



Tab D, No. 5

# 2019 Gulf of Mexico Shrimp Effort Estimates



Michelle Masi, Ph.D.

Southeast Fisheries Science Center  
Galveston Laboratory  
Galveston, TX USA

2021

# How Cellular Electronic Logbooks (cELBs) Work

*The goal of the current cELB program is to develop a better system to collect effort data in the Gulf of Mexico shrimp fishery.*

Distance and speed between data points are calculated to determine the amount of time fished by location (effort). Fishing effort data are then matched to the number of pounds of shrimp catch unloaded at the dock (landings) based on date.



NOAA Fisheries Service  
Galveston, TX

Data are received,  
stored, and  
transmitted to  
Galveston.



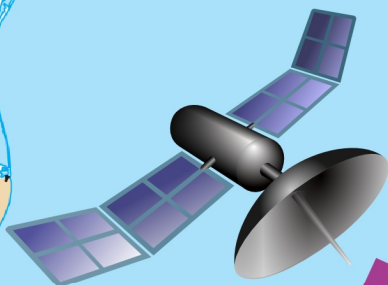
National Coastal Data  
Development Center (NCDDC)  
at Stennis Space Center, MS

When the vessel is within  
**NON-ROAMING** cellular  
range, data stored on the  
cELB are uploaded.



Cellular Tower

The cELB  
records the  
vessel's  
location every  
10 minutes  
using GPS  
technology.



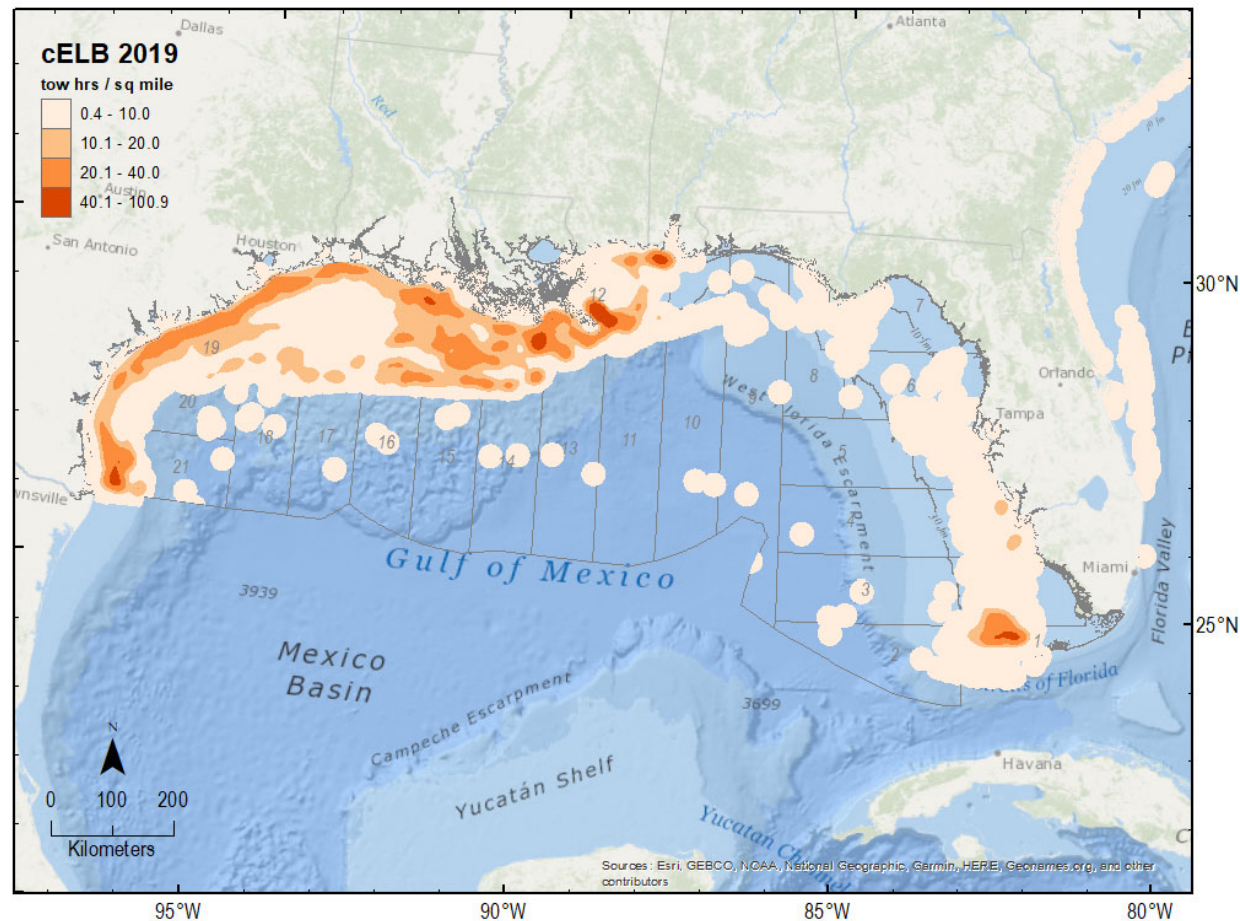
GPS Satellite

Shrimp Boat  
with cELB



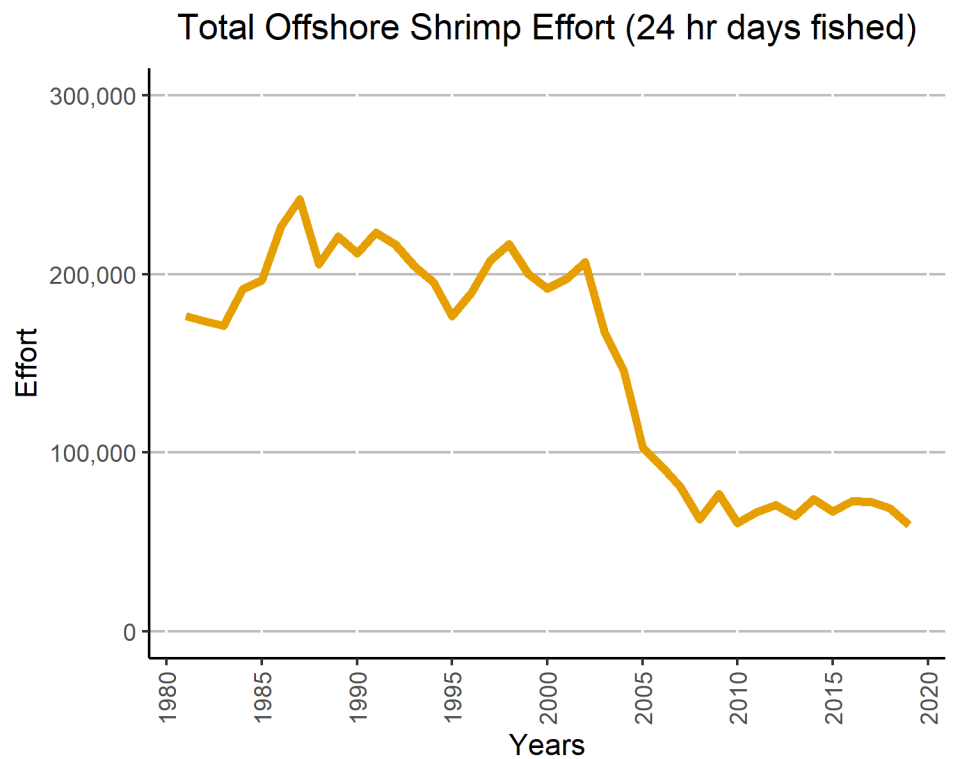
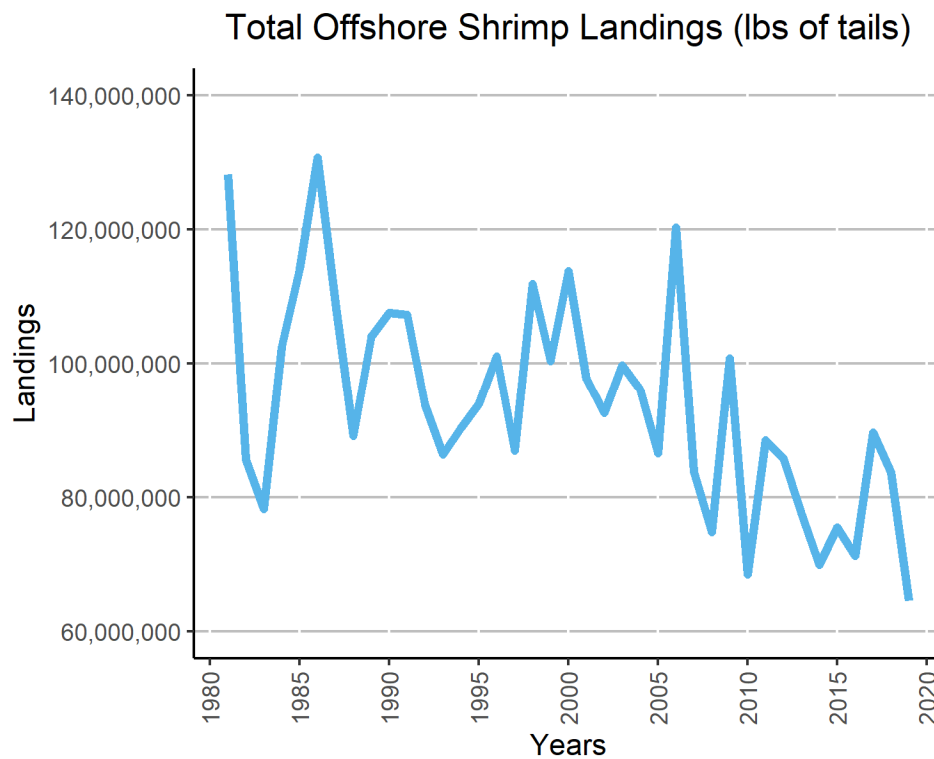
In early 2014, 500  
federally-permitted  
vessels were chosen  
to carry a cELB.

# 2019 Gulf Shrimp Effort Distribution (based on cELB data)



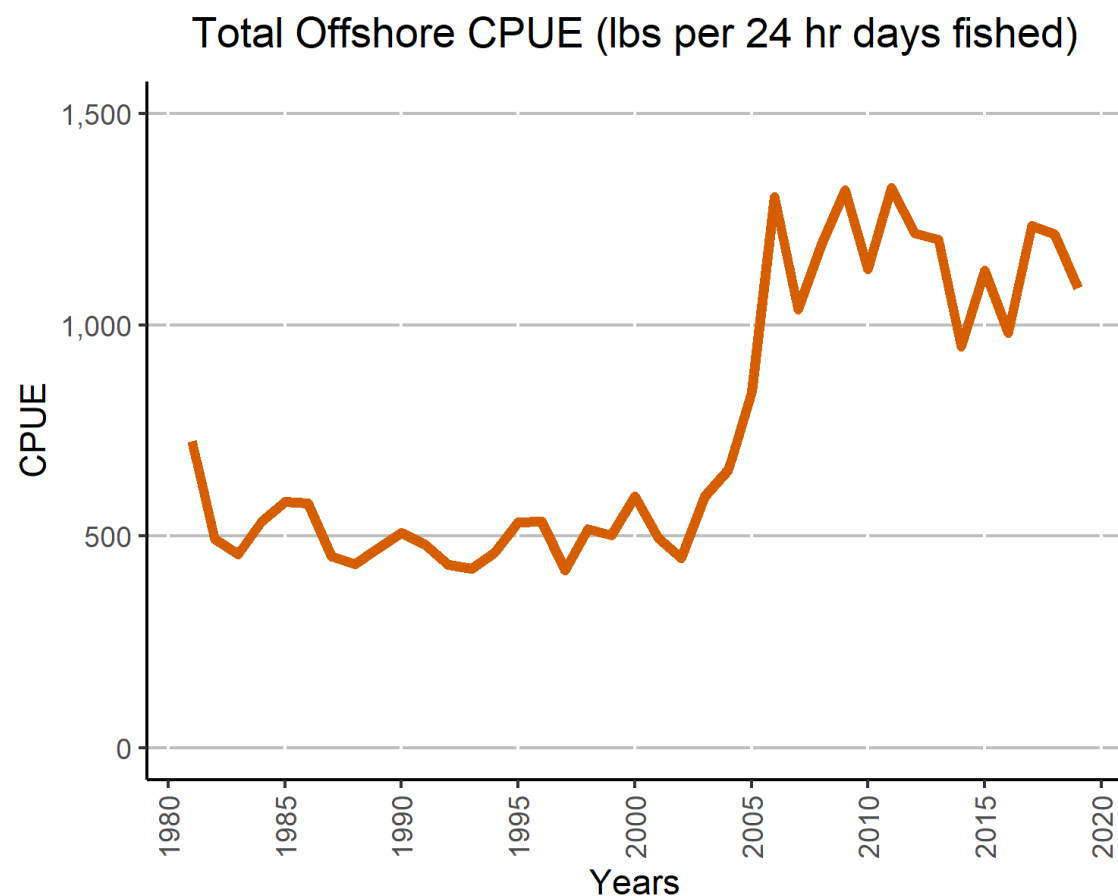
\*Map courtesy of Jo Williams: SEFSC, Galveston Lab

# 2019 Total Offshore Gulf Shrimp Landings and Effort



\*Total = Brown + Pink + White + Royal Red + Other Shrimp

# 2019 Total Offshore Gulf Shrimp Catch Per Unit Effort (CPUE)



\*Total = Brown + Pink + White + Royal Red + Other Shrimp



NOAA FISHERIES

U.S. Department of Commerce | National Oceanic and Atmospheric Administration | NOAA Fisheries

# 2019 Total Shrimp Effort Estimates

Area	Depth	Landings (lbs of tails)	Effort (24 hr days fished)	Baseline (2001-2003)	Percent Decrease from Baseline
Offshore	—	64,545,315	59,343	—	—
Stat Zone 10–21 (W. Gulf)	10–30 fathom	21,654,475	19,802	82,811	76.09%
Total Effort (in + offshore)	—	—	86,067	—	—

\*Target reduction goal for shrimp effort threshold is 60% below the baseline effort in the years 2001-2003 (Shrimp Amendment 18)

# Acknowledgements

We thank the following groups/individuals for their significant contributions in making these effort estimates:

- Gulf of Mexico Shrimp Fishing Industry
- Gulf of Mexico Fishery Management Council, SSC and Shrimp AP
- Gulf of Mexico Commercial Shrimp Fishermen