Görlitz AG Tagung 2025 GAVO Puzzler: Solution

Puzzler veterans will not be surprised to learn that our tool of choice to solve the puzzler is the VO's TAP protocol and its nice interactive client TOPCAT.

Once in TOPCAT's TAP window, see what services offer constellation data. When you type `constellations` into the search box, you will find a plausible-looking table in GAVO's TAP service: cstl.geo, which enticingly talks about "ADQL-queriable polygons".

Double-click on its entry, and you will see its table metadata: There are the polygons in p, centre positions in `ra` and `dec`, and names in `name`.

ADQL experts can then immediately write the query to solve this puzzler; other people should get on track with the hints provided. It's

```
SELECT name
FROM cstl.geo
WHERE 0=CONTAINS(POINT(ra,dec), p)
```

The result is a table with a single row: Eridanus.

For a somewhat more visual impression, simply pull the whole table (it's very small, so you can do that, while one of the VO's primary goals is to enable enough filtering on the server side that you only have to pull the data that you need) by running `SELECT * FROM cstl.geo`. You can then do a Sky Plot, add an Area Control and end up with something like this:
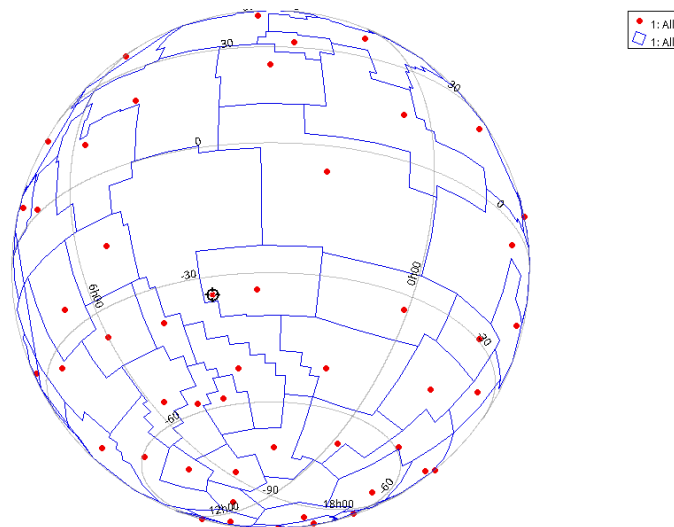
The centre of Eridanus is highlighted in that image.