

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	0.400	0.689				
2	0.293	0.817				
3	0.211	0.951				
4	0.337	0.940				
5	0.467	0.951				
6	0.524	0.800				
7	0.604	0.656				
8	0.700	0.525				
9	0.800	0.563				

