

# Gear Intercalibration à la GeoPOP

1. Two hauls per “station”
2. Input: Catches per size group for each haul
3. Output: Selectivity of Africana New, Africana Old, relative to Gisund, for each size class.

## Model assumptions:

1. A size spectrum at each station - random walk in log-domain
2. Nugget effect: Correlations between size groups within single haul
3. Catches are Poisson distributed with  
mean =  $\exp(\text{size spectrum} + \text{nugget})$
4. Prior model for intercalibration curves:
  - 4.1 As of now: Completely flat
  - 4.2 Smoothness assumption (e.g. random walk)
  - 4.3 Parametric form (e.g. Cotter)