Exploring the modeling potential

With a simple model and 30 epochs, explore the modeling power of the data.
We can conclude with this experiment, that the datasets have a promising modeling power. Here probably limited by the management issue of the learning rate. The LR was supposed to decrease linearly from epoch 1 to 30.

Mike Fournigault

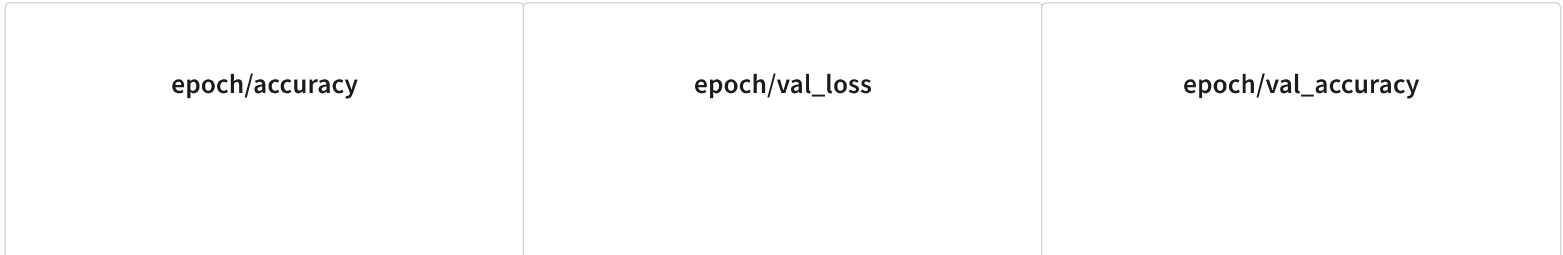
Created on April 14 | Last edited on April 17

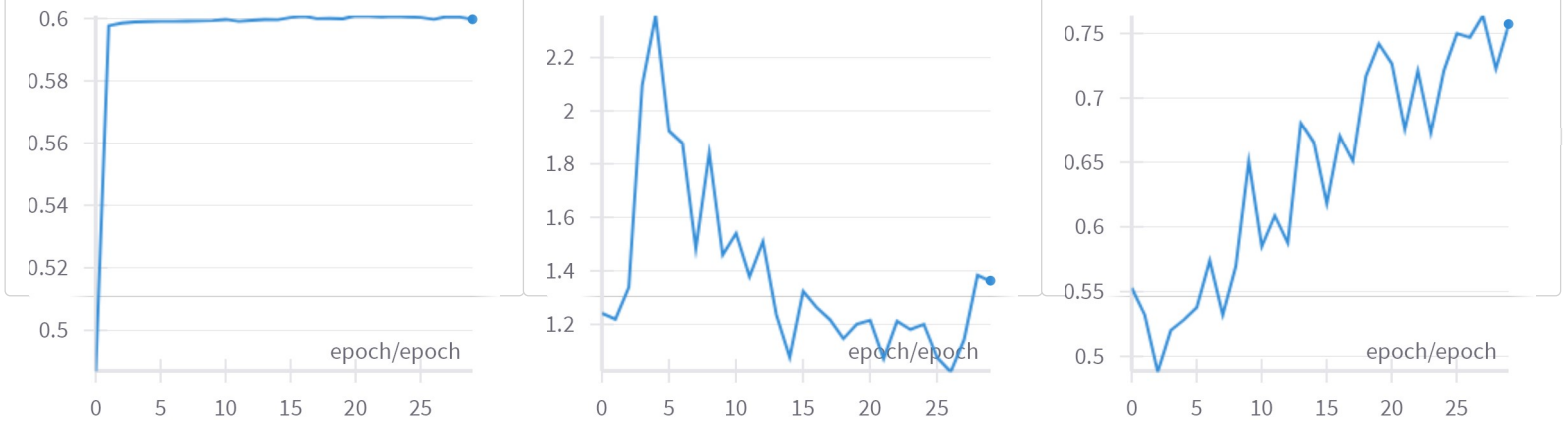
The MA of epoch Accuracy raises quickly 75%, the epoch validation accuracy very close to training accuracy, similarly for training/validation losses, showing no strong over-fitting. Testing accuracy of 78%.

The average accuracy for one epoch is arround 60% against 75%. This difference with the strong variation of accuracy within an epoch (see batch plots) show that there is work to do on data shuffling and batch size.

It is probably valuable to train a more complex model on these datasets, with a better training procedure (appropriate learning rate scheduler).

Epoch metrics analysis





Run: snowy-valley-37 1

Batch metrics analysis

Created with ❤️ on Weights & Biases.

https://wandb.ai/mike-fournigault1/astro_iqa/reports/Exploring-the-modeling-potential--VmlldzoxMjI3NTkwNw