



Economic impacts of certain Framework 53 measures

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November 18, 2014



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 - Discussion



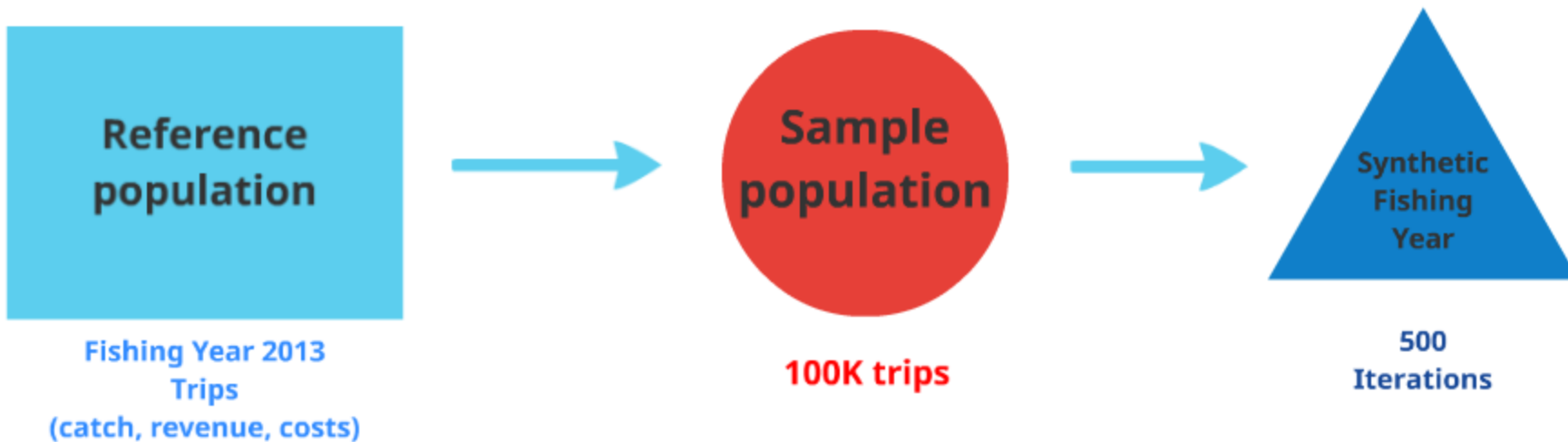
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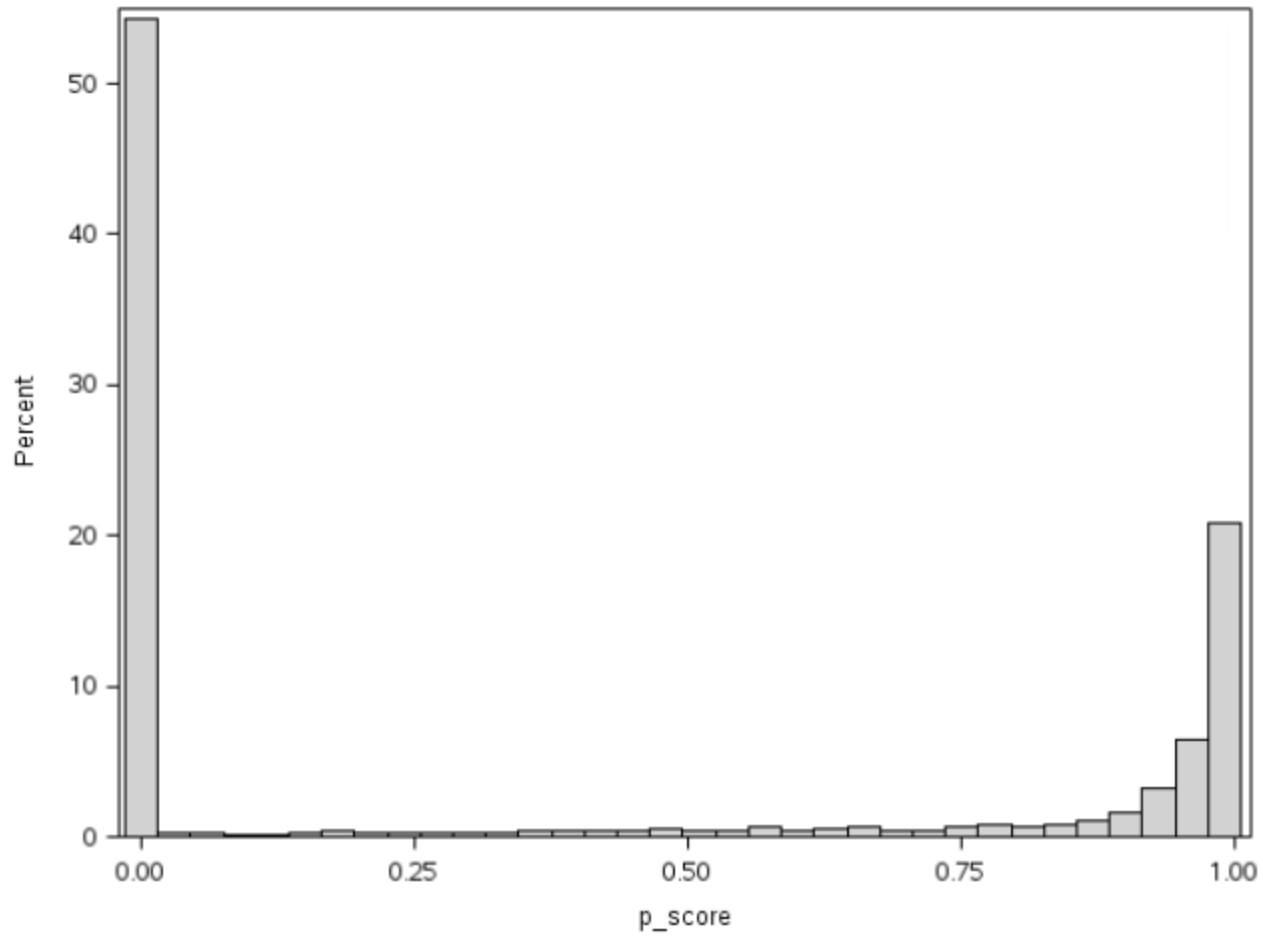
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Quota Change Model







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Model assumptions:

- Stock conditions, fishing practices and harvest technologies existing during the data period are representative;
- trips are repeatable;
- demand for groundfish is constant, noting that fish prices do vary between the reference population and the sample population but this variability is consistent with the underlying price/quantity relationship observed during the reference period;
- quota opportunity costs and operating costs are both constant; and,
- ACE flows seamlessly from lesser to lessee such that fishery-wide caps can be met without leaving ACE for constraining stocks stranded.



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		FY2010	FY2011 [^]		FY2012		FY2013		FY2014		FY2014	
		Realized	Model calibration		FW 47 (modified)		FW 48		FW 51		GOM had/cod EA ^{^^}	
			Predicted*	Realized	Predicted**	Realized	Predicted***	Realized	Predicted***	Realized	Predicted****	Projected ^{^^^}
Revenues	Gross revenue	110.2	137.8	121.4	92.3	93.1	75.5	79.2	71.0	n/a	81.0	90.0
	<u>Gross groundfish revenue</u>	89.1	114.4	93.7	73.5	70.4	57.0	58.6	55.6	n/a	64.3	70.5
Costs	Operations cost	25.1	30.4	32.9	17.8	31.5	15.0	26.1	21.6	n/a	24.3	n/a
	Quota opportunity cost	21.0	29.4	28.4	21.4	17.6	12.4	11.3	12.0	n/a	12.0	n/a
	Sector cost	2.5	3.3	2.7	1.9	2.0	1.8	1.8	1.6	n/a	1.7	n/a
<i>Pct gross revenues net of variable costs</i>		56%	54%	47%	55%	45%	61%	51%	50%		53%	

All estimates based on FY 2010-2013 DMIS data

Values reported in millions, 2014 dollars

[^] FY2011 revenues from GB haddock were predicted at \$25.2 million. Realized revenues from GB haddock were \$11.7 million

Gross groundfish revenues less GB haddock were predicted at \$82.7mil and realized \$76.7mil

* Reference pool = FY 2010

** Refence pool = FY 2010-11 (last six months FY10, first six months FY11)

*** Reference pool = FY2012

**** Reference pool = FY2013

^{^^} Based on updated GOM haddock ACL and GOM cod interim measures

^{^^^}Linear projection from Oct 23, 2014



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Results

- Losses on the order of 5-10% aggregate gross revenues
- Higher costs, lower profit margins
- Inshore GOM ports and small (<50ft) vessels most adversely affected—losses from 30-70+%



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Model	All groundfish trips, gross			All groundfish, gross			% Change from FY14 - Groun dfish trips	% Change from FY14 - Groun dfish
	Reve nues	p5 Reve nues	p95 Reve nues	Reve nues	p5 Reve nues	p95 Reve nues		
FY14 Baseline	81.0	77.8	84.0	64.6	61.8	67.1		
FW 53 ACLs	75.3	71.1	79.4	58.1	54.5	61.5	-7%	-10%
FW 53 ACLs + Closure A	76.9	72.6	80.4	59.6	56.0	62.5	-5%	-8%
FW 53 ACLs + Closure B	76.1	71.8	80.0	58.8	55.3	62.0	-6%	-9%
FW 53 ACLs + Zero retention GOM cod	78.0	73.9	81.5	60.4	56.9	63.1	-4%	-7%
FW 53 ACLs + Zero retention GOM cod + Closure A	77.8	73.8	81.6	60.3	56.8	63.3	-4%	-7%
FW 53 ACLs + Zero retention GOM cod + Closure B	78.1	74.3	81.0	60.5	57.6	63.2	-4%	-6%



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	FW 53 ACLs	FW 53 ACLs + Closure A	FW 53 ACLs + Closure B	FW 53 Zero Retentio n GOM cod	FW 53 ACLs + ZR GOM cod + Closure A	FW 53 ACLs + ZR GOM cod + Closure B
Connecticut	n/a	n/a	n/a	n/a	n/a	n/a
Massachusetts	-8%	-6%	-6%	-7%	-6%	-5%
Boston	-6%	0%	-1%	-5%	-1%	0%
Gloucester	-28%	-20%	-21%	-25%	-21%	-19%
New Bedford	6%	10%	9%	7%	10%	10%
Maine	-16%	-12%	-16%	-14%	-13%	-14%
Portland	-14%	-7%	-10%	-11%	-7%	-8%
New Hampshire	-42%	-46%	-46%	-42%	-46%	-46%
New Jersey	-33%	-33%	-33%	-33%	-33%	-33%
New York	33%	11%	11%	33%	11%	11%
Rhode Island	29%	24%	24%	29%	19%	19%
Point Judith	31%	19%	19%	31%	19%	19%
Other Northeast	n/a	n/a	n/a	n/a	n/a	n/a



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Length class	FW 53 ACLs	FW 53 ACLs + Closure A	FW 53 ACLs + Closure B	FW 53 ACLs + Zero Retention GOM cod	FW 53 ACLs + ZR GOM cod + Closure A	FW 53 ACLs + ZR GOM cod + Closure B
<30'	n/a	n/a	n/a	n/a	n/a	n/a
30'to<50'	-33%	-44%	-44%	-33%	-56%	-44%
50'to<75'	-16%	-11%	-11%	-11%	-11%	-11%
75'+	-3%	3%	0%	0%	3%	3%



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Discussion

- Losses to small, inshore GOM vessels greater than those seen in tables – likely >50%
- Closure scenarios predicted to increase aggregate gross revenues
 - Larger vessels gain, smaller vessels lose
- Zero retention scenarios predicted to increase aggregate gross revenues relative to non-ZR analogs
 - Driven by discard mortality rate assumptions
 - True and nominal discards likely to differ due to observer effects



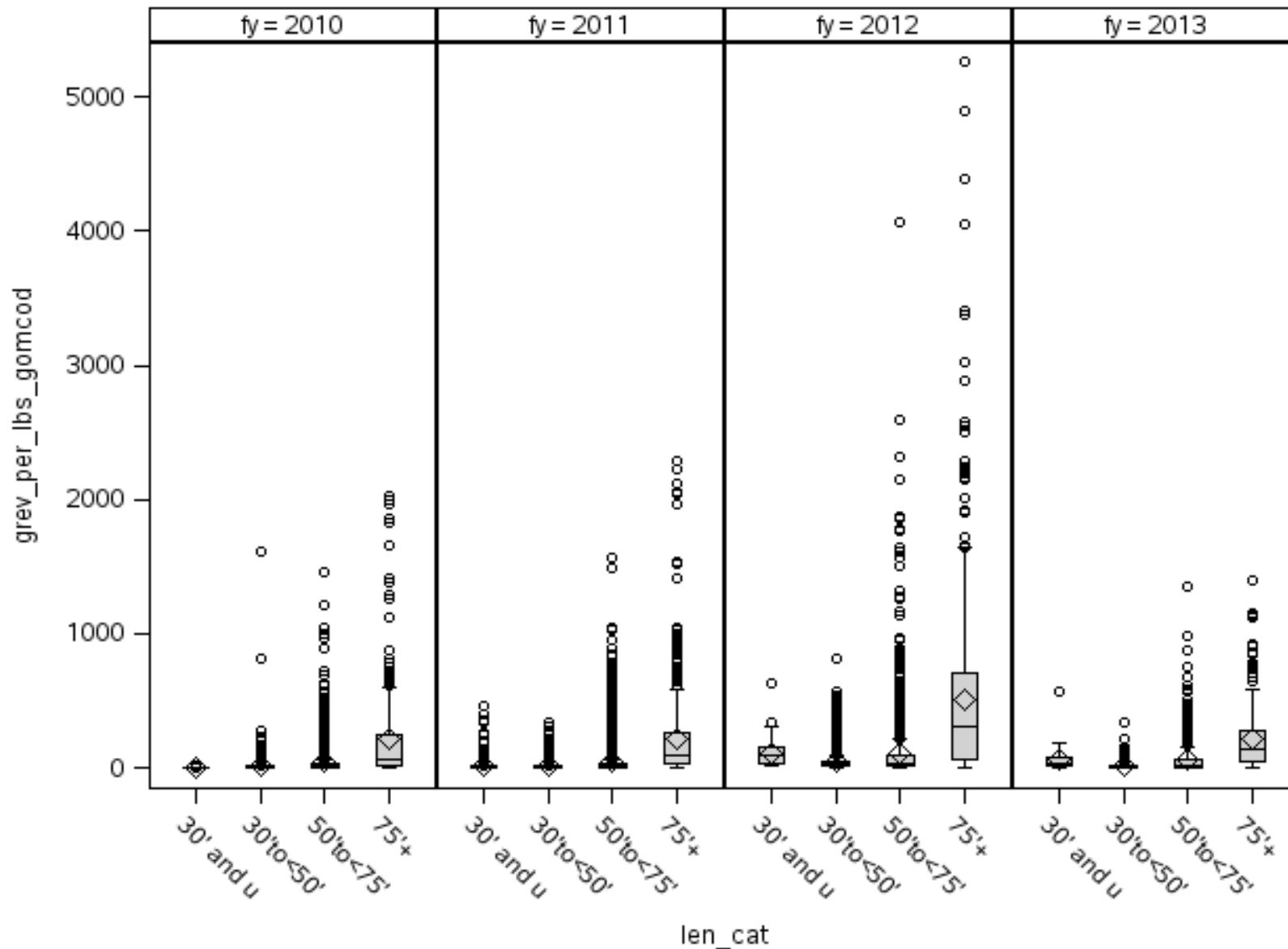
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len_cat	2010 (\$)	2011 (\$)	2012 (\$)	2013 (\$)
30' and u	4	6	85	34
30'to<50'	6	7	24	10
50'to<75'	9	9	34	21
75'+	68	89	300	141

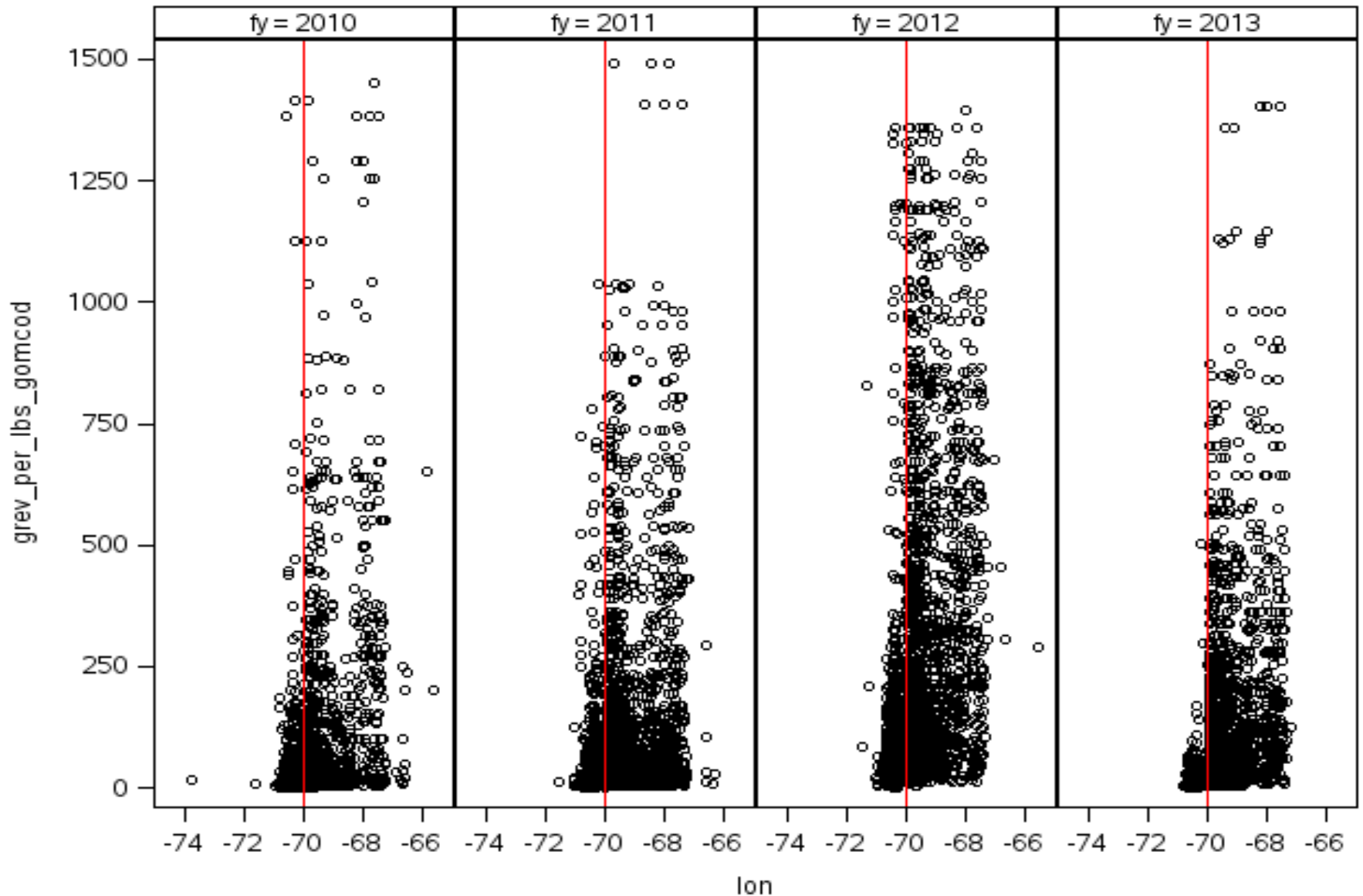




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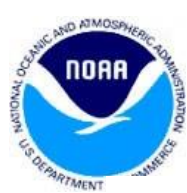
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model	Revenue per lbs cod ACE	<i>p5_rev</i>	<i>p95_rev</i>	longitude	<i>p5_lon</i>	<i>p95_lon</i>
FY14 Baseline	21	3	427	-69.90	-70.55	-67.93
ALCs no Closures	47	13	529	-69.72	-70.50	-67.68
Closure A	49	11	529	-69.67	-70.44	-67.68
Closure B	44	11	512	-69.70	-70.47	-67.70
Zero ret no Closures	47	13	529	-69.72	-70.50	-67.70
Zero ret Closure A	49	11	529	-69.67	-70.45	-67.68
Zero ret Closure B	46	12	512	-69.69	-70.47	-67.68



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