

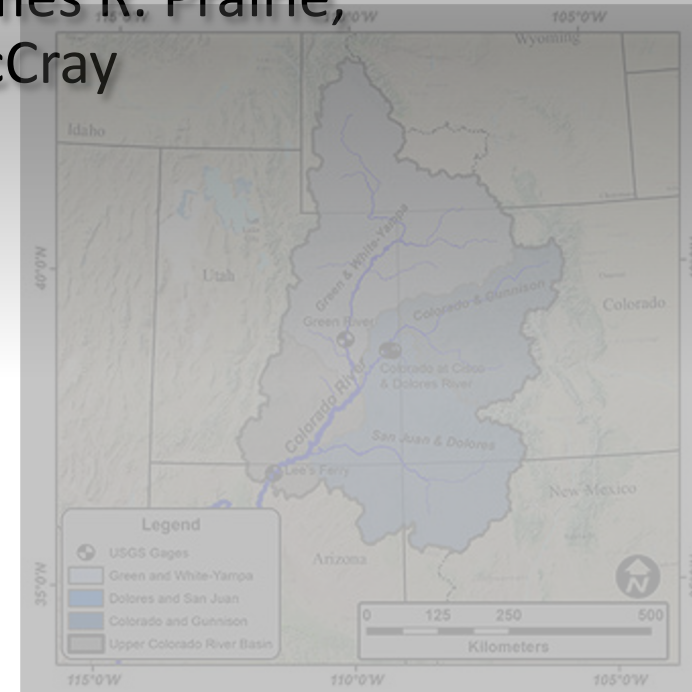


Examination of Miracle Spring Precipitation under the warmer climate in Colorado River Basin

Binod Pokharel, S.-Y. Simon Wang, Krishna Borhara, Kripa Akila Jagannathan,
Andrew Jones, James Eklund, Candice Hasenyager, Jake Serago, James R. Prairie,
Frank Kugel, Taylor Winchell, Lurna Kaatz, and Rachel McCray

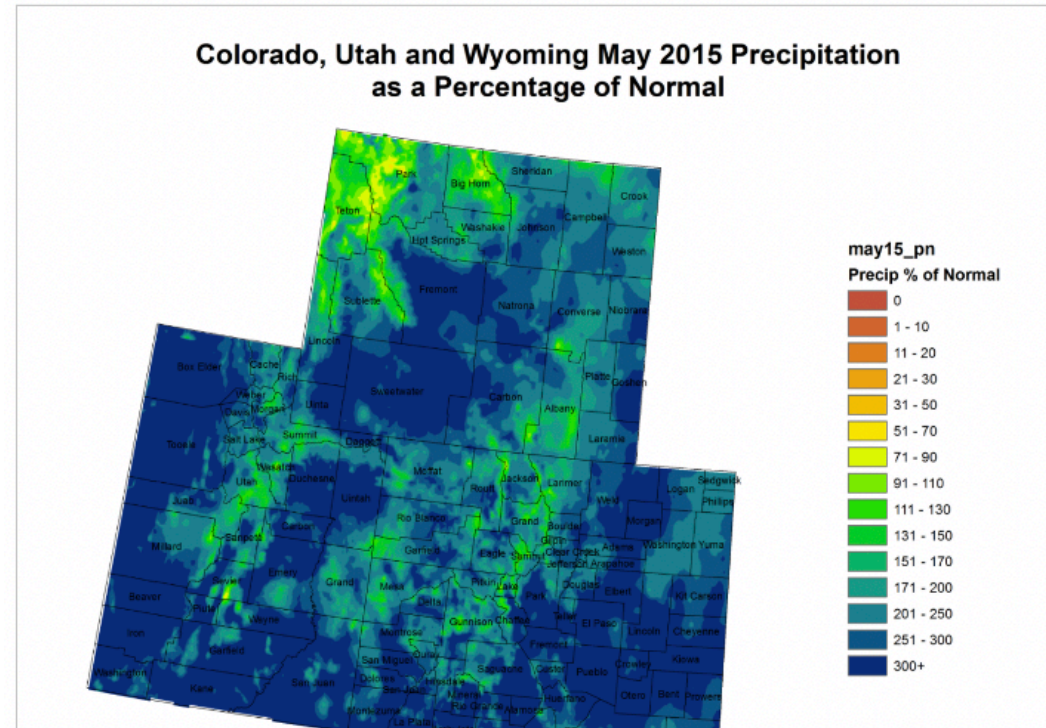
Key Questions

- How can we define Miracle Spring precipitation? What are the dynamical drivers of spring (miracle) precipitation?
- How does the frequency of these events change in the future?



Water managers dodge bullet with 'May miracle' rains — The Los Angeles Times #ColoradoRiver

July 22, 2015 Coyote Gulch Climate Change, Colorado River Basin, Colorado Water



The San Diego Union-Tribune

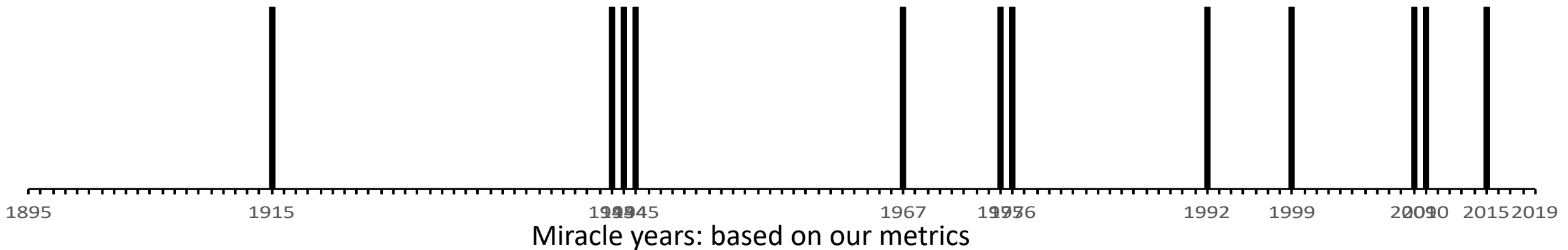
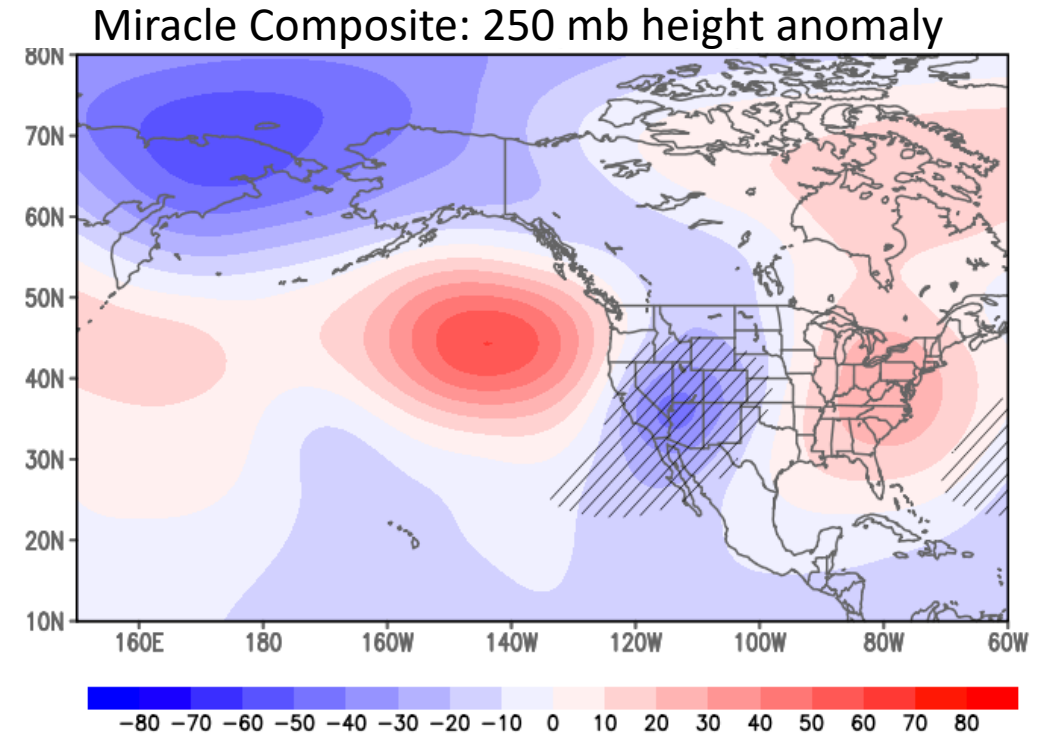
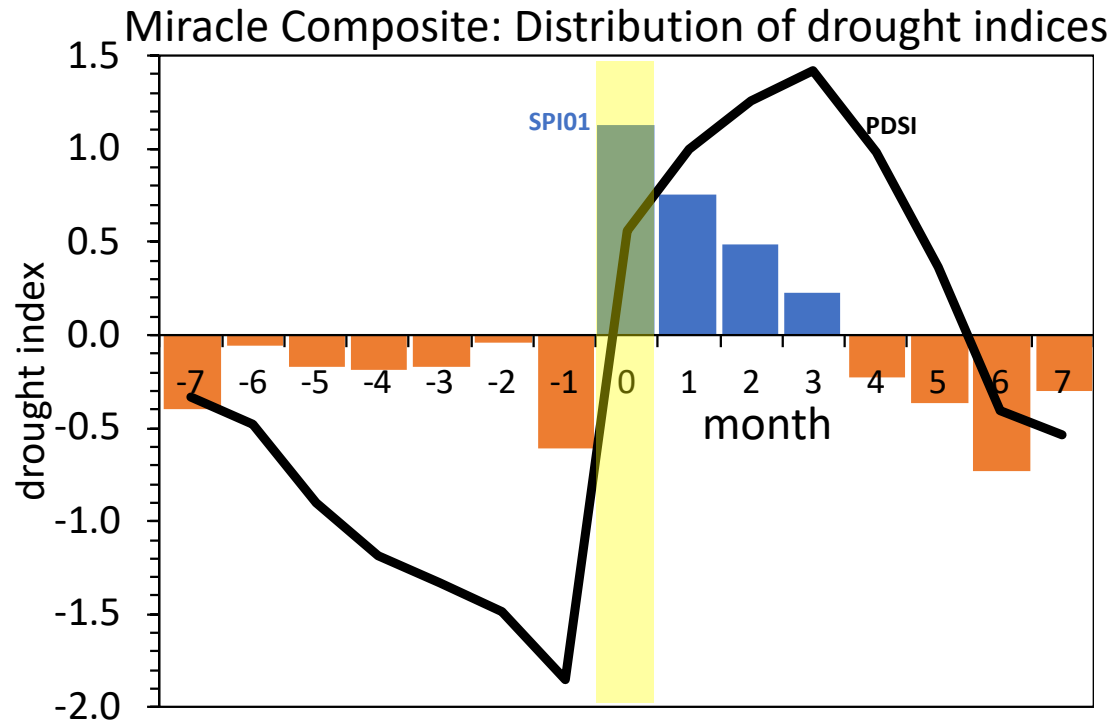
SUBSCRIBE NOW

'Miracle May' boosts river basin



Water intake pipes that were once underwater sit above the water line along Lake Mead in the Lake Mead National Recreation Area, Monday, May 18, 2015, near Boulder City, Nev. A series of storms in May are projected to keep Lake Mead's level high enough for the next two years to forestall

Miracle Spring Precipitation: Historical Observation



CMIP5 and CMIP6 Historical and RCP8.5 (Miracle Frequency)

- How well are we able to predict such an event?
- Do climate model capture these sequences involving dry winters followed by wet springs?
- How does the miracle event change if we consider larger or smaller basins?
- Can high resolution model simulate miracle events better than the GCM?

