

Long Baseline Navigation Activity

An AUV is navigating with LBL. The transponders A and B are 0.81 km apart. The speed of sound in water is 1500 m/s. Use the data provided to map the path of the AUV using the scale legend below.

Ping #	Ping round trip time in seconds		One way time to AUV		Distance to AUV in meters	
	Transponder A	Transponder B	Transponder A	Transponder B	Transponder A	Transponder B
1	0.231	0.973				
2	0.391	0.891				
3	0.485	0.751				
4	0.507	0.633				
5	0.559	0.532				
6	0.675	0.420				
7	0.825	0.280				
8	0.924	0.157				
9	0.987	0.153				

