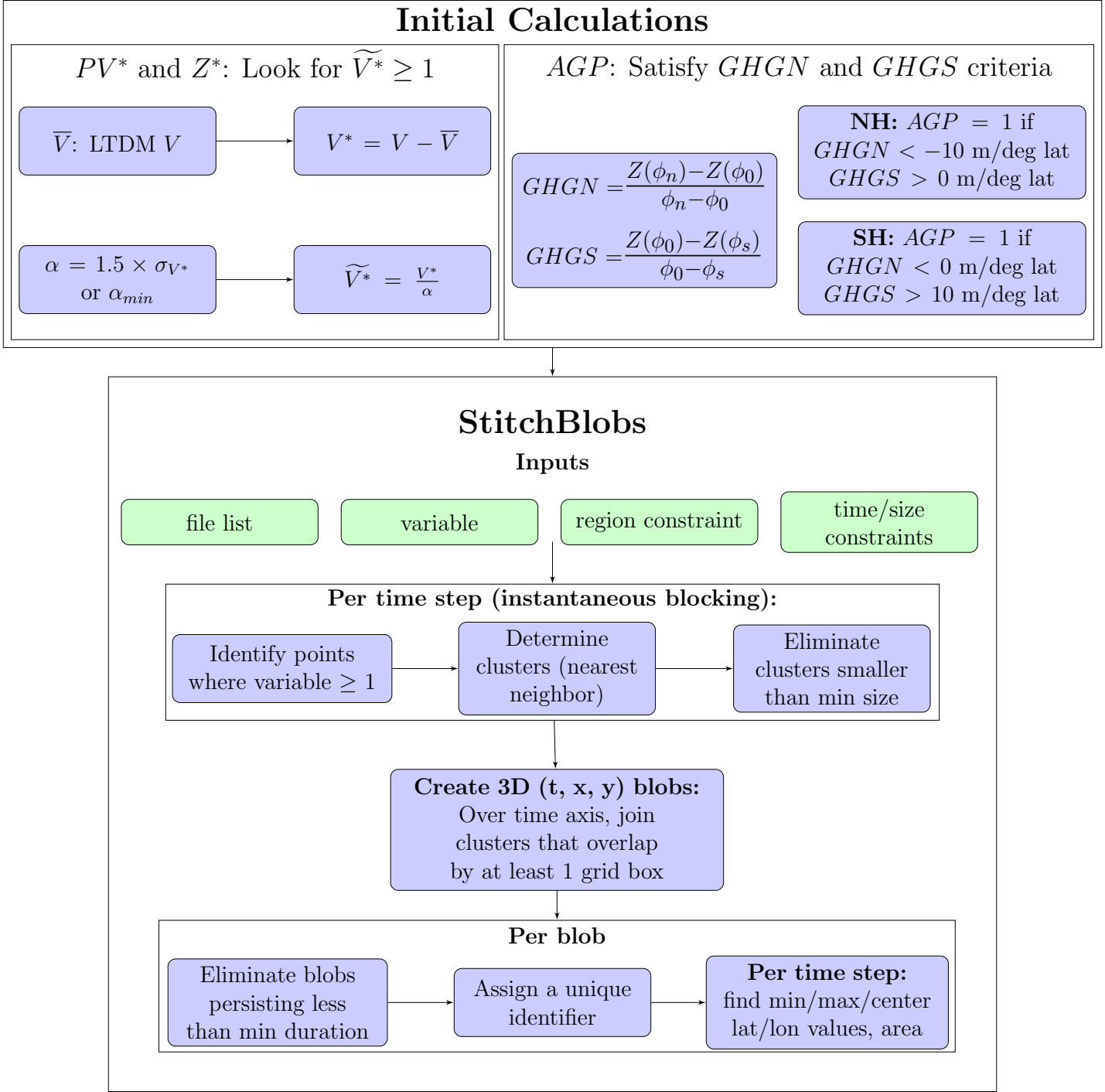
Initial Calculations
PV^* and Z^*: Look for $\widetilde{V^*} \geq 1$
$\overline{V}$: LTDM V
$V^* = V - \overline{V}$
$\alpha = 1.5 \times \sigma_{V^*}$ or α_{min}
$\widetilde{V^*} = \frac{V^*}{\alpha}$
AGP: Satisfy $GHGN$ and $GHGS$ criteria
$GHGN = \frac{Z(\phi_n) - Z(\phi_0)}{\phi_n - \phi_0}$
$GHGS = \frac{Z(\phi_0) - Z(\phi_s)}{\phi_0 - \phi_s}$
NH: $AGP = 1$ if $GHGN < -10$ m/deg lat $GHGS > 0$ m/deg lat
SH: $AGP = 1$ if $GHGN < 0$ m/deg lat $GHGS > 10$ m/deg lat
StitchBlobs
Inputs
file list
variable
region constraint
time/size constraints
Per time step (instantaneous blocking):
Identify points where variable ≥ 1
Determine clusters (nearest neighbor)
Eliminate clusters smaller than min size
Create 3D (t, x, y) blobs:
Over time axis, join clusters that overlap by at least 1 grid box
Per blob
Eliminate blobs persisting less than min duration
Assign a unique identifier
Per time step:
find min/max/center lat/lon values, area