Mt. Everest Adiabatic Lapse Rate

Directions: Use the data you recorded in the *Perpetual Planet Data Table* and follow the steps below to see how the data calculates compared to average outlined by the adiabatic lapse rate.

Step 1: Calculate the difference between the stations elevations.

_____ - _____ = _____

Base Camp   Phortse

_____ - _____ = _____

Camp II   Base Camp

_____ - _____ = _____

South Col   Camp II

_____ - _____ = _____

Balcony   South Col

Step 2: Calculate the difference between average temperatures at each station elevations.

_____ - _____ = _____

Base Camp   Phortse

_____ - _____ = _____

Camp II   Base Camp

_____ - _____ = _____

South Col   Camp II

_____ - _____ = _____

Balcony   South Col

Step 3: Average the differences between average temperatures at each station elevations.

_____ + _____ + _____ + _____ = _____

_____ /   4   = _____

Step 4: Does this value approximate the adiabatic lapse rate which states that the temperature decrease by approximately one degree Celsius for every 100 meters (or approximately one degree Fahrenheit for every 150 feet) gained in elevation?

_____

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