

CLSA-WFPS CONFERENCE 2007

April 15 – 18, 2007

Height Modernizations

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HEIGHT MODERNIZATION ACTIVITIES in CALIFORNIA

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CLSA/WESTFED 2007 Conference



NOAA, NOS, NGS



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- HEIGHT MODERNIZATION PROJECTS
 - Northern CA
 - » GPS 2-cm Networks, corridor leveling
 - Southern CA
 - » Leveling to CGPS GRM, GPS obs on BMs
- National Horizontal Re-Adjustment
 - Implications for CA
 - Use of SECTOR, HTDP velocity models



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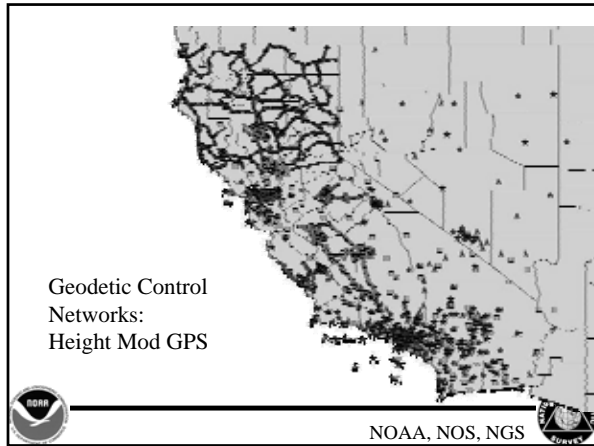
Height Modernization Projects in Northern CA

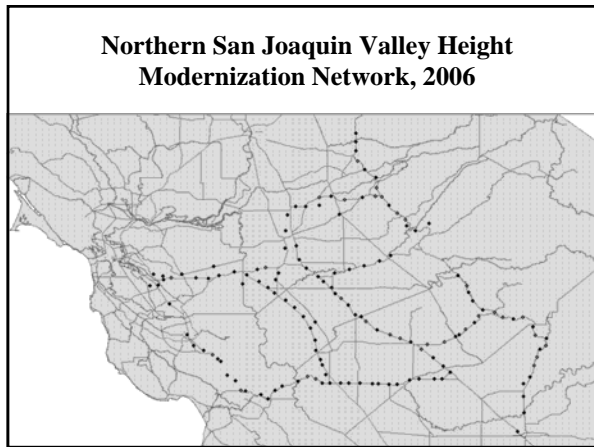
- Northern San Joaquin Valley, pending
- San Joaquin Valley/San Luis Obispo: GPS2017
- Clovis: GPS2091
- CT North Region, ortho pending: GPS1988
- Folsom Lake, pending North Region
- Glenn County: GPS2103
- Yolo County: GPS1790, GPS1478, and pending NR
- Tuolumne County: GPS1809
- South SF Bay: GPS1881
- Delta Subsidence Network: GPS1821 and GPS1308
- Contra Costa County: GPS1659
- Hamilton Field: GPS1491
- SF Bay and NE Bay: GPS1134, GPS1283

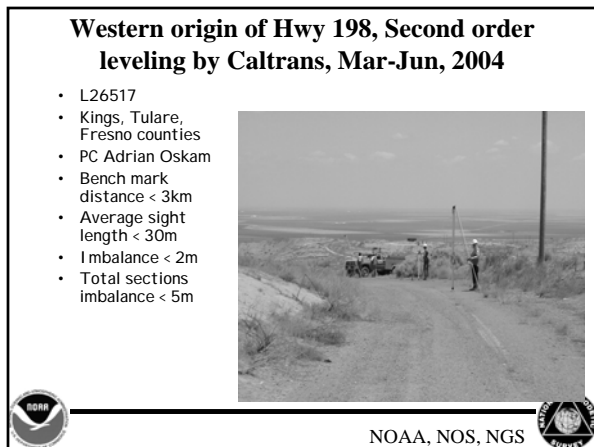


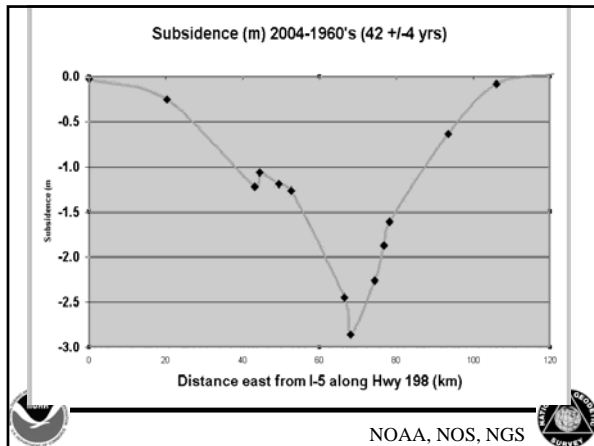
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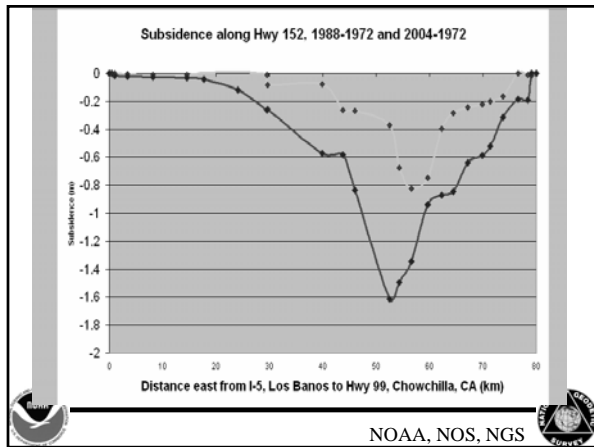












Southern CA Ht Mod activities

- Leveling to CGPS GRM (geodetic reference mon)
 - Non-CORS; datasheets have NAVD88 hts, to mm
- <http://csrc.ucsd.edu/projects/diffLeveling.html>
 - JFA, contractor
- Long (5-hr) static GPS on BMs relative to CGPS
 - Psomas, contractor

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Beta version of new datasheet

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1 National Geodetic Survey, Retrieval Date = MARCH 5, 2007
ES0470 *****
ES0470 DESIGNATION - R 18
ES0470 PID - ES0470
ES0470 STATE/COUNTY- AZ/YAVAPAI
ES0470 USGS QUAD - CONNVILLE (1968)
ES0470
ES0470 *CURRENT SURVEY CONTROL
ES0470
ES0470 NAD 83 (NRS2007) - 34 43 41.84339(N) 111 58 50.37120(W) ADJUSTED
ES0470 NAVD 88 - 1026.381 (meters) 3367.39 (feet) ADJUSTED
ES0470
ES0470 X - -1,964,472.392 (meters) COMP
ES0470 Y - -4,866,969.363 (meters) COMP
ES0470 Z - 3,613,704.412 (meters) COMP
ES0470 LAPLACE CORR- 1.29 (seconds) DEFLEC99
ES0470 ELLIP HEIGHT- 1000.78 (meters) (02/09/07) GRS OBS
ES0470 GEOID HEIGHT- -25.62 (meters) GEOID03
ES0470 DYNAMIC HT - 1025.099 (meters) 3363.18 (feet) COMP
ES0470 MODELED GRAV- 979,251.9 (MGALS) NAVD 88
ES0470
ES0470 VERT ORDER - FIRST CLASS II
ES0470
ES0470 Accuracy Estimates (95% confidence level in cm)
ES0470
ES0470 Type PID Designation North East Up
ES0470
ES0470 NETWORK ES0470 R 18 0.44 0.37 0.98
ES0470
ES0470 LOCAL ES0462 K 31 RESET 1.27 1.08 2.98
ES0470 LOCAL ES0574 HCGUIREVILLE 0.78 0.69 1.84
ES0470 LOCAL ES0586 K 344 1.25 1.22 2.94
ES0470 LOCAL ES0652 Y 492 0.88 0.71 1.98
ES0470
ES0470 LOCAL AVERAGE 1.04 0.92 2.44
ES0470

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