

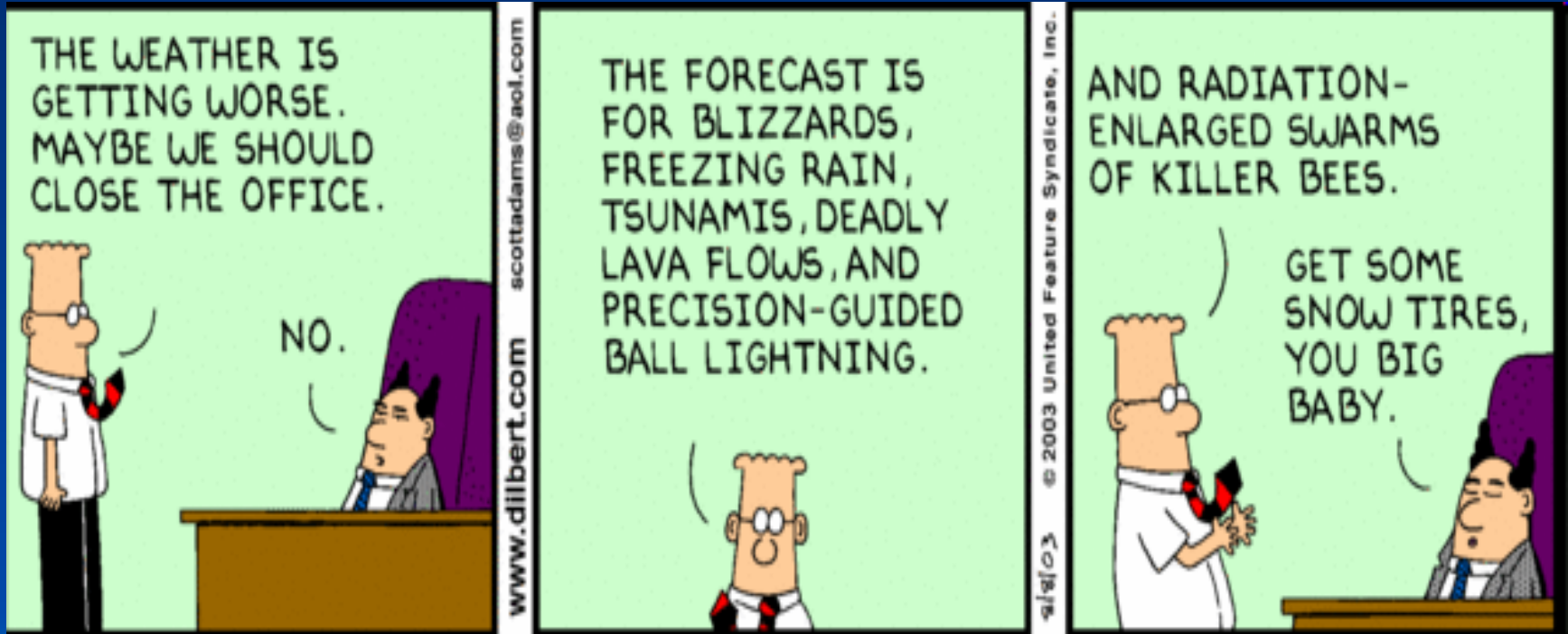
# Wildland Fire Climate Needs Roundtable

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# and now a Dilbert Weather Update



# Fire Climate Needs - Background

- The wildland fire community has the need for mid -and long-range predictions of weather patterns and fire-climate interaction assessments.
- Wildland fire managers rely heavily on focused seasonal weather predictions of temperature and precipitation as input into mid- and long-range fire potential forecasts.
- These forecasts are used for program readiness and resource movement throughout the wildland fire season.
- Such information is not readily available for the wildland fire community, especially in a decision-friendly format, and represents a data needs gap.



# Fire Climate Needs - Background

- NOAA (OAR and NWS) is an important contributor to Fire Weather Research, R2O and Operations
- NOAA is one of main members of National Interagency Fire Center, located in Boise ID
- There are over 100 Incident Meteorologists (IMETs), volunteers from NWS FOs, that support firefighters in U.S.
- Dr. Hayes met with leads from National Wildfire Coordination Group in March 2011; they brought needs to him
- Impact of climate information is large, as seen through preparation for Southwest U.S. fires in early 2011



# NWCG/NMAC Fire Support

- Mid-range fire weather information uses
  - Pre-positioning of initial attack resources (2-3 days in advance of event)
  - Movement of resources – typically takes 1-2 days to mobilize
- Long-range fire climate information uses
  - Determine start date of seasonal crews (can only be used for 90 days)
  - Determine start date of air resources under contract
  - Budget planning for fuel treatments



# Fire Climate Needs Support

- Studies of correlations of fire to long-term weather patterns is a recommendation in the 2008 NOAA SAB report “Fire Weather Research: A Burning Agenda for NOAA”
- “Identify fire needs for seasonal and mid-range weather predictions” is an action in the 2011 joint NWCG/NWS Action Plan
- Detailed climate outlooks for use in fire was an identified need in the 2007 OFCM National Wildland Fire Weather Needs Assessment



# Fire Climate Needs

- Seasonal predictions of
  - Mean upper level flow patterns (500mb height)
  - Frequency of precipitation
  - Wind events
  - Relative humidity trends
  - Predictions out to 120 days (weekly or bi-weekly time-steps to show trends)



# Long Term Fire Climate Needs

- Climate information out to 2 or 3 years is needed for the basis of fuel treatment planning and land management objectives.
- Ties directly to federal fiscal year budget planning
- Fire managers need to know how climate variability interacts with fire, and future potential impacts on the decadal time scale.





# Discussion

- Fire potential forecasts and associated fire management decisions are being made in the long and extended timeframes.
- Fire managers find value in the fire potential forecasts currently provided but need more enhanced fire related climate services if only by increasing the ability to assess the range of possible outcomes.
- **How may we best support the climate needs of wildland fire?**



# Contact Information

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