

EMODnet Secretariat progress update – 3rd 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 fifteenth Secretariat progress report since the start of the EMODnet Development Phase III (2017-2021). It covers activities developed within EMODnet for the period July-August-September 2020.

EMODnet progress overview

Common progress highlights

To celebrate 10 years of EMODnet, a virtual gathering was organised on the 22nd of September. The meeting was an opportunity to take stock of key EMODnet achievements over the past decade with testimonials from data providers, users and partners. About 225 people followed the webinar. During the webinar, the Secretariat released a [short documentary film](#) which captures the EMODnet story over the last ten years, from its launch to where we are now and where we will go next.

The EMODnet Secretariat is preparing for the 13th Steering Committee meeting and 8th Technical Working Group meeting taking place on 9-10 November and 12-13 November respectively. Both meetings will be held virtually.

Specific progress and achievements of the thematic data assembly groups

- **EMODnet Bathymetry** is preparing for the end of their project phase. The sea-basin coordinators have delivered their contribution for final integration, which included a detailed second quality assessment of the regional DTM products. The Thematic portal aims to deliver the new EMODnet 2020 grid (DTM) before the end of 2020. The number of CDI entries has increased from 29.858 to 30.493, and the number of Composite DTM entries from 195 to 203.
- In this reporting period, **EMODnet Biology**'s harvest accounted for 45 new datasets and 7 updates of previously available datasets. At this moment, 1.022 datasets are available online on the EMODnet Biology portal, representing 24.9 million occurrence records. Of these new datasets, 22 were contributed by the work package on Data Archaeology and Rescue; the work package further continued the digitisation and processing of a number of priority datasets. Work continued on the data products that were initiated during the workshop that was held from 15 to 18 June, and a scheme for publication has been set up. An EMODnet Biology annual meeting was held in September (22 and 24 September), attended by all partners and several associated data partners; each work package provided a status update for the first year.
- The **EMODnet Chemistry** database was enriched with 50.000 new CDI datasets across various sub-themes. Dialogues continued with Copernicus Marine Service (CMEMS), on the finalisation of the joint EMODnet-CMEMS Marine Strategy Framework Directive (MSFD) portfolio of which a draft was sent to the European Environment Agency (EEA) for feedback. To start with, this portfolio will highlight products relevant to D5-eutrophication in the Baltic Sea.
- New data deliveries were received from the **EMODnet Geology** work packages on sea-floor geology, geological events and probabilities, marine minerals, submerged landscapes. An update of the Marine Minerals product was carried out and released on the 7th October 2020. 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 still in different stages. A number of publications exist that will allow to create sets of geological maps for this part of the Caspian Sea.

- A number of datasets on the **EMODnet Human Activities** portal have been updated (among others: 'Aggregate extraction', 'State of bathing waters' and 'Active oil and gas licenses'). New sources for 'Wrecks' and 'Submarine cables' were found, of which the data will be online in the next quarter. Both data products, i.e. Vessel density and Route density maps, were updated to include more recent data (August 2020). A draft data model for the MSP layer in EMODnet was developed.
- **EMODnet Physics** updated the Global Runoff (GRDC) product to 31/12/2019. Two new products were developed and will be made visible during the last quarter of 2020: (i) a sea level product presenting information about the completeness and time extension of the Revised Local Reference (RLR) monthly sea level time series; and (ii) a sea level trend product integrating reprocessed altimetry data and RLR PSMSL data. The Portal continued updating the EMODnet Physics ERDDAP and the user guide on the adopted EMODnet Physics Metadata Standards and conventions.
- **EMODnet Seabed Habitats** obtained permission from the Hellenic Centre for Marine Research (HCMR) to make a total of 132 Greek maps open source and available for download from the GeoServes map library. An additional 28 maps from surveys or ground-truthed (i.e., point) datasets have been made available through the portal from a variety of European countries. A report on stakeholder needs for combined harmonized seabed habitat data products in Europe has been created. Progress has been made on collating and disseminating third-party maps using machine-to-machine connections where possible.
- **EMODnet Data Ingestion** reported an addition of 63 submissions, bringing the total to 822 submissions since its inception. The number of published data submissions 'as is' increased from 619 to 674 (+55); the submissions that have been elaborated to phase II, implying uptake in European marine data infrastructures feeding into EMODnet, increased from 255 to 286 (+31). During the reporting period, the [Real-Time data exchange demonstrator endpoint](#) was updated to that it is now offering more than 1550 sensors from several sources. Work continued on real-time data flowing from a variety of sources (including ILVO and NOAA NEFSC) into EMODnet Physics via the Berring Data Collective. EMODnet Ingestion and their partner Royal Belgian Institute of Natural Sciences (RBINS) started activities for updating and expanding the Ingestion promotion material (e.g. updating leaflets, new stickers, updating Ingestion movie, etc.).

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 end of this report.

- The number of monthly unique visitors of **EMODnet Data Ingestion** have decreased to below 1.000 (636 and 775).
- Overall, the average daily pageviews decreased for most of the **EMODnet Central Portal** pages. The most visited webpage is the 'Homepage', with an average daily of 80 pageviews, followed by the Bathymetry entry page (average daily of 28 pageviews). The next most viewed entry pages are those of Human Activities and Seabed Habitats (both around 11-12). Chemistry's entry page is the least visited, with an average daily page view of 3, yet most time was spent on this page (2.7 minutes). Increasing as well as decreasing average daily visit durations were noted for the entry pages of the different portals (varying between 1 and 2.7 minutes).
- Overall, the average daily (unique) page views for **EMODnet Bathymetry** remained stable or slightly decreased since the last quarter. The Viewing and Download service (provided by the EMODnet Bathymetry map viewer) remains the most viewed web page: a daily average of around 109-page views and 88 daily unique page views were recorded for this reporting period, which is comparable to the

statistics from the last quarter readings. On average, users spent around 1.5 minutes on the map viewer. Apart from the CDI marine data access service (10 average daily page views and 8 average daily unique page views), 4 or less pageviews were recorded for the other web pages, such as Web services & standards and the Homepage. Variable average visit durations were recorded for the other pages; the least time was spent on the 'Homepage' and 'How can you contribute' pages.

- Overall, slight decreases were observed in the number of (unique) pageviews for the various **EMODnet Biology** webpages. The most viewed page remained the Homepage, followed by the Map viewer. The biggest drop was noted in the number of pageviews for the Atlas product mapper. Increased as well as decreased average visit durations were recorded for the different webpages, ranging from 10.5 seconds for the Atlas product mapper to 1.5 minutes for the Data portal map viewer.
- Increases as well as decreases in the average daily (unique) pageviews were recorded for the different web pages of **EMODnet Chemistry**. The Homepage remains the webpage most viewed page (daily average of 30 pageviews for this quarter), followed by Search Chemical by Region (10 average daily pageviews). Even though the Products page received less average daily pageviews (6) compared to the previous quarter, it was identified as the webpage on which users spent the most time (1.5 minutes). Least time was spent on the Help page (10 seconds).
- Increasing as well as decreasing pageview figures have been observed for the various **EMODnet Geology** webpages. The most viewed webpage is the 'Homepage' (average of 16 daily page views) on which on average 40 seconds is spent during a visit, followed by 'Data products' (9 average daily page views; 46 seconds average visit duration) and the 'Map viewer' (average 7 daily page views; average visit duration of 1 minute).
- Average daily (unique) page views for **EMODnet Human Activities** slightly decreased since the previous quarter; 'View Data' remains the most viewed webpage (average daily pageviews of 47). It is also the webpage where users spent the most time (daily average duration of 1.6 minutes for this quarter). The Search Data page received 11 average daily pageviews and remains the third most visited page; users spent on average 46 seconds on this webpage.
- Average daily (unique) page views for **EMODnet Physics** remained fairly stable since the previous quarter: the 'Map Viewer' remains the most viewed web page (i.e. average of 60 daily pageviews); 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 an average of 7 minutes on the Map Viewer; and between 10 and 20 seconds on the other web pages (which remained stable). The average daily time spent on the Videos page had increased to 4 minutes.
- Overall, the average daily pageviews for the various **EMODnet Seabed Habitats** web pages have slightly decreased compared to the previous quarter. On the contrary, erratic average visit durations were recorded for the different pages. The Map Viewer remains the most viewed web page (average daily pageviews of 16) and users on average spent 1.7 minutes on the page. The page on which most time was spent, was the Documents page (average daily of 3 minutes). Least time was spent was on the Search metadata page (average daily of 4 seconds) and Data submission process (average daily of 2 seconds); which were also the least viewed webpages (average of 1 pageview).

Statistics on usage of EMODnet portals¹

a. Number of data downloads² :

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 and summer period. 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.



- **EMODnet Bathymetry** reported a decrease of almost 75% in the number of CDI downloads since the previous reporting period: the numbers went from 11.671 to 3009 CDI downloads.
 - As for the previous quarter, a decrease was recorded in the number of manual data downloads for EMODnet Biology. For this quarter, 225 downloads were recorded which is a 44% decrease compared to the previous quarter (when 405 data downloads were recorded).
 - **EMODnet Chemistry** reported a steep increase in the number of manual data downloads by 517% (from 33.453 to 206.423 CDI downloads).
 - Depending on the sub-theme, the number of data downloads in **EMODnet Human Activities** experienced increases as well as decreases, but in general a downward trend can be observed in the total number of data downloads. The Wind Farm sub-theme remains the most downloaded sub-theme. Also decreasing trends were recorded in the number of web service requests.
 - Increases were recorded in the number of data downloads for almost all data sub-themes of **EMODnet Physics** compared to the previous quarter (increases ranging from 28% for Winds (1223 downloads compared to 952), to 321% for River (160 compared to 38 downloads). On the contrary, the number of map visualisations decreased for all sub-themes (decreases between -10% for 'Winds' to -48% for 'Underwater Noise'). Increases as well as decreases were seen in the number of web services requests (WMS, WFS and API).
 - An increase of 19% was reported in the number of manual data downloads for **EMODnet Seabed Habitats** (from 36 to 43). Apart from a decrease in the number of WMS requests (-14%), increases were observed in the number of WFS (86%) and WCS requests (20%).
- b. Number of data product downloads³:
- Besides the decrease in the number of CDI downloads, also a decrease was reported in the number of data product downloads for **EMODnet Bathymetry**. Compared to the previous period, 20.5% less DTM tile downloads were performed by the users (from 8637 to 6863 DTM tile downloads). A decrease of about 17% was recorded in the number of HR-DTM file downloads (from 326 to 270 downloads). On the contrary, increases in the number of WMS and WFS requests were reported for both the DTM and HR-DTM, of 35.7% and 4.3% respectively.
 - **EMODnet Biology** reported on two manual data product downloads, being one less (-50%) compared to the previous quarter.
 - Increases 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 (101 files compared to 36 in the previous quarter), Dissolved gases (78 files compared to 8 files), Marine beach litter (12 compared to 7 files) and Marine seabed litter (12 files compared to 1 file)).
 - An increase was recorded in the number of product downloads for the Vessel density maps (803 compared to 681 downloads, which is an increase of 18%) for **EMODnet Human Activities**.
 - Apart from one data product, increases were reported in the number of data product downloads for **EMODnet Seabed Habitats** compared to the previous quarter. The Individual habitat maps from surveys remain the most downloaded product (14.612 downloads). The number of WFS and WCS requests have increased with 86% and 20% respectively.

Recent meetings and events

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

³ for portals which provided this information.

- **EMODnet Bathymetry:** the SEABED 2030 monthly meeting, to strengthen collaboration between EMODnet and this group, and to deal with data gathering and compilation in the GEBCO/SEABED 2030 grid.
- **EMODnet Biology:** the abovementioned annual meeting took place on 22 and 24 September, attended by all partners and several associated data partners. The meeting focused on updates from each of the work packages and related discussions.
- **EMODnet Chemistry:** a bilateral meeting took place with Mercator Ocean on the development of the joint EMODnet-CMEMS MSFD portfolio. The Portal attended the G20 Marine Litter workshop and presented a powerpoint on EU efforts for data harmonisation for policy purposes.
- **EMODnet Geology:** a number of internal meetings took place to discuss project progress (milestones and deliverables) and issues.
- **EMODnet Physics:** meetings with EuroGOOS (Tide Gauge Task Team and HF Radar Task Team) to discuss progress and plan future actions. A follow-up meeting with NordStream 2 to discuss data sharing and details on the received data files.
- **EMODnet Seabed Habitats:** internal remote meetings to discuss progress of the work; remote meeting with EMODnet Biology to discuss collaboration for ingestion of data into EurOBIS.

Upcoming EMODnet meetings and events

The main EMODnet meetings planned for the coming period are:

- 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.

More information

More information about EMODnet's resources available consult:

- 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 portals

For an overview of and access to each of the Sea-basin Checkpoint portal, visit:

<https://emodnet.eu/en/checkpoints>

- North Sea checkpoint - <https://emodnet.eu/en/checkpoint/north-sea>
- Mediterranean checkpoint - <https://emodnet.eu/en/checkpoint/medsea>
- Arctic checkpoint - <https://emodnet.eu/en/checkpoint/arctic>
- Atlantic checkpoint - <https://emodnet.eu/en/checkpoint/atlantic>
- Baltic checkpoint - <https://emodnet.eu/en/checkpoint/baltic>



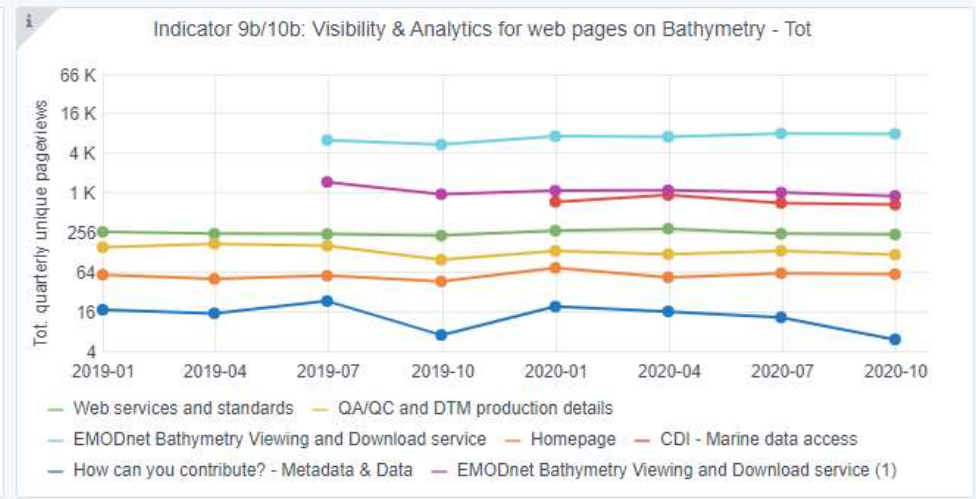
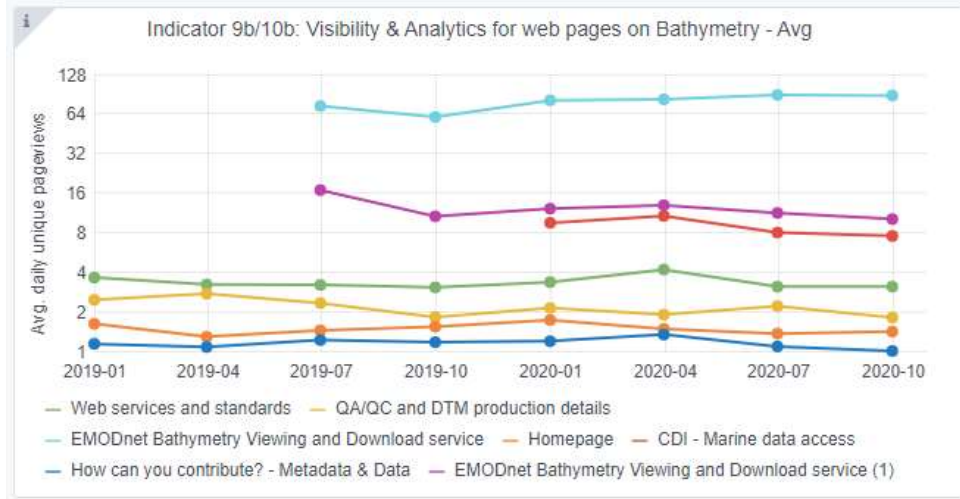
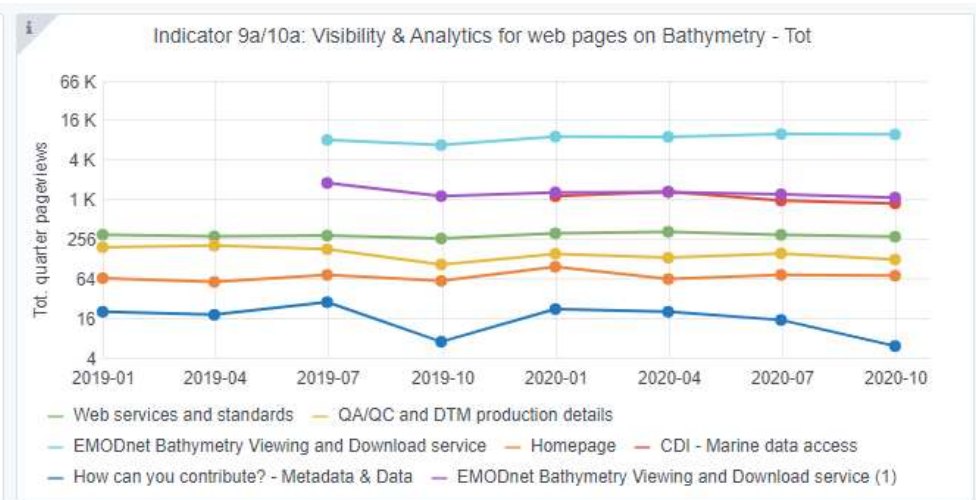
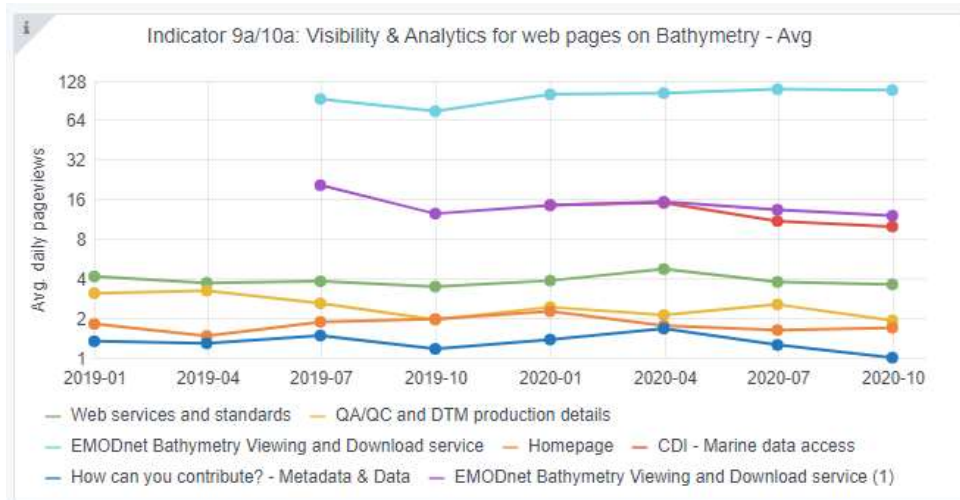
- Black Sea checkpoint - <https://emodnet.eu/en/checkpoint/black-sea>

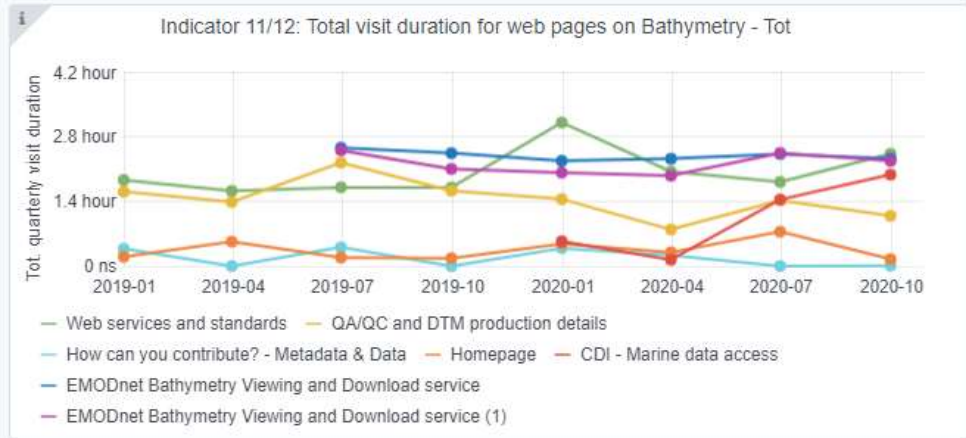
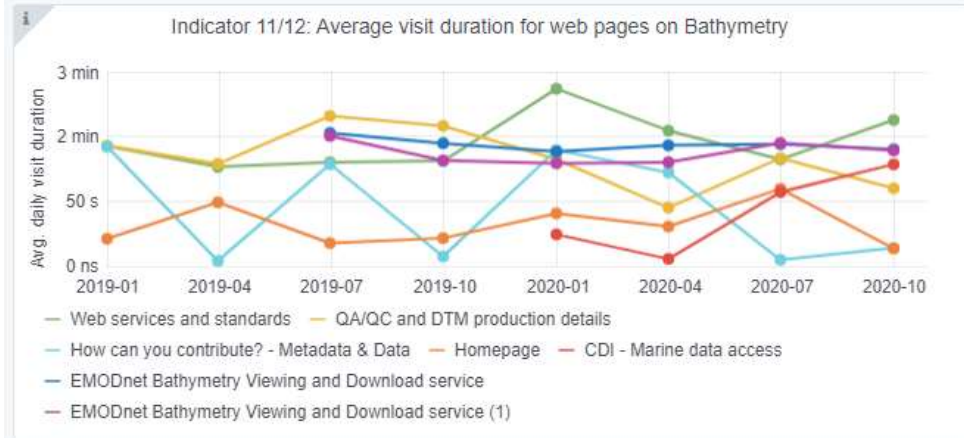
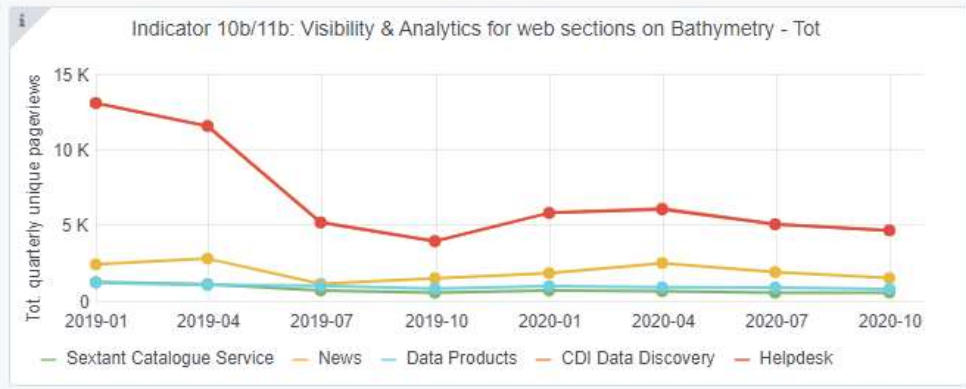
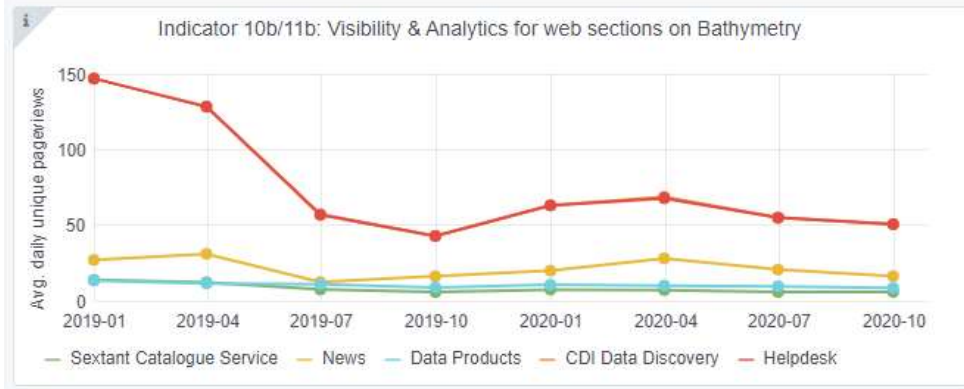
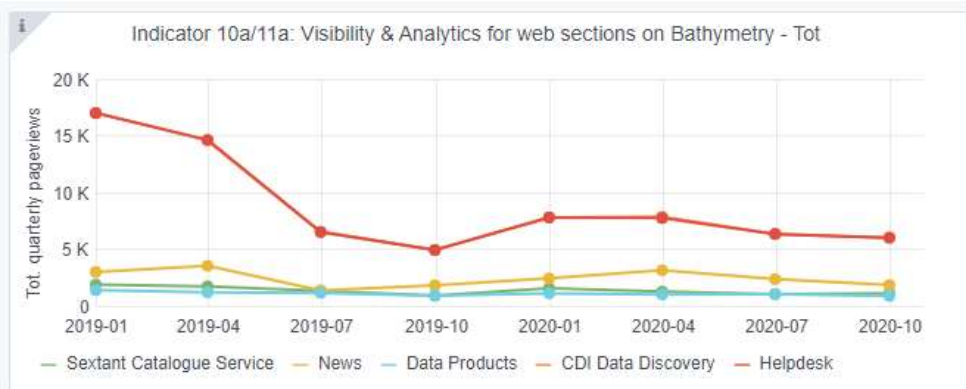
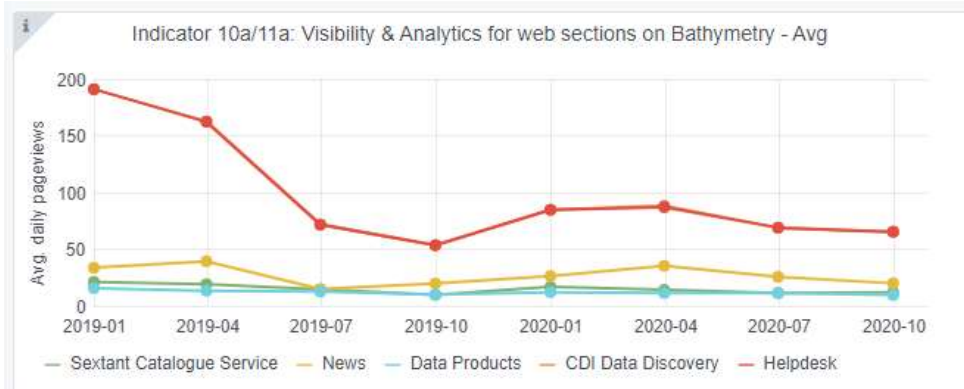
Data Ingestion Service

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

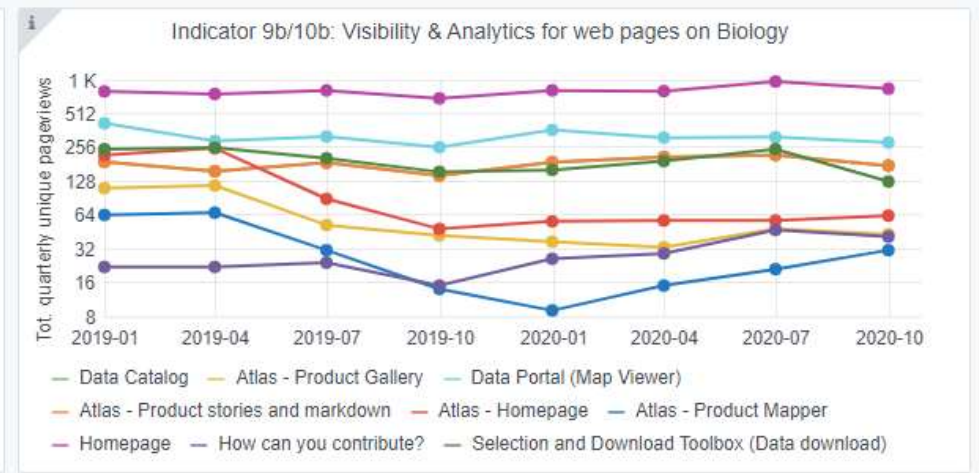
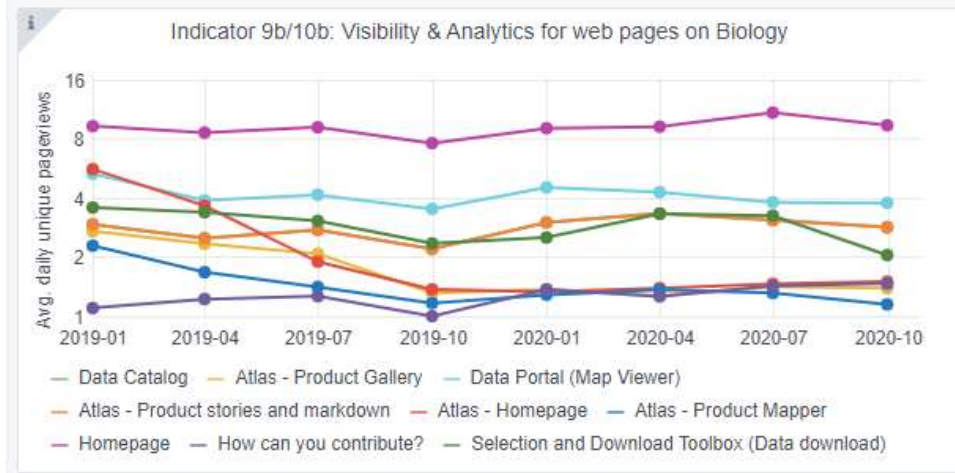
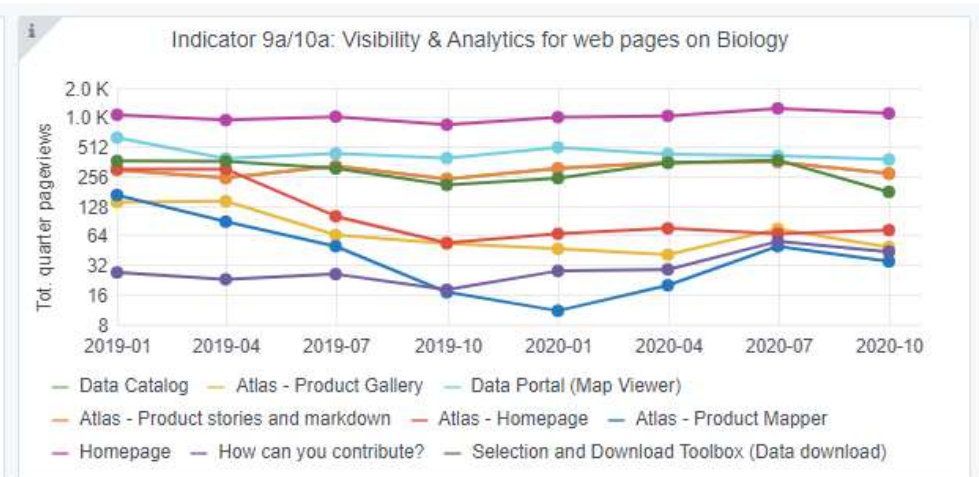
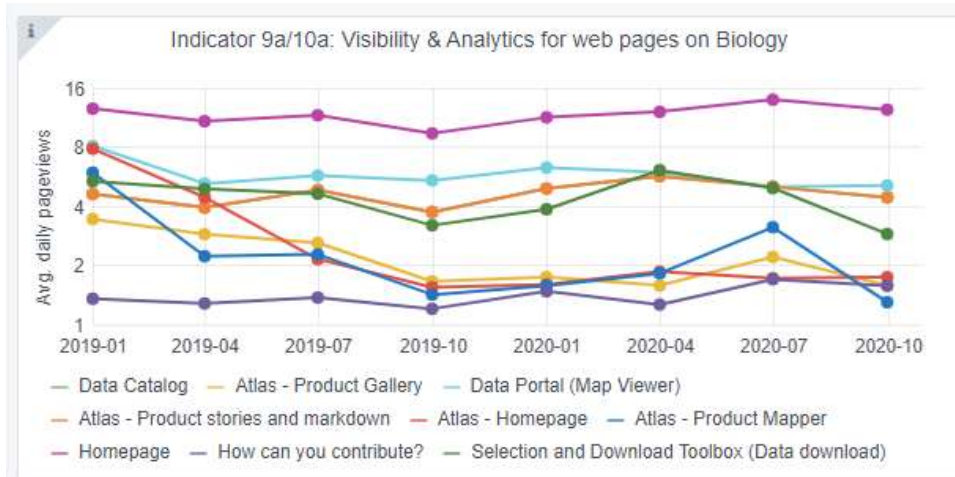
Gallery

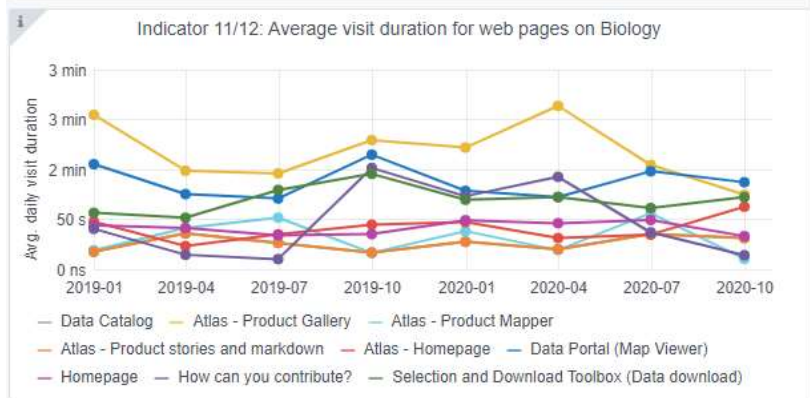
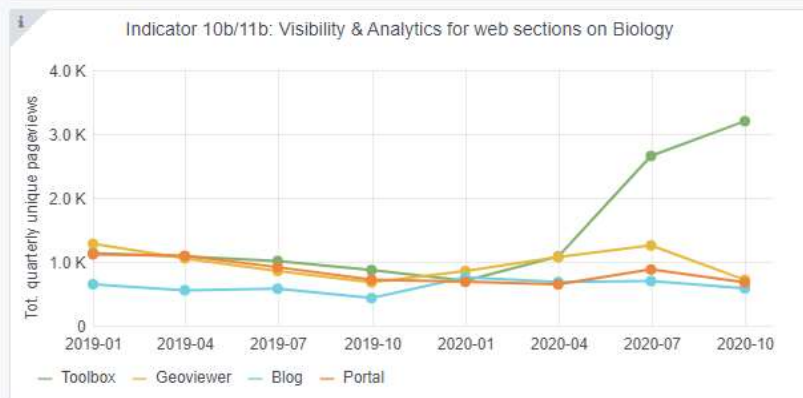
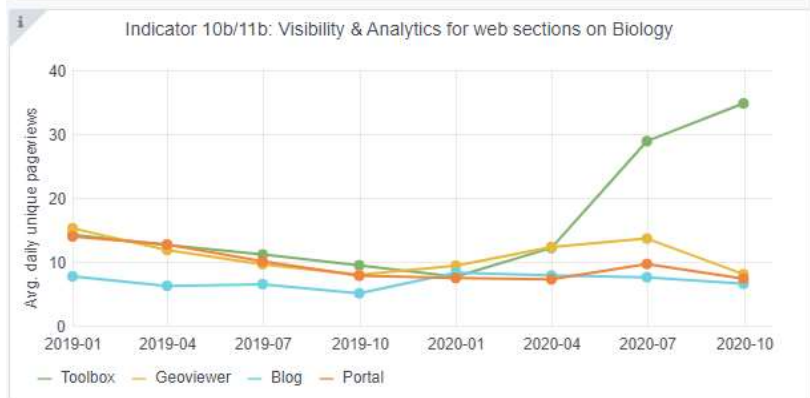
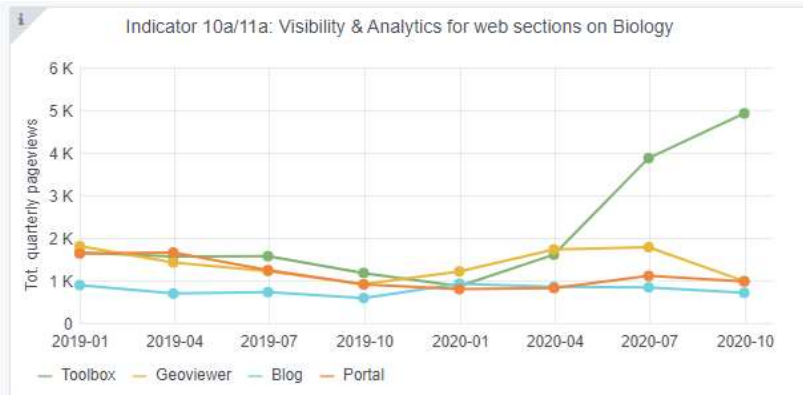
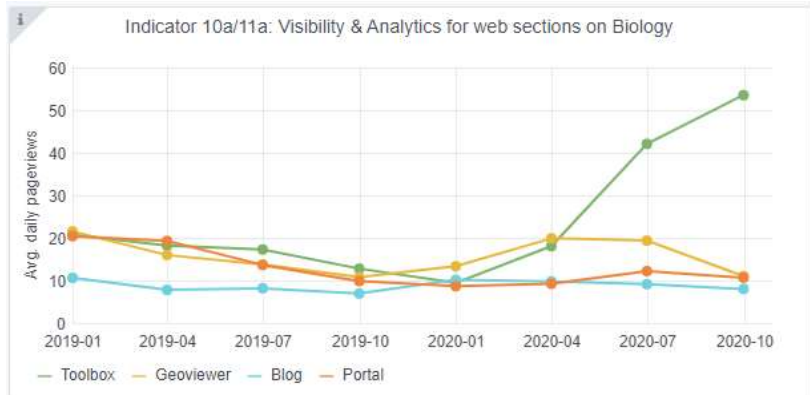
Bathymetry



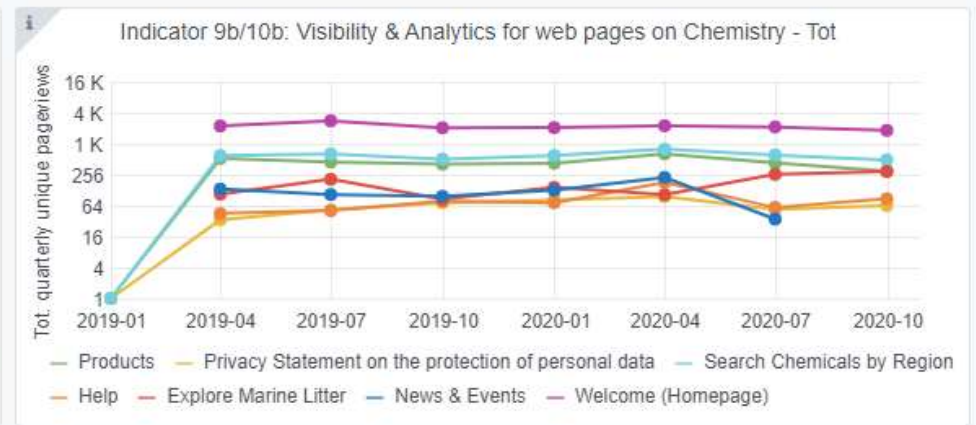
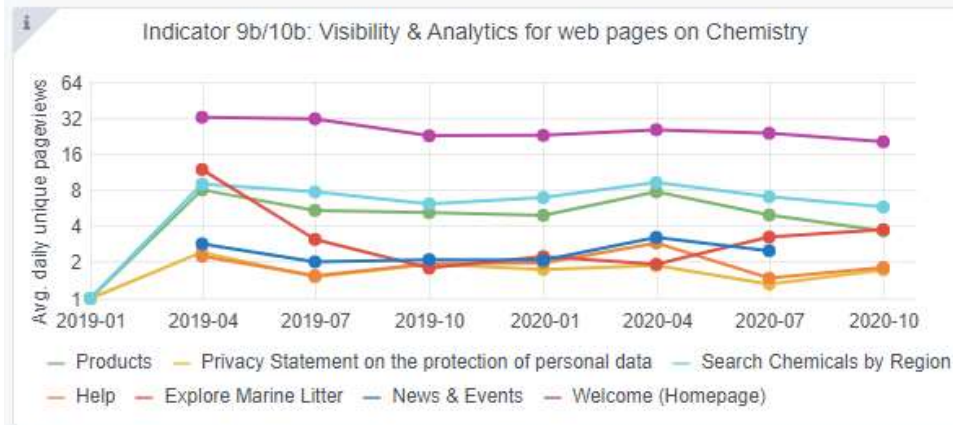
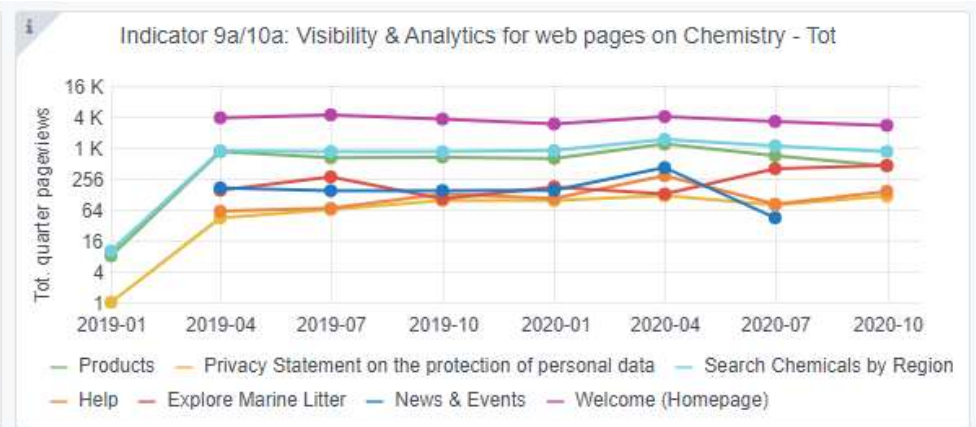
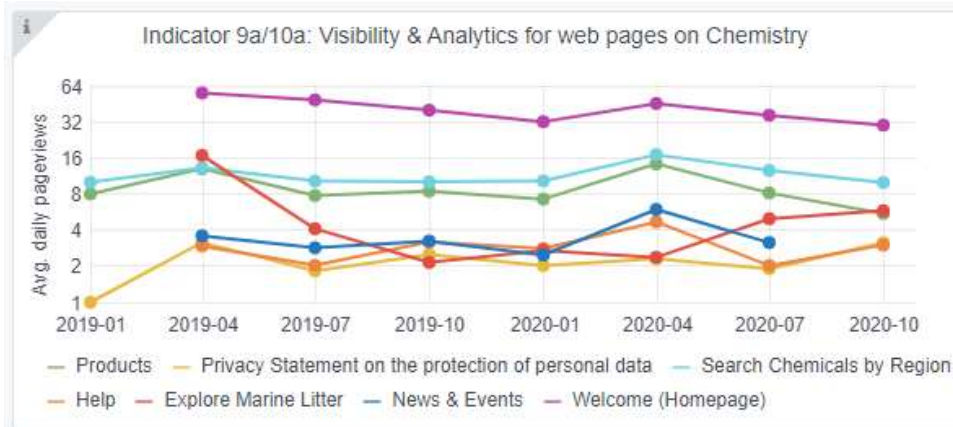


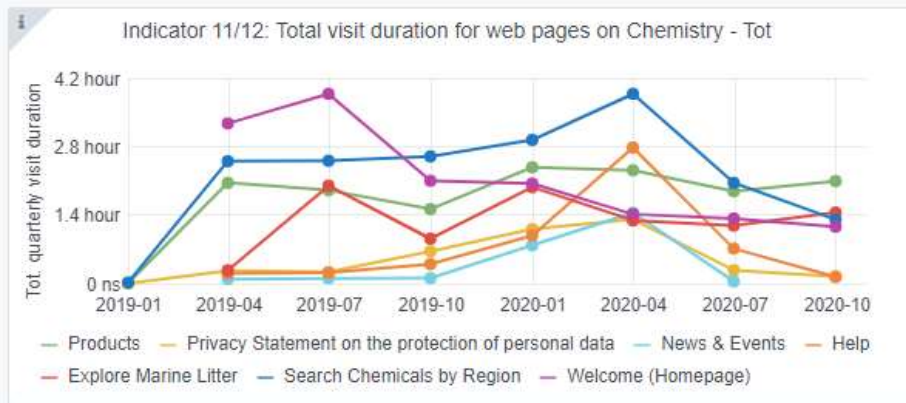
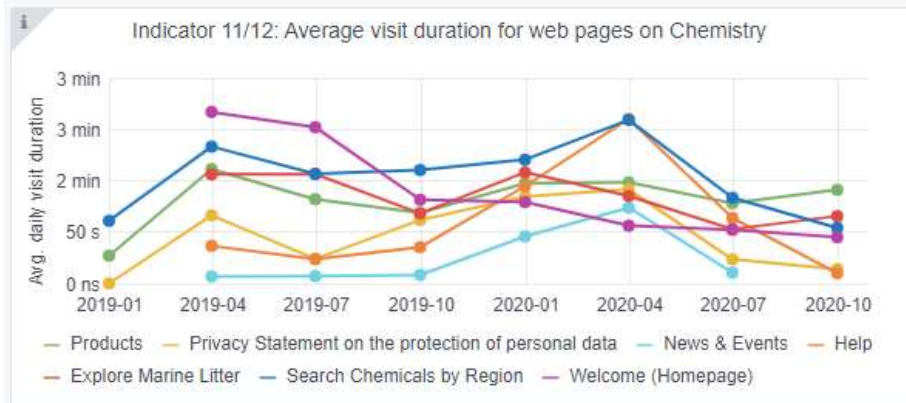
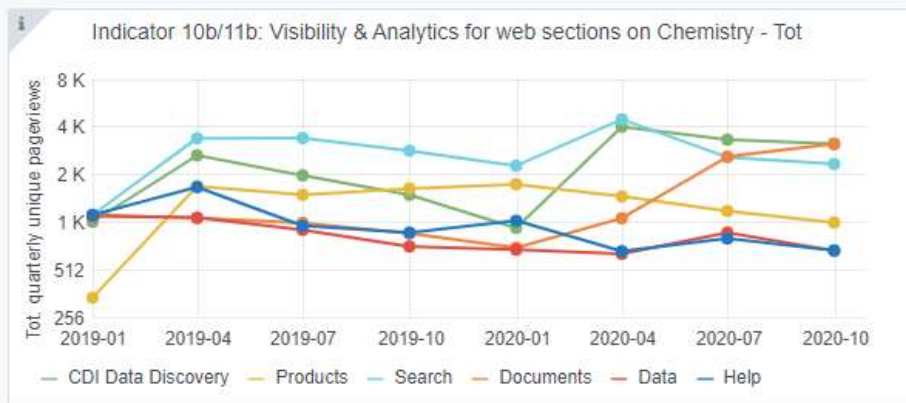
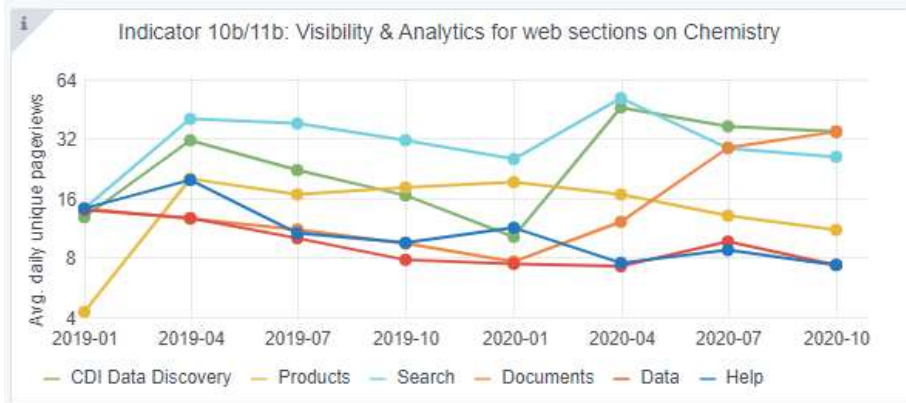
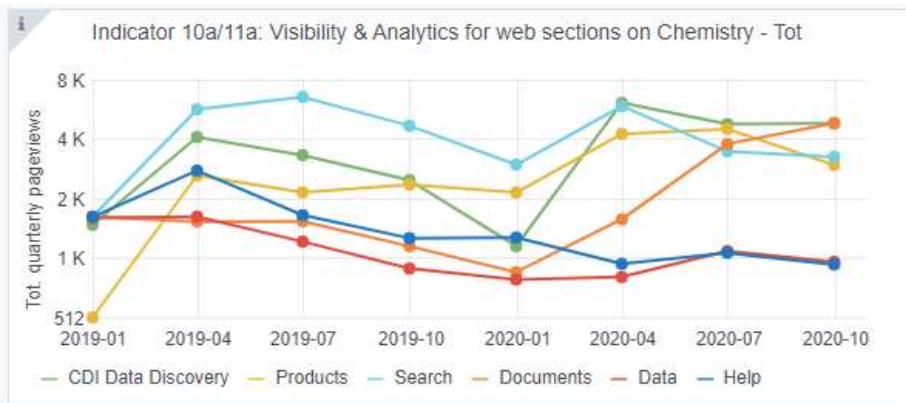
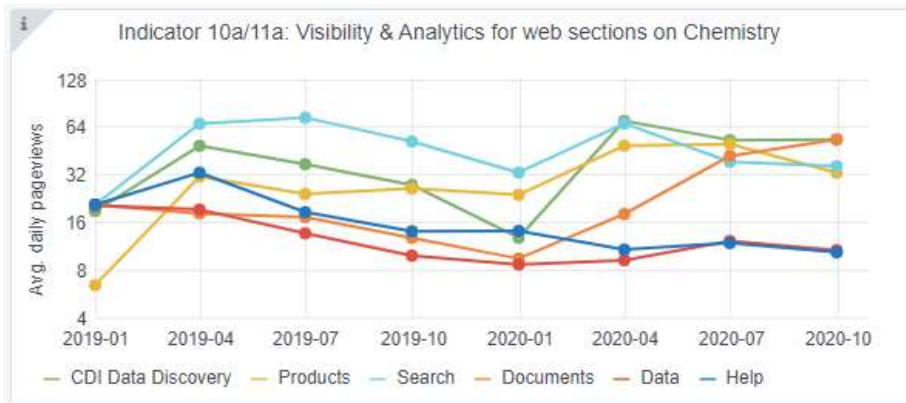
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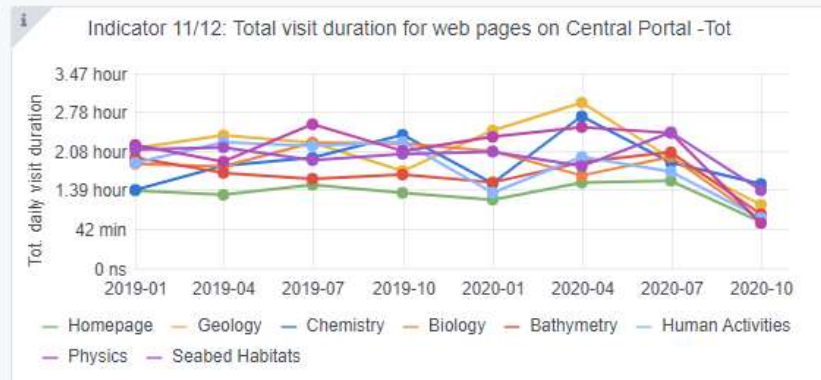
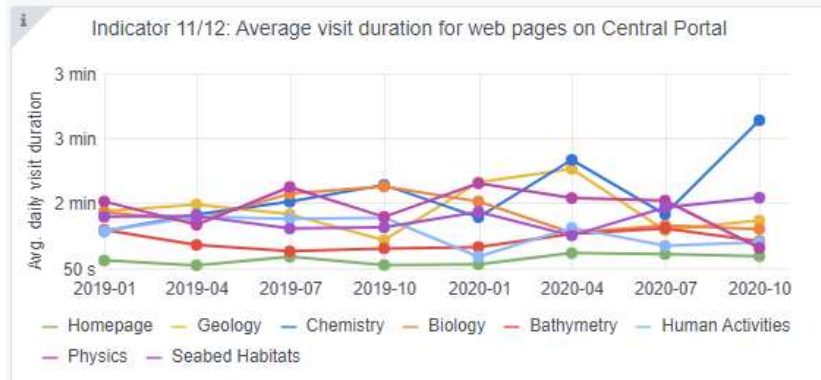
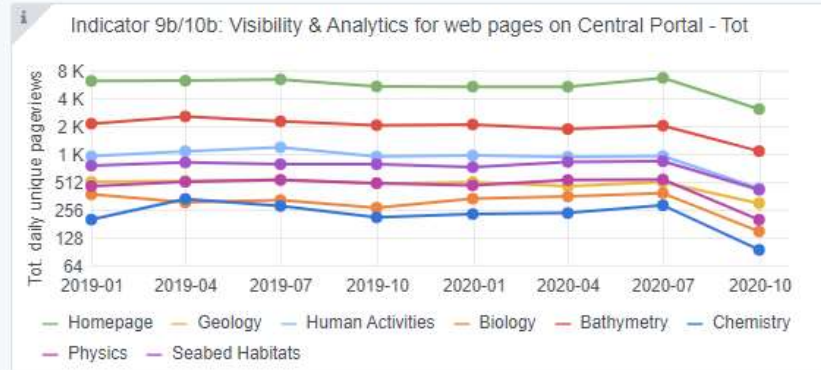
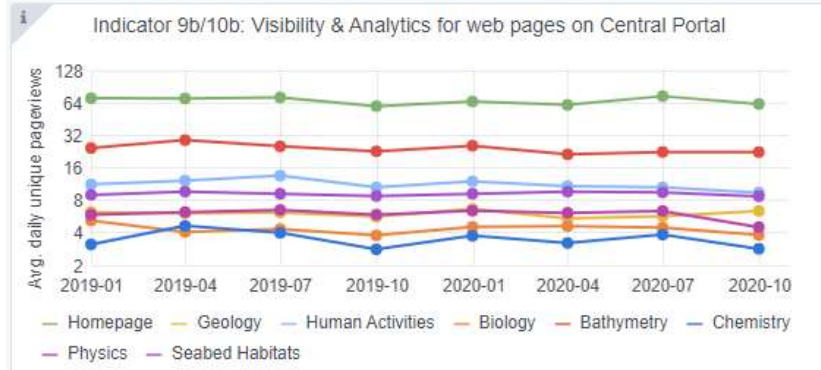
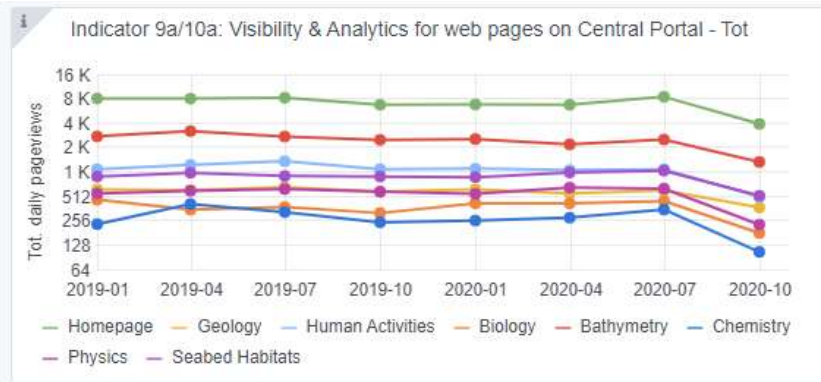
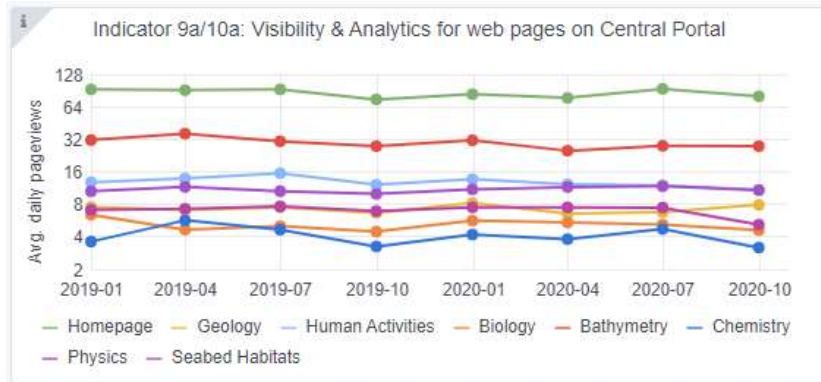


Chemistry

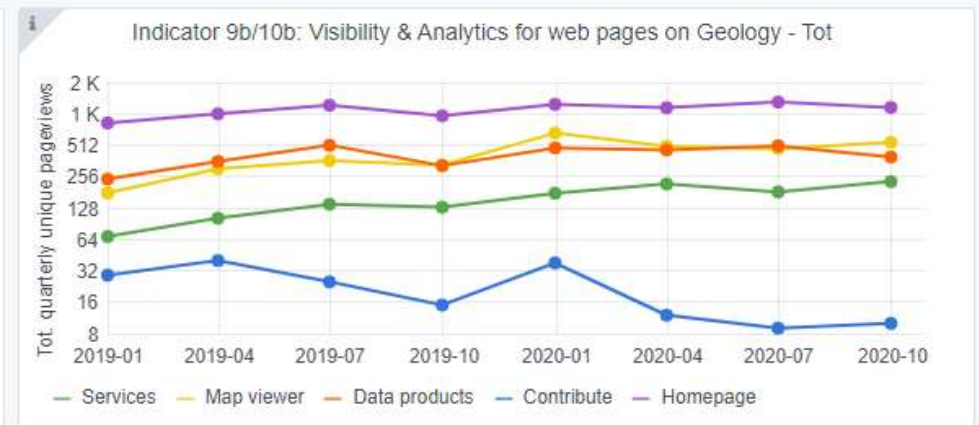
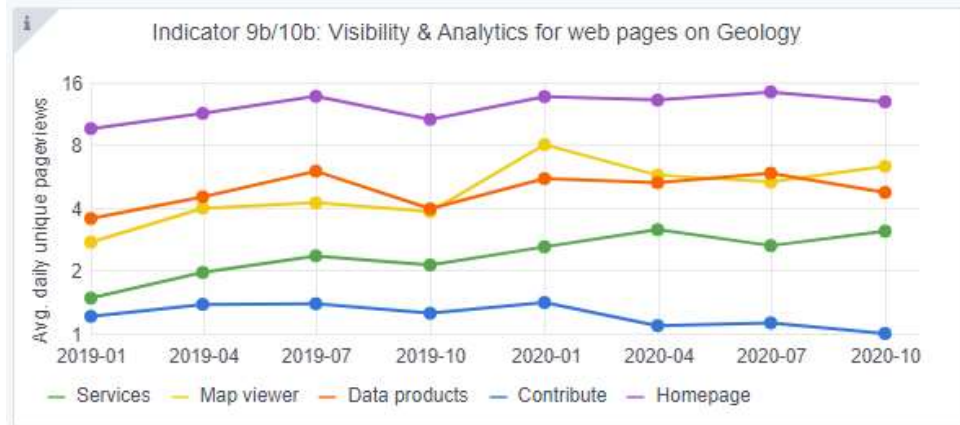
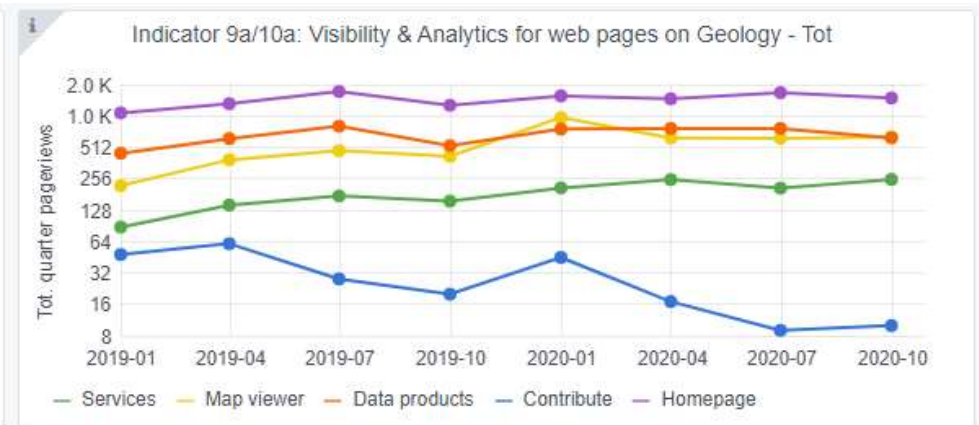
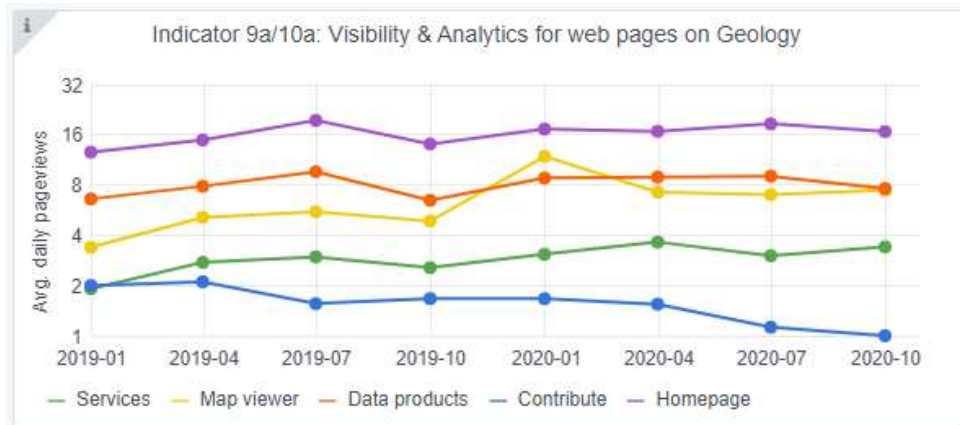


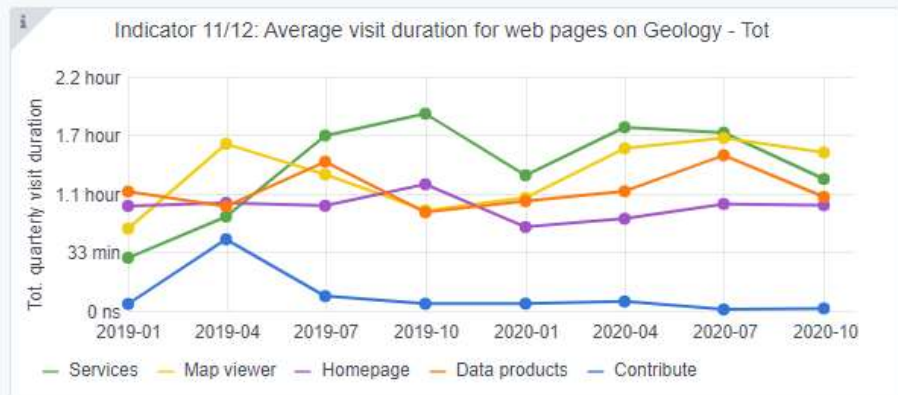
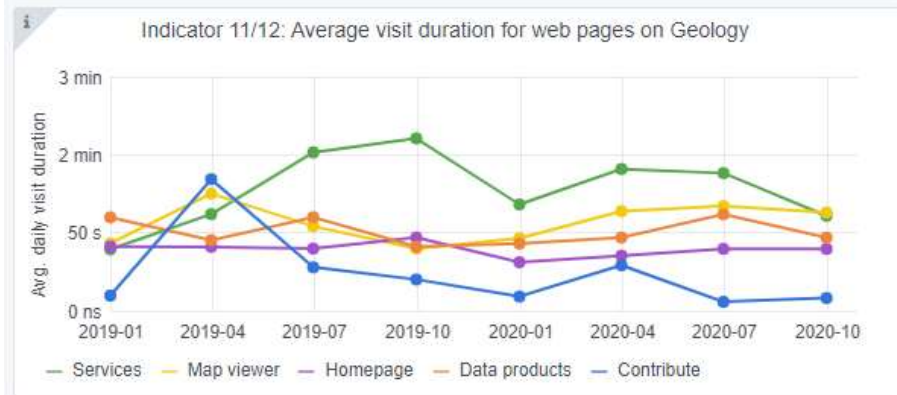
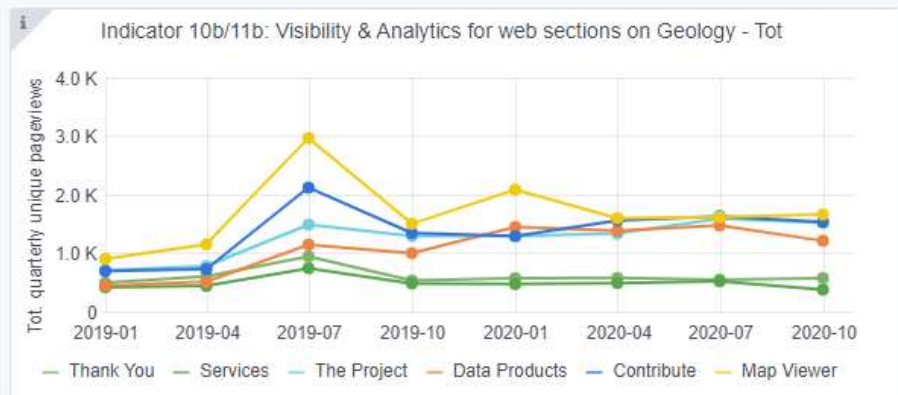
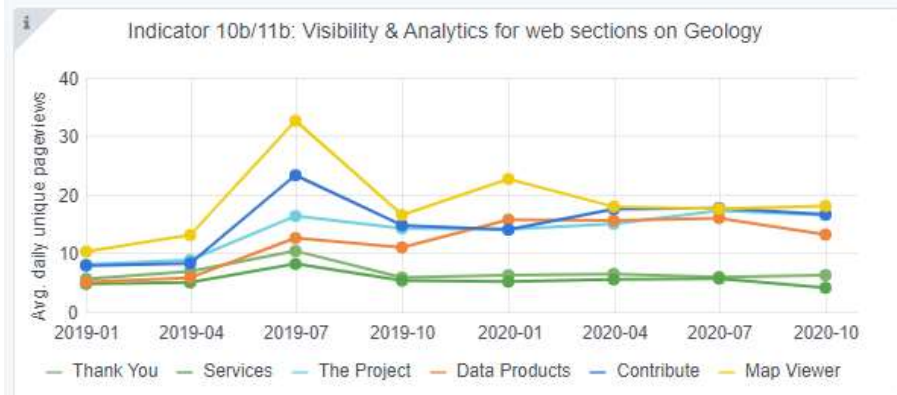
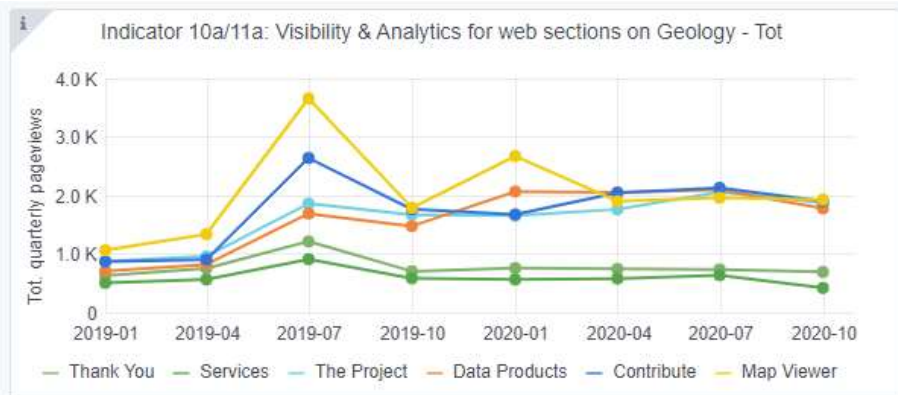
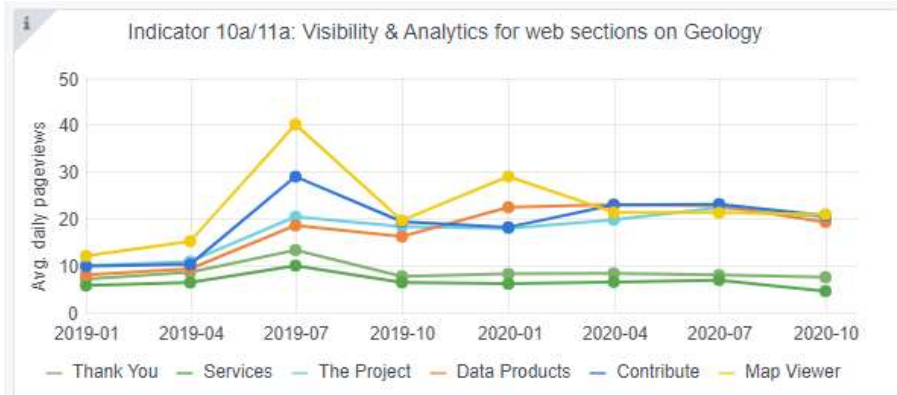


Central Portal

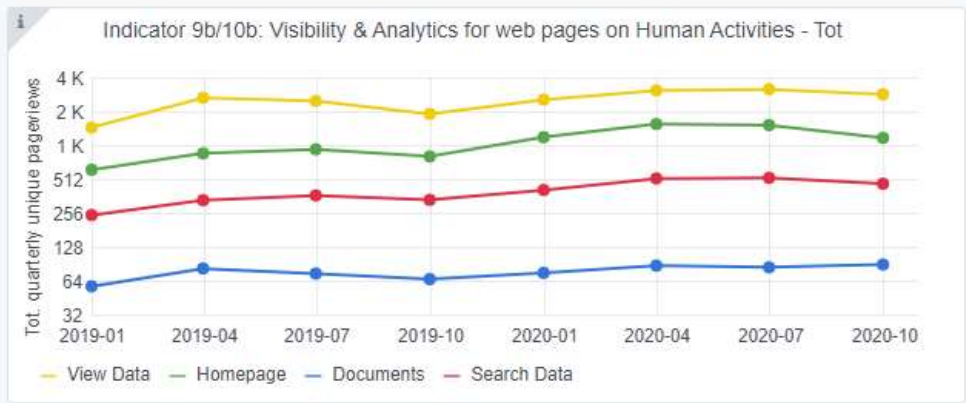
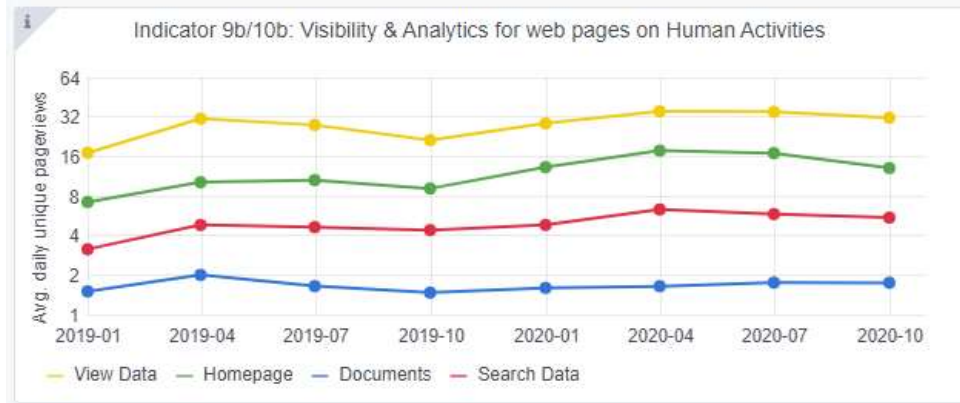
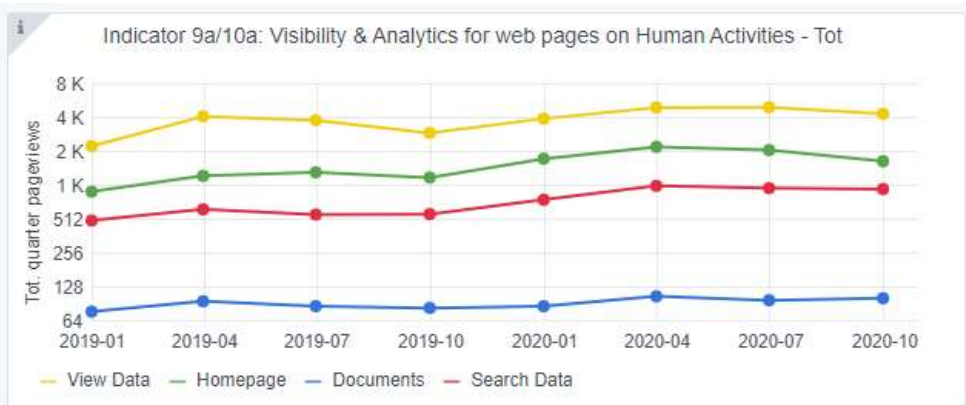
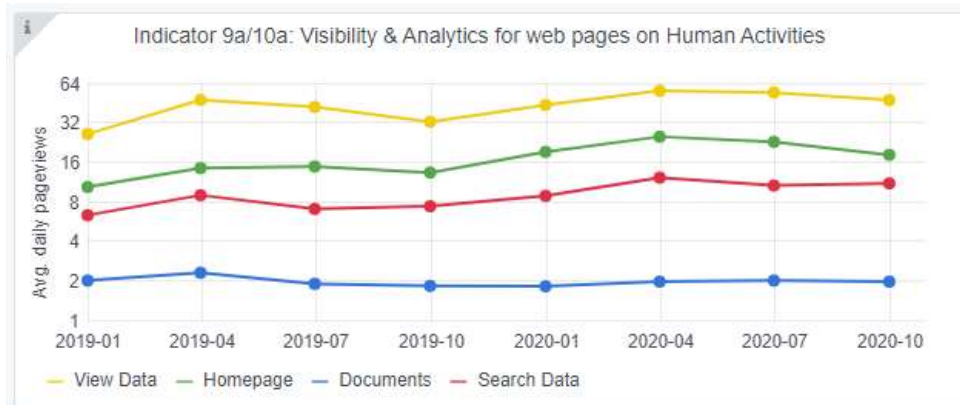


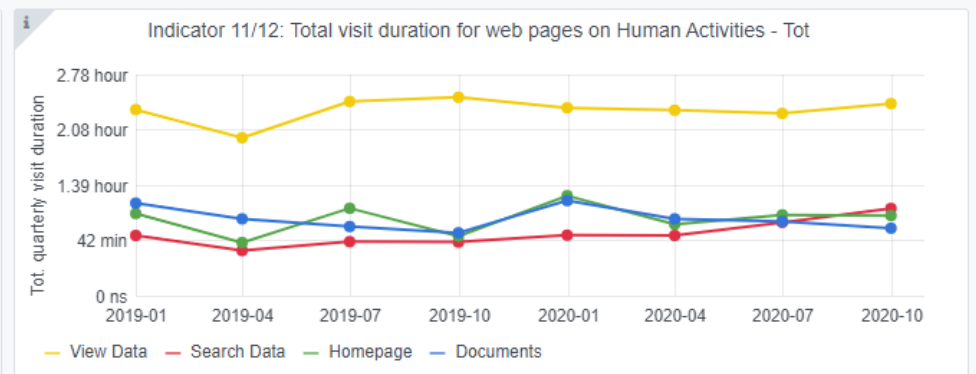
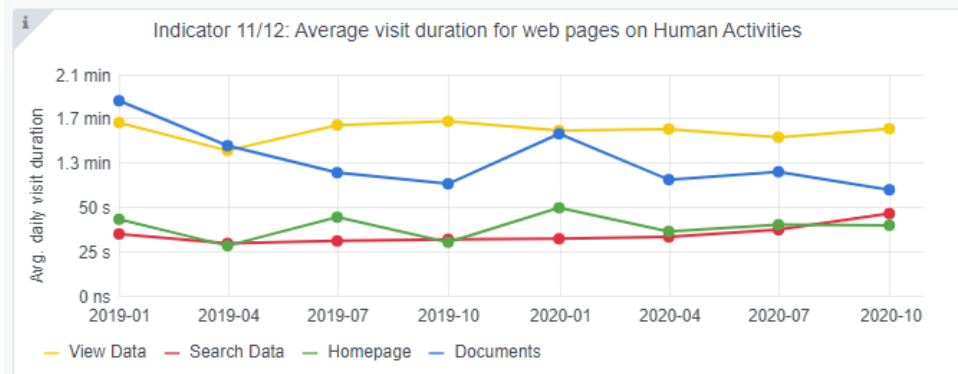
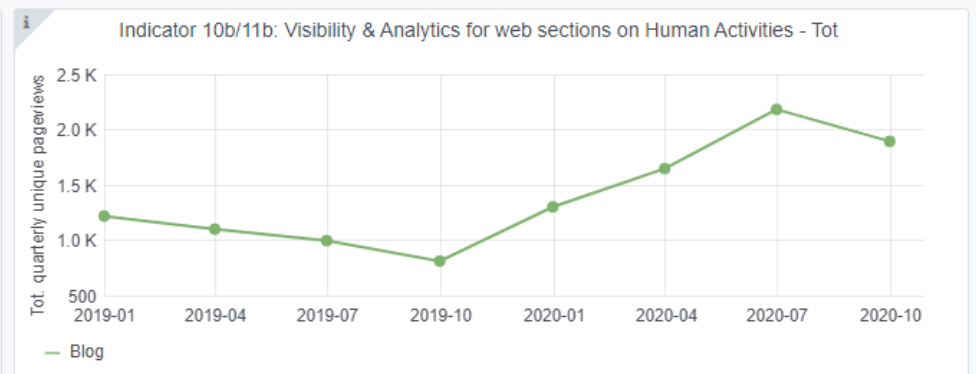
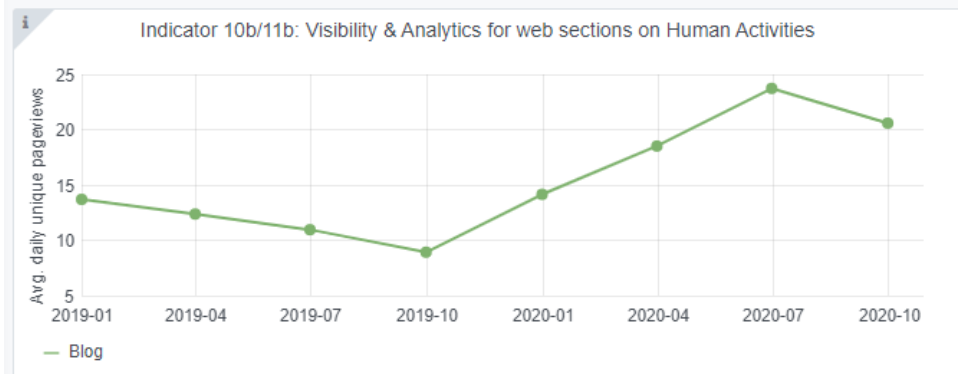
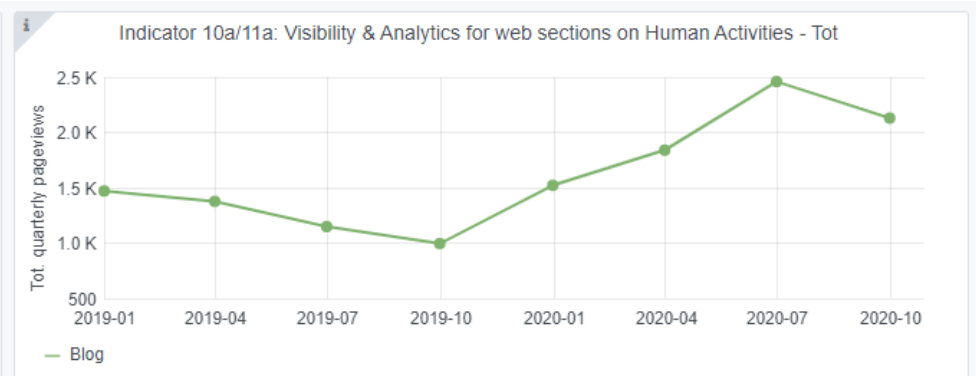
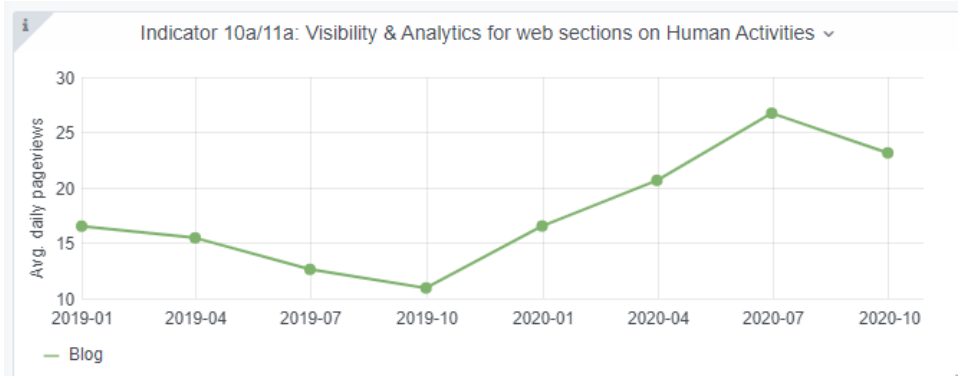
Geology



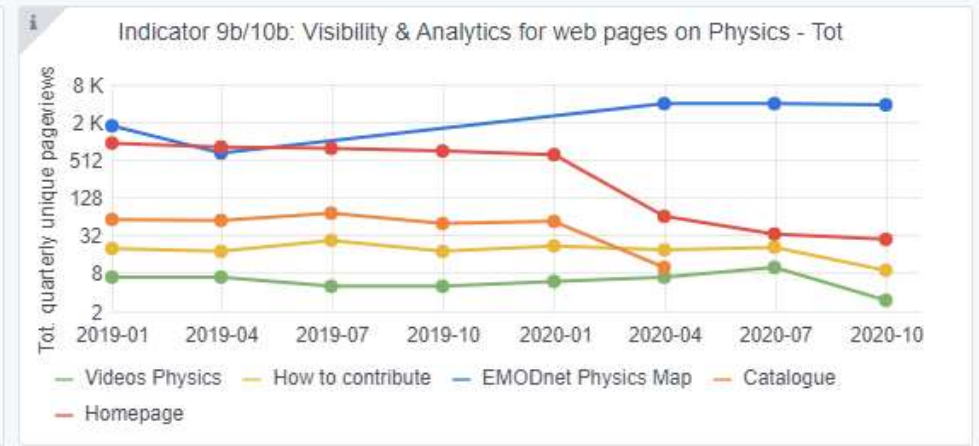
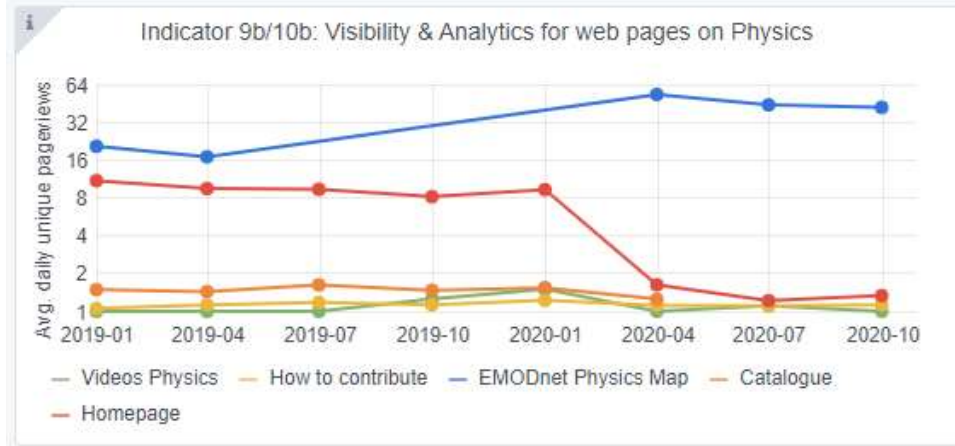
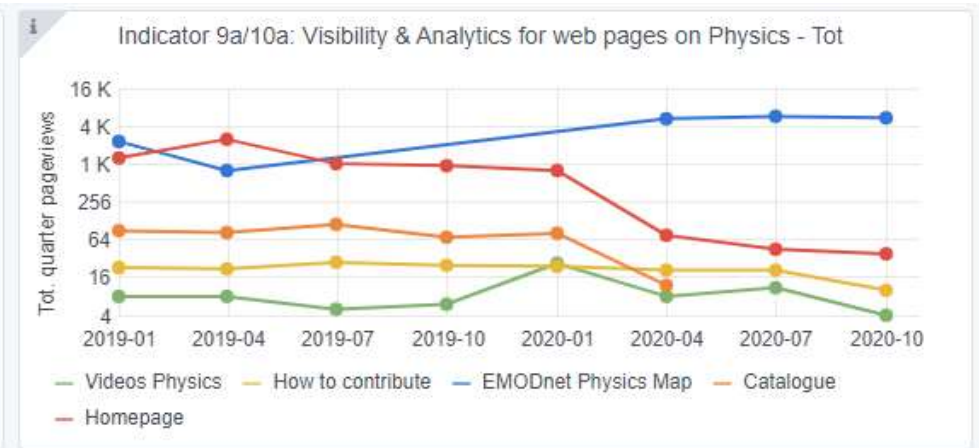
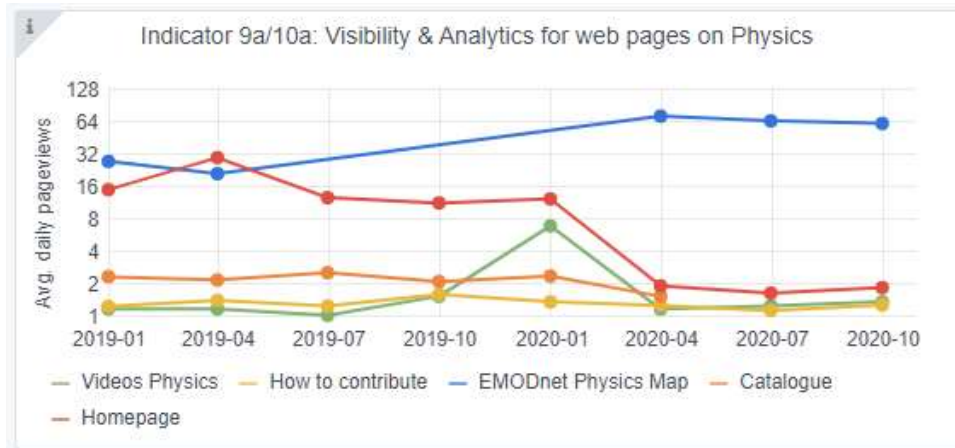


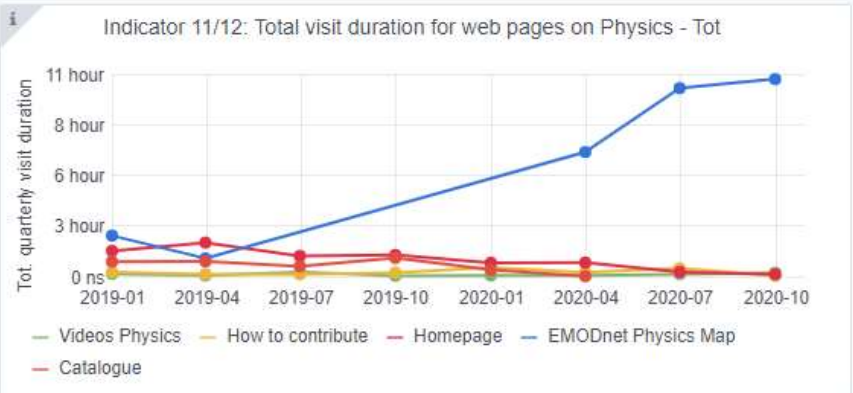
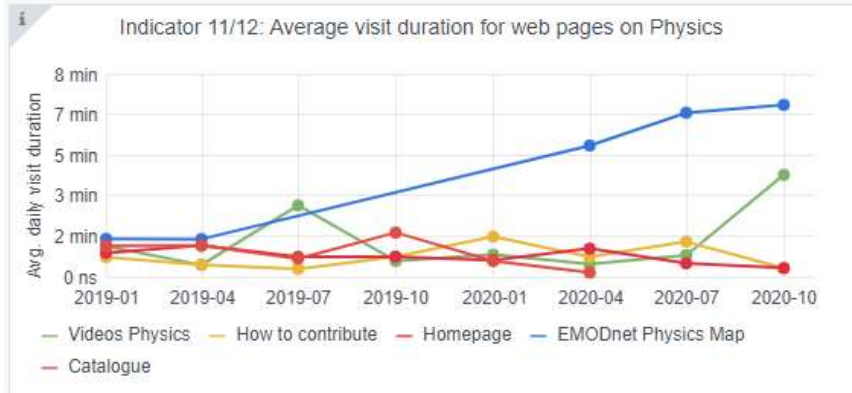
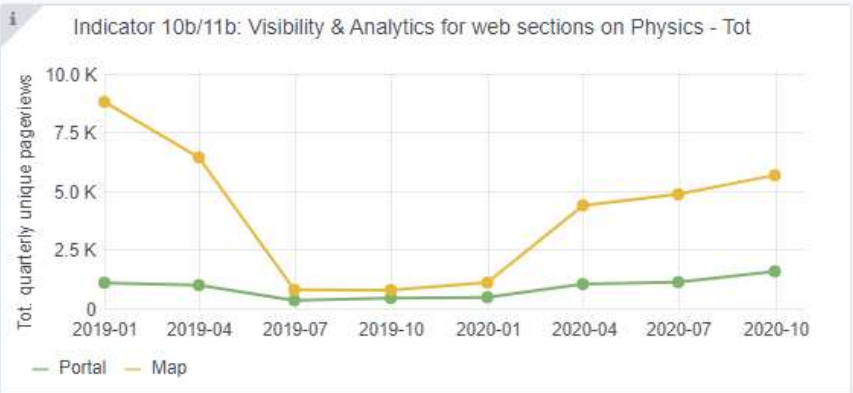
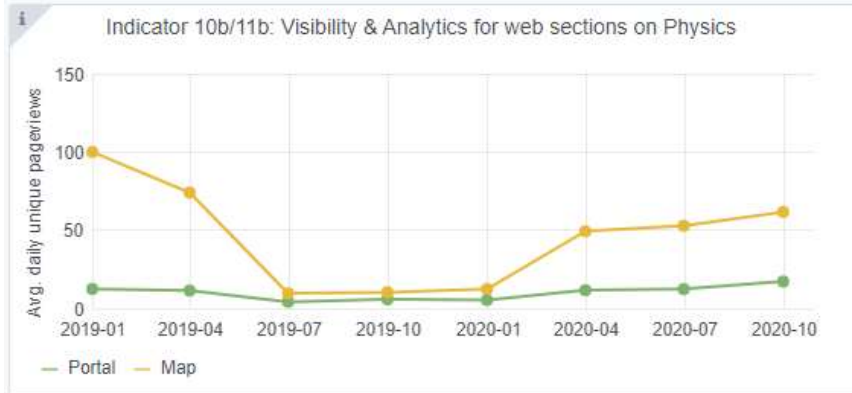
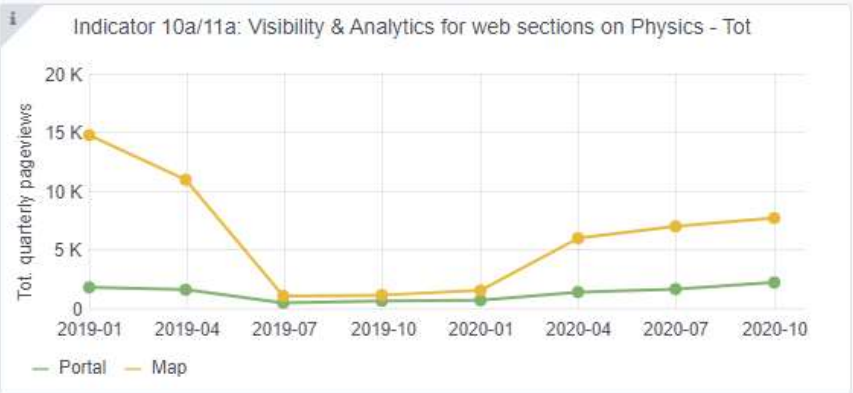
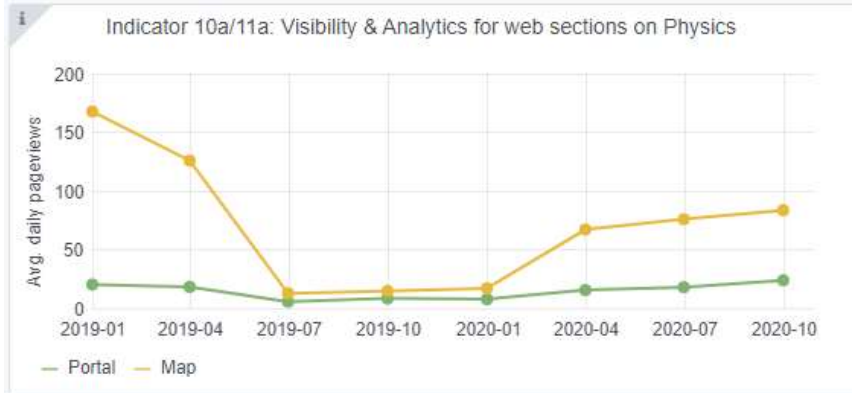
Human Activities





Physics





Seabed Habitats

