Effort Map info!

To Include:

* Filtering of data, cutoffs
* Defining distant water fleets
* Data source and links
* Disclaimer about not all fishing effort is captured, IUU etc.

This map shows distant water large-scale fishing effort in 2018, by flag states. Fishing effort is quantified in kilowatt hours (kWh), which is calculated as the time spent fishing in hours weighted by the total engine capacity of the vessel in kW. Select a flag state from the drop-down menu to see that flag state’s distant water fishing effort in the selected EEZ. Data are sourced from [Global Fishing Watch (GFW)](https://globalfishingwatch.org/). GFW is a novel dataset that uses machine learning models to produce satellite tracks of fishing vessels to detect fishing activity in near-real time.

**Is all global fishing effort captured on this map?**

No. This map only shows fishing effort by vessels captured by Global Fishing Watch (GFW). As it only includes fishing vessels with AIS systems onboard, GFW does not capture all global fishing effort. The International Maritime Organization (IMO) requires all vessels greater than 300 tons traveling in international waters to have AIS, though certain countries also require smaller vessels to carry them as well. There is great uncertainty regarding the total number of active fishing vessels in the world, let alone the total amount of fishing effort globally. [Kroodsma et al. (2018)](https://science.sciencemag.org/content/359/6378/904) estimated that in 2016 the number of vessels with AIS comprised approximately 56% of all vessels larger than 24 m, 9% of vessels 12-24 m, and only 0.2% of vessels under 12 m. They also estimated that vessels with AIS likely contributed between 26% - 34% of the global fishing effort (KW hours expended) of all vessels in the world, with that value increasing to 50% - 70% for all vessels fishing more than 100 nautical miles from shore (halfway to the EEZ boundary).

The number of vessels with AIS has been increasing exponentially since 2016, so it likely that this map (2018) represents more than 34% of global fishing effort of all vessels in the world, and more than 70% of fishing effort for vessels fishing more than 100 nautical miles from shore.