Results so far (LTER datasets) AFTER BORING CLAM:

Simple linear regression on raw data:

Functional group	Max winter wave height Pr(> t)	Mean winter wave height Pr(> t)
Mobile inverts	0.26065	0.01794
Epilithic sessile inverts	0.11378	0.04082
Endolithic sessile inverts	0.513845	0.005317
Understory algae	0.03779	0.02927
Giant kelp	0.662	0.8658
Fish	0.74626	0.6152

Log transformed data vs waves linear regression:

Functional group	Max winter wave height Pr(> t)	Mean winter wave height Pr(> t)
Mobile inverts	0.1401	0.002011
Epilithic sessile inverts	0.03882	0.0003481
Endolithic sessile inverts	0.9871	0.1089
Understory algae	0.1075	0.04847
Giant kelp	0.376	0.6649
Fish	0.08532	0.021934

Correlation (spearman) results:

Data	S	P-value	Rho value	Meaning
Mobile invert	1426807	0.2756	0.07558208	
max wave				
height				

Mobile invert mean wave height	1182430	0.0006331	0.2339122	Significant slight positive correlation between yearly average winter wave heights and mobile invert biomass
Epilithic sessile invert max wave height	1319960	0.03599	0.1448074	Significant slight positive correlation between max winter wave heights and epilithic sessile invert biomass, may be due to type one error
Epilithic sessile invert mean wave height	1123750	6.535e-05	0.2719306	Significant slight positive correlation between average winter wave heights and epilithic sessile invert biomass
Endolithic sessile invert max wave height	1663377	0.2624	-0.07769019	

Endolithic sessile invert mean wave height	1704635	0.1315	-0.104421	
Understory algae max wave height	1300077	0.02226	0.1576894	Significant slight positive correlation between understory algae biomass and max winter storms wave height, may be due to type one error
Understory algae mean wave height	1302116	0.02343	0.1563685	Significant slight positive correlation between understory algae biomass and mean winter storms wave height
Giant kelp max wave height	1731913	0.0775	-0.122094	
Giant kelp mean wave height	1542683	0.9942	0.00050667 24	

Fish max wave height	1293849	0.01902	0.1617246	Significant slight positive correlation between fish biomass and max winter storms wave height, may be due to type one error
Fish mean wave height	1236092	0.003759	0.199145	Significant slight positive correlation between fish biomass and mean winter storms wave height