

# TF test report 2.9

Test time: 27.06.2023

Model name: adm\_2\_9 (No threshold. follows anomalies. value limits 1/0 applied. Normalization applied.)

Model type: MLP

Model description: 85x32x32x32x8 MLP to detect anomalies on 4 panels based on the previous 20 points from 4 panels + 1 time point + derivatives of 4 panels.  
Tested on previously unseen data. Trained to detect sensor spikes, const regions, temp shifts and bumps

Model data size: NA

## Test results:

Accuracy on NO anomalies (0): 0.9699

Accuracy on ANOMALIES (1): 0.8195

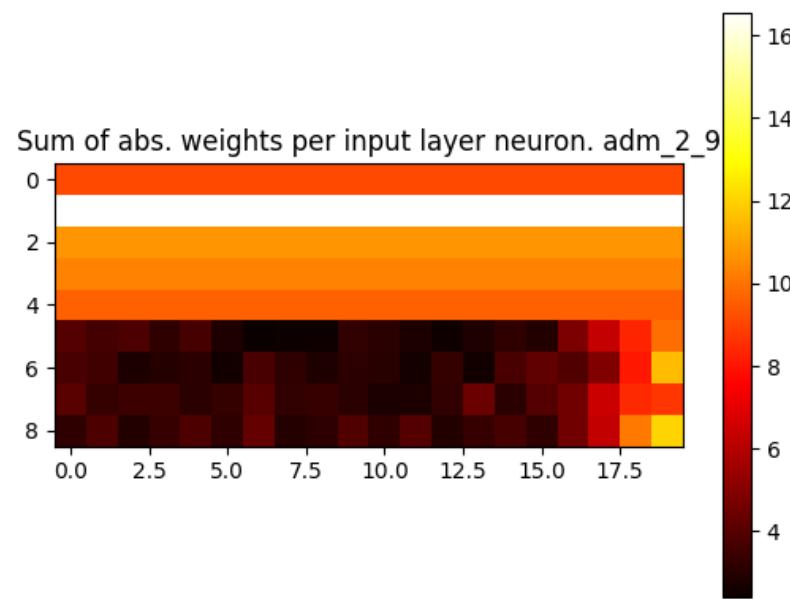
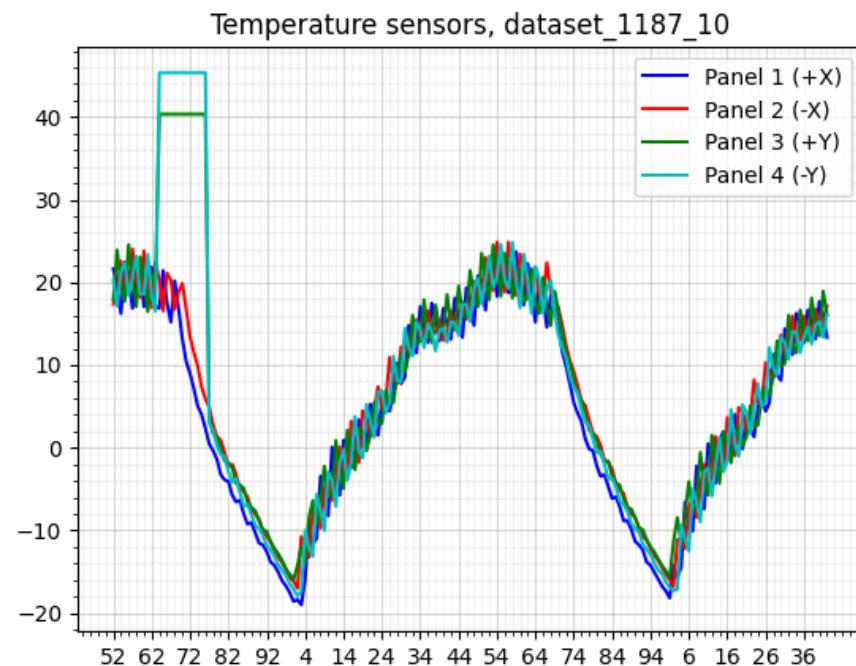
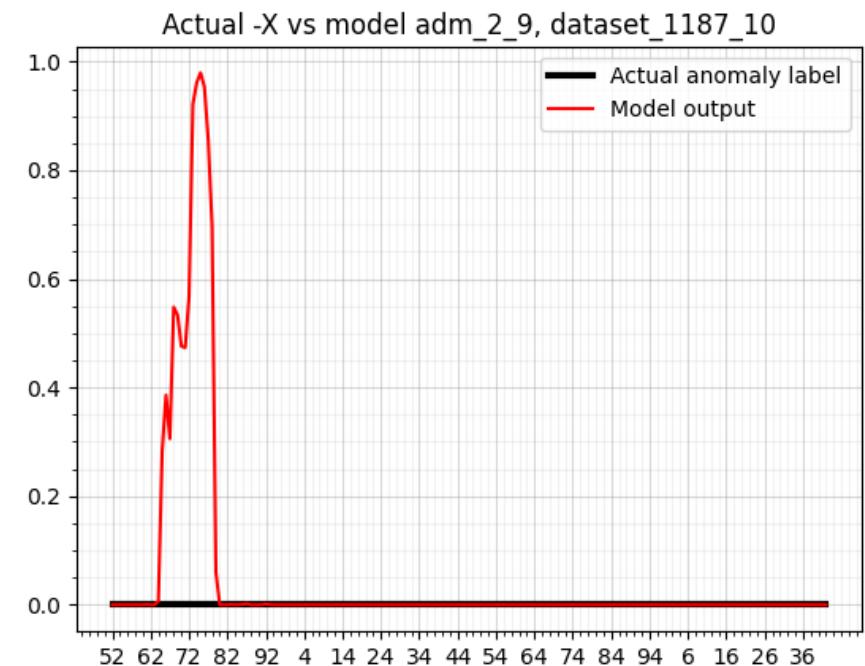
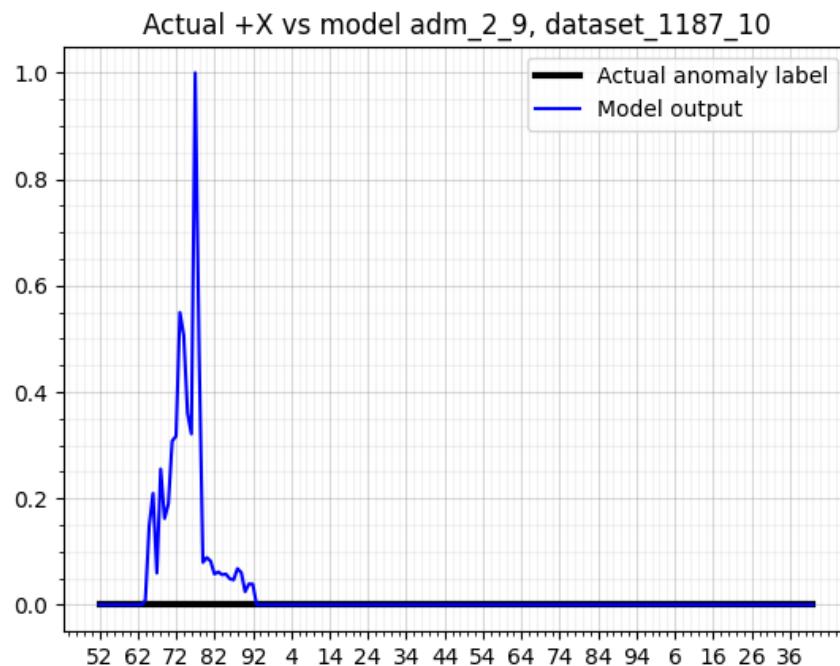


Figure 0: a) model structure (made with <http://alexlenail.me/NN-SVG/index.html>) b) Input data weight comparison





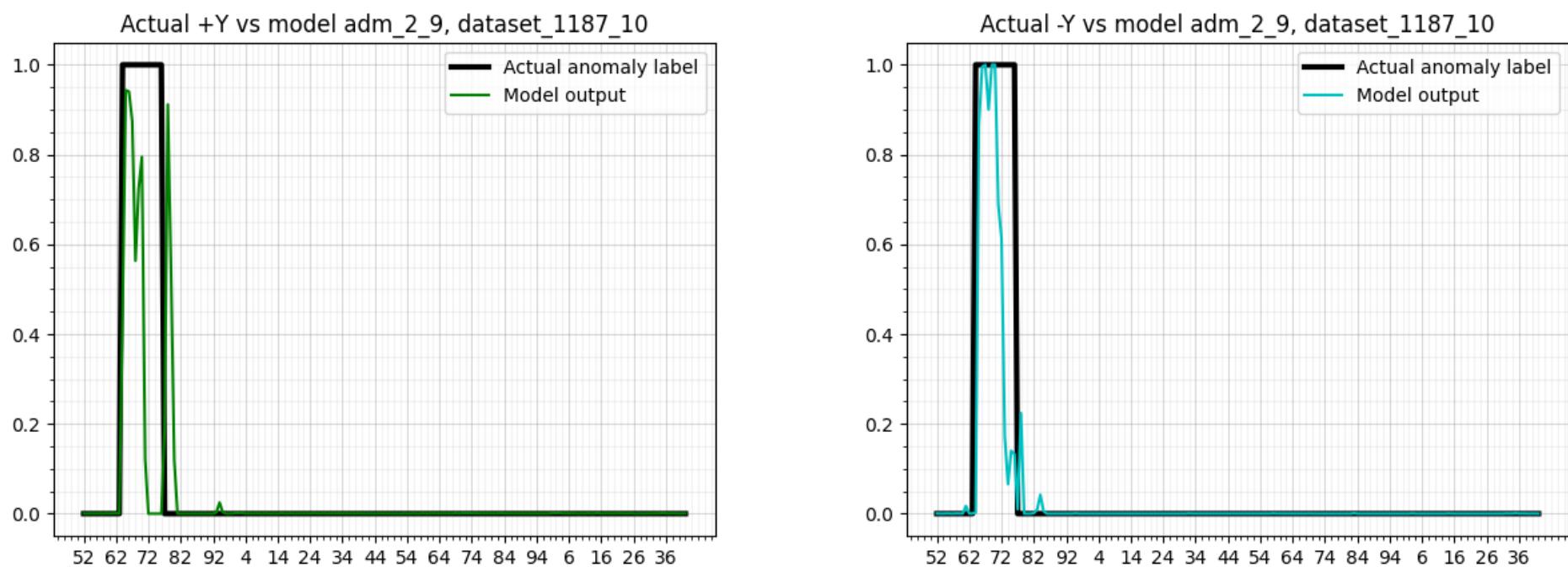
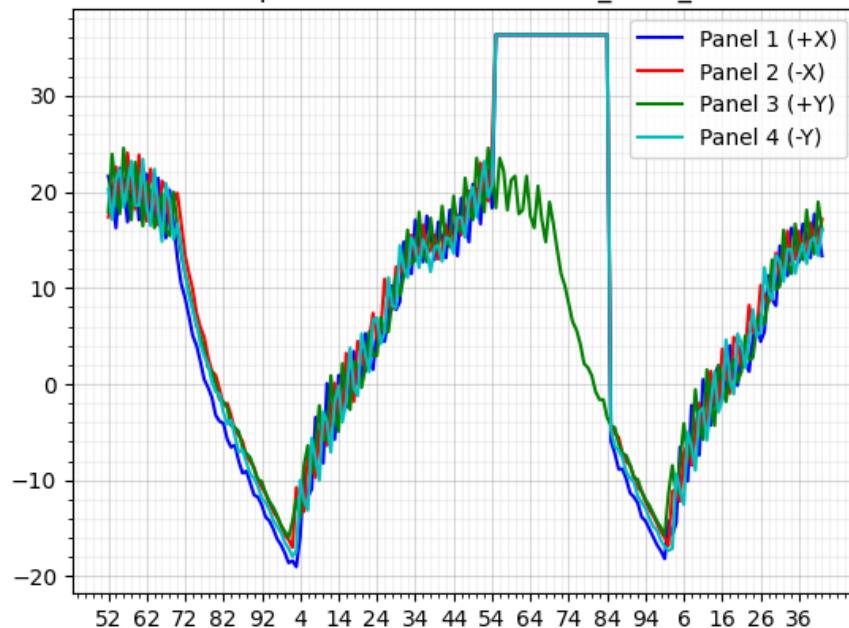
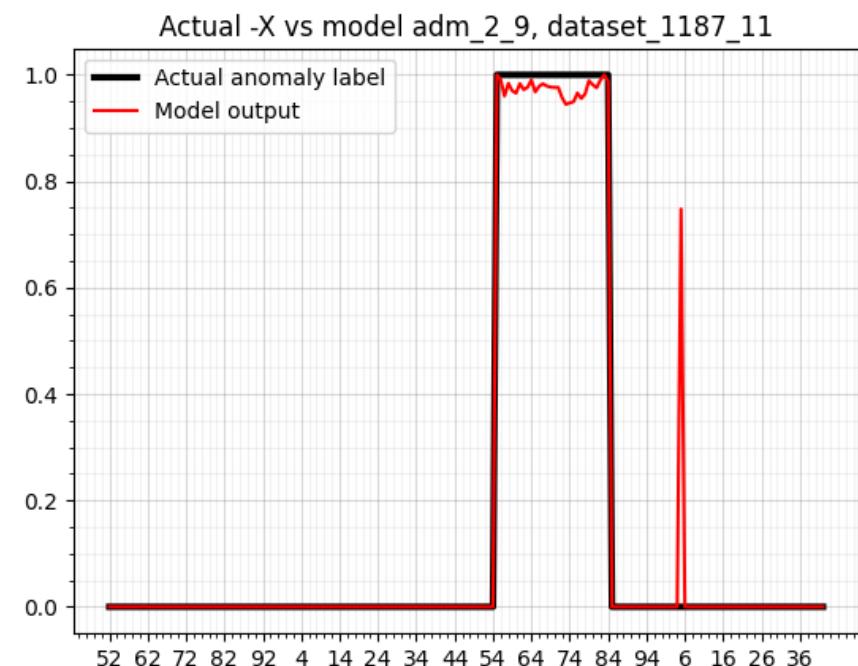
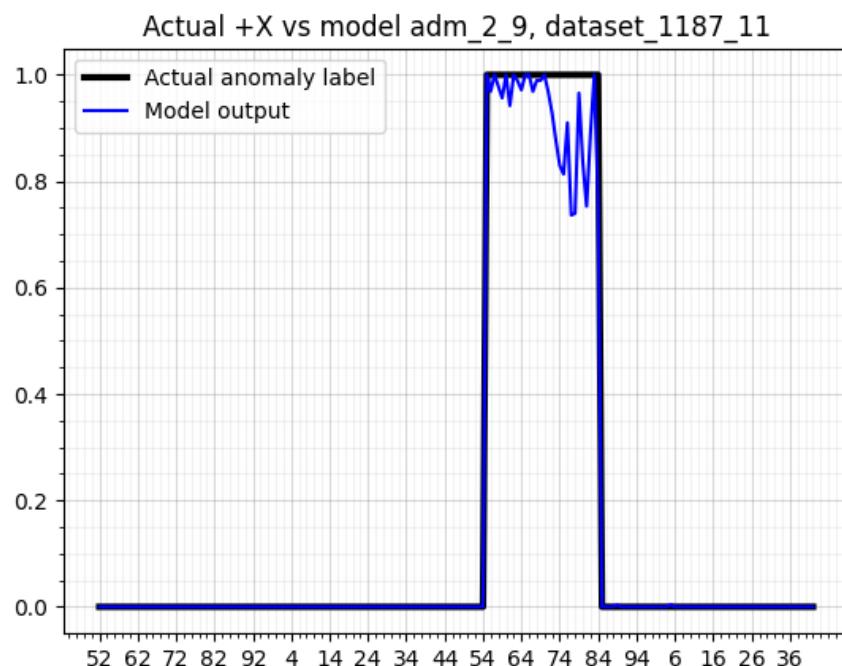


Figure 1: model inferences on dataset\_1187\_10\_mod1.png

## Temperature sensors, dataset\_1187\_11





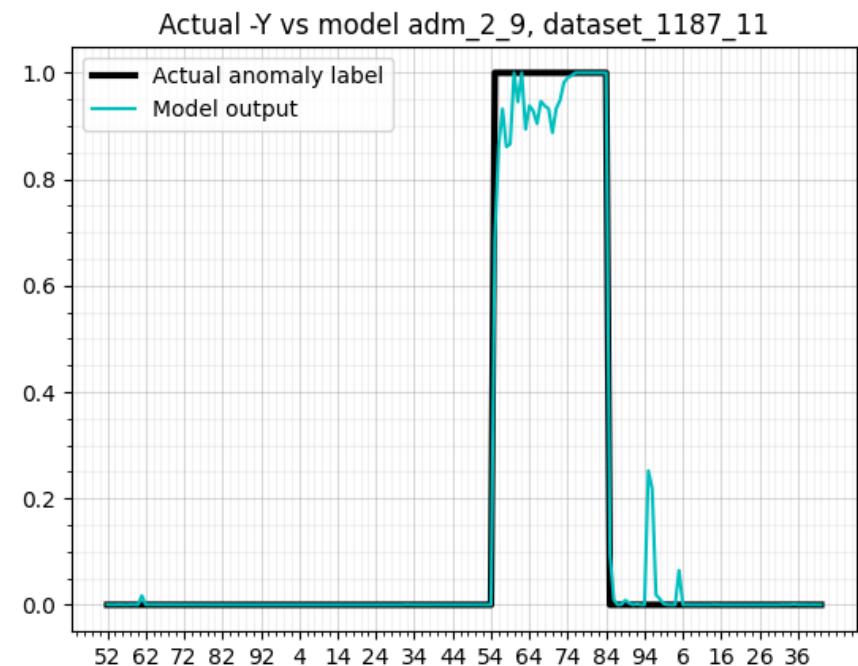
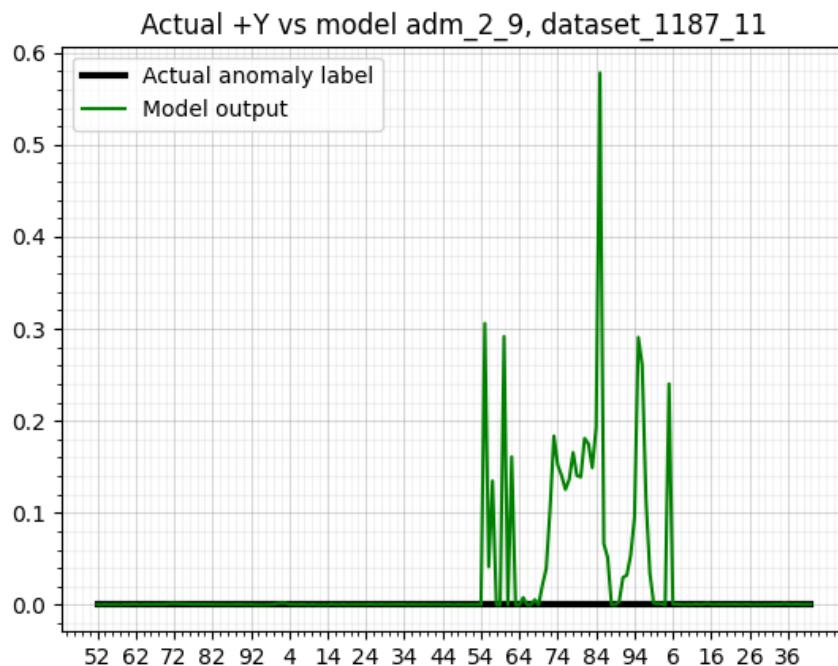
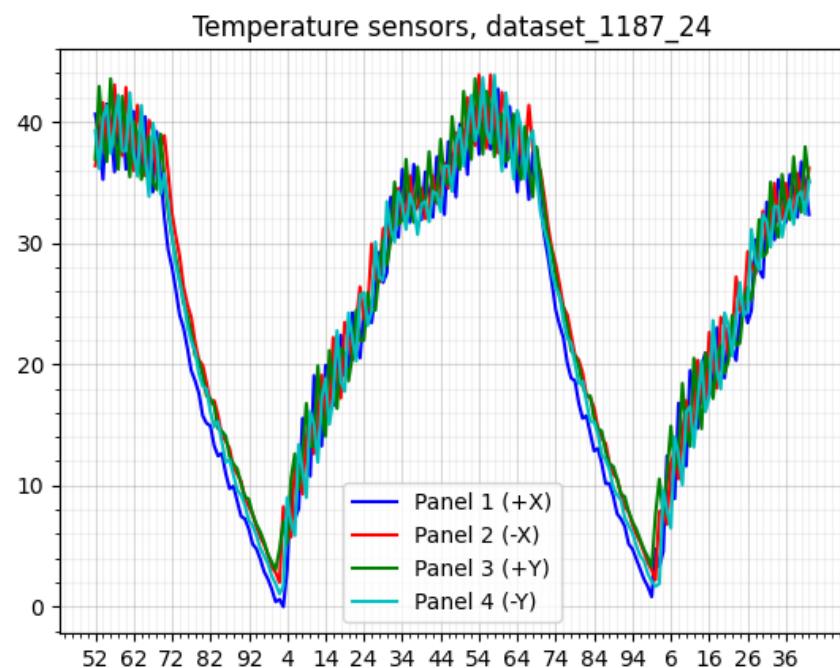
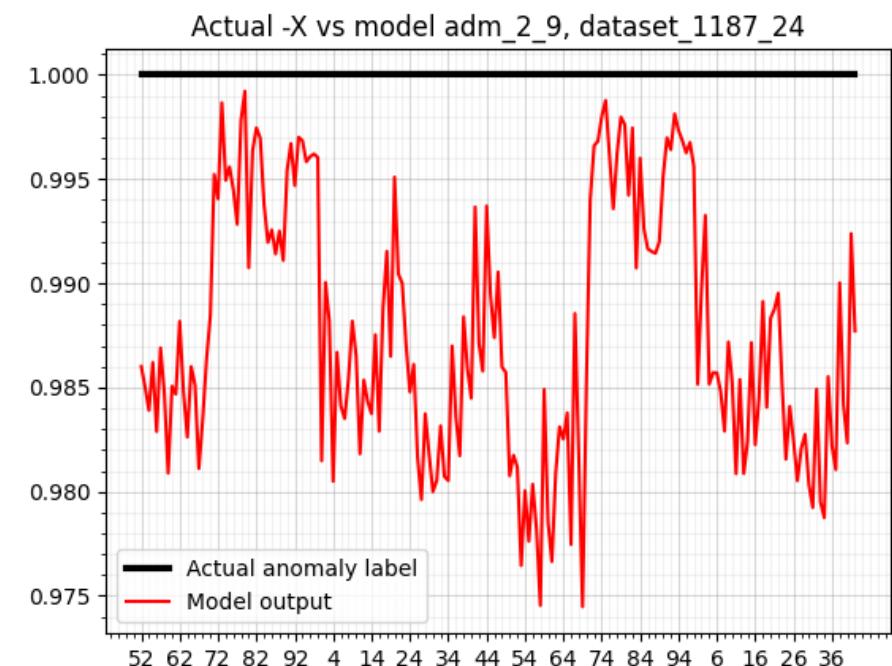
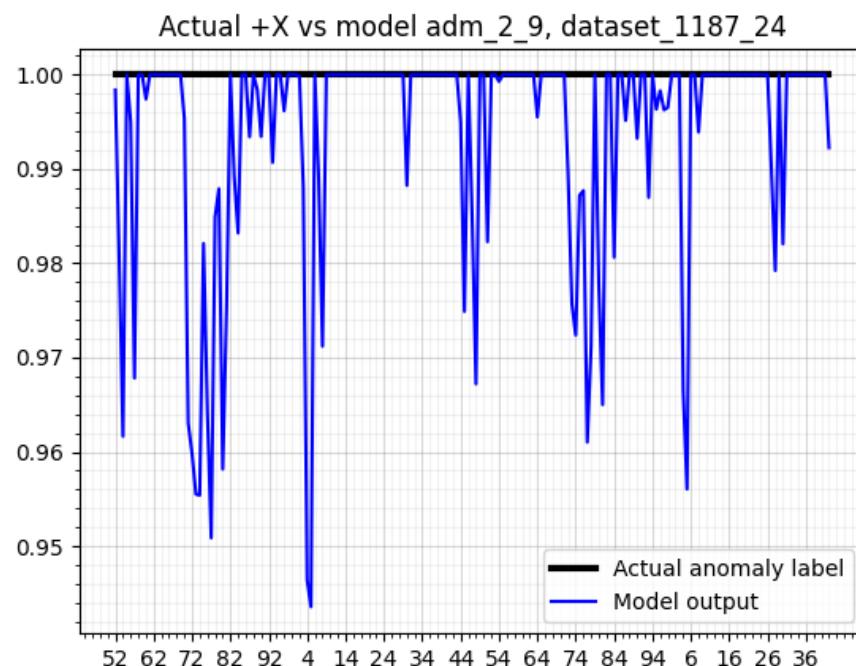


Figure 2: model inferences on dataset\_1187\_11\_mod1.png





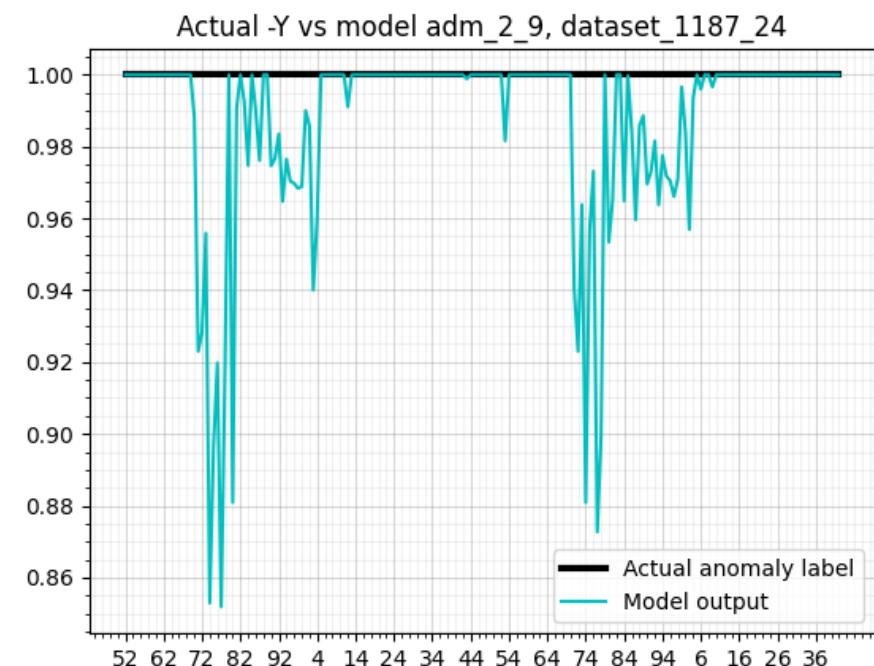
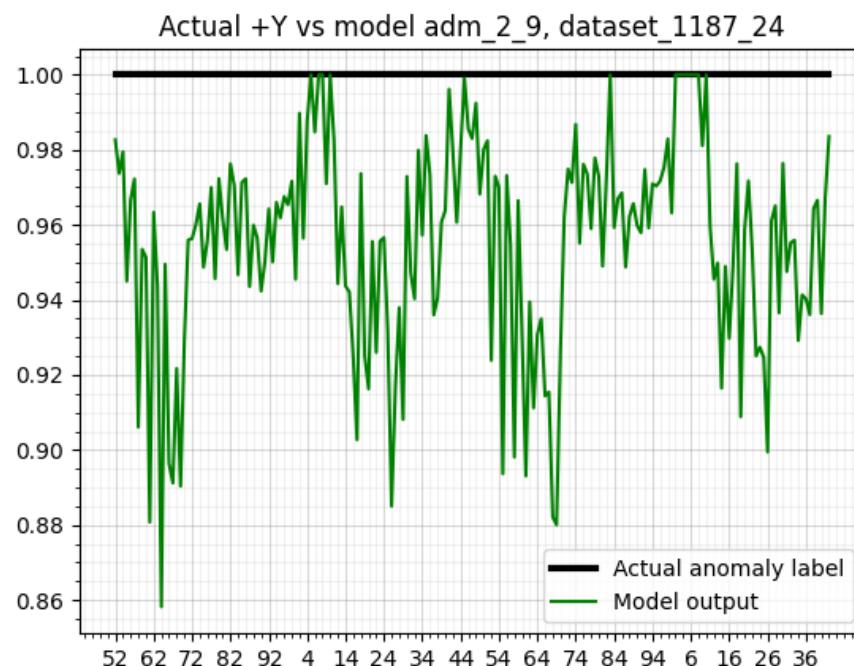
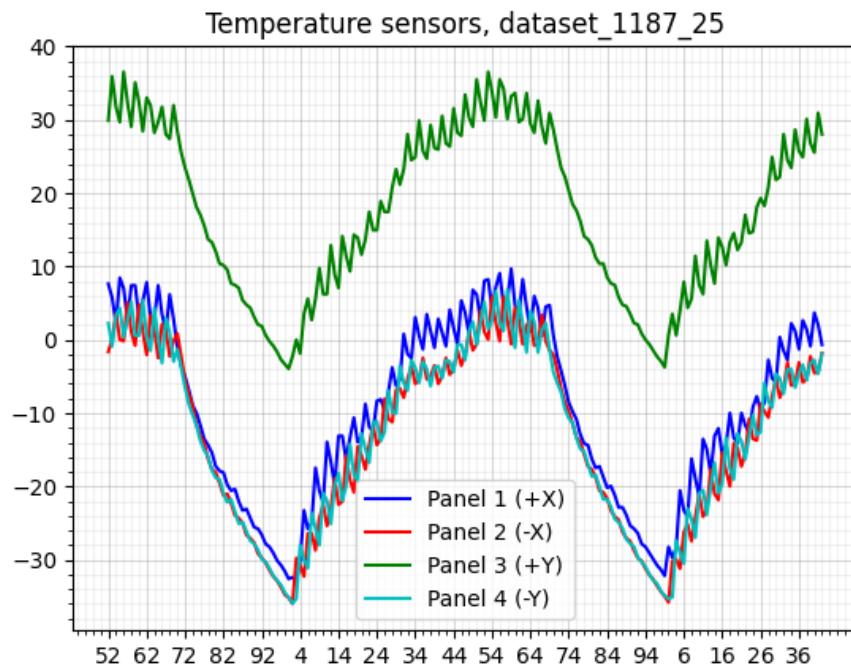
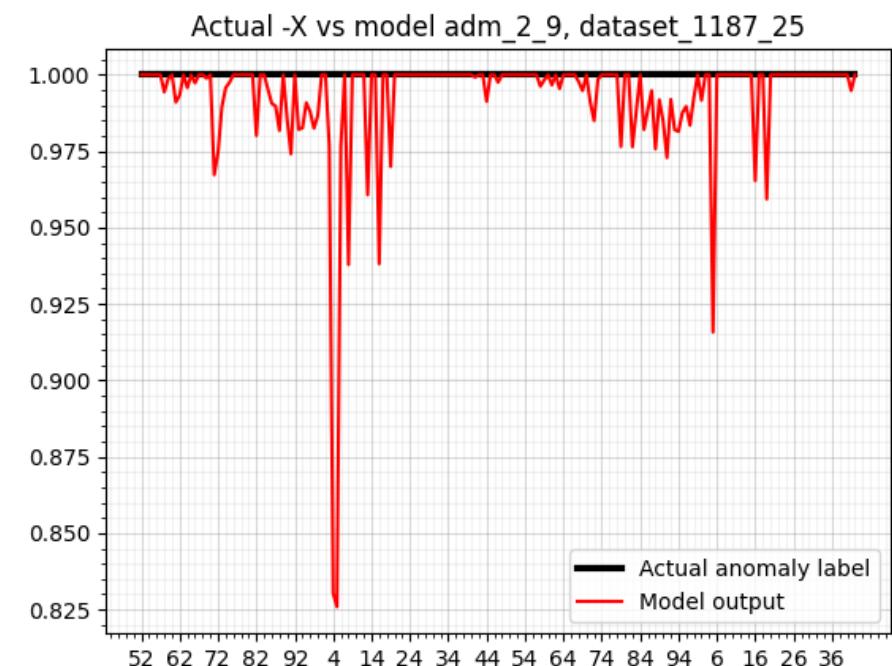
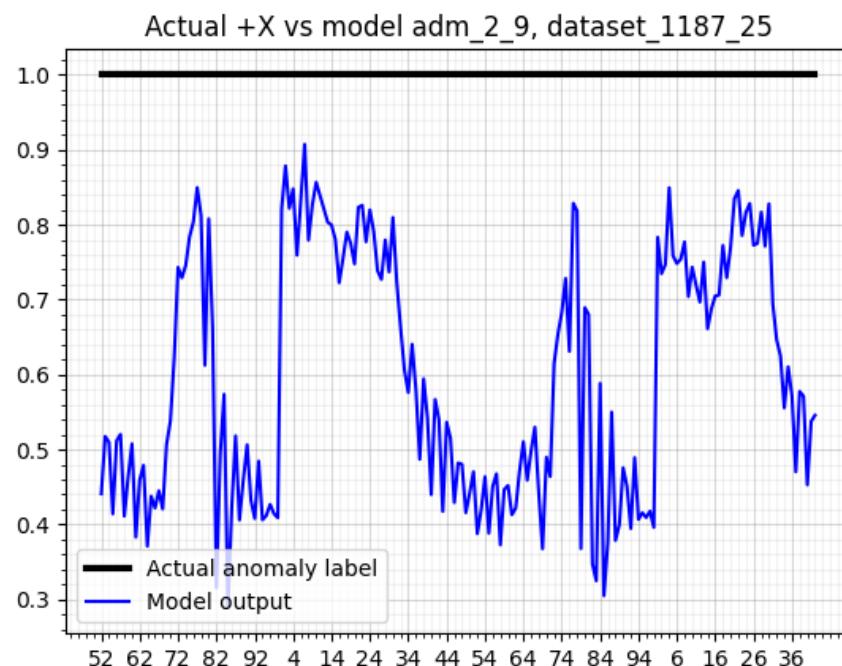


Figure 3: model inferences on dataset\_1187\_24\_mod1.png





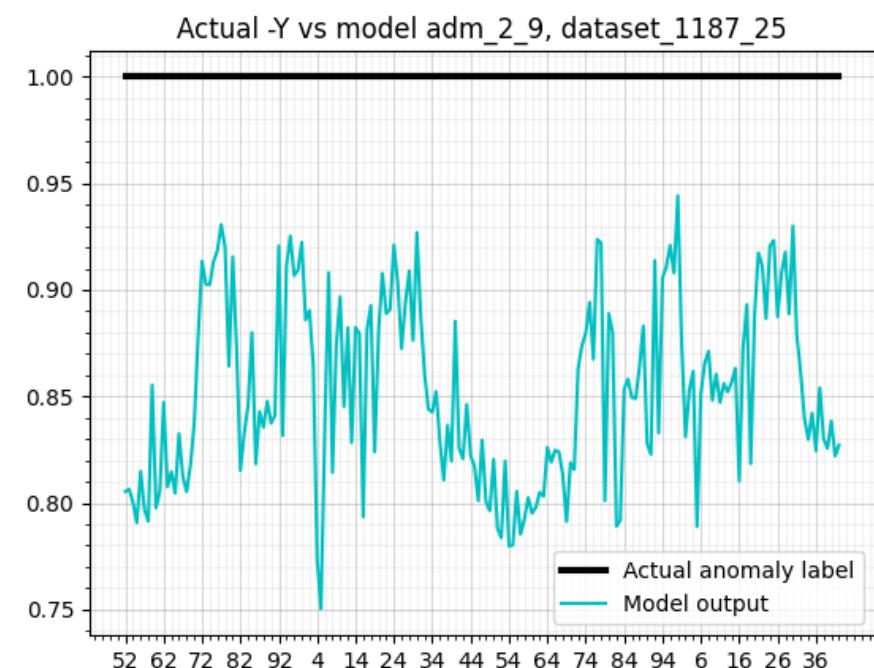
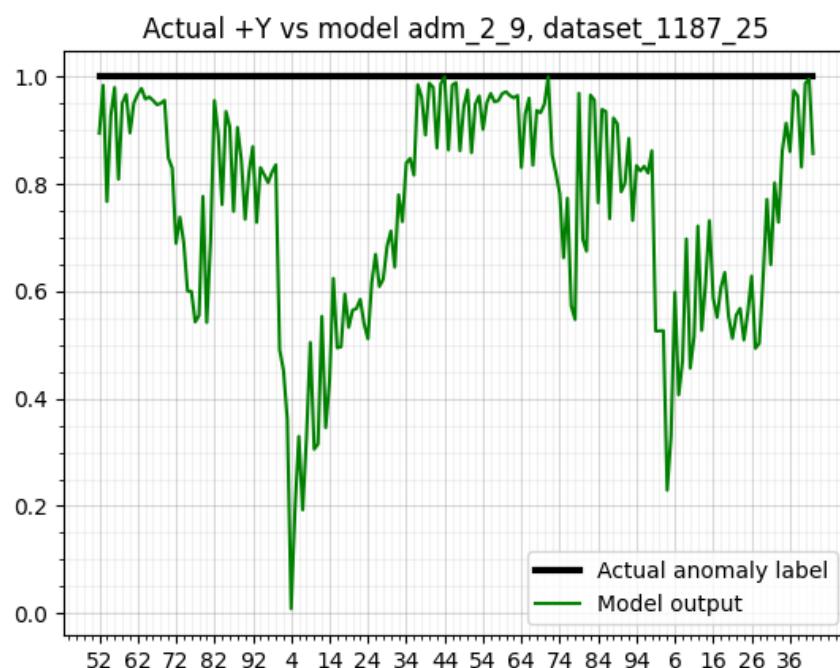
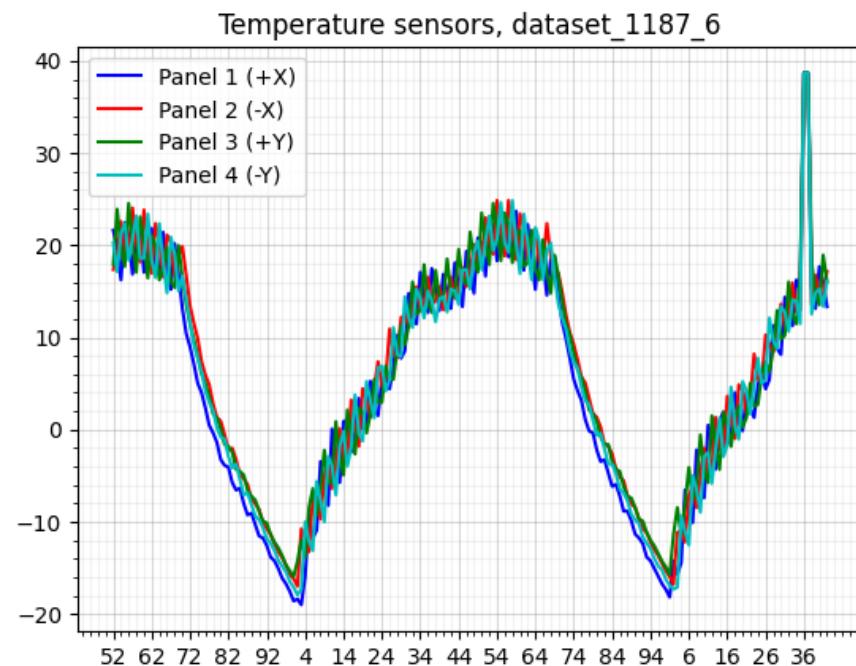
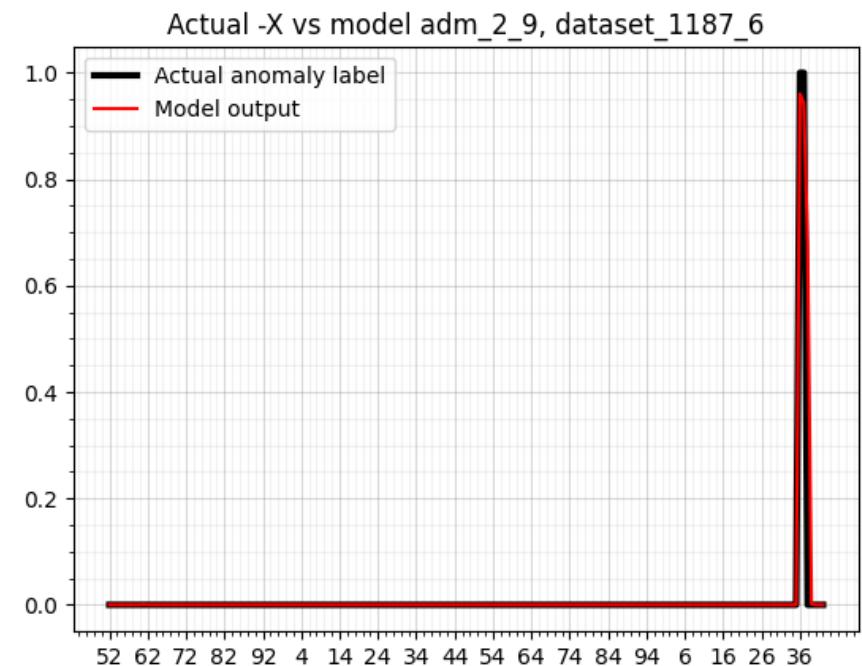
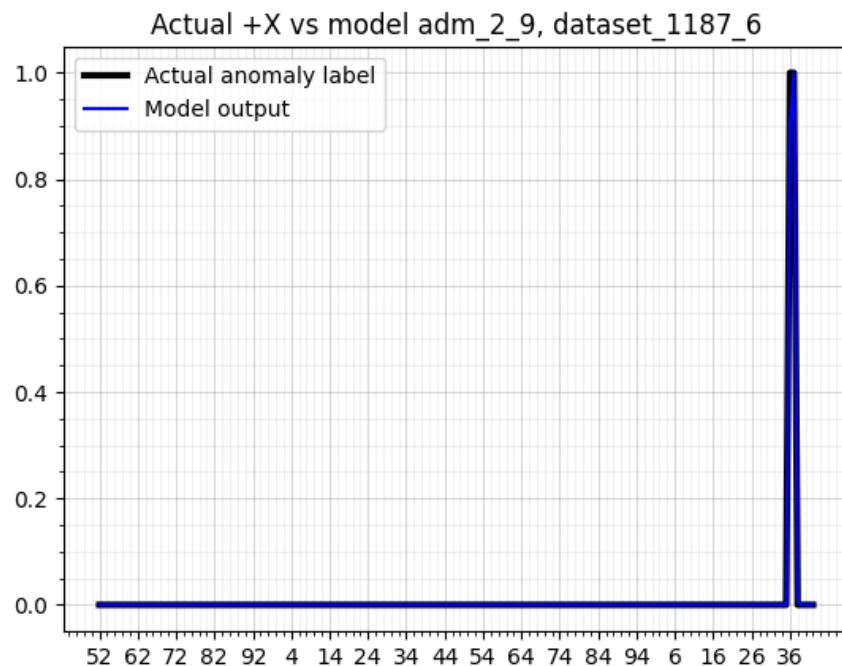


Figure 4: model inferences on dataset\_1187\_25\_mod1.png





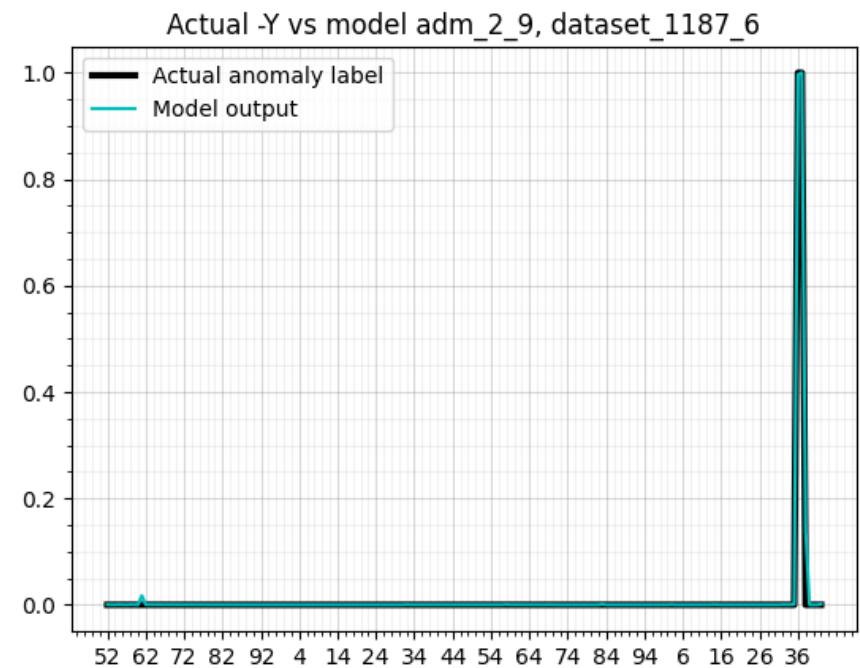
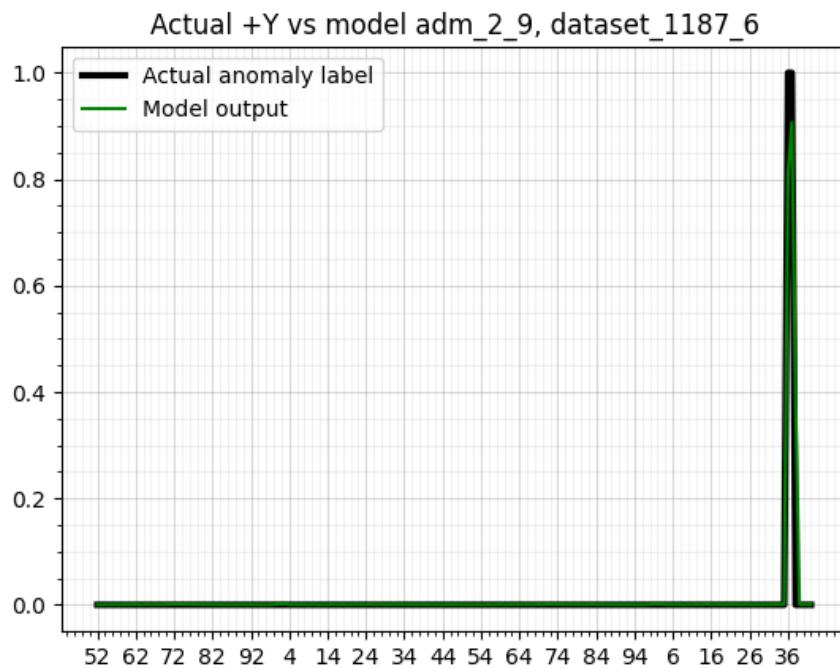
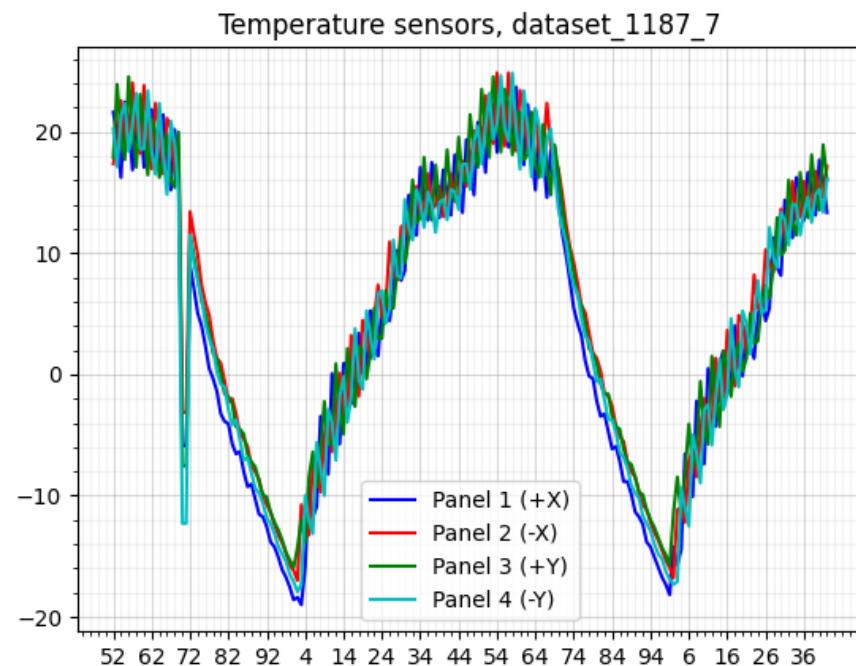
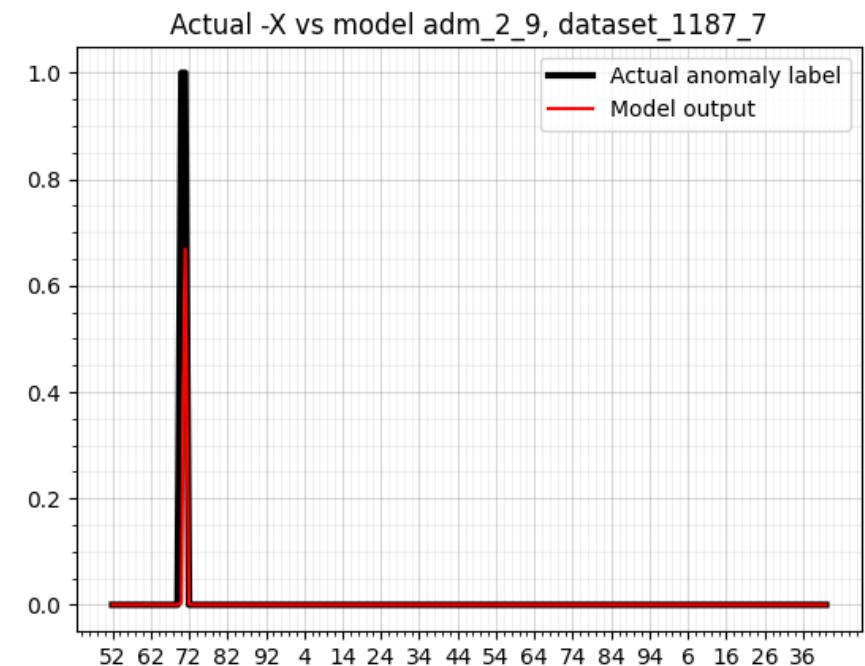
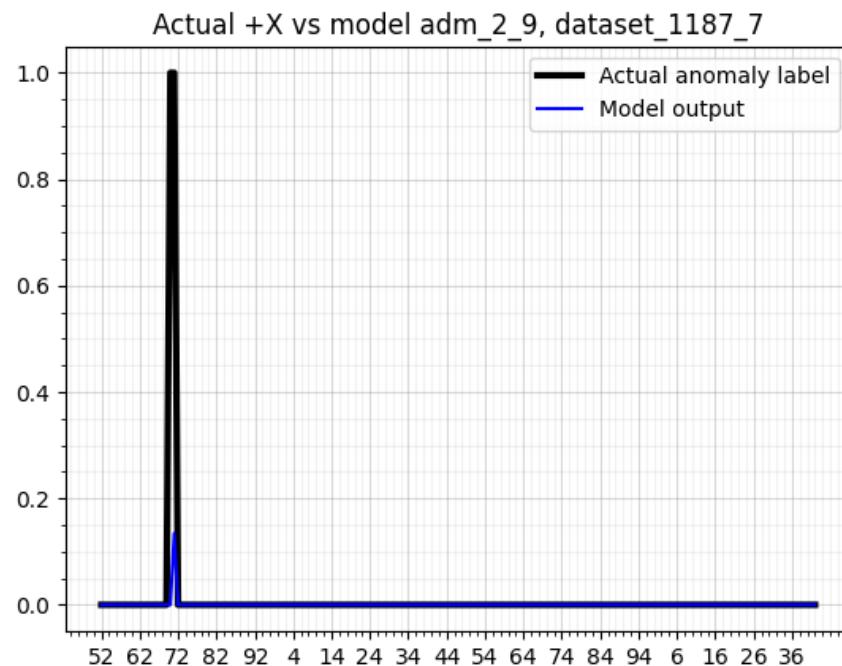


Figure 5: model inferences on dataset\_1187\_6\_mod1.png





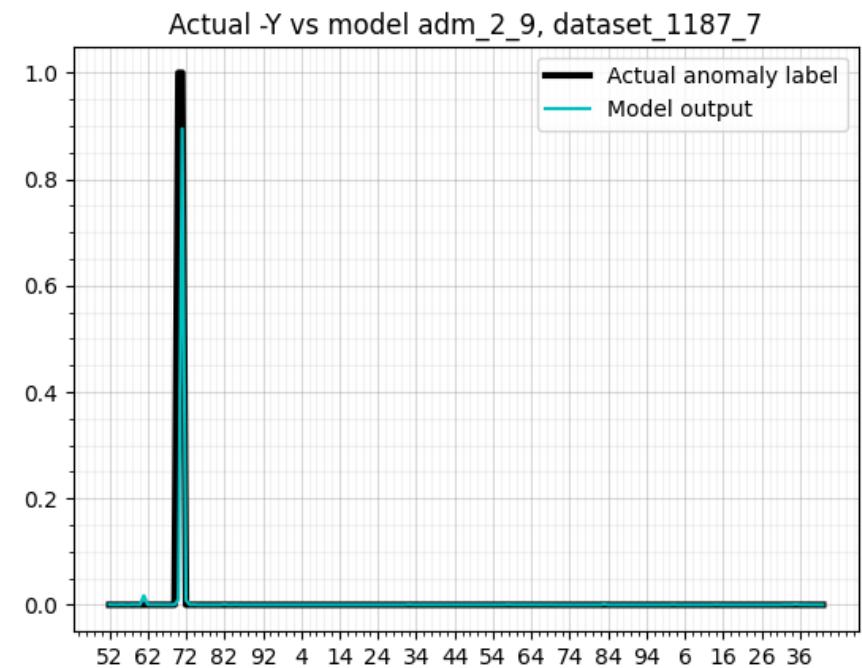
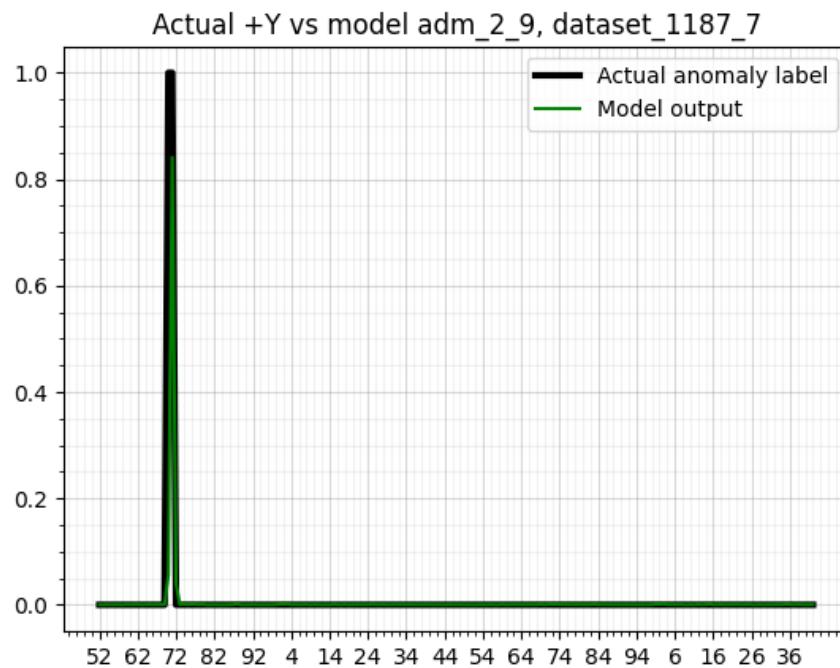
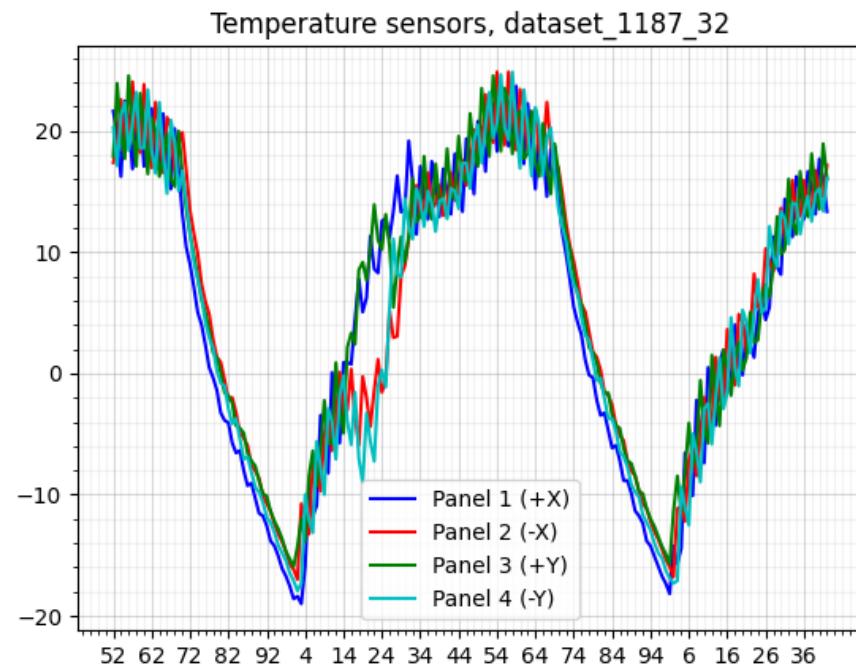
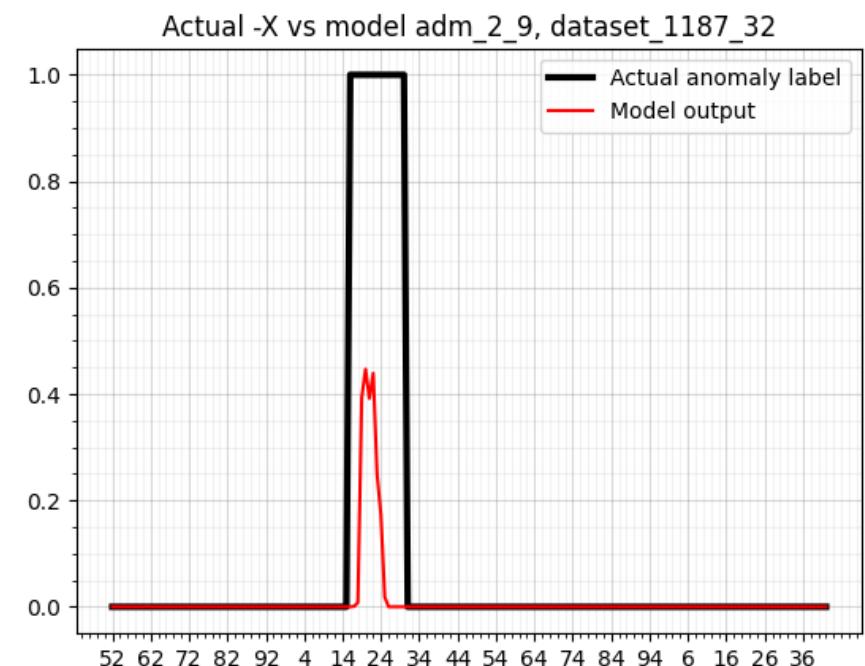
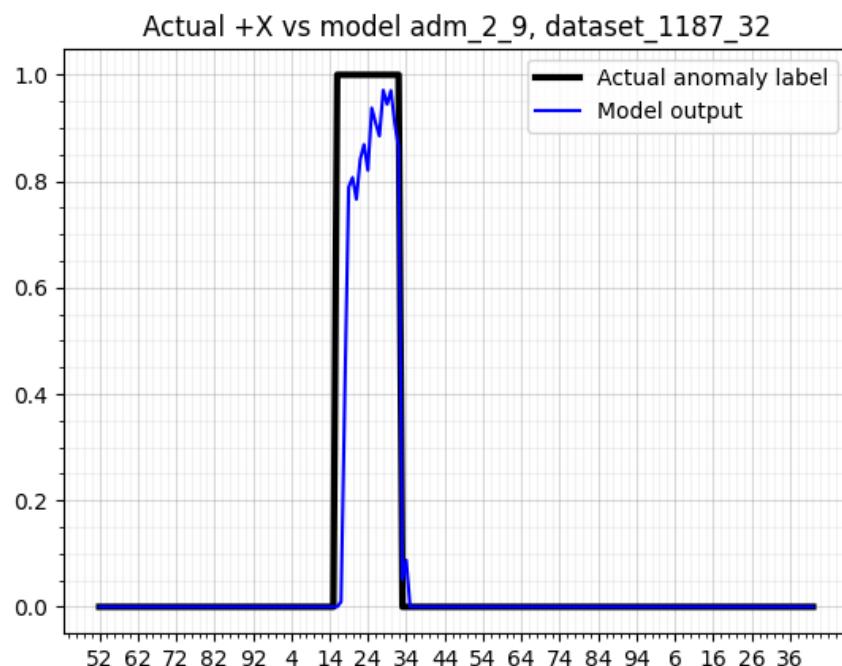


Figure 6: model inferences on dataset\_1187\_7\_mod1.png





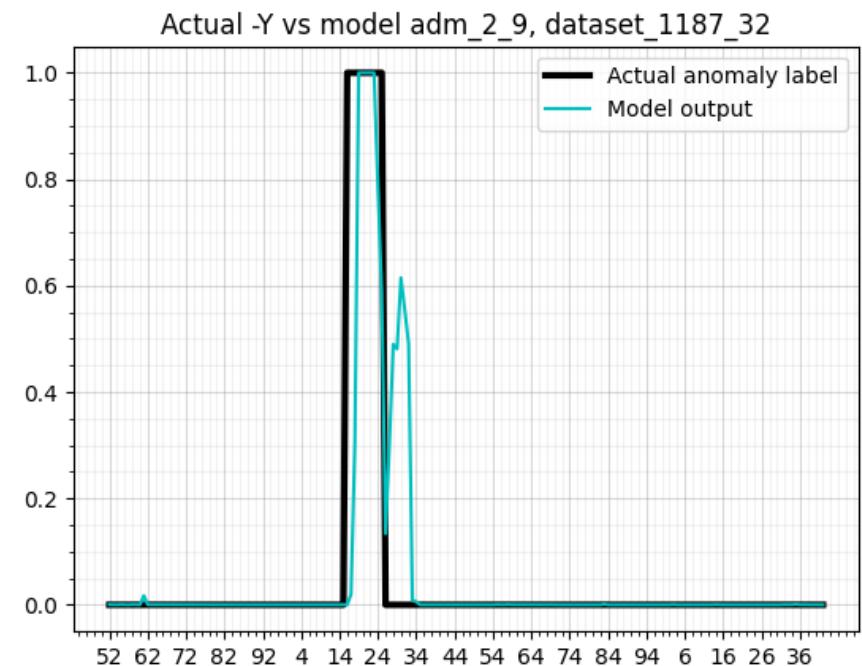
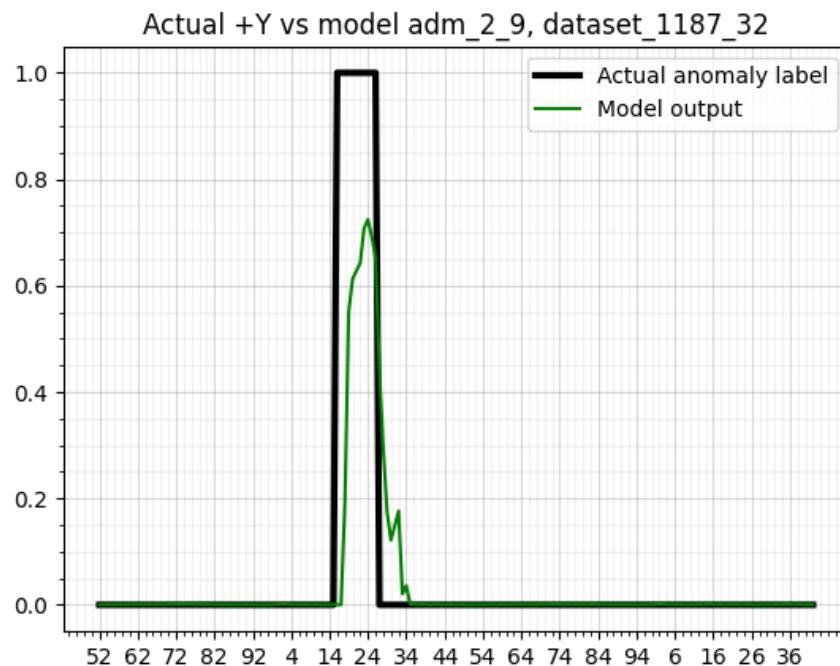
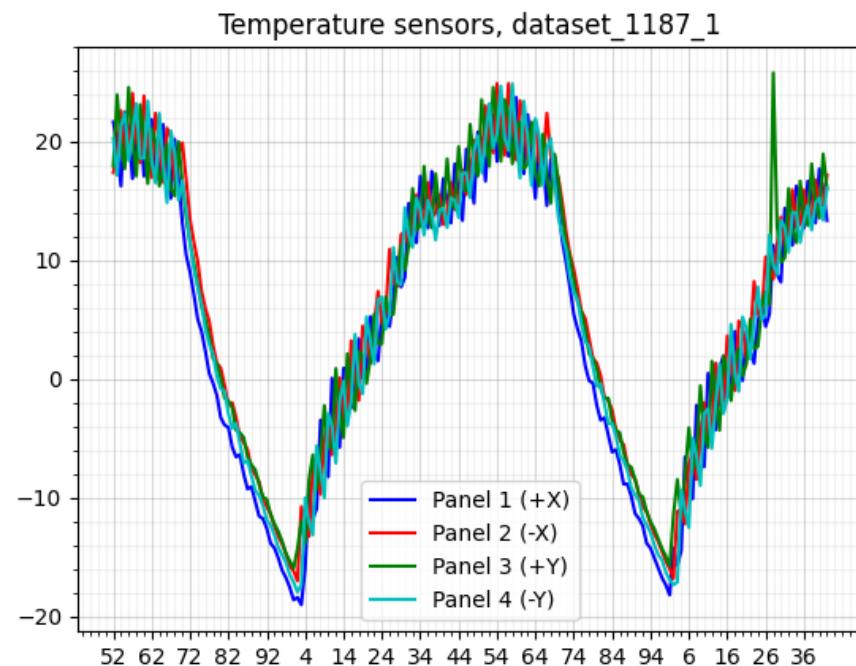
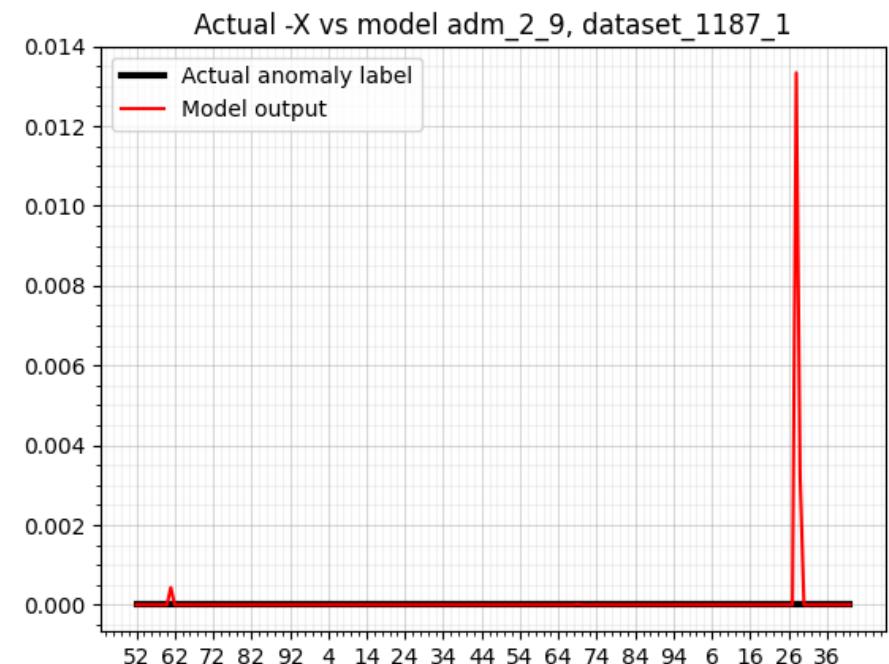
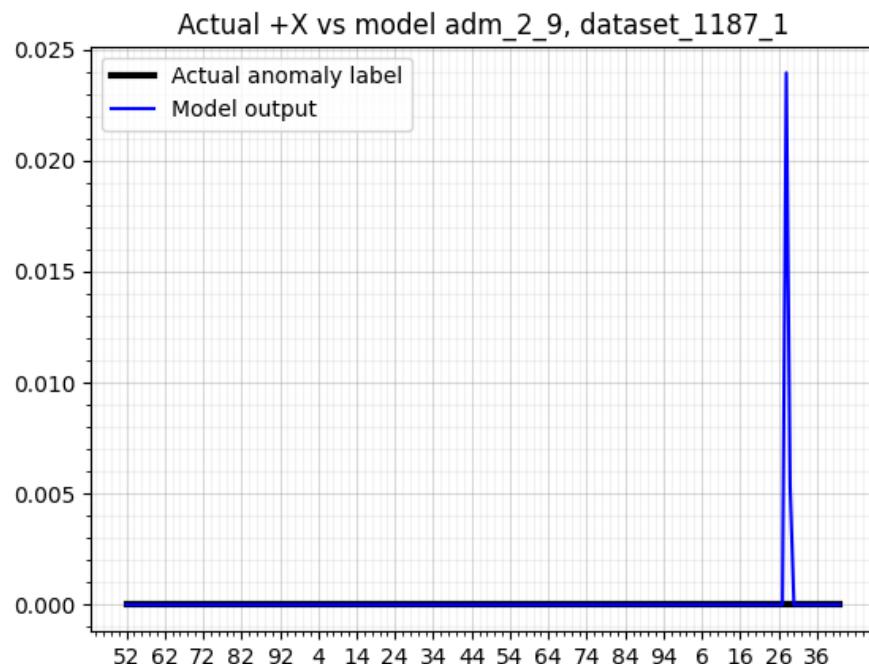


Figure 7: model inferences on dataset\_1187\_32\_mod1.png





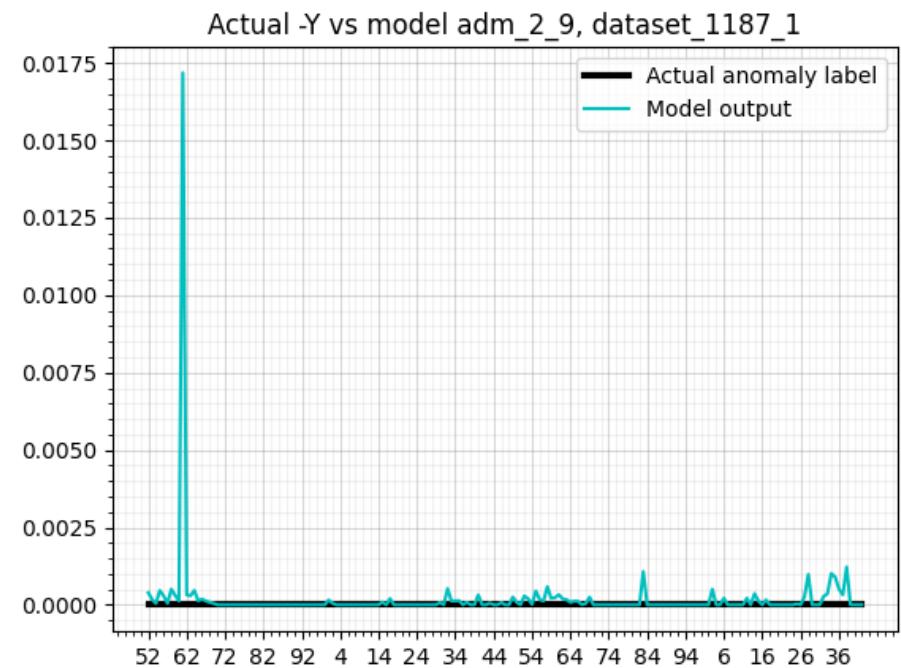
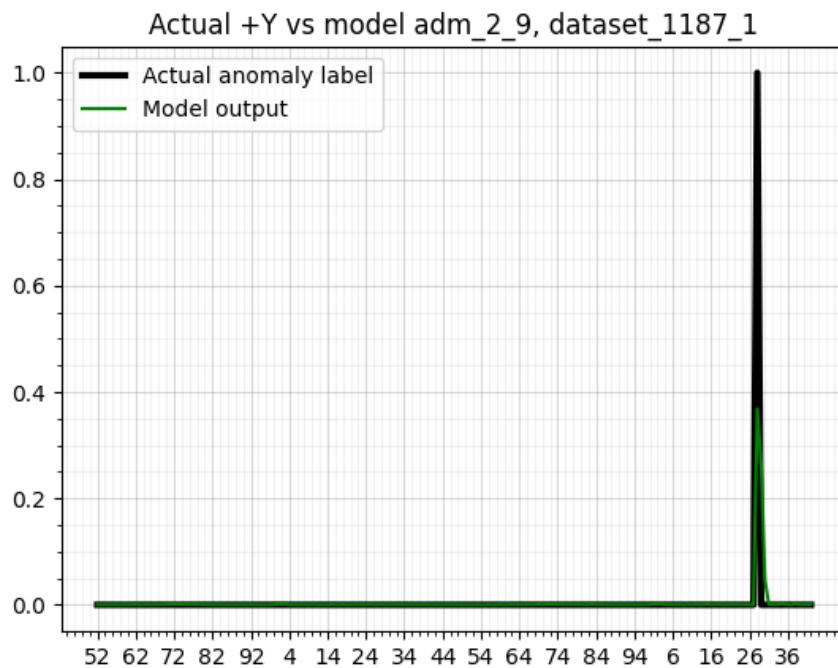
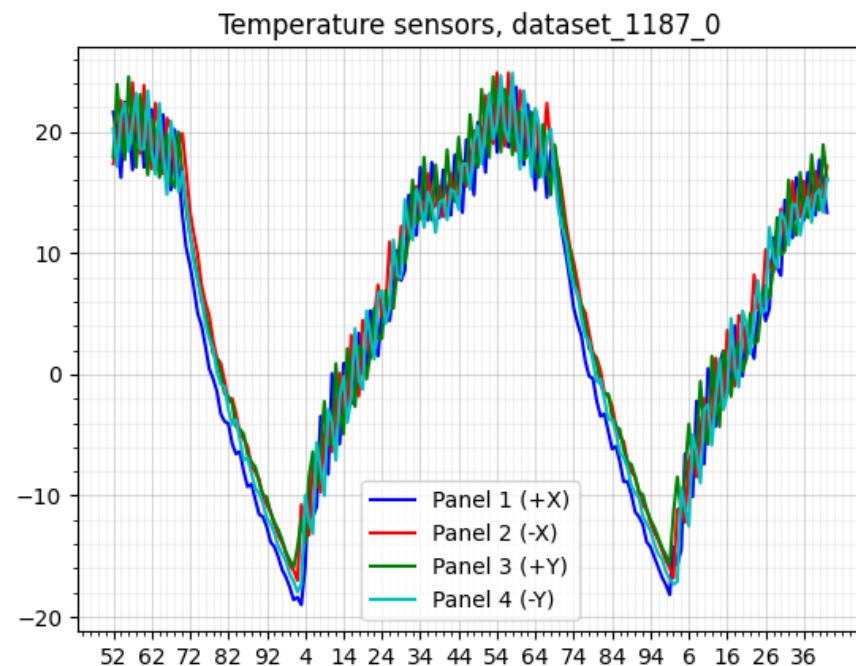
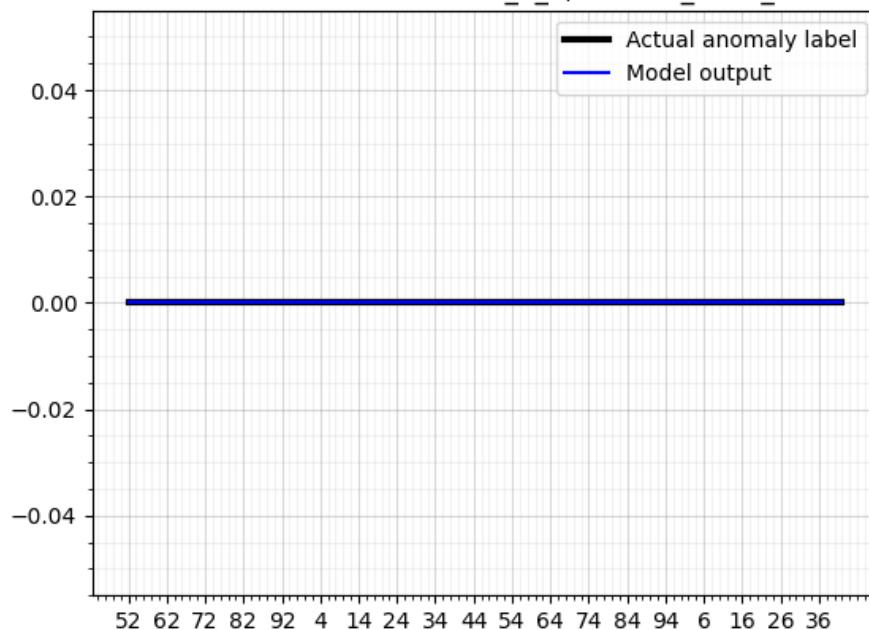


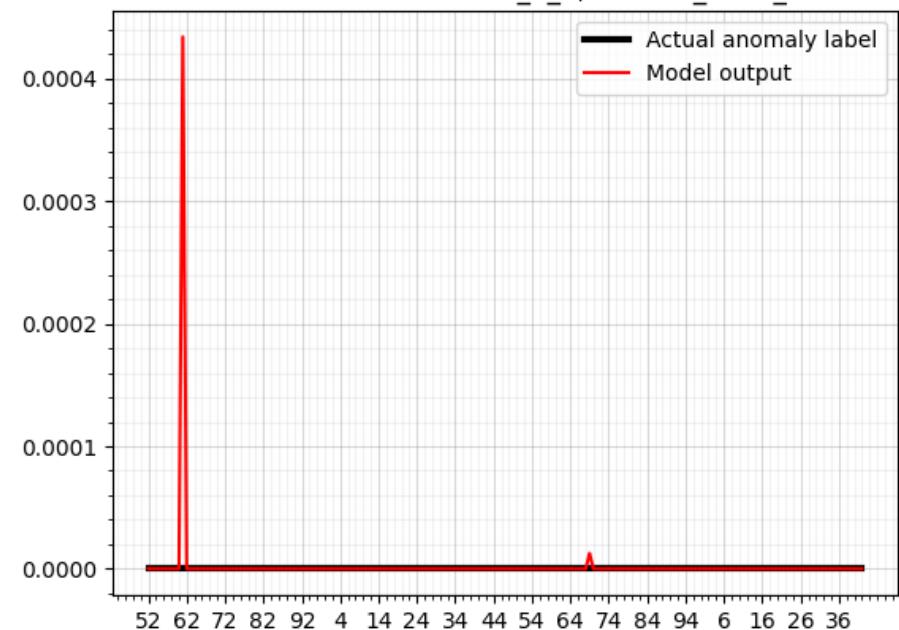
Figure 8: model inferences on dataset\_1187\_1\_mod1.png



Actual +X vs model adm\_2\_9, dataset\_1187\_0



Actual -X vs model adm\_2\_9, dataset\_1187\_0



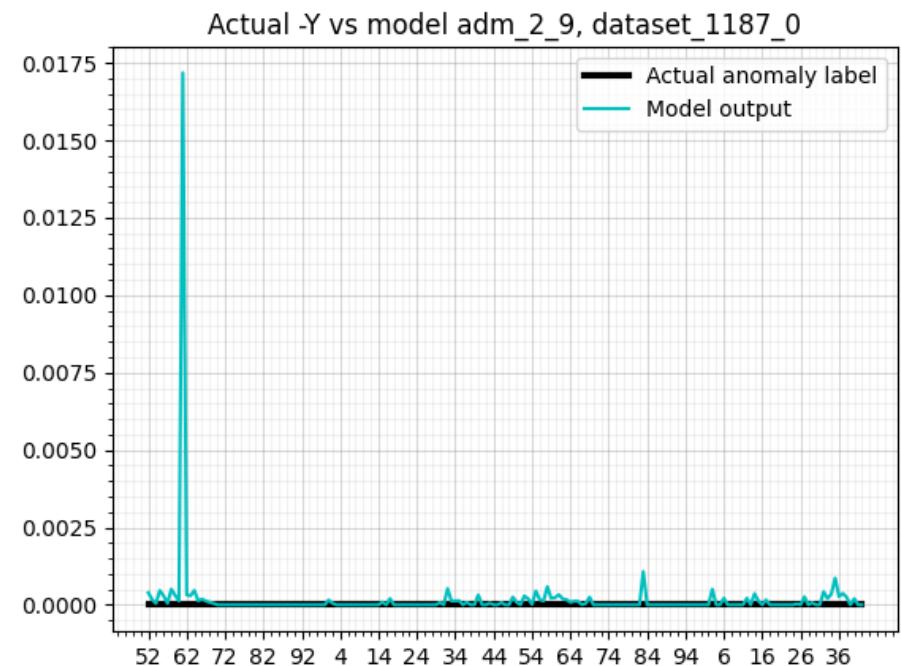
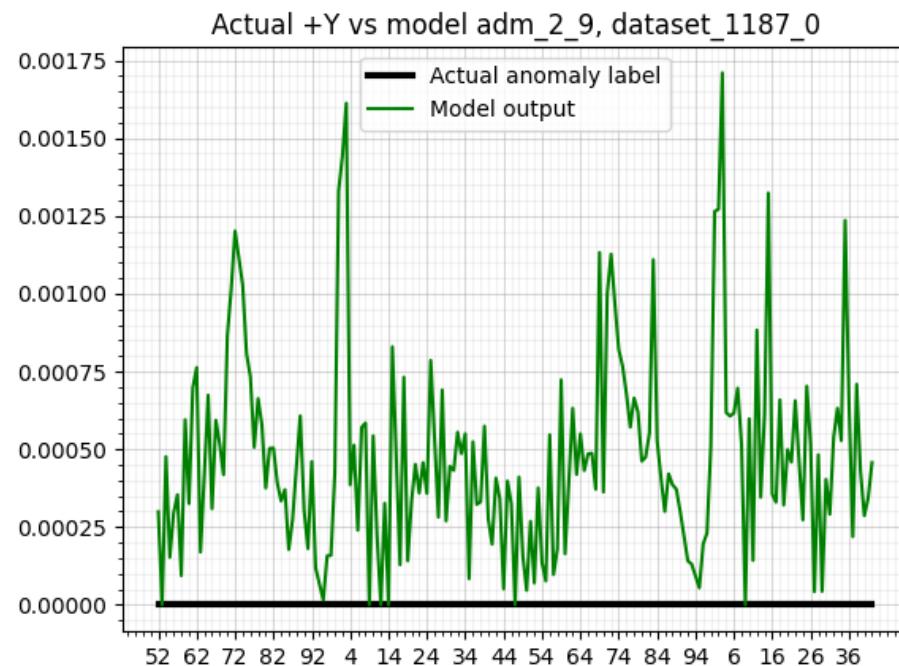
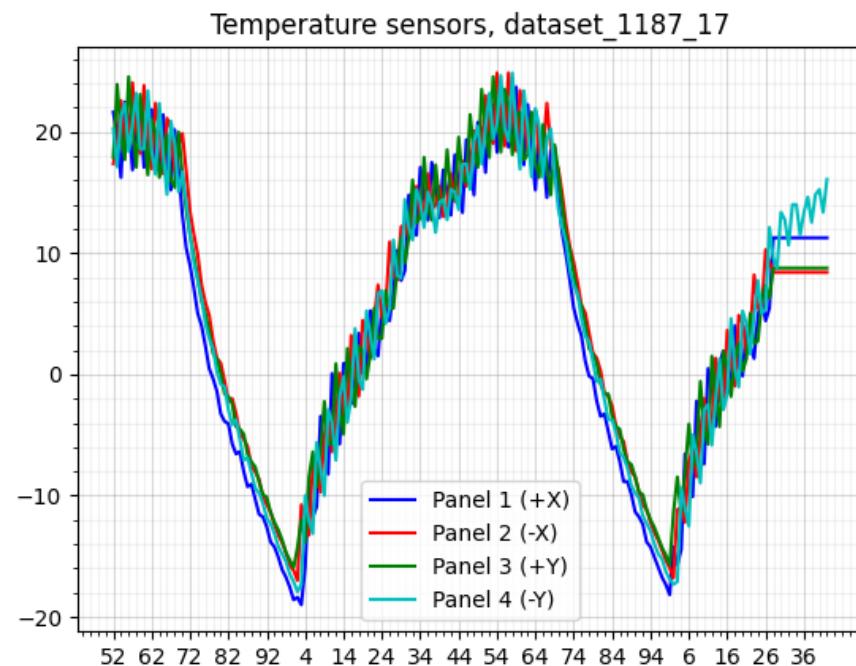
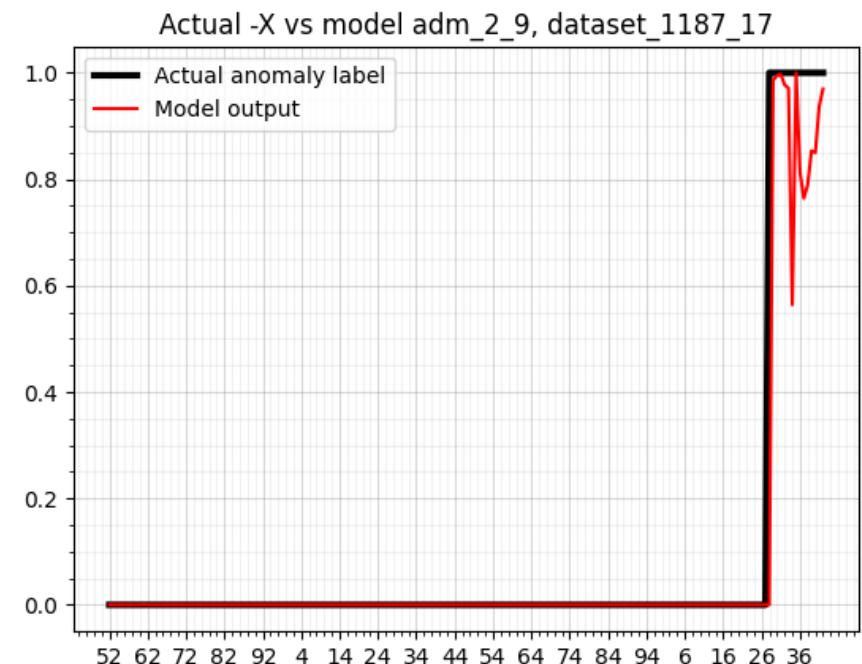
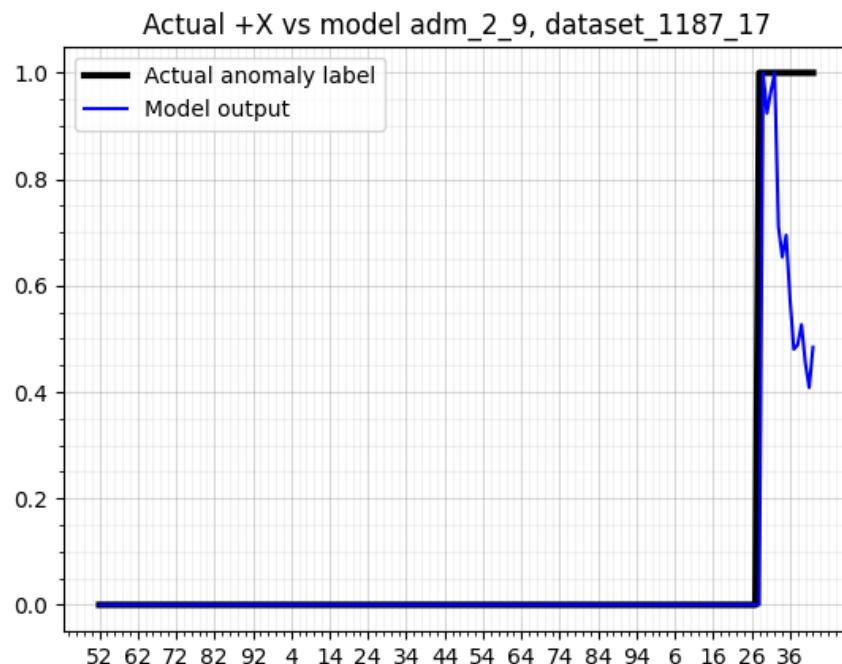


Figure 9: model inferences on dataset\_1187\_0\_mod1.png





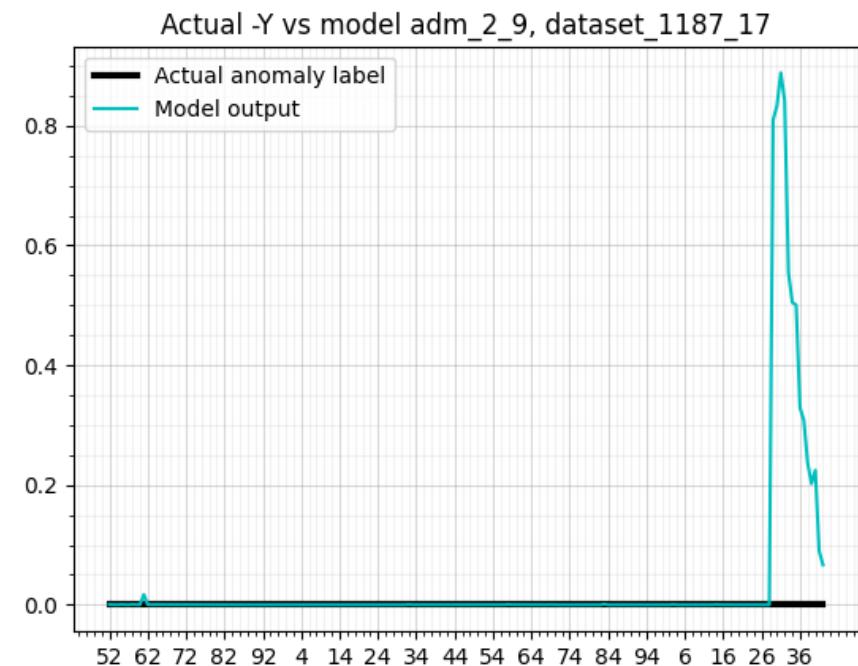
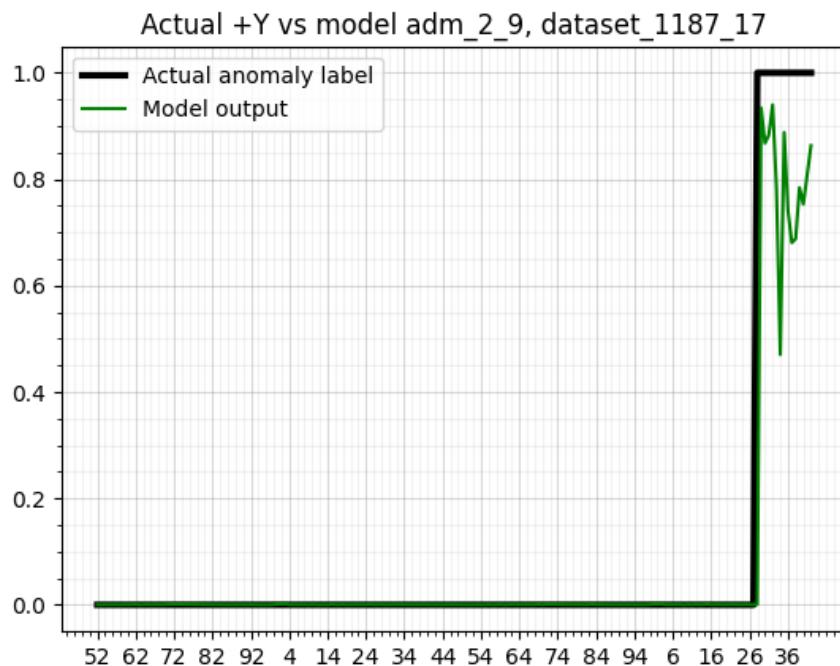
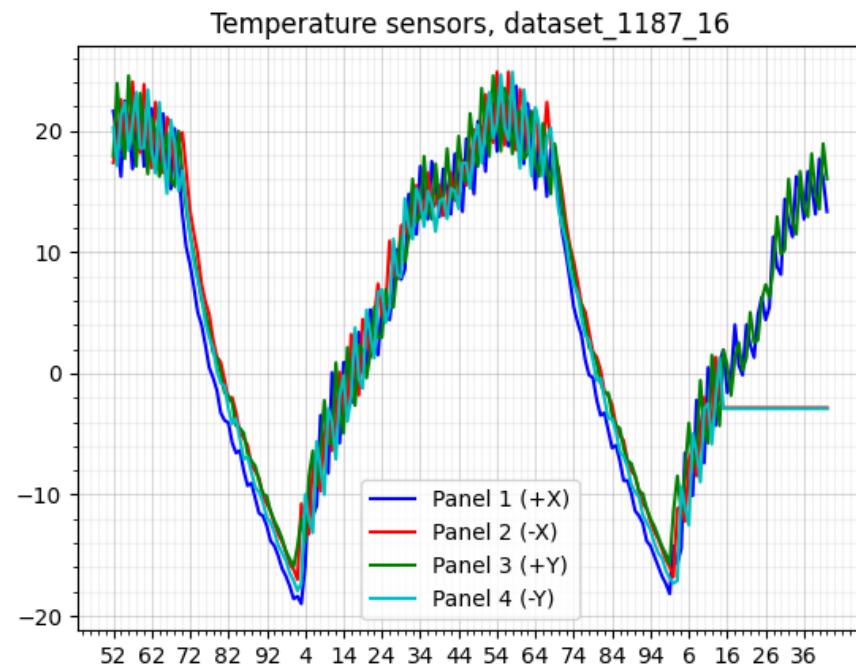
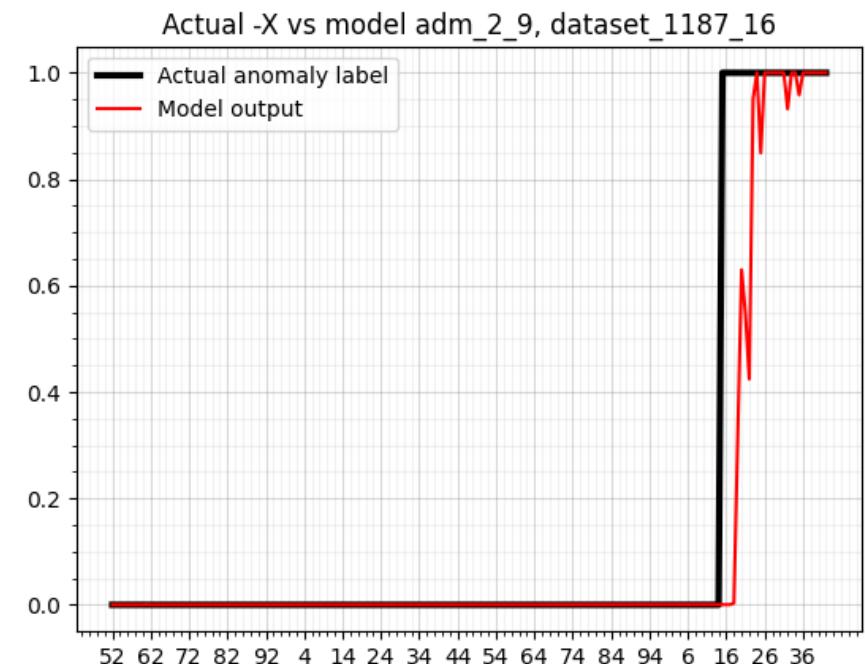
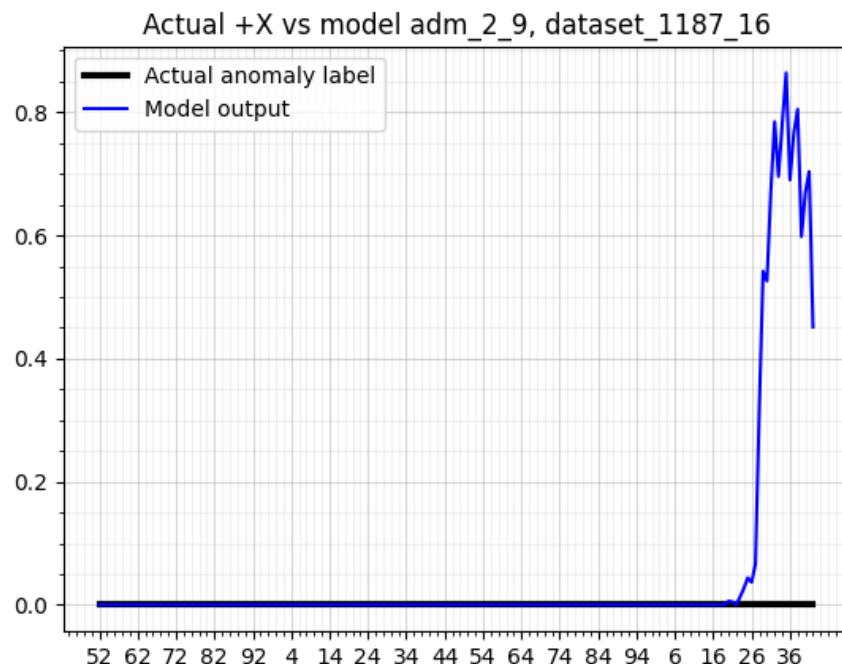


Figure 10: model inferences on dataset\_1187\_17\_mod1.png





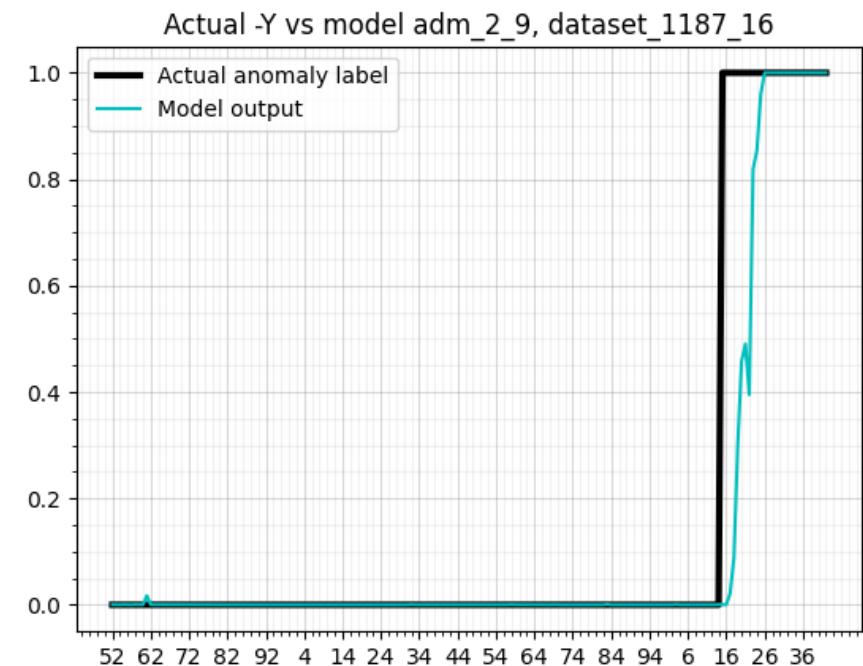
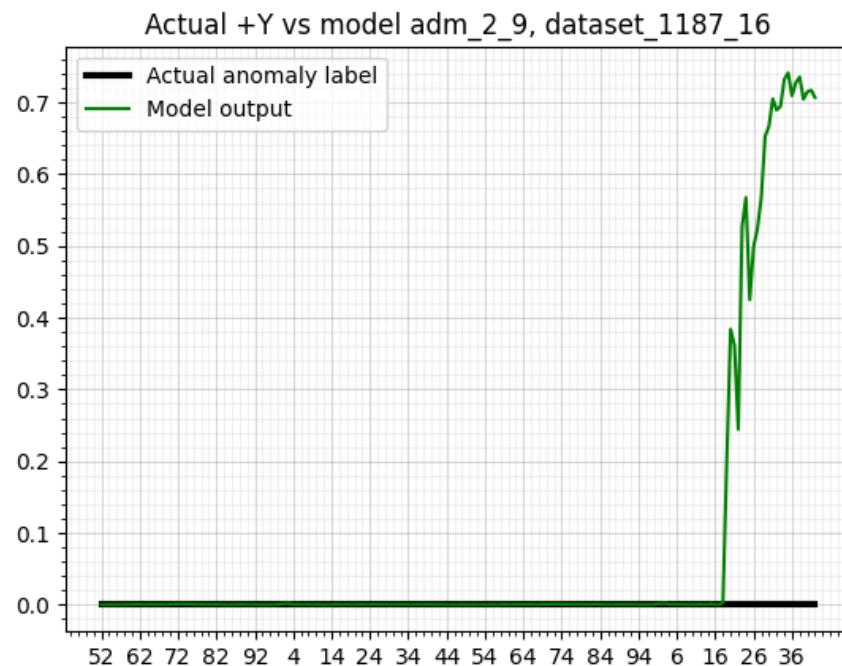
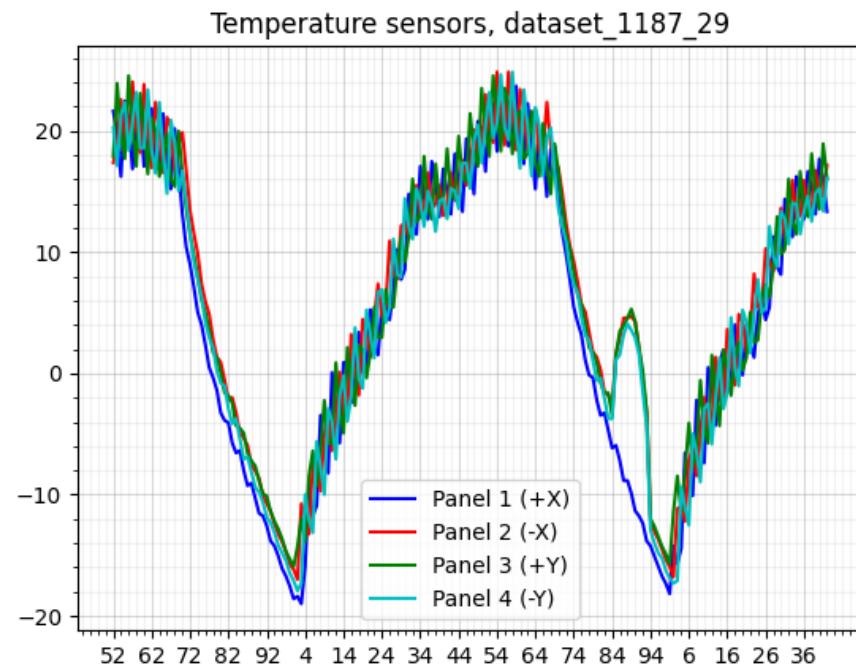
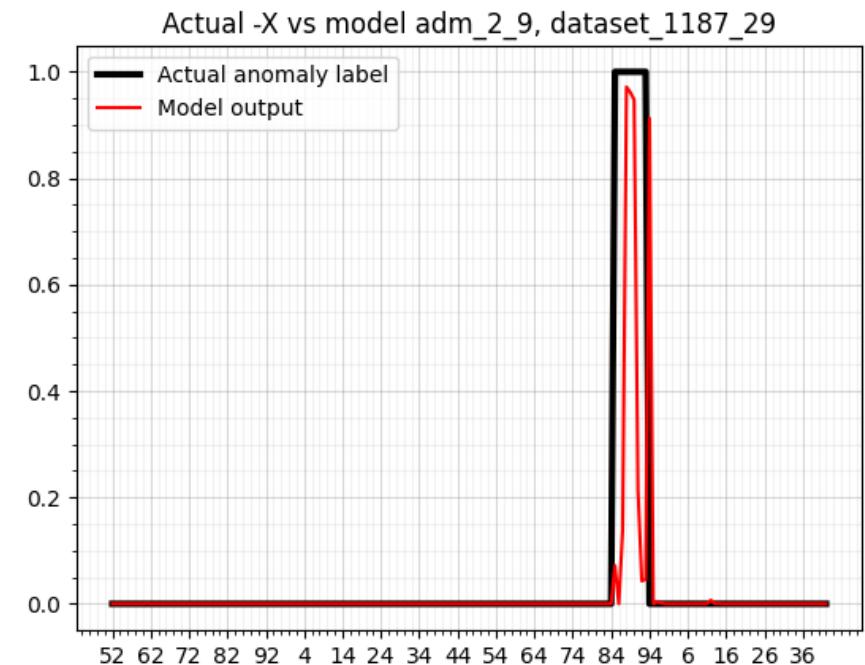
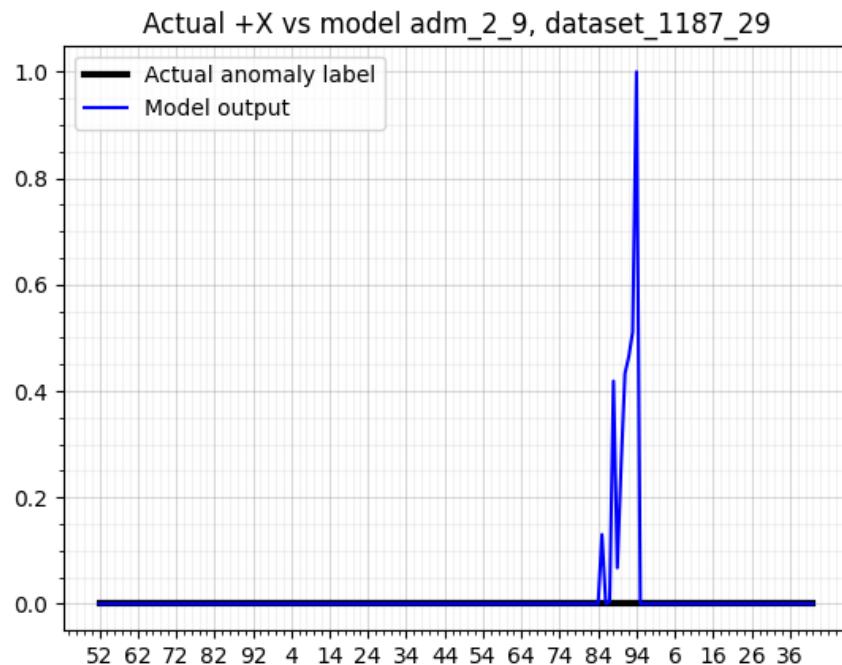


Figure 11: model inferences on dataset\_1187\_16\_mod1.png





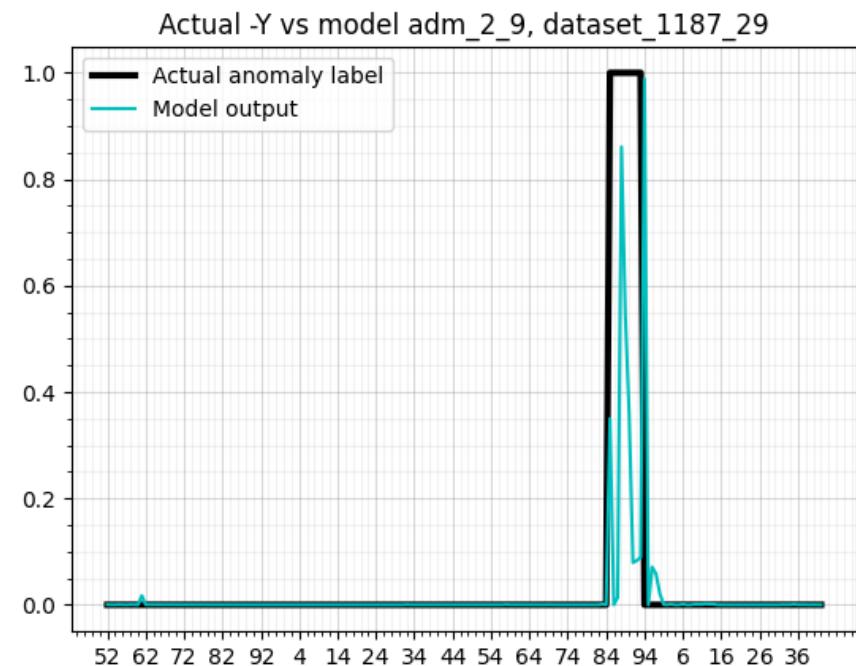
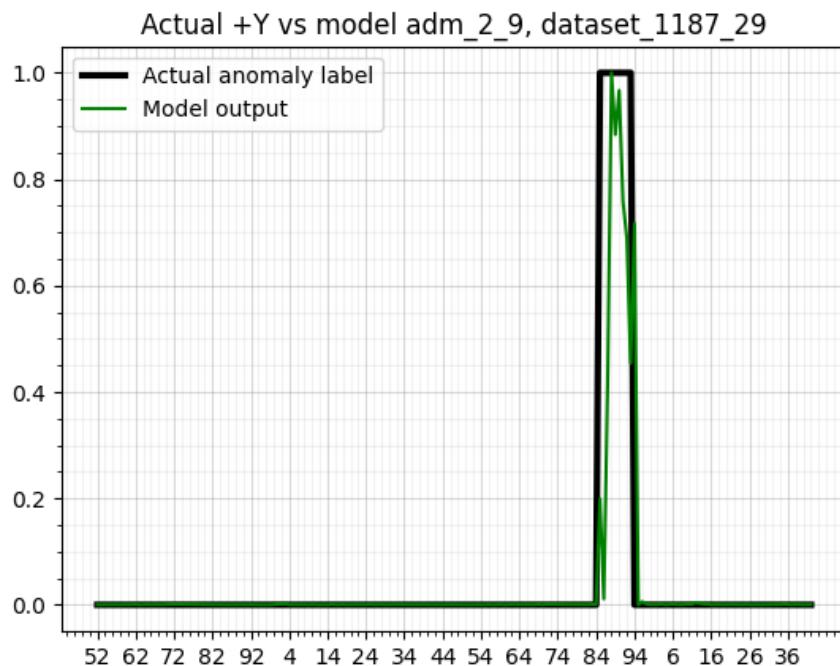
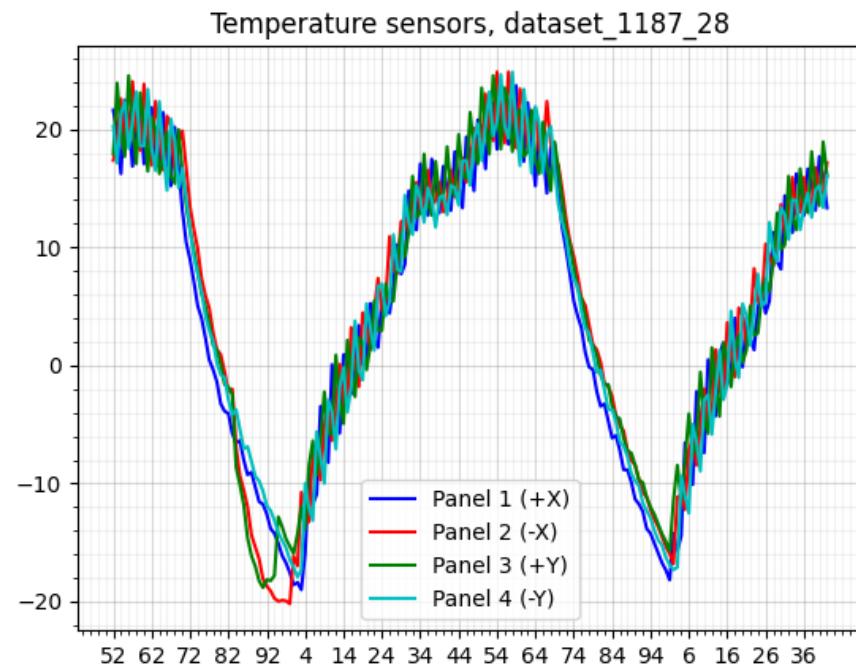
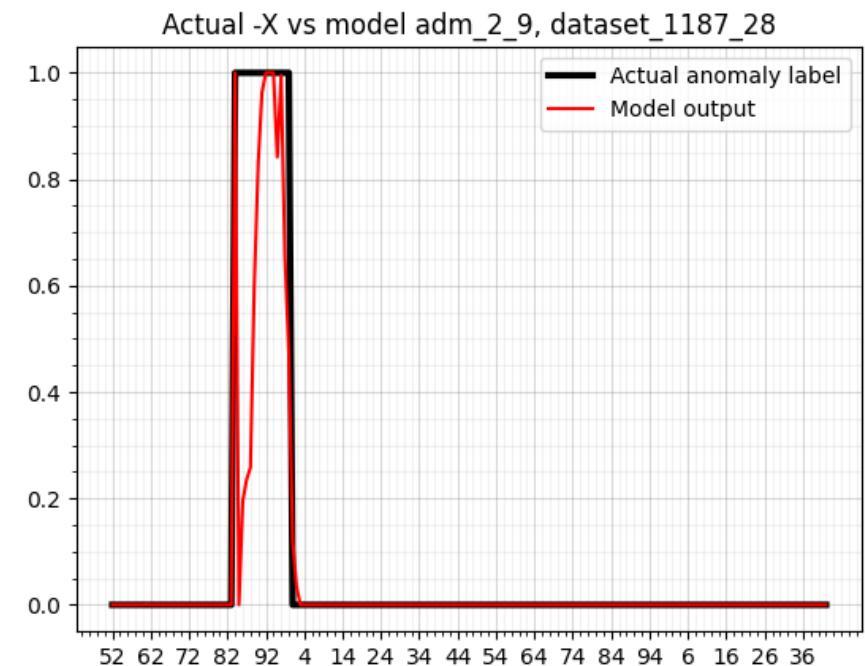
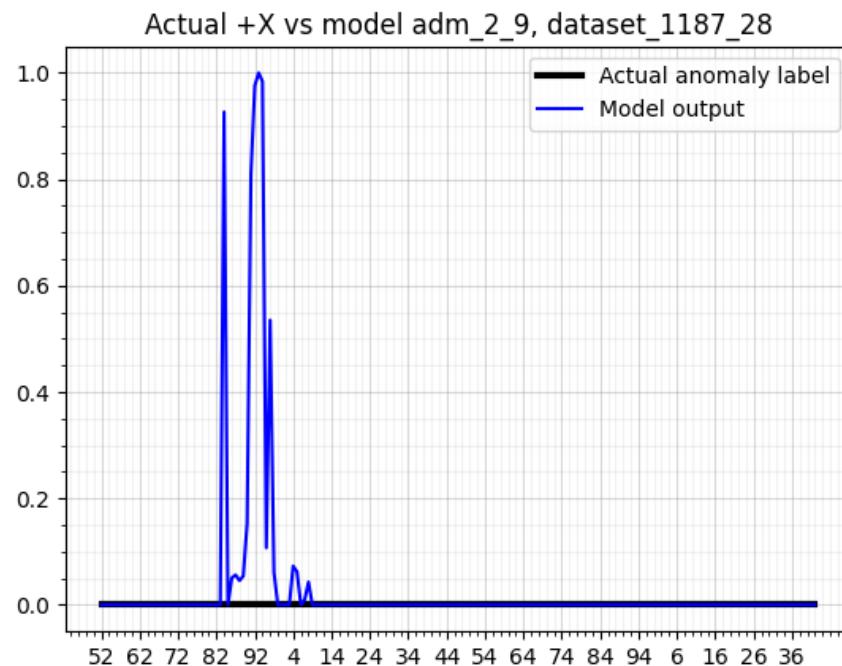


Figure 12: model inferences on dataset\_1187\_29\_mod1.png





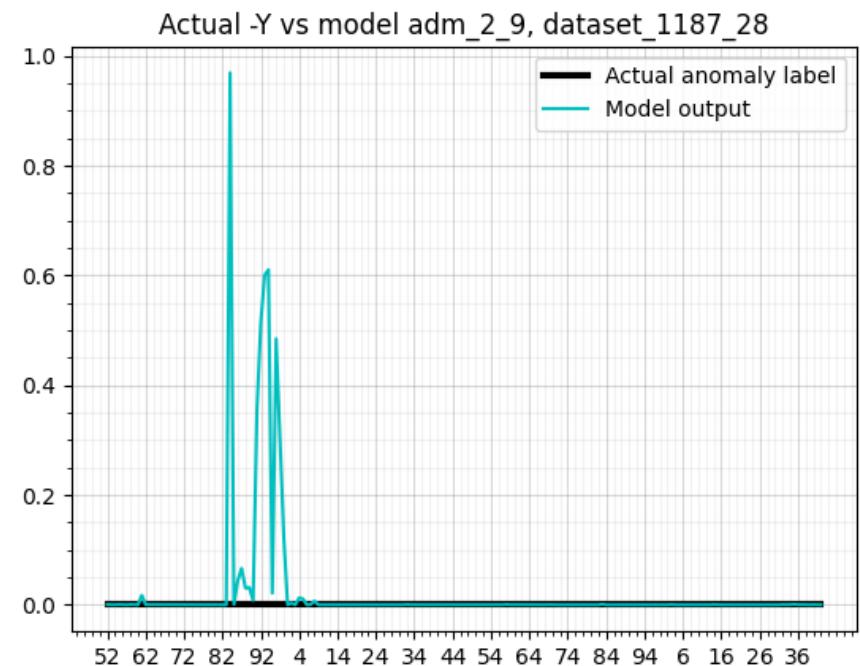
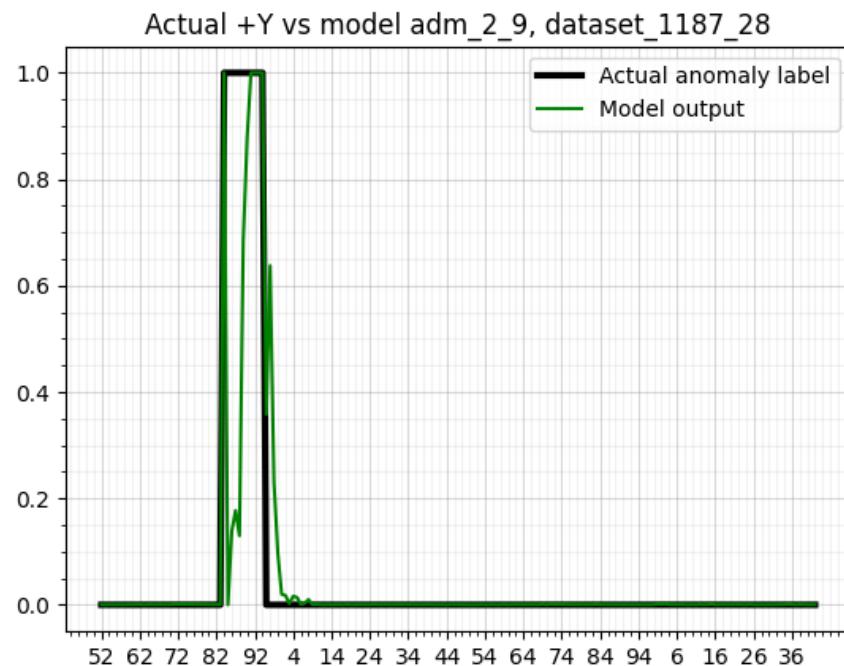
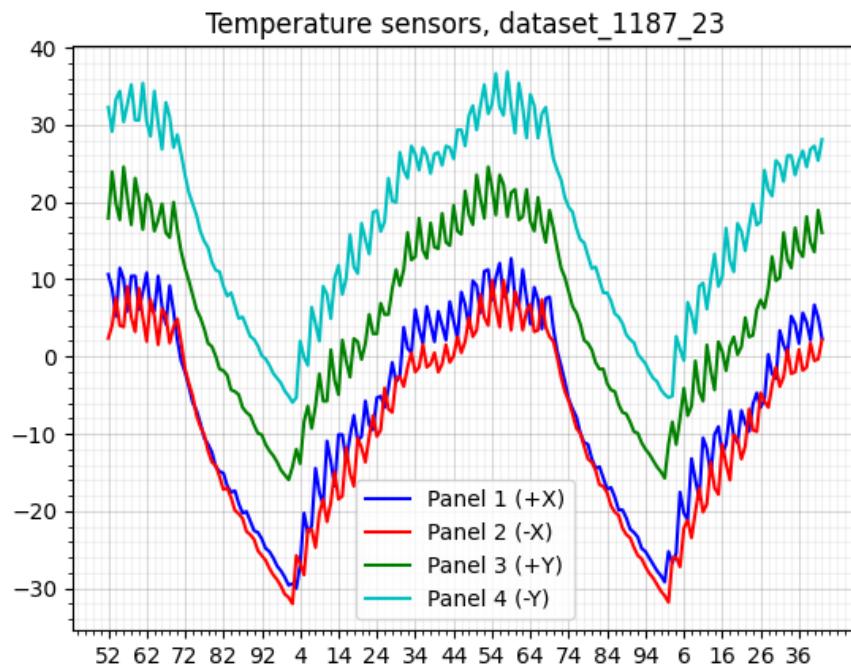
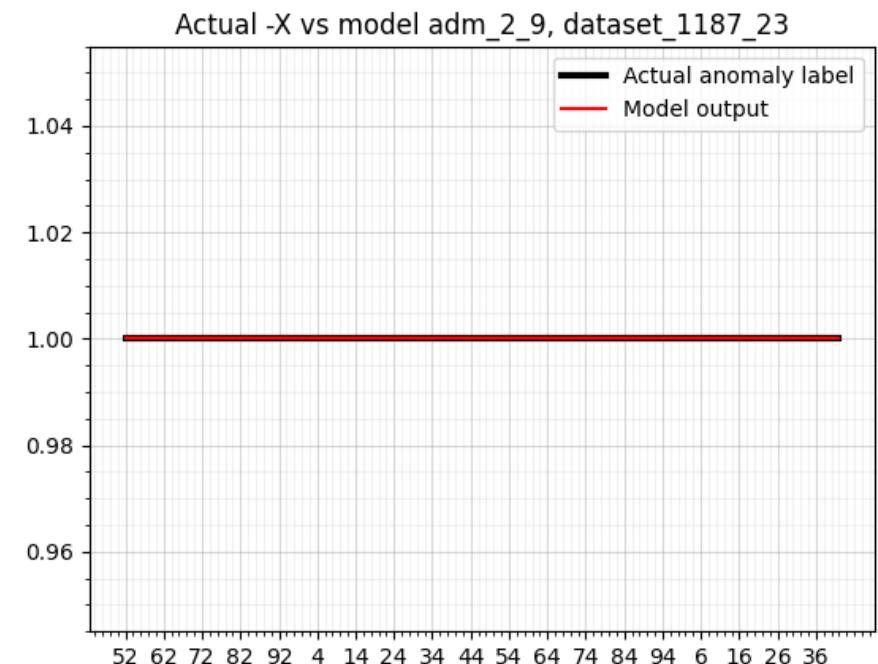
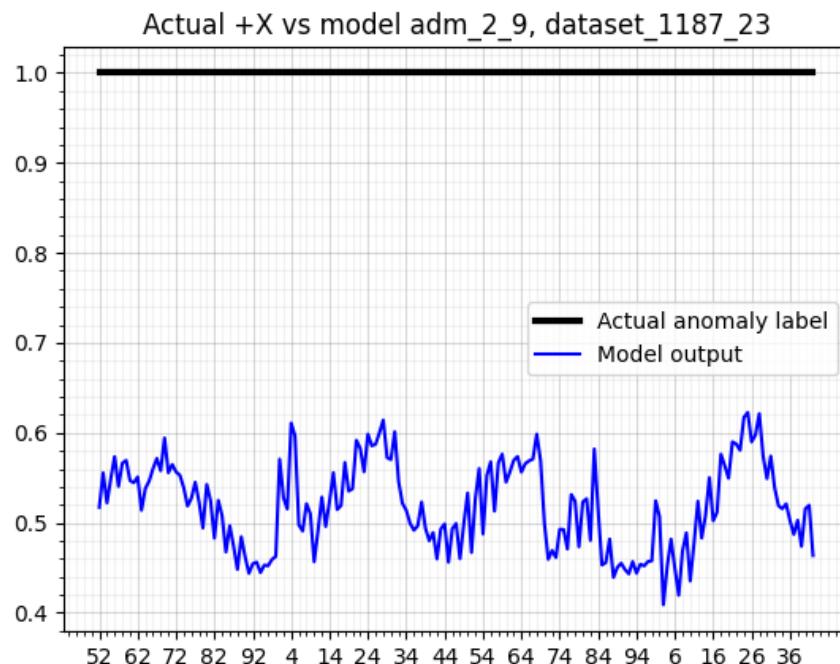


Figure 13: model inferences on dataset\_1187\_28\_mod1.png





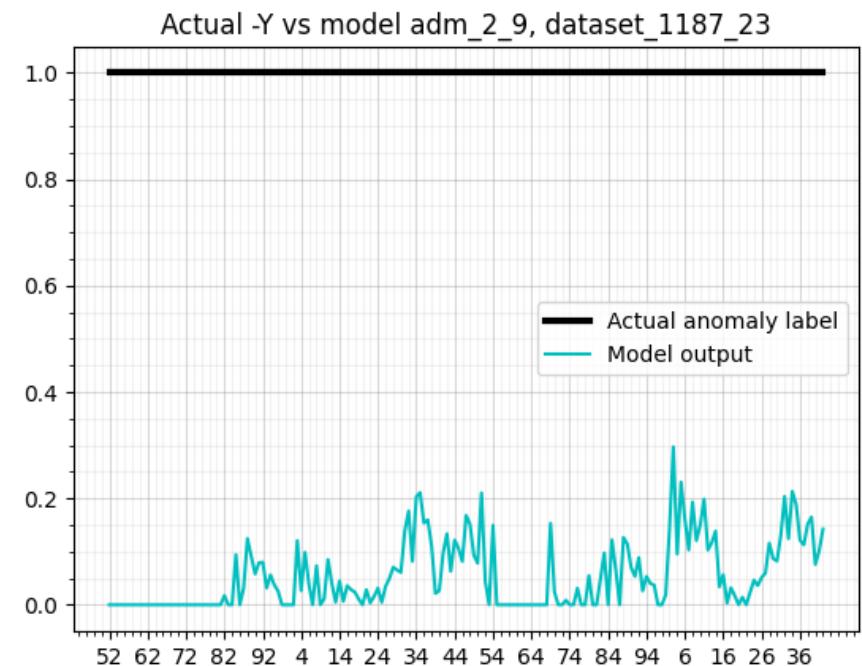
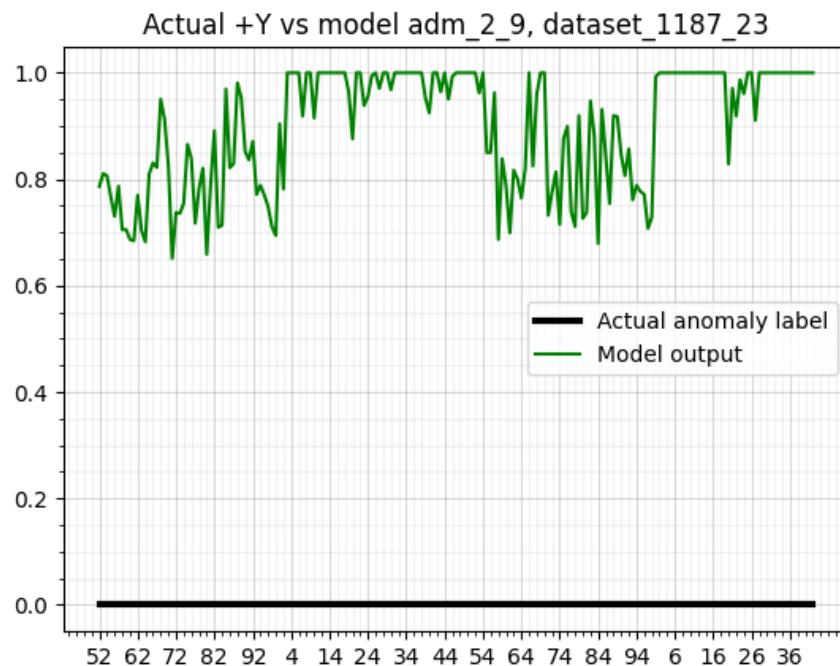
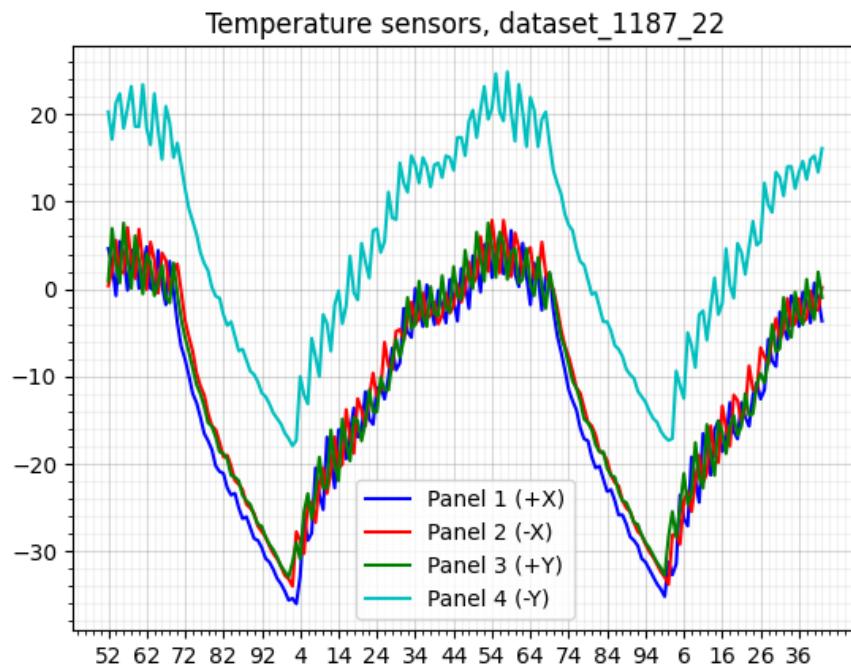
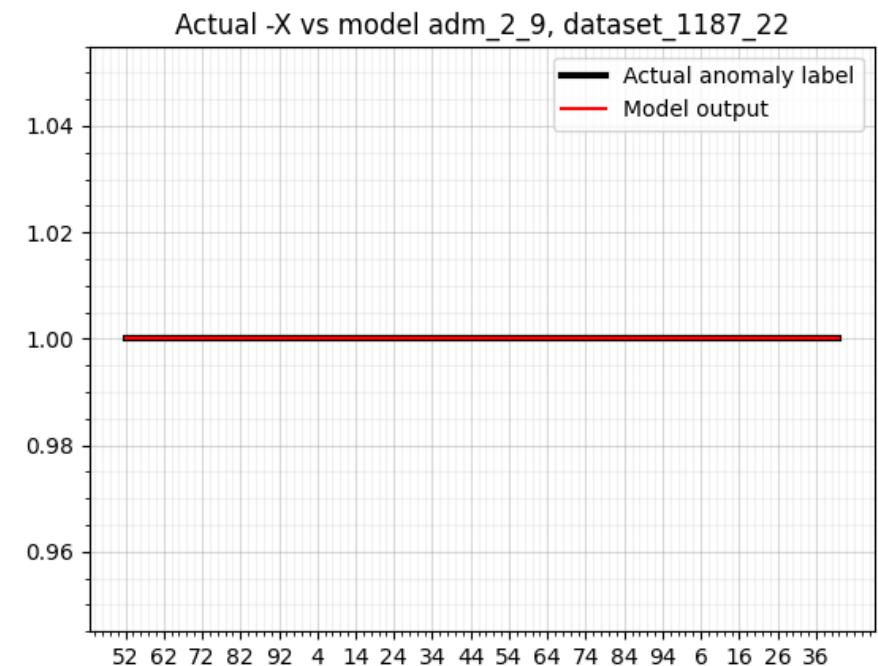
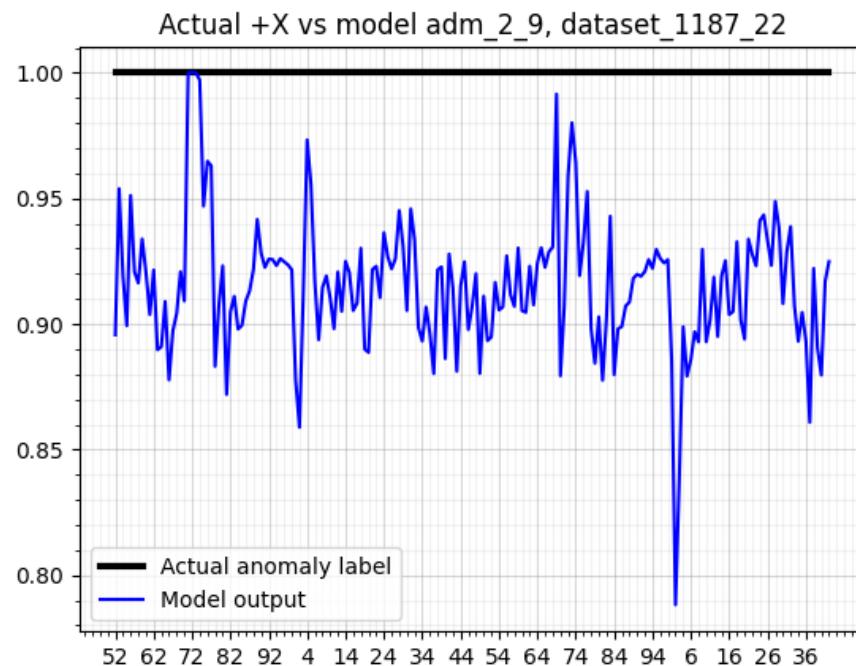


Figure 14: model inferences on dataset\_1187\_23\_mod1.png





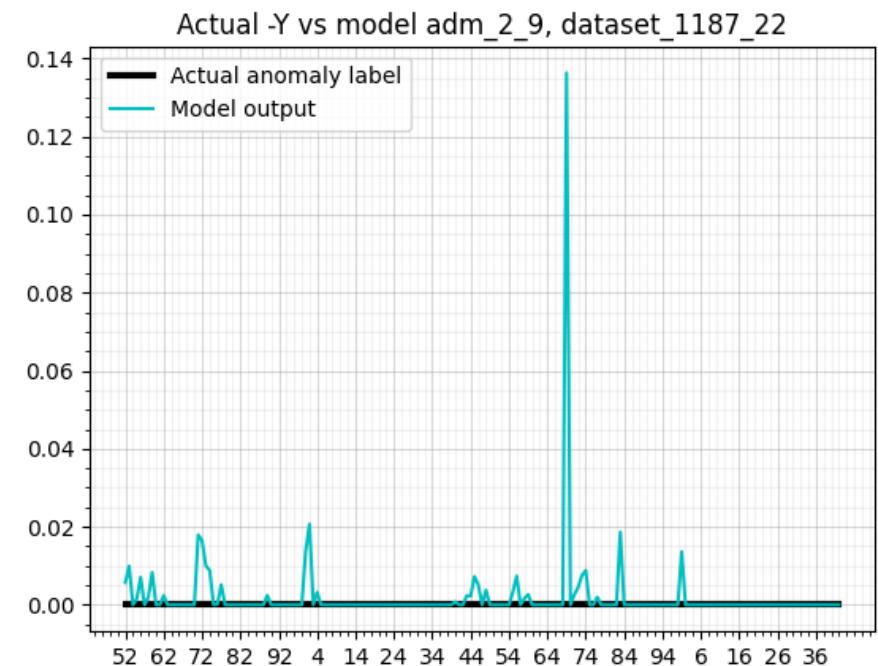
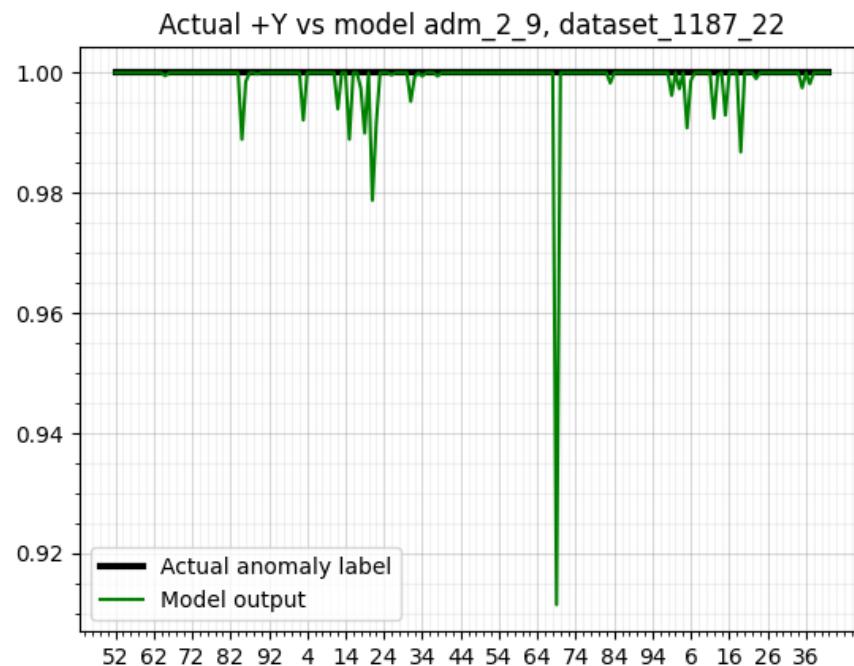
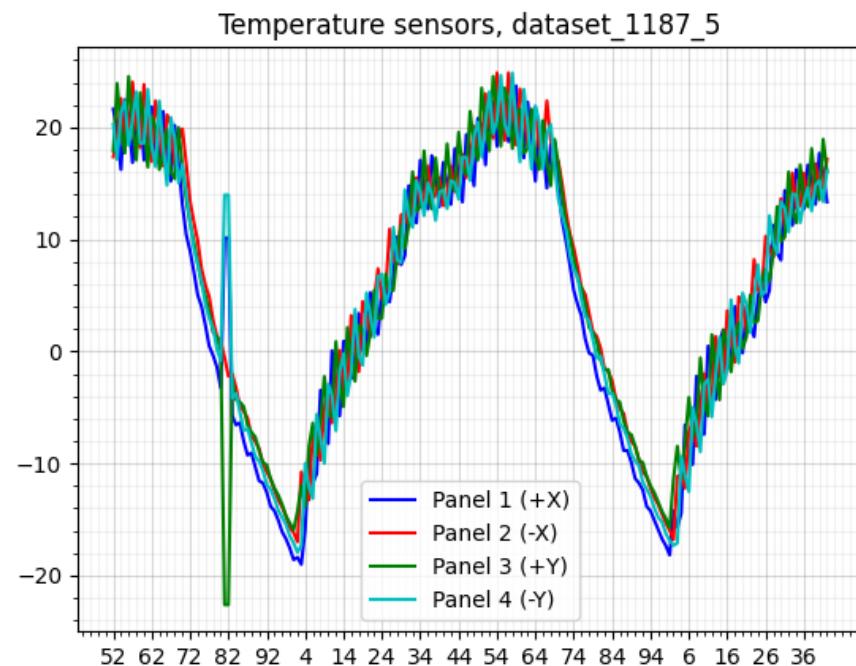
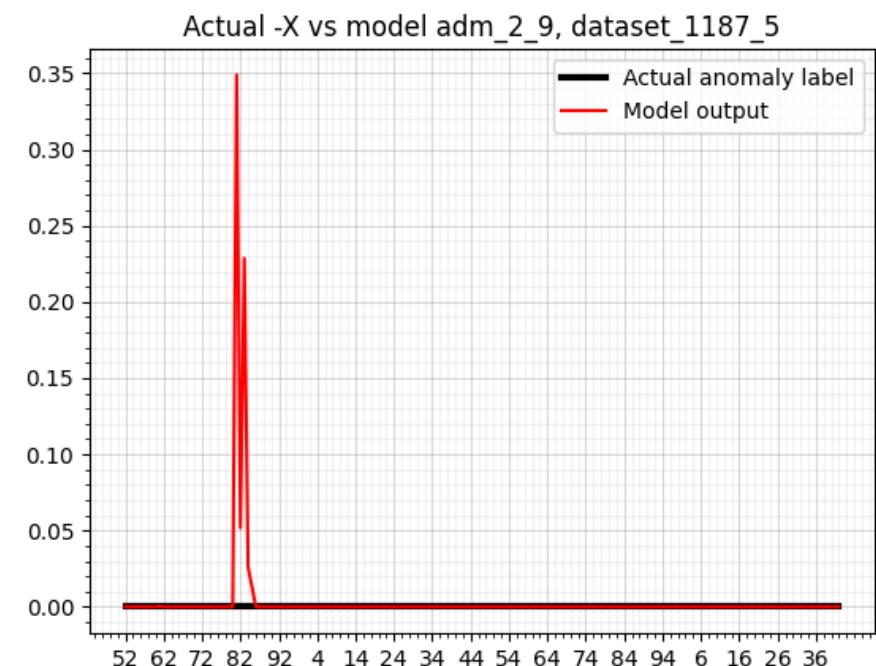
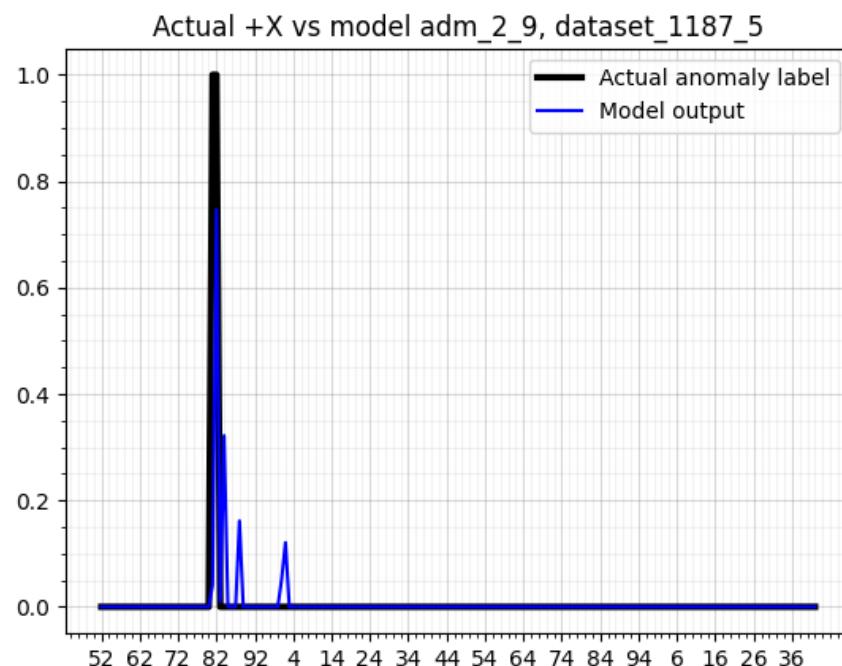


Figure 15: model inferences on dataset\_1187\_22\_mod1.png





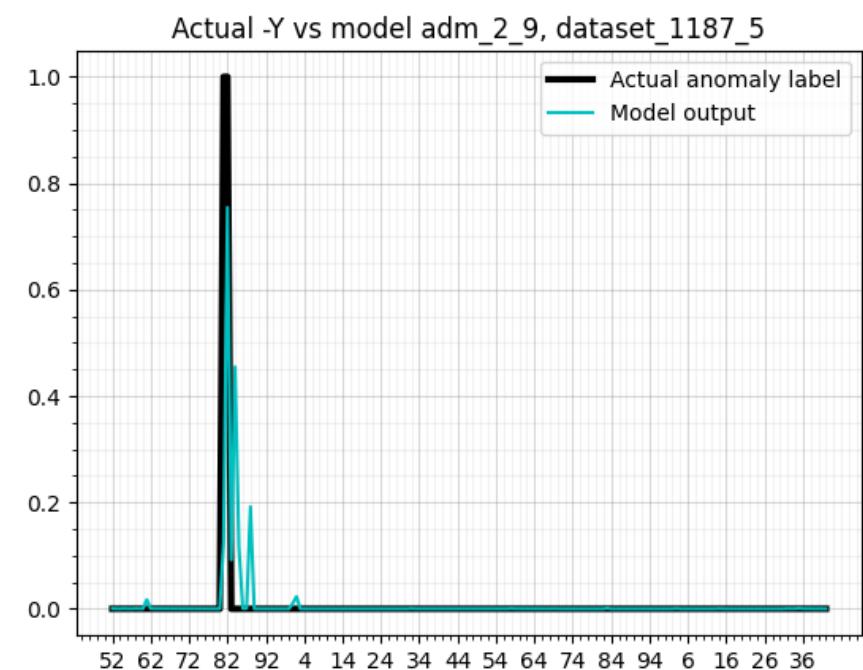
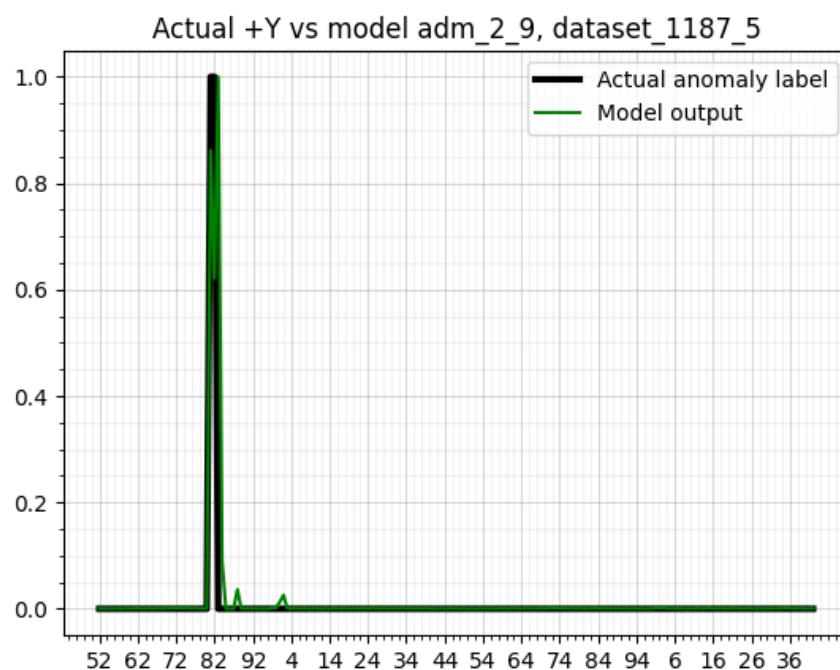
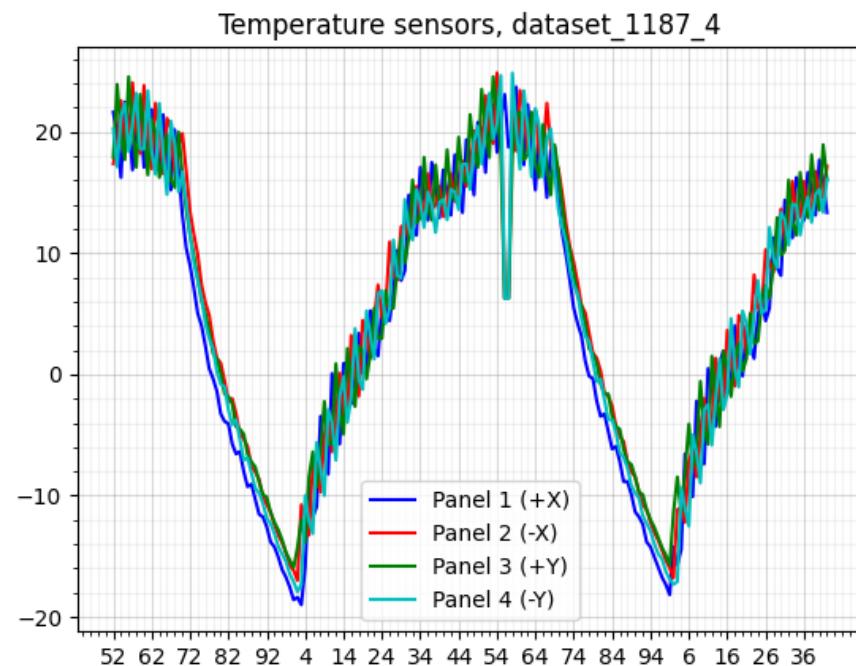
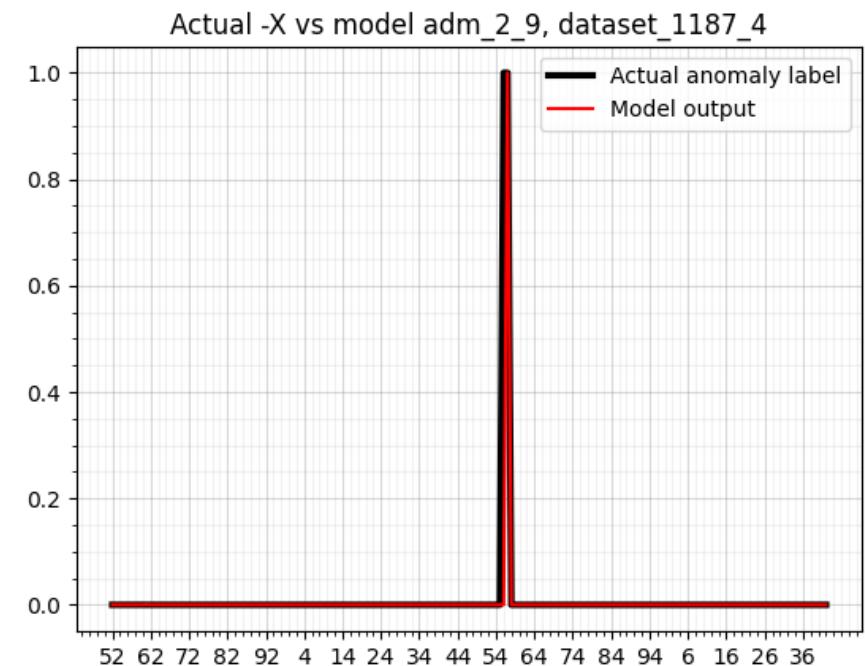
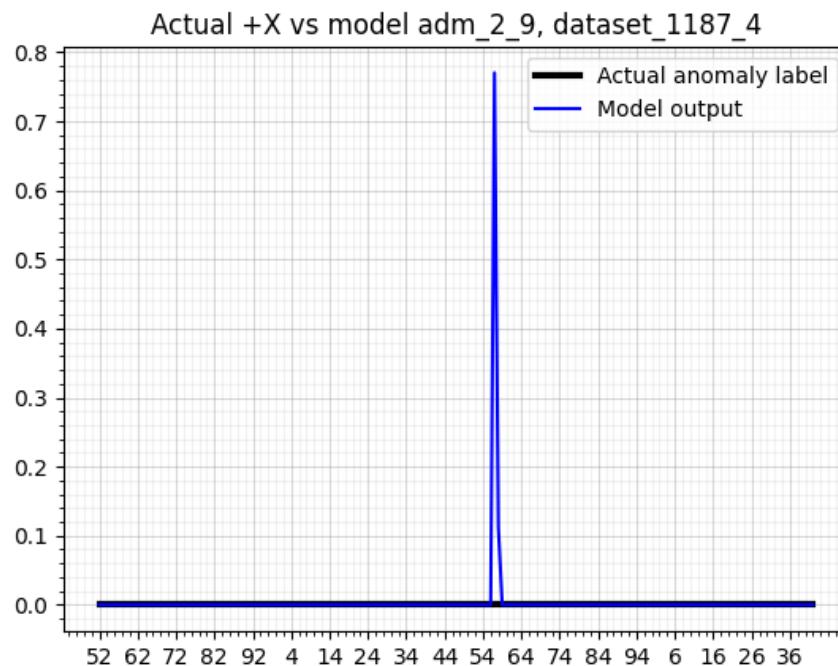


Figure 16: model inferences on dataset\_1187\_5\_mod1.png





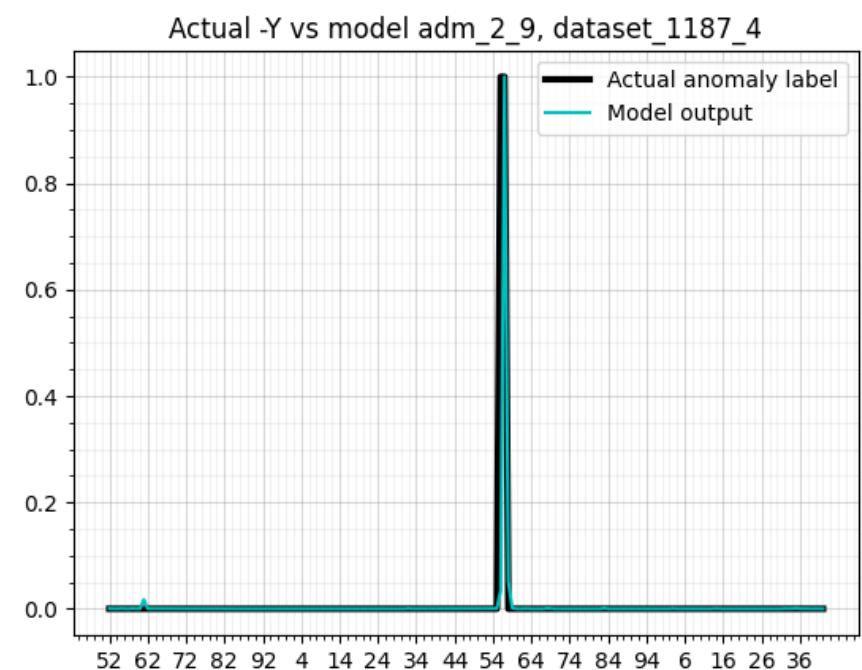
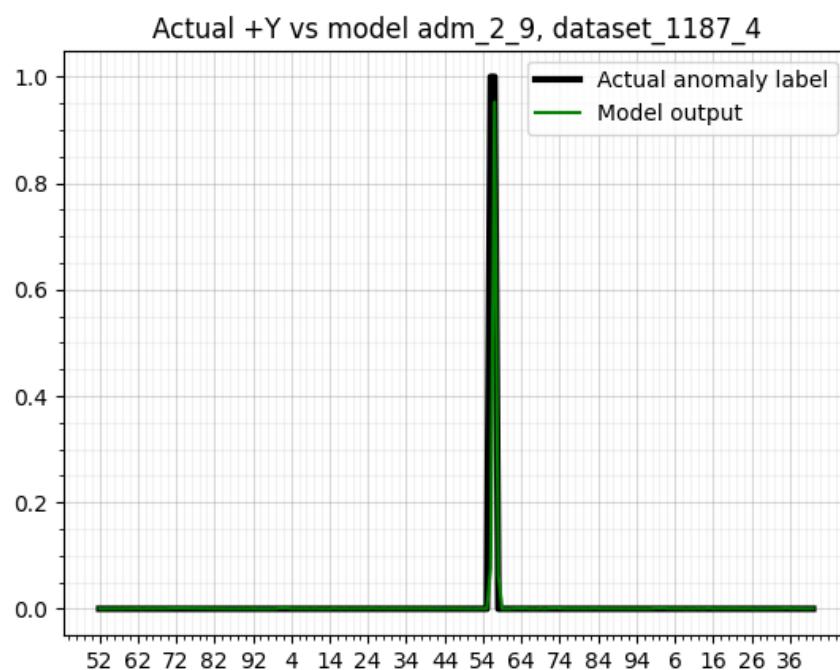
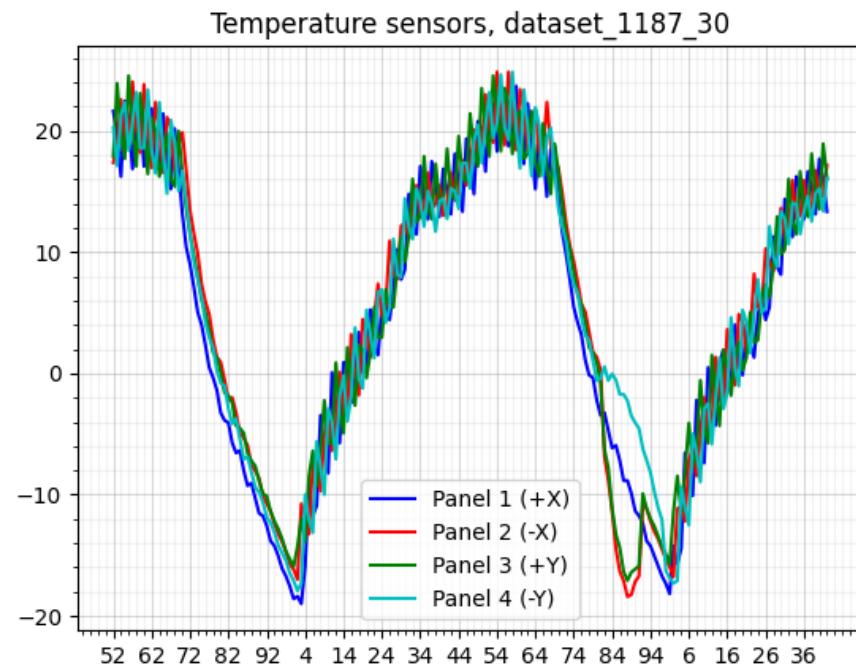
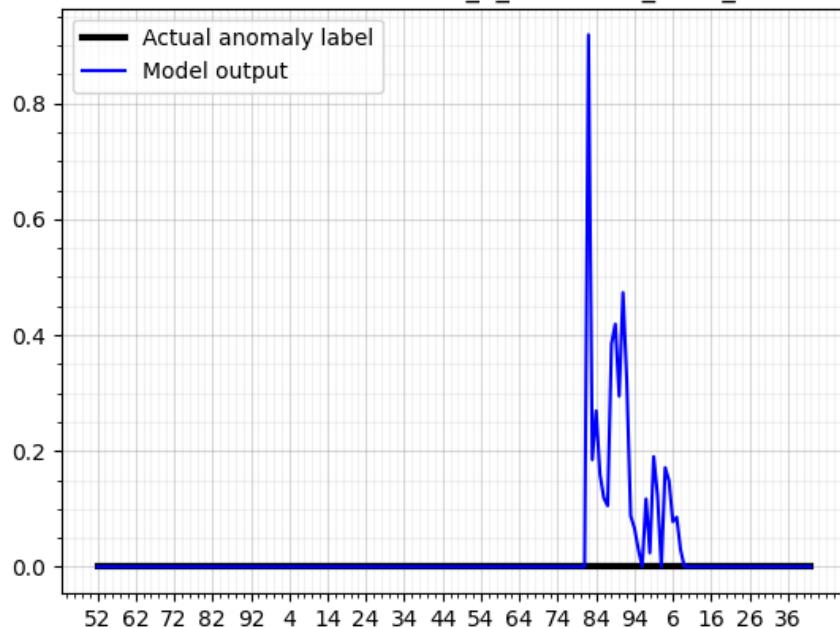


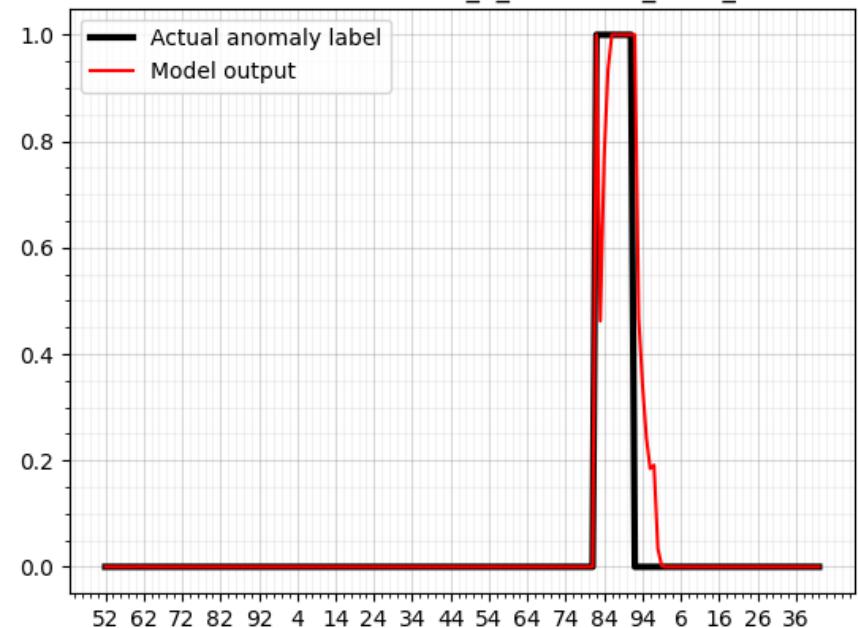
Figure 17: model inferences on dataset\_1187\_4\_mod1.png



Actual +X vs model adm\_2\_9, dataset\_1187\_30



Actual -X vs model adm\_2\_9, dataset\_1187\_30



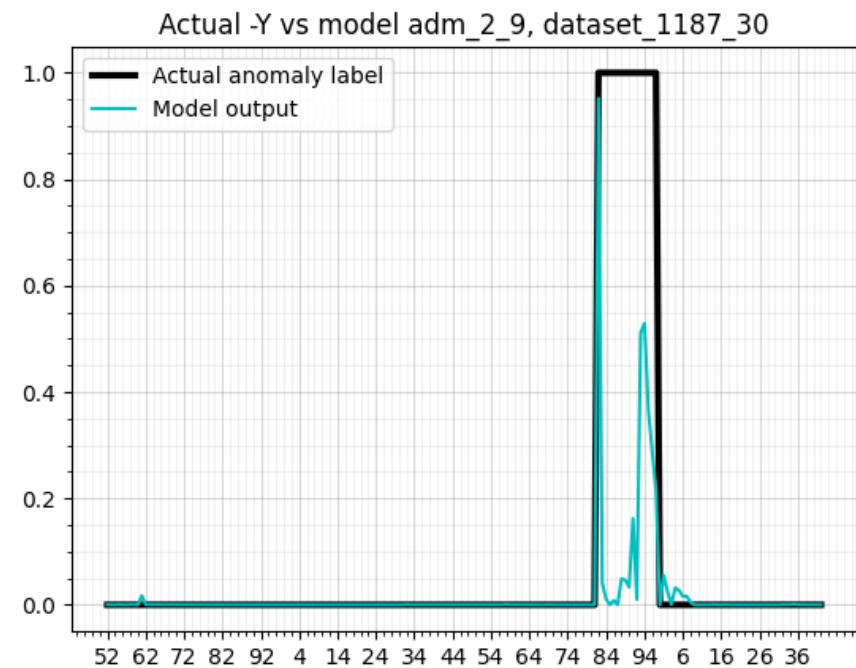
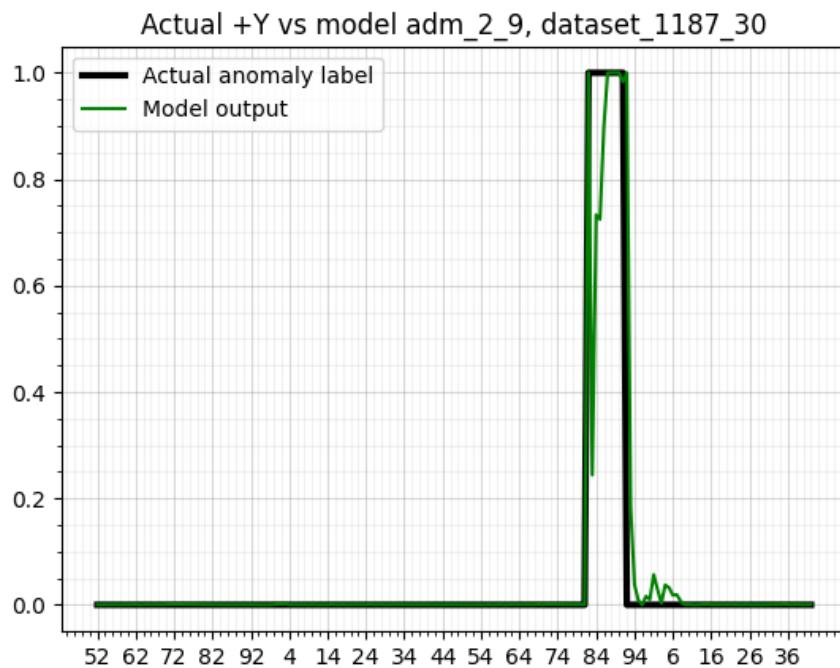
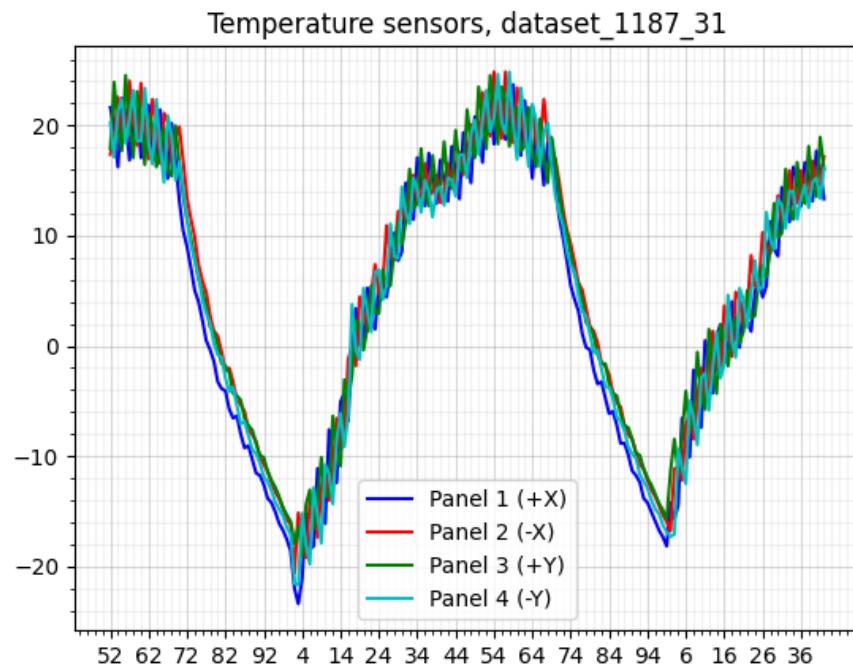
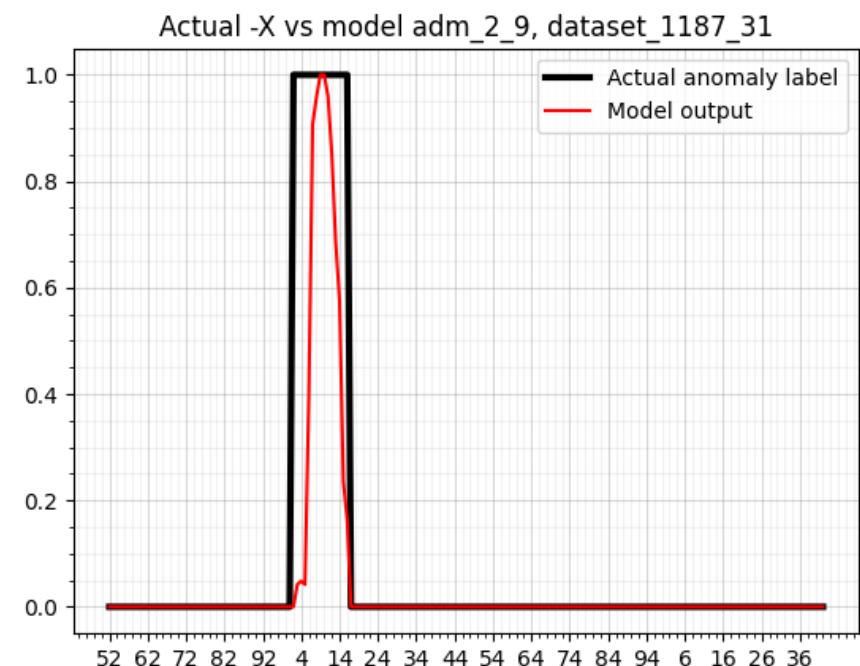
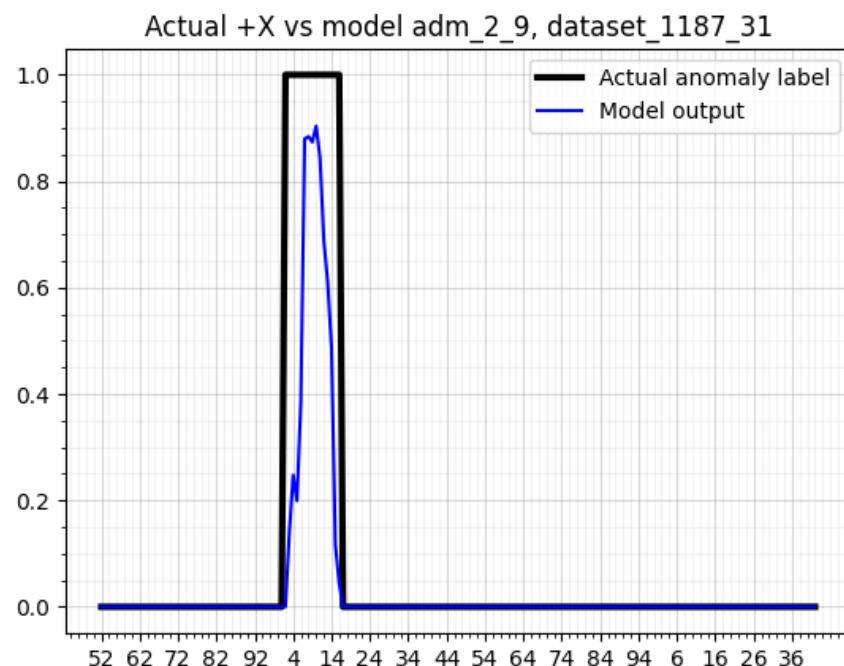


Figure 18: model inferences on dataset\_1187\_30\_mod1.png





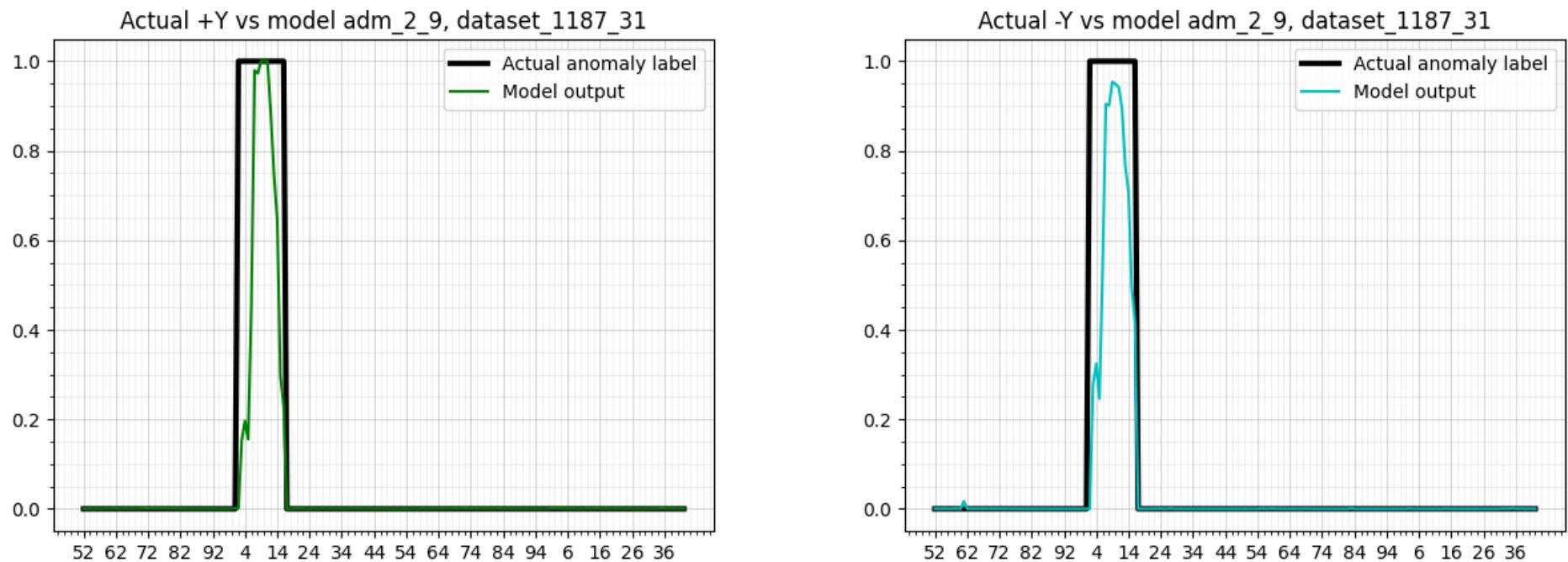
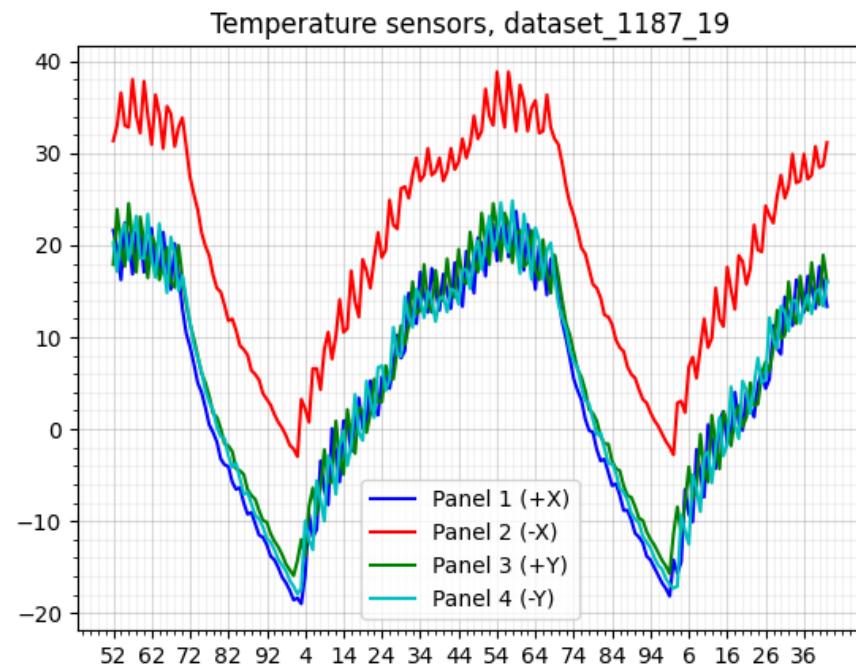
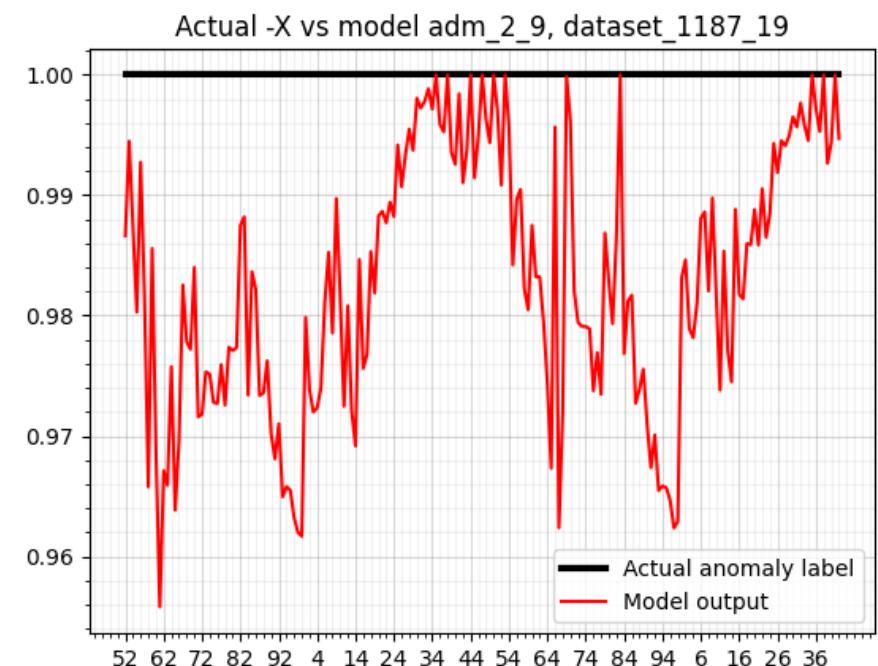
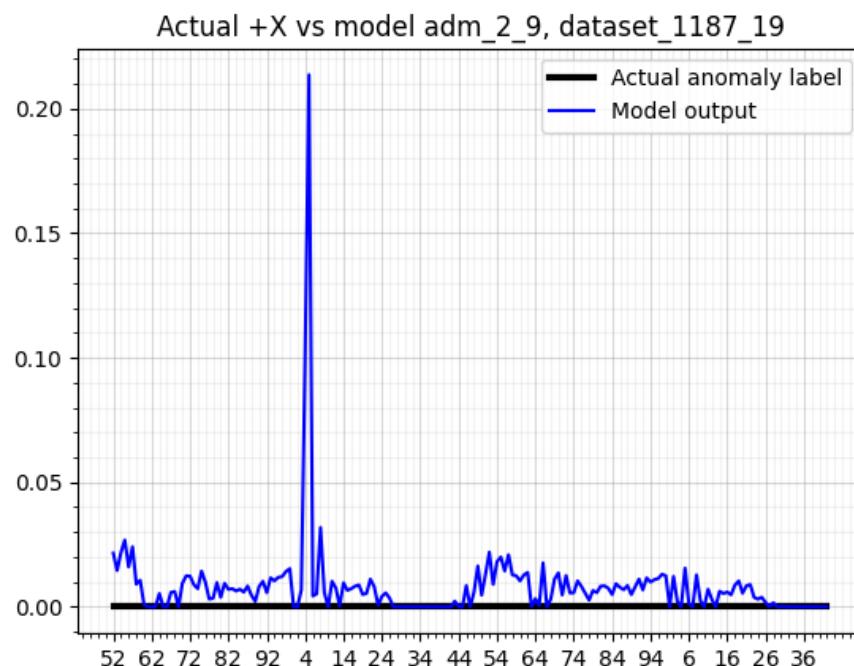
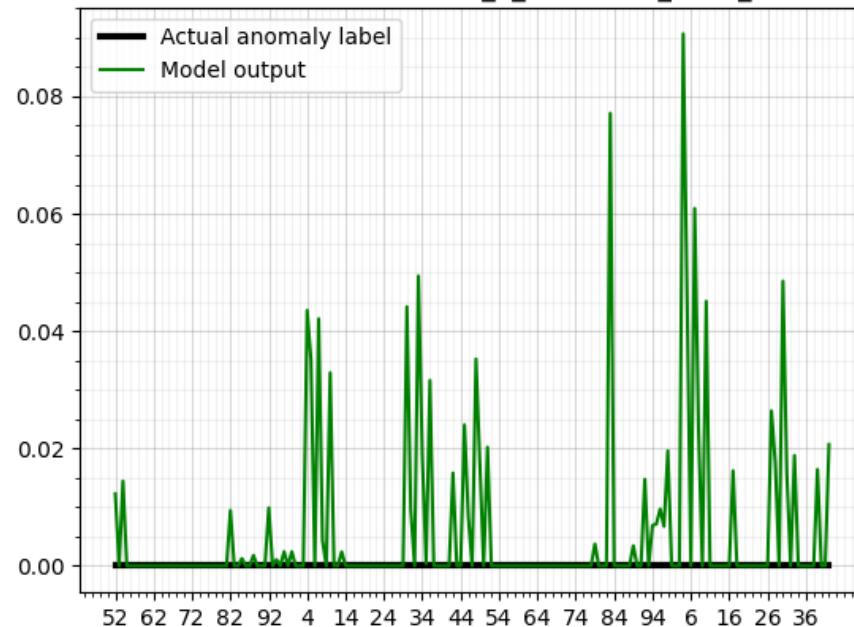


Figure 19: model inferences on dataset\_1187\_31\_mod1.png





Actual +Y vs model adm\_2\_9, dataset\_1187\_19



Actual -Y vs model adm\_2\_9, dataset\_1187\_19

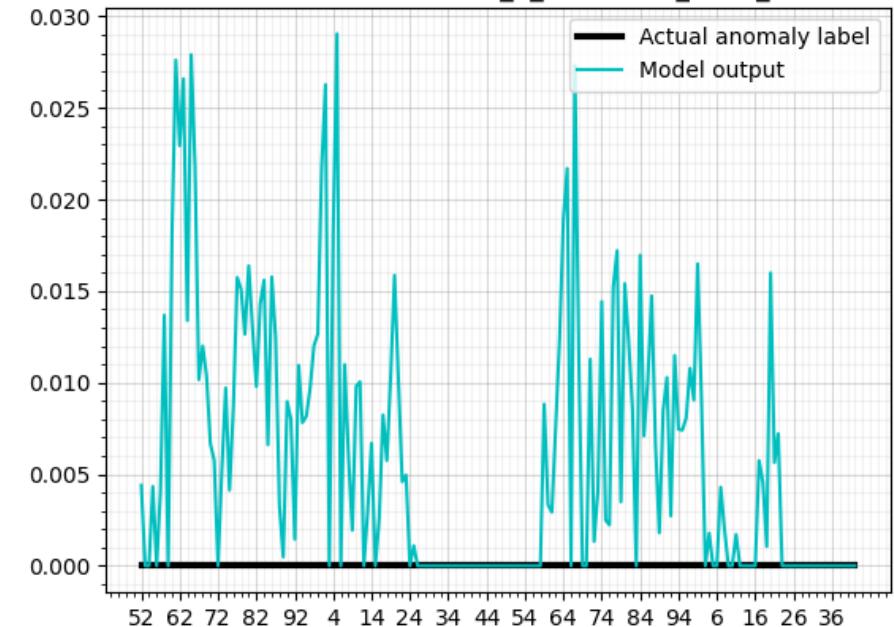
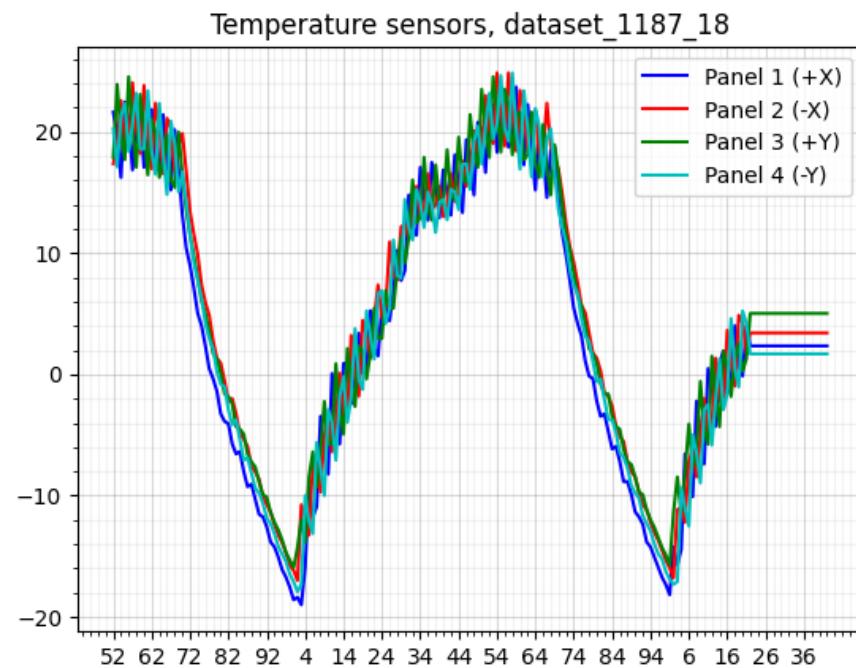
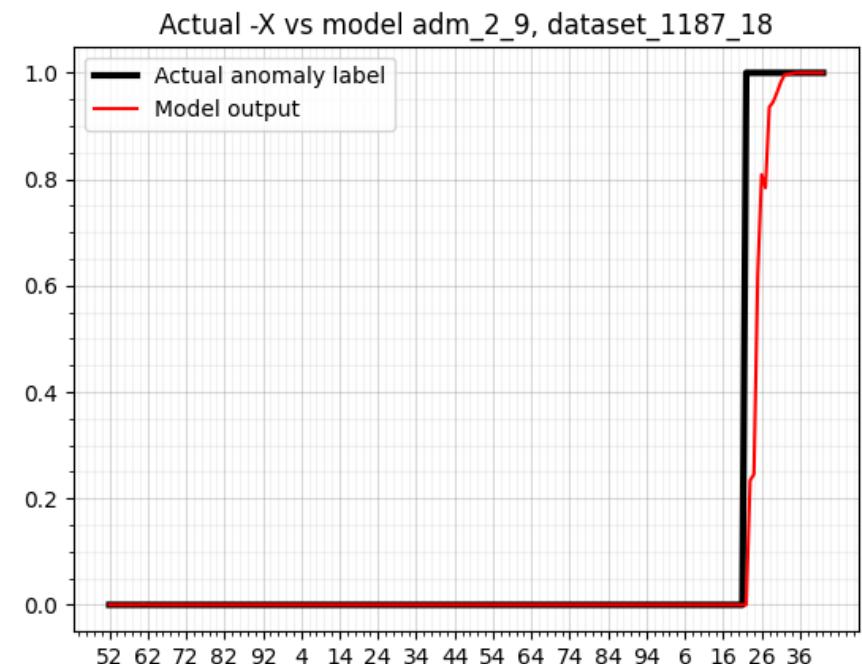
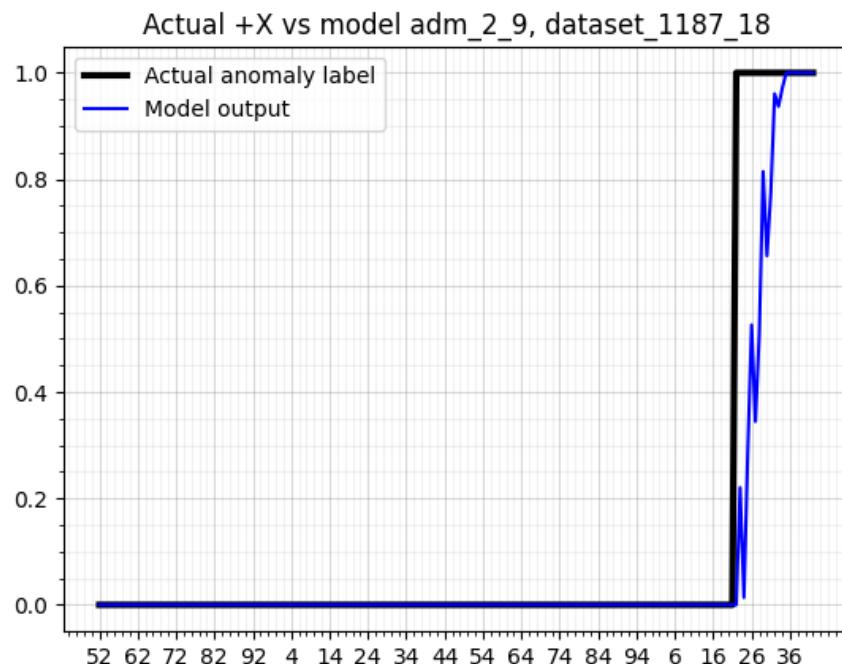


Figure 20: model inferences on dataset\_1187\_19\_mod1.png





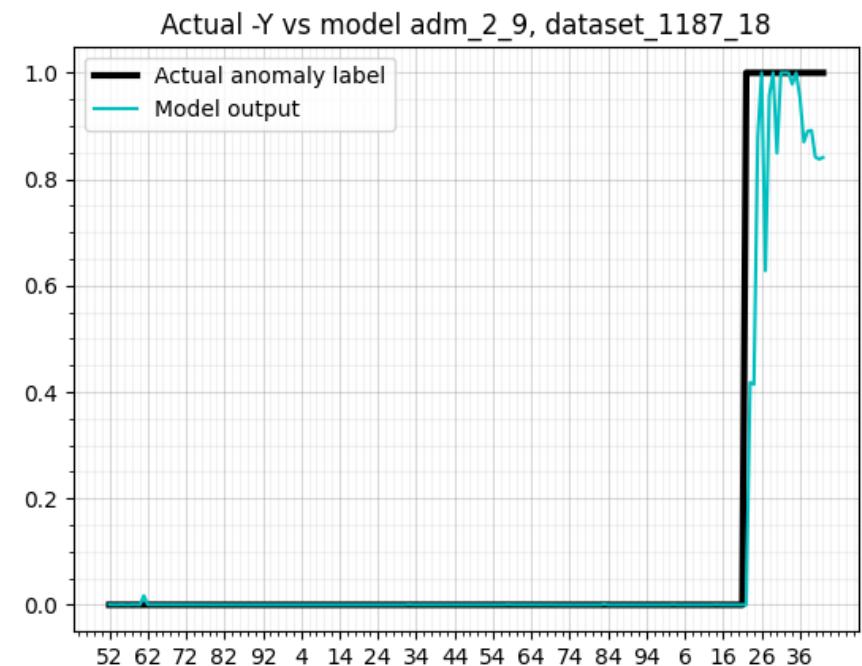
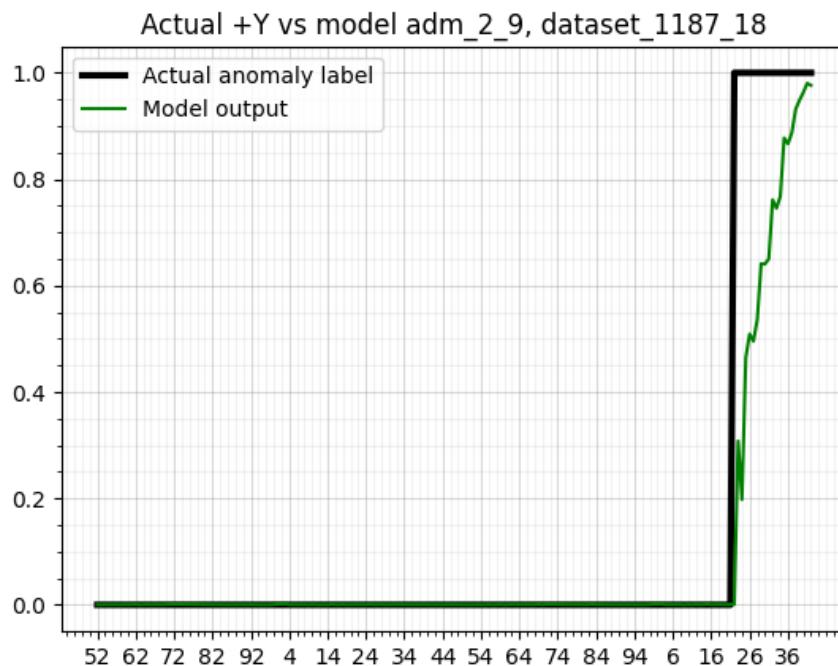
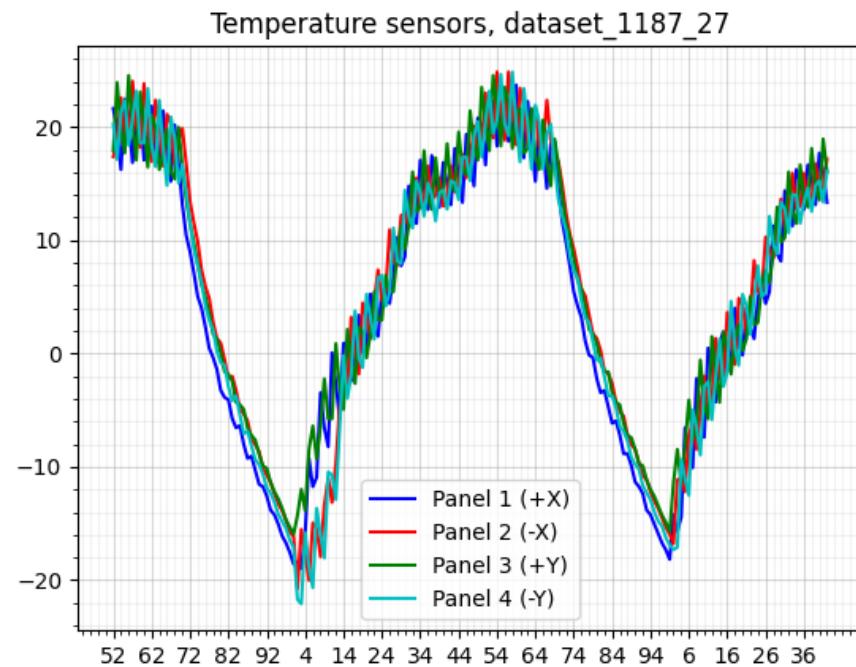
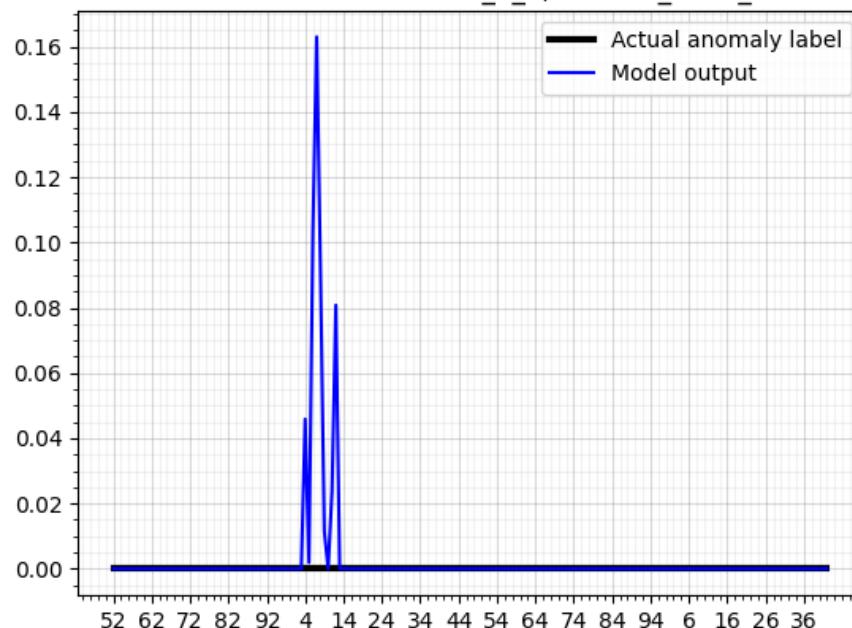


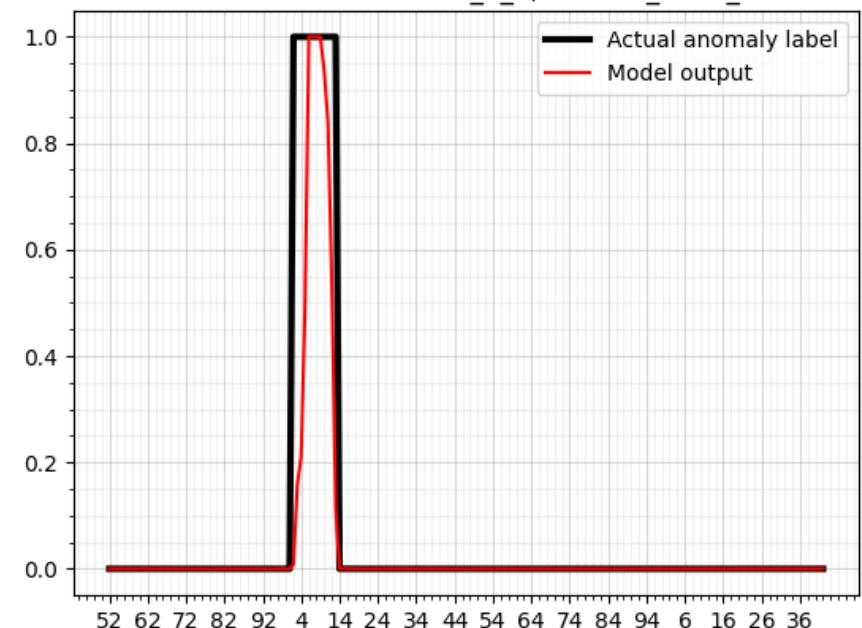
Figure 21: model inferences on dataset\_1187\_18\_mod1.png



Actual +X vs model adm\_2\_9, dataset\_1187\_27



Actual -X vs model adm\_2\_9, dataset\_1187\_27



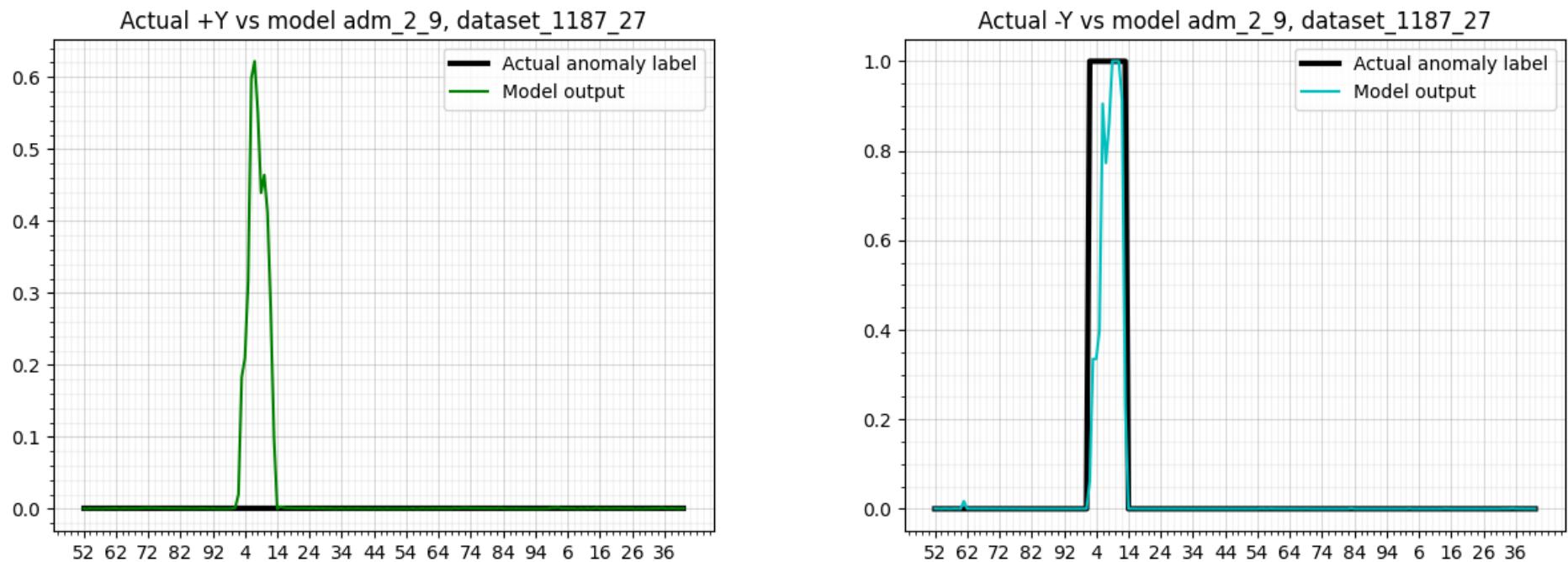
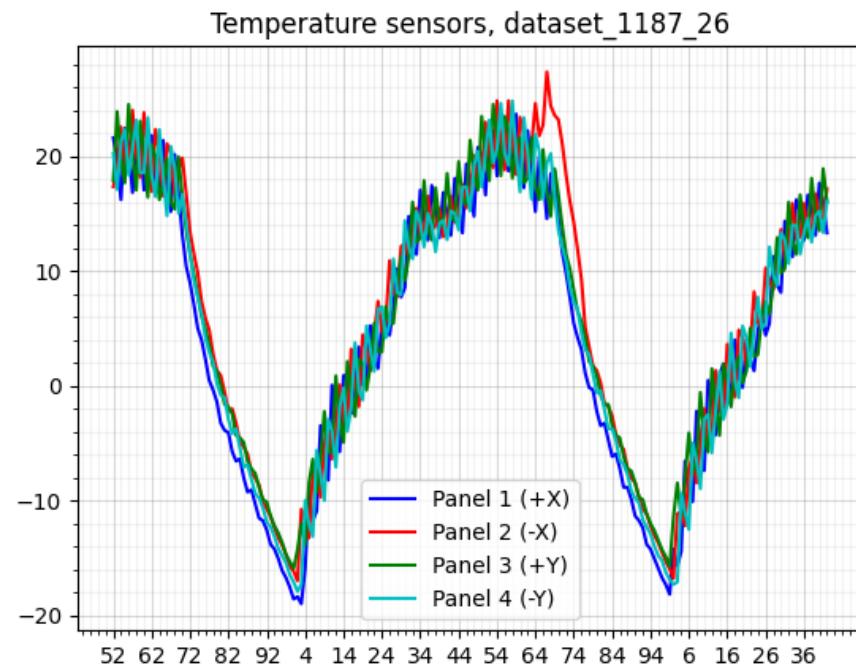
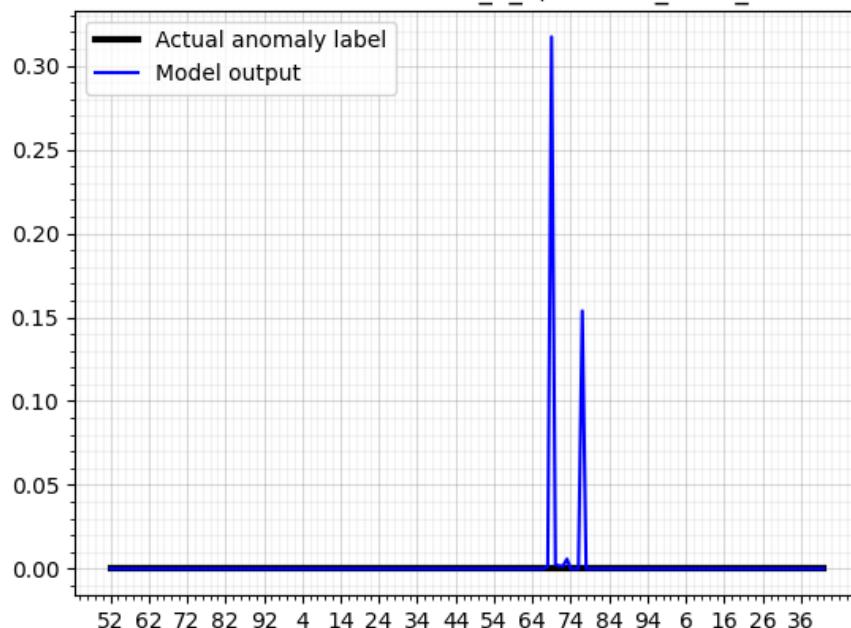


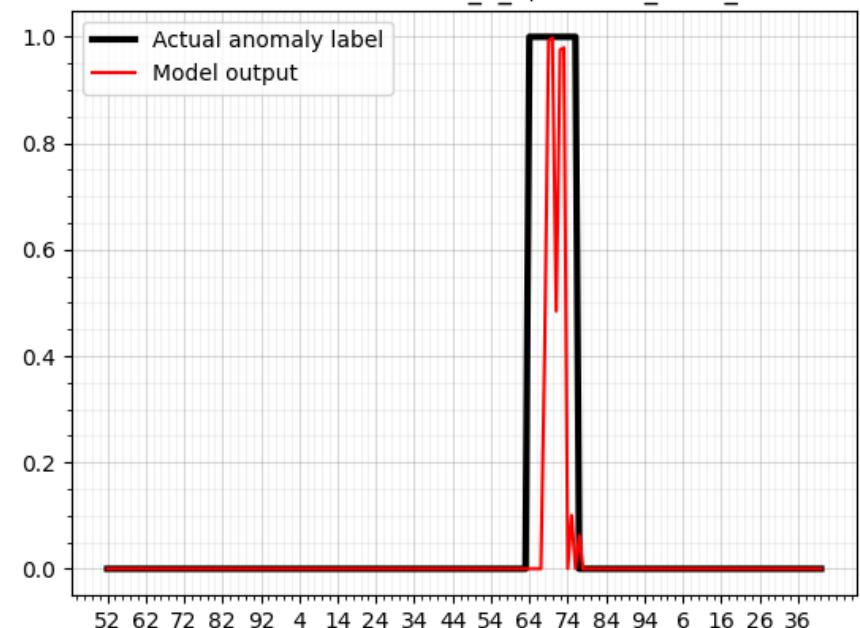
Figure 22: model inferences on dataset\_1187\_27\_mod1.png



Actual +X vs model adm\_2\_9, dataset\_1187\_26



Actual -X vs model adm\_2\_9, dataset\_1187\_26



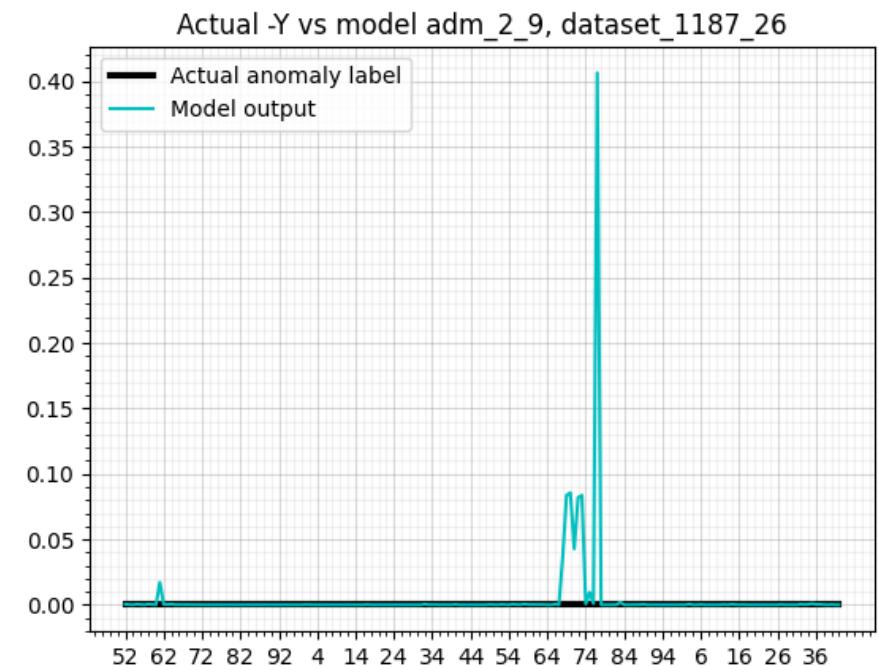
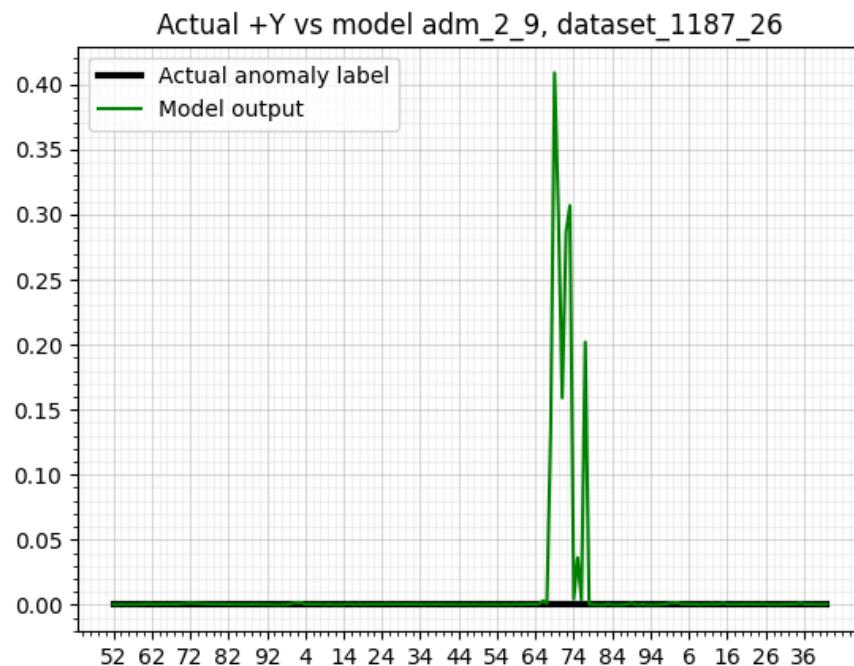
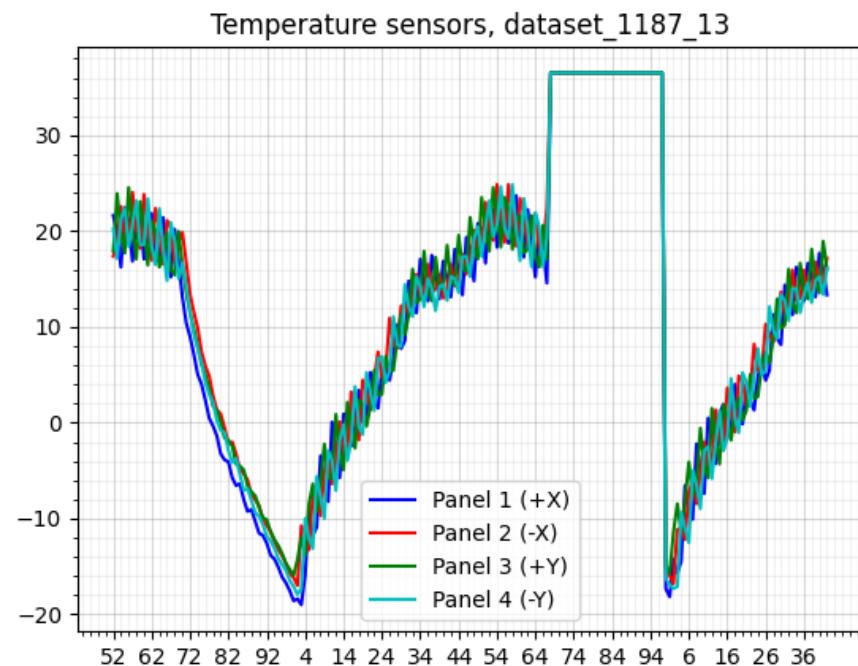
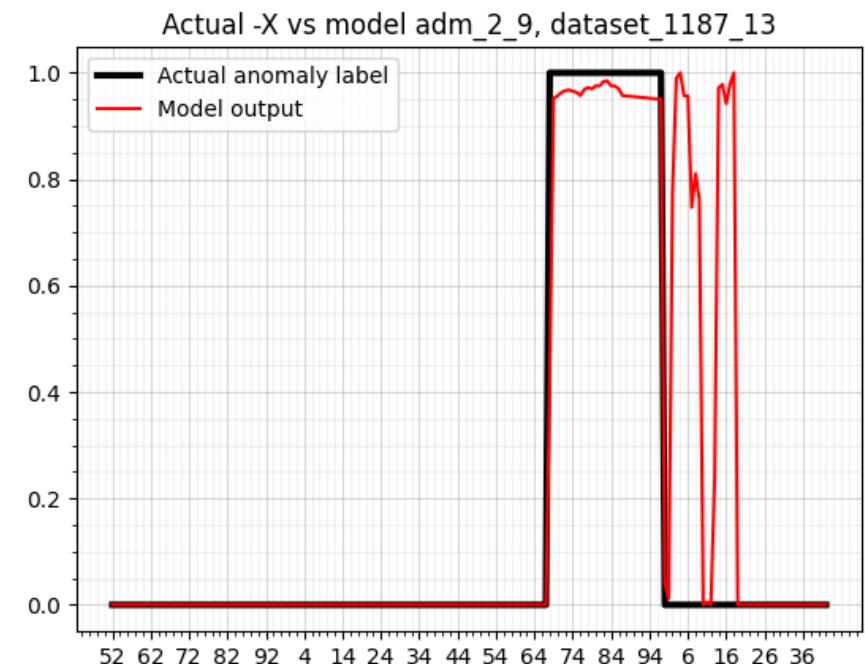
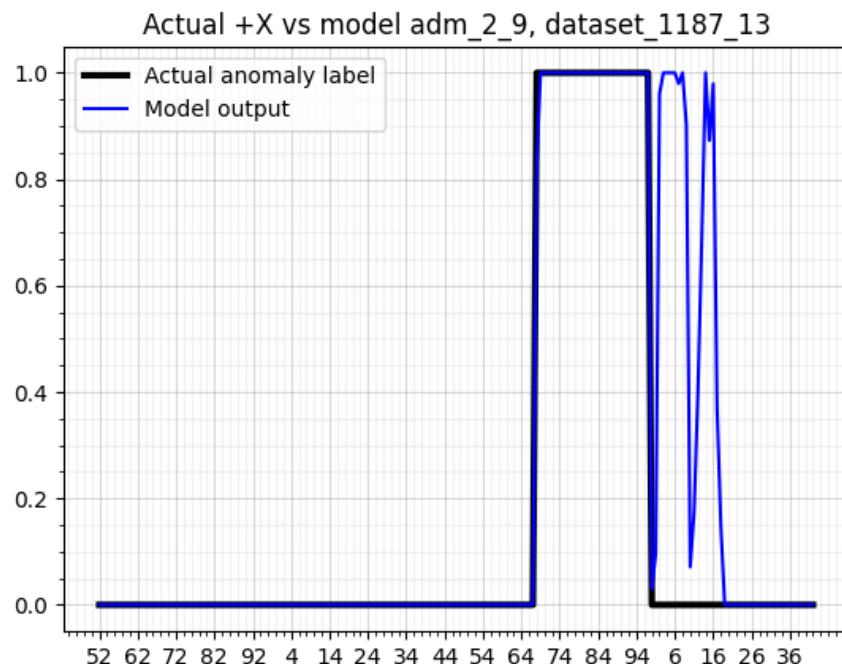


Figure 23: model inferences on dataset\_1187\_26\_mod1.png





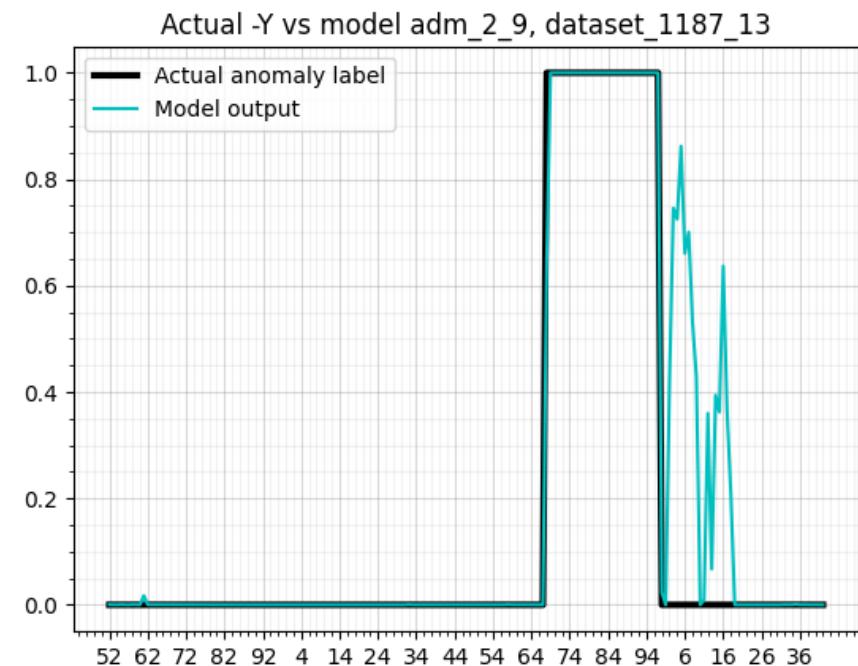
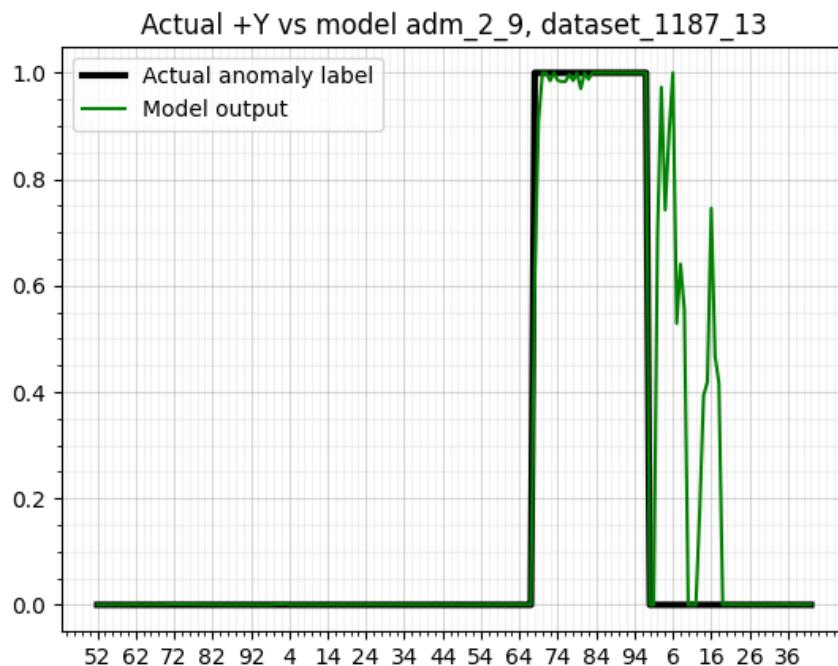
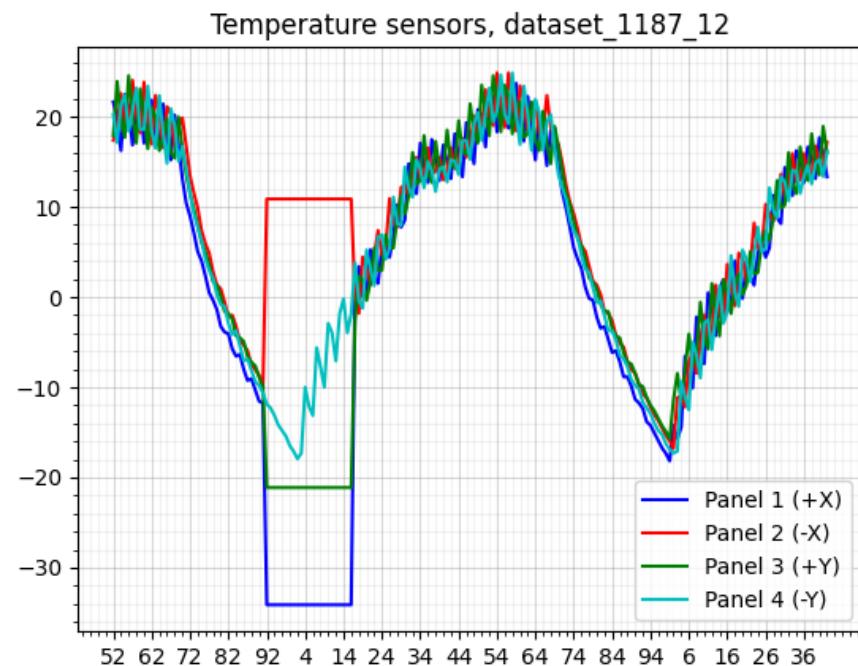
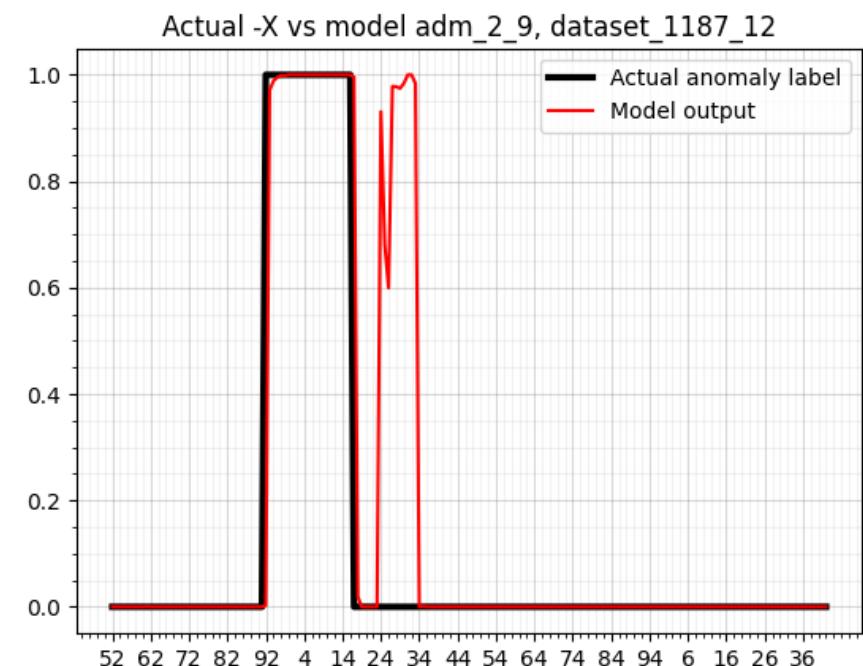
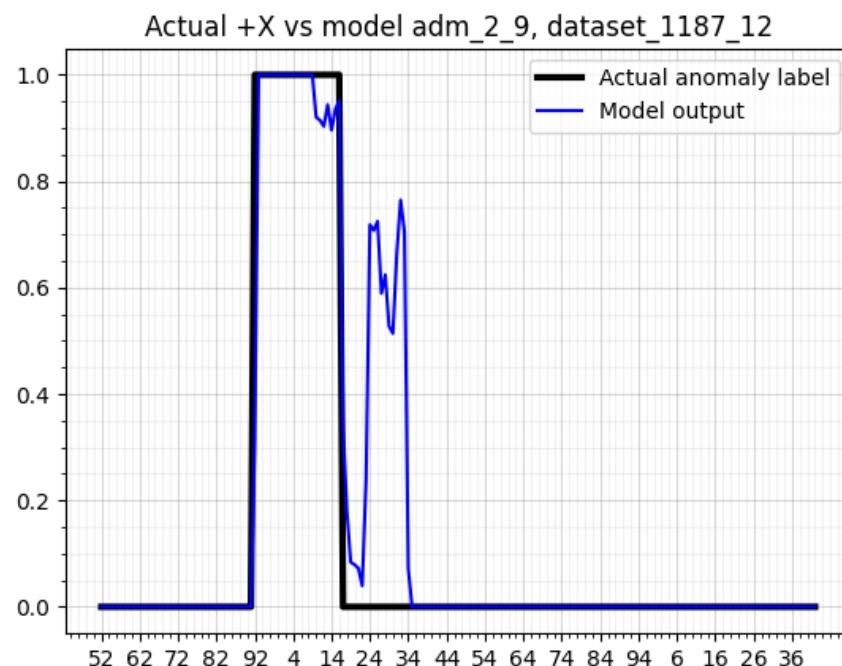


Figure 24: model inferences on dataset\_1187\_13\_mod1.png





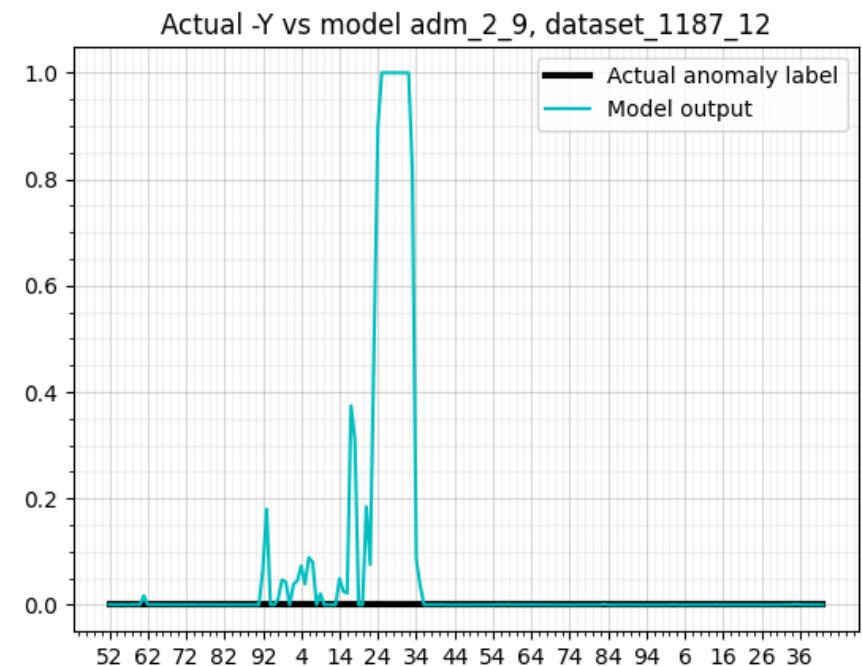
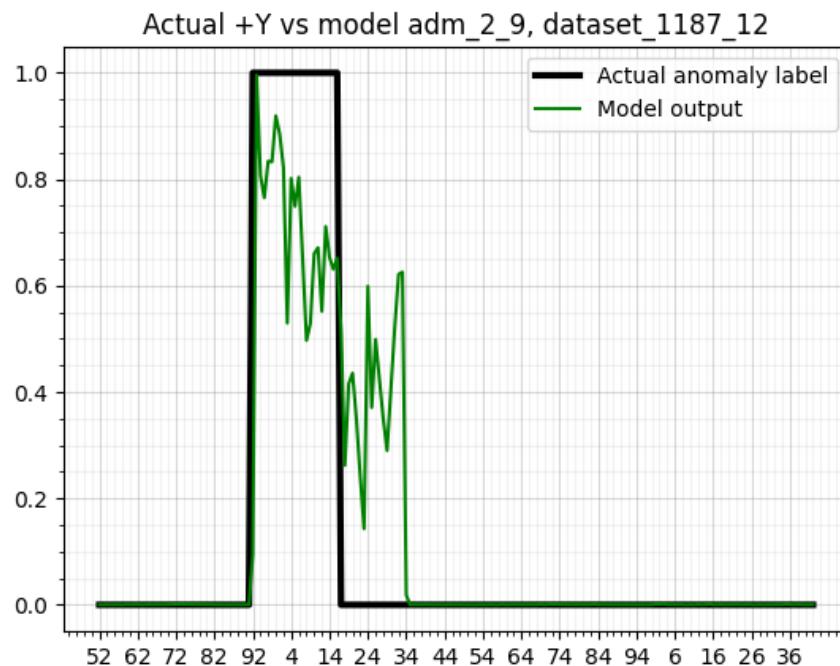
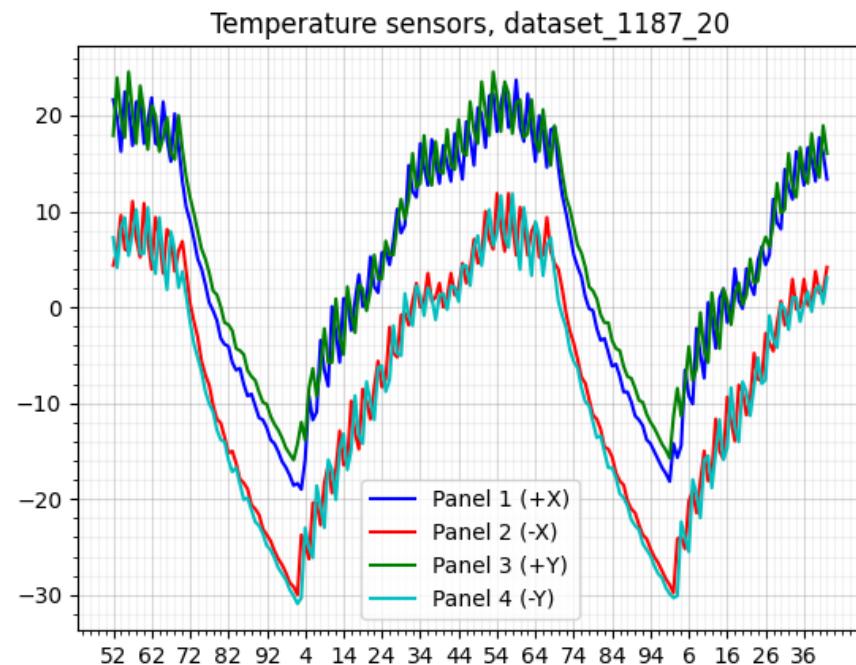
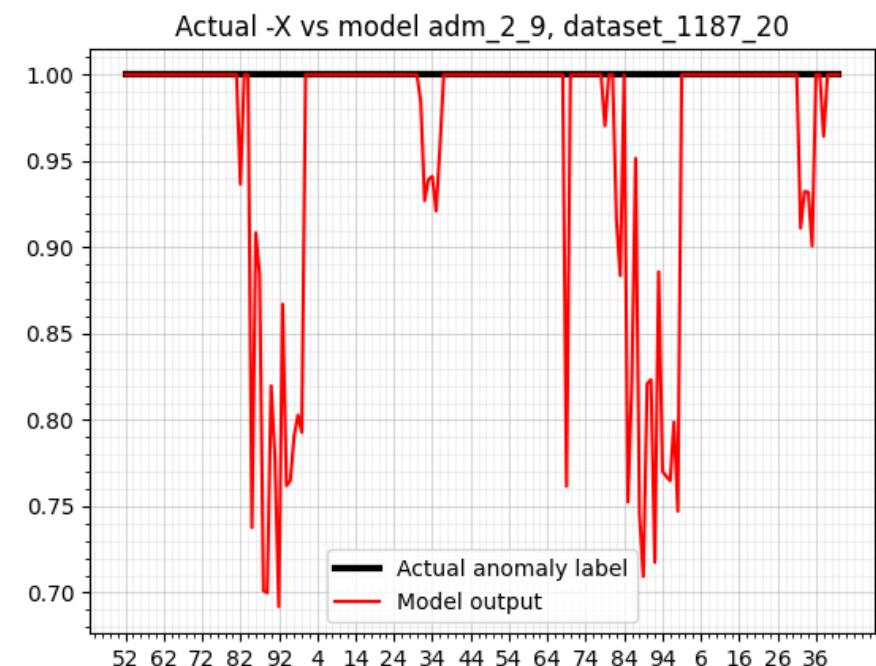
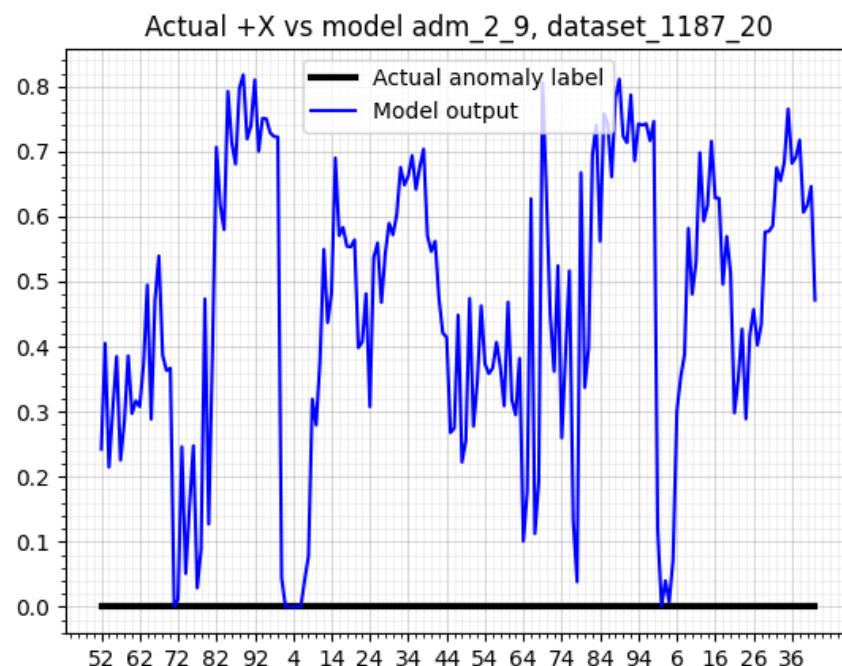


Figure 25: model inferences on dataset\_1187\_12\_mod1.png





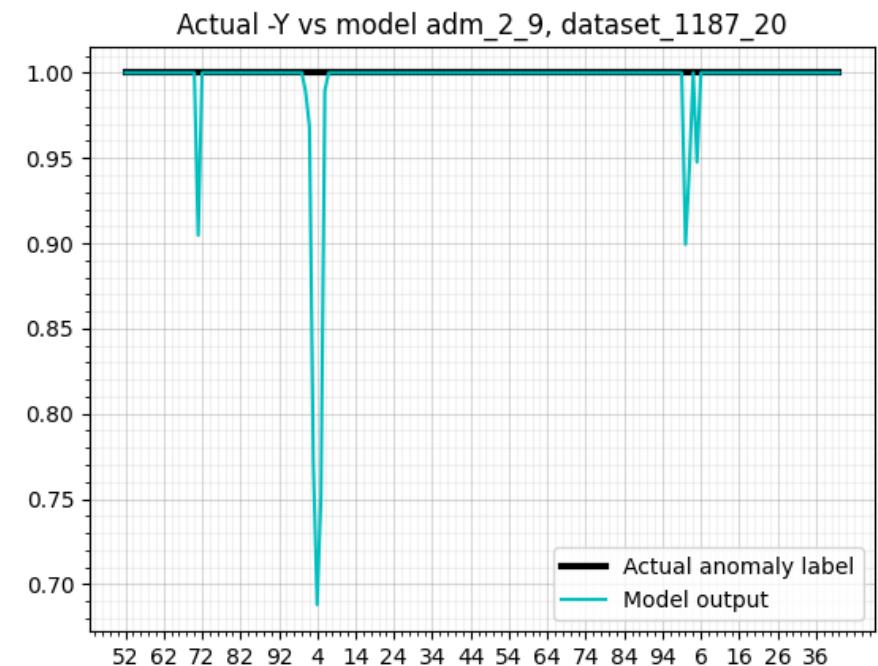
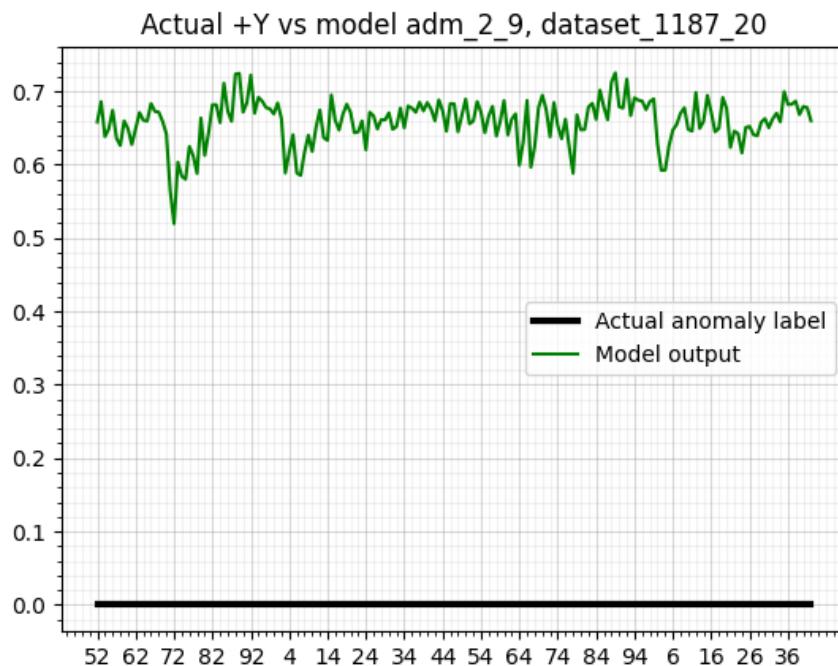
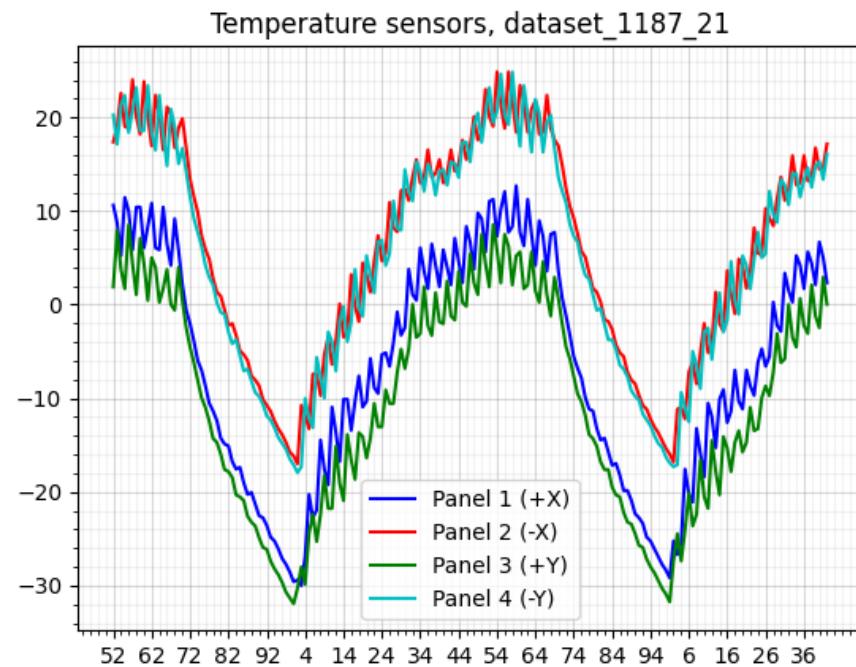
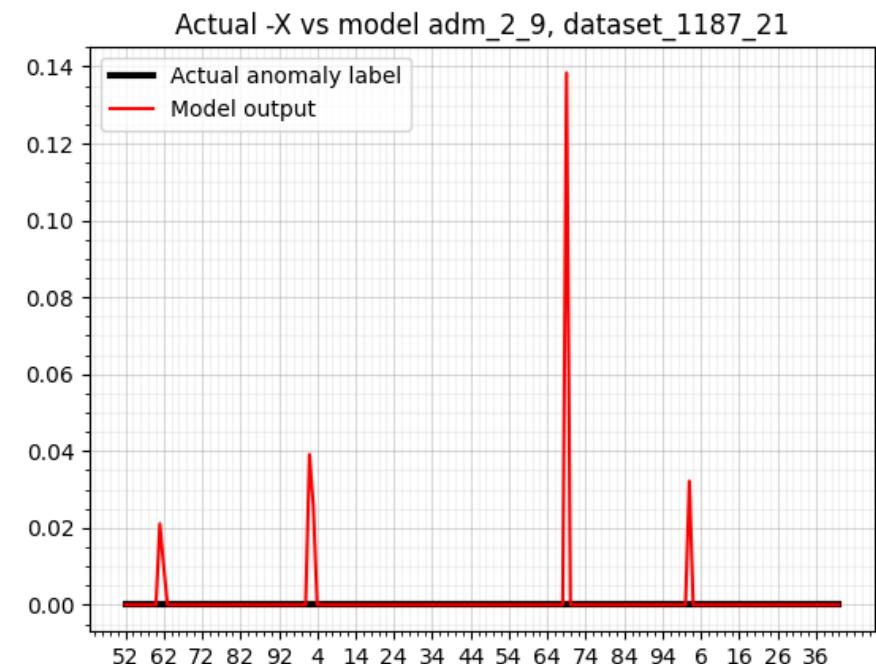
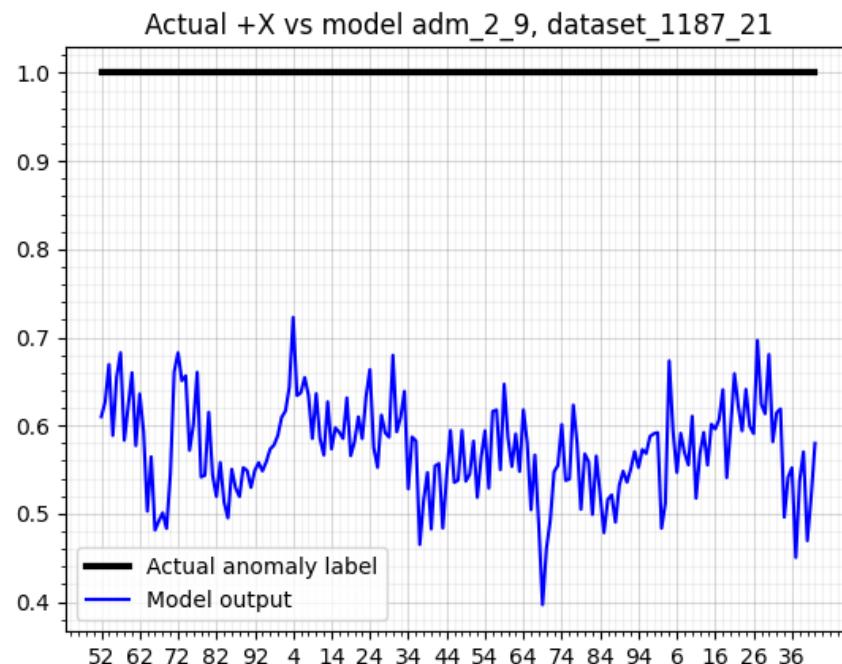


Figure 26: model inferences on dataset\_1187\_20\_mod1.png





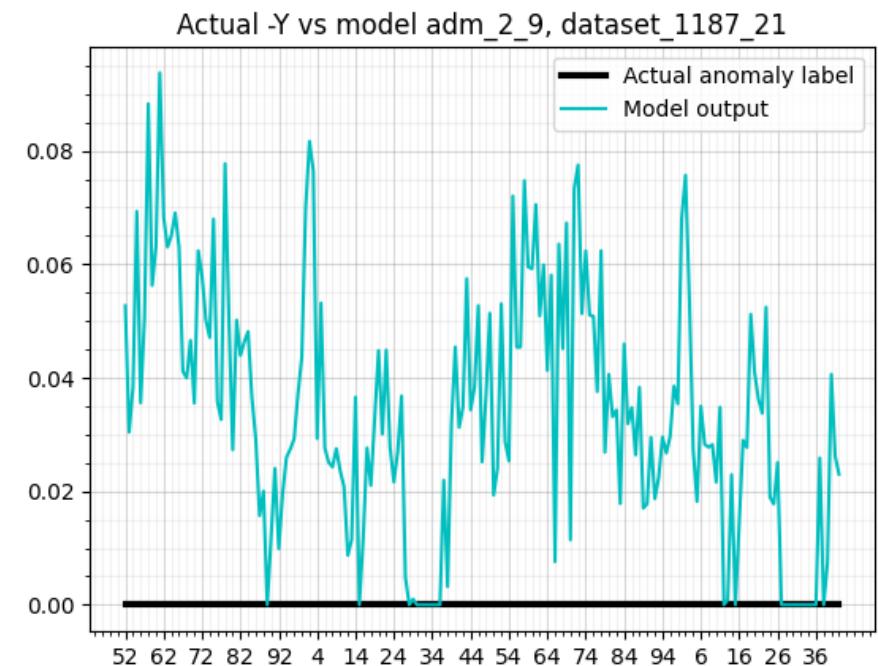
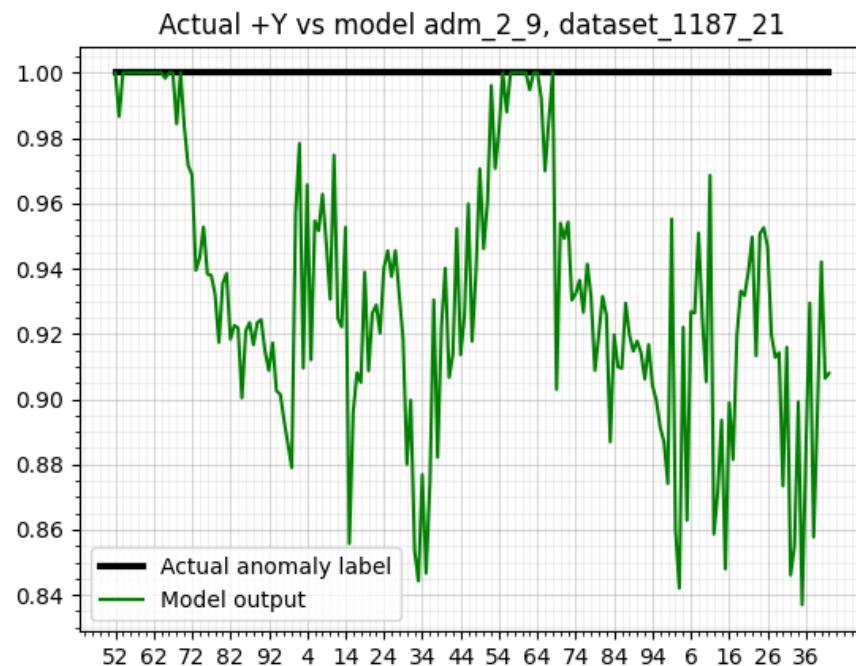
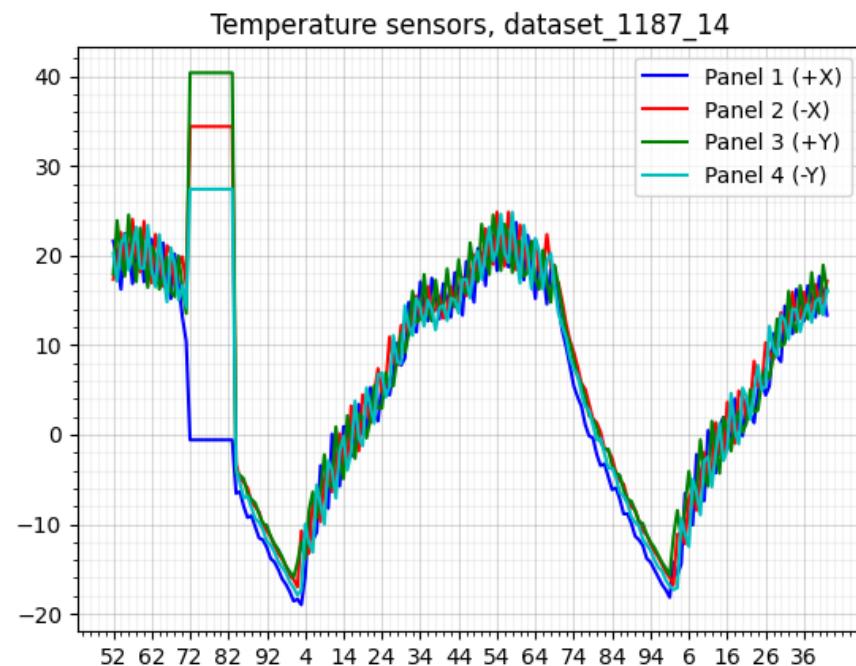
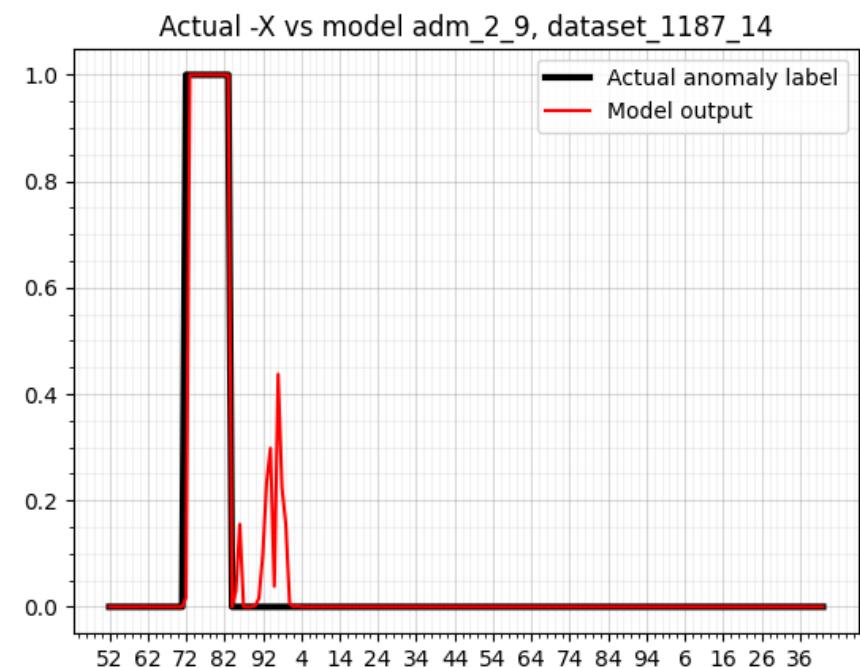
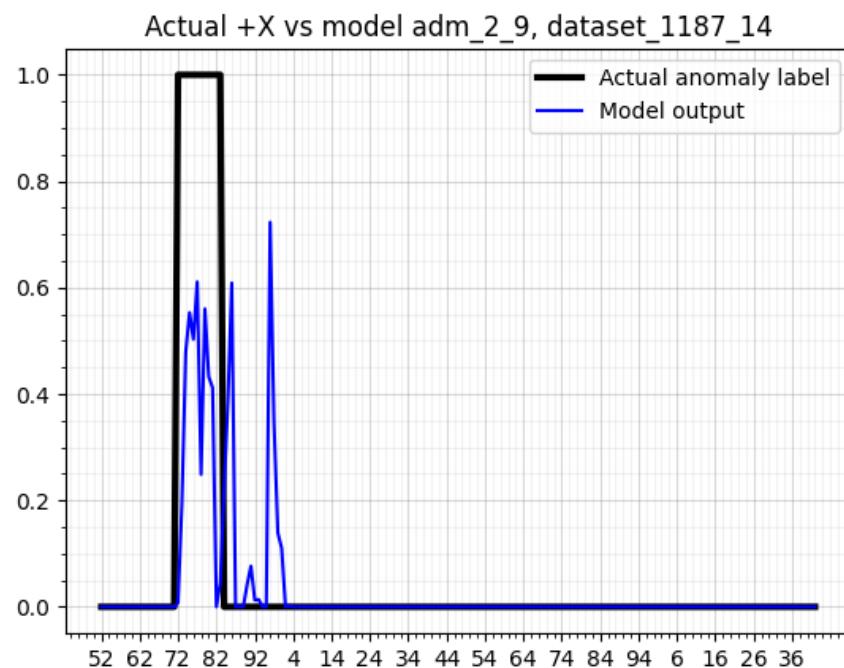


Figure 27: model inferences on dataset\_1187\_21\_mod1.png





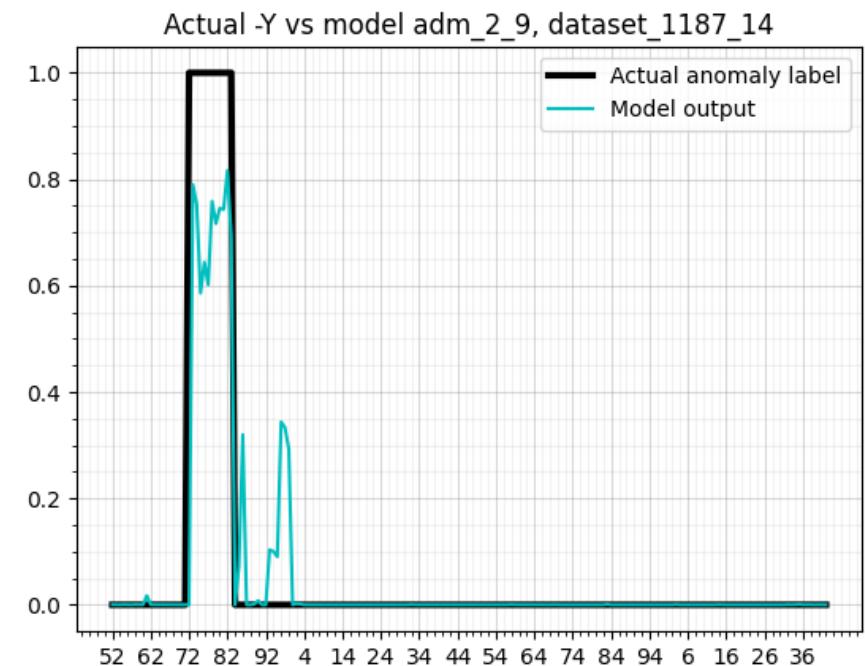
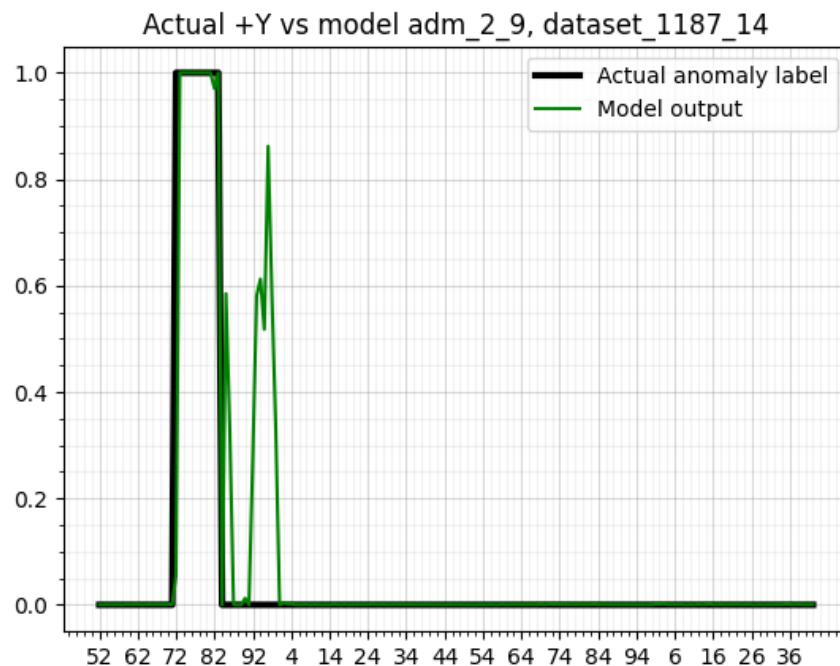
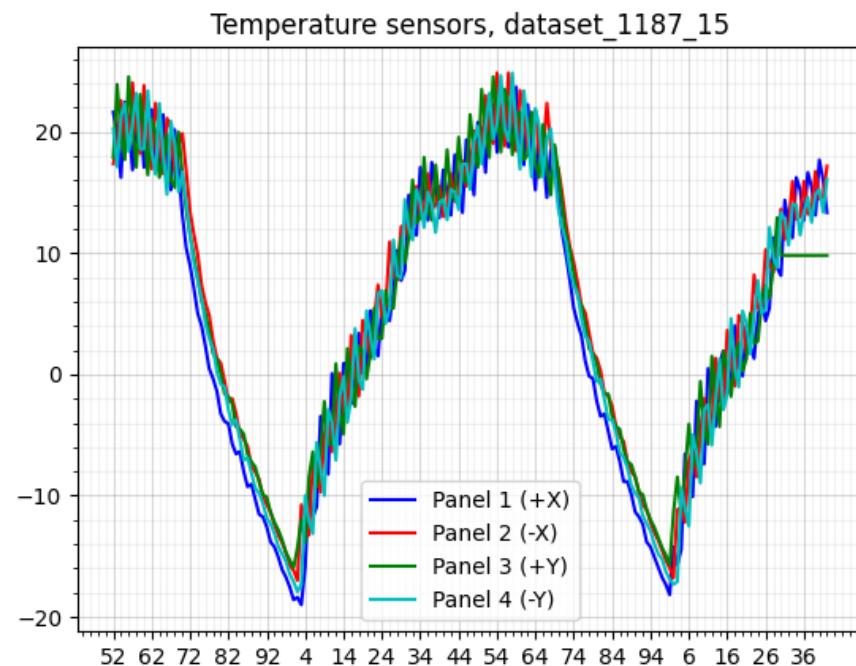
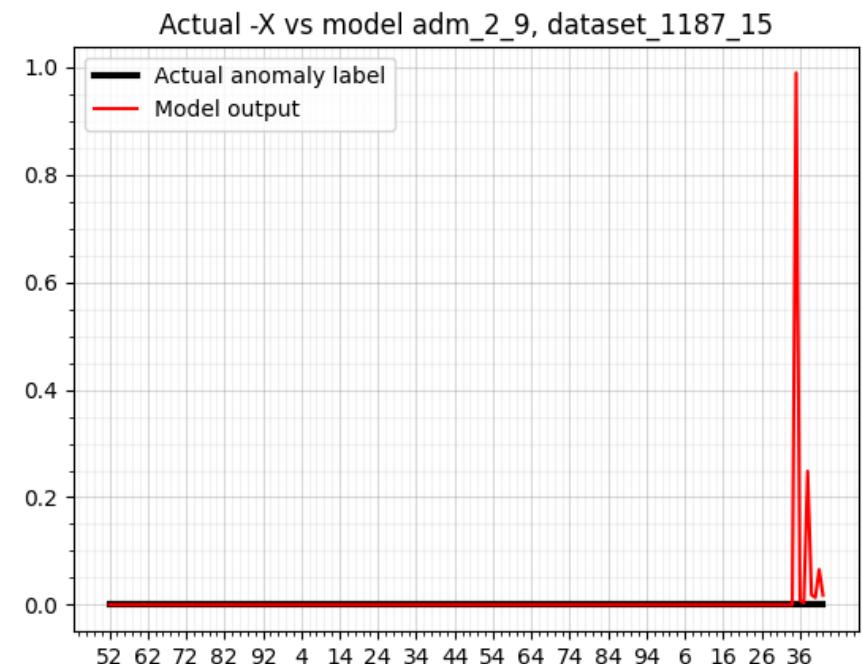
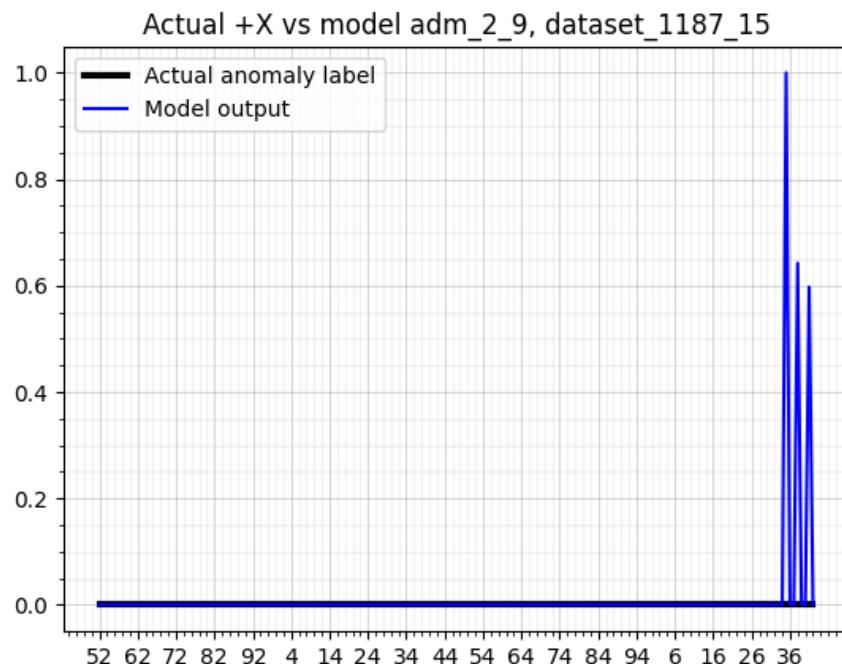


Figure 28: model inferences on dataset\_1187\_14\_mod1.png





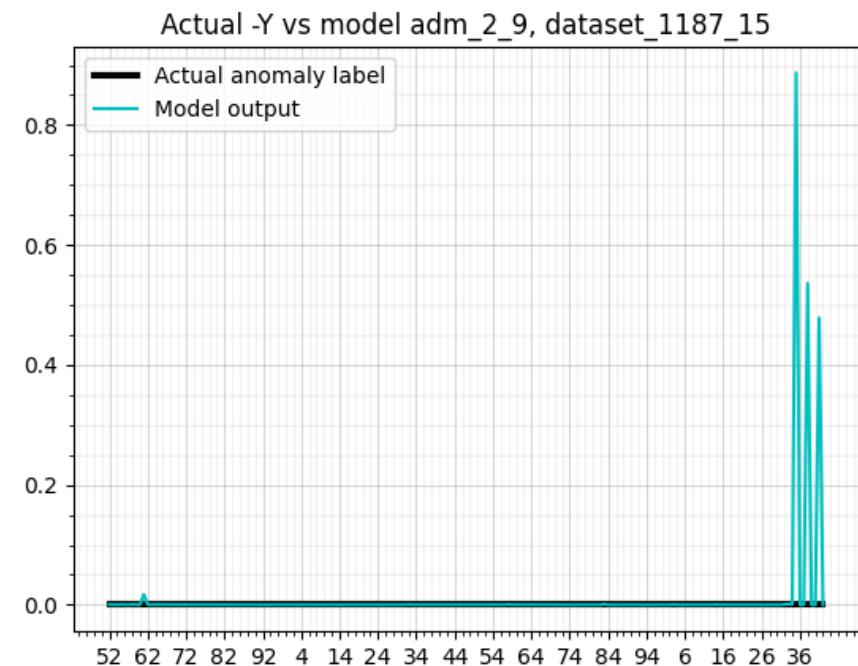
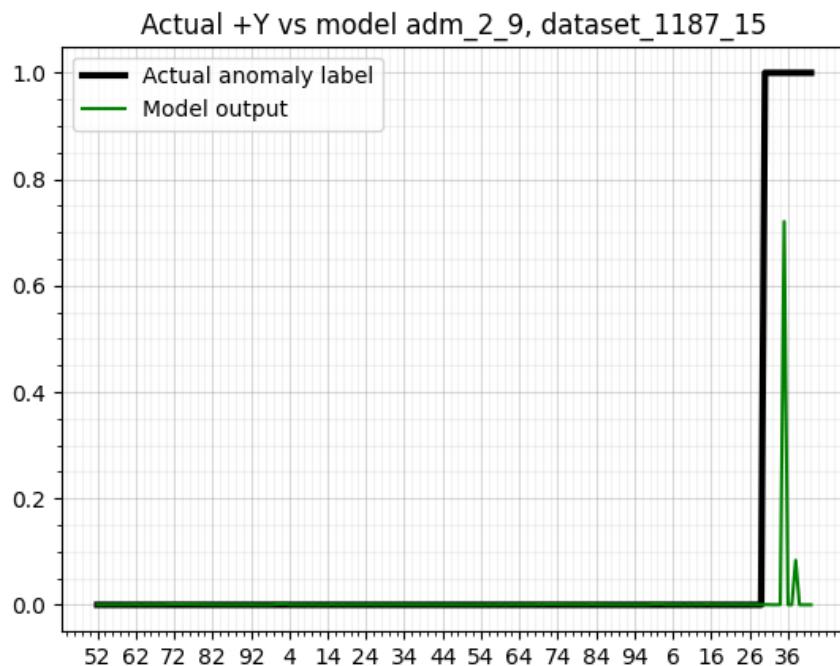
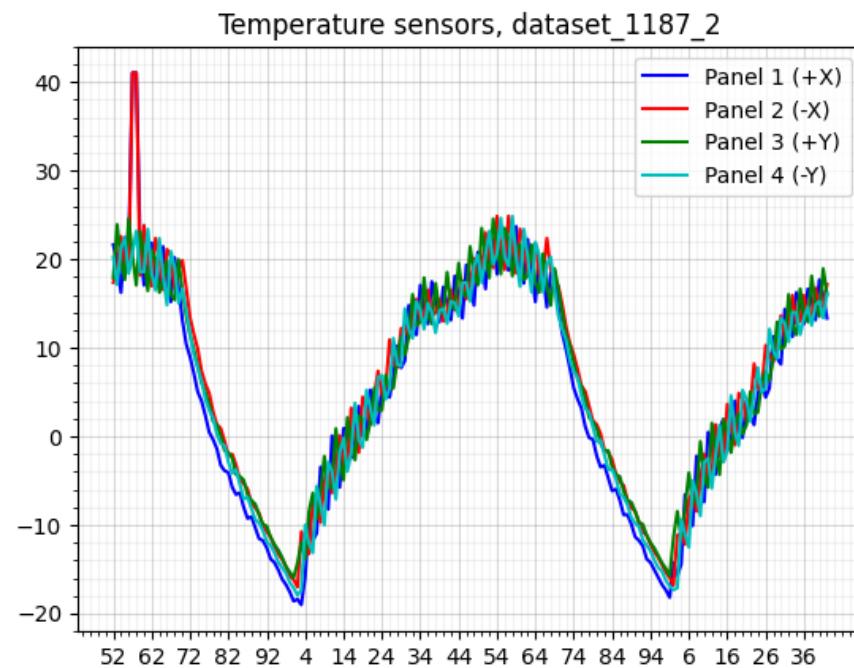
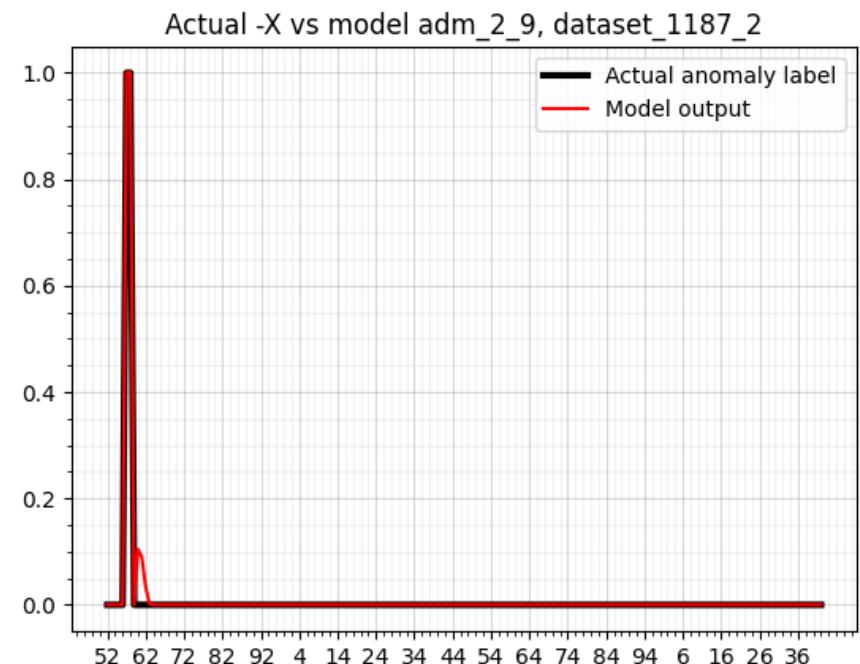
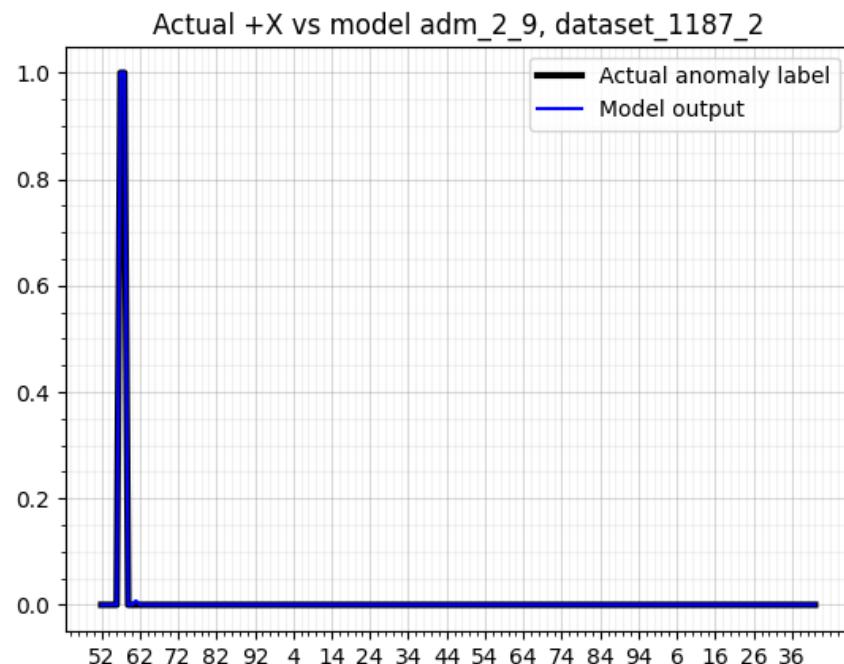
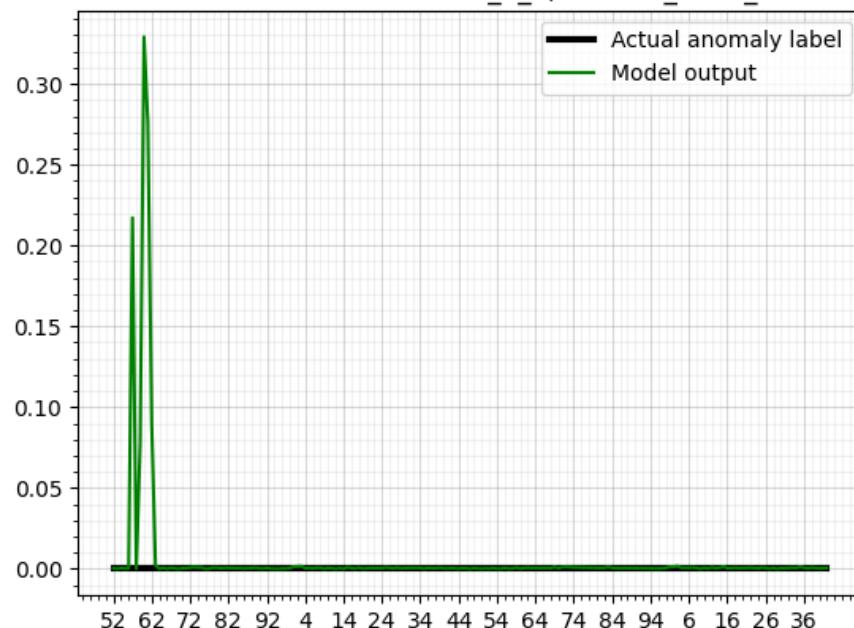


Figure 29: model inferences on dataset\_1187\_15\_mod1.png





Actual +Y vs model adm\_2\_9, dataset\_1187\_2



Actual -Y vs model adm\_2\_9, dataset\_1187\_2

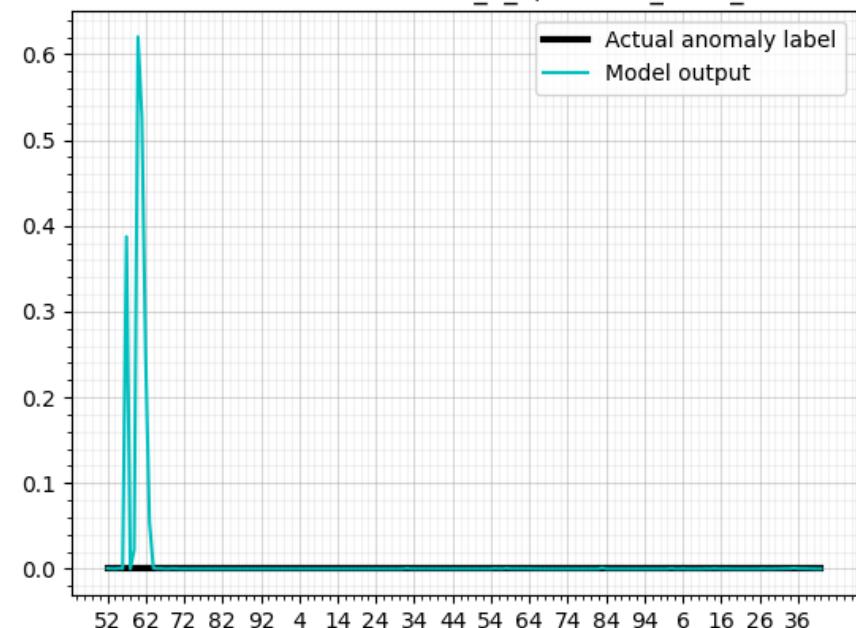
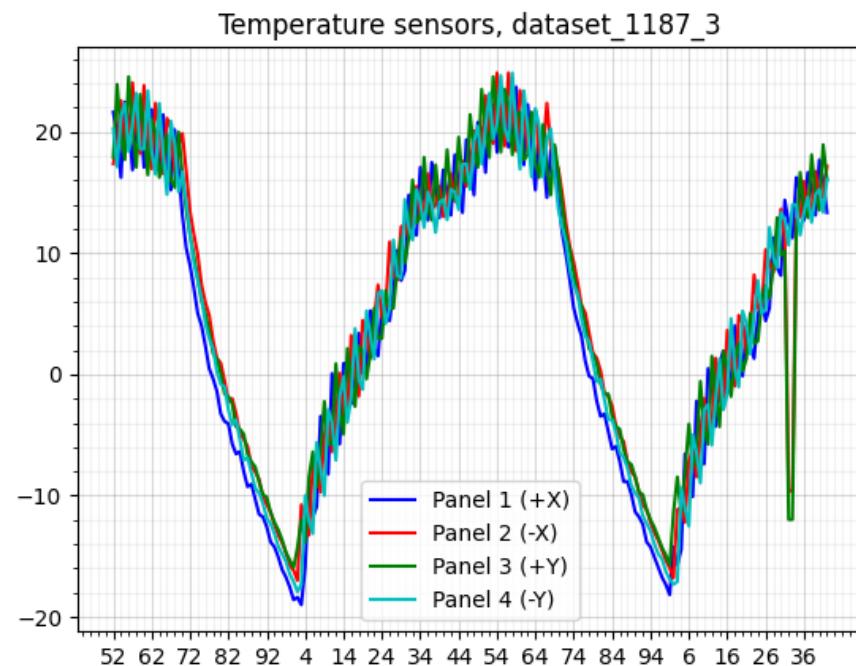
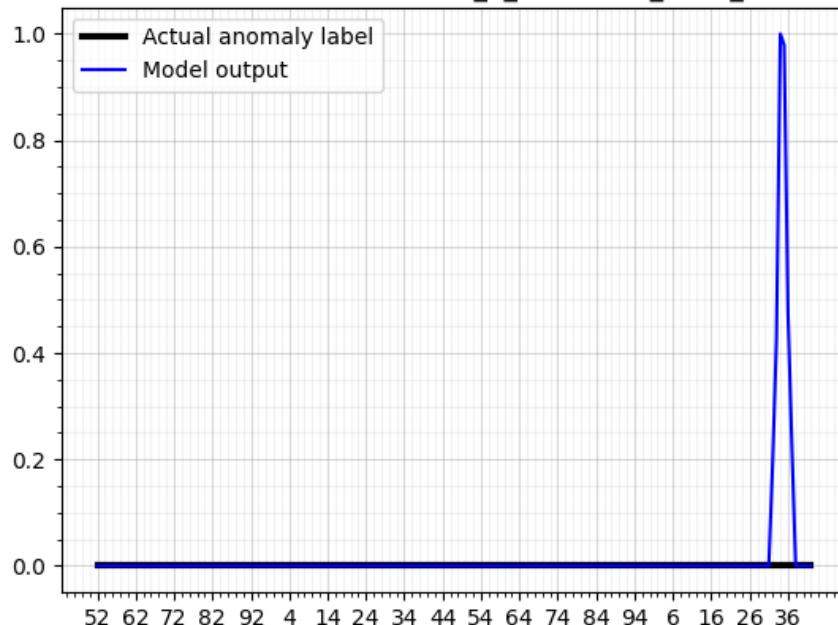


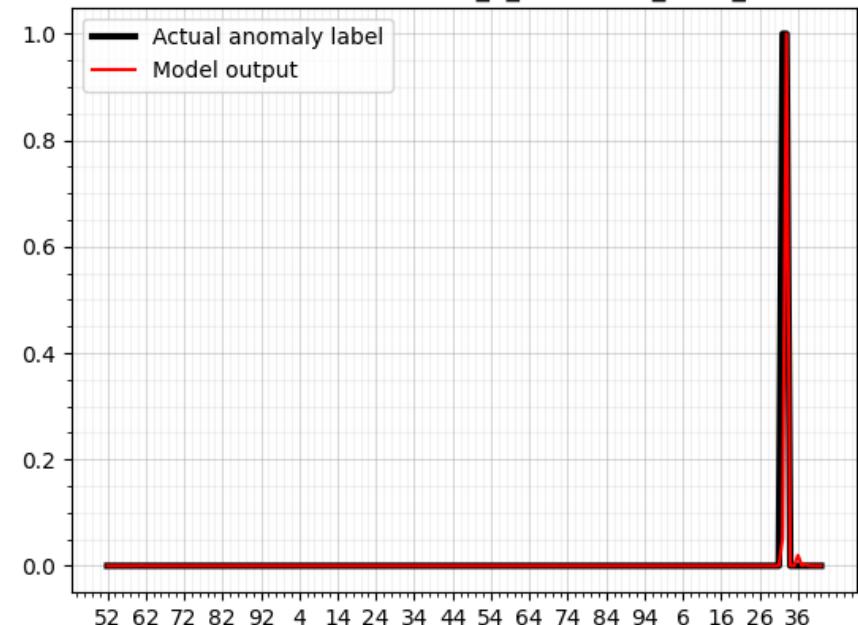
Figure 30: model inferences on dataset\_1187\_2\_mod1.png



Actual +X vs model adm\_2\_9, dataset\_1187\_3



Actual -X vs model adm\_2\_9, dataset\_1187\_3



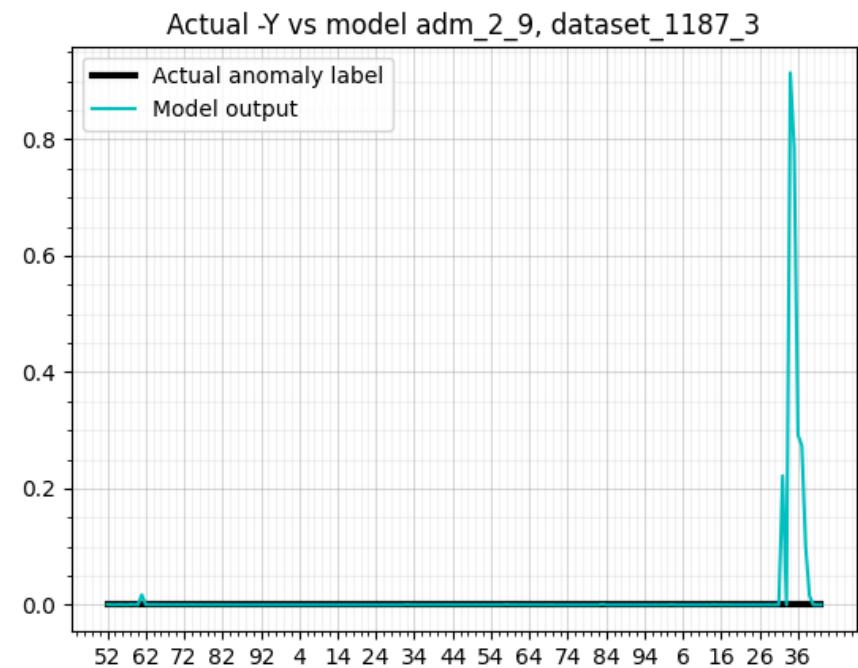
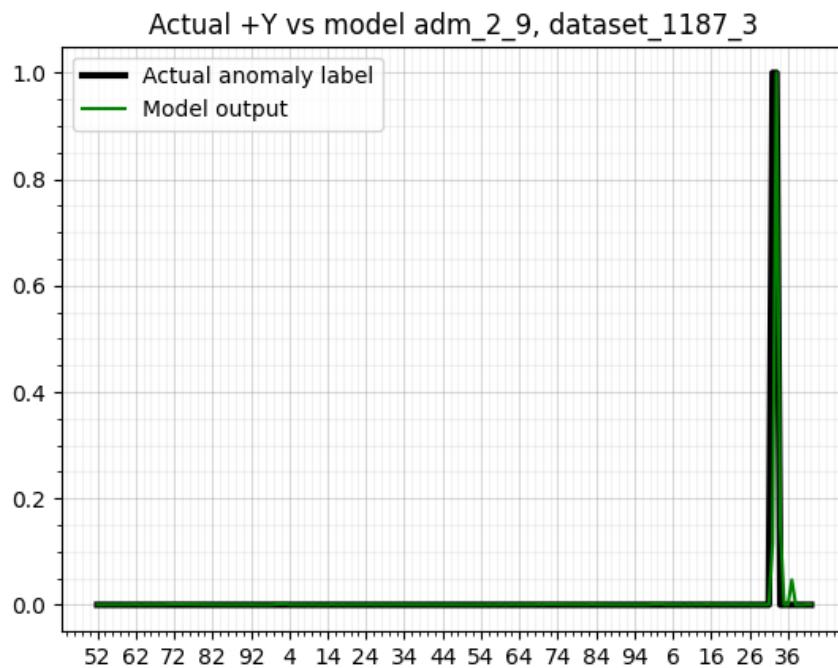
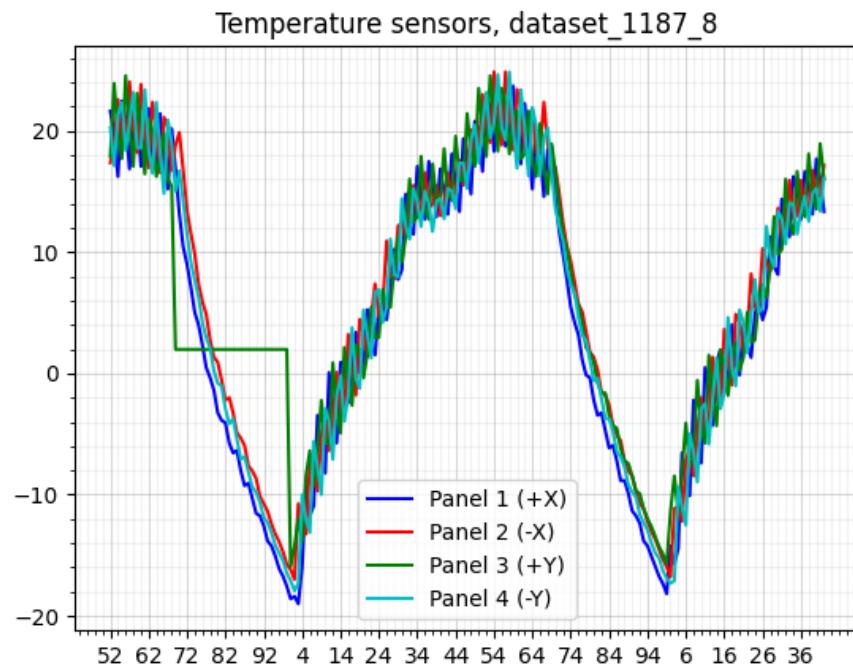
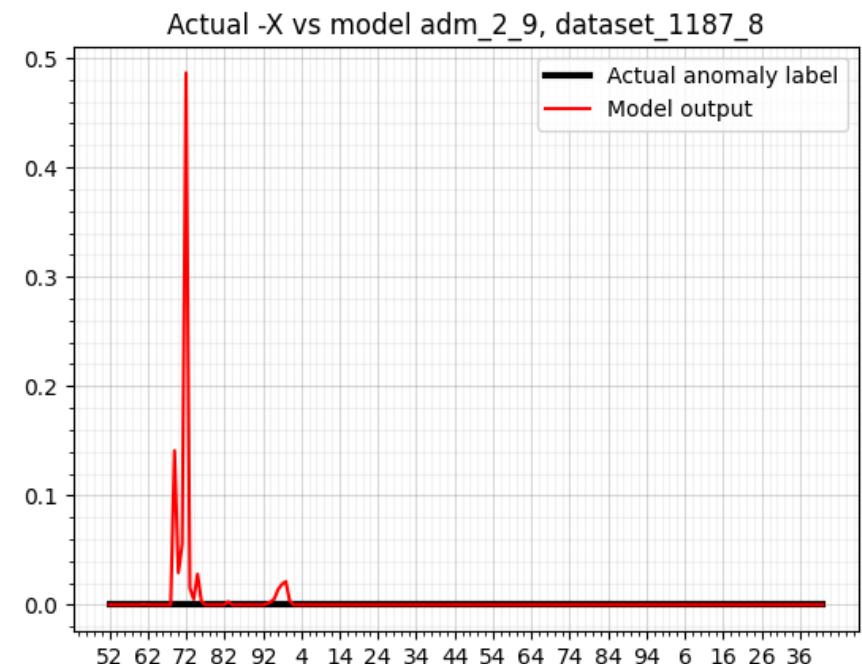
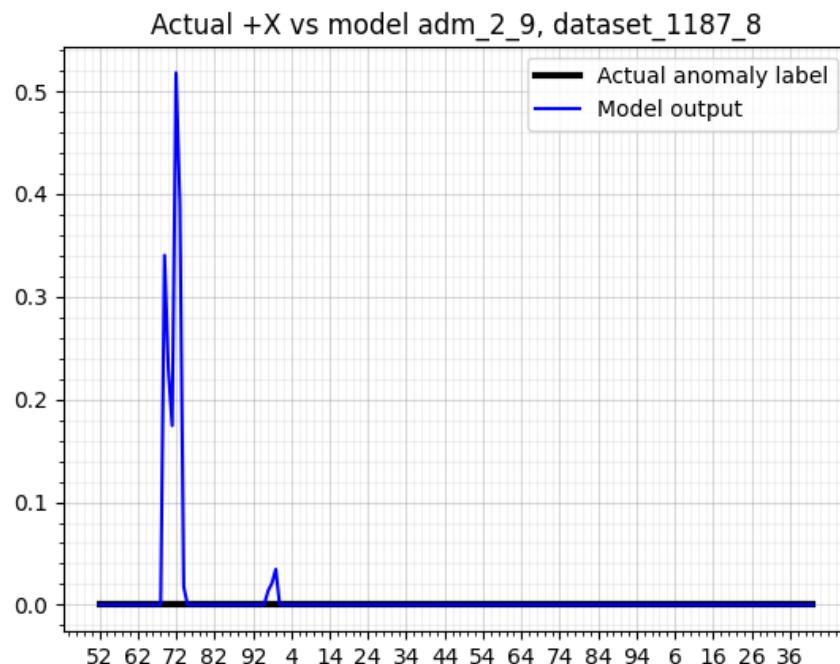


Figure 31: model inferences on dataset\_1187\_3\_mod1.png





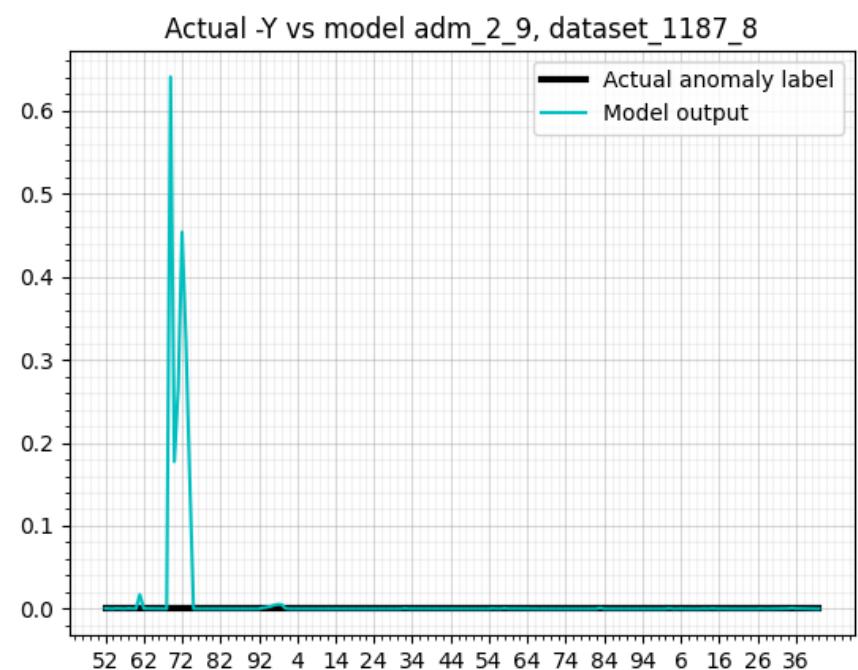
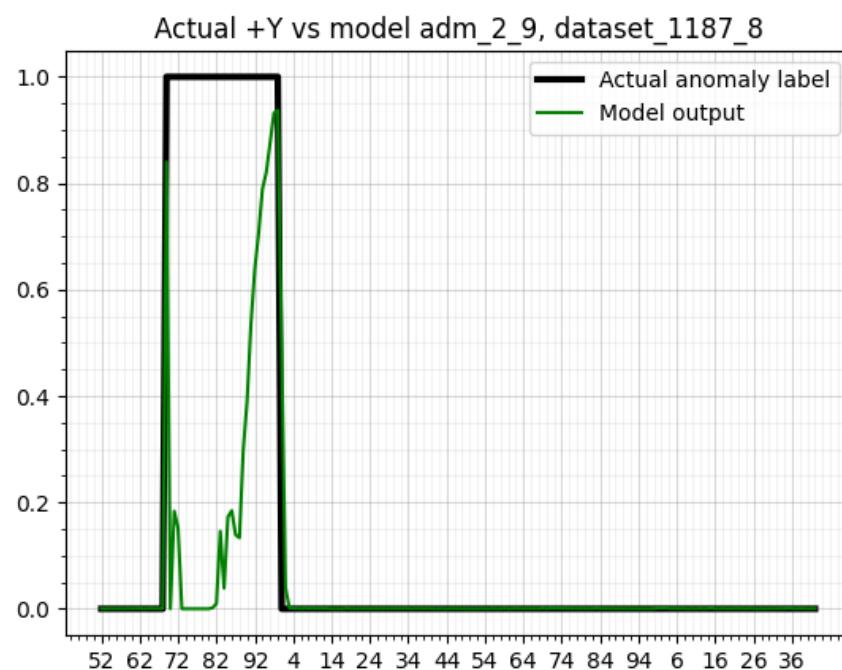
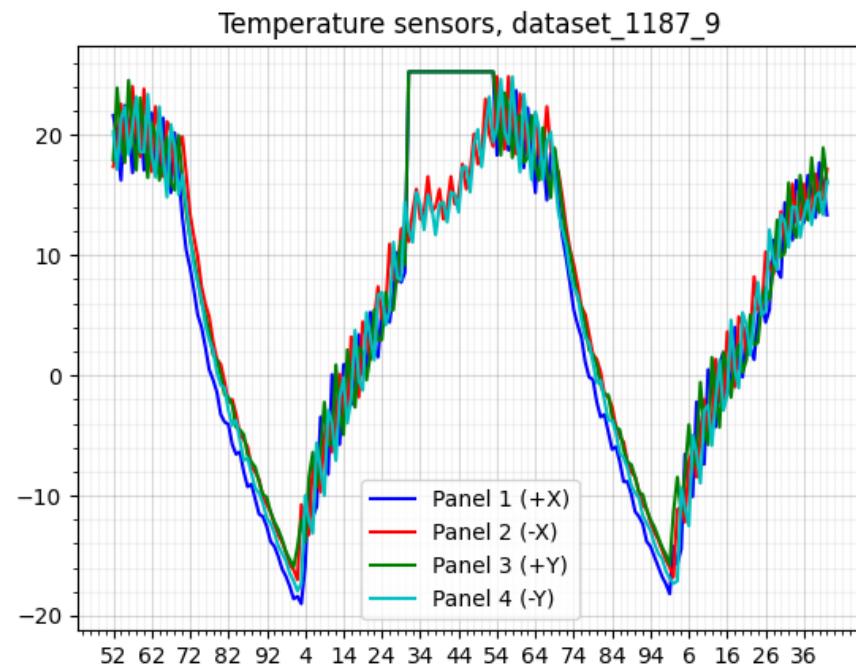
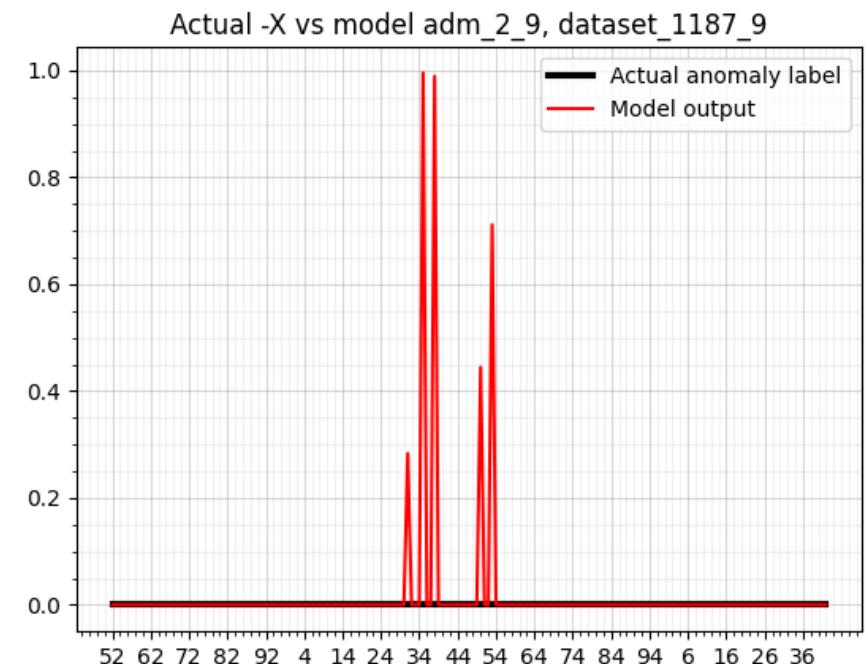
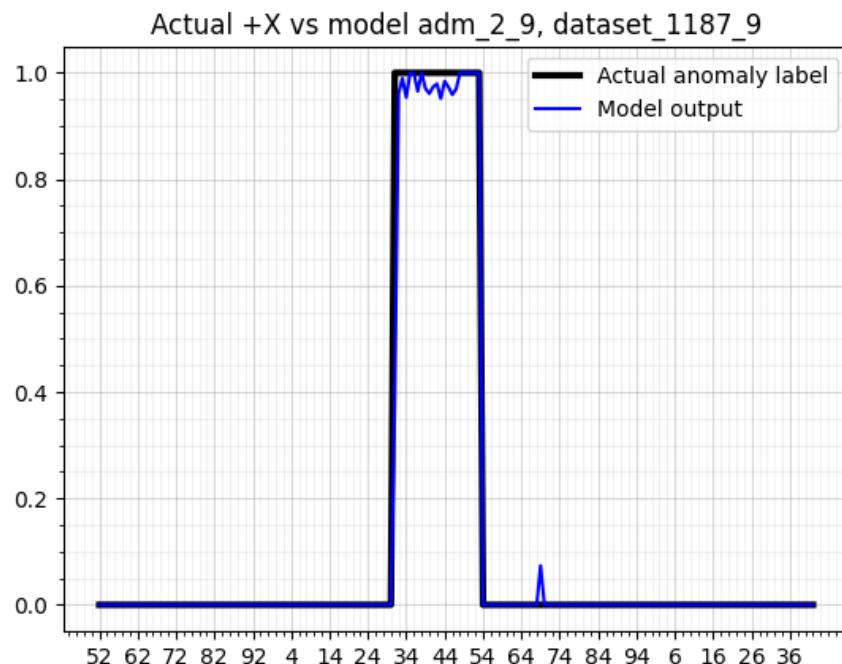


Figure 32: model inferences on dataset\_1187\_8\_mod1.png





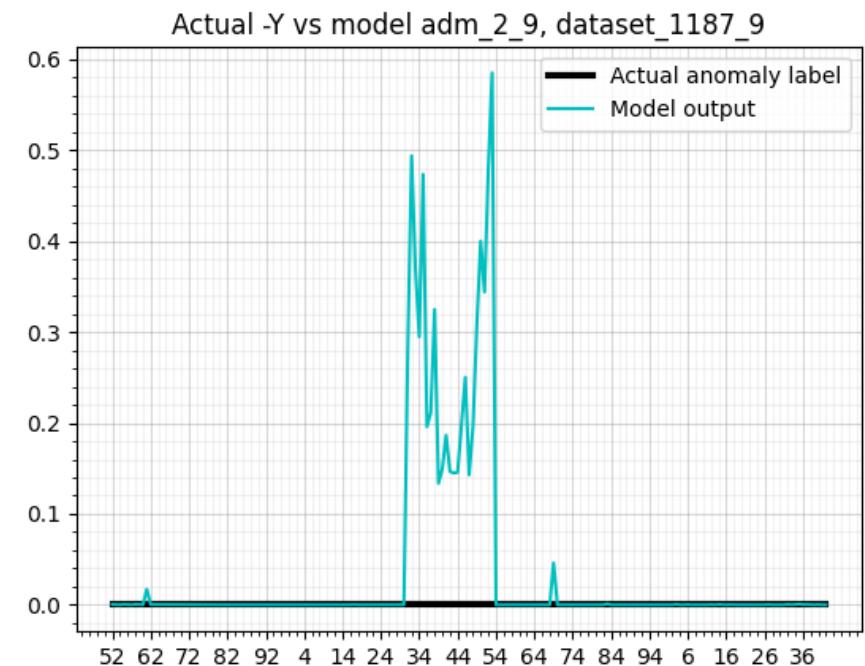
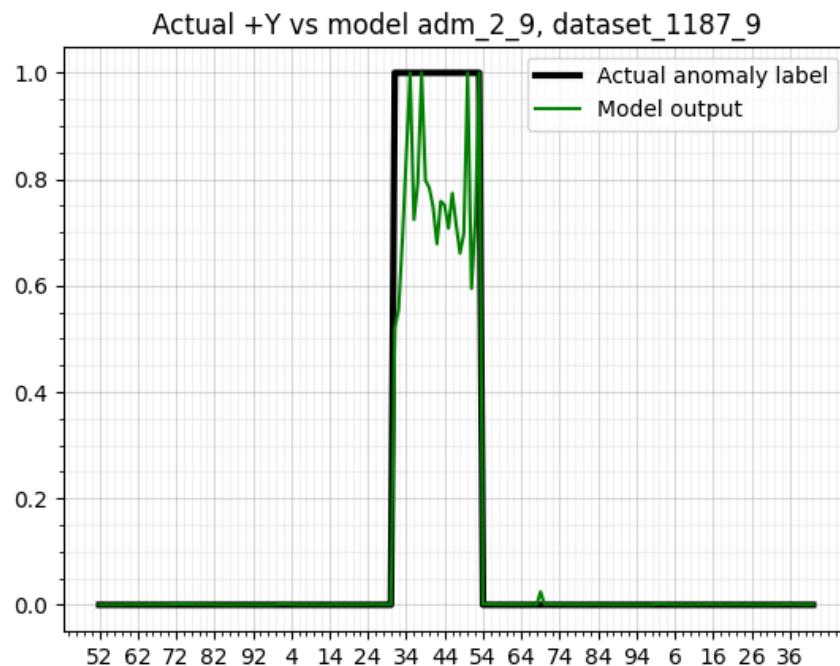


Figure 33: model inferences on dataset\_1187\_9\_mod1.png