

EMODnet Secretariat progress update – 2nd quarter 2020

This update is based on the quarterly progress reports of the different EMODnet projects (Thematic Portals, Data Ingestion Portal) supplemented with updates from the Secretariat. This is the fourteenth Secretariat progress report since the start of the EMODnet Development Phase III (2017-2021) and covers activities developed within EMODnet in the period April-May-June 2020.

EMODnet progress overview

Common progress highlights

The 12th EMODnet Steering Committee and 7th Technical Working Group meetings took place from 21-24 April 2020. Due to the COVID-19 pandemic, both meetings were efficiently held virtually, yielding a wide range of constructive results and dedicated actions for follow-up ([actions from 12th SC](#); [actions from 7th TWG](#)).

To celebrate 10 years of EMODnet, a virtual gathering will be organised on the 22nd of September. This [webinar](#) will be an opportunity to take stock of key EMODnet achievements over the past decade with showcases and testimonials from data providers, users and partners.

Continued efforts are done to further automate the collection of user statistics (based on data from Matomo) and their display on a Dashboard. The Dashboard is accessible online by all thematic groups. The Dashboard is a big step forward in the usage, progress and performance monitoring of all major EMODnet services.

During the summer until end of September, the EMODnet Secretariat will receive input from an [online survey](#). The ultimate goal is to solicit feedback from users and stakeholders that will feed into the process of centralisation, whereby the content and key services of the thematic portal websites will be integrated into the central portal. Additional targeted assessments will be carried out by the Secretariat to benefit from more in depth feedback and collect qualitative information as well as use cases.

Specific progress and achievements of thematic groups

- The **EMODnet Bathymetry** regional sea-basin coordinators have started selecting and aggregating gridded bathymetric datasets and are expected to finish the regional DTM compilation by end of July – mid-August. As such, those regional DTMs will be integrated to generate a new EMODnet DTM which is planned to be released towards the end of 2020. A new pre-tiled representation service of the world, i.e. the EMODnet Bathymetry World Base Layer (EMBWL), has been launched on 30 June 2020 and integrated in the Bathymetry portal map viewer. This layer shows an up-to-date compilation of available bathymetric and topographic data and can be used as a common base layer in all portal map viewers.
- In this reporting period, **EMODnet Biology**'s harvest accounted for 29 datasets (of which two were updates), in total contributing 201,707 occurrences. The portal organised a virtual workshop from the 15th to the 18th of June, which, among others, focused on pursuing the goal of incorporating other external knowledge in the improvement of the interpretation of the data in EMODnet Biology, including the use of data from other EMODnet lots. The products resulting from this workshop will be made available in the following months. Another virtual workshop was organised from 8 to 19 June on data formatting, QC and publishing, which was based on the Ocean Teacher course on "[Contributing datasets to EMODnet Biology](#)".
- **EMODnet Chemistry** has completely restyled its portal website, to improve the user-friendliness: the 'About' section has been updated and rewritten; and in the sections 'Data Access' and 'Data Products' the access to the key services has been made easier and clearer. The portal has produced a new data

management proposal for handling seafloor litter images and videos which is currently under review. A new web service to collect download metrics has been set up.

- **EMODnet Geology** partners have been actively collecting new data and metadata with emphasis on new data on marine minerals as well as updates to data already received are currently being processed – these will be made available in the following quarter. Together with the Russian partner VSEGEI, the portal aims to collect data to create sets of geological maps of the Caspian Sea; subcontracts with organisations in Kazakhstan, Azerbaijan and Iran are in different stages. Turkmenistan did not yet respond, but the Geology partnership is confident that they will be able to create geological maps based on data obtained by investigations conducted by the USSR Ministry of Geology before 1991 as well as a number of more recent publications.
- A number of datasets on the **EMODnet Human Activities** portal have been updated (among others: 'Protected areas', 'Dredging' and 'Micro & Macroalgae'). In addition, new datasets on Fishing effort and Fishing intensity were published. A data model is being developed, based on available Marine Spatial Plans (MSP) from Belgium, Germany, Latvia and the Netherlands, and considering comments received from the MSP Data Expert Group. Both data products, i.e. Vessel density and Route density maps, were updated to include more recent data (2019 data for Vessel density maps, and data up to June 2020 for the Route density maps).
- **EMODnet Physics** worked on the integration of data from a couple of new sources: data from [Berring Data Collective](#) are now accessible; the data flow for mini smart sensors on fishing vessels nets are being managed; the first data from Nord Stream II were received and are being ingested via EMODnet Data Ingestion portal. A number of data products were updated, among others EMODnet Physics Wind, Wave and Sea-level trends. Two new products were linked and added to the EMODnet Physics catalogue (e.g. River Proxy product and new Sea Surface Salinity). Two new layers showing drifting buoy trajectories were made available and will be integrated in the European Atlas of the Seas.
- **EMODnet Seabed Habitats** discussed with OSPAR the specifications for a EUNIS level 3 composite data product for the North-East Atlantic that combines survey maps and EUSeaMap. Also, discussions have taken place with HELCOM, where it was agreed that the latter would verify if the new EUNIS classification appropriately matches HELCOM HUB. If this is indeed the case, the new EUSeaMap will be published in EUNIS 2019 only; otherwise, the EUSeaMap will be published in EUNIS 2019 plus HELCOM HUB (inappropriate match).
- **EMODnet Data Ingestion** reported an addition of 52 submissions, bringing the total to 759 submissions since its inception. The number of published data submissions 'as is' increased from 595 to 619; the submissions that have been elaborated to phase II, implying uptake in European marine data infrastructures feeding into EMODnet, increased with 17 (from 238 to 255). The portal made an official agreement with Nord Stream 2 pipeline; the latter will make valuable environmental datasets available for EMODnet Ingestion for publishing and further elaboration.

EMODnet data portals usage

User visit statistics

The collection of user statistics (*i.e.* number of (unique) page views and average visit duration) were automated for the following progress/monitoring indicators: Visibility & Analytics for web pages; Visibility & Analytics for web sections; and Average visit duration for web pages. The resulting graphs for each EMODnet portal as well as the Central portal can be viewed in the gallery at the bottom of this report.

- Between 1.096 and 658 unique visitors per month were reported by **EMODnet Data Ingestion** for the current quarter.
- The most visited webpage on the **EMODnet Central Portal** is the Homepage (average daily of 94-page views), followed by the Bathymetry entry page (average daily of 28-page views). The next most viewed entry pages are those of Human Activities and Seabed Habitats (both around 12). Chemistry's entry page



is the least visited, with an average daily page view of 5. Increasing as well as decreasing average daily visit durations were noted for the entry pages of the different portals (varying between 1.3 and 2.2 minutes).

- Overall, the average daily (unique) page views for **EMODnet Bathymetry** remained stable or slightly decreased since the last quarterly period. The Viewing and Download service (provided by the EMODnet Bathymetry map viewer) remains the most viewed web page: a daily average of around 110-page views and 89 daily unique page views were recorded for this reporting period, which is comparable to the statistics from last quarter. On average, users spent around 1.6 minutes on the map viewer. Apart from the CDI marine data access service (11 average daily page views and 8 average daily unique page views), the other web pages, such as Web services & standards and the Homepage, five or less average daily (unique) page views were recorded.
- Erratic average daily page views were recorded for **EMODnet Biology**. The Homepage, How can you contribute, Atlas product Gallery and Atlas Product Mapper acquired more page views than the previous quarter; while the Data Catalogue, Data Portal Map Viewer, and Data Download Toolbox received fewer page views. On the other hand, the average daily unique page views remained stable for most web pages. On average, the users spent less time on the Atlas Product Gallery and Homepage webpages (average daily time of 1.7 minutes and 50 seconds respectively) compared to the previous quarter, but more time on the Data Portal Map Viewer (average daily time of 1.6 min; 2.2 hours in total) and an equal amount of time on the other web pages (average daily time between 30 seconds and 1 min).
- A slight decrease in the average number of daily (unique) page views was recorded for the different web pages of **EMODnet Chemistry**, apart from the web page Explore Marine Litter (5 average daily page views). The Homepage remains the most visited homepage (36 average daily page views), followed by Search Chemicals by Region (13 average daily page views) and Products (14 average daily page views). Compared to the previous quarter, most of the web pages have seen a drop in the average daily visit duration: on average 1.4 minutes is spent on Search Chemicals by Region, followed by Products (1.3 minutes); the webpage where the least time was spent was the News and Events page (on average 10 seconds).
- The user statistics (*i.e.* the average daily (unique) page views) for most of the **EMODnet Geology** web pages remained stable compared to the previous quarter. The most viewed webpage is the Homepage (average of 18.6 daily page views) on which on average 40 seconds is spent during a visit, followed by Data products (9 average daily page views; 1 minute average visit duration) and the Map viewer (average 7 daily page views; average visit duration of 1.1 minute). Since the last quarter, the average daily time spent on different webpages increased for the Data products web page, decreased for the Contribute page and remained stable for the other pages; the longest time was spent on the Services webpage (1.5 minutes).
- Average daily (unique) page views for **EMODnet Human Activities** remained fairly stable since the previous quarter: View Data remains the most viewed webpage (average daily page views of 54). It is also the webpage where users spent the most time (daily average duration of 1.5 minutes for this quarter). The Search Data page received 11 average daily page views and remains the third most visited page, but with an average daily visit duration of 37 seconds this is the webpage on which users spent the least time.
- Average daily (unique) page views for **EMODnet Physics** remained stable since the previous quarter: the Map Viewer remains the most viewed web page (*i.e.* average of 71 and 53 daily page views and daily unique page views respectively); the average daily page views for the other webpages (*e.g.* Homepage, Videos and Catalogue) remained stable at 1 or 2 page views. On average, users spent almost 7 minutes on the Map Viewer, which is longer than previous quarter; and between 30 seconds and 1.4 minutes on the other web pages (which remained stable).
- Overall, the average daily page views as well as visit duration for the various **EMODnet Seabed Habitats** web pages slightly decreased. Nevertheless, the Map Viewer remains the most viewed web page

(average daily pageviews of 19) and users on average spent 1.6 minutes on the page. In comparison, the Web Services page received less average daily pageviews (about 3), but this quarter it was the page where users spent the most time per visit (2 minutes).

Statistics on usage of EMODnet portals¹

a. Number of data downloads² :

- **EMODnet Bathymetry** reported a steady increase in the number of CDI downloads since the previous reporting period: the numbers went from 568 to 11.671 CDI downloads.
- Going from 442 to 405 downloads, there was a slight decrease (-8.3%) in the number of manual data downloads for **EMODnet Biology**.
- **EMODnet Chemistry** reported a steady increase in the number of manual data downloads by 61% (33.453 CDI downloads compared to 20.767 in the previous quarter).
- Depending on the sub-theme, the number of data downloads in **EMODnet Human Activities** experienced increases as well as decreases. Increases were seen for the datasets Monthly First Sales EUMOFa and Dumped Munitions Points (+500% (12 record downloads compared to 2 in the previous quarter) and +207% (43 compared to 14 record downloads) respectively). This quarter, users showed less interest in, among others, the datasets Aggregate Extraction Points (-44%, 15 compared to 27 record downloads) and FAO fishery statistical areas (-75%, 1 compared to 4 record downloads).
- Overall, there was a decrease in the number of data downloads for all data sub-themes of **EMODnet Physics** compared to the previous quarter (decreases ranging from -13% (13 compared to 15 downloads in the previous quarter) for Underwater noise to -79% (990 compared to 4.795) for Currents). Likewise, the number of map visualisations decreased for all sub-themes (decreases between -2% (854 requests compared to 868 in the previous quarter) for Sea Level trends to -45% (105 requests compared to 191) for River data) except for data on Ice Coverage (+66%, 63 requests compared to 38).

b. Number of data product downloads³:

- There was an increase of 12% in the number of downloads of DTM tiles in **EMODnet Bathymetry** (8637 DTM tile downloads, compared to 7690 downloads in the previous quarter). On the contrary, the downloads of High-Resolution DTM files have seen a decrease of 27.5% (326 HR-DTM file downloads, compared to 450 downloads in the previous quarter). Increases in the number of WMS and WFS requests were reported for both the DTM and HR-DTM, of 16.5% and 51.4% respectively.
- **EMODnet Biology** reported on three manual data product downloads. Trends are not yet available but will be from the next quarter (Q3 2020) onwards.
- Decreases between -18% and -100% were reported in the number of manual data product downloads for each of the different data product sub-themes of **EMODnet Chemistry** (e.g. Chlorophyll (36 files compared to 44 in the previous quarter), Dissolved gases (48 files compared to 8 files), Marine beach litter (7 compared to 15 files) and Marine seabed litter (1 file compared to 6)).
- For most of the product sub-themes of **EMODnet Geology**, increases between 10% and 50% were reported in the number of product downloads (e.g. 23 downloads for Events and probabilities compared to 19 downloads in the previous quarter). Decreases were equally reported, for Sea-floor geology (65

¹ Disclaimer: please note that percentages given can reflect small as well as large changes in the number of data and data product downloads. Note: Most thematic groups assigned reported decreases in the number of downloads to the COVID-19 situation. In most cases however it is difficult to provide an actual explanation for the downloading behaviour of users.

² for portals which provided this information

³ for portals which provided this information

compared to 74 downloads), Marine minerals (23 compared to 31 downloads) and Submerged landscapes (10 compared to 12 downloads). Increasing as well as decreasing trends were seen in the number of WMS and WFS requests; WMS requests seem more popular with requests ranging from 7.642 to 102.950 for this quarter. Seabed substrate (100k) and Coastal migration were the most popular product requests via web services.

- A decrease in the number of product downloads was reported for both the Vessel density maps (681 compared to 1087 downloads) and Route density maps (337 compared to 366 downloads in the previous quarter) for **EMODnet Human Activities** (-37% and -8% respectively).
- **EMODnet Seabed Habitats** reported increases as well as decreases in the number of manual data product downloads, compared to the previous quarter. The EUSeaMap was downloaded more often (+44%; from 18 to 26 downloads), but the Individual habitat maps from surveys remain the most downloaded product (14.488 downloads, increase of +8% from 13.389). The number of map visualisations, WMS and WFS requests increased with 1%, 28% and 96% respectively.

Recent meetings and events

Due to the CoViD-19 pandemic, meetings and events in April, May and June 2020 were organised or attended virtually. A number of key meetings:

- **EMODnet Bathymetry:** remote presentation and explanation on INSPIRE compliance for bathymetric data at the INSPIRE Conference.
- **EMODnet Biology:** a workshop took place over two weeks in June (8-19 June) and was based around the Ocean Teacher course on “Contributing datasets to EMODnet Biology”. The online workshop included a special section entitled “Dealing with archaeology data”, providing insights in the importance of data archaeology and how such data can be processed to become part of EMODnet Biology.
- **EMODnet Chemistry:** in June, a couple of remote regional meetings were organised for the different sea-basins (North Sea, Mediterranean Sea, Black Sea, and Arctic and Atlantic areas). Other video conferences took place to discuss the collection and validation of Eutrophication data.
- **EMODnet Geology:** a number of internal remote work package 4 (Sea-floor geology) meetings took place to discuss project progresses and tackle specific issues.
- **EMODnet Human Activities:** remote meeting with the Technical Expert Group on MSP to discuss the harmonised nomenclature to be used for the MSP Dataset and the requirements for the Data model design. An internal meeting also took place to discuss how to make the MSP datasets INSPIRE compliant.
- **EMODnet Physics:** follow-up meetings with CMEMS LAMBDA SE project on the ingestion of new river data; meeting with LAMMA to discuss how they can contribute to EMODnet Ingestion and be linked with EMODnet Physics.
- **EMODnet Seabed Habitats:** internal remote meetings to discuss progress of the work; remote meeting with HELCOM on the creation of new products that could also be useful to HELCOM.

Upcoming EMODnet meetings and events

The main EMODnet meetings planned for the coming period are:

- EMODnet will celebrate its 10 years at a webinar on 22 September 2020. At this event, EMODnet will take stock of key EMODnet achievements over the past decade with showcases and testimonials from data providers, users and partners. This online event will also set the stage for a forward look at the [Open Conference in June 2021](#) to co-design the next phase of EMODnet. More information and registration at <https://emodnet.eu/webinar>.
- Due to COVID, the EMODnet 2nd Open Conference and Jamboree has been postponed to a 14-18 June 2021. Keep an eye for updates at the [dedicated page](#) on the EMODnet Central Portal.



EMODnet Data and Data product portfolio: <http://www.emodnet.eu/data-portfolio>
EMODnet for Business brochure: <http://www.emodnet.eu/emodnet-business-brochure>

Thematic portals

- EMODnet Bathymetry - www.emodnet-bathymetry.eu
- EMODnet Geology - www.emodnet-geology.eu
- EMODnet Seabed habitats - www.emodnet-seabedhabitats.eu
- EMODnet Physics - www.emodnet-physics.eu
- EMODnet Chemistry - www.emodnet-chemistry.eu
- EMODnet Biology - www.emodnet-biology.eu
- EMODnet Human Activities - www.emodnet-humanactivities.eu

Sea-basin checkpoint portals⁴

- North Sea checkpoint - www.emodnet.eu/northsea/home
- Mediterranean checkpoint - www.emodnet-mediterranean.eu
- Arctic checkpoint - www.emodnet-arctic.eu
- Atlantic checkpoint - www.emodnet-atlantic.eu
- Baltic checkpoint - www.emodnet-baltic.eu
- Black Sea checkpoint - www.emodnet-blacksea.eu

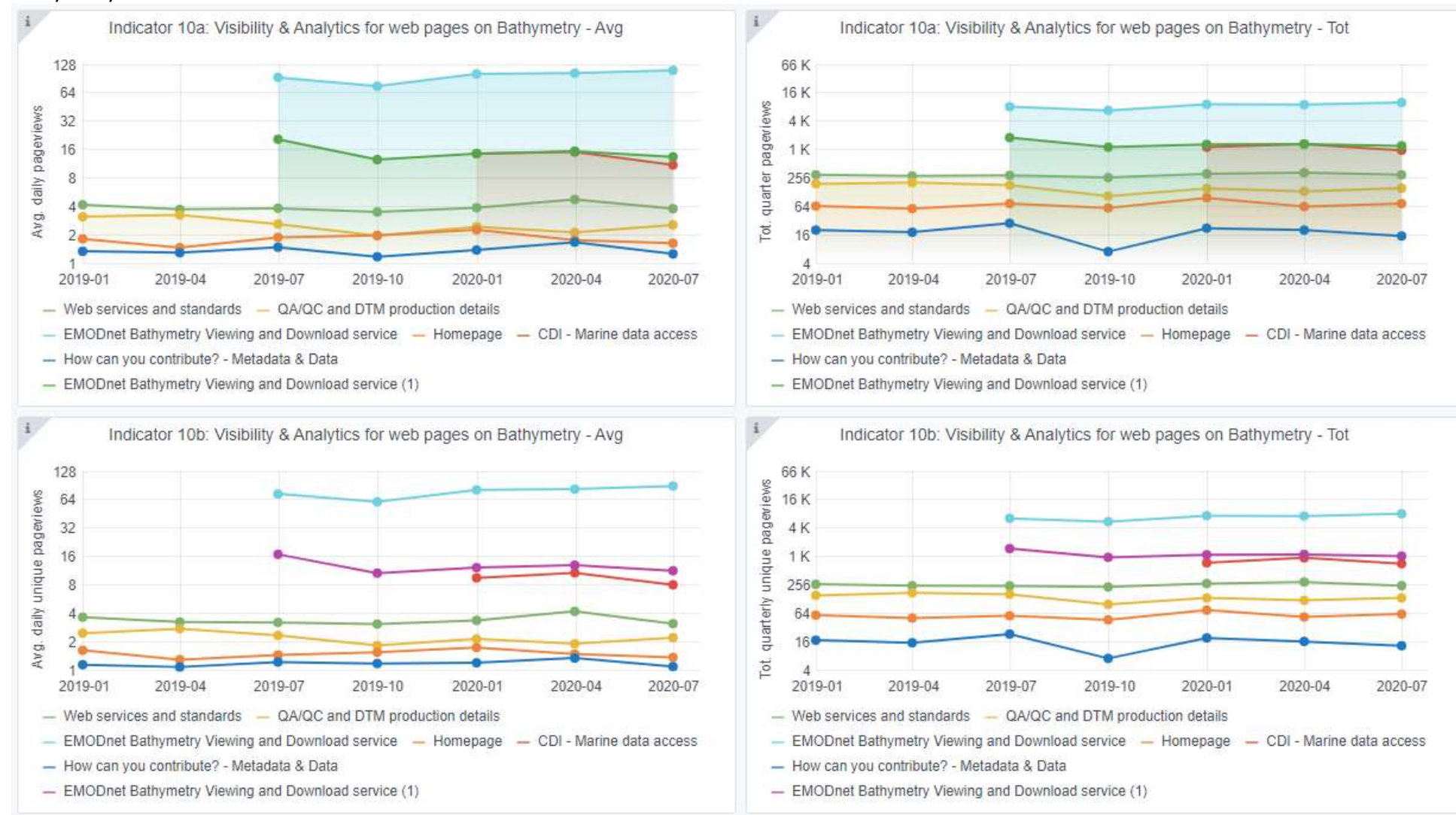
Data Ingestion Service

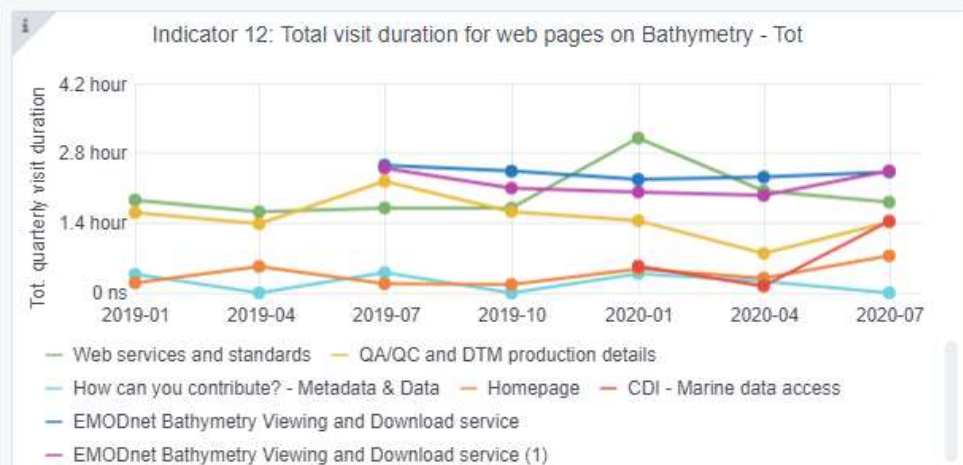
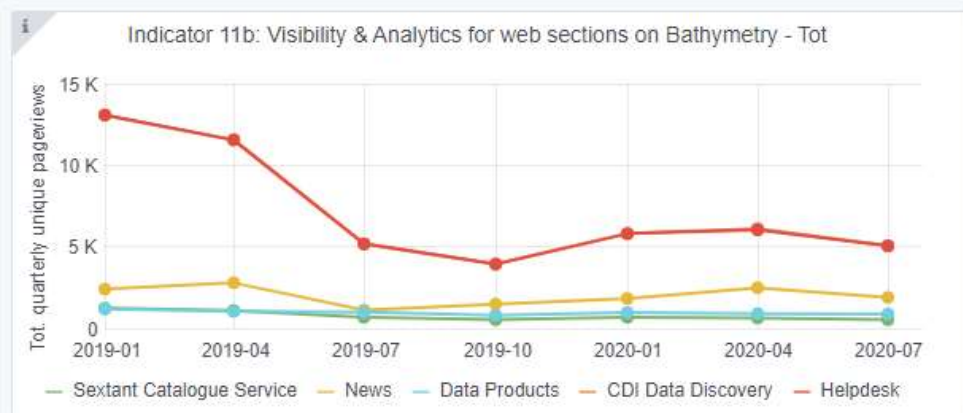
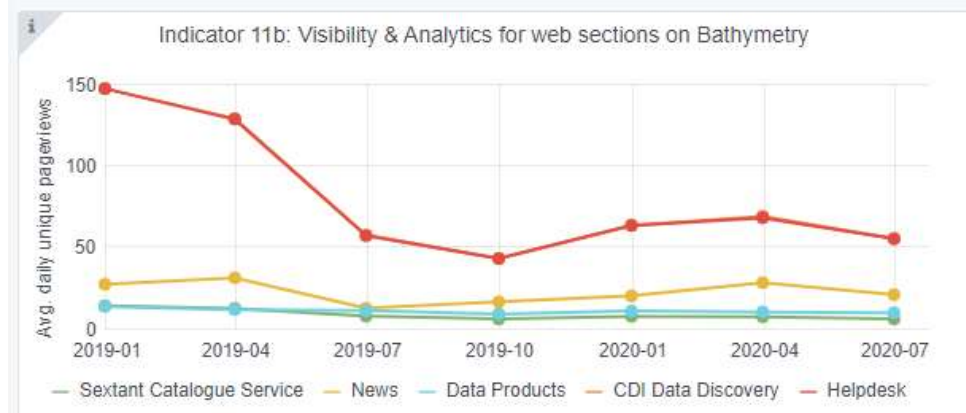
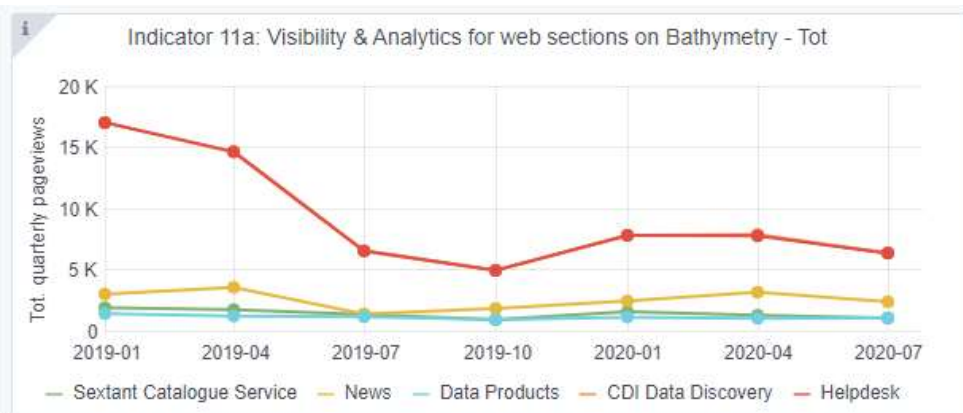
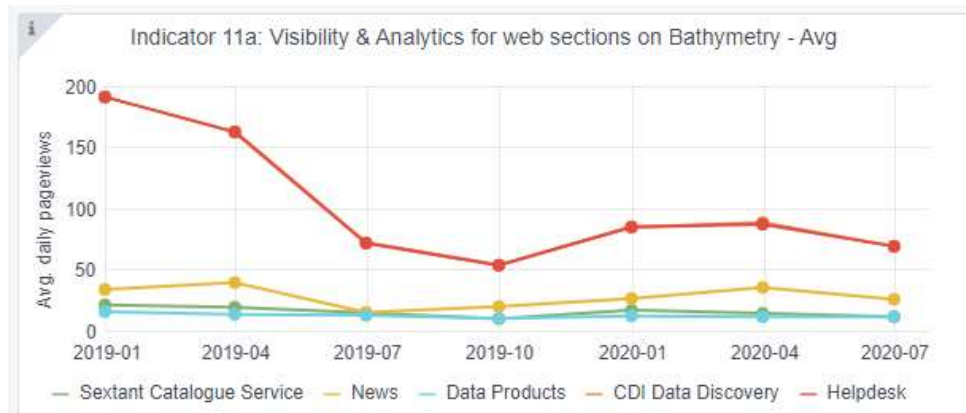
- Ingestion and safe-keeping of marine data - www.emodnet-ingestion.eu

⁴ The links for the Checkpoints will change to the [Central Portal](#) in August 2020

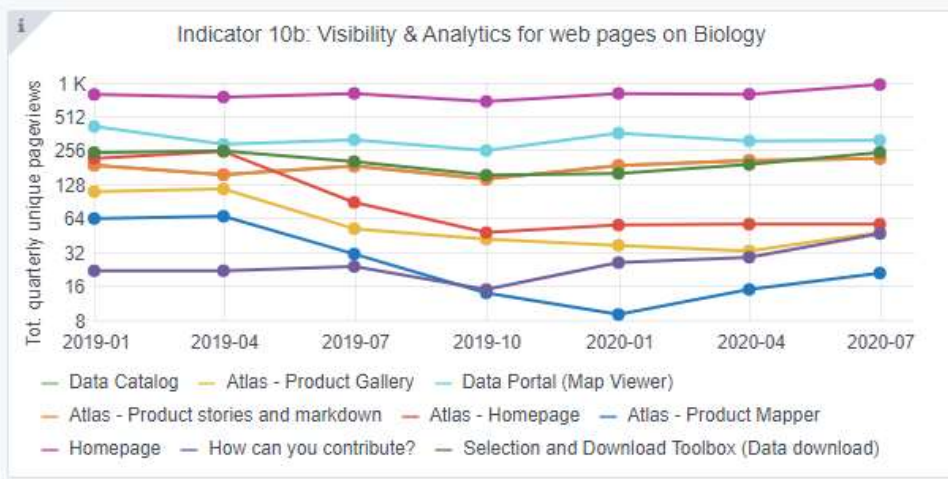
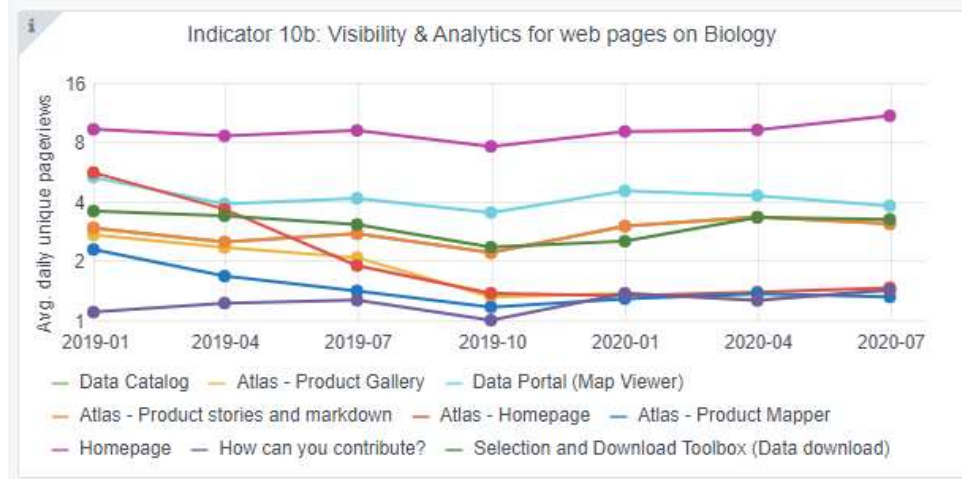
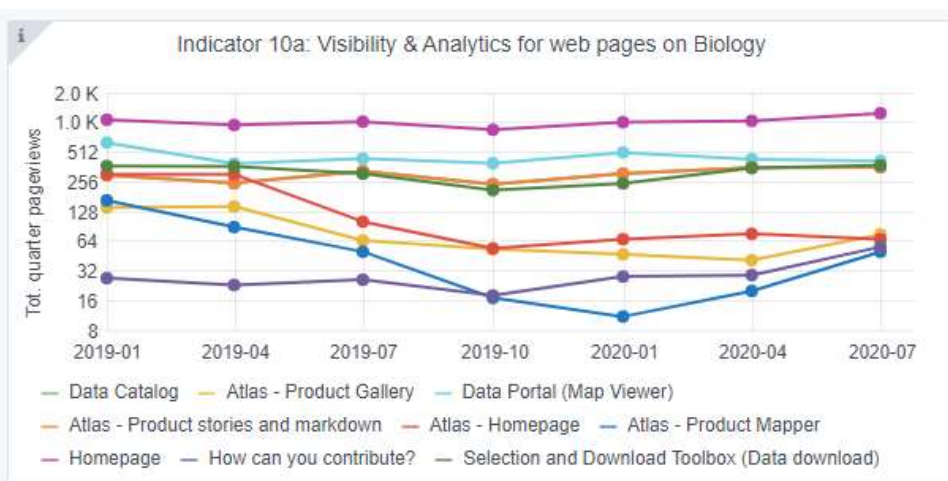
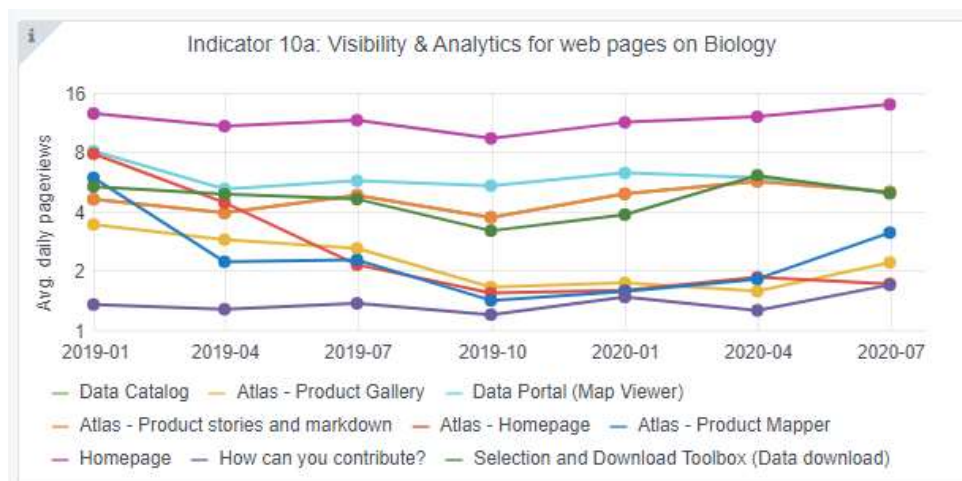
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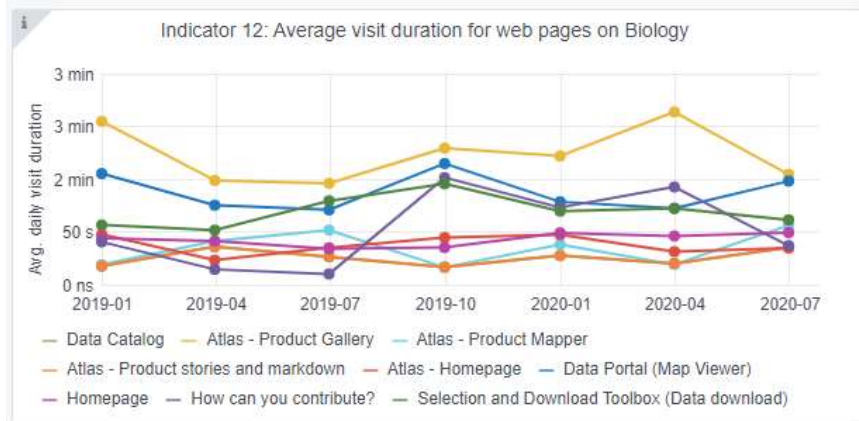
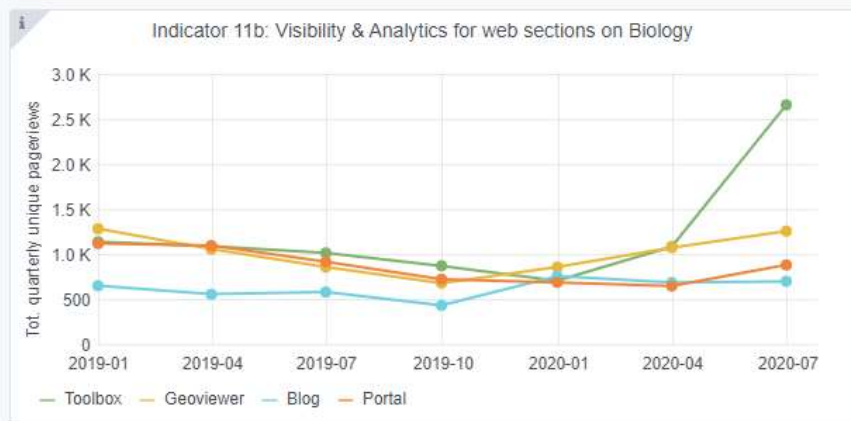
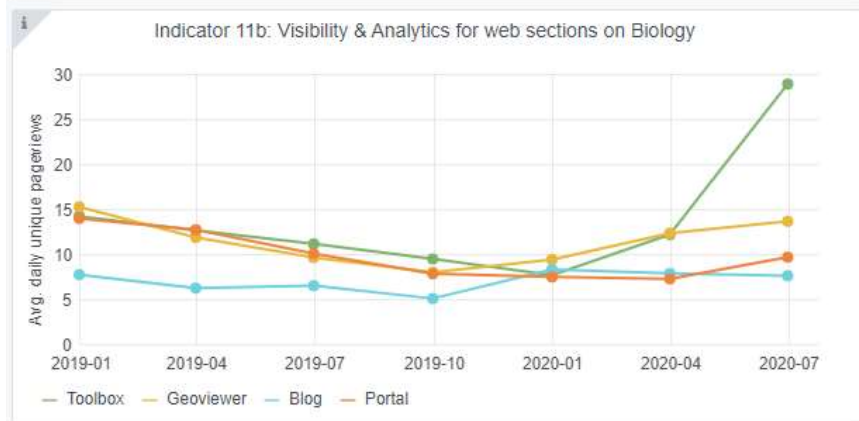
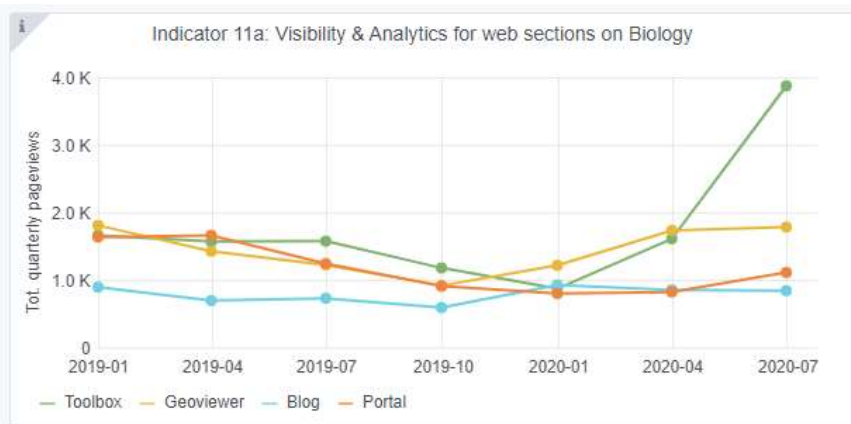
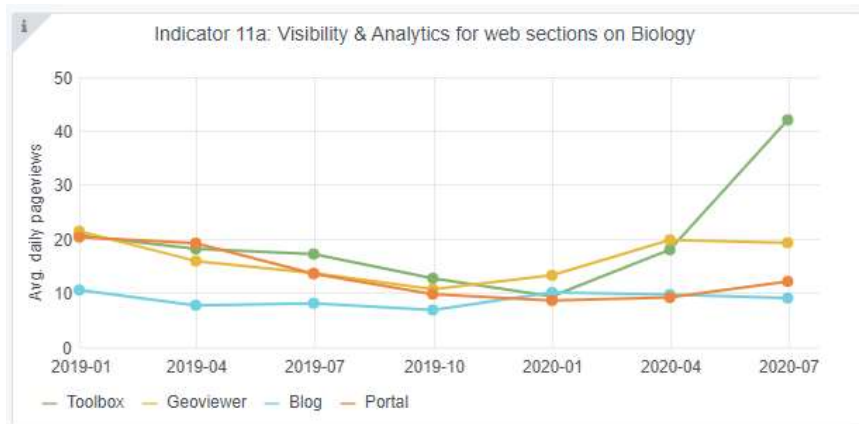
Bathymetry



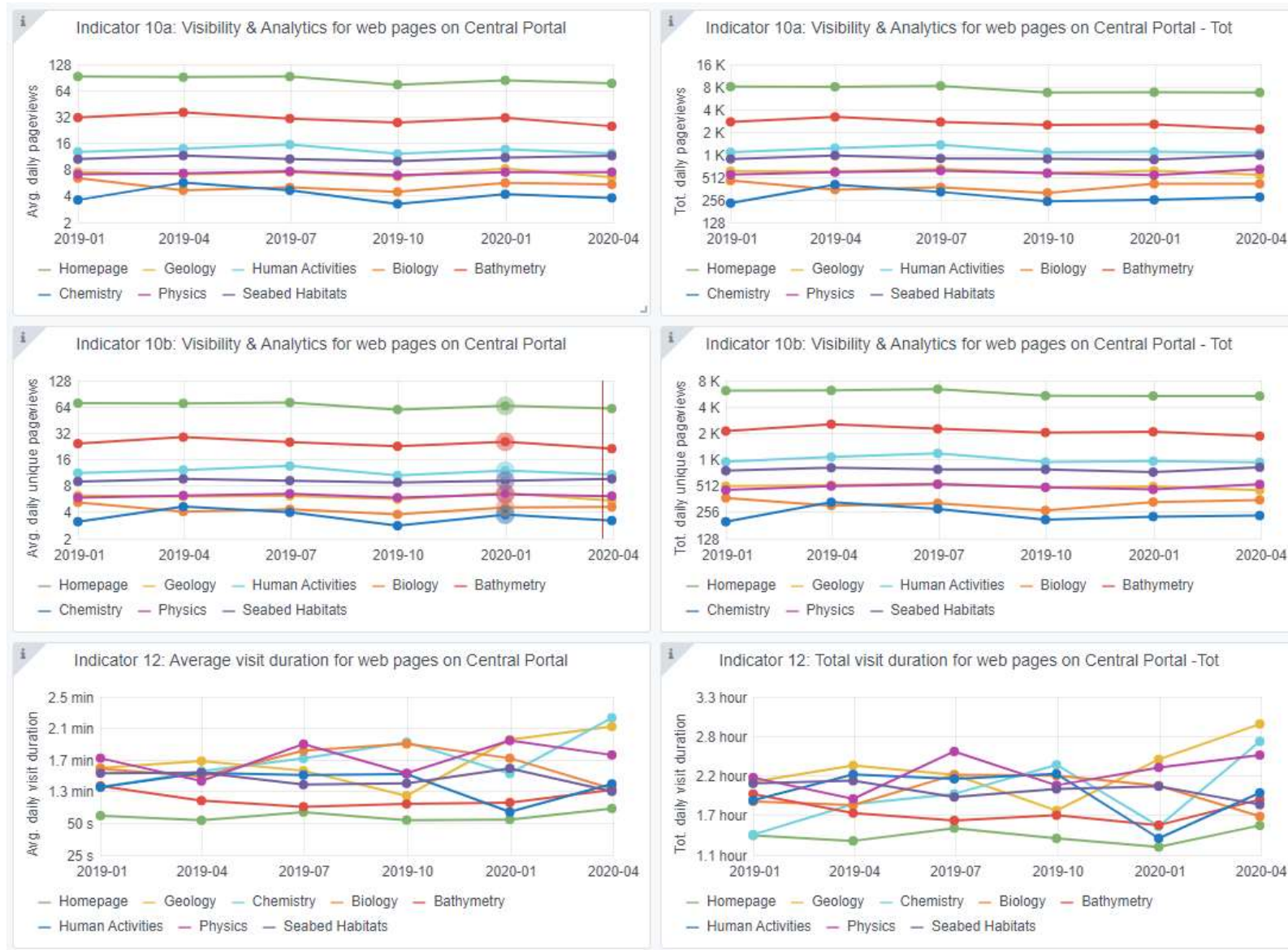


Biology

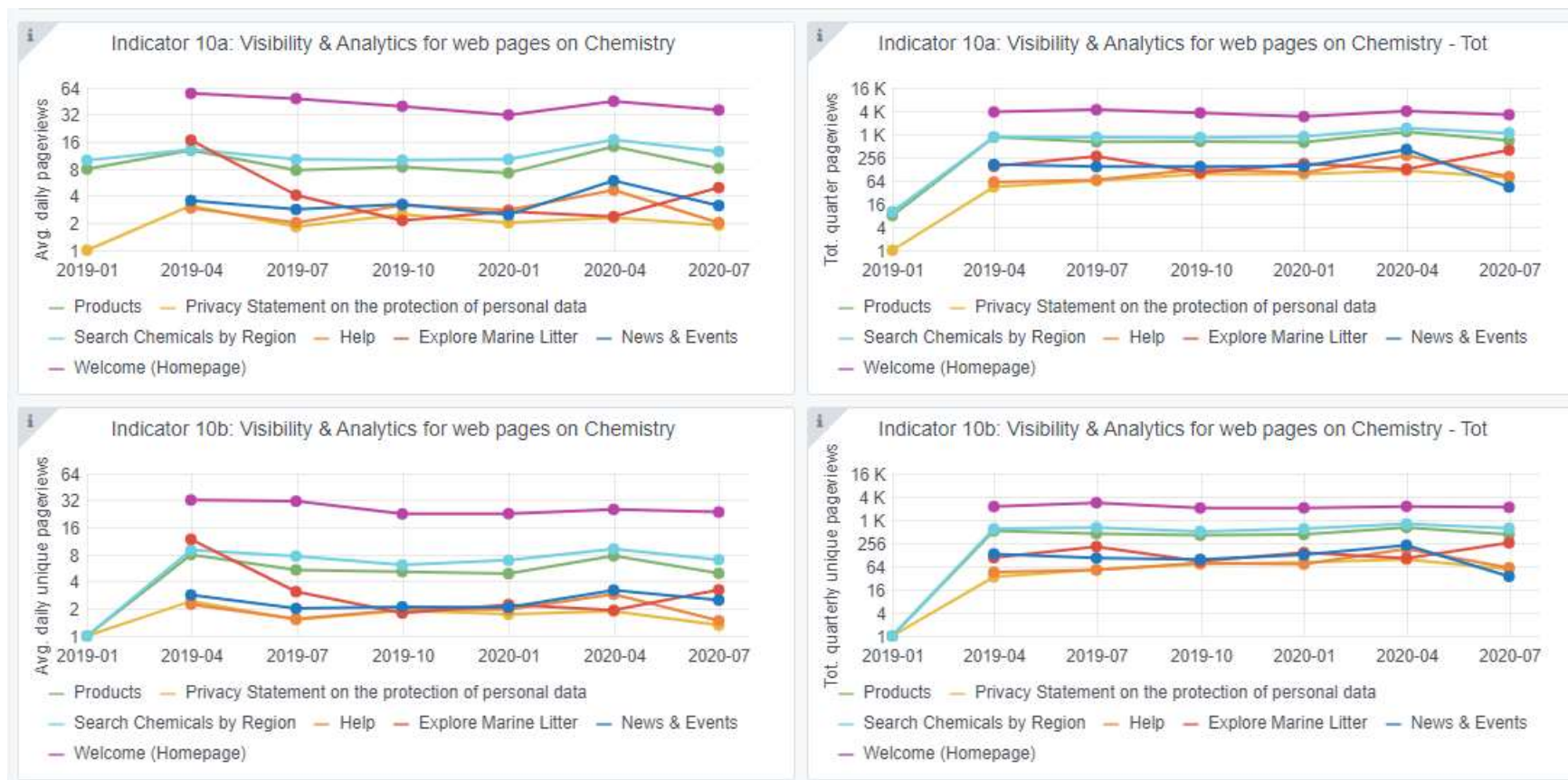


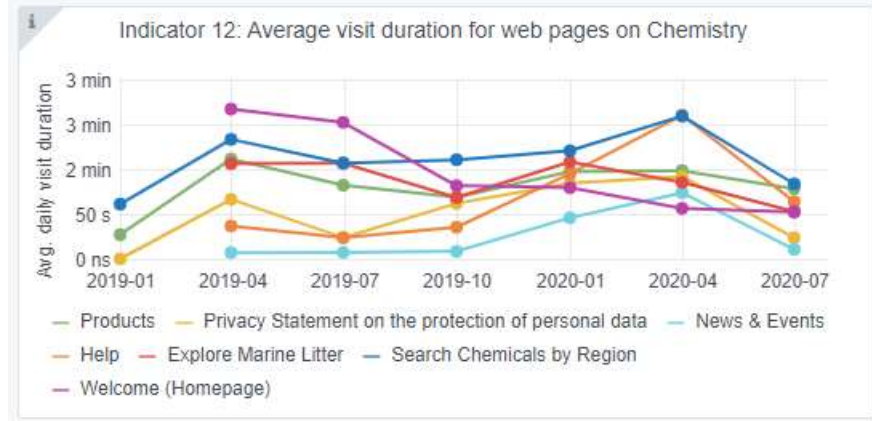
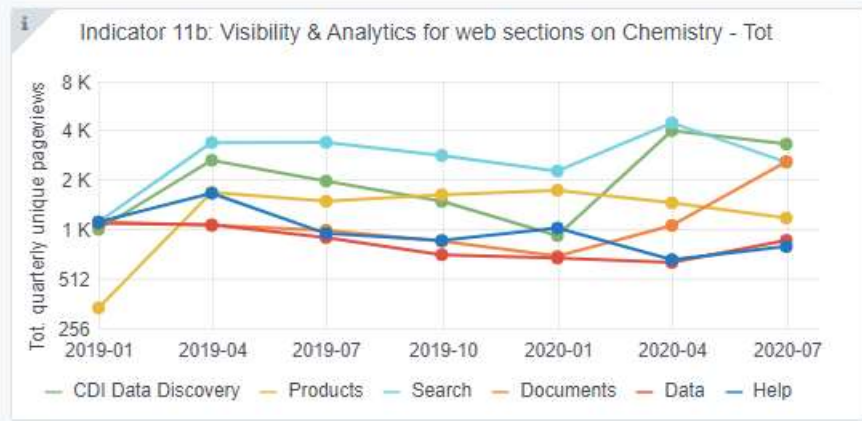
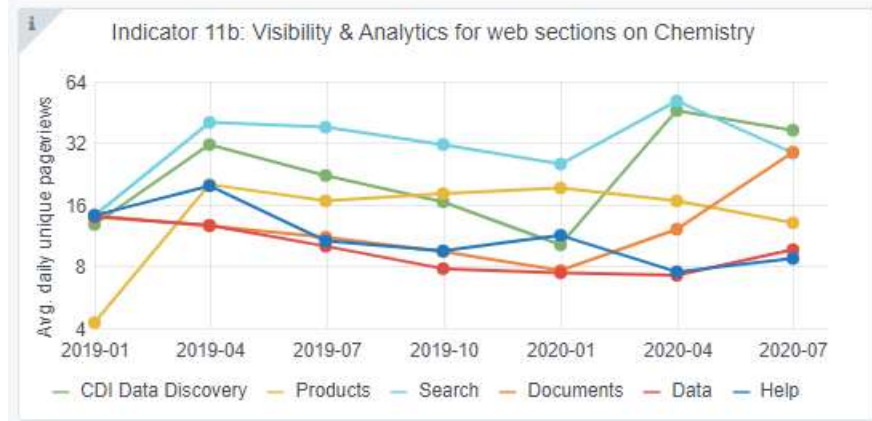
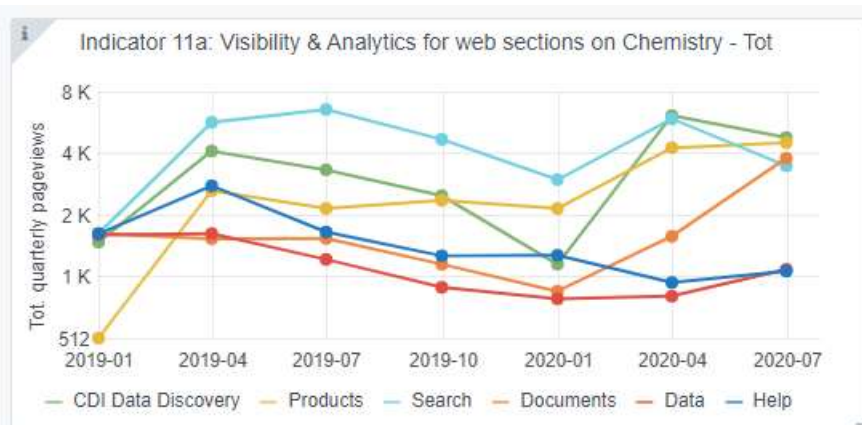
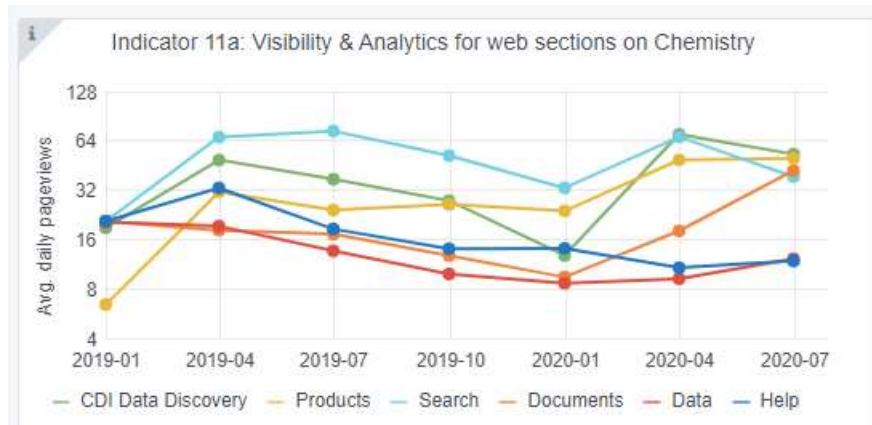


Central Portal

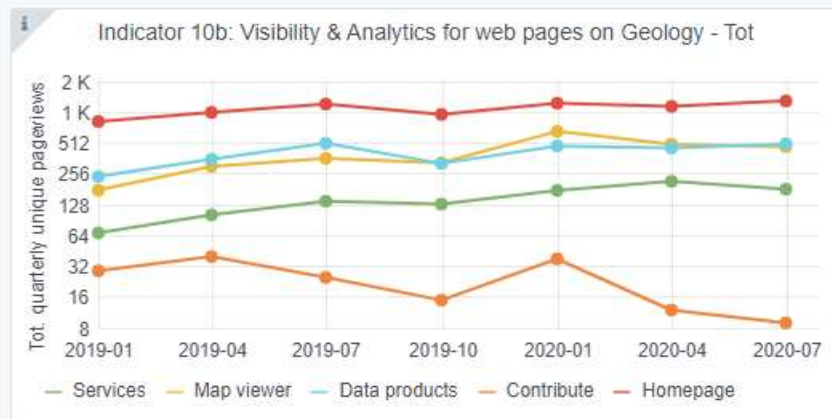
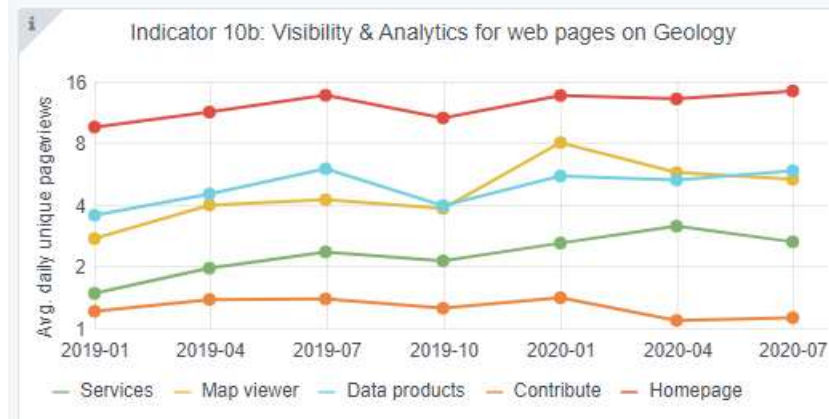
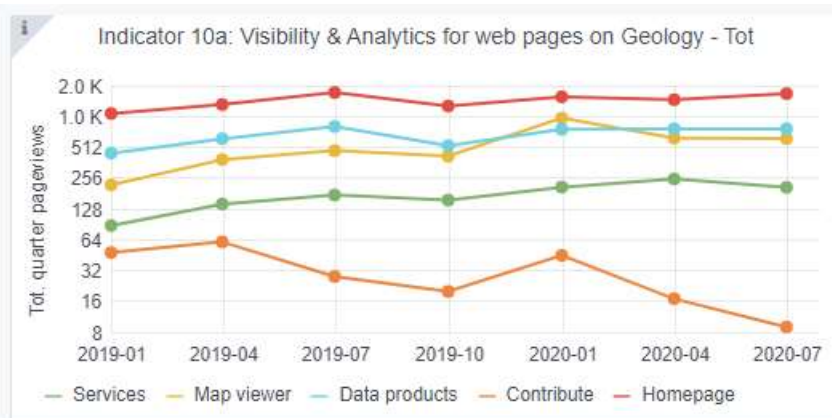
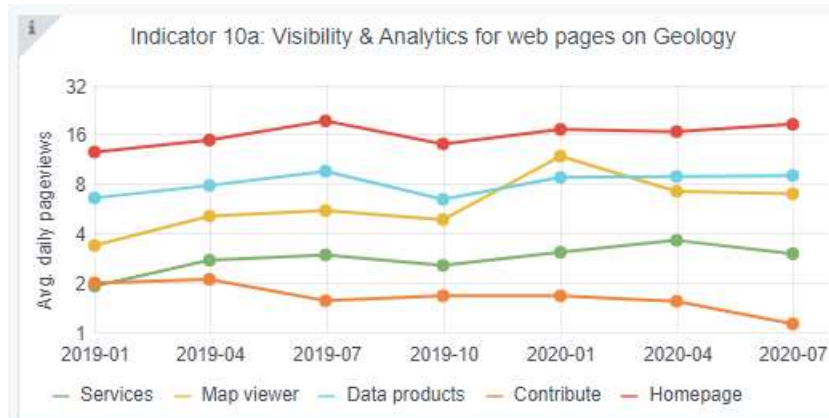


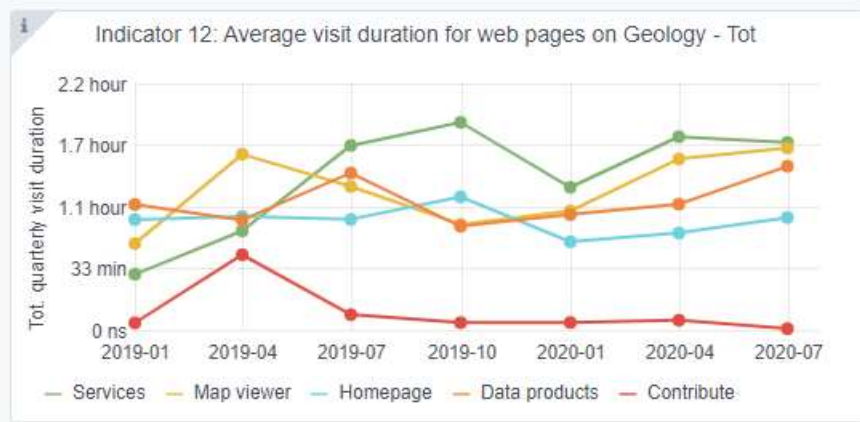
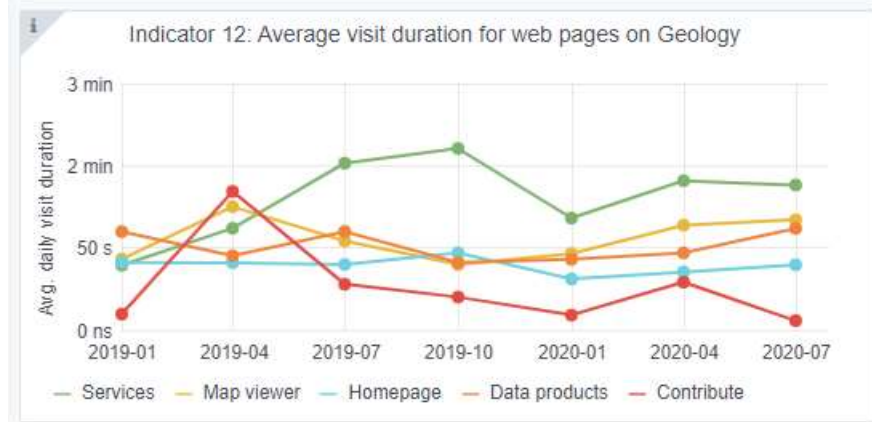
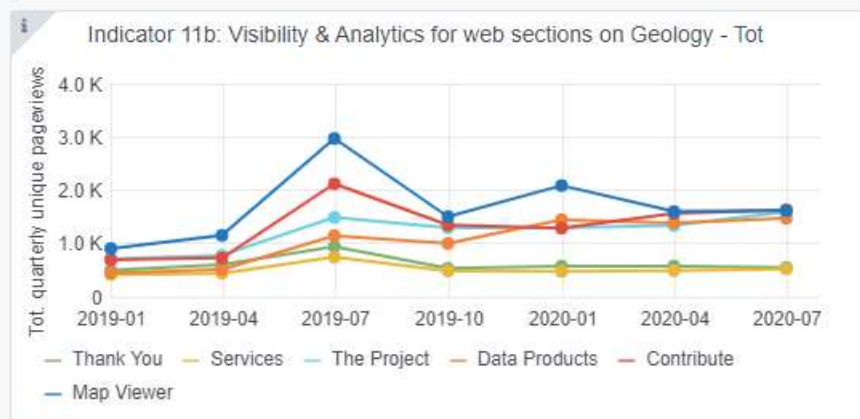
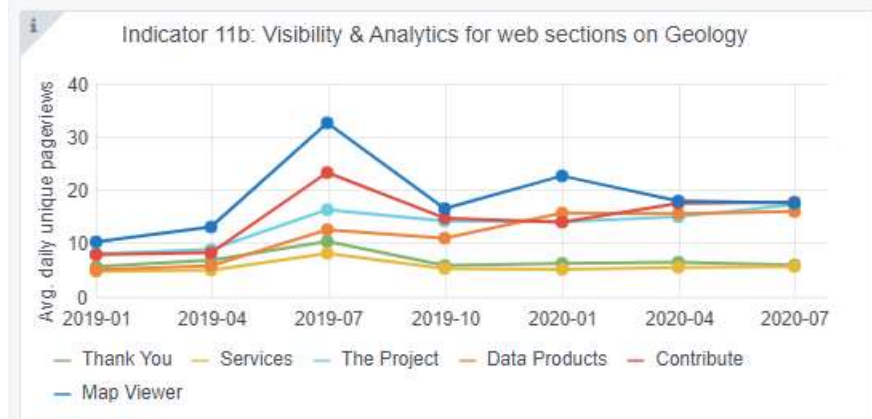
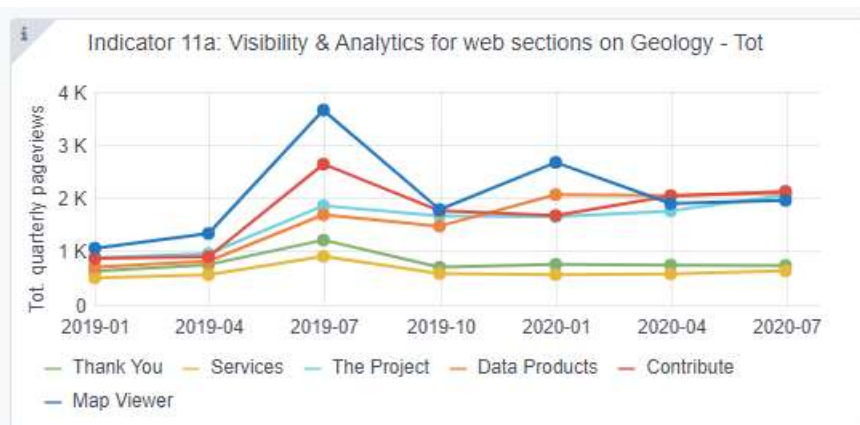
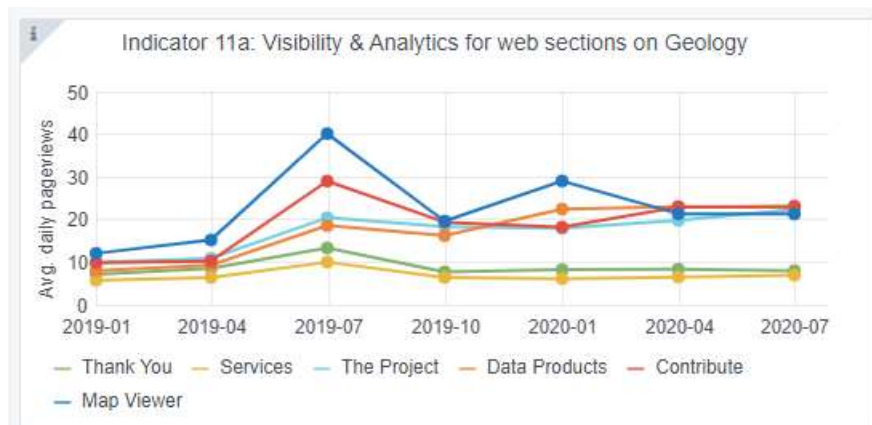
Chemistry



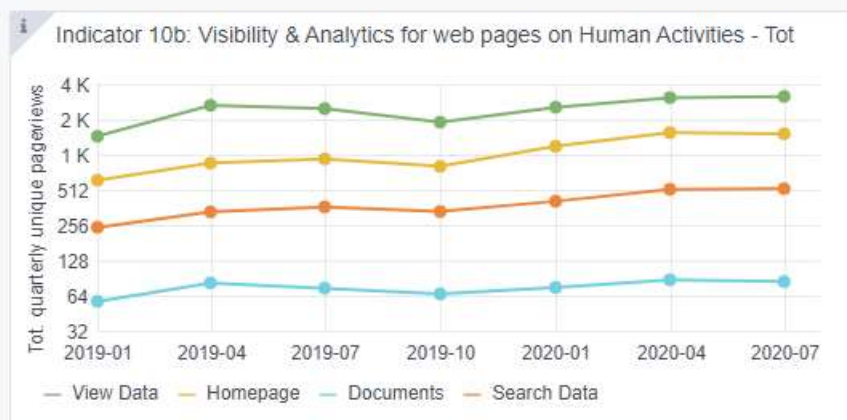
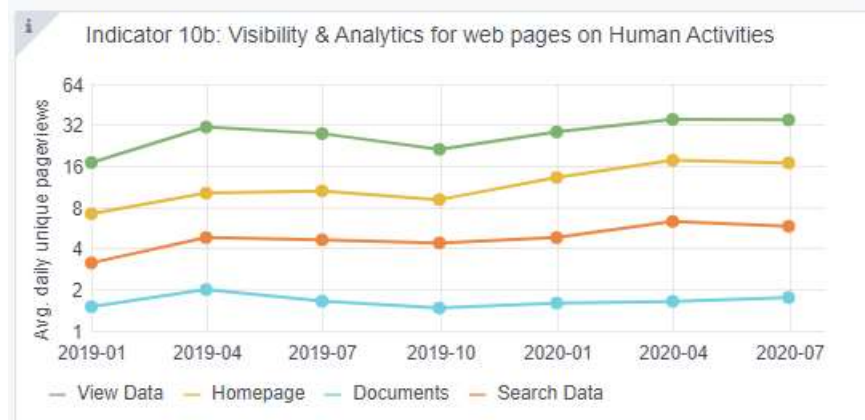
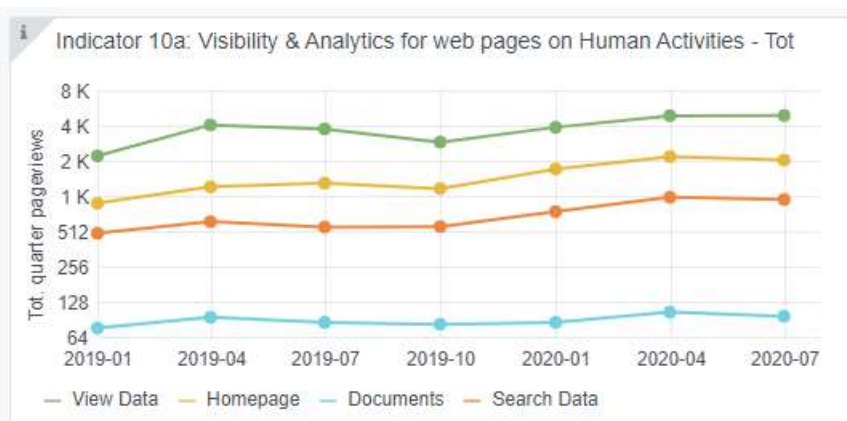
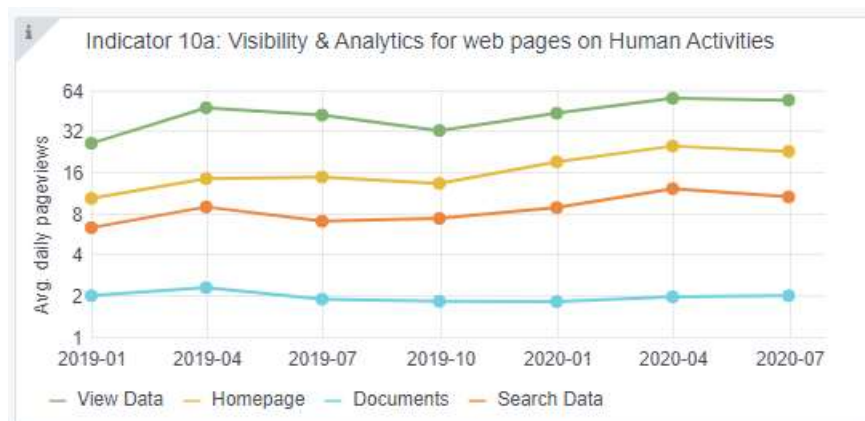


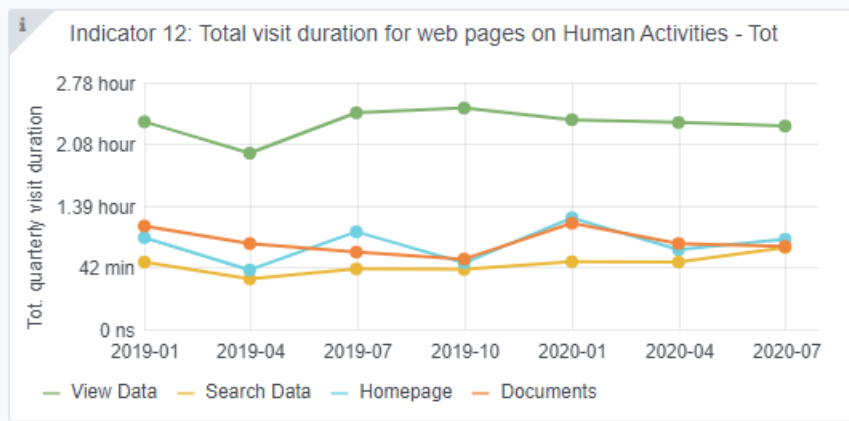
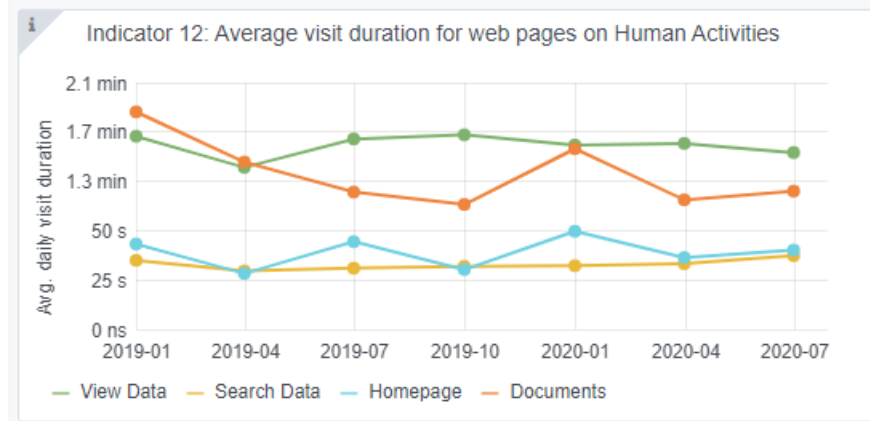
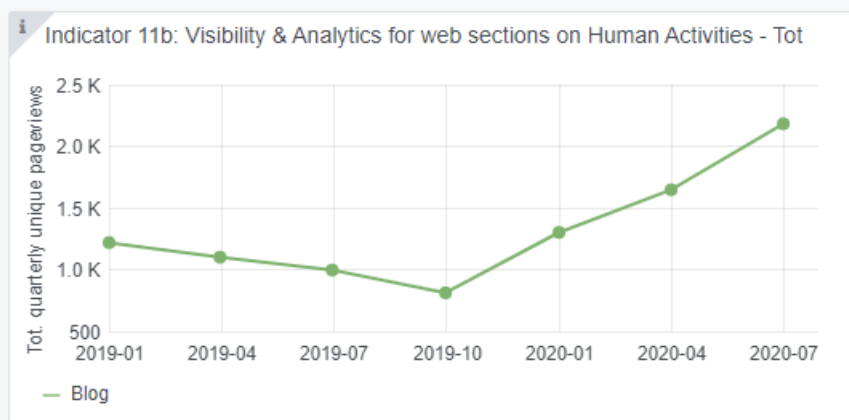
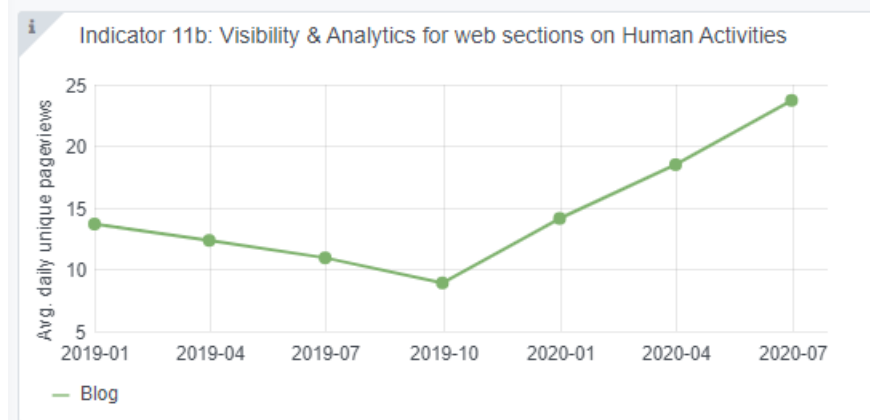
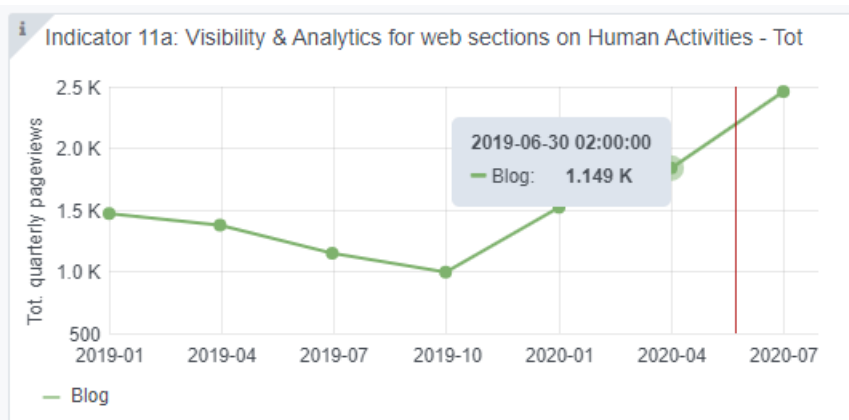
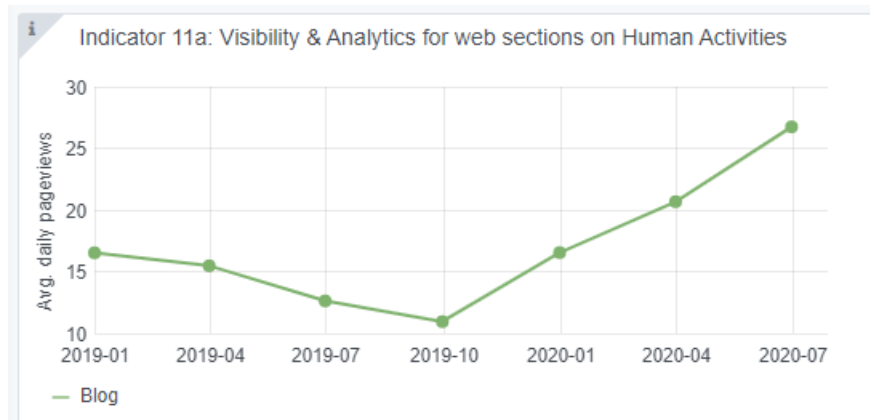
Geology



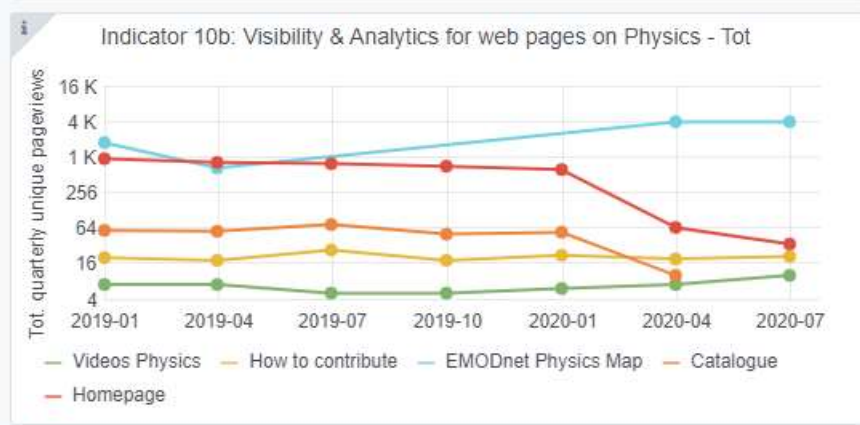
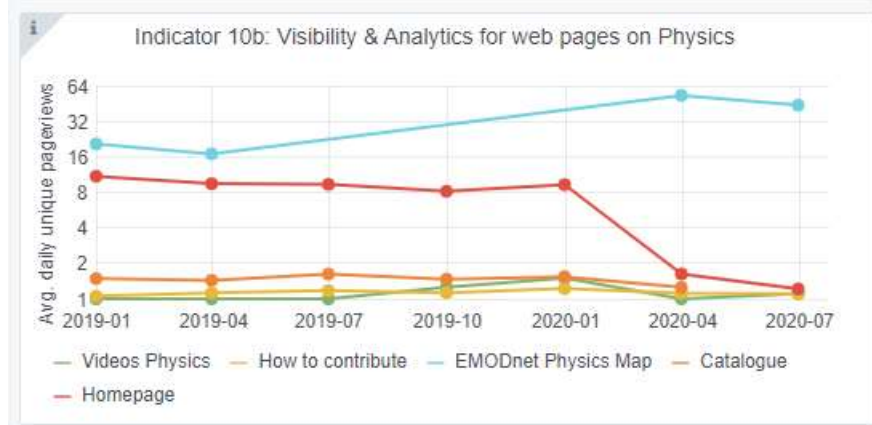
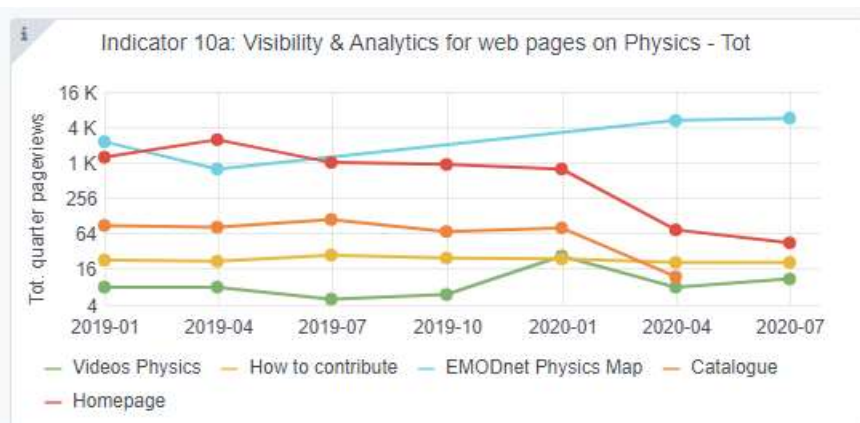
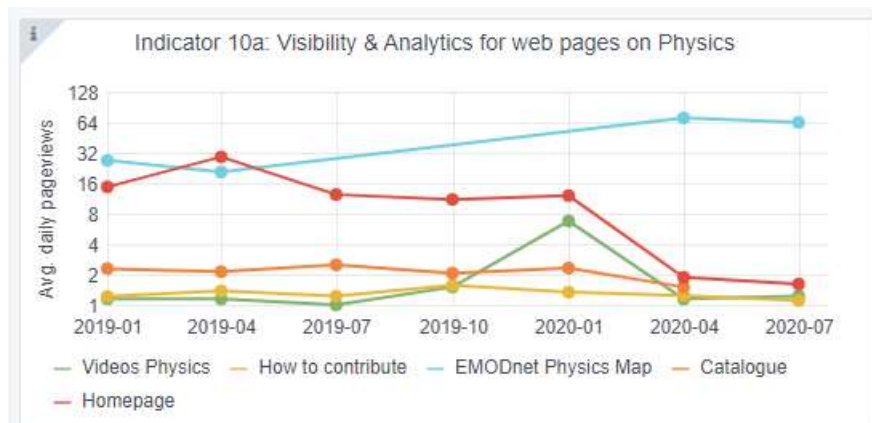


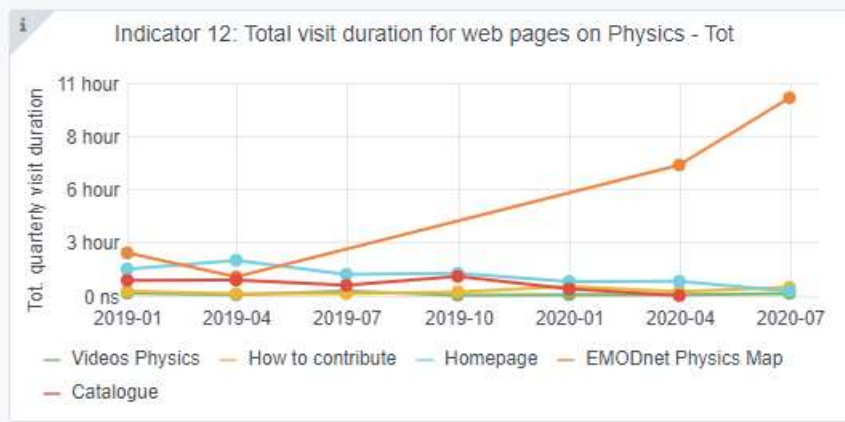
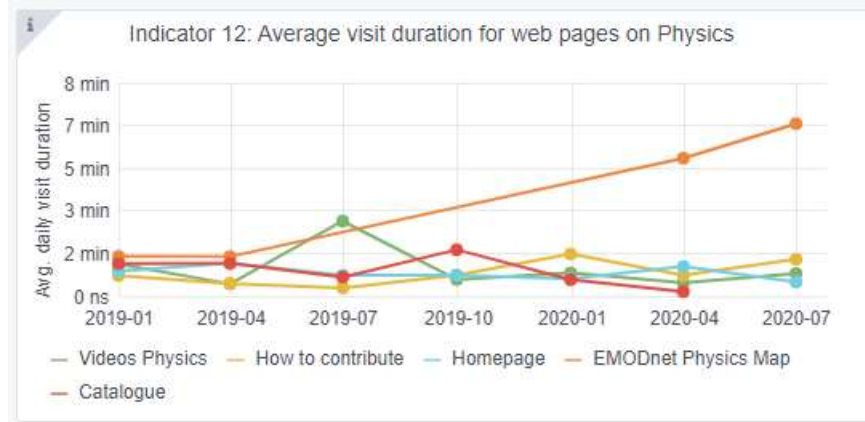
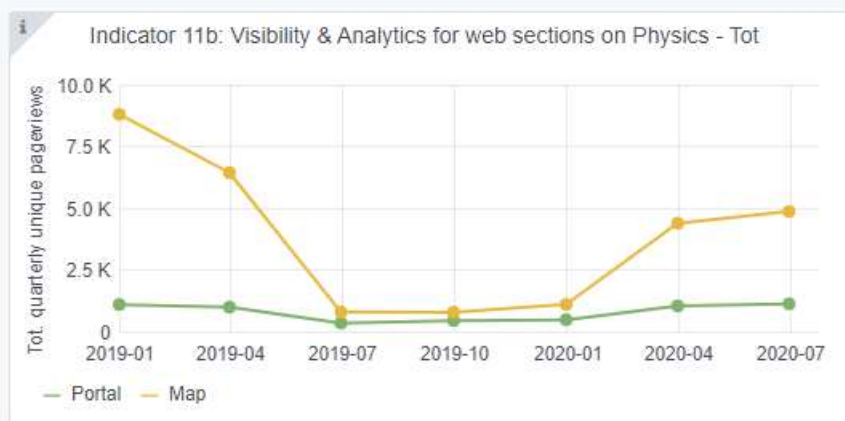
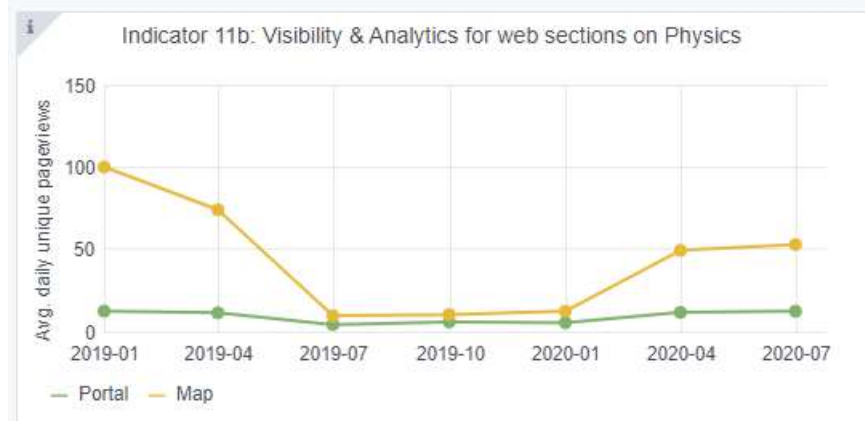
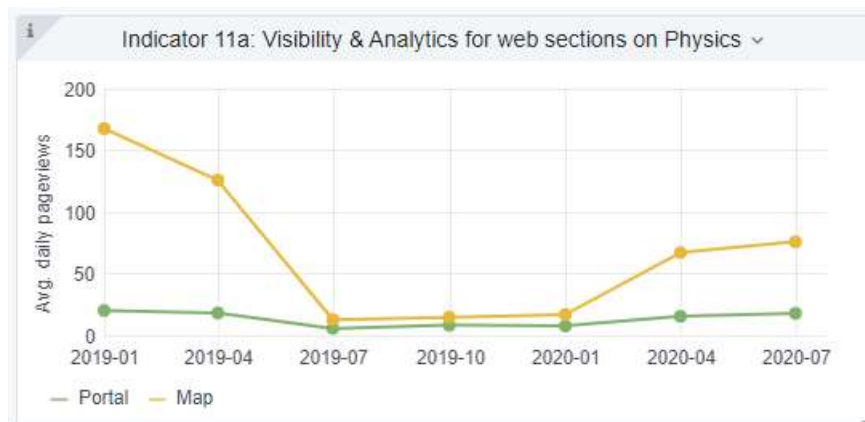
Human Activities





Physics





Seabed Habitats

