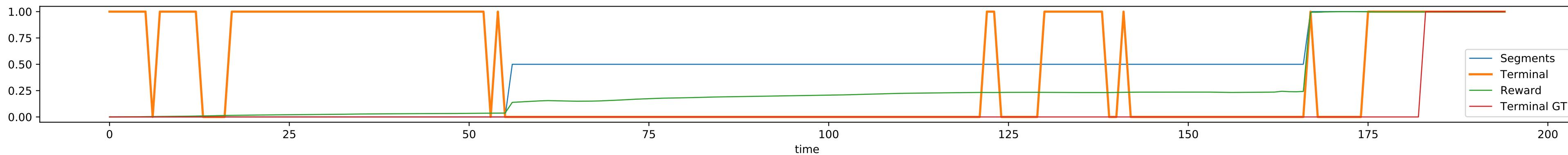
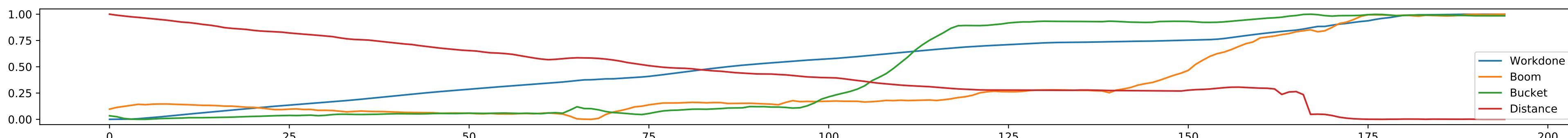
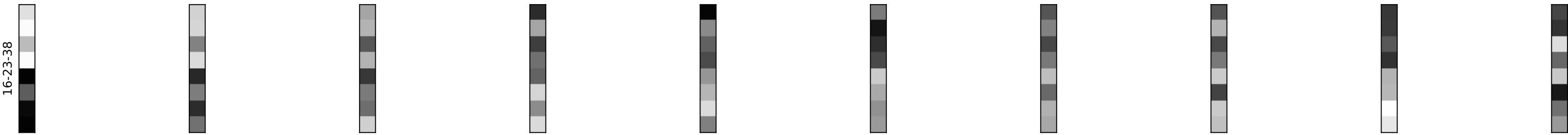


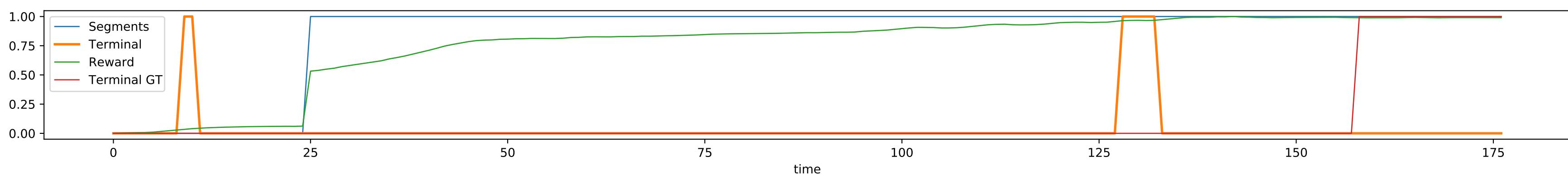
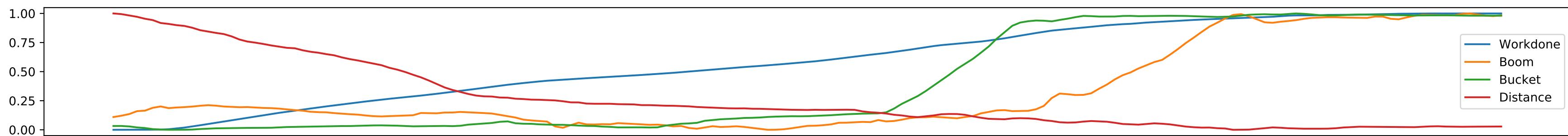
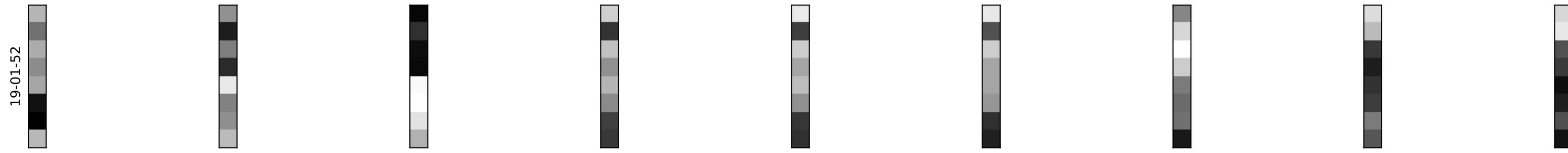
Learning Reward from Demonstrations \w sensors+vision (R_{max}=1600)

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

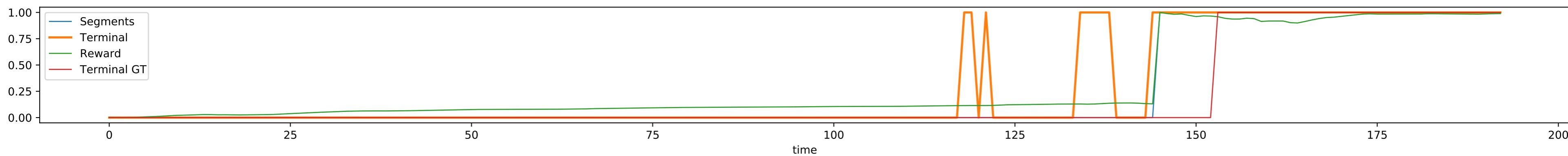
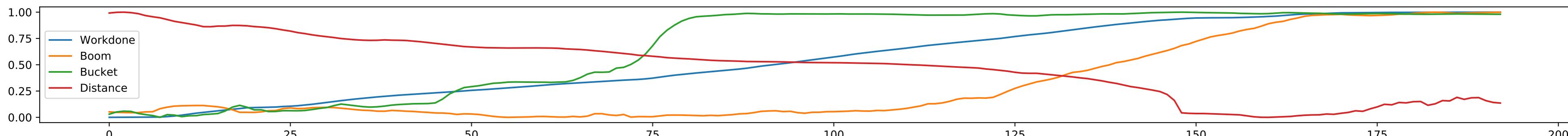
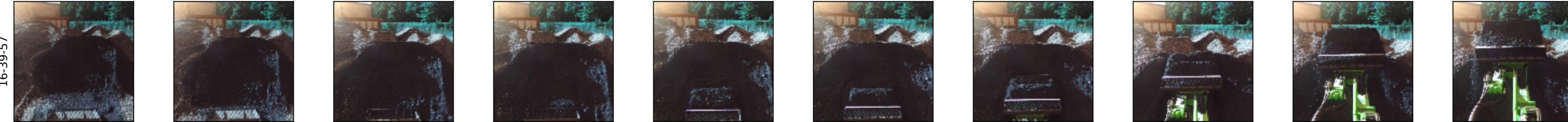
autumn - 16-23-38



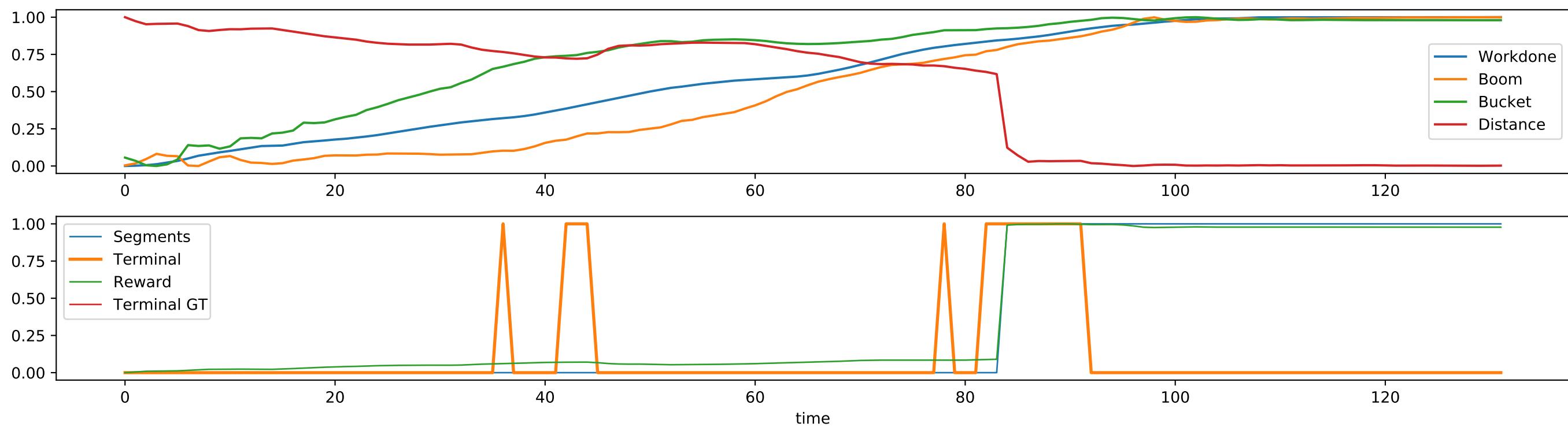
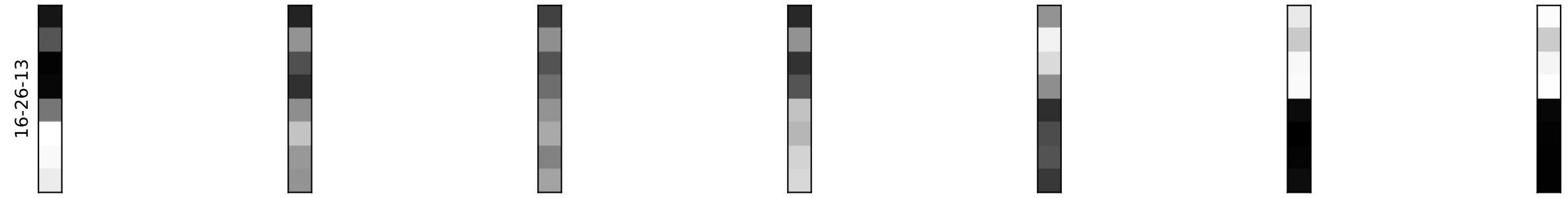
autumn - 19-01-52



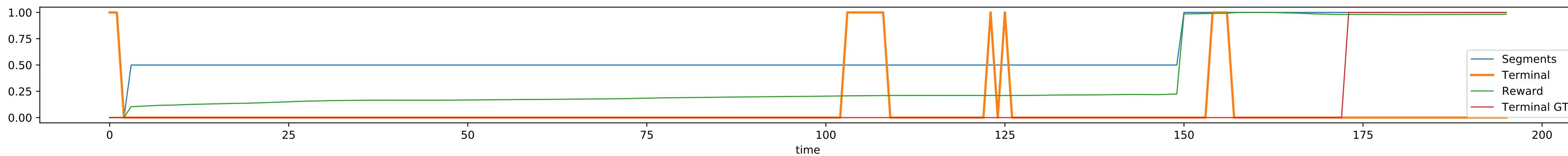
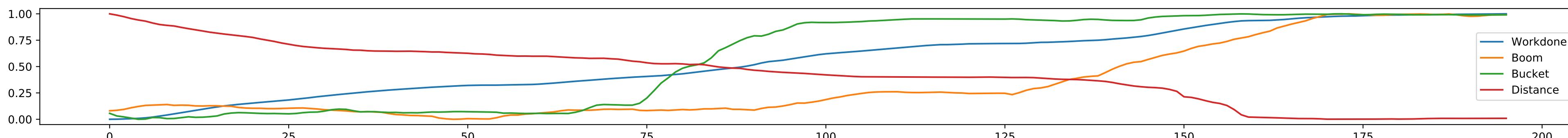
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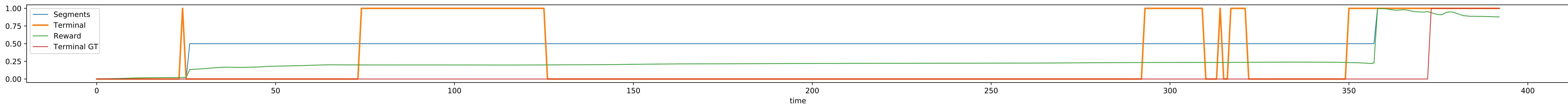
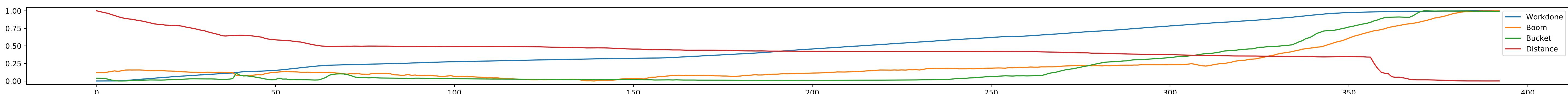
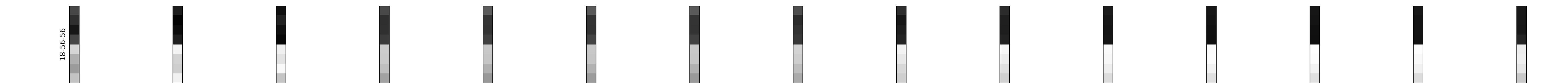


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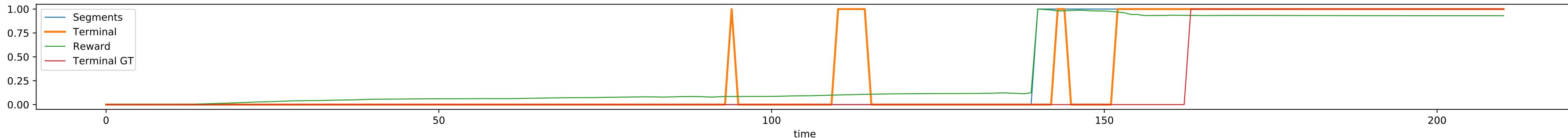
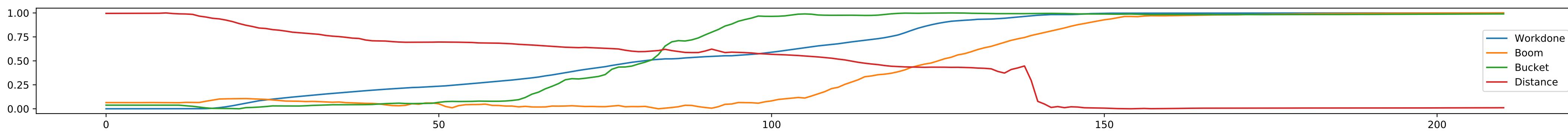
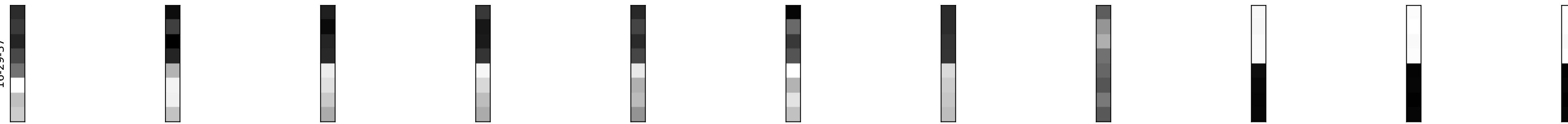


autumn - 16-31-52

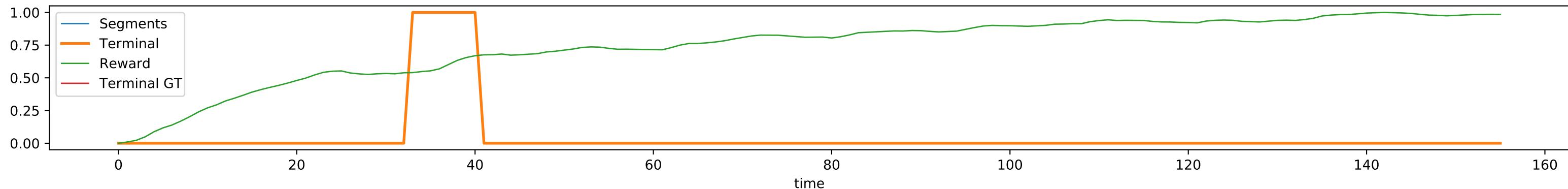
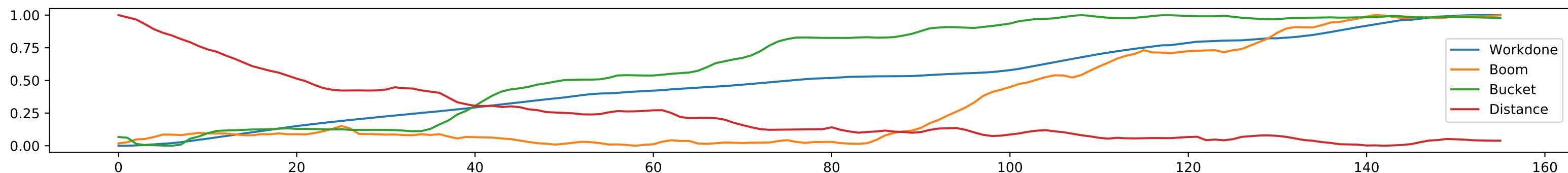




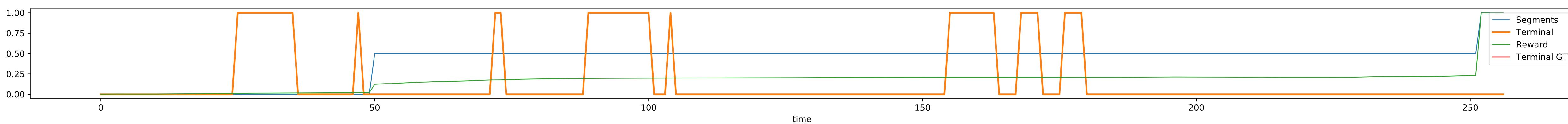
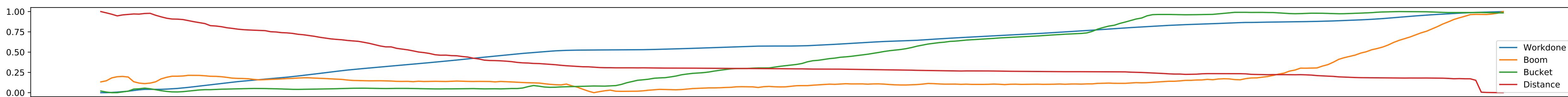
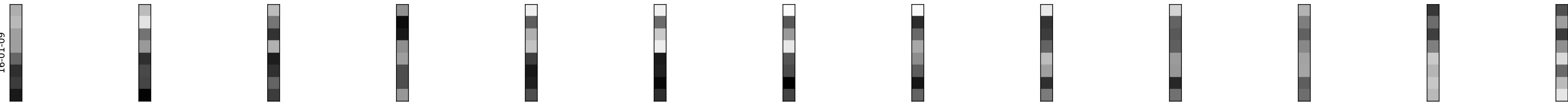
autumn - 16-29-37



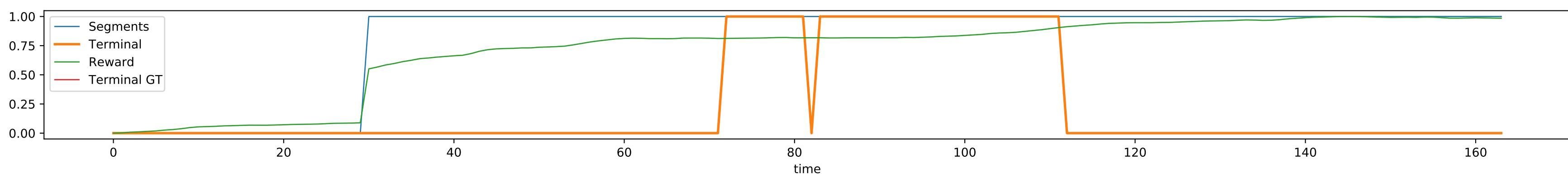
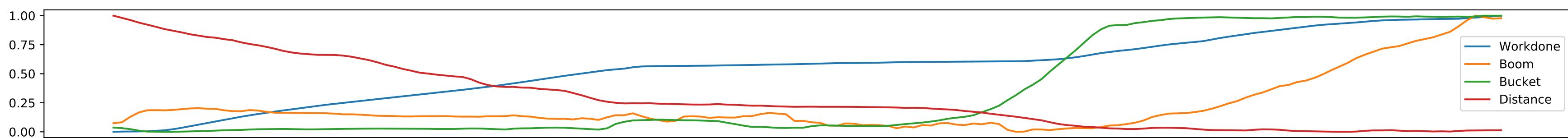
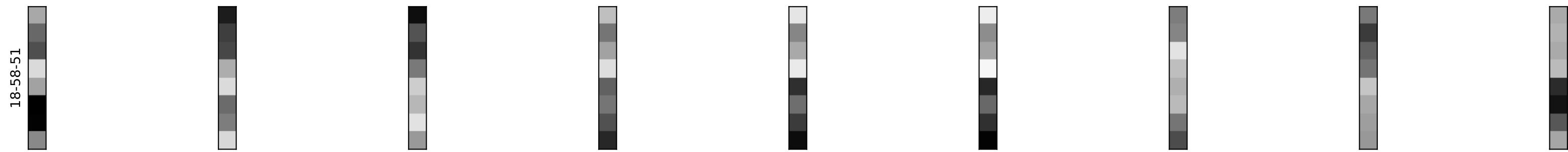
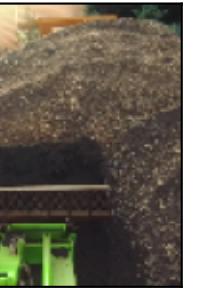
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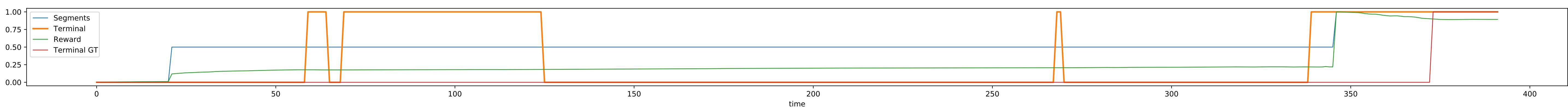
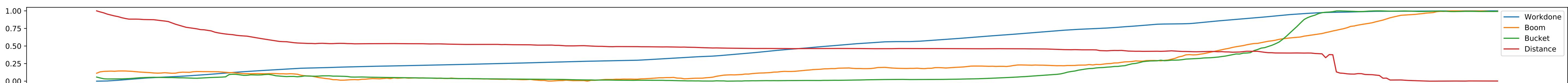
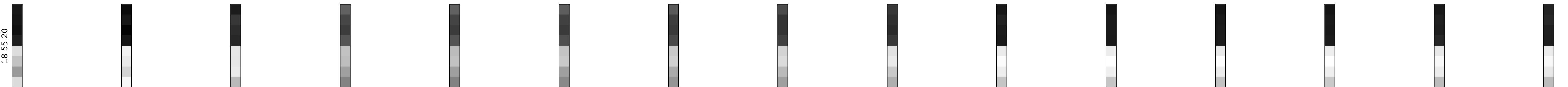
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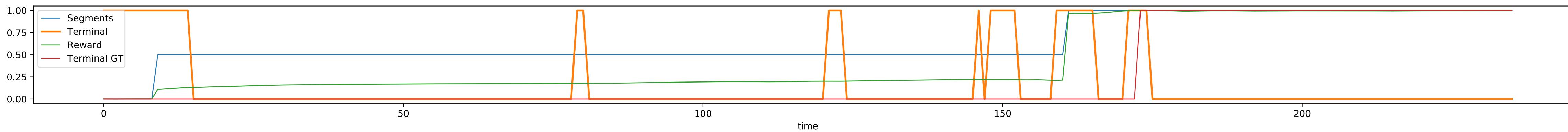
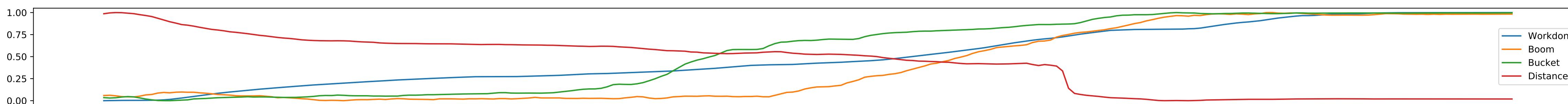
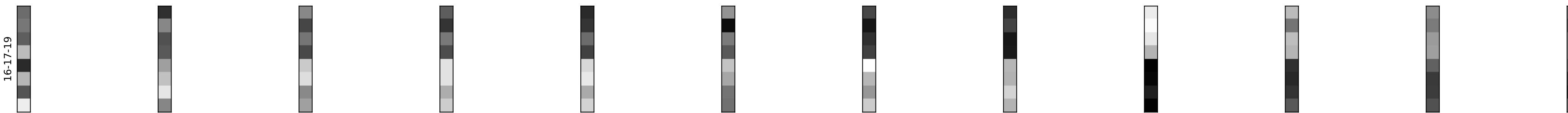
autumn - 18-58-51



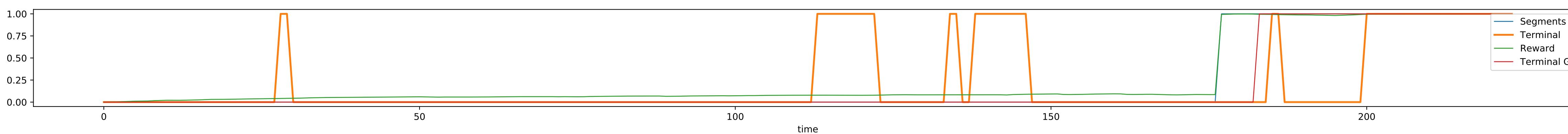
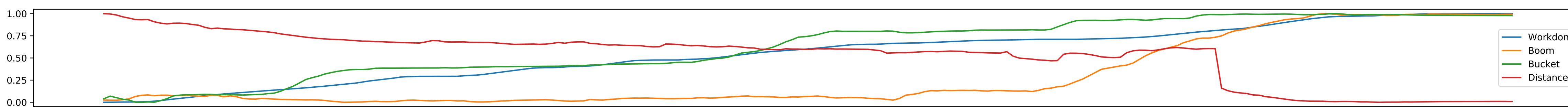
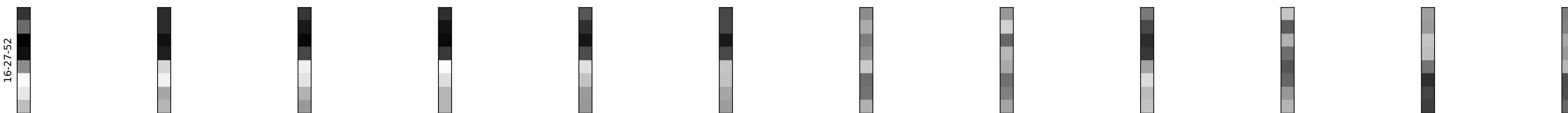
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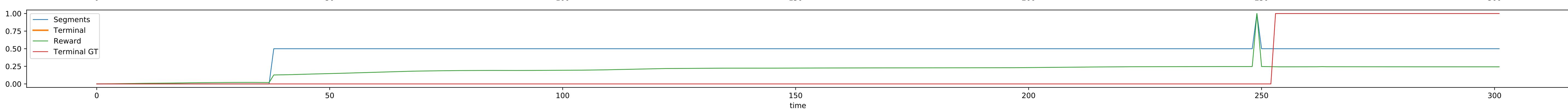
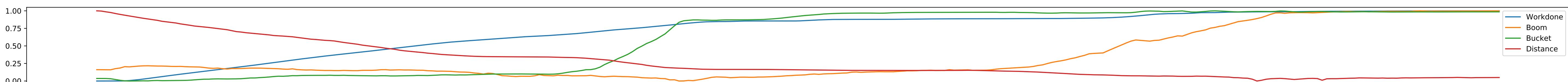
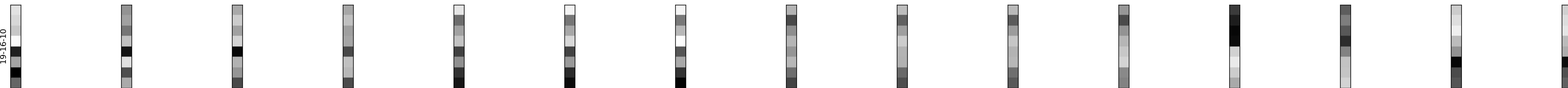


autumn - 16-17-19

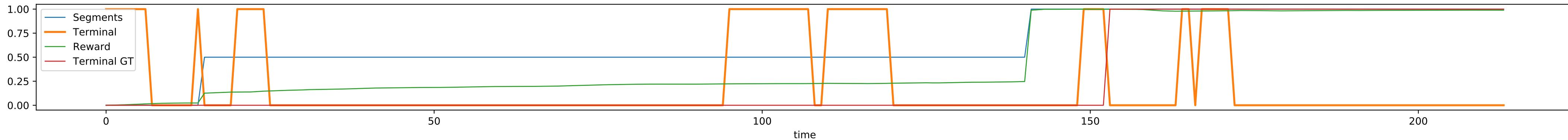
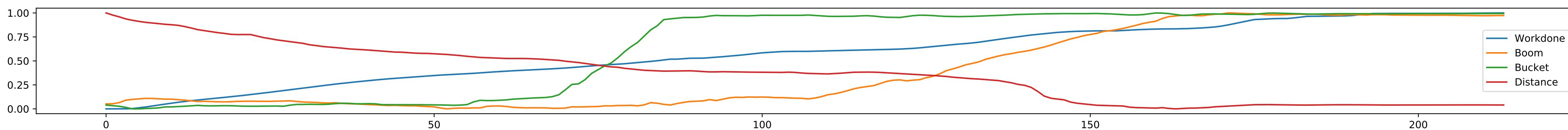
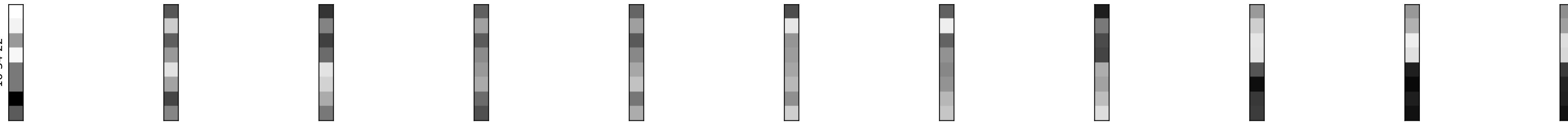


autumn - 16-27-52

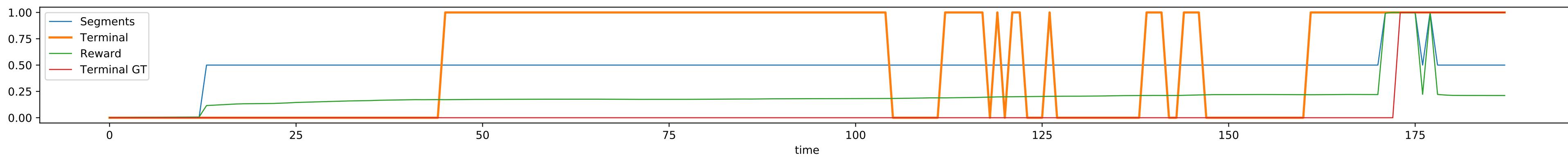
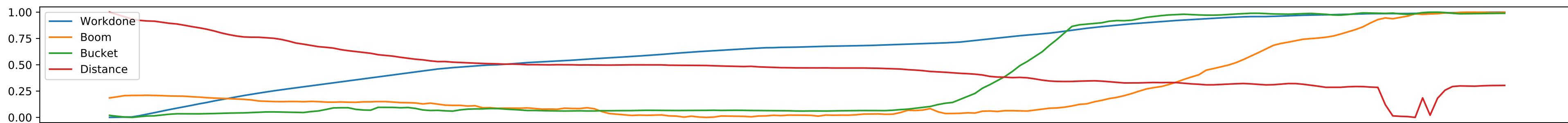




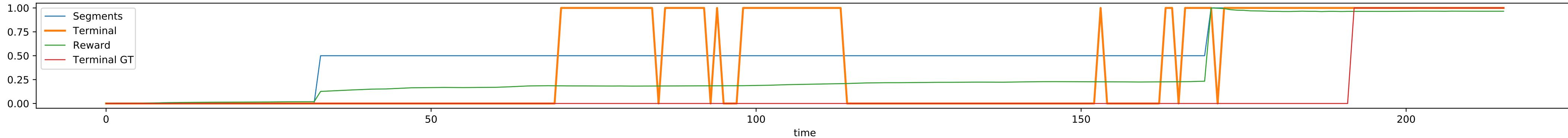
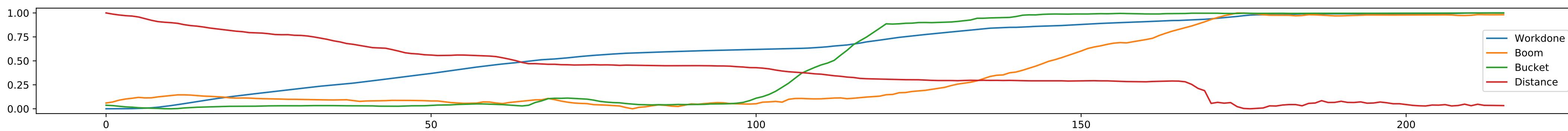
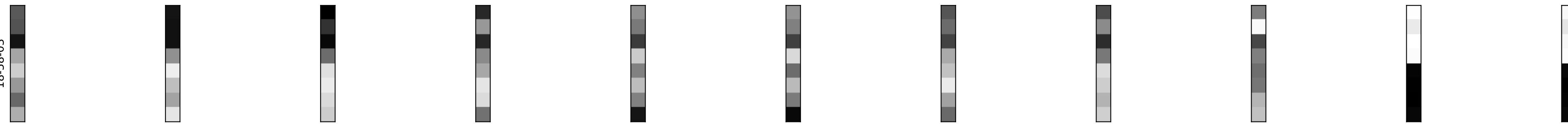
autumn - 16-34-22



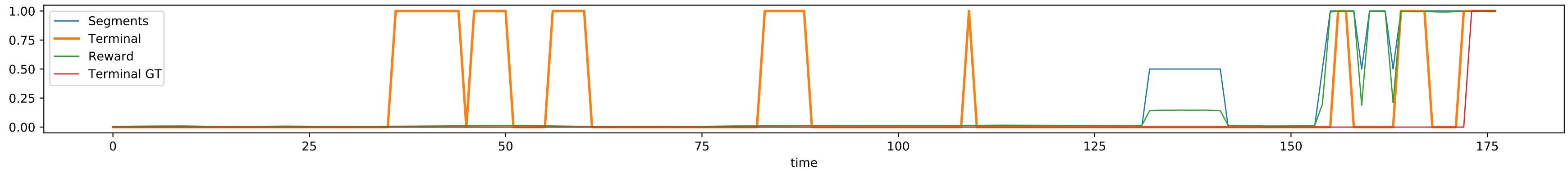
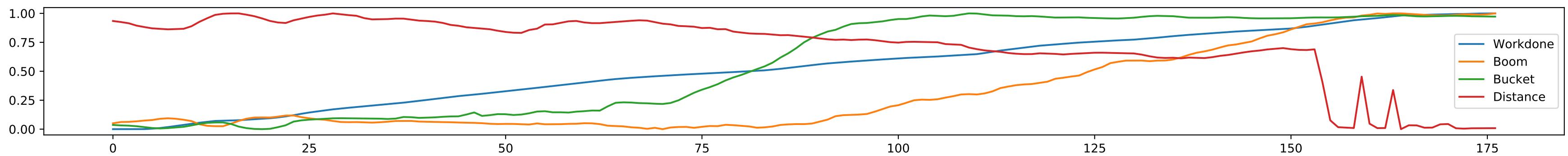
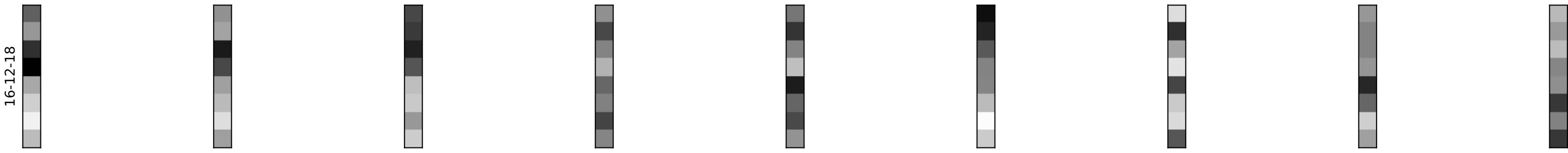
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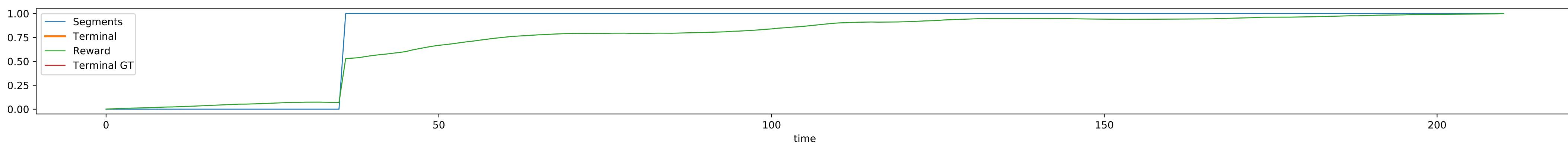
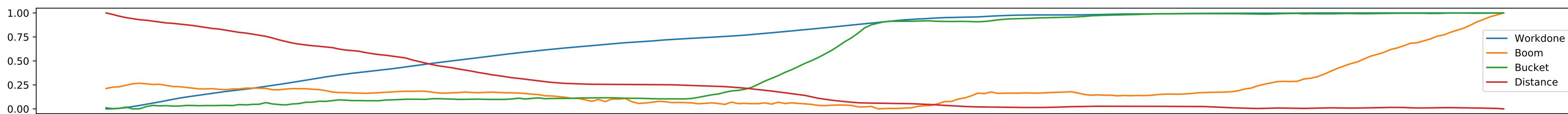
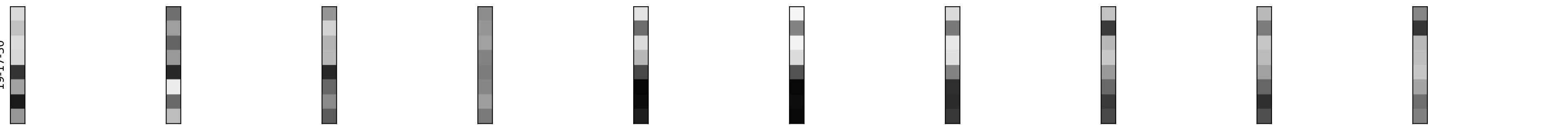
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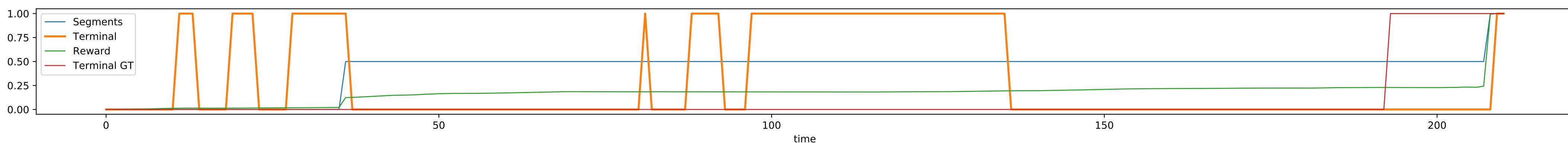
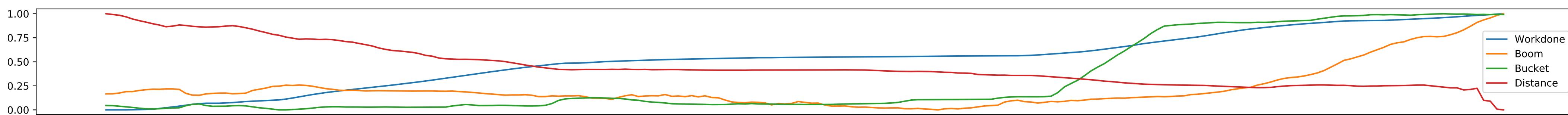
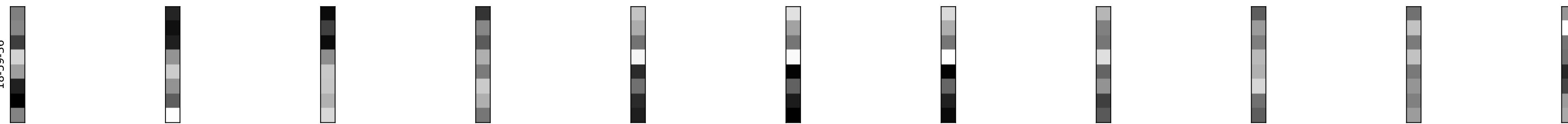
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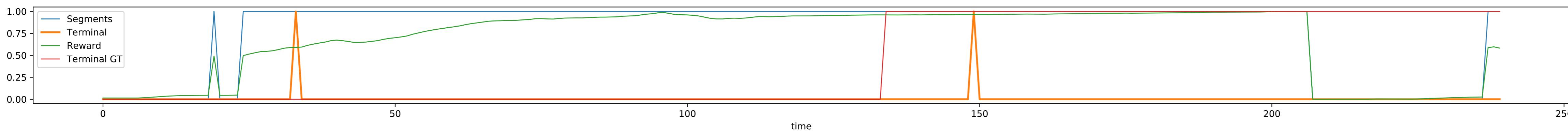
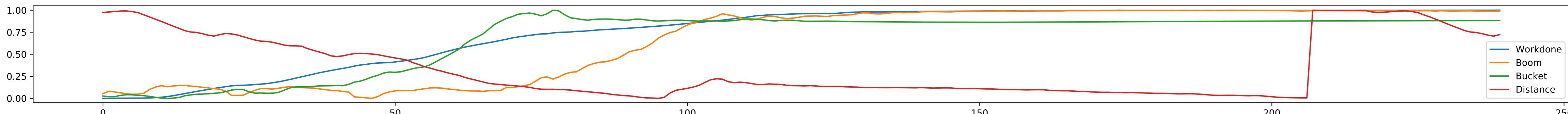
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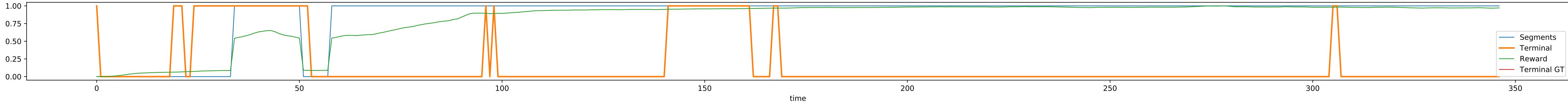
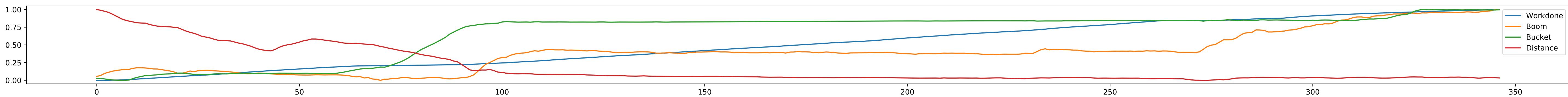
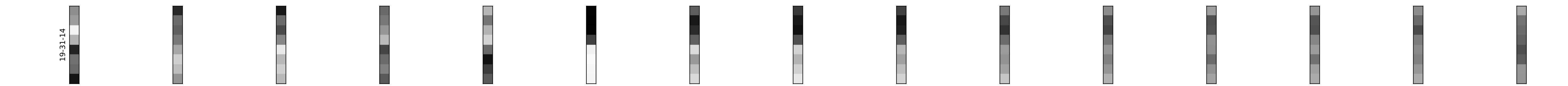


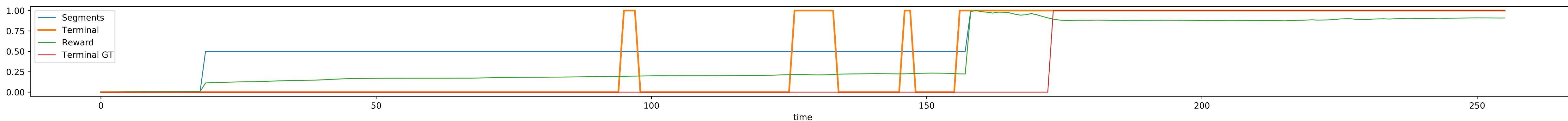
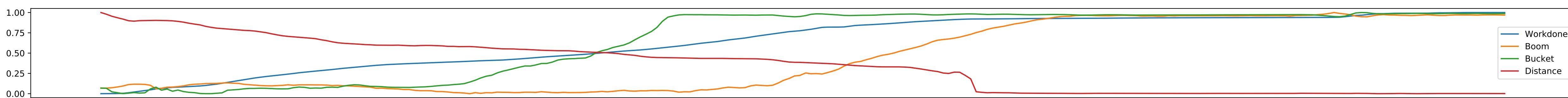
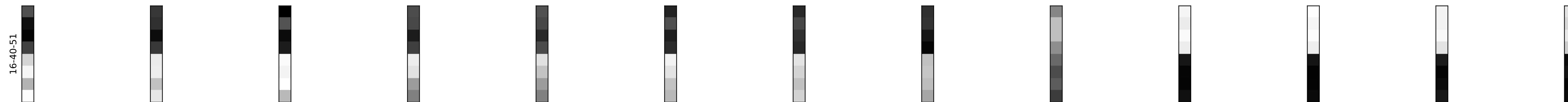
autumn - 18-59-36



autumn - 18-50-54





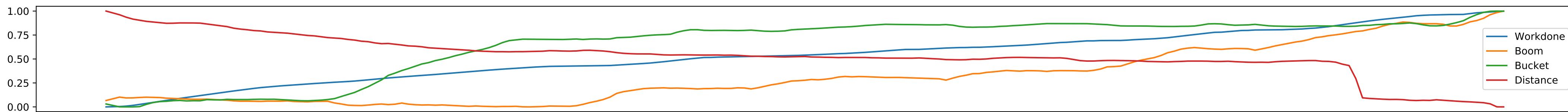
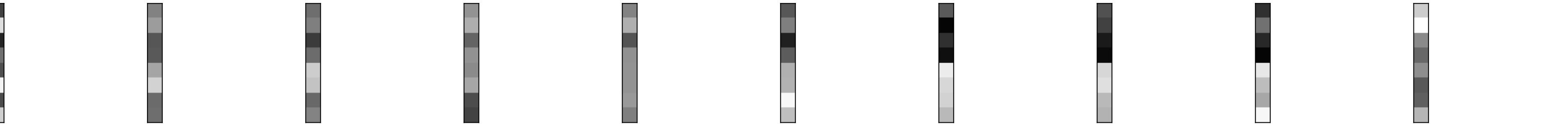


autumn - 16-19-28

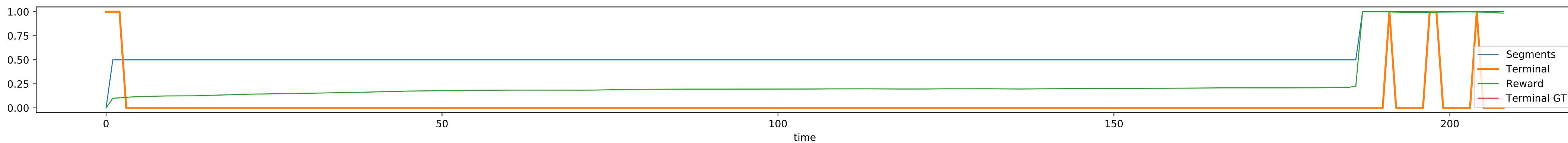
16-19-28



16-19-28



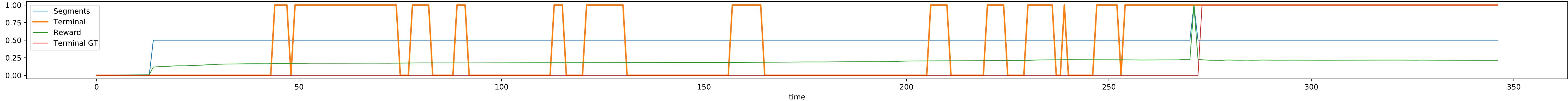
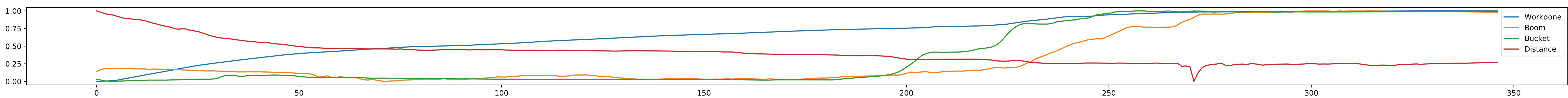
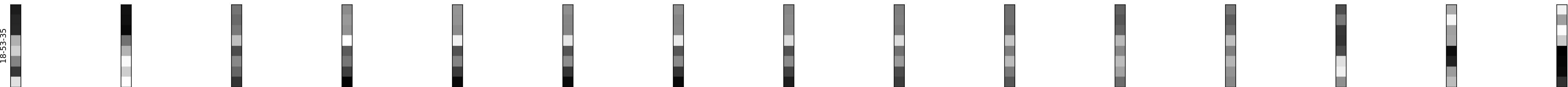
Workdone
Boom
Bucket
Distance



Segments
Terminal
Reward
Terminal GT

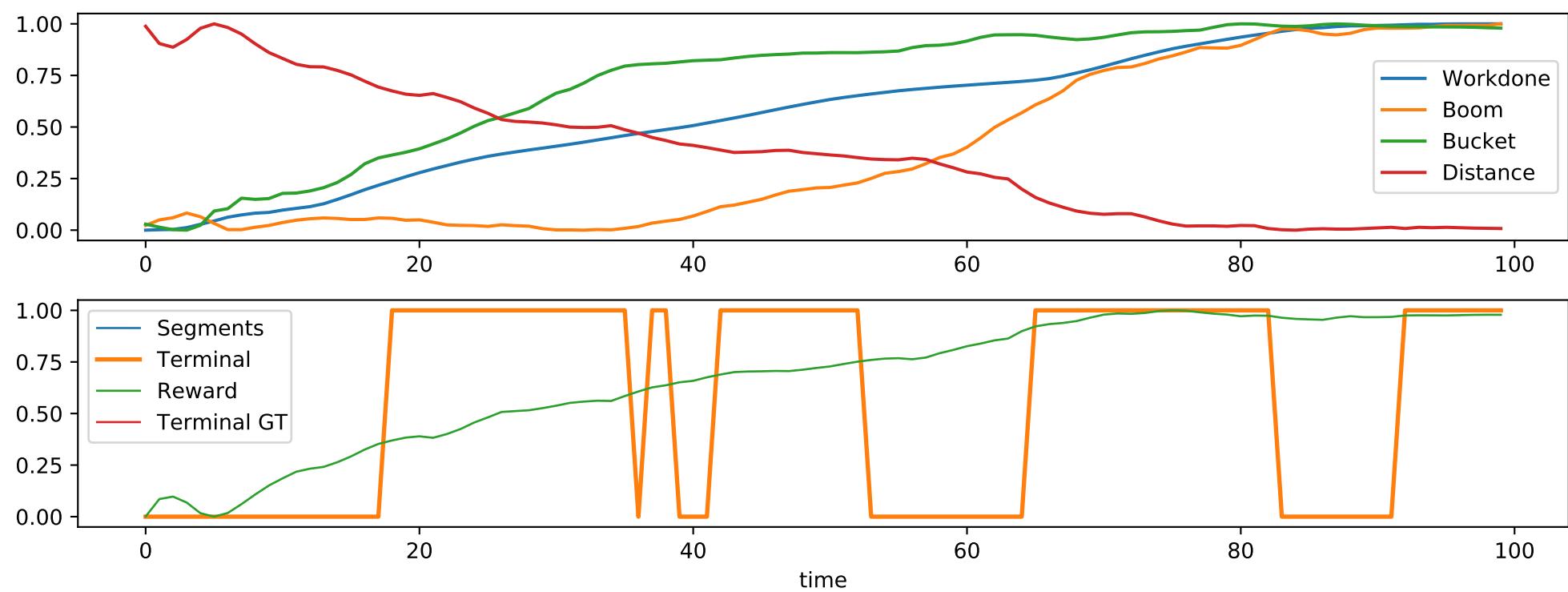
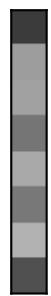
time

autumn - 18-53-35



autumn - 16-18-15

16-18-15



autumn - 16-18-15

16-18-15

