Table 1: Operational Priorities of the Tropical Cyclone Forecast and Warning Centers (NHC & CPHC, and JTWC)

NHC & CPHC Priority[1]	JTWC Priority[1]	Operational Need[1]	Linkage to Research Needs	Sig Change from FY09?
1	**1**	Guidance for tropical cyclone intensity change, especially for the onset, duration, and magnitude of rapid intensification events, as well as for over-water rapid weakening events.	A1a-f, B1-B3, B6, B7, B8	N
2	**2**	Improved capability to observe the tropical cyclone and its environment to support forecaster analysis and model initialization.	B1, C1-C3	N
3	**5**	Statistically based real-time guidance on guidance to assist in the determination of official track and intensity forecasts. This could include multi-model consensus approaches, provided in probabilistic and other formats.	B5,B6	N (did delete precipitation)
4	**10**	Advanced coastal inundation modeling and/or applications, visualization, or dissemination technology that enhances operational storm surge forecast accuracy or delivery.	A4, A5, B2, B3, B6	N (priority changed—was 5/7)
5	**6**	Improved and extended track guidance. Identification, and then reduction of, the occurrence of guidance and official track outliers, focusing on both large speed errors (e.g., accelerating recurvers and stalling storms) and large direction errors (e.g., loops), and on specific forecast problems, including interactions between upper-level troughs and tropical cyclones, track forecasts near/over land or elevated terrain, and extratropical transition.	A2, B1-B3, B5-B6	N (priority changed—was 6/8)
6	**4**	Enhancements to the operational environment (e.g., ATCF, AWIPS-II) to increase forecaster efficiency, by expediting analysis, forecast, coordination, and/or communication activities.	C1c	N (priority changed—was 4/6)
7	**3**	Guidance for tropical cyclone genesis that exhibits a high probability of detection and a low false alarm rate, and/or provides probability of genesis.	A3, B1-B3, B5-B7, B8	N
8	**15**	An extended (seven-day or longer) climatology-persistence skill baseline model for tropical cyclone track and intensity.	B8	Y (new)
9	**9**	Operational analysis of the surface wind field (including maximum sustained winds) in tropical cyclones, and winds affecting elevated terrain and high-rise buildings.	B1, B2, C1-C3	N
10	**8**	Guidance for changes in tropical cyclone size/wind structure and related parameters, including combined sea heights.	A1a-g, B1-B7, B8	N (priority decreased for JTWC—was 4)
11	**11**	Single-model track or intensity ensembles that have skill comparable to multi-model consensus techniques.	B6, B7	N (Reworded; still model ensemble focus)
12	**7**	Techniques to improve the utility of microwave satellite and radar data for tropical cyclone analysis.	B1, C1c	N (priority increased for JTWC—was 12)
13	**12**	Guidance for tropical cyclone precipitation amount and distribution associated with tropical cyclones and tropical disturbances..	A4, B1-B7, B8	N
14	**13**	Improved techniques for estimating the intensity of tropical cyclones passing over and north of sea-surface temperature gradients (e.g., in the eastern North Pacific Ocean and the Atlantic Gulf Stream).	C1, B8	N
15	**14**	Quantitative guidance tools for seasonal tropical cyclone forecasts for the Atlantic and eastern North Pacific basins, using statistical and/or dynamical methodologies.	A6,B2, B6, B8	N

[1]From JHT FY11 Announcement of Federal Funding Opportunity (http://www.nhc.noaa.gov/jht/JHT_FY11_Full_Announcement.pdf)

Blue highlighted areas above indicate changes from previous version of Table 1 used in FY08 snapshot.