



ASQ CRE Prep course

Lesson IV. B. 2. b.

Reliability Prediction Methods

Uncertainty

A photograph of a dark asphalt road winding through a vast, snow-covered landscape. The road is marked with white dashed lines and yellow vertical markers. In the background, there are snow-covered hills and mountains under a clear sky.

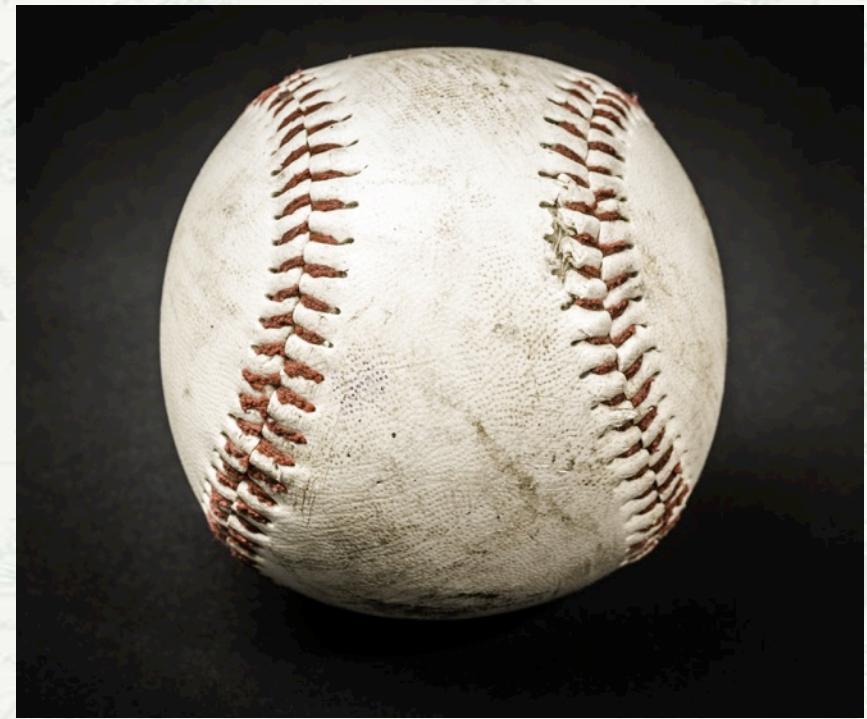
Polish that crystal ball

UNCERTAINTY CALCULATIONS

Prediction Uncertainty

**“Prediction is difficult,
Especially when
dealing with the
future.”**

... Danish Proverb



Prediction Uncertainty

**Exponential
distribution**

**Confidence intervals &
bounds**



Prediction Uncertainty

Normal distribution

$$\bar{X}_L = \bar{X} - Z \frac{\sigma}{\sqrt{n}}$$



Sketch out the
problem



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Lesson IV. B. 2. c.

Reliability Prediction Methods

Tolerance Intervals