

Figure 1. MGS spacecraft and MOLA.

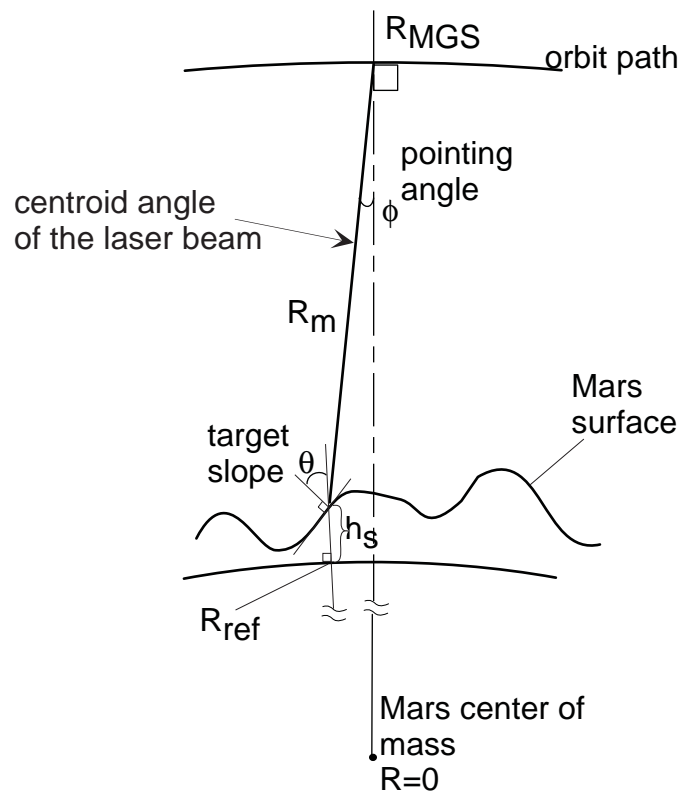


Figure 2. Illustration of the MOLA measurement geometry. The drawing assumes that the pointing angle, the pointing error and the surface normal vector are all in the same plane.

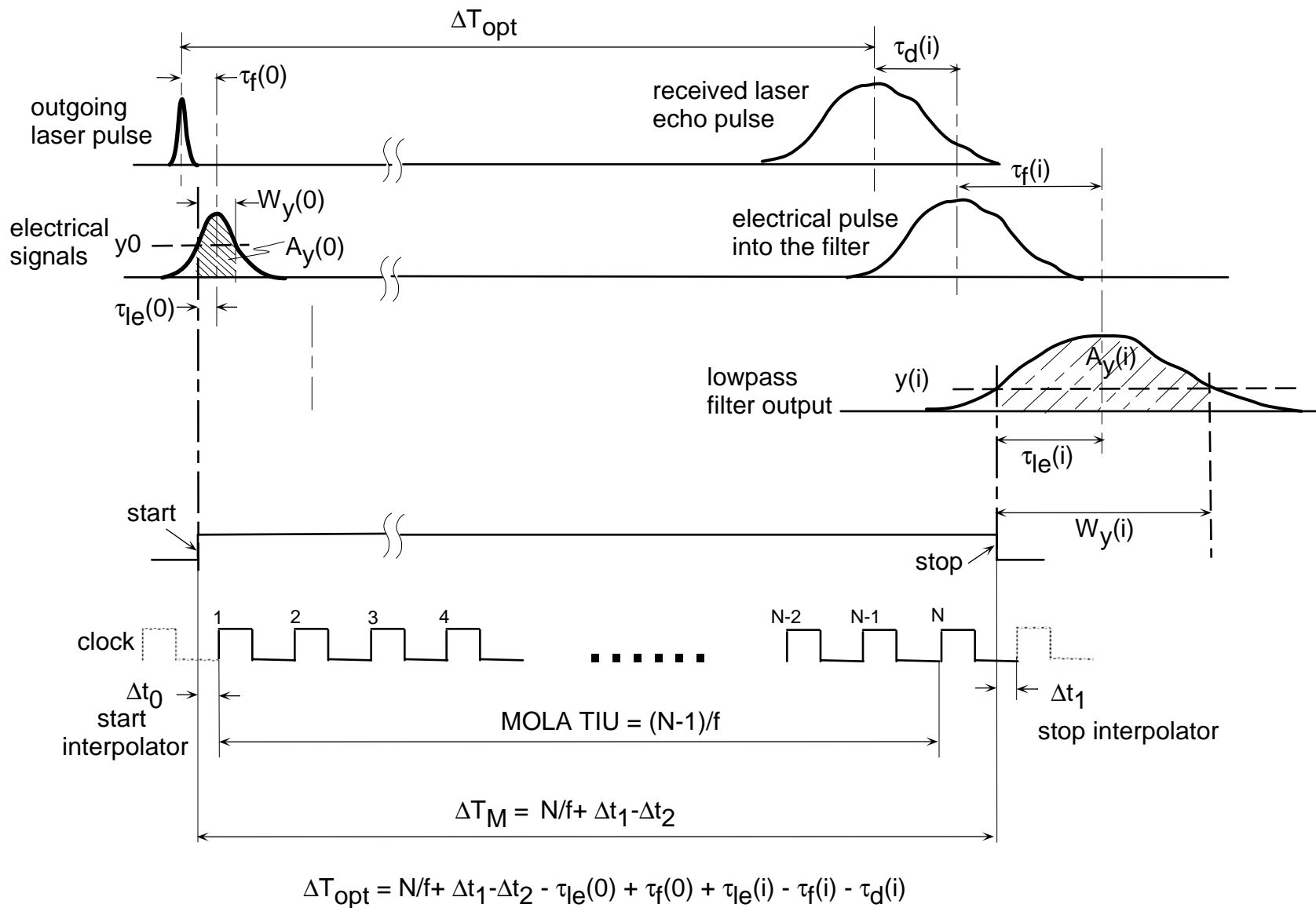


Figure 3. Timing diagram of the MOLA optical and electrical pulses.

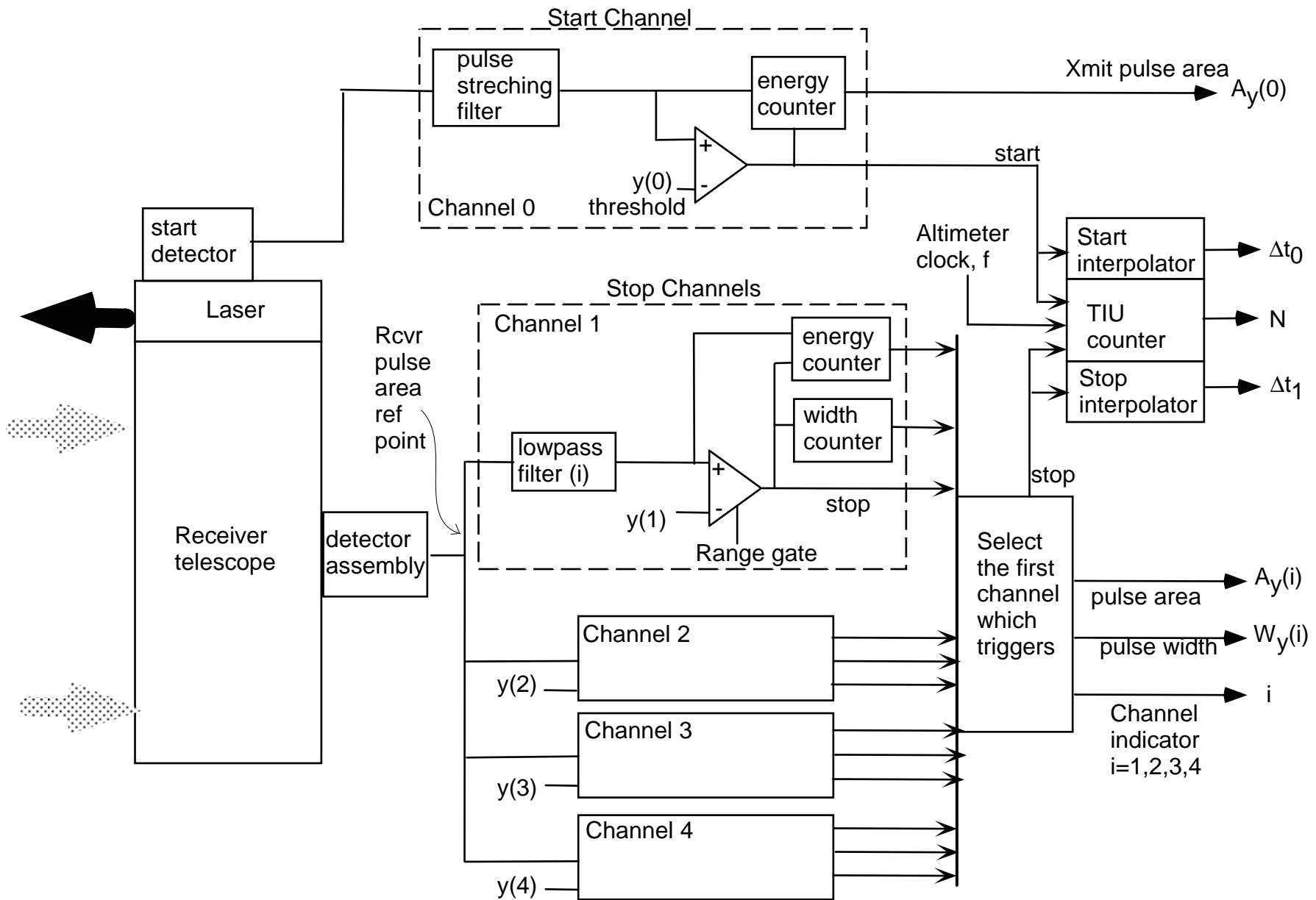


Figure 4. Simplified MOLA receiver block diagram. Assumes lossless power splitter and filters and unity scaling factor for all receiver channels. The filter characteristics are listed in Table 4.

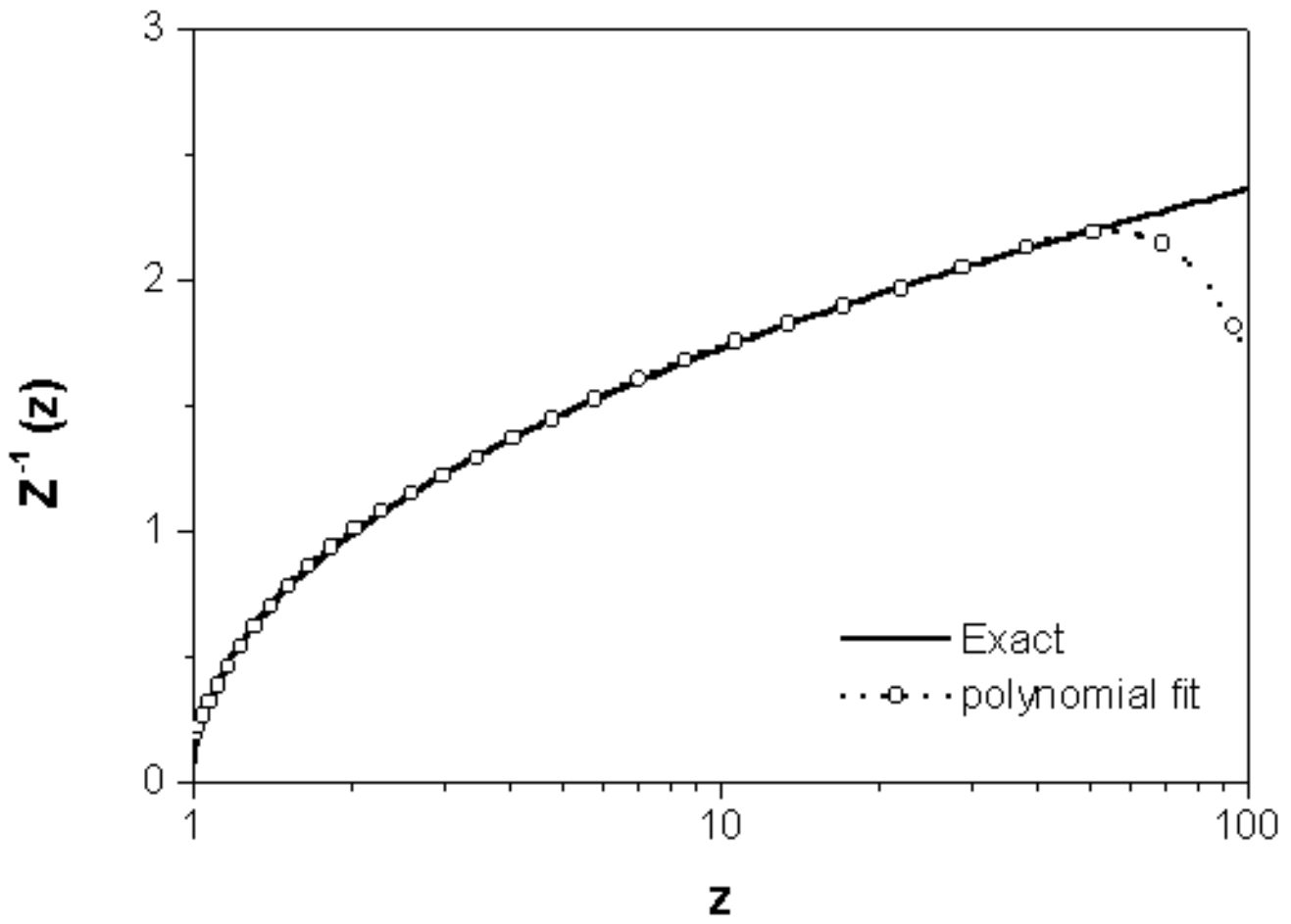


Figure 5. Z-Inverse and polynomial fit

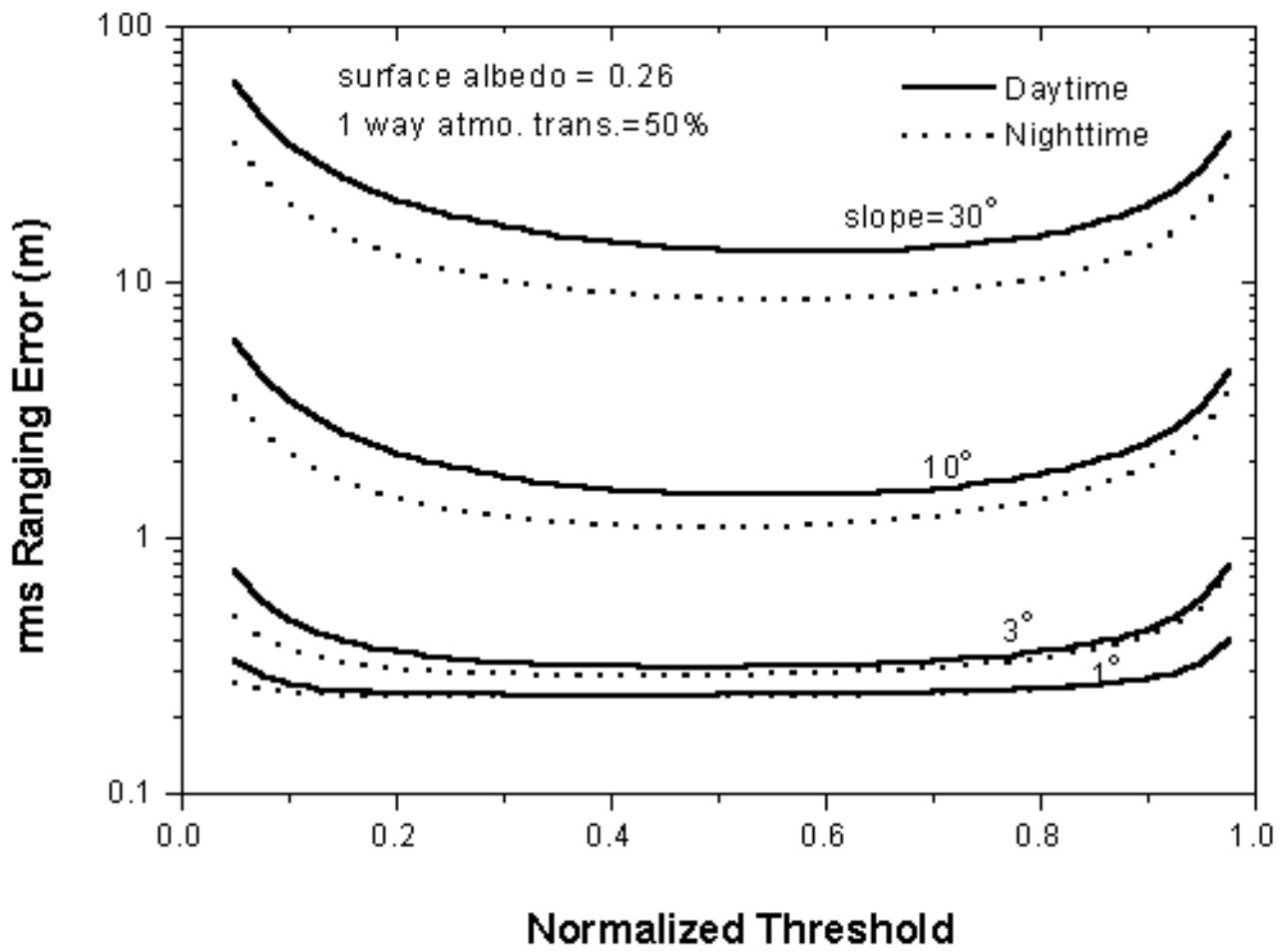


Figure 6. Channel 1 Ranging Error vs. Signal and Target Slope

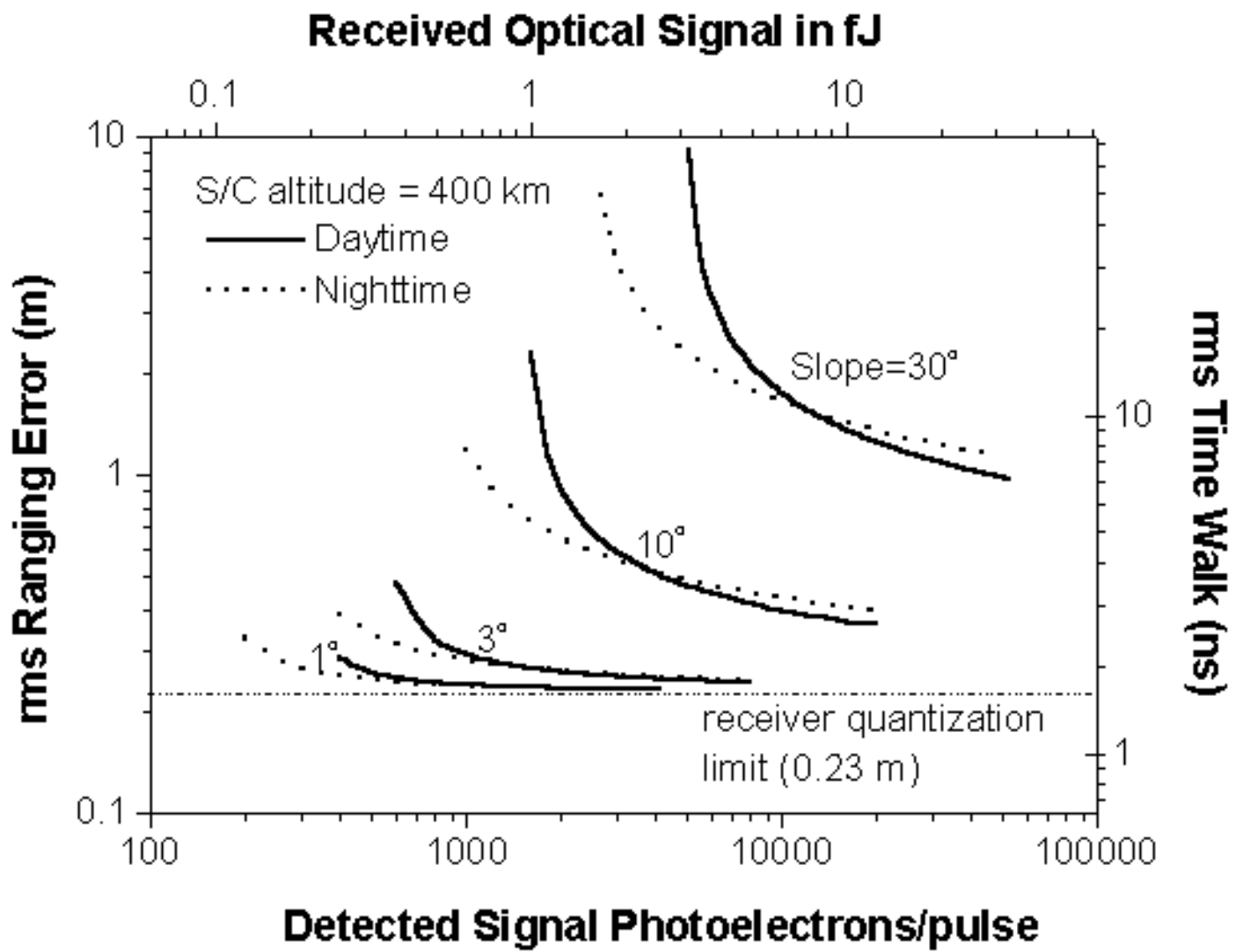


Figure 7. Channel 1 Ranging Error vs. Normalized Threshold Level

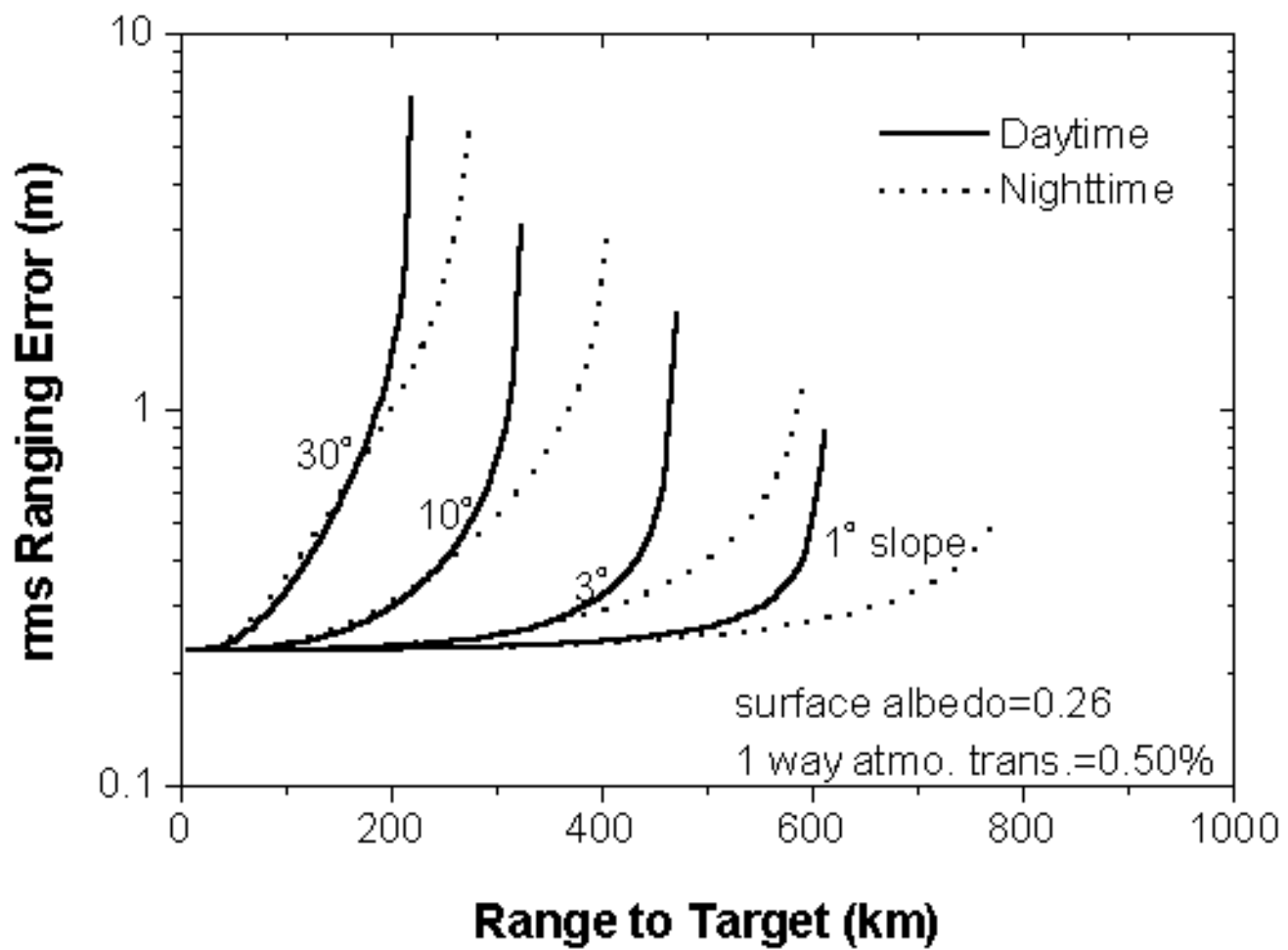


Figure 8. Ranging Error vs. Target Range and Slope