Possible figures for first chapter



Figure 1: Simulated asymmetric Laplace salinity (red line) fitted to Bay D’Espoir empirical salinity data (Histogram). Asymmetric Laplace distribution parameters are (location m = 32.25, scale =1.913, asymmetry k = 1.22). The histogram was binned in 0.5 increments.



Figure 2: Comparison in the salinity probabilities produced by the asymmetric Laplace distribution using different scale parameters (0.29, 0.67, 1.1, 1.4, 1.9, 2, 3, 3.5, 4). A higher pho values produces a narrower salinity distribution relative to lower values.



Figure 3: Comparisons in the salinity values and the corresponding log abundance for adult female sea lice overtime between scale parameter values of 0.67 and 1.82. Y-axis differ between plots.



Figure 4: Floquet exponents for 100 simulations of adult female sea lice with different scale parameter values (0.48, 0.67, 0.87, 1.06, 1.25, 1.44, 1.63, 1.82).



Figure 5: Floquet exponents for 100 simulations of adult female sea lice with different scale parameter values (0.10, 0.29, 0.48, 0.67, 0.87, 1.06, 1.25, 1.44, 1.63, 1.82). The regression line is fitted excluding pho values scale values 0.1 and 0.29.