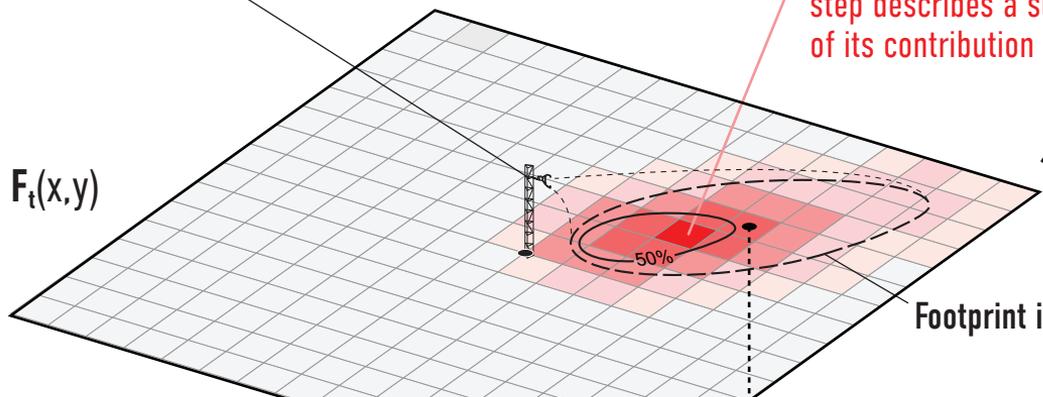


Eddy covariance system on tower

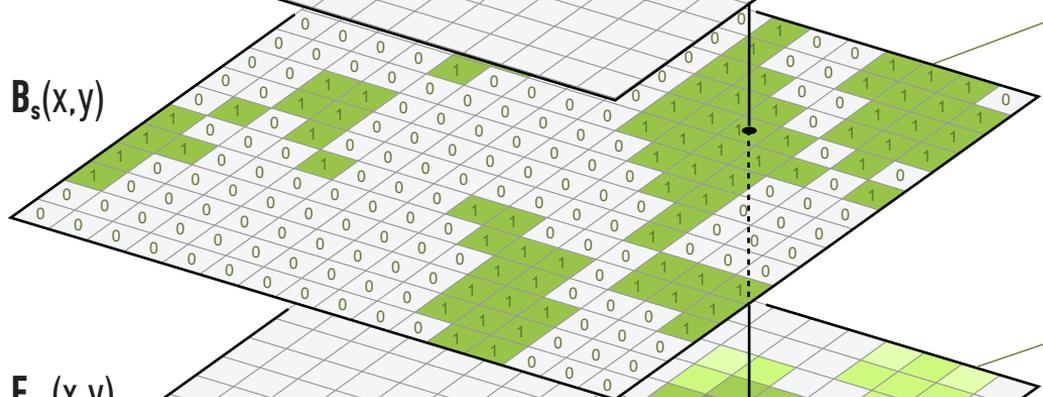
The **gridded footprint function** at any time step describes a surface cell's weighting of its contribution to the measured flux.



$F_t(x,y)$

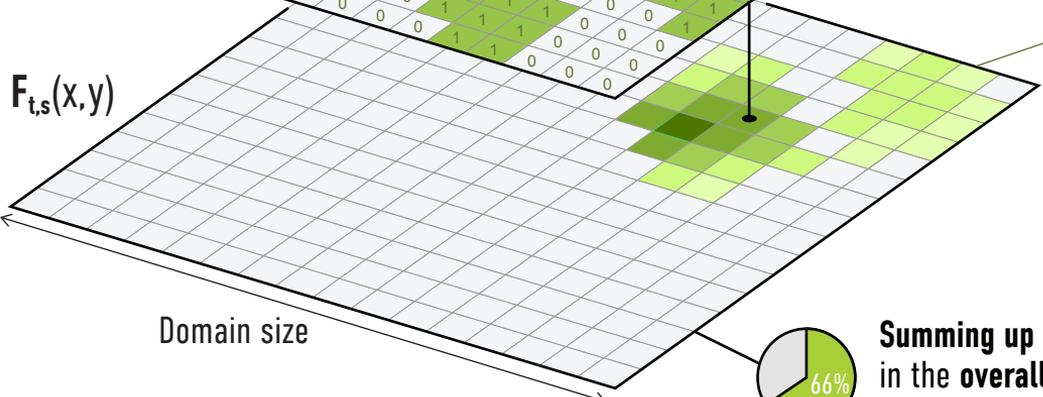
Wind

Footprint isopleths



$B_s(x,y)$

A **binary tree cover map** attributes to each cell information on the most prevalent tree species. For example, "1" means, the cell is dominated by Douglas fir.



$F_{t,s}(x,y)$

The gridded footprint function **multiplied** by the tree cover mask in each grid cell gives the **relative contribution** by this tree species to the unit flux in this cell.

Domain size



Summing up all grid cells of the product results in the **overall contribution of the tree species** to the turbulent footprint in this time-step.