![Global Fishing Watch]

2024 APIs, gfwr, and Data Downloads Products - Differences

Summary

	API Portal	gfwr	Data Downloads
Access via Global Fishing Watch site	*Map & data > Our APIs > SEE DOCUMENTATION*	*Map & data > Our APIs > Documentation > SDK*	*Map & data > Datasets & Code > Download Data*
Purpose	Allows programmatic access to our Products data via APIs, enabling other organizations to integrate GFW data in their platforms API version = 3	Provides convenient functions to freely pull our data directly into R API version = 2.0 (Update to v3, April)	Offers static files from published papers, DOI included and other datasets updated less frequently, typically monthly or annually.
Data Format	- JSON - CSV - MVT - PNG - TIFF	Tables and lists native to the R scientific programming language (can be saved to any format later)	- CSV - TIFF
Use Case	Developers can easily integrate our near real-time data into their existing platforms.	Researchers can easily access more recent data in their preferred coding language.	Researchers can download and cite more stable data sources for their publications.
Data delay	It depends on each dataset, but as reference: 2012 until ~72 hours ago for AIS fishing effort and vessel events 2019 until ~ 2 months ago for vessel registry data - Vessel insights: 2020 until ~72 hours ago	Same as API	Static data from publications are not updated. Other datasets are created monthly, annually, or less frequently like versioned fishing effort datasets are created every 2 to 4 years.

![Global Fishing Watch]

Data Differences

References:
- 🟢 : data available and same data to other products
- 🟡 : data available, is similar data compared to API but there are some differences
- 🔴 : data not available

Data Available	API Portal (Version 3)	gfwr (using API Version 2)	Data Downloads
AIS Fishing Effort	🟢 **AIS fishing effort gridded data** using the most current GFW vessel list and algorithms. Data Delay: 2012 until ~72 hours ago Available in 4Wings API	🟢 same as API Portal	🟡 **Fishing effort dataset**: includes fishing gridded data with more quality steps and measures . *(static file - 2012-2020)*
Vessel Information	🟢 **Vessel information** from AIS and public regional and national registries for *all vessel types* Data Delay: • 2012 until ~72 hours ago for AIS self-reported data • 2019 until ~ 2 months ago for vessel registry data Available in Vessel API	🟡 Vessel data: *only* from AIS data and *only* for fishing, support, and carrier vessel types. No registry data since it is using API v2. Data Delay: 2012 until ~72 hours ago for AIS self-reported data	🟡 **AIS Vessel data** as part of the Fishing effort dataset *(static file - 2012-2020)* 🟡 **Paper**: **Park et al. (2023). Tracking elusive and shifting identities of the global fishing fleet** *(static file - 35,000 fishing and fishing support vessels between 2012 and 2021)*
AIS Fishing Events	🟢 **AIS fishing events** Data Delay: 2012 until ~72 hours ago Available in Events API	🟢 same as API Portal	🔴 not available yet

Last Update: 25 June 2024

Global Fishing Watch

Data Available	API Portal (Version 3)	gfwr (using API Version 2)	Data Downloads
AIS Encounter Events and **AIS Loitering Events**	🟢 **AIS encounters events** between *some* vessel types. • Data Delay: 2012 until ~72 hours ago 🟢 **AIS loitering events** for all vessel types • Data Delay: 2012 until ~72 hours ago Available in Events API	🟢 same as API Portal	🟡 **Paper**: **Miller et al. (2018). Identifying Global Patterns of Transshipment Behavior** *(static file - 2012 - 2018) includes Encounter and Loitering event* 🟡 **Paper**: **Revealing the Supply Chain at Sea: A Global Analysis of Transshipment and Bunker Vessels** *(static file - 2012-2019) includes Encounter and Loitering event* 🟡 **Carrier vessel portal events** *(updated monthly - 2013 to current month) Authorizations are calculated differently.*
AIS Port visits	🟢 **AIS port visits** for all vessel types Data Delay: 2012 until ~72 hours ago Available in Events API	🟢 same as API Portal	🟡 **Carrier vessel portal events** *(updated monthly - 2013 to current month) There are less events, since additionally filters are applied.*
Vessel insights	🟢 **Vessel insights** for all vessel types Data Delay: • Coverage, Fishing events, AIS off event from 2020 until ~72 hours ago • RFMO IUU list from 2020 until ~ 2 months ago for vessel registry data Available in Events API	🔴 not available yet	🔴 not available yet
AIS Vessel Presence	🔴 not available yet	🔴 not available yet	🟢 **AIS Vessel Presence** gridded data as part of the Fishing effort dataset *(static file - 2012-2020)*

Global Fishing Watch

Data Available	API Portal (Version 3)	gfwr (using API Version 2)	Data Downloads
AIS Off events	🟢 **AIS off events** Data Delay: 2017 until ~72 hours ago Available in Events API	🔴 not available yet	🟡 **Paper**: Welch et al. (2022) - Hotspots of unseen fishing vessels *(static file - 2017-2019)*
AIS Voyages	🔴 not available yet	🔴 not available yet	🟢 **All Vessels Voyages Confidence 4** *(monthly update - Jan 2017 - current month)*
Anonymized AIS training data	🔴 not available	🔴 not available	🟢 **Anonymized AIS training data** *(static file - last update: Mar 2020)*
Distance from shore	🔴 not available	🔴 not available	🟢 **Distance from shore in meters** *(static file - last update: Mar 2020)*
Bathymetry	🔴 not available	🔴 not available	🟢 **Bathymetry** *(static file - last update: Mar 2020)*
Anchorages	🔴 not available yet	🔴 not available yet	🟢 **Anchorages** *(~ annual update - last update: 2022)*
Predicted setting and hauling events by drifting longliners broadcasting AIS	🔴 not available	🔴 not available	🟢 **Paper**: Kroodsma et al. (2023). Global prevalence of setting longlines at dawn highlights bycatch risk for threatened albatross *(static file - 2017-2021)* *Dataset of predicted setting and hauling events by drifting longliners broadcasting AIS between the years 2017 and 2021*

Data Available	API Portal (Version 3)	gfwr (using API Version 2)	Data Downloads
SAR vessel detection and fixed infrastructure	🟡 **SAR vessel detection dataset** Same data as in the Map but there are missing some fields compared to the Data Downloads: length_m or any of the scores like presence_score, matching_score, or fishing_score. Data Delay: 2017 until ~5 days ago Available in 4Wings API 🟡 **SAR Fixed infrastructure in MVT format** Same data as in the Map but it is filtered by label = noise and some regions compared to the Data Downloads.	🔴 not available yet	🟢 **Paper**: Paolo et al. (2024). Satellite mapping reveals extensive industrial activity at sea *(static file - 2017-2021)* 🟢 ***Vessel detection from Sentinel-1 SAR*** *(daily update with monthly files - Jan 2017 - 5 days ago)* 🟢 **Fixed infrastructure detections from Sentinel-1 and Sentinel-2** *(monthly update with all data since Jan 2017 - 3 months ago)*