



Test Monitoring Center

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MEMORANDUM: 04-037

DATE: April 27, 2004

TO: Don Bartlett, Chairman, L-37 Surveillance Panel

FROM: Donald Lind

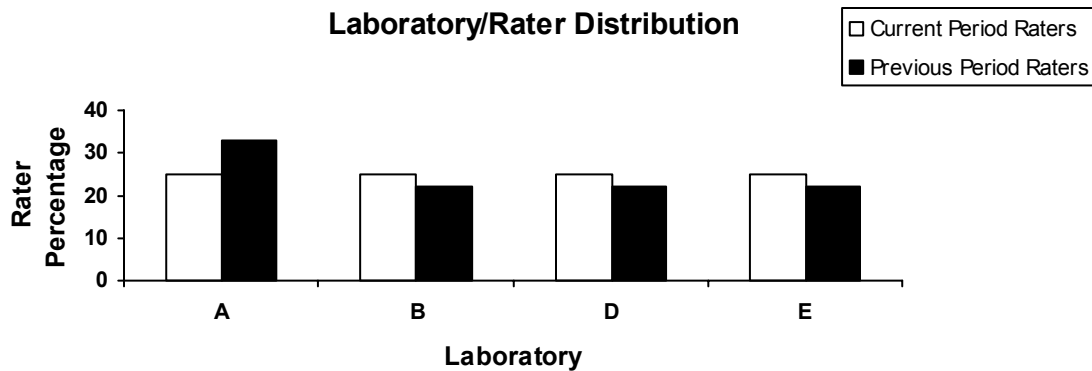
SUBJECT: L-37 Rater Calibration Test Status from October 1, 2003 through March 31, 2004

The following is a summary of the L-37 rater calibration tests that were reported to the Test Monitoring Center during the period October 1, 2003 through March 31, 2004.

Rater Summary

	Reporting Data	Calibrated as of 3/31/04
Number of Raters	8	8

The following chart shows the laboratory/rater distribution:



The following summarizes the status of the rater calibration tests reported to the TMC:

	TMC Validity Codes	No. of Tests
Statistically Acceptable	AC	8
Failed Acceptance Criteria	OC	0
Total		8

Summary

A total of eight L-37 rater calibration test results from eight different raters were reported to the TMC this period. All eight raters were within the acceptance criteria.

Severity and Precision

For this period, the mean delta/s was -0.10 severe for Wear, 0.07 mild for Rippling, -0.13 severe for Ridging, and -0.09 severe for Spitting. Precision was 0.64 for Wear, 0.63 for Rippling, 0.75 for Ridging, and 0.50 for Spitting. A straight standard deviation of Yi was used because the number of ratings per pinion was too small to determine a pooled standard deviation. Below is a table illustrating rater severity for this period:

Rater	Wear		Rippling		Ridging		Spitting	
	Yi	S.D. *	Yi	S.D. *	Yi	S.D. *	Yi	S.D. *
A	-0.28	0.46	0.16	0.55	-0.40	0.35	-0.52	0.44
B	-0.21	0.57	0.19	0.48	0.11	0.54	0.03	0.36
C	0.20	0.36	-0.04	0.45	-0.38	0.58	-0.28	0.43
D	0.66	0.56	0.16	0.54	0.05	0.77	-0.05	0.18
E	-0.17	0.89	0.15	1.43	-0.47	1.09	-0.28	0.69
F	-0.46	0.61	-0.02	0.52	0.83	0.13	0.30	0.35
H	-0.54	0.53	-0.39	0.38	-0.52	0.75	0.21	0.36
K	-0.03	0.61	0.33	0.43	-0.28	0.85	-0.15	0.82

* A straight standard deviation of Yi was used as the number of ratings per pinion was too small to determine a pooled standard deviation.

Industry Control Charts

Figures 1 through 4 are the L-37 rater industry control charts for pinion Wear, Rippling, Ridging, and Spitting respectively. Severity and precision EWMA charts for pinion Wear, Rippling, Ridging and Spitting were in control this report period.

Attachments

- c: L-37 Surveillance Panel
- L-37 Rater Task Force
- ftp://ftp.astmtmc.cmu.edu/docs/rater_calibration/l37rc-04-2004.pdf
- J. L. Zalar
- F. M. Farber

Distribution: Email

Listing of Tables and Figure Included as Part of This Report to the L-37 Rater Calibration Report

Figure 1 is the L-37 Rater Industry Control Charts for Pinion Wear

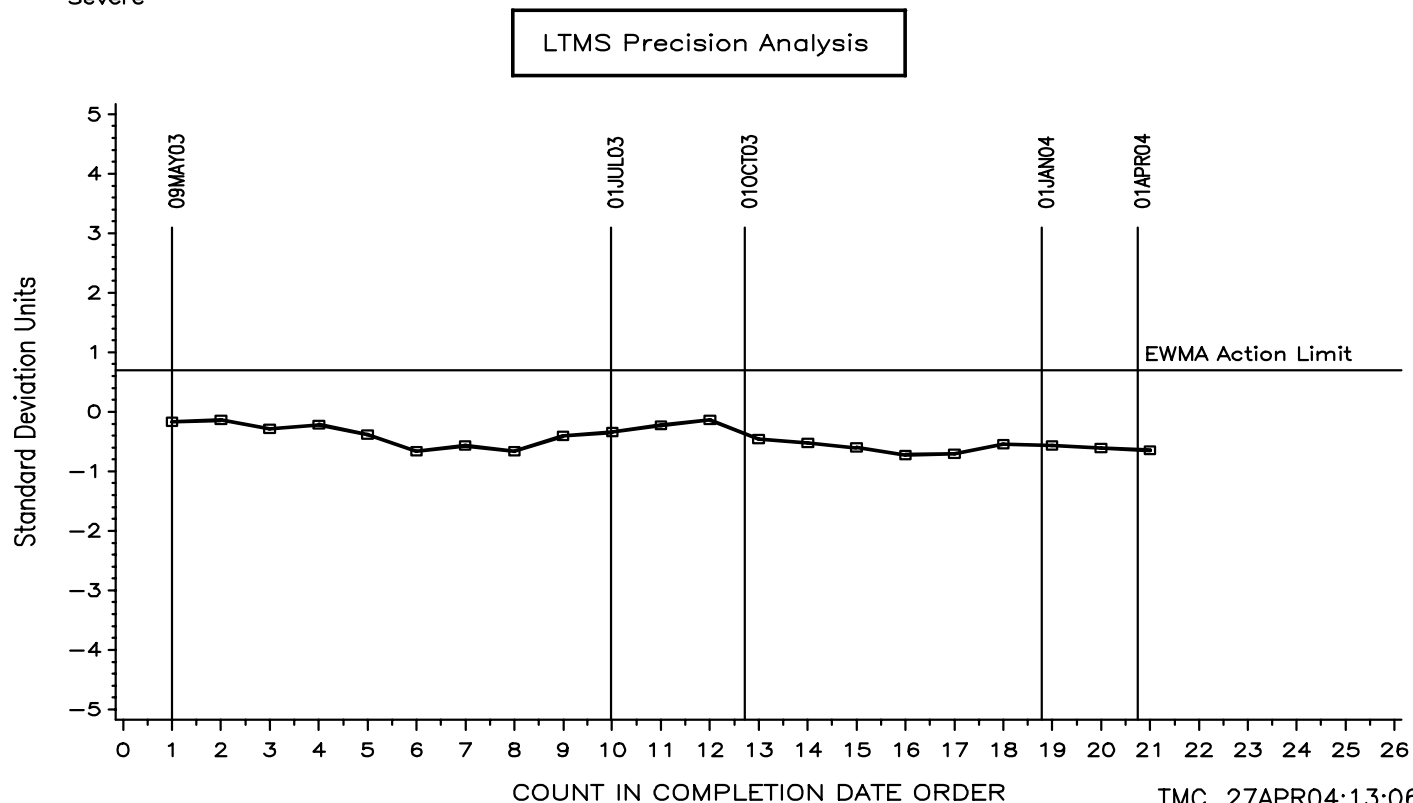
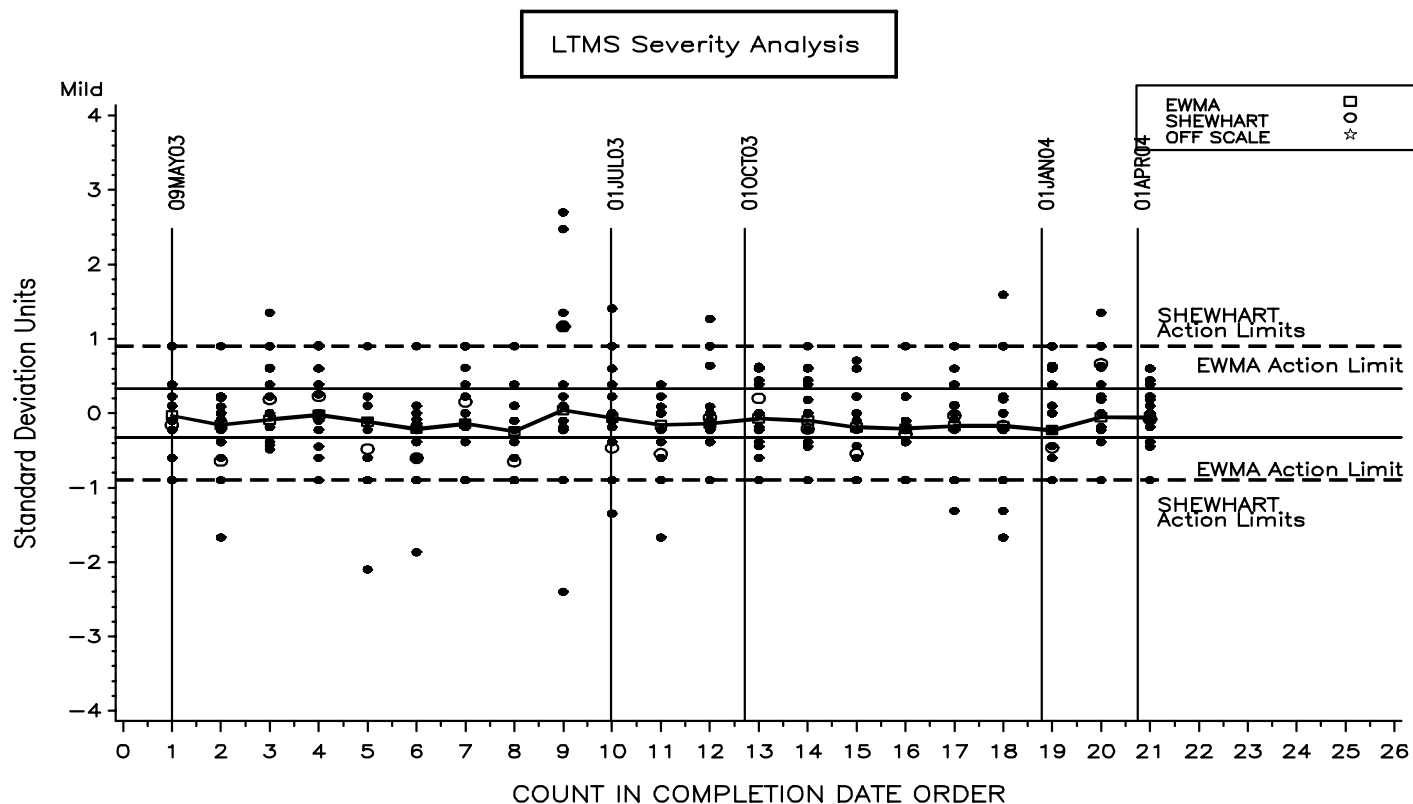
Figure 2 is the L-37 Rater Industry Control Charts for Pinion Rippling

Figure 3 is the L-37 Rater Industry Control Charts for Pinion Ridging

Figure 4 is the L-37 Rater Industry Control Charts for Pinion Spitting

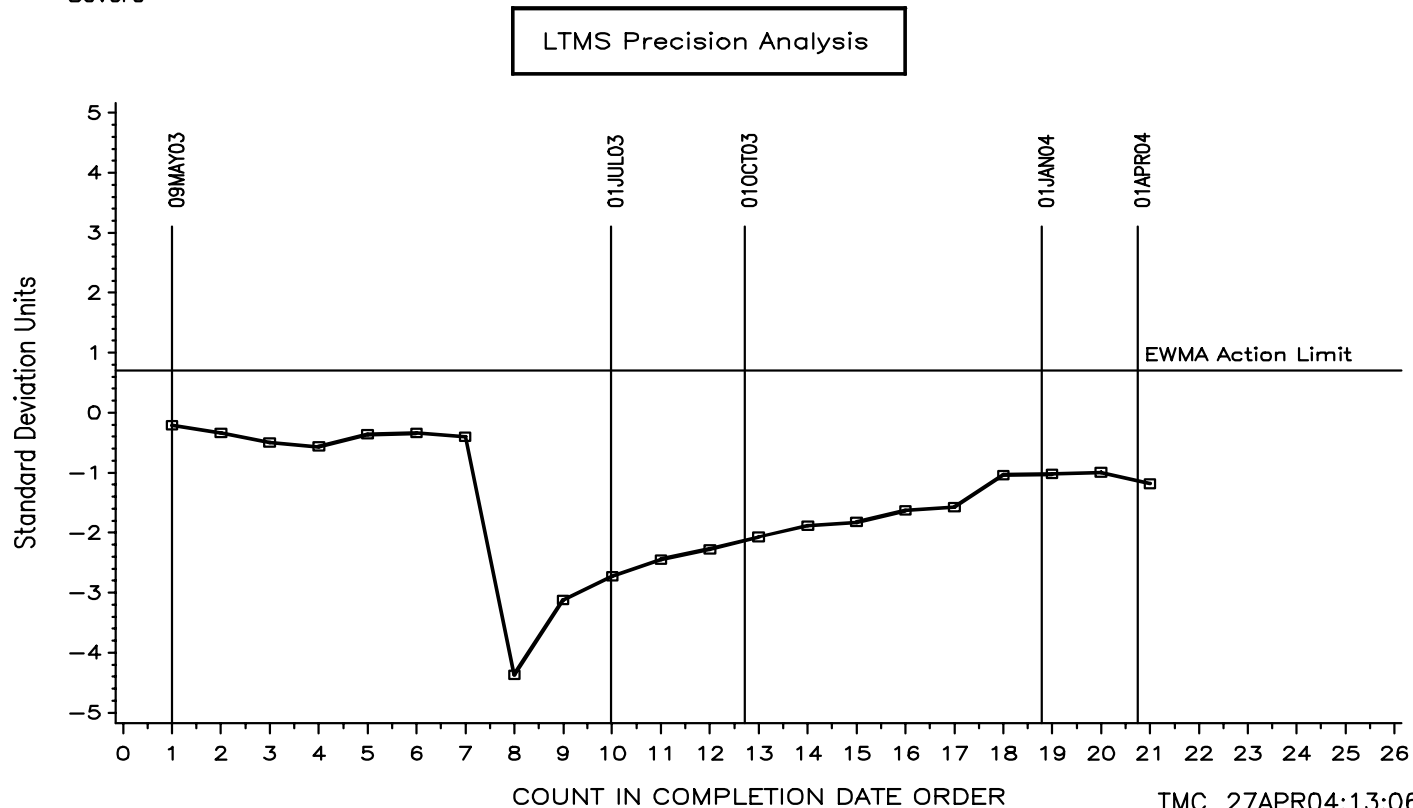
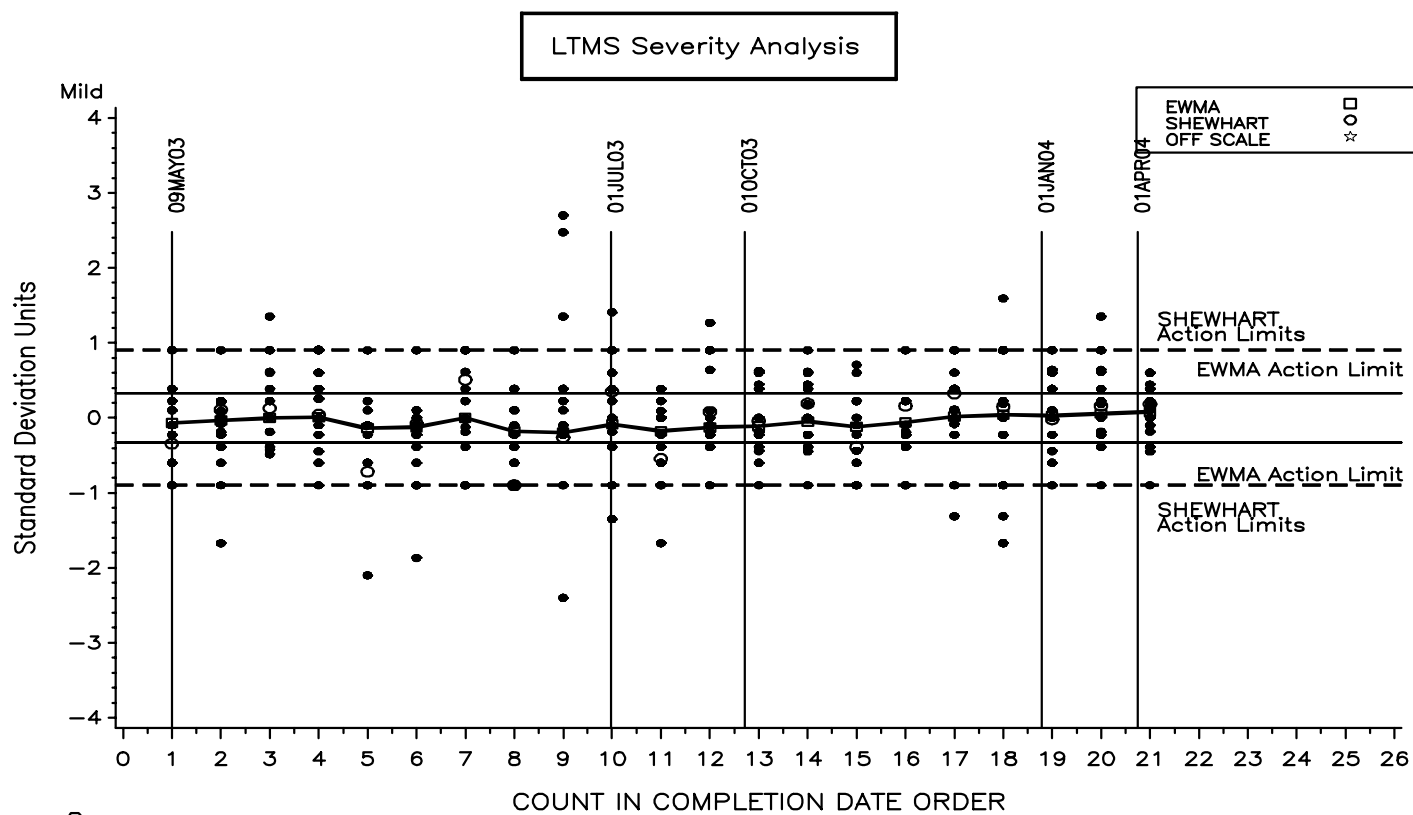
L-37 RATER CALIBRATION INDUSTRY OPERATIONALLY VALID DATA

WEAR



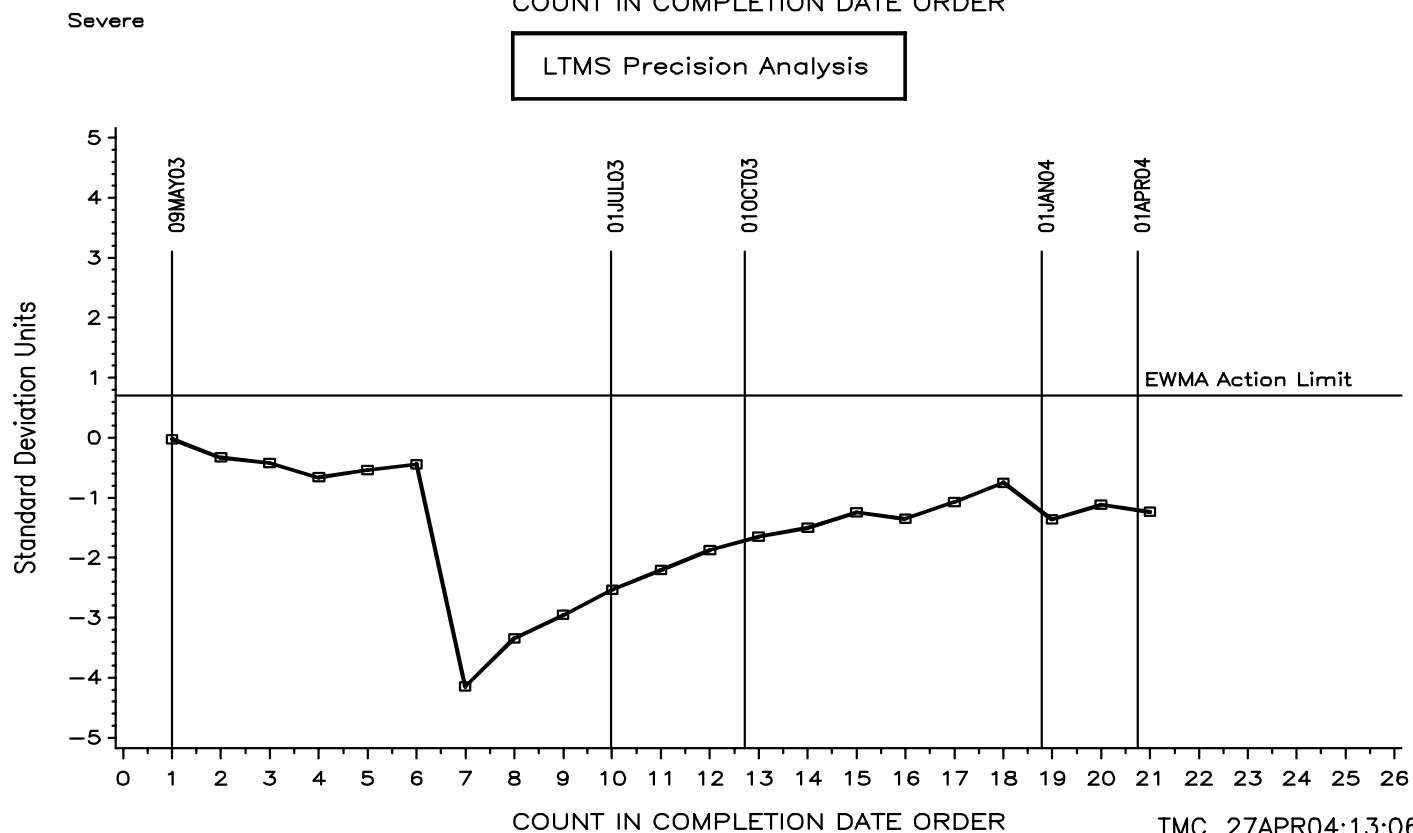
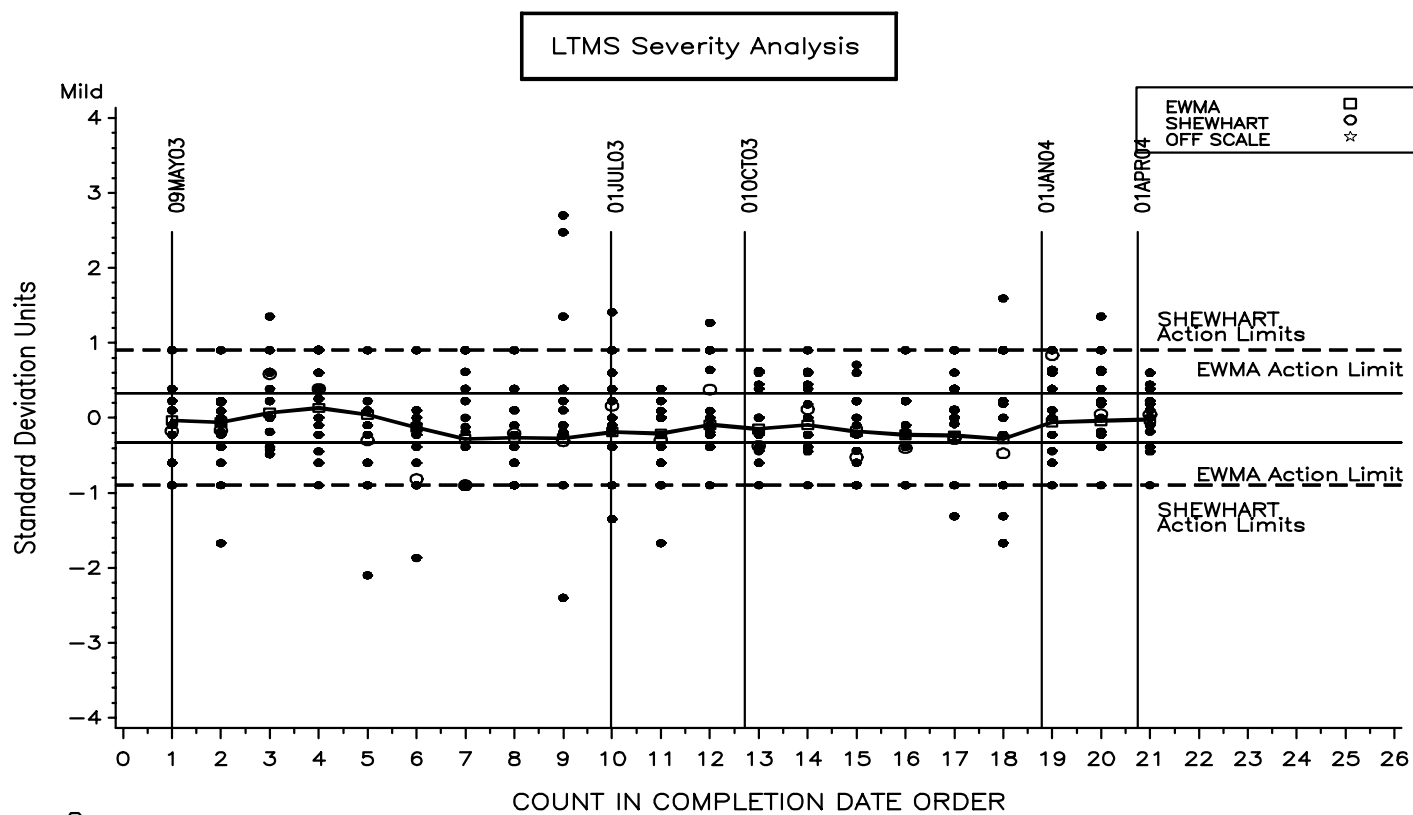
L-37 RATER CALIBRATION INDUSTRY OPERATIONALLY VALID DATA

RIPPLING



L-37 RATER CALIBRATION INDUSTRY OPERATIONALLY VALID DATA

RIDGING



L-37 RATER CALIBRATION INDUSTRY OPERATIONALLY VALID DATA

SPITTING

