Current Ship Location: Keelung City, Taiwan (Pre-Departure)

Summary
Conditions in Keelung continue to be favorable, with possibly some isolated showers. The ship is now scheduled to depart from the Keelung harbor at 04Z 02 September (12LST), traveling to (25N, 130E) for the next 48 hrs. Some isolated precipitation is expected along the ship’s initial route.

Invest 92W has the potential to undergo tropical cyclogenesis in the next 12-24 hours. The situation should be monitored closely over the next few days as the intensity and track forecast at this point still has a large spread. No change in MJO/BSISO forecasts at this time.

Day One (24 hr) Outlook: Models are in agreement with Invest 92W expected to continue to develop and undergo tropical cyclogenesis in the next 12-24 hours. There is an overall favorable environment for genesis with low shear, warm SSTs and divergence aloft. There is still a spread in the location of genesis between (13.4N, 127.1E) to (20.8N, 123.7E). Temperatures should reach into the low 90s ℉ in Keelung City, Taiwan with a 10-20% chance for precipitation.

Day Two (48 hr) Outlook: Invest 92W is expected to track northward but the timing of intensification and expected track are still uncertain. The ECMWF deterministic run is suggesting that the storm will move faster and potentially reach southeast of Taiwan by the next 48 hrs, while the GFS suggests a slower trajectory but a faster development compared to the ECMWF. Isolated precipitation may occur along the ship’s route.

Extended Outlook: Invest 92W is still forecast to move towards Taiwan, and models are in agreement that Invest 92W is less likely to make landfall in Taiwan. However, the speed of 92W’s trajectory and how fast the storm will develop are still divergent between models, which will impact the decision of when and where the ship turns southward towards the area of operation. We will continue closely monitoring the storm.

Discussion

TCs: Invest 92W is currently south of the area of operation and forecast to undergo genesis for the next 12-24 hr, and is tracking northwestward at 16 kt. An ASCAT pass at 1807Z September 1 captures that the low-level center is with 25-30 kt winds northeast of the center. Both GFS and ECMWF deterministic runs show that the storm will approach southeast of Taiwan around 12Z Sep 03 but with a slightly different location. In addition, there is some disagreement from models on track and how fast 92W will intensify. While ECMWF suggests that 92W will continue the northward trajectory with slow development until reaching northeast of Taiwan on 12Z Sep 04, the latest GFS run suggests that the storm will stall for the next 48-96 hrs near 125E, 21N and continue to intensify. The next 24-h model run should provide more clear guidance on 92W’s evolution.
The ship is now scheduled heading to (25N, 130E) and will be less likely to be impacted by the storm. However, when and where to turn south towards the area of operation is still uncertain as there is still quite a bit of model spread of both the intensity and track forecasts. Invest 92W should continue to be monitored closely.

Invest 90W is now upgraded to a tropical depression and declared as TD 14W by JTWC. The current forecast suggests that TD 14W will have no impact on the area of operation and future ship’s route.

**Convection:** The stationary frontal system has shifted slightly further northeast of Taiwan, and may still provide an unstable environment for convection to develop. Isolated precipitation may occur for the next 24-h around northern Taiwan. The frontal system is expected to continue moving northward.

**MJO/BSISO:** Models are suggesting that BSISO is in phase 4 right now but disagree with future propagation. CWB expects a retrograde towards phase 3 while ECM has a continual propagation towards phase 5 and 6. The GFS is forecasting a decay of the BSISO amplitude. Regardless, BSISO is not expected to bring enhanced convection in the northwest Pacific over the next couple weeks based on the latest models.

**SSTs:** SSTs are still expected to be warm between 29-31°C.

**Currents and Wave Heights:** Wave heights are expected to be 3-5 ft at the day of departure near the Keelung harbor (Sep 02), and are forecast to increase to 7-9 ft during the time when the ship is moving to the east.

**CAMP-EX:** no coordination planned in the next 48 hours.

FORECASTERS: CHA
Fig. 1. [1] JTWC tropical cyclone formation alert for Invest 92W issued at 1930Z Sep. 01.
Fig. 2. Alan Brammer’s GEFS Closed Surface Circulation initialized at 12Z Sep. 01, valid at 06Z Sep 02 (Top, ~Departure) and 06Z Sep 04 (Bottom, ~Near arrival).