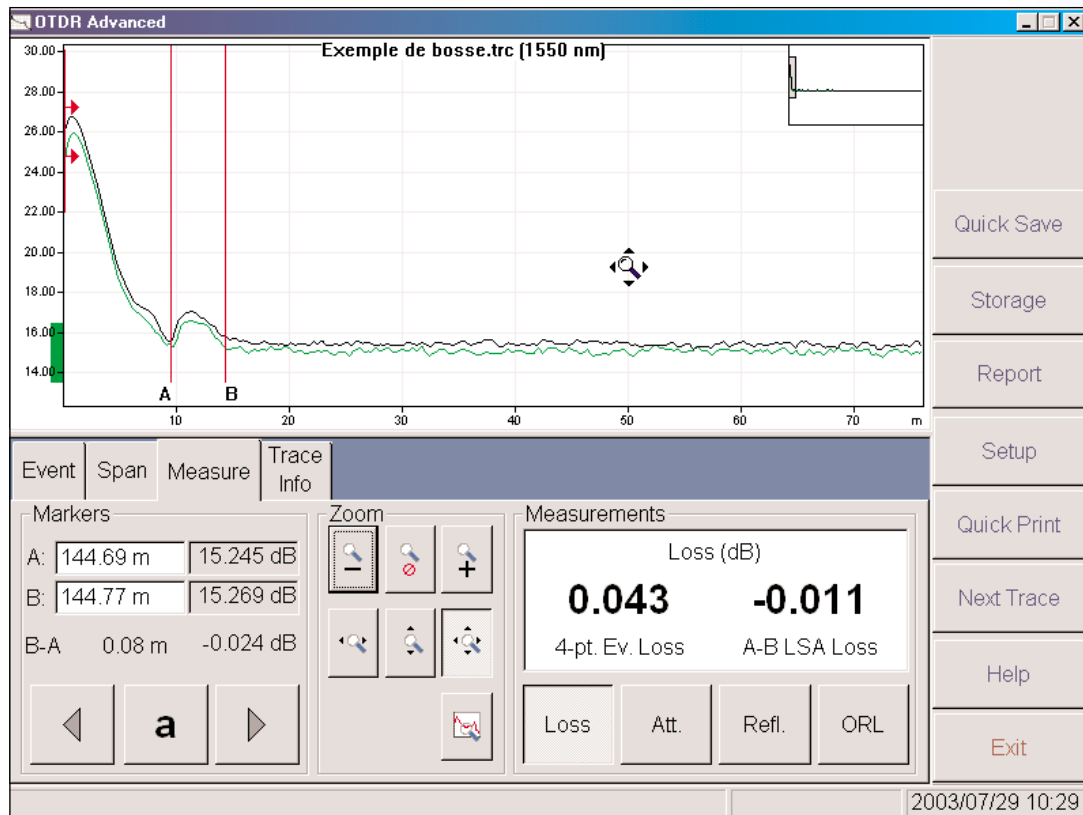


# Interpreting the Elevation Following a Reflective Event on an OTDR Measurement

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When using some OTDR modules, a small elevation sometimes appears on the graph after a strong reflective event. In certain cases, there can also be a dip before the elevation. Figure 1 illustrates an example of this phenomenon.



*Figure 1 – Example of elevation between markers A and B. This is an extreme case, located at the fiber launch.*

This behavior is due to an electronic component known as the analog-digital converter (ADC). When the return signal of the acquisition enters the ADC, the signal is processed and an energy surplus is created by the reflection. The OTDR software translates this excess energy by displaying a small elevation after such a reflection.

This elevation is actually part of the attenuation dead zone specified in the marketing specification sheet. So, if the dead zone is 15 meters for a pulse of 10 ns, and a elevation appears after the reflection, the dead zone will still be within the 15 meters.

As for the event dead zone, the presence of such a elevation does not affect it in any way; therefore, subsequent events will be detected normally. In addition, if there are any other close events (within the respective attenuation dead zone, but after the event dead zone), they will also be detected properly.

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