

Updated VIMS Growth Work

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Updated Analysis

- Original
- 227 Shells

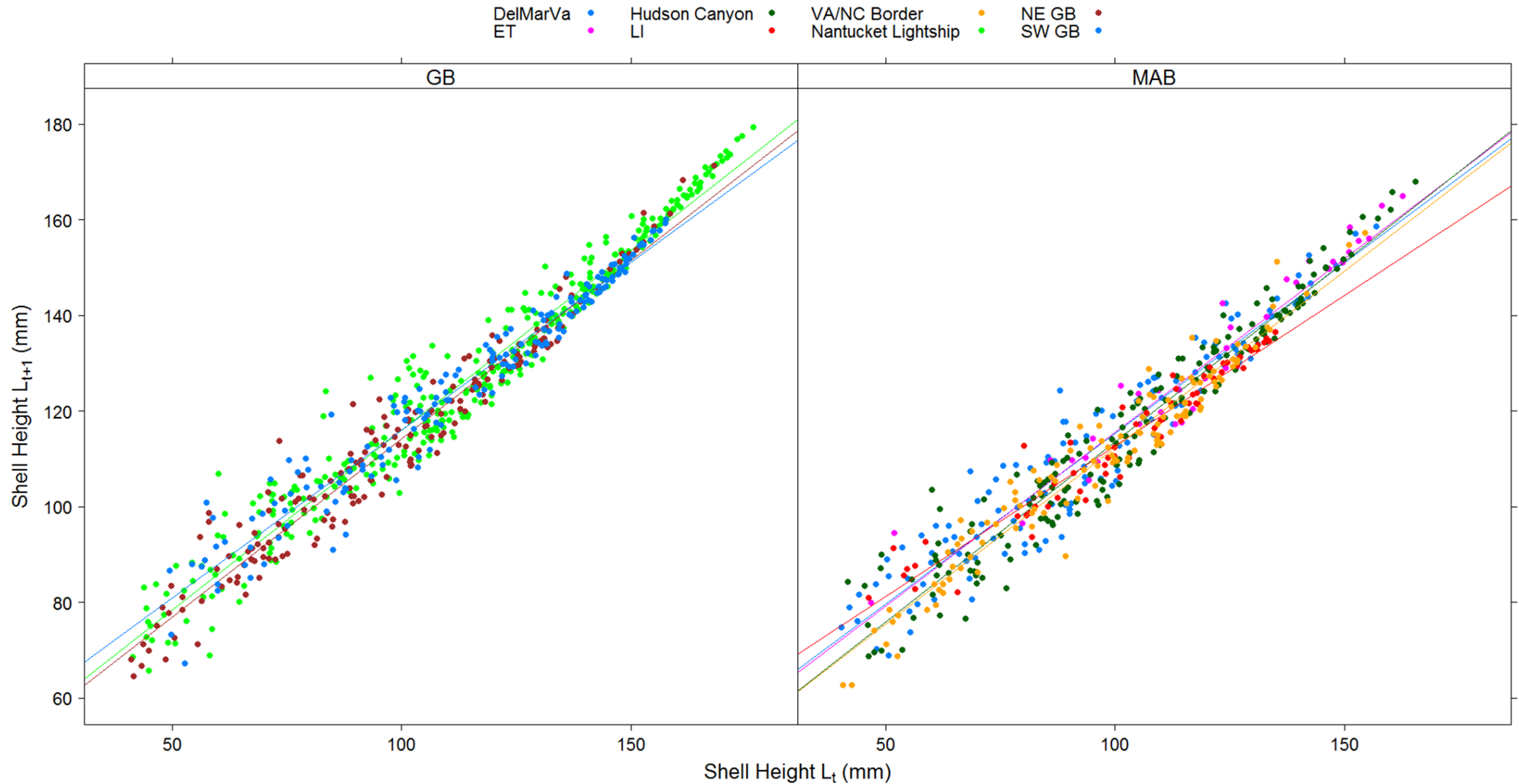
Area	Discrete Area	Number	Total
MAB	VA/NC Border	25	97
	DelMarVa	41	
	Hudson Canyon	31	
GB	Nantucket Lightship	55	130
	NE GB	42	
	SW GB	33	
Total		227	227

- Updated
- 254 Shells

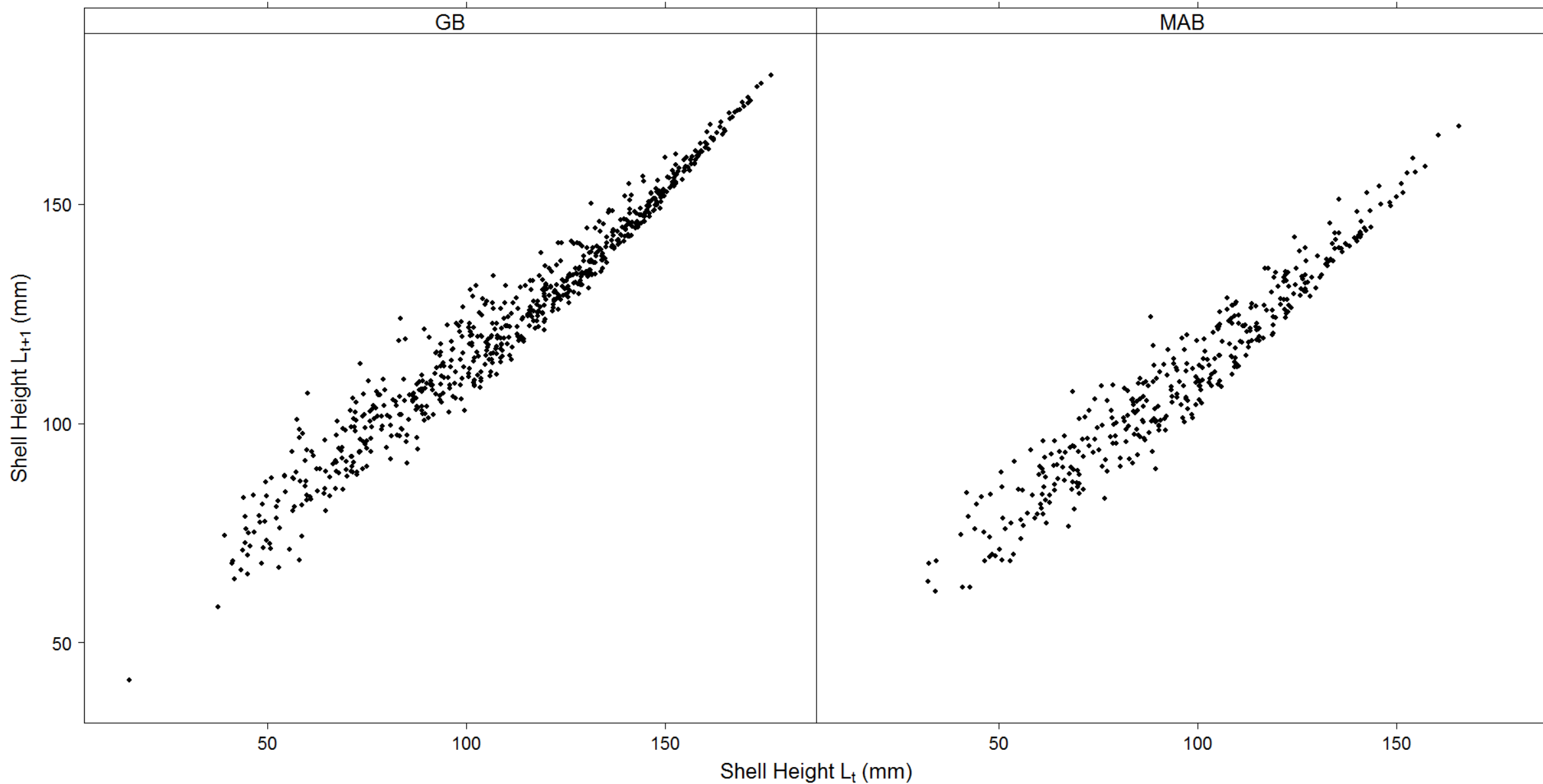
Region	Area	Number	Total
MAB	DelMarVa	42	121
	Hudson Canyon	34	
	VA/NC Border	25	
	ET	8	
	LI	12	
GB	Nantucket Lightship	57	133
	NE GB	43	
	SW GB	33	
Total		254	

Removed shells < 40 mm and added measurements from additional shells in both MAB and GB

Ford-Walford plots by area - updated



Ford-Walford plots by area - original



Mixed effect growth models

- Random intercept (variation in L_∞) model for updated results

Original estimates

Area	\bar{K}	\bar{L}_∞	σ_k	σ_{L_∞}	SD K_i	SD $L_{\infty,i}$	Number of Shells	Number of Intervals
MAB	0.413	139.086	0.015	1.879	0.141	13.896	97	393
GB	0.392	148.764	0.011	1.450	0.136	12.823	130	683
							227	1,076

Updated estimates

Region	\bar{K}	\bar{L}_∞	σ_k	σ_{L_∞}	SD $L_{\infty,i}$	Number of Shells	Number of Intervals
MAB	0.42	139.01	0.01	1.58	13.92	121	519
GB	0.38	148.57	0.007	1.46	13.75	133	703
						254	1,222

- Results showed similar trends compared to results from Hart and Chute
 - MAB higher K and lower L_{∞} K = 0.508, L_{∞} = 133.3 (Hart and Chute)
 - GB lower K and higher L_{∞} K = 0.427, L_{∞} = 143.9 (Hart and Chute)
- Estimates for earlier time period for both areas had greater L_{∞} and lower K
- May need to age more larger shells if available for both regions