Workflows Questions
It could be helpful to see some practical examples in detail of the implementation of the methodology for defining critical rainfall threshold based on information on historical events (suggested in the Heavy Rainfall Workflow). What sources have been used? how to "validate" the information? how to ensure the quality and reliability of the information collected and the final results?
In the Heavy Rainfall Workflow, what data would you recommend to use to assess vulnerability and exposure? could you provide some specific insights on the matter and more practical example?
Are all the combinations of GCM and RCM datasets in the CDS legitimate or is there a compatibility between the two that should be taken into account? if so, how? could the project provide some insights on the matter?
To integrate the local climate data, we have difficulty to convert regional CSV data-sets to netCDF format and vice versa. Can a python script be developed and integrated to related workflows to see the structure of CDS data sets?
In Heatwave XCLIM Workflow, we need to specify thresholds for Tmax and Tmin. Considering 90percentile of temperatures will be more accurate for thresholds. Can an additional python code be included to XCLIM to calculate the 90pct, 95pct in 2-3-4-5 days, a of Tmax and Tmin in historical data, so that we can decide to specify as thresholds?
In Agricultural Drought Workflow, GAEZ data set does not reflect the real situation in our region. How can we integrate our site-specific data for yield productivity (ton/ha), unit revenue of crops (euro/ton) and existing irrigation patterns? Can a simple CSV file be developed and integrated to workflow (like crop table) or any other simple method?
For the regions with missing datasets in certain workflows (i.e. droughts), could the methodology and code used to create the preprocessed datasets be shared to facilitate their creation and enable application of the workflows?
For the heatwaves workflow, do you have alternative methods to translate/interpret satellite-derived land surface data (LST) levels into human-perceived heat feeling?

Do you have recommendations on how to convert significant ocean wave heights near shore into run-up estimates?
Is there a possibility to integrate multiple risk workflows (e.g., heatwaves and drought) into a unified workflow to assess compound climate hazards that occur simultaneously and may interact in complex ways?
Can the risk matrices and outputs produced via CLIMAAX notebooks be directly integrated into decision-support systems or dashboards for use by regional stakeholders and authorities, such as agricultural directorates?
In regions like Aydin, Türkiye, where high-resolution livestock-specific data is limited, does CLIMAAX propose or support any data gap-filling methodologies or proxy indicators within its workflows?
Are there simplified or low-capacity versions of the CLIMAAX workflows being developed for local institutions that lack technical expertise, or are the current tools mainly targeted at technically skilled users?
For all workflows applied, the current methodology is based on outputs from a single CMIP5 climate model. While this approach provides a useful baseline, it would significantly enhance the robustness and credibility of the risk assessments to incorporate the latest CMIP6 model outputs and adopt a multi-model ensemble approach. Using CMIP6 ensembles would allow for a more comprehensive representation of uncertainty and improve the reliability of future climate projections used in the CLIMAAX workflows.
Some of the auxiliary data (like population or land use) mentioned in the methodology weren't available for download at the time we applied the workflows. It would be helpful if these datasets could be provided in a separate, easy-to-access repository for future users.
The high-resolution modelled river flood hazard maps for Europe provided by the JRC under historical climate conditions were useful for estimating general river flood patterns. However, the future river flood hazard maps from Aqueduct Floods were too coarse, even for a large basin like the Büyük Menderes in the Aydin region of Türkiye. Due to this limited spatial resolution, we couldn't use them effectively for future flood projections.
How adaptable are the workflows to regions outside Europe, particularly in terms of data availability and applicability of the methodologies?

When downloading elevation data through the specified link via code, there are occasional connection errors such as "site unavailable." In this case, the existing file can be manually downloaded. Can we directly use this file instead?
There is no clear reference within the data to select the correct class (key) for the region being studied under Thermal Climate Zones. In this case, how should the corresponding TCZ key value for the region be determined? Alternatively, can this dataset be directly downloaded from the specified link and used by masking?
Can the shared crop table data be used directly for Turkey, or is it necessary to prepare a customized table considering Turkey-specific crop patterns, productivity rates, or cultural characteristics?
Different sources such as the GAEZ Data Portal ([https://gaez.fao.org/pages/crop-summary) (https://gaez.fao.org/pages/crop-summary) and MapSPAM are provided for crop data. Which source should be preferred for analyses in Turkey? If data is to be downloaded from the GAEZ portal, which parameters and data layers should be selected?
Will you provide access from the river flood toolbox to a dataset with maximum discharge values and percent change in maximum discharges for present time and future scenarios? As mentioned in the work plan of our project, in order to conduct the analysis of the impact of climate change on flood hazard in the second phase of the project, we need to have data on the climate change impact on maximum discharges (as value of discharges or percent change) with different return periods available from the toolbox. In order to obtain relevant results in this analysis, we have to consider the evolution of peak discharge values, which have a higher sensitivity to climate change impacts compared to the values in the water depth grid currently available from the toolbox.
Some difficulties were encountered working with the extreme precipitation workflow, in order to understand the details/correct geographical projection associated with the bias-corrected datasets. How could we get this information easily?
How are workflows designed to be flexible and adaptable to the specific needs of different pilot regions or case studies? Is there a level of customisation built into the workflows?
What are the preferred data formats used in CLIMAAX workflows to ensure interoperability and ease of processing?

How do workflows facilitate the integration of different types of data (climate, impact, socio-economic) and their joint analysis? Are there specific tools for managing and processing this data within workflows?
How do workflows support the regular updating and revision of risk assessments, ensuring that they remain relevant and in line with the latest scientific evidence and changes in the regional context?
Could it be possible to describe in higher level of detail the input and output datasets as well as each process steps in the Workflows descriptions with the simpler language, providing the references (or explanations) of key concepts used in Handbook? This would increase usability of the workflows also by the less experience, but enthusiastic users.
Similarly, could it be possible to improve graphical and narrative description of the workflows' outcomes (graphs, plots, tables, datasets, units of measurement) in Handbook?
Are there some plans to strengthen the online infrastructure environment in order to avoid the performance and availability issues?
Any plans to generate the consistent georeferenced output data resources across the workflows (e.g. GeoTIFF, geopackage) for easier integration on GIS and sharing the outcomes via services/APIs? Of course, for fast communication static images (png), can stay as additional representations.
I've noticed that the kernel is unstable and needs to be restarted. Has this been noticed by the project management? Is it linked to the server workload? We can use up to 73GB of persistent storage, which fills quickly when two workflows are processed. Is this normal or a usage issue on our end? Is it possible to extend this storage space?
The data available are not precise enough when restricting ourselves to a small territory, a few dozen km2 for example. How can we prepare exogenous data so that it can be integrated into existing workflows? How can the data model be adapted? Has this already been done, and if so, do you have any example of such integrations? Can data exports resulting from notebook processing be easily converted into a GIS-compatible format, e.g. Geojson or Shp? Has this already been done, and if so, do you have any example of code snippets?