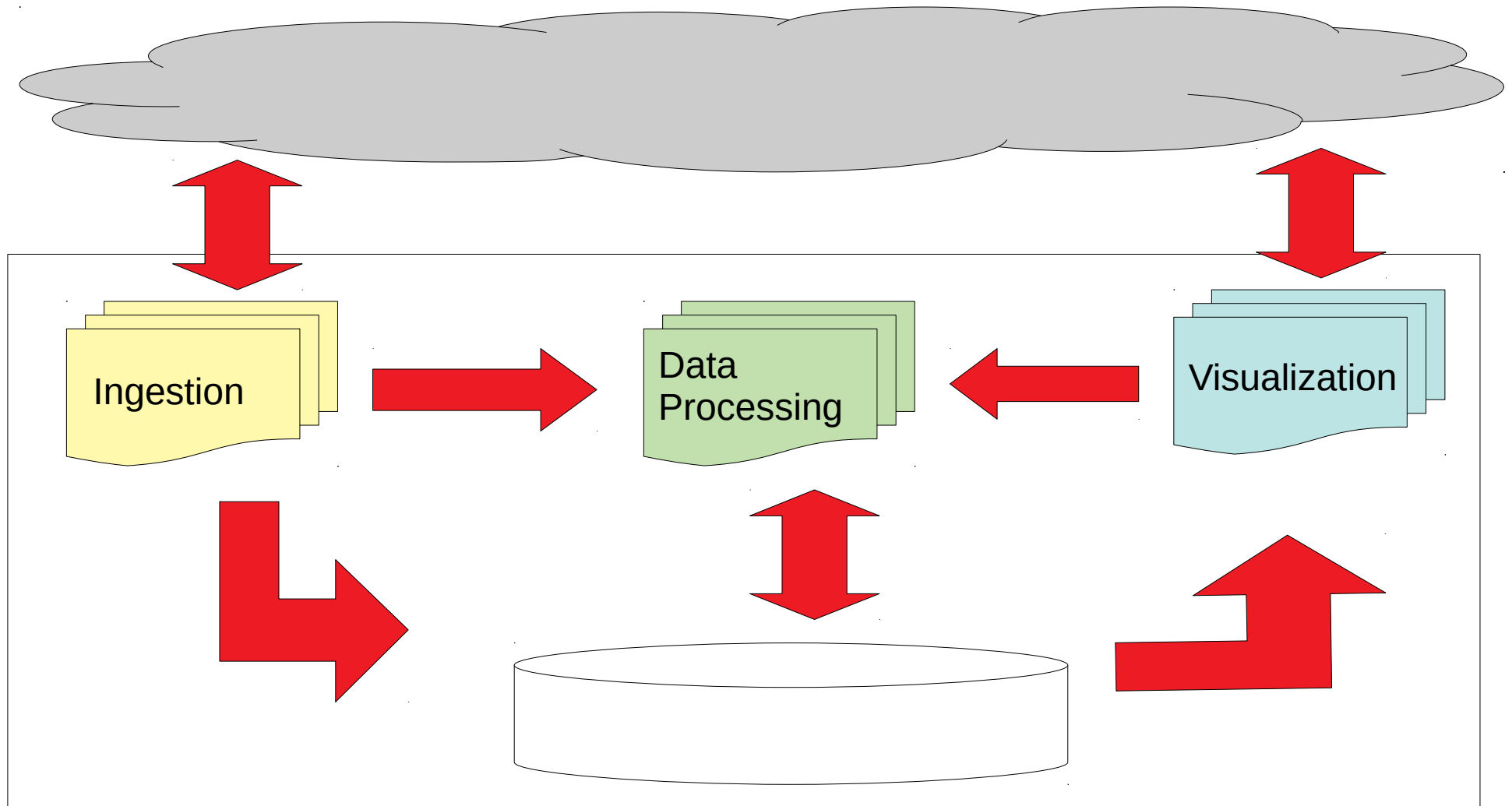


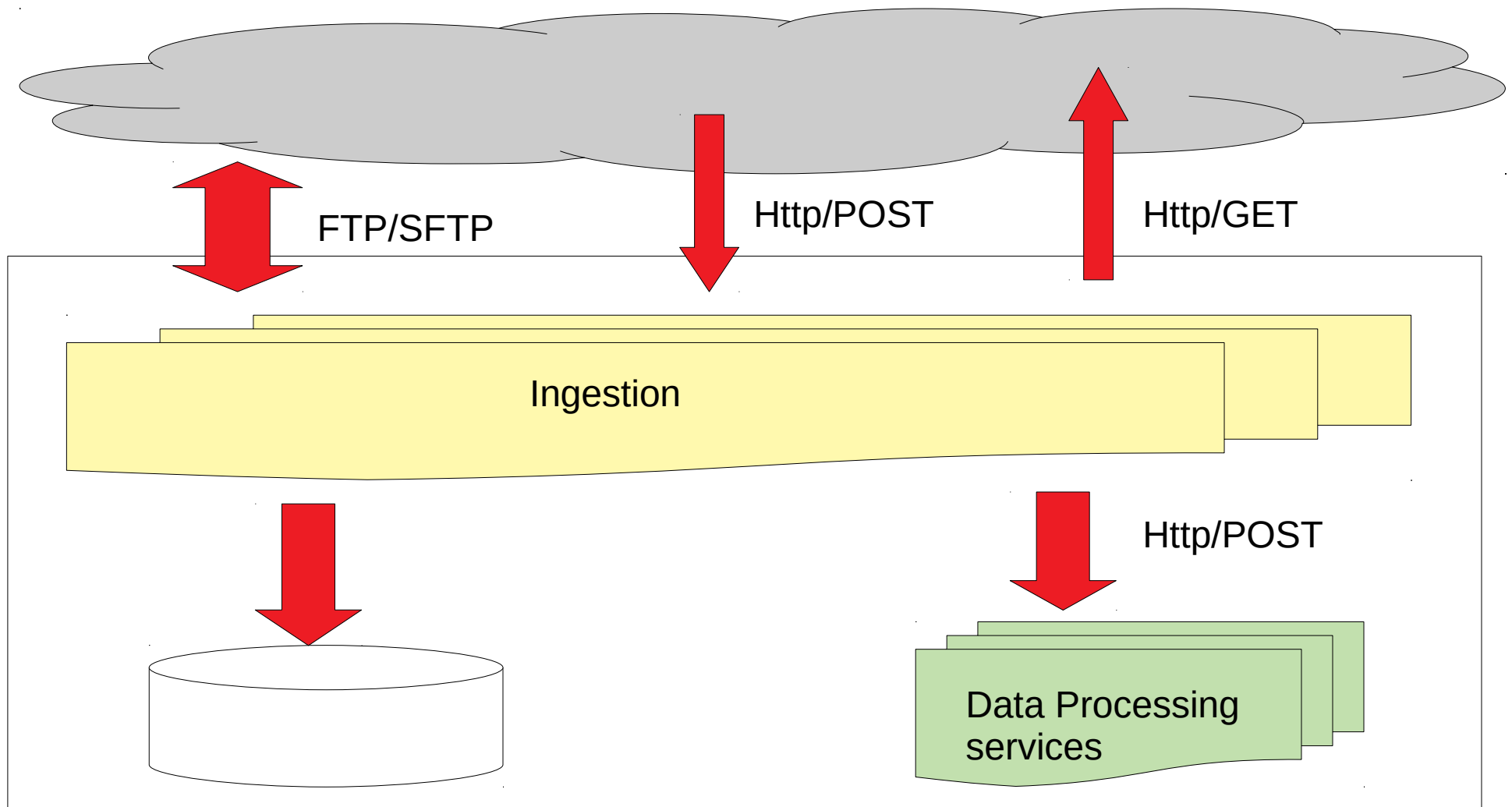


ETS demo

Architecture overview



Ingestion services

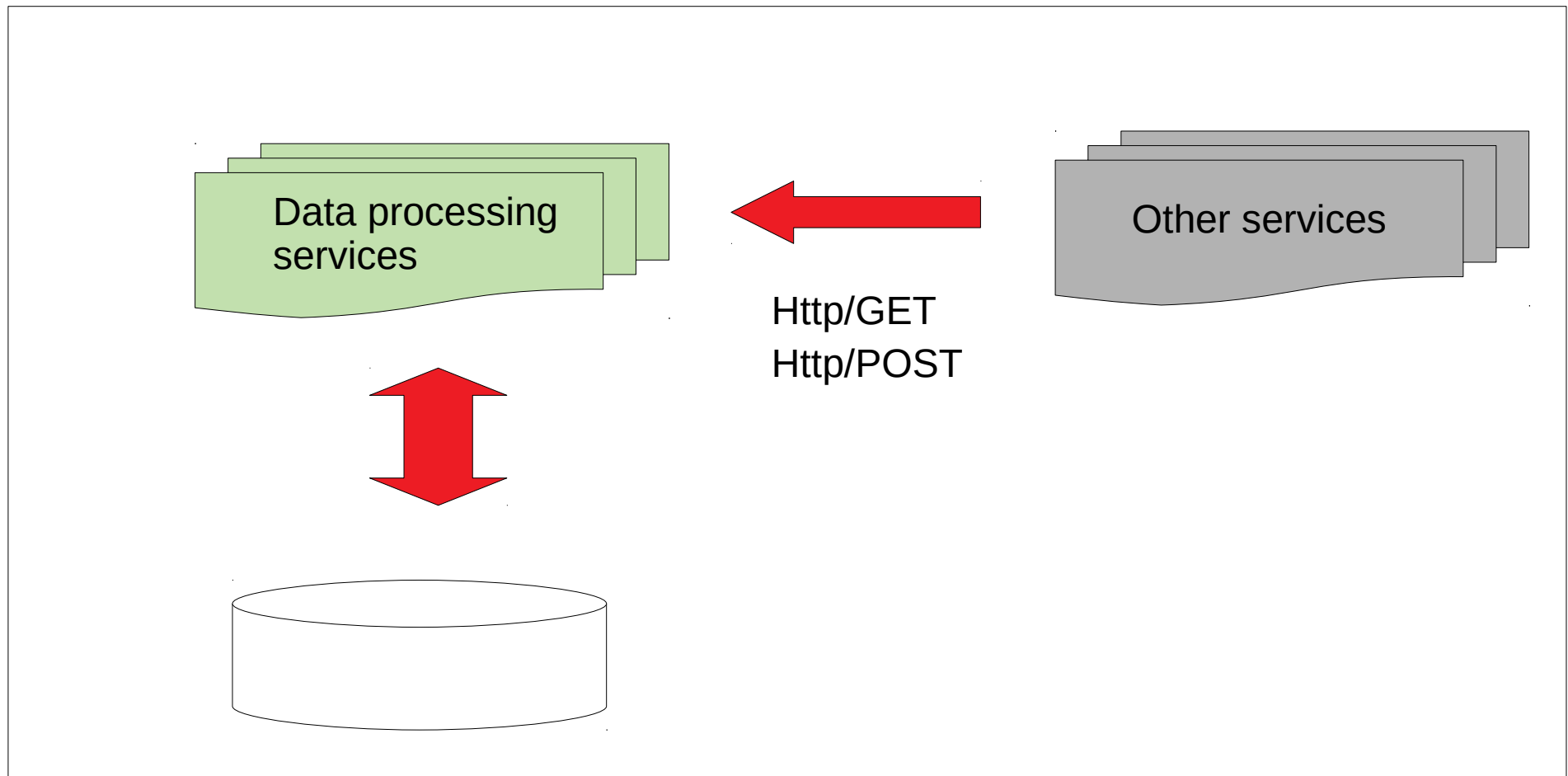




Description

- Retrieve data from external third-party services via different protocols (FTP/HTTP).
- API interactions:
 - External services (third-party)
 - Processing services (in order to spawn on-the-fly calculations)
- All retrieved data is stored in the DB.
- Technologies: django-rest-framework, ftplib, cron.

Data processing services

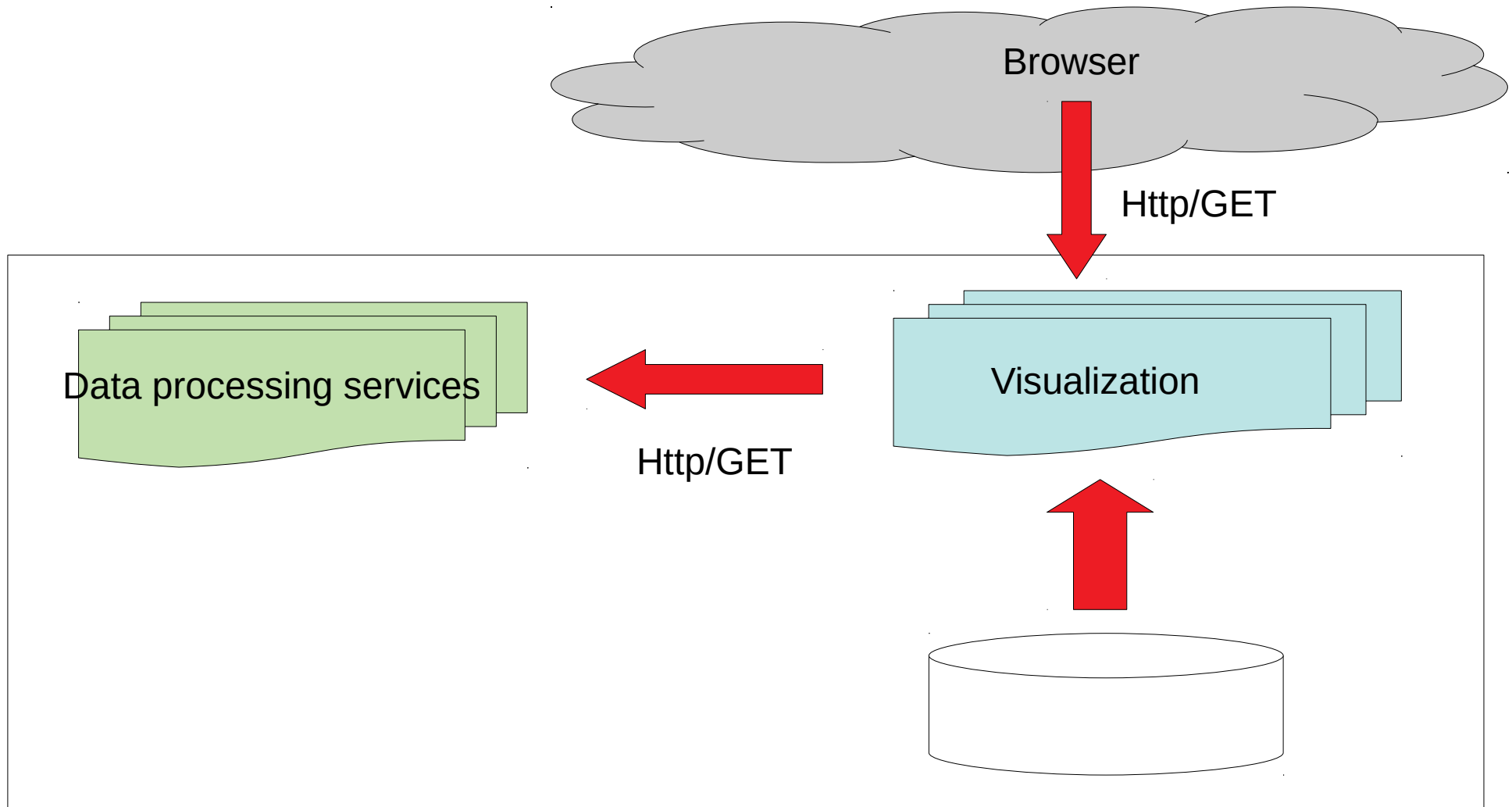




Description

- Perform intermediate calculations before persisting data.
- API interactions:
 - Ingestion services (spawn on-the-fly calculations)
 - Visualization services (spawn on-the-fly calculations and deliver calculated data)
- All calculations are performed using a scalable queueing system in order to prevent bottlenecks.
- Technologies: rabbitMQ/celery, django-rest-framework.

Visualization services





Description

- Provide data to the external clients for visualization purposes
- API interactions:
 - External services.
 - Processing services (spawn on-the-fly calculations).
- Technologies: django-rest-framework.