TP3 Stressed Sensitivity Test

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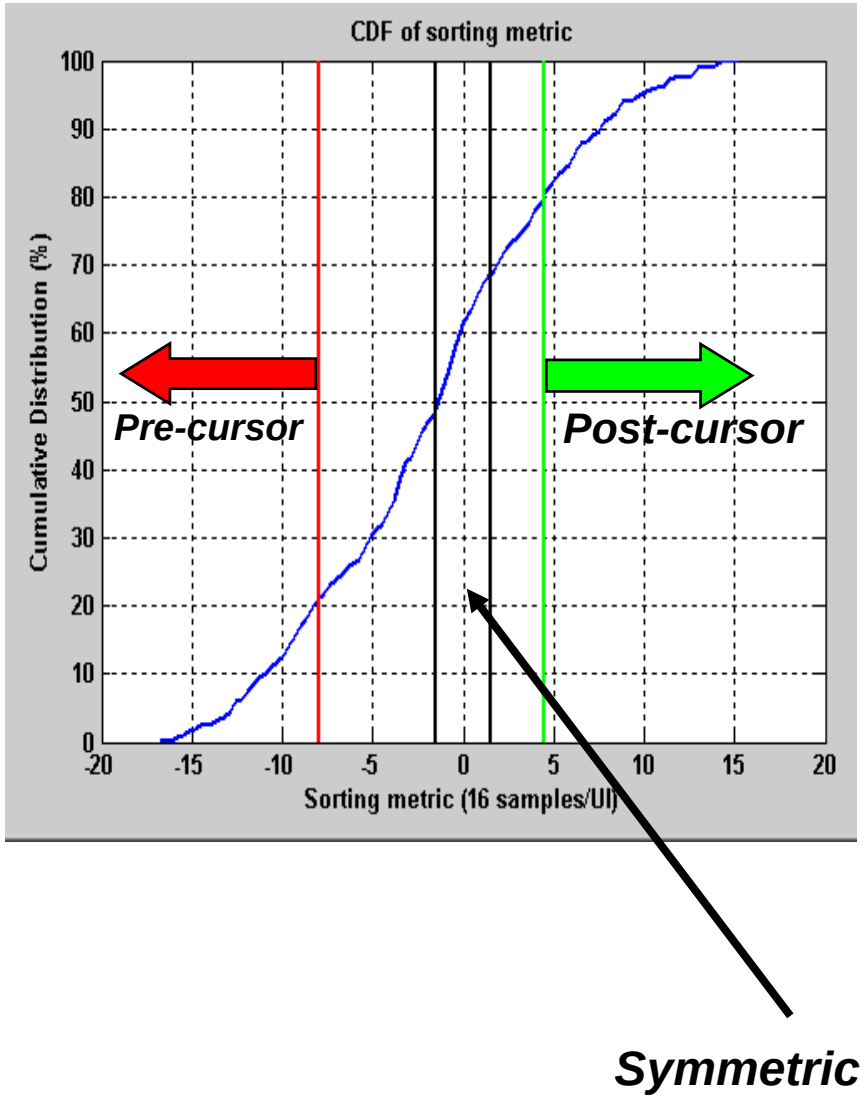
Model Details

- Classify IPR's into 3 types, Pre-Cursor, Symmetric or Post-Cursor
  - Compare "center of gravity" with largest peak
- Questions from last call
  - Symmetric bin does not capture equal power split pulses
  - Narrow window for pre/post-cursor
  - Numerical breakdown

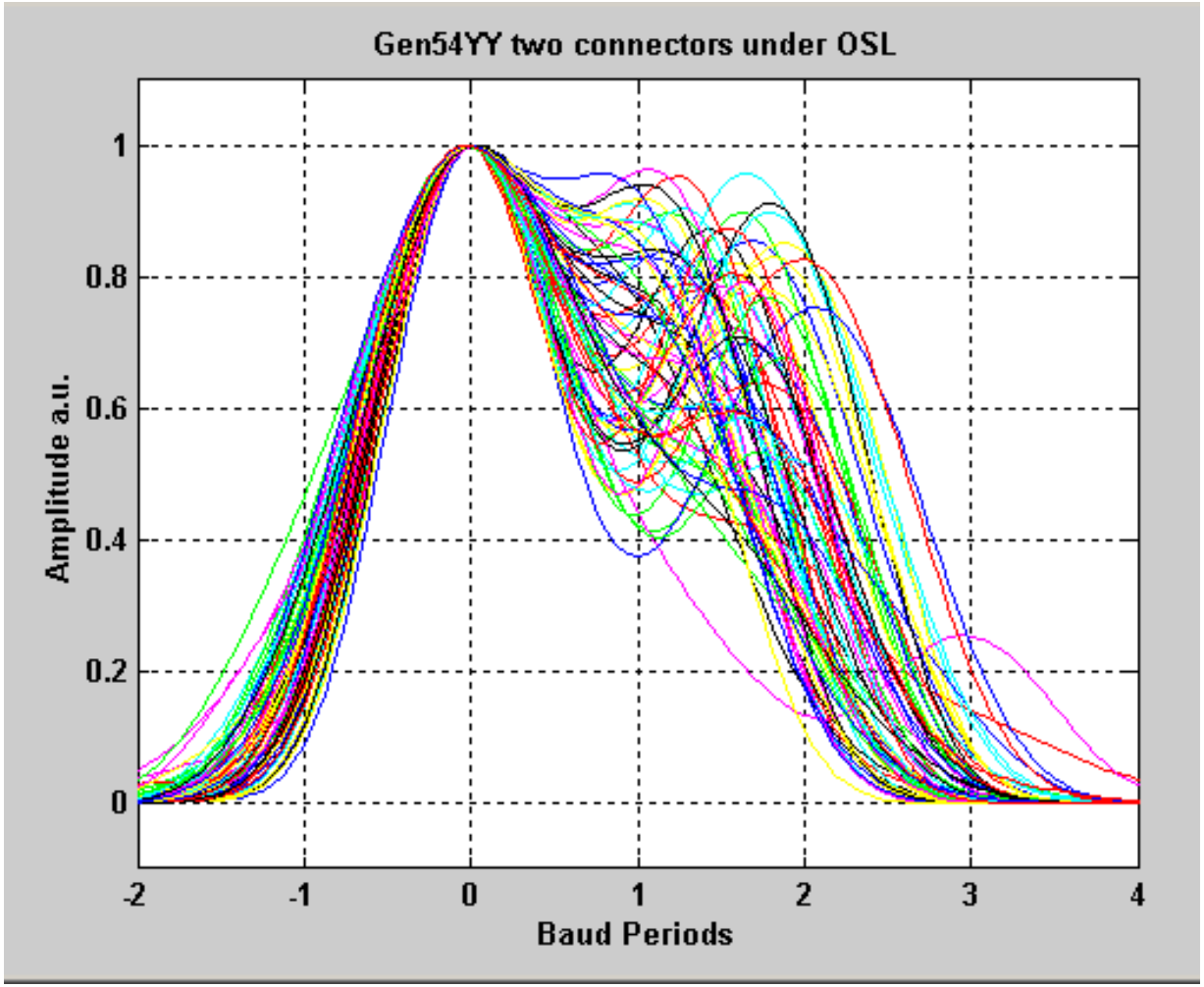
- Simulated Fiber Model details
  - 300m of Monte-Carlo fiber model (Gen54YY)
  - 2 connectors with random offsets,
    - Rayleigh distributed, mean = 3.58um, truncated at 7um
  - Standard Offset Launch 17-23um
    - 1000 trails per offset
  - Step 2: Channel Metrics
    - PIE-D range of 4.75 +/- 0.25dB
    - Passes LX4 specification
      - 3.6dB of ISI penalty (see ewen_1_1104)
    - 355 fibers passed the above criterion

Updated Sorting Algorithm

- Split pulses are captured in symmetric bin
  - Added 3% tolerance to finding location of main peak
    - In cases of multiple peaks, average location is recorded as main peak
- Sorting metric is DC group delay minus location of main peak
- CDF of sorting metric is used to bin pulses
  - ~20% are retained in each category

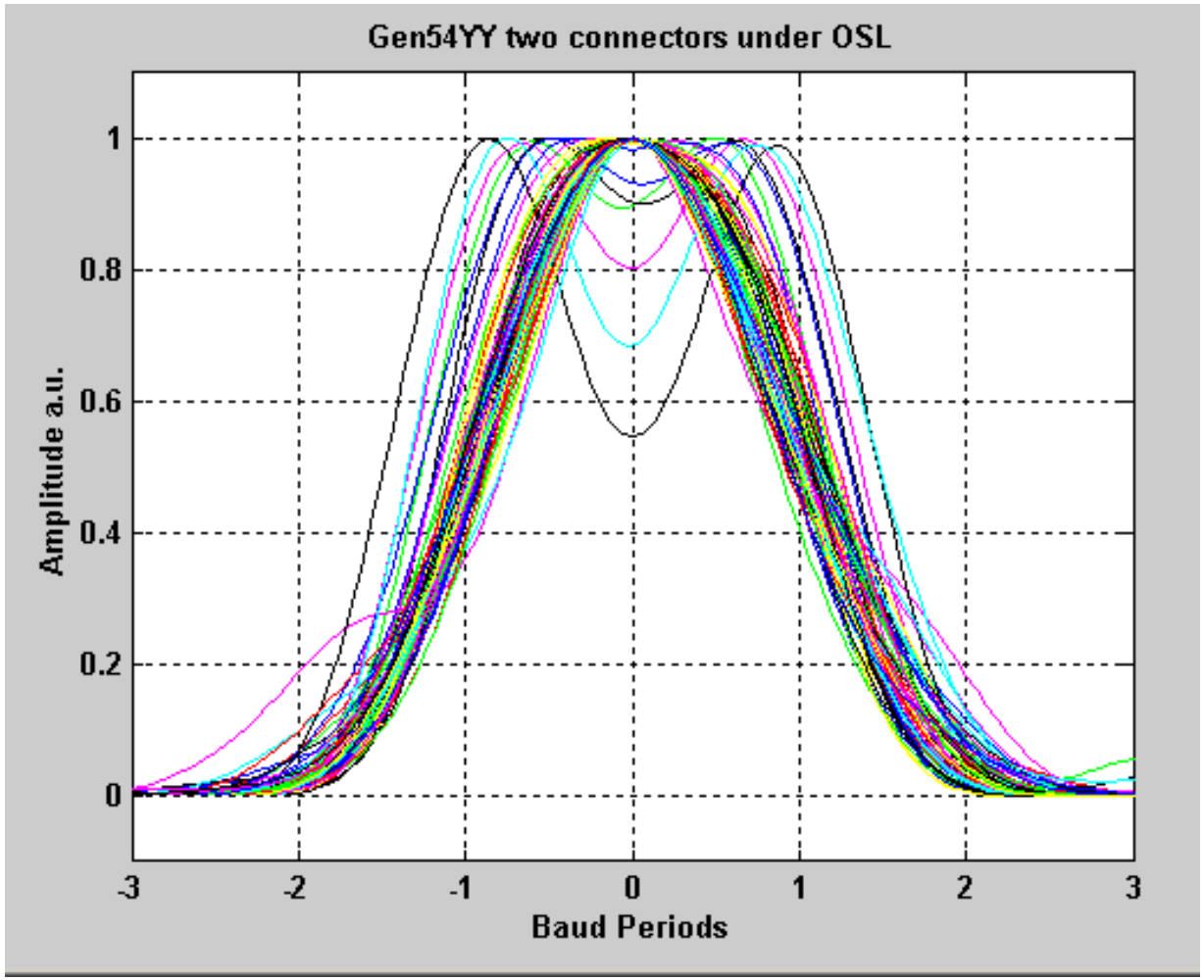


Post-Cursor



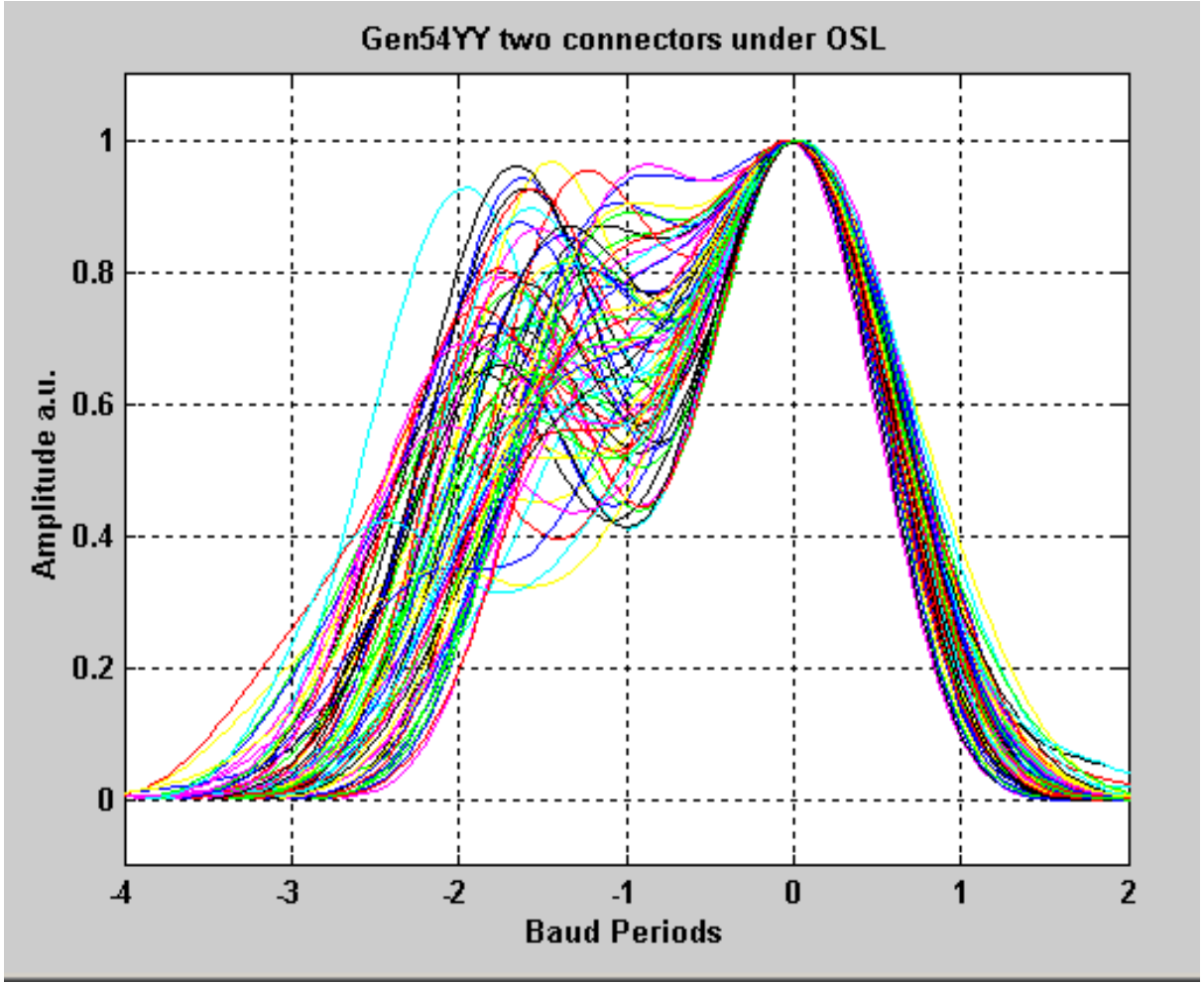
- 72/355 are classified as post-cursor

Symmetric



- 72/355 are classified as symmetric

Pre-Cursor



- 73/355 are classified as pre-cursor