

### 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	0.116	0.487	173	730
2	0.391	0.891	0.196	0.446	293	668
3	0.485	0.751	0.243	0.376	364	563
4	0.507	0.633	0.254	0.317	380	475
5	0.559	0.532	0.280	0.266	419	399
6	0.675	0.420	0.338	0.210	506	315
7	0.825	0.280	0.413	0.140	619	210
8	0.924	0.157	0.462	0.079	693	118
9	0.987	0.153	0.494	0.077	740	115

