

Chi-Squared Tests

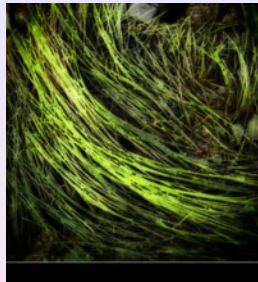
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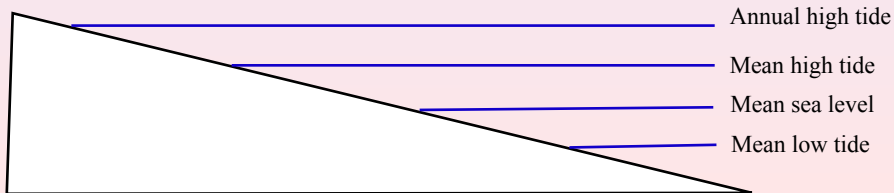
Comparing what's expected to what's observed

Example: Comparing to a distribution

- Null hypothesis: uniform distribution
- Must account for area/length of transect



Is the sea grass equally likely to be found in each tidal zone?



The Chi-squared calculations

$$\chi^2 = \sum \frac{(O_i - E_i)^2}{E_i}$$

O= the frequencies observed

E= the frequencies expected

Σ = the sum of

Let's try it

Zone	Observed	Expected	$(O-E)^2/E$
upper	40		
middle	75		
lower	125		
Total			

Needed Excel Function: CHISQ.DIST.RT(ChiSq,dof)