

Acceleration-Duration Eyes Front

Note: comparing data against the base case

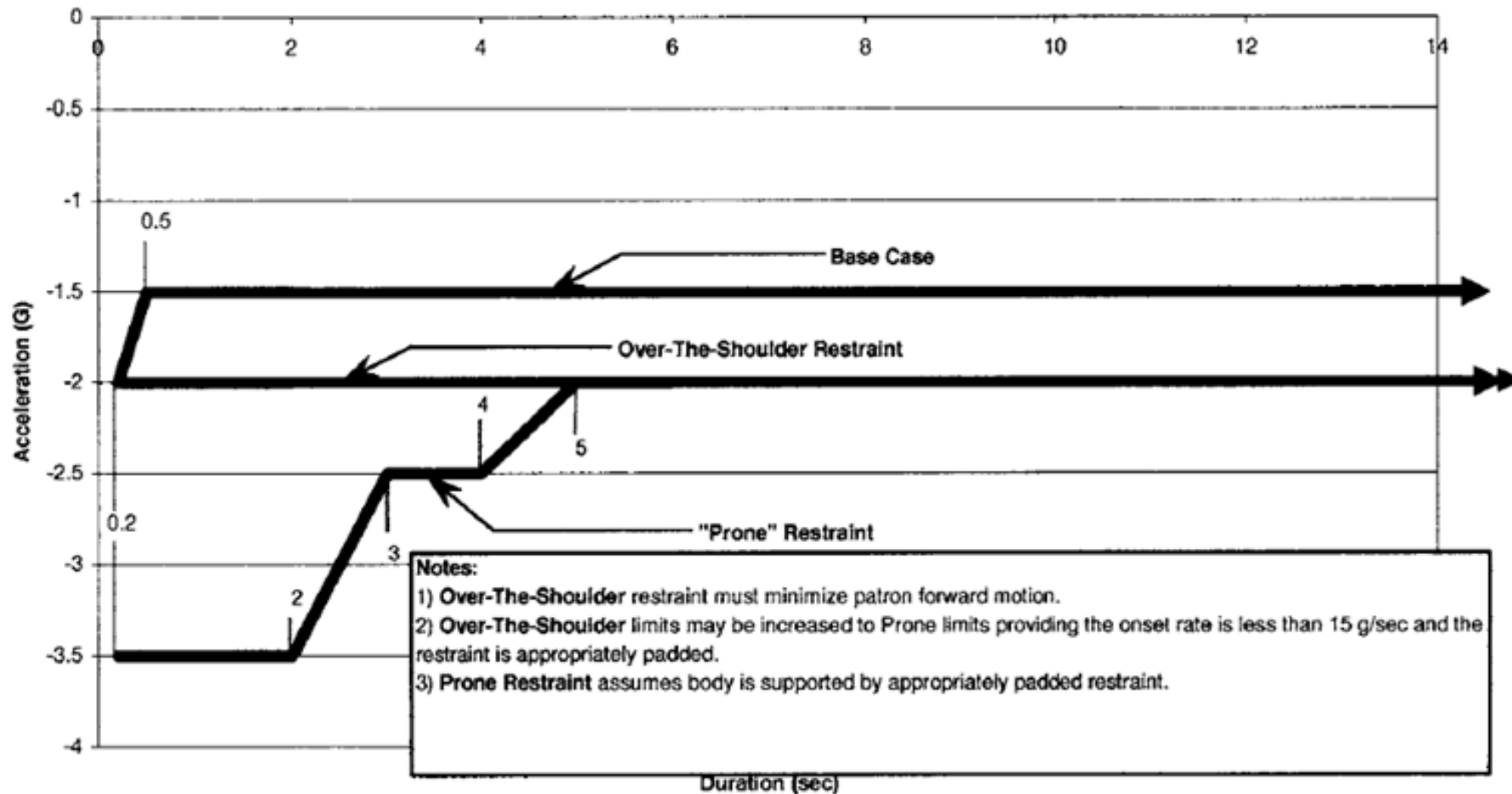
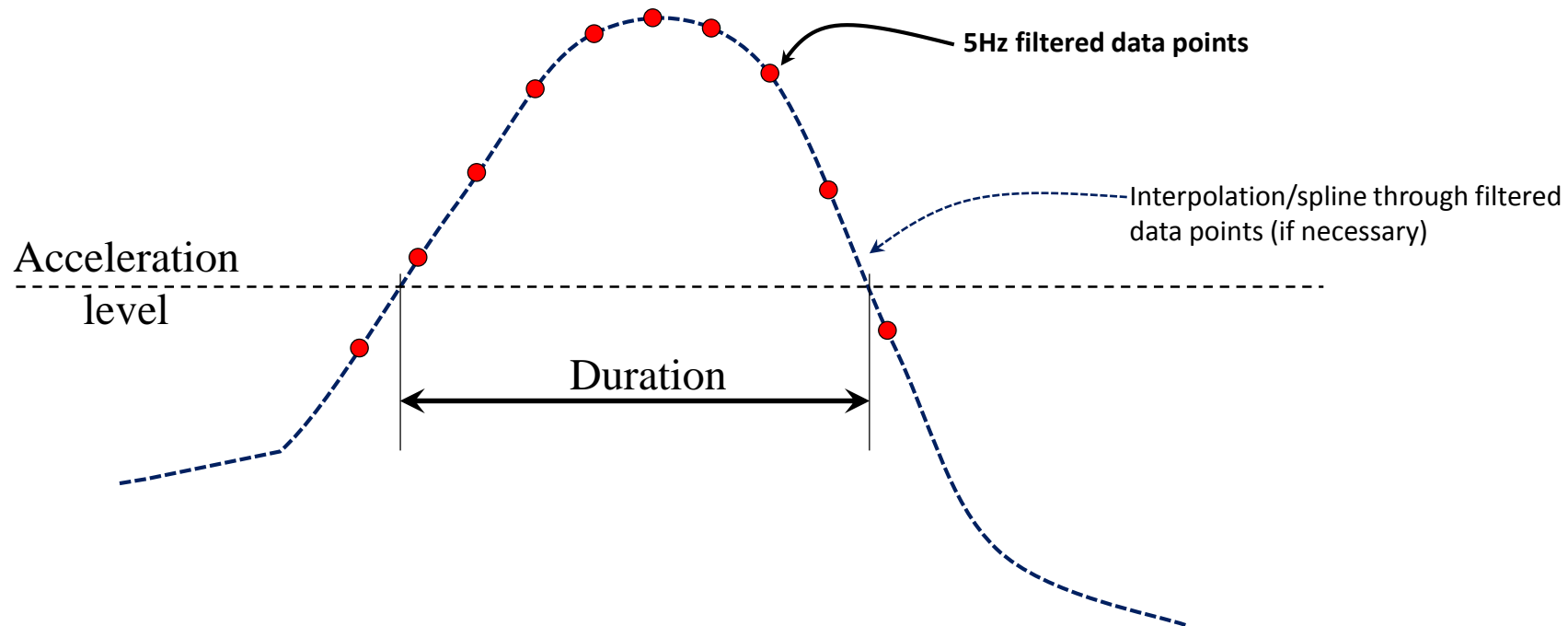


FIG. 7 Acceleration-Duration Limits for $-G_x$ (Eyes Front)

Process (suggested)

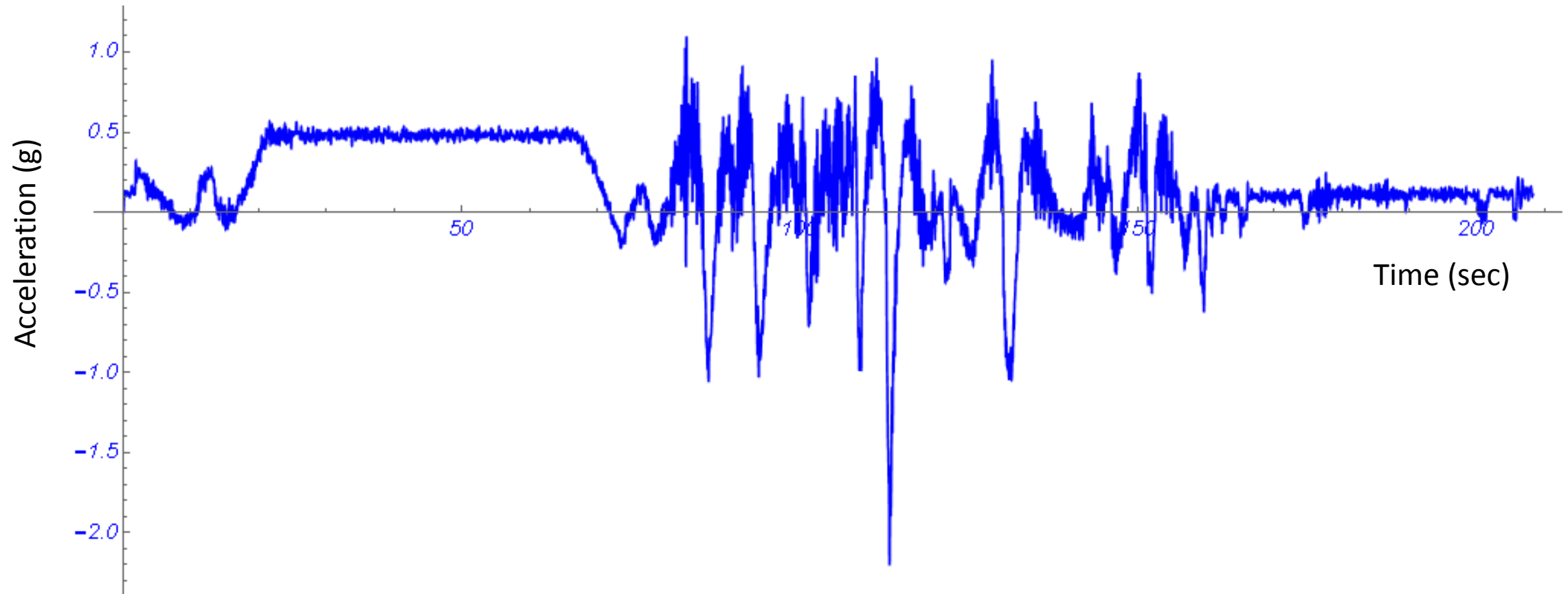
1. Filter data to 5Hz
2. If maximum acceleration is less than the 40 second exposure limit acceleration, data passes.
3. If not, select an acceleration value
4. Locate all places on the filtered acceleration time-history where this acceleration value is exceeded.
5. For each one of these events, calculate the duration at this acceleration value. Note that this may require interpolation between the sampled data points, depending upon the sample rate.
6. Compare the acceleration-duration point with the allowable limit curve



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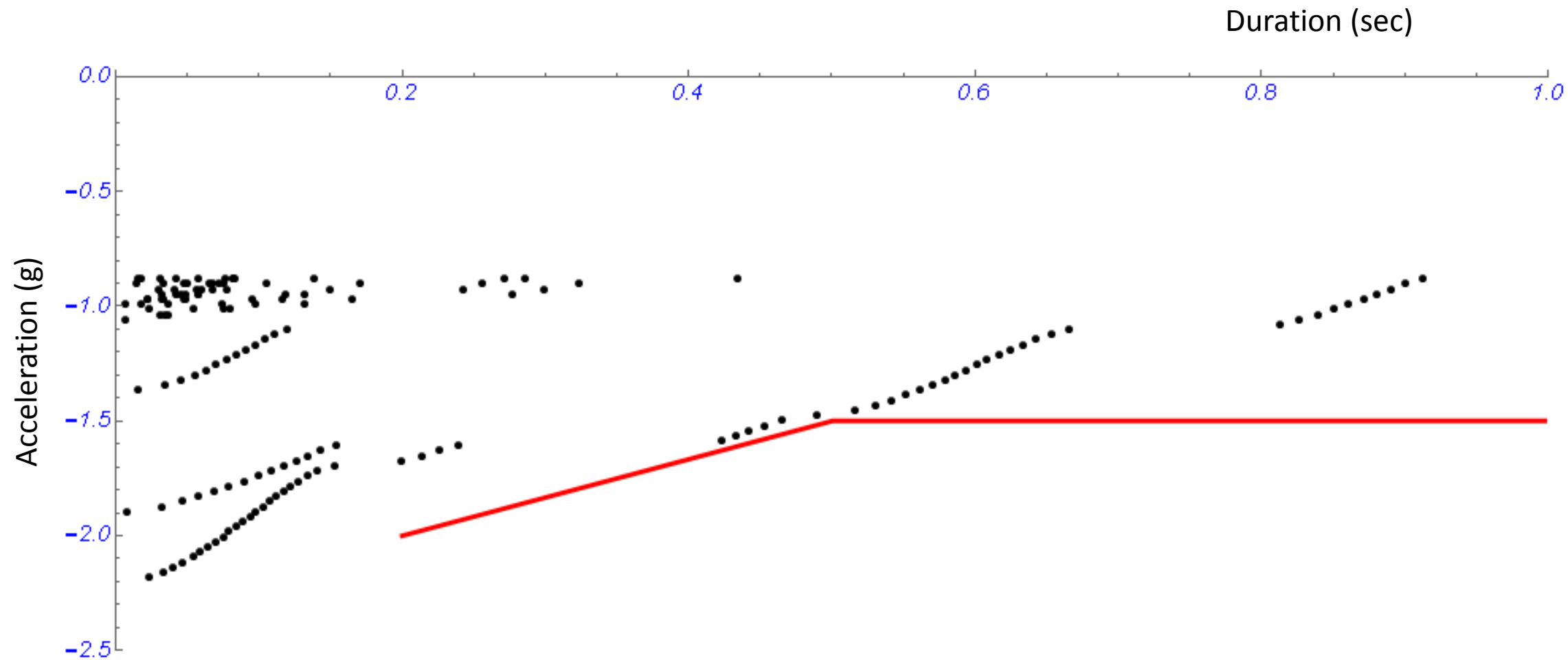
ASTM_AccelDuration_Front_justPasses

Data filtered using a 5.0Hz Butterworth Lowpass 4-pole filter, specifically the Matlab "filter" function



Acceleration-Duration Eyes Front

ASTM_AccelDuration_Front_justPasses



Acceleration-Duration Eyes Front

ASTM_AccelDuration_Front_justFails

Data filtered using a 5.0Hz Butterworth Lowpass 4-pole filter, specifically the Matlab "filter" function

