



Accéder aux données*

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* Accessing the Data





Gaia Data Release 1

- 1 B of stars with positions and G magnitudes
- 2 M of TGAS stars with positions, parallaxes and proper motions
- Lightcurves of a subset of RR Lyrae (2595) and Cepheid (599) variables
- 2152 ICRF quasars with positions and G mag.
- pre cross-matched tables between Gaia DR1 and large catalogues





Gaia Data Release 1

- starting from 14 September 2016
- · available via Gaia Archive and partner data centres



- soon at VO-Paris
- · demos on querying and retrieving data from Gaia Archive





Astronomical Data Query Language

- $\cdot\,$ is a flavour of SQL for astronomers to access databases via TAP
- · is an IVOA standard: www.ivoa.net/documents/latest/ADQL.html
- provides rich geometry data types/functions
 - BOX, CENTROID, CIRCLE, POINT, POLYGON and REGION
 - CONTAINS and INTERSECTS
 - COORDSYS, COORD1, COORD2, AREA and DISTANCEC
- Nicolas introduces SQL/ADQL...





Demo

archives.esac.esa.int/gaia





exercise 1: create an account



exercise 2: search with Simple Form

gaia archive				and the second	
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Simple Form ADQL Form Query Results					
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exercise 3: search with ADQL Form

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exercise 4: upload personal data

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exercise 5: cross-match two tables

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Using applications





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exercise 6: use TAP service in Topcat

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Examples (A)				





Advanced

- integrating **The Archive** into your research work flow with open source techniques
- · W3C standard, Http connection with RESTful interface
- IVOA standards: www.ivoa.net
 - Table Access Protocol (TAP)
 - Universal Worker Service (UWS)
 - · VOTable, VOSpace,...
- neutral to platforms/languages
- \cdot Gaia tools/apis have already appeared on Github
- · After DR1, managing/manipulating data locally will become trickier...