

# Precipitation duration

## Definition

Precipitation duration in hours is used by 100-hr and 1000-hr fuel moisture indices of the NDRFS. When absent it can be estimated using a formula proposed by [Bradshaw et al. \(1983\)](#).

## Formula

[Bradshaw et al. \(1983\)](#) proposed to replace the  $P_{Dur}$  as follows:

$$P_{Dur} = \min\left(8, \frac{P + 0.02}{p_r}\right)$$

with the precipitation rate  $p_r$  [inch/h] defined as

$$p_r = \begin{cases} 0.25, & \text{for } \textit{Climate 1 or 2} \\ 0.05, & \text{for } \textit{Climate 3 or 4} \end{cases}$$

where  $P$  is the 24-hours precipitation in inches and *Climate* is the climate class according to [Deeming \(1977\)](#).

## References

Literature:

[Bradshaw et al. \(1983\)](#)

[Deeming \(1977\)](#)

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The original document is available at <http://wiki.fire.wsl.ch/tiki-index.php?page=Precipitation+duration>