

LANDFIRE Fire Behavior Fuel Model 13 Attribute Data Dictionary

Attribute	Description
VALUE	Thirteen typical surface fuel arrangements or "collections of fuel properties" (Anderson 1982) were described to serve as input for Rothermel's mathematical surface fire behavior and spread model (Rothermel 1972). These fire behavior fuel models represent distinct distributions of fuel loadings found among surface fuel components (live and dead), size classes and fuel types. The fuel models are described by the most common fire carrying fuel type (grass, brush, timber litter or slash), loading and surface area-to-volume ratio by size class and component, fuelbed depth and moisture of extinction.
-9999	Fill - NoData
1	FBFM1 - Surface fires that burn fine herbaceous fuels, cured and curing fuels, little shrub or timber present, primarily grasslands and savanna
2	FBFM2 - Burns fine, herbaceous fuels, stand is curing or dead, may produce fire brands on oak or pine stands
3	FBFM3 - Most intense fire of grass group, spreads quickly with wind, one third of stand dead or cured, stands average 3 ft tall
4	FBFM4 - Fast spreading fire, continuous overstory, flammable foliage and dead woody material, deep litter layer can inhibit suppression
5	FBFM5 - Low intensity fires, young, green shrubs with little dead material, fuels consist of litter from understory
6	FBFM6 - Broad range of shrubs, fire requires moderate winds to maintain flame at shrub height, or will drop to the ground with low winds
7	FBFM7 - Foliage highly flammable, allowing fire to reach shrub strata levels, shrubs generally 2 to 6 feet high
8	FBFM8 - Slow, ground burning fires, closed canopy stands with short needle conifers or hardwoods, litter consist mainly of needles and leaves, with little undergrowth, occasional flares with concentrated fuels
9	FBFM9 - Longer flames, quicker surface fires, closed canopy stands of long-needles or hardwoods, rolling leaves in fall can cause spotting, dead-down material can cause occasional crowning
10	FBFM10 - Surface and ground fire more intense, dead-down fuels more abundant, frequent crowning and spotting causing fire control to be more difficult
11	FBFM11 - Fairly active fire, fuels consist of slash and herbaceous materials, slash originates from light partial cuts or thinning projects, fire is limited by spacing of fuel load and shade from overstory
12	FBFM12 - Rapid spreading and high intensity fires, dominated by slash resulting from heavy thinning projects and clearcuts, slash is mostly 3 inches or less

Attribute	Description
13	FBFM13 - Fire spreads quickly through smaller material and intensity builds slowly as large material ignites, continuous layer of slash larger than 3 inches in diameter predominates, resulting from clearcuts and heavy partial cuts, active flames sustained for long periods of time, fire is susceptible to spotting and weather conditions
91	Urban
92	Snow/Ice
93	Agriculture
98	Water
99	Barren
R	Red color range/255
G	Green color range/255
B	Blue color range/255
RED	Red color value range 0 - 1
GREEN	Green color value range 0 - 1
BLUE	Blue color value range 0 - 1