## 1. Systematic difference "delta"

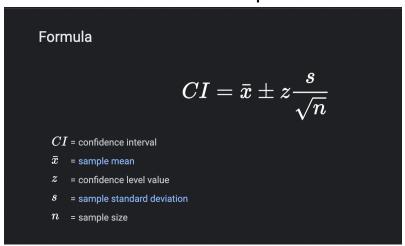
Modis = a\* NEX + b

Use Intercept b to estimate systematic difference

Seasonal (DecJanFeb, MarAprMay. JuneJulyAug, SepOctNov)

Modis \_CA\_DecJanFeb = a\* CMCC-ESM2 SSP126 DecJanFeb 2015 - 2020 CA + b 33 = a (coefficient) \* 25 + b (intercept )

## 2. Confidence interval of intercept



Sample mean = Average intercept across 32 models for SSP 126 at CA

Sample standard deviation =

Sample size =

Confidence level = 95% or 99%

## **Procedures**

- 1. Monthly Dataset to seasonal dataset for both MODIS and NEX (eg: 6年的Dec Jan Feb 放一个dataset )
- 2. 用三个月的数据fit model 算intercept
- 3. 95% CI for intercept
- 4. Repeat for 32 models \* 2 scenarios \* 4 regions = 256 个intercept
- 5. Excel table