



The American Meteorological Society

# Certified Consulting Meteorologists

## Newsletter

Volume 7, Issue 1

Spring 2016

This newsletter is intended to enhance communications between CCMs, the BCCM, and the AMS. It is published quarterly to provide information about the on-going activities of the CCM program. Please remember to use the **CCM LinkedIn page** for your communication and exchanges between CCMs.

**Ron Baskett, Alicia Wasula, and Larry Peabody**

CCM Newsletter Editors

**Kelly Savoie and Sangjun Lee**

CCM Newsletter Managing Editors

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## The Chair's Column



Dear CCM Colleagues:

Thank you for your support as the new Chair of the Board. The CCM program has several new items on our agenda this year. We have established several goals and corresponding committees for 2016 that will ensure the Board meets its responsibility to the AMS, the CCM community, and most importantly, to our clients. Tony Lupo is the Chair-Elect of the BCCM this year and we have an excellent group of BCCM members ready to tackle the challenges of the upcoming months.

## CCM Board Committees

We have four main CCM committees, each with several subcommittees. Each committee with the respective members are listed below. Please feel free to contact any of the committee members should you have any questions, thoughts or ideas.

### **Board Business Committee:**

- Subcommittees include Candidate Grading, Written/Oral Test, Mentoring/Training, and Professional Development
- Mitch Baer, Jennifer Call, Mark Wenclawiak, Tony Lupo, Tim Hall, Ron Baskett, Steve Hanna, David Legates, Lance Steel and Alicia Wasula

### **Documentation Committee:**

- Subcommittees include Handbooks and Newsletter
- Ron Baskett, Steve Hanna, Gale Hoffnagle, Larry Peabody and Alicia Wasula

### **Outreach Committee:**

- Subcommittees include Board Collaboration, Professional Status, Marketing and Social Media

- Mark Wenclawiak, Jennifer Call, Mitch Baer, Tony Lupo, Tim Hall, Steve Hanna, Gale Hoffnagle, David Legates, Lance Steele and Alicia Wasula

### **Volunteer Committee:**

- Subcommittees include Volunteer Solicitation and CCM Forum
- Steve Hanna, Jennifer Call, Gale Hoffnagle, Larry Peabody and Alicia Wasula

### **New CCMs**

Since the last newsletter was published, the following meteorologists have completed all requirements for certification and were added to the roll of active CCMs:

Scott Adamson, CCM #714  
 Robert Farrell, CCM #715  
 Michael Favetta, CCM #716  
 Jim Holian, CCM #717  
 Christopher Hovanic, CCM #718  
 Aubrey Jones, CCM #719  
 Edgar Stanton Lanham, CCM #720

Maureen McCann, CCM #721  
 Mark McGinnis, CCM #722  
 Daniel Pagliaro, CCM #723  
 Charles Paxton, CCM #724  
 Joseph Sabato, CCM #725  
 Scott Sabol, CCM #726

### **Status of CCM Candidates**

#### 2015 Candidates:

Candidates ready for oral exam: 3  
 Candidates with exams/reports being graded: 1

#### 2016 Candidates:

New applications received in 2016: 0

A reminder: nominations for the Henry T. Harrison Award for Outstanding Contributions by a Consulting Meteorologist are due at the AMS by May 1st!

Finally, I would like to thank all of the board members completing their service at the January 2015 Annual Meeting: Buddy Ritchie, Joe Chang, Jay Rosenthal and Esmail Malek (not pictured).



Buddy Ritchie, Outgoing BCCM Chair



Joe Chang



Jay Rosenthal

Please feel free to [email me](#) with any CCM questions, concerns or comments. I look forward to working with all of you throughout 2016.

Jennifer M. Call, CCM#674  
 Chair, Board of Certified Consulting Meteorologists  
 American Meteorological Society ■

## Book Announcement: Treading on Thin Air

Contributed by WeatherExtreme Ltd.

Dr. Elizabeth Austin of WeatherExtreme Ltd.'s, book, [\*Treading On Thin Air: Atmospheric Physics, Forensic Meteorology, and Climate Change: How Weather Shapes Our Everyday Lives\*](#) is available for pre-order and has its official release date April 25, 2016!

*Treading On Thin Air* is part memoir and reveals how the weather and climate are intimately tied to our daily lives. In her book, Dr. Austin will demystify climate change, revealing what is really happening with our climate and why, whether it is El Niño, tornadoes, floods or hurricanes. Weather and society are at its most fascinating at extremes, and as Dr. Austin is one of a handful of forensic meteorologists around the globe, she has been called upon to investigate plane crashes, murders, wildfires, avalanches, even bombing cases. Drawing upon her rich experiences, Austin's *Treading on Thin Air* promises to be an enlightening and informative journey through the wild world of weather. Below is an excerpt from the book:

*Weather is an inescapable part of our daily lives, from the nuances of air travel to the breadth of human history. Our past, present, and future is intimately rooted in weather and climate.*

*Weather, water, and climate. How we feel, how productive we are, even our sheer existence, depends on these three things. The United States economic activity varies annually by 1.7% due to weather—that is more than \$500 billion dollars each year!*

Her book is already available on pre-order on many sites such as Amazon and Barnes and Noble. For full pre-order and release information, visit [the website](#).

### About Dr. Austin

Dr. Elizabeth Austin, CCM, is the founder and president of [WeatherExtreme Ltd.](#) and is recognized as one of America's foremost experts on extreme weather, climate change and forensic meteorology. Dr. Austin has worked with NASA, the United Nations, the U.S. Department of Justice, and has counseled on cases ranging from aviation and wildfires to avalanches and tornadoes. An active member of the National Weather Association and the American Meteorological Society, she resides at Lake Tahoe with her family. ■

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## New AMS Online Weather and Climate Service Providers Directory

We would like to remind you about the new online Weather and Climate Service Providers Directory. The new directory offers many more features than the former online CCM Directory and Professional Directory in BAMS, so we hope you will find it to be an improvement. The advantages to this new directory include the ability for you to update your own listing, enhanced features, and greater visibility. There will be AMS Member and Non-Member rates and as a benefit to our CCMs, you will be given a complimentary listing. CCMs will show up first in search results followed by AMS members and then non-members. Some of the great features of this new directory include the ability for you to add:

- company logo
- profile photo
- social media links
- Website URL
- CV
- photo albums
- videos
- text articles
- up to ten specialties

To enter your free listing, go to the following [sign up page](#) created exclusively for CCMs, and follow the prompts; have your AMS Member Account Number and CCM Number available. The directory is linked from the AMS home page under "Find an Expert" in the Popular Resources section of the site. To date, 70 CCMs have taken advantage of a free listing in the directory. ■

## Where's El Niño?

Contributed by Jay Rosenthal, CCM (#602)

Although it is a week into March, southern California is finally in position to get a taste of the El Niño conditions we have been expecting for about a year from the "Godzilla El Niño" of 2015-2016. Meteorologists, both operational and researchers, have been expecting the deluges and subsequent mudslides that have characterized just about every recent major El Niño including those in rain years 1977-78, 1982-83, 1992-93, and 1997-98. All of those had successive periods with heavy rains starting in December and January, and especially in February and early March. As of March 6 this year, not only have the big rains not visited southern California and the greater Los Angeles area, but we are way below normal precipitation so far for the year. At Los Angeles, only 4.99 inches have been received since October 1 (the start of the rain year) compared to a normal amount of 11.51 inches by this time. We are even well below last year's 7.40 inches, a drought year. CCMs, meteorologists of all sorts, emergency managers, the media and many in the general public are shaking their heads. What went wrong?

Although there is still some time to catch up to expectations, it is a big enigma. The classic positive sea surface temperature anomaly along the equator has certainly been there and rivals the one in 1997-98 for intensity. What is different however, is that in addition to the classic SST anomaly pattern that is characteristic of El Niños, we have also had a very large additional area of much warmer than normal water temperatures to the south of California. One possible effect of this may have been to help build a persistent area of high pressure that has so far deflected much of the storm activity towards Northern California and the Pacific Northwest. The subtropical jet stream has largely been oriented southwest to northeast instead of more west to east. A second branch has persistently crossed Mexico from the tropical Pacific to bring heavy rains and early severe weather along

the southern tier of states and up the U.S. East Coast. Water vapor satellite data has shown these two branches for months.

It just goes to show that there is still a lot to discover in meteorology, and it should be an important area of study for the modeling community, those involved in long range forecasting and climate scientists. ■

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## AMS Online Awards & Fellows Nominations Deadline is May 1st

The Council of the American Meteorological Society invites members and friends of the AMS to submit nominations for consideration for the Society Awards, Lecturers, Named Symposia, Fellows, Honorary Members, and nominees for elective Officers and Councilors of the Society. Of particular interest to CCMs, are the following awards:

- The Henry T. Harrison Award for Outstanding Contributions by a Consulting Meteorologist
- The Award for Outstanding Contribution to the Advance of Applied Meteorology
- Fellows

The AMS Online Awards and Fellows Nominations opened 1 November 2015. For a description of the awards and details on the nomination process, please see the [AMS Awards site](#).

Nomination Deadlines:

- Online Awards, Fellows, and Lecturers: 1 May 2016
- Honorary members: 1 July 2016 ■

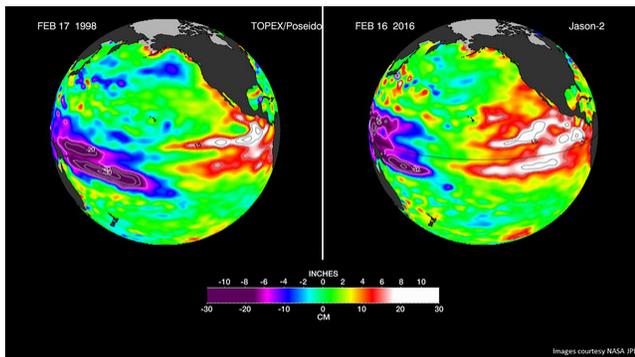
# Why This El Niño is Different

Contributed by  
 Jan Null, CCM, Golden Gate Weather Services  
 John Monteverti, CCM, San Francisco State University

Among the mantras over the past year by ourselves and many other responsible meteorologists, are that 1) each El Niño is unique, 2) the number of past events in comparisons is very small, 3) they are not a forecast and 4) that there are “no guarantees”. To date many of these blogs, webpages and associated articles have looked at the similarities to previous strong and very strong El Niño events.

However, as the El Niño 2015-2016 and its impacts continue to unfold, we think it’s important to look at how this year is dissimilar in many ways to previous events. To that end we have co-authored the following pages: [Differences Between 2015-16 El Niño and Previous Strong and Very Strong Events](#) and [Comparisons of Precipitation and Zonal Wind Anomalies by Monthly Groupings for 2015-2016 with those for Five Strongest El Niño Events since 1951](#).

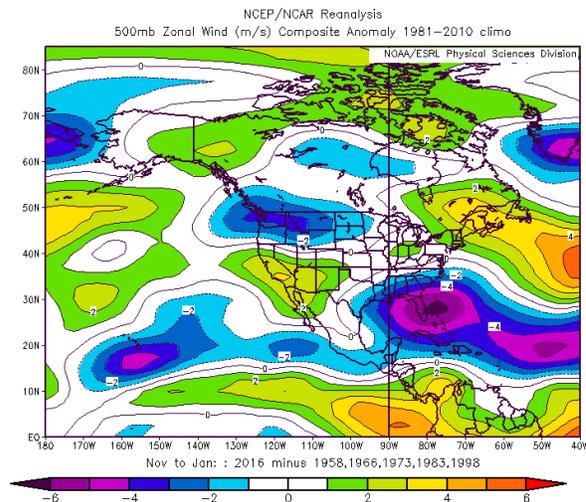
The figure below shows the Sea Surface Height Anomalies (as proxy for Sea Surface Temperatures Anomalies) for February 1998 and February 2016. Note the much broader extent of the warmer water in the eastern tropical Pacific, including the plumes all the way north to near Hawaii. Conversely, cooler water from the western Pacific extends eastward to almost 160 W.



Another feature that bears highlighting is the area of warm anomalies northeast of Hawaii that existed in February 2016, but was absent in February 1998. The direct impact of these temperature anomalies is usually to enhance the poleward height gradient in the middle and upper troposphere (as occurred in

1998).

The conundrum is that, though the 2015-16 El Niño will go into the records as the strongest since 1951, the warm water northeast of Hawaii actually created a weaker than usual (for strong El Niño events) zonal flow in the lower subtropics. This is illustrated by the figure below, which compares the zonal winds for 2016 to those composited for the previous five strong El Niño events.



The broad area of negative anomalies (blue) near Hawaii and northeastward indicates that the zonal flow in the lower subtropics did not develop as expected in the November to January period. This pattern did favor a stronger than usual jet flow northeastward to the Oregon-California border and copious precipitation in Oregon and Washington. Finally, the geometry of the 2015-2016 El Niño sea surface temperature anomalies to some extent does resemble that which occurred during the El Niño of 1957-58. We can hope that what happened in that year will be duplicated in the present case. The second half of the winter and spring were very wet across the whole state of California. The rainfall California is receiving in March 2016 is a hopeful sign that perhaps this might occur in the present event too. ■

# The SARFFG-SWDFP Program: What it means to Weather Safety in Southern Africa

Contributed by WeatherExtreme Ltd.

Have you ever seen a TV Weathercaster point to a distant part of the globe, mention that a strong storm was approaching, and that there would be heavy rain and flooding? Maybe a few days later, you might hear in the news that sure enough, 50 or 100 (or more) people died in that same storm?

If you knew about the storm, why didn't the people in its path have that information? Did they get a warning of a coming storm? Did the warning make it out to their remote villages? If they got the warning...did they know what to do to stay safe?

To deal with these questions, a new program is being developed by the United Nations (UN) through the World Meteorological Organization (WMO). The project will merge two systems now being put in place across 9 nations in southern Africa: The Severe Weather Forecast Demonstration Project (SWFDP) and the Southern African Region Flash Flood Guidance (SARFFG) system.

A report just issued by the UN/WMO summa-

rizes the meetings which took place in October and November.

It is available through [this link](#).

James Purpura CCM, Director of Forecasting of WeatherExtreme Ltd., was part of the team that helped kick off this initial meeting. If successful, it will be an activity not ever achieved before: nations helping each other in the issuance of weather warnings, then having the various countries work to assure the warnings get to all who need it, and most importantly, those receiving the warnings know what to do with the information, to assure safety for themselves and their families.

As you can imagine this will be a tremendous challenge. Communications are very poor, but capacity is increasing. Social media is being investigated as a way to reach remote areas, and receive weather reports, as most Africans access social media through mobile devices vs. a desktop or laptop computer. ■



James Purpura CCM (front row, far right) with the participants in the South African Warning Project

## Connect on Social Media

### LinkedIn

The LinkedIn page is becoming more active. If you have not joined, please do! The LinkedIn page is accessible and open only to CCMs. You must join LinkedIn (it is free) first before requesting to join the CCM page. Once you join LinkedIn (or if you are already a member), then just simply type "Certified Consulting Meteorologist" in the search box on the top right to search for our group. We anticipate the LinkedIn site to be an easy way for CCMs to communicate with each other and keep us all abreast of news, developments, and items of interest to CCMs.



### Facebook

For all CCMs, colleagues, and the general public, we have a CCM Facebook page. It can be found by searching in Facebook for "Certified Consulting Meteorologist (CCM)." This page needs much more interest to be generated, beginning with every CCM "liking" the page.



### Twitter

For all CCMs, colleagues and the general public, we have a new Twitter account. Leading up to the Annual Meeting, this year we intend to market the CCM booths at the Student & Career Fairs and AMS Resource Center via Twitter. Also at the Annual Meeting, we use this account to announce upcoming speakers to promote the CCM Forum during each talk. If you are on Twitter, please follow the handle @AMS\_BCCM ■



## Upcoming AMS Meetings

### [2016 AMS Washington Forum](#)

12–14 April 2016 Washington, DC

### [32nd Conference on Hurricanes and Tropical Meteorology](#)

17–22 April 2016 San Juan, PR

### [44th Conference on Broadcast Meteorology](#)

15–17 June 2016 Austin, TX

### [32nd Conference on Agricultural and Forest Meteorology, 22nd Symposium on Boundary Layers and Turbulence, and Third Conference on Biogeosciences](#)

20–24 June 2016 Salt Lake City, UT

### [17th Conference on Mountain Meteorology](#)

27 June–1 July 2016 Burlington, VT

### [2016 Summer Community Meeting](#)

19–21 July 2016 Tuscaloosa, AL

### [Joint 21st Satellite Meteorology, Oceanography and Climatology Conference and 20th Conference on Air-Sea Interaction](#)

15–19 August 2016 Madison, WI

### [28th Conference on Severe Local Storms](#)

7–11 November 2016 Portland, OR ■

Thanks to all of our contributors for this issue.

We encourage you to share your experiences, views, findings, or studies for the next newsletter.

E-mail your articles to:

[Larry Peabody](#) and/or [Alicia Wasula](#)

Summer 2016 Newsletter submission deadline is June 10