

National Fire Weather Report



2011

By

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IMET Summary 2011

For a weather summary of fire season 2011, please see:

NOAA National Climatic Data Center, State of the Climate: Wildfires for Annual 2011, published online December 2011, retrieved on January 25, 2012 from <http://www.ncdc.noaa.gov/sotc/fire/2011/13>.

For a summary of fire season 2011 from the National Interagency Fire Center, please see:

http://www.predictiveservices.nifc.gov/intelligence/2011_statssumm/2011Stats&Summ.html

Calendar year 2011 was the 7th busiest season on record (since 1987) for Incident Meteorologist (IMET) dispatches. The season started early with severe drought impacting west Texas and the Southwest. IMETs were requested to support statewide Texas Forest Service Support starting in late February. This support lasted through the end of the year and continues as of this writing in 2012 with only a brief break the week of Christmas. This 10+ month on site meteorological support marks the longest on site meteorological support for any particular event in the history of the IMET program, surpassing the 7 months of support for the Texas fires of 2009 and the 5 months of support for the Deepwater Horizon oil spill off the coast of Louisiana in 2010.

While drought continued in the Southwest, a cold, wet spring in the Pacific Northwest resulted in a late starting fire season for areas of the Great Basin and Pacific Northwest. The first fire requiring an IMET in this area for the 2011 season was the Indian Fire in Idaho late July. The next fire requiring IMET support in this area didn't occur until late August. While the season modifying or ending precipitation was late in arriving in the fall of 2011, the last support in the Great Basin and Pacific Northwest occurred in late September, resulting in a very short 2 month season for this area.

Non-wildfire support was also rendered for flooding incidents in the Midwest. In a significant change in the entities that order IMET support, State requests, driven mainly by the Texas Forest Service requests, nearly outnumbered the number of federal requests, with 66 IMET dispatches requested by state governments for wildland fire and 69 being requested by federal wildland fire agencies. The remaining dispatches (12) were requests from federal and state agencies for non-wildfire support.

IMET Dispatches 2011

<i>IMET Home Office</i>	<i>County Warning Area</i>	<i>Incident Location, State</i>	<i>Dispatch</i>	<i>Return</i>	<i>Days</i>
Manuel Blacksburg, VA	LWX	Valley Complex near Harrisonburg, VA	2/21/11	2/24/11	4
Murdoch Midland, TX	SJT	TFS Support near Merkel, TX	2/23/11	3/10/11	16
Bird El Paso, TX			3/9/11	3/19/11	11
Okulski (Type 2) Memphis, TN			3/17/11	3/27/11	11
Goudsward Little Rock, AR			3/26/11	4/10/11	16
Byrd Jackson, MS			4/9/11	4/25/11	17
Davis Tampa, FL			4/23/11	5/8/11	16
Dunn (T) Fort Worth, TX			4/20/11	4/26/11	7
McKinney (T) Houston, TX			4/26/11	5/4/11	9
Prochazka (T) Houston, TX			5/5/11	5/18/11	14
Evenson Burlington, VT			5/6/11	5/21/11	21
Barron (T) Tampa, FL			5/17/11	5/25/11	9
Jacobson Jackson, KY			5/19/11	6/5/11	18
Frantz Peachtree City, GA			6/4/11	6/19/11	16

<i>IMET Home Office</i>	<i>County Warning Area</i>	<i>Incident Location, State</i>	<i>Dispatch</i>	<i>Return</i>	<i>Days</i>
Lynn Peachtree City, GA	SJT	TFS Support (cont.) near Merkel, TX	6/17/11	6/29/11	13
Murdoch Midland, TX			6/30/11	7/6/11	7
Byrd Jackson, MS			7/6/11	7/22/11	17
Edwards Jackson, KY			7/20/11	8/4/11	16
Goudsward Little Rock, AR			8/2/11	8/8/11	7
Byrd Jackson, MS			8/8/11	8/25/11	18
Lynn Peachtree City, GA			8/23/11	9/7/11	16
Pelton Jackson, KY			9/5/11	9/20/11	16
Harris Fort Worth, TX			9/18/11	10/3/11	16
Davis Tampa, FL			10/1/11	10/16/11	16
Harris Fort Worth, TX			10/14/11	10/29/11	16
Stubblefield Flagstaff, AZ			10/27/11	11/8/11	13
Jacobson Jackson, KY			11/7/11	11/22/11	16
Thompson Oxnard, CA			11/20/11	12/5/11	16
Pendergrast Melbourne, FL			12/3/11	12/18/11	16
Haner Seattle, WA			12/29/11	1/13/12	16

<i>IMET Home Office</i>	<i>County Warning Area</i>	<i>Incident Location, State</i>	<i>Dispatch</i>	<i>Return</i>	<i>Days</i>
Hooper Paducah, KY	HGX	TFS EOC Support near College Station, TX	3/8/11	3/16/11	9
Chamberlain Grand Junction, CO	BOU	Indian Gulch Fire near Golden, CO	3/23/11	3/26/11	4
Quagliariello Charleston, SC	CHS	Ogeechee Complex near Ogeechee, GA	3/26/11	3/31/11	6
Frantz Peachtree City, GA	JAX	SE GA Complex near Waycross, GA	3/27/11	4/5/11	10
Bird El Paso, TX	EPZ	White Fire near Ruidoso, NM	4/4/11	4/8/11	5
Moore Pueblo, CO	BOU	Crystal Fire near Fort Collins, CO	4/6/11	4/11/11	6
Hooper Paducah, KY	FGF	ND Flood Support near Moorhead, ND	4/8/11	4/15/11	8
Murdoch Midland, TX	MAF	Trans Pecos Complex near Midland, TX	4/14/11	5/2/11	19
Petersen Pueblo, CO			5/1/11	5/15/11	15
Pieper SR HQ	FWD	PK West Complex near Breckenridge, TX	4/19/11	4/27/11	9
Pieper SR HQ	MAF	Rock House Fire near Fort Davis, TX	4/27/11	5/1/11	5
Pendergrast Melbourne, FL			4/30/11	5/3/11	4
Hooper Paducah, KY	PAH	McCracken County EOC Support near Paducah, KY	4/29/11	5/12/11	14
Thompson Oxnard, CA	TBW	Bull Fire near Nogales, AZ	4/30/11	5/4/11	5
Pelton Jackson, KY	MFL	Jarhead Fire near Ochopee, FL	5/1/11	5/13/11	13

<i>IMET Home Office</i>	<i>County Warning Area</i>	<i>Incident Location, State</i>	<i>Dispatch</i>	<i>Return</i>	<i>Days</i>
Pendergrast Melbourne, FL	BMX	AL Tornado Recovery near Birmingham, AL	5/3/11	5/15/11	13
Pellerito Charleston, WV			5/14/11	5/29/11	16
Goudsward Little Rock, AR			5/27/11	6/12/11	17
Smith Sacramento, CA			6/10/11	6/26/11	17
Hooper Paducah, KY			6/24/11	7/3/11	10
Haner Seattle, WA			7/1/11	7/17/11	17
Baker Riverton, WY			7/15/11	7/31/11	17
Quagliariello Charleston, SC	JAX	Honey Prairie Fire near Fargo, GA	5/7/11	5/20/11	14
Fox (T) Spokane, WA			5/14/11	5/29/11	16
Ippoliti Binghamton, NY			5/18/11	6/1/11	15
Tonkin Eureka, CA			5/28/11	6/12/11	16
Lewis (T) Charleston, WV			5/31/11	6/14/11	15
Hockenberry NWS HQ – NIFC			6/10/11	6/24/11	15
Jelsema (T) Charleston, SC			6/13/11	6/29/11	17
Decker Boise, ID			6/22/11	7/8/11	17

<i>IMET Home Office</i>	<i>County Warning Area</i>	<i>Incident Location, State</i>	<i>Dispatch</i>	<i>Return</i>	<i>Days</i>
Kennedy (T) Morehead City, NC		Honey Prairie Fire (cont.) near Fargo, GA	6/24/11	7/9/11	16
Goudswaard Little Rock, AR			7/7/11	7/22/11	16
Bettwy (T) Miami, FL			7/7/11	7/22/11	16
Franks Wilmington, OH			7/20/11	8/2/11	14
Wachter Albuquerque, NM	FGZ	Locust Fire near Whiteriver, AZ	5/8/11	5/12/11	5
Merrell Newport, NC	MHX	Pains Bay Fire near Manns Harbor, NC	5/9/11	5/23/11	15
Ramey Grand Junction, CO	TWC	Horseshoe 2 Fire near Elfrida, AZ	5/9/11	5/23/11	15
Waranauskas (T) Great Falls, MT			5/14/11	5/24/11	11
Clapp Sacramento, CA			5/22/11	6/3/11	13
Thompson Oxnard, CA			6/2/11	6/17/11	16
Reedy Tucson, AZ			6/15/11	6/29/11	15
Bird El Paso, TX	EPZ	Mayhill Fire near Mayhill, NM	5/11/11	5/17/11	7
Wachter Albuquerque, NM	EPZ	Miller Fire near Silver City, NM	5/12/11	5/25/11	14
Hoon (T) Reno, NV			5/14/11	5/26/11	13
Bird El Paso, TX			5/24/11	6/4/11	12
Manuel Blacksburg, VA		SACC Support near Atlanta, GA	5/17/11	5/30/11	14

<i>IMET Home Office</i>	<i>County Warning Area</i>	<i>Incident Location, State</i>	<i>Dispatch</i>	<i>Return</i>	<i>Days</i>
Hooper Paducah, KY	SGF	Joplin EOC Support near Joplin, MO	5/23/11	6/1/11	10
Meyers Phoenix, AZ	TWC	Arlene Fire near Patagonia, AZ	5/25/11	5/26/11	2
Paulson Minneapolis, MN	SGF	Joplin FEMA Support near Joplin, MO	5/26/11	6/10/11	16
Wachter Albuquerque, NM	TWC	Wallow Fire near Alpine, AZ	5/30/11	6/14/11	16
Survick Pocatello, ID	PUB	Bear Fire near Raton, NM	6/1/11	6/4/11	4
Ruthford Portland, OR	ABQ	Osha Fire near Penasco, NM	6/2/11	6/7/11	6
Survick Pocatello, ID	TWC	Wallow Fire near Springerville, AZ	6/4/11	6/17/11	14
Hoon (T) Reno, NV			6/8/11	6/22/11	15
Meyers Phoenix, AZ			6/21/11	7/2/11	12
Ruthford Portland, OR	TWC	Wallow Fire near Globe, AZ	6/7/11	6/19/11	13
McKinney (T) Houston, TX			6/12/11	6/27/11	16
Brenchley Honolulu, HI			6/15/11	6/29/11	15
Richmond Anchorage, AK	AFG	Hastings Fire near Fairbanks, AK	6/8/11	6/20/11	13
Berg (T) Fairbanks, AK			6/8/11	6/20/11	13
Harrison Las Vegas, NV	ABQ	Track Fire near Raton, NM	6/13/11	6/21/11	9
Stubblefield Flagstaff, AZ	FGZ	Wallow Fire near Reserve, NM	6/13/11	6/28/11	16

<i>IMET Home Office</i>	<i>County Warning Area</i>	<i>Incident Location, State</i>	<i>Dispatch</i>	<i>Return</i>	<i>Days</i>
Struthwolf Salt Lake City, UT	TWC	Monument Fire near Hereford, AZ	6/14/11	6/29/11	16
Kubina Cleveland, OH			6/27/11	7/1/11	5
Moore Pueblo, CO	PUB	Duckett Fire near Westcliffe, CO	6/15/11	6/21/11	7
Rothfuss Miami, FL	MFL	Oil Pad Complex near Ochopee, FL	6/16/11	6/24/11	9
Wachter Albuquerque, NM	ABQ	Pacheco Fire near Santa Fe, NM	6/19/11	7/3/11	15
Dodd (T) Eureka, CA			6/22/11	7/3/11	12
Pendergrast Melbourne, FL	JAX	Race Pond Fire near Waycross, GA	6/20/11	7/3/11	14
Chamberlain Grand Junction, CO	ABQ	Las Conches Fire near Los Alamos, NM	6/27/11	7/12/11	16
Tobin Spokane, WA			6/29/11	7/13/11	15
Loeffelbein (T) Missoula, MT			7/1/11	7/16/11	16
Clemmons (T) Flagstaff, AZ			7/2/11	7/13/11	12
Bunnag Medford, OR			7/6/11	7/19/11	14
Gilchrist Glasgow, MT			7/18/11	7/24/11	7
Wallmann Reno, NV	TWC	Stanley Fire near San Carlos, AZ	6/28/11	6/30/11	3
Thompson Oxnard, CA			6/30/11	7/4/11	5
Bird El Paso, TX	EPZ	Donaldson Fire near Sacramento, NM	6/30/11	7/6/11	7

<i>IMET Home Office</i>	<i>County Warning Area</i>	<i>Incident Location, State</i>	<i>Dispatch</i>	<i>Return</i>	<i>Days</i>
Quagliariello Charleston, SC	JAX	Sweat Farm Again Fire near Waycross, GA	7/5/11	7/19/11	15
Hoenisch Great Falls, MT	PIH	Indian Fire near North Fork, ID	7/21/11	8/2/11	13
Balfour San Diego, CA	SGX	Eagle Fire near Warner Springs, CA	7/23/11	7/29/11	7
Lutz Medford, OR	MFR	Anna Fire near Summer Lake, OR	8/9/11	8/11/11	3
Kennedy Newport, NC	AKQ	Lateral West Fire near Suffolk, VA	8/10/11	8/25/11	16
Pellerito Charleston, WV			8/23/11	8/29/11	7
Wachter Albuquerque, NM	MAF	Baton Rouge Complex near Roswell, NM	8/10/11	8/14/11	5
Manuel Blacksburg, VA	SHV	TFS Support – East Branch near Lufkin, TX	8/17/11	9/1/11	16
Prochazka Houston, TX			8/29/11	9/15/11	18
Goldstein Sacramento, CA	REV	Ray May Fire near Gardnerville, NV	8/19/11	8/22/11	4
Gettman Medford, OR	REV	Annie Fire near Fort Bidwell, CA	8/19/11	8/22/11	4
Decker Boise, ID	JAX	Honey Prairie Fire near Fargo, GA	8/23/11	9/9/11	18
Hockenberry NWSHQ – Boise			9/8/11	9/21/11	14
Jelsema Charleston, SC			9/19/11	10/4/11	16
Rothfuss Miami, FL			10/2/11	10/15/11	14
Cerniglia Seattle, WA			10/13/11	10/28/11	16

<i>IMET Home Office</i>	<i>County Warning Area</i>	<i>Incident Location, State</i>	<i>Dispatch</i>	<i>Return</i>	<i>Days</i>
Lipson Riverton, WY	CYS	Squaw Mtn Fire near Wheatland, WY	8/23/11	8/26/11	4
Survick Pocatello, ID	RIW	Hole in the Wall Fire near Clark, WY	8/24/11	9/2/11	10
Nester Missoula, MT	BYZ	Diamond Complex near Ashland, MT	8/25/11	9/1/11	8
Lipson Riverton, WY	CYS	Cheyenne River Fire near Lusk, WY	8/26/11	8/30/11	5
Bean Hanford, CA	HNX	Motor Fire near Mariposa, CA	8/27/11	9/2/11	7
Bonk Pendleton, OR	PDT	High Cascades Complex near Warm Springs, OR	8/27/11	9/6/11	11
Redman Boise, ID	PIH	Salt Fire near Salmon, ID	8/28/11	9/12/11	16
Van Bussum NWSHQ-Boise			9/9/11	9/24/11	16
Cerniglia Seattle, WA	PQR	Dollar Lake Fire near Odell, OR	8/30/11	9/13/11	15
Wolf Spokane, WA			9/11/11	9/25/11	15
Weishaar Portland, OR			9/23/11	9/26/11	4
Solomon Pendleton, OR	PDT	High Cascades Complex near Warm Springs, OR	9/2/11	9/16/11	15
Trimarco (T) Pendleton, OR			9/7/11	9/16/11	10
Borsum Billings, MT	CYS	Christnick Fire near Laramie, WY	9/2/11	9/3/11	2
Harris Fort Worth, TX	OUN	Ferguson Fire near Indianahoma, OK	9/2/11	9/10/11	9
Ruthford Portland, OR	PDT	Shadow Lake Fire near Sisters, OR	9/3/11	9/17/11	15

<i>IMET Home Office</i>	<i>County Warning Area</i>	<i>Incident Location, State</i>	<i>Dispatch</i>	<i>Return</i>	<i>Days</i>
Thompson Oxnard, CA	HNX	Canyon Fire near Tehachapi, CA	9/5/11	9/10/11	6
Wachter Albuquerque, NM	EWX	Bastrop Complex near Bastrop, TX	9/6/11	9/16/11	11
Bird El Paso, TX	HGX	Southeast Texas Fire Complex near Conroe, TX	9/9/11	9/29/11	21
Messick Pocatello, ID	PDT	Cactus Mountain Fire near Imnaha, OR	9/9/11	9/15/11	7
Murdoch Midland, TX	SHV	Northeast Texas Fire Complex near Longview, TX	9/10/11	9/26/11	17
Thompson Oxnard, CA	HNX	Keene Complex near Tehachapi, CA	9/10/11	9/14/11	5
Loeffelbein Missoula, MT	MSO	Forty One Complex near Hamilton, MT	9/10/11	9/19/11	10
Haner Seattle, WA	SEW	Big Hump Fire near Brinnon, WA	9/10/11	9/13/11	4
Wallmann Reno, NV	HNX	Comanche Fire near Arvin, CA	9/11/11	9/15/11	5
Sullivan (T) San Diego, CA			9/12/11	9/15/11	4
Paulson Minneapolis, MN	DLH	Pagami Creek Fire near Ely, MN	9/12/11	9/27/11	16
Lewis (T) Charleston, WV			9/17/11	9/24/11	8
Lewis Charleston, WV			9/24/11	10/1/11	8
Fleegel Marquette, MI			9/29/11	10/13/11	15
Lutz Medford, OR	MFR	Umpqua Complex near Diamond Lake, OR	9/12/11	9/19/11	8

<i>IMET Home Office</i>	<i>County Warning Area</i>	<i>Incident Location, State</i>	<i>Dispatch</i>	<i>Return</i>	<i>Days</i>
Harrison Las Vegas, NV	HNX	Breckenridge Complex near Bakersfield, CA	9/12/11	9/17/11	6
Manuel Blacksburg, VA	FFC	SACC Support near Atlanta, GA	9/15/11	9/27/11	13
Borsum Billings, MT	BYZ	Boone Mt Rx near McLeod, MT	9/21/11	9/23/11	3
Tonkin Eureka, CA	EKA	Ruth Fire near Ruth, CA	9/24/11	9/29/11	6
Carter Spokane, WA	SHV	Southeast Texas Fire Complex near Lufkin, TX	9/25/11	10/10/11	16
Dumont (T) Elko, NV			9/29/11	10/10/11	12
Struthwolf Salt Lake City, UT			10/8/11	10/23/11	16
Weishaar Portland, OR			10/21/11	10/28/11	9
Harty Hanford, CA	SGX	Great Fire near Rosemont, CA	10/3/11	10/6/11	4
Hoon Reno, NV	LKN	Dunphy Complex near Battle Mountain, NV	10/3/11	10/5/11	3
Lewis Charleston, WV	RLX	Bridge Day 2011 near Fayetteville, WV	10/15/11	10/15/11	1
Hooper Paducah, KY	FFC	SACC Support near Atlanta, GA	10/18/11	11/1/11	15
Hooper Paducah, KY			11/10/11	11/21/11	12
Brenchley Honolulu, HI	HFO	APEC Conference near Honolulu, HI	11/11/11	11/13/11	3
Wroe (T) Honolulu, HI			11/11/11	11/13/11	3

IMET Incident Response Summary

<i>YEAR</i>	<i>FIRES</i>	<i>ACRES</i>	<i>IMET DISPATCHES</i>	<i>IMET DAYS</i>	<i>IMET HOURS</i>
1987	143,877	4,152,575	87	587	8,218
1988	154,573	7,398,889	123	912	12,768
1989	121,714	3,261,732	58	344	4,816
1990	122,763	5,452,874	42	264	3,696
1991	116,953	2,237,714	29	171	2,394
1992	103,830	2,457,665	42	261	3,654
1993	97,031	2,310,420	15	89	1,246
1994	114,049	4,724,014	117	954	13,356
1995	130,019	2,315,730	27	201	2,814
1996	115,025	6,701,390	106	781	10,934
1997	89,517	3,672,616	15	94	1,316
1998	81,043	2,329,709	94	951	13,314
1999	93,702	5,661,976	81	553	7,742
2000	122,827	8,422,237	204	1,565	21,910
2001	84,079	3,555,138	112	924	12,936
2002	88,458	6,937,584	174	1,490	20,860
2003	85,943	4,918,088	152	1,406	19,684
2004	77,534	6,790,692	91	662	9,268
2005	66,552	8,686,753	103	794	11,116
2006	96,385	9,873,745	207	1,920	26,880
2007	85,822	9,321,326	185	1,947	27,258
2008	80,094	5,254,109	171	1,781	24,934
2009	78,792	5,921,786	71	680	9,520
2010	71,971	3,422,724	80	759	10,626
2011	74,126	8,711,367	147	1678	23,492
'87 - '11 Average	99,867	5,379,714	101	869	12,164
'02 - '11 Average	80,568	6,983,817	138	1,312	18,364

Table 1. Years highlighted in gold are the top 3 years in terms of acres burned. Years highlighted in gray are the bottom 3 years in terms of acres burned.

2011 Statistics

The trend of acres burned as well as IMET dispatches has been on the rise over the last decade. The chart below shows the upward trend in the last 10 years.

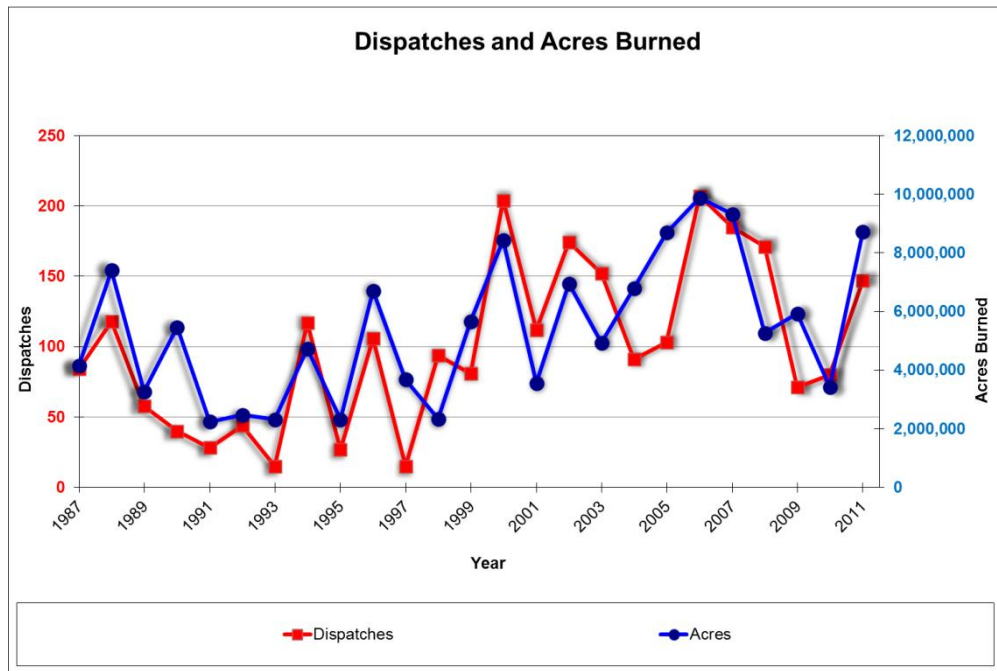


Chart 1. IMET dispatches and acres burned from 1987 through 2011.

IMET dispatches were on a record pace through June due to the fire activity in the Southwest, but a late start to the Western fire season resulted in fewer dispatches through July and August, bringing the overall total closer to the 10 year average.

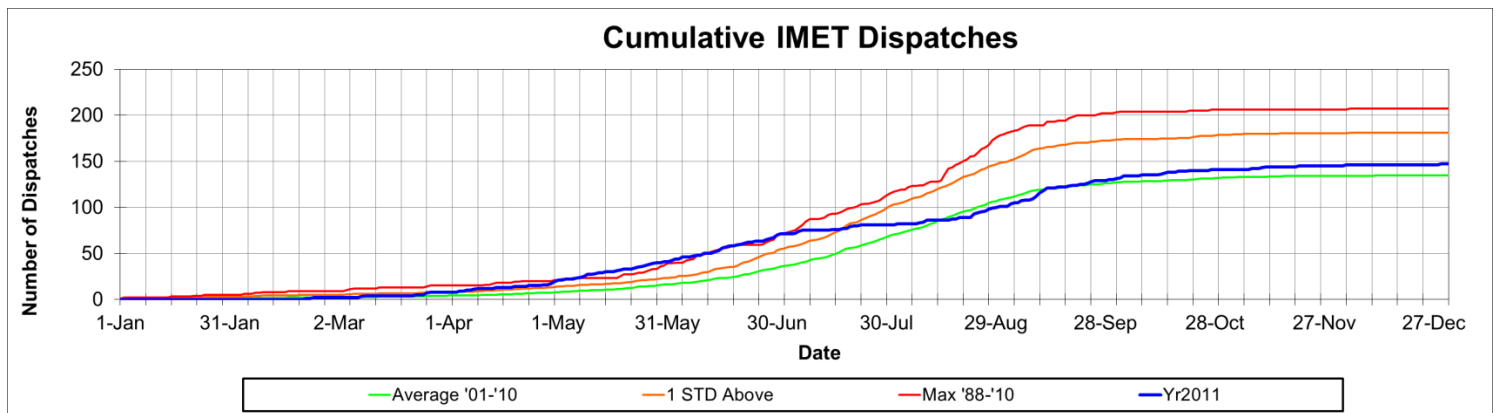


Chart 2. Cumulative IMET Dispatches for 2011.

Increased activity in the Southwest resulted in several days of record number of IMETs on site in May and June. A late fire season in the West resulted in some of the lowest number of IMETs on site during July and early August since records began in 1988.

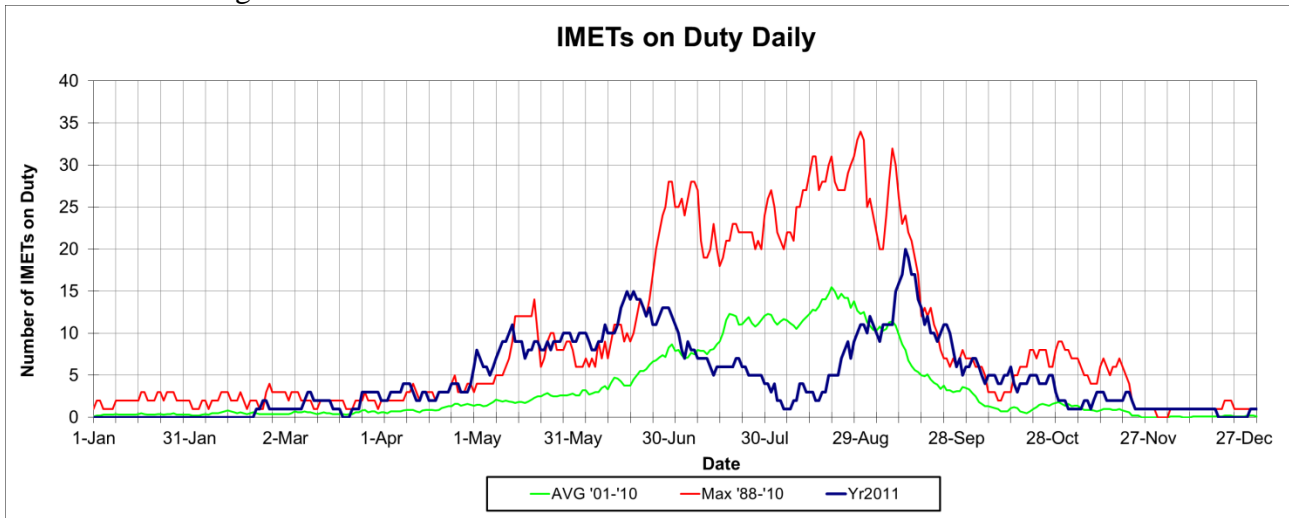


Chart 3. Number of IMETs on assignment each day of 2011.

IMET response is very important to NWS IMET program users. They prefer that the NWS provide IMETs from close-by and within 24 hours of the request for services. This matches expectations of their own incident overhead personnel. The NWS is meeting or exceeding wildland fire agencies' requirement in both distance and time.

Average Distance From IMET Office to Fire	<i>551 miles</i>
Median Distance From IMET Office to Fire	<i>328 miles</i>

Table 2. Average and median distance from an IMET's office to an incident in 2011. The difference is mainly due to the number of IMETs dispatched to Texas to support statewide Texas Forest Service operations.

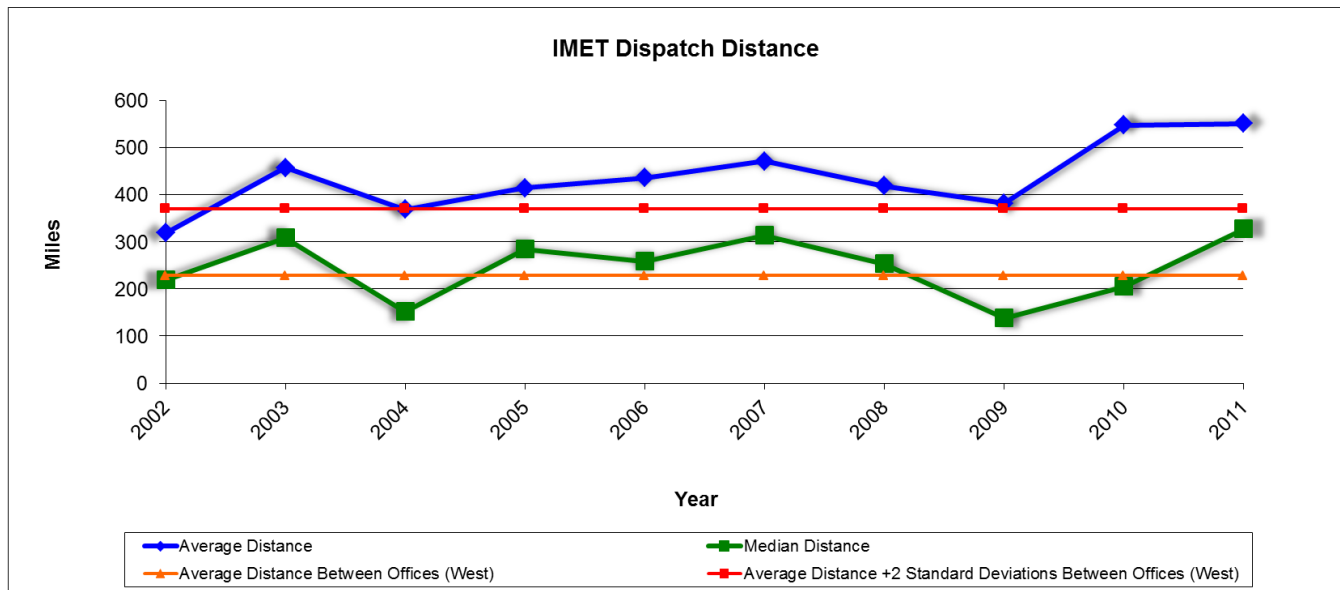


Chart 3. Average and Median Distance from IMET's office to incident since 2002.

Average Time For IMET Dispatch	9.9 hours
Median Time for IMET Dispatch	0 hours
Note: The dispatch times for swap outs are defaulted to “0” hours because there is no wait time on the part of the incident team since an IMET is already on site.	

Table 3. 2011 Average and Median time from the time an IMET is requested until they arrive on site. A median time of “0” means that the majority of dispatches were swap outs.

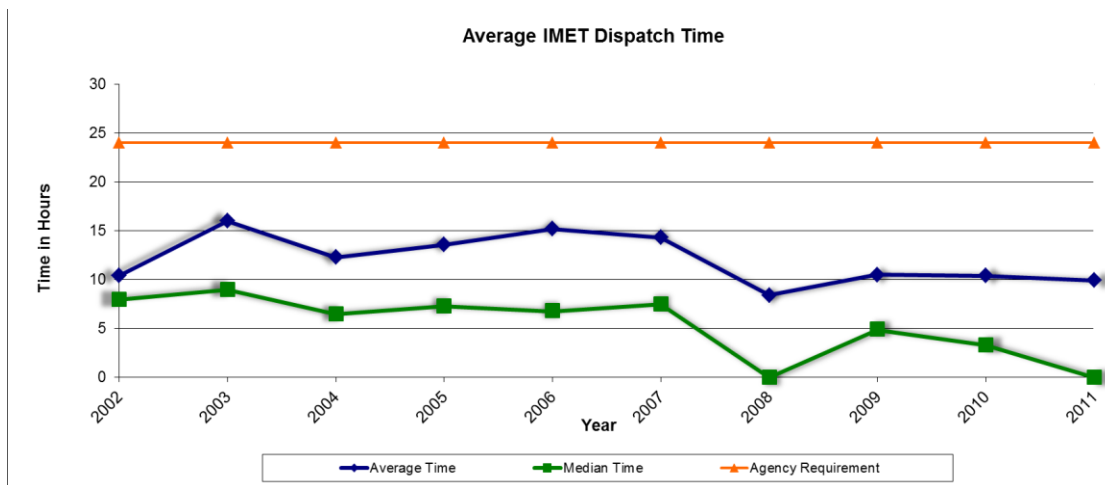


Chart 4. Average and median IMET dispatch times since 2002.

While some IMETs did not get deployed in 2011 due to availability issues, of those that did deploy, on average they had 2 missions. The average number of days per mission was 11. The NWS was able to certify 6 new IMETs in 2011 and filled 100% of the dispatch requests from our users.

2011 Statistics		Notes
Average Number of Dispatches per IMET	2	
Average Number of Days per Dispatch	11	
Percentage of Dispatch Requests Filled	100%	Every request that was received by the National Fire Weather Operations Coordinator (NFWOC) in Boise was filled.
Number of Trainees Completing Training	6	Eastern Region: 3 Western Region: 2 Southern Region: 1

Table 4. Dispatch numbers and days per IMET. Also percentage of requests filled and number of trainees certified in 2011.

The majority of IMETs dispatched in 2011 were from the Western Region.

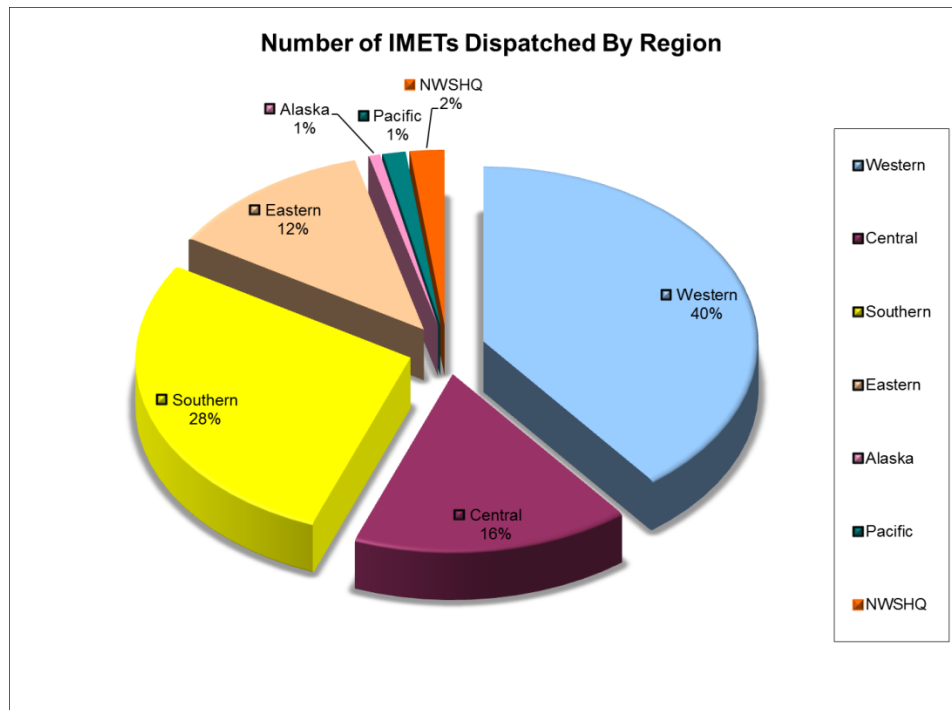


Chart 5. Percentage of IMETs dispatched per NWS Region for 2011.

The majority of incidents over the previous 10 years have been in Western Region.

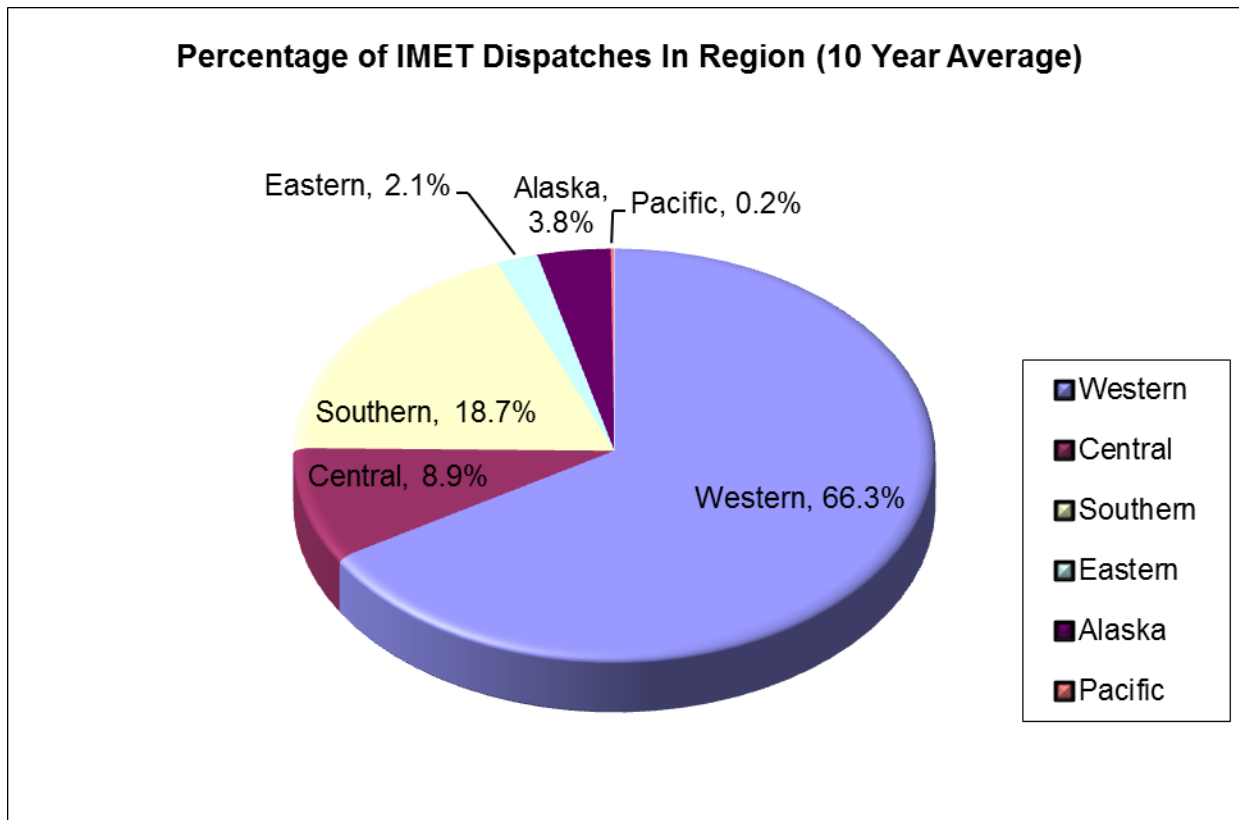


Chart 6. Ten year average percentage of IMET dispatches per NWS Region.

IMET dispatches in 2011 were almost evenly split between the federal fire agencies (Department of Agriculture’s US Forest Service; The Department of Interior’s Bureau of Land Management, Bureau of Indian Affairs, US Fish and Wildlife Service, and the US Park Service) and state fire agencies (in 2011, mainly Texas).

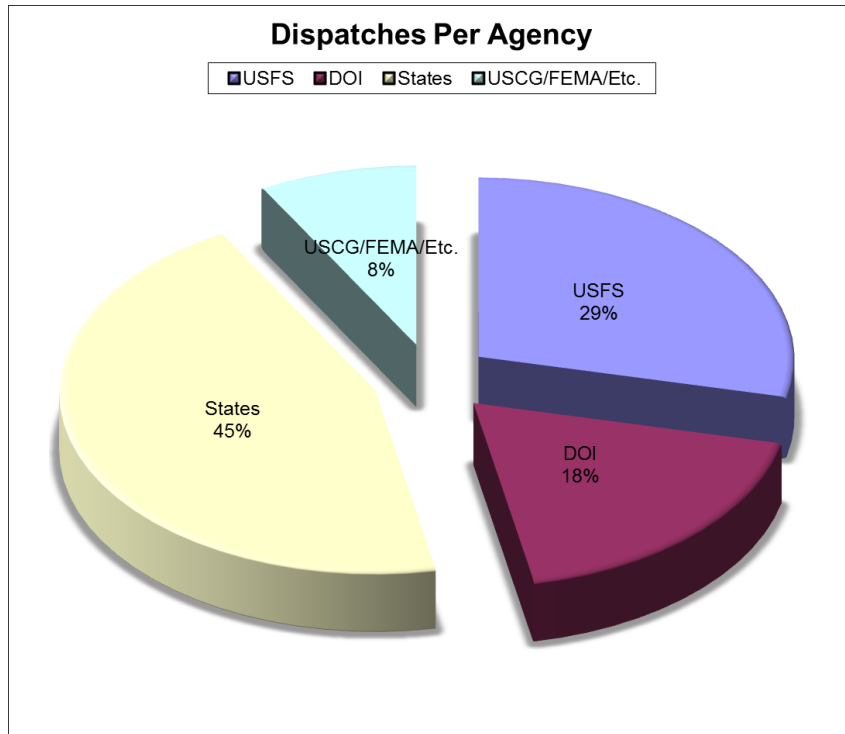


Chart 7. Percentage of total 2011 dispatch requests per agency.

While support for incidents mainly comes from within the same NWS region, there is cooperation between the regions with mutual support. Table 5 shows the within region support and the support external to each region for 2011.

Region	Percentage of Incidents Within Region Covered By Own IMETs	Actual Number	Percentage of Incidents Where IMETs Sent To Another Region to Cover	Actual Number
Western	86%	38 of 44	39%	20
Central	73%	11 of 15	25%	13
Southern	48%	39 of 81	4%	2
Eastern	100%	5 of 5	25%	13
Alaska	100%	1 of 1	0%	0
Pacific	100%	1 of 1	2%	1
NWS HQ	--	--	6%	3

Table 5. IMET support within regions and external to regions for 2011.

Each region of the United States is unique in its fire seasons. These differences are dependent on the fuels available and the climate. The peak fire season times are listed in Table 6 for each NWS region.

Western Region	<i>15 Jun – 15 Sep</i>
Central Region	<i>1 Jun – 15 Sep</i>
Southern Region	<i>1 May – 15 Jul</i>
Eastern Region	<i>1 Jun – 31 Jul, 15 Oct – 15 Nov</i>
Alaska Region	<i>25 May – 15 Aug</i>
Pacific Region	<i>None</i>
Nationally	<i>1 May – 30 Sep</i>

Table 6. Peak fire seasons for each NWS Region.

2011 National Red Flag Warning Verification

NWS offices nationwide issue red flag warnings for expected severe fire weather conditions. Table 7 summarizes the verification statistics for 2011 for red flag warnings.

Region	POD	FAR	CSI	Lead Time (hrs)	Number RFWs Issued	Spot Forecasts
Western Region	<i>0.92</i>	<i>0.27</i>	<i>0.69</i>	<i>18.56</i>	<i>1,277</i>	<i>8,018</i>
Central Region	<i>0.92</i>	<i>0.22</i>	<i>0.73</i>	<i>12.21</i>	<i>4,678</i>	<i>5,069</i>
Eastern Region	<i>0.96</i>	<i>0.08</i>	<i>0.88</i>	<i>10.05</i>	<i>681</i>	<i>1,562</i>
Southern Region	<i>0.89</i>	<i>0.27</i>	<i>0.67</i>	<i>15.27</i>	<i>10,253</i>	<i>5,270</i>
Alaska Region	<i>1.00</i>	<i>0.17</i>	<i>0.83</i>	<i>9.25</i>	<i>75</i>	<i>502</i>
Pacific Region	<i>0.50</i>	<i>0.50</i>	<i>0.33</i>	<i>14.50</i>	<i>56</i>	<i>77</i>
National	<i>0.91</i>	<i>0.25</i>	<i>0.70</i>	<i>14.37</i>	<i>17,020</i>	<i>20,498</i>

Table 7. POD = Probability of Detection; FAR = False Alarm Rate; CSI = Critical Success Index.

The national performance standard for 2011 was:

POD	<i>0.87</i>
Lead Time	<i>10.45 hours</i>

Table 8. 2011 national performance standards.

Table 9 summarizes the national POD, FAR, CSI, Lead Time (in hours), average annual RFWs issued and average annual Spot Forecasts issued since national statistics have been tracked starting in 2003. Chart 8 below indicates a growing trend in the number of red flag warnings issued as well as the number of sport forecasts issued.

POD	FAR	CSI	Lead Time	RFWs Issued	Spot Forecasts
0.91	0.23	0.72	12.99	15,681	18,577

Table 9. Nine year average POD, FAR, CSI, lead time (in hours), number of red flag warnings issued annually and number of spot forecasts issued annually.

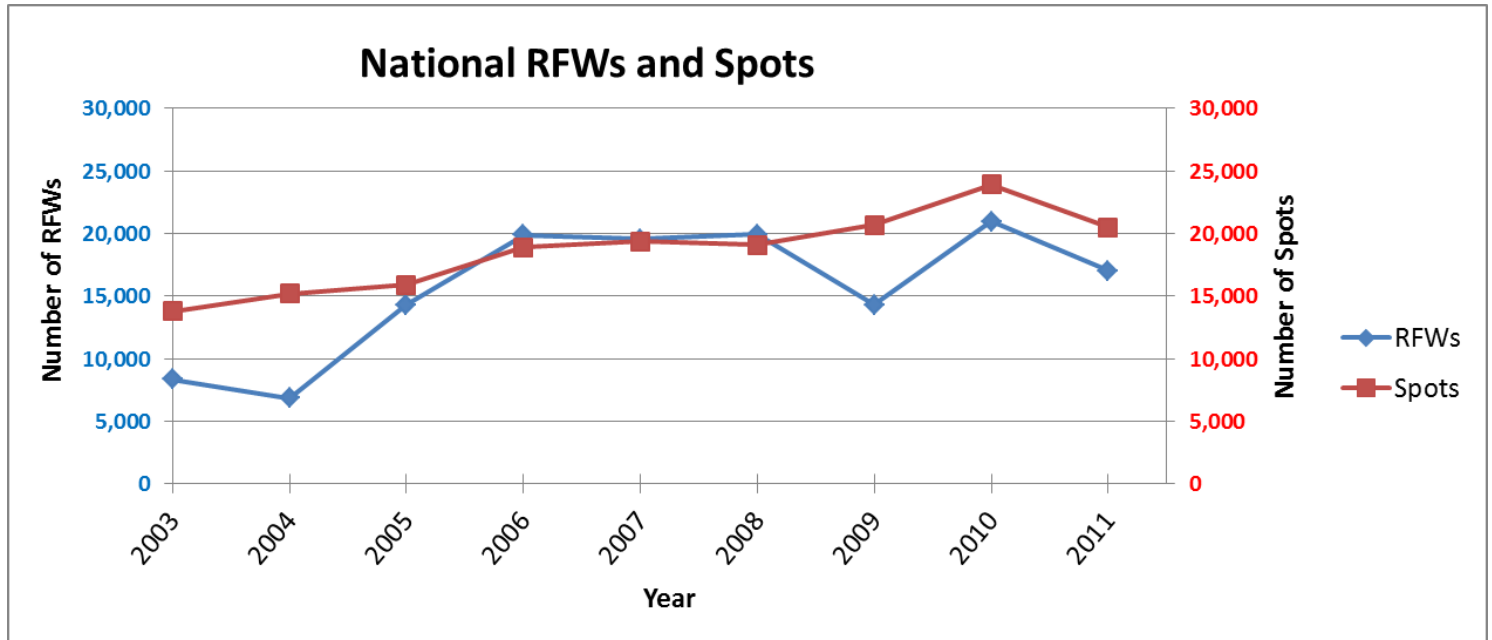


Chart 8. Number of Red Flag Warnings and Spot forecasts issued annually by the NWS since 2003.

The following are the red flag warning national performance standards for the next 5 years:

Year	POD	Lead Time (hours)
2012	0.87	10.45
2013	0.88	10.50
2014	0.88	10.50
2015	0.89	10.55
2016	0.89	10.55

Table 10. NWS fire weather program national performance standards for the next 5 years for red flag warnings.

The NWS IMET utilizes special equipment to work in the field at incidents called the All Hazard Meteorological Response System (AMRS). This equipment allows the IMET to set up a mini weather forecast office in the field. This allows the IMET to gather and interpret model data, satellite and radar data and observations, do an in depth analysis of this data and issue forecasts, watches and warnings on site at an incident. The NWS has 70 AMRS located at Weather Forecast Offices (WFOs) across the nation, mainly in areas where wildland fire is a threat. Some stations have more than one unit reflecting those areas that are most prone to a wildfire threat and have multiple IMETs on site to deploy to these incidents. The AMRS locations (and the IMETs that use them) are show below in figure 3.

AMRS LOCATIONS 2011

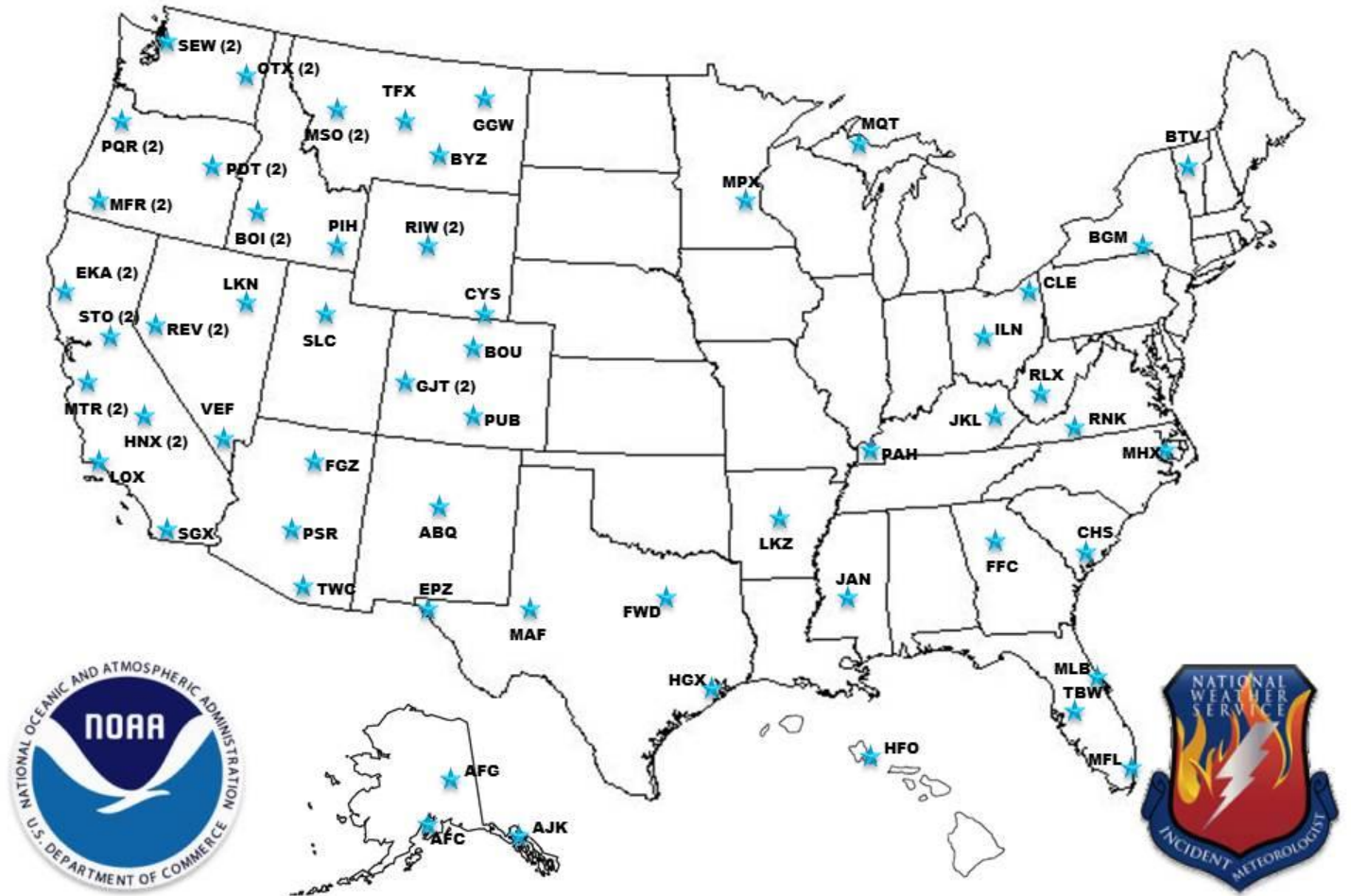


Figure 3. Home location of NWS All Hazard Meteorological Response Systems (AMRS) and their associated IMETs. Number in parenthesis indicates multiple AMRS at location.