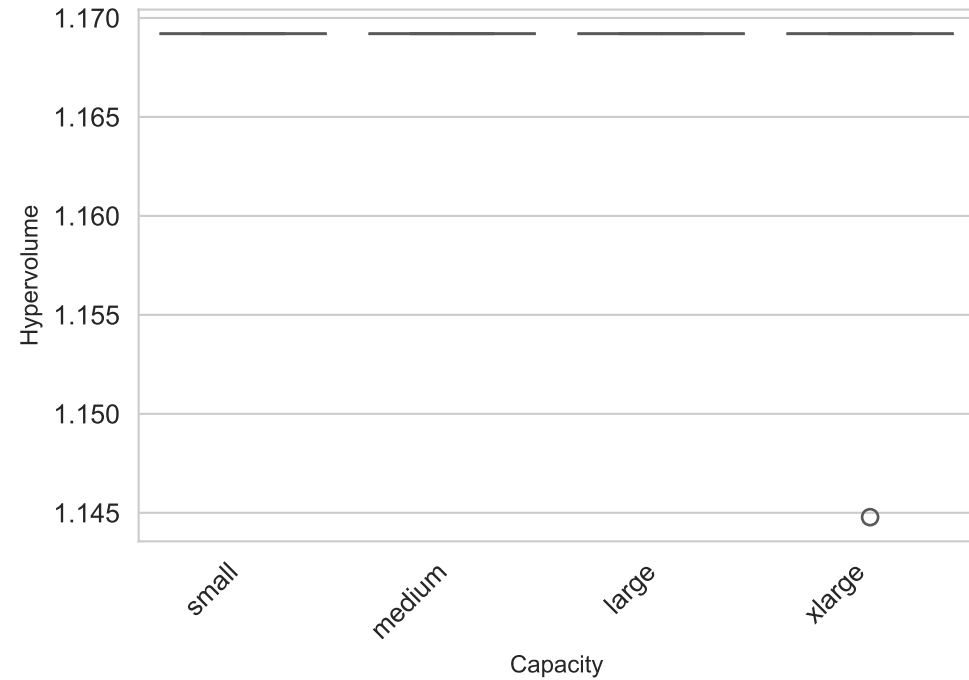
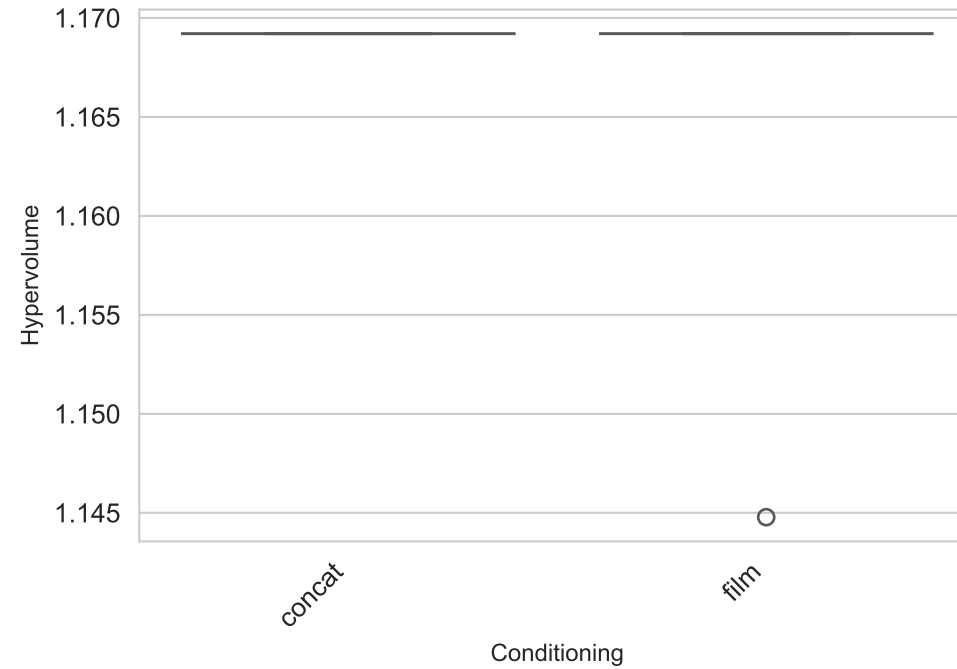


Traditional Multi-Objective Metrics - Capacity Ablation

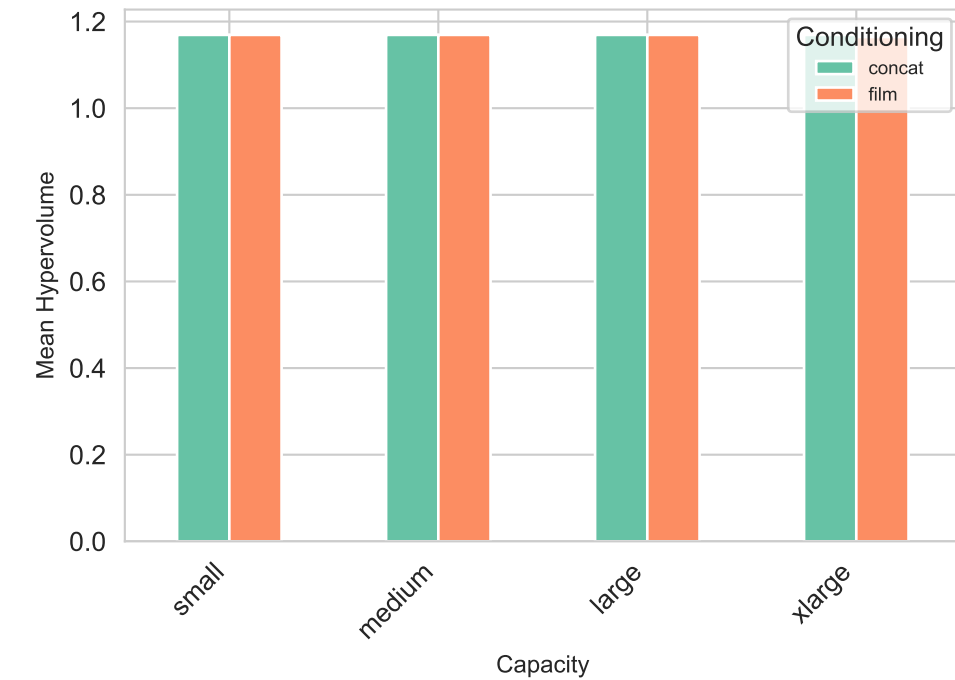
Hypervolume by Capacity



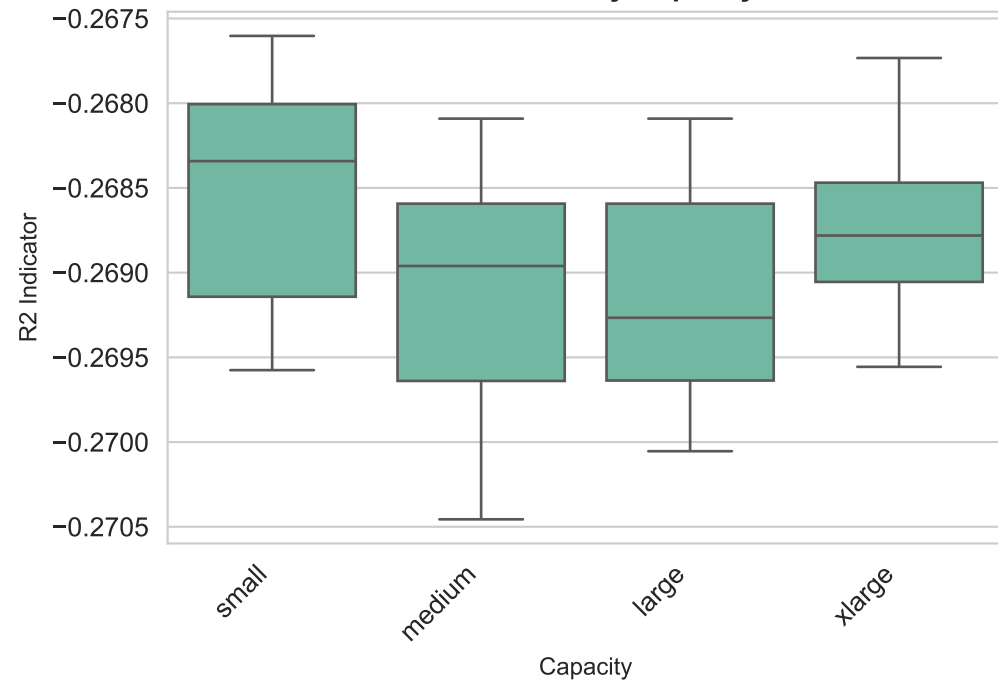
Hypervolume by Conditioning



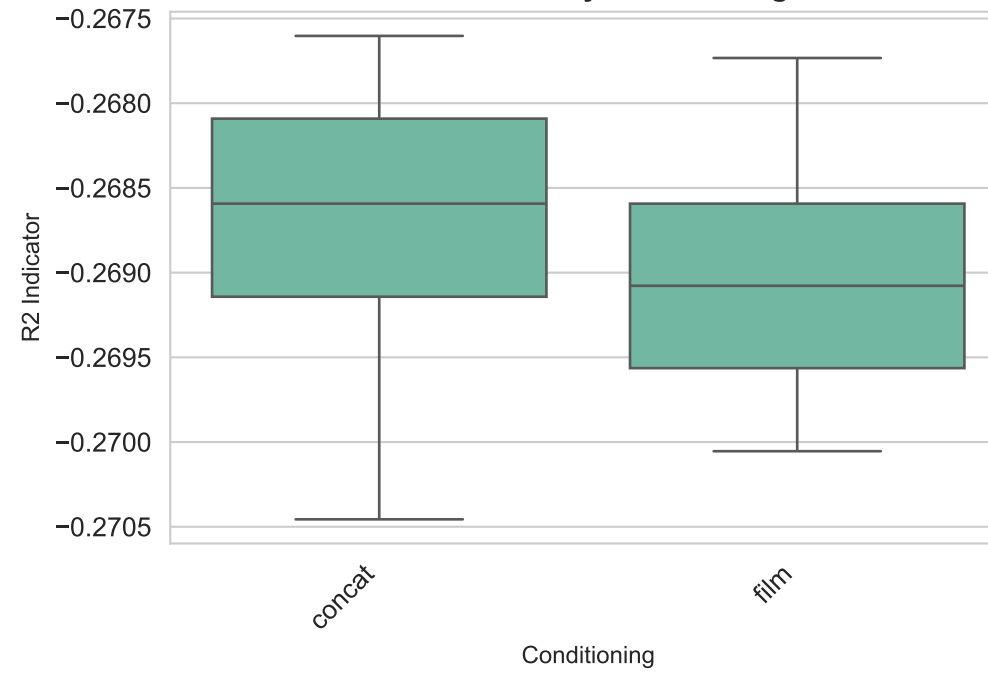
Hypervolume by Capacity × Conditioning



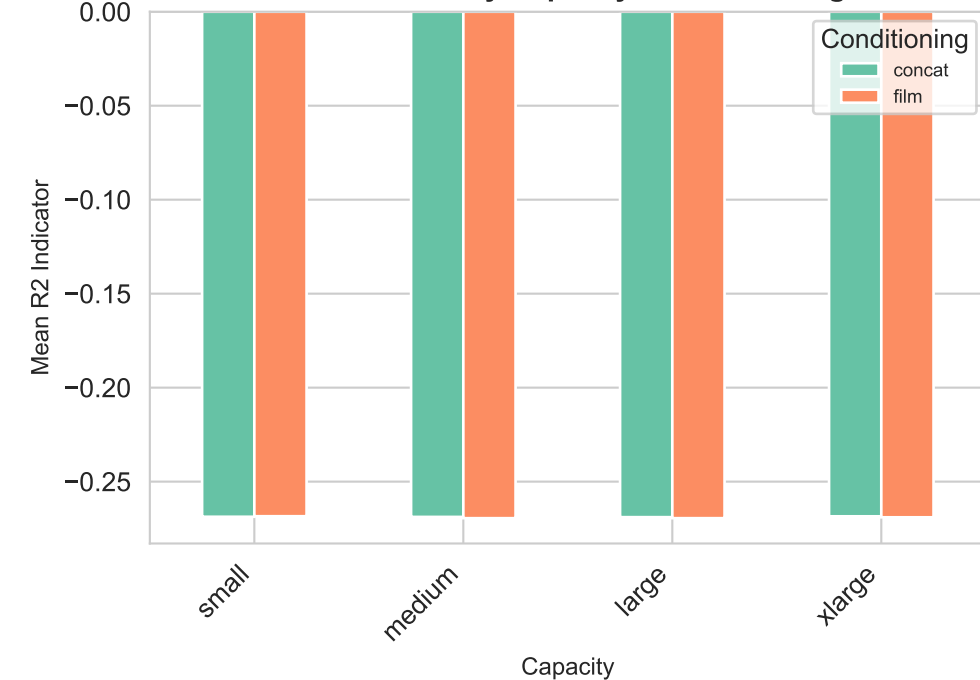
R2 Indicator by Capacity



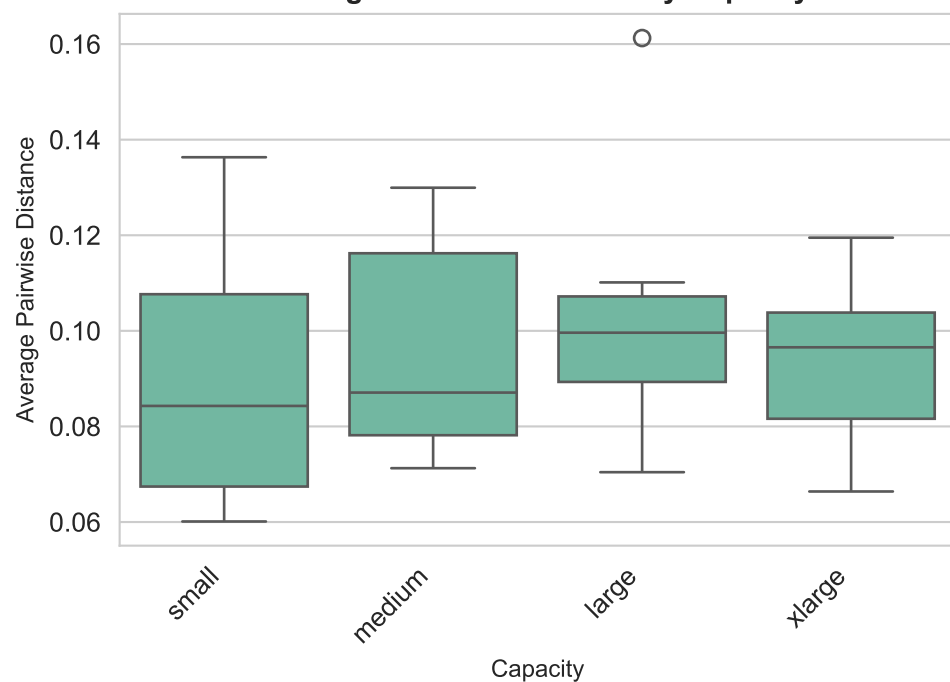
R2 Indicator by Conditioning



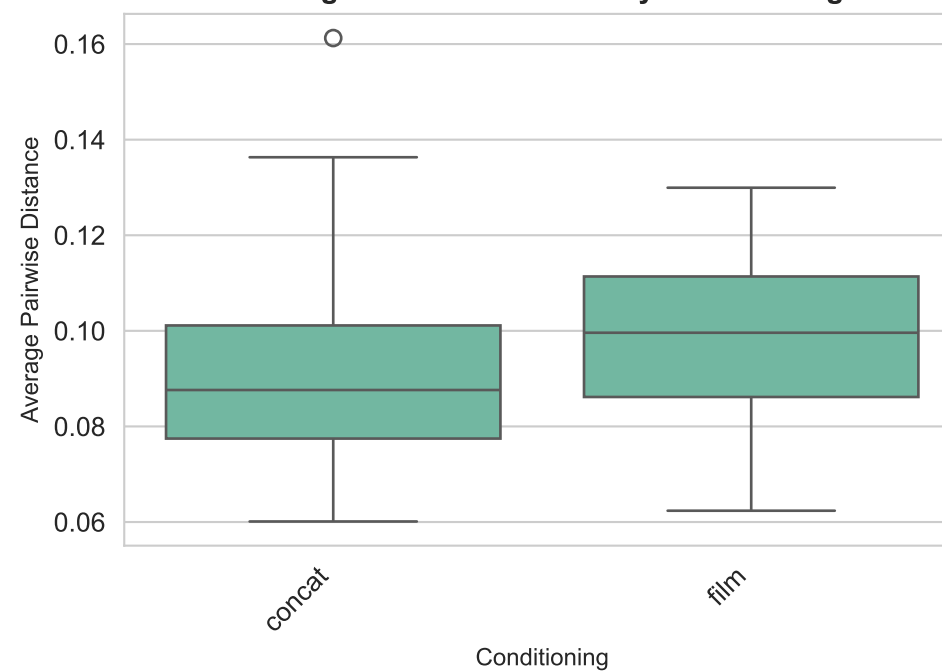
R2 Indicator by Capacity × Conditioning



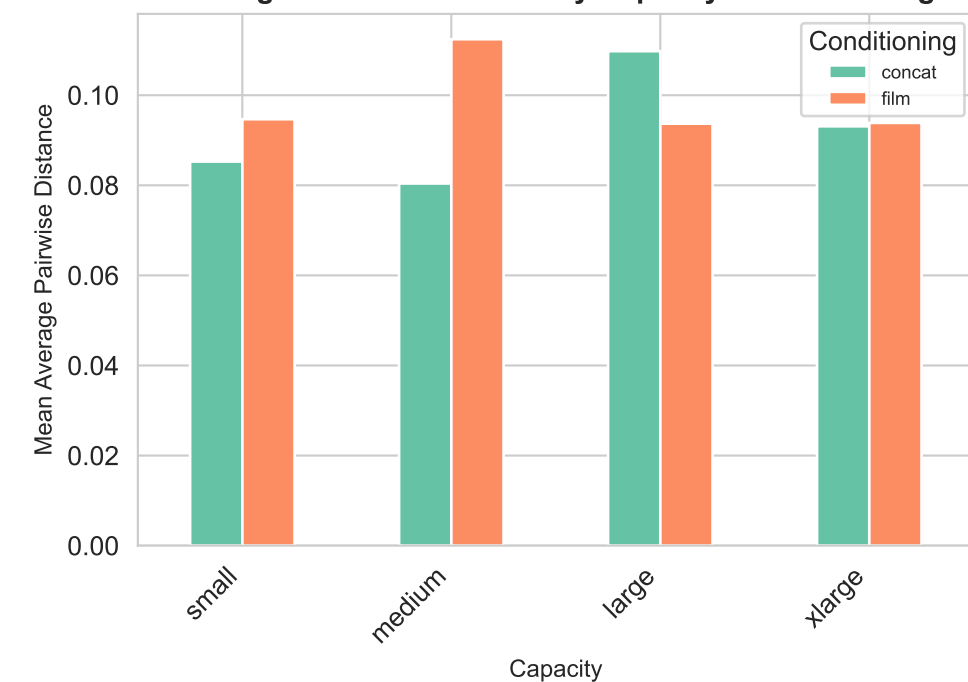
Average Pairwise Distance by Capacity



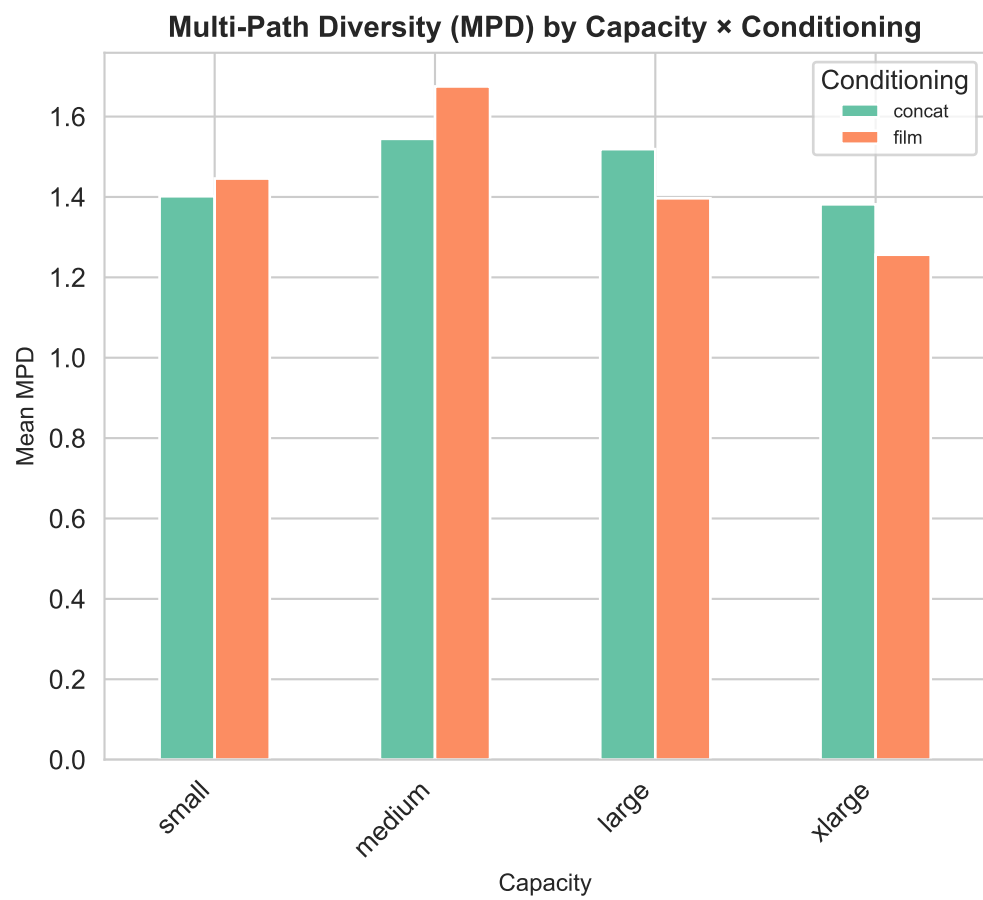
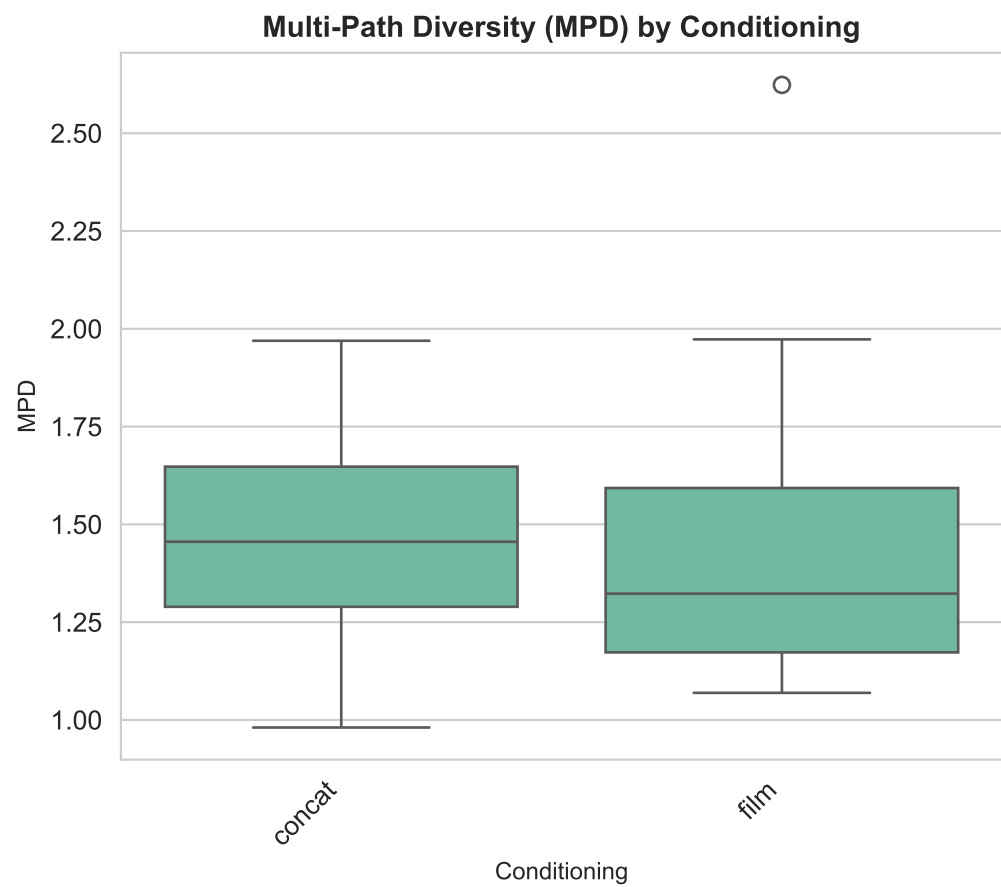
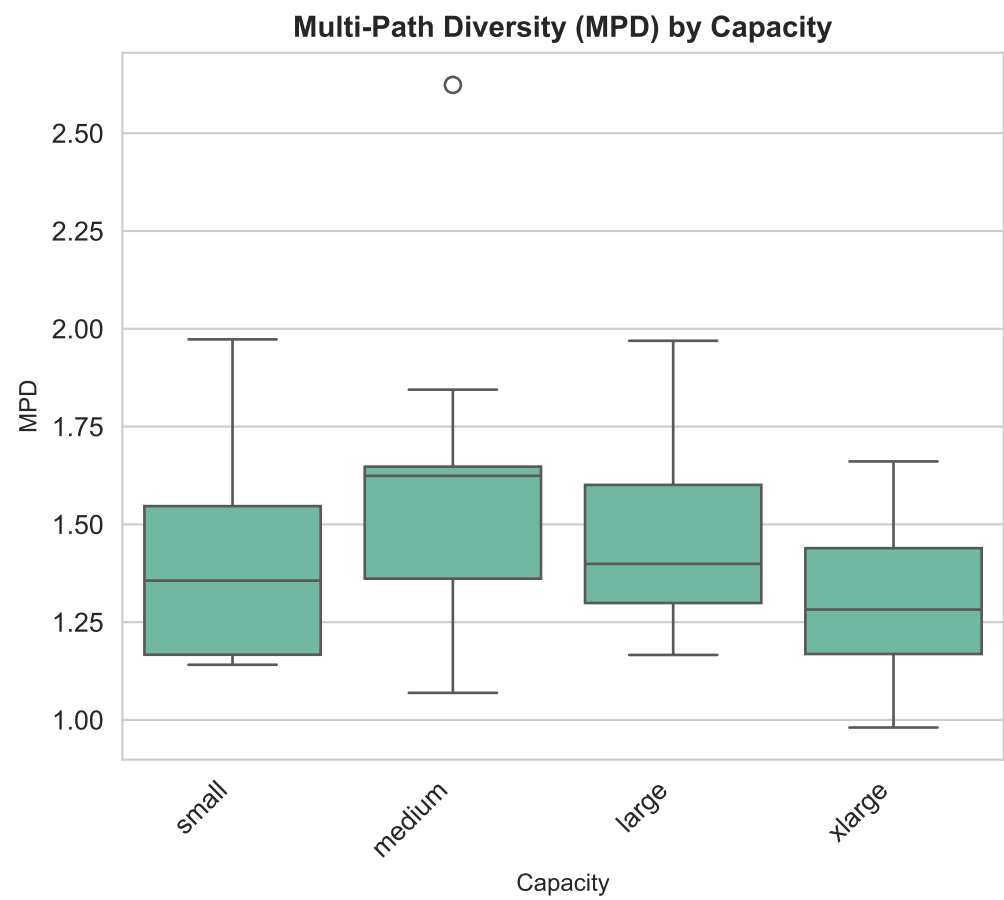
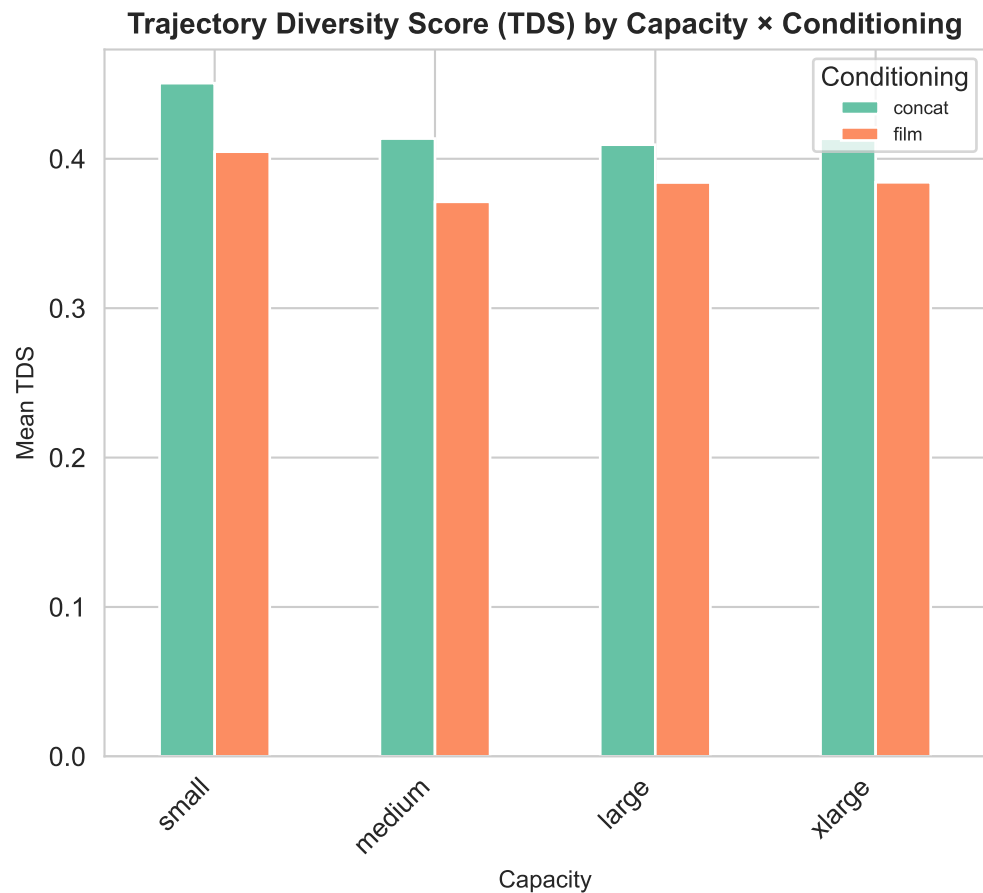
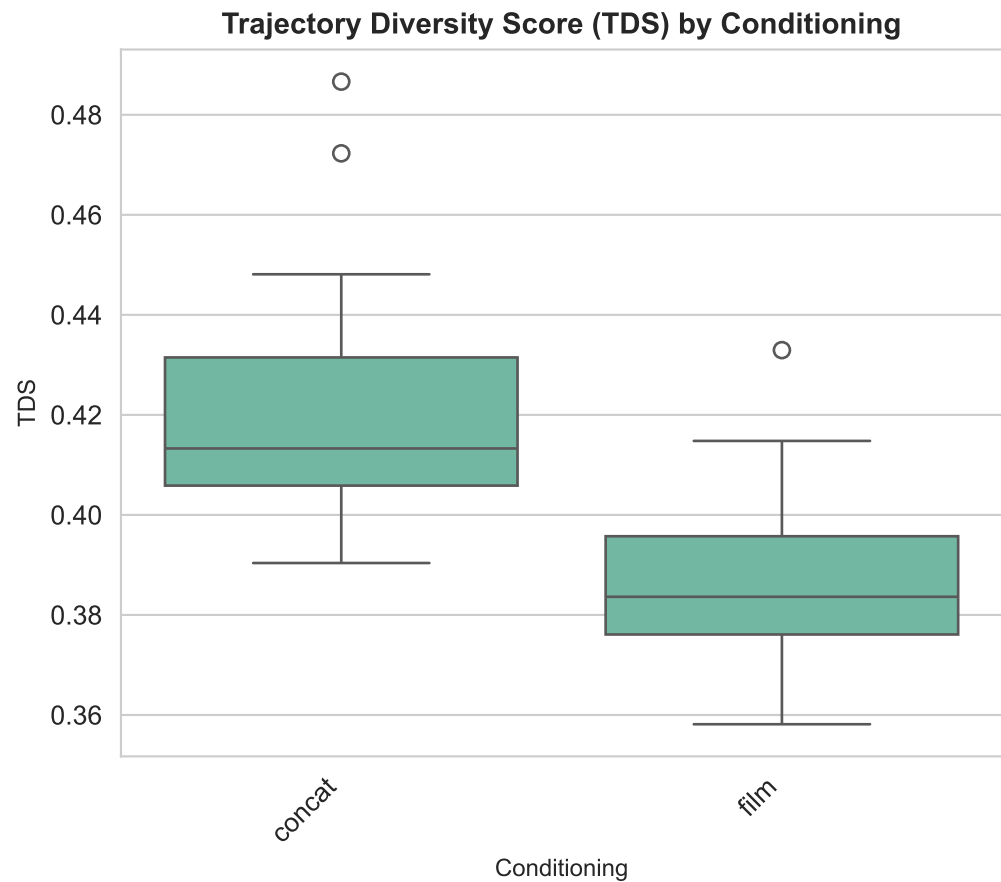
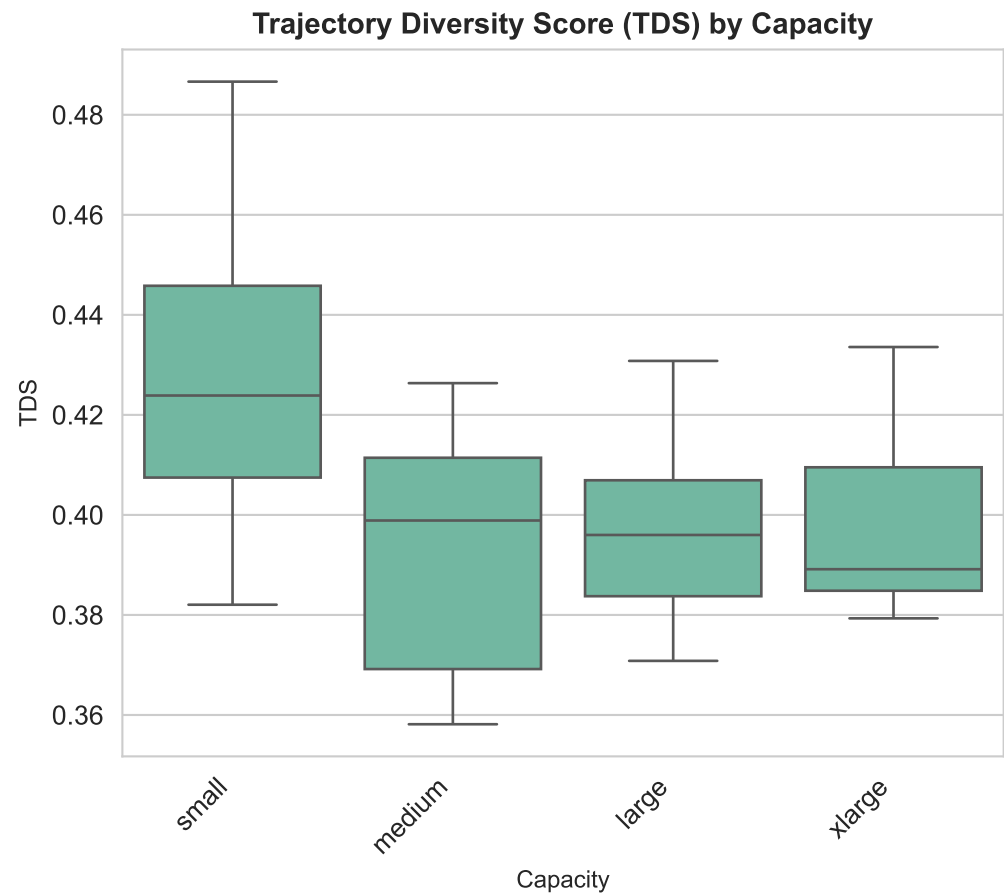
Average Pairwise Distance by Conditioning



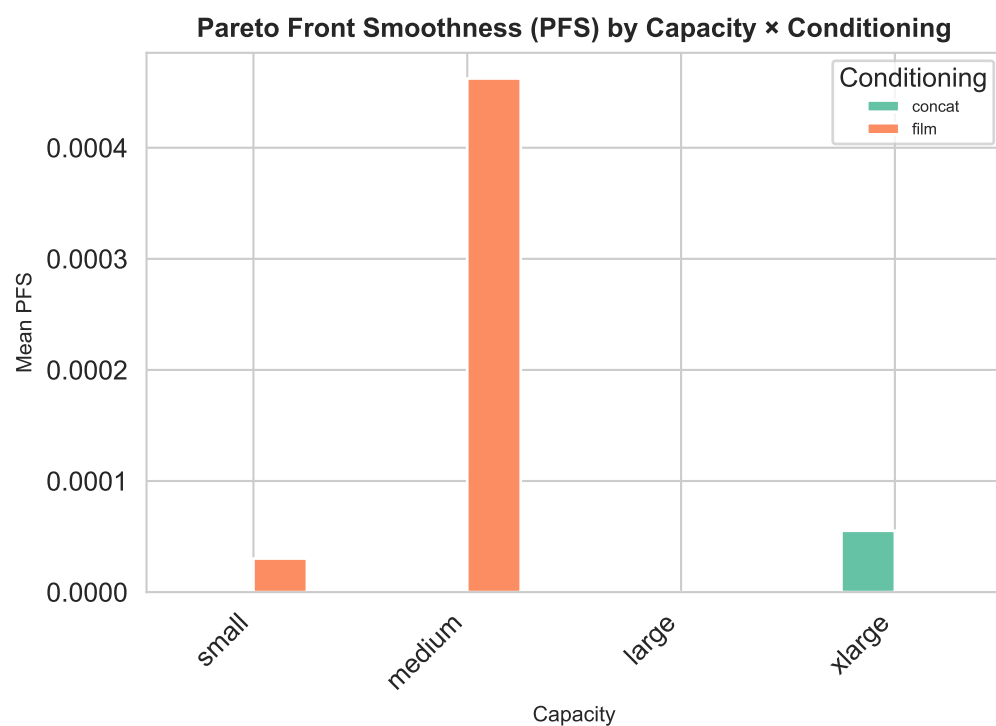
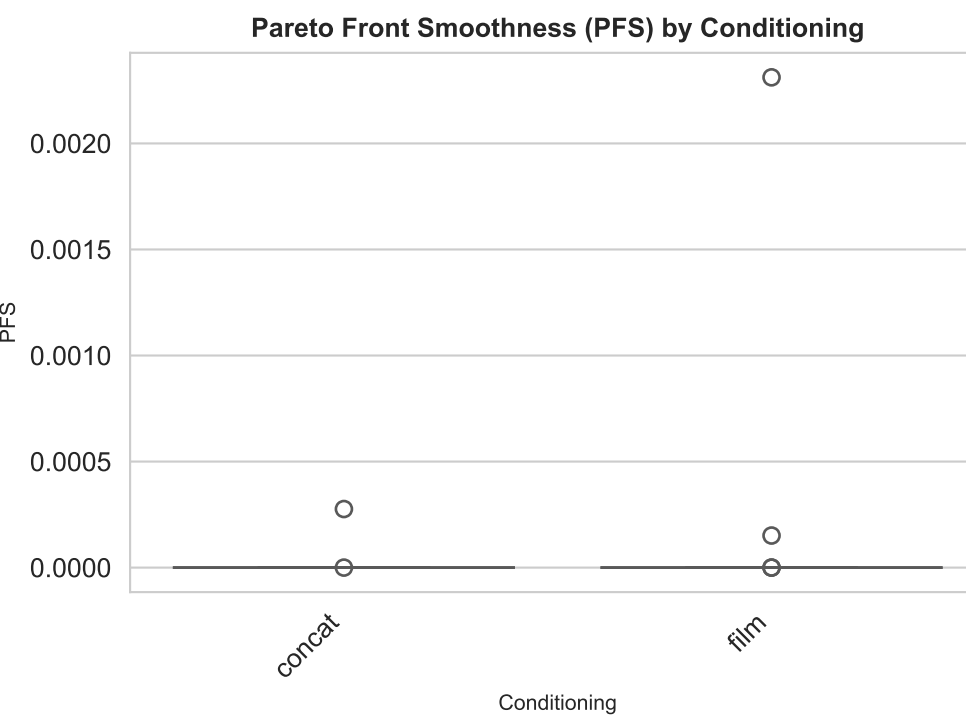
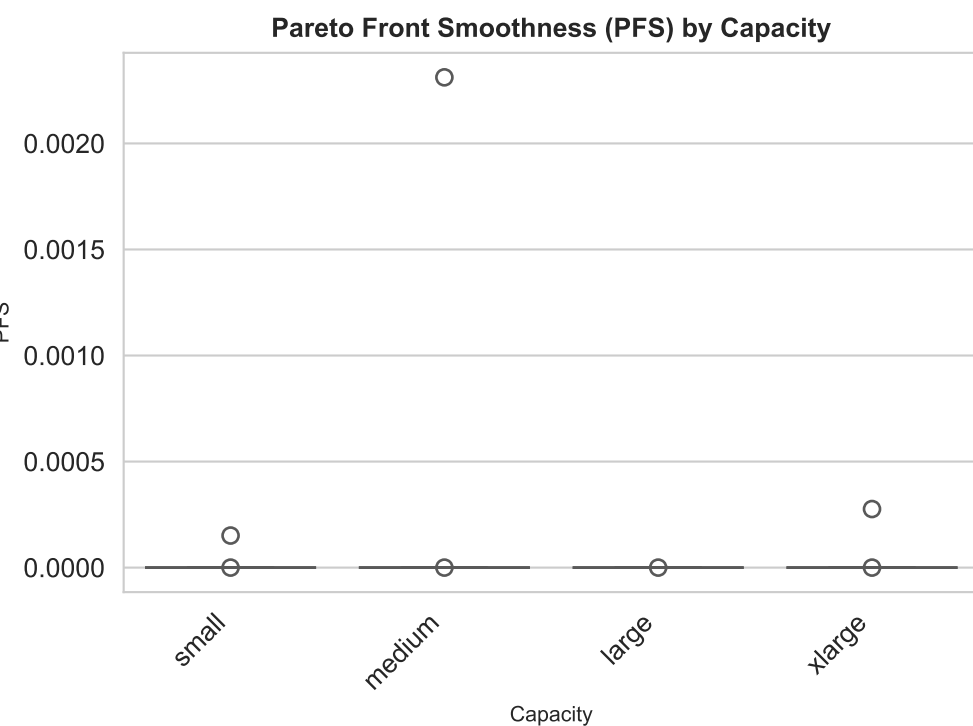
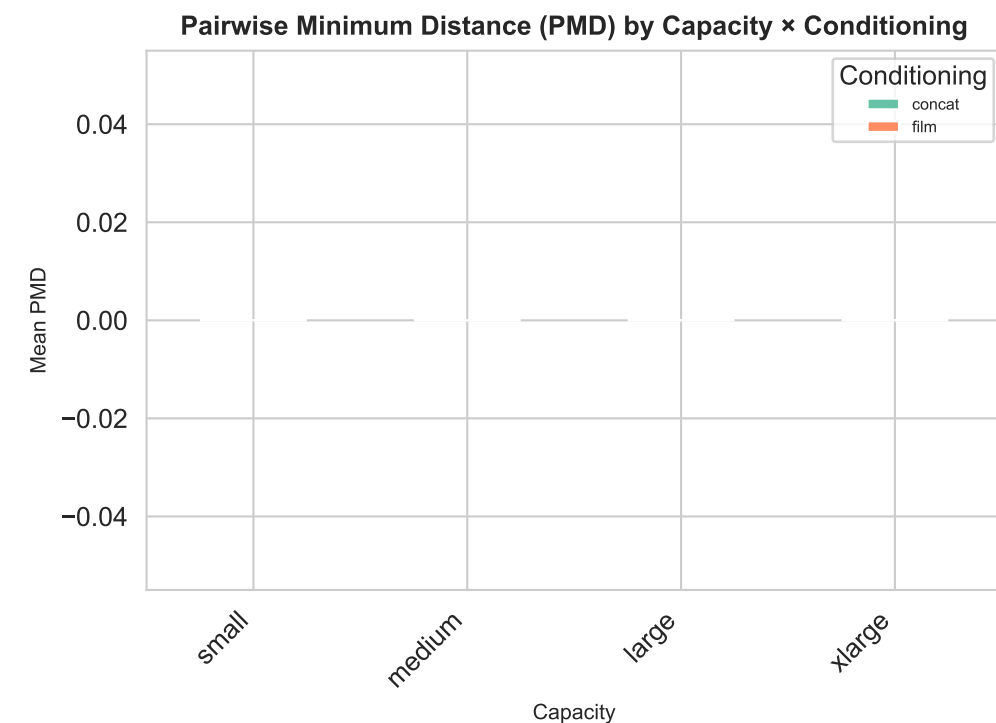
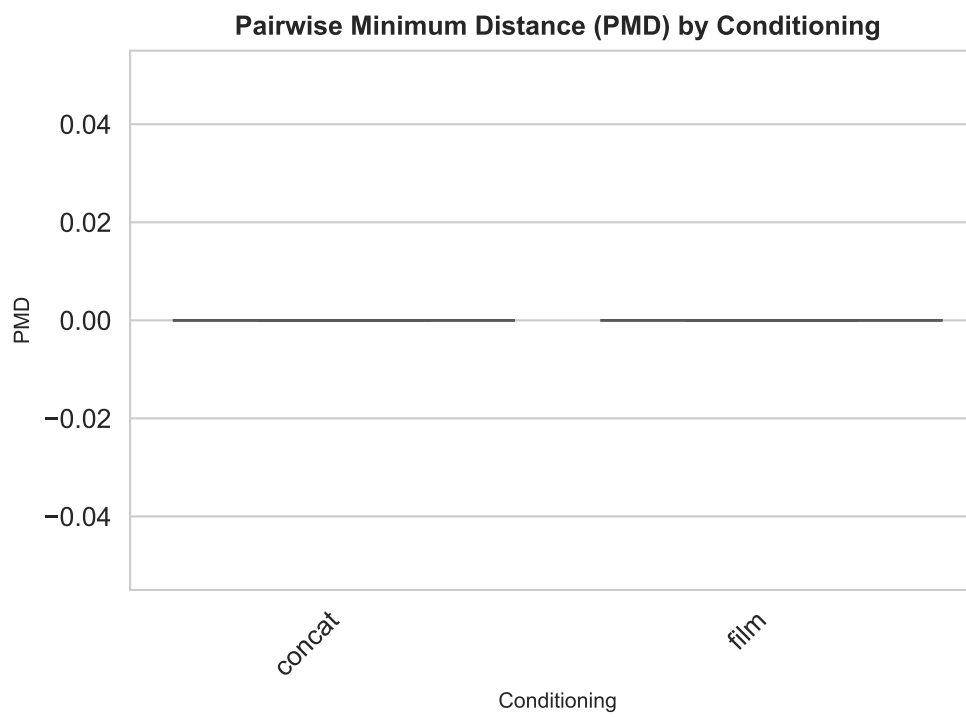
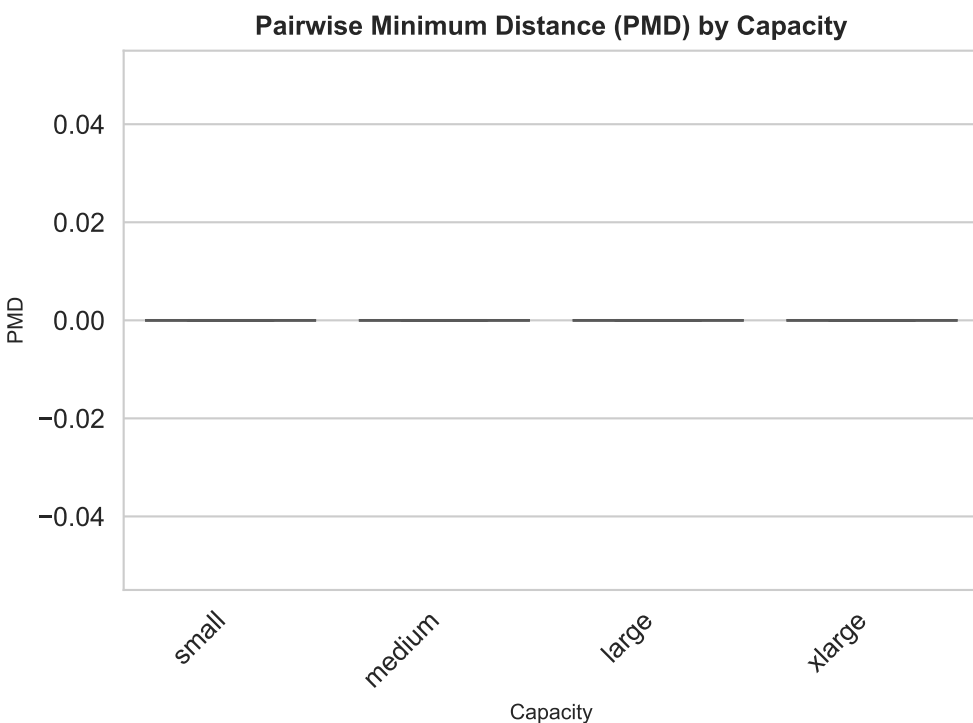
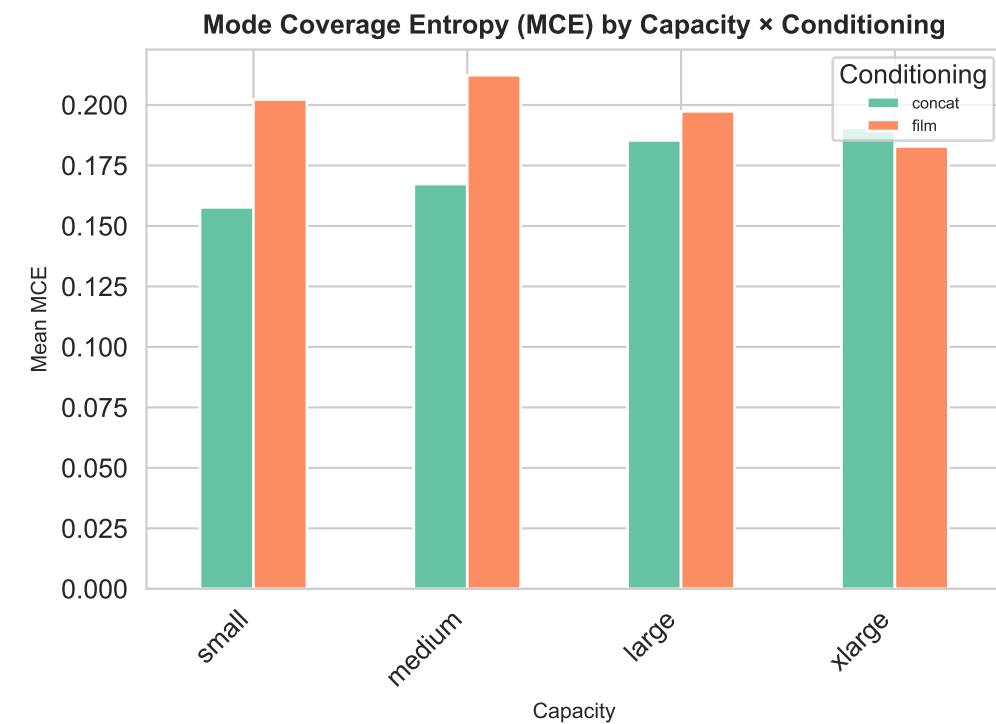
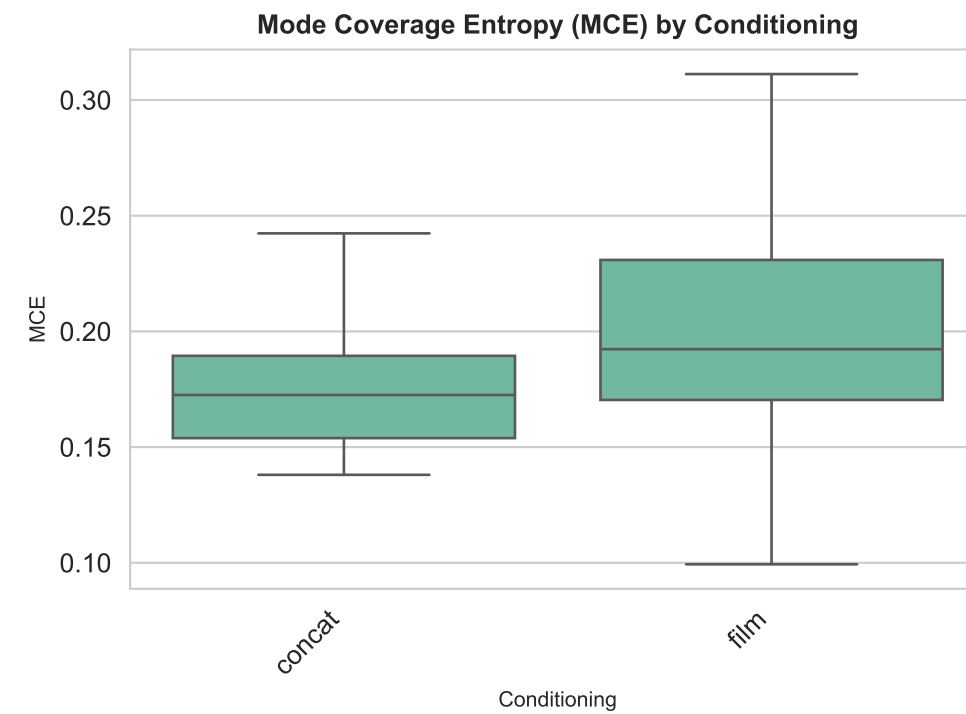
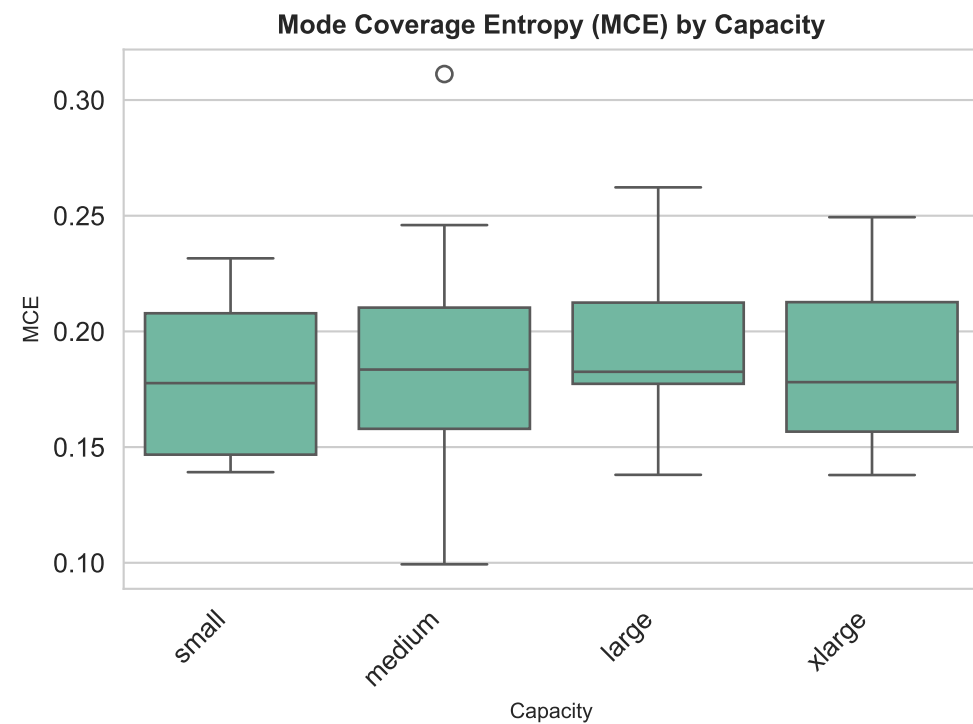
Average Pairwise Distance by Capacity × Conditioning



Trajectory Diversity Metrics - Capacity Ablation

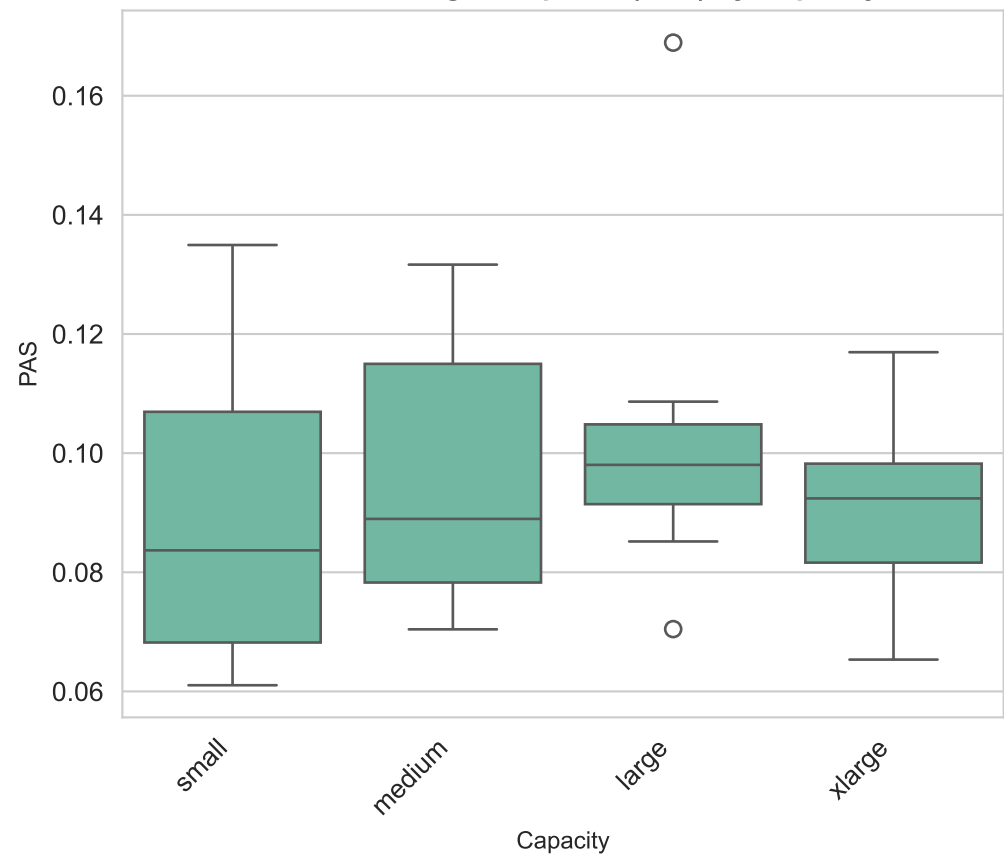


Spatial Diversity Metrics - Capacity Ablation

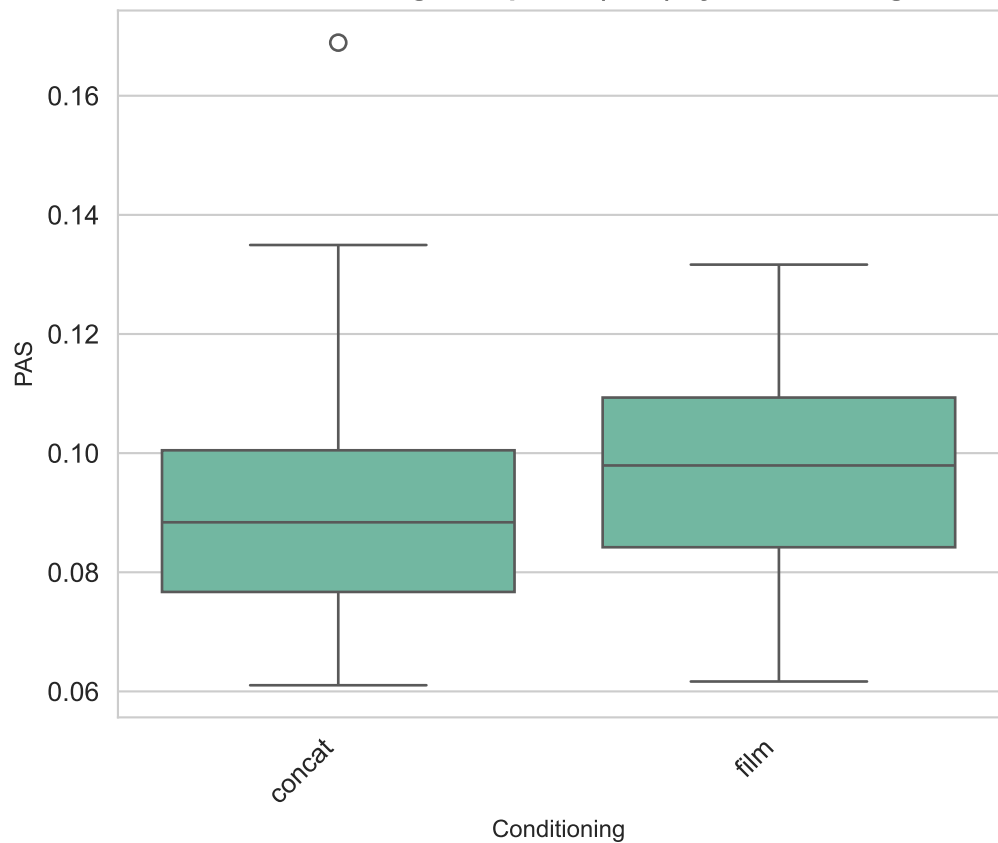


Objective & Flow Metrics - Capacity Ablation

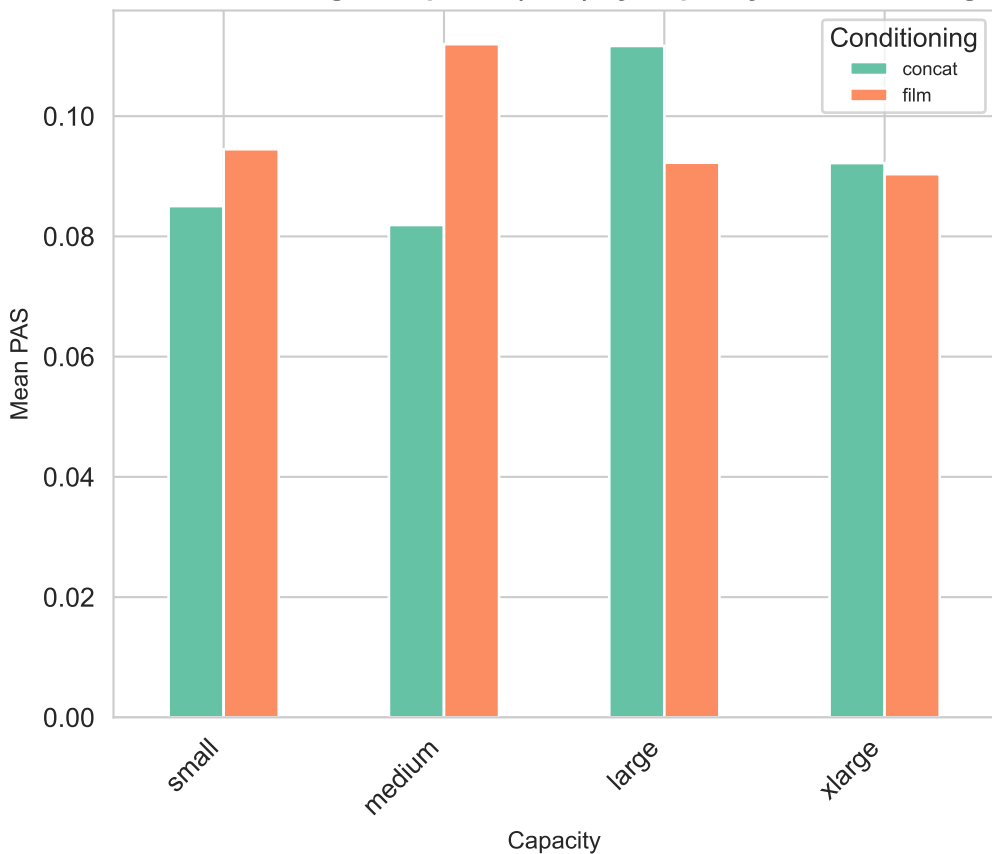
Preference-Aligned Spread (PAS) by Capacity



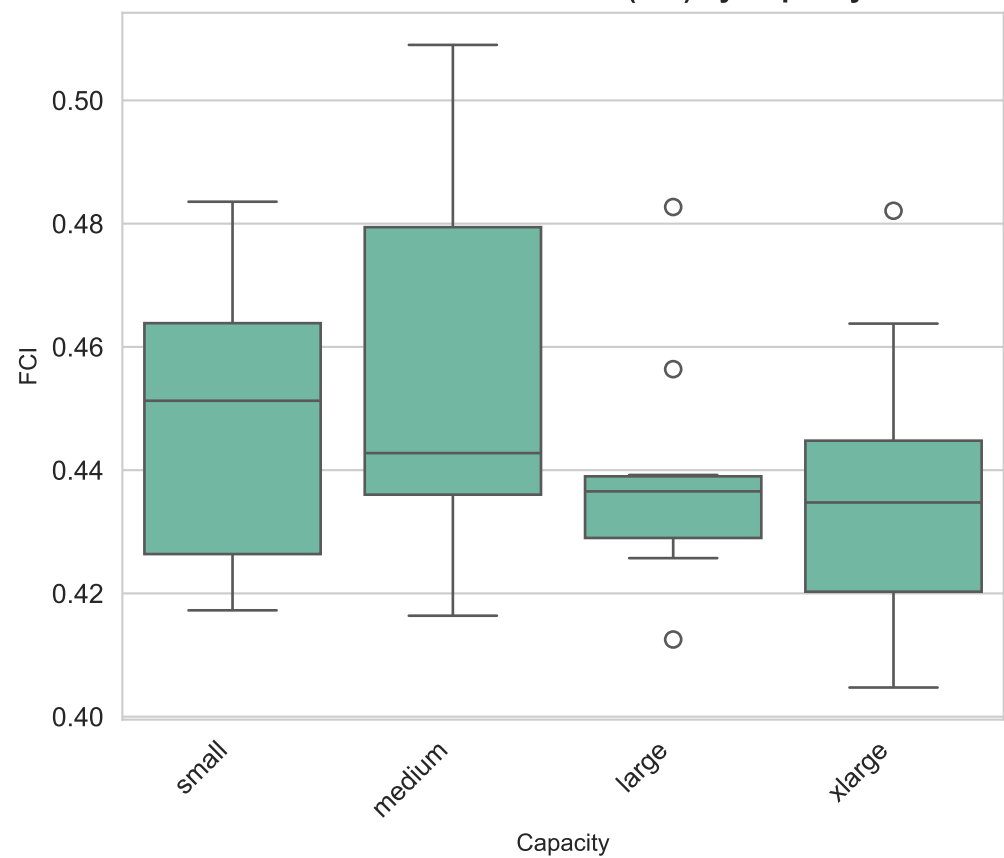
Preference-Aligned Spread (PAS) by Conditioning



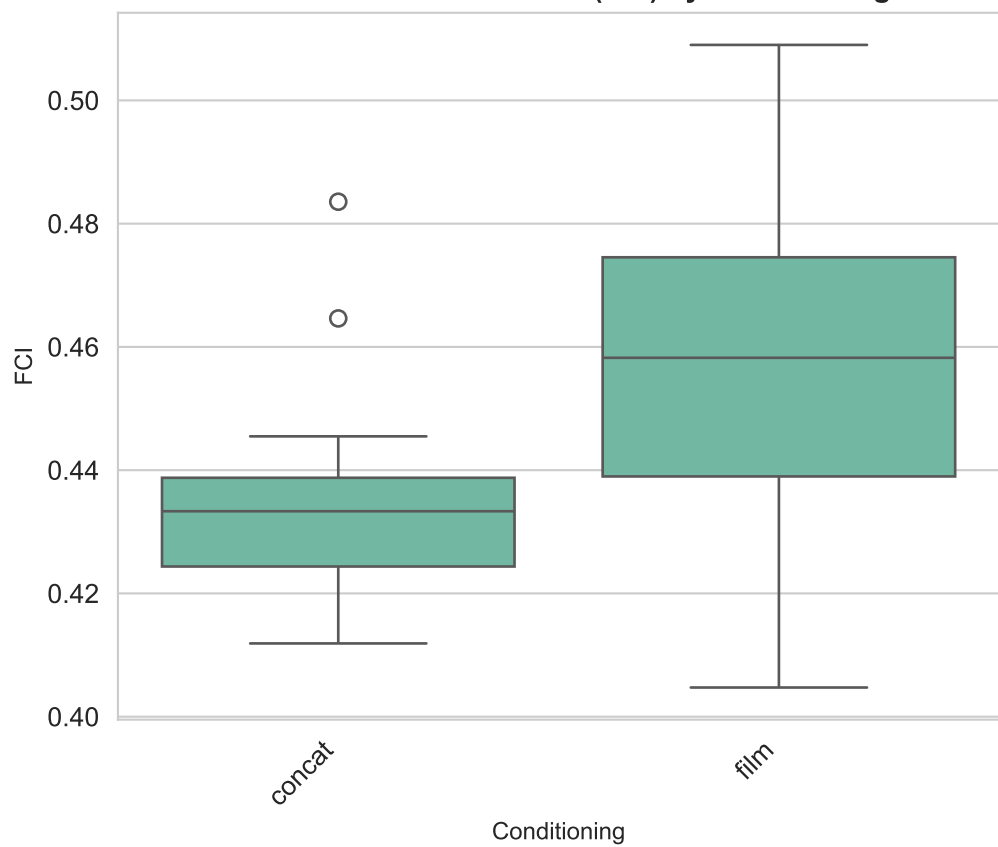
Preference-Aligned Spread (PAS) by Capacity × Conditioning



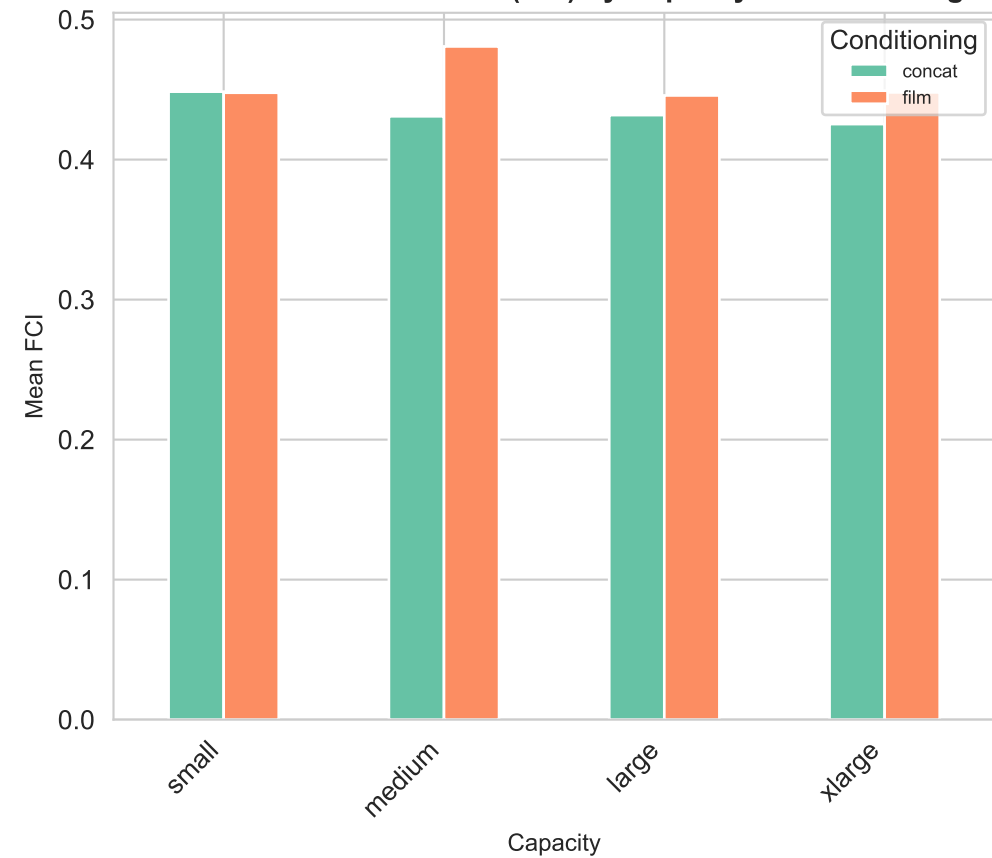
Flow Concentration Index (FCI) by Capacity



Flow Concentration Index (FCI) by Conditioning

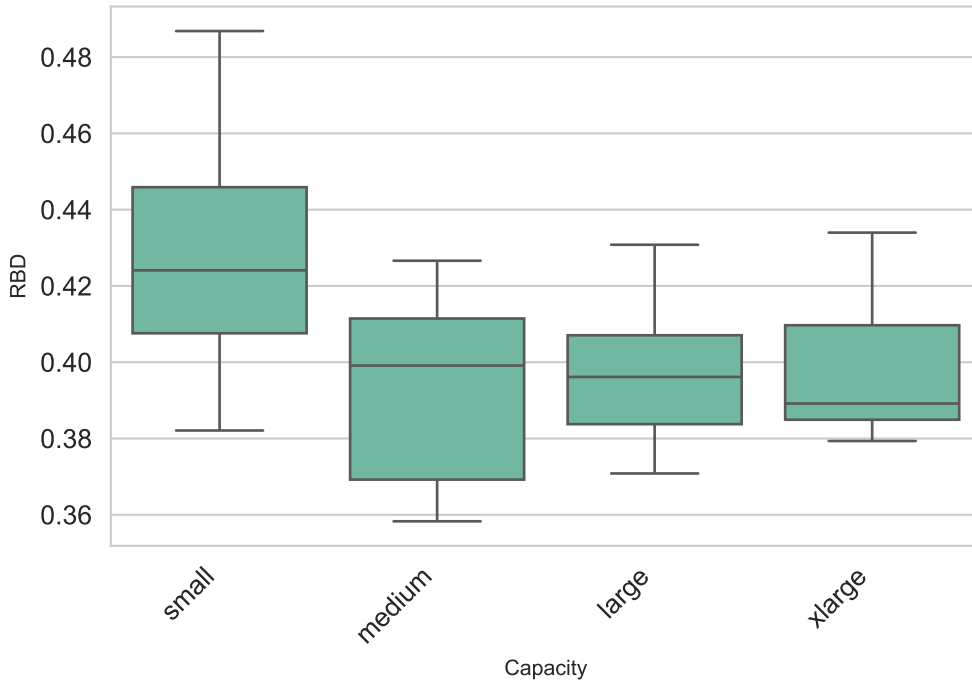


Flow Concentration Index (FCI) by Capacity × Conditioning

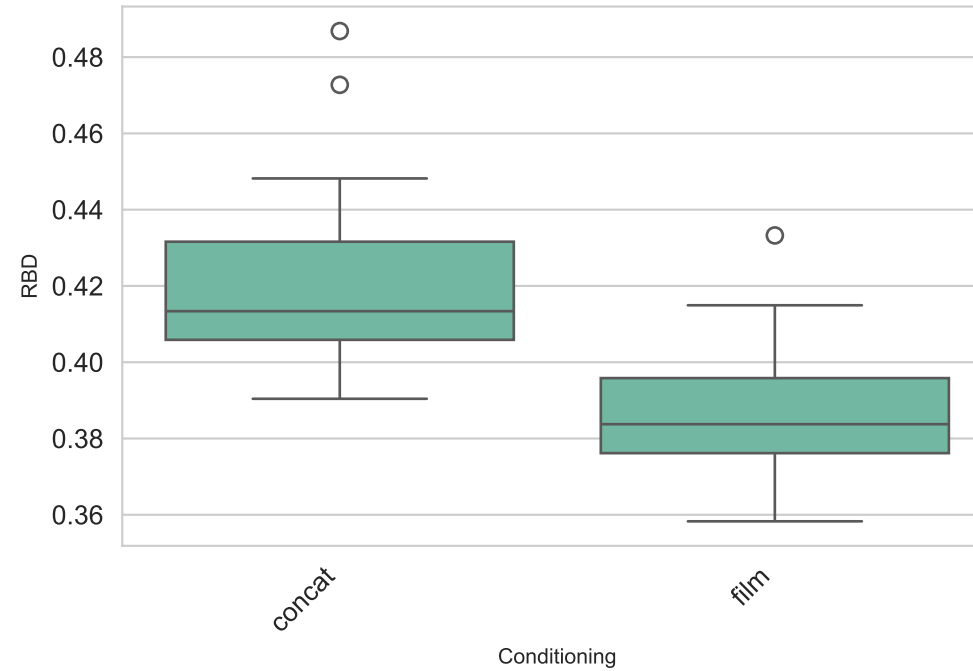


Dynamics & Composite Metrics - Capacity Ablation

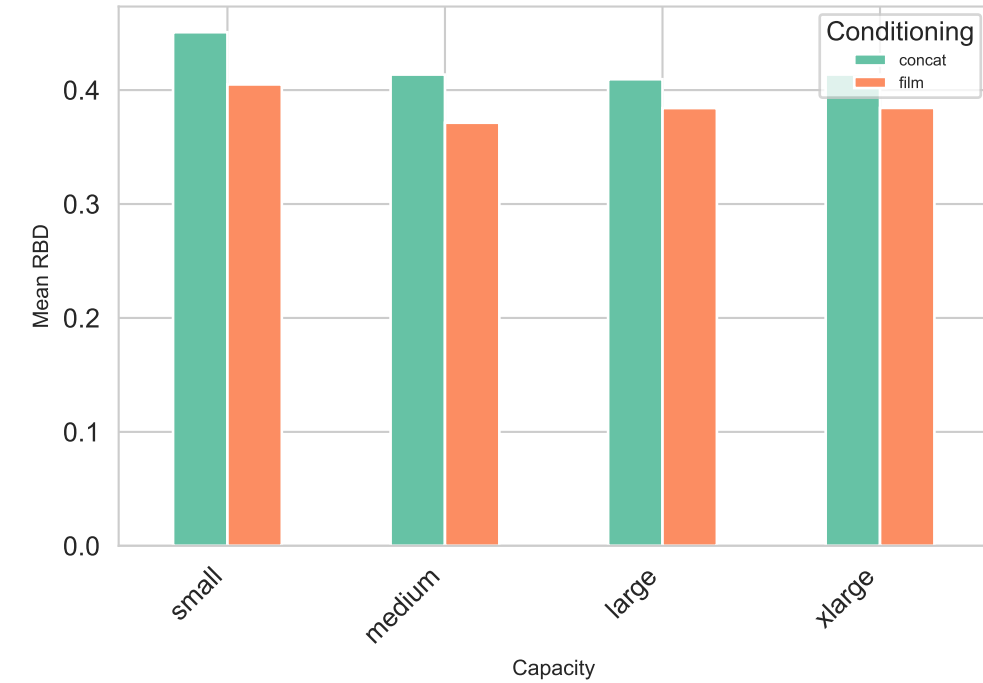
Replay Buffer Diversity (RBD) by Capacity



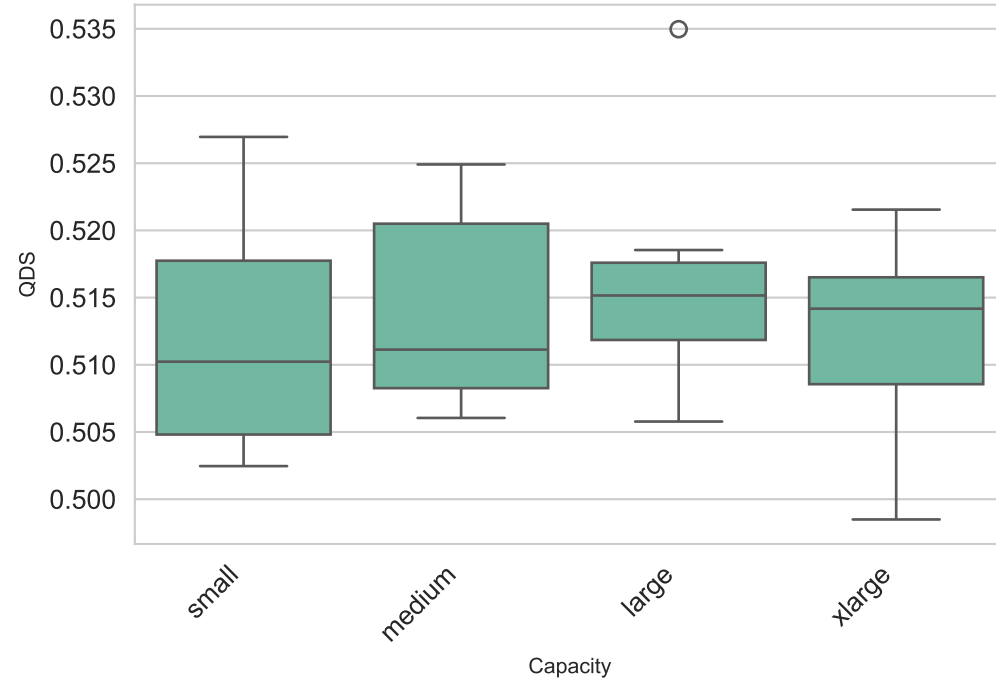
Replay Buffer Diversity (RBD) by Conditioning



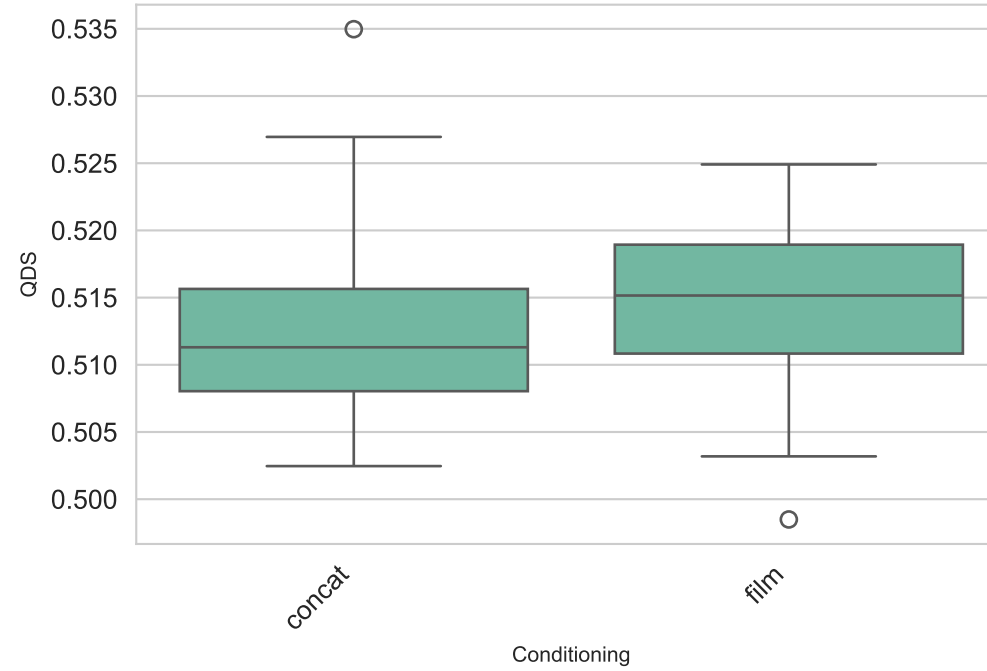
Replay Buffer Diversity (RBD) by Capacity × Conditioning



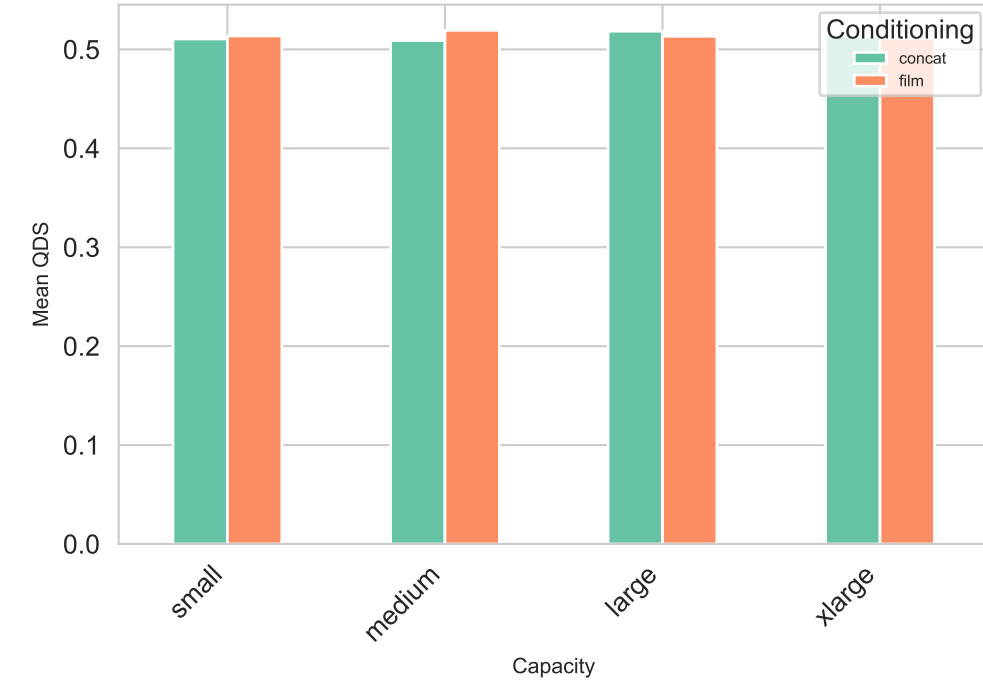
Quality-Diversity Score (QDS) by Capacity



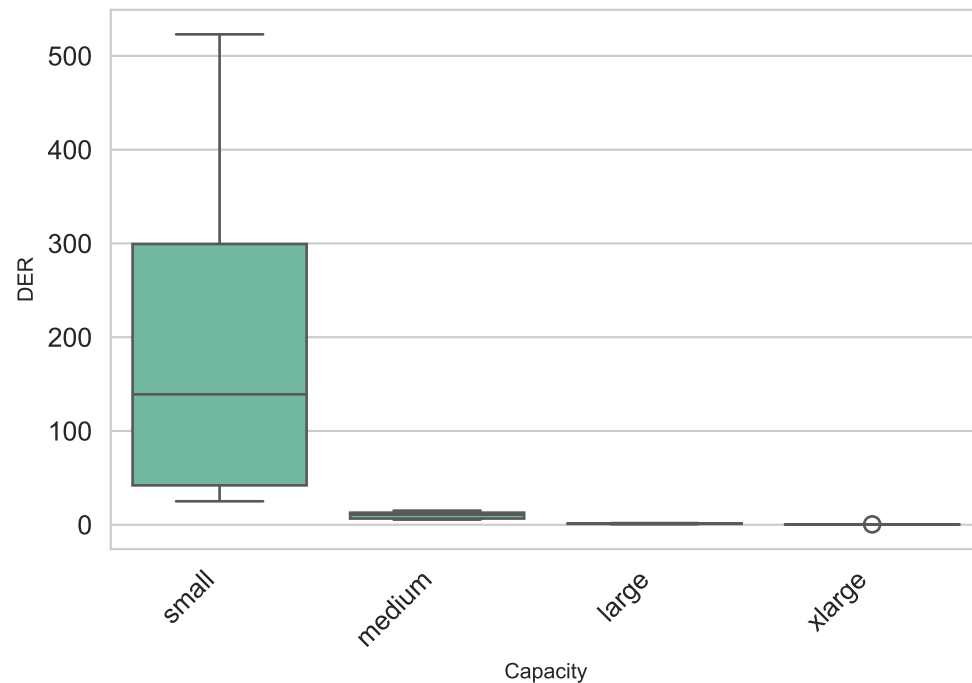
Quality-Diversity Score (QDS) by Conditioning



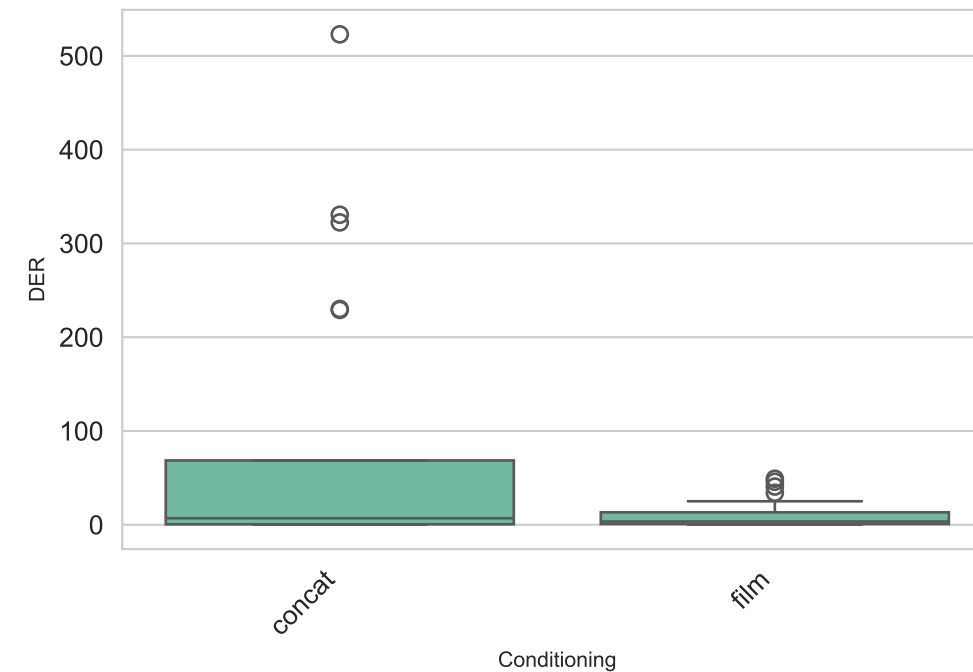
Quality-Diversity Score (QDS) by Capacity × Conditioning



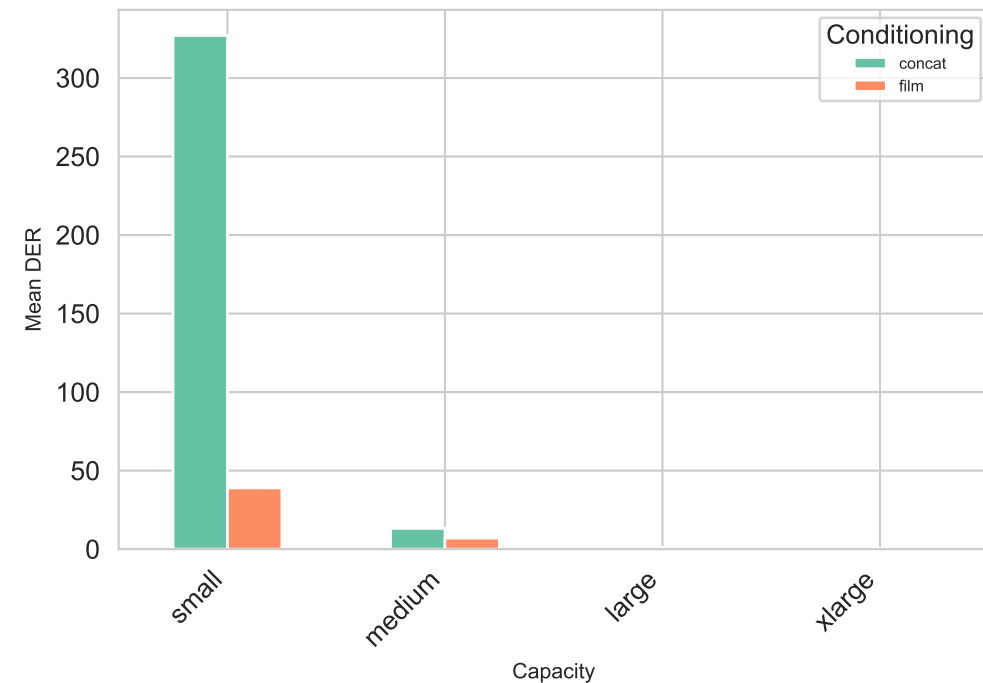
Diversity-Efficiency Ratio (DER) by Capacity



Diversity-Efficiency Ratio (DER) by Conditioning

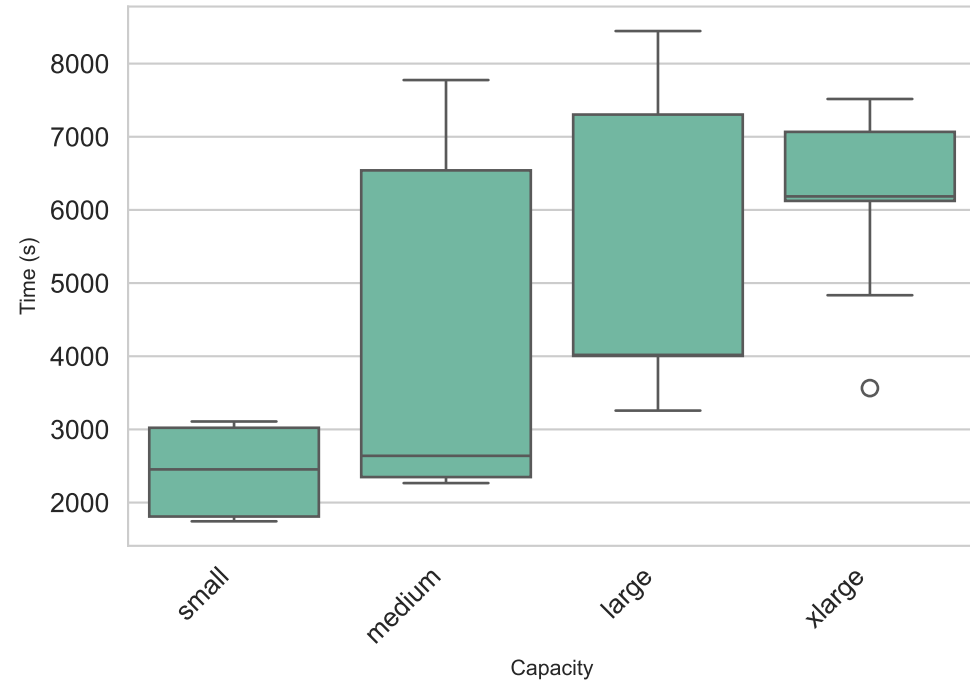


Diversity-Efficiency Ratio (DER) by Capacity × Conditioning

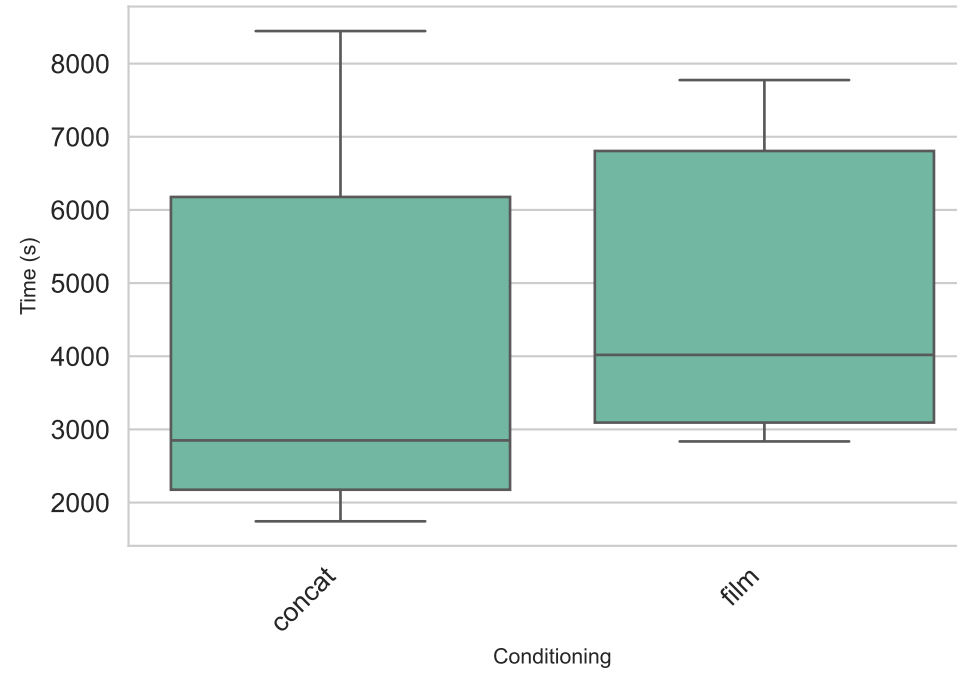


Performance & Computational Metrics - Capacity Ablation

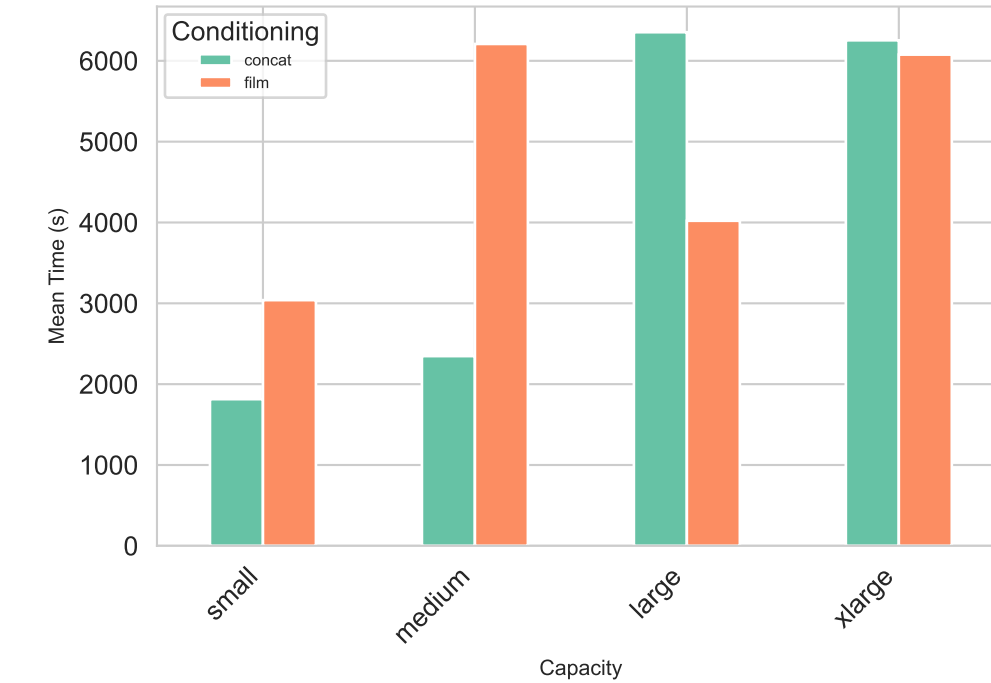
Training Time by Capacity



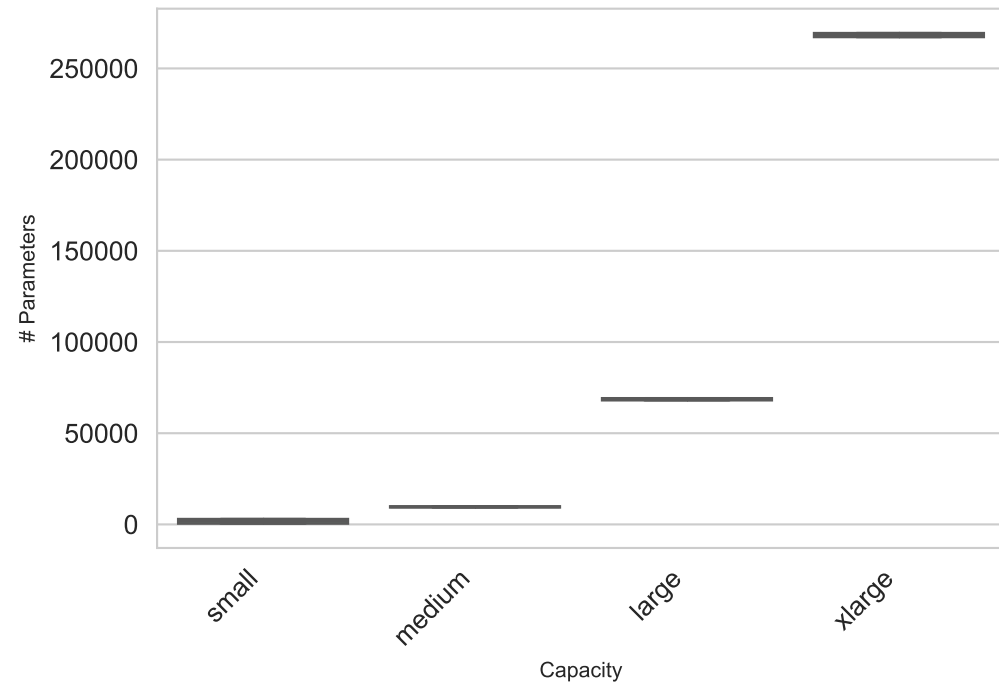
Training Time by Conditioning



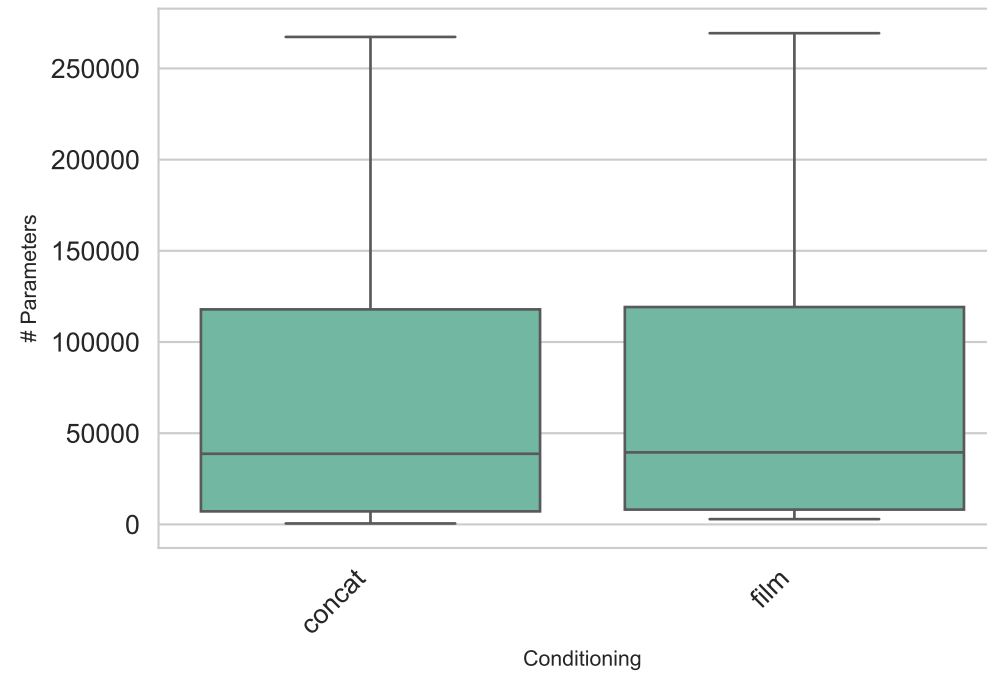
Training Time by Capacity × Conditioning



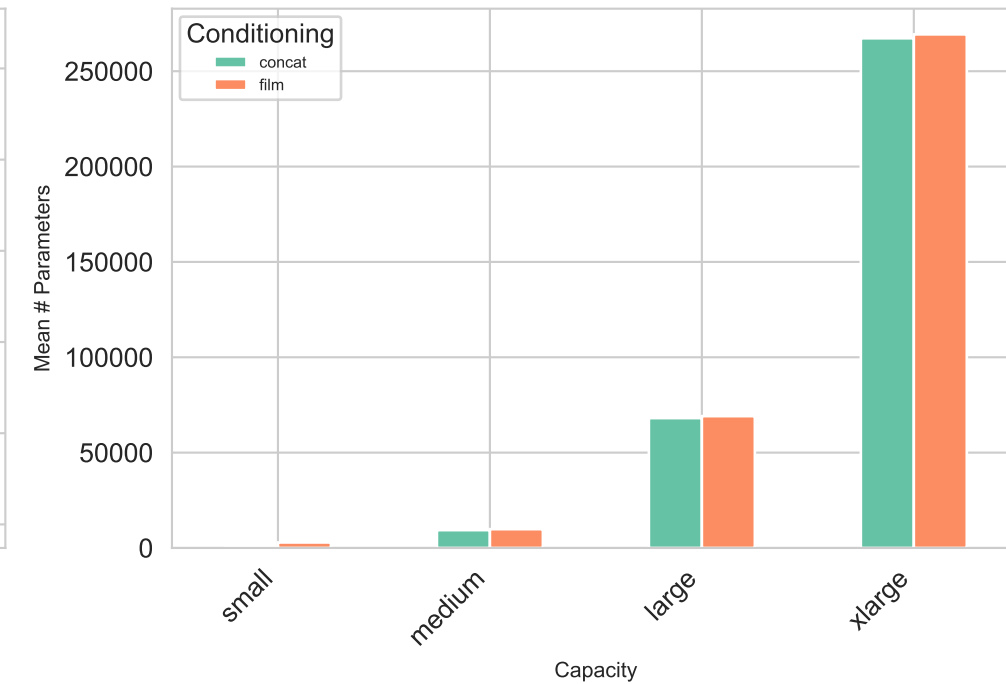
Model Parameters by Capacity



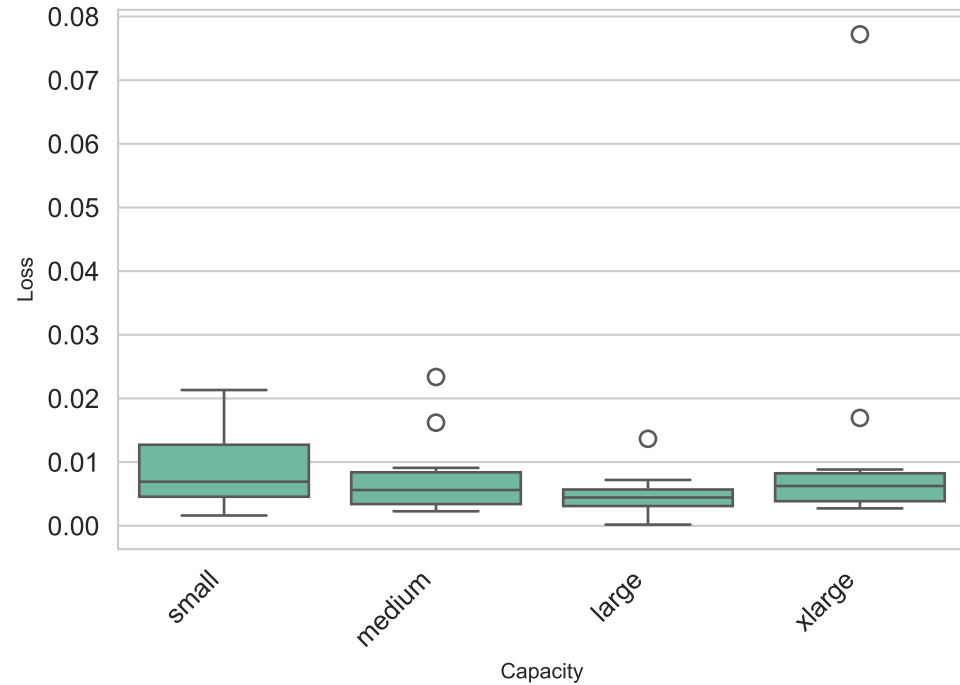
Model Parameters by Conditioning



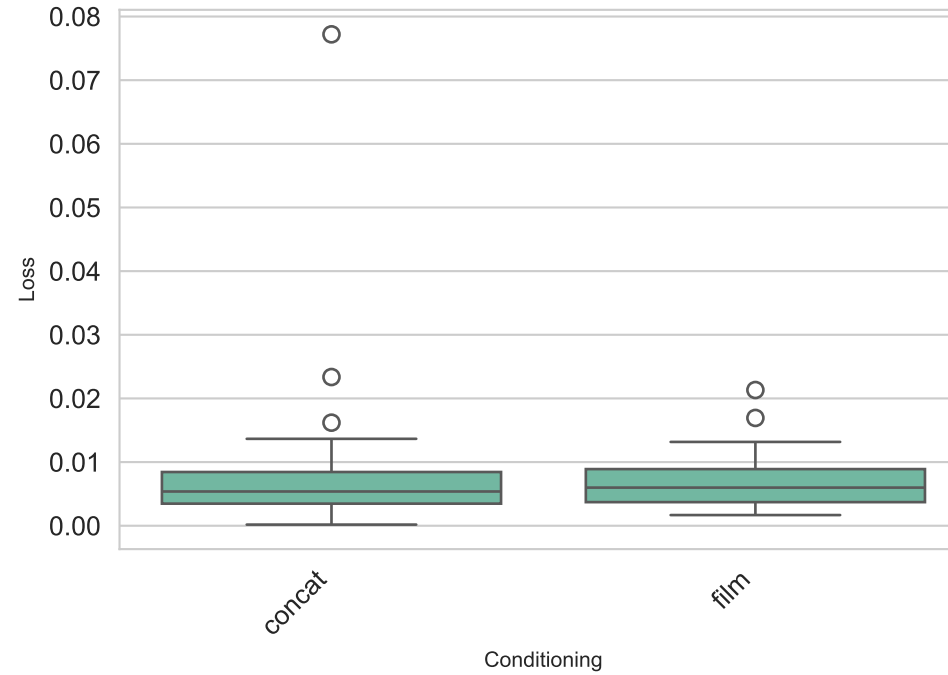
Parameters by Capacity × Conditioning



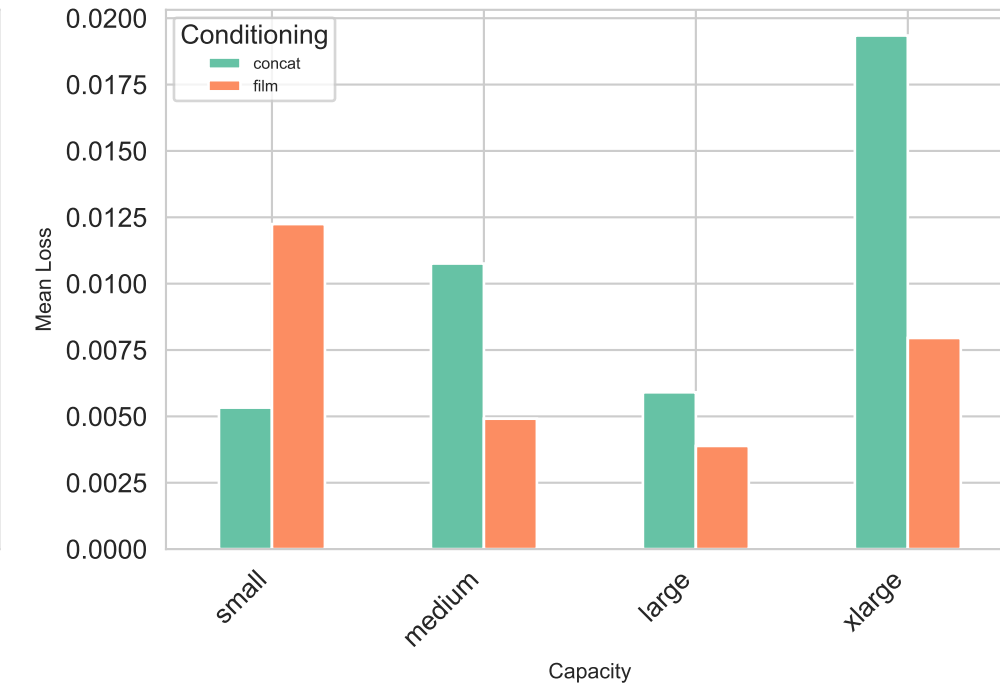
Final Loss by Capacity



Final Loss by Conditioning

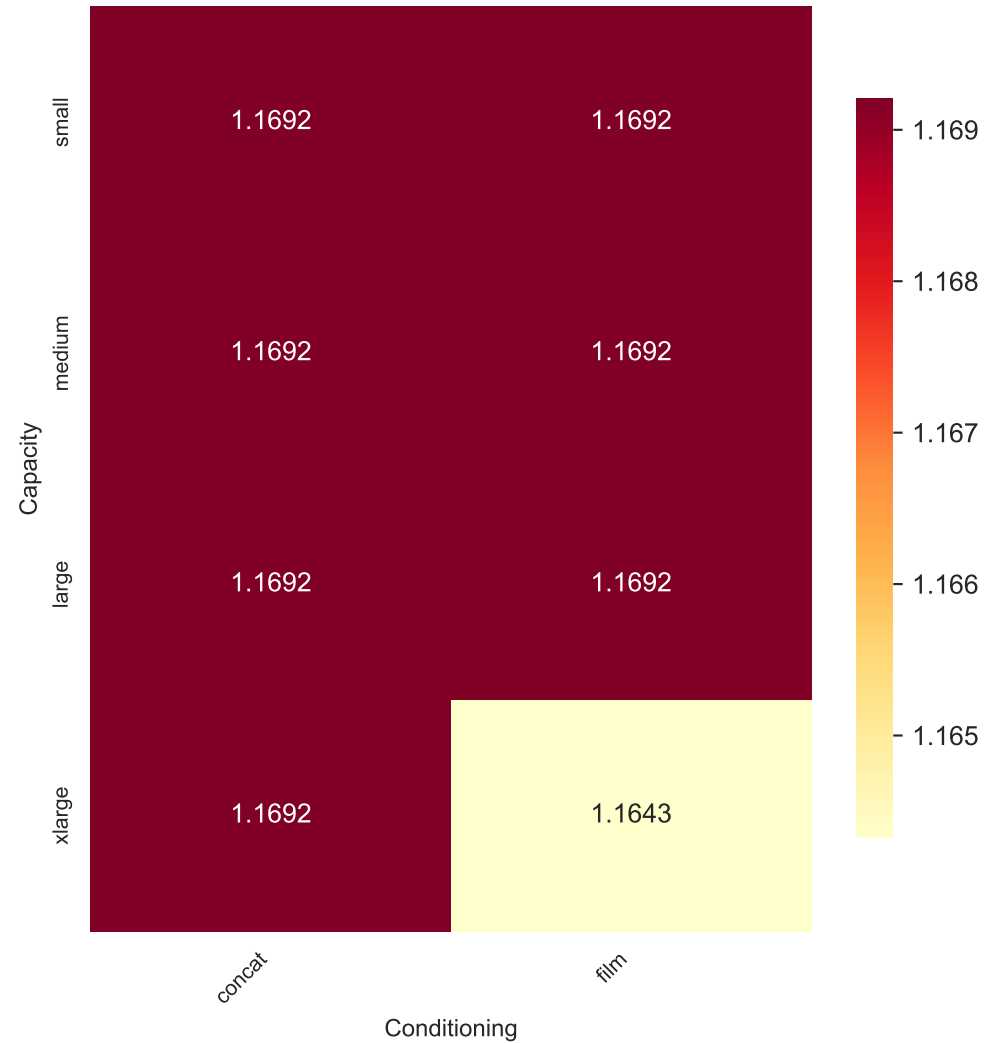


Loss by Capacity × Conditioning

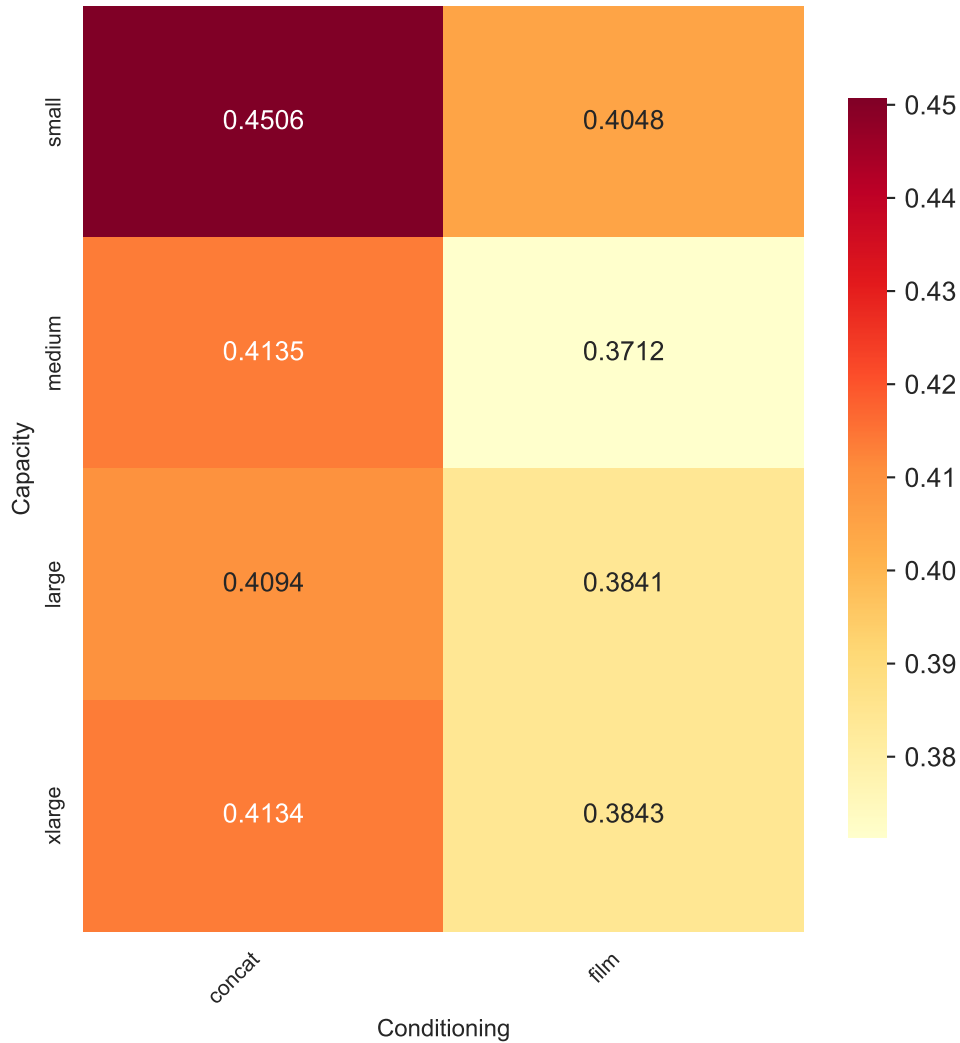


Capacity × Conditioning Heatmaps

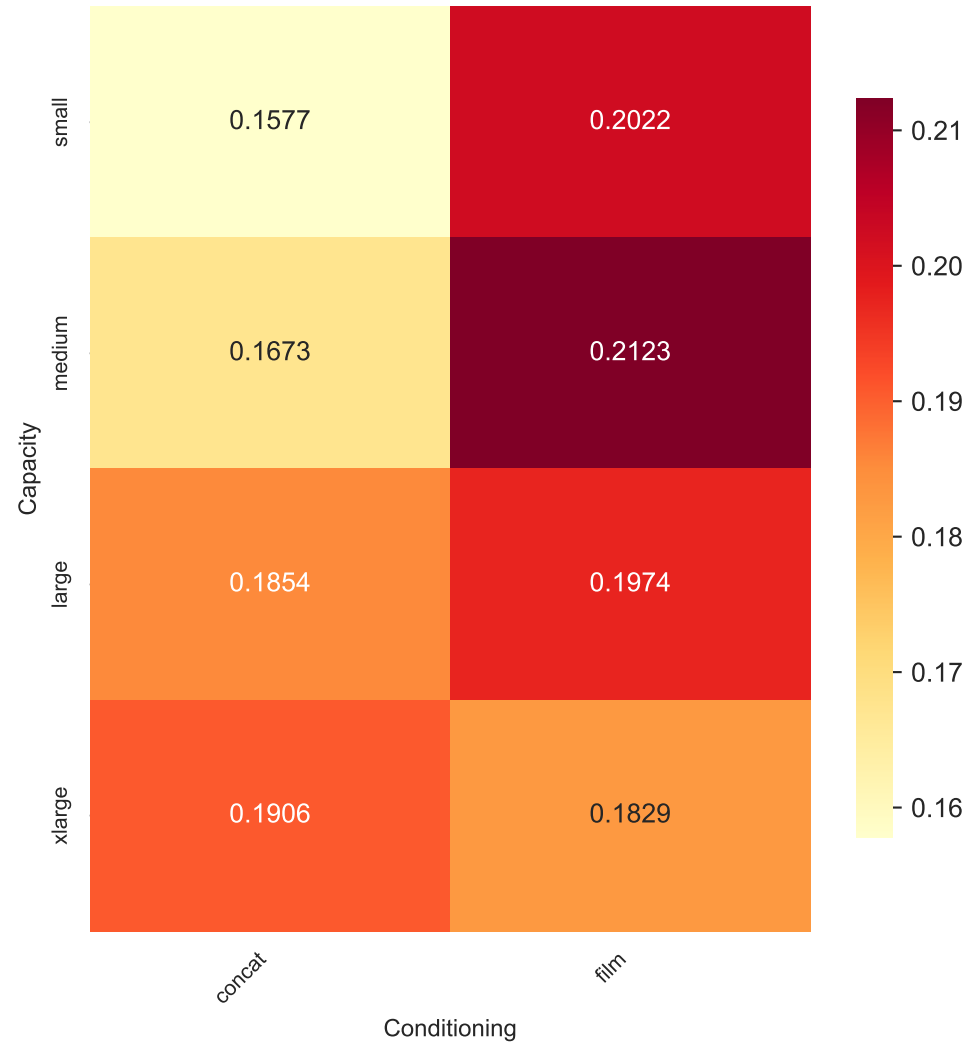
HYPERVOLUME



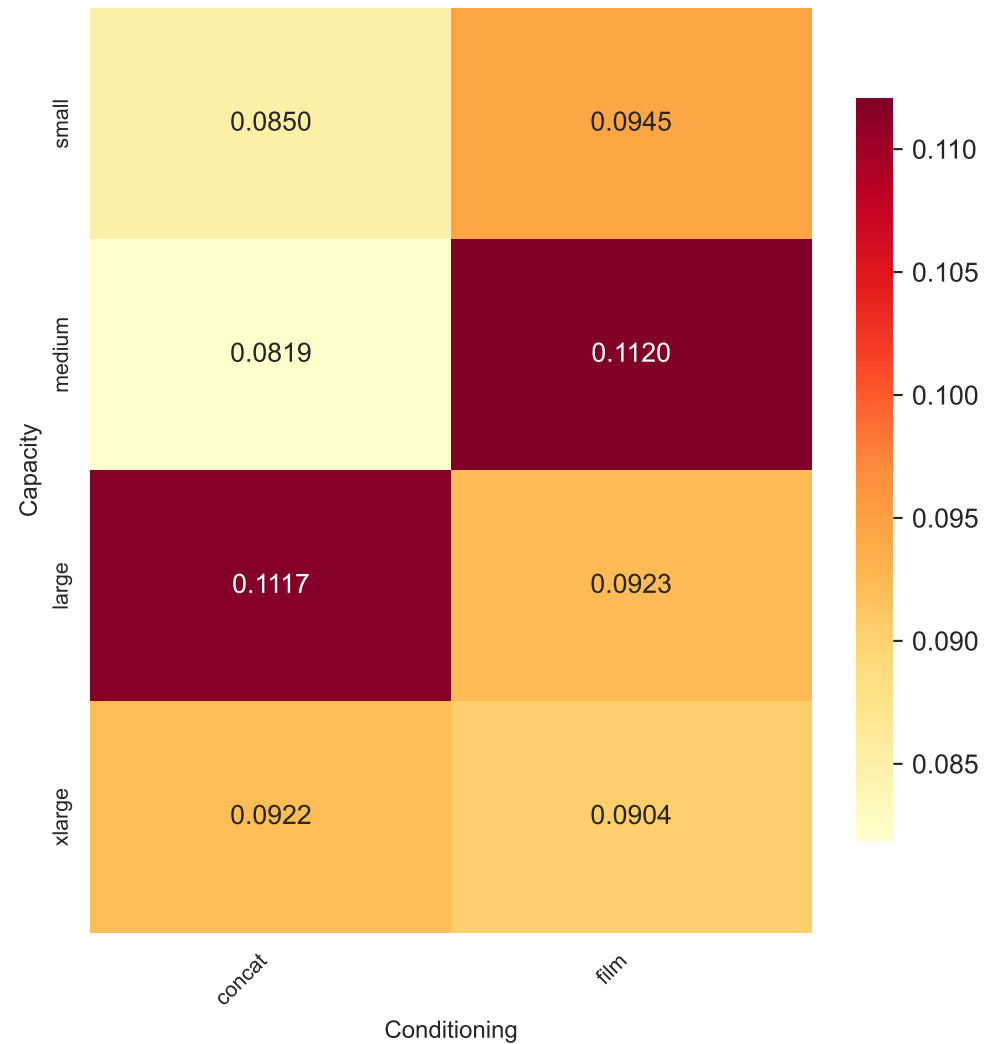
TDS



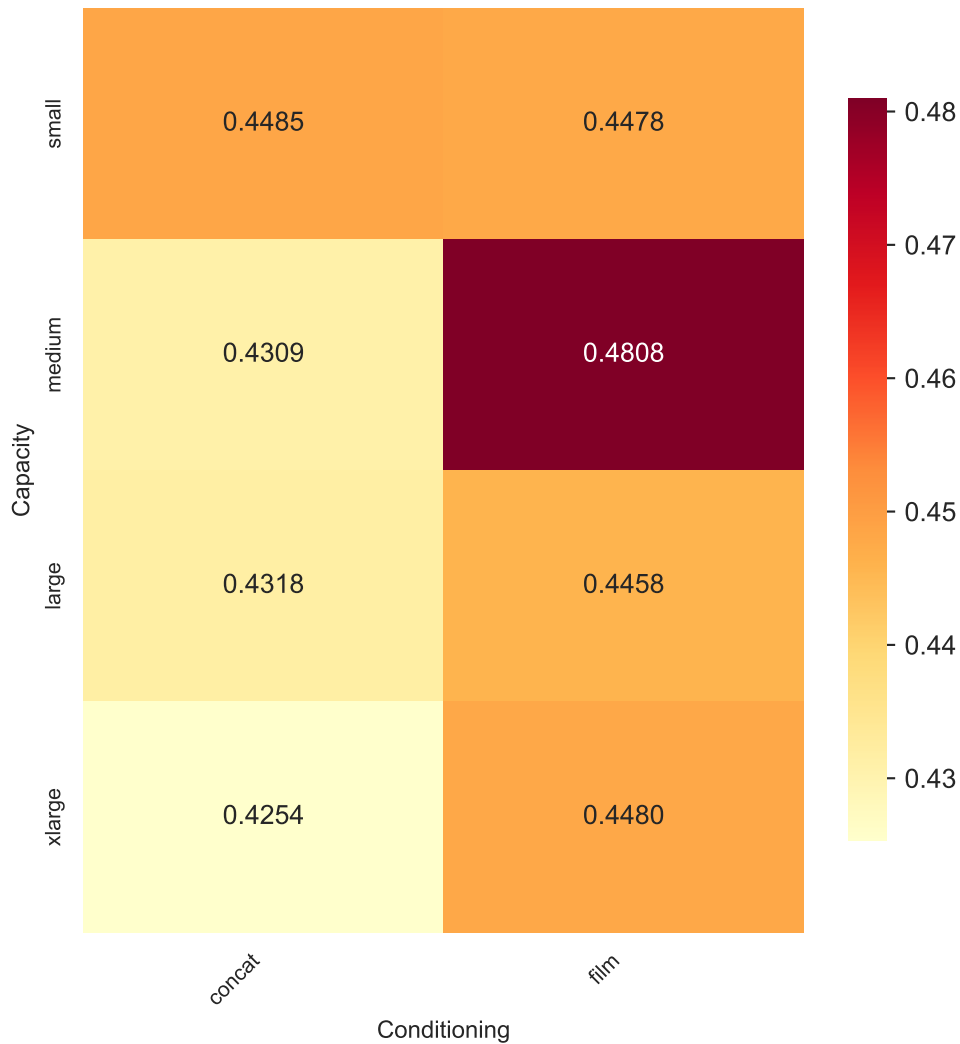
MCE



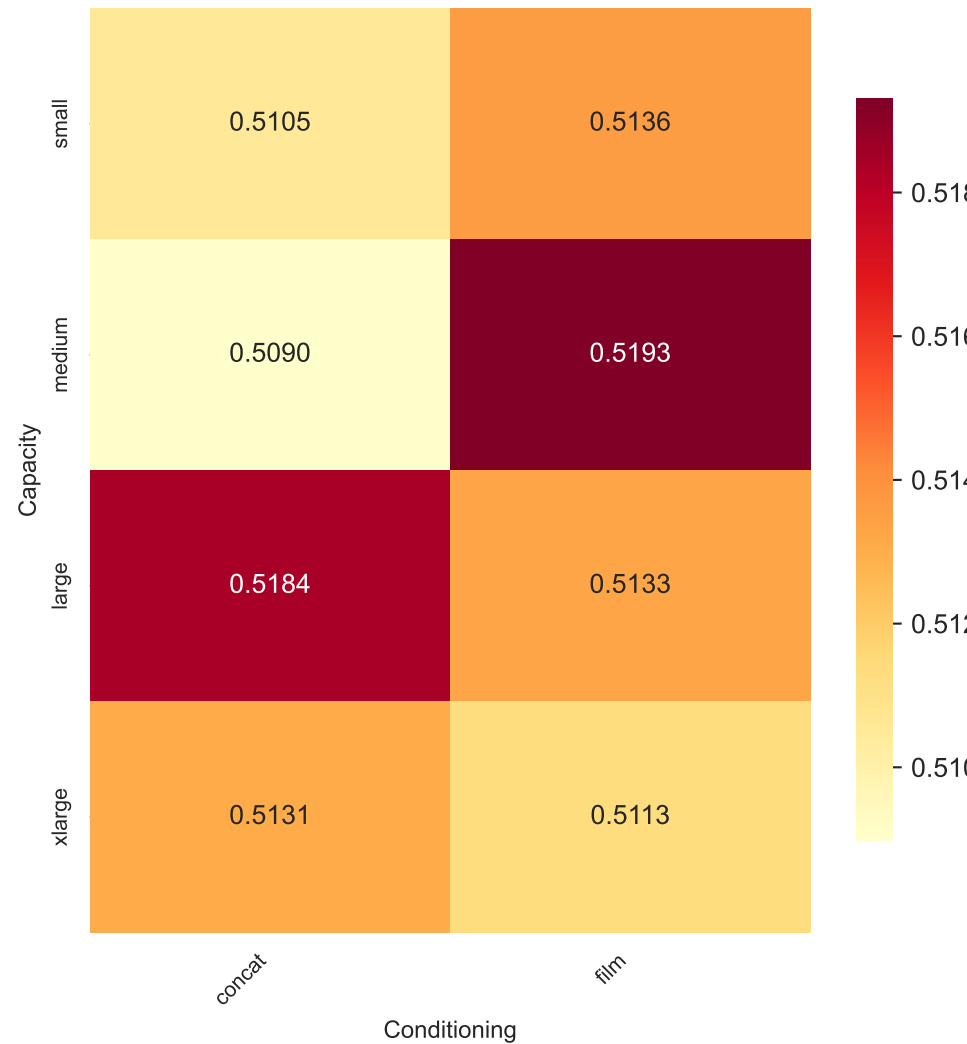
PAS



FCI



QDS



Summary Statistics Tables - Capacity Ablation

Mean ± Std by Capacity

Capacity	HYPERVOLUME	TDS	MCE	PAS	FCI	QDS	DER
small	1.169±0.000	0.428±0.035	0.180±0.036	0.090±0.025	0.448±0.023	0.512±0.008	182.988±171.692
medium	1.169±0.000	0.392±0.026	0.190±0.059	0.097±0.024	0.456±0.033	0.514±0.008	10.082±3.503
large	1.169±0.000	0.397±0.018	0.191±0.038	0.102±0.026	0.439±0.019	0.516±0.008	1.149±0.378
xlarge	1.167±0.008	0.399±0.020	0.187±0.039	0.091±0.015	0.437±0.024	0.512±0.007	0.216±0.080

Mean ± Std by Conditioning

Conditioning	HYPERVOLUME	TDS	MCE	PAS	FCI	QDS	DER
concat	1.169±0.000	0.422±0.025	0.175±0.030	0.093±0.026	0.434±0.017	0.513±0.008	85.376±153.435
film	1.168±0.005	0.386±0.018	0.199±0.050	0.097±0.019	0.456±0.029	0.514±0.007	11.842±16.870

Overall Statistics

Metric	Mean	Std	Min	Max	Count
HYPERVOLUME	1.1686	0.0039	1.1448	1.1692	40
TDS	0.4039	0.0282	0.3581	0.4866	40
MCE	0.1870	0.0424	0.0993	0.3112	40
PAS	0.0950	0.0226	0.0610	0.1689	40
FCI	0.4449	0.0256	0.4047	0.5090	40
QDS	0.5136	0.0075	0.4985	0.5350	40
DER	48.6087	113.9928	0.1450	522.9829	40