

# Outlook

Wilkens Weather  
Technologies, L.P.



Member AR Group Inc.

NEWS FOR CLIENTS &  
COLLEAGUES OF WWT

## 2006 Hurricane Season Outlook

When we begin to think about the approaching 2006 hurricane season, June 1<sup>st</sup> to November 30<sup>th</sup>, it is impossible to forget the record setting season we had last year (which actually did not end until January 6<sup>th</sup> of this year, when Zeta fizzled out). Twenty-eight named storms, 15 hurricanes, 7 major hurricanes, four category 5 hurricanes and another reaching a strong category 4, were all records set last year. It should also be noted that the 28th storm was not classified as such until April of this year during a post season analysis. One hopes that there is not a repeat of this any time soon, and most folks would like it if these records were never broken. However, we said that after the 1995 hurricane season, and look what happened 10 years later.

The probability of getting two such active and destructive hurricane seasons like 2004 and 2005 was very low. It is statistically very unlikely that 2006 and 2007 will have hurricane seasons as severe as these last two. There are indi-

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### WWT Opens New Office in Aberdeen, Scotland

Wilkens Weather Technologies has taken another major step in developing its North Sea marine forecasting business with the opening of an office in Aberdeen, Scotland.

In concert with Nowcasting International of Ireland, Wilkens Weather has become a major player in the North Sea forecasting sector in recent years. In order to support their rapidly growing business, WWT has opened a new forecast office in Aberdeen, Scotland, to

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Check us out at [www.wilkensweather.com](http://www.wilkensweather.com)

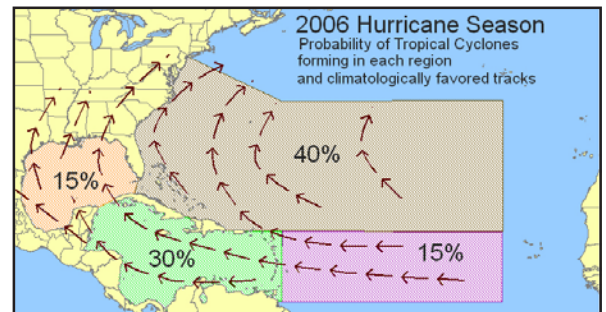


Figure 1- 2006 Hurricane Season

### Upcoming Shows

**Offshore Technology  
Conference (OTC)**  
**Reliant Center at Reliant  
Park - Houston**  
**May 1-4, 2006**  
**Booth #4334**  
**See You There!**

**HTA**

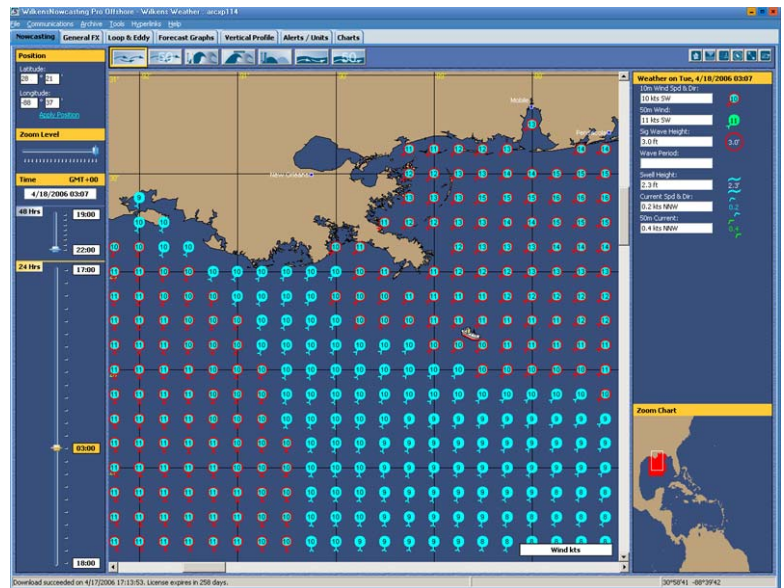
Do you need more precise information on what effect a hurricane will have on your onshore facilities? Our **Hurricane Threat Assessments** are designed to provide you with the additional information that you need. Contact us at [wwt@wilkensweather.com](mailto:wwt@wilkensweather.com) for more information

## WWT and Nowcasting announce Nowcasting Pro 5

Wilkins Weather Technologies and Nowcasting International are pleased to announce the launch of the latest version of the high-resolution forecasting tool *Nowcasting Pro 5*. "The driving force behind this latest version of Nowcasting Pro is the need to keep our product line well ahead of anything available on the international market. The popularity of Nowcasting Pro over the last few years has led to attempts to mimic this patented technology by rival organizations, but luckily to no avail," stated Nowcasting International CEO, Dr. Mark White.

Among the new functionality available in the latest version of Nowcasting Pro is the ability to access 72 hour high resolution forecast data versus the 48 hours worth of data available in the previous releases. Additionally, a new and unique 3D view has been added to help visualize conditions at your point of interest. "We have also spent a lot of time on the usability side of things; the latest version of Nowcasting Pro provides simple and seamless access to forecast data in an unbelievably fast and user-friendly manner," according to Andrew Jarocki, Nowcasting International's Senior Software Engineer.

Current users of Nowcasting Pro will be able to upgrade to the new version of the software starting in May.



Wilkins Nowcasting Pro5 Interface

## WWT New Office in Aberdeen, Scotland *Cont. from page 1*

augment their main forecast base in Houston, Texas, and the Nowcasting technical operations base in Ireland.

Mr. Andy Swan has been engaged as the Senior Meteorologist in Aberdeen. Andy brings nearly 27 years of forecasting experience in the weather forecast sector to the WilkinsNowcasting team, having previously worked with both the UK Met office and Weathernews International in Aberdeen.

"The new Aberdeen office is an exciting new addition to the WilkinsNowcasting service offering to the North Sea oil & gas market. Our clients will benefit from the tremendous experience brought to our team by the introduction of Andy Swan, along with the full infrastructural support of the long established Wilkins Weather Technologies Houston weather forecast office," commented Richard Wilkens, President of Wilkins Weather Technologies.

In this highly competitive market, WilkinsNowcasting focuses on high quality data and state of the art operational planning tools, which has helped their European business grow very rapidly. "We have put tremendous energy into developing high quality data services as well as customer service, and the result in terms of business growth with our partners Nowcasting International has been excellent. We are delighted to respond to this development by making this additional commitment to our North Sea customers," continued Richard Wilkens.

Nowcasting International has been growing its business in the energy sector since they introduced their revolutionary "operational planning tools" in 1999. Nowcasting Pro is now used throughout the industry for operational planning and has revolutionized how operators interact with weather

forecast data. "We have a very loyal customer base built up in Aberdeen, Stavanger, and elsewhere around the North Sea, and we are very happy to be in a position to offer additional support through a local forecast office," said Dr. Mark White, CEO of Nowcasting International. "In the last few years, we have firmly established our credibility, and our business has been growing very rapidly. We are delighted that the business has now grown to the extent that we are ramping up our services to include this new forecast base in Aberdeen," said Dr. White.

The new Aberdeen weather forecast office will allow WilkensNowcasting to offer an increased North Sea focus to its established Aberdeen client base. Until now, WilkensNowcasting North Sea clients have been serviced with weather forecast reports from the Irish Operations base and the Houston forecasting office.

## 2006 Hurricane Season

*Cont. from page 1*

icators that point to an above normal season, but one not nearly as active or destructive as last year and the year before.

Looking at the latest sea surface temperature anomaly patterns in the Pacific and Atlantic Oceans, we noticed that at the end of March 2005 there was a band of cooler than normal water off the west coast of South America from Panama to central Chile, and this extended westward along the equator to 150 degrees West longitude. This was a La Niña event. Presently, there is still the cooler than normal waters along the equator, between 90 and 180 degrees West longitude, but the water along the coasts of Ecuador and Peru is now a bit warmer than normal, (see Figure 2). This shows a small El Niño influence.

As a result, this year should have less of a La Niña influence and a bit more of an El Niño influence, if the above-mentioned SST trends continue into the autumn months. There may be a slight further warming of the ocean water off Peru and northern Chile as this year progresses.

In addition to this, waters in the tropical latitudes of the Atlantic between the equator and 15 degrees North are significantly cooler than at this time last year, especially east of 40 degrees West Longitude. A significant portion of the middle and late season tropical cyclones get started in this region. This should result in a lower occurrence of tropical cyclones forming in the central and eastern tropical North Atlantic this year compared to last year.

However, as far as North America is concerned, it was the cyclones that formed in the western North Atlantic region that did the most damage. These waters are still slightly warmer than normal, so it will be the high level winds and steering currents that determine development and movement in the Gulf of Mexico, western Caribbean Sea and the Atlantic just east of the United States. Fewer cyclones than 2005

**DHI**  
**ARGOSS**  
**Wilkens Weather**  
**Nowcasting International**

Wilkens Weather has joined together with Nowcasting International, ARGOSS and DHI to provide our customers with a one stop source for all your met-ocean and weather forecasting needs. For more information on how D.A.W.N can benefit your company, contact us at [wwt@wilkensweather.com](mailto:wwt@wilkensweather.com).

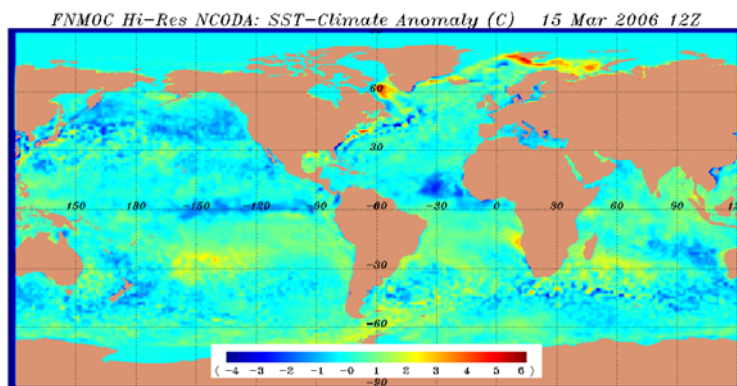


Figure 2 - Sea Surface Temperature Anomalies

2006 Storm Names	
Alberto	Leslie
Beryl	Michael
Chris	Nadine
Debby	Oscar
Ernesto	Patty
Florence	Rafael
Gordon	Sandy
Helene	Tony
Isaac	Valerie
Joyce	William
Kirk	

are forecast to form, due mostly to an expected lower frequency of occurrence of favorable conditions.

This year Wilkens Weather Technologies is expecting the total number of named storms forming in the North Atlantic Ocean region to be substantially less than last year. However, we are still expecting an above normal season with 15 named storms, 9 of these becoming hurricanes and 4 of those becoming intense hurricanes.

## Summer 2006 - Heat, Humidity and Hurricanes?

We can summarize this hurricane season, which is discussed in detail in another article in this newsletter, by saying it is expected to be less busy than last year. So, how about heat and humidity? Will this summer be any hotter than last year, making higher humidity levels more likely? How much rainfall can we expect? We will look at some of the same parameters for these questions as we did to answer the hurricane question - El Niño, La Niña, and the prevailing winds aloft across the North American region.

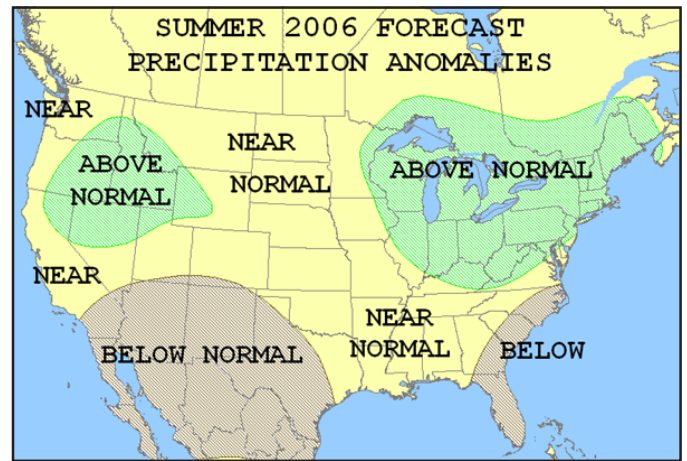
A look at the Pacific Ocean sea surface temperatures (SST's) this spring reveals that La Niña is becoming a bit stronger offshore Ecuador, but is weakening west of there along the equator to the central portions of the Tropical Pacific. Therefore, except for the portion of the ocean immediately offshore Ecuador, extreme northern Peru and western Columbia, much of the tropical Pacific is at or slightly warmer than normal.

The impact of this La Niña is expected to be in the form of warmer temperatures, less precipitation and higher pressures in the western Atlantic region, including the US Gulf Coast. However, it is expected that SST will trend toward normal or neutral conditions by early to mid summer. As a result, there is expected to be some increase in rainfall activity and some easing of the heat during the middle to latter weeks of the summer across the southeast and south-central US.

Looking farther north, spring began with a strong area of high pressure over the Arctic Sea ice and another one over the central portion of North America. Although this particular scenario is not likely to persist through all of spring and into summer, there is a chance of a few similar, but weaker recurrences for short periods of time taking place between now and next October. This scenario favors cooler than normal summer temperatures for eastern Canada.

Also, central and eastern Canada and the Arctic averaged warmer than normal for this past winter. The sea ice of the Arctic and sub-Arctic latitudes is not as extensive as the long-term average, and the thickness of the ice is less than it was 10 or more years ago. This makes it quite possible that the sea ice will retreat during this summer about as it did last summer. Thus, more of the Arctic Ocean should be exposed than has been the norm during August and September. Warmer than normal temperatures in western and south-central Canada should result from this during the summer, which would reduce the extent and strength of the cool air surges entering the U.S. from the north.

A recent development in the high level wind pattern in the western half of the Northern Hemisphere is a split in the

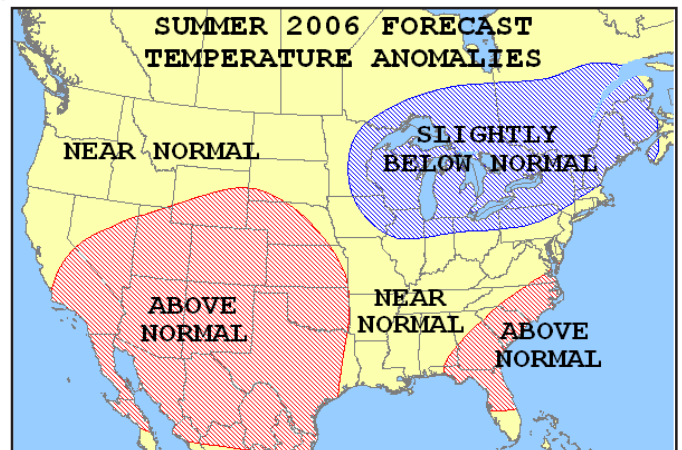


Summer 2006 Forecast Precipitation Anomalies

jet streams over the North Pacific. The polar, or northern branch of the jet stream, diverts northward from the middle latitudes, while the subtropical, or southern branch of the jet stream drops into the subtropical latitudes. The two branches remain widely split across the eastern North Pacific, North America and the North Atlantic, with an alternating pattern of lows and highs between the two. This should persist for much of the spring, though it should slowly weaken and shift northward by the early part of summer. The high pressure area aloft that typically resides over the subtropical latitudes during the summer is expected to have breaks in it this year. These breaks would allow disturbances aloft from the middle latitudes to drop into the subtropical latitudes and also draw some tropical activity northward from the Caribbean Sea, tropical North Atlantic, and the Gulf of Mexico.

Taking all this into consideration, the forecast for the United States this summer includes slightly cooler than usual temperatures from the Great Lakes to northern New England and southward to the Ohio River Valley. Near normal temperatures are foreseen for a band from the Pacific Northwest to the northern Rockies to the central Gulf Coast states to New Jersey and southern New England. These should result from a near equal occurrence of above and below normal temperatures in these regions. Above normal temperatures are indicated for the Southwest and the Southeast north of South Florida.

The above described pattern would provide less than the normal amount of rain to the Southwest and the extreme Southeast. Normal rains are forecast for the northern Rockies, northern Plains, the Middle and Lower Mississippi River Valley states and the Mid Atlantic states. The states from Minnesota to New England are forecast to have more summer rains than they usually do, as is a portion of the interior Northwest. The spring should have near or somewhat above normal rains in the Gulf Coast and Southeast states, but portions of the summer are expected to be drier than normal here. Of course, tropical weather systems will have a say in how dry or wet the Gulf and Southeast states are during the summer. Stay tuned.



Summer 2006 Forecast Temperature Anomalies

# Lightning?

Is lightning activity a serious threat to your operations? Wilkens Weather Technologies can now provide real-time lightning information and forecasts to our clients. Contact us at [wwt@wilkensweather.com](mailto:wwt@wilkensweather.com) for more information.