

Urban TEP provides several processing centres with pre-installed data processors and user-provided data processors. Urban TEP offers to host data processors and processing chains provided by a customer (service provider, data provider, research project, etc.) in a processing centre.

The On-demand Processing Service offers processing on request. The customer specifies input collection, temporal and spatial extent, the processor to be applied, and its parameters. Processing requests can be submitted using a GUI in the portal and WPS as machine-to-machine interface. After processing, the customer can access the result dataset for download or further use on the platform.

Input data can be Sentinel data and datasets from the Urban TEP data portfolio. Depending on the processing centre, also Landsat data can be used as input.

A processor can be provided and uploaded by the customer. Example processor software packages and interface for processor upload are available. Support is provided during processor integration and external request interface integration.

A budget of monthly processing resources is included in the offer. Within this budget, requests can be submitted by the customer without additional costs. Additional resources will be offered if required.

This service is intended for medium to large scale urban data processing that takes advantage of the combination of satellite data and the Urban TEP portfolio. It is also intended for system-to-system integration with a user's system and Urban-TEP as backend.

Algorithms provided:

- user-provided data processors with support for integration,
- optional selection of open-source processors from Sentinel Toolboxes and other processing frameworks.
- Urban TEP timescan for Landsat-8 and for Sentinel-2
- The data processing service is comprised of:
 - availability of the service described above
 - access to the input data

- up to 2000 processing requests per month computing in the volume of up to 1000 core hours, 8 GB RAM per product
- 6 support cases per year

Optional services by Urban-TEP are:

- Algorithm development
- Processor optimization for High-Performance Computing (HPC) environment
- Support during processor testing on the platform
- Output dataset hosting, integration of the output dataset as layers into VISAT
- Systematic processing as data-driven service to process new data every day
- Bulk processing of large datasets and provision of the processing result
- Training and workshop for processor integration

These activities can be requested in addition to the on-demand processing service.