CORNELL'S OCEAN ATLAS – Jimmy and Ivan Cornell, 2nd edition. Published in spiral-bound format between hard covers by Cornell Sailing Ltd [www.cornellsailing.com] at £69. 136 A3-size pages, in 4 colours throughout. ISBN 978-1-9997229-0-6

To be honest, I had assumed on first seeing the cover and flicking through a couple of the pages, that this book was a nicely illustrated reprint of the NOAA Pilot Charts which are available for free download online. However, on reading the explanation of the pilot data's sources in the foreword, and looking more closely at the charts' content and arrangement, my view quickly changed.

The book's content is more detailed, more relevant, more accurate and more up-to-date than that of either NOAA or the Admiralty, whose data spans way back into the 19th century and was collected from manual observations by commercial shipping. That means that it is unavoidably subject to inaccuracy and patchiness in its coverage, while its historic nature means it cannot significantly reflect any impact on weather and currents which may have been caused by climate change since the latter part of the last century. Instead, the weather and current data used by the Cornells reflects detailed and comprehensive satellite observations covering specifically the last 25 years.

So far as detailed content is concerned, this 'ocean atlas' is subtitled 'pilot charts for all the oceans of the world', but neither nomenclature really does the book justice. Firstly, as an 'atlas' it includes descriptions and explanations of global oceanic weather systems and phenomena, as well as global current circulations and 'local' winds and weather patterns covering all oceans and all latitudes. Secondly, as a volume of 'pilot charts' it is in no way reproducing either the Admiralty Routeing Charts or the NOAA Pilot Charts. Instead, although it presents the data in the familiar wind rose format in 5° squares, the data itself has been independently computed by the Cornells using publicly available weather and current data obtained from satellite observations over the 25 years from 1991 to 2016. The charts also include average tropical revolving storm paths derived from the same data, as well as – new for this second edition – what it calls 'windgrams', single average wind roses for specific commonly sailed routes, printed down the right hand side of pilot chart pages and covering the area and month in which they are usually undertaken.

As for coverage, it is indeed global and fully includes the high latitudes. However, it saves space and increases relevancy by increasing the number of pages and their content in respect of the more frequented areas of the world's oceans – it has 32 pages covering the North Atlantic, Caribbean, Mediterranean and the Baltic; 24 for the North Pacific; 24 for the South Pacific; 25 in total for the North and South Indian and just 13 for the South Atlantic.

Are the changes since the first edition significant? Yes, I think they are. Firstly, it expands the underlying data set by 25% in adding the last five years (and, given climate change, the impact of those last five on the averages may be more relevant than the last fifty!), and secondly, it now includes the 'windgrams' noted above, which represent a very useful addition. The list price has, however, remained the same.

So would I spend £69 on it, when I can download NOAA's entire catalogue for nothing or buy just the Admiralty Routeing charts I think I will need for £15 apiece – particularly when it contains more than just a couple of full pages of advertising? Yes, I would. And why? Because it shows comprehensive, detailed, accurate, relevant and, above all, recent, averages of what are the 'new normal' conditions to be expected anywhere in the world's seas. It is not a coffee table book, in spite of its colours and its glossiness – it's too big and its content makes it too much of a text book. However, for both armchair planning and keeping on board when deciding exactly where and when to sail next, it's something I would certainly appreciate. For the work which has gone into deriving its data and making it accessible in this way, it represents very good value and its data cannot be found in this form elsewhere.

NB: OCC members ordering Cornell's Ocean Atlas are offered a reduced price of £60 plus postage, and can have a signed personal dedication if they wish.