

Project 3 Final Report

Characteristic Path Length Averages:

Sea Ice Threshold	Data	Random Threshold	Data
0.95	19.4476	0.95	3.38749
0.925	15.8906	0.925	2.73872
0.9	12.6373	0.9	2.40408

Mean Clustering Coefficient

Sea Ice Threshold	Data	Random Threshold	Data
0.95	0.429812	0.95	0.00339566
0.925	0.518585	0.925	0.00596911
0.9	0.562443	0.9	0.00899415

For a small-world graph. The shortest path averages and characteristic path length should be larger than that of a random graph with the same edge probability. Both of these hold true in this case, giving strong evidence to draw the conclusion that the sea ice graph is indeed a small-world graph, answering the question we set out to answer at the beginning of the project.