

The obvious first choice to be made with respect to the Paros to Naxos sprint is whether to leave the islands to port or to starboard. Although the southern route is 1.4 nautical miles shorter, I find it difficult to eyeball which course is faster. This is where a routing program comes handy, because it can do the math. With the weather forecast valid for the 0800 start the southern route appeared to be about 26 minutes faster.

Presumably the course designer had carefully chosen the start position such that it is possible to pass through the sound separating Antiparos island to the north and Despotikó island to the south on a straight course of  $135.5^\circ$ , but with the prevailing wind direction of  $331^\circ$  that course resulted in a TWA of  $164^\circ$ , well inside a shallow dent in the polar diagram of the Platu 25 between  $171^\circ$  and  $142^\circ$ . In contrast to the majority of the southern fleet I started with a TWA of  $-171^\circ$ , passing to the south of the small island at the entrance to the sound.

Prior to the start I had used a pocket calculator to compute that I had to head up to a TWA  $-142^\circ$  8 minutes after the start in order to avoid the beach of Despotikó island. For this kind of calculations I usually use the orange dots that appear on the predictor line when a time is inserted into the delay box of the SOL client, but in this particular situation this was not advisable. In order to limit the size of the very high resolution weather data, the race area was not unreasonably large. There was plenty of room to get around the islands and a few others, but the 6 hour long predictor lines were occasionally touching the pink box that surrounds the race area. This triggers a bug in the SOL client that renders the locations of the orange dots useless for timing purposes.

After another 6 minutes I was clear of the eastern tip of Despotikó island and went back to sailing low until I could head up to a TWA of  $-142^\circ$  again to approach Ákra Petalídhā, the southern cape on Antiparos island to complete the first leg of the course.

On the second leg from Antiparos to Naxos the very high resolution weather forecasts revealed its benefits. There was a distinct zone of reduced windspeed in the lee of Paros island and higher wind speed where the air could flow less obstructed between the island. This was accompanied with slight changes in wind direction. Very nice indeed.

I employed a tactic well known in IRL sailing when reaching in puffy conditions: headed up in the lulls and bear away in the gusts. This seems to have worked well, because I arrived at Ákra Katoméri, the southern cape of Naxos, in a most promising position.

The beginning of the third leg was the most difficult for me. I wanted to avoid the very shallow dent in the polar diagram roughly between  $119^\circ$  and  $99^\circ$ . Therefore I began to sail low. But the dent is so shallow, that I really wasn't sure whether this was smart or not at all. Sailing low when the next mark is more to windward just does not feel right. At the same time I was occupied with analyzing the new weather forecast that had arrived a few minutes earlier. Difficult times.

I was relieved when I regained the lead before reaching the last cape before the finish line. From here to the finish it was a close reach at about  $-55^\circ$  TWA. The wind direction was initially constant, but it was heading towards the end of the leg. The wind speed was lower toward the shore and higher offshore.

In order to take care of the imminent header I decided to sail a little higher than the rhumbline because the course was so close to the wind where an increase in wind speed does not result in a substantial increase in boat speed.

In a situation like this I like to zoom in on the next mark and maintain a course where the mark is kept roughly in the middle between the CC and TWA predictor lines. That way I try to limit the extra distance sailed by deviating from the rhumbline. I don't have a scientific theory for this, it's just SOTP, if you like.

Keeping the next mark in the middle between the predictor lines requires a course correction every now and then. As every experienced SOLer knows, every change of course incurs a performance penalty, so this does not feel fast.

But there is a technique to avoid the penalty.

When on a CC course and the TWA predictor line gets too close to the mark, one can change to a TWA course with the actual TWA at the time of the course change. Because there is no change of course, this is totally for free. Afterwards the CC predictor line will start to move towards the mark, and when it gets too close compared with the TWA predictor line it is time to change back to a CC course. By alternating between a CC and a TWA course in this manner it is theoretically possible to reach the mark on a curved course without paying a performance penalty for changing course.

My guts feeling is that the total cost of a dozen or so course changes by half a degree in a 24 footer going upwind is utterly negligible, but employing this technique gives the impression that I have really tried hard to stay that extra second ahead of the competition.