



Torrance Departures Inquiry on Early Southbound Turns

To: Bill Withycombe, Western-Pacific Regional Administrator

By: Western Service Center Operations Support Group

Date: June 2012



**Federal Aviation
Administration**



Torrance Departures Background

- FAA received request from Torrance Airport (TOA) to evaluate westbound departing helicopters and missed approach aircraft, to respond to citizen concerns:
 - Departing aircraft turning southbound appear to be turning too soon over the neighborhood instead of going to shoreline first
 - Missed approach aircraft are higher sooner and are turning earlier than other aircraft departures

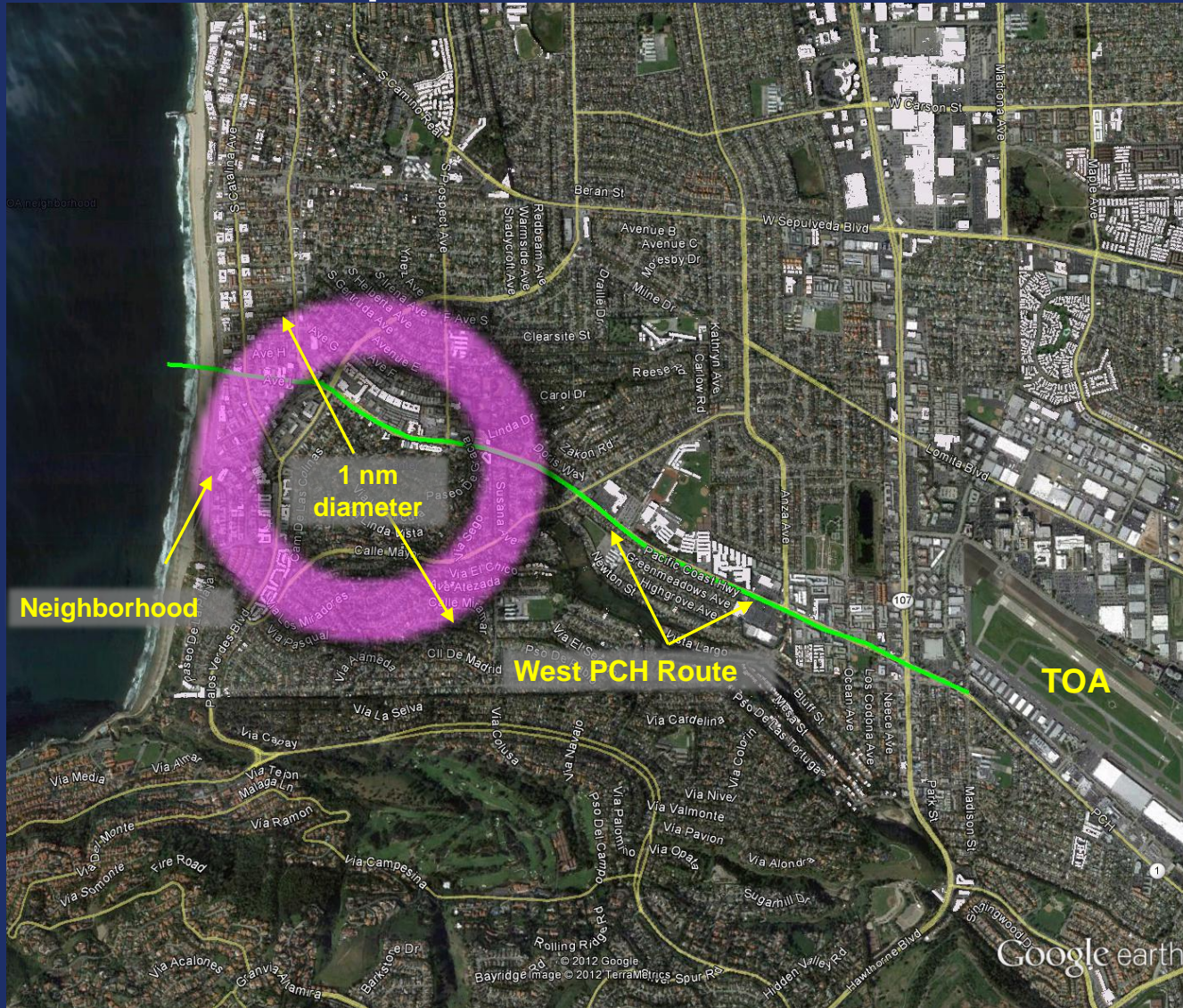


Torrance Departures Evaluation Parameters

- Evaluated two days in 2010 mentioned by citizen concern, and two randomly-selected weeks in 2011 and 2012
- Area of one nautical mile diameter centered over neighborhood expressing concerns
- Included reference to West PCH route from TOA Letter Of Agreement with local helicopter operators
- Used Performance Data Analysis and Reporting System (PDARS)
- Traffic data from Southern California TRACON (SCT)



Torrance Helicopter Routes – West PCH



Torrance Area Traffic July 13, 2011

This view includes all traffic in
TOA area SFC-2,200'
(tracks higher than 2,200'
are hidden)

Ceilings around 3,000', visibility
10 miles or more all day

Altitude (100s ft)

From	To	Color
0	5	Red
5	8	Yellow
8	12	Green
12	16	Cyan
16	22	Blue
22	28	Orange
28	35	Brown

Torrance Traffic June 16, 2011

Helicopter traffic pattern remains south of Lomita Blvd at 600' MSL

Helicopters using West PCH Route; most current flights are 1,200' or higher

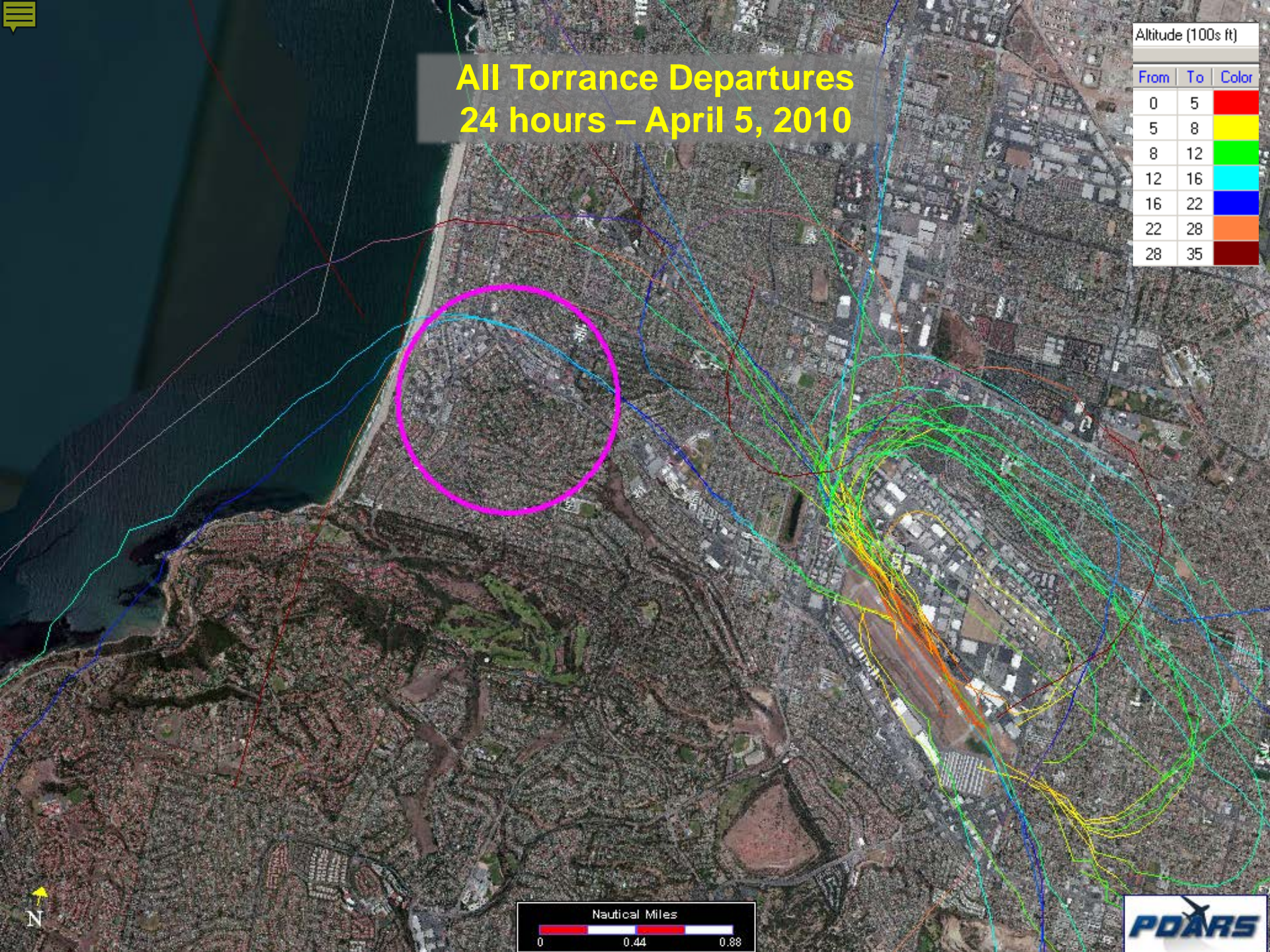
Low ceilings most of day, visibility 2 miles or less until about 10AM

Altitude (100s ft)

From	To	Color
0	5	Red
5	8	Yellow
8	12	Green
12	16	Cyan
16	22	Blue
22	28	Orange
28	35	Brown

All Torrance Departures 24 hours – April 5, 2010

Altitude (100s ft)		
From	To	Color
0	5	Red
5	8	Yellow
8	12	Green
12	16	Cyan
16	22	Blue
22	28	Orange
28	35	Brown



Torrance Departures IFR only – April 5, 2010

Altitude (100s ft)		
From	To	Color
0	5	Red
5	8	Yellow
8	12	Green
12	16	Cyan
16	22	Blue
22	28	Orange
28	35	Brown



2 IFR flights in 24 hours;
Zero over flights



Torrance Departures VFR only – April 5, 2010

Altitude (100s ft)

From	To	Color
0	5	Red
5	8	Yellow
8	12	Green
12	16	Cyan
16	22	Blue
22	28	Orange
28	35	Brown

1741Z
1912Z



24 VFR flights in 24 hours; 2 over flights (on West PCH)



All Torrance Departures 24 hours – April 24, 2010

Altitude (100s ft)		
From	To	Color
0	5	Red
5	8	Yellow
8	12	Green
12	16	Cyan
16	22	Blue
22	28	Orange
28	35	Brown



Torrance Departures IFR only – April 24, 2010

Altitude (100s ft)		
From	To	Color
0	5	Red
5	8	Yellow
8	12	Green
12	16	Cyan
16	22	Blue
22	28	Orange
28	35	Brown

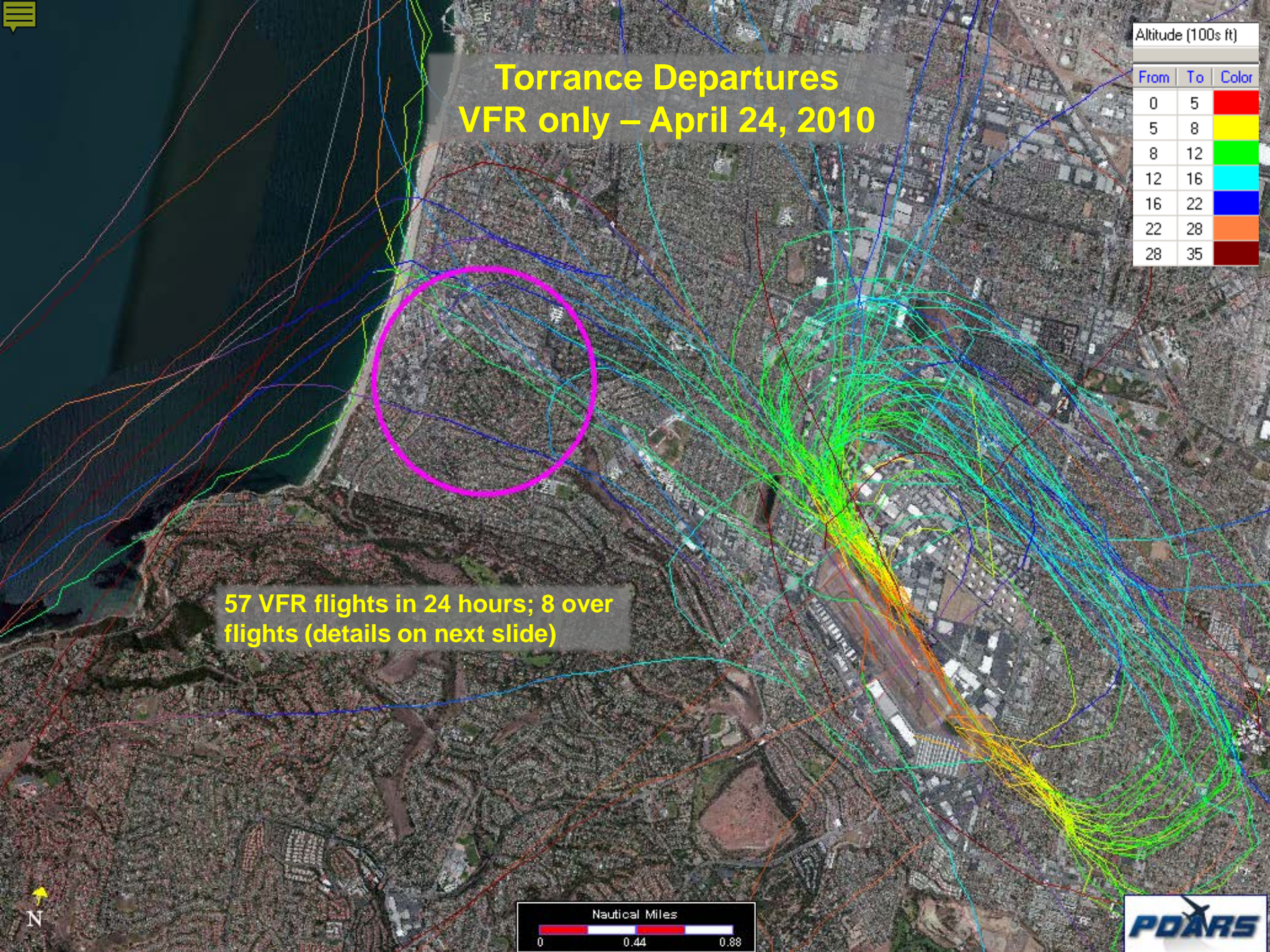
7 IFR flights in 24 hours;
Zero over flights



Torrance Departures VFR only – April 24, 2010

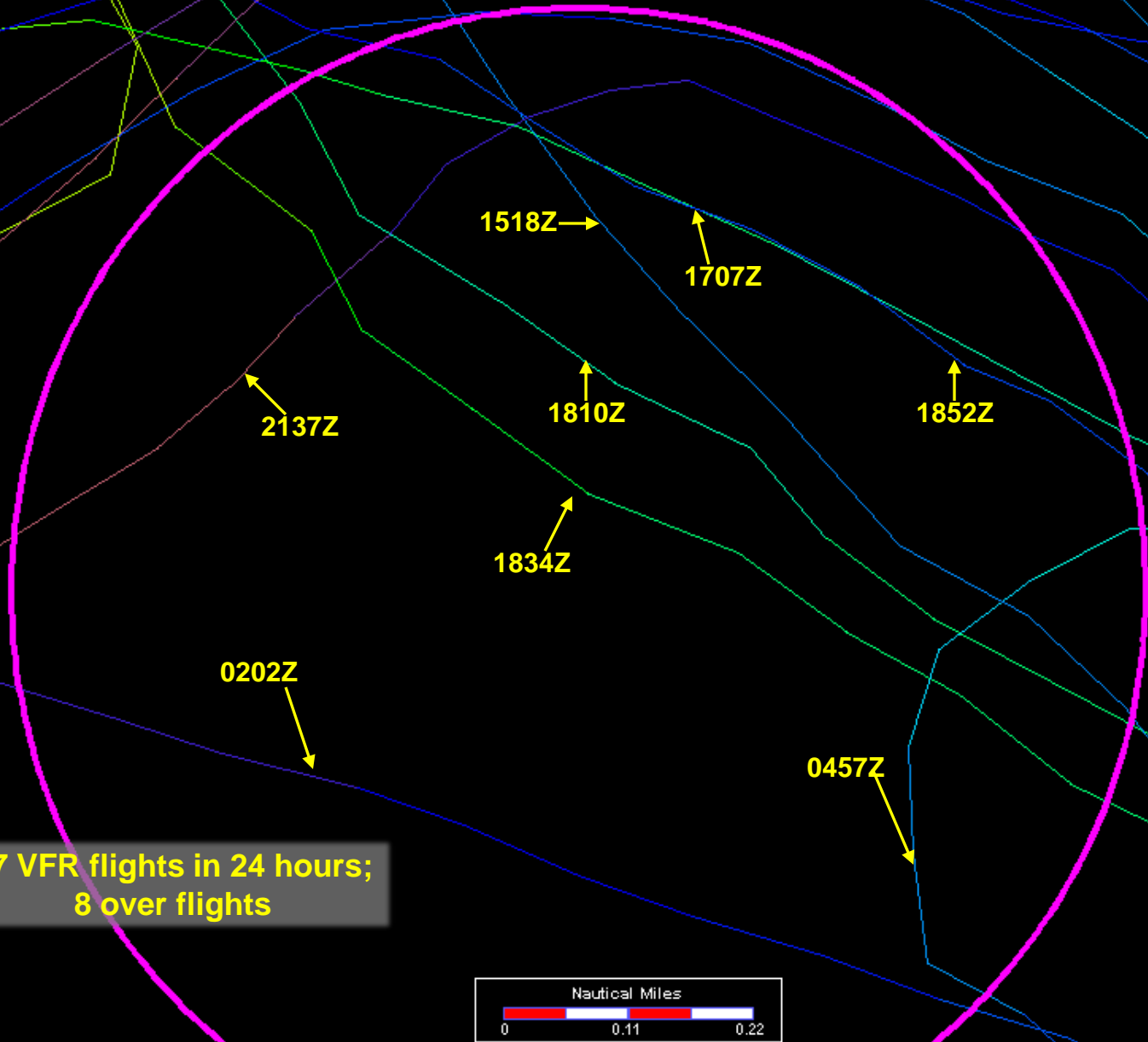
Altitude (100s ft)		
From	To	Color
0	5	Red
5	8	Yellow
8	12	Green
12	16	Cyan
16	22	Blue
22	28	Orange
28	35	Brown

57 VFR flights in 24 hours; 8 over flights (details on next slide)



Torrance Departures VFR only – April 24, 2010

Altitude (100s ft)		
From	To	Color
0	5	Red
5	8	Yellow
8	12	Green
12	16	Cyan
16	22	Blue
22	28	Orange
28	35	Brown

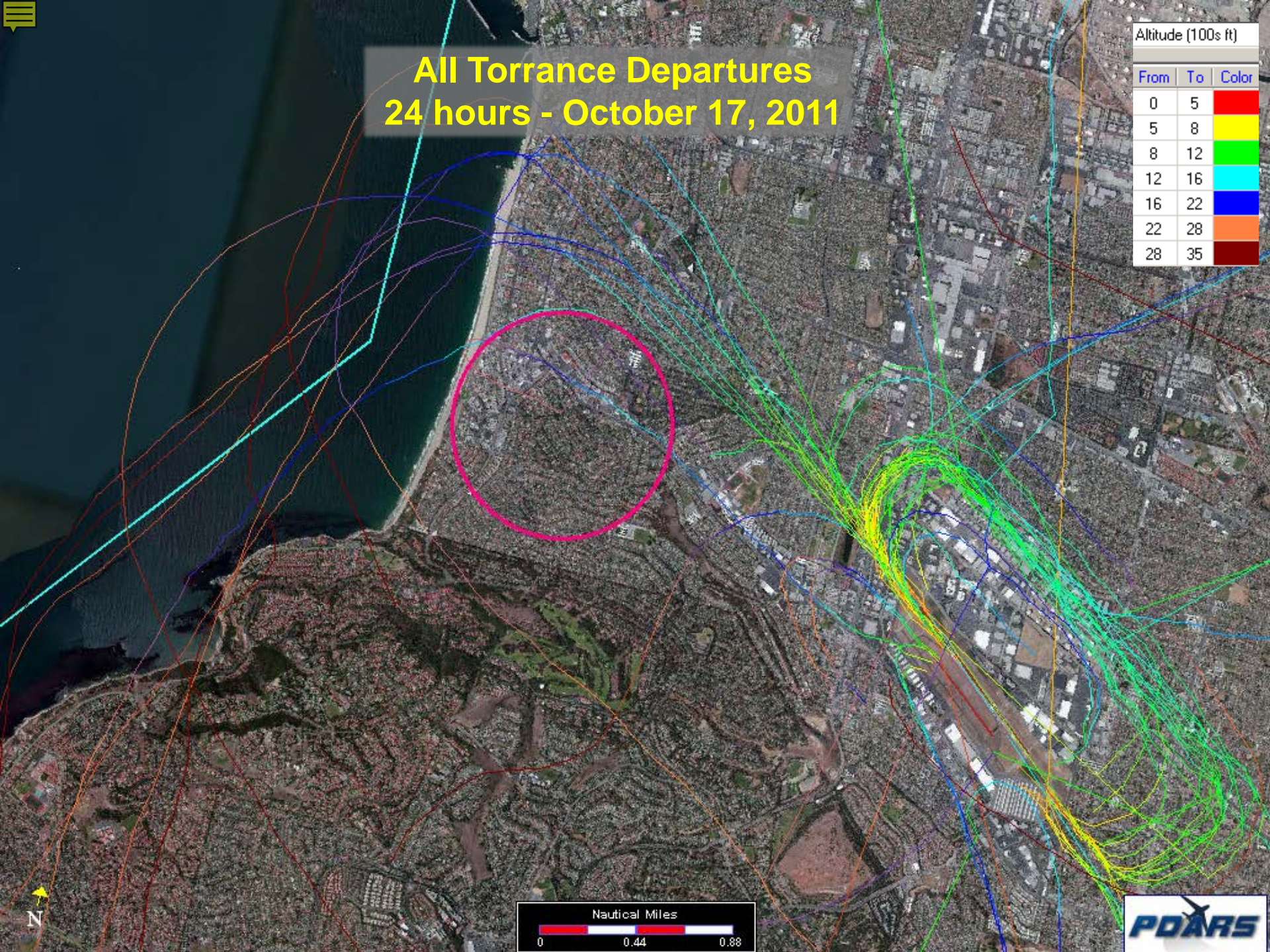


57 VFR flights in 24 hours;
8 over flights



All Torrance Departures 24 hours - October 17, 2011

Altitude (100s ft)		
From	To	Color
0	5	Red
5	8	Yellow
8	12	Green
12	16	Cyan
16	22	Blue
22	28	Orange
28	35	Brown



Torrance Departures IFR only – October 17, 2011

Altitude (100s ft)		
From	To	Color
0	5	Red
5	8	Yellow
8	12	Green
12	16	Cyan
16	22	Blue
22	28	Orange
28	35	Brown

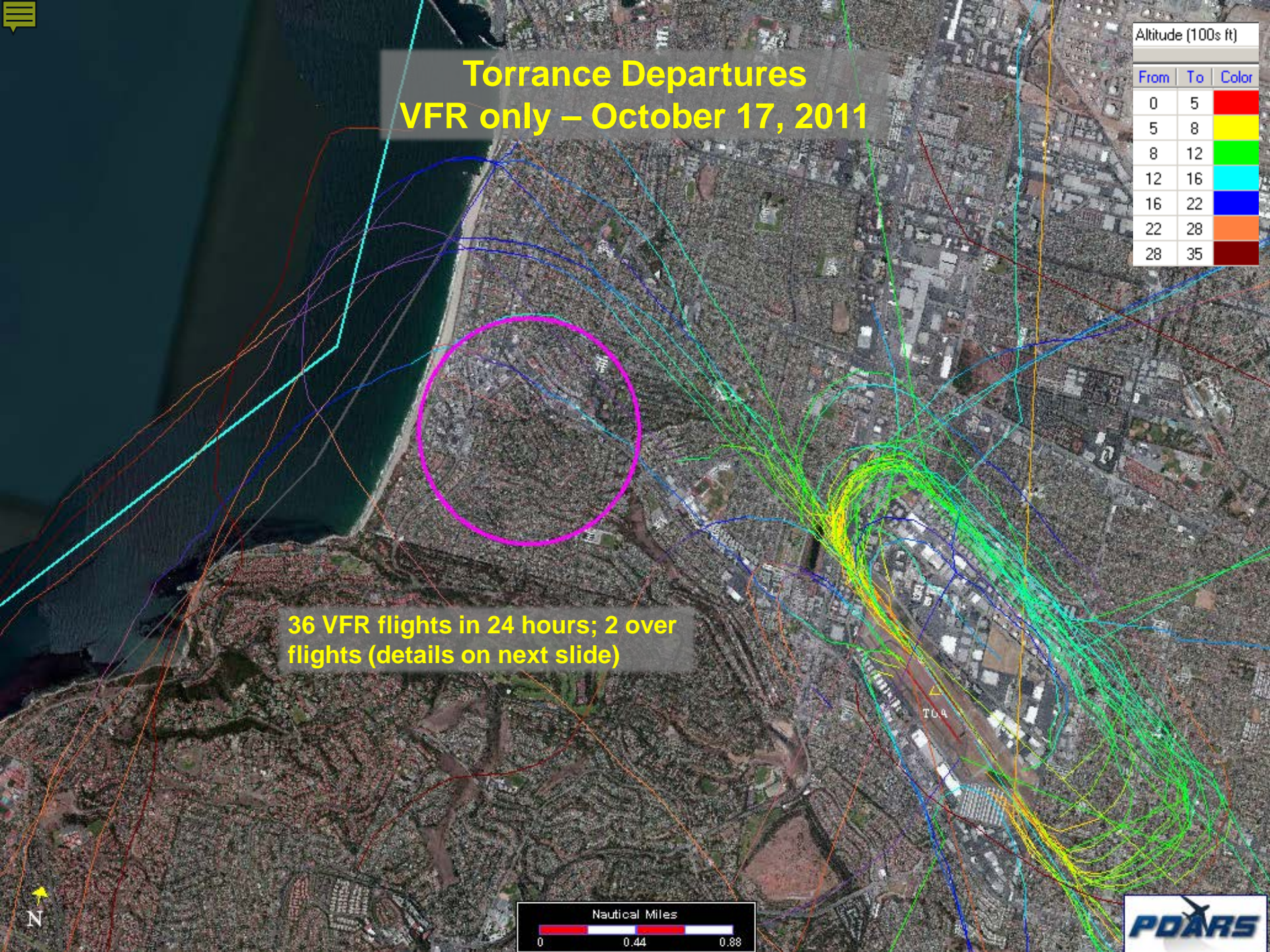


2 IFR flights in 24 hours;
Zero over flights

Torrance Departures VFR only – October 17, 2011

Altitude (100s ft)		
From	To	Color
0	5	Red
5	8	Yellow
8	12	Green
12	16	Cyan
16	22	Blue
22	28	Orange
28	35	Brown

36 VFR flights in 24 hours; 2 over flights (details on next slide)



Torrance Departures VFR only – October 17, 2011

Altitude (100s ft)		
From	To	Color
0	5	Red
5	8	Yellow
8	12	Green
12	16	Cyan
16	22	Blue
22	28	Orange
28	35	Brown

1858Z

2029Z

36 VFR flights in 24 hours; 2 over flights (one turned left, was above 1,500')

Nautical Miles

All Torrance Departures 24 hours - October 19, 2011

Altitude (100s ft)		
From	To	Color
0	5	Red
5	8	Yellow
8	12	Green
12	16	Cyan
16	22	Blue
22	28	Orange
28	35	Brown



Torrance Departures IFR only – October 19, 2011

Altitude (100s ft)		
From	To	Color
0	5	Red
5	8	Yellow
8	12	Green
12	16	Cyan
16	22	Blue
22	28	Orange
28	35	Brown



3 IFR flights in 24 hours;
Zero over flights

Torrance Departures VFR only – October 19, 2011

Altitude (100s ft)

From	To	Color
0	5	Red
5	8	Yellow
8	12	Green
12	16	Cyan
16	22	Blue
22	28	Orange
28	35	Brown

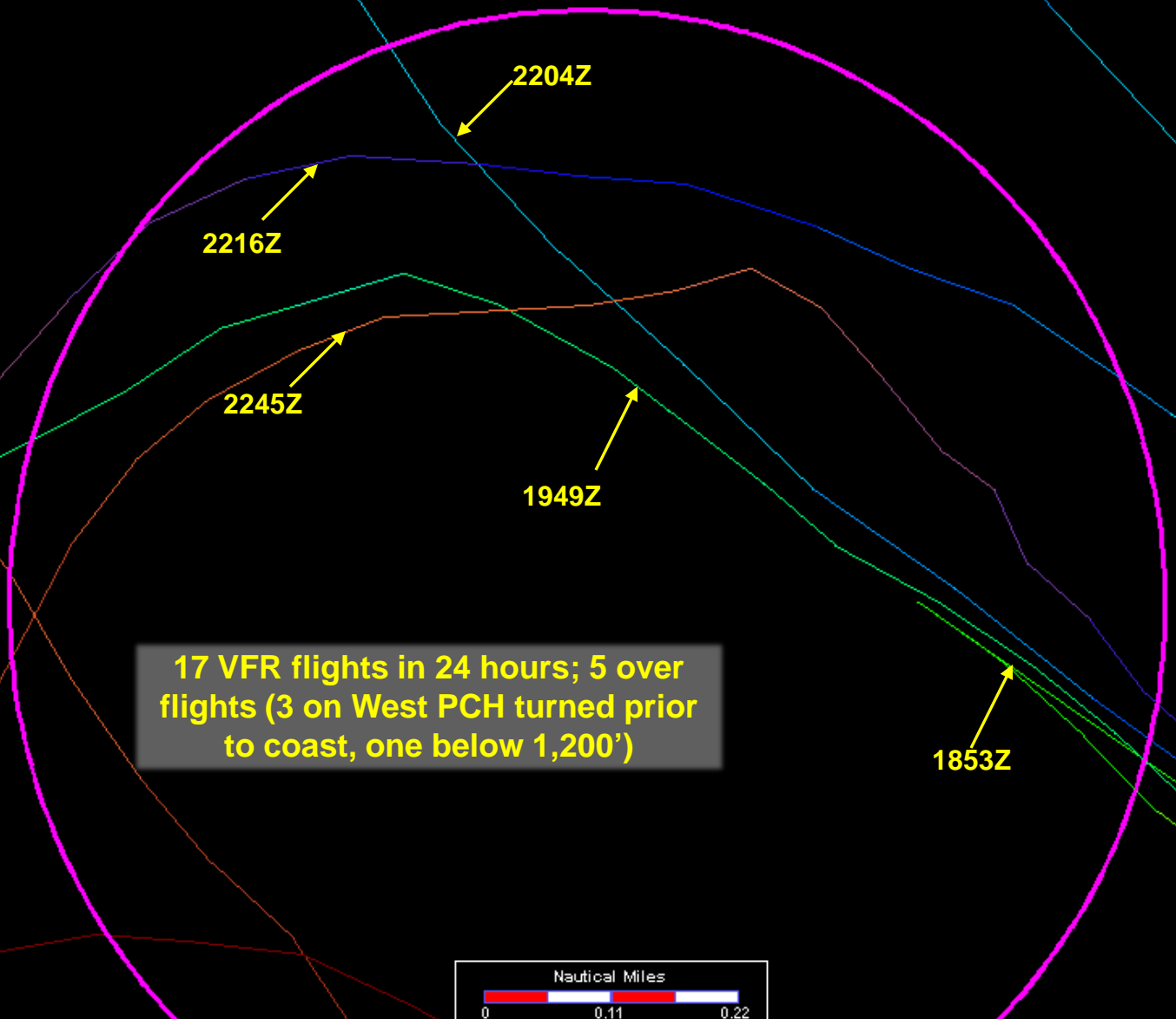
17 VFR flights in 24 hours; 5 over flights (details on next slide)



Torrance Departures VFR only – October 19, 2011

Altitude (100s ft)

From	To	Color
0	5	Red
5	8	Yellow
8	12	Green
12	16	Cyan
16	22	Blue
22	28	Orange
28	35	Brown



17 VFR flights in 24 hours; 5 over flights (3 on West PCH turned prior to coast, one below 1,200')



All Torrance Departures 24 hours - October 21, 2011

Altitude (100s ft)		
From	To	Color
0	5	Red
5	8	Yellow
8	12	Green
12	16	Cyan
16	22	Blue
22	28	Orange
28	35	Brown



Torrance Departures IFR only – October 21, 2011

Altitude (100s ft)		
From	To	Color
0	5	Red
5	8	Yellow
8	12	Green
12	16	Cyan
16	22	Blue
22	28	Orange
28	35	Brown

7 IFR flights in 24 hours;
Zero over flights



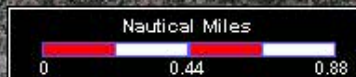
Torrance Departures VFR only – October 21, 2011

Altitude (100s ft)		
From	To	Color
0	5	Red
5	8	Yellow
8	12	Green
12	16	Cyan
16	22	Blue
22	28	Orange
28	35	Brown

2333Z

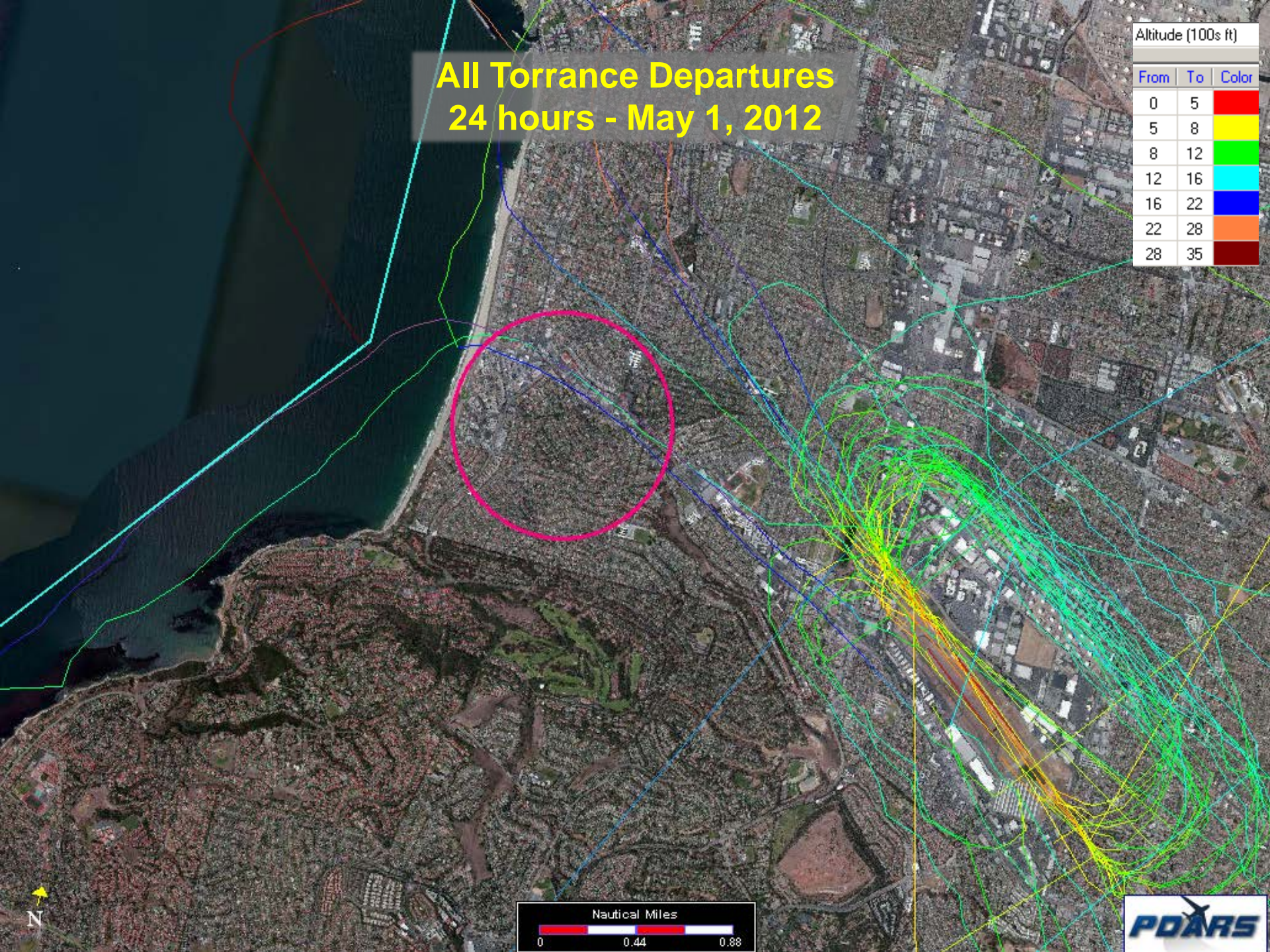
2242Z

29 VFR flights in 24 hours; 2
over flights (one continued
west to turn south over coast,
the other made 180 degree turn)



All Torrance Departures 24 hours - May 1, 2012

Altitude (100s ft)		
From	To	Color
0	5	Red
5	8	Yellow
8	12	Green
12	16	Cyan
16	22	Blue
22	28	Orange
28	35	Brown



Torrance Departures IFR only - May 1, 2012

Altitude (100s ft)		
From	To	Color
0	5	Red
5	8	Yellow
8	12	Green
12	16	Cyan
16	22	Blue
22	28	Orange
28	35	Brown

1826Z C172

4 IFR flights in 24 hours; One over flight
(after allowed turn over coast)

Torrance Departures VFR only - May 1, 2012

Altitude (100s ft)		
From	To	Color
0	5	Red
5	8	Yellow
8	12	Green
12	16	Cyan
16	22	Blue
22	28	Orange
28	35	Brown

1905Z

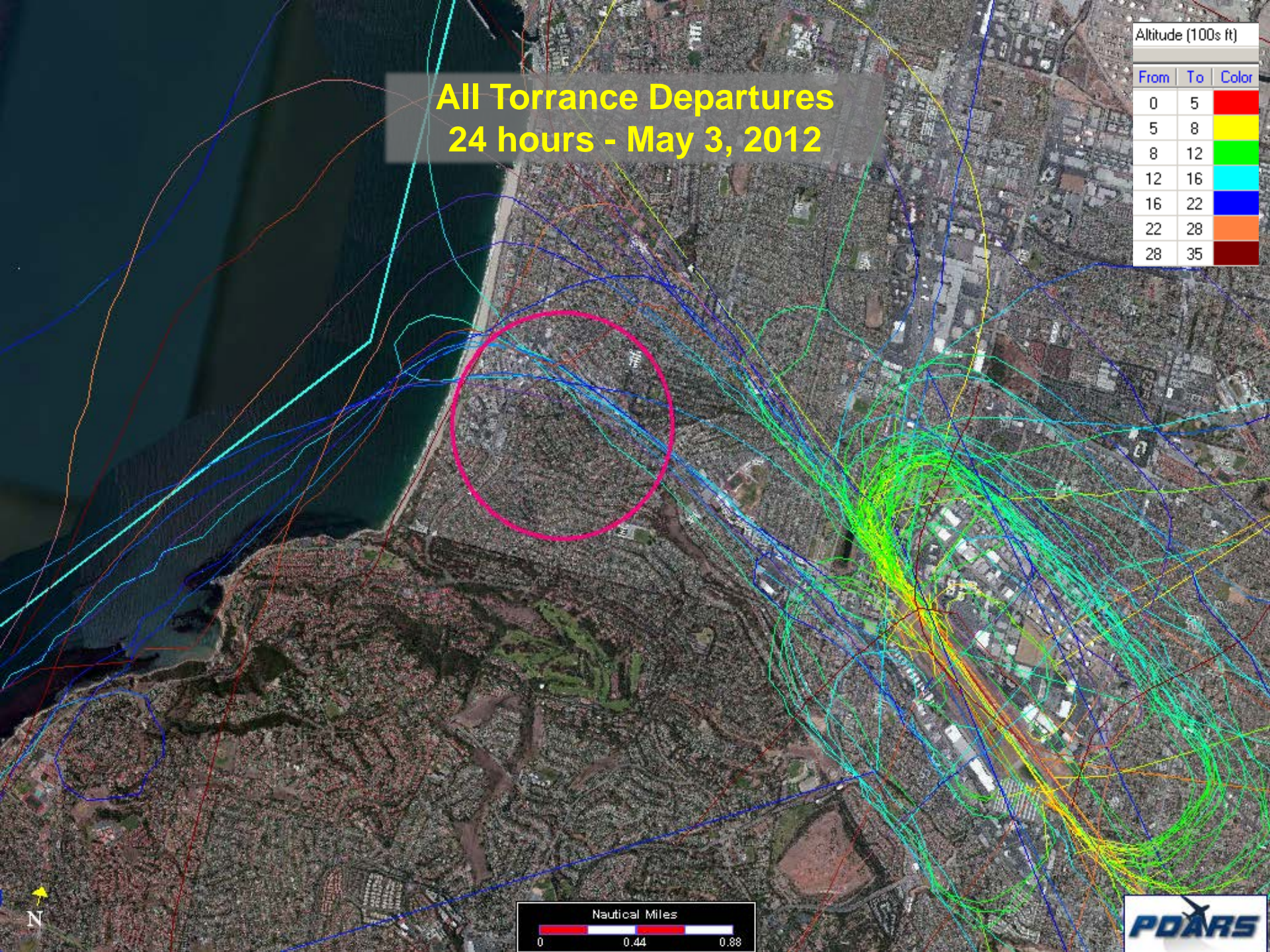
2116Z

23 VFR flights in 24
hours; 2 over flights
(on West PCH route)



All Torrance Departures 24 hours - May 3, 2012

Altitude (100s ft)		
From	To	Color
0	5	Red
5	8	Yellow
8	12	Green
12	16	Cyan
16	22	Blue
22	28	Orange
28	35	Brown



Torrance Departures IFR only - May 3, 2012

1421Z BE36



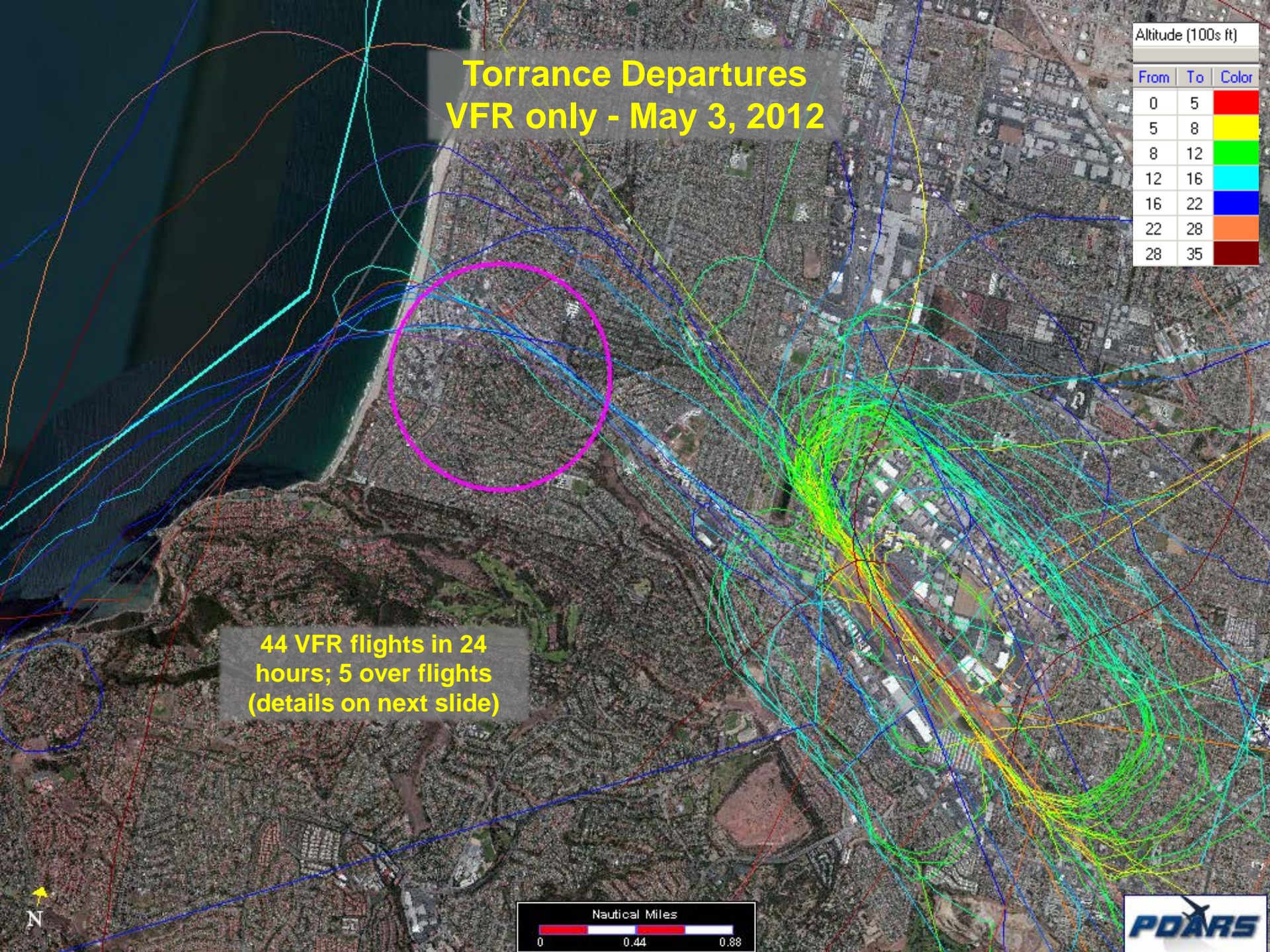
3 IFR flights in 24 hours;
One over flight

Altitude (100s ft)		
From	To	Color
0	5	Red
5	8	Yellow
8	12	Green
12	16	Cyan
16	22	Blue
22	28	Orange
28	35	Brown

Torrance Departures VFR only - May 3, 2012

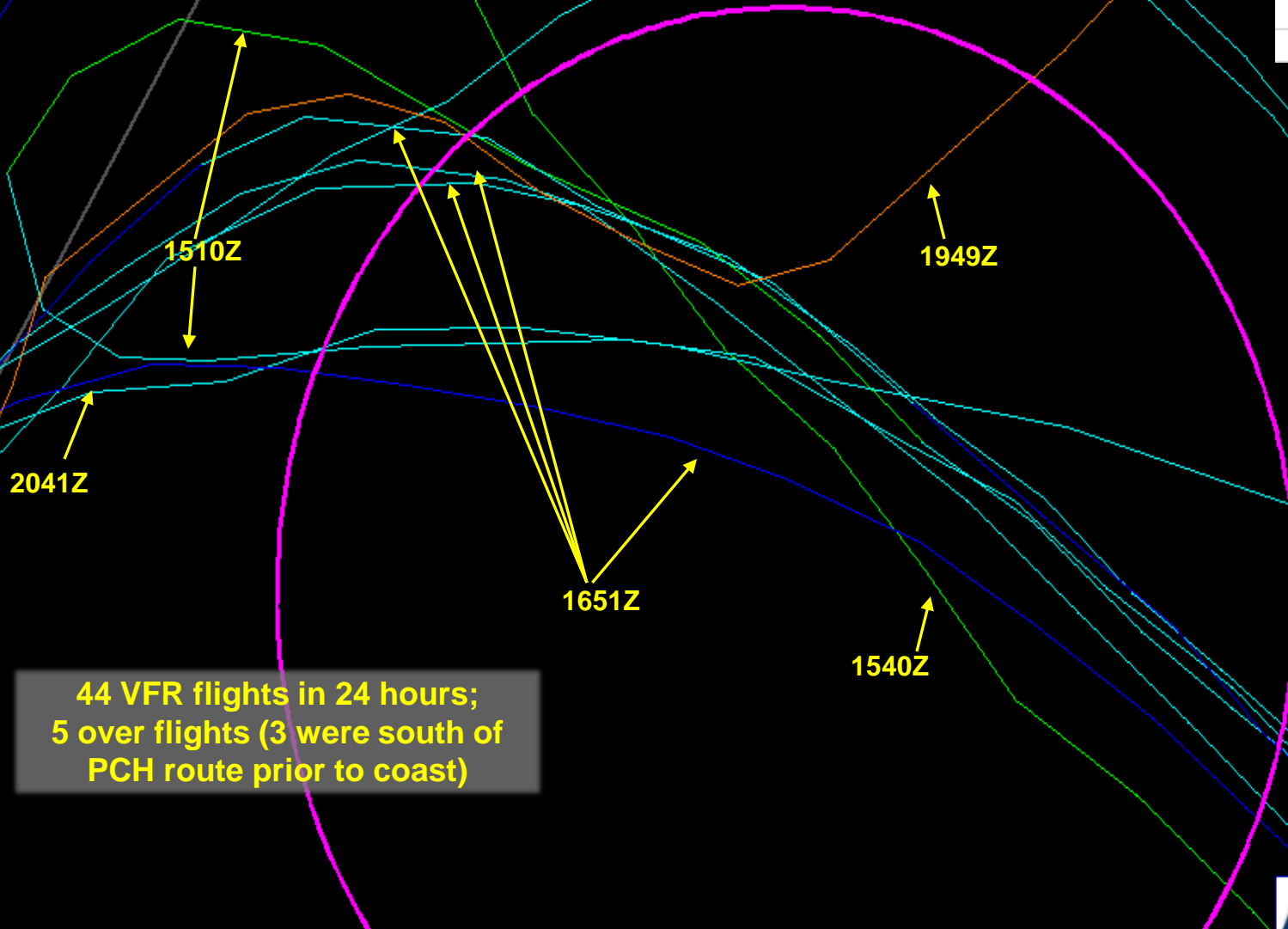
Altitude (100s ft)		
From	To	Color
0	5	Red
5	8	Yellow
8	12	Green
12	16	Cyan
16	22	Blue
22	28	Orange
28	35	Brown

44 VFR flights in 24 hours; 5 over flights (details on next slide)



Torrance Departures VFR only - May 3, 2012

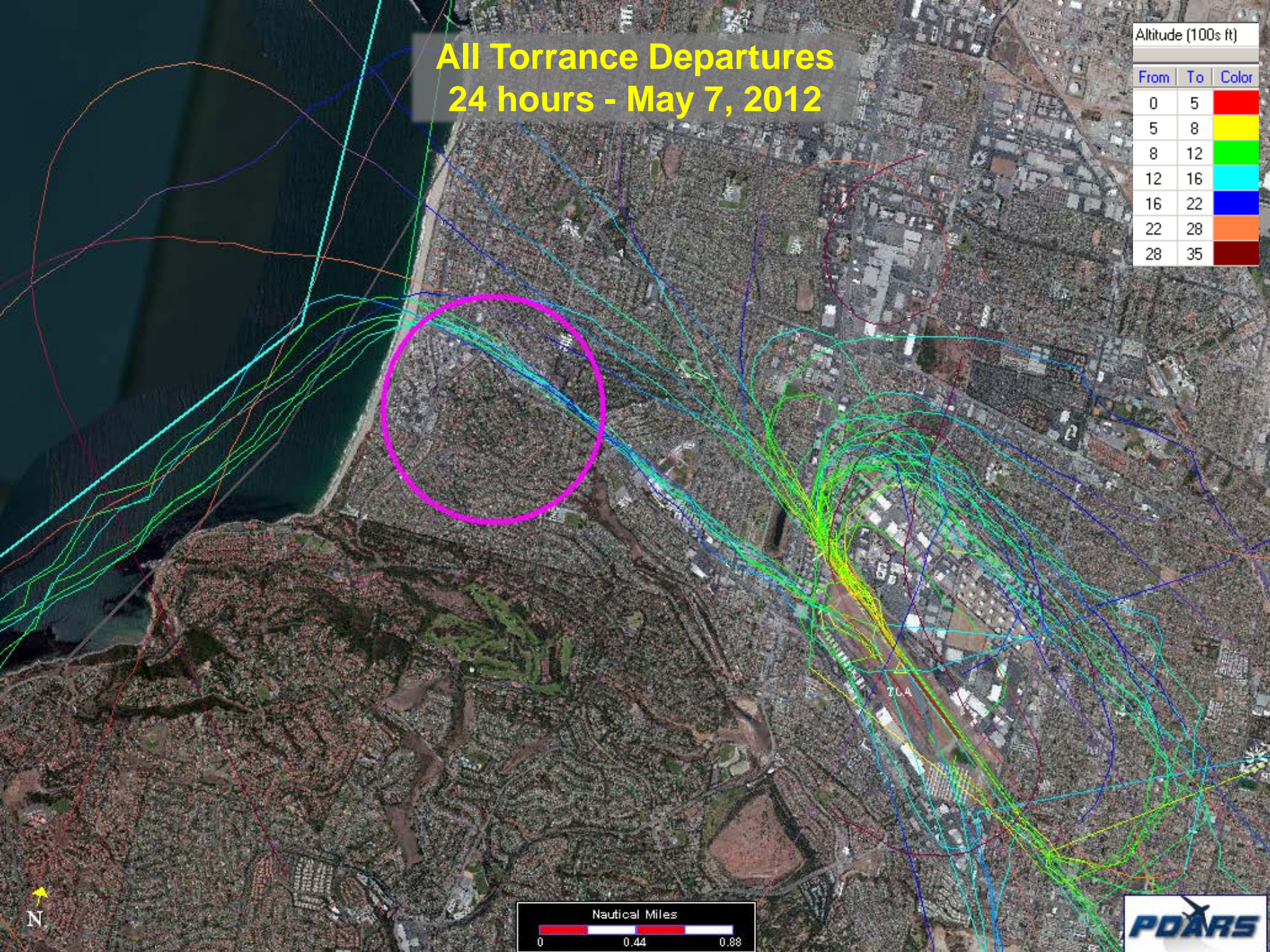
Altitude (100s ft)		
From	To	Color
0	5	Red
5	8	Yellow
8	12	Green
12	16	Cyan
16	22	Blue
22	28	Orange
28	35	Brown



44 VFR flights in 24 hours;
5 over flights (3 were south of
PCH route prior to coast)

All Torrance Departures 24 hours - May 7, 2012

Altitude (100s ft)		
From	To	Color
0	5	Red
5	8	Yellow
8	12	Green
12	16	Cyan
16	22	Blue
22	28	Orange
28	35	Brown



Torrance Departures IFR only - May 7, 2012

Altitude (100s ft)		
From	To	Color
0	5	Red
5	8	Yellow
8	12	Green
12	16	Cyan
16	22	Blue
22	28	Orange
28	35	Brown

3 IFR flights in 24 hours;
Zero over flights

Torrance Departures VFR only - May 7, 2012

Altitude (100s ft)		
From	To	Color
0	5	Red
5	8	Yellow
8	12	Green
12	16	Cyan
16	22	Blue
22	28	Orange
28	35	Brown

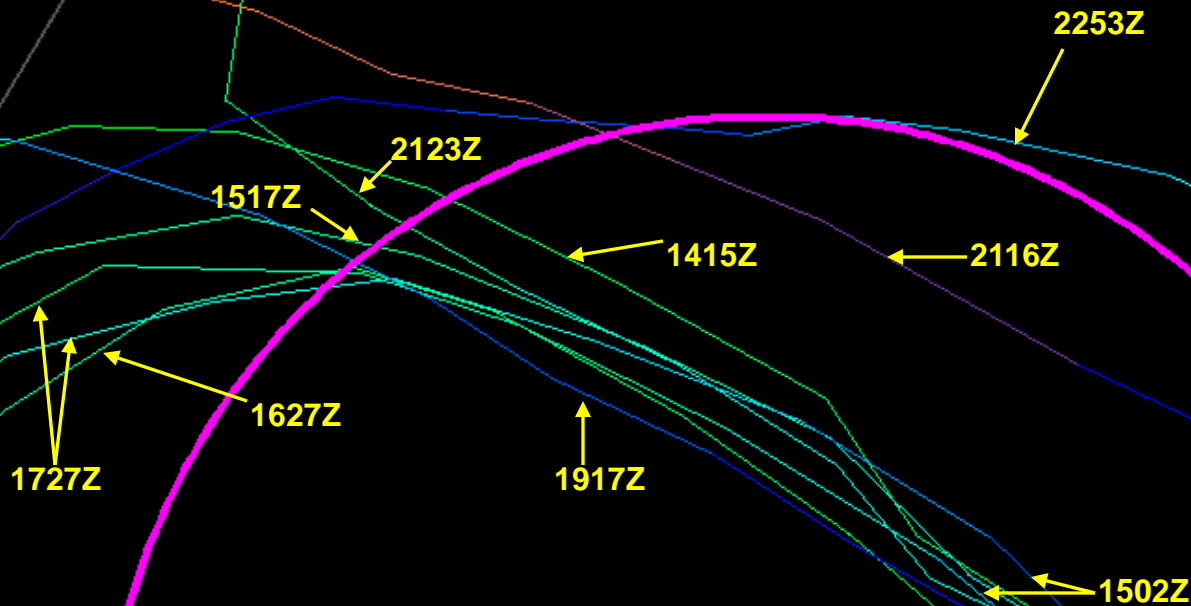
29 VFR flights in 24 hours;
10 over flights, all on
West PCH route
(details on next slide)



Torrance Departures VFR only - May 7, 2012

Altitude (100s ft)

From	To	Color
0	5	Red
5	8	Yellow
8	12	Green
12	16	Cyan
16	22	Blue
22	28	Orange
28	35	Brown



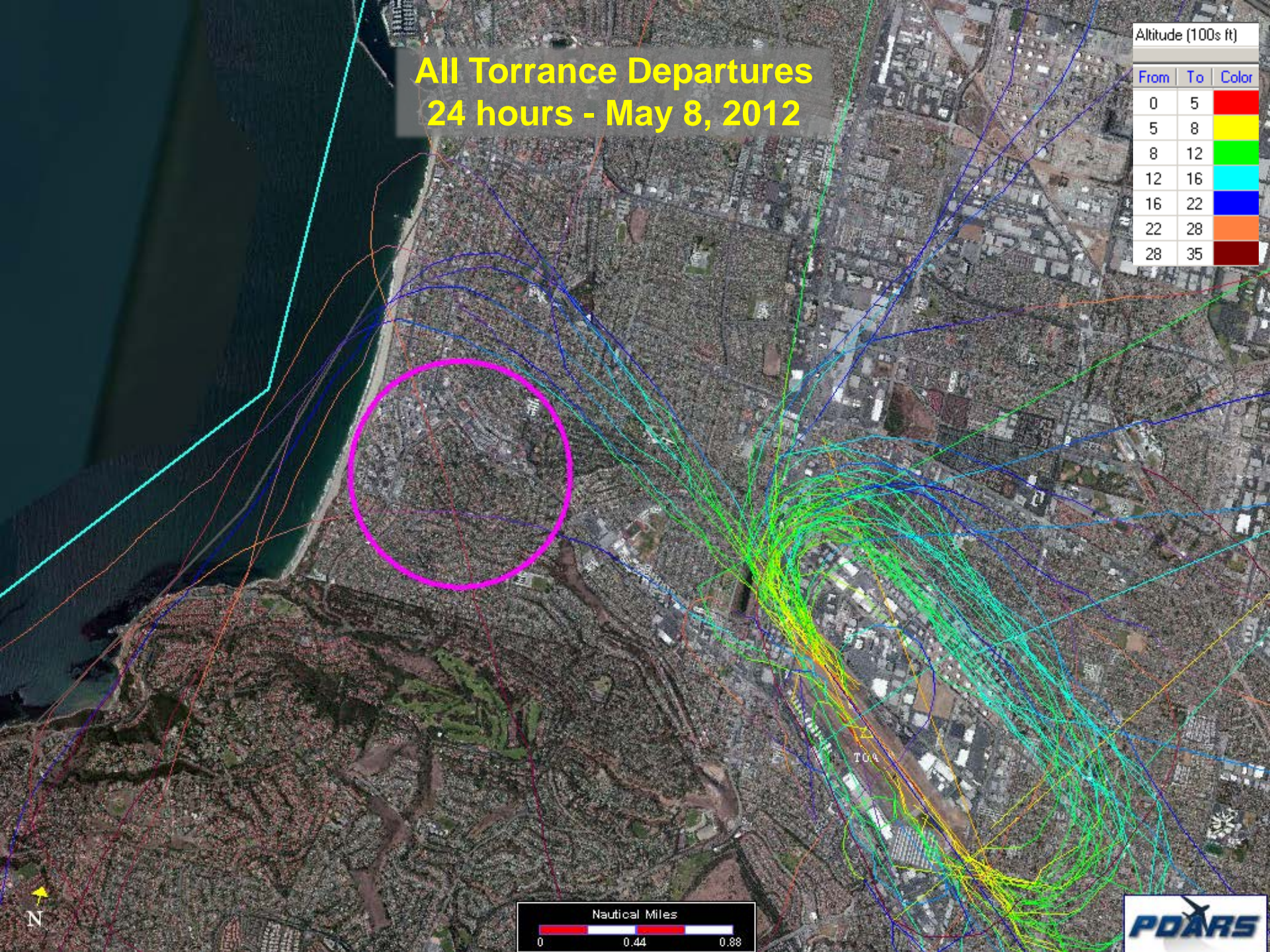
29 VFR flights in 24
hours; 9 over flights (all
on PCH route)



All Torrance Departures 24 hours - May 8, 2012

Altitude (100s ft)

From	To	Color
0	5	Red
5	8	Yellow
8	12	Green
12	16	Cyan
16	22	Blue
22	28	Orange
28	35	Brown



Torrance Departures IFR only - May 8, 2012

1517Z C182

Altitude (100s ft)		
From	To	Color
0	15	Red
15	999	Green

2 IFR flights in 24 hours; One over flight
(turned left at coast above 1,500')

Torrance Departures VFR only - May 8, 2012

Altitude (100s ft)

From	To	Color
0	5	Red
5	8	Yellow
8	12	Green
12	16	Cyan
16	22	Blue
22	28	Orange
28	35	Brown

42 VFR flights in 24
hours; Zero over flights



Torrance Departures Observations

- TOA noise abatement ordinance allows for aircraft to make left turns prior to coast if they are 1,500' or higher
- On the 16 days reviewed:
 - Although missed approach aircraft cannot be separately identified, all IFR aircraft departing west from TOA complied with the noise abatement ordinance
 - NOTE: Missed approach aircraft must execute left turn at 1,100' to avoid IFR conflict with LAX and HHR aircraft assigned a 210° heading
 - Most VFR aircraft followed West PCH route
 - Of all VFR aircraft departing westbound, on average, less than one VFR aircraft per day turned south prior to reaching the coast below 1,500'





Questions?