<p><strong>NOAA Office:</strong>OCS </p>   
<p><strong>Duration of Use Case:</strong>Ongoing </p>  
<p><strong>Link to Case:</strong> </p>  
<p><strong>Geographic Location:<Global/strong> </p>  
<p><strong>Is the Use Case Published?</strong>No </p>  
<p><strong>Primary Use:</strong>Commerical Shipping, Operations </p>  
<p><strong>Which Marine Industries Benefit from the case:</strong>Marine transportation, Ports </p>  
<p><strong>Case Benefits:</strong>PMN services and products can be valuable for reducing the carbon impact of global shipping as they support optimized route planning. For example, surface current forecasts allow mariners to capitalize on or avoid large ocean surface currents like the Gulf Stream. By taking advantage of a strong current, a ship can operate well below its maximum speed; this process is known as “slow steaming.” A container ship traveling at 16 knots can save 7.5% on fuel by making up a portion of their speed by riding large ocean currents and smaller vessels like commercial fishing vessels, can reduce fuel use by 50%. Utilizing NOAA’s data to identify opportunities for slow steaming can reduce emissions and provide substantial cost savings. </p>  
<p><strong>Description:</strong>innovative services and products that make NOAA's weather, oceanographic, and bathymetric data more accessible. The collective value of NOAA datasets is significantly greater than when they are disseminated separately or are not easily discovered, and PMN is building out the information infrastructure that enables the full use of this data for navigation purposes. Through standardized data formats and a national processing and dissemination system, the PMN program is providing support tools for mariners as they plan and transit within U.S. waterways and ports. In June of 2020, NOAA and the Bureau of Economic Analysis released the first comprehensive assessment of the U.S. marine economy. It was the first time that the marine economic data was considered for its specific contribution to the overall economy compared to other larger industry sectors. The results showed a total marine economy that is growing faster than the U.S. economy as a whole and contributed nearly $373 billion to GDP while supporting ~2.3 million jobs. Globally, today’s marine economy is valued at approximately $2 trillion annually and is projected to grow to greater than $3 trillion by 2030</p>