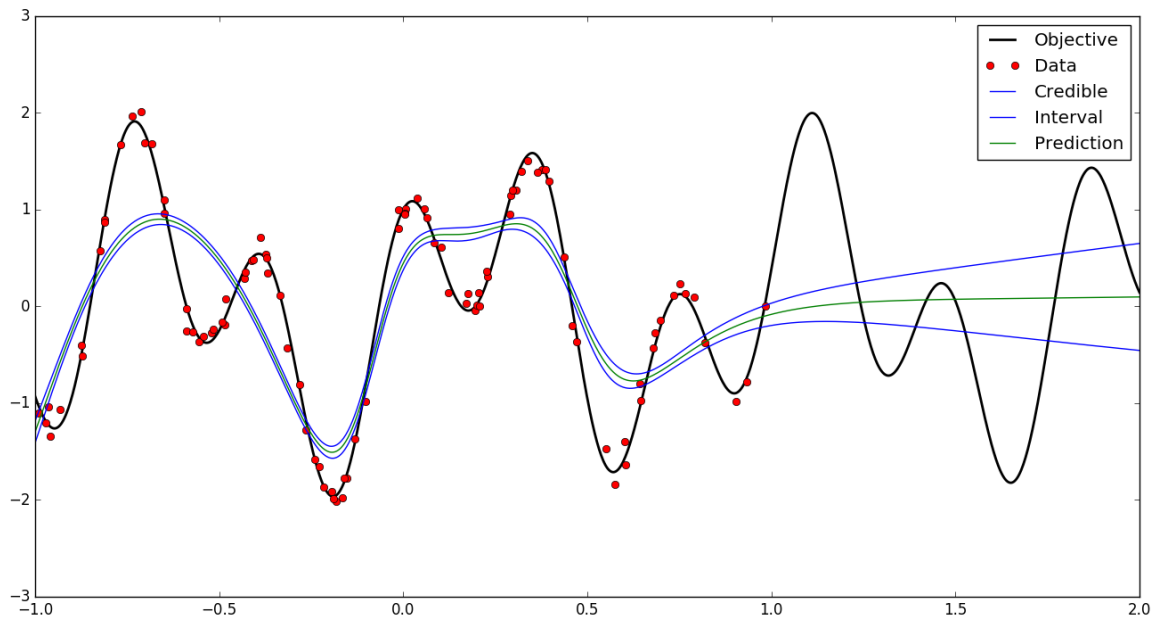


## BNN with HMC preliminary results

1->20->1

same priors used on both weights

No gibbs sampling to update priors

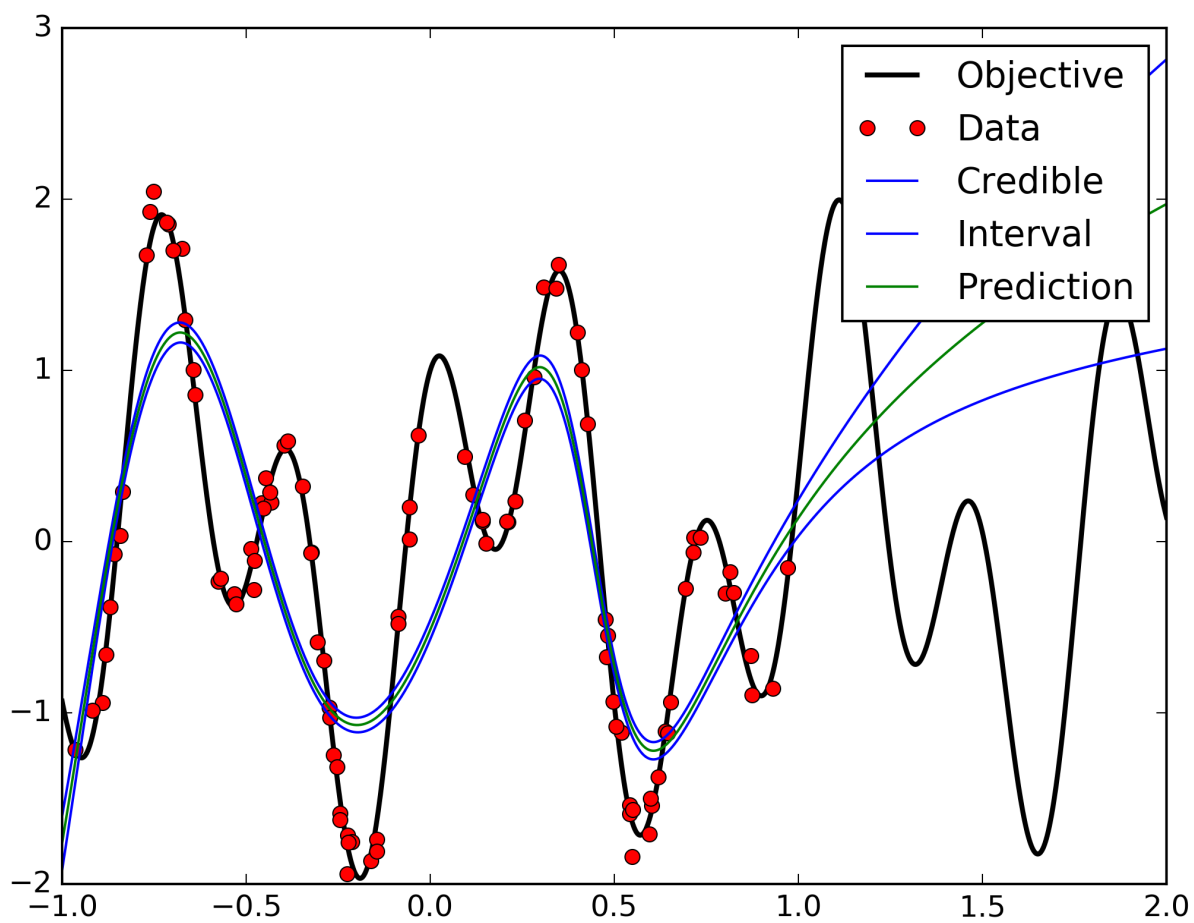


Unsure about how the uncertainty estimates should be obtained. Following code fragment was used. `op_samples` has outputs of the neural networks taken over 1000 samples from HMC. The 1000 samples are taken after a 1000 sample burnin.

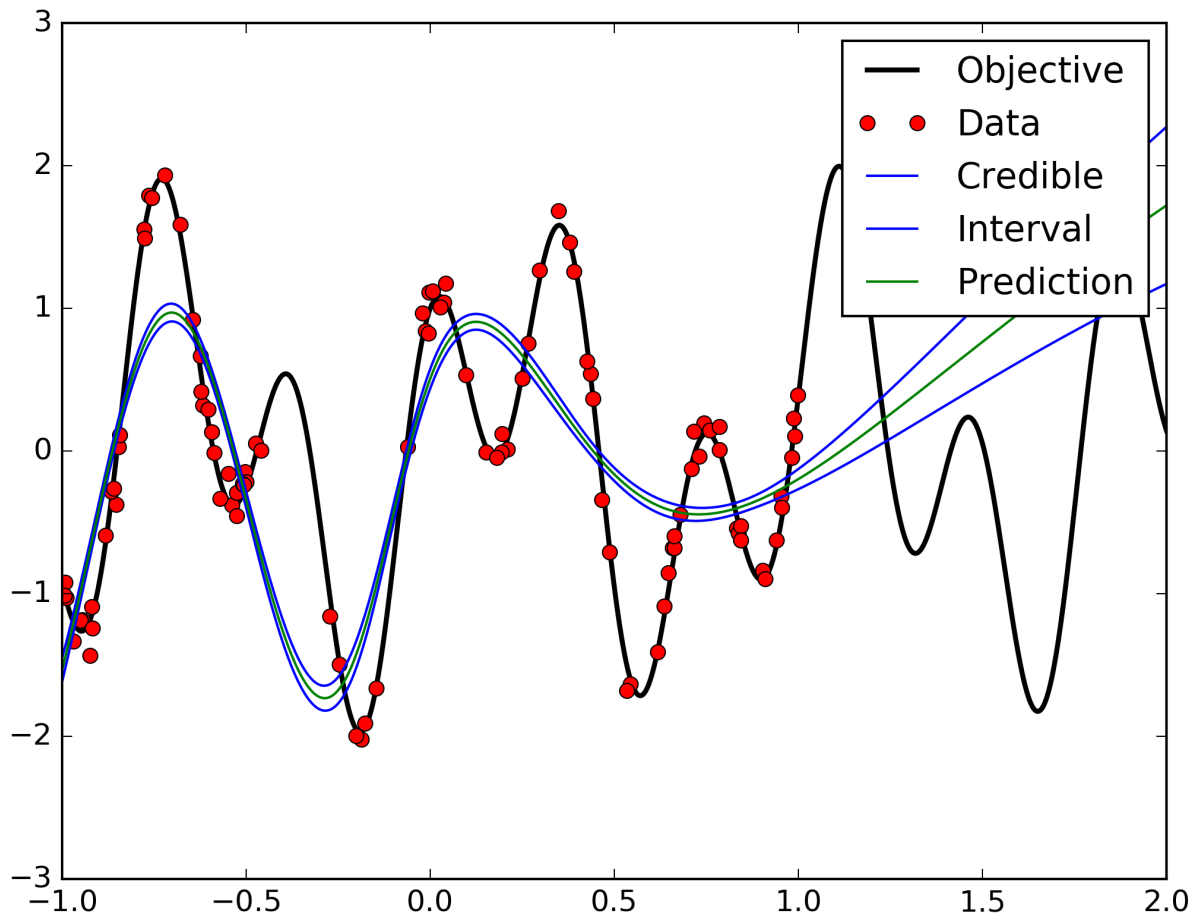
```
y_sd = np.std(op_samples,axis=0)
```

I

With more hidden\_width hwidth=50

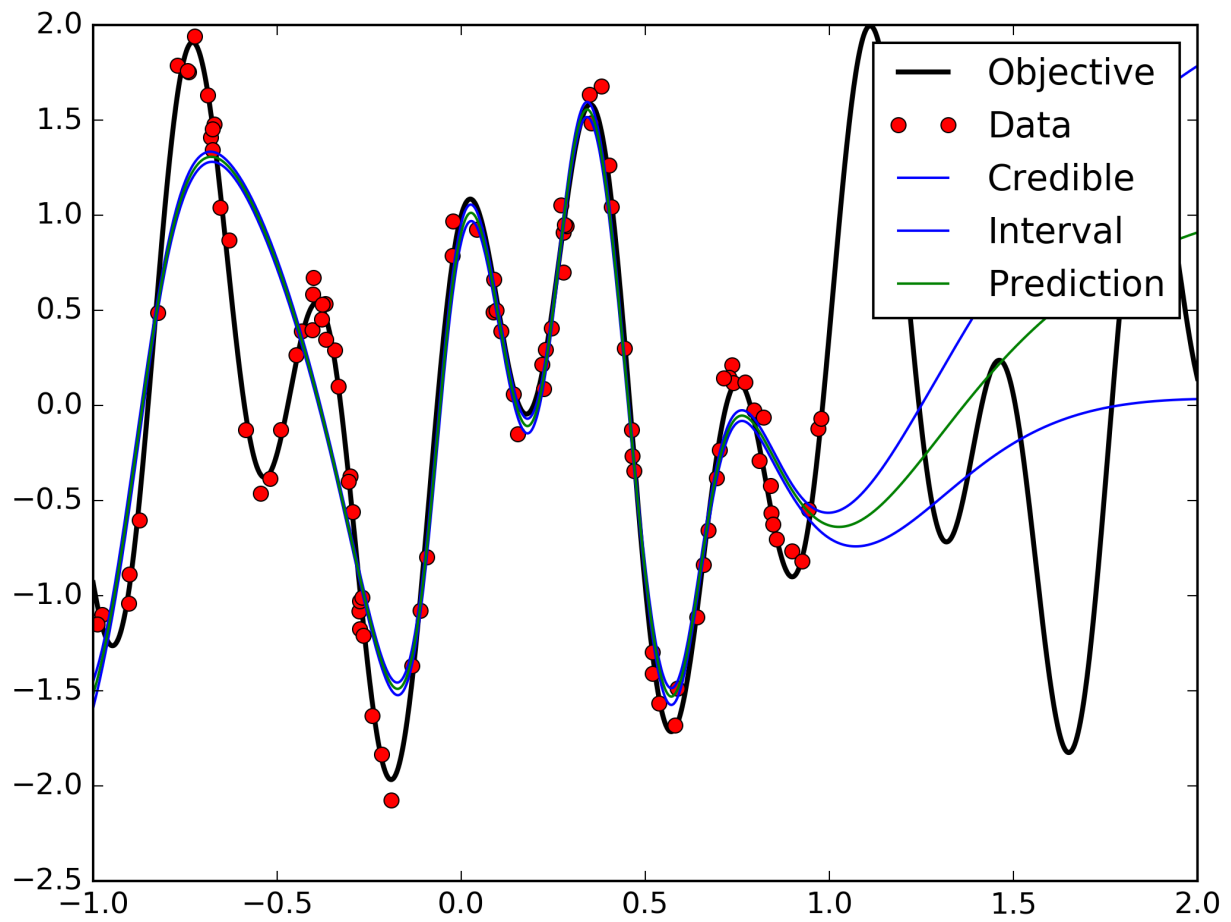


hWidth=100



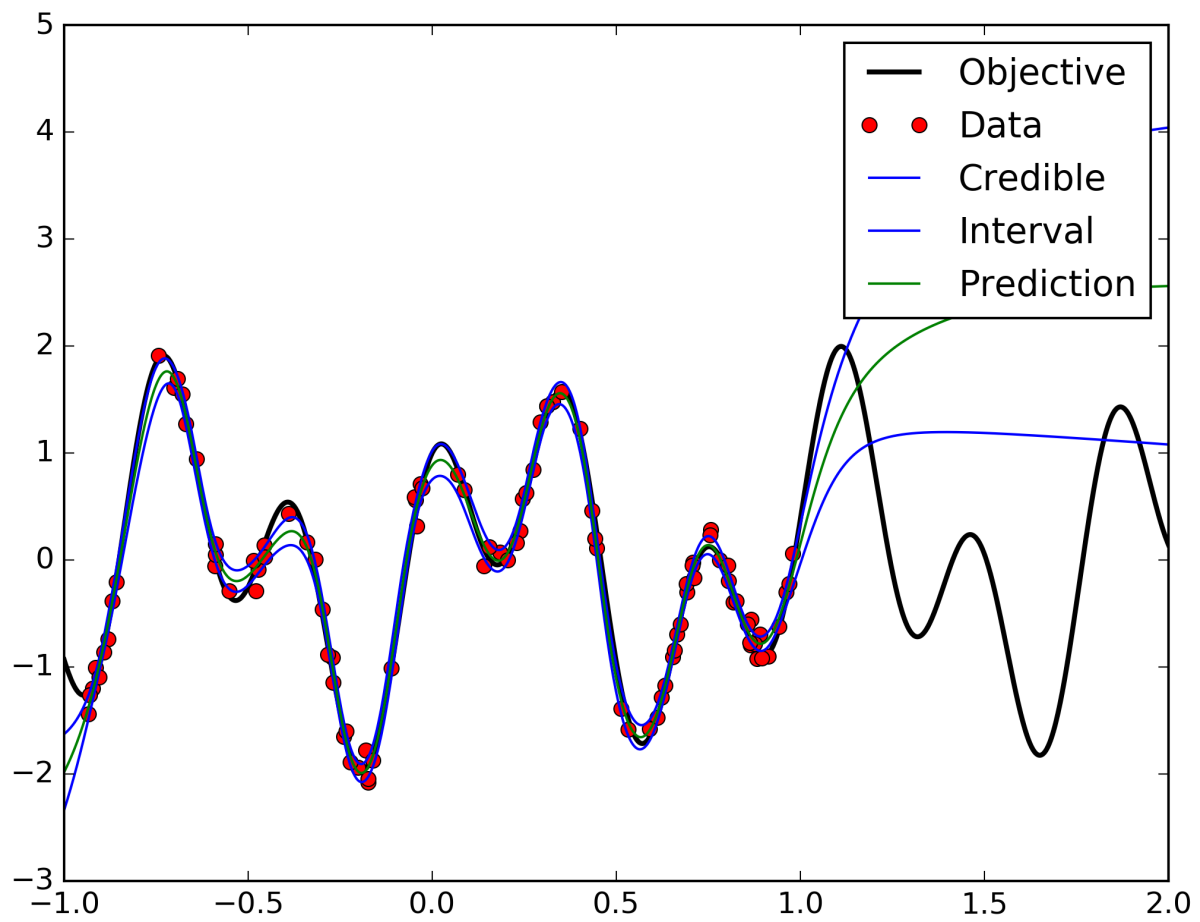
////////////////////////////////////

The noise var in the output was decreased



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More Complicated NN using 1->50->50->50->1



precisions =[10,7,7,10] hWidth=[50,50,50]

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