(Hurricane still seen to be forming data doesn't seem sufficient to conclude the values at t=3 and t=6 to be logical)

t (hours) = 3: Correlation Coefficient = 0.03918746237614766

t (hours) = 6: Correlation Coefficient = -0.3099485856525383

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

t (hours) = 9: Correlation Coefficient = -0.014702918168712404

t (hours) = 12: Correlation Coefficient = 0.050523367942023154

t (hours) = 15: Correlation Coefficient = -0.06456690982362331

t (hours) = 18: Correlation Coefficient = -0.06475880047369272

t (hours) = 21: Correlation Coefficient = -0.14643203167147345

t (hours) = 24: Correlation Coefficient = 0.021429935147209877

t (hours) = 27: Correlation Coefficient = -0.06919846379302931

Hurricane begins to make landfall

t (hours) = 30: Correlation Coefficient = -0.24159886509529405

t (hours) = 33: Correlation Coefficient = -0.289335751531656

t (hours) = 36: Correlation Coefficient = -0.319526242263712

Interestingly enough we see a peak here as on the plots this is when the hurricane eye makes landfall

t (hours) = 39: Correlation Coefficient = -0.3999384887888932

t (hours) = 42: Correlation Coefficient = -0.3879778321729574

t (hours) = 45: Correlation Coefficient = -0.2963456835648

t (hours) = 48: Correlation Coefficient = -0.23063524412130598

t (hours) = 51: Correlation Coefficient = -0.2298406302233337

t (hours) = 54: Correlation Coefficient = -0.2765330325967337

t (hours) = 57: Correlation Coefficient = -0.3017846079088758

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 = -0.34760488046764454

t (hours) = 63: Correlation Coefficient = -0.19179940590648034

Data here was sparse

t (hours) = 66: Correlation Coefficient = -0.05550983604619968

t (hours) = 69: Correlation Coefficient = -0.08827392690120961

t (hours) = 72: Correlation Coefficient = -0.08894708912492758

t (hours) = 75: Correlation Coefficient = -0.03492952722521163

t (hours) = 78: Correlation Coefficient = -0.04809957950003306

t (hours) = 81: Correlation Coefficient = -0.051222216414999695

t (hours) = 84: Correlation Coefficient = -0.04355034662976833

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) = 87: Correlation Coefficient = -0.15622612913087622

t (hours) = 90: Correlation Coefficient = -0.22966821568613388

t (hours) = 93: Correlation Coefficient = -0.13538301531048924

t (hours) = 96: Correlation Coefficient = -0.07214890878275837

By the precipitation plots once again precipitation seems to be sufficiently small here which is also backed up by the matrix of zeros given by the algorithm

t (hours) = 99: Correlation Coefficient = -0.16134040585392614

t (hours) = 102: Correlation Coefficient = -0.20227561442608297

t (hours) = 105: Correlation Coefficient = -0.09356118225462805

t (hours) = 108: Correlation Coefficient = -0.019614138012830032

t (hours) = 111: Correlation Coefficient = -0.019729942419210823

t (hours) = 114: Correlation Coefficient = -0.07129390486307939

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 = -0.16464871431352904

t (hours) = 120: Correlation Coefficient = -0.2543428675099447

t (hours) = 123: Correlation Coefficient = -0.21954485318295808

t (hours) = 126: Correlation Coefficient = -0.21585934259425174

t (hours) = 129: Correlation Coefficient = -0.3079579453735998