

Storm Watch, 28 June 2010 and BP's Deepwater Oil Spill Open Thread

Posted by methaz on June 28, 2010 - 10:35am

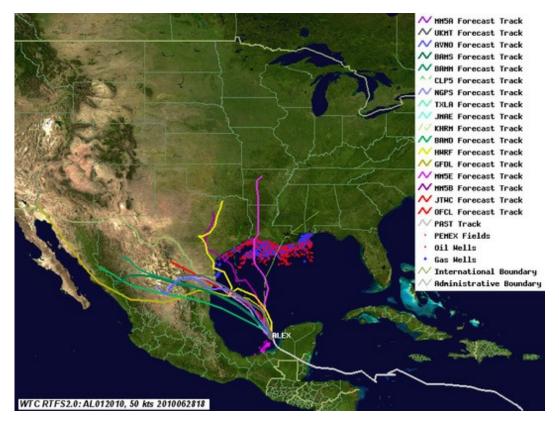
Topic: Supply/Production

Tags: alex, deepwater horizon, gulf of mexico, hurricanes [list all tags]

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4pm ET Update

Alex is well over water, but not organizing as fast as virtually everybody was expecting. Latest winds are in the 55-60mph range. The computer models have flip-floped again. The Global Forecast System (GFS), which is used as inputs to many of the other models, has dramatically moved south today after an equally dramatic move north yesterday. I expect NHC will not change the track and intensity forecast much from this morning, which makes landfall just south of Brownsville, TX. Watches and warnings are up for South Texas and northern Mexico.



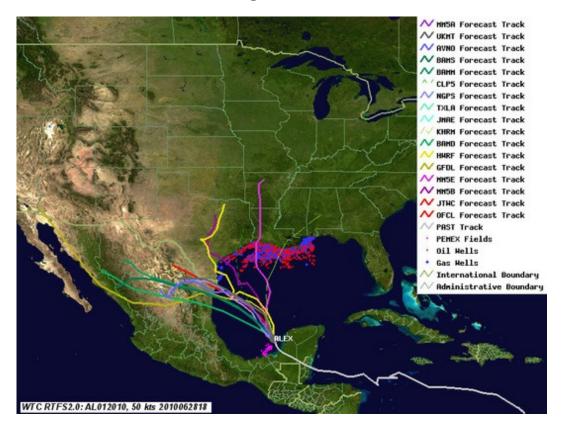
As for impacts, not much to change from this morning. Apache, Exxon Mobil, and Anadarko have started evacuating personnel, but as noted, we (Kinetic Analysis Corporation) aren't forecasting significant damage from this storm, only a brief reduction of output by 10-25% for a few days this week due to precautionary shutdowns, with full production restored by this weekend. We also

The Oil Drum | Storm Watch, 28 June 2010 and BP\'s Deepwater Oil Spill Openhithpe@dwww.theoildrum.com/node/6667 don't expect significant impacts on the Deepwater Horizon well capping operations, however, waves will interfere with clean up as noted this morning.

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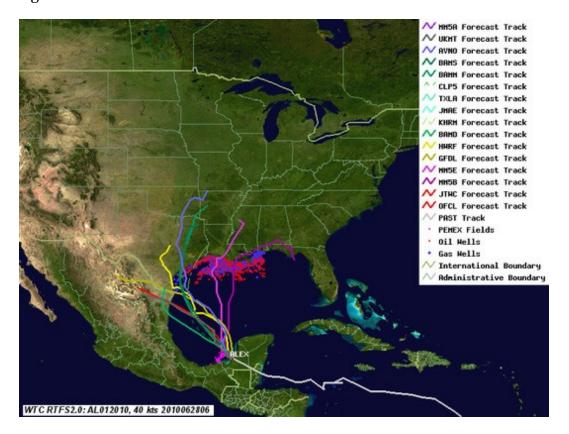


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7am ET Situation

Alex has moved back over water, in the Gulf of Campeche, and has begun to build in intensity. The primary dynamic computer model tracks are showing landfalls on the south Texas coast, between Brownsville and Corpus Christi. The official forecast has been creeping northward, and I would expect further northward shifts. But Alex remains a tough storm to forecast. Although the environment remains favorable for hurricane formation, the models (both NMC's and our in

The Oil Drum | Storm Watch, 28 June 2010 and BP\'s Deepwater Oil Spill Openhithpe@dwww.theoildrum.com/node/6667 house versions) for some reason are not intensifying the storm much. In fact, the HWRF is not even allowing Alex to become a hurricane before landfall. Here's the tracks:



As before, the red line is the Official forecasts, yellow are the NHC HWRF and GFDL, purple are part of our local MM5 "what if" scenarios that are low probability, but to help gauge impacts on the Deepwater Horizon (DH) site. Our impact assessment discussion follows below. Bottom line is that on this track, we expect evacuations of some rigs and platforms off the south coast of Texas, but no significant damage or long term production impact. Waves should not seriously impact the Deepwater Horizon capping operations, but increasing waves may cause problems with the clean up.

Current Production Impacts (as of 7am ET)

PEMEX export operations have slowed, but they did not evacuate any platforms and reported no shutdowns. The storm should not serious impact them - by the time Alex strengthens, it will be far enough away to cause no damage.

Shell and BP are already evacuating non-essential personnel, and preparing evacuations. Shell reports Auger and Brutus platforms are already shut in. Our forecast is for no long term impacts, but for as much as 25% of production to be shut in for up to 5 of days due to precautionary evacuations until the storm passes.

Estimating Production Impact

Assuming it only reaches Category 1 Strength, the biggest uncertainty in predicting production impact is psychological. Other than older systems, platforms can weather a hit by a Cat 1 hurricane with minimal damage. So the key question is if managers will evacuate and shut in as a precaution, and how far away will they do so. Using past years as a guide, as programmed into our computer models, we expect 10-25% shut in for up to 5 days. However, these guys may be extra skiddish - nobody wants to be the next BP. So we'll see how that impacts the decision making process.

Estimating impact of Deepwater Horizon Operations

On these tracks, except than a couple of outliers, there should be minimal impacts on operations, unless (and this is a big unless) they decide to shut down as a precaution. Then, according to Admiral Allen, there would be up to a 14 day disruption. I'm not sure of the specs for the support ships, which probably have lower limits, but the primary drill ship, the Discoverer Enterprise, can continue operations in up to 30 foot waves. Our worst case runs right now are for 25ft waves on site. It's a tough call for the Admiral. If the storm intensifies more than forecast and turns, there won't be much time to shut down and bug out.

Cleanup operations will certainly suffer. Even 3ft waves are bad news for skimmers, making operations difficult or impossible, and we will be seeing those for sure in a day or so along the affected coast. Booms to protect shorelines can be overtopped or damaged, and oil pushed in to sensitive areas. Unfortunately the swell from the storm probably won't cause much mixing and dispersion.

Tracking Resources

- National Hurricane Center
- NOAA real time weather and wave data from Thunder Horse complex, about 50 miles south of the Deepwater Horizon site
- South Florida WMD graphics, including model tracks
- CIMS/UW Tropical Cyclone Tracking Site

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