

From: [Ben Livneh](#)
To: [Andrea Ray - NOAA Federal](#)
Cc: [Stephen Torbit](#); [John Guinotte](#); [Joseph Barsugli - NOAA Affiliate](#)
Subject: Re: Wolverine ROMO update
Date: Monday, March 20, 2017 12:04:45 PM

Thanks Andrea,

I am preparing to depart shortly. Chile is one time-zone eastward of the eastern time zone in the US (so it's +3hours from Colorado). I won't know the itinerary for Wednesday until I get there tomorrow (Tuesday), but will send out an email late Tuesday or early Wednesday with details and if/how best to have a voice call....

Regarding 2012, that is a good point that it was an unusual spring, and it should be further noted that it is one of 3 drought years in the baseline period...

More soon

Ben

On Mon, Mar 20, 2017 at 11:58 AM, Andrea Ray - NOAA Federal <andrea.ray@noaa.gov> wrote:

Hi all, thanks for the update, Ben. We're going to meet anyway this afternoon to go over comments on the rest of the draft. How about we plan to check in on Wednesday once we've seen the latest results. Joe and I talked a bit last week about how to handle 2012 -- partly its an unusual spring weather-wise (we can explain that) that would be hard to replicate. We can discuss that more when we talk.

Ben -- is there a good time to talk on Wednesday? we could keep it to a half hour. Would you confirm what time zone? I think its the same as eastern time, but they may not have daylight savings.

and thanks to you and Aaron for all the detailed work on this so we can understand the issues and explain it!

Andrea

On Mon, Mar 20, 2017 at 9:07 AM, Stephen Torbit <Stephen_Torbit@fws.gov> wrote:

Thanks Ben, too bad the monthly data didn't improve performance as we had hoped. I am good with using 2002 or 2004 for the assessment. I just want for all of us to think through how we deal with the perception that we "cherry picked" certain years. I am sure that the scientific literature on climate modeling has encountered these events before and has an established language to express these kinds of events. We will need all of your collective insights and recommendations to provide the logic in the methodology discussions.

Steve

Stephen C. Torbit

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From: Ben Livneh [mailto:Ben.Livneh@colorado.edu]

Sent: Sunday, March 19, 2017 3:48 PM

To: Stephen Torbit; Guinotte, John; Joseph Barsugli - NOAA Affiliate; Andrea Ray - NOAA Federal

Subject: Wolverine ROMO update

Hi Steve,

Last week, we explored further precipitation adjustments for ROMO to try to improve performance in 2012 SCA prediction. However, the resulting model simulations only yielded very modest improvements.

Therefore, my recommendation is to note that 2012 was problematic in our analysis and instead to focus on 2002 and/or 2004 as drought years, since the performance was better.

This weekend Aaron put together a matrix of model performance both spatially, SCA compared with MODIS, as well as at the SNOTEL locations, for number of days exceeding 100mm of SWE. After reviewing, we found a few minor errors that he is working to fix and will plan on having a revised version by Tuesday, which should enable us to make a final parameter selection and then redo the GCM deltas. Aaron has 2 exams this week (one in Snow Hydrology very apropos!) so we set the Tuesday deadline rather than sooner.

I'll be landing in Santiago Tuesday and will likely resume internet access on Wednesday when I set up at the university there.

I hope all is well,

Ben

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