# Deep Learning Lab Course Ex6

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The error over the runtime (wall clock) of SMAC and Hyperband is shown in figure 1 and 2. While Hyperband finds suitable parameter in less than 6000 s the SMAC algorithms need nearly 4 times as much time.
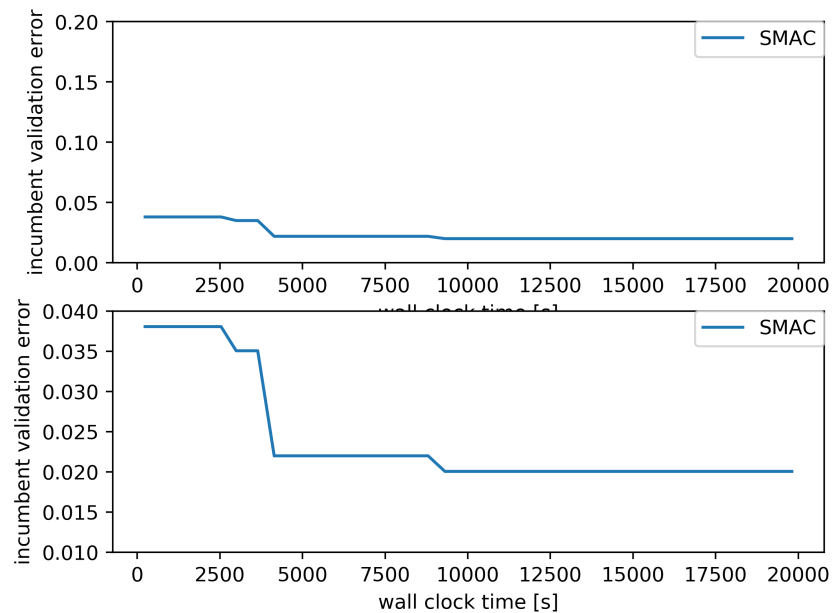


Figure 1: SMAC run

This is again seen if we lock at the learning rates, which where used. Hyperband only evaluates half of the function in each iteration and therefor is faster as seen in figure 4. While SMAC runs all till the end in figure 3.
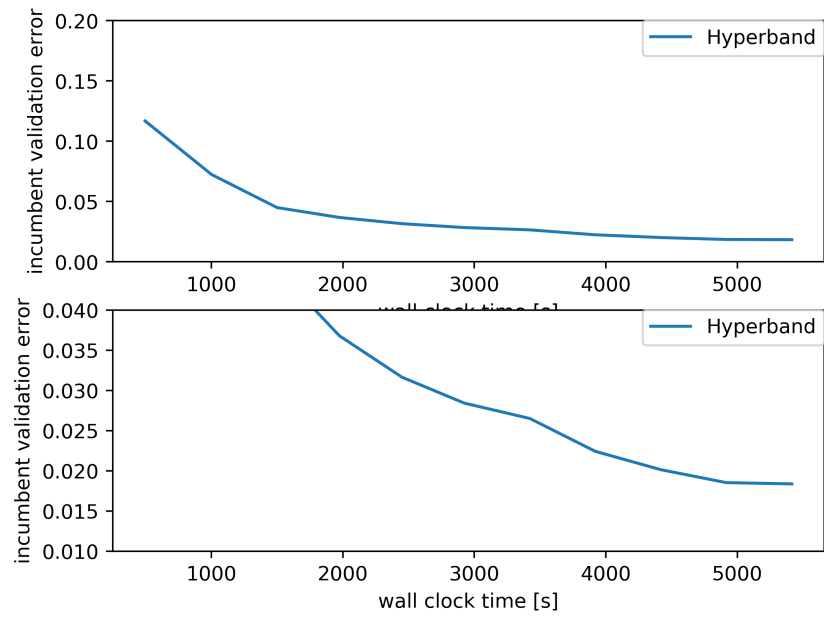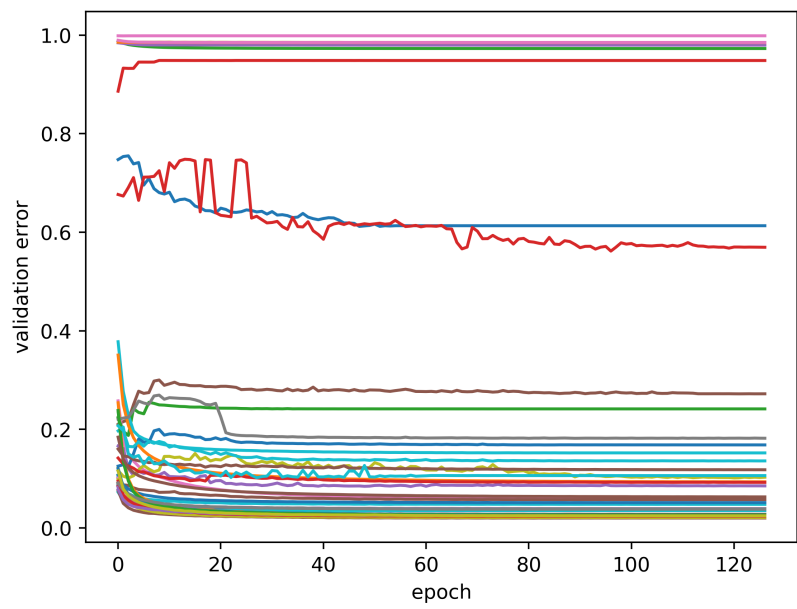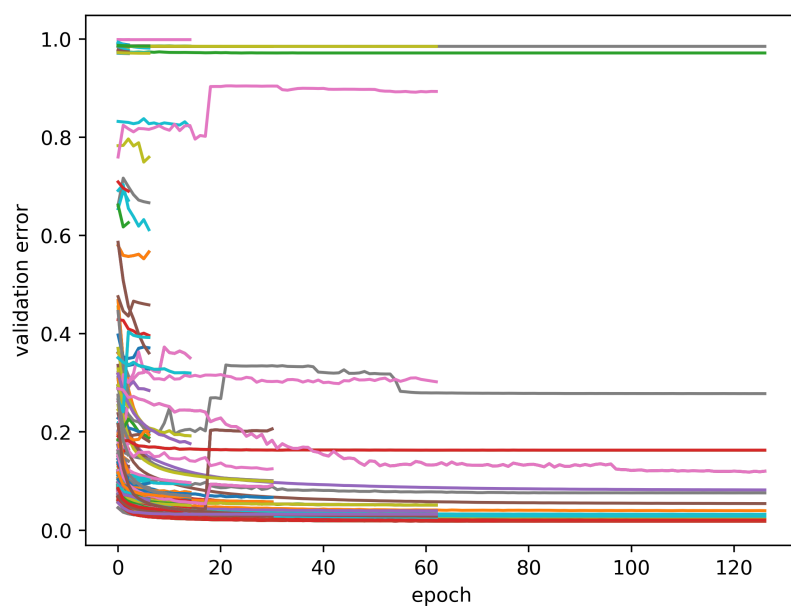
Figure 2: Hyperband run



Figure 3: SMAC learning rate

Figure 4: Hyperband learning rate