



FY12 AWOC Severe Forecast Challenge Rules

1. You will need to submit a unique username that we can use to identify you by when posting results and forecasts. This allows for us to post results without using your real name so you may remain anonymous. You will send this username to: christopher.spannagle@noaa.gov
2. You must participate at least twice per week for 11 of the 13 weeks (You may miss two weeks). If you forecast all 13 weeks, your 4 lowest scores will be dropped.
3. A week consists of Sunday-Saturday
4. Challenge will run from Sunday April 15th to Saturday July 14th
5. You may forecast as many days during a week (at least twice) as you would like but only your two highest scores for that week will be counted.
6. Your forecast for a particular day must be submitted by 16Z on the day of the forecast and will be for severe weather that occurs from 19Z of the day you issue your forecast to 1159Z the next day. Any late forecasts will not be counted.
7. All forecasts must include a “forecast discussion” (see page 2) explaining why you expect severe weather at the chosen location.
8. WDTB reserves the right to disqualify any challenge participant for unethical behavior (e.g., cheating).

The Forecast Process

1. Prior to 16Z you will go to the forecast challenge page on the WDTB website (<http://www.wdtb.noaa.gov/courses/awoc/forecastchallenge.html> note: there is no link to this directly from the WDTB website) and enter your forecast. This page will request you to enter your name, your office three-letter abbreviation, the type of severe weather you're forecasting and ask you to select a point in the CONUS that you are expecting the chosen severe weather to occur and finally ask for the reasoning behind your severe weather forecast.
2. All forecasts are for 19Z the day of the forecast to 1159Z the next morning.
3. The forecast discussion is intended for your own benefit as you think through the forecast process; it is also a check to make sure that you are not just using the SPC severe weather probabilities as gospel. This discussion should be **IN YOUR OWN WORDS** and is expected to essentially be a mesoscale discussion type format and should include at least some of the following:
 - Climatology (specific local response)
 - Pattern recognition
 - Evaluation of key ingredients and/or influences for each threat.
For example, the three items below are ingredients for supercells to form but may be influences regarding tornado potential
 1. Shear (low-level, effective, and deep)
 2. Buoyancy (surface /ML based, vertically integrated)
 3. Lifting mechanisms
4. WDTB AWOC Severe Instructors will review forecast discussions for scientific relevancy and consistency. You will also receive feedback on at least 2 of your discussions from WDTB instructors during the course of the challenge.
5. Any forecast that does not include a forecast discussion will be disqualified.
6. Example forecast discussion:
An area of low pressure and associated warm front will move across southern and central WI this afternoon. Strong 0-1km shear of 30 kts and 0-6 km shear of 50 kts will combine with CAPE values of ~3500 j/kg and LCLs of ~ 900m to produce an environment conducive to the development of supercells across the region. I expect storms to develop near the warm front and evolve into isolated supercells with a threat of significantly large hail and tornadoes. Severe downbursts are also possible but not widespread severe winds since I don't expect convection to be widespread.

Scoring

1. Points are awarded based on how close severe weather occurs to the forecast point. The closest report to the selected location will be scored in the event there are no reports within a 25 mile radius of your point.
2. You have the option of choosing “None” for your severe weather type; this means that you expect no severe weather ANYWHERE in the CONUS. If you choose this forecast and no severe reports are received you will receive 10 points.
3.
 - a. Point system:
 - ii. 100 points exact location (within 2 miles of your selected point)
 - iii. 80 points within 10 miles
 - iv. 60 points within 25 miles
 - v. 40 points within 50 miles
 - vi. 20 points within 75 miles
 - vii. 10 points within 100 miles
 - viii. 10 points for a correct “null” forecast
 - b. Bonus points
 - i. You will receive a 50 point bonus if your forecast event occurs anywhere within a 25 mile radius of your point OR is the closest report to your point between 25 and 100 miles from your forecast point (i.e. you predict svr hail in Norman, OK and severe hail occurs in Norman, OK you would receive 150 points, 100 for the event occurring within 2 mi of your point and another 50 for forecasting the correct type of severe weather). You will receive a 100 point bonus if you forecast a tornado and a tornado occurs.
 - ii. You will get an additional 50 point bonus if a significant severe hail or wind report (hail > 2” or wind > 65 kts (75 mph) occurs within 25 miles of your forecast point and an additional 100 points if a significant tornado (EF2 or greater) occurs within 25 miles of your forecast point. This bonus will only count if your forecast severe weather type occurs. (I.e. you forecast hail and a significant hail report is received within 25 miles of your forecast location).
4. Scoring will be based off of local storm reports submitted by NWS Weather Forecast Offices. As new information comes in WDTB reserves the right to modify scores up to a week after a particular event.

5. Standings and scores from the previous day will be posted at 15Z the next day on the forecast challenge page on the WDTB website (note that some fluctuations will be possible as reports get updated).

Tiebreaking Procedure

1. In the event of a tie at the end of the challenge, the following tie-breaking procedures will be applied, in order, until a winner is declared:
 - a. Most number of accurate forecasts (number of times you correctly forecast the type of severe weather that occurred)
 - b. Most number of times severe weather occurred at (within 2 miles) of your forecast location
 - c. Most number of times severe weather occurred within 10 miles of your forecast location
 - d. Most number of times severe weather occurred within 25 miles of your forecast location
 - e. Most number of times severe weather occurred within 50 miles of your forecast location
 - f. Most number of times severe weather occurred within 75 miles of your forecast location
 - g. Most number of times severe weather occurred within 100 miles of your forecast location
 - h. Coin flip

Additional Information

1. All participants who successfully complete the requirement of the challenge will receive a WDTB T-Shirt. The top THREE finishers will receive a plaque commemorating their achievement in the 2012 AWOC Severe Forecast Challenge.
2. There will be a weekly “Forecast Challenge Debrief” webinar presented by a WDTB AWOC Severe instructor every week at 16Z during the challenge, these presentations will be ~ 1 hour or less. Priority for these sessions will go to those who have registered through the LMS but all AWOC Severe students will be allowed to attend and if time allows, ask questions at the end of the session. The first debrief will be held at 16Z on Friday, April 20th. The phone number to be used for these sessions is: 877-954-4462 passcode: 743889
3. Forecast Challenge links:
Challenge website: <http://www.wdtb.noaa.gov/courses/awoc/forecastchallenge.html>
Daily Scores: <http://www.wdtb.noaa.gov/courses/awoc/challenge/daily-scores.pdf>
Overall Standings: <http://www.wdtb.noaa.gov/courses/awoc/challenge/standings.pdf>
Rules: <http://www.wdtb.noaa.gov/courses/awoc/challenge/challenge-rules.pdf>
4. If you have any questions or concerns about anything related to the forecast challenge you may contact us at the following email addresses:
Christopher.Spannagle@noaa.gov
James.G.Ladue@noaa.gov
Veronica.Holtz@noaa.gov