

Figure 4: GDRO and ASGDRO on Wilds Benchmark and MetaShift. The parentheses below each name of dataset indicate the validation metric used for model selection [24]

Baseline	Method	PACS	VLCS	OfficeHome	TerraIncognita	DomainNet	Avg
Model Ensemble	ZooD-F.Selection <sup>†</sup> [12]	96.3	80.6	85.1	42.3	50.6	71.0
	EoA <sup>+†</sup> [2]	93.2	80.4	80.2	55.2	<b>54.6</b>	72.7
	CADG <sup>+†</sup> [9]	94.6	82.2	79.5	<b>55.7</b>	51.6	72.7
	Rew+HSIC <sup>†</sup> [6]	96.7	81.4	85.3	53.0	49.2	73.1
ResNet-50	ERM <sup>†</sup>	85.5	77.5	66.5	46.1	40.9	63.3
	$\mathrm{IRM}^\dagger$	83.5	78.6	64.3	47.6	33.9	61.6
	$GDRO^\dagger$	84.4	76.7	66.0	43.2	33.3	60.7
	I-Mixup <sup>†</sup>	84.6	77.4	68.1	47.9	39.2	63.4
	$ ext{MMD}^{\dagger}$	84.7	77.5	66.4	42.2	23.4	58.8
	SagNet <sup>†</sup>	86.3	77.8	68.1	48.6	40.3	64.2
	$ARM^\dagger$	85.1	77.6	64.8	45.5	35.5	61.7
	$VREx^{\dagger}$	84.9	78.3	66.4	46.4	33.6	61.9
	$RSC^\dagger$	85.2	77.1	65.5	46.6	38.9	62.7
	SWAD <sup>†</sup> [5]	88.1	<b>79.1</b>	70.6	50.0	46.5	66.9
CLIP-based	DPLCLIP	96.6	79.0	82.7	45.4	59.1	72.6
	DPLCLIP+GDRO	95.9	79.7	83.6	46.0	59.1	72.9
	DPLCLIP+ASGDRO	96.8	80.7	83.7	48.9	59.8	74.0

Table 4: **DomainBed**. The symbol † indicates reported performance. Except for the cited methods, all performances were taken from [17]. Bold accuracy w.r.t. average accuracy.

<sup>[17]</sup> Ishaan Gulrajani and David Lopez-Paz. In search of lost domain generalization. arXiv preprint arXiv:2007.01434, 2020.

<sup>[24]</sup> Pang Wei Koh, Shiori Sagawa, Henrik Marklund, Sang Michael Xie, Marvin Zhang, Akshay Balsubramani, Weihua Hu, Michihiro Yasunaga, Richard Lanas Phillips, Irena Gao, et al. Wilds: A benchmark of in-the-wild distribution shifts. In International Conference on Machine Learning, pages 5637–5664. PMLR,2021.