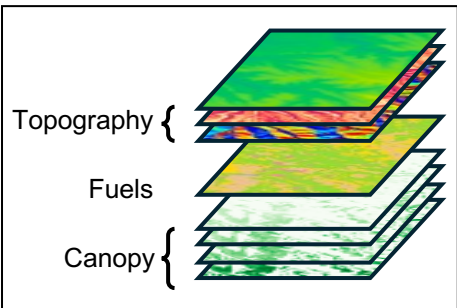




# Fire spread simulation

Landscape data



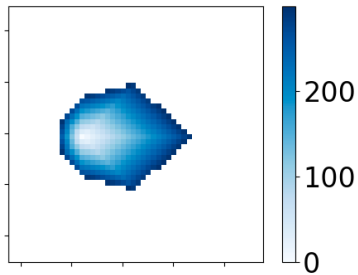
Weather conditions

Ignition coordinate

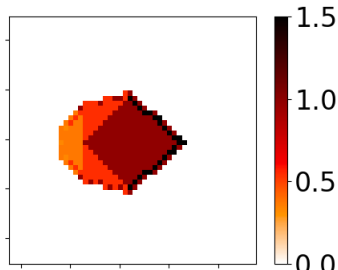
Fuel lookup table

**Fire growth  
model  
(Cell2Fire)**

Elapsed Time

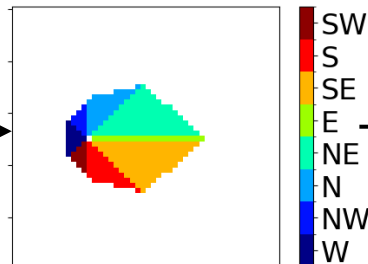


Fire Behavior  
(ROS)



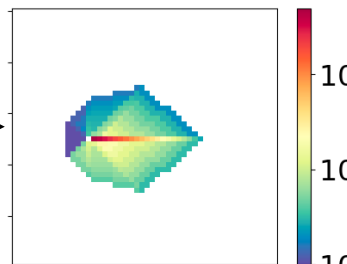
# Hydrology-inspired modeling

D8 Algorithm



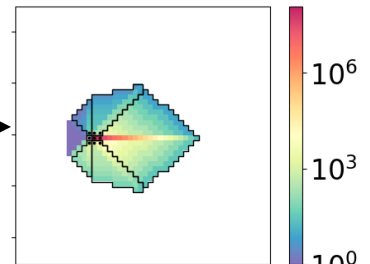
Spread Direction

Accumulate



$\Sigma$ Fire Spread Paths

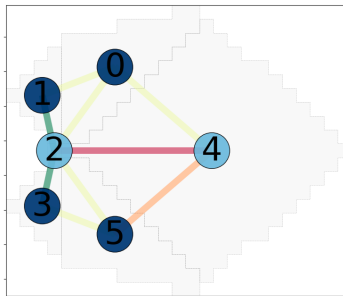
Basin Delineation



**Polygons**

Compute network  
node and edge  
weights

Build Network



**Network**