



MtnRT[®] Forecasts for Fire Weather (Fire Spread Index)

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Description

The MtnRT forecasts of Fire Spread Index (FSI), as well as temperature, wind vector, rain, and snow are based on Fox Weather's WRF 12km sector that includes all of Kansas, Colorado, Oklahoma, Texas (north of 27N), and all of New Mexico. MtnRT® forecasts, including Fire Spread Index continue to be available for the western US, including Arizona,

MtnRT® graphical weather forecasts extending out 120 hours are now available for the western US, and for selected portions of the west and southwest Great Plains sector, the southern plains (central Texas), and the Rocky Mountains east slope.

The algorithm we use for calculating Fire Spread Index was developed by Nelson (1964)(1). Although originally developed for fire spread conditions specific to the southeastern US (North Carolina), it is used as a basic index for general forest management in the Sierra Nevada and northern California. Fox Weather uses it as a general index in forecast mode as a good indicator of changing weather-related conditions of Fire Spread out several days. The fuel moisture index varies with antecedent rainfall, snowfall, and the relative humidity field, as well as general growth stage of predominant fuels over our forecast areas.

Fox Weather's forecast service for Fire Weather also includes spot forecasts at 1 hour time increment out 120, 144, or 168 hours for customer-selected locations.

(1) Nelson, R.M., 1964: The National Fire Danger Rating System: Derivation of spread index for eastern and southern states.. USFS Research Paper SE-

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