

Hurricane Irma Discussion Number 29

NWS National Hurricane Center Miami FL

AL112017

500 AM AST Wed Sep 06 2017

Irma continues as a Category 5 hurricane this morning, having passed over Barbuda a few hours ago. Earlier data from an Air Force Reserve Hurricane Hunter aircraft included SFMR winds near 155 kt and that the central pressure had fallen to 914 mb inside the 25 n mi wide eye. There has been little change in the satellite appearance of the hurricane since that time, so the initial intensity remains 160 kt.

The initial motion is 285/14. Irma is currently being steered by the subtropical ridge to the north, and a general west-northwestward motion on the south side of the ridge is expected during the next 48-72 h. This portion of the forecast track is little changed and is in best overall agreement with the ECMWF model. **The forecast has become more uncertain after 72 h due to large eastward shifts by the ECMWF, Canadian, and HWRF models related to forecasts of the mid- to upper-level trough over the southeastern United States.** The bulk of the guidance now calls for Irma to turn northward between 78W-80W, moving near or over the Florida east coast or the northwestern Bahamas. The official forecast has also been shifted eastward, but out of respect for the previous forecast and the possibility the guidance may shift back to the west, it lies to the left of the bulk of the guidance. The forecast now calls for landfall in south Florida between 96-120 h. Users are reminded to not focus on the exact forecast track, especially at the longer ranges, since the average NHC track errors are about 175 and 225 statute miles at days 4 and 5, respectively.

Irma is likely to remain in a light shear, warm water, environment for the next 3 to 4 days. The intensity guidance continues to show slow weakening during this time, and this part of the intensity forecast is little changed from the previous advisory, with Irma remaining a strong hurricane during this time. The intensity forecast is lowered at 120 h due to the forecast landfall, and even if Irma stays over water it is likely to encounter some vertical shear at that time.