

# Features of Atom services

## Atom services - update notification feature.

One of the main quality criteria of open data is its up-to-dateness. Spatial data of ČÚZK are periodically and continuously updated. Information on updating the entire data series or an individual data file (e.g. map sheet, cadastral territory) can be submitted in a user-friendly way precisely through ATOM services.

The features of these services include, in addition to providing downloadable data links and the possibility of searching in data sets using parameterized queries (see [detailed information on these functions](#)), also the feature of providing information about updates.

The functionality is similar to that provided by RSS feeds to website users if they need to be automatically notified of new articles, updates and other content changes. Also, the applications that provide these news reports to users can usually work with both RSS feeds and ATOM services.

The user can choose whether to simply set the notification in their email client or web browser. The setup procedures listed in the [How to read ČÚZK RSS channels](#) are also valid for the ČÚZK service ATOM.

One of the applications, freely available for common web browsers (Google Chrome, Mozilla Firefox, Microsoft Edge), is the [RSS Feed Reader extension](#). In this case, the user who needs to receive information about data updates proceeds as follows:

- 1) On the [RSS Feed Reader website](#), download the appropriate version of this extension for your browser and turn it on in the Extensions tab.
- 2) In the [metadata catalog](#) or on the [information pages of the ATOM ČÚZK services](#), look for the URL for the metadata (service feed) of the ATOM service for the relevant product whose updates it needs to monitor.

Example: In the metadata - [information about the product ZTM 1: 50,000 in S-JTSK](#), I will look for the service feed [URL of the ATOM service for data in SHP format](#) in the "Data download" column or on the [atom - SHP](#) link in the right column.

3) Clicking on the given links will start the RSS Feed Reader extension in the browser and display the xml document of the service feed in a user-friendly form, in particular it will display individual dataset feeds (names of map sheets of ZTM 50/S-JTSK) with links to direct download of zipped files from the repository. It is also possible to include the entire service (service feed) or selected map sheets (dataset feeds) in monitoring updates.

Please note: with a large number of data files for some products, not all items provided by the service will be displayed, and therefore it is advisable to include in the monitoring only selected files determined on the basis of the construction of a parameterized query of the OpenSearch service.

Example:

From the URL service feed, e.g. <https://atom.cuzk.cz/ZTM10-SJTSK-SHP/ZTM10-SJTSK-SHP.xml>, I then select only the data set name parameter "ZTM10-SJTSK-SHP".

I can then determine the parameter for the territorial extent by entering the coordinates of the BBOX, or from the name of the map sheets, which I get for example from a service showing their

advantages - <https://ags.cuzk.cz/geoprohlizec/?p=98> . For the area of interest of the capital city of Prague, it can be a part of the name common to this area, i.e. "Praha".

Question: <https://atom.cuzk.cz/get.ashx?theme=ZTM10-SJTSK-SHP&searchTerms=Praha> I will then include in the RSS Feed Reader's monitoring and receive notifications for updates of only these selected data files.

Other suitable examples given in this [document](#).

4) Furthermore, the user no longer has to worry about anything, as soon as the data provider changes the file in the storage to a more up-to-date one, he will receive a notification, the method of which he chooses in the RSS Feed Reader settings.

## Atom services - data search and download functions.

The links in the metadata information about the products to download data using the ČÚZK map applications using the search and download functions of ATOM services are intended, unlike the above examples, for ordinary users who need to obtain data from the relevant territory as quickly as possible.

An example of using the ČÚZK application to download pre-prepared files for the ZTM 1: 50,000 product:

- Geoviewer application - [Downloading pre-prepared files - selection above the map](#)
- Atom Download Services application – [download of pre-prepared files](#) (also with space limitation option)

The search for the necessary map sheets for download is ensured by supplementing Atom services with OpenSearch services ([example of OpenSearch service description for Atom service ZTM 50, SHP, S-JTSK](#)), which have a limit of 100 search results (in this case, map sheets).

Note: If the user is not comfortable with downloading pre-prepared files via the ČÚZK service ATOM, for example, he needs a different format, the area covered by the file is too large for working on the project or, on the contrary, he is not comfortable dividing it into small parts, he can use another function of the Geoviewer application - [Data slice export](#). The export of a seamless slice of data does not use the functionality of ATOM services, it takes place online over the provider's data storage based on the spatial selection specified by the user. The result can be, especially in the case of raster data, very voluminous, which could make the subsequent use of the data in the user's applications difficult. Therefore, a spatial selection limitation is set for individual products.