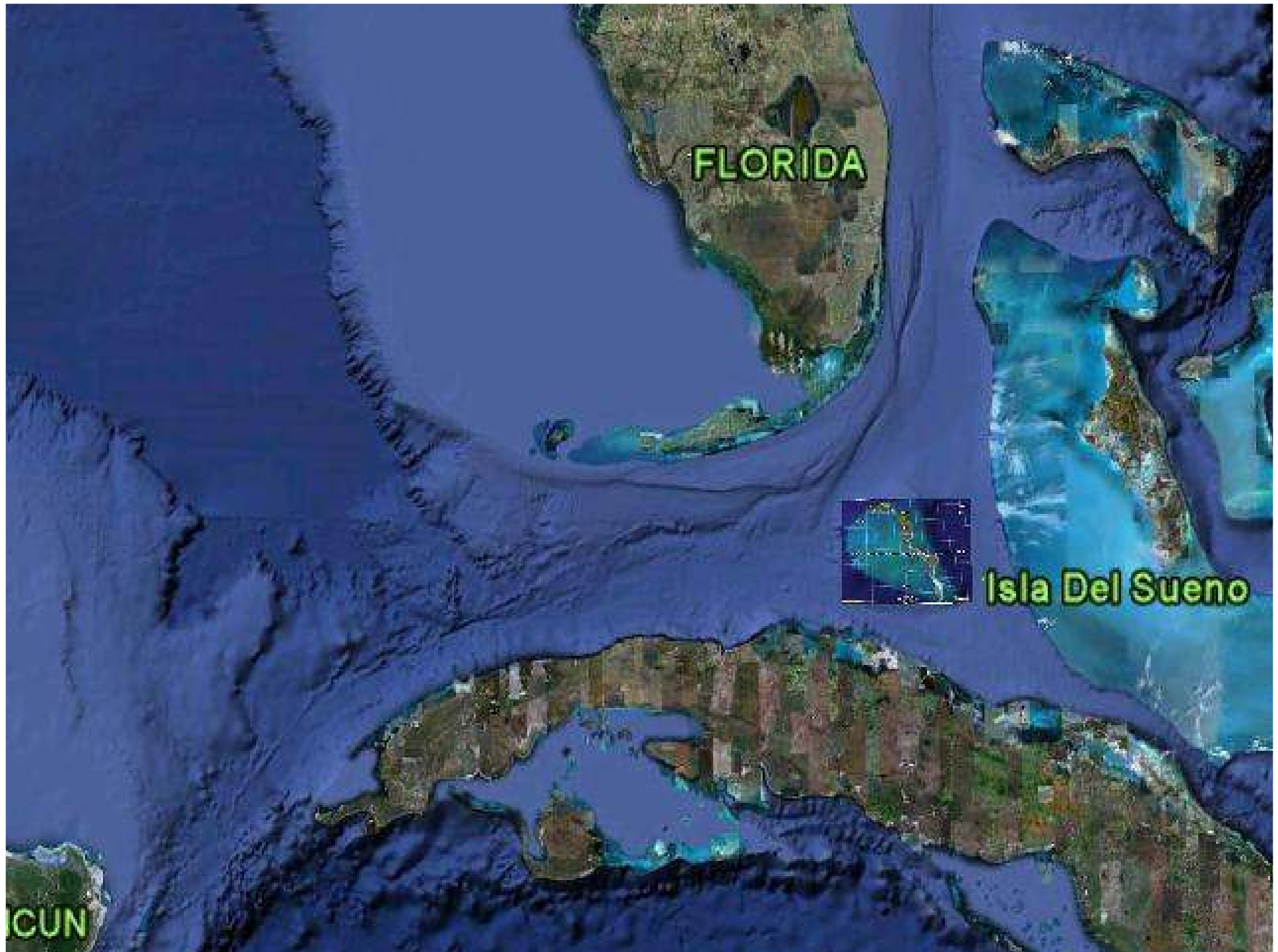# Migrant Boats

A geo-temporal analysis
and
visualization of migrant boats

Anika Mahmud

Background of the Task

- Ferdinando Catalano and his manifesto

  -Family is the governing body

  -Women are the followers and men are the guides

- Result of the manifesto

  -Crack down the supporters by the government

  -Supporters flee to USA during the years
   2005,2006 and 2007

FLORIDA

Isla Del Sueno

ICUN

Task

1. Characterize the choice of landing sites and their evolution over the three years.

2. Characterize the geographical patterns of interdiction over the three years.

3. What is the successful landing rate over the time period?

Data Set

<CoastGuardRecord>
<EncounterCoords>
-80.33100097073213,25.10742916222947</EncounterCoords>
<RecordType>**Interdiction**</RecordType>
<Passengers>**23**</Passengers>
<USCG_Vessel>**Ironwood**</USCG_Vessel>
<EncounterDate>**2005-04-24**</EncounterDate>
<RecordNotes />
<NumDeaths>**0**</NumDeaths>
<LaunchCoords>
-80.23429525620114,24.08680387475695</LaunchCoords>
<VesselType>**Rustic**</VesselType>

Preprocessing of Data

- Convert to excel file
- Change format of lat/long data

-80.33100097073213,25.10742916222947
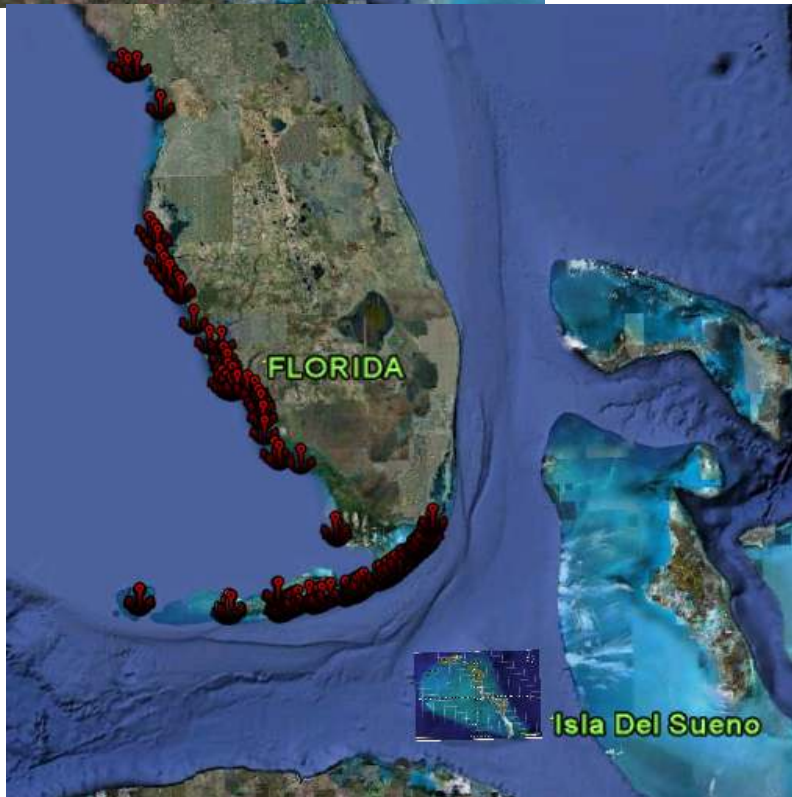
to

25.10742916222947 and -80.33100097073213

- C# code to sort data
- Convert Excel files to Keyhole Markup Language (KML) files
- Set Isla Del Sueno in the map
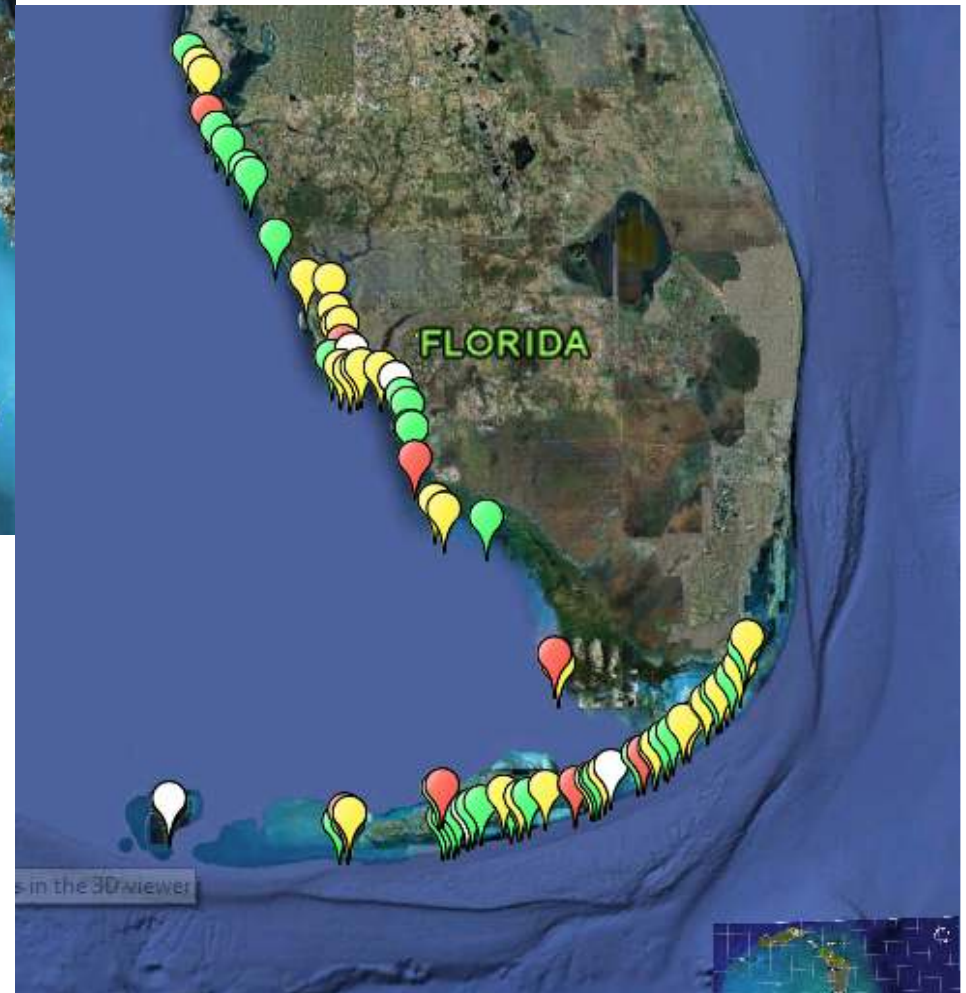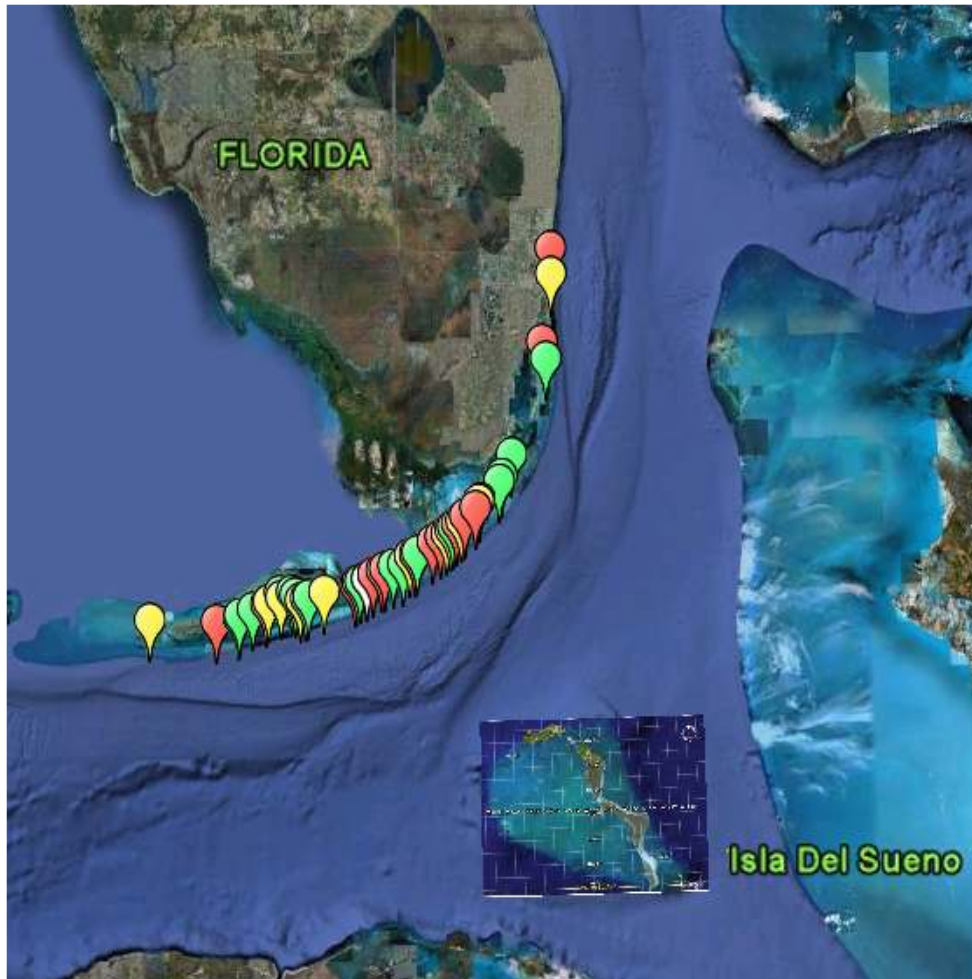
Analysis of landing site

- Finding yearly pattern
- Finding seasonal pattern
  - Winter, Spring, Summer, Fall
  - Used color coding
  - Added date and season in the nodes
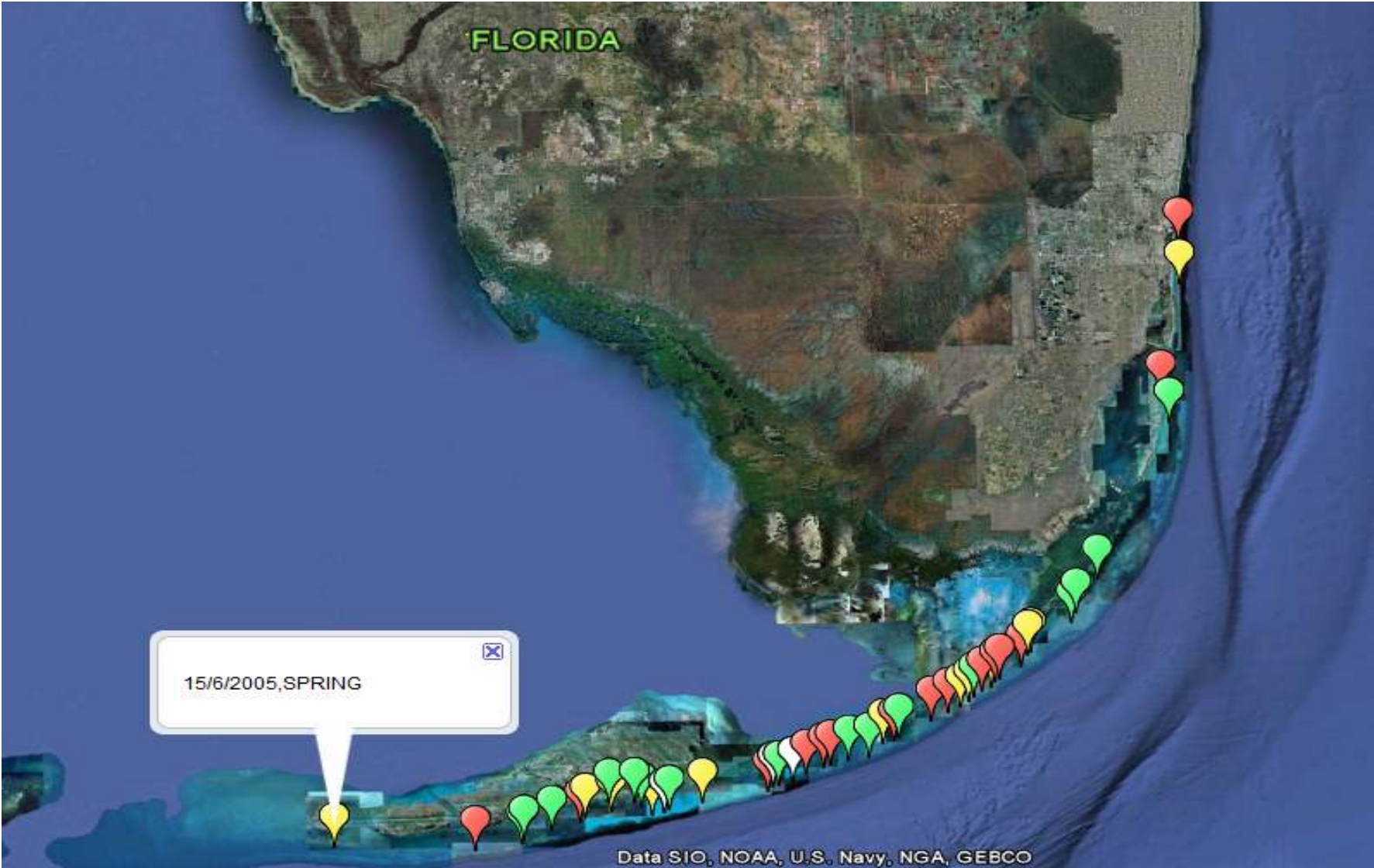
- Finding sites of landing
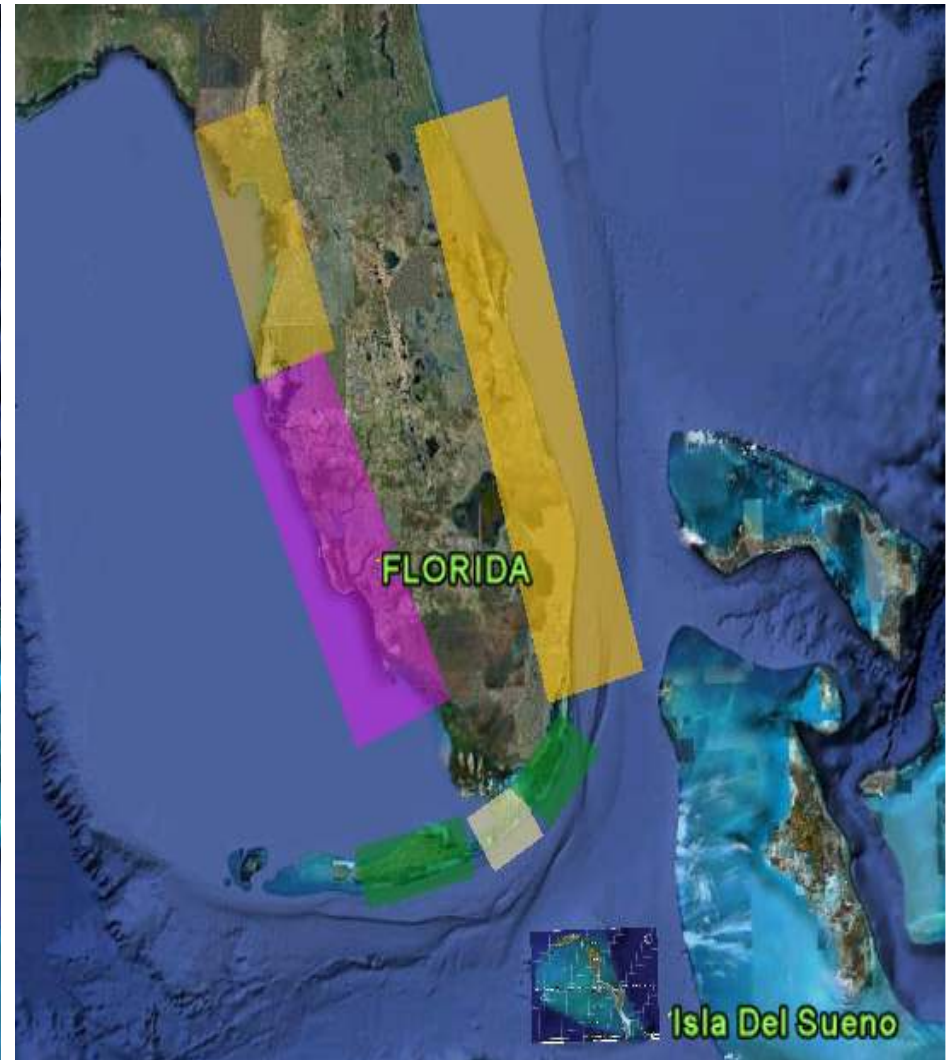
Landing in the three years

Seasonal Pattern

Seasonal Pattern (cont..)

Seasonal Pattern (cont..)

Landing sites

Tasks Remaining

- Finding interdiction pattern
- Finding success rate
- Extract other data

      - Preferred Route

      - Preferred Vessel

      - Death pattern

Questions
and
Suggestions?