

SARP Flight #3

Take off: 12 noon

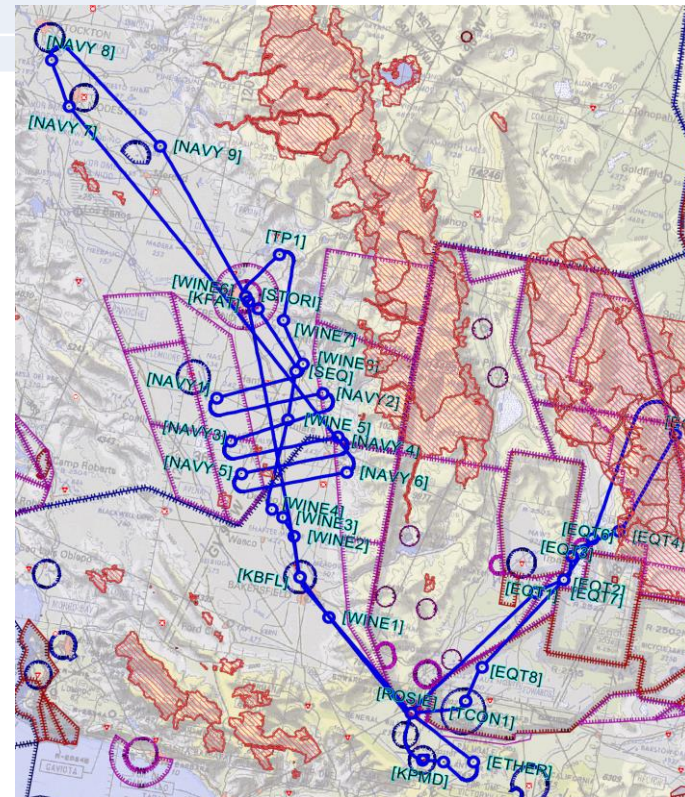
Tuesday, July 16th, 2019

Key science objectives for this flight:

- Low level run over to Searle Valley and Death Valley (Search for enhanced levels CO₂ and SO₂ resulting from Ridgecrest Earthquake – July 5, 2019)
- TCCON Spiral
- Low Level runs over select wineries:

Order	Winery	Type	Address
1	Heck Cellars F	Rural	15401 Bear Mountain Winery Rd, Arvin, CA 93203
2	ASV Wines, McFarland	Storage	31381 Pond Rd Suit 3, McFarland, CA 93250
3	Franzia-Tulare	Residential	1887 N Mooney Blvd, Tulare, CA 93274
4	E&J Gallo, Fresno	Urban	5610 E Olive Ave, Fresno, CA 93727
5	Franzia-Sanger	Rural	2916 S Reed Ave, Sanger, CA 93657
6	Golden State Vintners, Cutler	Rural	38558 Rd 128, Cutler, CA 93615

- Missed approached at Bakersfield, Fresno and Sequoia air field
- Low level survey over the Tulare region to cover UCI WAS ground sampling locations
- Low level run up to Modesto
- High level run (>25k ft) for DIAL from Modesto to Fresno to Bakersfield
- Total flight time: approximately 5 hours.

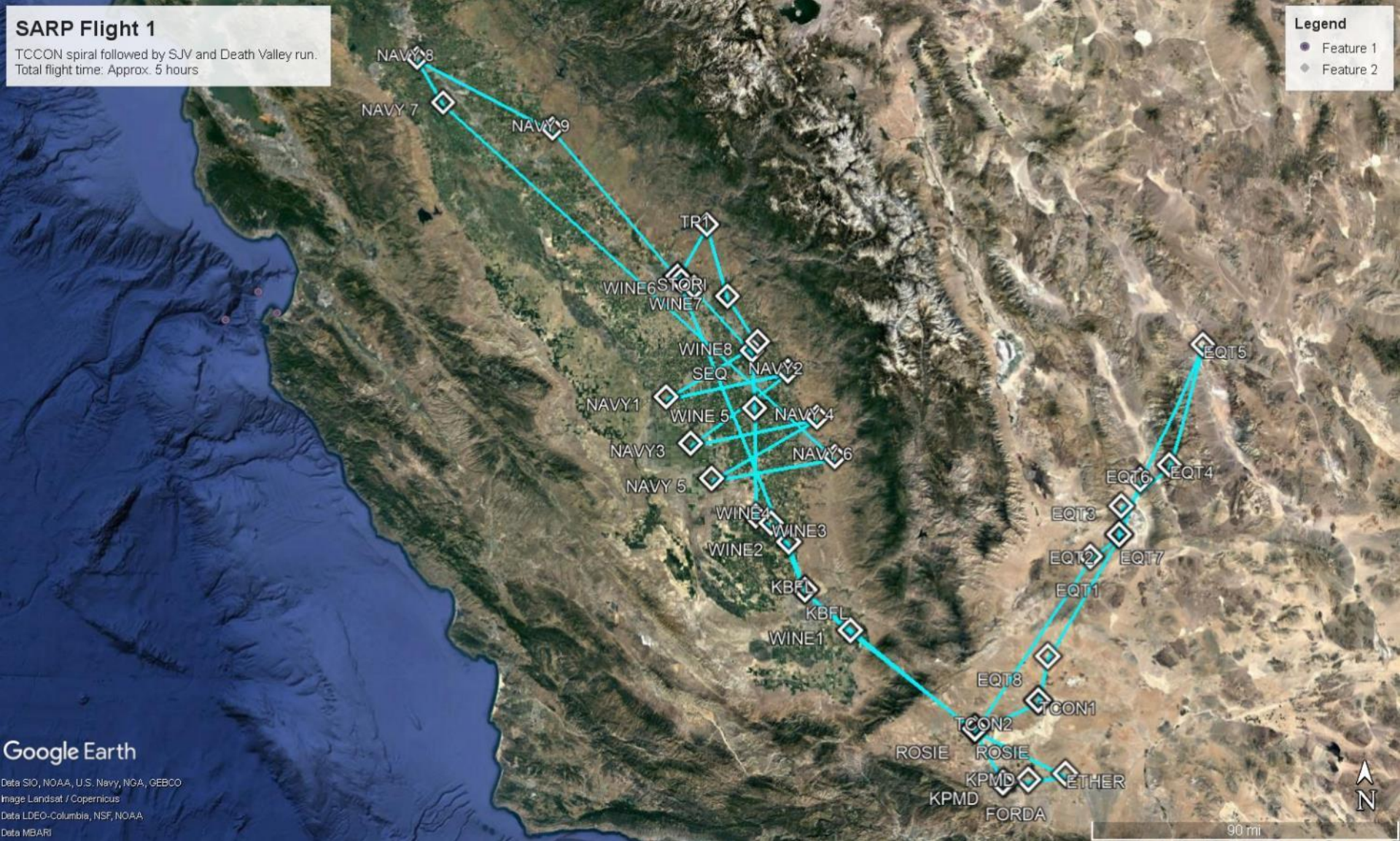


SARP Flight 1

TCCON spiral followed by SJV and Death Valley run.
Total flight time: Approx. 5 hours

Legend

- Feature 1
- ◆ Feature 2



Google Earth

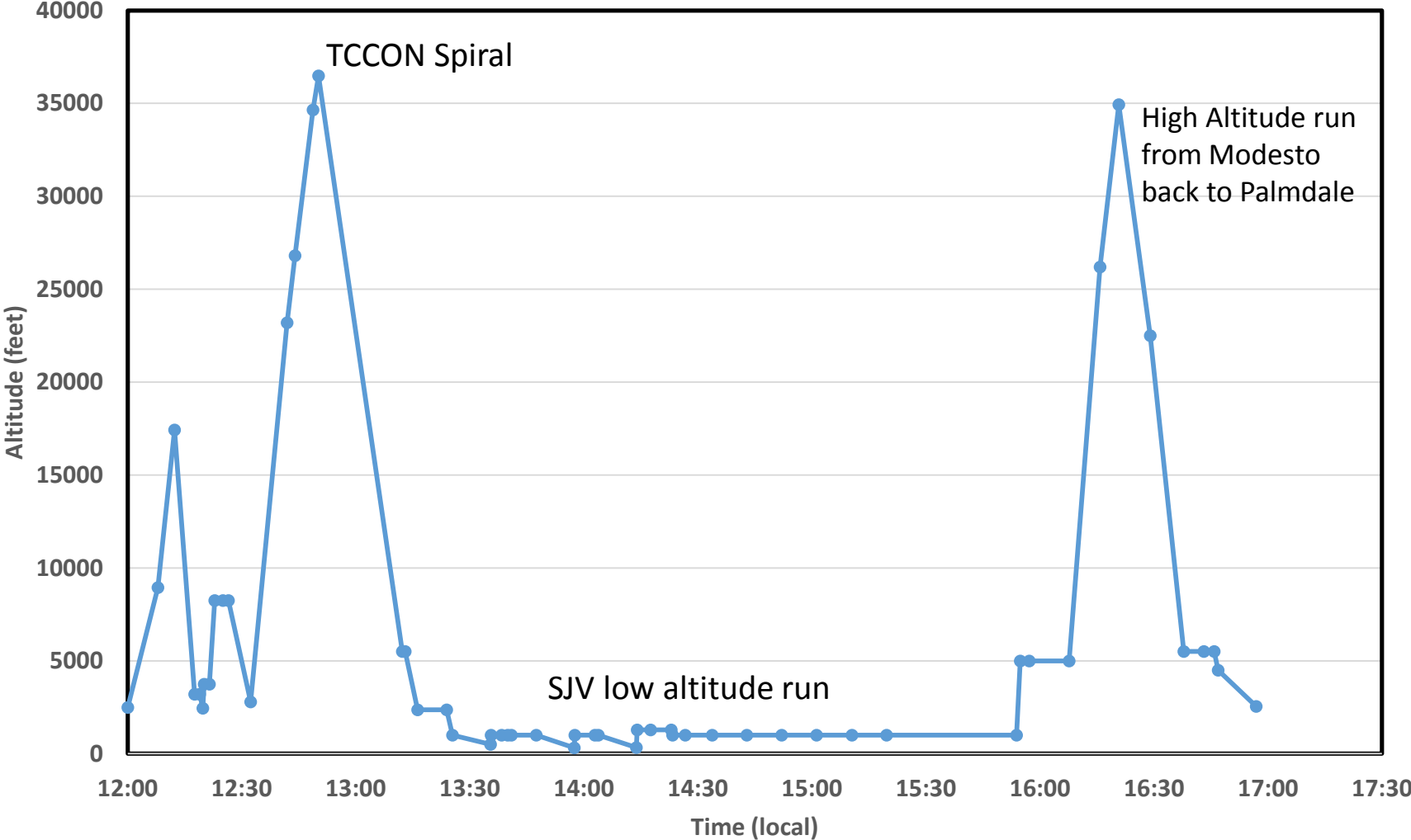
Data SIO, NOAA, U.S. Navy, NGA, GEBCO
Image Landsat / Copernicus
Data LDEO-Columbia, NSF, NOAA
Data MBARI

90 mi



Altitude Profile

SARP Flight #1 SJV flight



SARP Flight #1

Morning Flight, T.O: 0800

Wednesday, July 17th 2019

Key science objectives for this flight:

- Salton Sea (low and high legs)
- 1 pass through the LA Basin with missed approaches at Long Beach, Riverside and Ontario
- TCCON Spiral

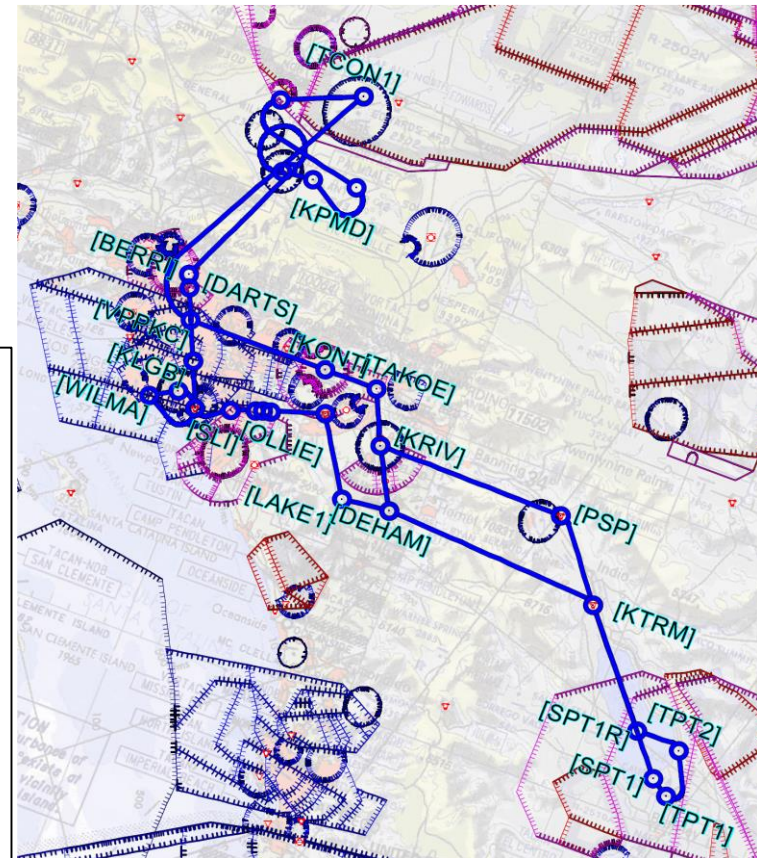
Total flight time approx. 3 hours.

Tentative T.O. 8am.

RTB by 11:15am

Summary of flight:

- Head out of Palmdale at altitude, enter flight pattern for missed approach at Long Beach airport.
- High altitude leg from Long Beach to Riverside, followed by a missed approach at Riverside Airport.
- High altitude pass (DIAL run) from KTRM (north point of Salton Sea to south end (TPT), low altitude pass on return.
- Missed approach at Ontario airport, ascend to high altitude for downward spiral over TCCON site.

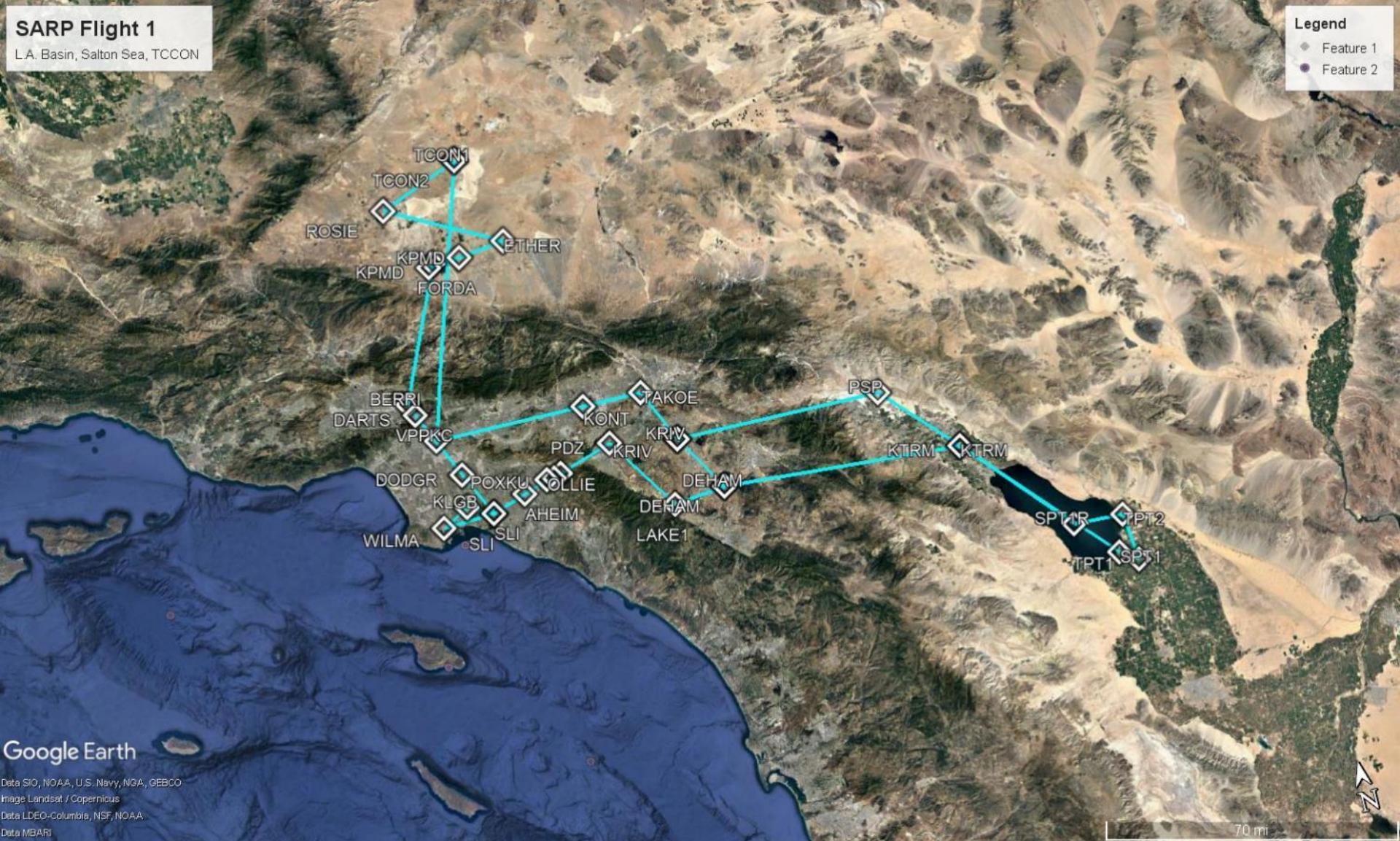


SARP Flight 1

L.A. Basin, Salton Sea, TCCON

Legend

- Feature 1
- Feature 2

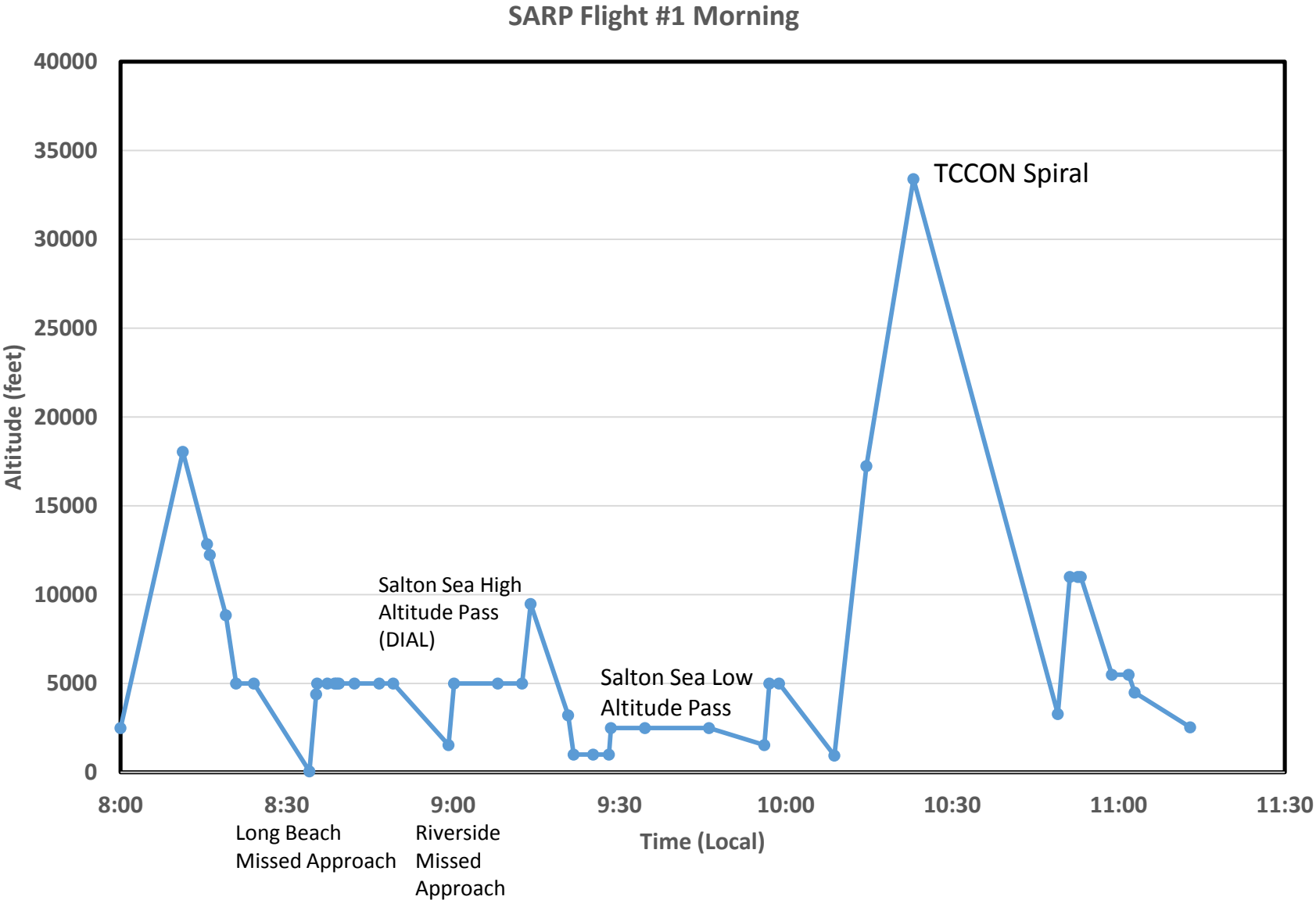


Google Earth

Data SIO, NOAA, U.S. Navy, NGA, GEBCO
Image Landsat / Copernicus
Data LDEO-Columbia, NSF, NOAA
Data MBARI

70 mi

Altitude profile



SARP Flight #2

Afternoon Flight, T.O: 1300

Wednesday, July 17th 2019

Key science objectives for this flight:

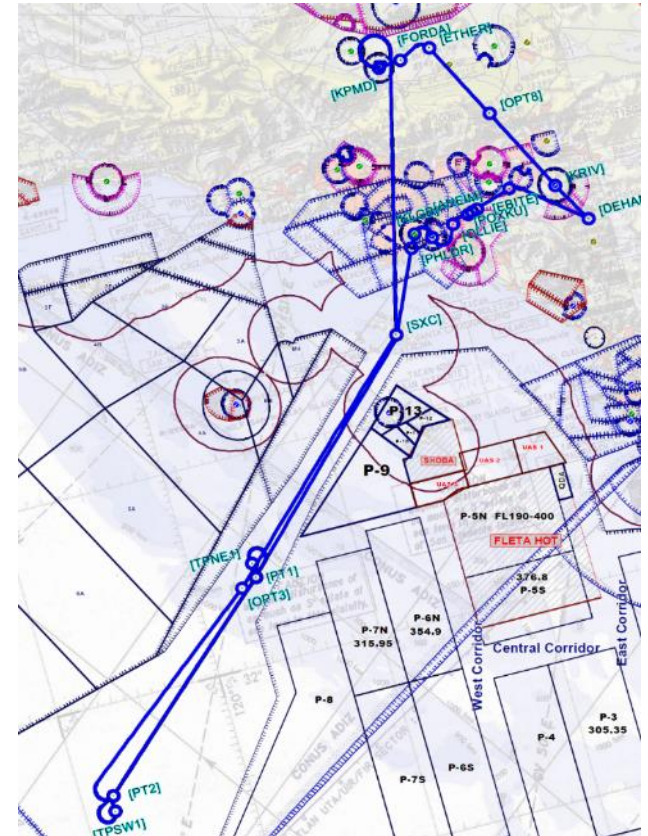
- DMS (Dimethylsulfide) Ocean runs. (See following slides for more info)
- LA Basin missed approaches
- Total flight time, approximately 3.5 hours.

Tentative T.O. 1230pm.

RTB by 430pm

Summary of flight:

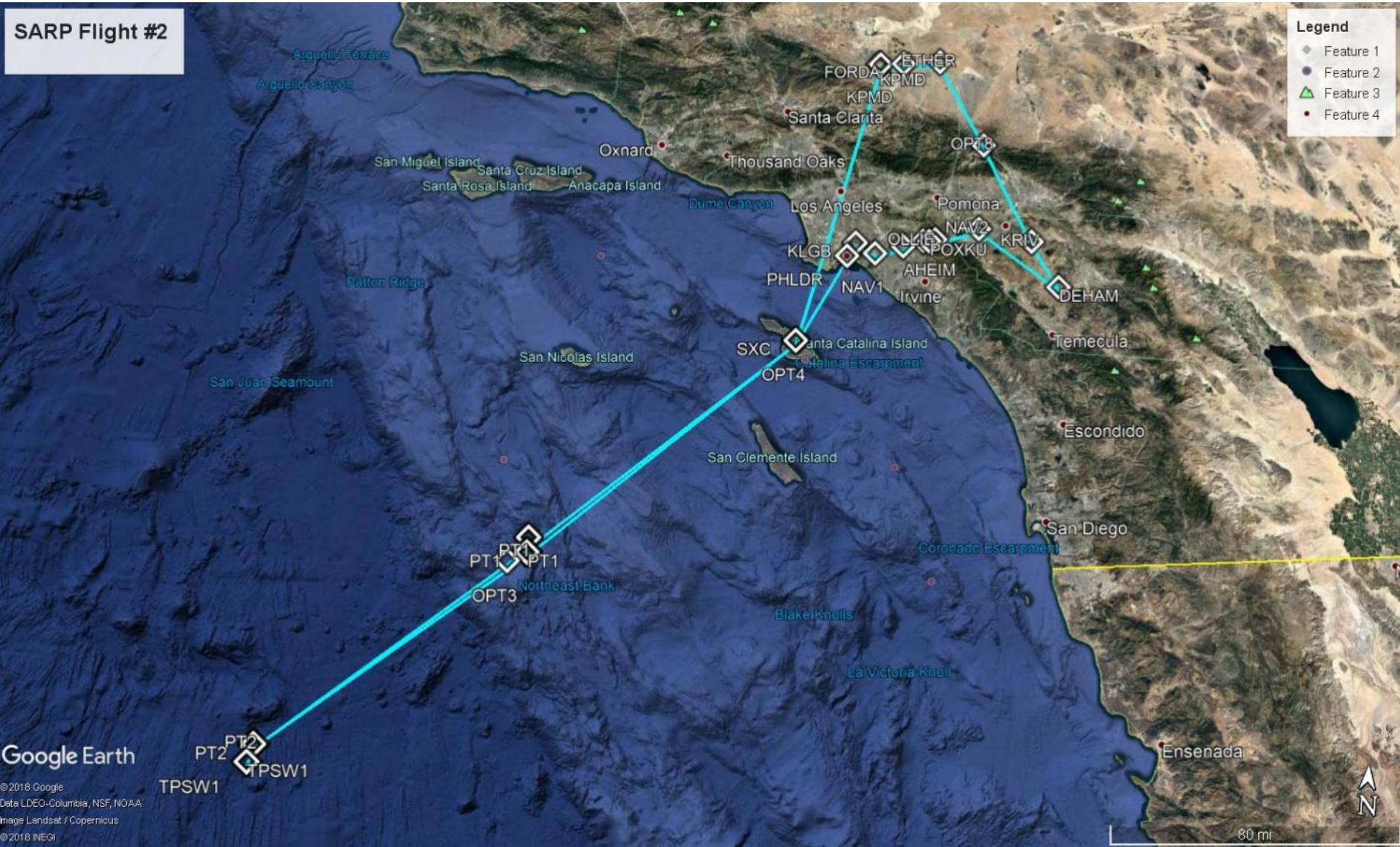
- Head out of Palmdale at altitude, Head south west towards Catalina Island
- Begin Descent at way point [SXC] over the water
- First low level leg from [PT1] to [PT2] at 500ft (15 min leg)
- Second low level leg from [PT2] to [PT1] at 800ft (15 min leg)
- Third low level leg from [PT1] to [PT2] at 1200ft (15 min leg)
- Return to LA Basin at Low Altitude
- Missed Approach at Long Beach Airport
- Missed approach at Riverside Airport



SARP Flight #2

Legend

- Feature 1
- Feature 2
- ▲ Feature 3
- Feature 4



Altitude profile

SARP Flight #2 Afternoon

