



# 2017 NIROPS National Summary

Tom Mellin,  
National Infrared Program Manager  
December 13, 2017  
NIROPS Closeout, NIFC, Boise

Some slides updated 1/5/18 with December 2017 fires



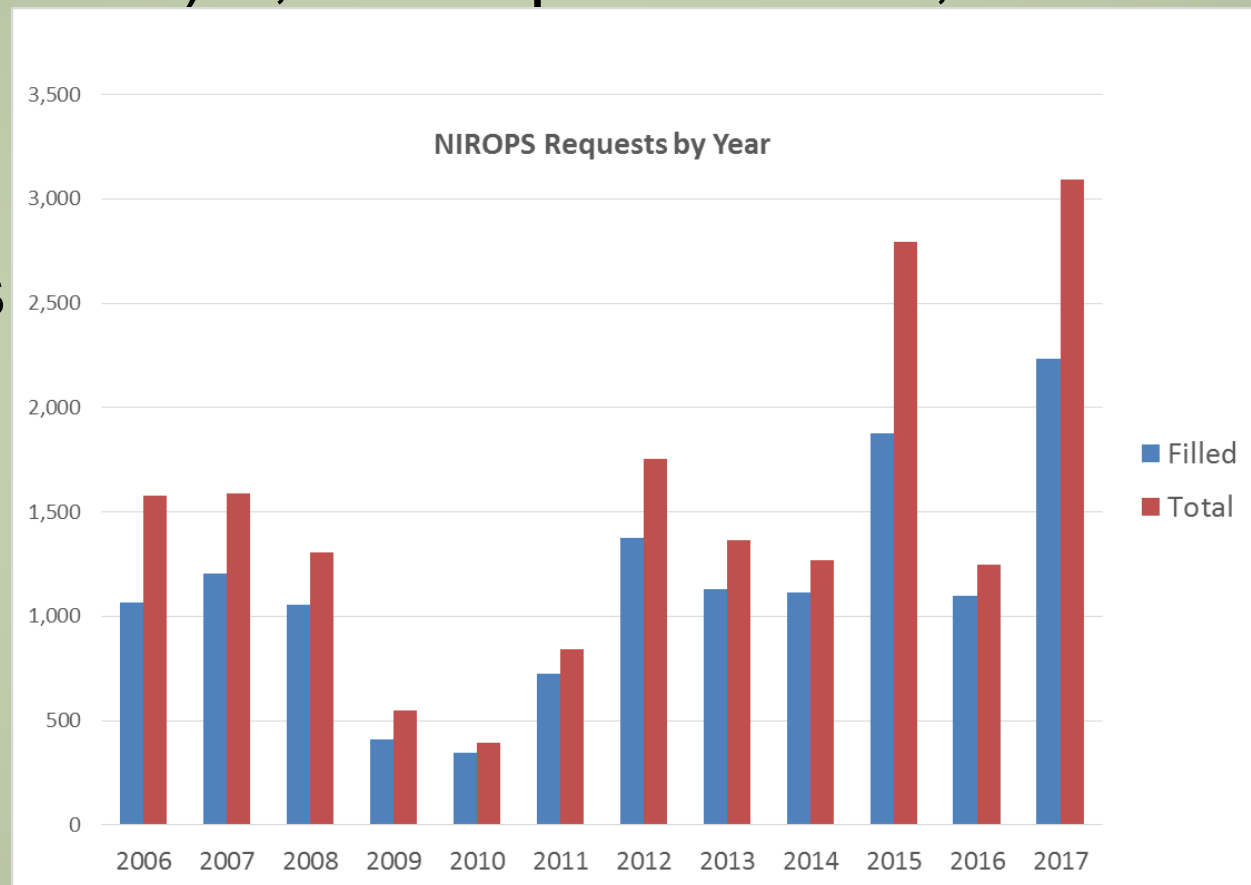
2017 –

- 9.8 million acres burned as of Dec 29th, 149% of the ten year average (2007-2016)
- Went to PL4 on July 9, dropped to PL3 on September 22
- Included 39 days at PL5
- Early start – April 17 in FL & GA
- End – Dec 24 in SoCal 🎄

Updated 1/5/18

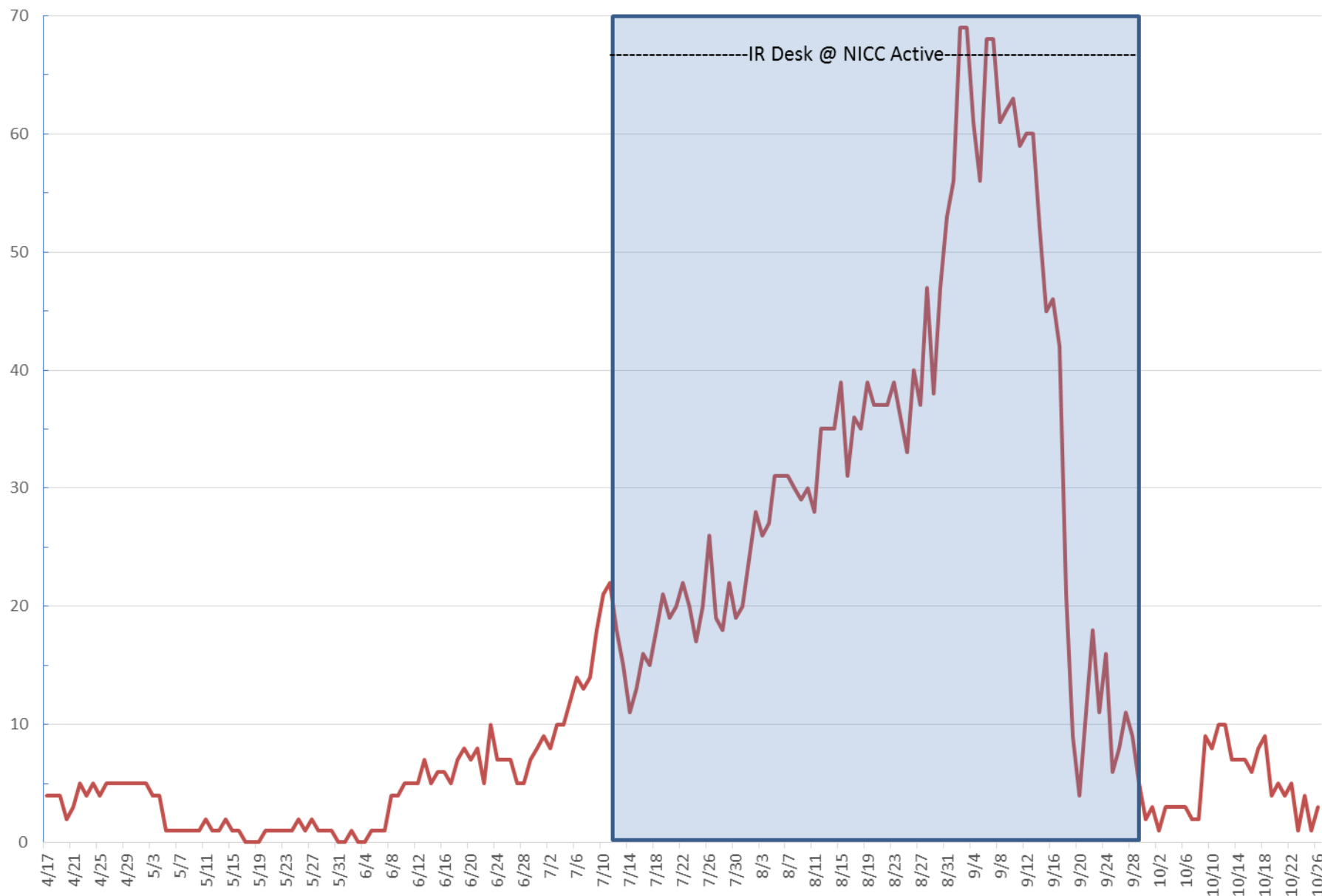
## 2017 NIROPS Requests

- 3,092 total requests with 2,232 filled
- 10 yr avg (2007-2016) 1,310 requests and 1,033 filled
- 28% UTF rate
- Aircraft 3 filled  
13% of missions  
(28% in 2015)

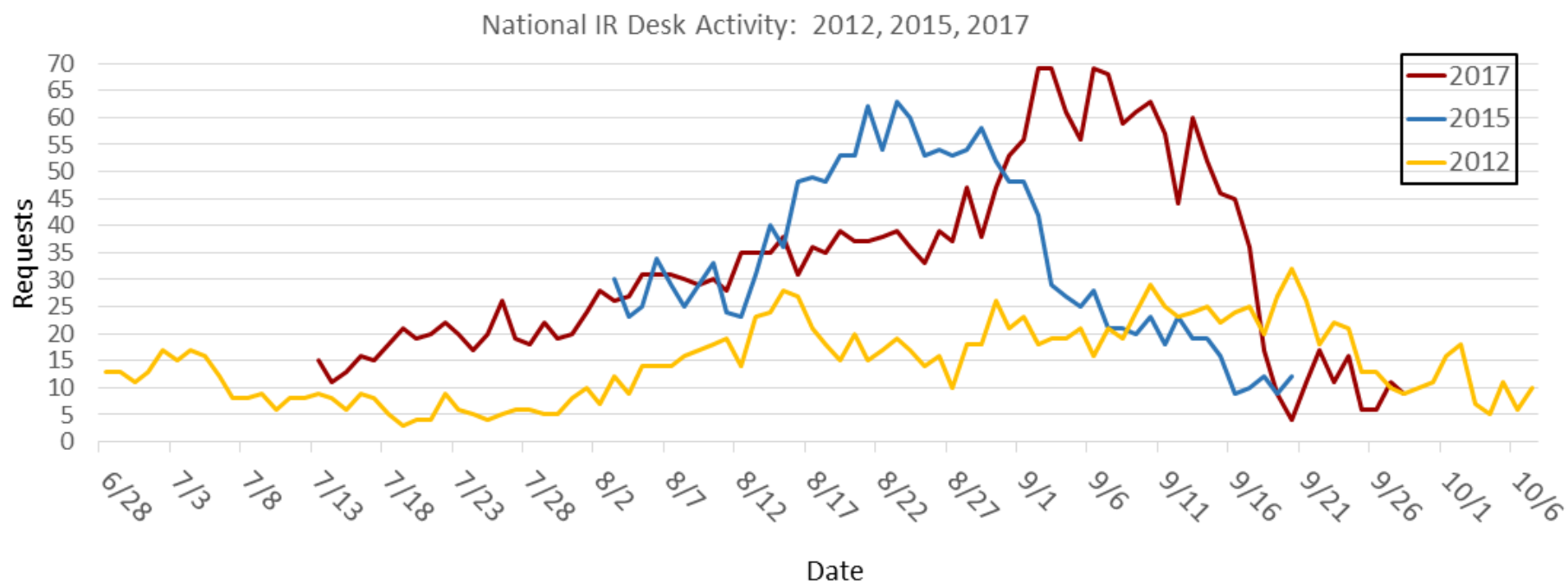


Updated 1/5/18

## NIROPS requests, 4/17- 10/26, 2017



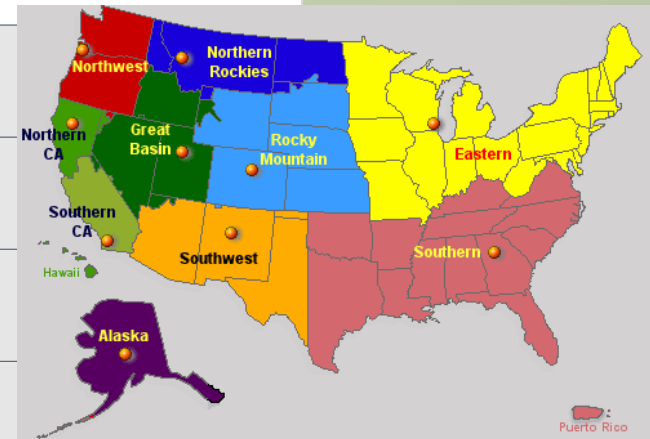
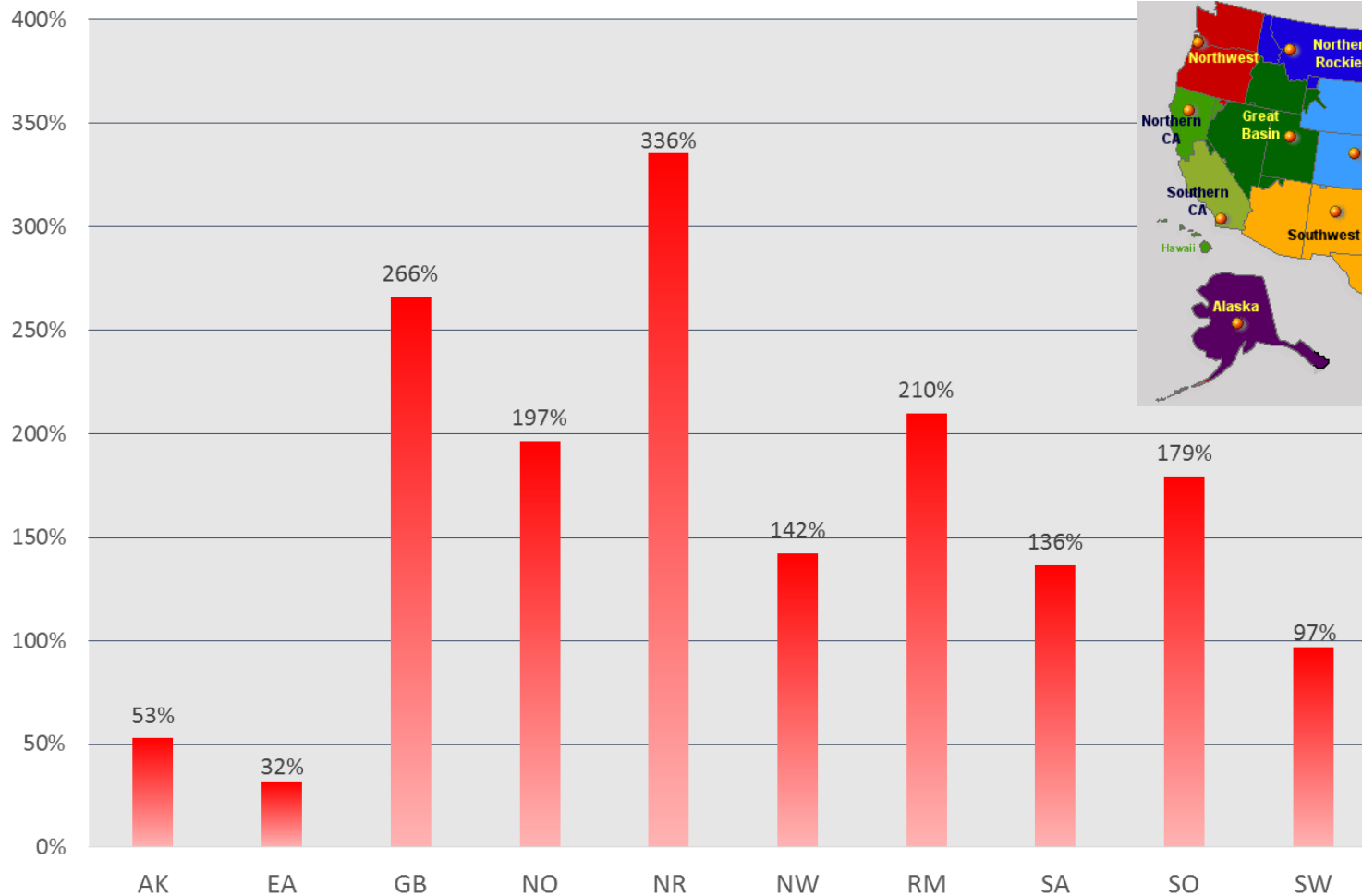
## National IR Desk Activity Comparison





## Fire Activity by GACC

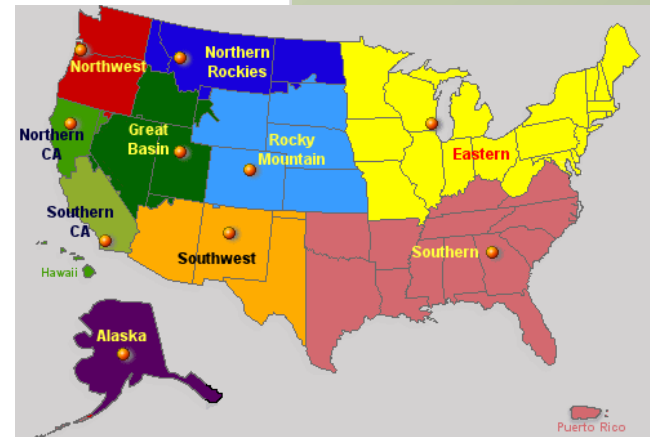
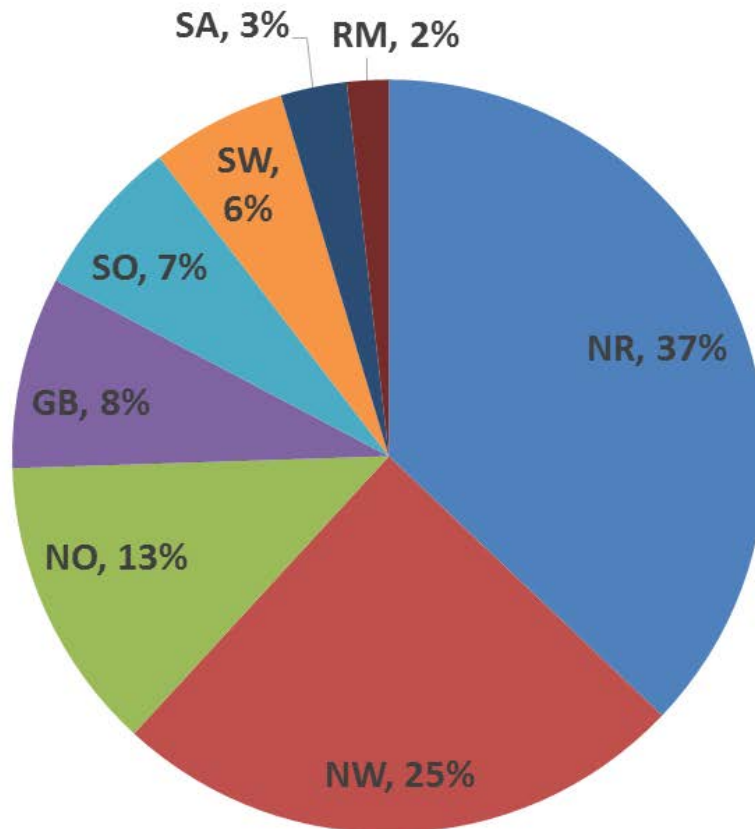
Acres Burned by GACC - 2017 (as of Dec 29)  
(as a percent of each GACC's 10-year average)



Updated 1/5/18

## 2017 – Orders by GACC

Percent of NIROPS orders by GACC



Updated 1/5/18

## Busiest Night 2017 – 9/1/17, 48 Fires

### ● N144Z (29 fires)

- North Fork Hughes, Hanover, Honeymoon, Hidden, Ibex, Bearskin, Highline (ID)
- Sapphire Cx, Meyers, Sprague, Rice Ridge, Park Creek, Reader, Highway 200 Cx, Liberty, Nelson Creek, Lolo Peak, Gibraltar Ridge, Alice Creek, Caribou, Monahan, Deep Creek, Sheep Gap, Strawberry, Scalp, Reef, Crucifixion Creek (MT)
- Pole Creek (WY)
- Bridge Creek (WA)

### ● N149Z (13 fires)

- Whitewater, Staley, Horse Prairie, Milli 0843 CS, Miller Cx, Jones, Indian Creek, Chetco Bar (OR)
- Helena, Salmon August Cx, Eclipse Cx, Orleans Cx (CA)

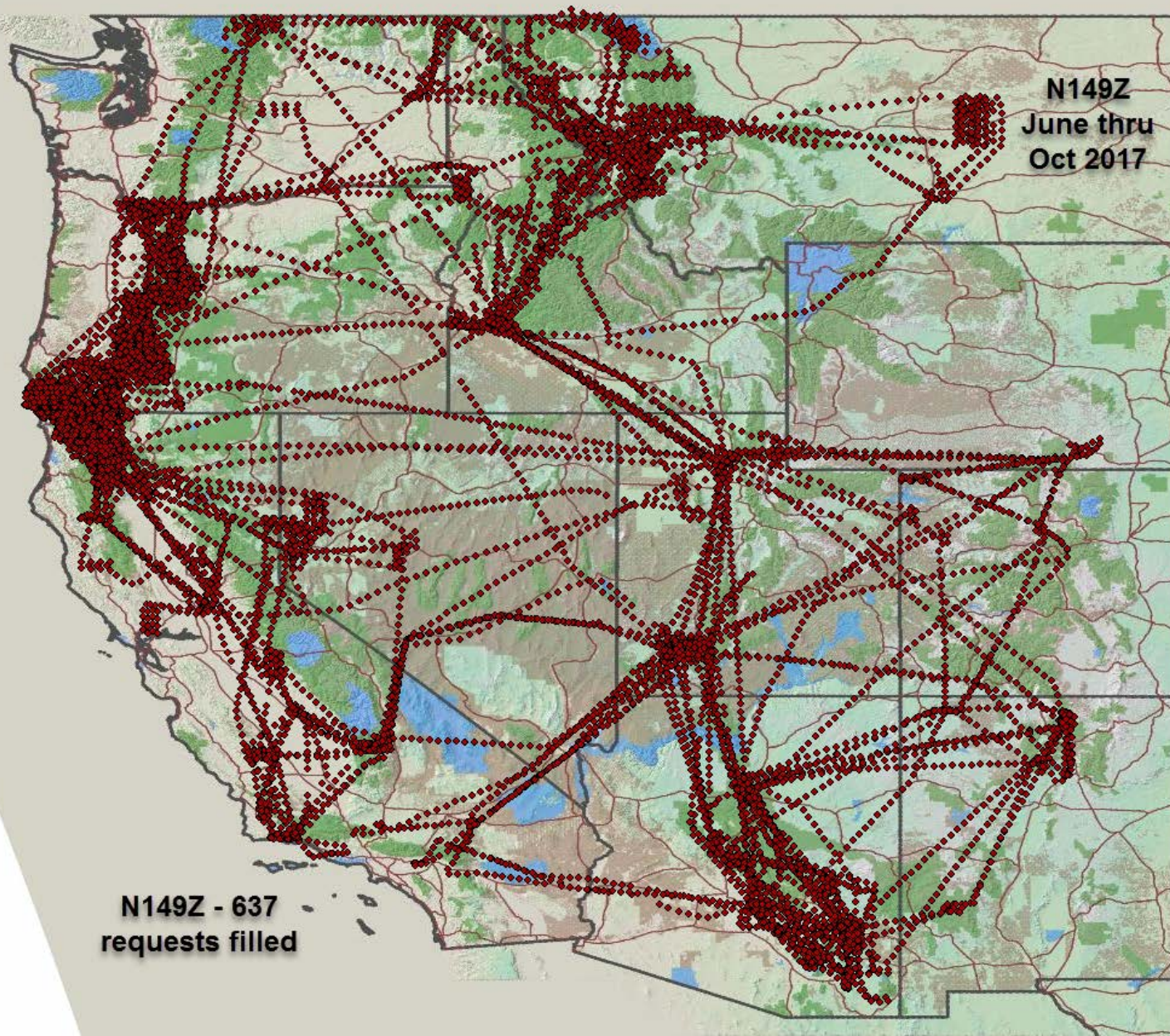
### ● Aircraft 3 (6 fires)

- Jolly Mountain, Norse Peak (WA)
- Railroad, Pier, Ponderosa (CA)
- Sartin Draw (MT)

2015 Busiest night was 8/19 with 47 fires flown,  
26 by 144Z, 16 by 149Z, 5 by AC3



# NATIONAL INFRARED OPERATIONS



N149Z - 637  
requests filled

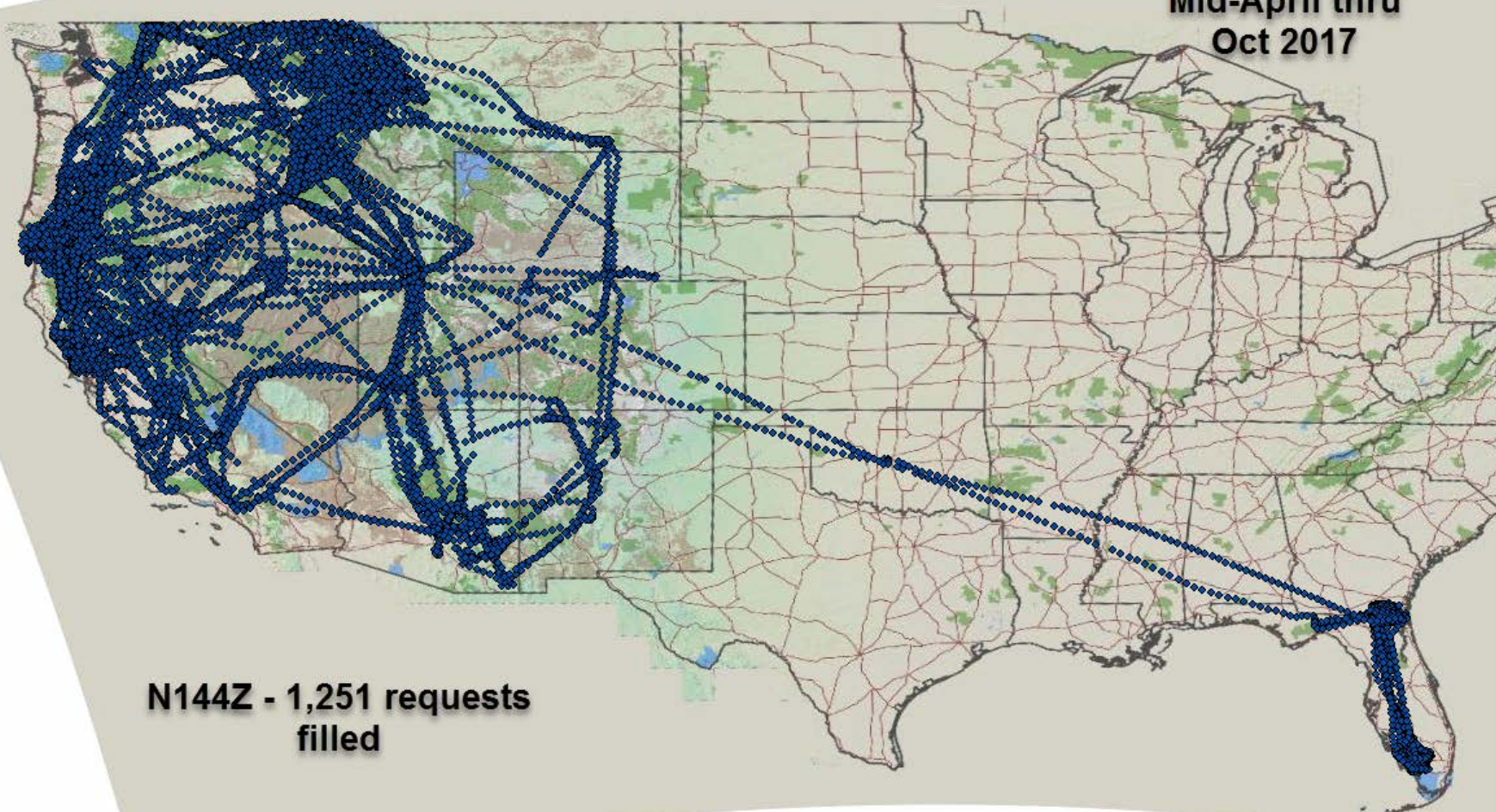
N149Z  
June thru  
Oct 2017



# NATIONAL INFRARED OPERATIONS



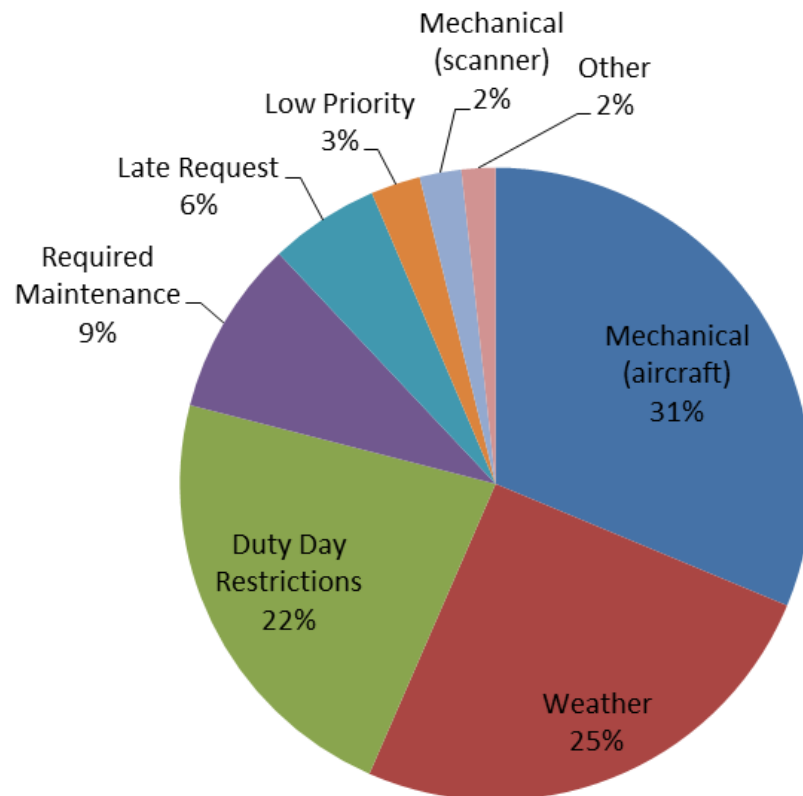
**N144Z**  
**Mid-April thru**  
**Oct 2017**



**N144Z - 1,251 requests**  
**filled**

## UTFs (Unable to Fill)

- 749 total UTFs (NIROPS only)
- UTF rate drops from 28% to 21% when weather UTFs are not counted
- UTF for Aircraft 3 - 27% (19% non-weather)



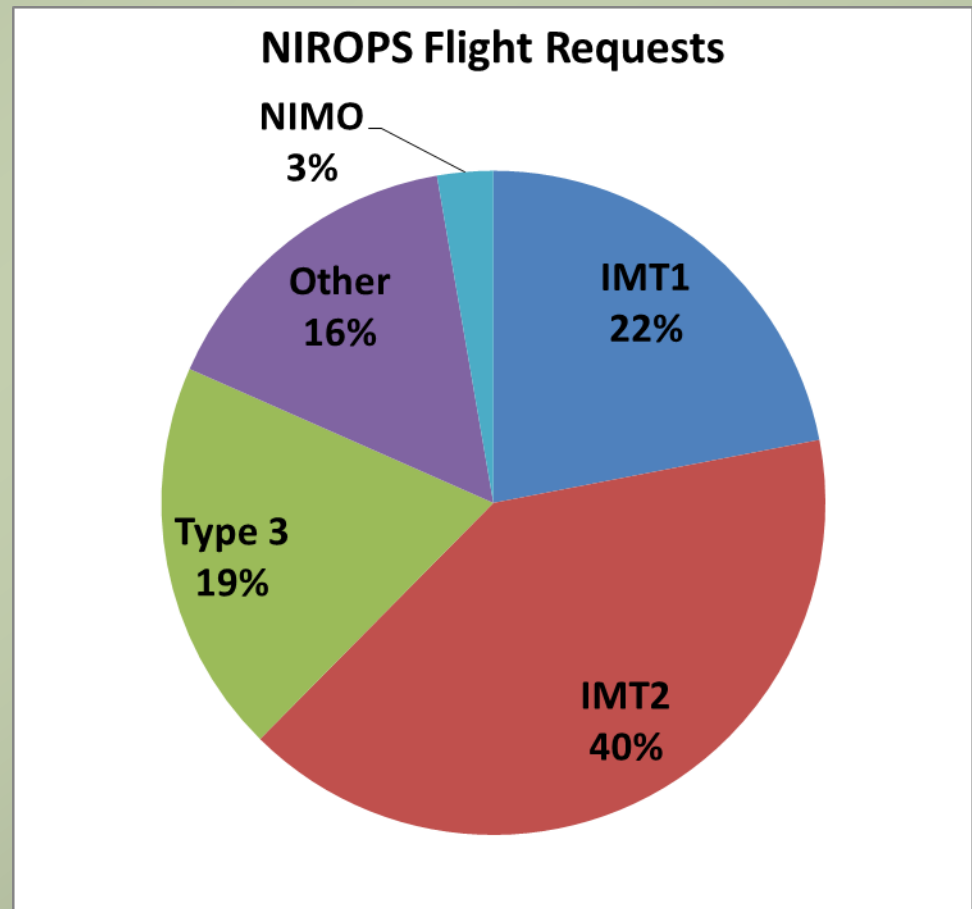
**2017 NIROPS UTF Reasons**



## Who is Requesting?

- 131 orders did not fill out (out of 3,057)

Team Type	non-weather UTF rate
Other	25%
Type 3	26%
Type 2	17%
Type 1	15%
NIMO	28%



## Prioritization of fires for IR

- Type of team assigned – Type 1, 2, 3, etc.
- Values at risk, WUI, evacuations
- Priority listings in National IMSR
- GACC priority listings
- ★ Geographic location and grouping of fires ★
- Activity during the day
  - Satellite fire detections – MODIS, VIIRS
  - Plume activity – visible satellite
- Consultation with NICC
- Heat detected from previous NIROPS flights
- Expected weather over incident
- Feedback from IRINs



## Extended Support to numerous incidents

- Lolo Peak (MT) – 52 flights
- Park Creek (MT) – 51 flights
- Chetco Bar (OR) – 50 flights
- Miller Cx (OR) – 48 flights
- Sunrise (MT) – 48 flights
- Sapphire Cx (MT) – 45 flights
- Liberty (MT) – 43 flights
- Rice Ridge (MT) – 43 flights
- Meyers (MT) – 34 flights
- Highline (ID) – 30 flights



## It Takes a Team!

- IR Techs - 5 person rotation
- Pilots – 6 FS fulltime
- 44 different IRINs, 6 trainees got assignments and 5 got signed off
- National IR desk staffed from 7/12 to 9/29 by 5 different IRCNs
- Aircraft 3 (Firehawk) coverage key during maintenance on NIROPS aircraft- AC3 liaison at GTAC and NGA/USGS/FS analysts
- R4 Aviation maintenance crew

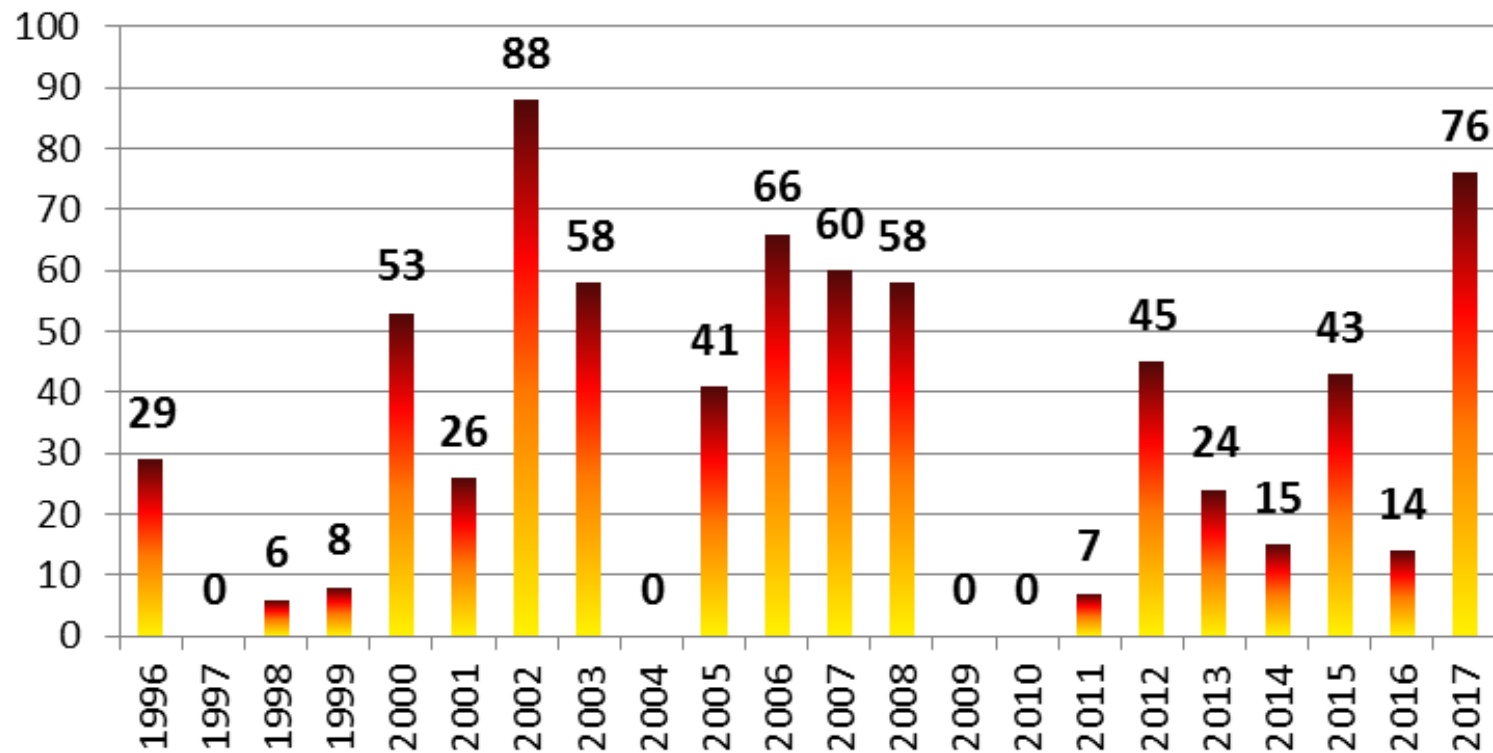


# Takeaways from 2017

- Unprecedented demand
- Planes are getting old!
  - 149Z – 33 years old (1985)
  - 144Z – 17 years old (2001)
- When best to utilize other IR resources
  - Small fires, initial attack, early stages
  - Fire cooling down, mostly hot spot detection
  - Daytime flights
- Other IR resources are complementary to NIROPS but don't replace our capacity and products

Next Year?.....

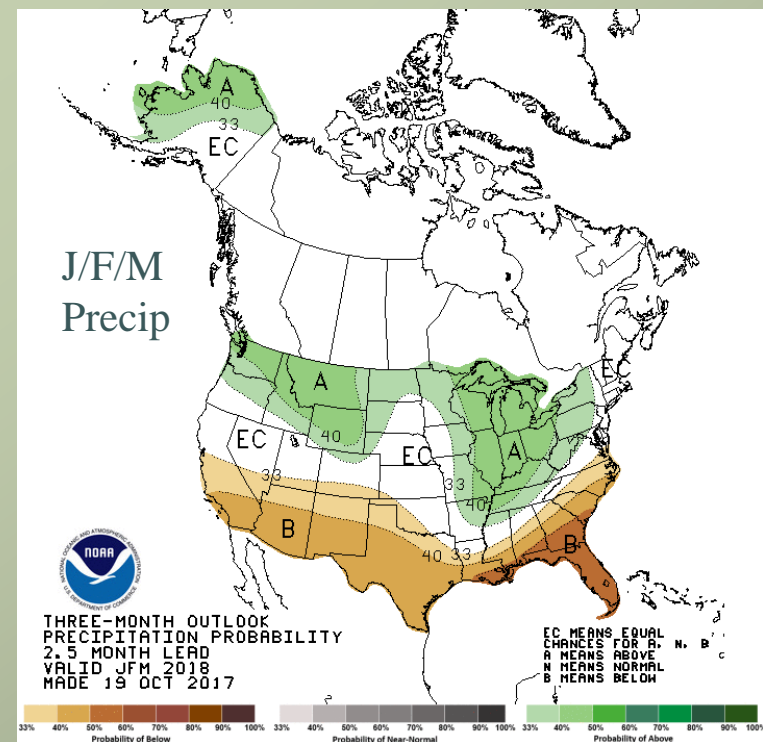
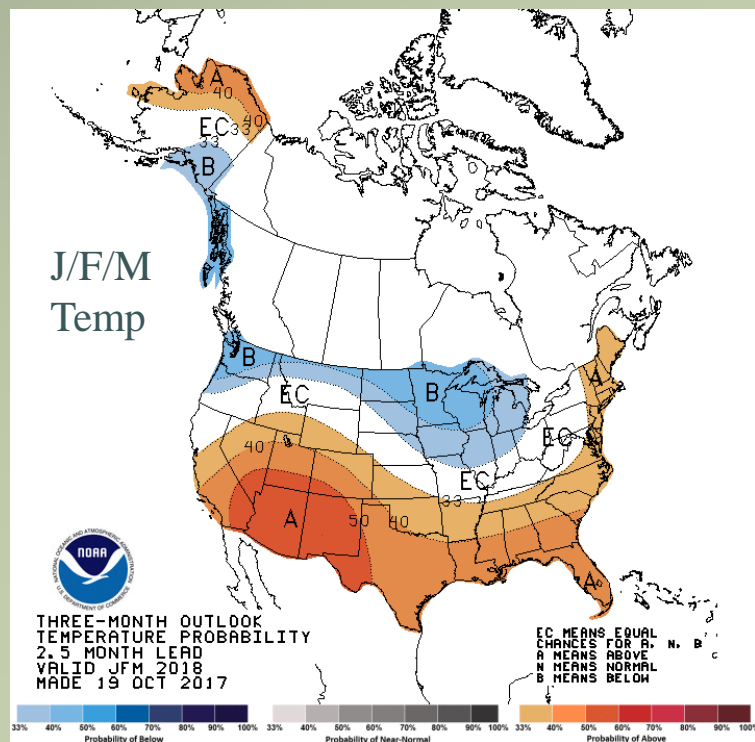
## # Days at National PL 4 or 5





## Looking ahead to 2018

- Most forecasts call for weak La Niña
- Monitor fire activity and try to maintain one system in ready status





# Get ready for next year!

Tubbs

Adobe

Nuns/Norrbom

Atlas

Patrick

Phoenix imagery  
Sonoma and Napa Co. fires (CA)  
Oct 10, 2017, 2044 hrs PDT

