Tendencias de Bidding en el Golfo de México
Where are the most value areas offshore in the Gulf of Mexico?
Is there a Pattern on the bidding activity?
Looking for Water, not Fire
Where

Are bids following a trend?

WHERE are the most valued areas in the GOM?

WHERE are the hot spots in the Gulf?

How

HOW we got to today's lease sale system.

HOW are we looking to find a pattern?

What

WHAT are we looking for?

Bids & values patterns
USA
Federal Gov (BOEM)
(OCS)
Offshore Continental Shelf Submerged Lands
93.75 million acres offered
5 and 5.7 acres blocks
Leasing

BACKGROUND

1861 1973 2016
1900 2000

Track Nomination - Vs - Area Wide Leasing

1861 1900 1973 81 2000
Leasing Today

• Why we are interested in this area:
  • A premier hydrocarbons province on global scale
    - 20 to 25 % of US oil production (DW: 15%);
    - 23 % of natural gas production;
    - 15 % of total proved reserves
  • Second most important source of revenue for US government; offshore activities mean USD 6 billion per year to Louisiana’s economy alone

source: http://maritime-connector.com/wiki/q-max/
Annual DJ production expected to grow from $0.8\ \text{Tcf}$ to $4.5\ \text{Tcf}$ to satisfy 50% of incremental US gas demand over 10 years.
Petrotrek + Petroview + IHS + Internal DB + .Gov + Industry Mag + BOEM + EIA Energy Information Administration
Description of the Data
(let the data speak to you)

Entire Lease sales bidding activity since 1996 Including last 20 years for a total of 15,337 high/wining bids

Currently lease 4,795 date back to 1936

Highest bid: USD 157,111,000 Almost all the bids are in the range of zero to 16 million
Methodology

Initial Data Assessment

Multi-sources

Sufficient data Adequate values

Join data with geometry

Data cleaning

Format and enable time

Currently lease & Entire Lease sale records review
Bidding Behavior (20)years
Bidding Behavior (20) years
Currently leased Blocks throughout time (since 1936)
Currently leased Blocks throughout time (cumulative)
Methodology

- Multi-sources
- Data cleaning
- Join data with geometry
- Features to Events
- Aggregation
- hot spots
- Bids on events
- Time

G
Spatial Trends
From blocks → to events

Entire Lease Sale since 1996 (Historic)
Spatial Trends
From blocks → to events

Entire Lease Sale since 1996
Spatial Distribution **(Events)**

- Entire Lease Sale since 1996
Spatial Trends

Blocks $\rightarrow$ from events $\rightarrow$ to density surface

Multi-sources

Data cleaning

Join data with geometry

Features to Events

Aggregation

Time

Bids on events

hot spots
Hot Spots **(Bids)**

Political and Geo-limits Influence on the Results
Spatial Trends

blocks $\rightarrow$ from events $\rightarrow$ to density surface

Multi-sources

Data cleaning

Join data with geometry

Features to Events

Aggregation

hot spots

density surface

Bids on events
Spatial Distribution (Events)
density surface
Interpolation (Events) in to a Density Surface
Spatial Trends

Data cleaning → Multi-sources → Join data with geometry → Features to Events → Aggregation → hot spots → Bids on events → blocks from events to density surface
Feature and **Bid$**
Sources


- Lambert A. Wilmer (1858), The life, travels and adventures of Ferdinand De Soto (The life, travels and adventures of Ferdinand de Soto ed.), Philadelphia: J.T. Lloyd


Thank you