Even in this wireless age, undersea cables are responsible for carrying over 95 percent of all overseas communications. These sprawling fiber optic lines can cost hundreds of millions of dollars to lay across the ocean, and when damaged, are often extraordinarily difficult to repair.

So when TE SubCom of Eatontown, New Jersey, recently began laying a new submarine communications cable from Virginia Beach to Bilbao, Spain, the company was determined to take every possible precaution to ensure its safety. To that end, TE’s engineers consulted the Mid-Atlantic Ocean Data Portal – particularly its commercial fishing data maps – to design an alignment that was least threatened by bottom-tending activities such as dredging and trawling. Once complete, the 4,000-mile MAREA line – commissioned by owners Facebook and Microsoft – will be the highest-capacity submarine cable ever to cross the Atlantic and the first to connect the U.S. to southern Europe.

The Portal’s Commercial Fishing VTR and VMS collections contain dozens of maps illustrating concentrations of fishing activity by gear type and catch type over several time ranges. By studying these maps, TE was able to locate fishing hot spots that should be avoided.

Map: Commercial scallop fishing concentrations and submarine cable locations.