

# RESULTS

	( <b>'Symbol'</b> , <i>DataTypes.CATEGORICAL</i> , <i>InputTypes.ID</i> ), ( <b>'date'</b> , <i>DataTypes.DATE</i> , <i>InputTypes.TIME</i> ), ( <b>'log_vol'</b> , <i>DataTypes.REAL_VALUED</i> , <i>InputTypes.TARGET</i> ), ( <b>'open_to_close'</b> , <i>DataTypes.REAL_VALUED</i> , <i>InputTypes.OBSERVED_INPUT</i> ), ( <b>'days_from_start'</b> , <i>DataTypes.REAL_VALUED</i> , <i>InputTypes.KNOWN_INPUT</i> ), ( <b>'day_of_week'</b> , <i>DataTypes.CATEGORICAL</i> , <i>InputTypes.KNOWN_INPUT</i> ), ( <b>'day_of_month'</b> , <i>DataTypes.CATEGORICAL</i> , <i>InputTypes.KNOWN_INPUT</i> ), ( <b>'week_of_year'</b> , <i>DataTypes.CATEGORICAL</i> , <i>InputTypes.KNOWN_INPUT</i> ), ( <b>'month'</b> , <i>DataTypes.CATEGORICAL</i> , <i>InputTypes.KNOWN_INPUT</i> ), ( <b>'Region'</b> , <i>DataTypes.CATEGORICAL</i> , <i>InputTypes.STATIC_INPUT</i> )
<i>Variables</i>	
<i>dropout_rate</i>	<b>0.3</b>
<i>hidden_layer_size</i>	<b>5</b>
<i>learning_rate</i>	<b>0.01</b>
<i>max_gradient_norm</i>	<b>0.01</b>
<i>minibatch_size</i>	<b>64</b>
<i>num_heads</i>	<b>1</b>
<i>stack_size</i>	<b>1</b>
<i>total_time_steps</i>	<b>257</b>
<i>num_encoder_steps</i>	<b>252</b>
<i>num_epochs</i>	<b>1</b>
<i>early_stopping_patience</i>	<b>5</b>
<i>multiprocessing_workers</i>	<b>5</b>
<i>input_size</i>	<b>8</b>
<i>output_size</i>	<b>1</b>

These parameters are the fixed ones. For details, check the script *volatility.py* in the folder *data\_formatters*  
The data source is: <https://realized.oxford-man.ox.ac.uk/data>

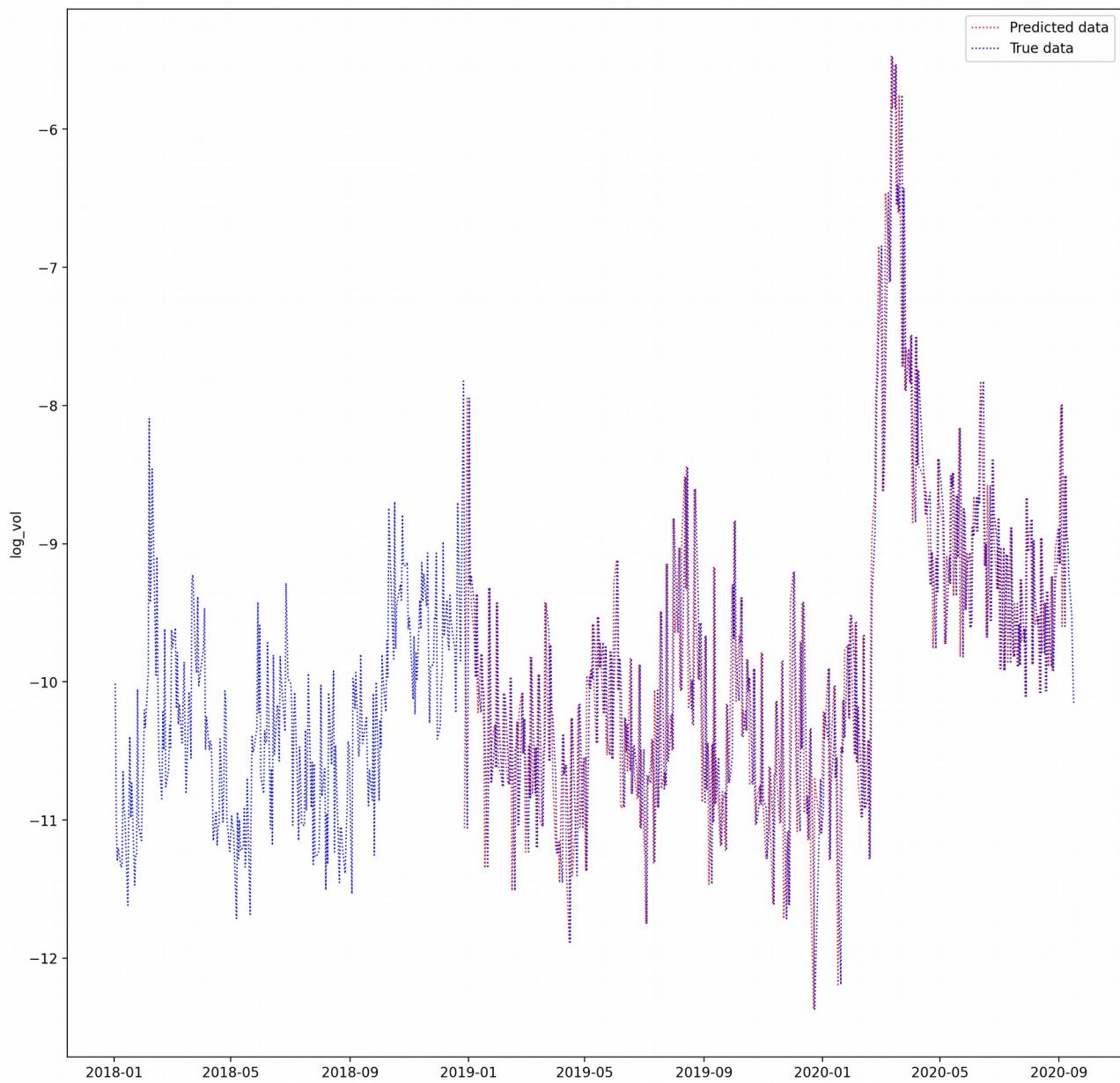


Figure 1: AEX

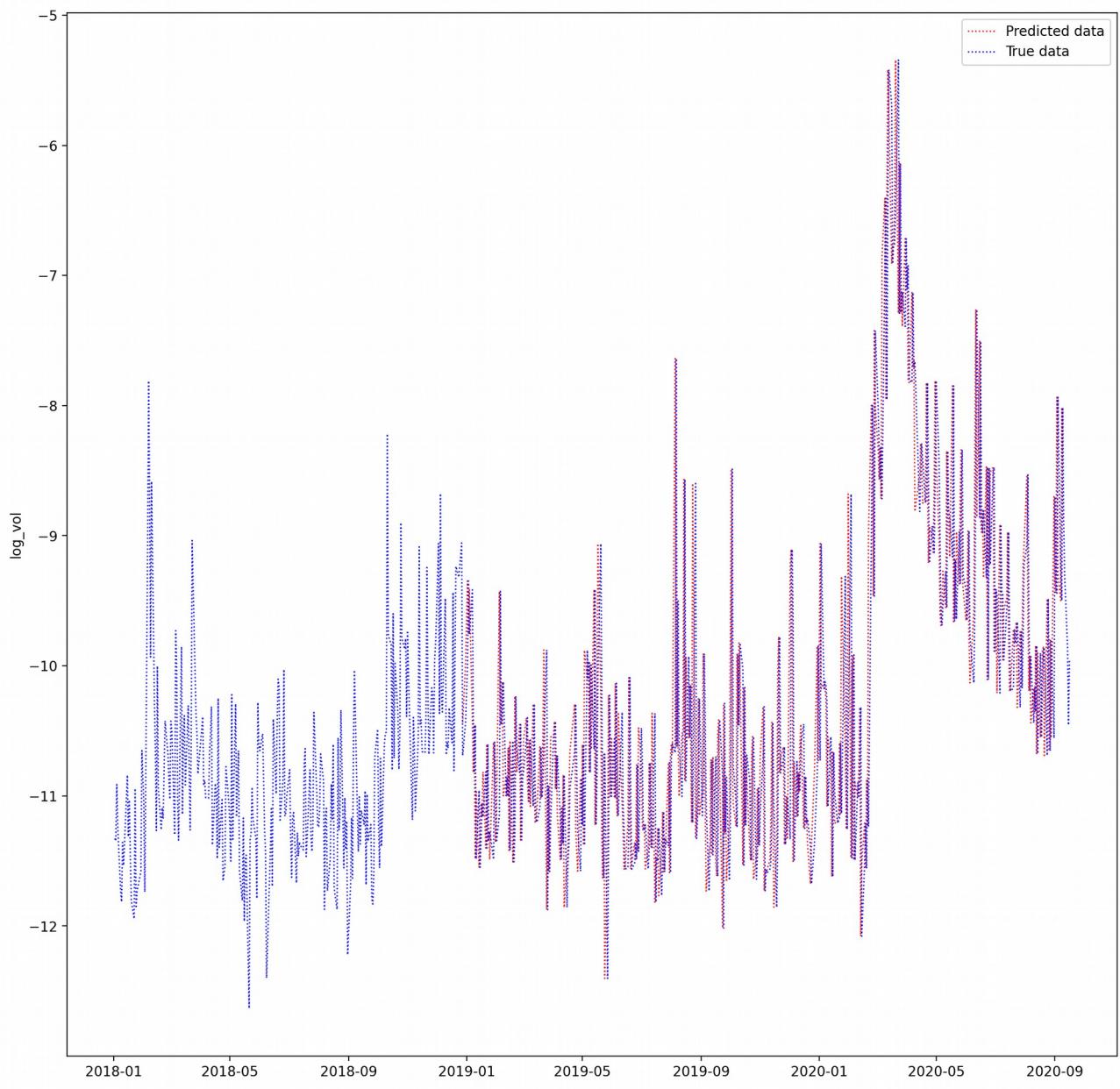


Figure 2: AORD

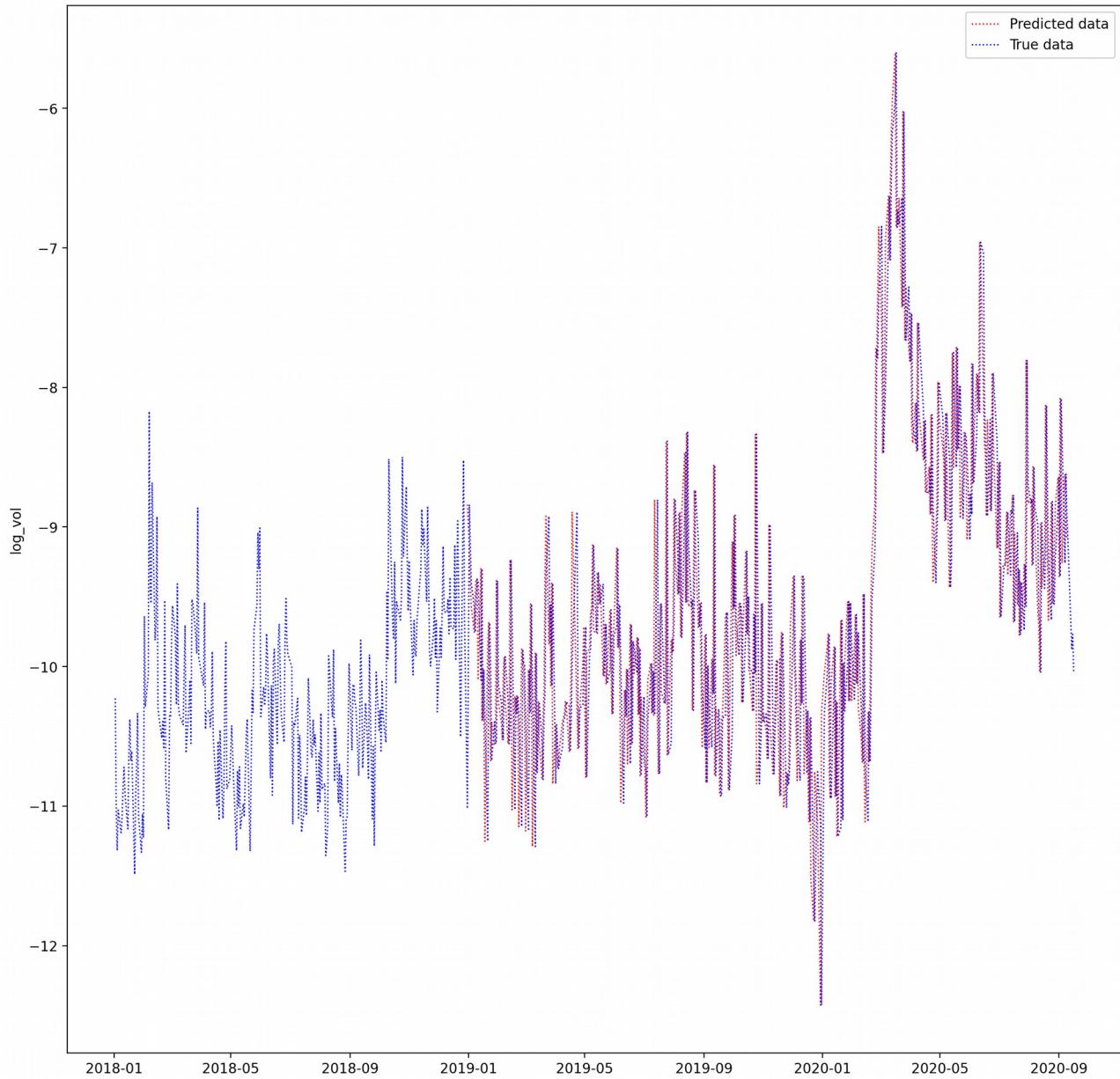


Figure 3: BFX

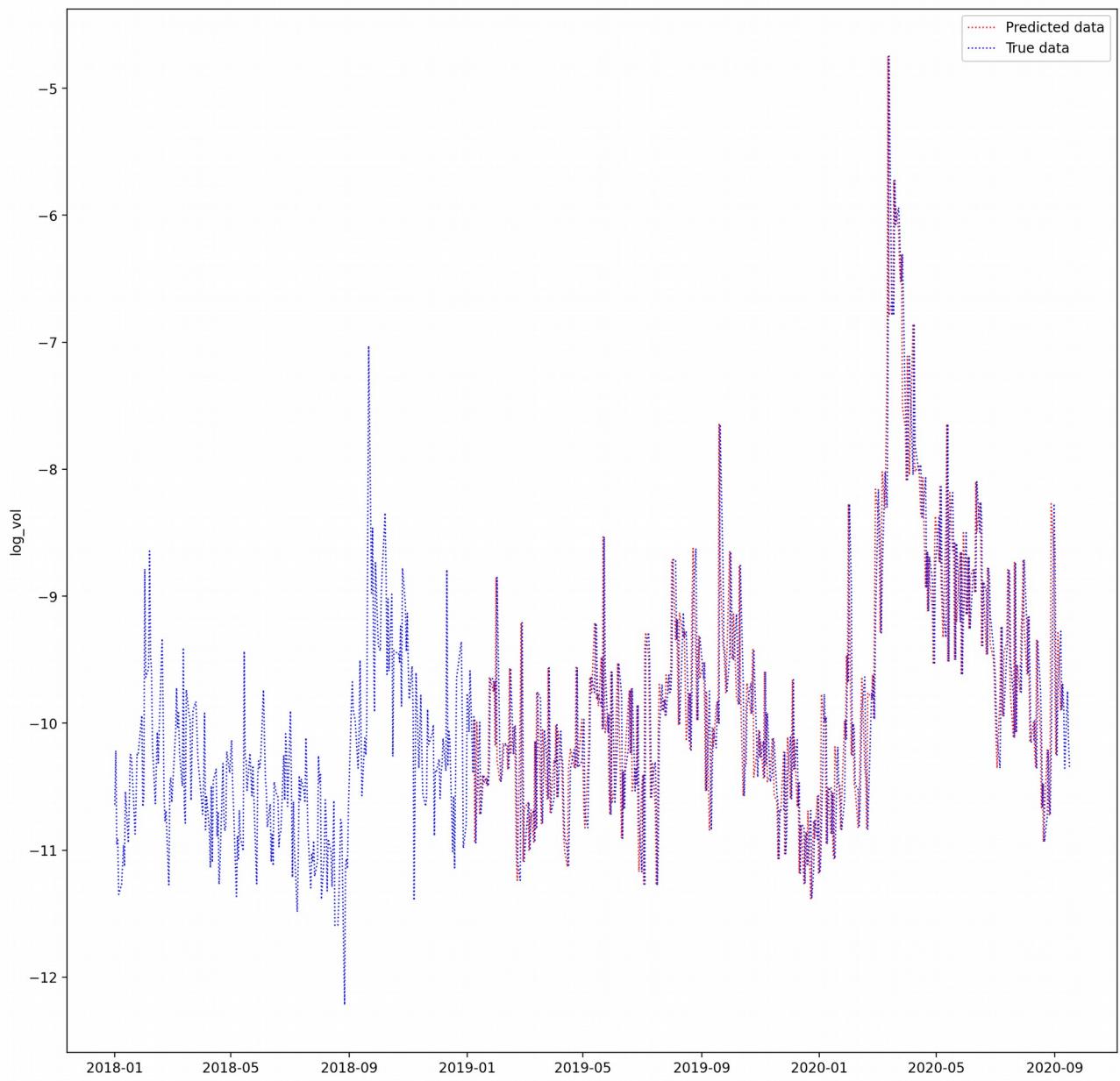


Figure 4: BSESN

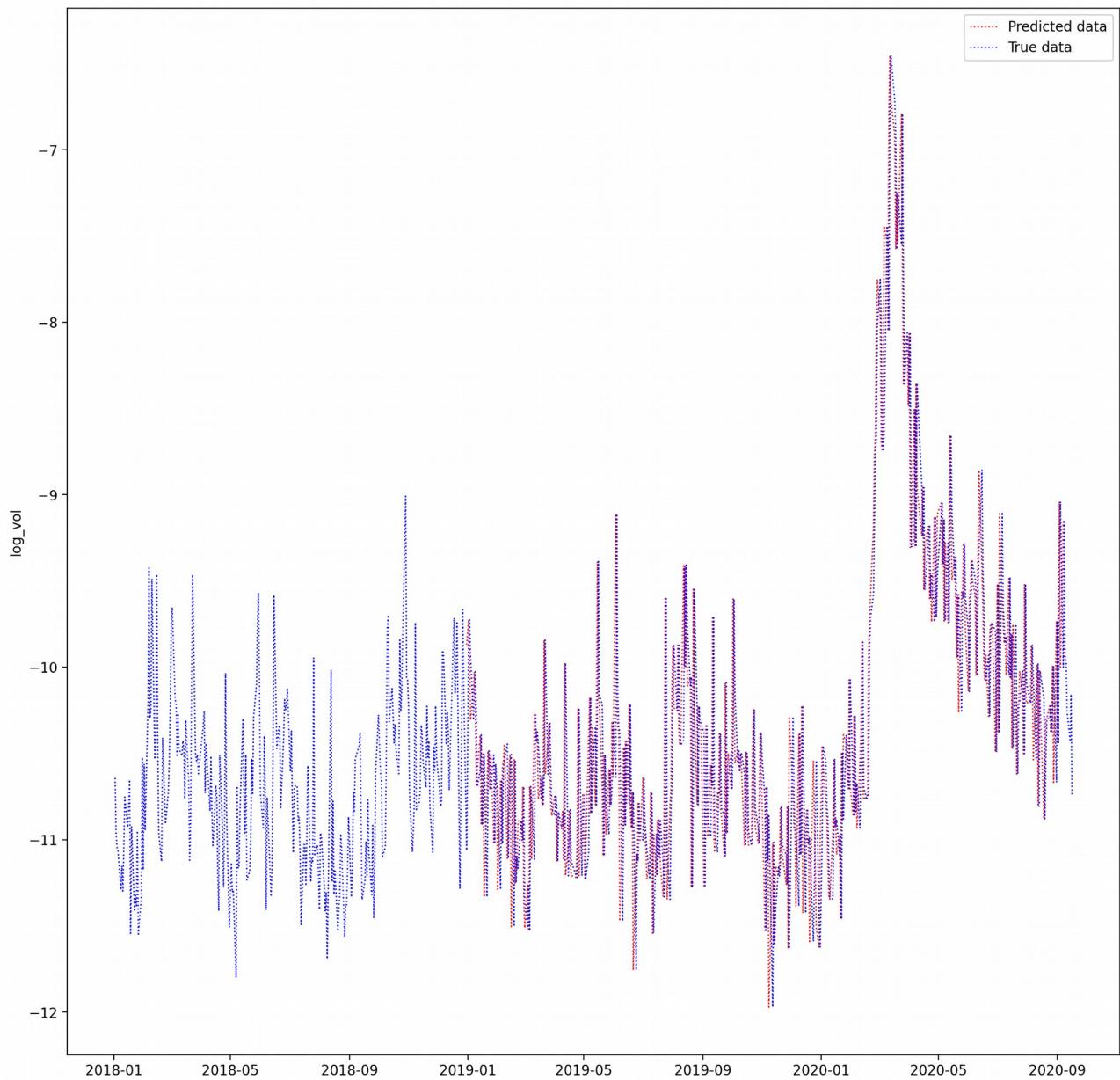


Figure 5: BVLG

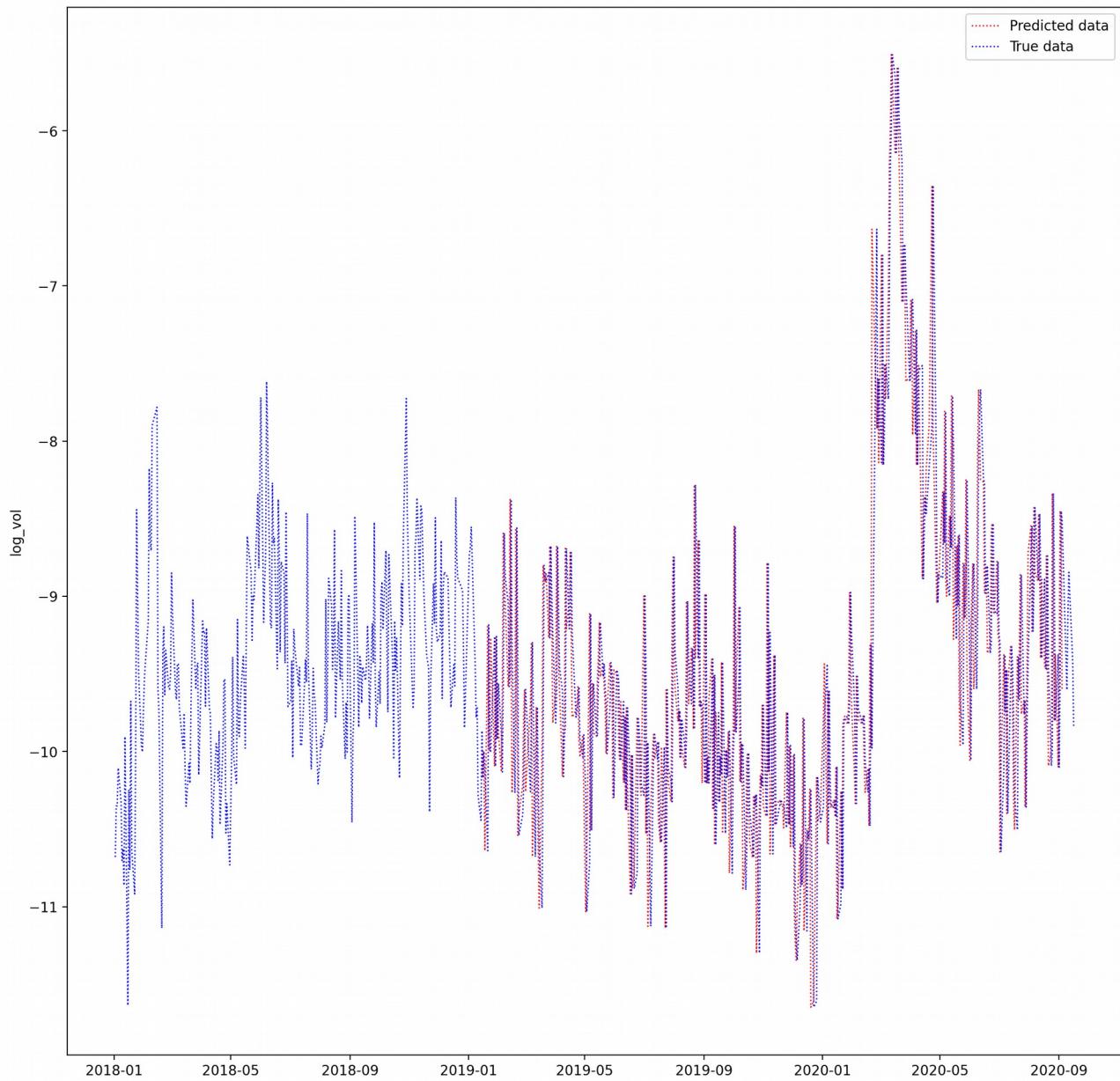
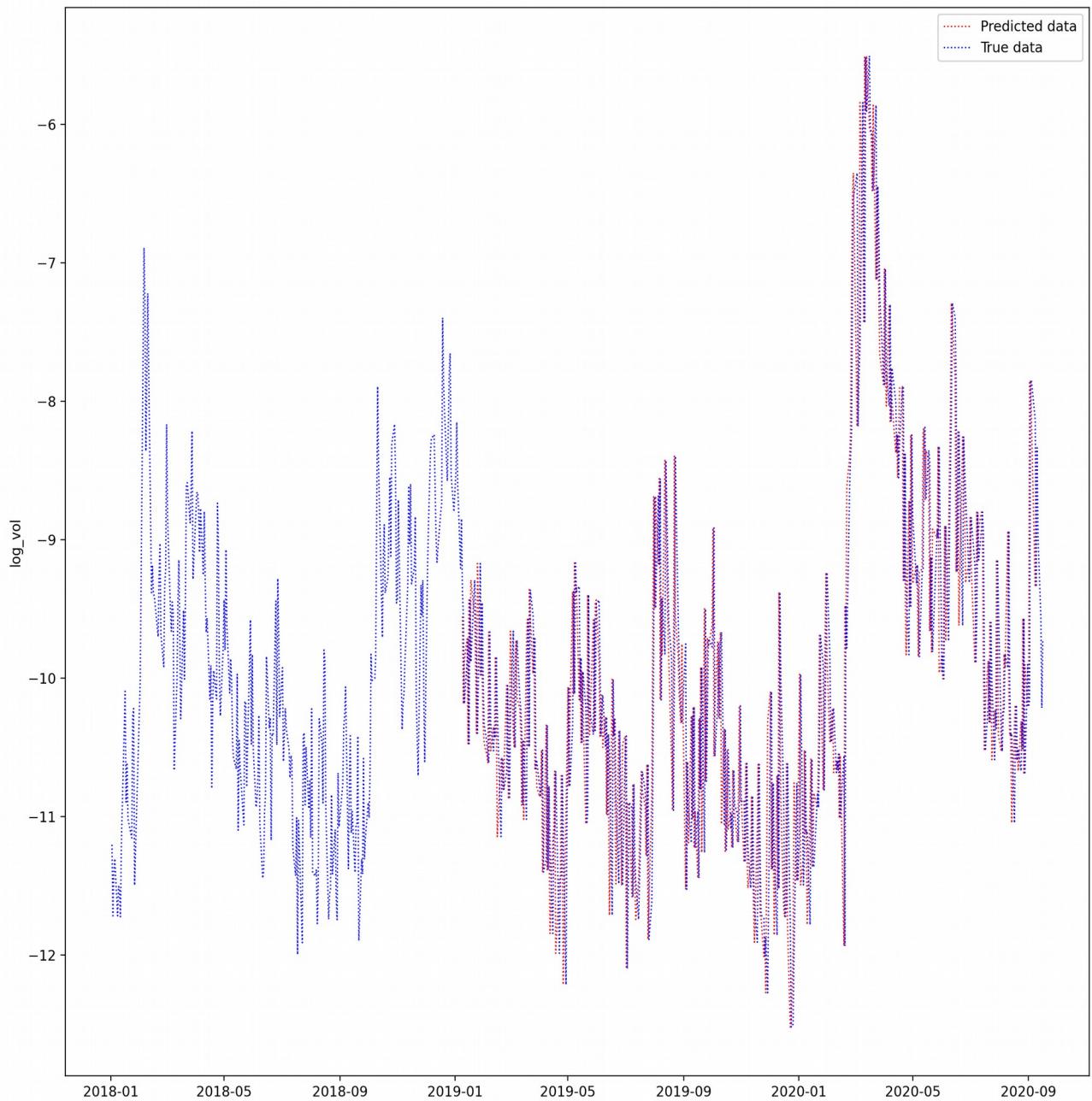


Figure 6: BVSP



*Figure 7: DJI*

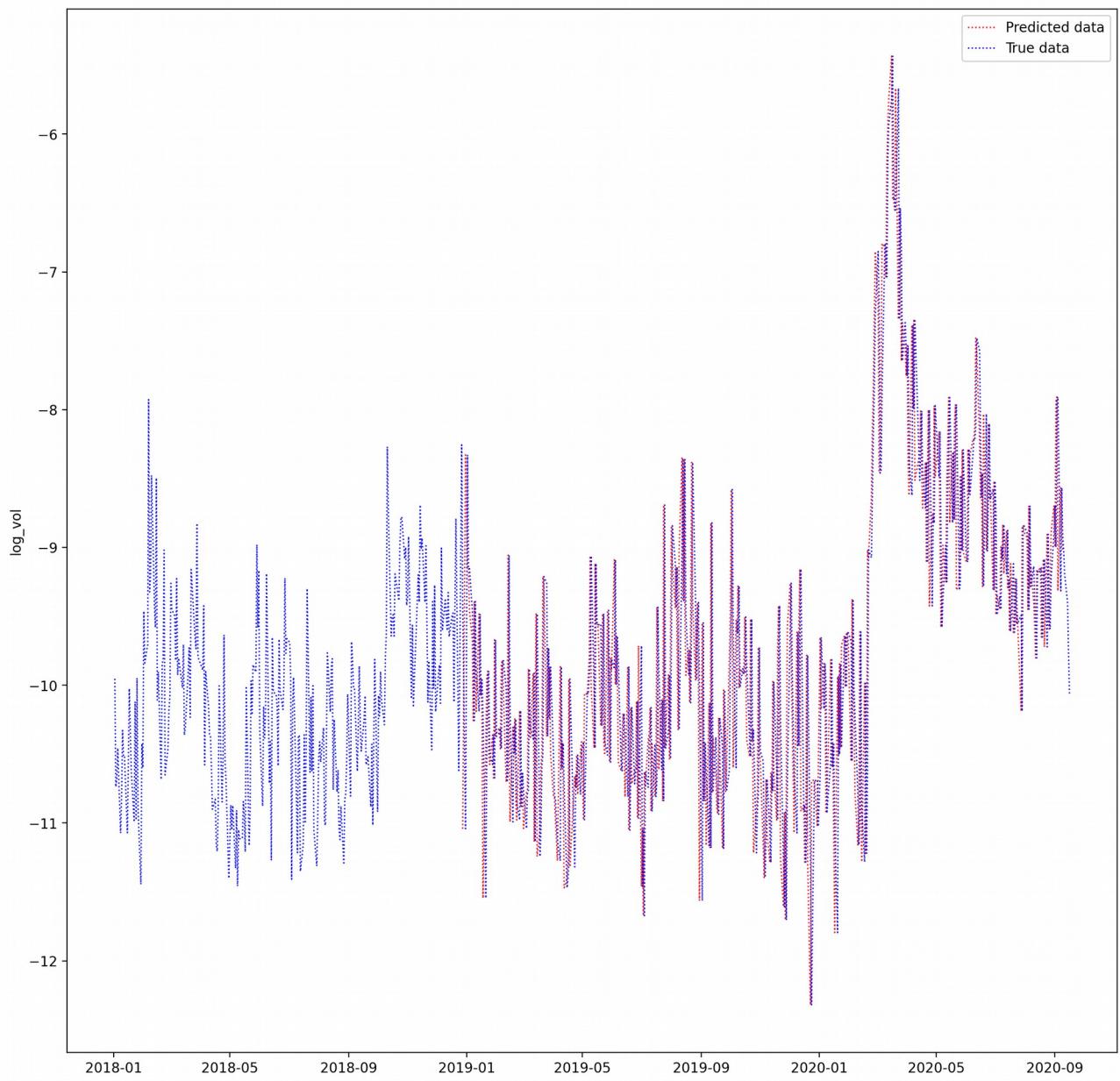


Figure 8: FCHI

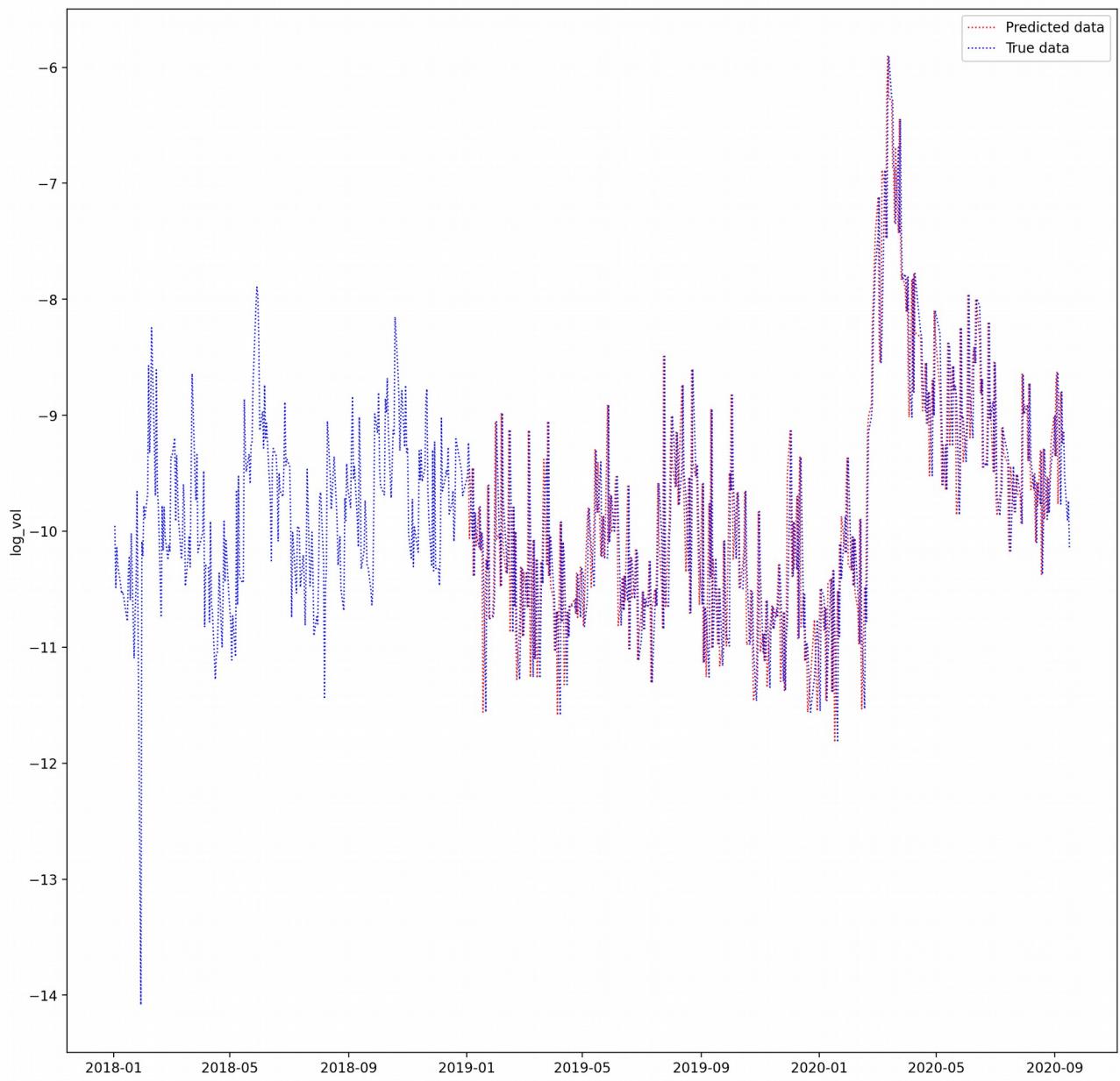
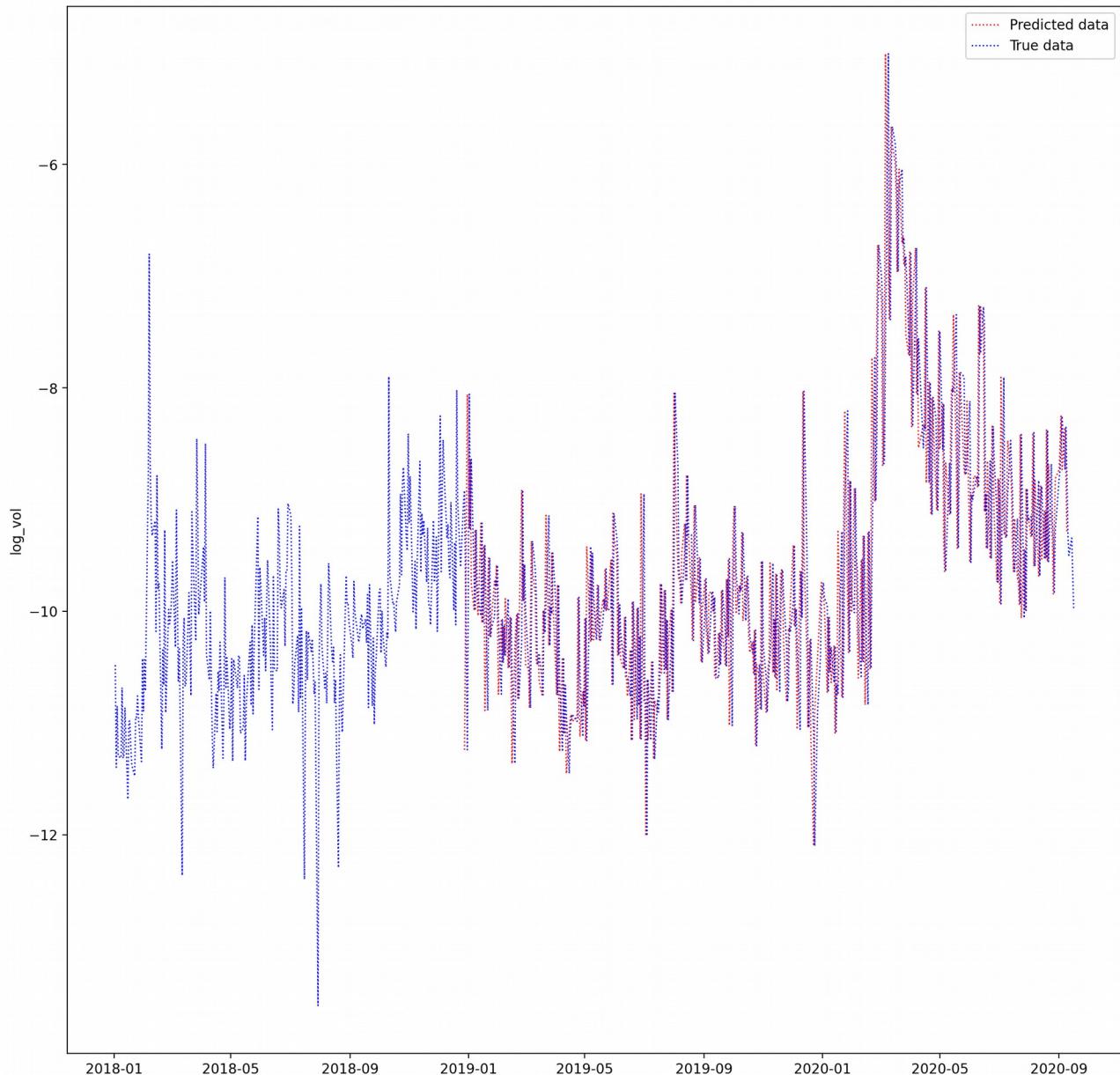


Figure 9: FTMIB



*Figure 10: FTSE*

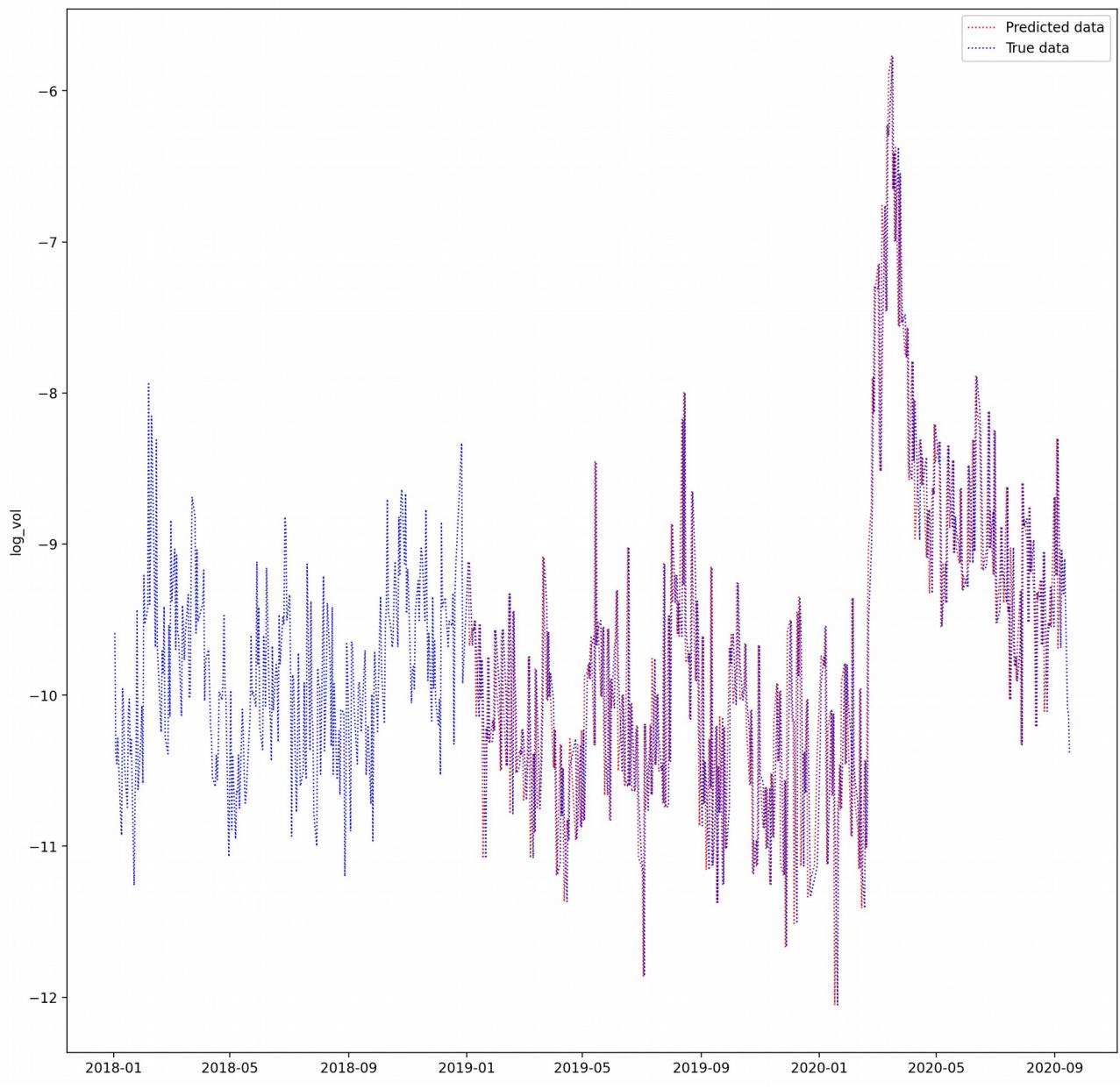


Figure 11: GDAXI

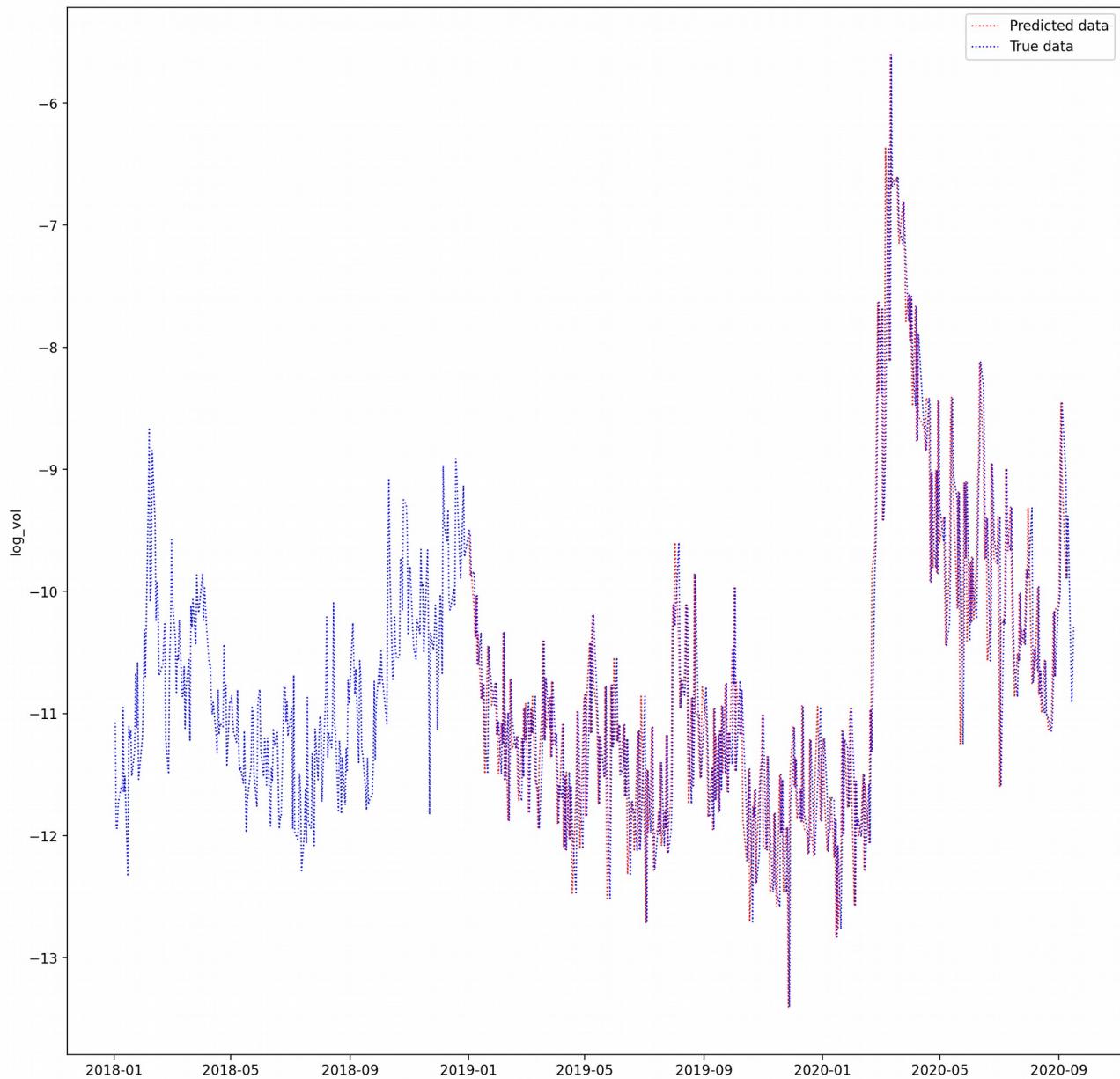


Figure 12: GSPTSE

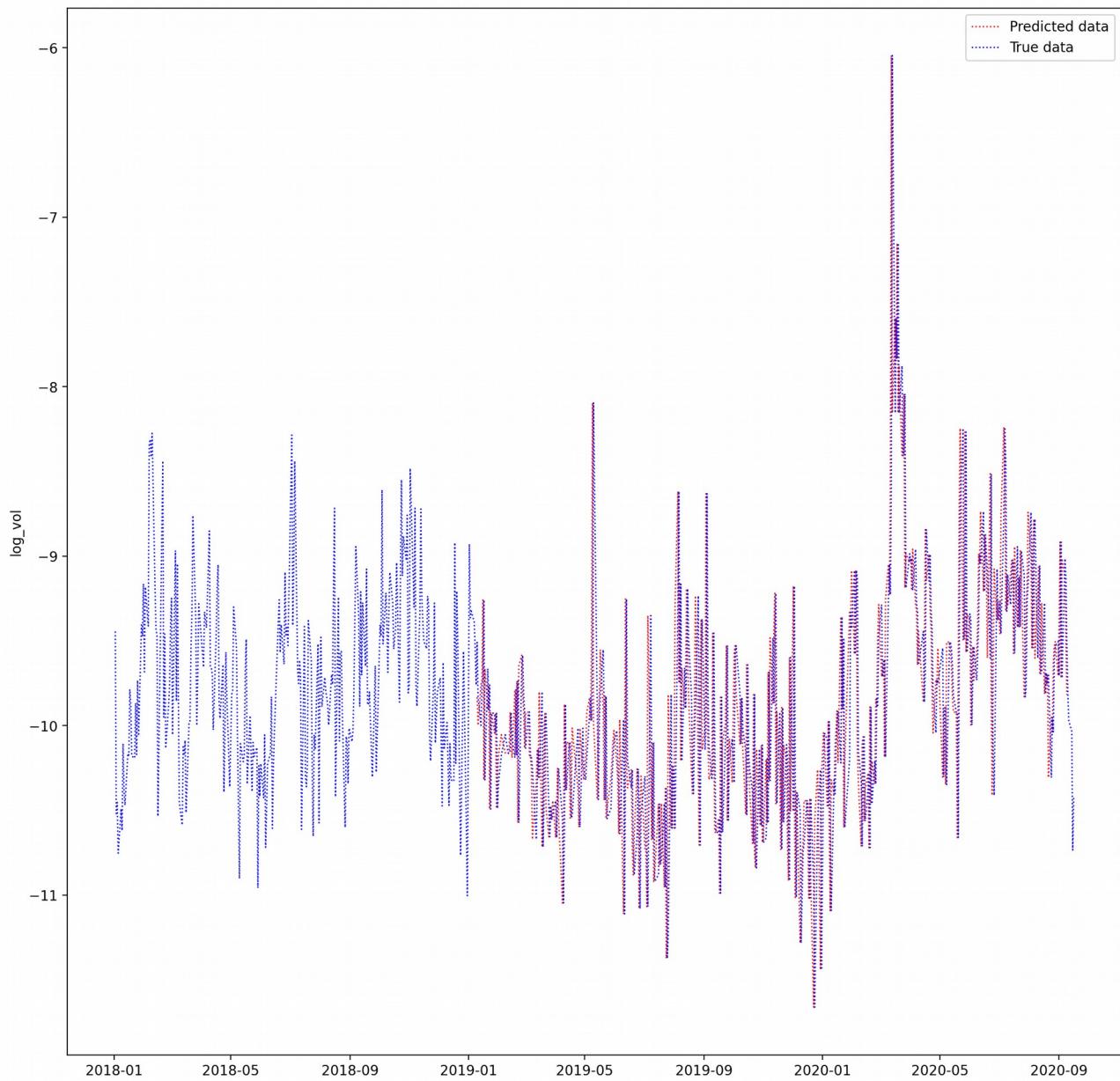


Figure 13: HSI

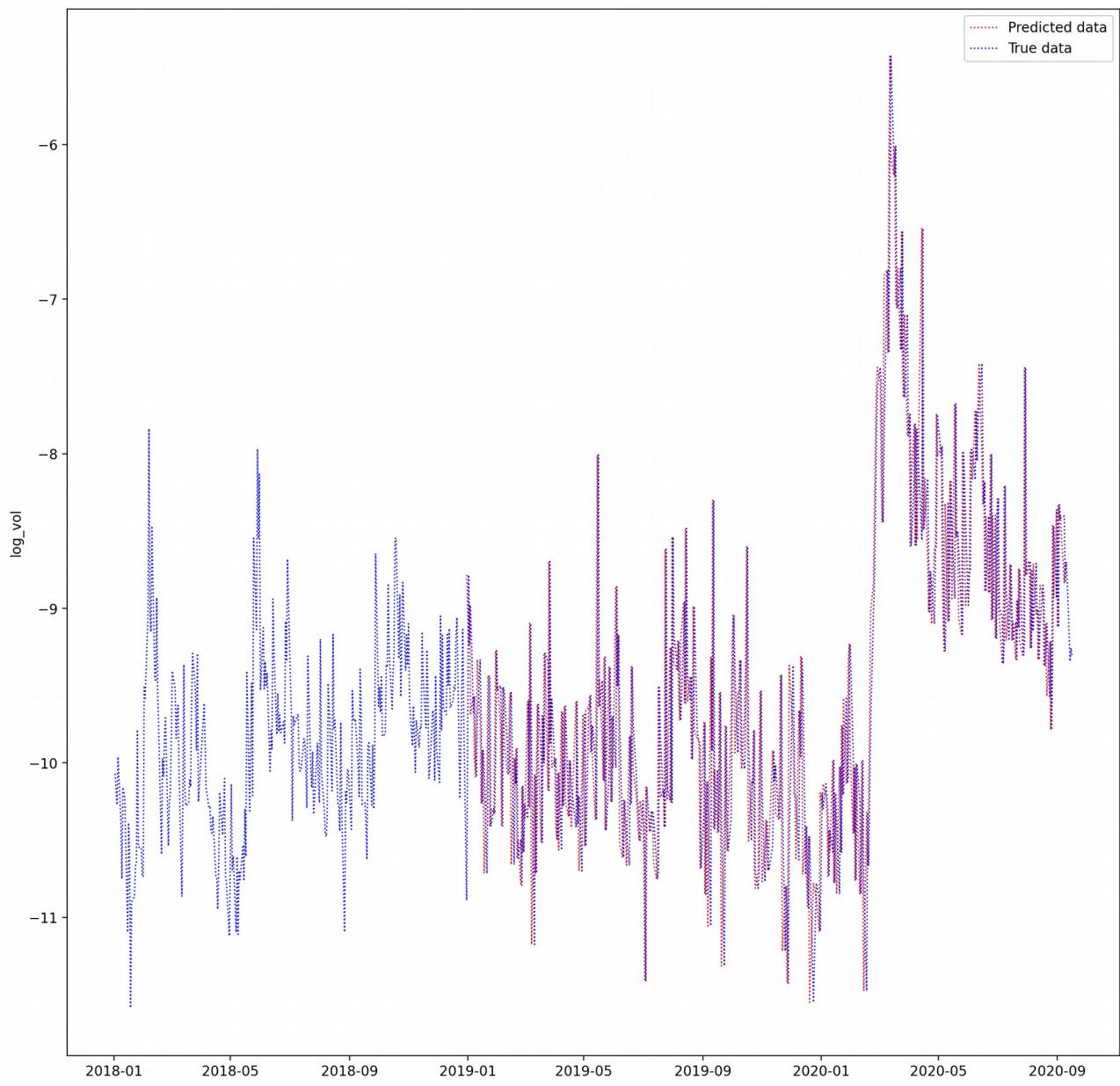


Figure 14: IBEX

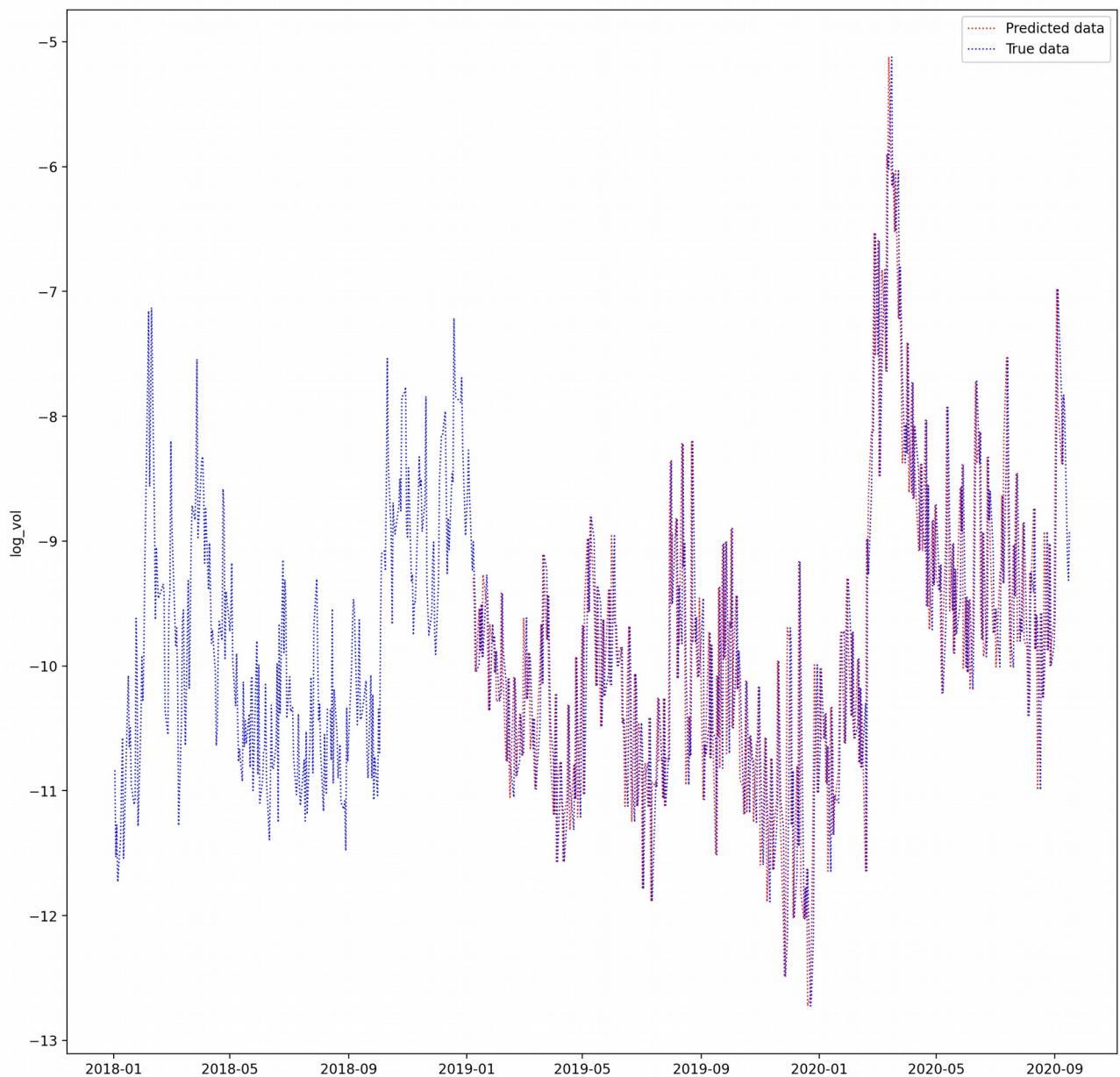


Figure 15: IXIC

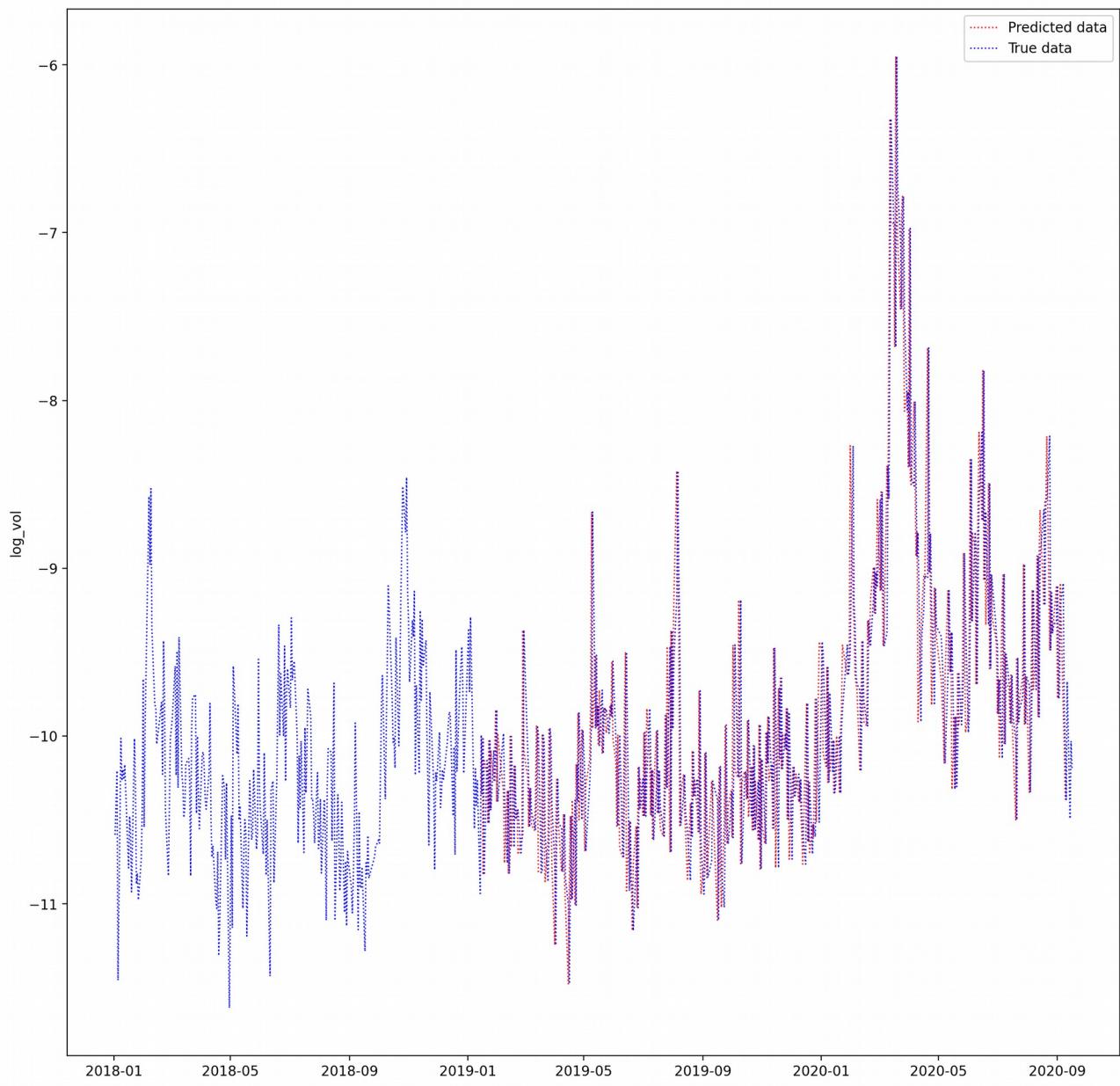


Figure 16: KS11

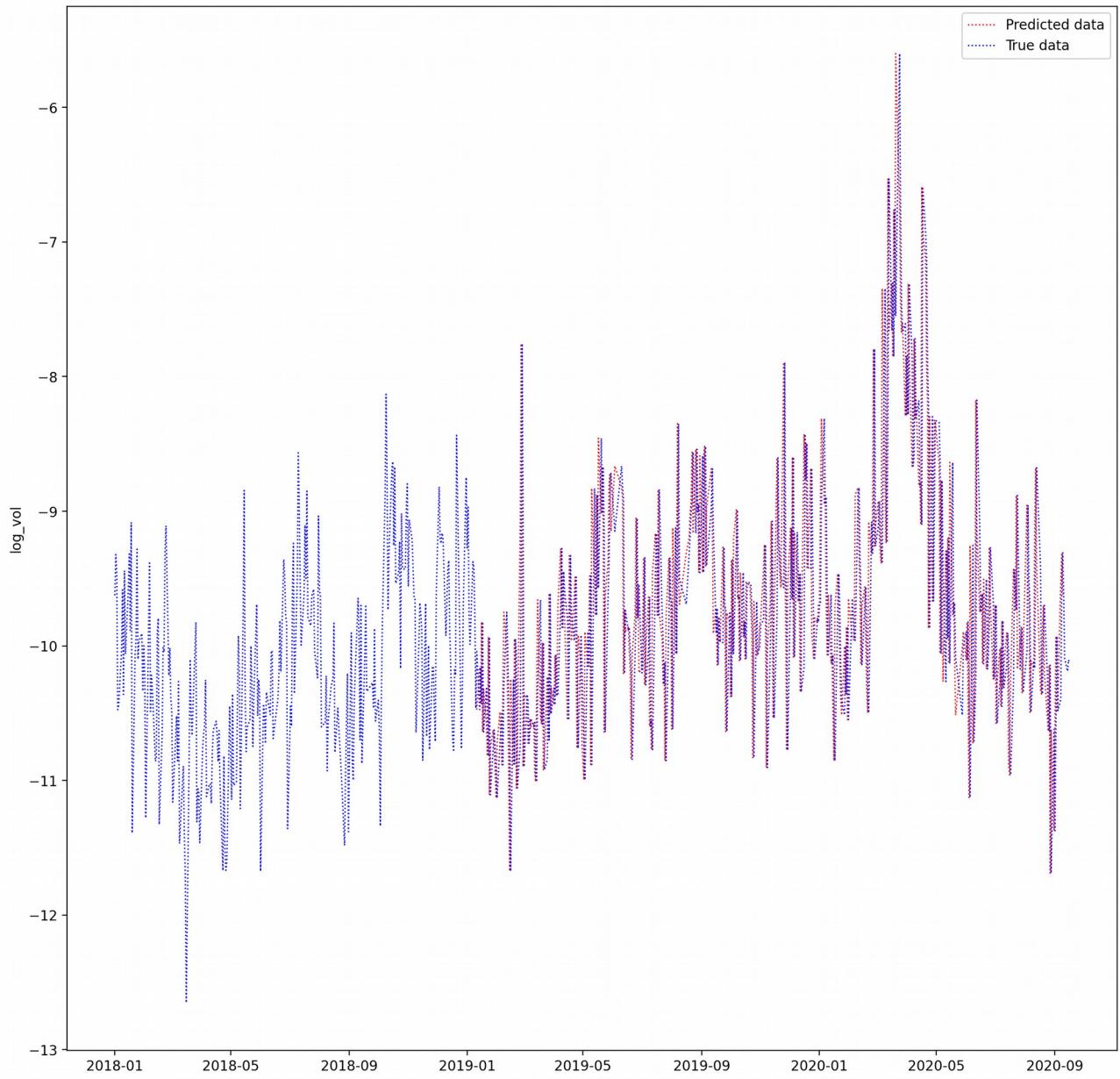


Figure 17: KSE

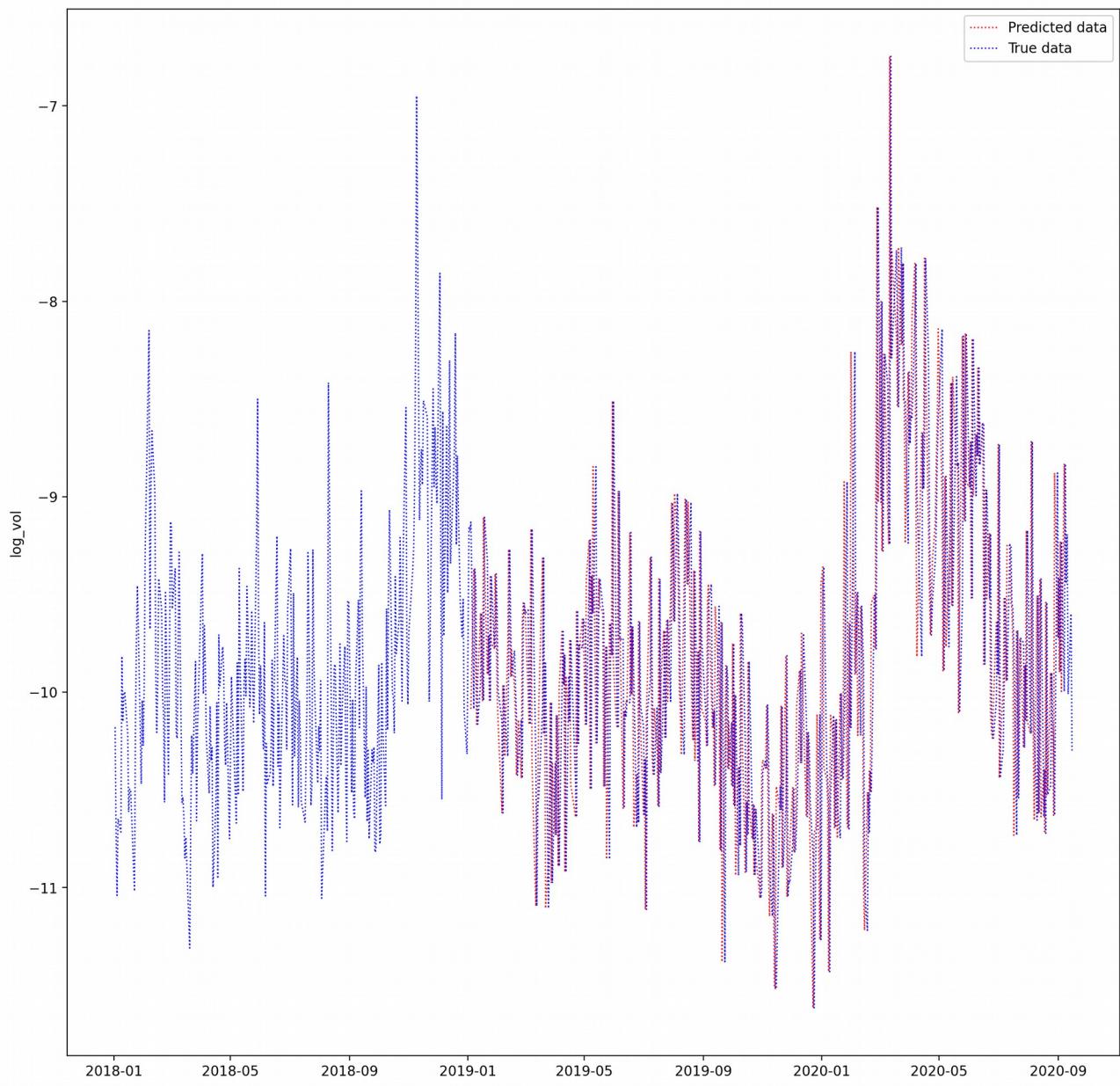


Figure 18: MXX

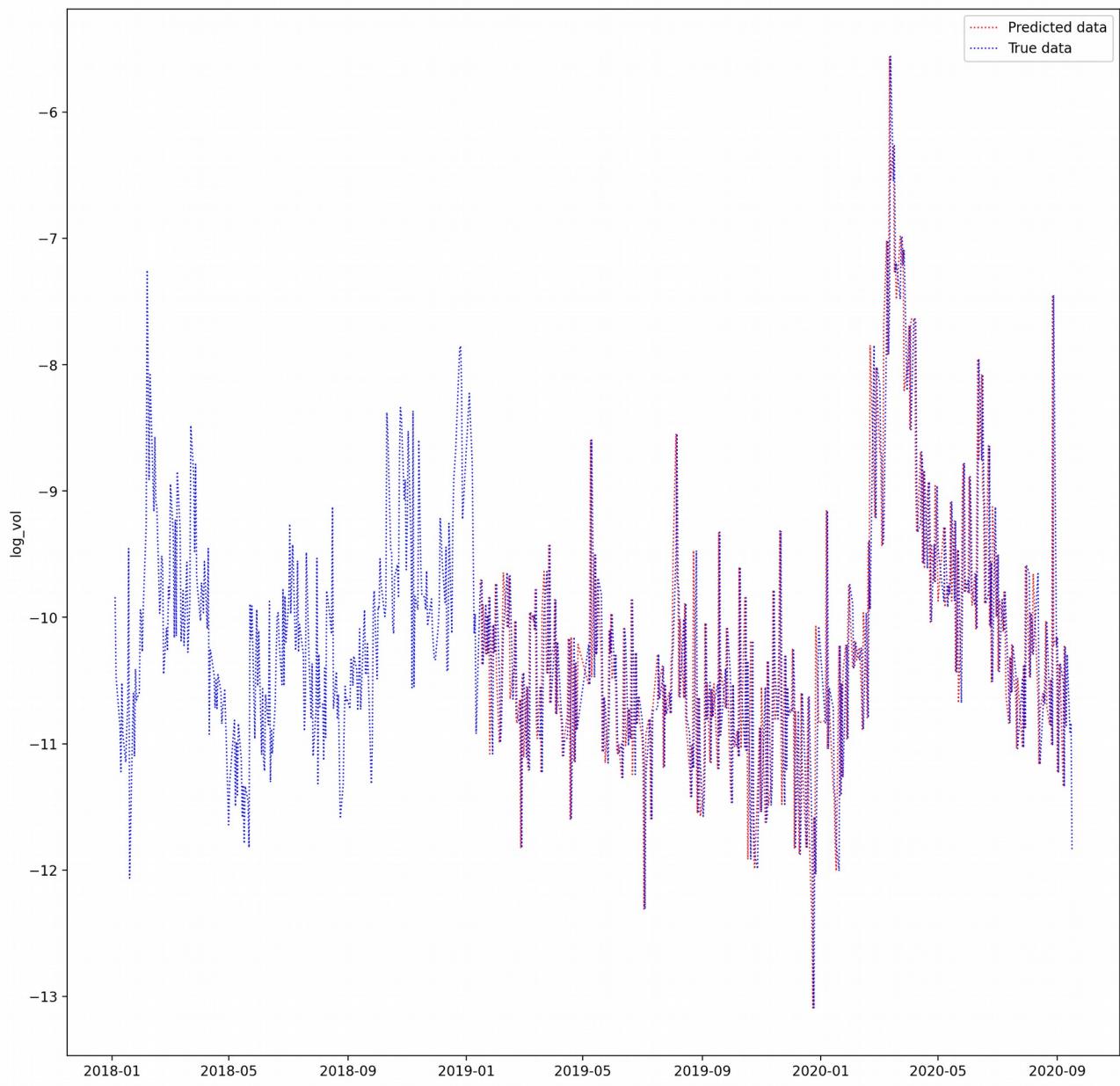


Figure 19: N225

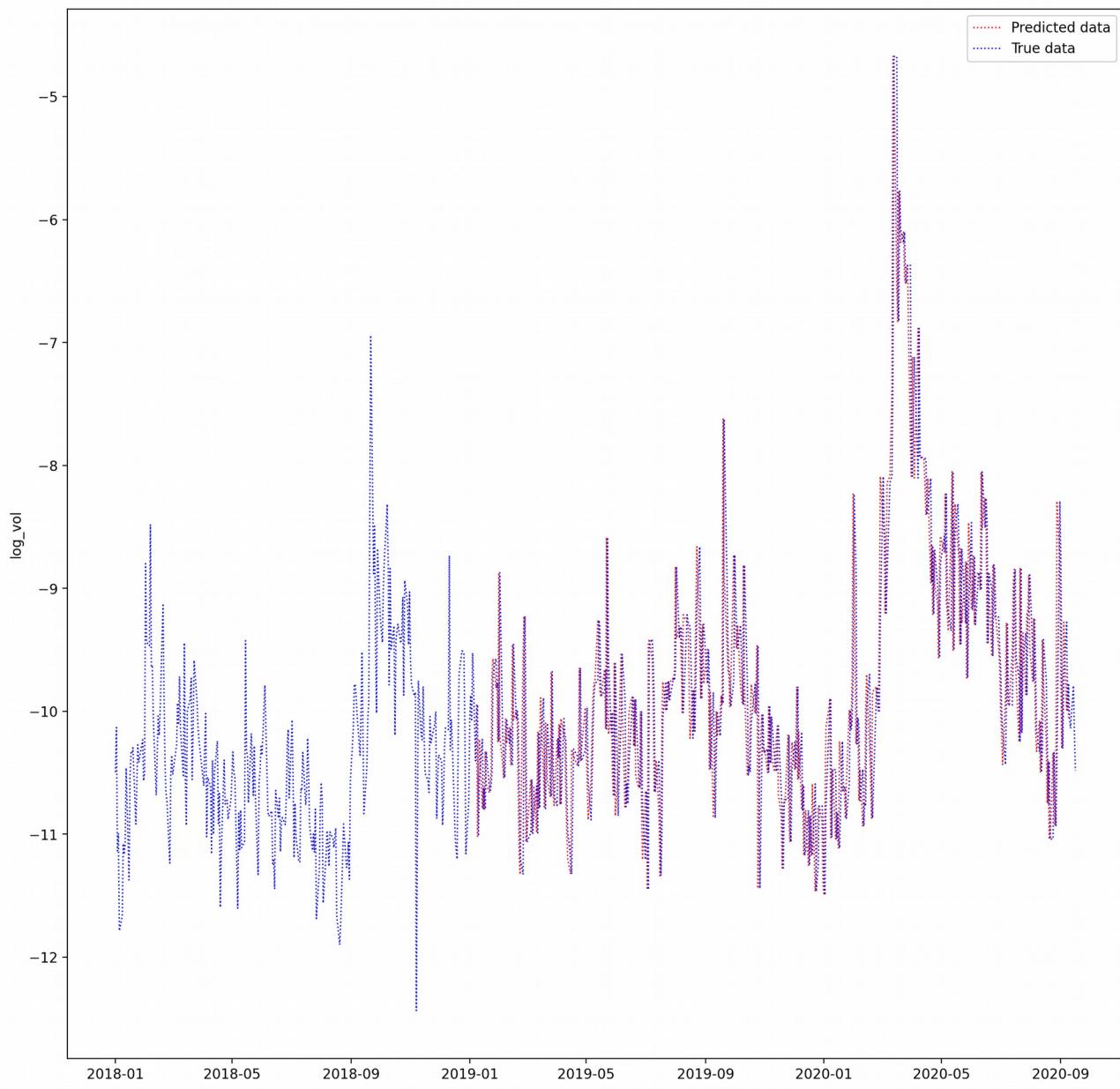


Figure 20: NSEI

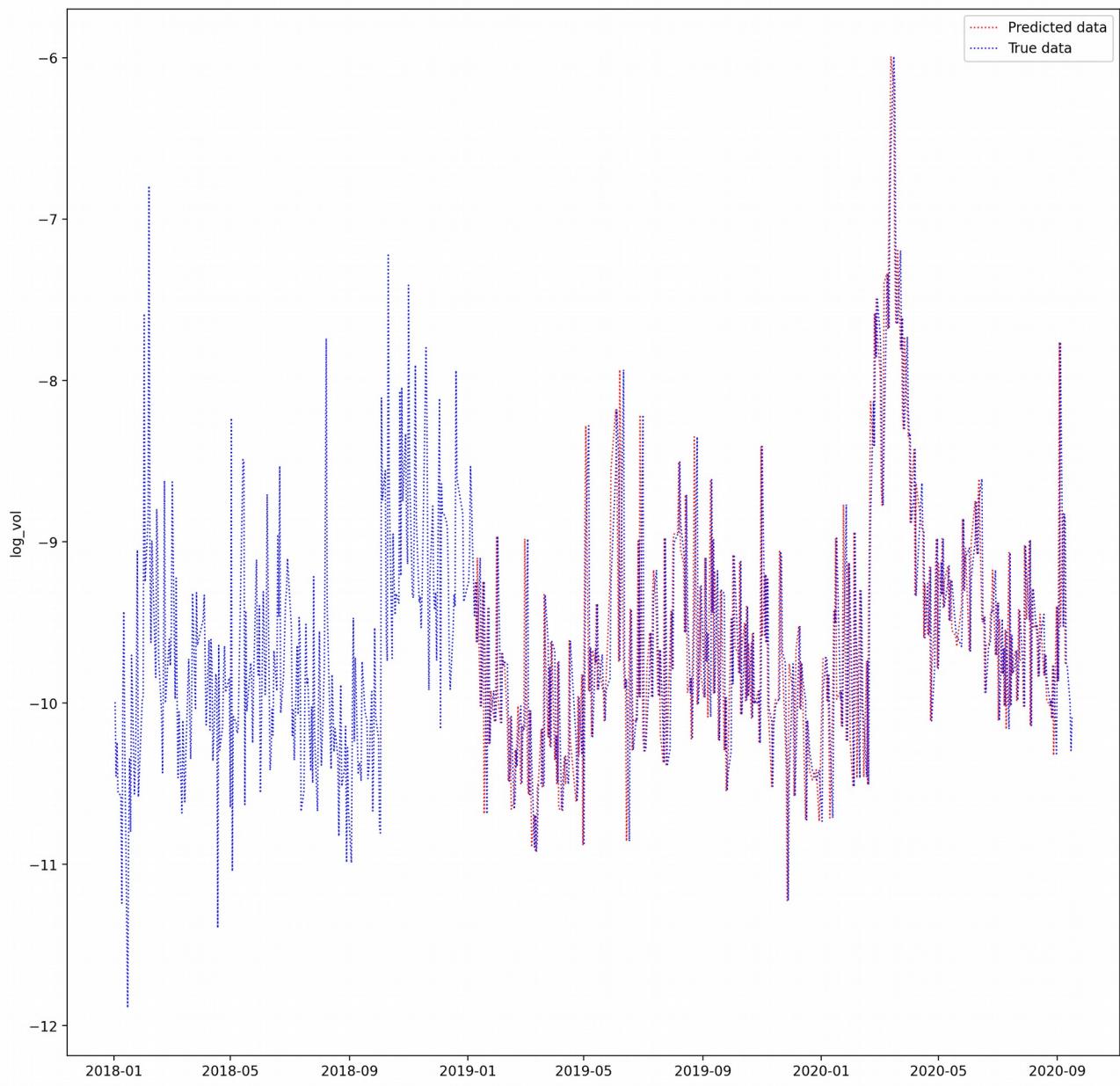


Figure 21: OM XC20

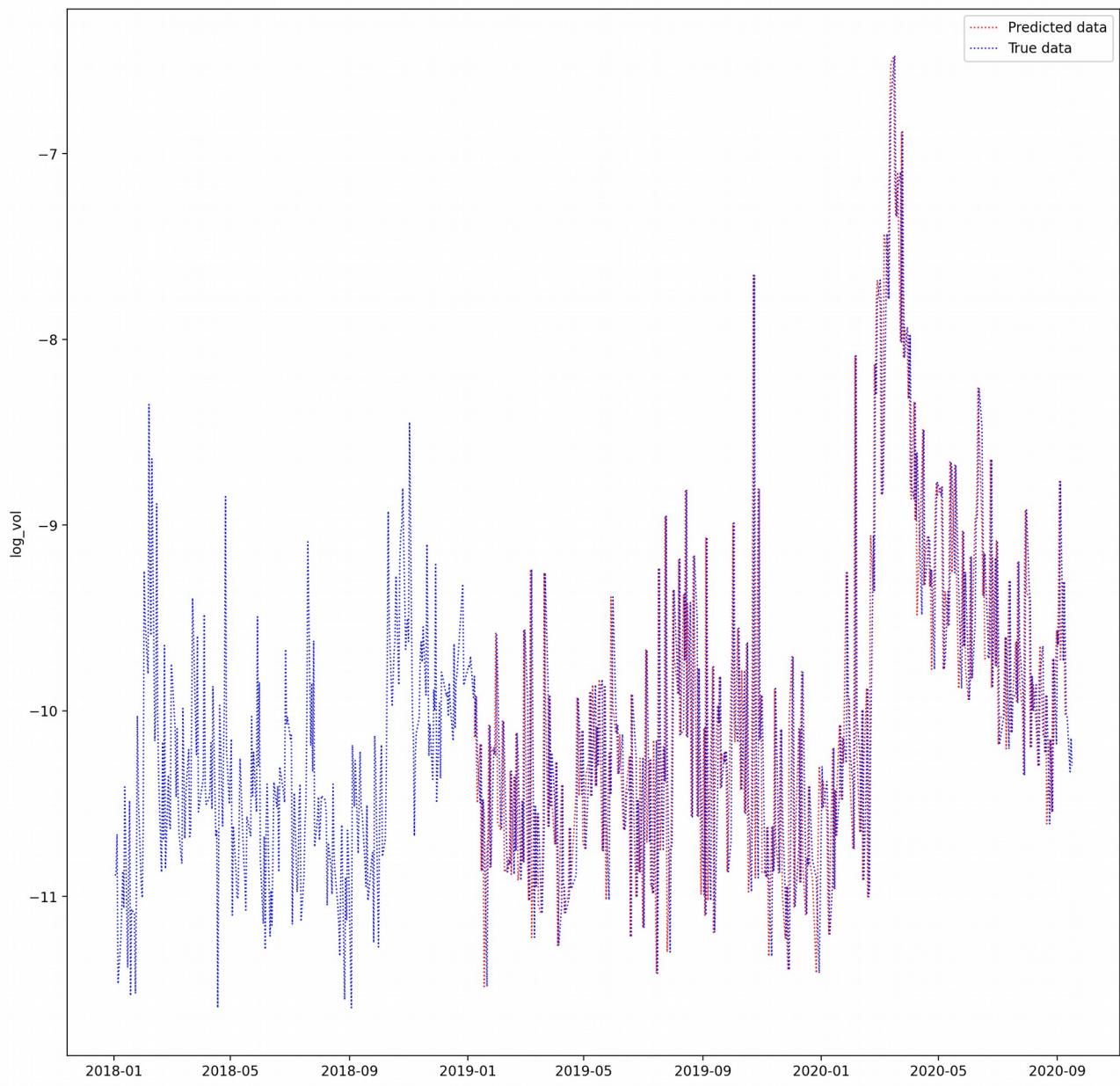


Figure 22: OMXHPI

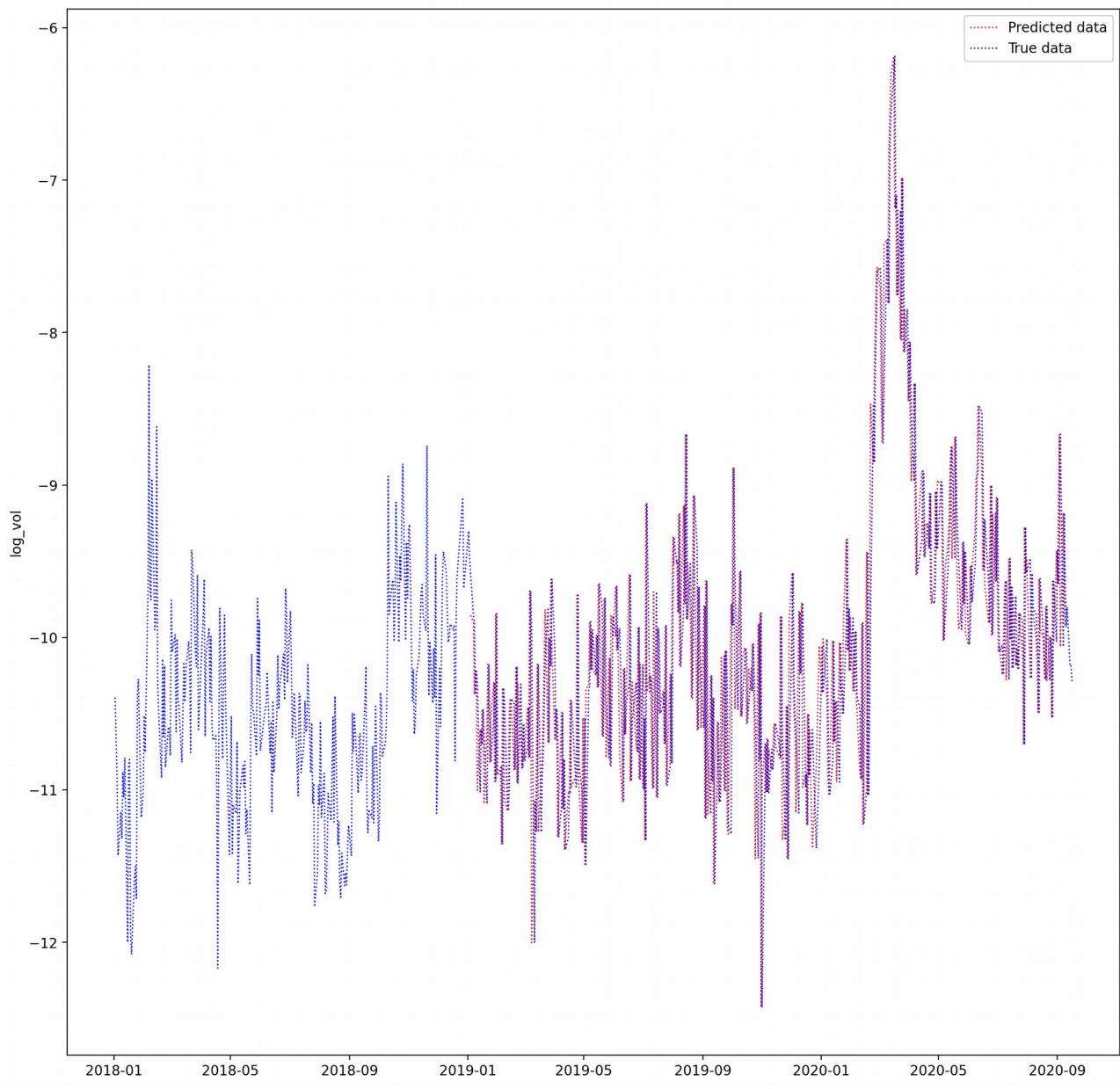


Figure 23: OMXSPI

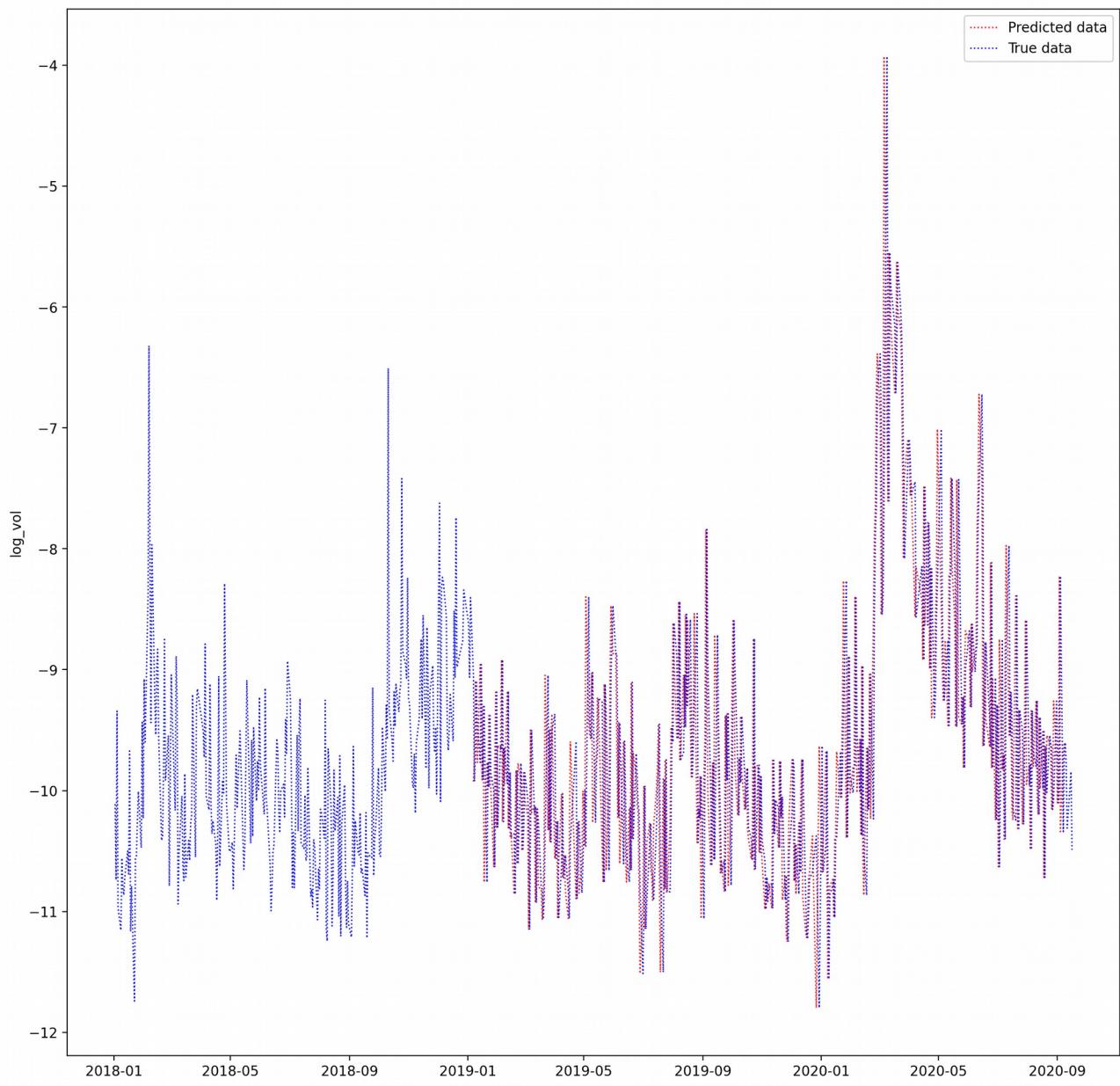


Figure 24: OSEAX

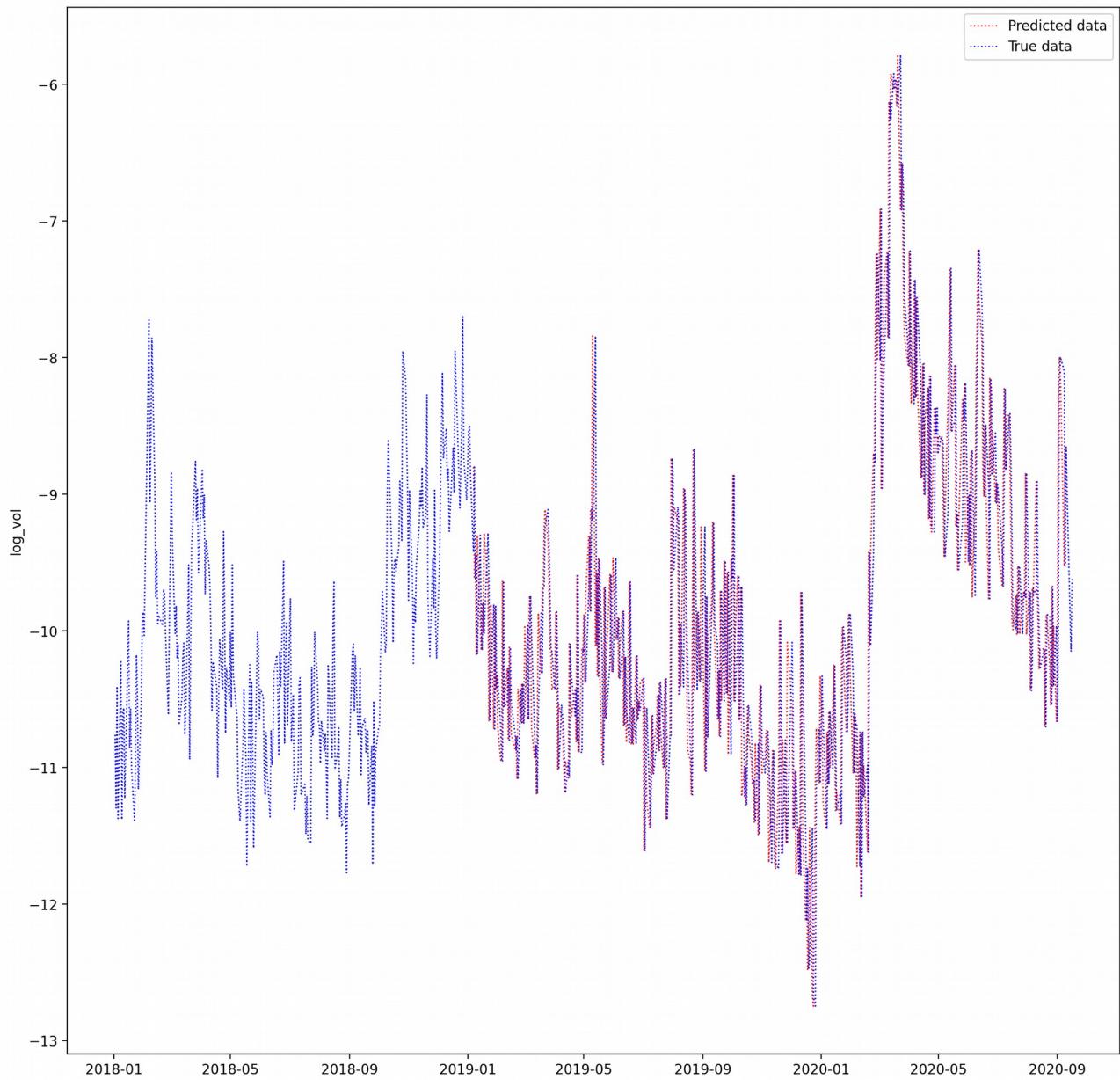


Figure 25: RUT

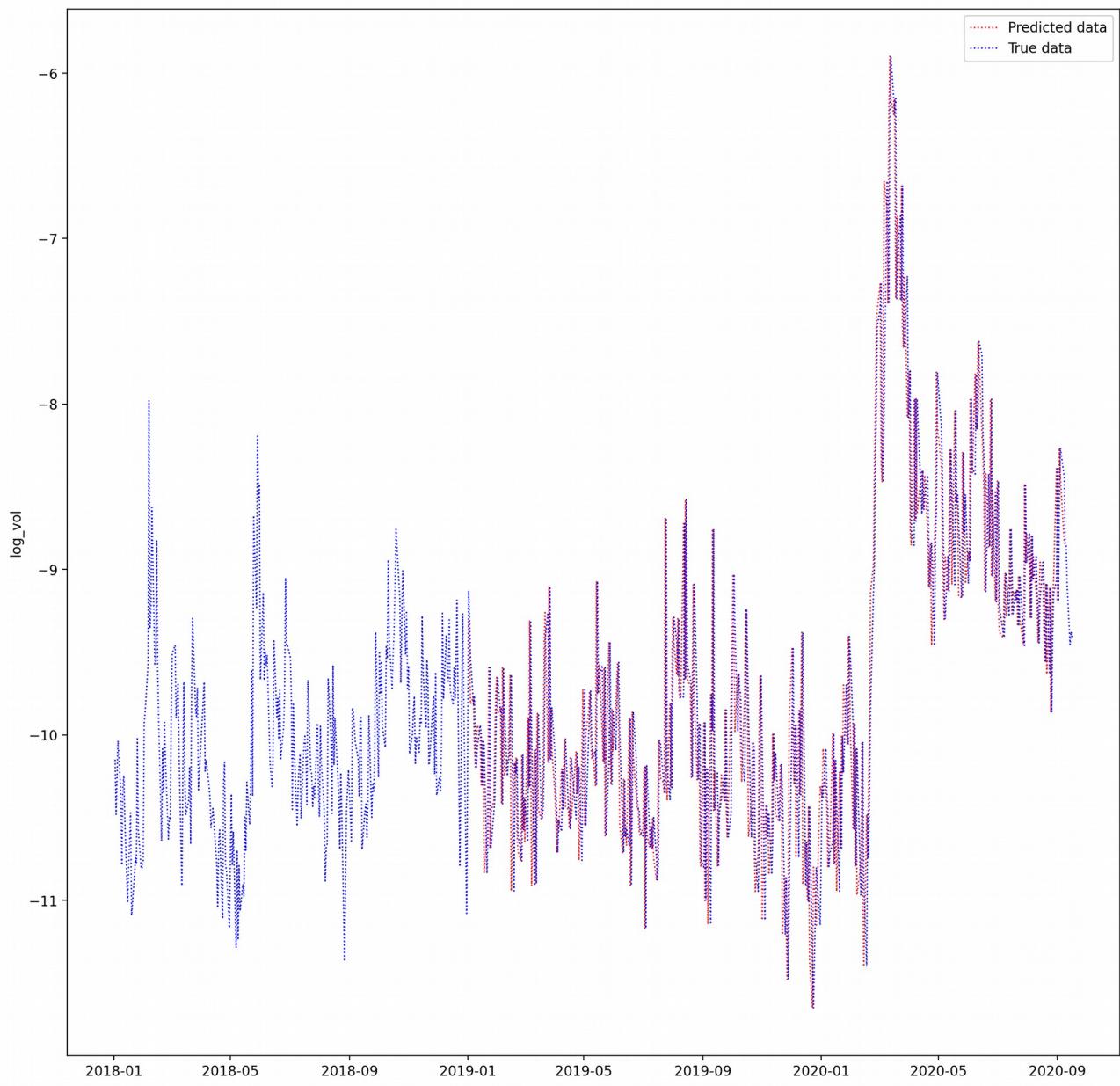


Figure 26: SMSI

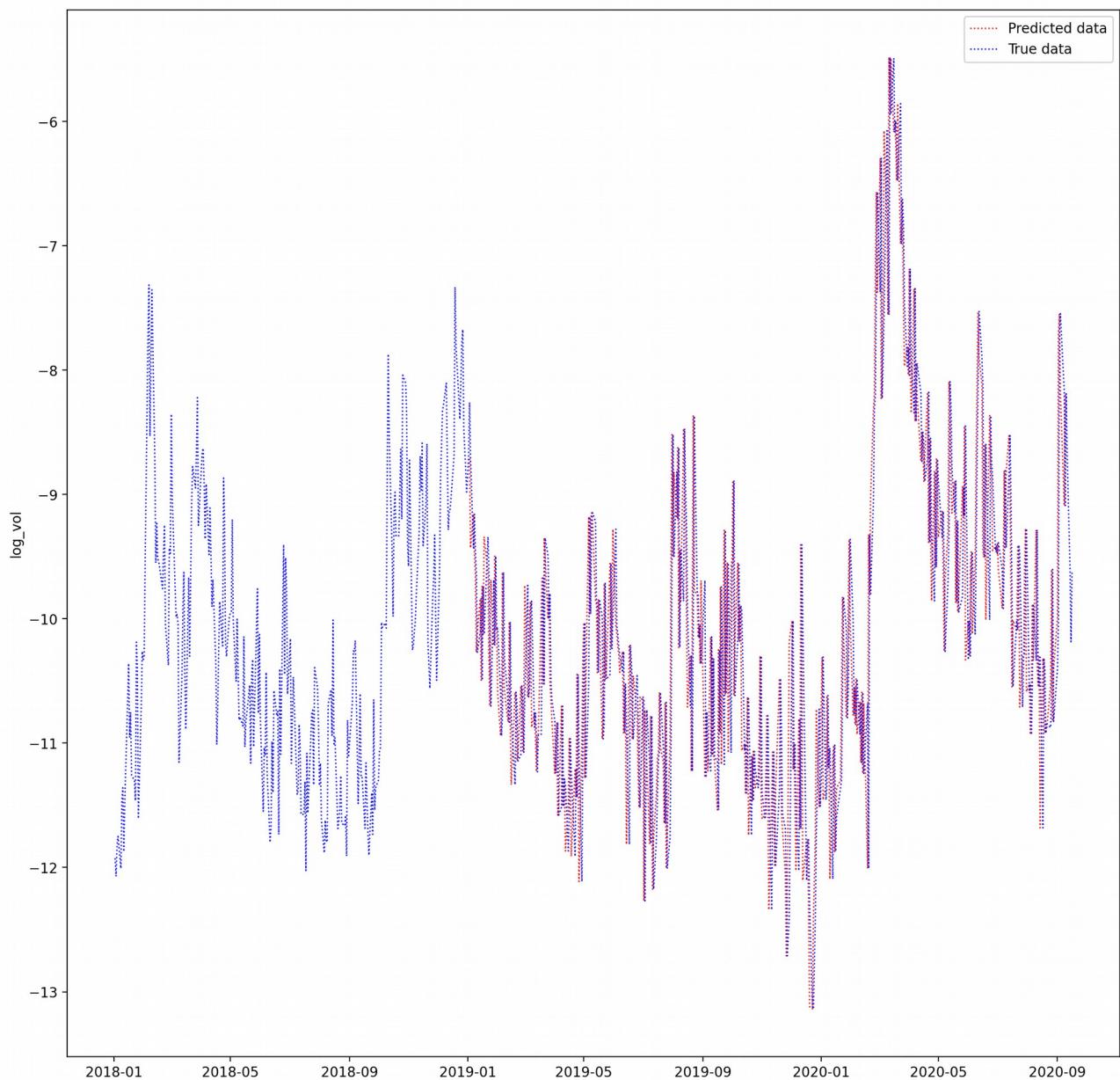


Figure 27: SPX

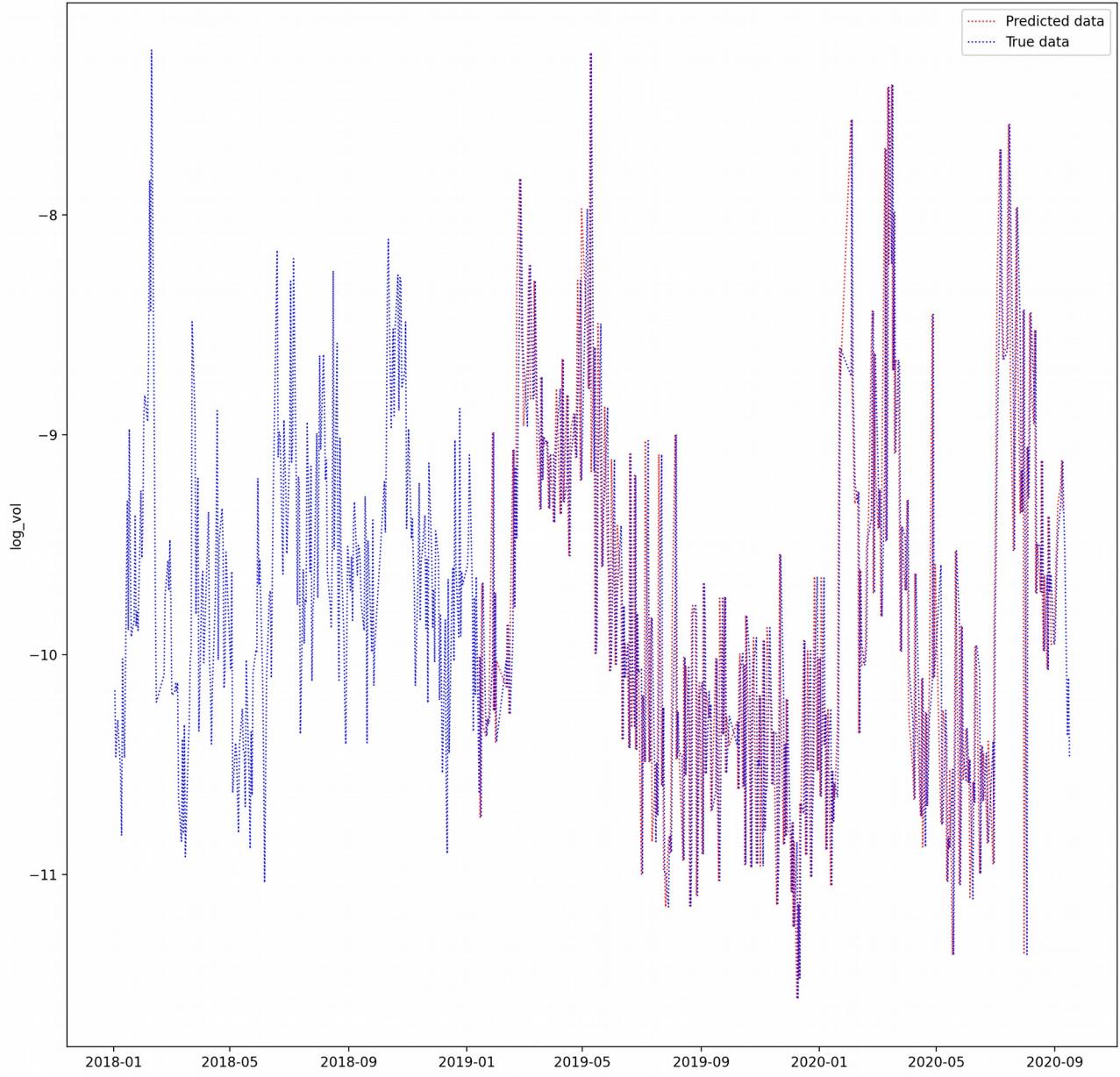


Figure 28: SSEC

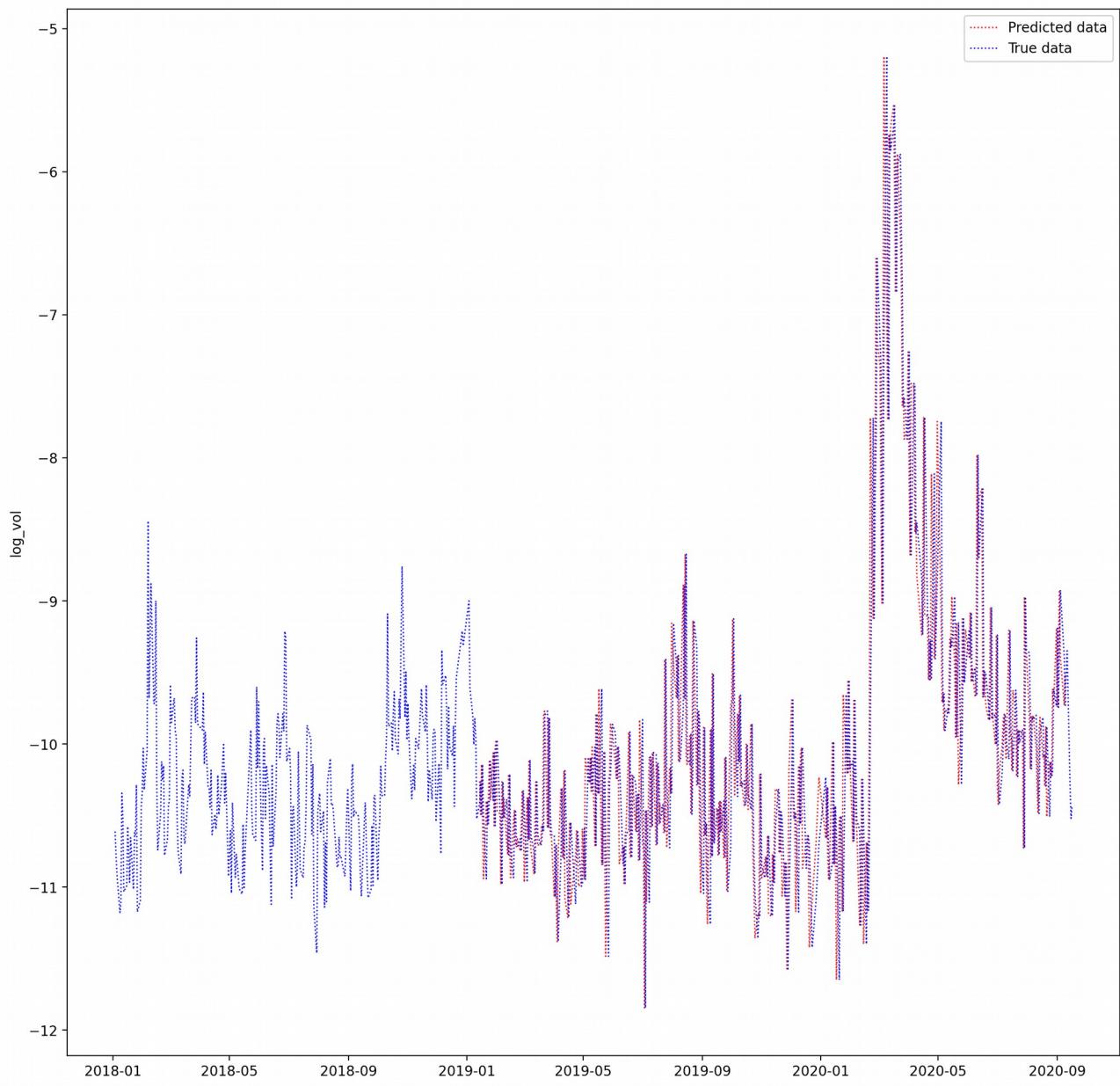


Figure 29: SSMI

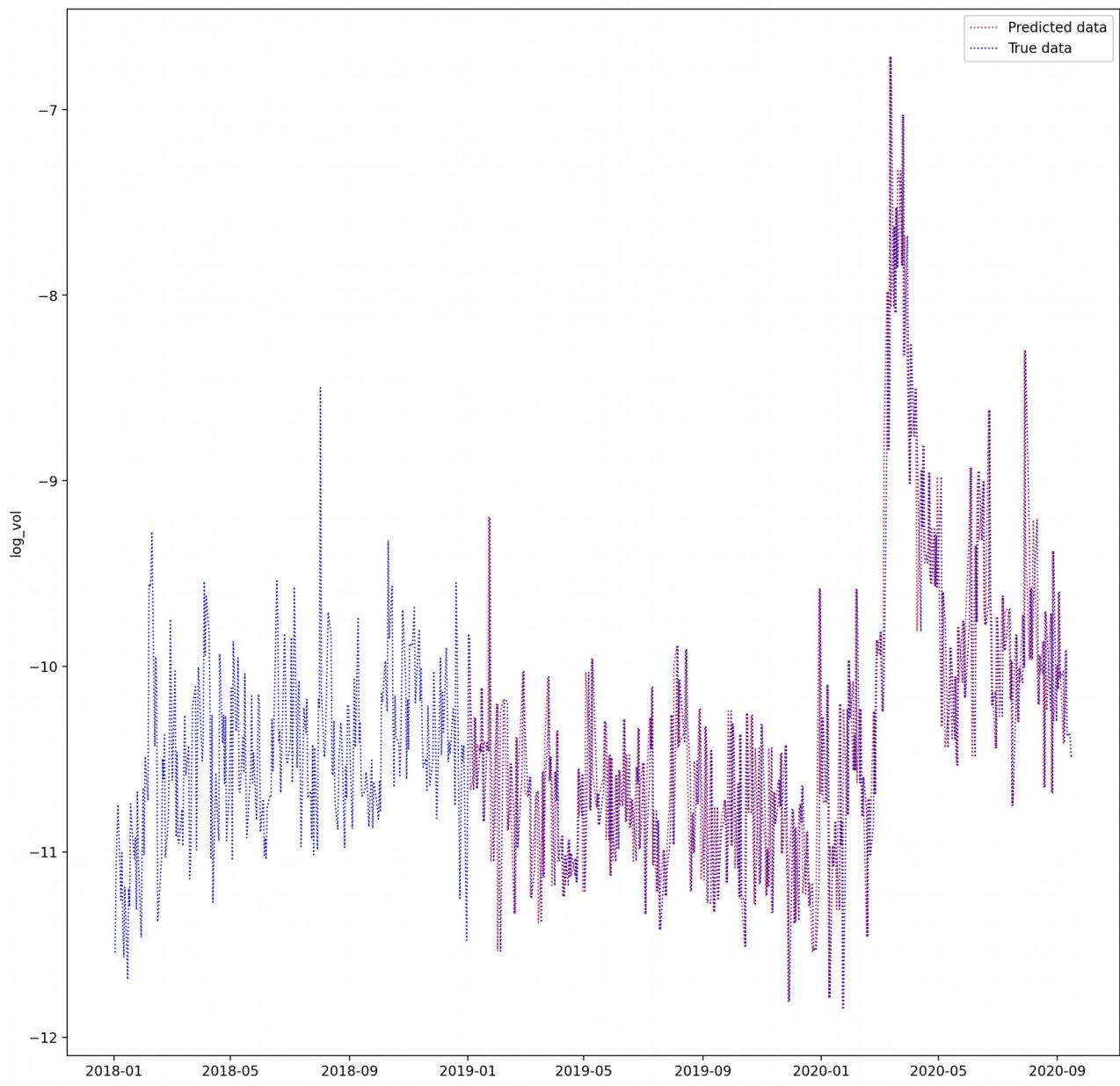


Figure 30: STI

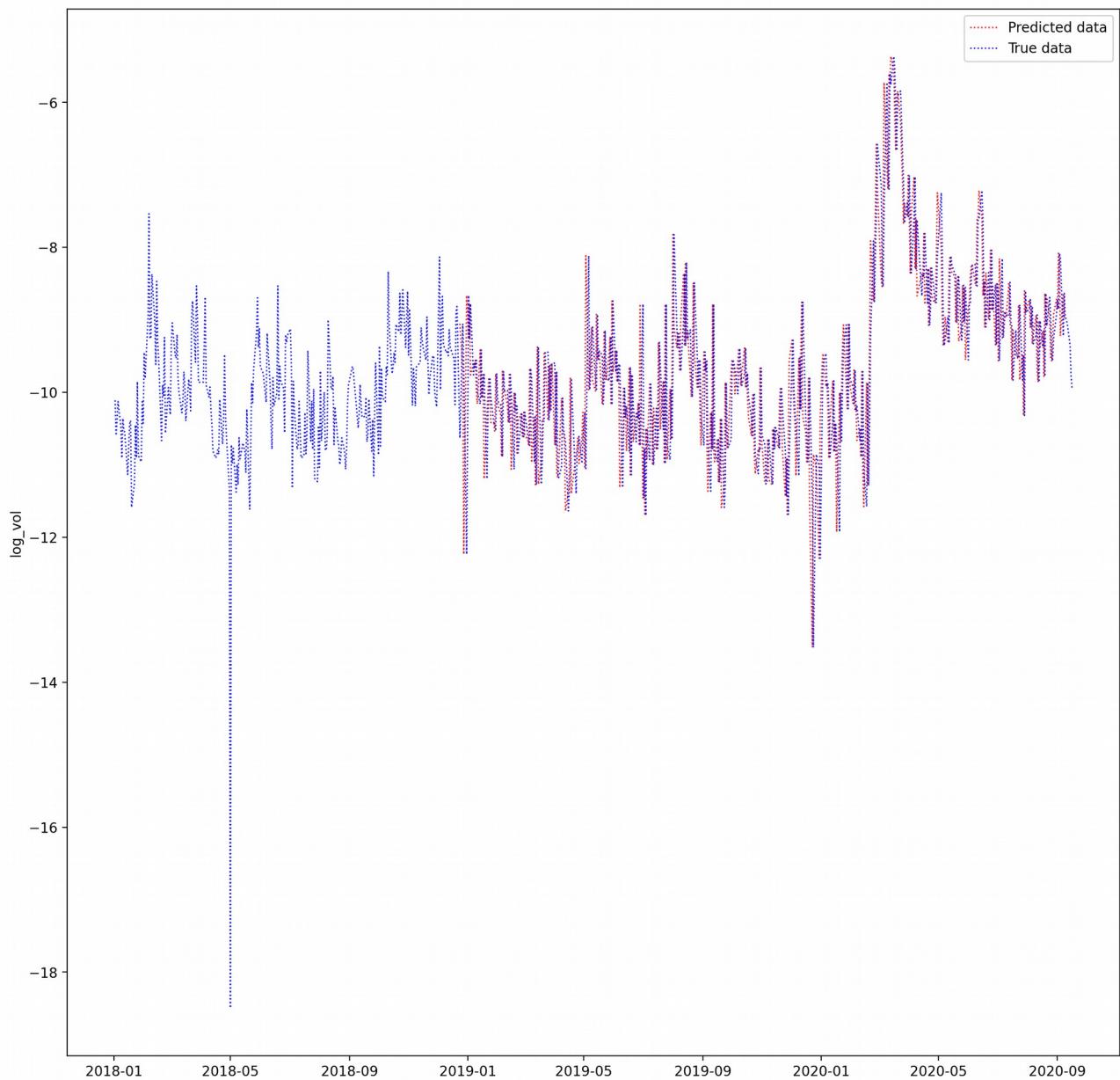


Figure 31: STOXX50E