Alaska Fuels & Fire Weather (mesowest contract)

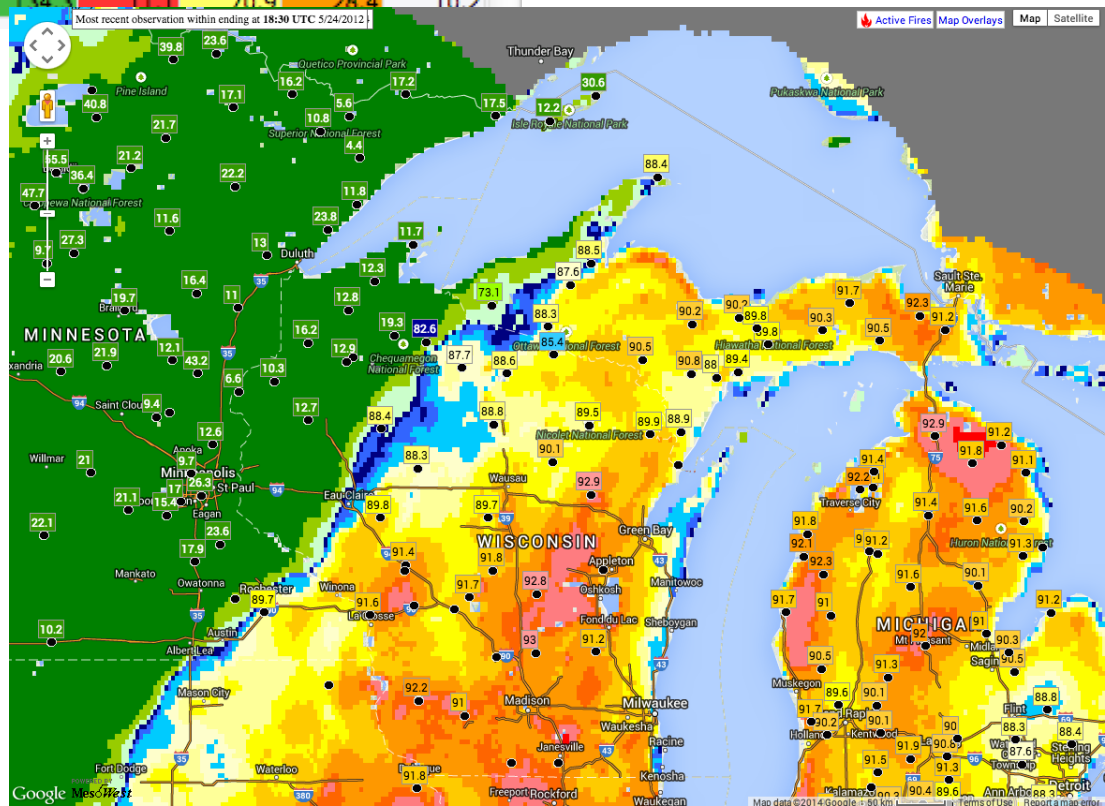
Predictive Services - FWI Database (sorted by Station)

Month: May | Day: 19 | Year: 2014 | Range: 1 day | Geographic Area: KENAI/KODIAK | Refresh

Groups | Stations | Forecasted | Group Info/Ma

Station	Date	Hr	ATF	RHP	WSM	PREC	FFMC	DMC	DC	ISI	BUI	FWI	DSR
BDV	05-19	14	61	27	4	0.00	94.0	142.6	217.3	10.4	141.8	37.0	16.3
BTL	05-19	14	51	44	14	0.00	88.4	35.7	118.6	10.5	40.7	20.8	5.9
GRA	05-19	14	56	32	8	0.00	92.6	94.0	134.5	11.9	93.4	34.2	14.1
KNA	05-19	14	55	29	8	0.00	92.6	101.1	167.8	11.8	100.6	35.3	14.9
KNL	05-19	14	55	33	2	0.00	93.1	100.0	158.8	7.9	99.5	26.7	9.1
NCK	05-19	14	58	24	3	0.00	93.3	71.4	122.5	8.7	71.1	24.1	7.6
PADQ	05-19	14	54	28	20	0.00	91.6	33.3	94.9	26.6	35.5	36.7	16.0
PAEN	05-19	14	54	28	23	0.00	91.3	50.0	144.9	33.5	53.7	51.4	29.0
PAHO	05-19	14	53	28	15	0.00	89.5	58.6	155.7	13.5	60.4	30.1	11.2
SDF	05-19	14	58	23	13	0.00	93.4	68.8	163.4	19.9	68.8	41.3	19.7
SGS	05-19	14	56	29	3	0.00	93.0	74.5	158.9	8.4	74.4	24.1	7.6
SWN	05-19	14	60	23	5	0.00	93.8	71.1	134.3	11.1	70.9	28.4	10.2

- View emphasis changing from table to map display
- Hourly display of FFMC, ISI, and FWI
- 2-3 days of forecasts, updated twice each day.

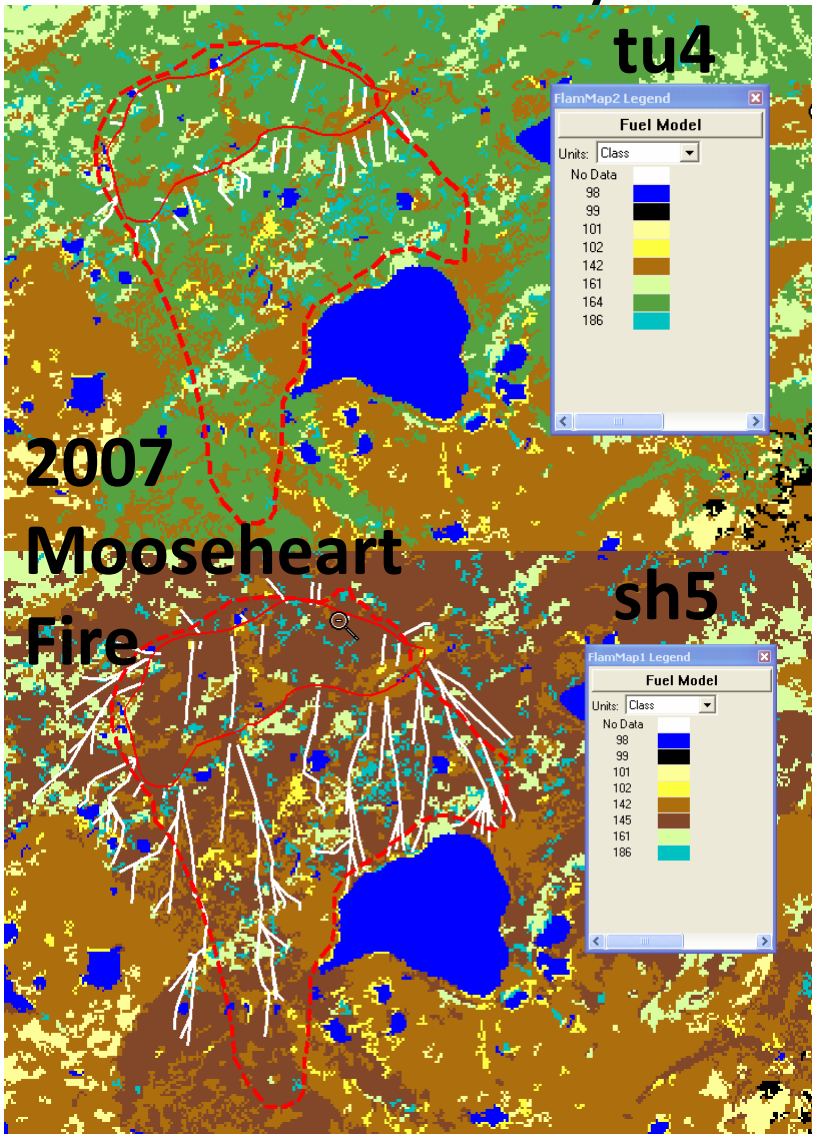


Draft Alaska Adjectives

	LOW	MODERATE	HIGH	VERY HIGH	EXTREME
Pre-Green	ISI 0.0-2.0	ISI 2.0-8.0 FFMC <86	ISI 6.0-8.0 FFMC >=86	ISI >=8.0 FFMC <92.0 *Or* ISI >= 8.0 FWI < 36.0	FFMC 92.0+ FWI 36.0+
BUI 0.0-39.9	FFMC 0.0 85.9	FFMC 86.0-88.9	FFMC 89.0-92.9 *Or* FFMC 93.0+ ATF <80	FFMC 93.0+ ATF 80+ FWI <40.0	FFMC 93.0+ ATF 80+ FWI 40+
BUI 40.0-59.9	FFMC 0.0-83.9	FFMC 84.0 88.9	FFMC 89.0-92.9 *Or* FFMC 93.0+ ATF <75	FFMC 93.0+ ATF 75+ FWI <40.0	FFMC 93.0+ ATF 75+ FWI 40+
BUI 60.0-89.9	FFMC 0.0-83.9	FFMC 84.0-85.9	FFMC 86.0-89.9	FFMC 90.0-92.9 *Or* FFMC 93.0+ FWI <36.0	FFMC 93.0+ FWI 36.0+
BUI 90.0-109.9	FFMC 0.0 81.9	FFMC 82.0-85.9	FFMC 86.0-88.9	FFMC 89.0-91.9 *Or* FFMC 92.0+ FWI <36.0	FFMC 92.0+ FWI 36.0+
BUI 110.0 +	FFMC 0.0-79.9	FFMC 80.0-83.9	FFMC 84.0-88.9	FFMC 89.0-91.9 *Or* FFMC 92.0+ FWI <28	FFMC 92.0+ FWI 28.0+

IDXDATE	SHORTNAME	FULLNAME	ATF	RHP	WSM	PREC	FFMC	DMC	DC	ISI	BUI	FWI	DSR	Adjective
Observed, August 1, 2014														
8/1/2014	CKN	CHICKEN	64	55	3	0	87.1	13.8	262.5	3.6	24.4	6.6	0.8	2-Mod
8/1/2014	DRY	DRY CREEK	63	47	4	0	87.4	38.9	328.8	4.1	60.1	12.6	2.4	3-High
8/1/2014	PAOR	NORTHWAY	70	38	16.1	0	88.6	21.9	361.3	13.0	38.1	23.4	7.2	2-Mod
8/1/2014	TEE	T LAKE	66	60	1	0	88.1	46.9	341.1	3.5	69.8	12.2	2.3	3-High
8/1/2014	TET	JATAHMUND LAKE	75	32	17	0	90.8	13.8	217.9	19.2	23.8	24.6	7.9	3-High
8/1/2014	TKF	TOK AKTAS	75	33	7	0	90.8	53.4	459.7	8.4	82.8	25.5	8.4	4-VHigh
8/1/2014	TKR	TOK RIVER VALLEY	66	45	6	0	86.8	25.4	289.4	4.4	41.7	10.9	1.9	2-Mod
8/1/2014	TWR	ALCAN HWY MI-1244	70	42	3	0	87.5	17.4	345.8	3.8	30.9	8.1	1.1	2-Mod
Forecast, August 2, 2014														
8/2/2014	CKN	CHICKEN	63	75	2	0.38	42.5	7.7	243.8	0.1	14.3	0.0	0.0	1-Low
8/2/2014	DRY	DRY CREEK	62	55	3	0.13	66.7	31.3	328.3	0.7	50.5	1.7	0.1	1-Low
8/2/2014	PAOR	NORTHWAY	66	45	5.8	0	88.7	24.2	367.7	5.7	41.5	13.2	2.6	2-Mod
8/2/2014	TEE	T LAKE	67	61	1	0.11	67.0	39.7	347.6	0.6	61.7	1.7	0.1	1-Low
8/2/2014	TET	JATAHMUND LAKE	77	28	6	0	92.2	17.7	225.4	9.5	29.6	16.4	3.9	3-High
8/2/2014	TKF	TOK AKTAS	69	49	4	0	89.6	55.7	466.4	5.6	85.8	19.5	5.2	3-High
8/2/2014	TKR	TOK RIVER VALLEY	66	49	5	0	87.3	27.5	295.8	4.3	44.7	11.1	1.9	2-Mod
8/2/2014	TWR	ALCAN HWY MI-1244	71	35	7	0	89.9	20.4	352.7	7.5	35.7	15.1	3.3	3-High
Forecast, August 3, 2014														
8/3/2014	CKN	CHICKEN	75	43	7	0	78.6	10.7	251.1	1.8	19.3	2.5	0.1	1-Low
8/3/2014	DRY	DRY CREEK	69	46	2	0.01	81.2	33.7	335.0	1.5	53.8	4.9	0.4	1-Low
8/3/2014	PAOR	NORTHWAY	71	38	0	0	89.5	27.1	374.6	4.0	45.9	10.5	1.7	3-High
8/3/2014	TEE	T LAKE	78	44	2	0.01	83.8	42.7	355.2	2.1	65.7	7.6	1.0	1-Low
8/3/2014	TET	JATAHMUND LAKE	77	31	3	0	92.2	21.4	232.9	7.5	34.8	14.9	3.3	3-High
8/3/2014	TKF	TOK AKTAS	74	32	6	0	91.0	59.1	473.6	8.1	90.1	25.9	8.6	4-VHigh
8/3/2014	TKR	TOK RIVER VALLEY	70	38	5	0	89.2	30.4	302.6	5.8	48.6	14.6	3.1	3-High
8/3/2014	TWR	ALCAN HWY MI-1244	77	36	3	0	90.6	23.9	360.2	6.0	41.0	13.7	2.8	3-High

C-2 Fire Behavior & Fuel Model Selection In WFDSS Analysis



2.5.5 C-2, Boreal Spruce

Open, Rate of Spread in ch/hr

Multiply by 1.1 to get feet/min

Divide by 80 to get miles/hour

Divide by 3 to get meters/min

***Torching*, Active Crown Fire**

Intensity Class		Flame Length	FLI kW/m	FLI BTU/ft/sec
1	up to	1	10	3
2	up to	4	500	145
3	up to	8	2000	578
4	up to	12	4000	1156
5	up to	18	10000	2891
6	> than	18	10000	2891

Buildup Index (BUI)

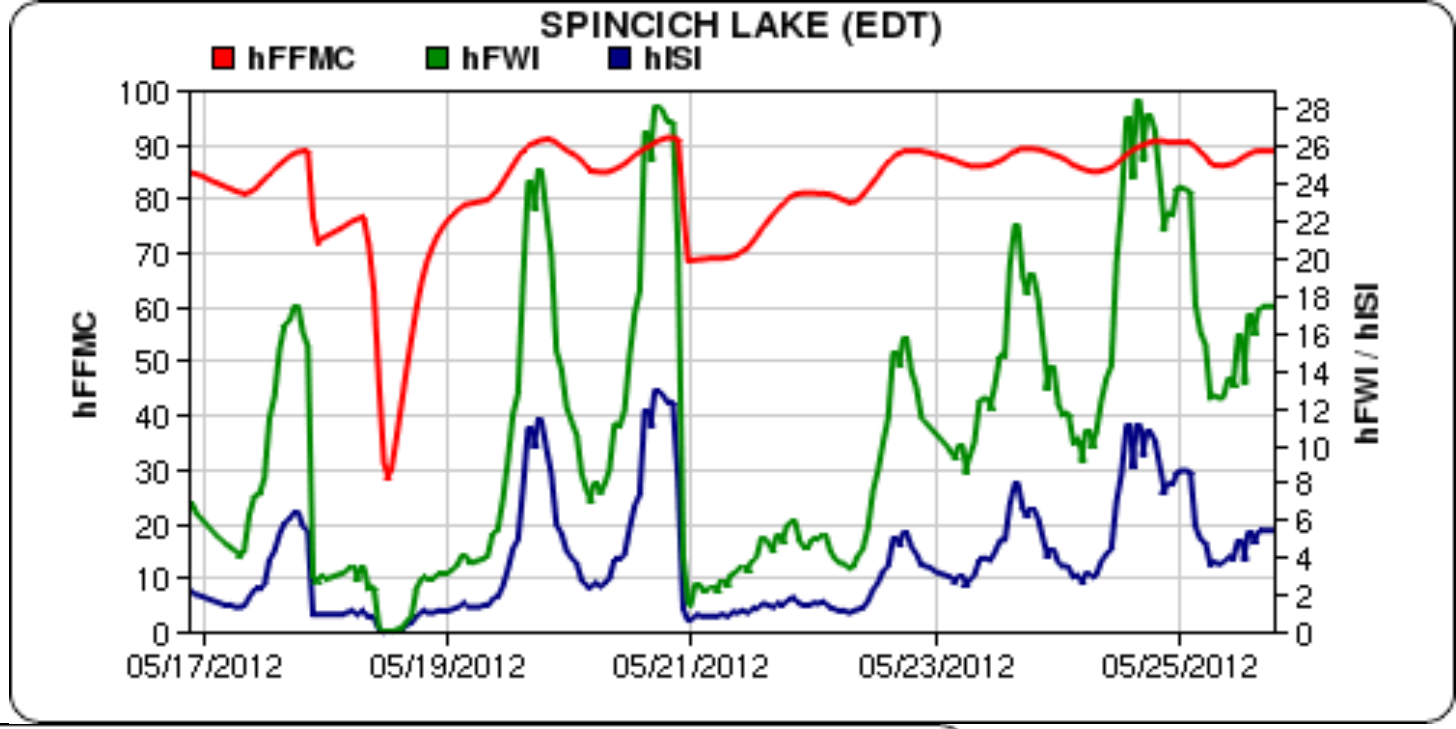
ISI	10	30	50	70	90	110	130	150	170	190
1	0.3	1	1	2	2	2	2	2	2	2
2	0.9	3	4	4	5	5	5	5	5	5
3	2	6	7	8	8	9	9	9	9	9
4	3	8	11	12	12	13	13	13	14	14
5	4	11	15	16	17	18	18	18	19	19
6	5	15	19	21	22	23	23	24	24	24
7	6	18	23	26	27	28	29	29	30	30
8	7	22	28	31	32	34	34	35	35	36
9	8	25	32	36	38	39	40	41	41	42
10	9	29	37	41	43	45	46	47	48	48
11	10	33	42	46	49	51	52	53	54	54
12	11	37	47	52	55	57	58	59	60	61
13	12	41	52	57	61	63	64	66	66	67
14	14	45	57	63	66	69	70	72	73	74
15	15	49	62	68	72	75	77	78	79	80
16	16	52	66	74	78	81	83	84	85	86
17	17	56	71	79	84	87	89	91	92	93
18	18	60	76	84	89	93	95	97	98	99
19	20	64	81	90	95	99	101	103	104	105
20	21	68	86	95	101	104	107	109	111	112
21	22	72	91	100	106	110	113	115	117	118
22	23	75	95	106	112	116	119	121	123	124
23	24	79	100	111	117	122	125	127	129	130
24	25	83	105	116	123	127	130	133	135	136
25	26	86	109	121	128	133	136	139	141	142
26	27	90	114	126	133	138	142	144	146	148
27	28	93	118	131	138	143	147	150	152	154
28	29	97	122	136	144	149	153	155	158	159
29	30	100	127	140	149	154	158	161	163	165
30	31	103	131	145	153	159	163	166	168	170
31	32	106	135	150	158	164	168	171	174	176
32	33	110	139	154	163	169	173	176	179	181
33	34	113	143	158	168	174	178	181	184	186
34	35	116	147	163	172	179	183	186	189	191
35	36	119	151	167	177	183	188	191	194	196
36	37	122	155	171	181	188	193	196	199	201
37	38	125	158	175	185	192	197	201	204	206
38	39	128	162	179	190	197	202	205	208	210
39	40	130	165	183	194	201	206	210	213	215
40	41	133	169	187	198	205	210	214	217	220

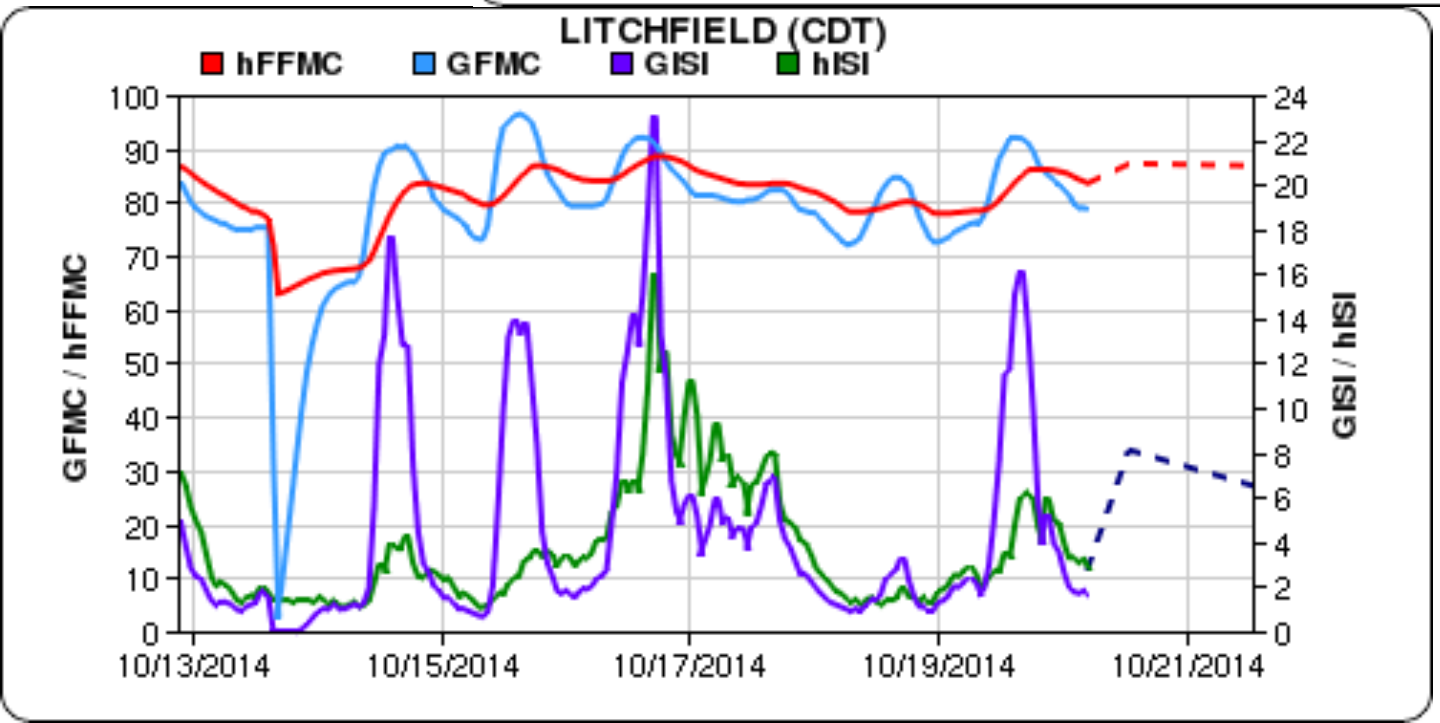
FFMC & GFMC Fuel Moisture Inputs

FFMC	96	94	93	91	90	88	87	86	84	83
10-hr	5	6	7	8	9	10	11	12	13	14
GFMC	99	98	97	96	95	94	93	92	91	90
1-hr	2	3	4	5	6	7	8	9	10	11

- Use of FFMC & GMFC values (current, historic, and forecast) to edit dead fuel moisture inputs to Short Term Fire Behavior (STFB) & FSPro models in WFDSS

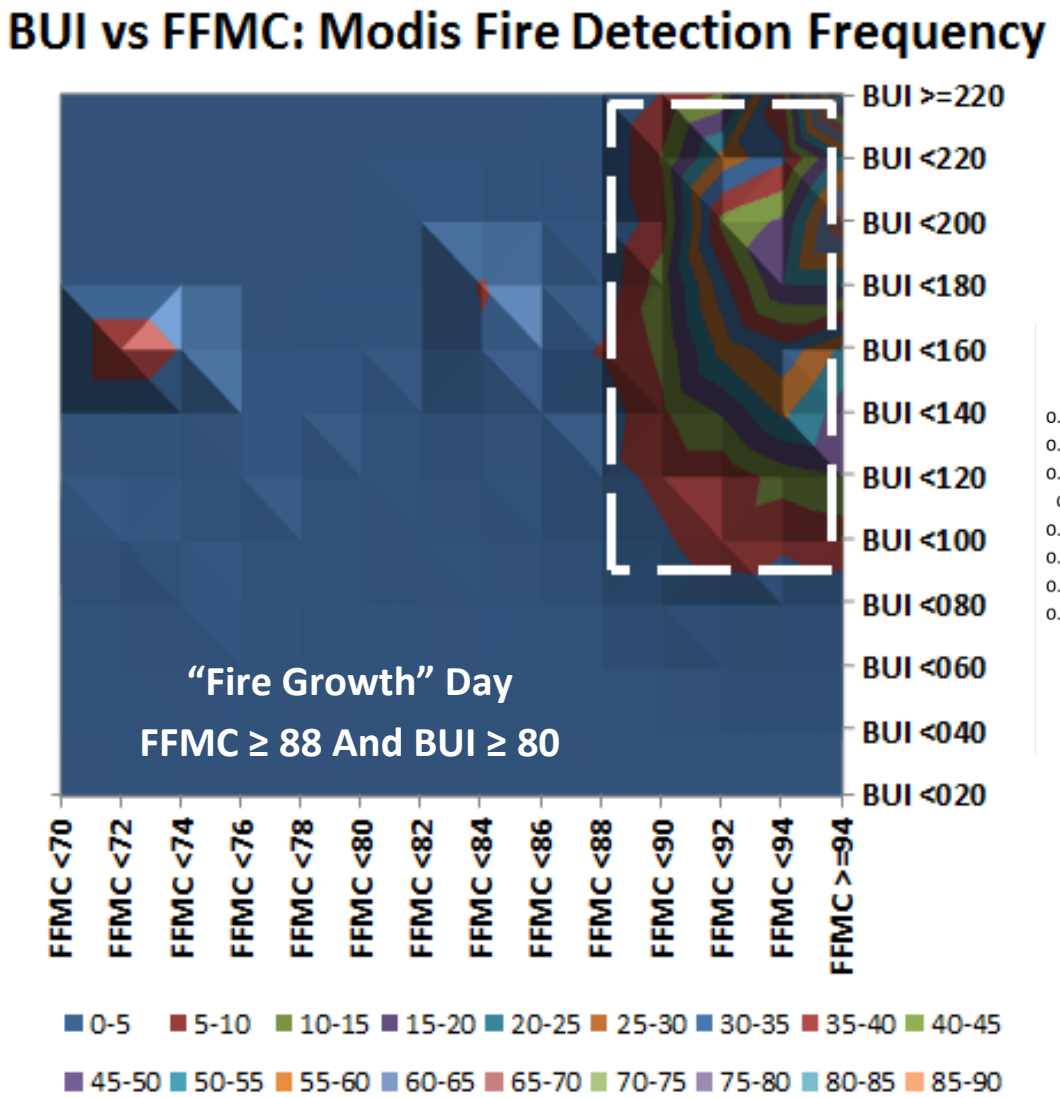
Hourly Codes for Burn Period



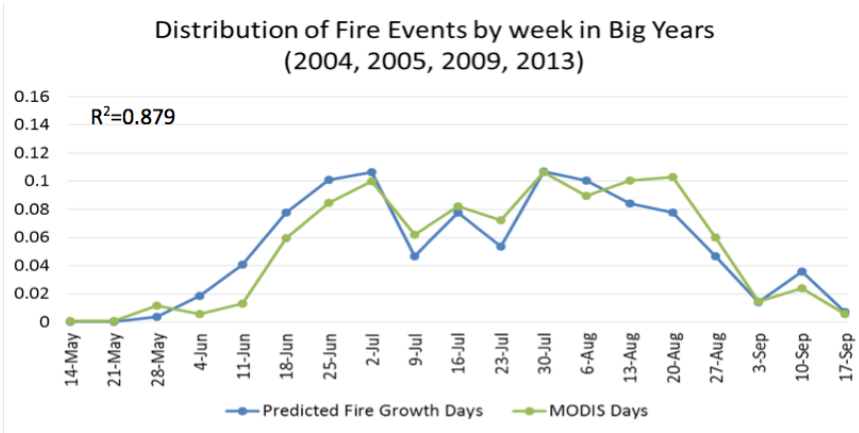


FFMC & new "Grass Fuel Moisture Code" (GFMC)

FSPro "Burnable Days" and ERC Forecasts



Edit the number of ERC Table rows to reflect the episodic nature of active fire growth for our interior fires



Use FFMC & BUI Forecasts to evaluate ERC forecasts as "burnable" or "non-burnable" days