

JULY
2013

VOLUME VI,
ISSUE IV

SERVING NWS SKYWARN SPOTTERS,
CO-OP OBSERVERS & COCORAHS OBSERVERS

Sage Winds

National Weather Service - Boise, Idaho
www.weather.gov/boise

Dust AND the Wind

On Tuesday, June 18th, a thunderstorm over Baker County, Oregon caused a duststorm in Boise. How?

What Goes Up, Must Come Down!

A convective downdraft is the downward moving air current from a cumulonimbus cloud. Downdrafts accelerate as they approach the surface of the earth. Once the downdraft reaches the surface, it fans out kicking up horizontal winds. (Think of dumping a bucket of water upside down. The water hits the floor and, with nowhere else to go, fans out in all directions.) These horizontal winds are usually referred to as "thunderstorm outflow", while the leading edge of the outflow is often referred to as an "outflow boundary". If conditions are primed, outflow winds can reach speeds over 70 mph.

On June 18th, thunderstorms over Baker County, Oregon produced cool outflow winds rushing toward Idaho. These winds picked up dust and other loose particles as they traveled southeast toward the western Snake Plain. (This particular batch of outflow winds was likely enhanced by strengthening west winds behind a cold frontal passage occurring almost simultaneously.)

By the time the outflow boundary reached Boise, around 7 pm MDT, it registered a speed of 47 mph and was transporting a significant wall of dust. (As seen in the image below, taken from the NWS Forecast Office in Boise—near the Boise airport.) The boundary continued east, recording a wind speed of 37 mph at Mountain Home, before dissipating.



24-HR SPOTTER HOTLINE: 1-800-882-1428

We're Having A Heat Wave...

An intense and highly-amplified ridge of high pressure dominated the Western U.S. weather pattern over the past week—bringing multiple days of record-breaking temperatures (and thunderstorm activity) to southeast Oregon and southwest Idaho.

Despite recent suppression of the ridge throughout the Intermountain Region, very hot conditions continue across the Desert Southwest.

BY THE NUMBERS

- 20—The number of official temperature records broken between June 27th and July 3rd.
- 110—The high temperature reached in both Boise and Ontario on July 1st; both were records.
- 1—The number of degrees Boise was from hitting its all-time record of 111 degrees.
- 1924—The year Boise's previous records were set on July 1st and 2nd. That means Boise broke an 89 year-old record two days in a row.
- 5—The number of temperature records broken in this period in Burns, Oregon.



There's an App for That!

The CoCoRaHS Android App Is Here, and It's FREE!

Observers, you can now submit your daily precipitation reports via Appcay's "CoCoRaHS Observer" application on your mobile Android device. The app has received positive reviews and can be downloaded via [Google Play](#) or [Appcay Software](#). A similar application is not yet available for iPhone users.



BOI.SPOTTER@NOAA.GOV

It's a Bird! It's a Plane! It's...Bad Advice!

One of this summer's blockbuster movies "Man of Steel" is currently under fire for spreading poor weather-safety advice. Clark Kent grew up in Kansas, so you'd think his surrogate father, Jonathon Kent, would know that a highway overpass is NOT a safe place to seek shelter from a tornado. But, why not?

REASONS NOT TO SEEK SHELTER UNDER AN OVERPASS:

- The limited sheltering does not reduce one's exposure to flying debris.
- Overpasses can catch and collect flying debris.
- Winds may accelerate due to channeling effects.
- Due to frictional drag, tornado

wind speeds are always weakest near the ground. The crux of an overpass is significantly above "true" ground level, thus exposing yourself to even stronger wind speeds.

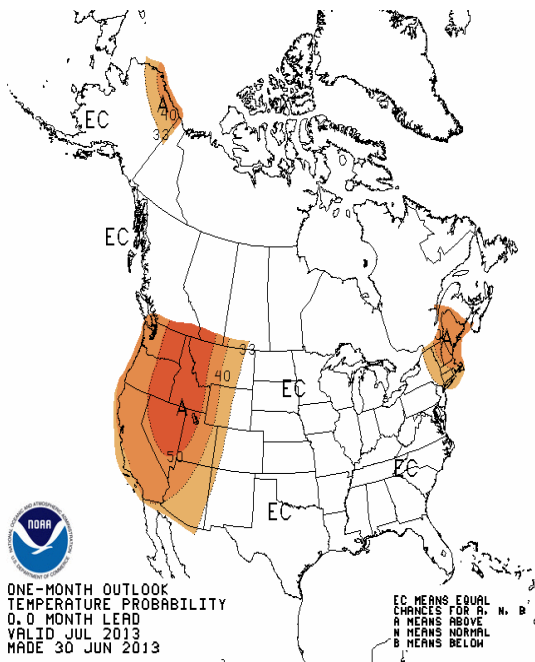
WHAT TO DO:

Seek shelter in a home or building, specifically:

- In the basement, or
- An interior room on the LOWEST floor.

For more information on why overpasses are insufficient sheltering, click [here](#).

July Outlook



<<
Temperature Outlook

>>
Precipitation Outlook

