

LANDFIRE Fire Behavior Fuel Model 40 Data Dictionary

Attribute	Description	Enumerated Value	Enumerated Value Description
Value	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. Further detail can be found in Scott and Burgan (2005) and Rothermel (1983).	91	NB1
		92	NB2
		93	NB3
		98	NB8
		99	NB9
		101	GR1
		102	GR2
		103	GR3
		104	GR4
		105	GR5
		106	GR6
		107	GR7
		108	GR8
		109	GR9
		121	GS1
		122	GS2
		123	GS3
		124	GS4
		141	SH1
		142	SH2
		143	SH3
		144	SH4
		145	SH5
		146	SH6
		147	SH7
		148	SH8
		149	SH9
		161	TU1
		162	TU2
		163	TU3
		164	TU4
		165	TU5
		181	TL1
		182	TL2
		183	TL3
		184	TL4
		185	TL5
		186	TL6
		187	TL7
		188	TL8
		189	TL9
		201	SB1
		202	SB2
		203	SB3
		204	SB4
Count	number of pixels for the corresponding value		

FBFM13 display attribute, fire behavior 40 fuel model			
	NB1	Urban	
	NB2	Snow/ice	
	NB3	Agriculture	
	NB8	Water	
	NB9	Barren	
	GR1	Short, sparse dry climate grass is short, naturally or heavy grazing, predicted rate of fire spread and flame length low	
	GR2	Low load, dry climate grass primarily grass with some small amounts of fine, dead fuel, any shrubs do not affect fire behavior	
	GR3	Low load, very coarse, humid climate grass continuous, coarse humid climate grass, any shrubs do not affect fire behavior	
	GR4	Moderate load, dry climate grass, continuous, dry climate grass, fuelbed depth about 2 feet	
	GR5	Low load, humid climate grass, fuelbed depth is about 1-2 feet	
	GR6	Moderate load, continuous humid climate grass, not so coarse as GR5	
	GR7	High load, continuous dry climate grass, grass is about 3 feet high	
	GR8	High load, very coarse, continuous, humid climate grass, spread rate and flame length may be extreme if grass is fully cured	
	GR9	Very high load, dense, tall, humid climate grass, about 6 feet tall, spread rate and flame length can be extreme if grass is fully cured	
	GS1	Low load, dry climate grass-shrub shrub about 1 foot high, grass load low, spread rate moderate and flame length low	
	GS2	Moderate load, dry climate grass-shrub, shrubs are 1-3 feet high, grass load moderate, spread rate high, and flame length is moderate	
	GS3	Moderate load, humid climate grass-shrub, moderate grass/shrub load, grass/shrub depth is less than 2 feet, spread rate is high and flame length is moderate	
	GS4	High load, humid climate grass-shrub, heavy grass/shrub load, depth is greater than 2 feet, spread rate is high and flame length very high	
	SH1	Low load dry climate shrub, woody shrubs and shrub litter, fuelbed depth about 1 foot, may be some grass, spread rate and flame low	
	SH2	Moderate load dry climate shrub, woody shrubs and shrub litter, fuelbed depth about 1 foot, no grass, spread rate and flame low	
	SH3	Moderate load, humid climate shrub, woody shrubs and shrub litter, possible pine overstory, fuelbed depth 2-3 feet, spread rate and flame low	
	SH4	Low load, humid climate timber shrub, woody shrubs and shrub litter, low to moderate load, possible pine overstory, fuelbed depth about 3 feet, spread rate high and flame moderate	
	SH5	High load, humid climate grass-shrub combined, heavy load with depth greater than 2 feet, spread rate and flame very high	
	SH6	Low load, humid climate shrub, woody shrubs and shrub litter, dense shrubs, little or no herbaceous fuel, depth about 2 feet, spread rate and flame high	
	SH7	Very high load, dry climate shrub, woody shrubs and shrub litter, very heavy shrub load, depth 4-6 feet, spread rate somewhat lower than SH6 and flame very high	
	SH8	High load, humid climate shrub, woody shrubs and shrub litter, dense shrubs, little or no herbaceous fuel, depth about 3 feet, spread rate and flame high	
	SH9	Very high load, humid climate shrub, woody shrubs and shrub litter, dense finely branched shrubs with fine dead fuel, 4-6 feet tall, herbaceous may be present, spread rate and flame high	
	TU1	Low load dry climate timber grass shrub, low load of grass and/or shrub with litter, spread rate and flame low	
	TU2	Moderate load, humid climate timber-shrub, moderate litter load with some shrub, spread rate moderate and flame low	
	TU3	Moderate load, humid climate timber grass shrub, moderate forest litter with some grass and shrub, spread rate high and flame moderate	
	TU4	Dwarf conifer with understory, short conifer trees with grass or moss understory, spread rate and flame moderate	
	TU5	Very high load, dry climate shrub, heavy forest litter with shrub or small tree understory, spread rate and flame moderate	
	TL1	Low load compact conifer litter, compact forest litter, light to moderate load, 1-2 inches deep, may represent a recent burn, spread rate and flame low	
	TL2	Low load broadleaf litter, broadleaf, hardwood litter, spread rate and flame low	
	TL3	Moderate load conifer litter, moderate load conifer litter, light load of coarse fuels, spread rate and flame low	

TL4	Small downed logs moderate load of fine litter and coarse fuels, small diameter downed logs, spread rate and flame low
TL5	High load conifer litter, light slash or dead fuel, spread rate and flame low
TL6	Moderate load broadleaf litter, spread rate and flame moderate
TL7	Large downed logs, heavy load forest litter, larger diameter downed logs, spread rate and flame low
TL8	Long needle litter, moderate load long needle pine litter, may have small amounts of herbaceous fuel, spread rate moderate and flame low
TL9	Very high load broadleaf litter, may be heavy needle drape, spread rate and flame moderate
SB1	Low load activity fuel, light dead and down activity fuel, fine fuel is 10-20 t/ac, 1-3 inches in diameter, depth < 1 foot, spread rate moderate and flame low
SB2	Moderate load activity fuel or low load blowdown, 7-12 t/ac, 0-3 inch diameter class, depth about 1 foot, blowdown scattered with many still standing, spread rate and flame low
SB3	High load activity fuel or moderate load blowdown, heavy dead down activity fuel or moderate blowdown, 7-12t/ac, 0-.25 inch diameter class, depth > 1 foot, blowdown moderate, spread rate and flame high
SB4	High load blowdown, heavy blowdown fuel, blowdown total, foliage and fine fuel still attached to blowdown, spread rate and flame very high

Red	Red color value/255	0 -1	
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Green	Green color value/255	0-1	
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Blue	Blue color value/255	0-1	
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For more information, refer to: http://www.fs.fed.us/rm/pubs/rmrs_gtr153.pdf