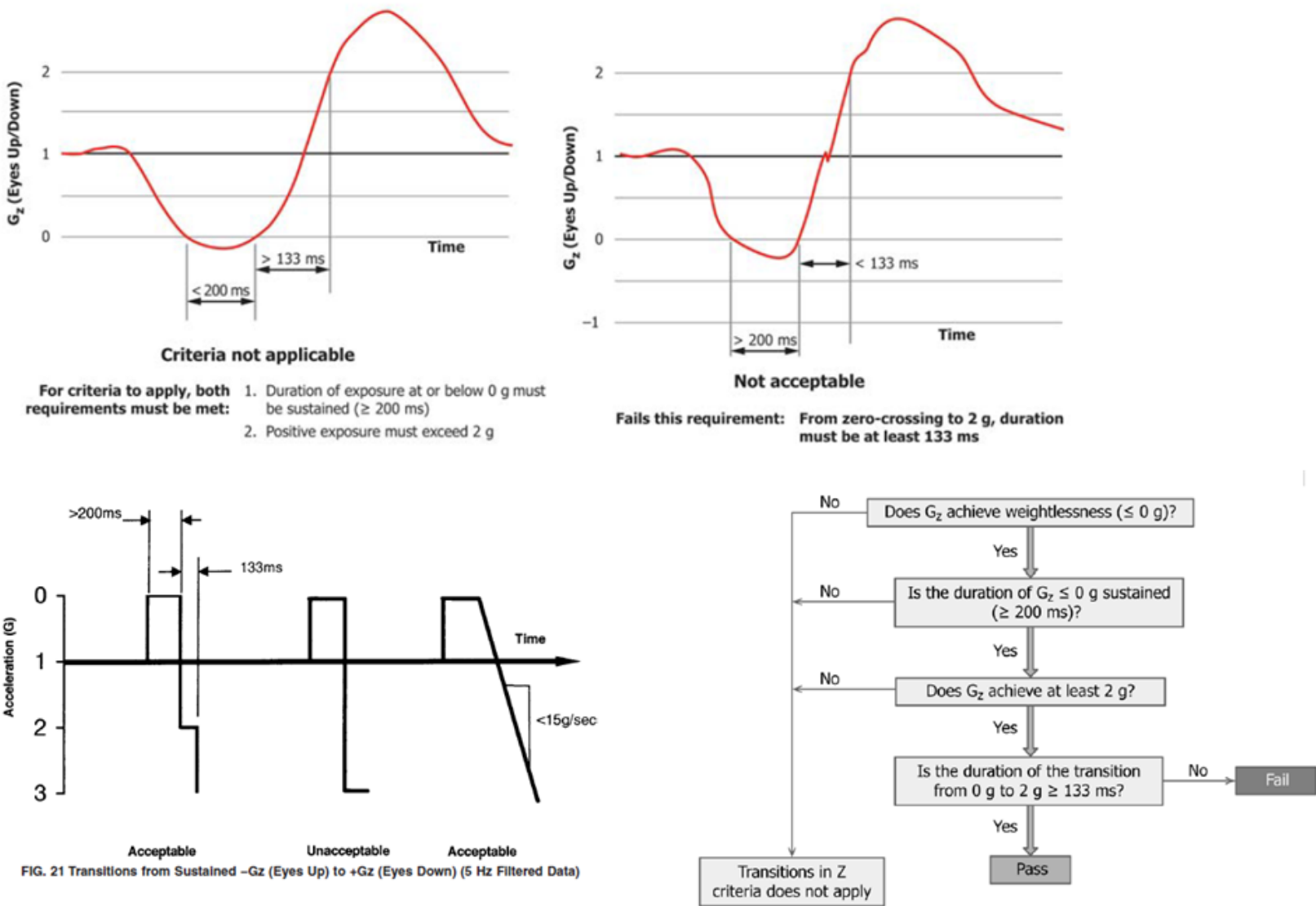
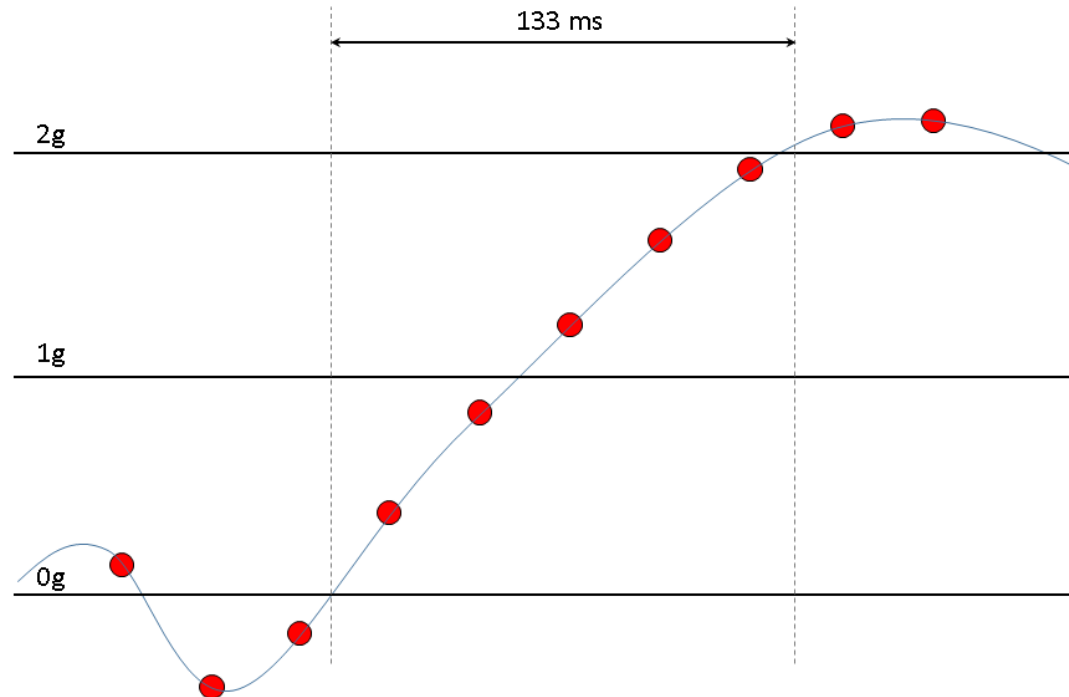


7.1.7.2 Other transitions in Z accelerations are shown in Fig. 21. The following criteria shall apply: When transitioning from sustained weightless (0 G) and more negative levels to 2 G and more positive levels, duration shall be a minimum of 133 ms. Fig. 22(a) illustrates the decision process for applying the Transitions in Z criteria, and Fig. 22(b) contains examples.



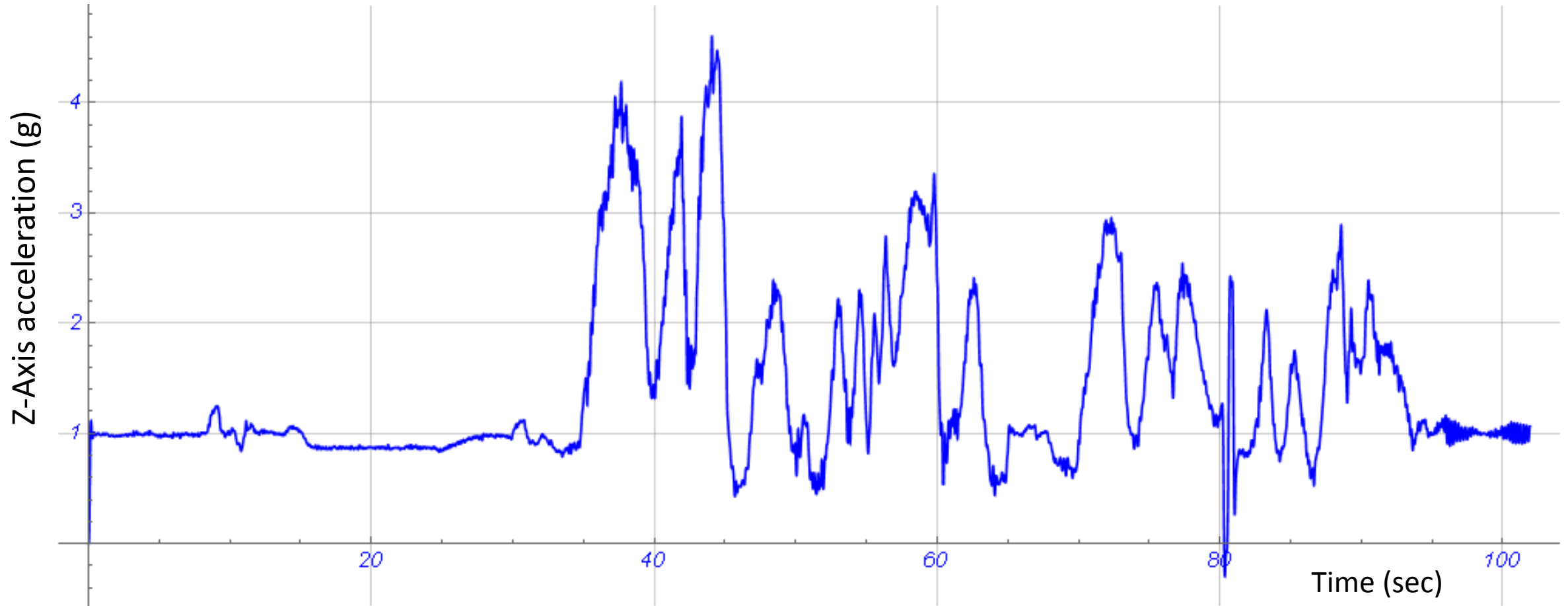
Process (suggested)

1. Filter the Z-axis data to 5Hz
2. If the minimum acceleration is greater than 0g, data passes.
3. If maximum acceleration is less than 2g, data passes.
4. If the minimum is less than 0g and the maximum is greater than 2g, take a 133ms wide window of data points at any point along the acceleration time history. If the minimum within this window of points is less than 0g and the maximum is greater than 2g, then the run has failed this check.
5. Note that depending upon the sample rate, interpolation may be required



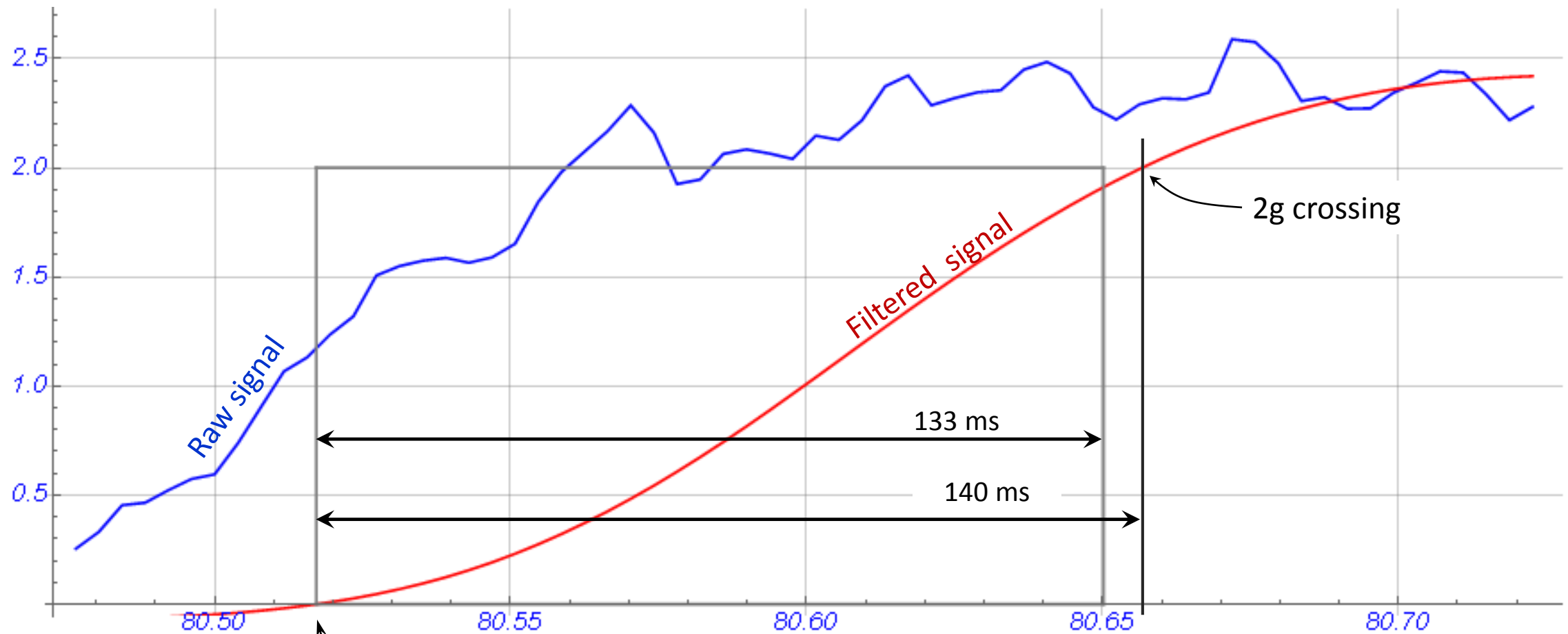
ASTM_Transitions_Z_Gloc_justPasses

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



ASTM_Transitions_Z_Gloc_justPasses

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

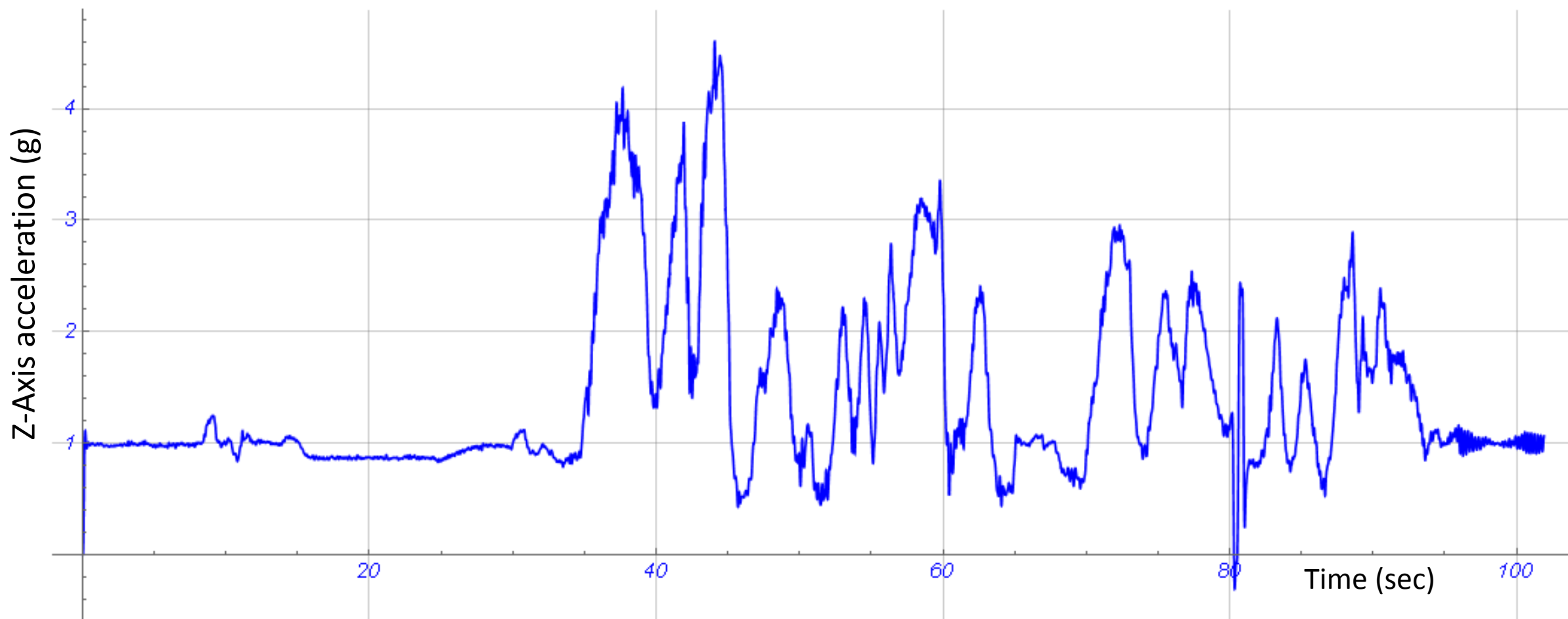


Transitions-in-Z GLOC event starts at 80.5172 seconds
and crosses through 2.0g at 80.657 seconds for a
duration of 140 milliseconds

Since this is greater than 133ms, this run passes this criteria

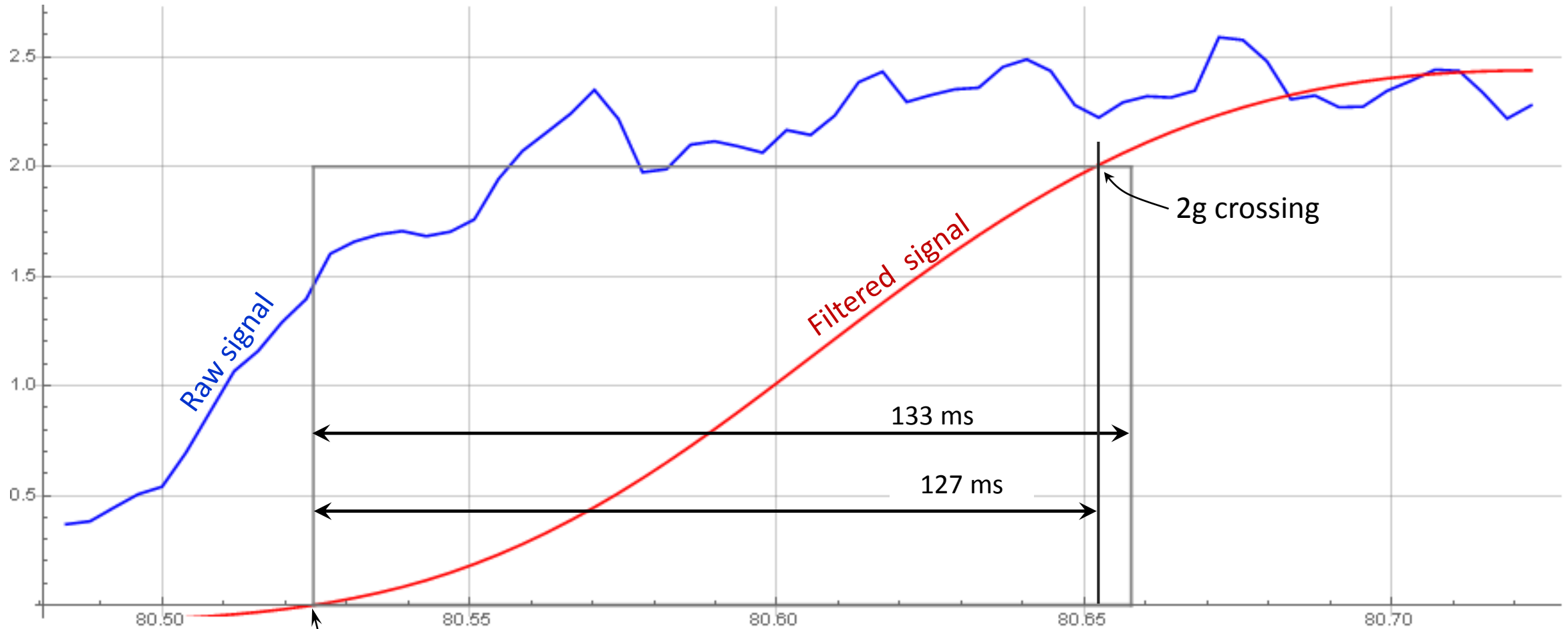
ASTM_Transitions_Z_Gloc_justFails

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



ASTM_Transitions_Z_Gloc_justFails

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



Transitions-in-Z GLOC event starts at 80.5246 seconds
and crosses through 2.0g at 80.652 seconds for a
duration of 127 milliseconds
Since this is less than 133ms, this run fails this criteria