Cyclone Gonu Thread 2-Muscat and Bandar Abbas now in the projected path of Gonu (updated at 8p EDT)

Posted by Prof. Goose on June 4, 2007 - 6:00pm
Topic: Supply/Production
Tags: bandar abbas, cyclone, cyclone gonu, gas prices, india, iran, mina al fahal, muscat, oil, oil prices, oman, pakistan, peak oil, qalhat, sur, united arab emirates [list all tags]

Newest Gonu thread created on the front page with newest information as of noon EDT on 6/7/07--the new link can be found by clicking here or you can also find it by going to the front page of TOD at theoildrum.com, we'll have a link there for the foreseeable future that will take you to our most recent coverage!

KAC/UCF and Chuck Watson are forecasting, based on their damage models, that the Qalhat (Sur) LNG terminal will be out for 20-30 days and the Mina al Fahal oil terminal will be down for 10-20 days--all of this assuming they are built to US standards.

All tips and resources (*and there are already many down there in the first thread, let's replicate that here today in the second thread! Thank you!*) welcome in the comment thread below. If you have any insights, please email the editors box with the word GONU in the subject.

Last updated at 8pm EDT, 6/5.

Here is a link to the first Cyclone Gonu Thread from yesterday. Please put all new resources and insights here as of 7:30am EDT 6/5, but make sure to check out the first thread as well.

Also, click "there's more" below for MUCH more graphics and links, and there's much more from our readers in the comment thread as well...but you are likely to want to go to link noted above for the most recent coverage.

Why might Cyclone Gonu matter? Well, that answer begins with the fact that the world production of petroleum plateauing around 85 mbbl/day, any slight blip in supply or exporting could be quite noticeable on the world markets. A sizeable portion of the world's petroleum exports go through the Gulf of Oman.

Particularly, Oman matters in this because it produces 743,000 bbl/day; Oman is also a net exporter, non-OPEC, whose production peaked earlier in the decade. (Thanks to Mike from Green Car Congress for the link.).

Of course, this storm also has the potential to affect Iran, UAE, India, and/or Pakistan for that matter--mainly because of shipping disruptions, but there could be some real effects on infrastructure and assets depending on track and landfall. There are also refining and other production assets in Southern Iran.

(One will note, as you explore the old comment thread that many of these possibilities are explored...there's a lot of material that we are still sorting through on Iran, shipping lanes, storm surge, etc.)

Resources:

The latest from Margie Kieper at Weather Underground:

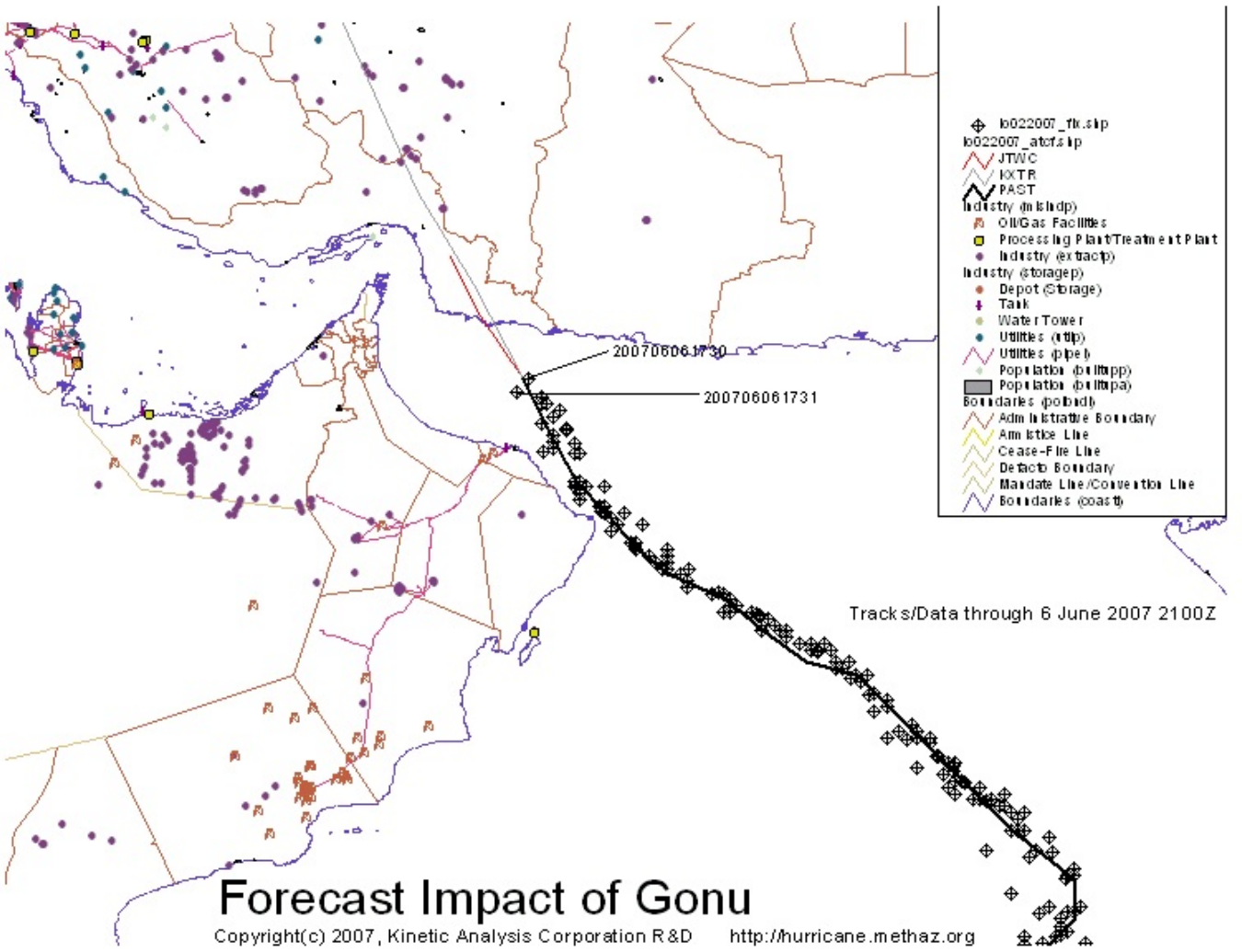
> This is sad -- the very area that I documented last night, at the extreme southeastern tip of Oman, is going to be the hardest hit area from Gonu. The cyclone has moved slowly northwest during the day, approaching Oman, and the latest track has it making landfall right at the southeast corner that juts into the Arabian Sea, and then sliding along the coastline, up towards the capital, Musqat, and dissipating against the mountainous terrain. So if the cyclone follows this track, all along the coastline winds will be onshore. Microwave imagery from three hours ago confirms the remaining convection is strongest in the northwestern quad and right at that point of landfall. And IR imagery shows the core of the hurricane just offshore (although with what appears to be a slightly more northward movement, which would track it over water into the Gulf of Oman).

Earlier in the day from Margie Kieper and Steve Gregory (on Jeff Masters' blog) over at Weather Underground:

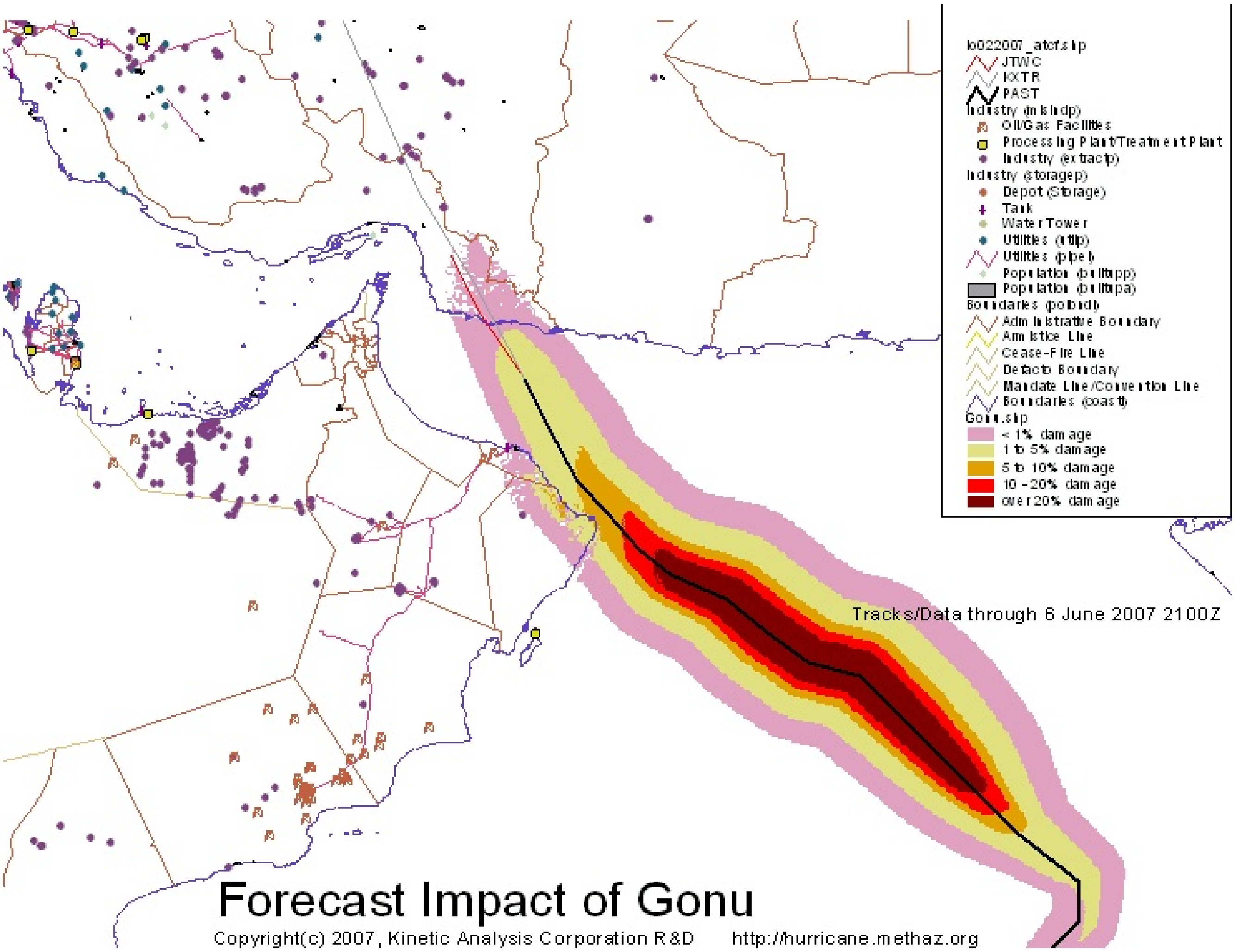
> The Storm surge shown (10-15 ft) will almost certainly hit the Iran coast - even if the storm weakens to a strong CAT 2 late Tuesday (NY time). The Eastern tip of Oman will likely also experience 10-15 foot surge due to the close proximity of the storm track. Further up the Gulf, before reaching the Straits of Hormuz - storm surge heights of 1-4 feet are expected on the Oman side, and 4-possibly 6 feet on the Iranian side near the entrance to the Straits. Significant wave heights will be 20-30 feet, dropping to 15 feet near the Straits.

This is an unprecedented event. NO CYCLONE has ever entered the Gulf of Oman. And there are no custom 'storm surge' models available for that area. This forecast is based on my experience and subjective analysis of the seabed slope and storm surge interaction with the sea floor. Considering the region has never experienced a hurricane, let alone a strong one it is highly unlikely the loading facilities or platforms were constructed to withstand the forces - both wave action and wind force - that they will experience. Significant, damage will occur. How much long term damage, and the volumes associated with it - can not be determined at this time.

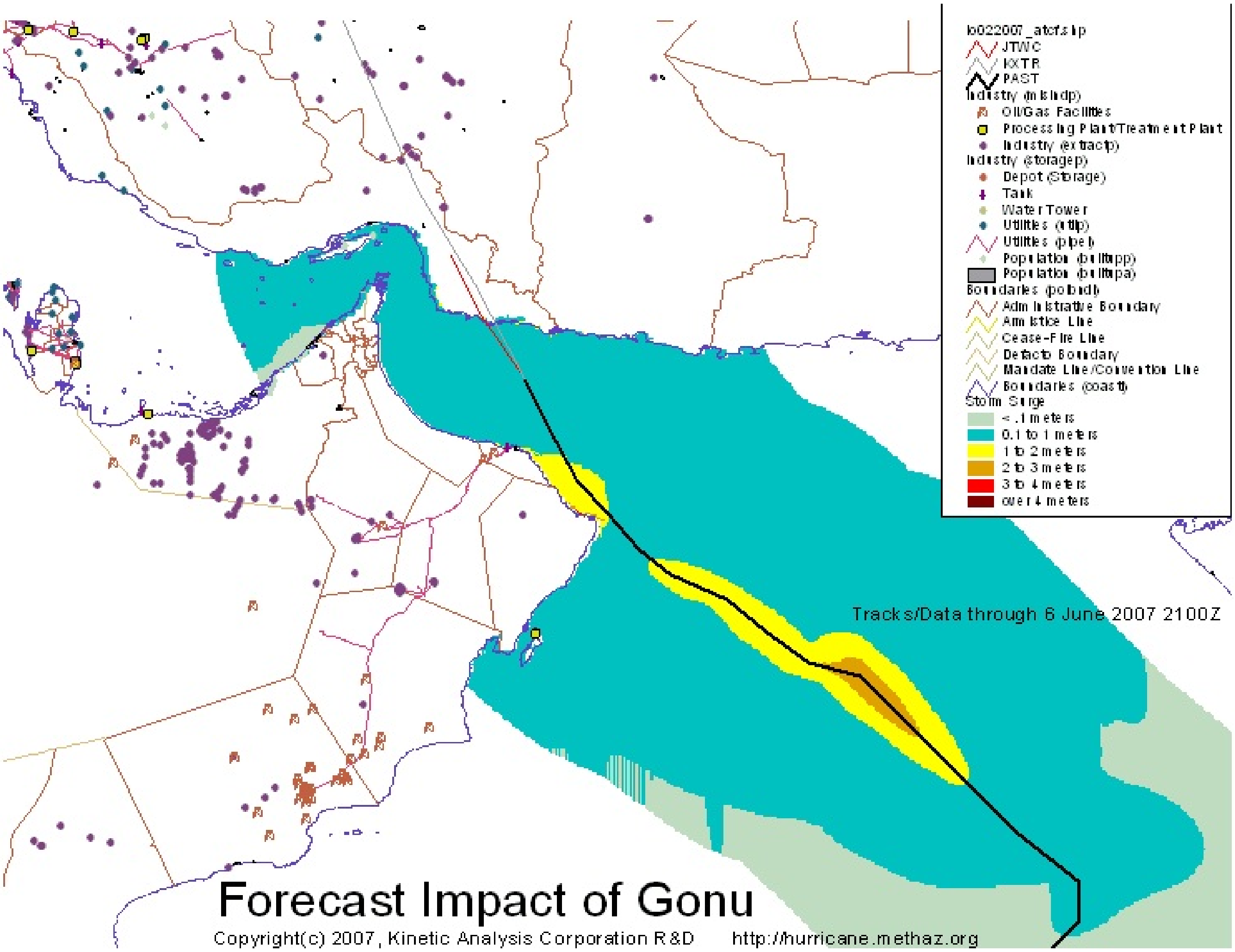
And here's the latest projected track:

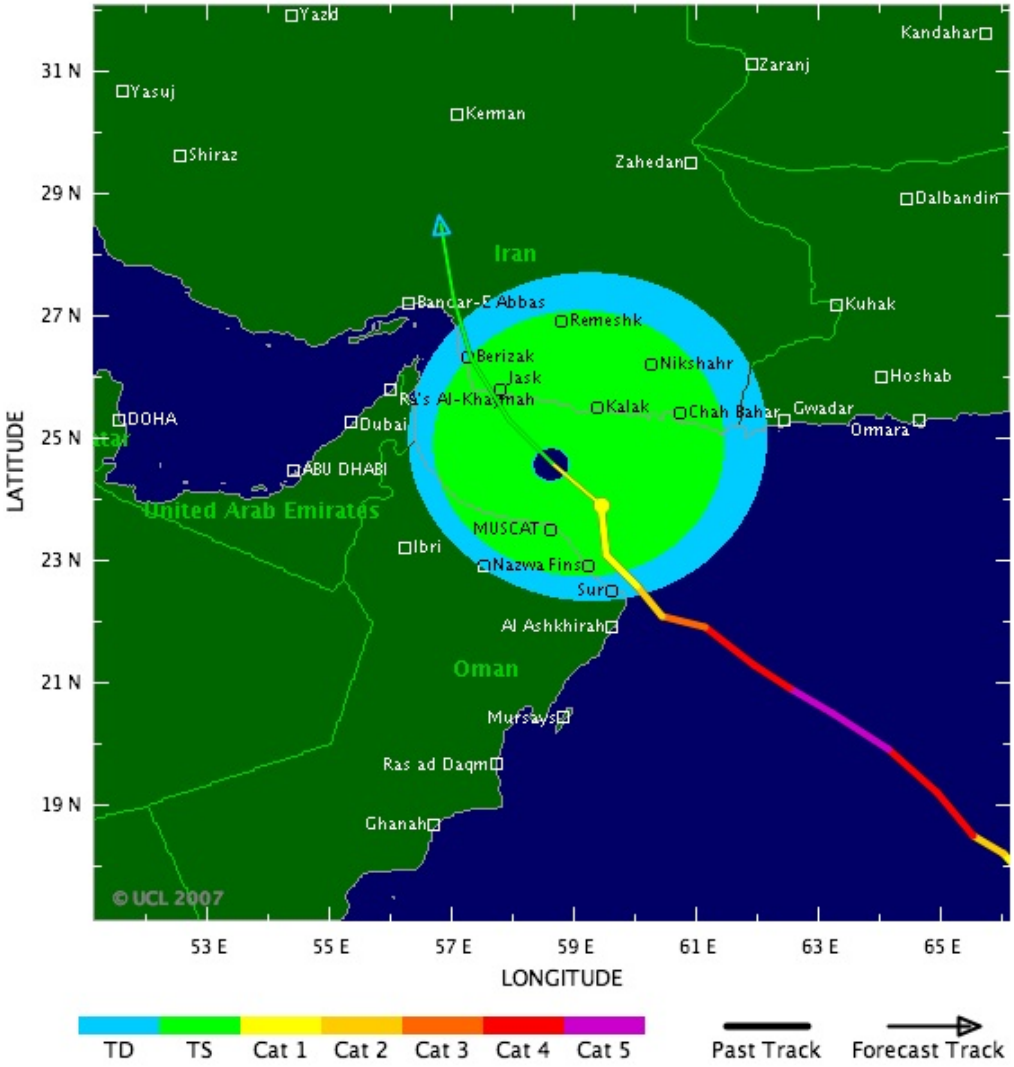


As for damage assessments, a tip of the hat to Kinetic Analysis Corporation (affiliated with the University of Central Florida). Early estimates of damage and tracking are available here (Scroll down to Gonu). Here's a graphic:



KAC/UCF has also been kind enough to send us some graphics of the storm surge model with the current forecast:


io022007_atcf.shp
JTWC
KXTR
PAST
Industry (miscindp)
Oil/Gas Facilities
Processing Plant/Treatment Plant
Industry (extractp)
Industry (storagep)
Depot (Storage)
Tank
Water Tower
Utilities (utilp)
Utilities (pipel)
Population (builtupp)
Population (builtupa)
Boundaries (polbndl)
Administrative Boundary
Armistice Line
Cease-Fire Line
Defacto Boundary
Mandate Line/Convention Line
Boundaries (coastl)
Storm Surge
< .1 meters
0.1 to 1 meters
1 to 2 meters
2 to 3 meters
3 to 4 meters
over 4 meters
Tracks/Data through 6 June 2007 2100Z
Forecast Impact of Gonu
Copyright(c) 2007, Kinetic Analysis Corporation R&D http://hurricane.methaz.org



Here's a link to a map of land-based oil assets on the peninsula.

Regarding GONU...
http://news.google.com/news?hl=en&ned=&q=gonu

Sorted by date...
http://news.google.com/news?hl=en&ned=&q=gonu&ie=UTF-8&scoring=n

http://wwwa.accuweather.com/news-blogs.asp?blog=andrews&date=2007-06-04_...

> --I can say with confidence that this forecaster has never seen the likes of this

If you go here, and click
on the North Indian Ocean links, you can get a feel for how rare this is. From 1995 on, no tropical storm of any strength ever reached the Persian Gulf.

http://tsr.mssl.ucl.ac.uk/