

7/22/05:

Yoyo control was implemented in the 2 scenarios in file sound\_faf05\_jul22\_04\_day.5\_1\_sec1.mat.

**Optimal: points=30, threshold=1000 for morning 7/22/05**

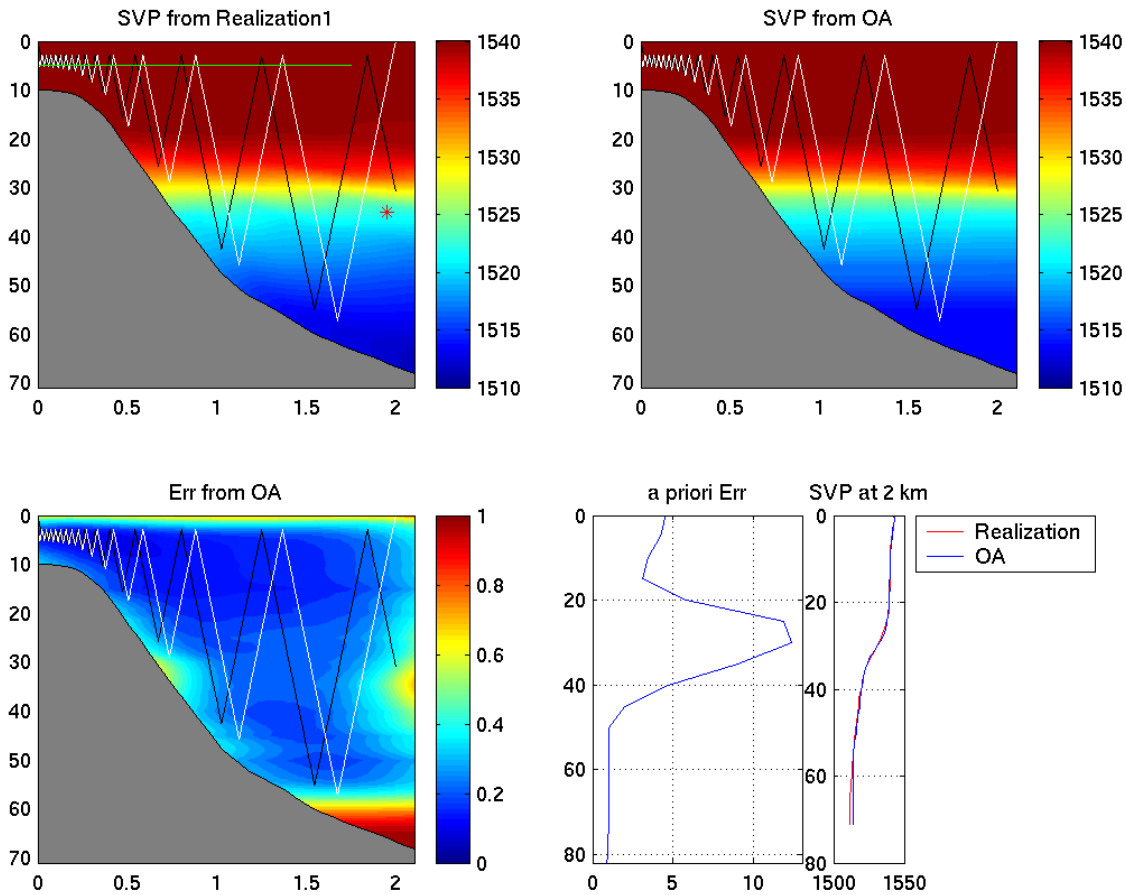


Figure 27: Yoyo control implementation. Morning 7/22/05. sound\_faf05\_jul22\_04\_day.5\_1\_sec1.mat. Black line is the forward path; White line is the backward path; Red star is the sound source location; Green line is receivers' location. Note that to avoid bottom AUV turns around at 5 m above bottom.

**Optimal: points=30, threshold=1000 for afternoon 7/22/05**

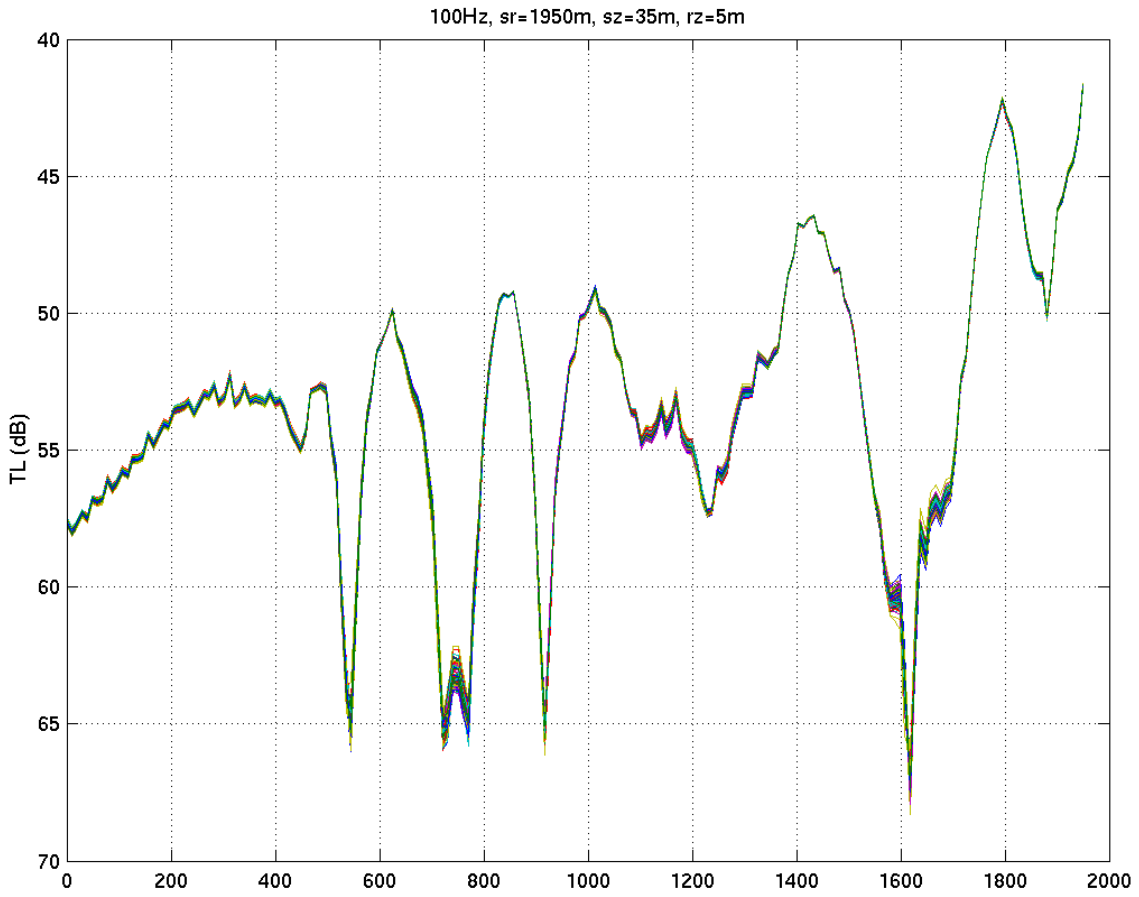


Figure 28: Morning 7/22/05. sound\_faf05\_jul22\_04\_day.5\_1\_sec1.mat.

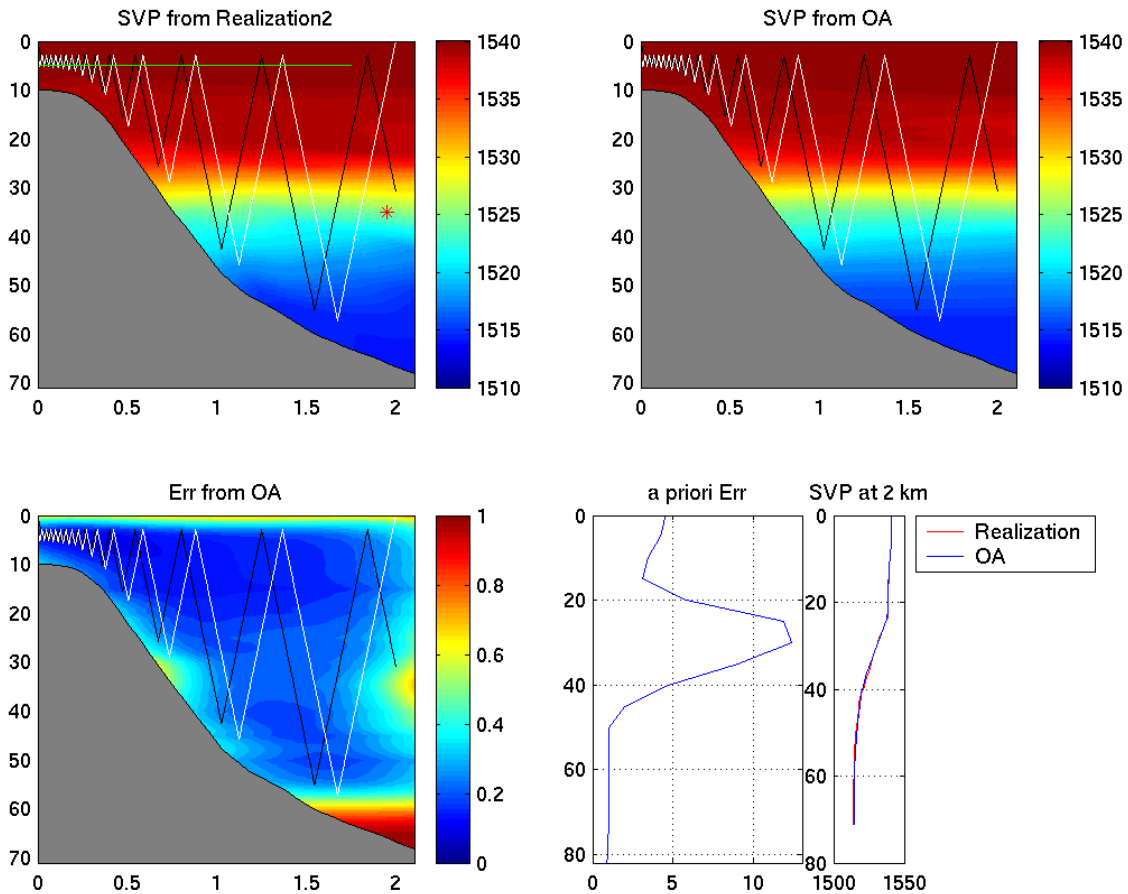


Figure 29: Yoyo control implementation. Afternoon 7/22/05. sound\_faf05\_jul22\_04\_day.5\_1\_sec1.mat. Black line is the forward path; White line is the backward path; Red star is the sound source location; Green line is receivers' location. Note that to avoid bottom AUV turns around at 5 m above bottom.

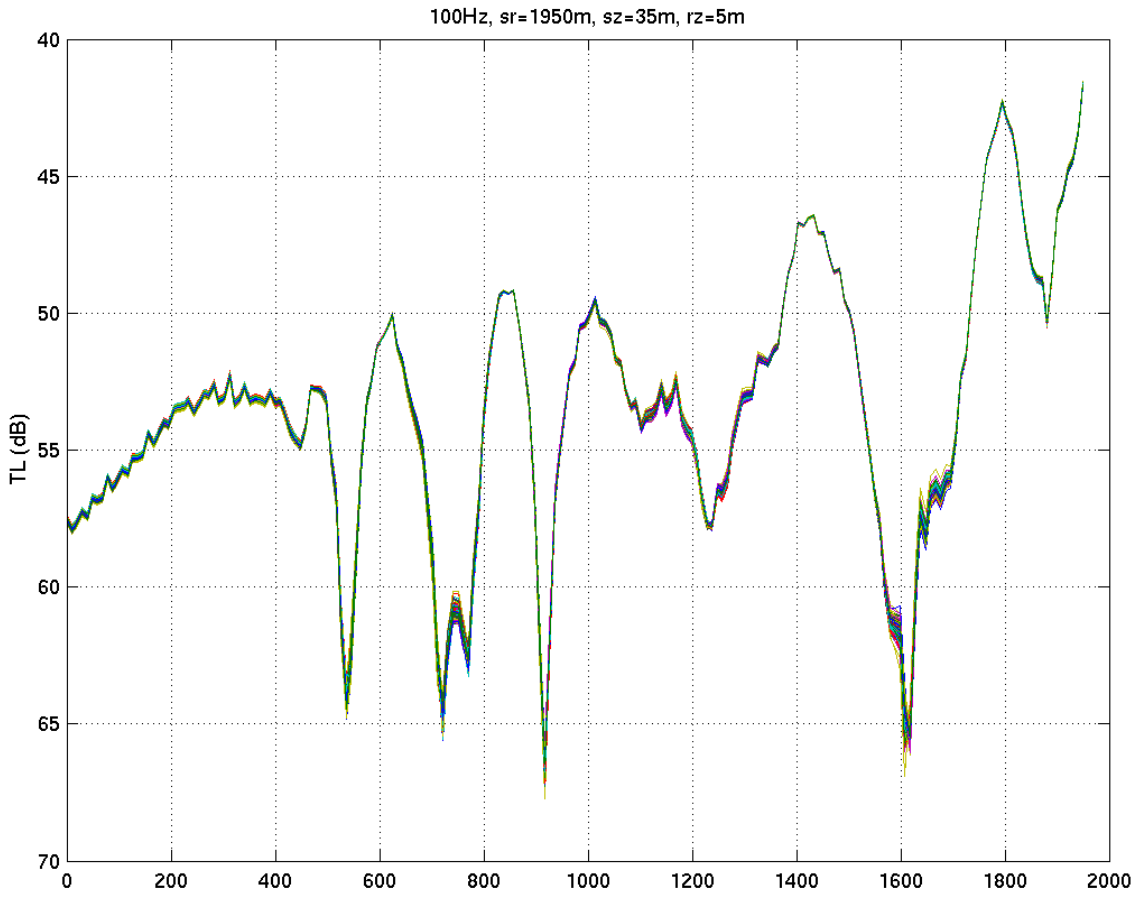


Figure 30: Afternoon 7/22/05. sound\_faf05\_jul22\_04\_day.5\_1\_sec1.mat.