

# EU H2020 and FP7 Projects

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- **Recommendation 2018-06-12/03:** The UG recommends to explore ways to include in a systematic way higher-level science data products and pipelines developed from ESA data based on EU funded programs (e.g. FP7 and H2020) and other externally funded research teams in the astronomy archives. The purpose of this effort should be, next to preservation on long timescales, to make these data and analysis tools accessible through ESA science interfaces such as ESASky.
- **Action 2018-06-12/07:** D. Baines to identify and produce a list of EU FP7 and H2020 projects producing high-level science data products from ESA astronomy mission data.

- <https://cordis.europa.eu/projects> -> explore interactive H2020 data
  - Searched for Theme = Space and Topic description with 'Scientific data'
  - 6 projects:
    - BeyondPlanck (Planck; WMAP; CBASS)
    - Exoplanets\_A (HST, XMM, Gaia +others)
    - EWC (HST; in prep for Euclid)
    - RADIOFOREGROUNDS (Planck)
    - SBNAF (Herschel, Akari, Gaia +others)
    - StarFormMapper (Gaia & Herschel)
- Data will be ingested into the ESA Planck Legacy Archive

- <https://cordis.europa.eu/projects> -> projects and results -> see all FP7
  - Searched for FP7-Space and 'Exploitation of space science and exploration data'
  - 5 projects:
    - ARCHES (XMM-Newton)
    - ASTRODEEP (HST, XMM, Herschel, Spitzer)
    - DISCANALYSIS (Herschel, XMM, HST +others)
    - ETAEARTH (Gaia, Kepler, HARPS-N)
    - EXTraS (XMM-Newton)
- Data will be ingested into the ESA XMM-Newton Science Archive  
(experts in both projects are members of the XMM-Newton Survey Science Centre; SSC)

- The SSC (XMM-Newton Survey Science Centre: <http://xmmssc.irap.omp.eu/>) is planning to produce radio to gamma-ray SEDs for bright sources detected in the EPIC cameras. This is currently under preparation by Strasbourg, reusing the Arches SED pipeline for the 4XMM catalogue. Plan is to release 4XMM during 2019 and ingest the catalogue in the XMM-Newton Science Archive (XSA) providing access to the new SED plots.

- Since 2017: XMMSL2 catalogue, ingested in XSA, contains data from the EXTraS project: XMMSL2 is the second catalogue of X-ray sources found in slew data taken from the XMM-Newton observatory, and has been constructed by members of the XMM SOC and the EPIC consortium on behalf of ESA.
- In particular, the XSA provides access to one of the catalogue columns: *US\_EXTRAS: This release of XMMSL2 makes use of work carried out within the framework of the EXTraS project. XMMSL2 is closely linked to the long-term variability (LTV) catalogue within EXTraS, and this US\_EXTRAS column provides the corresponding SRCID value within the EXTraS LTV catalogue.*
- The SSC is also planning to improve the variability information (intra observation and inter observation) for the sources in the EPIC Catalogues (4XMM and later). They are currently working on the definition of the variability tests, and the EXTraS work is taken into account. The variability information will be included and made available via the XSA.

- 2 EU H2020 projects (Radioforegrounds and BeyondPlanck) will have their data ingested into the Planck Legacy Archive.
- 2 EU FP7 projects (ARCHES and EXTraS) will ingest (or are currently ingesting) data into the XMM-Newton Science Archive
- 7 EU H2020/FP7 projects still to look at.
- Contact the project PIs to understand their data and needs ?
- Assess if the data should be included in any ESA Science archives ?
- Provide recommendations if data is identified ?

[NOTE: an 8<sup>th</sup> project was added during the discussions: DUSTPEDIA]