

Debris Flow-2007/2008 Event Log

IOP-5

Lat: 33.94933 N Lon: -118.44217 W Alt: 43 m Truck HD: 100 deg
 Date/Time SR1 ready for operation: 23 January 2008 1220 UTC

Note taker: Ken Howard (NSSL)

Time (UTC)	Event
1220	Arrived on site, leveled truck and got all systems up OK
1255	Began data collection. Scatter showers NW of burn areas. Forecast timing of precip bands/fetch impacting debris flow areas highly questionable as system is nearly stationary and most of the heavy precip action slightly northeast inland and offshore. Flash flood watch for burn areas.
1400	No change. Full moon mid level strata CU deck overhead
1500	No change.
1600	Activity appears to be moving further west.
1645	Sea clutter becoming more widespread
1754	Small water spout directly west <1km from shore
1758	Regional radar comp analysis loops shows activity becoming more consolidated with possible next impulse. However, areas of heaviest precipitation remain well northwest of burn areas of interest.
1819	Off shore convective bands now moving closer to coast with increasing echo at mid levels over south facing slopes including burn areas.
1845	Onshore reflectivity increasing as larger mass moves closer to shore. Activity along south facing slopes continues to increase especially to the north of burn areas.
1850	Low cu forming w,e,s while mid level deck continues to thicken w and n
1855	Sea clutter is becoming more predominate ahead of large convective offshore areas.
1905	Offshore winds have increased which in part explains the increased SC. CUs continues to increase vertically.
1920	Cloud depth increasing over burn areas. Malibu .01 last 6?
1940	BB becoming more pronounced
1950	Light moderate precipitation continuing to move inland with heaviest closer to shore since operations IOP began.
1955	GC removing too much over burn areas and coastal terrain.
2024	SPC MD - heavy snow is developing across the mountains of Santa Barbara/Ventura/northwestern Los Angeles/Southeastern San Luis Obispo/and southern Kern counties. Lowering snow levels and increasing snow rates...possibly in excess of 2 inches per hour...are expected by 21-23z.
2030	Mod to heavy precip slightly west and south (over coast) of burn areas. BB pronounced
2040	Moderate showers continue to develop just south of burn areas in coastal region

2100	Light precip at radar.
2109	Quick lunch – Moderate reflectivity offshore expanding and moving east - Impressive
2145	Bright band well defined and decreasing in height.
2205	Call from FO asking if we can send velocity. Will check. Stated we (NSSL) archives all 3 moments. Requested info about sighting of water spout
2215	Light rain continues at radar
2225	Strong gust winds and moderate precip visibility rapidly dropping.
2230	Vis < 2k and dropping
2231	Circle X Ranch .08 last hour
2237	Intense solid line forming during the last hour with the apex pointed towards LA – again very impressive!
2249	SPC meso analysis centered on LAX possibly underplaying precip.
2230	NWS STF Moderate to locally heavy showers are beginning to push into Western Los Angeles county. At 215 pm pst...National Weather Service doppler weather radar indicated an area of moderate to heavy showers with embedded thunderstorms moving into western Los Angeles county from Malibu to Santa Monica and north into the San Fernando valley. Rainfall rates with generally be around 1/2 inch per hour with locally higher amounts to near one inch in and near thunderstorms.
2250	SMARTR and KVTX CREF compare relatively with the exception of SE towards LB. SMARTR shows clearly the convective areas along the coast and inland at LB. Need to look at SOX to see without SMARTR
2256	Impressive band of moderate reflectivity moving slowly NE towards LAX with north section impeding on coastal areas. The velocity field evolution is worth further examination with . Band of high reflectivity west of LA along terrain gradients.
2301	Velocity couplet directly west at 80km to 4 degrees
2310	Moderate rain at radar with strong winds G25 est. Vis 1 km
2320	Moderate showers over burn area as northern end of band intersects coast.
2338	Wind gust increasing with occasional moderate rain
2340	Circle X Ranch .32/hr ending at 2300 UTC
2358	BB thickness slight greater over ocean compared to inland – possibly a blockage over land.
0000	.3 at LAX and Santa Monica with .4 at Malibu in hour ending at 2300
0013	Moderate rain at radar vis 500m.
0021	Back edge of band defined in lower tilts with light scatter showers behind. Upslope still predominate signal inland. BB remain swell defined. Gust winds (<25) and moderate rainfall at radar
0027	One hour rainfall ending at 0000 Circle X Ranch .16; Malibu .07; Santa Monica .12; LAX .09; Long Beach .10. Inland amounts of note Beacon Hill .27 ;Van Nuys .14; Simi Valley .2
0035	Gust frequency increasing at Radar
0040	Intensification of activity over the Long Beach
0053	Rainfall at radar decreasing. Activity becoming more scatter west as band appears

