

# AirMISR Surface Vegetation Studies

- Objective: Validate MISR surface property measurements
  - If successful, supersedes AirMISR planned campaign over tree stands in the Pacific Northwest, currently scheduled for August 2002.
  - Requires:
    - Simultaneous AirMISR/MISR images over uniform vegetated surface.
    - AirMISR runs performed at multiple solar scattering angles (different headings).
    - Clear skies.

# Overpass Dates & ER-2 Track Offset

MISR Overpasses for Tulare Lake Farm, and ER-2 track offset for 010/190 run

Date	GMT	Naut.mi.
5/21	18:59:22	1.7 E
5/23	18:47:15	2.6 W
5/30	18:53:21	0.4 W
6/6	18:59:21	1.7 E
6/8	18:47:11	2.6 W
6/15	18:53:05	0.5 W
6/22	18:58:53	1.5 E
6/24	18:46:40	2.8 W
7/1	18:52:48	0.6 W

Other dates and times will be published if objective has still not been met.

On days that are also candidates for AirMISR flights over Railroad Valley, the Railroad Valley flight takes priority. This implies that on those days, Tulare Lake will only be attempted if RRV has already been accomplished or if weather (clouds) precludes an attempt at RRV.

# Target Coordinates and Lines

- Tulare Lake Farms, central valley, CA

36° 1' 53.69" N            119° 50' 20.08" W

36.03158056 N            -119.83891111 W

36° 1.89483' N            119° 50.33466' W

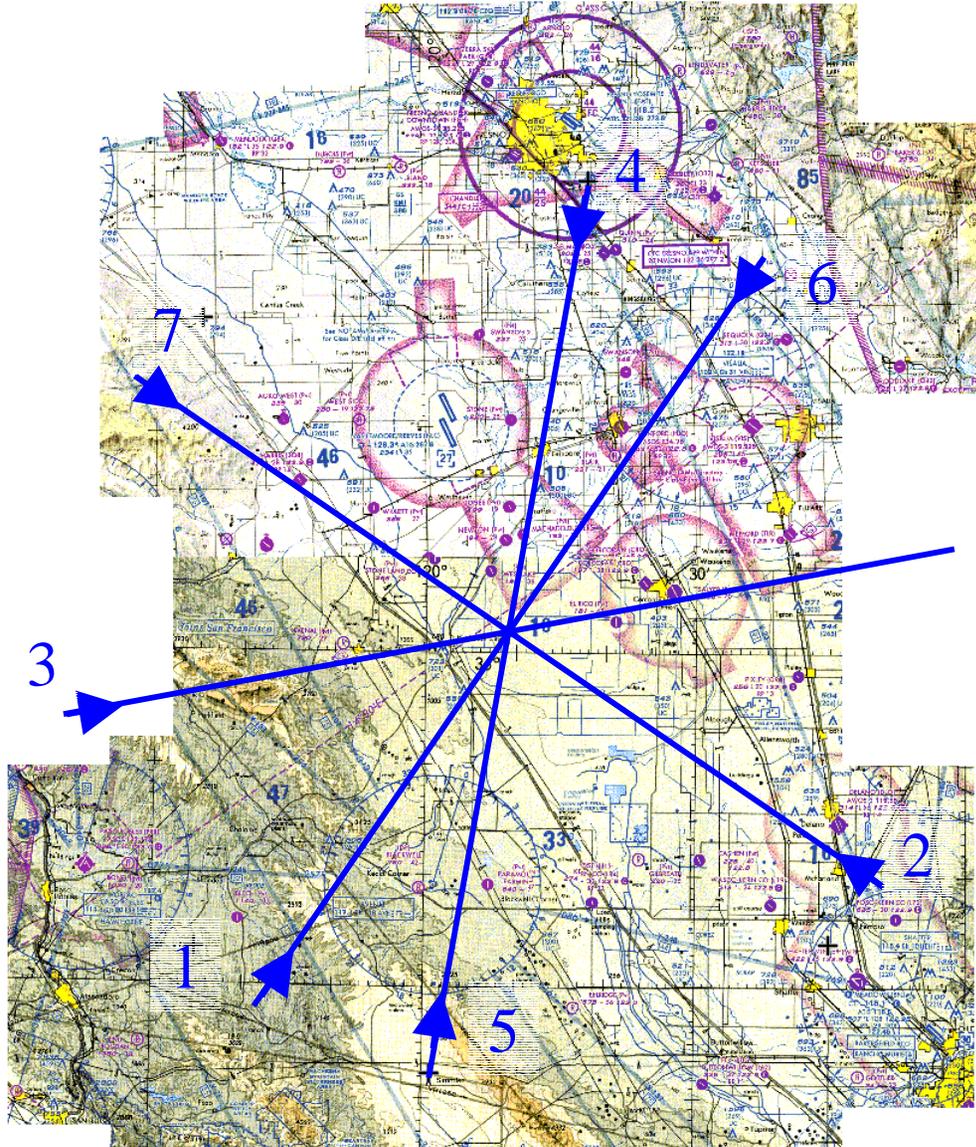
(same coordinate, different formats)

- All lines are 80 nautical miles long, or 12 minutes of flight time, plus any lead-in the pilot requires/recommends to stabilize aircraft
- All runs begin by pressing N3 at estimated 6 minutes before target overpass
- The first three runs are relative to the sun position; the following plan assumes a start at 20 minutes before the MISR overpass, or at about 18:30 UTC
- Run 1, perpendicular to sun:            030/210 true
- Run 2, to/from the sun:                120/300
- Run 3, between runs 1 and 2            075/255 or 165/345
- Run 4, along Terra track                010/190 (with the track offset of the day)

After the first four lines are acquired as close in time as possible, it is desired to obtain as many runs in the opposite direction as time permits. The following is one possible set of reciprocal runs:

- Run 5, back reverse of line 4            (with the track offset of the day)
- Run 6, back along line 1
- Run 7, back along line 2
- Other plans are possible, and suggestions are welcome

# Flight Line Sketch (one possibility)



# Sun Azimuth

