Calculating Residual Pool Area

These calculations refer to each of 3 field methods:

1) **DataCollectionEvent** (SiteLayout) – obtain DCE and Length (whole meters).
2) **Slope & Bearing** – from data, calculate AverageSiteSlope (%) – this calculation is discussed separately.
3) **Thalweg** - Thalweg Depth (cm) for each ThalwegStation

Use the AREASUM spreadsheet (attached) for calculations.

RAW INPUT

DCE – Data collection event (siteID+time)
Length – this is the total site length (whole meters), from site layout.
ThalwegStation – e.g. A00, A01, A02,…
ThalwegDepth – wetted depth (cm) at each ThalwegStation
AverageSiteSlope – obtained from the "Slope" derived data calculation

CALCULATED INPUT

ThalwegIncrement – This is calculated as Length divided by 100.
It is the longtitudinal distance between ThalwegStations
AverageThalwegDepth – Within-site average Thalweg Depth(cm)
StdDevThalwegDepth – Site standard deviation of ThalwegDepth (cm)
IntervalArea-residual pool vertical profile area – between ThalwegStations (m2). This is reported for individual intervals.

METRIC OUTPUT

AreaSUM- Sum of IntervalArea, across the site. "Residual Pool Vertical Profile Area" (m2/reach)
RP100 - Mean Residual Depth (m2/100m)

Variable	Description
AreaSUM	Residual Pool Vertical Profile Area" (m2/reach)
RP100	Mean Residual Depth (m2/100m)