**1:3 -> 101, 105, 150, range: 49**

**4:6 -> 155, 170, 175, range:20**

**…**

**…( x4 values total)**

**123, 234, 345, 4:6,……**

**1:3 -> 101, 105, 150, range: 49**

**2:4 -> 105, 150, 155, range: 50**

**…**

**…**

**… (x12 values total)**

**SHELDON et al., 2018**

Assumption 1: ecosystems vary in mean temperature and in variation around the mean. Variation around the mean temperature is relatively less in the tropics.

* Given that mean temperature decreases with elevation at all altitudes 🡪 the climates at any two given points along a tropical elevational gradient will overlap less in their range of temperatures than will two equivalently separated temperate points.

Assumption 2: populations (especially ectotherms) are adapted to climates they experience.

* Thermal specialists characterize less variable (i.e., tropical climates), whereas thermal generalists are more prominent in variable (i.e., temperate) climates.

Prediction 1: Tropical mountain ranges are more likely to act as physiological barriers to movement because thermal specialists are less able to acclimate to and survive the range of temperatures encountered on the journey.

Prediction 2: thermal specialists in the tropics will have reduced dispersal along climatic gradients and thus smaller elevational ranges than thermal generalists

**Ghalambor et al., 2006**

A different view:

A screenshot of a cell phone

Description automatically generated