Minimal requirements for Time Series data: for discussion

- Data Discovery (Query)
    - A service shall be able to receive queries regarding its data collection(s) from a client, with the client placing one or more of the following constraints:
        - RA, Dec.
        - **Target name** — for SSO, or moving objects RA, Dec might not be enough or relevant.
        - **Time range (min, max) — date of observation.**
        - **Integration time (total / mean)** — Note that in mosaic images the total integration time doesn't make much sense. In such case a mean might be better.
        - **Time Sampling / cadence (min, max)** — for knowing type of variability that can be discoverable.
        - Wavelength / neutrino / GW— for combining data in same/different filters (EM) or messenger type.
        - Type of data: photometry, radial velocities, spectra, images, polarisation, other **(*)**
    - A service shall return the list of observations, and the corresponding metadata for each observation, meeting the user constraints. If no constraints are given all list of observations should be returned, and if no data satisfies the constraints, the service should indicate that no data satisfies such constraints.
- Data Access
    - For the observations satisfying the users criteria the service must be able to allow the user to select and download
        - all the observations (the service shall return the complete data and metadata for each selected observation) or;
        - a subset of the data (the service shall be able to extract and return a user-specified subset of the complete data and metadata for each selected observation).
- Subset
    - The user should be able to select a subset of the data based on one or several of the following things:
        - Position (within a certain area)
        - Magnitudes / Fluxes interval (min, max)
        - Radial velocity interval (min, max)
        - Wavelength / Frequency / Energy interval (min, max)
        - Polarisation: a list
        - Type of data: one value among (Events, photometry, radial velocities, spectra, images, polarisation, other)
        - **Time range (min, max)**
        - **Exposure time interval (min, max)**
        - **Time Sampling / cadence** (min, max)

(*) The user might want to limit to only spectra, or only photometry, etc., "other" stands for anything that would not fit into these categories of data. At a second step, the user might want to set further filters on each of the possible fields, e.g. on magnitudes, on radial velocity, etc. Constraints on those parameters shall be possible at the discovery phase or at a second phase, on the data subset.