Models evaluation on some test sets (30 Dec 2020)

DATASET	METRIC		MODEL		
			Arena	CVPR	CVPR Smooth Aug Noise
Training	loss	train	0,03	0,06	0,20
		valid	0,07	0,13	0,20
	r2	train	**1,00**	**0,99**	**0,92**
		valid	**0,99**	**0,97**	**0,92**
Test Arena	r2	x	**0,81**	**0,69**	**0,83**
		y	**0,86**	**0,82**	**0,87**
		z	**0,79**	**0,79**	**0,86**
		w	**0,74**	**0,74**	**0,78**
	rmse	x	0,12	0,15	0,11
		y	0,10	0,12	0,10
		z	0,06	0,06	0,05
		w	0,29	0,29	0,26
	test loss		0,41	0,42	0,36
Test Indoor1	r2	x	**0,16**	**0,58**	**0,83**
		y	**0,30**	**0,81**	**0,83**
		z	**0,21**	**0,78**	**0,85**
		w	**0,08**	**0,70**	**0,76**
	rmse	x	0,24	0,17	0,11
		y	0,23	0,12	0,12
		z	0,11	0,06	0,05
		w	0,54	0,31	0,28
	test loss		0,86	0,44	0,37
Test Indoor2	r2	x	**-0,86**	**0,64**	**0,81**
		y	**0,51**	**0,82**	**0,84**
		z	**-2,78**	**0,77**	**0,86**
		w	**0,24**	**0,67**	**0,75**
	rmse	x	0,36	0,16	0,11
		y	0,20	0,12	0,11
		z	0,24	0,06	0,05
		w	0,50	0,33	0,29
	test loss		1,00	0,45	0,37

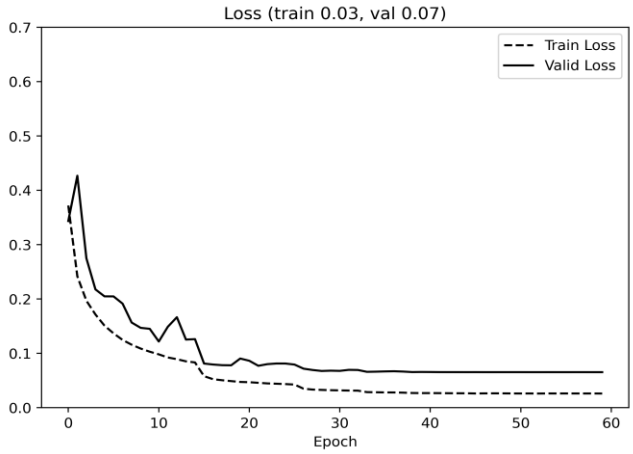
Model Arena: trained on original images from the drone arena

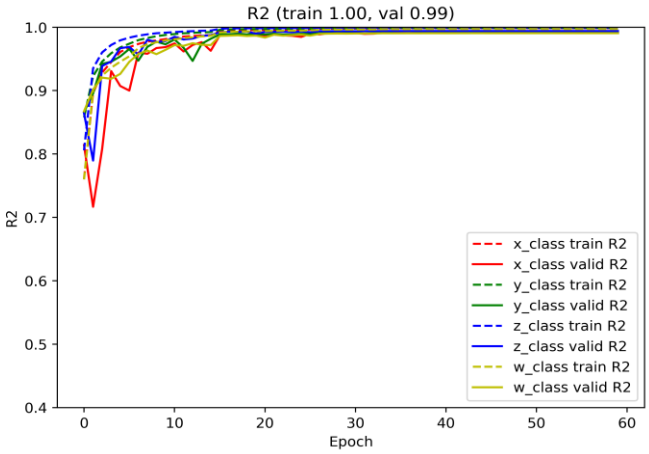
Model CVPR: trained on images with background replaced from dataset (link)

Model CVPR Smooth Aug Noise: same as before but with image augmentation and mask smoothing

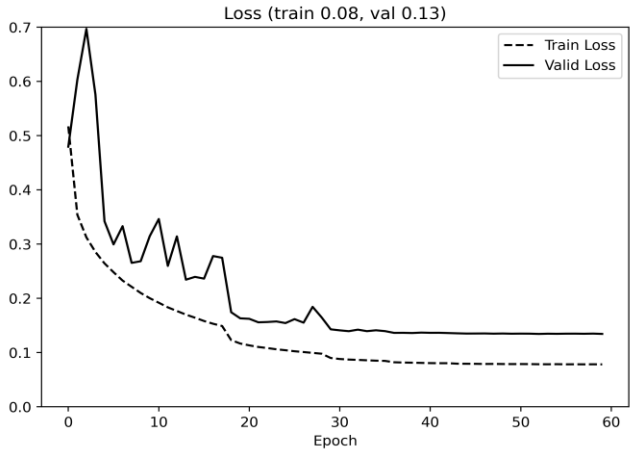
NOTE: R2 represents the proportion of variance (of the target y) that has been explained by the independent variables in the model (the features in x). It provides an indication of goodness of fit and therefore a measure of how well unseen samples are likely to be predicted by the model, through the proportion of explained variance. **As such variance is dataset dependent, R^2 may not be meaningfully comparable across different datasets.**

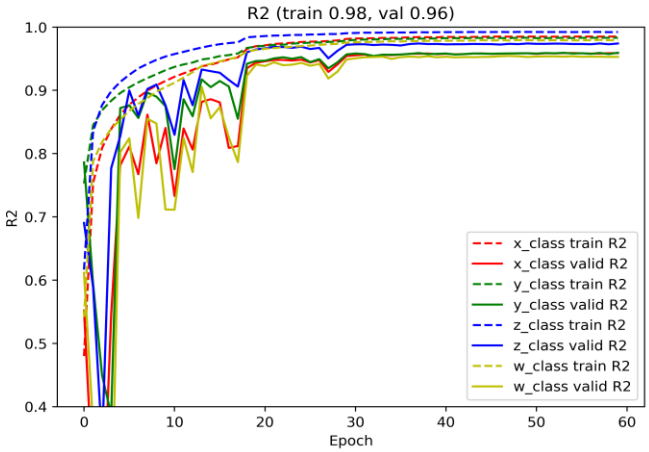
20201230_050135 - 20201229_170151 tethys_idsia_ch - regr_len63720_b64_rw_trainfrom0_ep60



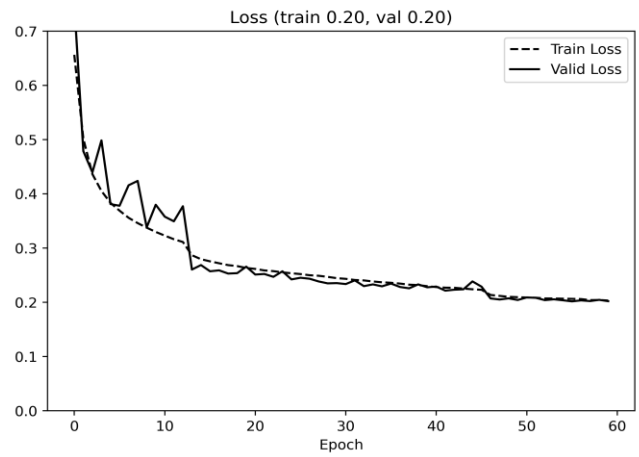


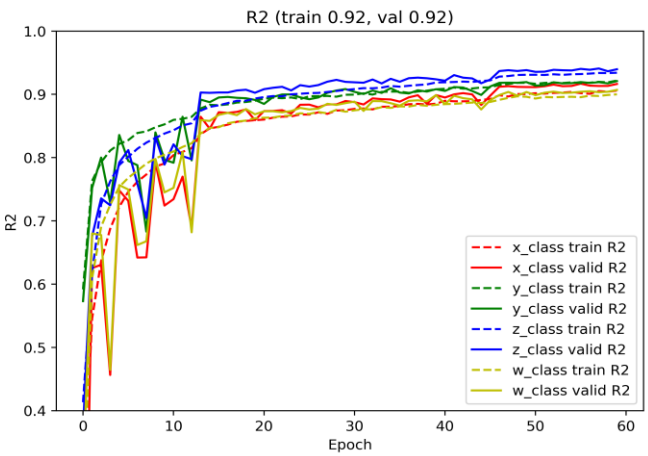
20201230_050137 - 20201229_221211 tethys_idsia_ch - regr_len63720_b64_rw_trainfrom0_bgCVPRindoor(len15589)_ep60





20201230_050140 - 20201229_164916 tethys_idsia_ch - regr_len63720_b64_rw_trainfrom0_bgCVPRindoor(len15589,smooth)_augm095(noise)_ep60





Indoor 1

Indoor 2