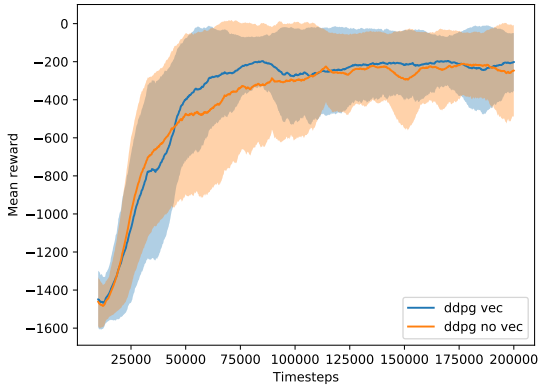


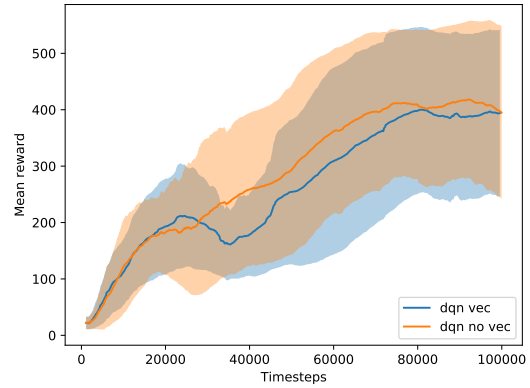
Vectorizing DQN / DDPQ in Stable Baselines Zoo

Model configuration:

Name	Env	Algo	Vectorize env	Time steps	Hyperparameters
ddpg vec	Pendulum-v0	DDPG	Y	1e6	see hyperparams/ddpg.yml
ddpg no vec	Pendulum-v0	DDPG	N	1e6	see hyperparams/ddpg.yml
dqn vec	CartPole-v1	DQN	Y	1e5	see hyperparams/dqn.yml
dqn no vec	CartPole-v1	DQN	N	1e5	see hyperparams/dqn.yml

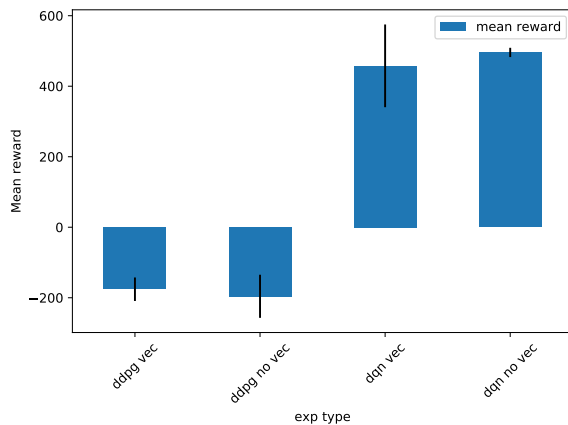


(a) DDPG

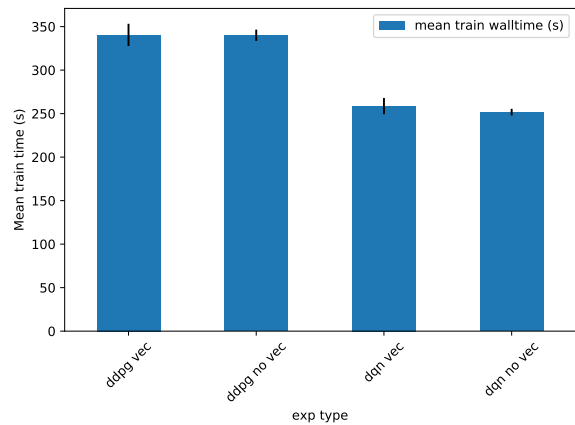


(b) DQN

Figure 1: Average learning curves over 10 different random seeds.



(a) Average reward over 100 test evaluations and 10 seeds.



(b) Average training walltime over 10 seeds.

Vectorizing DQN or DDPG does not seem to affect the training, the average return or the training time significantly.