

How To Obtain A Good Approximation of Boca Ciega Bay Wind Speeds (And How Not To) By Dan Chesnut

When a broad, uniform airflow exists around the Tampa Bay area, a “consensus” of several local weather stations gives us a good approximation of our wind speeds when no wind gauge reading from the bay is available.

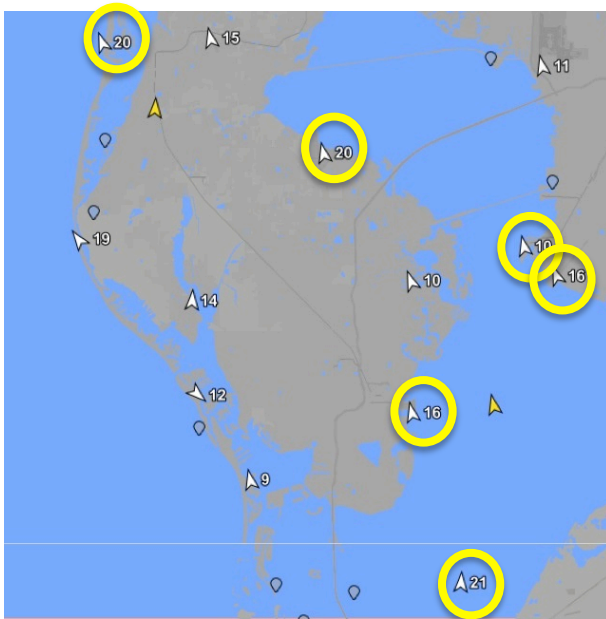
Use the SailFlow “Wind Observations” page:

<http://www.sailflow.com/en-us/Search/ViewResults.aspx#27.803,-82.622,10,1>

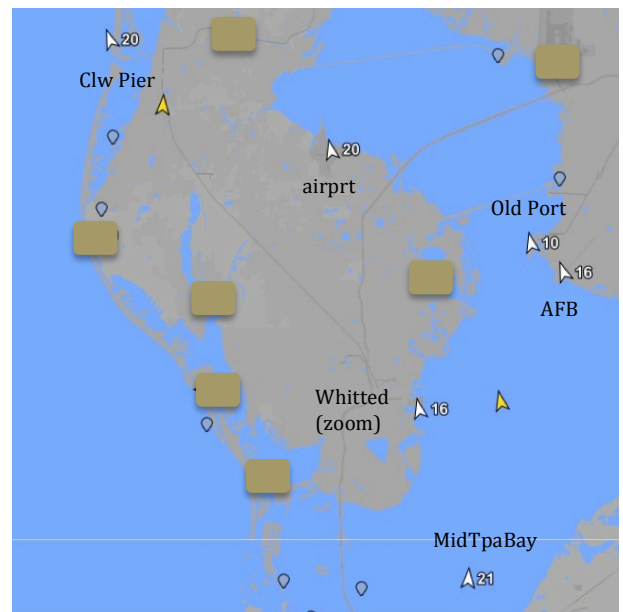
Take the average of these official stations, taking into account any station where the wind is blowing off the land (lower wind speed), or is clearly not in line with other stations. Ignore all the other stations, which are private and very unreliable.

Note: One of the best weather stations is at Whitted Airport, downtown St.

Petersburg, is not visible unless you zoom in on that part of the SailFlow map.



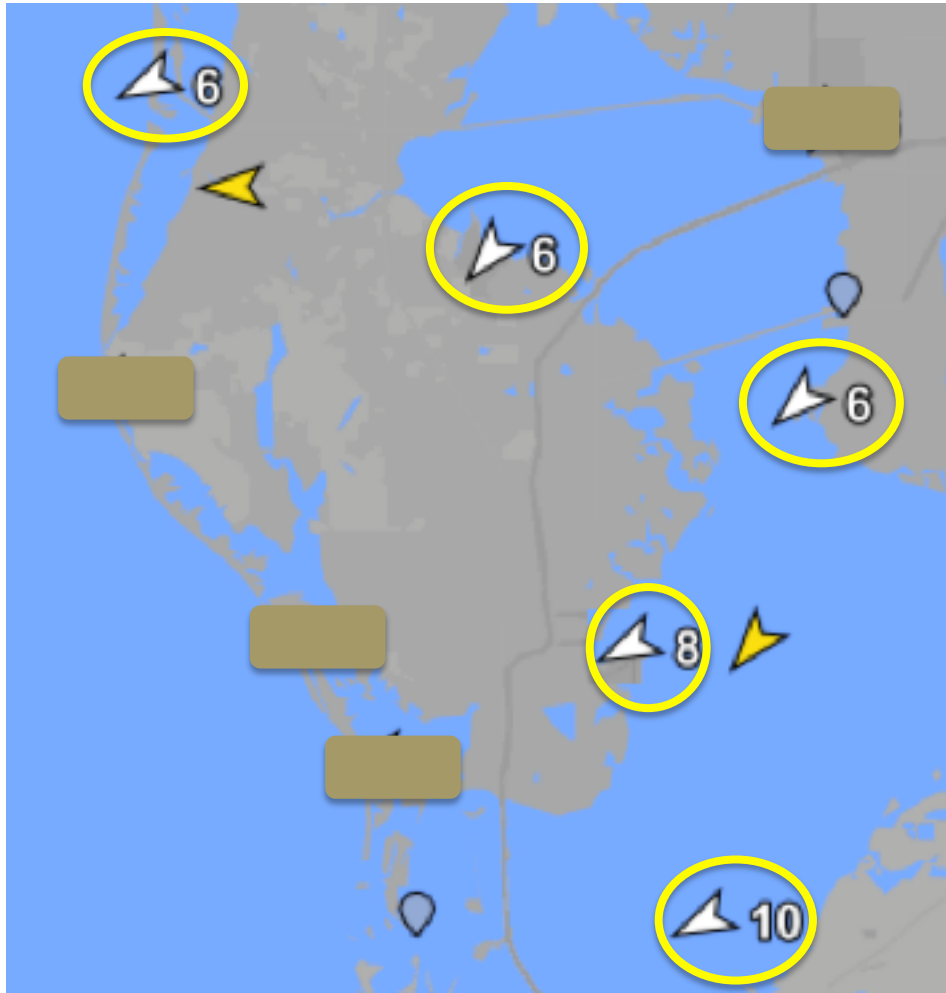
These key stations show the winds are 14-18 knots across our area. (Ignore the others.)



Train your eyes to see only these stations. Remember to zoom in to get the Whitted winds.

With a \$15 per month subscription from SailFlow, a few more high quality stations are available.

Almost all online wind data is in mph., not knots. On SailFlow, you can switch to kts. All official wind readings are based on a 10 meter height. (About 33 feet.) All official wind readings are averages. There is no such thing as “the wind speed.”



Winds are 5-7 knots across open waters of the Bay area.
(speeds converted from mph)

DO: Use a hand held wind gauge out on the water. At 8 feet above the water, add 2 knots to adjust for the low height. Low level surface friction makes a difference.
DO: Use a masthead wind gauge on the water, adjusting for boat motion.

AVOID:

Do not use WeatherUnderground for Gulfport! It shows either Whitted Airport (downtown St. Petersburg), or a private station in South Pasadena surrounded by trees!

Do not trust apps, WindFinder, other low budget, commercial sources. None of them create their own data. They all rely on one of the local weather stations. Unless you know for a fact which wind gauge is being used, it can't be trusted. And again, it is better to have a "consensus" of several stations, as with SailFlow.

Do not trust white caps. 1) The Beaufort scale applies to deep, open ocean waters, not a shallow, confined bay. 2) Most of the time when white caps exist on Boca Ciega Bay, they are not visible from BCYC. 3) FYI, officially, white caps form at about 11 knots, depending on fetch and depth of water.

Do not trust human guesswork! Humans are not all that reliable. Do not listen to people who tell you they can tell the wind speed because of the sound of the wind, or the bending of the trees, or because they have been hanging around here for 500 years and they can “just tell.” There is some validity to these methods, but they still are inaccurate. I know this because I have made many measurements that disprove these human methods.



The “Mango”
WeatherUnderground
station for Gulfport.
Well below the
surrounding treeline.
Useless for sailors.