

Flame Length & Spread Distance

The flame length is the distance between the flame tip and the midpoint of the flame depth at the base of the flame. Flame length is an observable, measurable indicator of fireline intensity.



Spread distance, in chains, is the distance of forward fire spread for a specified amount of time.

spread distance (SD) =
rate of spread (ROS) × projection time (PT)
 $SD = ROS \times PT$

Example 1 - The rate of a fire spread is 4 chains per hour.
What will the spread distance be in 3 hours?

$$SD = ROS \times PT = 4 \text{ ch/h} \times 3\text{h} = 12 \text{ chains}$$