When sailing to South Africa and going down the Mozambique channel there are few important factors to consider.

One is the Agulhas current running north to south and the other is the 2 prevailing wind directions. The prevailing NE wind that runs with the current in general ranges from around 12 to 25kn on average. The wind strength does however occasionally top 40kn making conditions very uncomfortable. The rate of current is around 1 - 2kn on average up north and around 2 - 5kn down south assisting in your passage south.

The counter prevailing wind being a SW wind driven by polar fronts peeling off from the lower latitudes is the worrisome one. These winds usually take the form of a strong to very strong pre frontal 'buster' that averages around 35kn at first and then eases up to an average of 15 to 20kn for a day or 2. The more intense fronts can deliver winds up to and over 50kn and even stronger. The SW wind creates a wind over current situation that creates steep waves at close intervals making it more dangerous. As you progress south of Durban the current accelerates up to and over 5kn and even quicker at times. Not only does the current accelerate but it also moves a lot closer to shore than up north. SW busters in this area regularly to the 40kn range and the sea state easily reaches 6 to 8m+ making it a very dangerous section of coastline.

The weather window period between fronts is usually around 3 to 4 days in times when the systems are stable and in periods of instability it goes down to a 40-to-48-hour cycle. This is rather important as you have to bank on a minimum of a 48 hour window to do the 250nm passage from Durban to East London. This 48 hour allowance would include a safety window of 8 to 10 hours in case of a sudden change (happens reasonably often) in the weather forecast model(s). Keep in mind that between Durban and East London there are no safe harbours or hiding holes to shelter from the SW fronts.

A note on the climate models for the southern African coastline. The ECMWF model is the most accurate in general. South Africa has 42 coastal reporting stations but a large number of these stations are out of action or only transmit data intermittently to NOAA. The result of this is that the weather models for the region are 'smoothed out' to allow for the missing information which means it is an approximation and can therefore contain errors. It does for example not have information on small isolated weather anomalies that occur often on the Wild Coast and can affect your passage south. Sail with one eye on the barometer at all times.

In closing a short description in identifying the current.

- 1. The smell of the ocean changes quickly.
- 2. The colour changes to a deep dark blue almost deep purple.
- 3. The temperature is approximately 2 to 3 degrees warmer than the water out of current. Check you inlet water temp or an old school thermometer will do the trick.
- 4. There is often a line of clouds running parallel to the coastline (more prevalent in winter) eminating from the higher rate of evaporation and condensation over the current.

Timing and patience is everything in selecting the best possible window for your passage. Enjoy your passage and relax at your stops. Explore and see the sights. Your window will present itself in good time.

Remember that if you get it wrong the penalty can be rather severe as this coastline is a known boat breaker.

Warm regards.

Vince Nel

OSASA Director (Offshore Sailing Association of South Africa) OCC Port Officer Representative for Durban (Ocean Cruising Club) RNYC Member of the General Committee (Royal Natal Yacht Club)

Cell: +27 65 508 2038 (WhatsApp)

