

Atmospheric Rivers Impact On Record January 1862 Floods In Northern California ---LIKELY OVERBLOWN

Our indepth research on the January 1862 floods in Northern California indicate that Atmospheric Rivers were a “no-show”. A comparison of two 10 day precipitation totals for both Grass Valley and Sacramento tell part of the story. *Refer to the last paragraph of page 1 and page 2 of the main report for details.*

The closeness of this comparison 79.6% for Sacramento, 79.9% in Grass Valley, allows us to make the following statement: Our indepth investigation favors WIDESPREAD OVERRUNNING that is Uniform and Proportional and includes Cold Outbreaks, Low Level Snow and Major Storm Activity.

Historical outflow research at the Golden Gate by a group of Portland State University Scientists verify that the greatest 18 day outflow since records began in 1858, occurred during the latter half of January 1862. The record 18 day outflow was estimated to be ~ 25% greater than the heaviest 18 day outflow that occurred during the Major Flood of 1997. *Reference : A novel approach to flow estimation in tidal rivers. This article can be found in Water Resources, Vol. 49, 1-16, 2013.*

CONCLUSION: The point being that the geographical area of enhanced precipitation being covered by overrunning (like the widespread heavy rain that fell in Northern California during the period January 15th through midday the 20th) would be much larger than the area of enhanced coverage due to an Atmospheric River. In addition, the uniformity of precipitation over that area would preclude an atmospheric river. As a result runoff and outflow produced a record at the Golden Gate that has persisted for more than a 150 years.

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