

Spotting Distance from a Burning Pile

	Parameter	Unit	Simulation #1		Simulation #2		Simulation #3	
			IFTDSS	BehavePlus	IFTDSS	BehavePlus	IFTDSS	BehavePlus
Outputs	Spotting Distance from a Burning Pile	miles	0.0548	0.1	0.2	0.2	0.35	0.4
	Cover Height	ft	10	10	30	30	50	50
	Firebrand Height	ft	122	122	244	244	366	366
	Flat Terrain Spotting Distance	miles	0.0537	0.1	0.2	0.2	0.39	0.4
Inputs	Downwind Canopy Height	ft	10		30		50	
	Wind Speed at 20-ft	miles/hour	5		15		25	
	Ridge-to-Valley Elevation Difference	ft	200		500		1,000.00	
	Ridge-to-Valley Horizontal Distance	miles	0.5		1		2	
	Spotting Source Location		Ridgetop		Midslope, windward side of slope		Valley bottom	
	Flame Height from a Burning Pile	ft	10		20		30	

Spotting Distance from a Wind-Driven Surface Fire

	Parameter	Unit	Simulation #1		Simulation #2		Simulation #3	
			IFTDSS	BehavePlus	IFTDSS	BehavePlus	IFTDSS	BehavePlus
Outputs	Spotting Distance from a Wind-Driven Surface Fire	miles	0.18	0.2	0.55	0.5	0.85	0.9
	Cover Height	ft	11.94	11.9	30	30	50	50
	Firebrand Height	ft	356.31	356.3	434.6	434.6	521.75	521.7
	Firebrand Drift	miles	0.0608	0.1	0.21	0.2	0.39	0.4
	Flat Terrain Spotting Distance	miles	0.18	0.2	0.53	0.5	0.92	0.9
Inputs	Downwind Canopy Height	ft	10		30		50	
	Wind Speed at 20-ft	miles/hour	5		15		25	
	Ridge-to-Valley Elevation Difference	ft	200		500		1,000.00	
	Ridge-to-Valley Horizontal Distance	miles	0.5		1		2	
	Spotting Source Location		Ridgetop		Midslope, windward side of slope		Valley bottom	
	Flame Length	ft	10		20		30	

Spotting Distance from Torching Trees

	Parameter	Unit	Simulation #1		Simulation #2		Simulation #3	
			IFTDSS	BehavePlus	IFTDSS	BehavePlus	IFTDSS	BehavePlus
Outputs	Spotting Distance from Torching Trees	miles	0.22	0.2	0.54	0.5	0.75	0.8
	Cover Height	ft	17.61	17.6	30	30	50	50
	Steady State Flame Height	ft	215.04	215	177.89	177.9	215.04	215
	Tree Height/Flame Height Ratio		0.14	0.1	0.17	0.2	0.14	0.1
	Steady State Flame Duration		2.42	2.4	3.07	3.1	2.42	2.4
	Firebrand Height	ft	879.72	879.7	805.27	805.30	879.72	879.7
	Flat Terrain Spotting Distance	miles	0.21	0.2	0.52	0.5	0.81	0.8
Inputs	Downwind Canopy Height	ft	10		30		50	
	Torching Tree Height	ft	30		30		30	
	Spot Tree Species		Douglas-fir (Pseudotsuga menziesii)		Ponderosa pine (Pinus ponderosa)		Subalpine fir (Abies lasiocarpa)	
	Torching Tree D.B.H.	inch	30		30		30	
	Wind Speed at 20-ft	miles/hour	5		15		25	
	Ridge-to-Valley Elevation Difference	ft	200		500		1,000.00	
	Ridge-to-Valley Horizontal Distance	miles	0.5		1		2	
	Spotting Source Location		Ridgetop		Midslope, windward side of slope		Valley bottom	
	Number of Trees Torching		15		15		15	