

October 13, 2009 - Storm Summary

This storm, at least its source of moisture, had its origins in the south Pacific as Super Typhoon Melor. Melor rampaged Japan on October 7-8th, then headed NNE & weakened as it got caught up in the mid-latitude westerlies. Remnant moisture & the warm/humid air mass from the old typhoon was carried across the Pacific during the weekend of the 10th/11th by a strengthening westerly jet stream. At the same time, a strong upper level trough of low pressure began deepening SE'ward out of the Gulf of Alaska toward California. It was a case of perfect timing as moisture from the old typhoon reached the California coast just as the trough out of the Gulf of Alaska did...and the strong westerly jet across the Pacific did a little dip and maxed out right on the central coast of California. Forecast models had a reasonably good handle on this storm reaching California up to 10 days in advance, although it was about the 8th when they pretty much had it dialed in. Rainfall amounts forecast by the models a week in advance were a little hard for forecasters to believe, but as the event drew closer the models remained consistent and thus confidence grew. It was a well advertised storm (i.e. no surprises), that ultimately lived up to its billing...and more. It was a very wet storm, setting numerous daily rainfall records, mainly across the central state. The bulk of its rain fell within a 16 hour period beginning early in the morning on the 13th and ending that evening. The 22.40" recorded at Mining Ridge in the coastal mountains about 20 miles south of Big Sur was particularly impressive (& being evaluated for believability). There has only been 11 other occasions in California with 20+ inches reported in one day. The daily rainfall records this storm broke were mostly from the famous Columbus Day storm of 1962. Although this year's October storm was a big one, it really wasn't even close to the magnitude of the Columbus Day Storm of 1962 which lasted more than two days & produced wind gusts of unprecedented seeds along the North Coast of California and the Oregon Coast. The October 13, 2009 storm will likely end up being the strongest storm of 2009 for California - unless El Niño cooks up something special before the end of the year. by Marc Walsh

	13-Oct Total Rainfall	Sacramento Valley	13-Oct Total Rainfall	Storm's Maximum Winds Sac Valley	Gust (mph)
North Coast Valleys					
Angwin	4.60	Travis AFB	4.75	Sutter Buttes	83
Middletown	4.29	Vacaville	4.23	North Yuba	65
Saint Helena	3.92	Dixon-West	4.13	Codora	61
Napa	3.65	Clarksburg	3.08	Lincoln	59
Sonoma	3.16	Sac Downtown	3.04	Esparto	58
Konocti RAWs	2.95	Arbuckle	3.02	Natomas	57
Santa Rosa	2.82	Sac Exec	2.92	Biggs	56
Upper Lake	2.55	Knights Landing	2.70	Willows	55
Ukiah Airport	2.02	Woodland	2.28	Kirkville	55
Kelseyville	1.75	Sac Int'l	2.07	Redding	51
		Artois	2.05	Artois	50
		Corning	2.04	Red Bluff	47
Bay Area		Red Bluff	1.95	Chico State Farm	44
Kentfield	6.14	Marysville	1.68	Chico WWG Office	34
San Rafael	5.70	Chico WWG	1.55		
Central Contra Costa (Concord)	3.93	Chico RAWS	1.27	Others	
Oakland	3.80	Chico State Farm	1.26	Pt. Blunt Angel Island	77
Shell-East (Martinez)	3.57	Redding	1.17	Twin Peaks in S.F.	75
Redwood City	3.52	Durham	1.11	Mt. Diablo	70
Concord (CCR)	3.45			Pt. Reyes Lighthouse	63
Conoco-Phillips Carbon Plant	3.00	San Joaquin Valley		Golden Gate Bridge	63
Livermore	2.75	Lodi	3.07	San Francisco (SFO)	56
San Francisco Int'l (SFO)	2.55	Lockeford	2.51	San Francisco Recycling	56
San Francisco Recycling	2.52	Farmington	1.68	Stockton	52
San Jose Int'l	2.33	Merced	1.66	Monterey	51
NUMMI (Fremont)	1.76	Modesto	1.57	Sac Exec	48
		Stockton	1.46	San Jose Int'l	45
Central Coast Interior		Fresno	1.39	Paso Robles	43
Las Tablas	9.19	Bakersfield	0.08	Salinas	41
Santa Margarita	7.80			Merced	41
Watsonville	4.51	Bay Area/Central Coast Mtns		Bakersfield	41
San Luis Obispo	3.76	Mining Ridge	22.40	Modesto	40
Gilroy	3.53	Three Peaks	16.46	Conoco-Phillips Carbon Plant	40
Paso Robles (downtown)	3.52	Anderson Peak	13.82	NUMMI (Fremont)	39
Monterey	2.92	Mt. Umunhum	13.27	Central Contra Coast SD (Concord)	32
Santa Cruz Yacht Harbor	2.59	Ben Lomond	10.35	Shell-West (Martinez)	27
King City	2.13	Loma Prieta	9.21	Fresno	25
Salinas	1.66	Mt. Diablo	5.75		
Bradley	0.92				

Storm's minimum pressure was 967mb at 5pm PDT 10/13/09 ~400 mi west of the Washington coast.