This data reflects the actual correlation values since the time steps between precipitation and temperature are matching in the algorithm

t (hours) = 3: Correlation Coefficient = 0.016479231834151318

t (hours) = 6: Correlation Coefficient = -0.28675807538540754

t = 9 maybe seen to be the most accurate start point for analysis given every 3 hour time step

t (hours) = 9: Correlation Coefficient = -0.13073533374832785

t (hours) = 12: Correlation Coefficient = -0.07879410296772689

t (hours) = 15: Correlation Coefficient = -0.21768169716640087

t (hours) = 18: Correlation Coefficient = -0.3565961659768108

t (hours) = 21: Correlation Coefficient = -0.27088829130848036

t (hours) = 24: Correlation Coefficient = -0.012277002125900233

t (hours) = 27: Correlation Coefficient = -0.09511689264603919

t (hours) = 30: Correlation Coefficient = -0.19596449132328858

t (hours) = 33: Correlation Coefficient = -0.29153749060390477

t (hours) = 36: Correlation Coefficient = -0.3601915099743089

t (hours) = 39: Correlation Coefficient = -0.47684741225933974

Hurricane makes full landfall at full strength

t (hours) = 42: Correlation Coefficient = -0.595520536740184

t (hours) = 45: Correlation Coefficient = -0.5530978904017924

t (hours) = 48: Correlation Coefficient = -0.39476714301678

t (hours) = 51: Correlation Coefficient = -0.3238542307896573

t (hours) = 54: Correlation Coefficient = -0.3338208645317056

t (hours) = 57: Correlation Coefficient = -0.38183463346211927

Using the precipitation plots it is easiest to see the trend of these values increasing can be contributed to the hurricane moving back over the Gulf Coast

t (hours) = 60: Correlation Coefficient = -0.44050470152701043

t (hours) = 63: Correlation Coefficient = -0.41170667264350463

t (hours) = 66: Correlation Coefficient = -0.4223301850157451

t (hours) = 69: Correlation Coefficient = -0.4404493789945432

t (hours) = 72: Correlation Coefficient = -0.23533965247762229

Data here was sparse suggesting very little precipitation

t (hours) = 75: Correlation Coefficient = -0.1884598805428822

t (hours) = 78: Correlation Coefficient = -0.17834860222485754

t (hours) = 81: Correlation Coefficient = -0.1469324689121898

Graphically, based on precipitation plots, most of the rainfall here went from being on the Gulf of Mexico to creeping onto the Gulf Coast yet again

t (hours) = 84: Correlation Coefficient = -0.15358362114248655

t (hours) = 87: Correlation Coefficient = -0.27770269064387276

The precipitation then peaks at t=90

t (hours) = 90: Correlation Coefficient = -0.4526550650314022

t (hours) = 93: Correlation Coefficient = -0.3611608175500255

t (hours) = 96: Correlation Coefficient = -0.3500617740392972

t (hours) = 99: Correlation Coefficient = -0.29939053676878147

t (hours) = 102: Correlation Coefficient = -0.2459972057668927

t (hours) = 105: Correlation Coefficient = -0.17176886914875414

t (hours) = 108: Correlation Coefficient = -0.11430512234022171

t (hours) = 111: Correlation Coefficient = -0.12880392613903588

t (hours) = 114: Correlation Coefficient = -0.1955537609043297

The data here is sparse but what little data is present supports most the precipitation being over the Gulf Coast

t (hours) = 117: Correlation Coefficient = -0.30677778631880026

t (hours) = 120: Correlation Coefficient = -0.36379207660512397

t (hours) = 123: Correlation Coefficient = -0.22972870648013274

t (hours) = 126: Correlation Coefficient = -0.2084443581130254

t (hours) = 129: Correlation Coefficient = -0.32769252589192427