

Wednesday, September 30, 2015, when I checked the models to see the projected track of hurricane Joaquin I was very surprised to see the GFS model had the hurricane coming up the Chesapeake Bay. This was much like the August 23, 1933 hurricane that took a similar path and caused great destruction in Virginia. This was the worst hurricane since the 1896 September 29th Richmond hurricane. It really looked bad for Virginia if you believed the models and of course I was very concerned. In checking the models later that morning the Nam model had the hurricane doing a loop over North Carolina and giving a little over 31 inches of rain in one part of interior North Carolina. The only model that showed the hurricane going out to sea was the European model and everyone was hoping that the hurricane would take the European model's predicted track. It was very fortunate for Virginia as the hurricane did take the European track. However, the Southeastern Mid-Atlantic States still had to deal with a very deep negatively tilted trough and the formation of a strong Northeaster that was being blocked to the north by high pressure. The Nam model seemed ridiculous forecasting 31 inches of rain in North Carolina but as it turned out South Carolina had some reports of more than 20 inches. So the model was not off all that much in the amount of rain but had location and the hurricane track wrong. This of course was without the near coastal track of the hurricane as it moved well to the east of Virginia. South Carolina suffered major damages with reports that it would be over \$1 billion damage. People in Virginia sensed that it could have just as well been Virginia as South Carolina. Most of the rainfall was from the strong Northeaster that was fed an Atlantic stream of moisture from the circulation around hurricane Joaquin. It actually could have been much worse if the hurricane track was nearer the coast or made land fall on the east coast.