

Optimization of Airspace and Procedures in the Metroplex (OAPM)



SoCal OAPM Design Progress

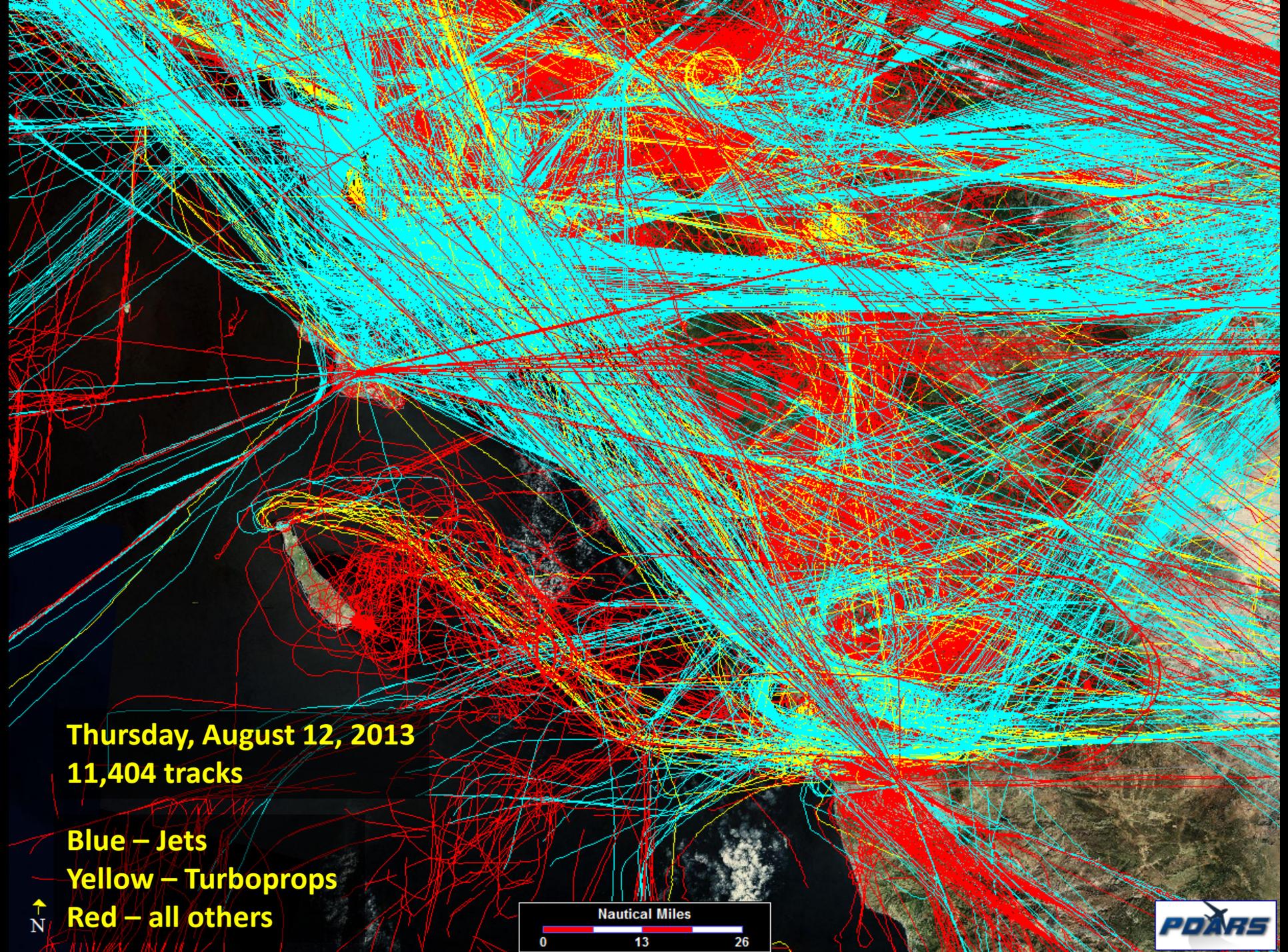
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Date: 01/08/14



Federal Aviation
Administration



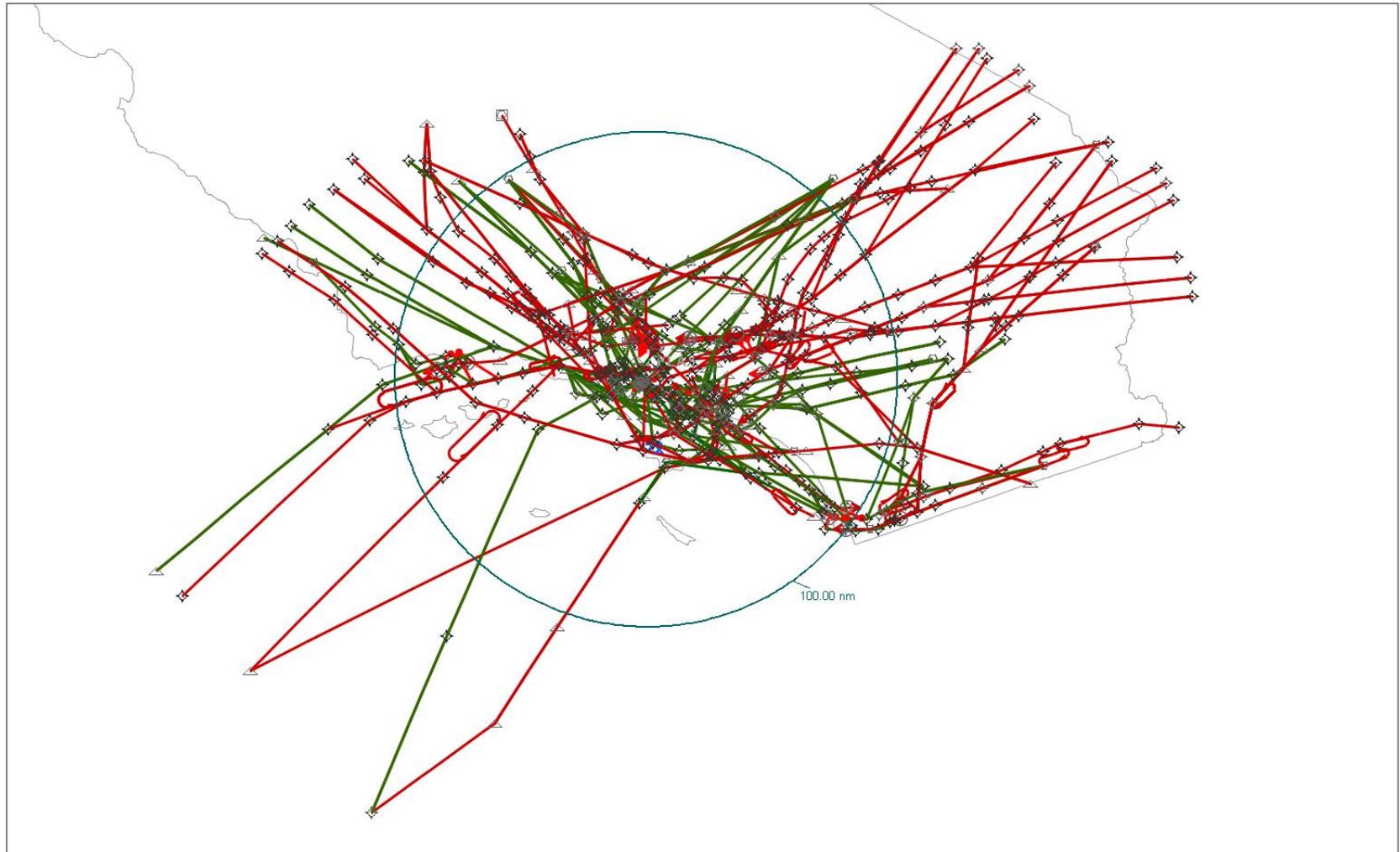


Thursday, August 12, 2013
11,404 tracks

Blue – Jets
Yellow – Turboprops
Red – all others



SoCal OAPM Procedures



Agenda

- Introductions
- OAPM Purpose
- Out of Scope Issues
- SoCal OAPM Abbreviated Work Plan
- D&I Team progress report and accomplishments to date
- Next Steps
- Questions?



OAPM Purpose

- RTCA's Task Force 5 recommendations for NextGen implementation included:
 - Focus on major metropolitan areas
 - Optimize flight paths and climb/descent profiles
 - Institute collaborative teams to broadly proliferate existing PBN experience and expertise
 - Promote RNAV “everywhere” and RNP (Required Navigational Performance) “where beneficial”
 - Integrate airspace and procedure design
 - Decouple operations arriving and departing adjacent airports
 - Use 3 NM and terminal separation rules wherever possible

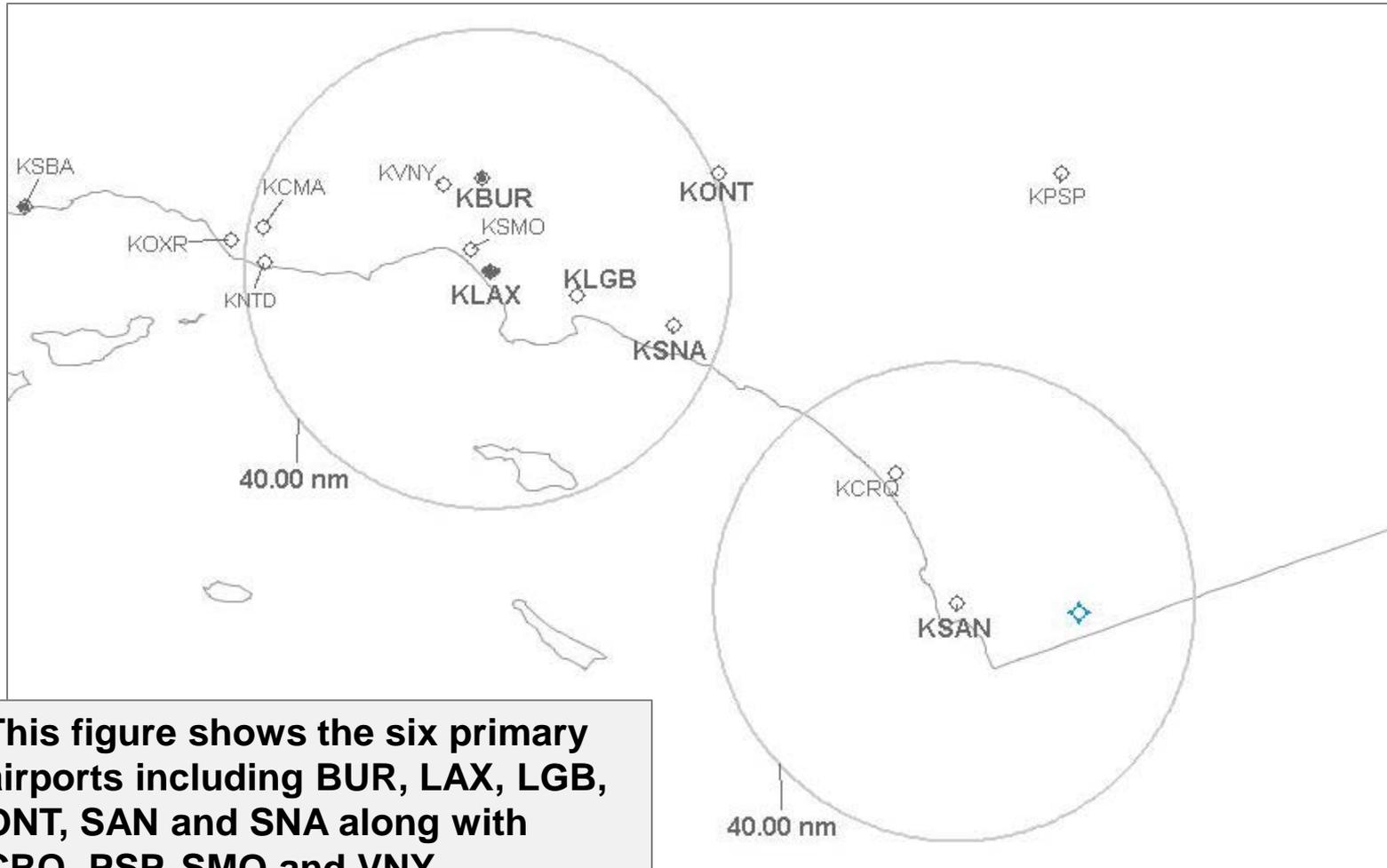


Out of Scope Issues

- Some issues considered out of scope of OAPM process
 - RNAV visual approaches
 - PSP operations revert to ZLA overnight
 - Lack of radar coverage
 - Extended service volume for ONT ILS
 - Reverse flows over GMN
 - Class B, Class C, TRSA changes
 - NTD airspace transfer
 - Restructure of T-routes in SCT terminal airspace



SoCal OAPM Area of Interest



SoCal OAPM Abbreviated Work Plan

Activity	Date
Industry Week 2	JAN 13, 2014
Industry Week 3	FEB 10, 2014
Final Design Report	MAR 28, 2014
Begin Evaluation Processes	APR 4, 2014
SMS Process Start	JUN 23, 2014
Final Design Complete	JUN 9, 2014



Current Tasks

- More than seventy SIDs and STARs have been developed
- Where practical runway transitions will be established to join instrument approach procedures
- Airline Industry partners have used their flight simulators to evaluate and provide feedback for proposed SIDs and STARs
- Human-In-The-Loop Simulations (HITLs) will be conducted to ensure operational feasibility
- Airspace boundary changes (vertical and lateral) necessary to support procedure design have been initiated



Other SoCal STARs and SIDs

- In addition to LAX operations, operations at seven key SCT airports were examined closely
 - San Diego International Airport (SAN)
 - Bob Hope Airport (BUR)
 - Ontario International Airport (ONT)
 - John Wayne Airport/Orange County (SNA)
 - Long Beach/Daugherty Field (LGB)
 - Santa Monica Municipal Airport (SMO)
 - Van Nuys Airport (VNY)
- Other airports were also considered

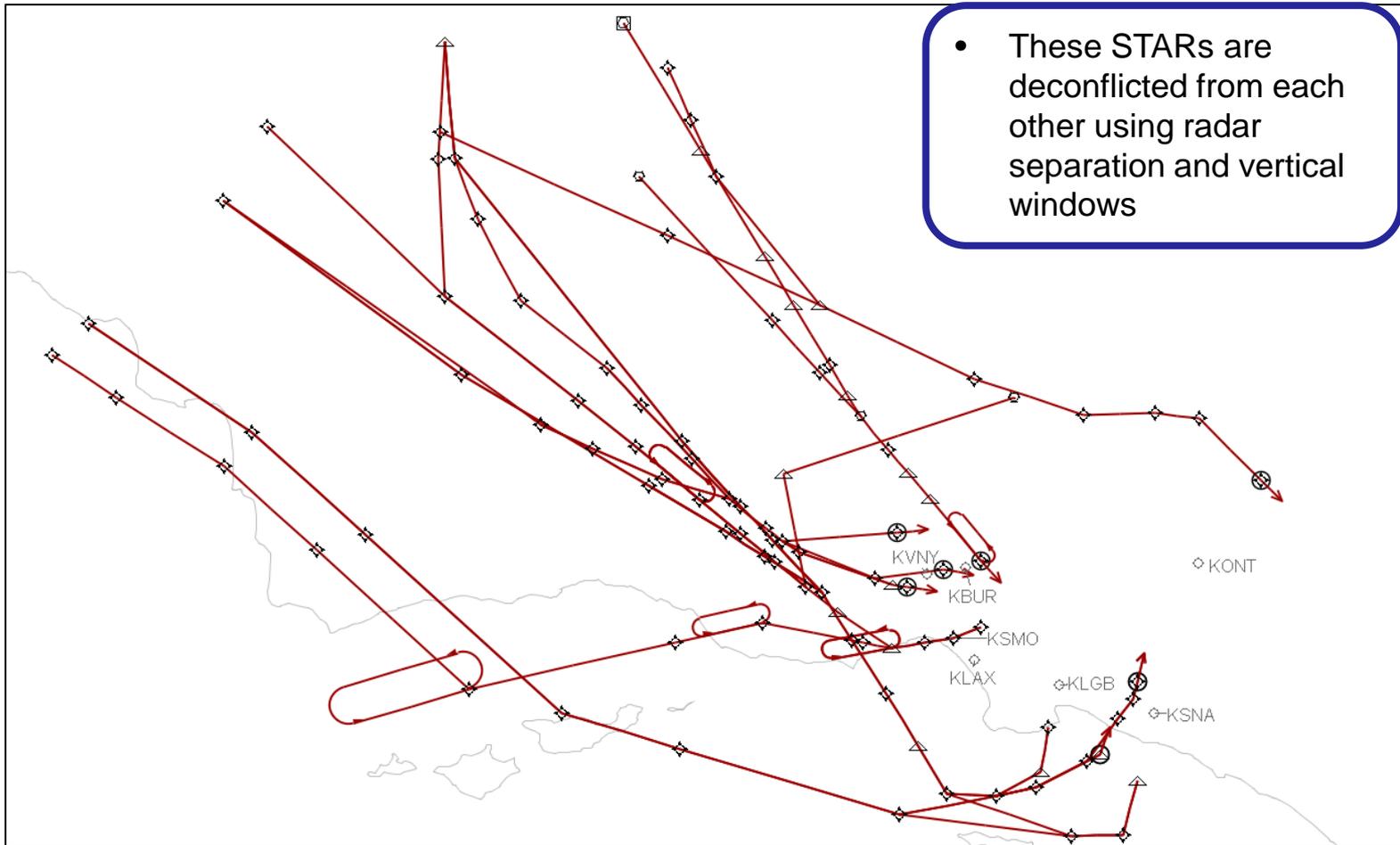


Key Airport STARS and SIDs

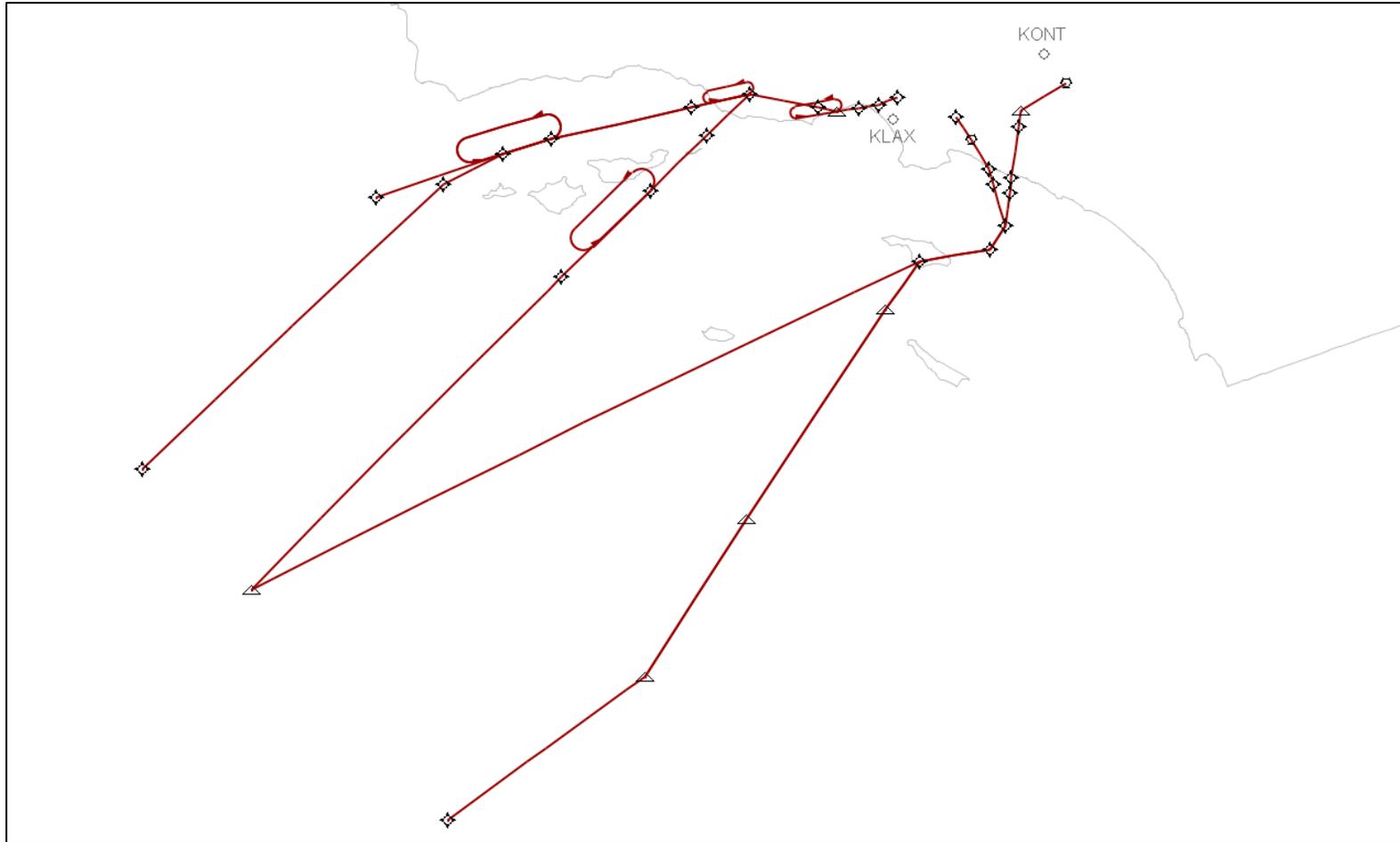
- The SoCal OAPM team developed STARS with OPDs into other SCT airports
 - The Design Team has worked closely with airlines to determine the best procedures to maximize efficiency, reduce flight deck /controller workload and provide predictable routes
 - Where appropriate STARS will terminate on an instrument approach procedure
 - Other STARS will terminate on a course and receive radar vectors to the airport
- SIDs from other key airports will be RNAV off the ground or radar vectors based on industry feedback and/or geographic limitations within the terminal area



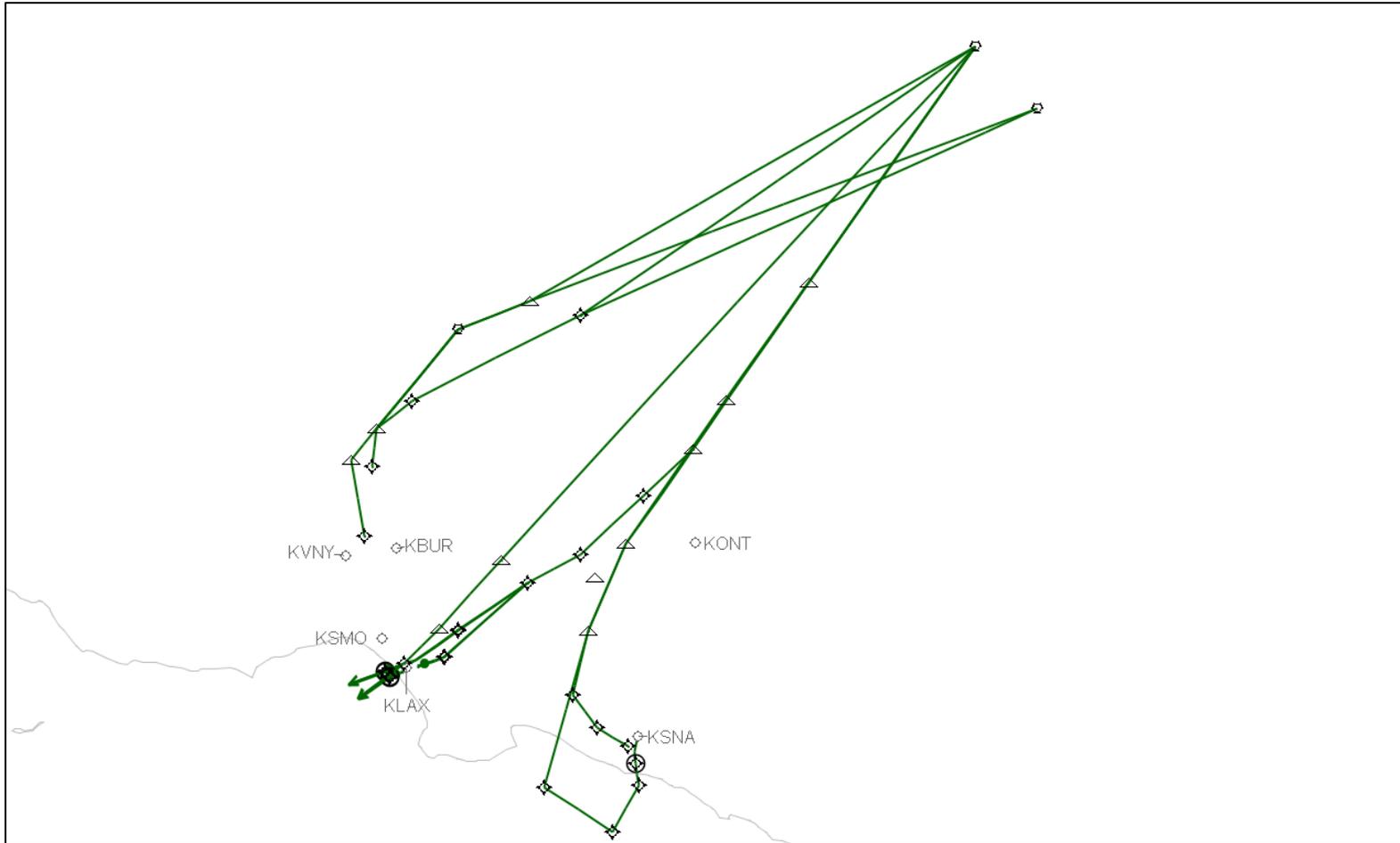
Composite of all NW LAX/BUR/VNY/SMO/SNA/LGB STARs



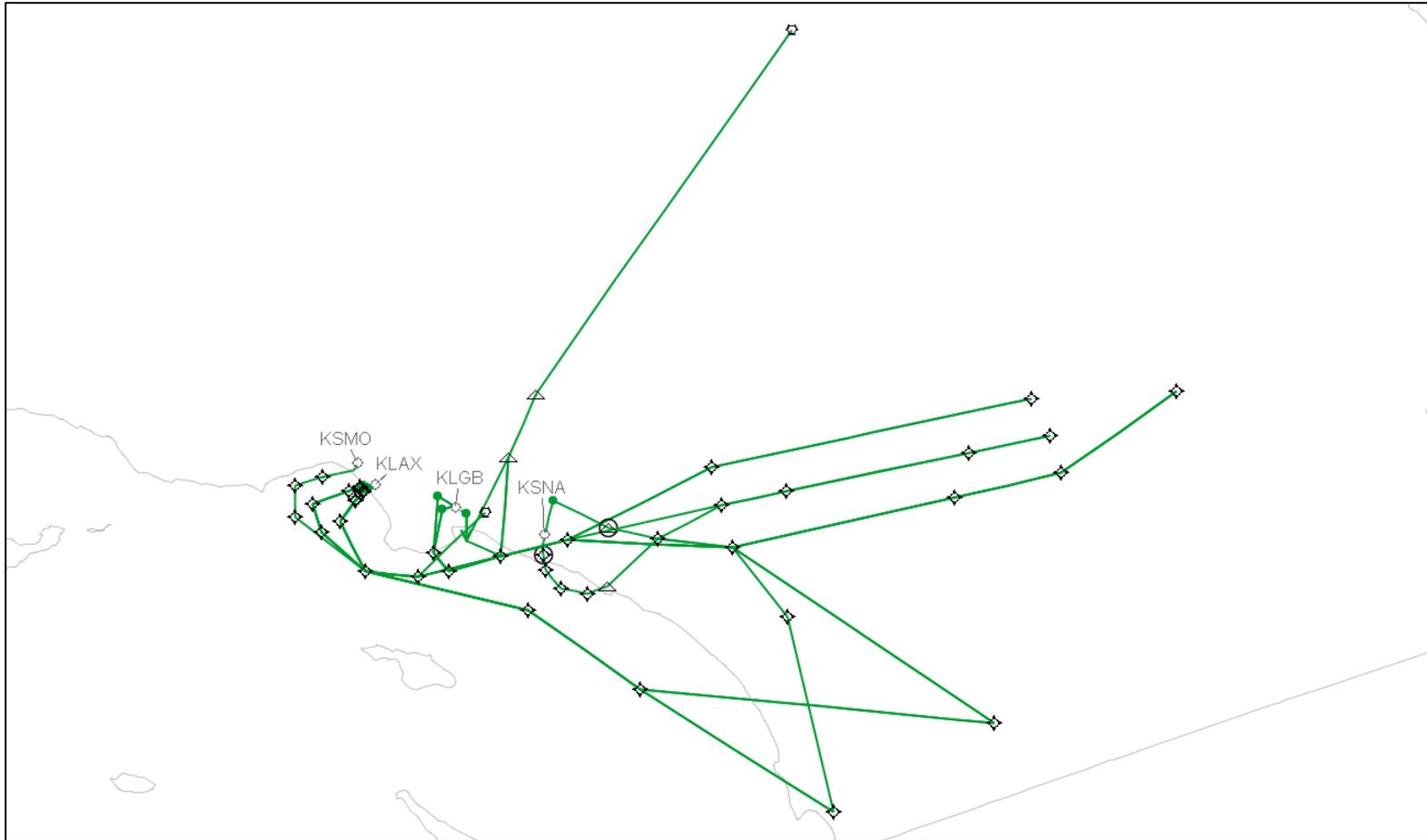
Composite of LAX/ONT STARs from Offshore



Composite of LAX/BUR/VNY/SNA NE SIDs



Composite of LAX/SMO/SNA SIDs



SoCal OAPM Work Plan and Schedule

- The evaluation phase will begin April 4, 2014
 - This phase includes operational evaluation, environmental, and safety reviews



QUESTIONS?

