Truncating to Digital Time:



 $[\mbox{A/D}$ events are generated at the midpoint of the rising edges. Precision is $\mbox{lnS}]$

Rounding to Digital Time:





Overlay (truncated in red, rounded in green):

Conclusion

In both cases close A/D events give either a 1-tick 0r zero delay: for truncation, events A & B give a 1-tick delay and C & D a zero delay, and vice-versa for rounding.

The digital events for truncation occur earlier than those for rounding when they differ.