A. New Experiments on the Adult Data Set

Table 1: Mean accuracy (%) of competing methods on Adult with 10 repetitions.

			MEAN			STD	
ENV PARTITION	METHODS	TRAIN	TEST	Worst	TRAIN	TEST	Worst
FALSE	ERM	93.34	82.16	79.55	0.31	0.33	0.37
	EIIL	79.97	72.77	70.94	0.56	0.61	0.73
	LfF	82.03	75.04	73	5.54	3.01	2.45
	TIVA	91.45	81.95	79.28	0.12	0.39	0.46
	ZIN	93.16	82.26	79.67	0.17	0.27	0.29
	MINMAX-TV- ℓ_1	92.40	83.33	80.95	0.11	0.14	0.16
TRUE	GROUPDRO	87.51	76.42	73.07	0.59	1.29	1.54
	IRM	93.19	82.32	79.76	0.28	0.23	0.29
	IRM-TV- ℓ_1	92.42	83.31	80.93	0.19	0.18	0.19