

NWS Melbourne Marine Web Letter

July 2008

News

Projects mentioned in previous web letters are continuing.

The most significant ongoing work is being done at FIT (Florida Institute of Technology) towards developing a **near shore wind/wave model**. It is hoped that during the summer or early fall that NWS Melbourne will begin to evaluate the output from this model.

Additionally, a new standardized marine web interface is being developed for the southern and southeastern U.S. There will be some new functionality with this web site, one of which is a "**point and click**" forecast capability over the marine area. The standardized look for this web site will allow users to examine data from many different offices using a common interface. I will still maintain a [marine page](#) that has links pertinent to east central Florida.

Upwelling

Surf temperatures in early July showed that waters along the beaches cooled into the lower 70s in many places. This phenomena is due to upwelling, where cooler waters from below rise up and replace the warmer surface waters. Significant upwelling occurs when the Bermuda high pressure ridge remains nearly stationary for long periods of time, causing southerly flow along the east coast of Florida. Other research has shown that small meanders east/west in the Gulf Stream can cause a period of upwelling. The most recent significant upwelling event occurred during the [summer of 2003](#) when sea surface temperatures in the 50s were reported in August!

Summer Weather

The summer season usually results in diminished winds and seas (except during infrequent large scale events caused by tropical systems or strong high pressure centers to our north). Often the Bermuda high pressure ridge parks itself across central Florida, resulting in doldrum type conditions (especially in August). Many boaters take great delight in the often rather flat sea conditions that develop for long periods of time. However, the pattern that often produces the flattest seas over the nearshore coastal waters, westerly flow, also brings a dangerous threat from storms moving off the peninsula during the afternoon and evening.

Forecasters often try to provide information on when these days will occur. Remember, the weatherwise boater will look at the [Hazardous Weather Outlook](#) and [Area Forecast Discussion](#) to glean details that are not available in the Coastal Waters Forecast.

Talks

I made a presentation at the Halifax River Yacht Club in early July. If you have a group that would like a speaker about marine forecasting, feel free to contact me Randy.Lascody@noaa.gov

The next Marine Web Letter can be expected during October or November (depending how the hurricane season goes).

Randy Lascody