

## Twitter Thread by Daniel Swain

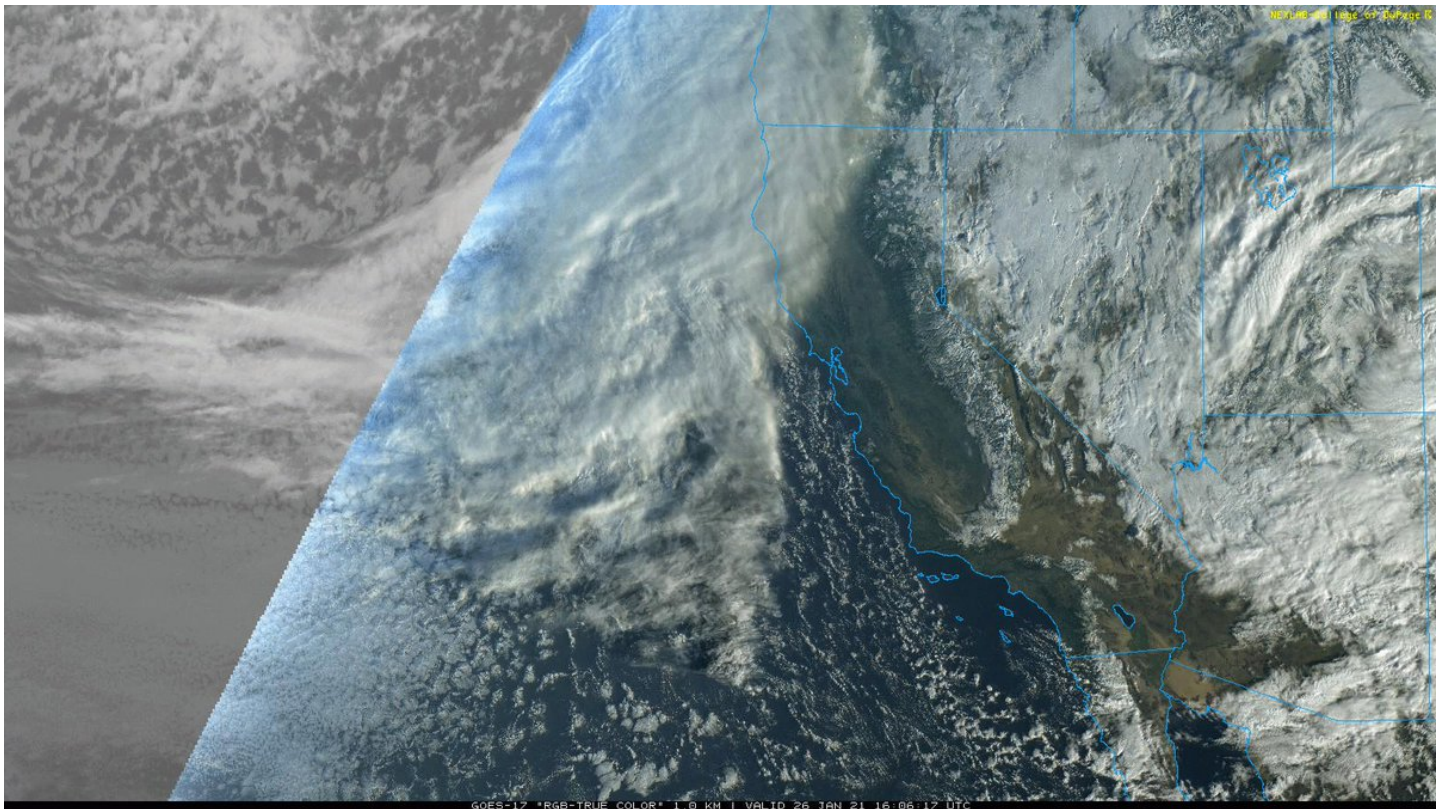


**Daniel Swain**

@Weather\_West



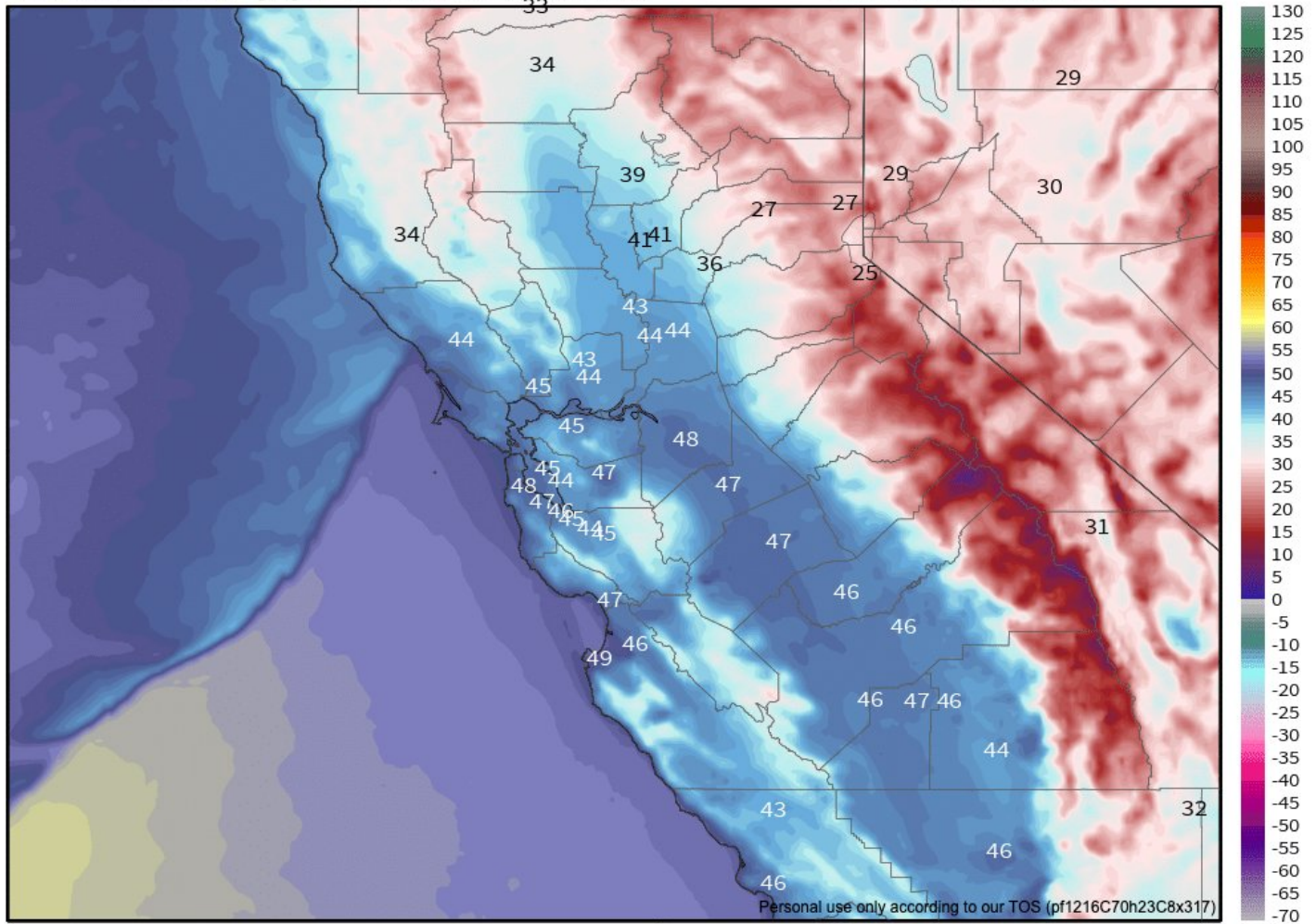
**Thread on very strong inbound CA storm. A cold & clear morning will quickly give way to increasing clouds, NorCal valley rain & snow down to 1,500-2,000 ft (locally lower) later this PM. Current satellite imagery shows this strengthening system off the coast. (1/10) #CAwx**



**Tonight, a rapidly intensifying cold front will sweep across NorCal. This front will be unusually well defined, for a CA winter storm, and will replace an already cold airmass with...another cold airmass! (2/10) #CAwx**

NCEP NAM-3km 2-meter Temperature [°F]  
Init: 12Z26JAN2021 -- [18] hr --> Valid Wed 06Z27JAN2021

MIN|MAX 1.0° | 59.0°F  
Wed 01:00 EST 27JAN2021



NAM-WRF 2503x1115y 0.029°x0.027° Forecast Grid -- First Inner Nest of 12 km NAM

[weathermodels.com](http://weathermodels.com)

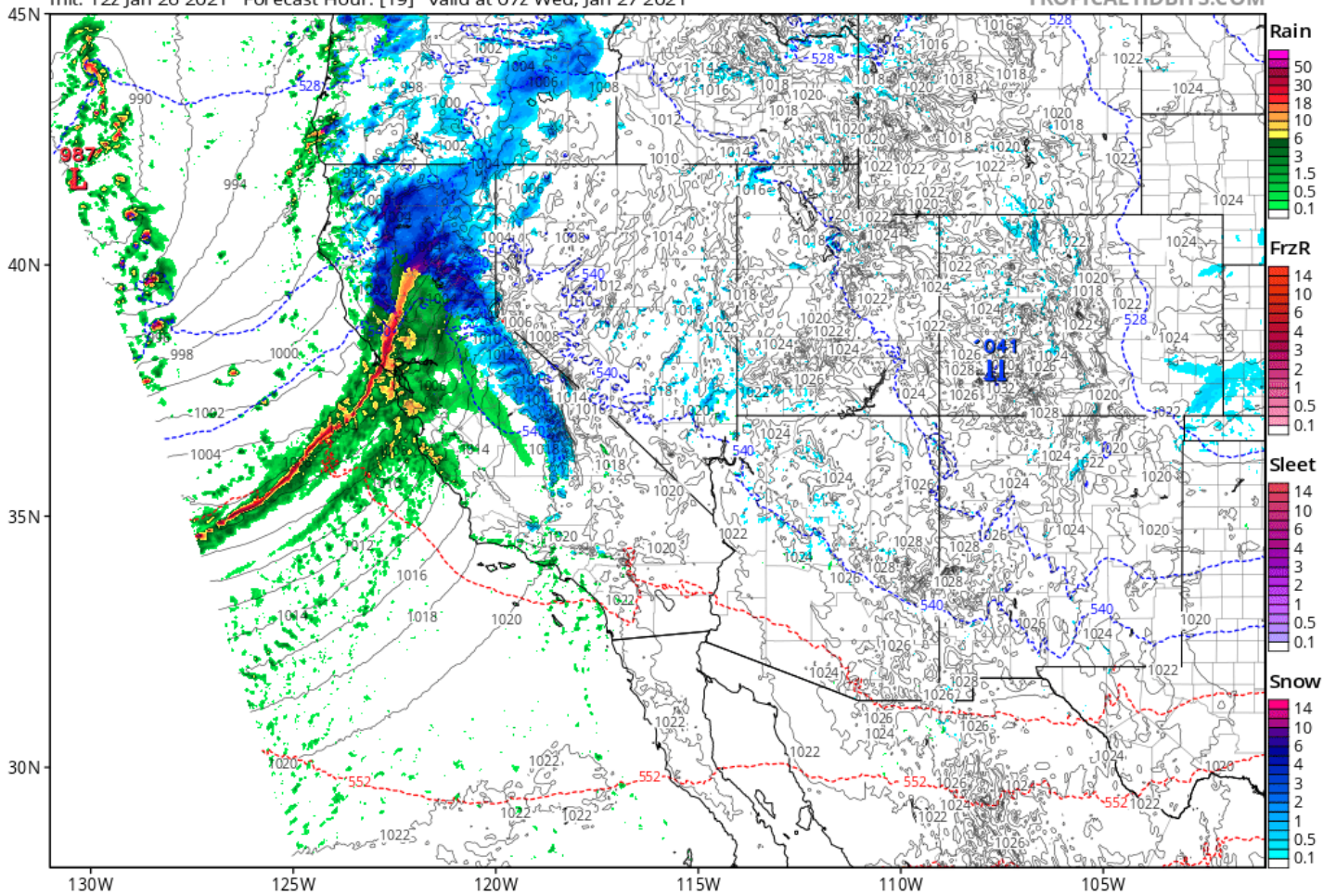
The cold frontal passage is expected to be quite dramatic across NorCal in the overnight hours. A convective "narrow cold frontal rainband" (NCFR) will likely develop, which could bring a period of torrential rain or snow to many areas, as well as possible lightning. (3/10) #CAwx



# NAM-3km Instantaneous Precip Rate (mm/hr), MSLP (hPa), & 1000-500mb Thick (dam)

Init: 12z Jan 26 2021 Forecast Hour: [19] valid at 07z Wed, Jan 27 2021

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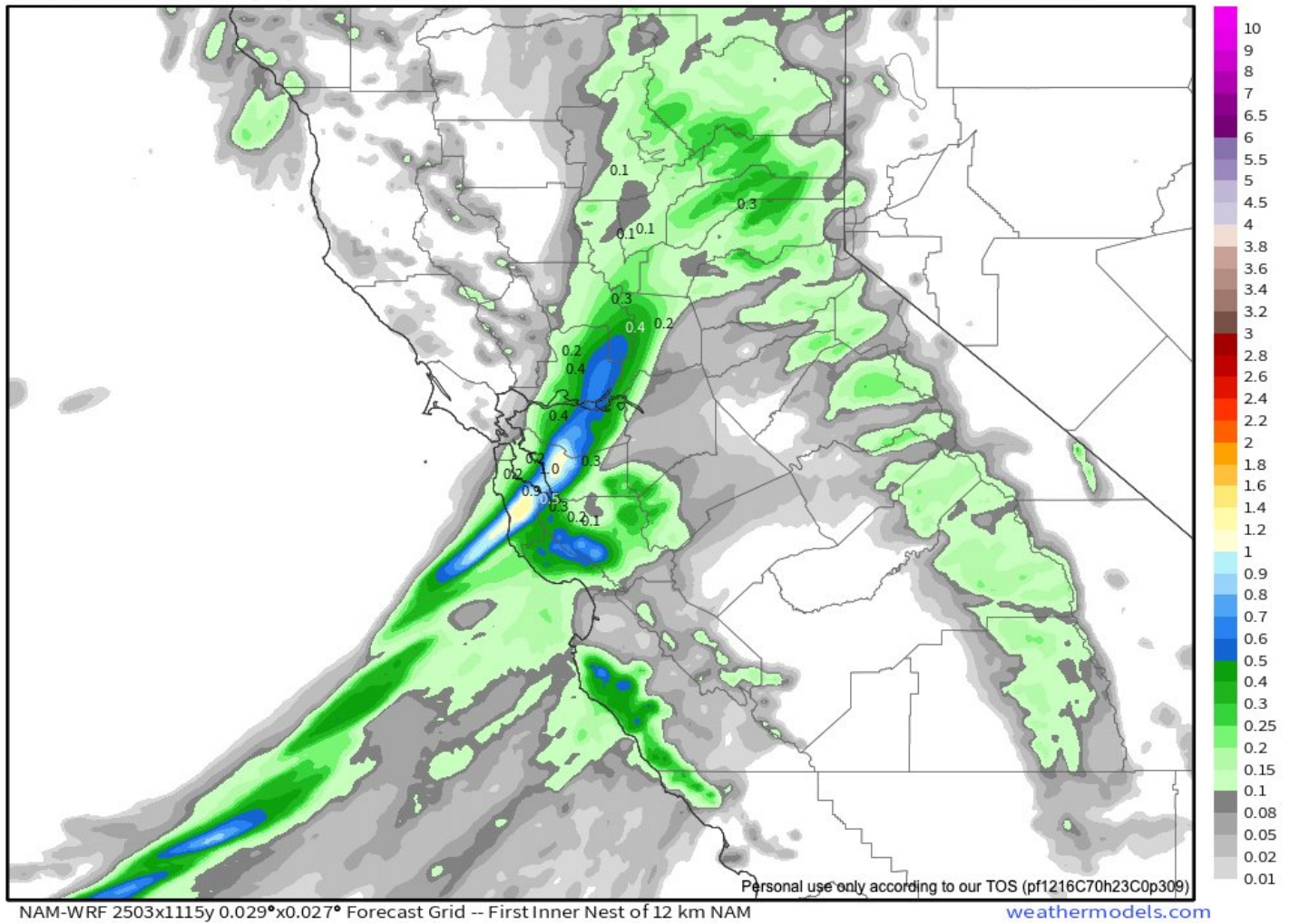


Extremely heavy precipitation is possible for a 30-60+ minute period when this NCFR feature moves ashore. Over an inch of rain could fall per hour in some spots. This portion of the event poses a high threat of debris flows in/near recently burned areas. (4/10) #CAwx

NCEP NAM-3km Hourly Precipitation [inch]  
Init: 12Z26JAN2021 -- [22] hr --> Valid Wed 10Z27JAN2021

Wed 05:00 EST 27JAN2021

MAX 1.3 inch

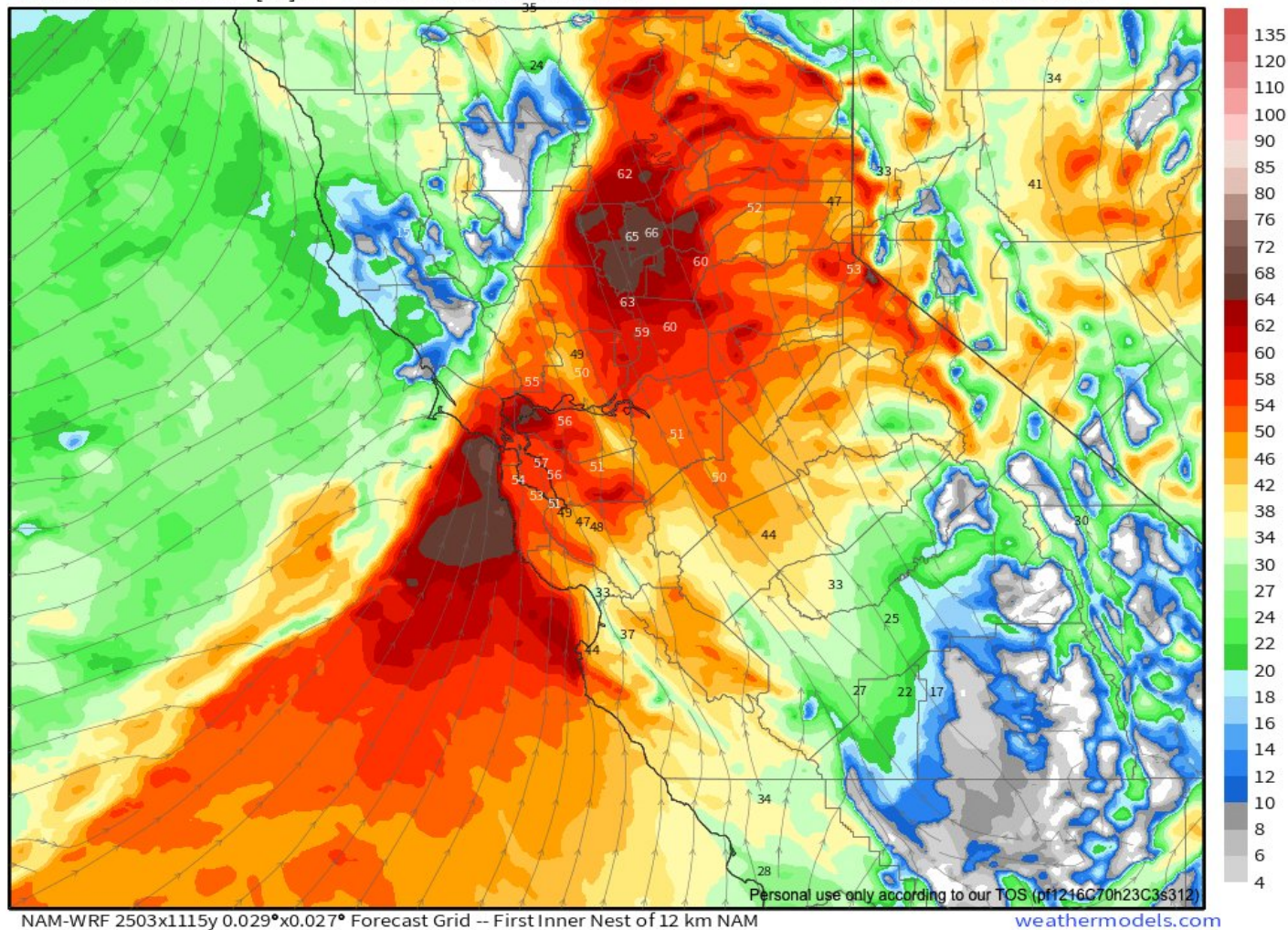


In addition to torrential rainfall, the cold front/NCFR will be accompanied by very strong wind gusts across much of NorCal. In fact, high-res models are suggesting potential for gusts of 60-70 mph even in lower elevation places. Widespread power outages possible. (5/10) #CAwx



NCEP NAM-3km 10-meter Wind Gust [mph] & Proximate Direction  
Init: 12Z26JAN2021 -- [19] hr --> Valid Wed 07Z27JAN2021

Wed 02:00 EST 27JAN2021  
MAX: 70.3 MPH

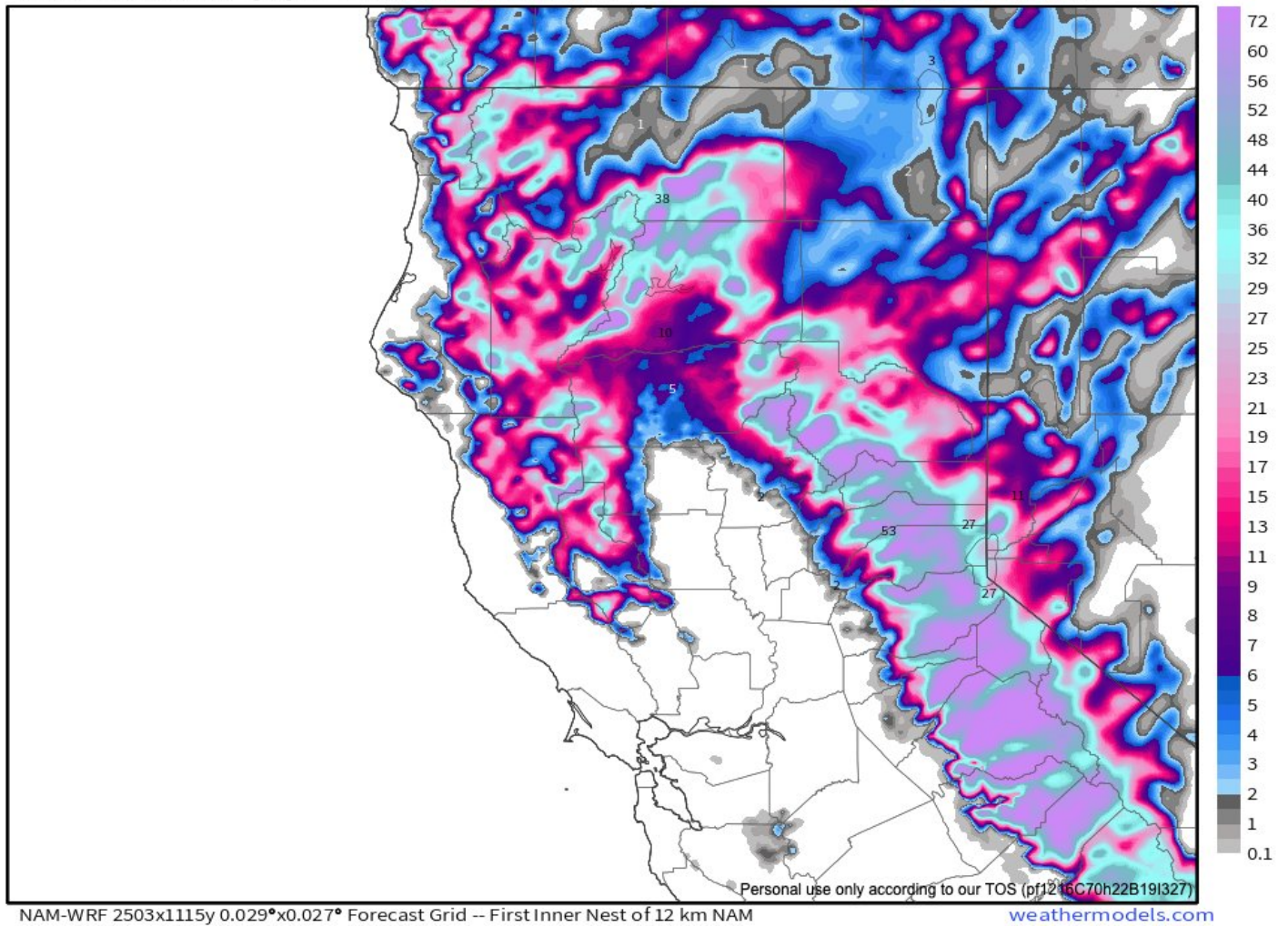


Meanwhile across the northern and central Sacramento Valley, a very rare heavy snowfall event will unfold. Some places near the Valley floor (near Redding and even Red Bluff) could see a foot or more of accumulation (!). Some lighter snow possible even south of that. (6/10) #CAwx

NCEP NAM-3km Snowfall [inch] 10:1 ratio  
Init: 12Z26JAN2021 -- [60] hr --> Valid Fri 00Z29JAN2021

Thu 19:00 EST 28JAN2021

MAX 130.3 inch



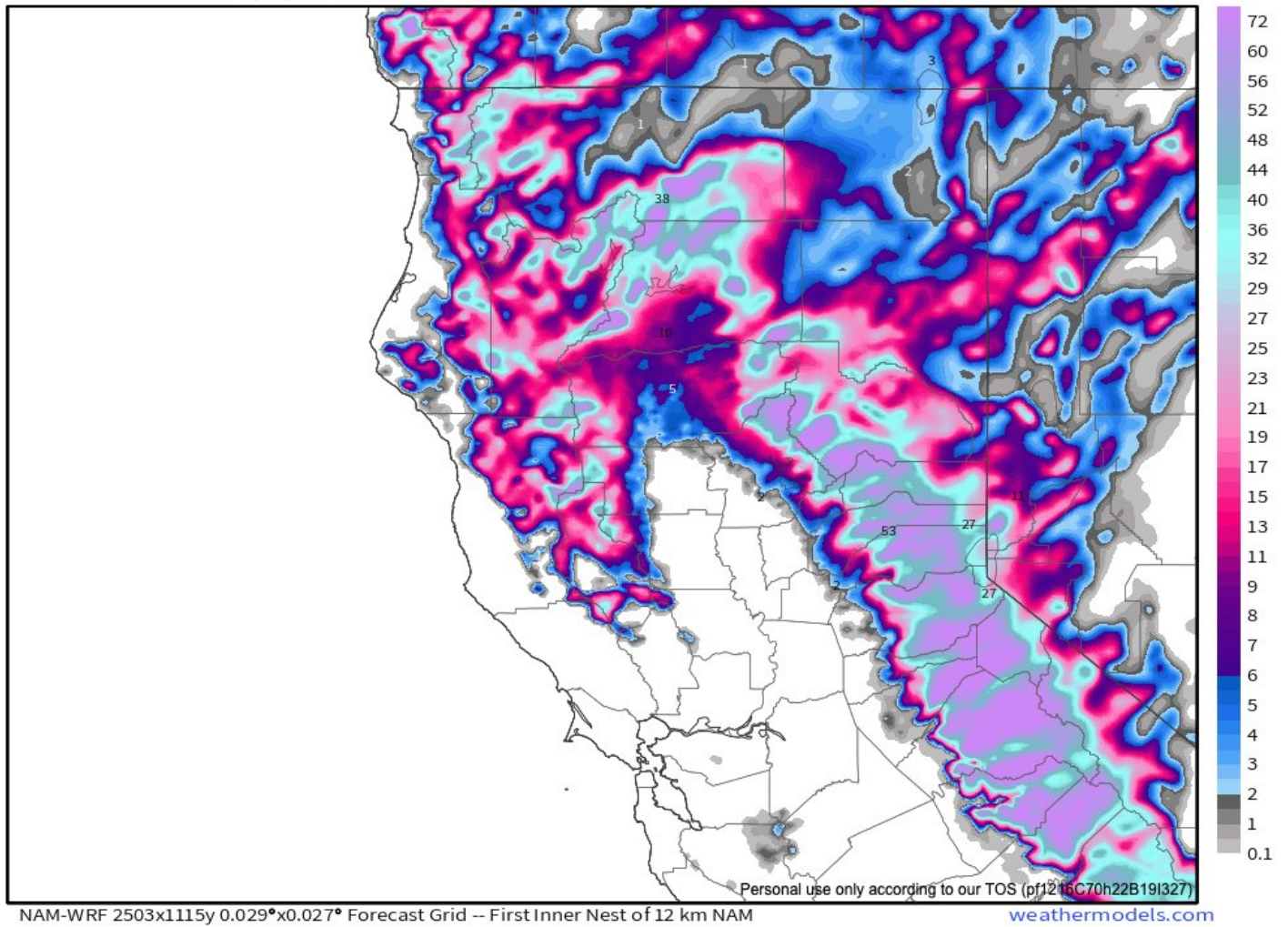
That very rare, heavy & wet snowfall in the North Valley could lead to widespread disruption and power outages. Meanwhile, extremely heavy snowfall (multiple feet) is likely at slightly higher elevations above 2,000ft. Mountain travel may become impossible. (7/10) #CAwx



NCEP NAM-3km Snowfall [inch] 10:1 ratio  
Init: 12Z26JAN2021 -- [60] hr --> Valid Fri 00Z29JAN2021

Thu 19:00 EST 28JAN2021

MAX 130.3 inch



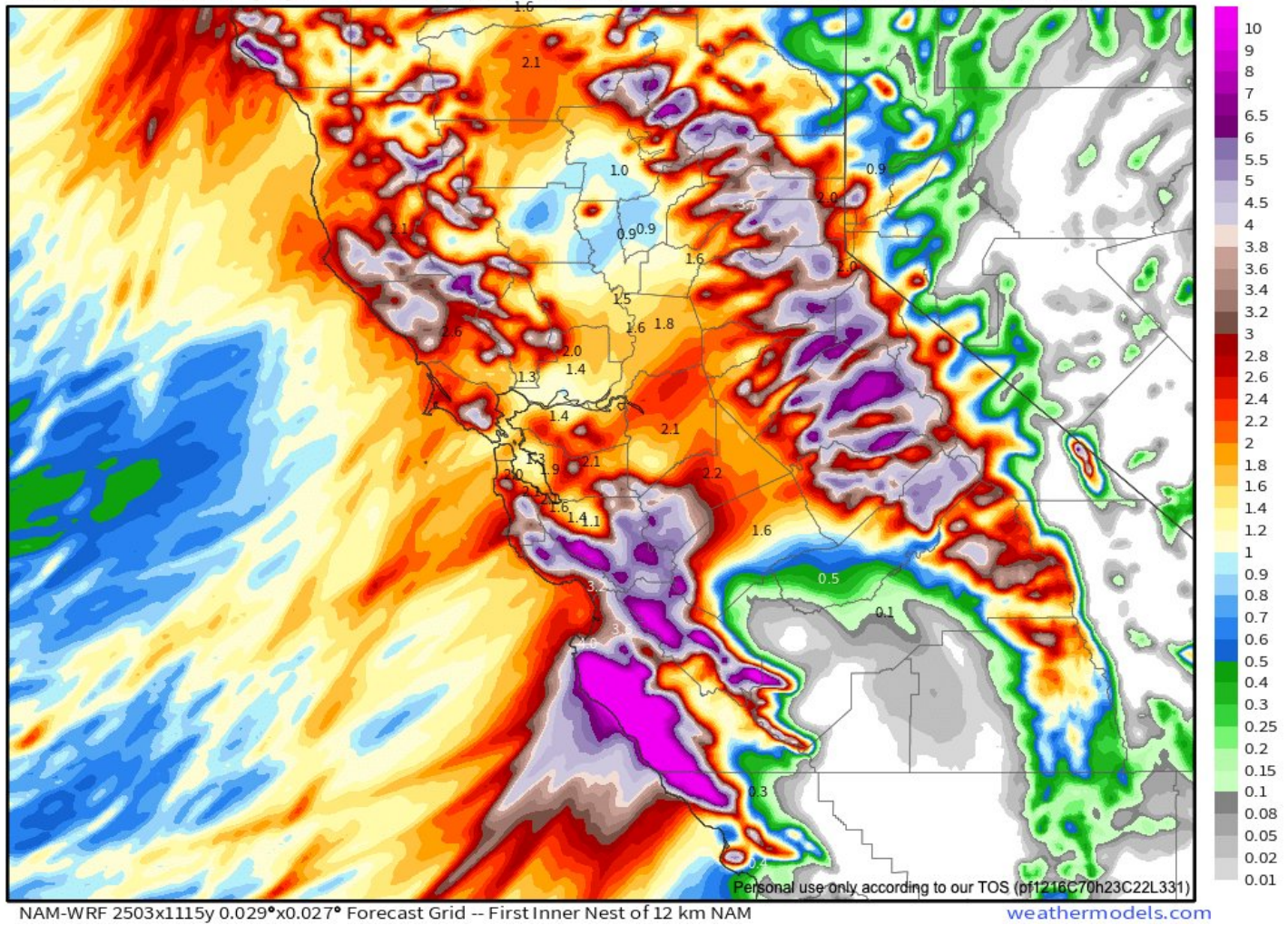
Then, on Wednesday, the #AtmosphericRiver/associated cold frontal rainband will likely stall along Central Coast (near border of Monterey/SLO counties). High-res models are suggesting potential for \*extreme\* 48hr rainfall accums, & very high flood/mudslide risk there. (8/10)#CAwx

NCEP NAM-3km Precipitation [inch]

Init: 12Z26JAN2021 -- [48] hr --> Valid Thu 12Z28JAN2021

Thu 07:00 EST 28JAN2021

MAX 23.3 inch



The Hwy corridor and Big Sur, as well as the Dolan/River Fire footprints, appear to be at very high risk in this scenario. Other models aren't quite as aggressive with rainfall totals here, but still suggest a high likelihood of 10-15 inches. (9/10)  
#CAwx

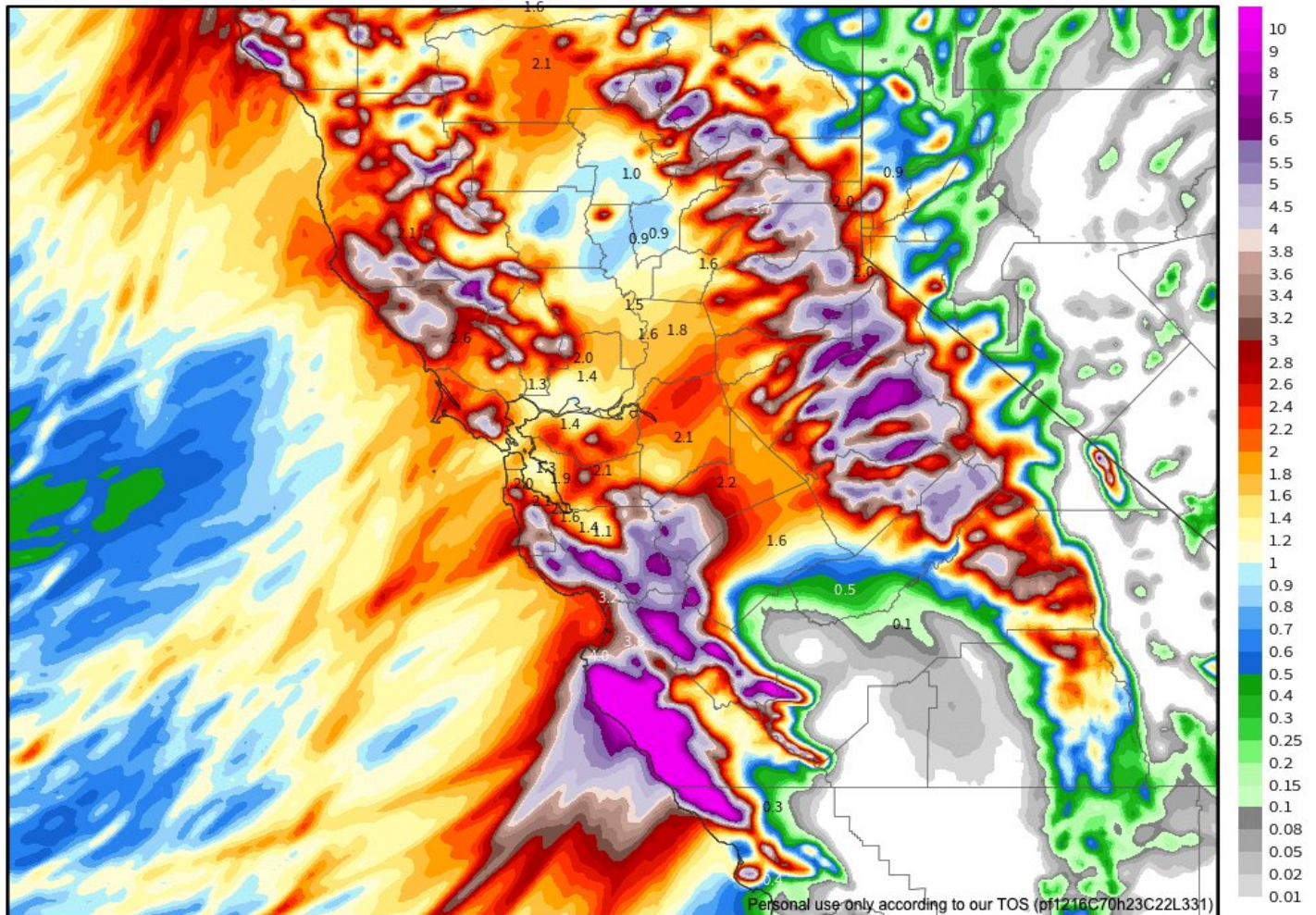


NCEP NAM-3km Precipitation [inch]

Init: 12Z26JAN2021 -- [48] hr --> Valid Thu 12Z28JAN2021

Thu 07:00 EST 28JAN2021

MAX 23.3 inch



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Finally, on Thurs, the cold front/AR will shift southward down the coast. Impacts will be less severe in SoCal than across northern/central CA, but this will still be a pretty robust system as it brings a briefer period of heavy rain/snow to SoCal. (10/10)

#CAwx

# NAM-3km Instantaneous Precip Rate (mm/hr), MSLP (hPa), & 1000-500mb Thick (dam)

Init: 12z Jan 26 2021 Forecast Hour: [60] valid at 00z Fri, Jan 29 2021

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