

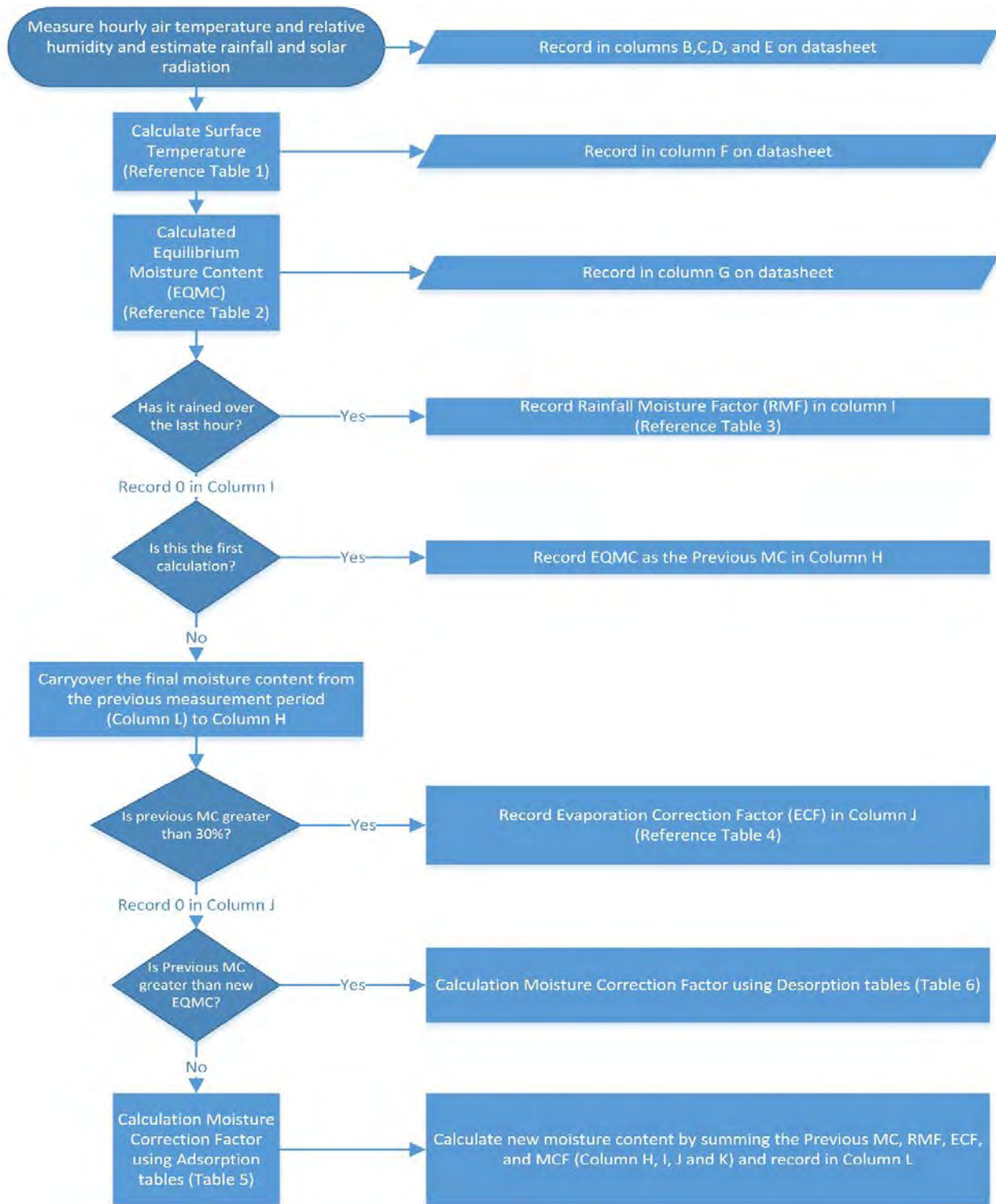
SimpleFFMC: Fine Dead Fuel Moisture Tables

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Revision 1



Reference Table 1: Surface temperature estimation

		Solar Radiation (W/m2)														
Temperature (F)		0 (Dark)	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	>1300
	<15	32	34	36	38	40	42	44	46	48	50	52	54	56	58	60
	15	37	38	40	42	44	46	48	50	52	54	56	58	60	62	64
	20	41	43	45	47	49	51	53	55	57	59	60	62	64	66	68
	25	45	47	49	51	53	55	57	59	61	63	65	67	69	71	73
	30	49	51	53	55	57	59	61	63	65	67	69	71	73	75	77
	35	54	56	58	60	62	64	66	68	69	71	73	75	77	79	81
	40	58	60	62	64	66	68	70	72	74	76	78	80	82	84	86
	45	62	64	66	68	70	72	74	76	78	80	82	84	86	88	90
	50	67	69	71	73	75	76	7								

Reference Table 2: Equilibrium Moisture Content (%) estimation

		Relative Humidity (%)																				
		2	5	10	15	20	25	30	35	40	45	50	55	60	65	70	75	80	85	90	95	99
Surface Temperature (F)	<15	3	5	7	8	10	11	12	13	13	14	15	16	17	18	19	21	22	23	25	28	34
	15	3	5	7	8	9	10	11	12	13	14	15	16	17	18	19	20	22	23	25	28	34
	20	3	5	6	8	9	10	11	12	13	14	15	15	16	17	19	20	21	23	25	28	34
	25	3	4	6	7	8	10	10	11	12	13	14	15	16	17	18	19	21	22	24	27	33
	30	3	4	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	22	24	27	33
	35	3	4	6	7	8	9	10	11	12	13	13	14	15	16	17	19	20	22	24	27	33
	40	2	4	5	6	8	9	9	10	11	12	13	14	15	16	17	18	20	21	23</		

Reference Table 3 : Rainfall Moisture Factor	
Rainfall (inches)	Rainfall Moisture Factor (RMF) (%)
0	0
0.01	8
0.02	15
0.03	19
0.04	22
0.05	25
0.06	26
0.07	28
0.08	29
0.09	29
0.1	30
0.11	30
0.12	30
0.13	31
0.14	31
0.15	31
0.16	31
0.17	31
0.18	31
0.19	31
0.2	31
0.21	31
0.22	31
0.23	31
0.24	31
0.25	31
0.26	31
0.27	31
0.28	31
0.29	31
0.3	31
0.31	31
0.32	31
0.33	31
>0.33	31

<i>Reference Table 4: Evaporation</i>	
<i>Surface Temperature (F)</i>	<i>Evaporation Correction Factor (ECF)</i>
30	-2
35	-3
40	-3
45	-3
50	-3
55	-3
60	-4
65	-4
70	-4
75	-4
80	-5
85	-5
90	-6
95	-6
100	-6
105	-7
110	-7
115	-8
120	-8
125	-9
130	-9
135	-9
140	-9
145	-9

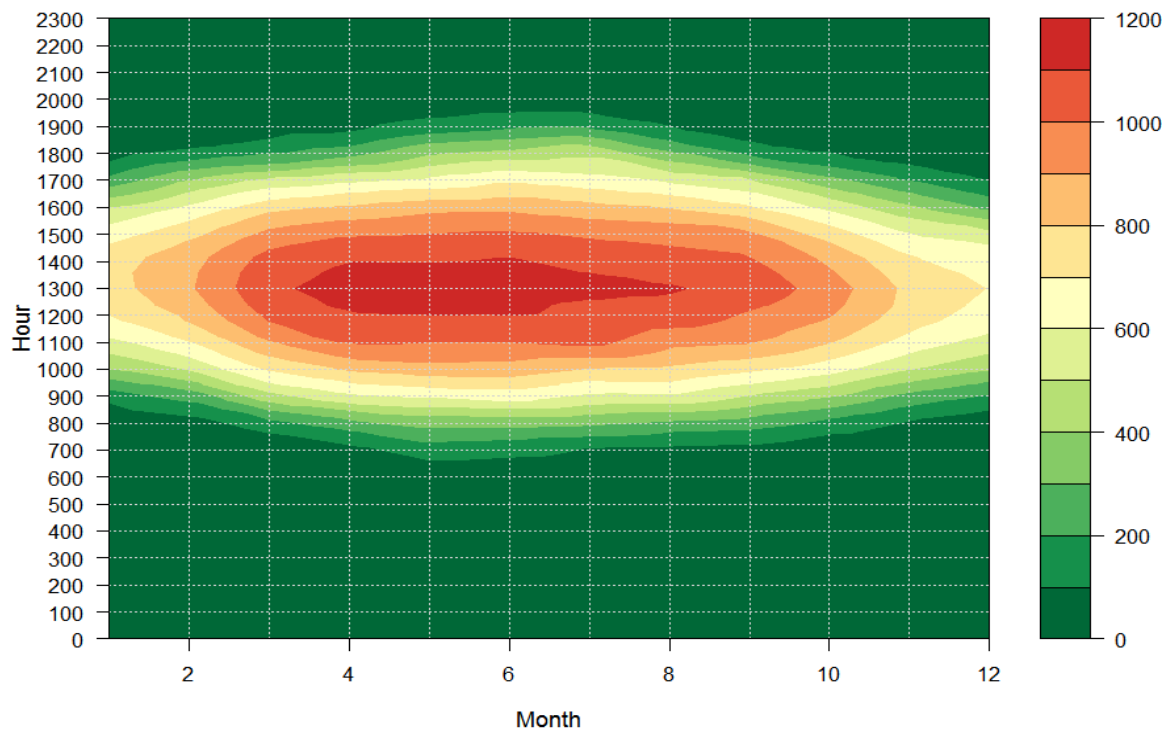
Reference Table 6A

		Relative Humidity (%)																			
Temperature (F)	1% Adsorption	<5	5 to 9	10 to 14	15 to 19	20 to 24	25 to 29	30 to 24	35 to 39	40 to 44	45 to 49	50 to 54	55 to 59	60 to 64	65 to 69	70 to 74	75 to 79	80 to 84	85 to 89	90 to 94	95+
	<30	1	4	5	6	7	8	9	10	10	11	12	13	14	15	16	17	18	19	21	24
	30-49	1	2	3	4	5	6	7	7	8	9	9	10	11	12	12	13	14	16	17	20
	50-69	0	1	2	3	3	4	4	5	5	6	6	7	7	8	9	9	10	11	12	15
	70-89	0	1	1	1	2	2	2	3	3	3	4	4	4	5	5	6	6	7	8	9
	90-99	0	0	0	1	1	1	1	1	2	2	2	2	2	2	3	3	3	4	4	5
	100-104	0	0	0	1	1	1	1	1	1	1	2	2	2	2	2	2	3	3	4	4
	105-110	0	0	0	0	1	1	1	1	1	1	1	1	2	2	2	2	2	3	3	4
	110-115	0	0	0	0	0															

Reference Table 6C

		Relative Humidity (%)																			
Temperature (F)	9% Adsorption	<5	5 to 9	10 to 14	15 to 19	20 to 24	25 to 29	30 to 24	35 to 39	40 to 44	45 to 49	50 to 54	55 to 59	60 to 64	65 to 69	70 to 74	75 to 79	80 to 84	85 to 89	90 to 94	95+
	<30	-5	-3	-2	-1	0	1	1	2	3	4	4	5	6	6	7	8	9	11	12	15
	30-49	-4	-3	-2	-1	-1	0	0	1	1	2	2	3	3	4	4	5	6	7	8	10
	50-69	-3	-2	-2	-1	-1	-1	0	0	0	0	1	1	1	2	2	2	3	4	4	6
	70-89	-2	-2	-1	-1	-1	-1	-1	-1	0	0	0	0	0	0	1	1	1	1	2	3
	90-99	-1	-1	-1	-1	-1	-1	-1	-1	0	0	0	0	0	0	0	0	0	0	1	1
	100-104	-1	-1	-1	-1	-1	-1	-1	-1	0	0	0	0	0	0	0	0	0	0	0	1
	105-110	-1	-1	-1	-1	-1	-1	-1	-1	0	0	0	0	0	0	0	0	0	0	0	1
	110-115	-1	-1	-1	-1	-1	-1	-1	-1	0											

Solar Radiation (W/m^2)



SimpleFFMC Fine Fuel Moisture calculation worksheet											
A	B	C	D	E	F	G	H	I	J	K	L
	Weather Observations					Equilibrium Moisture Content (EQMC)	Previous MC (t-1)	Rainfall Factor (RMF)	Evaporation Correction Factor (ECF)	Moisture Correction Factor (MCF)	FMC
	Temp	RH	Rainfall	Solar Radiation	Surface Temp						
Units	(F)	(%)	(in)	(W/m2)	(F)	(%)	(%)	(%)	(%)	(%)	(%)
Table Reference				Estimated from local table	Ref Table 1	Ref Table 2		Ref Table 3	Ref Table 4	Ref Tables 5 and 6	
Notes				If no local table, use 800 for clear days, 400 for overcast days and 0 at night			Moisture content from previous hour or EQMC if first observation	0 if no rainfall over last observation period	0 if FMC (t-1) < 30%	If FMC (t-1) > EQMC use Table 5, otherwise use Table 6	FMC (t -1) + RMF + ECF + MCF
Calculation Ref								If D = 0, record 0	If H < 30, record 0	If H > G, use Table 5 else use Table 6	H+I+J+K
St. Marks (West) Florida											
Date/Time											
25-Jul-16											
7:00 AM	77	94	0	23.26	90	19	19	0	0	-1	18
8:00 AM	84	76	0	161.657	96	14	18	0	0	-1	17
9:00 AM	82	86	0	123.278	94	16	17	0	0	-1	16
10:00 AM	83	72	0								