SAR Data at UNAVCO and ASF

Scott Baker

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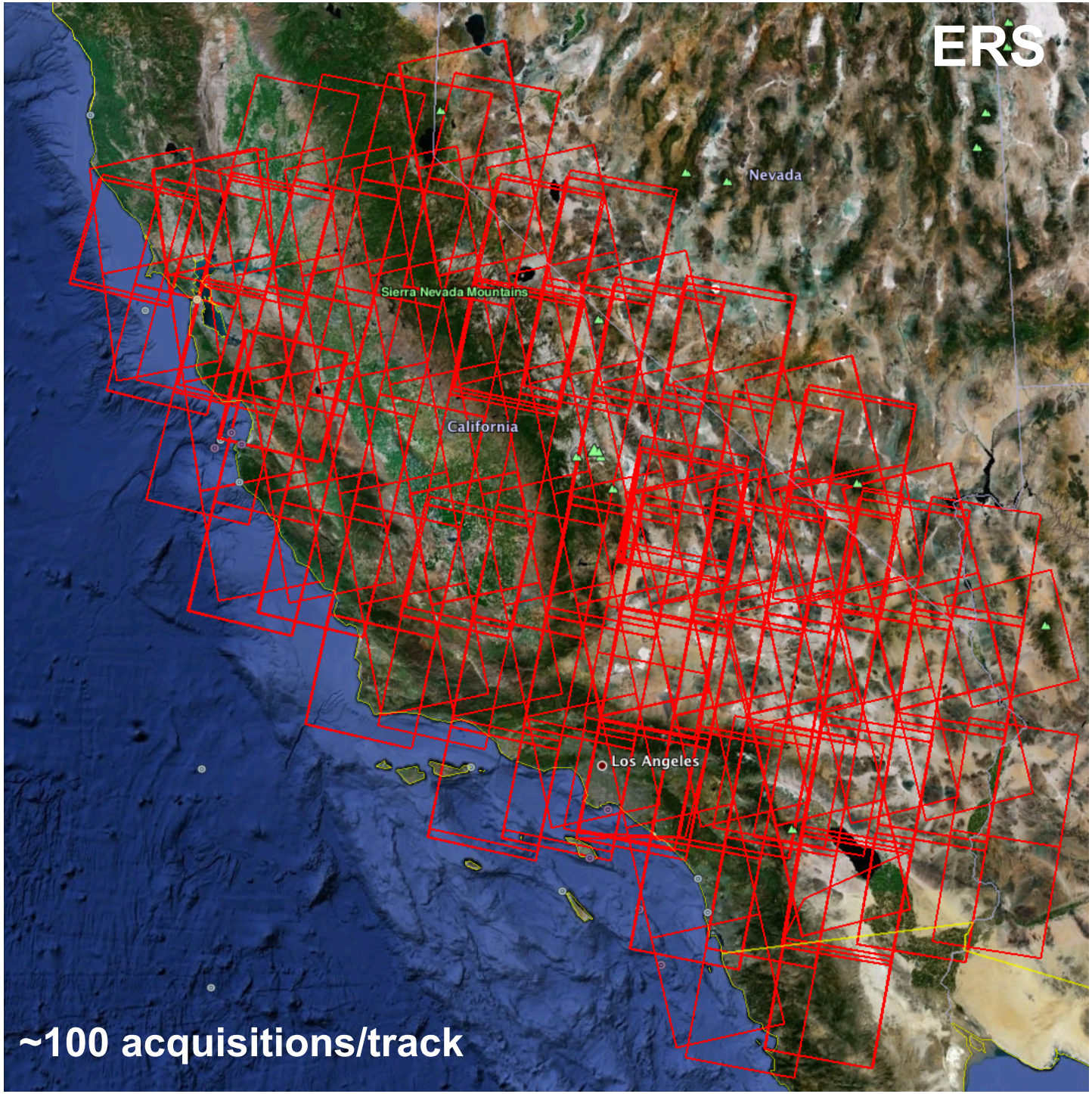
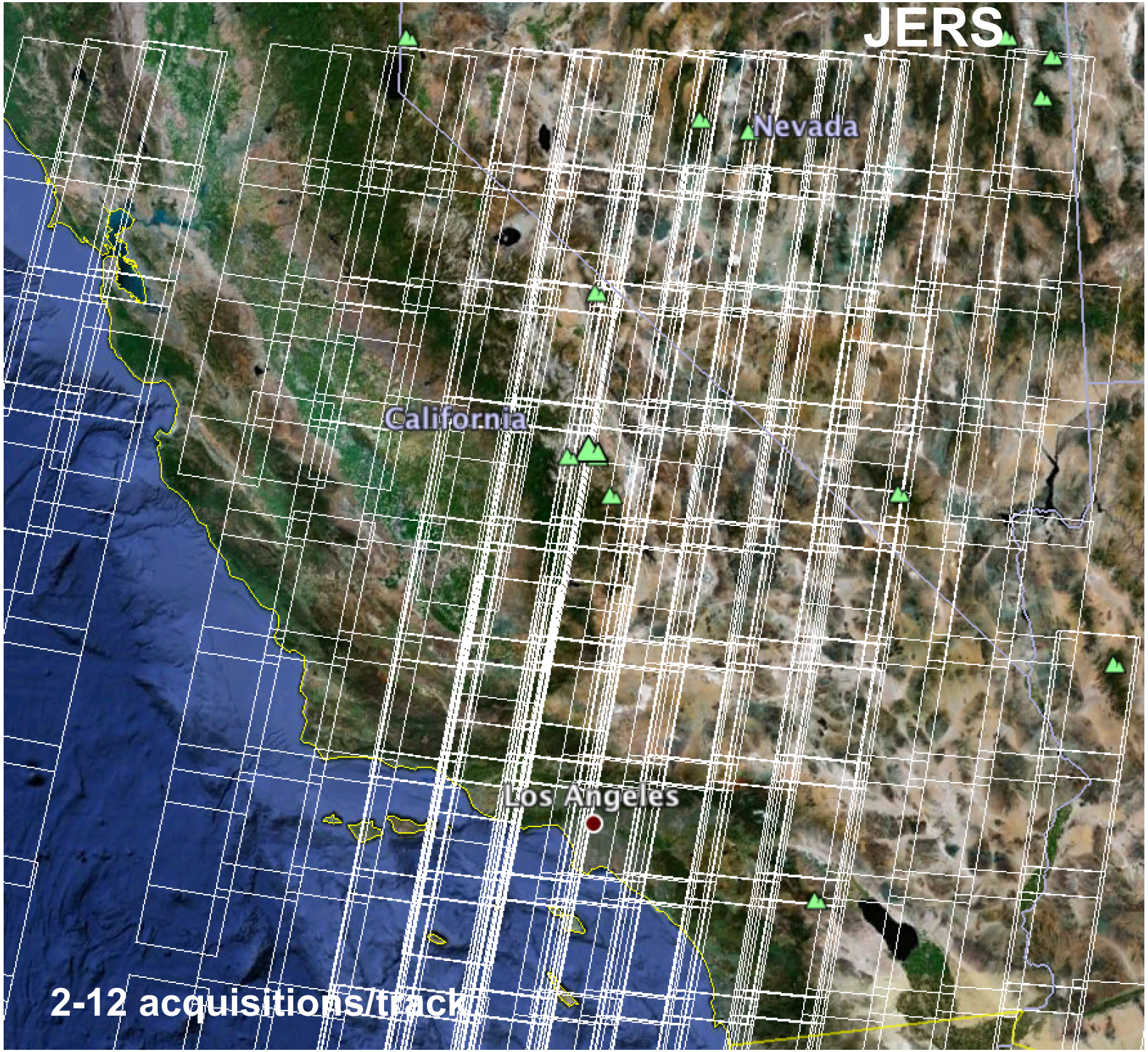
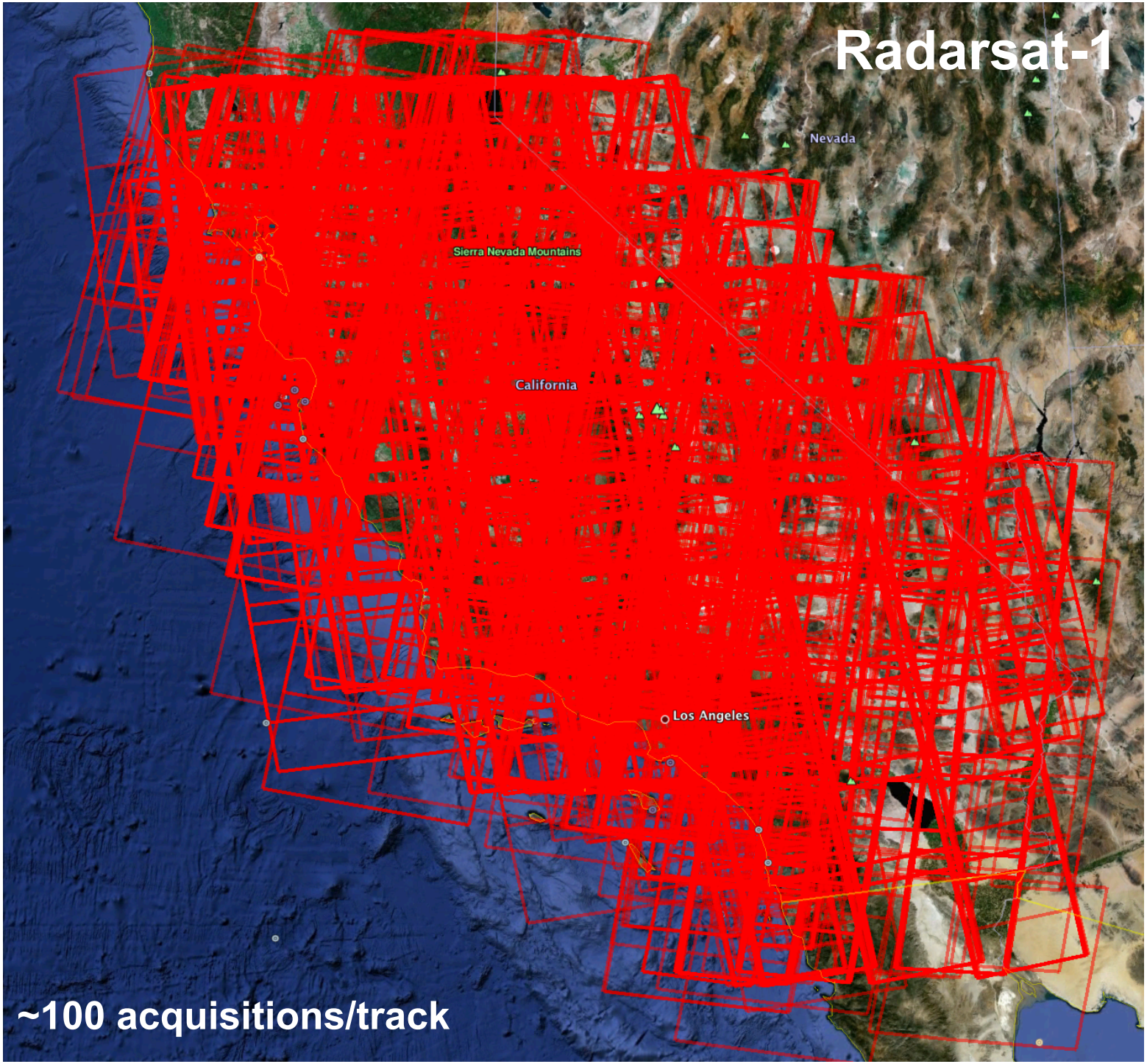
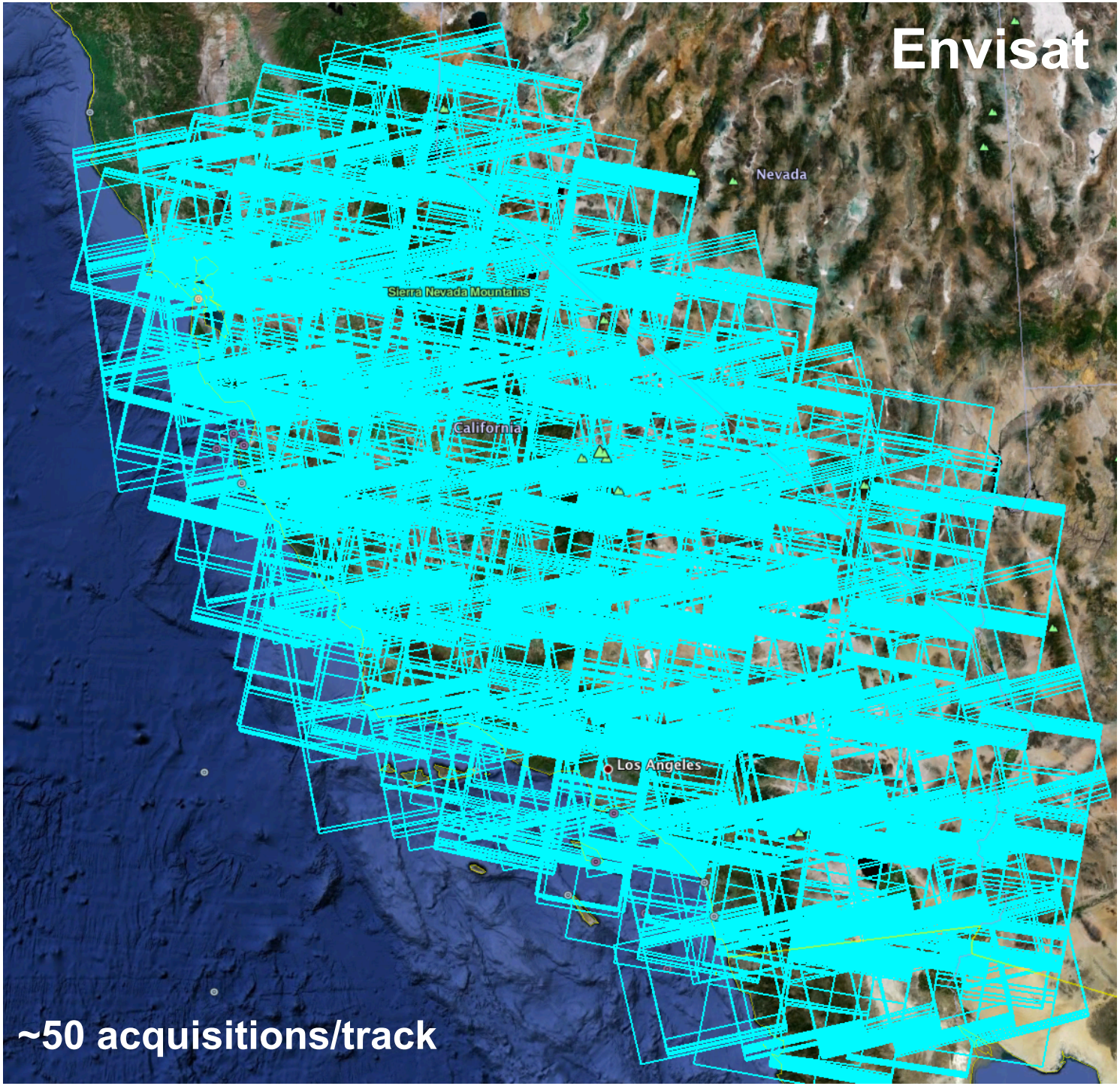
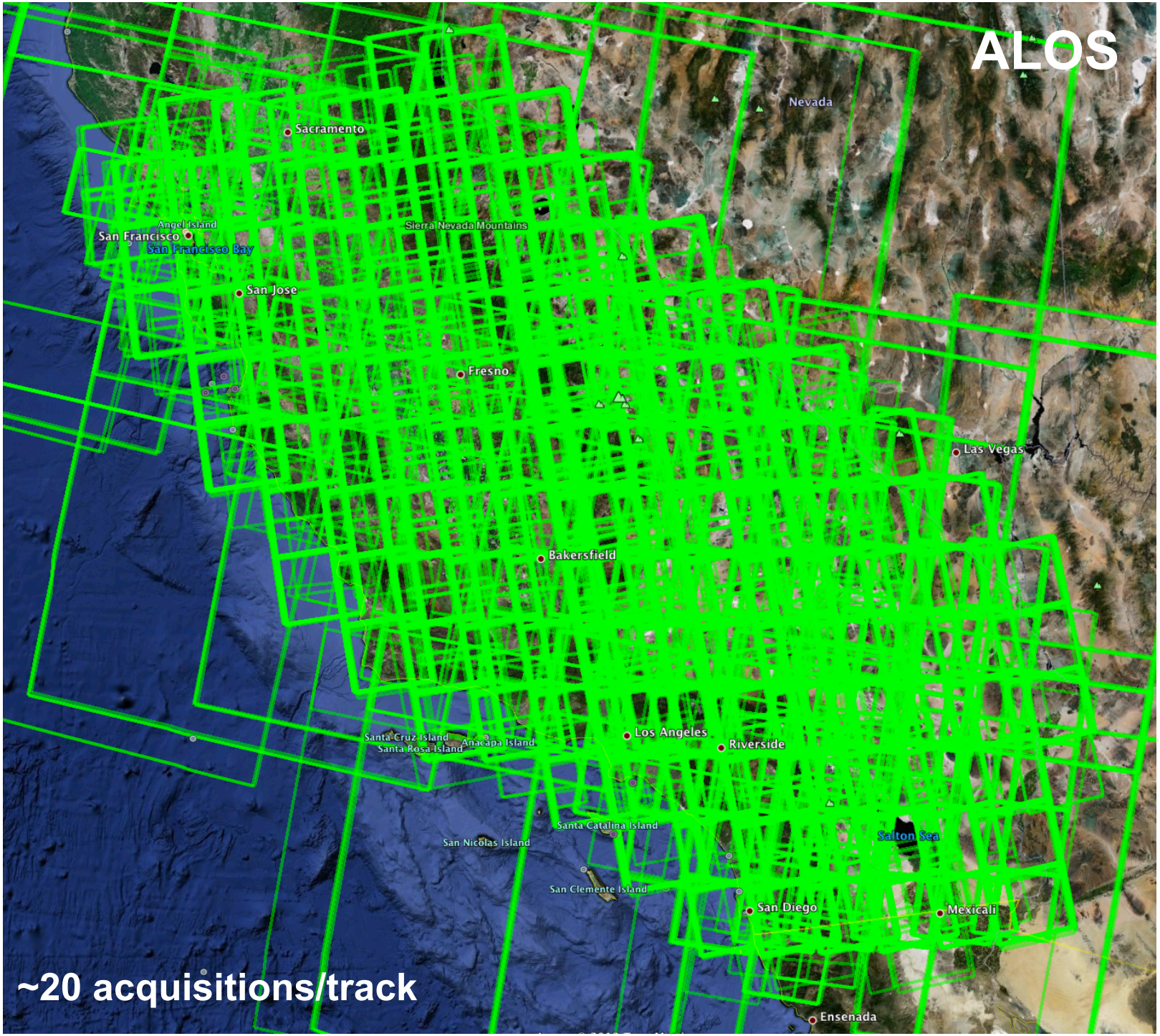
UNAVCO


ERS
Nevada
Sierra Nevada Mountains
California
Los Angeles
~100 acquisitions/track


JERS
Nevada
California
Los Angeles
2-12 acquisitions/track


Radarsat-1
Nevada
Sierra Nevada Mountains
California
Los Angeles
~100 acquisitions/track


Envisat
Nevada
Sierra Nevada Mountains
California
Los Angeles
~50 acquisitions/track

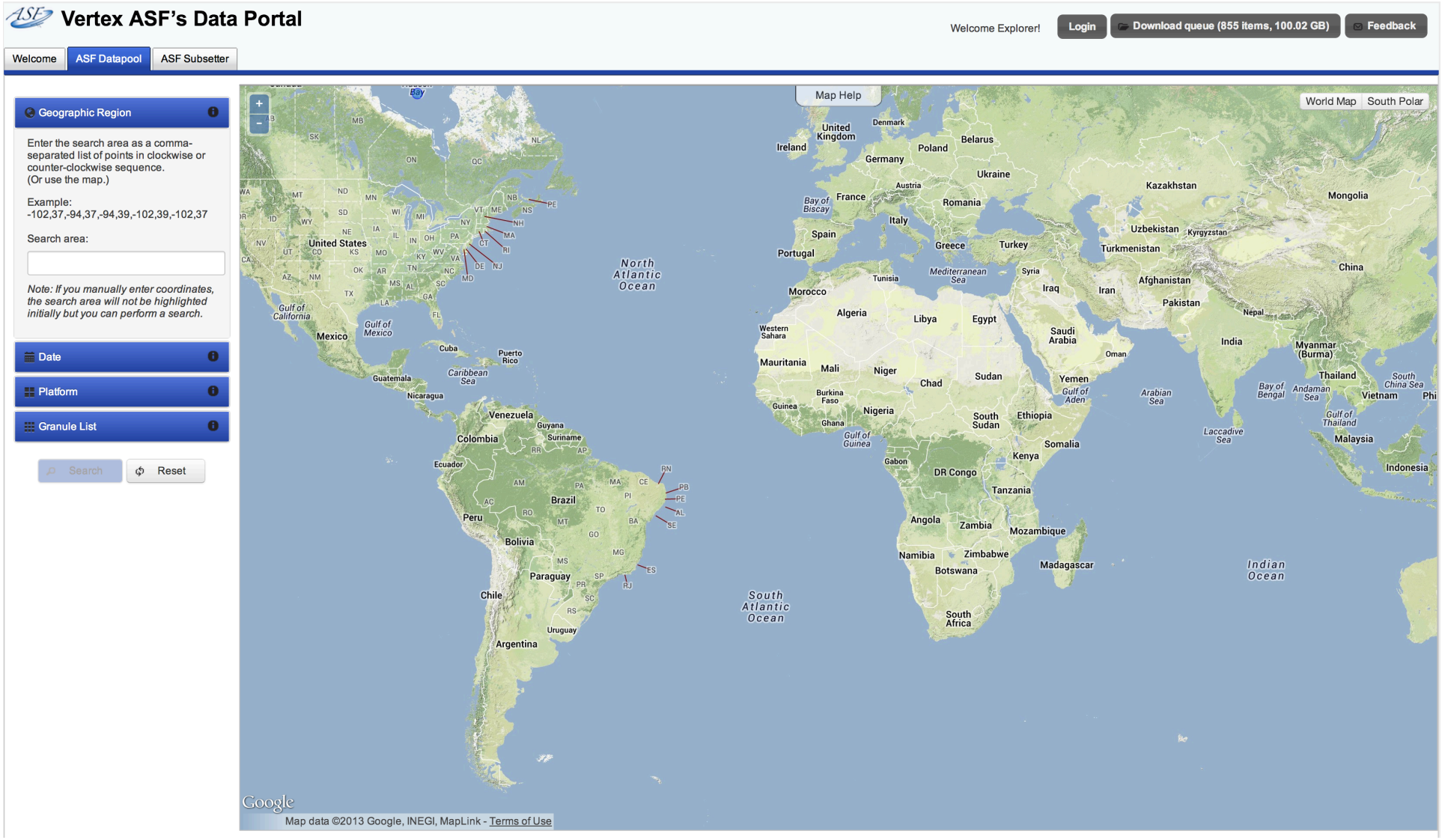

ALOS
Nevada
Sacramento
Angel Island
San Francisco
San Francisco Bay
Sierra Nevada Mountains
San Jose
Fresno
Las Vegas
Bakersfield
Santa Cruz Island
Santa Rosa Island
Anacapa Island
Los Angeles
Riverside
Santa Catalina Island
San Nicolas Island
Salton Sea
San Clemente Island
San Diego
Mexicali
Ensenada
~20 acquisitions/track

Previous Missions

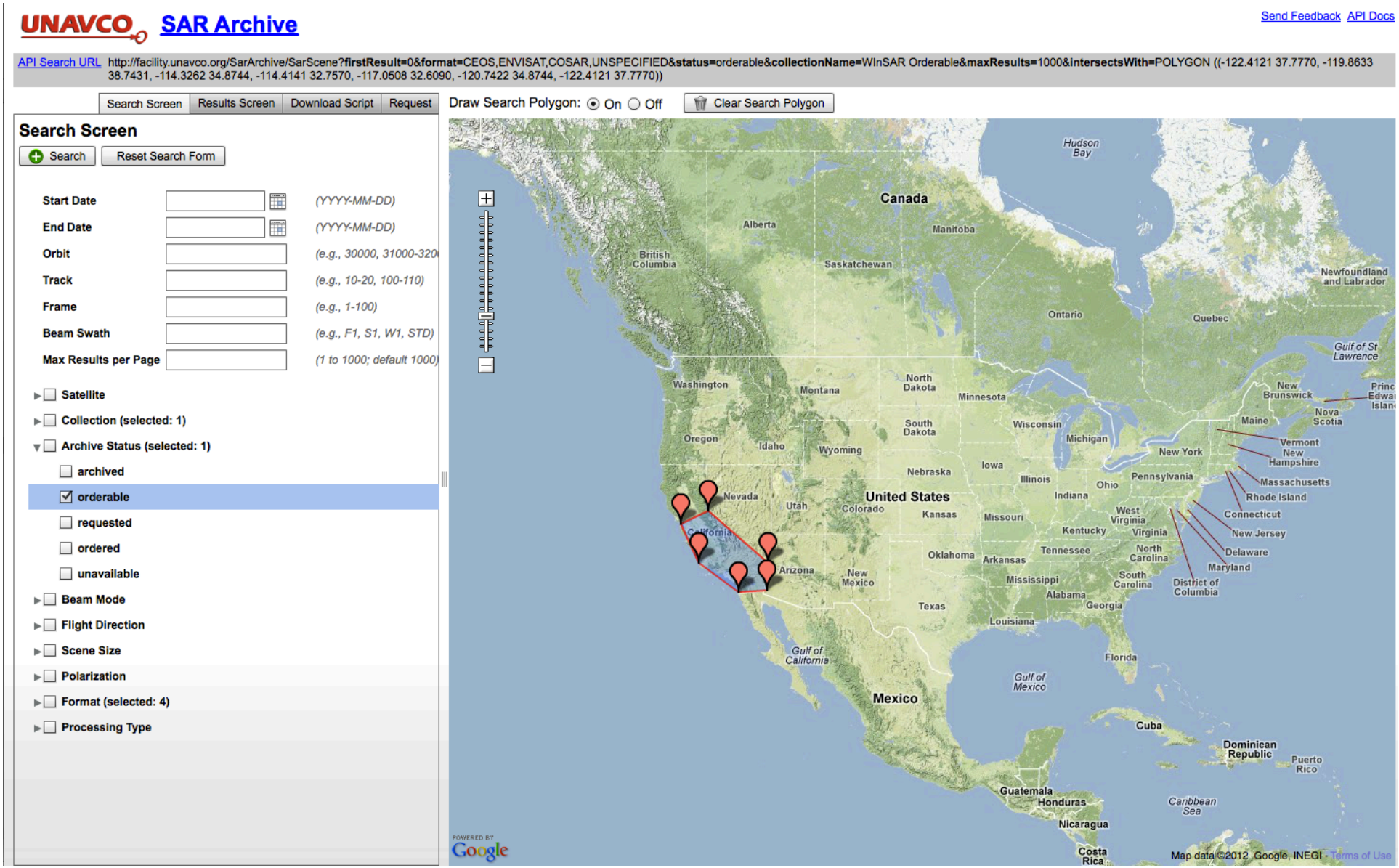
Satellite	Repeat (days)	Swath/Resolution	# Scenes
ERS-1/2 (C-Band) *1992-2000,1995-2011*	35	100km / 30m	~11000 (UNAVCO)
Radarsat-1 (C-Band) *1996-**	24	100km / 30m 50 km / 8m	~7000 (ASF, UNAVCO)
Envisat (C-Band) *2002-2012*	35 30 (Oct. 2010)	56-100km / 30m 400km / 150m	~7000 (UNAVCO) ~300
ALOS (L-Band) *2006-2011*	46	40-70km / 7,14m 250-350km / 100m	~4000 (ASF) ~100
JERS (L-Band) *1992-1998*	44	75 km / 18m	~1400 (ASF)

*Still operational, but limited data availability

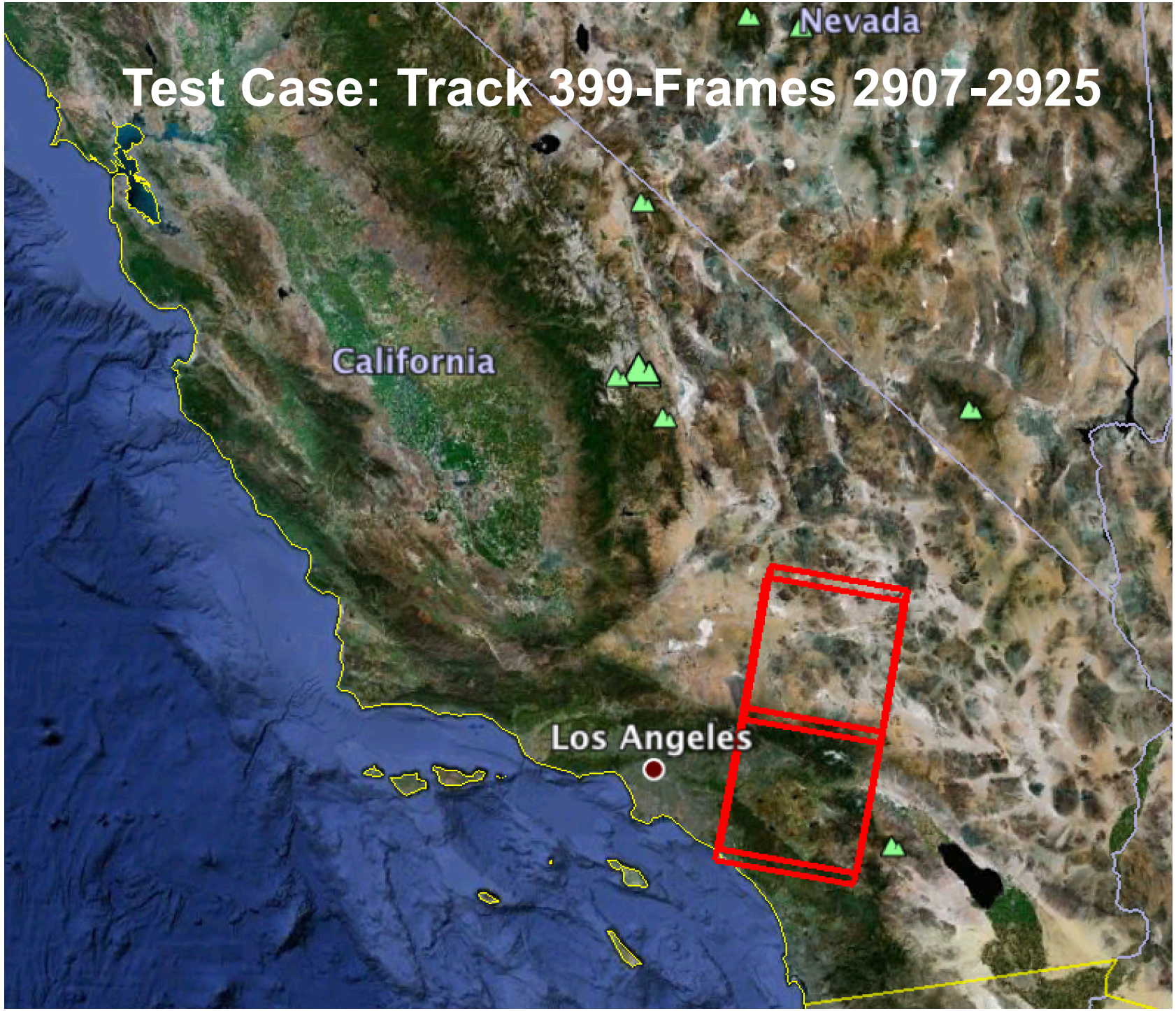
https://vertex.daac.asf.alaska.edu/



http://facility.unavco.org/data/sar/sar.html

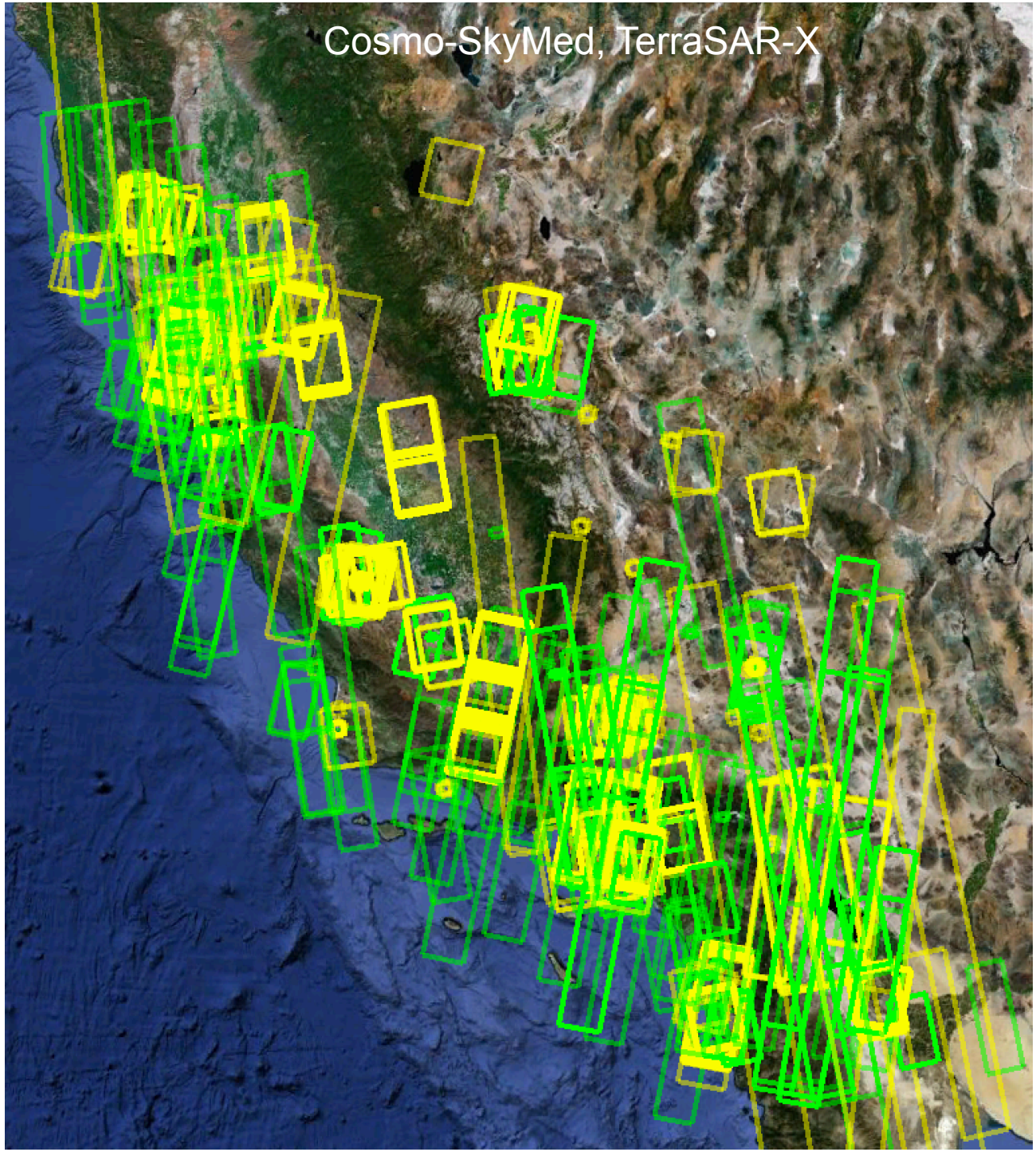


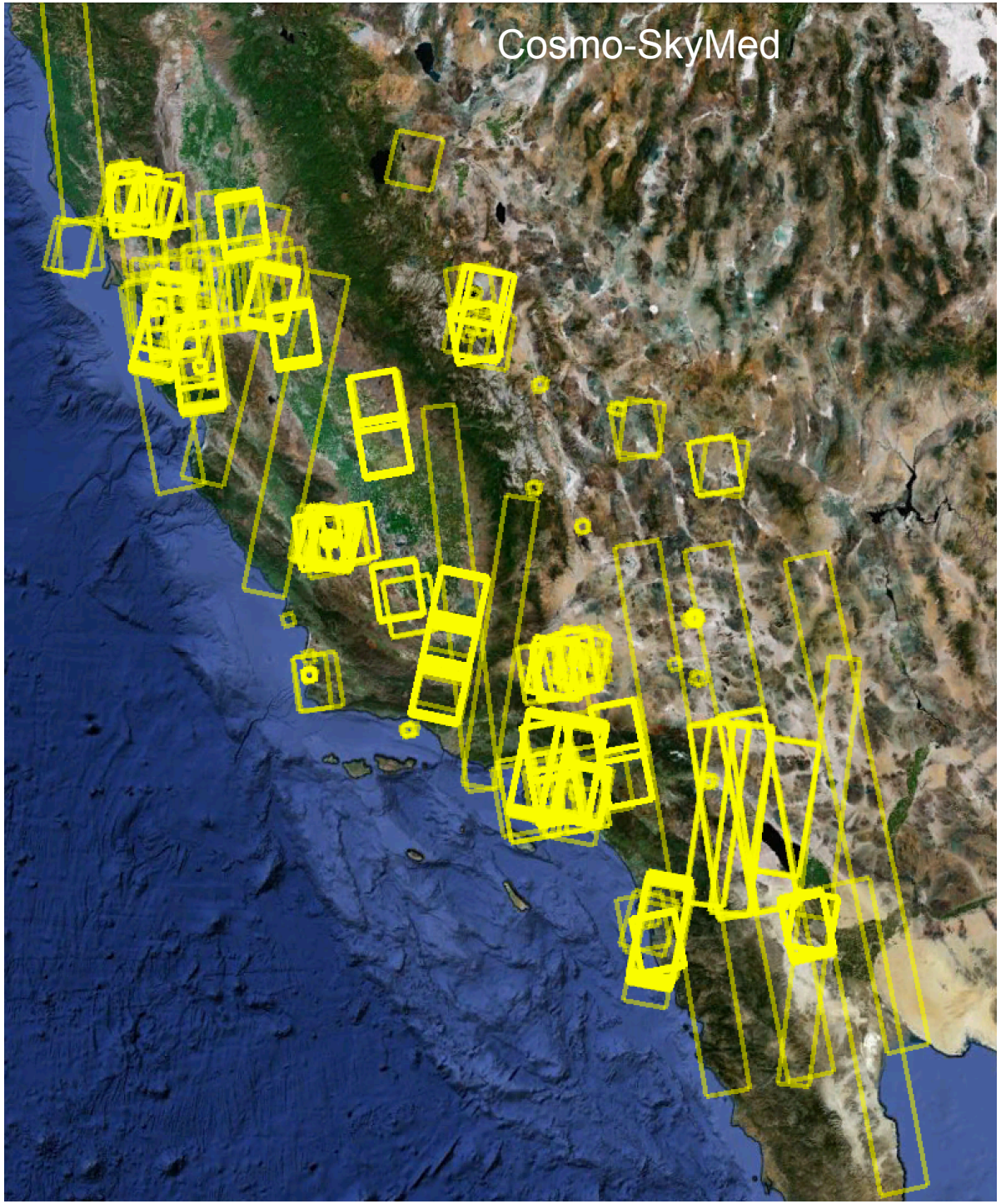
Test Case: Track 399-Frames 2907-2925

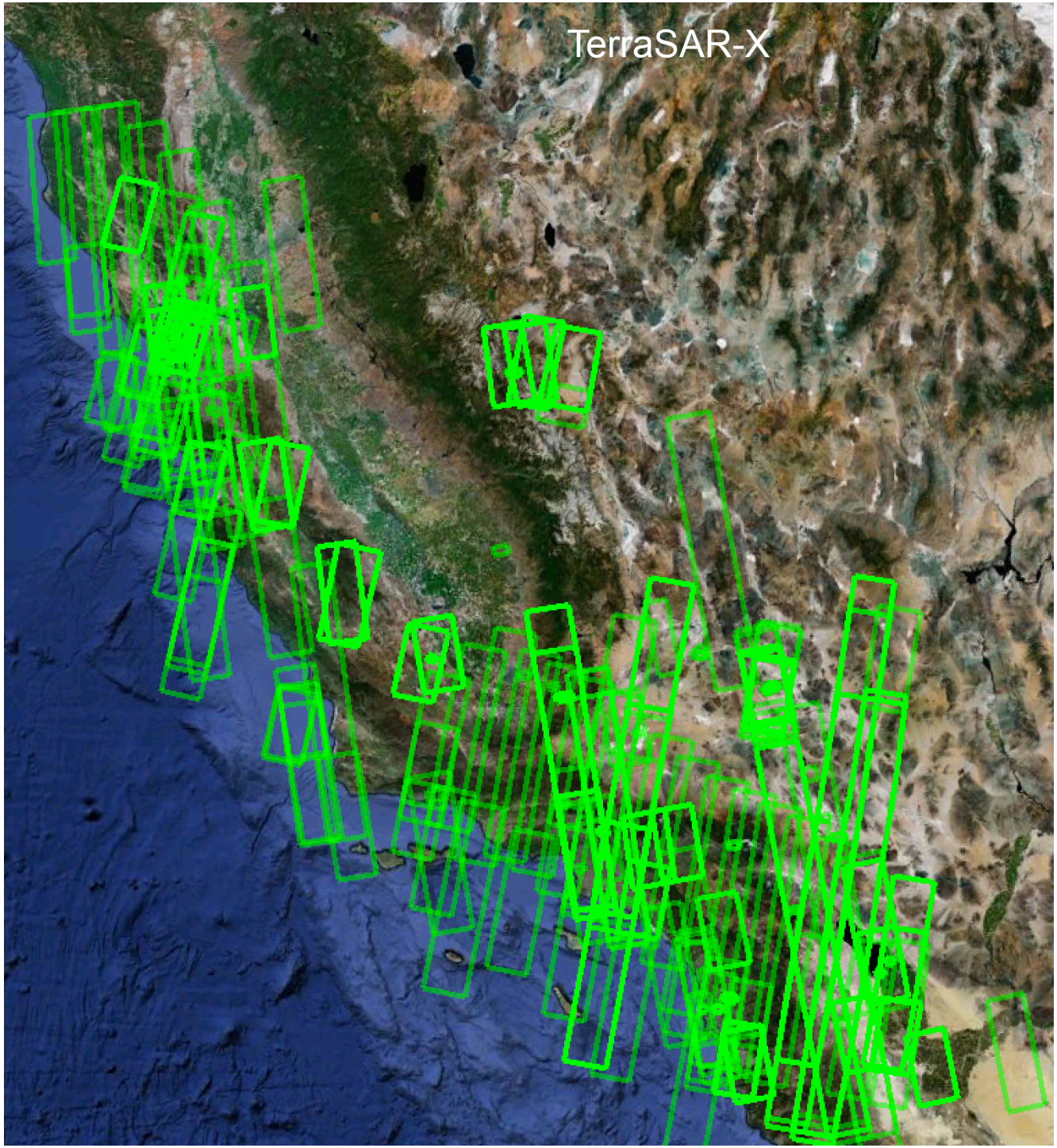


Current Missions

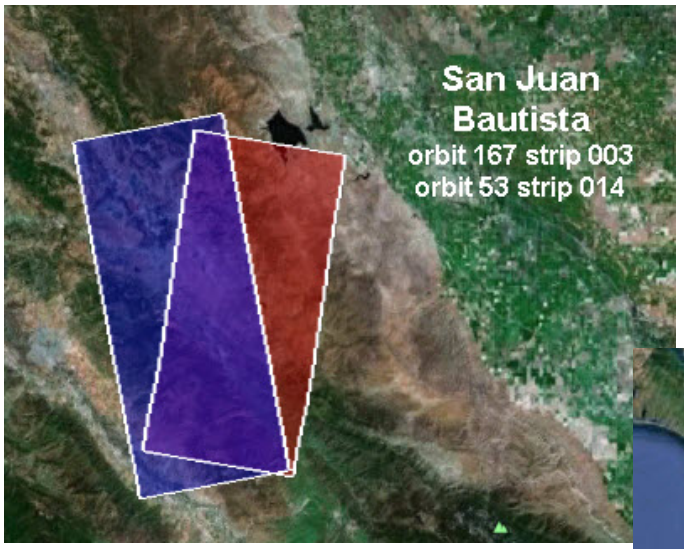
Satellite	Repeat (days)	Swath/Resolution	# So. Cal. Scenes
TSX-1/TDX-1 (X-Band) *Nov 2007, Jun 2010*	11	30km / 3m 10 km / 1m	~800
Radarsat-2 (C-Band) *April 2008*	24	50 km / 10m 100km / 25m 25km / 10m	~2000
Cosmo-SkyMed (X-Band) *Jun 2007 – Nov 2010*	16 (1-8)	40km / 3m 10km / 1m	~1700
UAVSAR	Variable	16km / 1.8m	~200

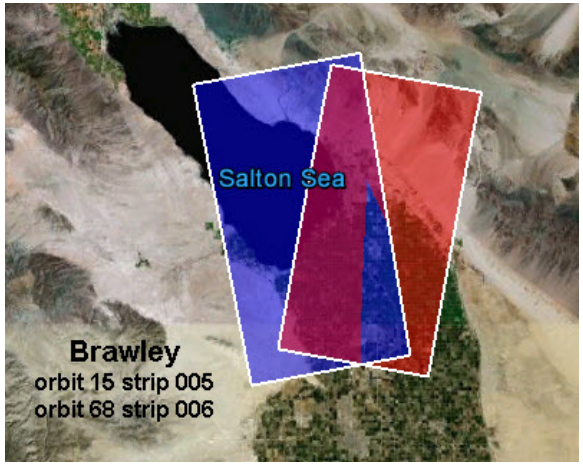

Cosmo-SkyMed, TerraSAR-X

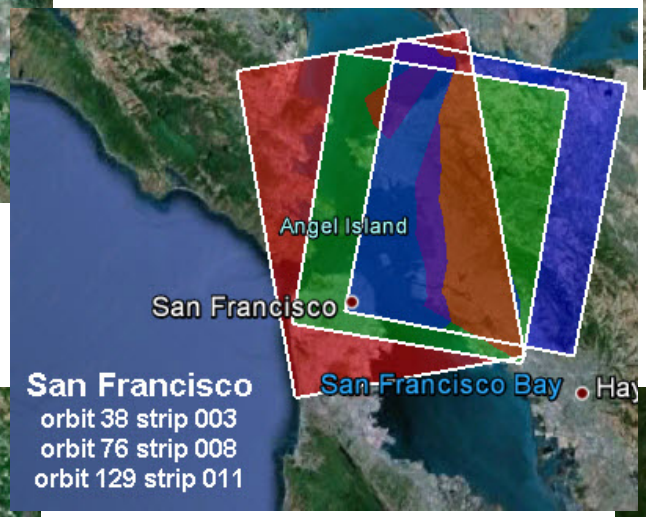

Cosmo-SkyMed

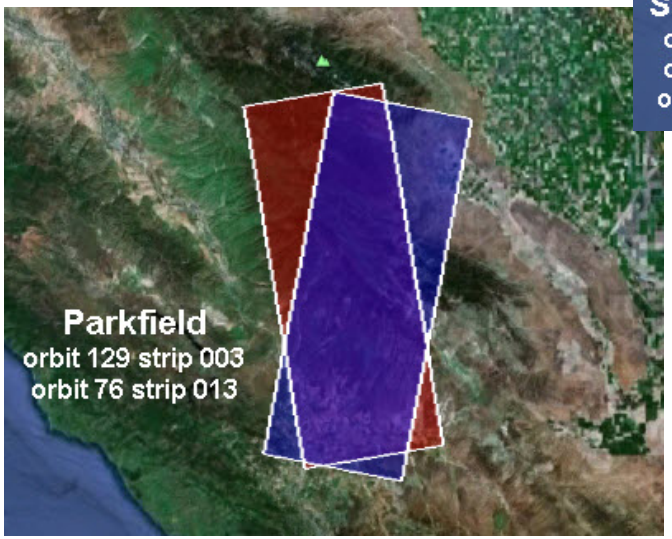

TerraSAR-X

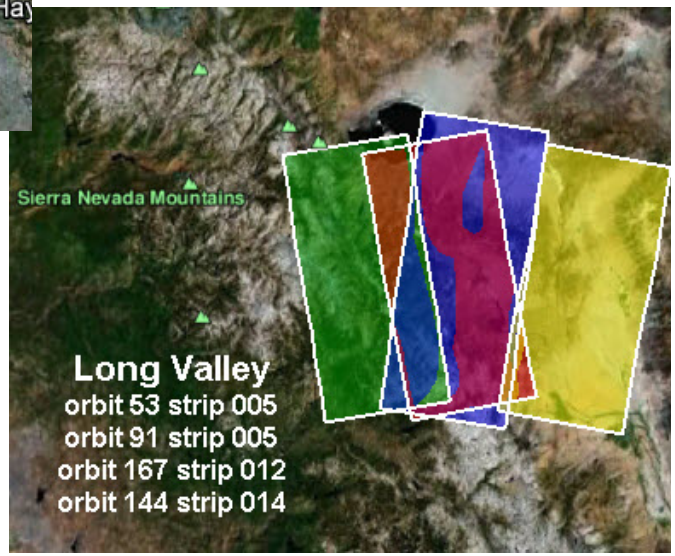
http://winsar.unavco.org/tasking_tsx.html











Questions?
UNAVCO