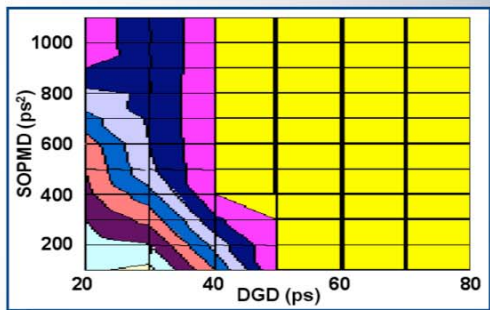


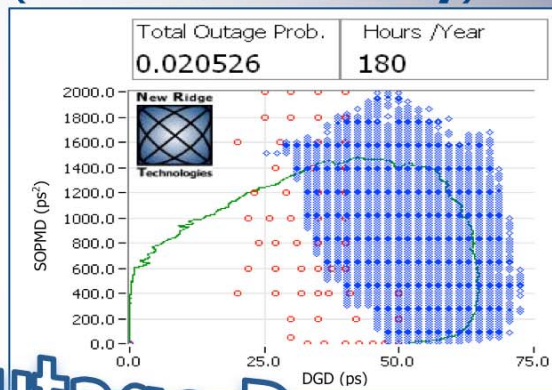


# PMD Outage For Any System On Any Fiber

## 3-steps to Predict PMD Outages, Duration and Frequency



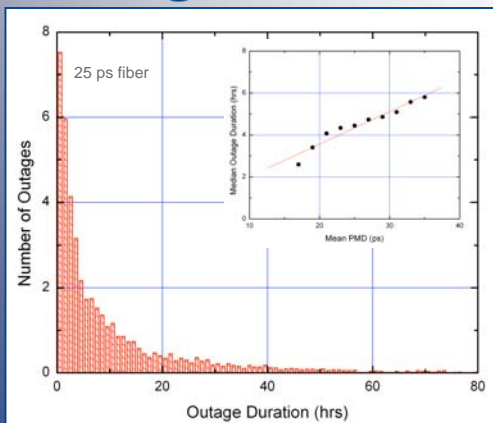
$$TOP = \int d\tau \int d\tau_{\omega} I(\text{Maximum Penalty})$$



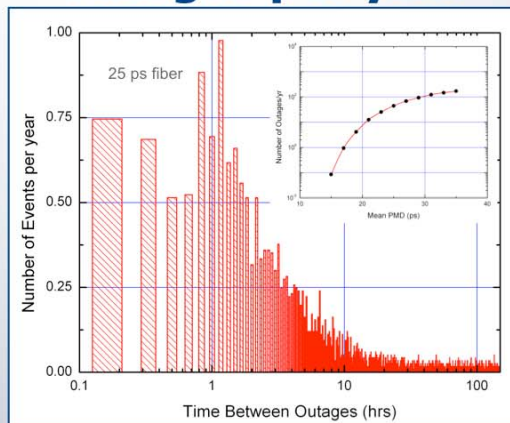
1. Measure PMD Tolerance Data for 1<sup>st</sup> & 2<sup>nd</sup>-order PMD Stress
2. Determine the Maximum Penalty your system tolerates
3. Total Outage Probability (TOP) is the weighted area above Maximum Penalty

## New PMD Outage Dynamics

### Outage Duration



### Outages per year



For 2009 NRT Upgrades TOP to Include:

1. Outage Duration
2. Outages per year
3. Time between Outages