Step-by-step for geospatial analyses

1. Plot your locations
   1. Identify x and y
   2. Put it in geographic context
2. Plot the measurements at locations
3. Calculate the variance (matrix of variance)
4. Calculate the co-variance (variance-covariance matrix)
5. Decompose into upper-triangular matrix
6. Find the spatially autocorrelated process
7. Graph the empirical variogram
8. Find the actual variogram
   1. Sill, range, nugget
   2. Model of curvature
9. Make predictions

For simulations

1. Plot your locations
   1. Identify x and y
   2. Put it in geographic context
2. Simulate data by selecting your model (sill, nugget, range and model type) and generating data in a matrix of the variance that follows this model.
   1. Calculate the variance (matrix of variance)
   2. Calculate the co-variance (variance-covariance matrix)
   3. Decompose into upper-triangular matrix
3. Graph the empirical variogram
4. Find the actual variogram
   1. Sill, range, nugget
   2. Model of curvature