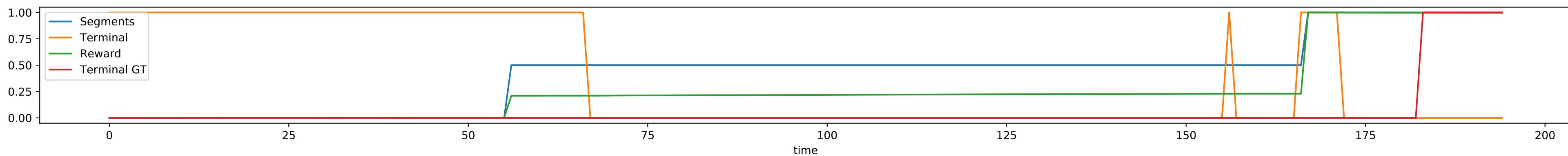
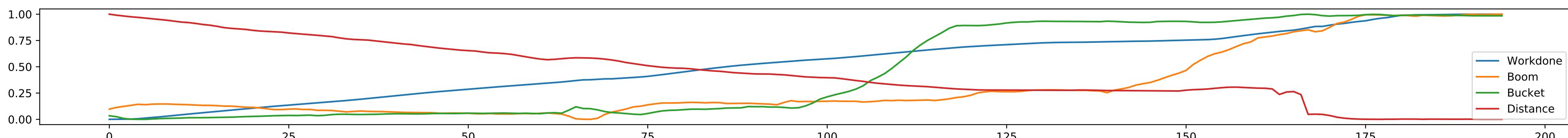
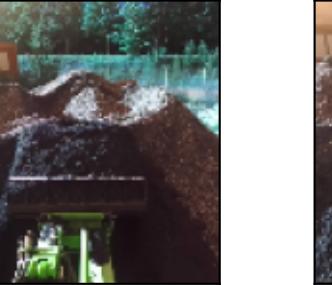


Learning Reward from Demonstrations w/sensors ($R_{\max} = 1600$)

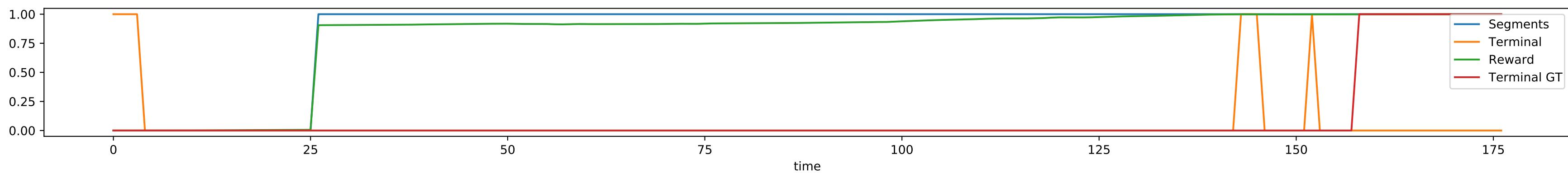
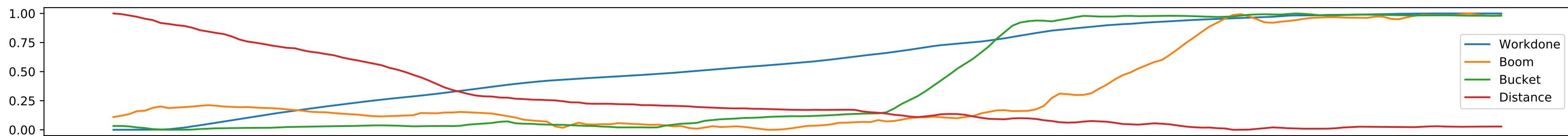
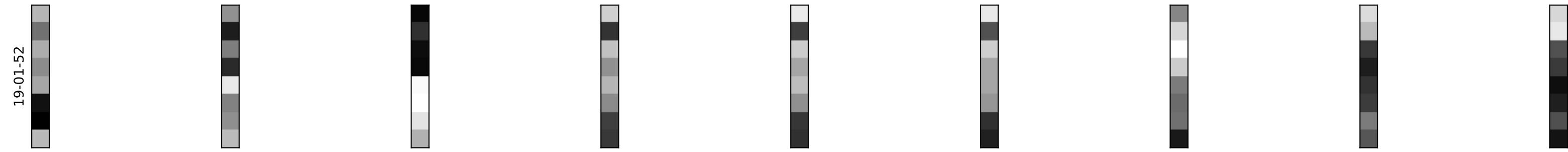
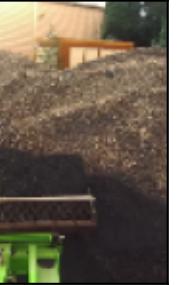
Training Data		Sensor Values	Clustering & Classification	Reward
80 % of positive demos: mix of winter and autumn	Boom angle, Bucket angle, Distance to the pile, Segment, Reward	Difference R_{\max} and Distance to the next cluster center	K-means clustering and KNN Classifier	20 % of positive demos: mix of winter and autumn

autumn - 16-23-38

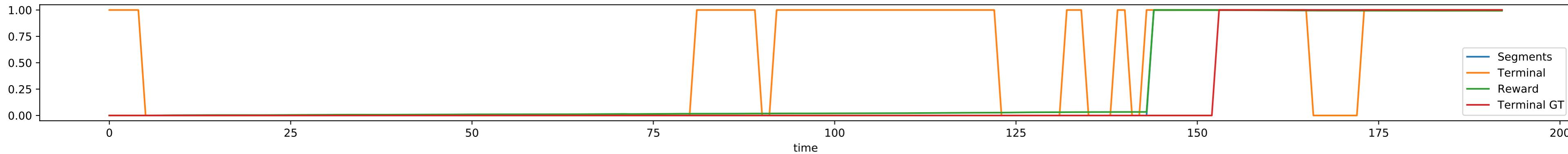
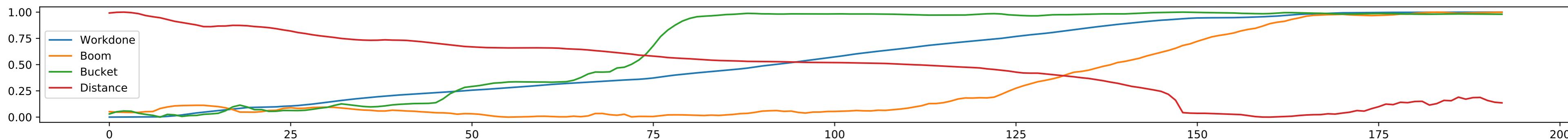
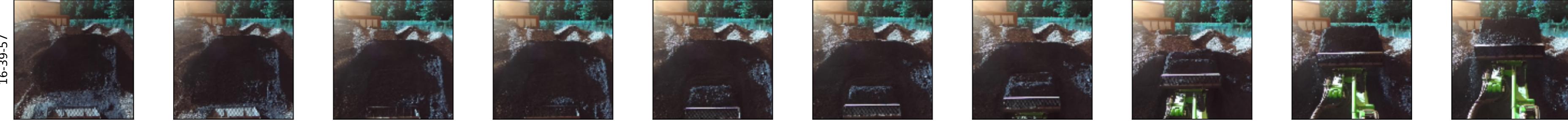


autumn - 19-01-52

19-01-52



autumn - 16-39-57

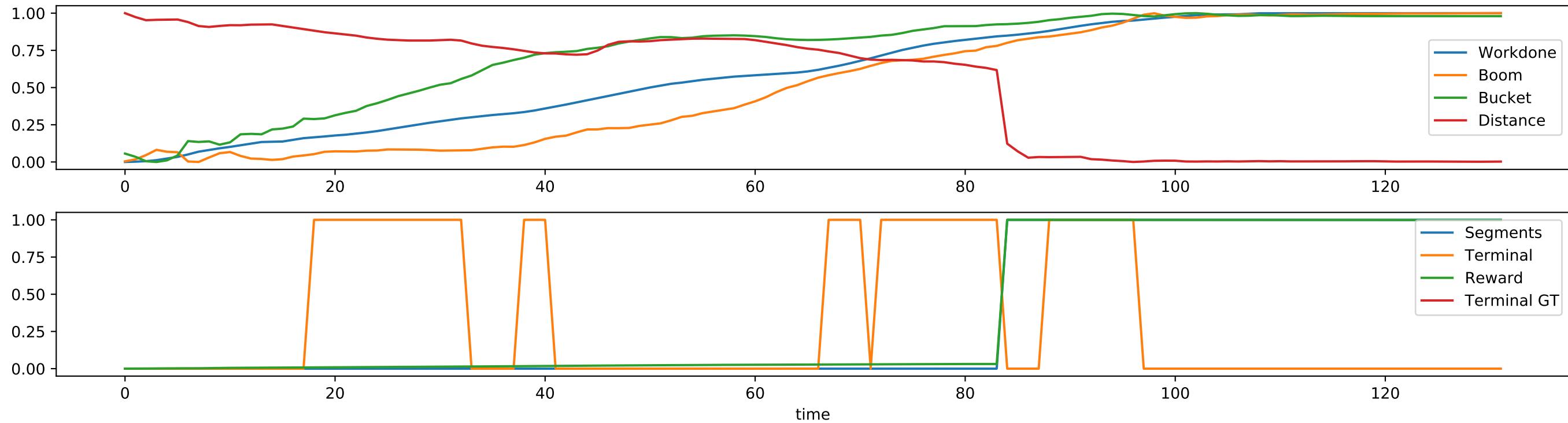
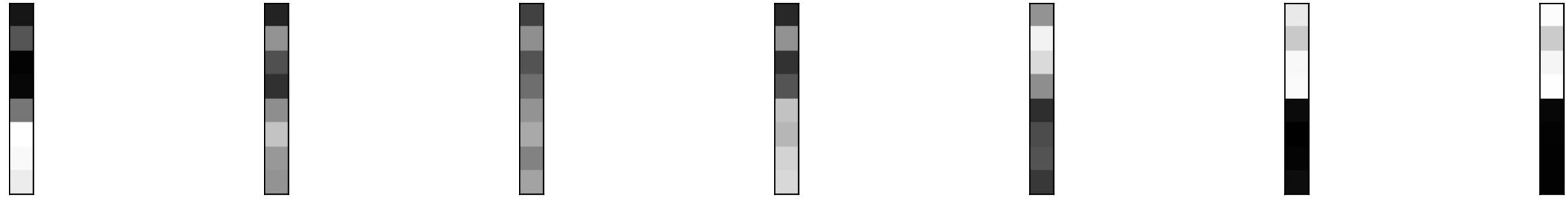


autumn - 16-26-13

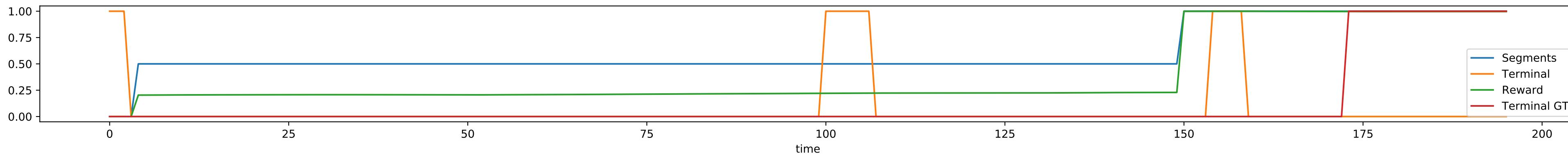
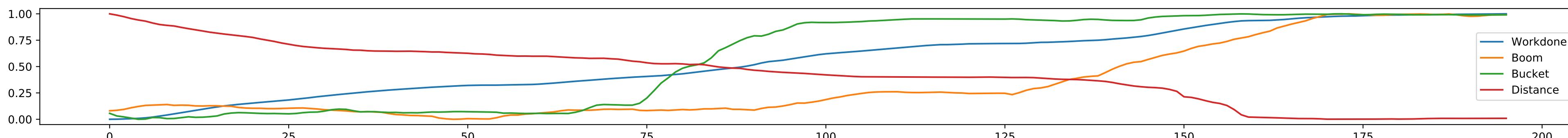
16-26-13

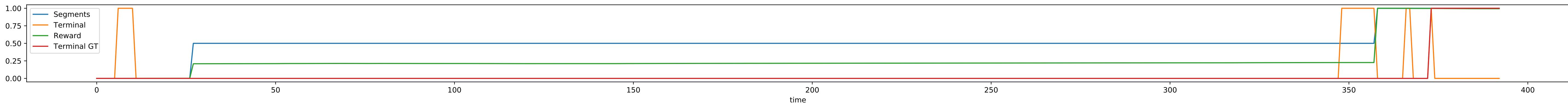
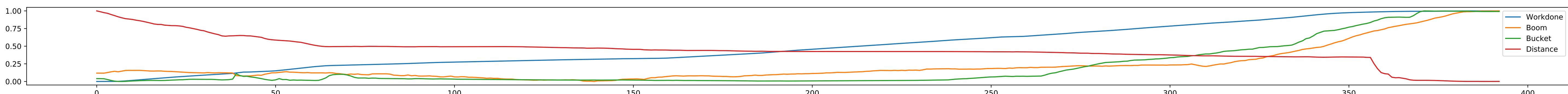
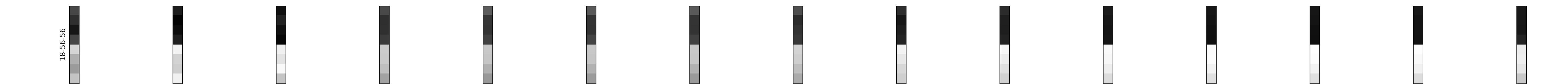


16-26-13

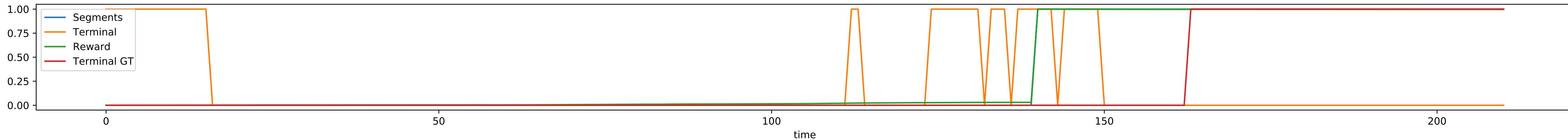
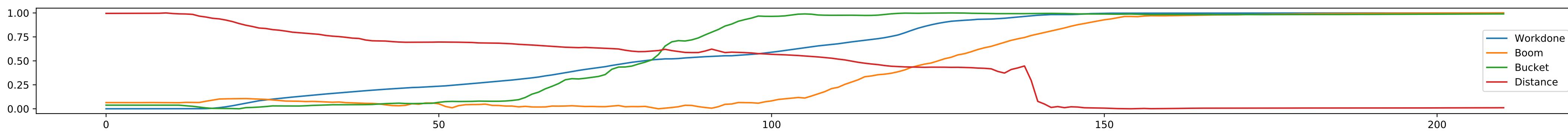
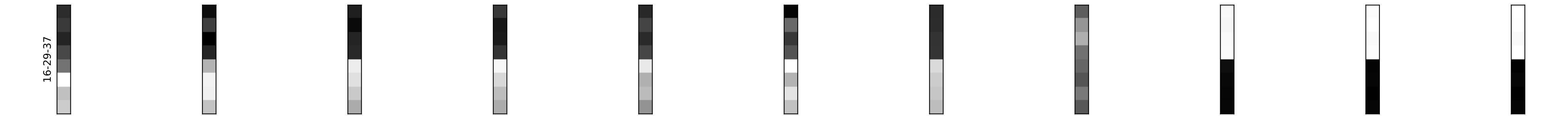


autumn - 16-31-52

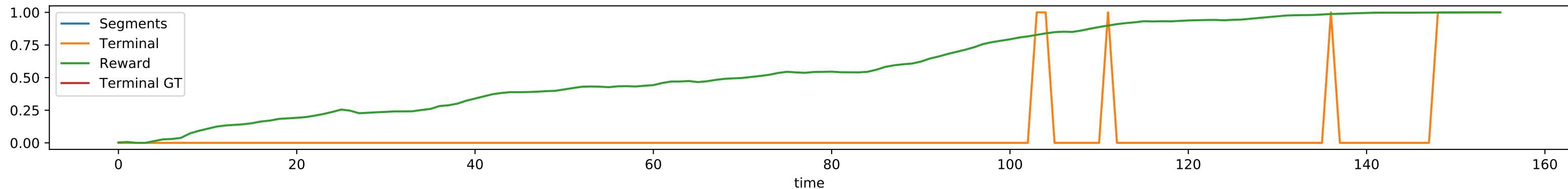
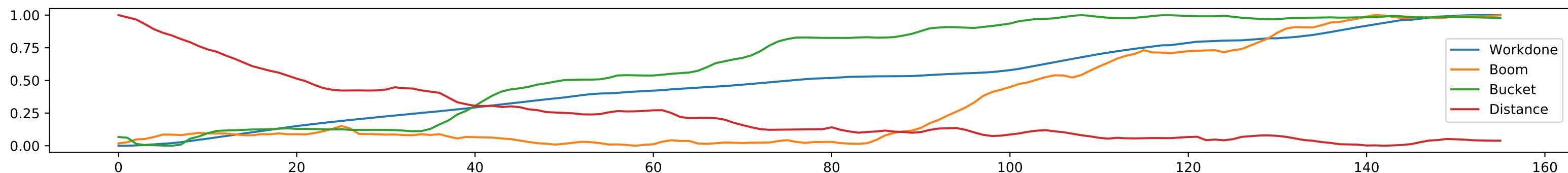




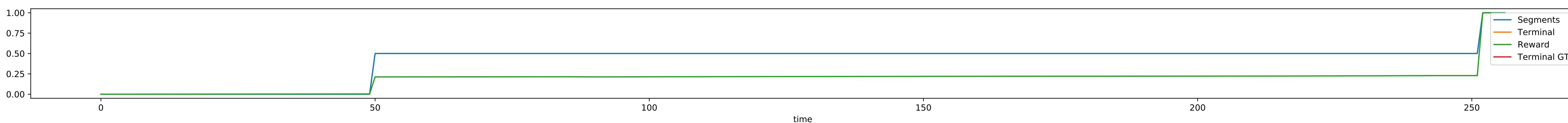
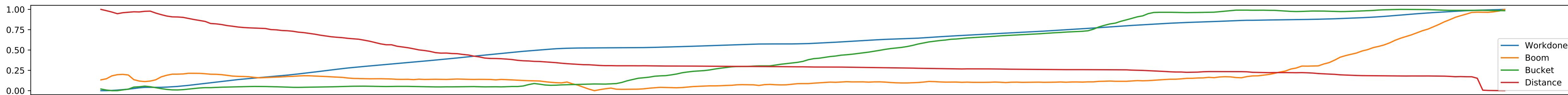
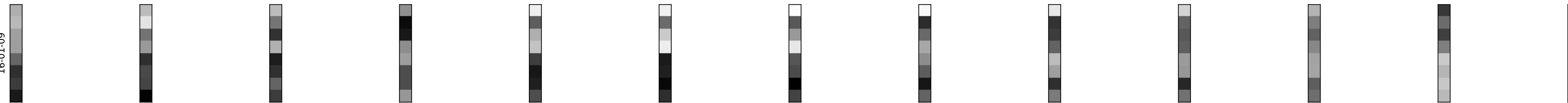
autumn - 16-29-37



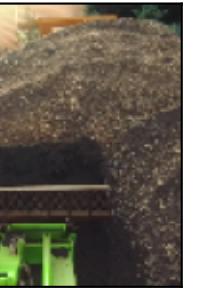
autumn - 16-27-12



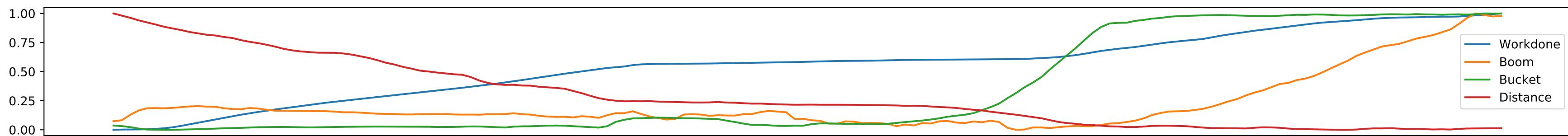
autumn - 16-01-09



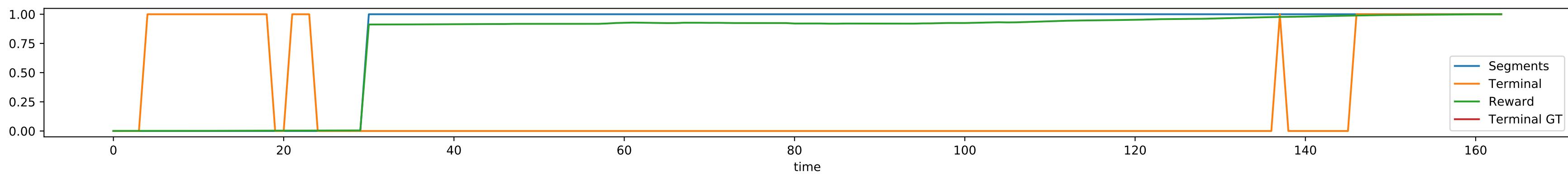
autumn - 18-58-51



18-58-51

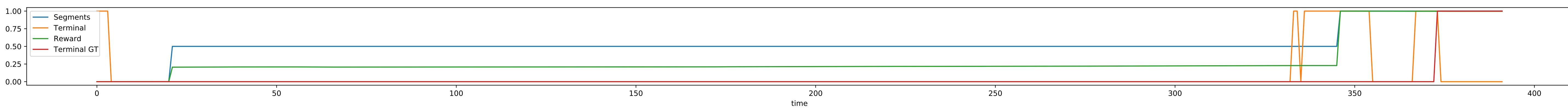
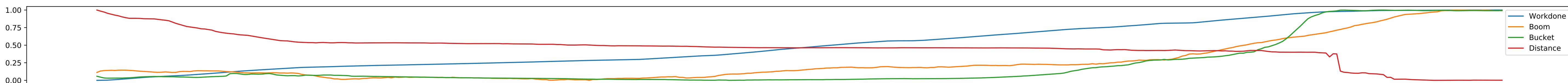
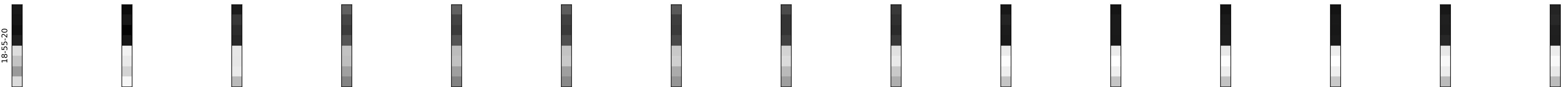


Workdone
Boom
Bucket
Distance

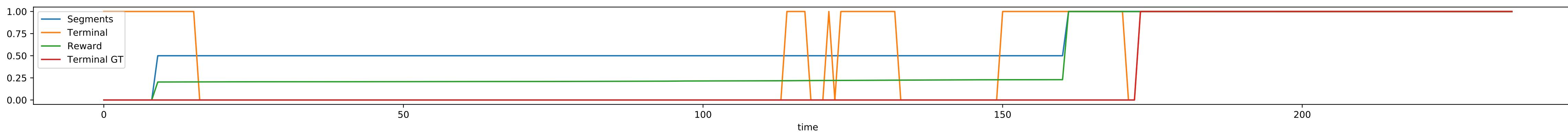
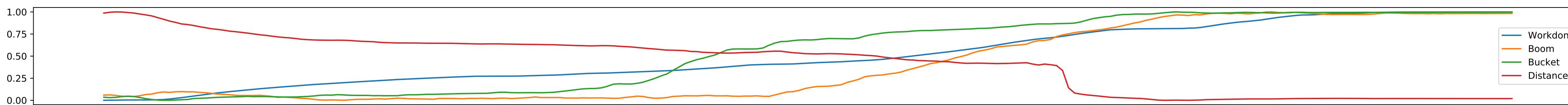


Segments
Terminal
Reward
Terminal GT

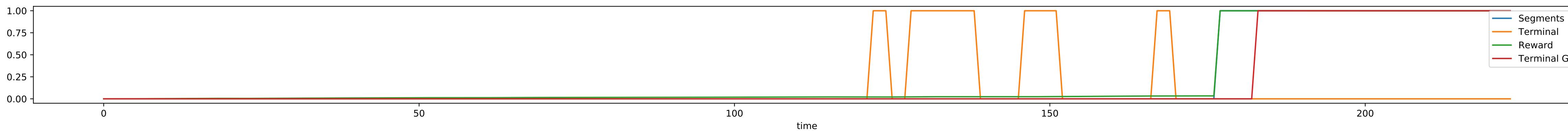
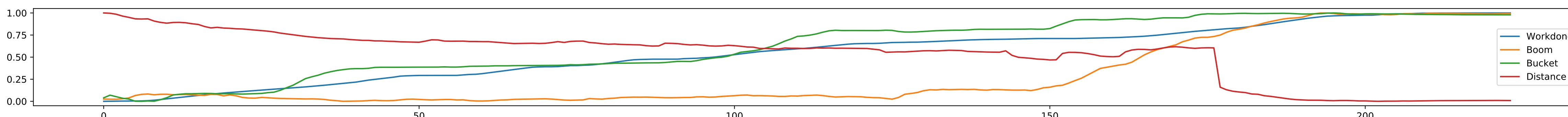
autumn - 18-55-20

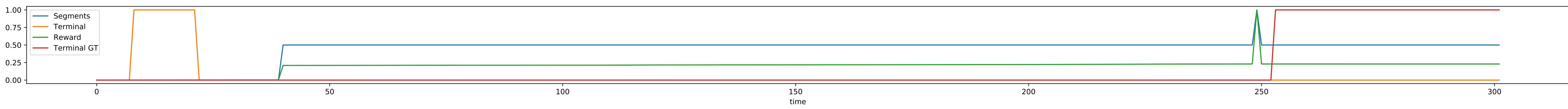
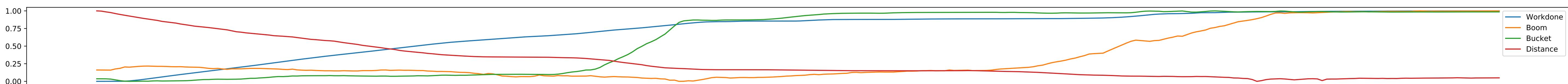
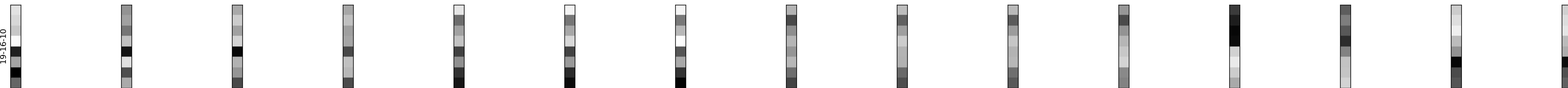


autumn - 16-17-19



autumn - 16-27-52

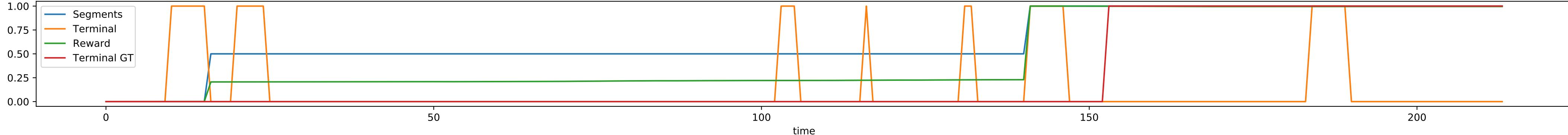
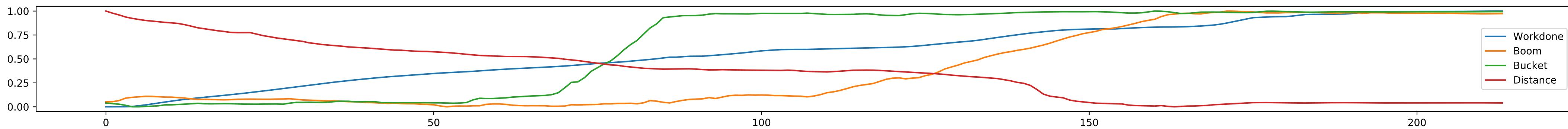
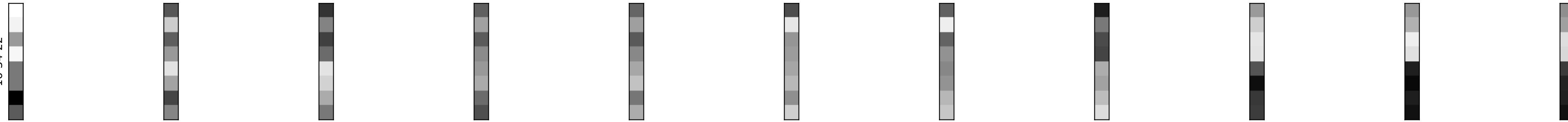




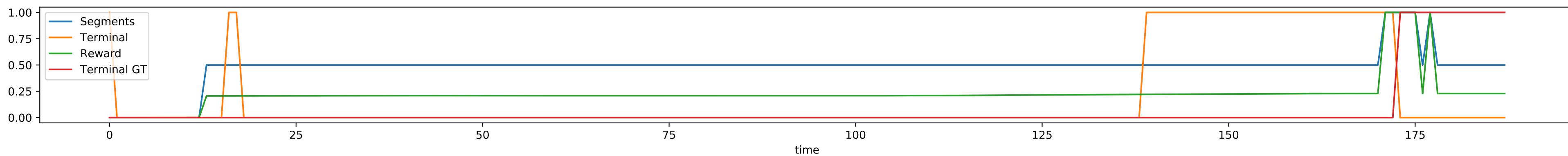
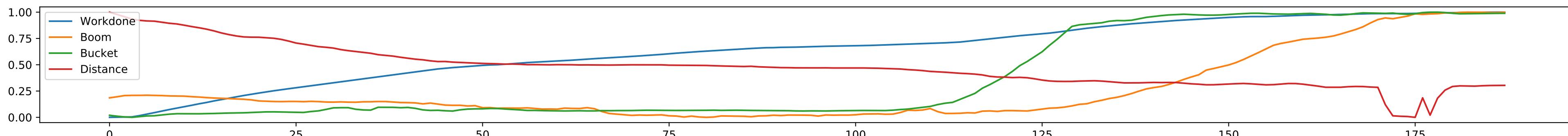
autumn - 16-34-22



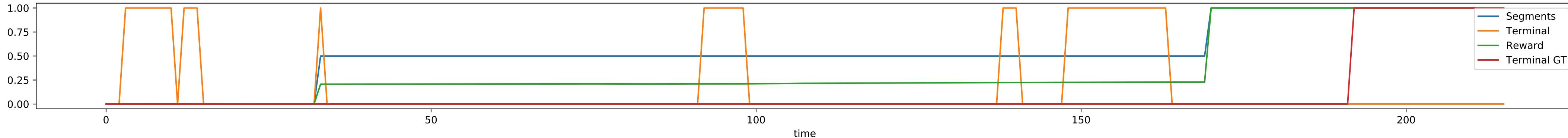
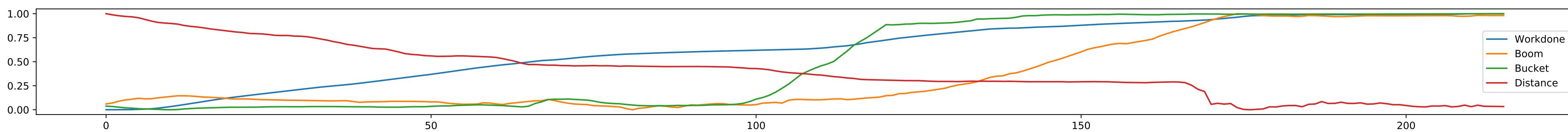
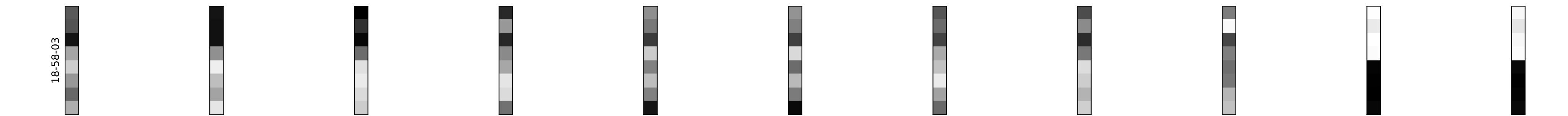
16-34-22



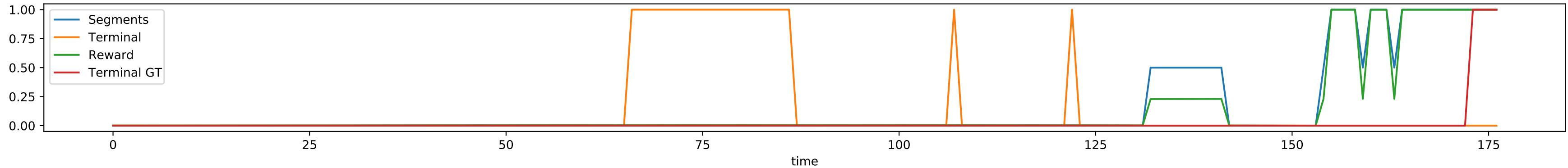
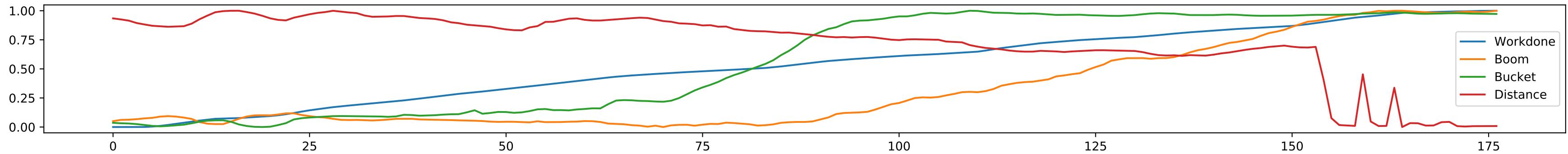
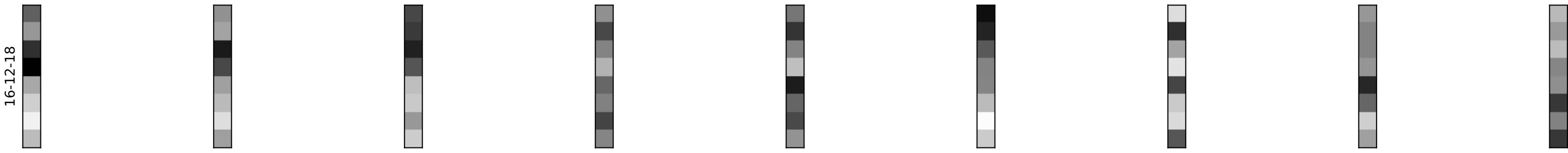
autumn - 18-54-34



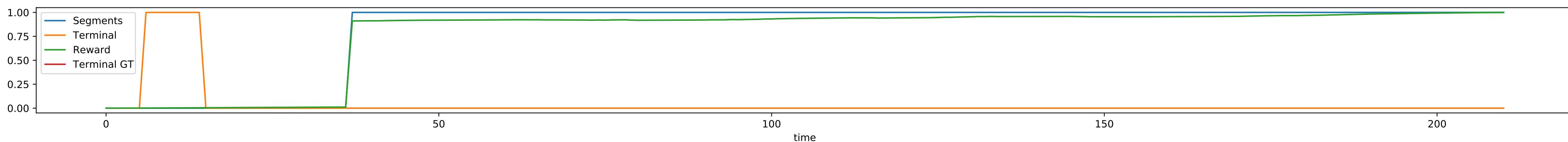
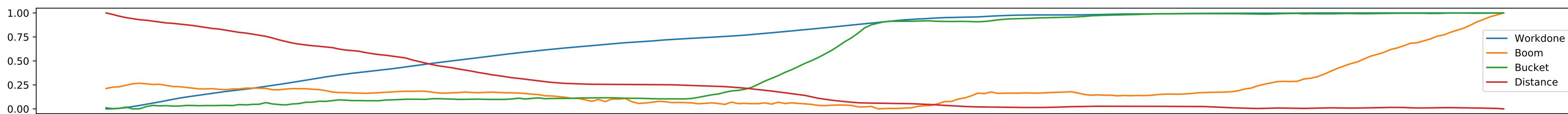
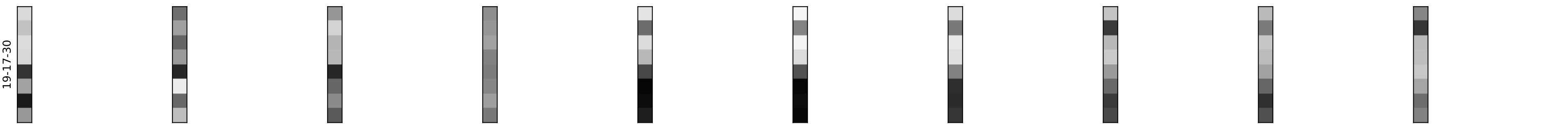
autumn - 18-58-03



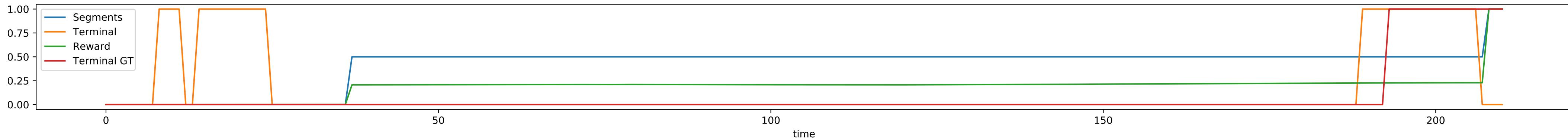
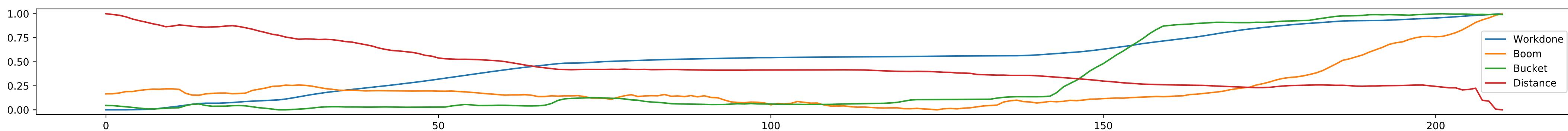
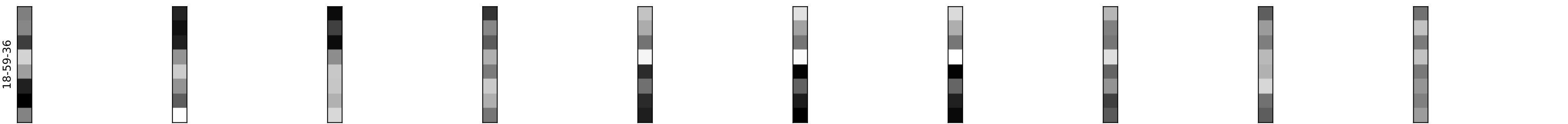
autumn - 16-12-18



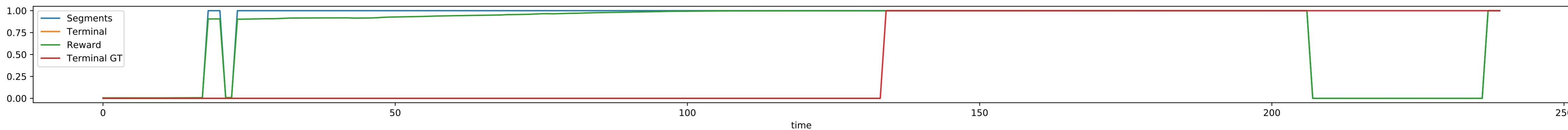
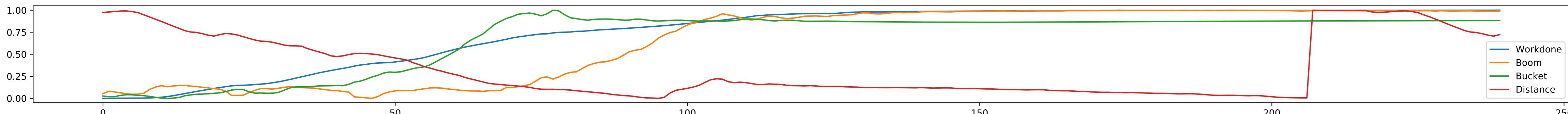
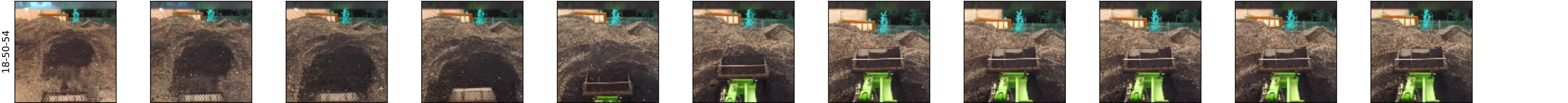
autumn - 19-17-30



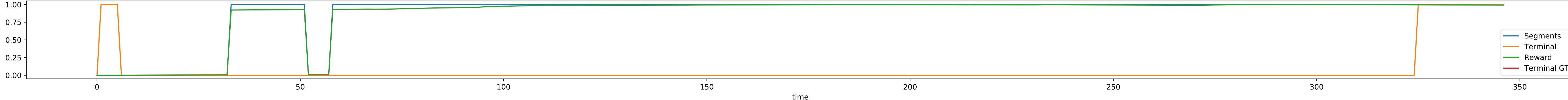
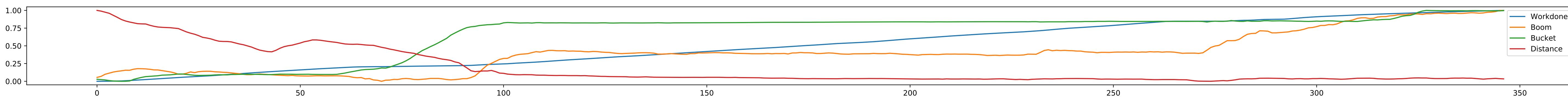
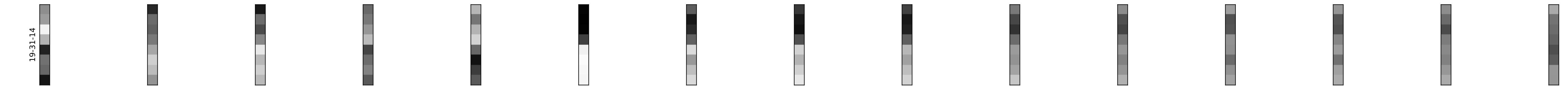
autumn - 18-59-36



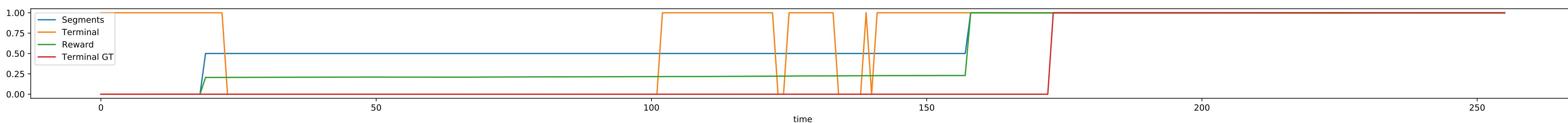
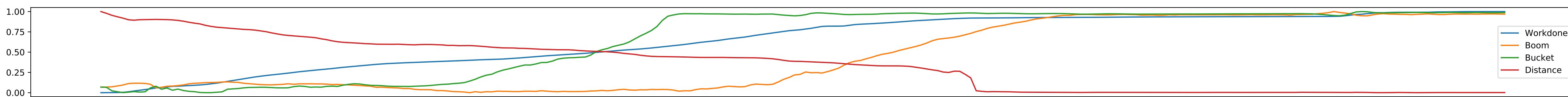
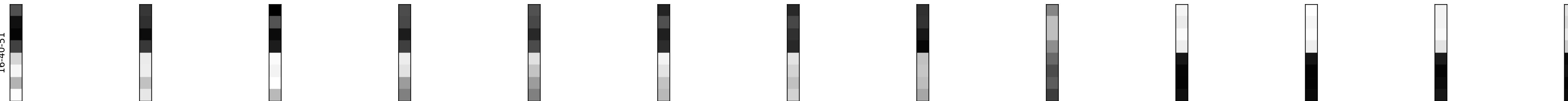
autumn - 18-50-54



autumn - 19-31-14



autumn - 16-40-51

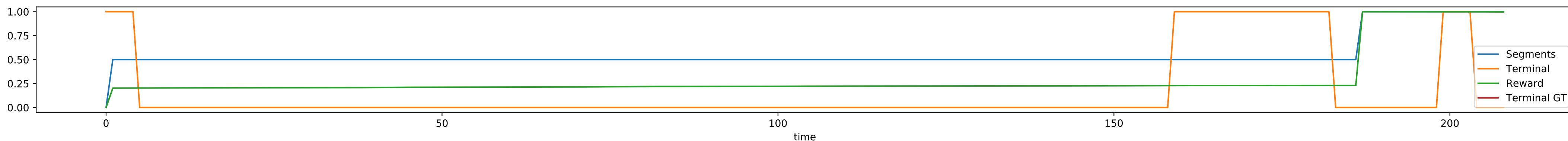
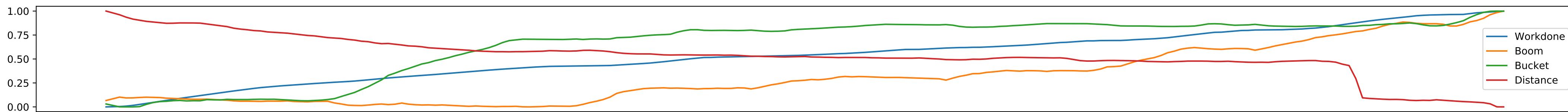
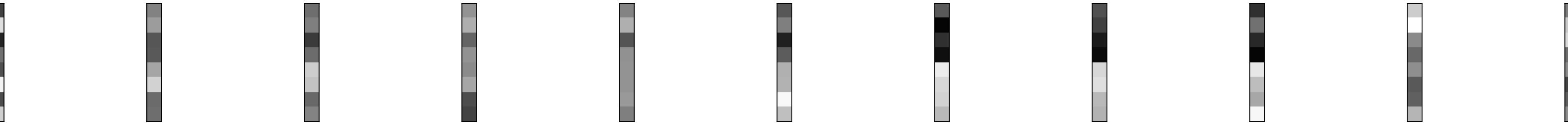


autumn - 16-19-28

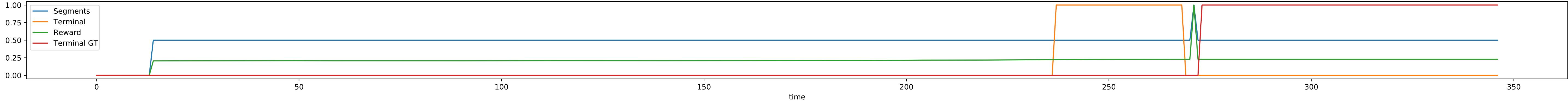
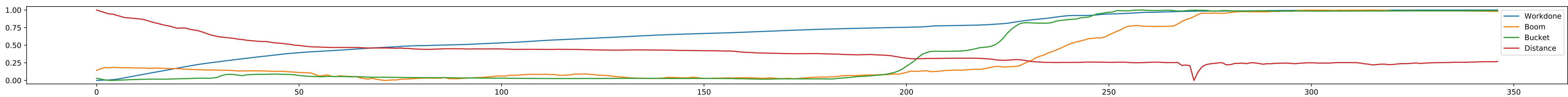
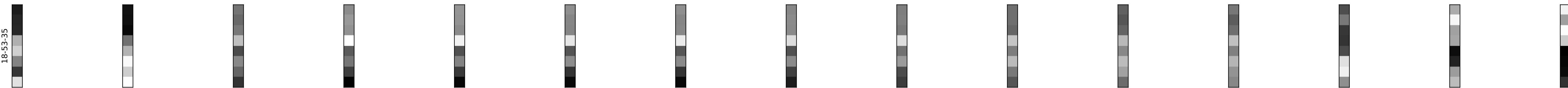
16-19-28



16-19-28

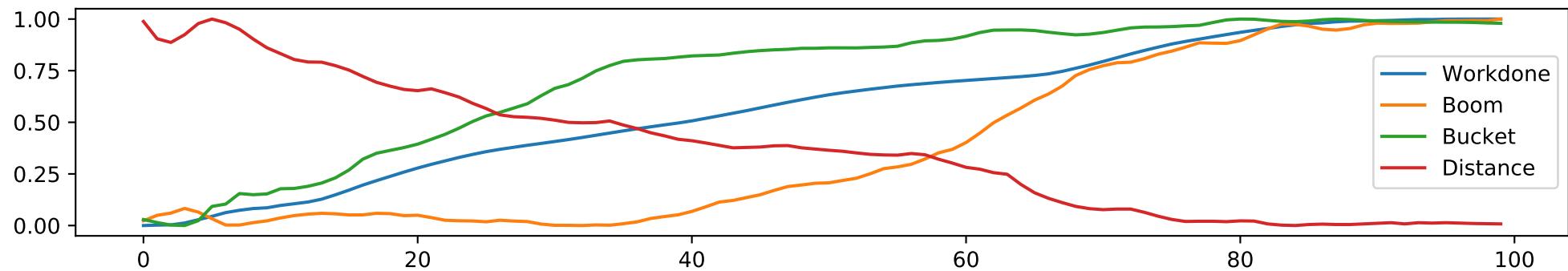


autumn - 18-53-35

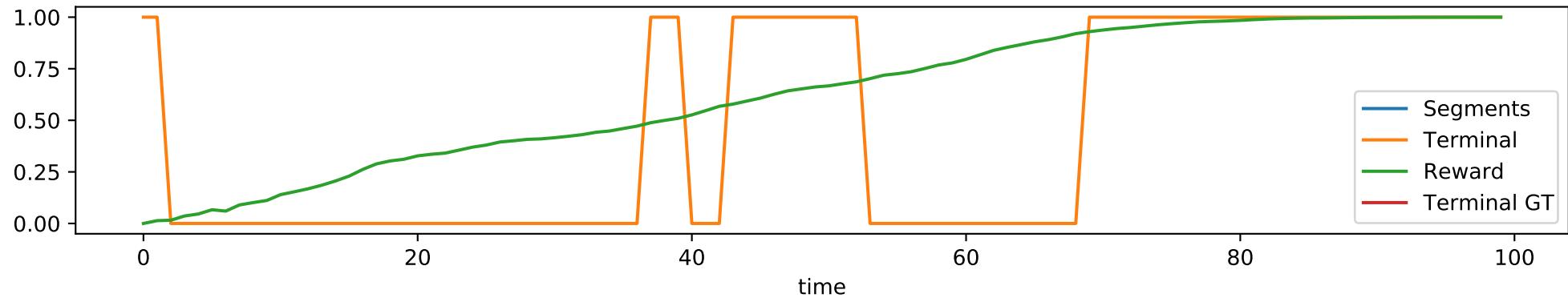


autumn - 16-18-15

16-18-15



- Workdone
- Boom
- Bucket
- Distance



- Segments
- Terminal
- Reward
- Terminal GT

time

autumn - 16-18-15

16-18-15

