



2014 Gulf of Mexico Shrimp Effort Estimates

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NMFS cELB Shrimp Effort Estimates

- Effort data collected with the NMFS cellular Electronic Logbooks (cELB)
- Effort estimates based upon the cELB collected data for the first time in 2014
- Effort in the 10-21 stat zone and 10-30 fathom zone is at 67.11% of the baseline

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

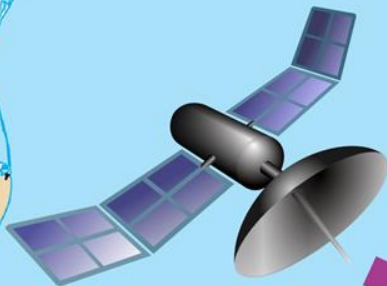
Shrimp Boat
with cELB



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

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

GPS Satellite



2014 Effort Estimates

Area	Depth	Landings (pounds- heads off)	Effort (nominal days fished)	Baseline	Percent Decrease from Baseline
Offshore		69,939,290	73,683	-	-
Stat Zone 10-21	10-30 fathom	29,428,876	27,233	82,811	67.11%

2014 Effort Estimates

Prepared: Mon Sep 28 17:02:22 2015 based on 2014 landings file dated 2015-09-28

Table 1: 2014 Effort Estimates – Trimesters 1-3

description	Landings	Effort	low	high
Total Offshore	69939290	73683	71936	75429
SZ10-21 10-30f	29428876	27233	26349	28117
SZ10-21 Offshore	66083273	70090	68404	71776
SZ13-21 10-30f	26336722	24988	24162	25813
SZ13-21 Offshore	57866563	63515	61897	65134

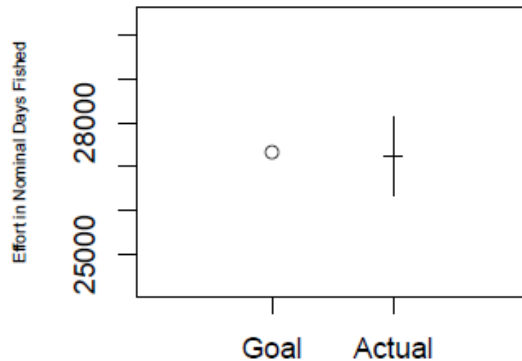
Table 2: Cumulative Mean Baseline Effort 2001-2003

desc	tri.1	tri.2	tri.3
s1021d1030	10043	54800	82811
s1321d1030	9319	50341	75262

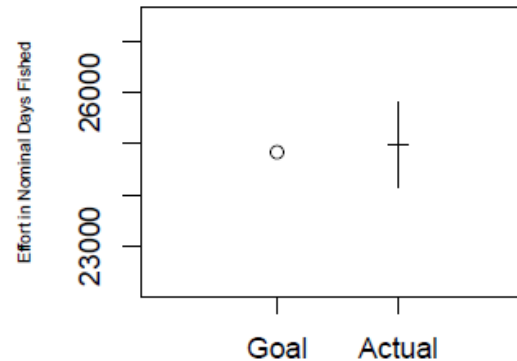
Table 3: Percent Reduction of Effort from Baseline 2001-2003

desc	pctRed
SZ10-21 10-30f	0.6711
SZ13-21 10-30f	0.6680

SZ 10-21 10-30 fm – trimester 3



SZ 13-21 10-30 fm – trimester 3



ELB Toys from 433 Boxes 2014

-95

-90

-85

-80

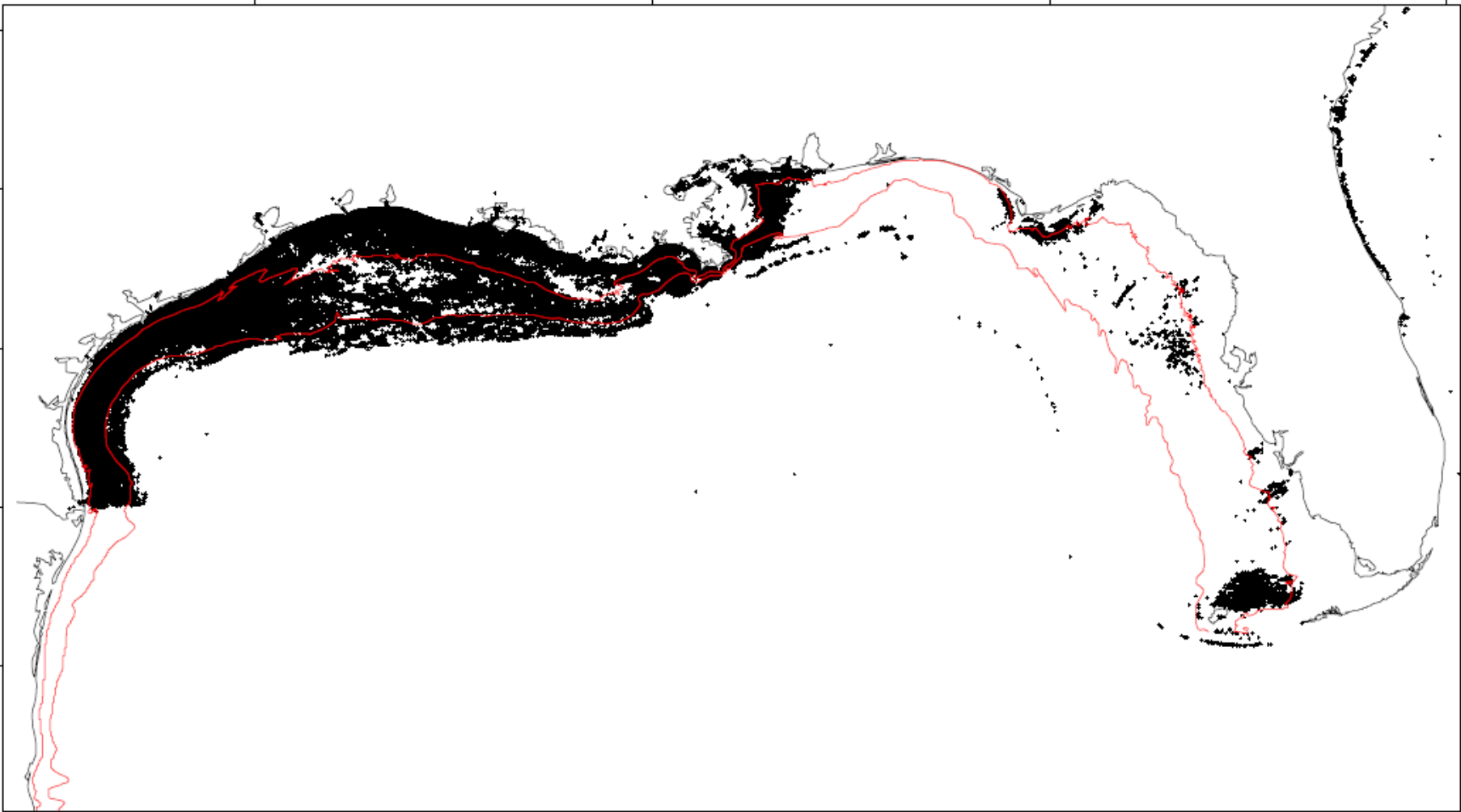
32

30

28

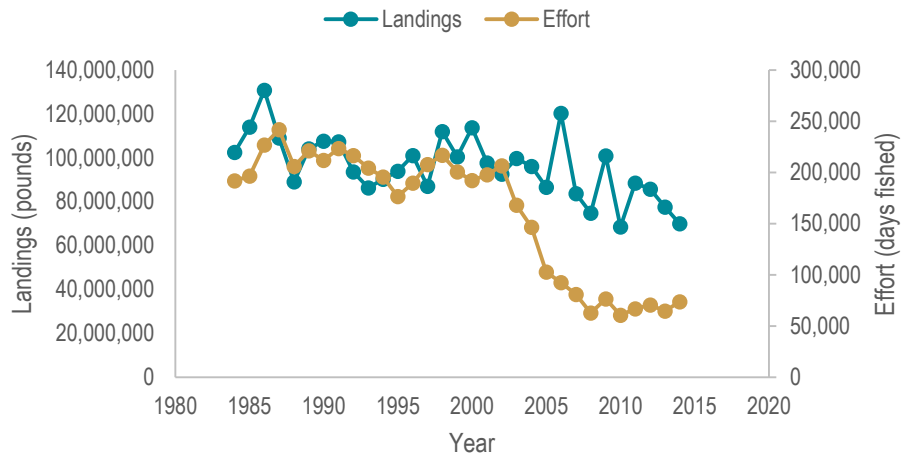
26

24

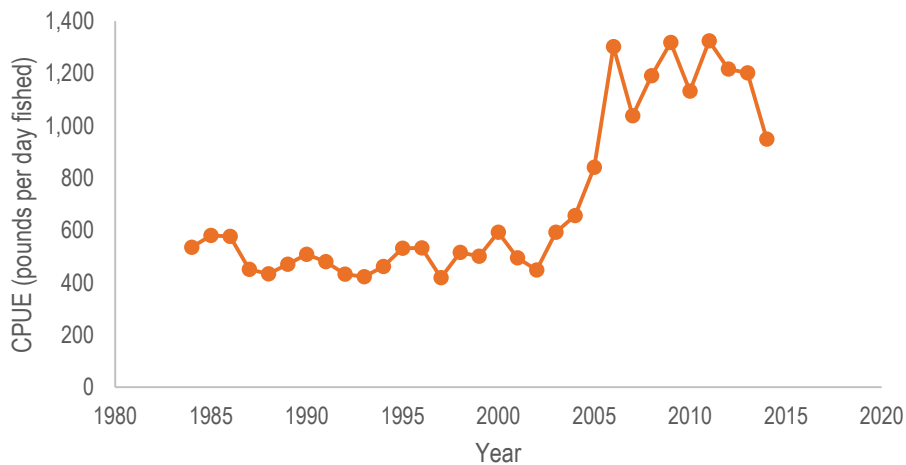


NOAA FISHERIES

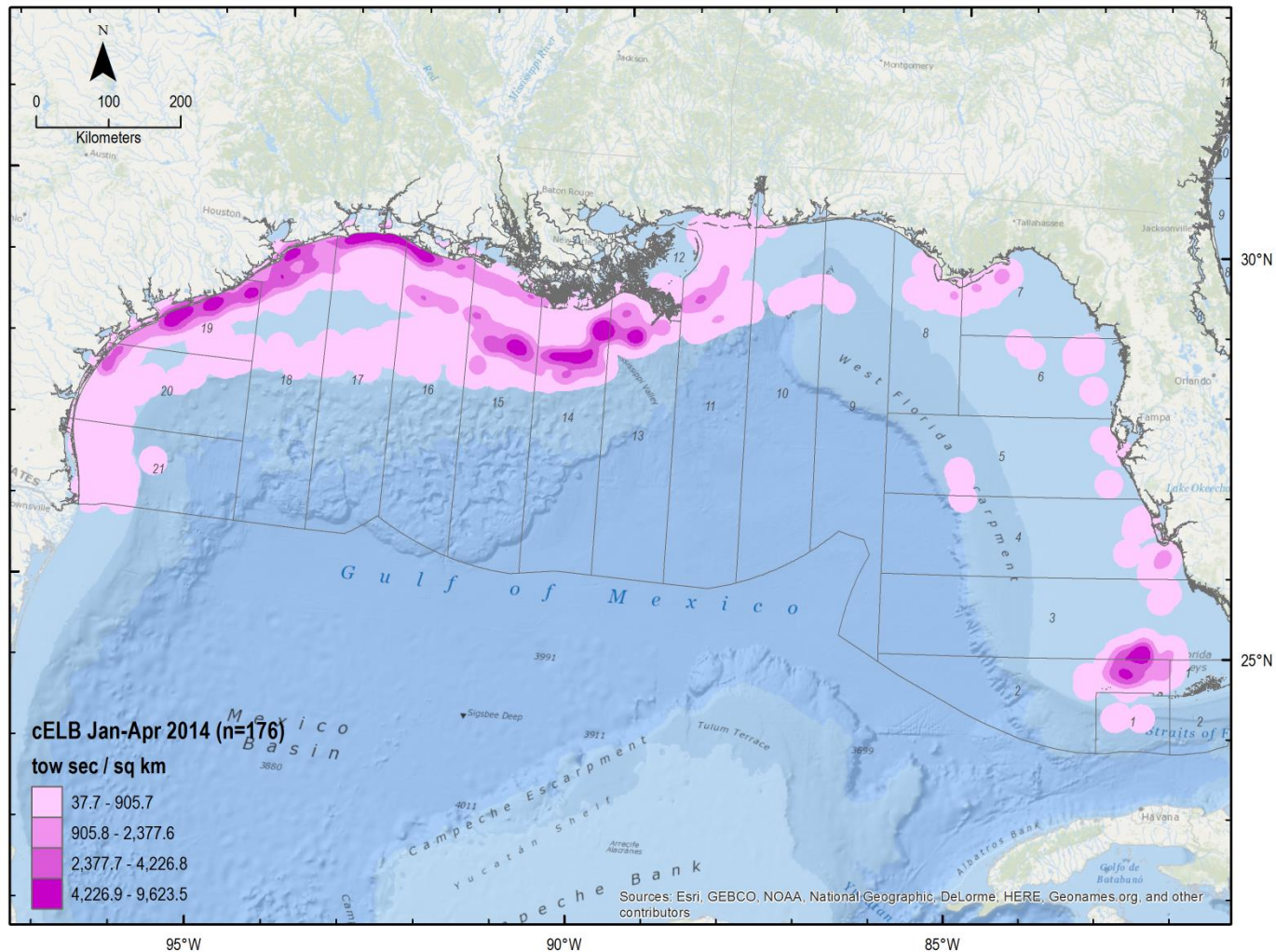
Total Landings and Effort



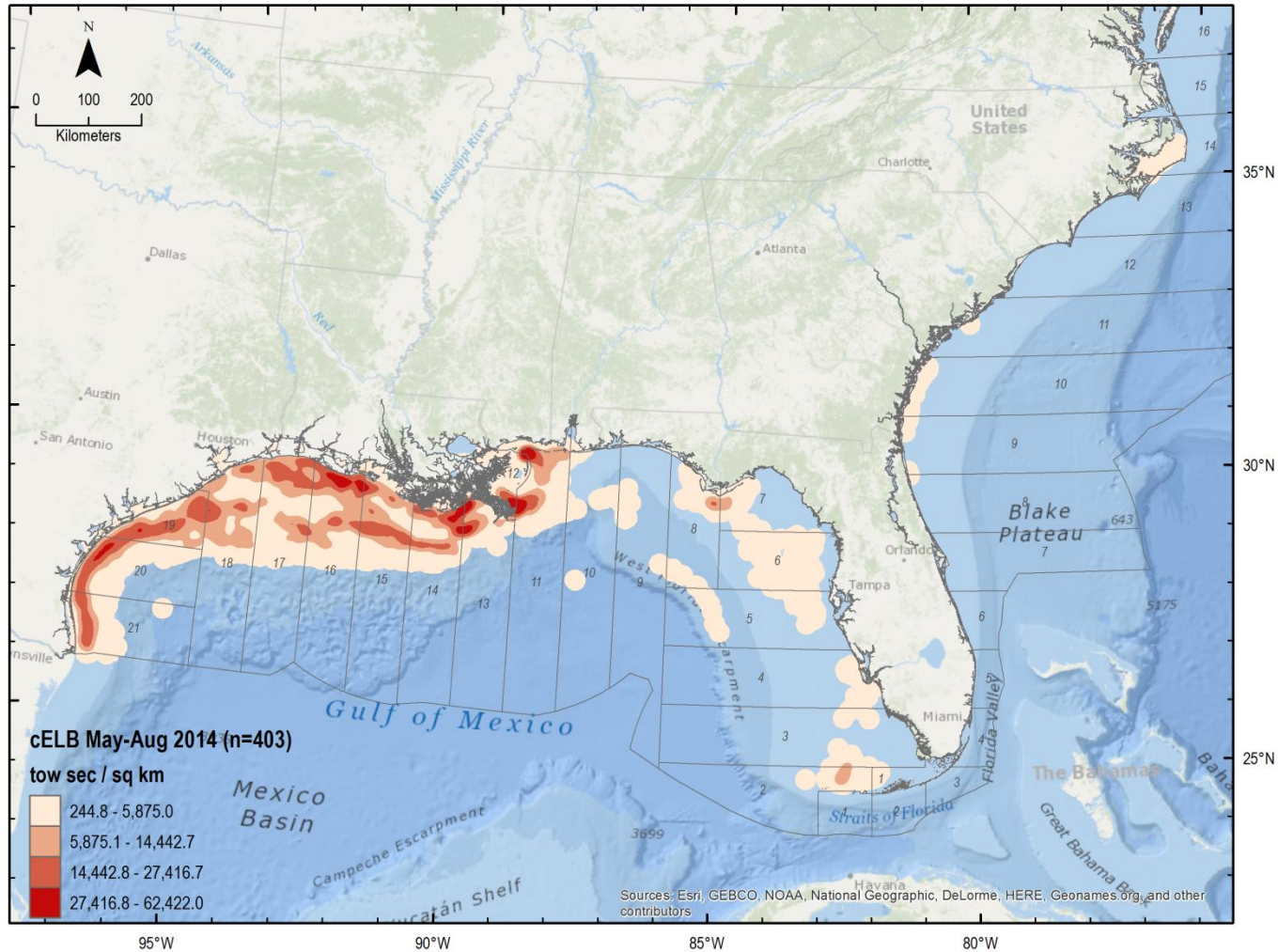
CPUE



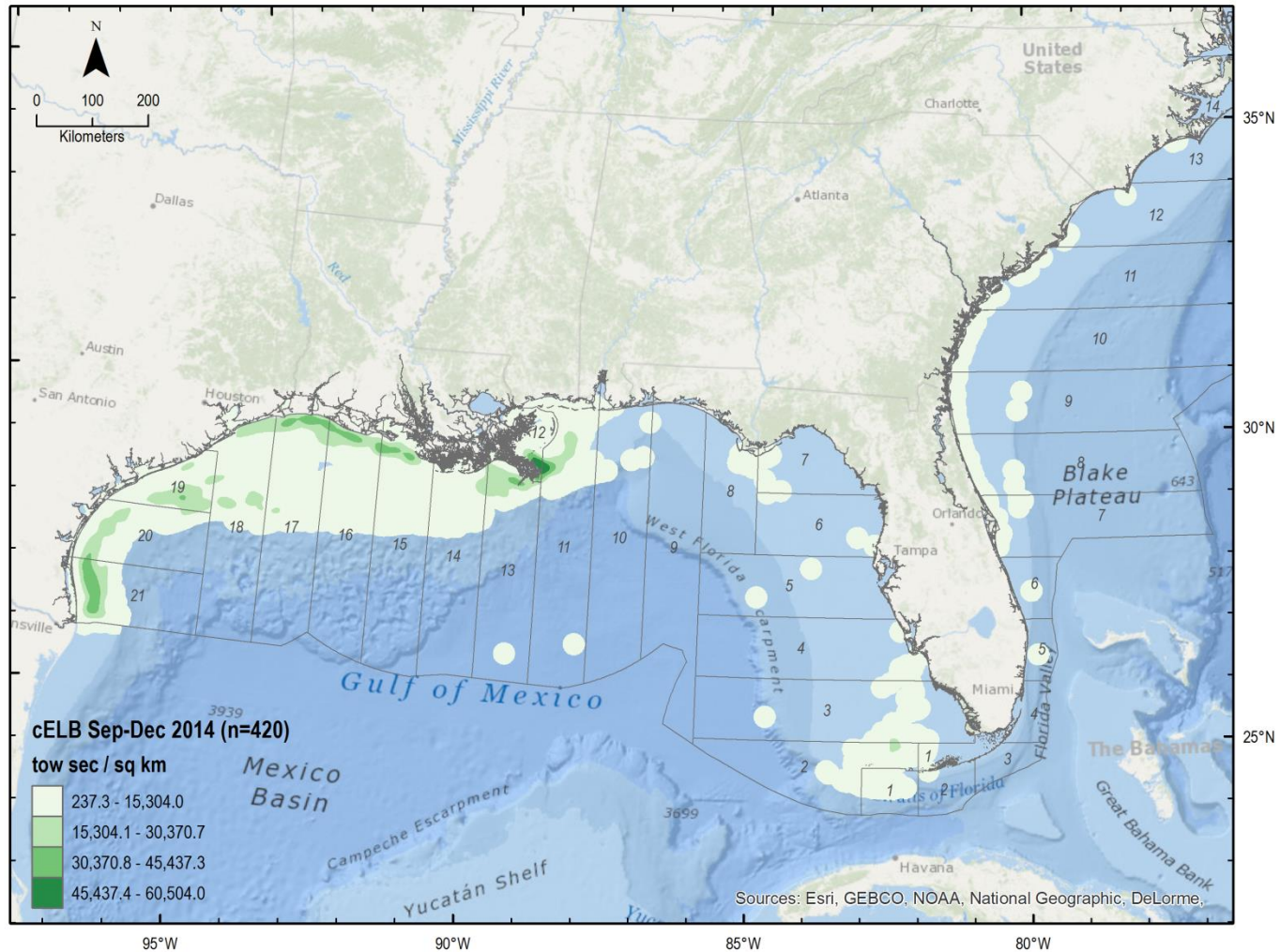
Distribution of cELB Effort: Jan–Apr 2014



Distribution of cELB Effort: May–Aug 2014



Distribution of cELB Effort: Sept–Dec 2014



Summary

- Effort in the Red Snapper zone is below the baseline (67.11%)
- New cELB units are successfully measuring fishing effort
- Total effort increased in 2014
- Total landings decreased in 2014
- While still high historically, total CPUE was lower in 2014 compared to previous years

Acknowledgements

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- Gulf and South Atlantic Fisheries Foundation, Inc., – Ms. Judy Jamison
- Gulf of Mexico Commercial Shrimp Fishermen