Monitoring Weather Conditions Near Wildfires

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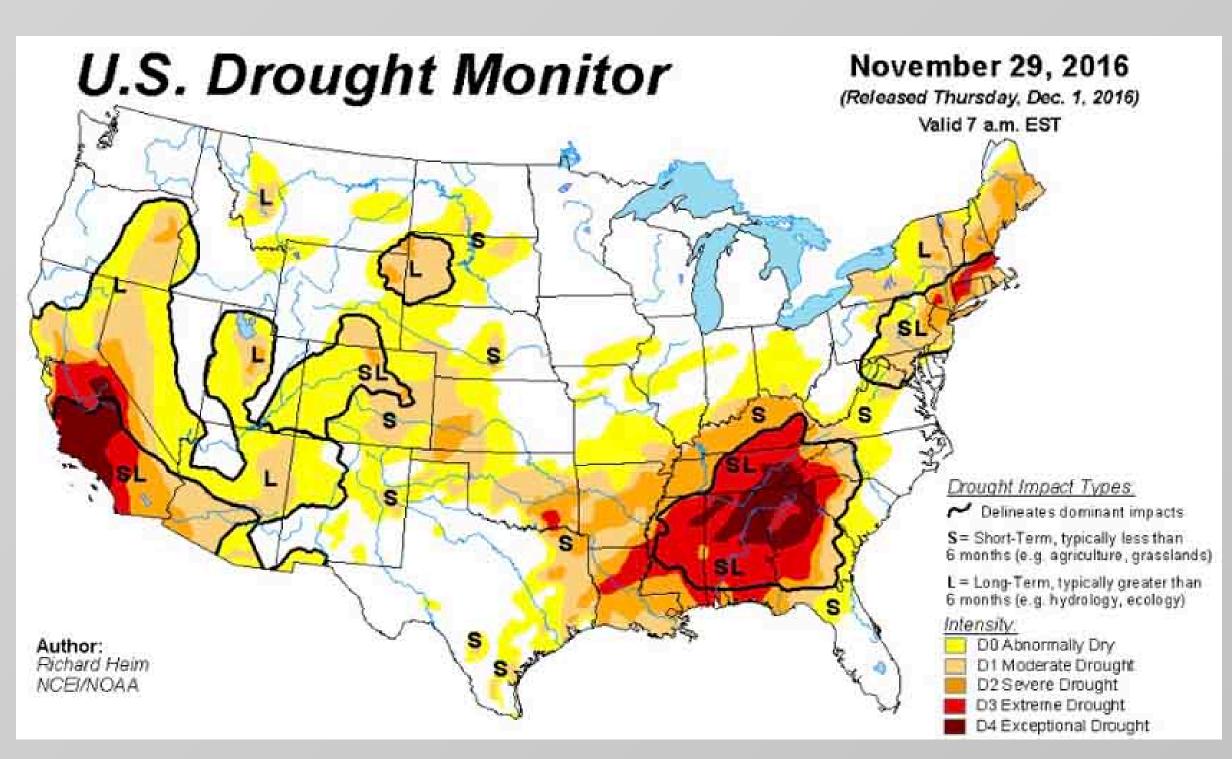
Project Overview and Objectives

- Due to the dangerous and highly susceptible nature of wildland fires to threaten lives and property, it is critical to monitor and be aware of conditions surrounding these wildfires. The vulnerability of fire-fighting personnel and the public to changing weather conditions near wildfires necessitates improved monitoring of those meteorological conditions for increased situational awareness.
- # Improve design over old product
- #

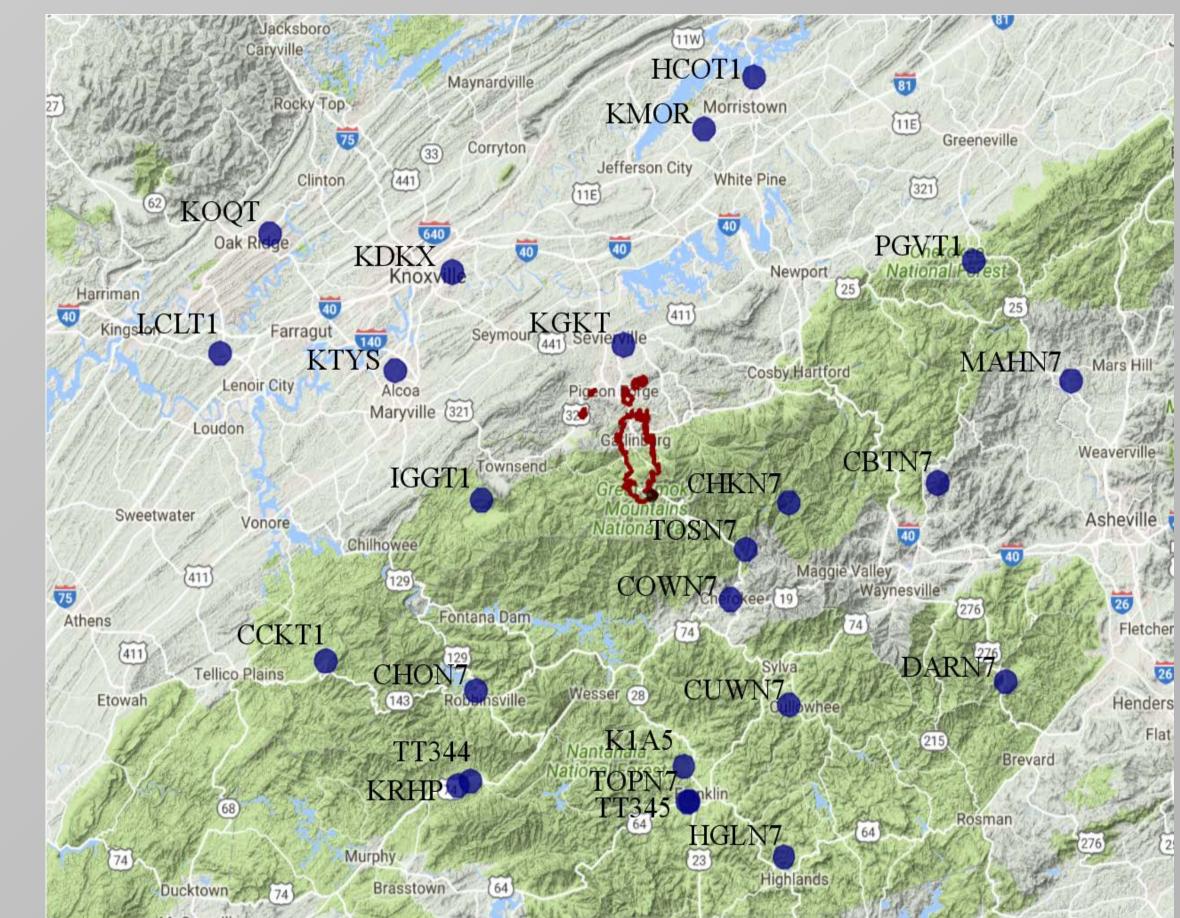
Chimney Top 2 Fire (Gatlinburg, TN)



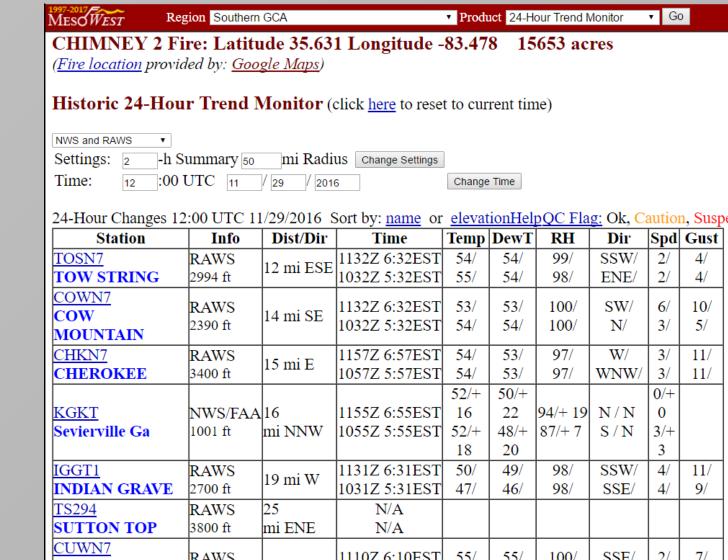
Meteorological Conditions



Time Series for Fire Growth



Previous Table



Summary

Web Application: Table Function and Features

Monitoring Weather Conditions Near Wildfires										
Currently in DEMO mode,	showing t	the Chimney Top 2	Fire (Gatlinburg, TN).						
For an introduction and m	ore inforr	mation on this page	, click <mark>here.</mark>							
			,							
Current time: Nov 29	2016 ()1:35:00 UTC								
Air Temperature -	Station	Distance To Fire	Bearing To Fire	Time From	Air	Relative	Wind	Wind	Wind	Weather
Min:	ID	Perimeter ©	Perimeter	Observation	Temperature	Humidity	Speed	Gust	Direction	Condition
Max:		mi	Degrees	Minutes	°F	%	mph	mph		
Relative Humidity -	KGKT	4	160	20	68.0	40	24.2	33.4	SSW	Overcast
Min:	TOSN7	11	299	63	54.0	71	4.0	17.0	S	
	COWN7	14	322	63	56.0	69	6.0	18.0	WSW	
Max:	IGGT1	14	52	64	57.0	61	13.0	44.0	SW	
Wind Speed -	CHKN7	15	273	38	53.0	69	8.0	25.0	WNW	
Min:	KDKX	20	129	20	68.0	46	16.1	38.0	SW	Partly Cloudy
Max:	KTYS	21	102	5	66.2	49	27.6	34.5	S	
Wind Gust -	CUWN7	26	326	25	53.0	78	13.0	32.0	S	
Min:	KMOR	26	194	20	55.4	62	6.9	16.1		Overcast
Max:	CHON7	27	40	30	61.0	59	9.0	23.0	SSW	
IVIGA	K1A5	28	351	10	56.5	71	5.8		SSW	Drizzle
	CBTN7	31	273	32	40.0	100	0.0	0.0		
Apply	TT345	32	351	20	60.3	63	1.6		Е	
	TOPN7	32	351	30	56.0	74	6.0	26.0	S	
Apply & Update URL	HCOT1	33	201	30	58.0	56	6.0	15.0	NNE	
	TT344	35	33	20	57.4	72	5.4		NW	
Exclude stations that do not meet any of the	KRHP	36	34	10	59.4	67	15.0	23.0	SSW	
	CCKT1	38	61	36	62.0	58	11.0	47.0	NE	
selected parameters?	PGVT1	38	252	36	52.0	68	20.0	60.0	NE	

Air Temperature -			Bearing To Fire	Time From	Air	Relative	Wind	Wind	Wind	Weather
Min: 60	ID	Perimeter o	Perimeter	Observation	Temperature		Speed	Gust	Direction	Condition
Max:		mi	Degrees	Minutes	°F	%	mph	mph		
Relative Humidity -	KGKT	4	160	20	68.0	40	24.2	33.4		Overcast
Min:	TOSN7		299	63	54.0	71	4.0	17.0	S	
Max: 20	COWN7		322	63	56.0	69	6.0	18.0	WSW	
Wind Speed -		14	52	64	57.0	61	13.0	44.0	SW	
	CHKN7		273	38	53.0	69	8.0	25.0	WNW	D 41 CL 1
Min: 20	KDKX	20	129	20	68.0	46	16.1	38.0	SW	Partly Cloud
Max:	KTYS	21	102	5	66.2	49	27.6	34.5	S	
Wind Gust -	CUWN7		326	25	53.0	78	13.0	32.0	S	
Min: 30	KMOR		194	20	55.4	62	6.9	16.1	CCIA	Overcast
Max:	CHON7		40	30	61.0	59	9.0	23.0	SSW	5
	K1A5	28	351	10	56.5	71	5.8		SSW	Drizzle
	CBTN7		273	32	40.0	100	0.0	0.0	_	
Apply	TT345	32	351	20	60.3	63	1.6		E	
Apply & Update URL	TOPN7		351	30	56.0	74	6.0	26.0	S	
Apply & Opuate OKL	HCOT1		201	30	58.0	56	6.0	15.0	NNE	
Exclude stations that do not meet any of the selected parameters?	TT344		33	20	57.4	72	5.4	22.0	NW	
	KRHP	36	34	10	59.4	67	15.0	23.0	SSW	
	CCKT1		61	36	62.0	58	11.0	47.0		
	PGVT1		252	36	52.0	68	20.0	60.0	NE	Our me = = t
		39	118	42	66.0	47	9.2	24.2	S	Overcast
	HGLN7		337	30	45.0	99	12.0	32.0		
			99	30	62.0	55	6.0		S	
	DARN7	43	296	31	46.0	86	3.0	14.0	SW	

Acknowledgemen ts

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