

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)



Photo credit: Courtesy of National Park Services Staff via REUTERS

Web Application: Table Function and Features

Monitoring Weather Conditions Near Wildfires

Currently in DEMO mode, showing the Chimney Top 2 Fire (Gatlinburg, TN).
For an introduction and more information on this page, click [here](#).

Current time: Nov 29 2016 01:35:00 UTC

Air Temperature - Min: <input type="text"/> Max: <input type="text"/> Relative Humidity - Min: <input type="text"/> Max: <input type="text"/> Wind Speed - Min: <input type="text"/> Max: <input type="text"/> Wind Gust - Min: <input type="text"/> Max: <input type="text"/>	Station ID	Distance To Fire Perimeter	Bearing To Fire Perimeter	Time From Observation	Air Temperature °F	Relative Humidity %	Wind Speed mph	Wind Gust mph	Wind Direction	Weather Condition
		mi	Degrees	Minutes	°F	%	mph	mph		
	KGKT	4	160	20	68.0	40	24.2	33.4	SSW	Overcast
	TOSN7	11	299	63	54.0	71	4.0	17.0	S	
	COWN7	14	322	63	56.0	69	6.0	18.0	WSW	
	IGGT1	14	52	64	57.0	61	13.0	44.0	SW	
	CHKN7	15	273	38	53.0	69	8.0	25.0	WNW	
	KDKX	20	129	20	68.0	46	16.1	38.0	SW	Partly Cloudy
	KTYS	21	102	5	66.2	49	27.6	34.5	S	
	CUWN7	26	326	25	53.0	78	13.0	32.0	S	
	KMOR	26	194	20	55.4	62	6.9	16.1		Overcast
	CHON7	27	40	30	61.0	59	9.0	23.0	SSW	
	K1A5	28	351	10	56.5	71	5.8		SSW	Drizzle
	CBTN7	31	273	32	40.0	100	0.0	0.0		
	TT345	32	351	20	60.3	63	1.6		E	
	TOPN7	32	351	30	56.0	74	6.0	26.0	S	
	HCOT1	33	201	30	58.0	56	6.0	15.0	NNE	
	TT344	35	33	20	57.4	72	5.4		NW	
	KRHP	36	34	10	59.4	67	15.0	23.0	SSW	
	CCKT1	38	61	36	62.0	58	11.0	47.0	NE	
	PGVT1	38	252	36	52.0	68	20.0	60.0	NE	

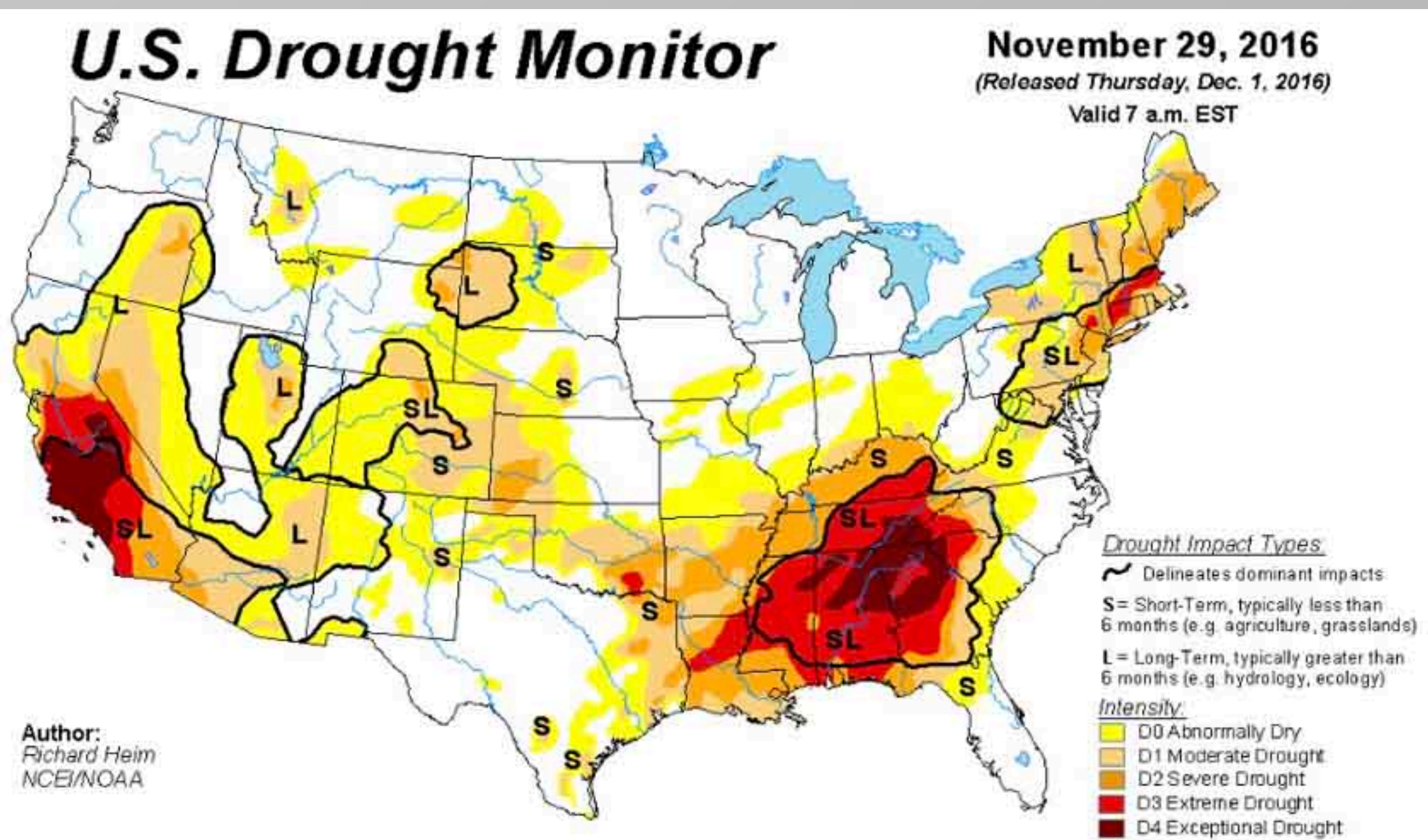
Exclude stations that do not meet any of the selected parameters? ☐

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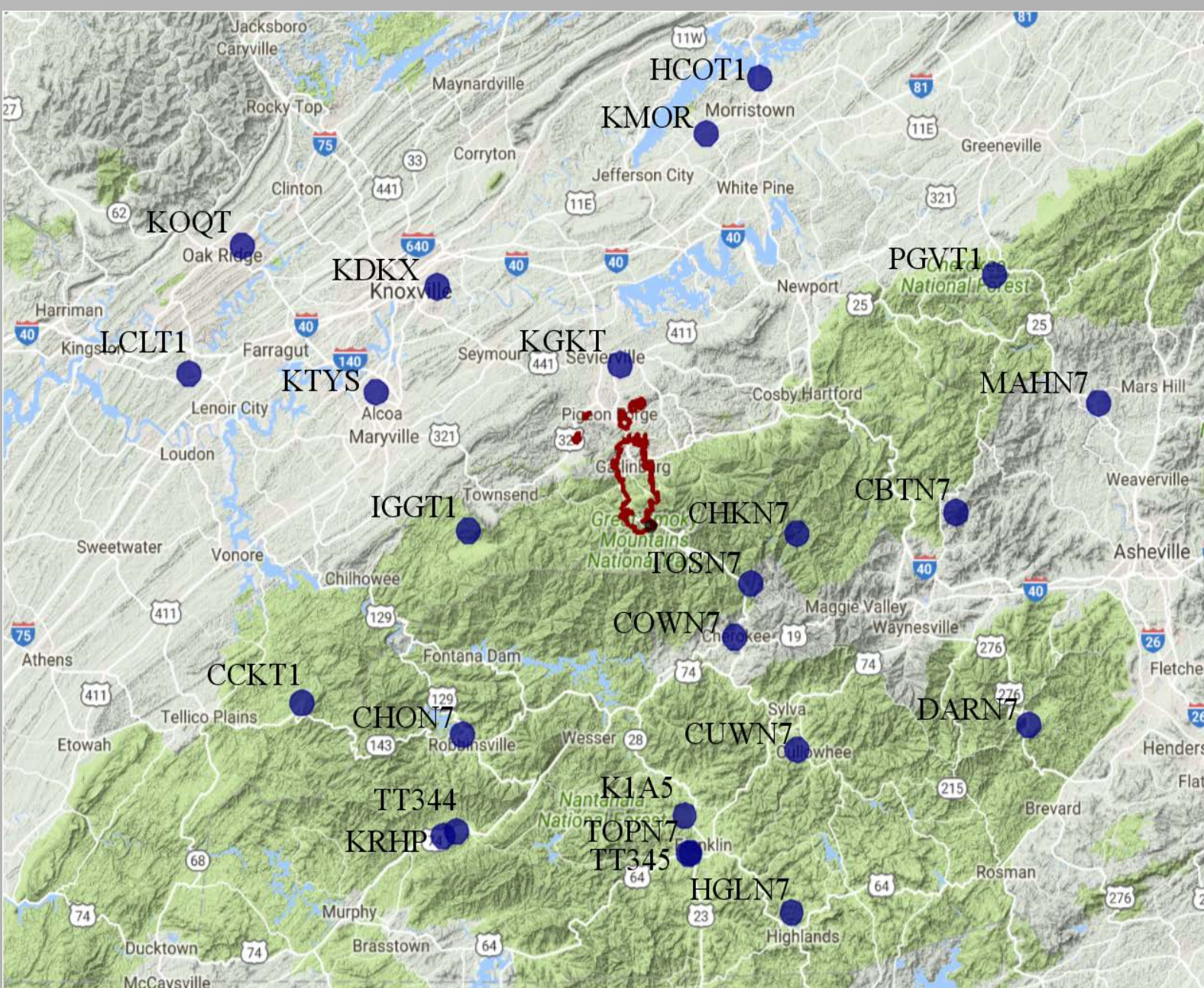
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	KDKX	20	129	20	68.0	46	16.1	38.0	SW	Partly Cloudy
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	KGKT	4	160	20	68.0	40	24.2	33.4	SSW	Overcast
	CUWN7	26	326	25	53.0	78	13.0	32.0	S	
	HGLN7	40	337	30	45.0	99	12.0	32.0	S	
	TOPN7	32	351	30	56.0	74	6.0	26.0	S	
	CHKN7	15	273	38	53.0	69	8.0	25.0	WNW	
	KOQT	39	118	42	56.0	47	9.2	24.2	S	Overcast
	KRHP	36	34	10	59.4	67	15.0	23.0	SSW	
	CHON7	27	40	30	61.0	59	9.0	23.0	SSW	
	COWN7	14	322	63	56.0	69	6.0	18.0	WSW	
	TOSN7	11	299	63	54.0	71	4.0	17.0	S	
	KMOR	26	194	20	55.4	62	6.9	16.1		Overcast
	MAHN7	47	259	27	51.0	70	3.0	16.0	SW	
	HCOT1	33	201	30	58.0	56	6.0	15.0	NNE	
	DARN7	43	296	31	46.0	86	3.0	14.0	SW	
	LCLT1	40	99	30	62.0	55	6.0	11.0	S	
	K1A5	28	351	10	56.5	71	5.8		SSW	Drizzle
	CBTN7	31	273	32	40.0	100	0.0	0.0		
	TT344	35	33	20	57.4	72	5.4		NW	
	TT345	32	351	20	60.3	63	1.6		E	

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Meteorological Conditions



Fire Growth



Summary and Conclusions

Acknowledgements

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