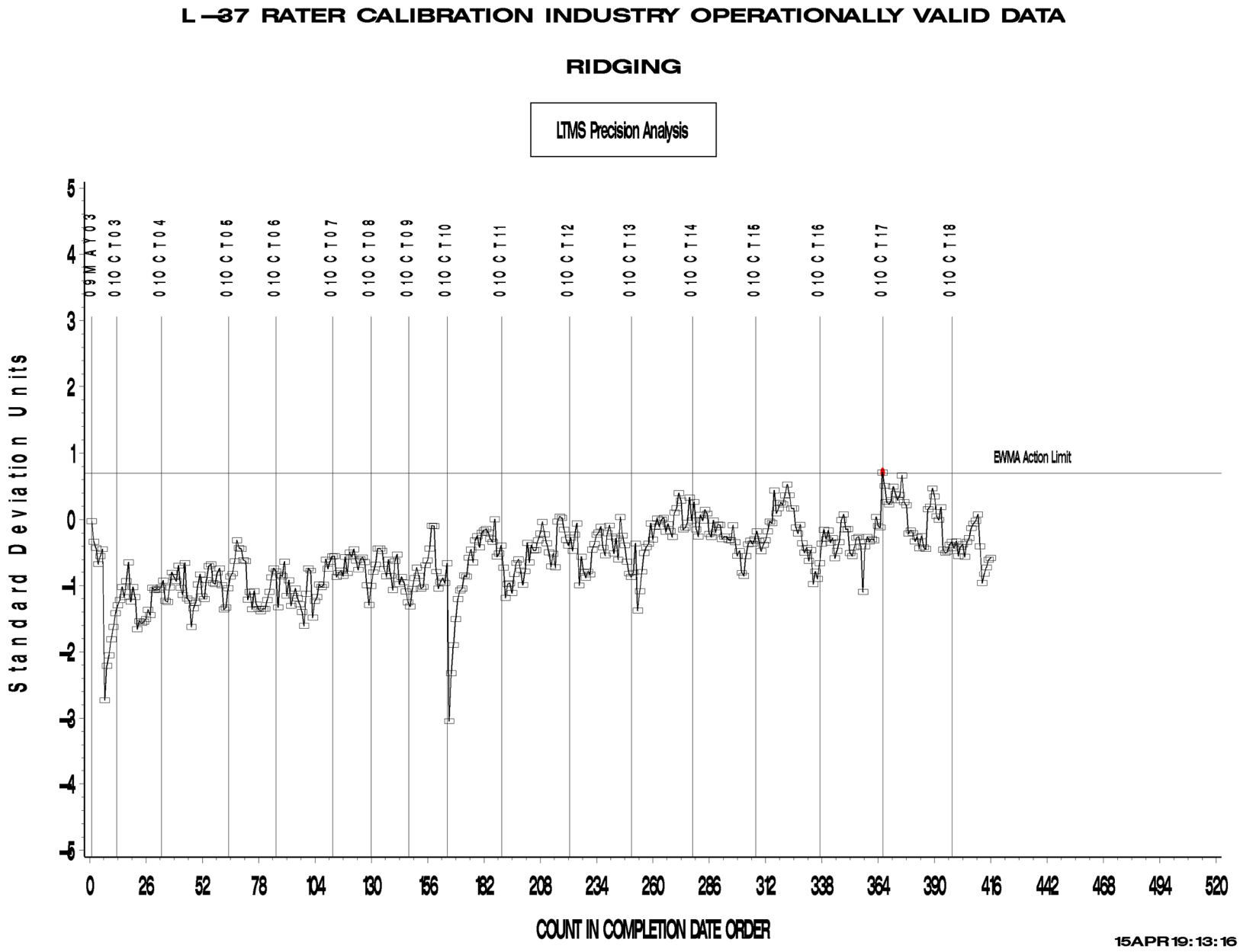
L-37 Rater Calibration



L-37 Rater Calibration



L-37 Rater Calibration

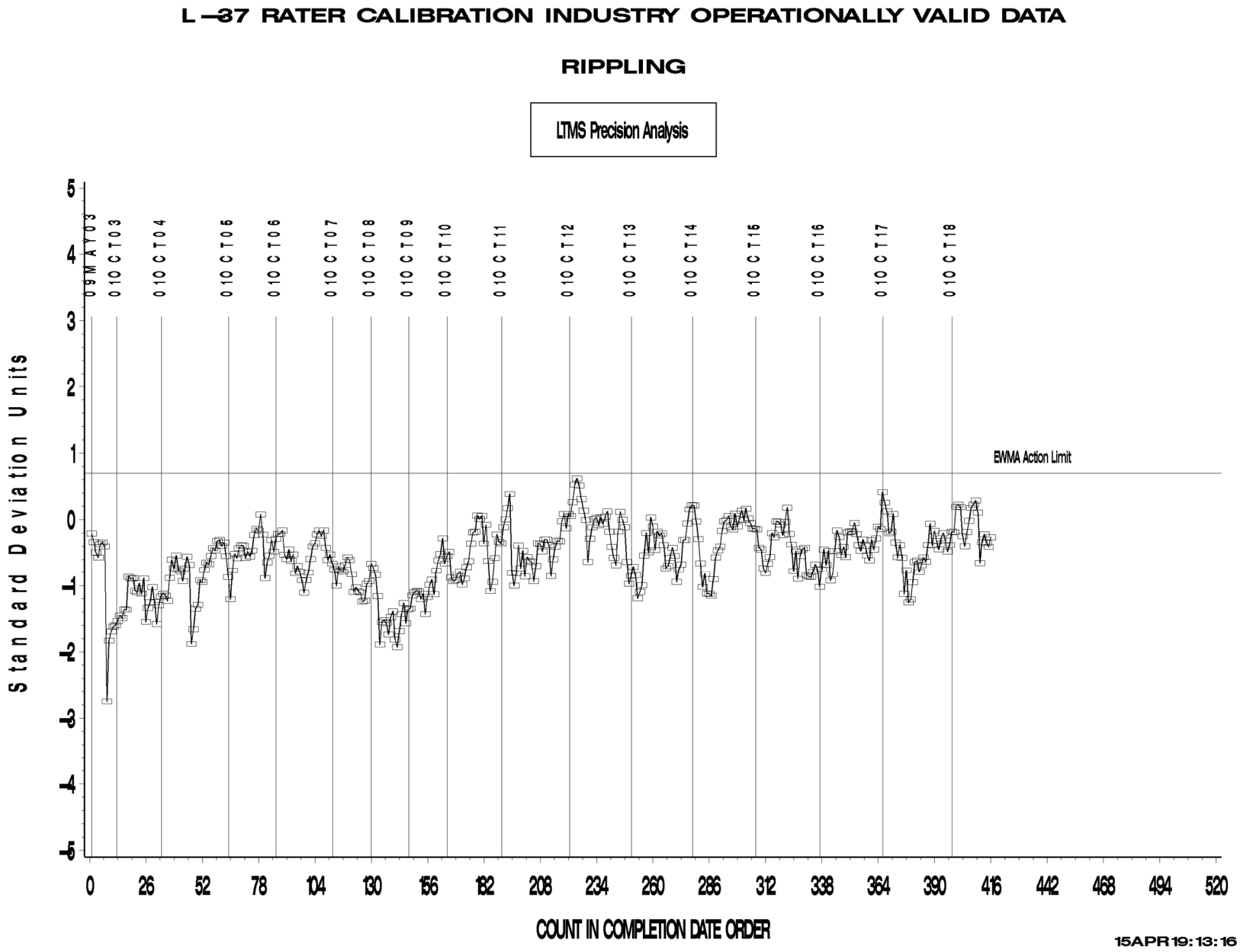


Test Monitoring Center

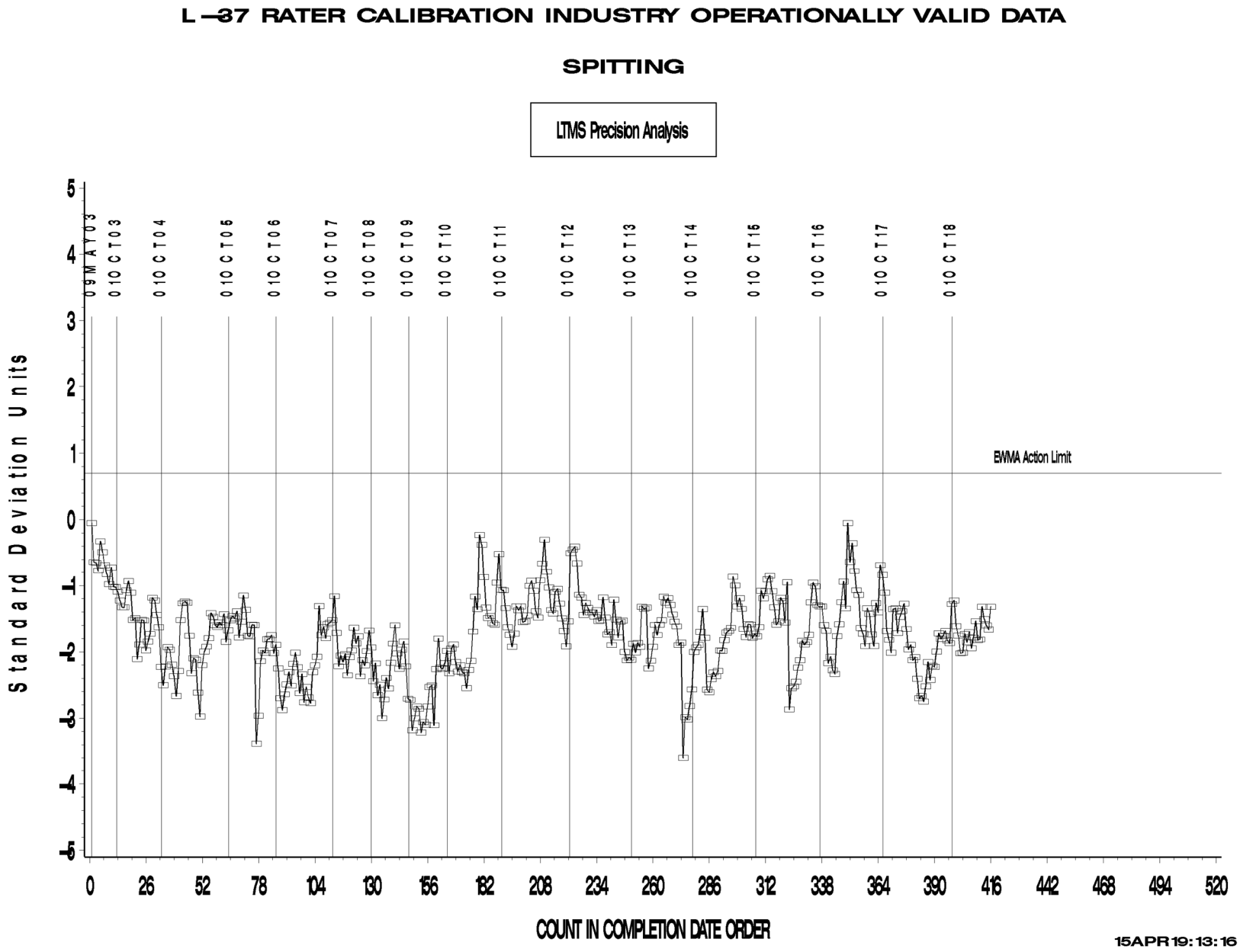
http://astmtmc.cmu.edu

A Program of ASTM International

L-37 Rater Calibration



L-37 Rater Calibration

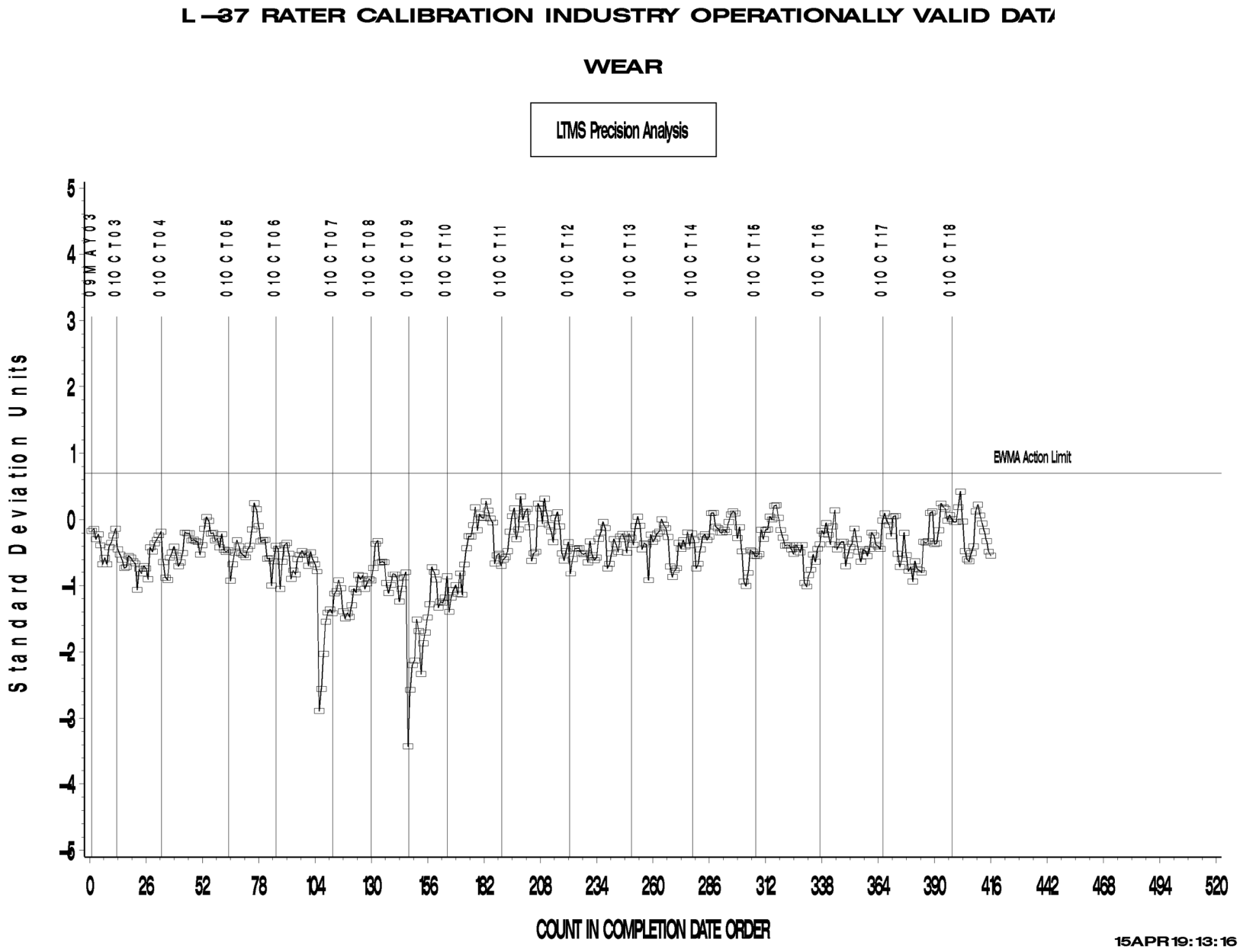


Test Monitoring Center

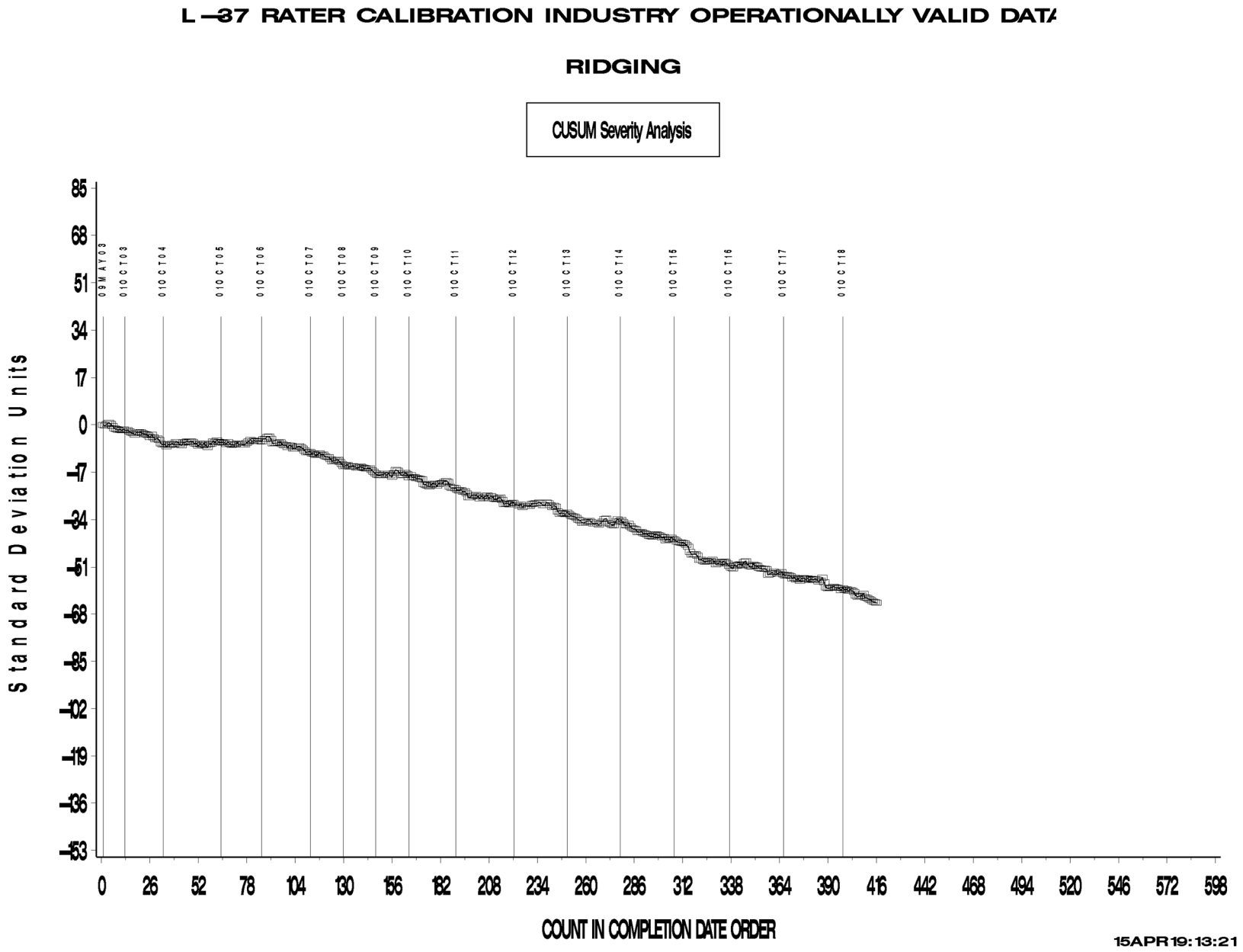
http://astmtmc.cmu.edu

A Program of ASTM International

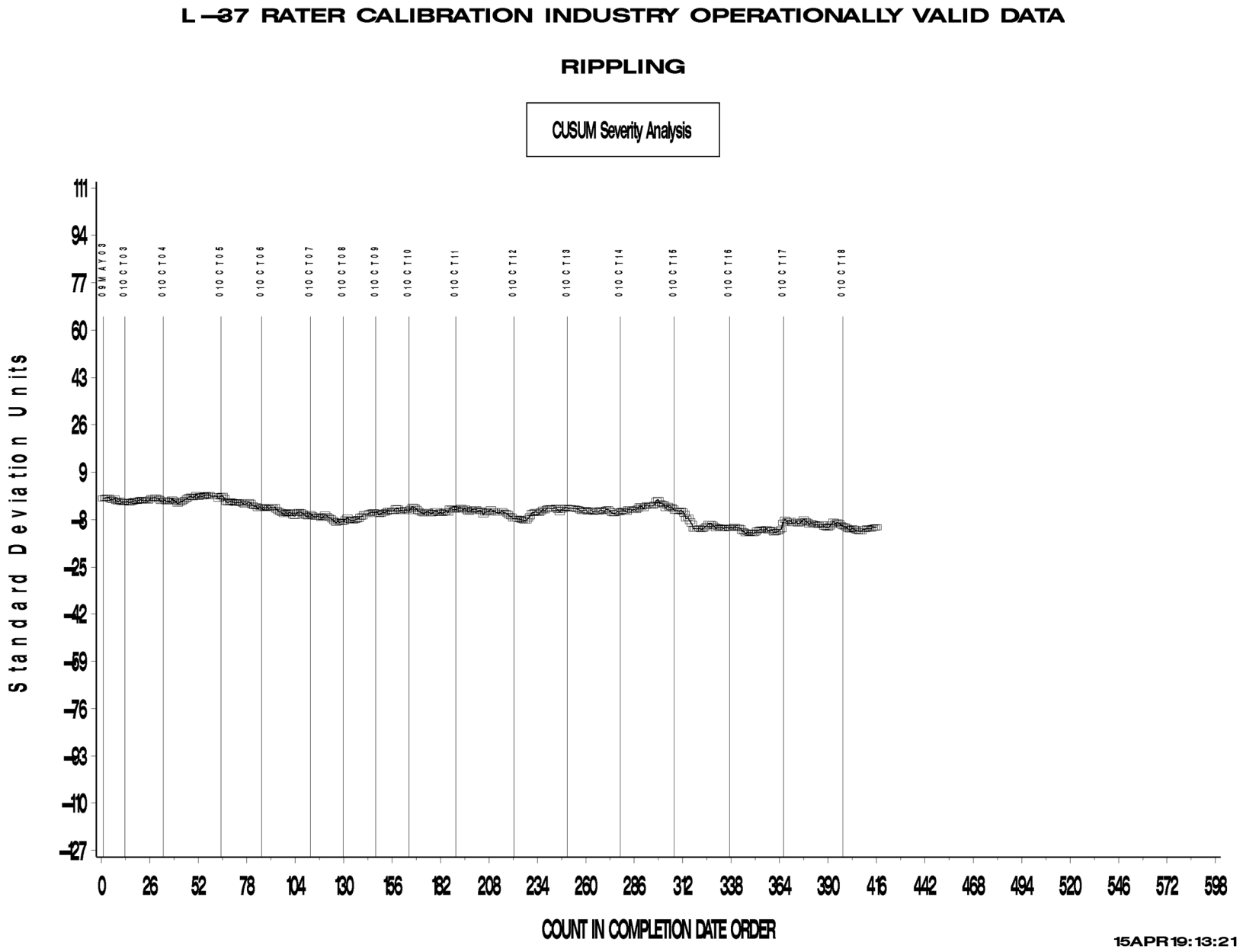
L-37 Rater Calibration



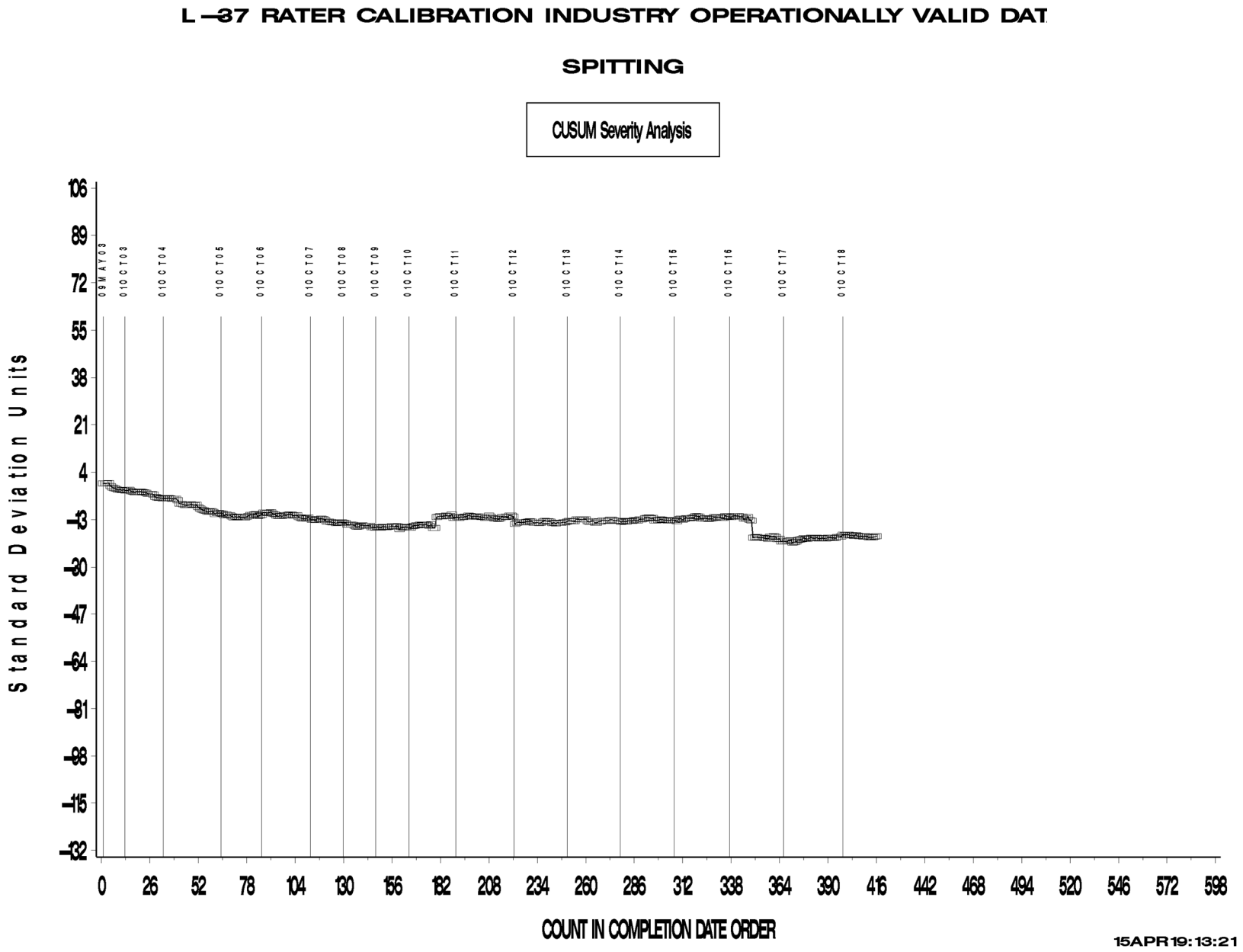
L-37 Rater Calibration



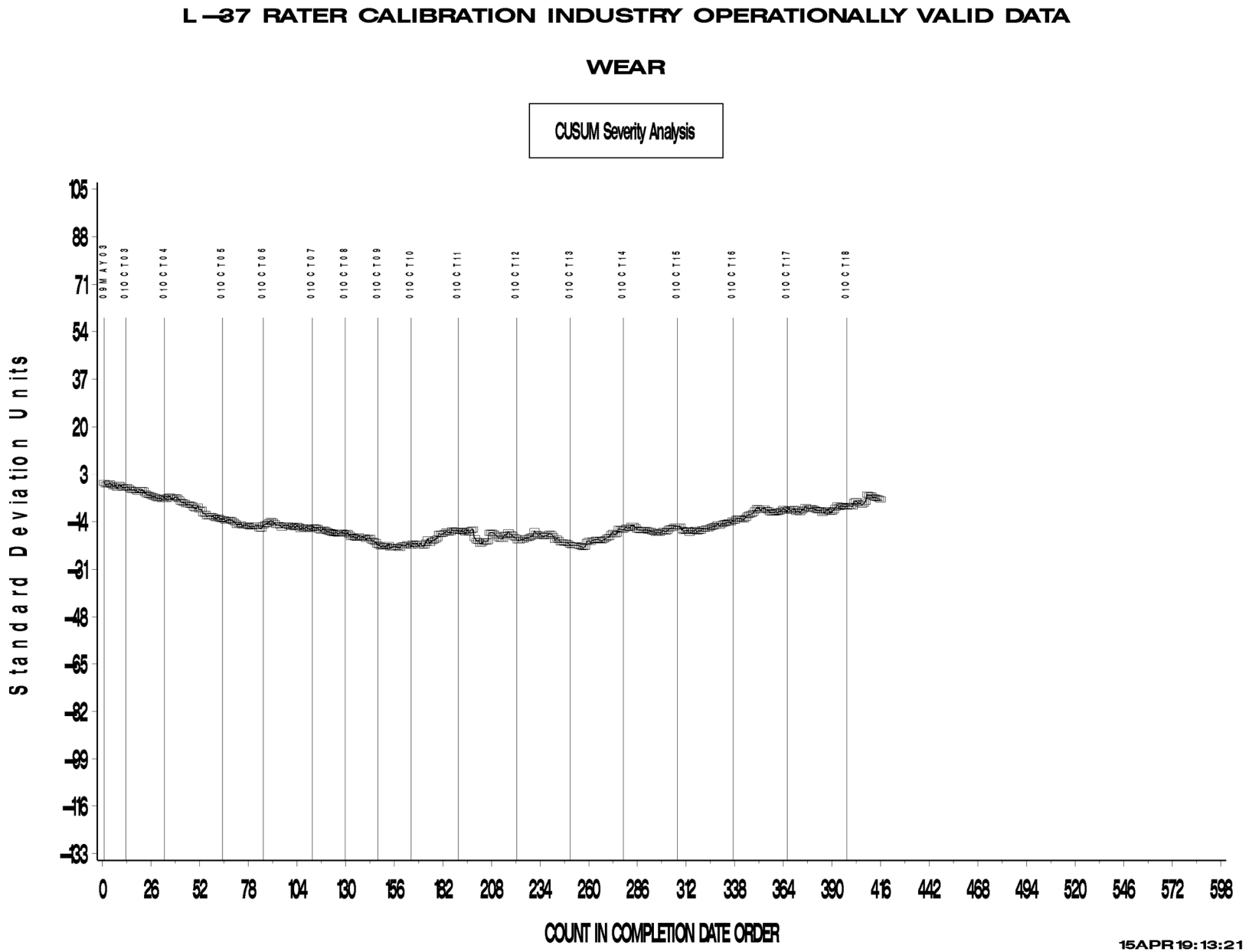
L-37 Rater Calibration



L-37 Rater Calibration



L-37 Rater Calibration



Test Monitoring Center

http://astmtmc.cmu.edu

A Program of ASTM International