



Store and retrieve morphologies for small non-point-like objects

tessellation?

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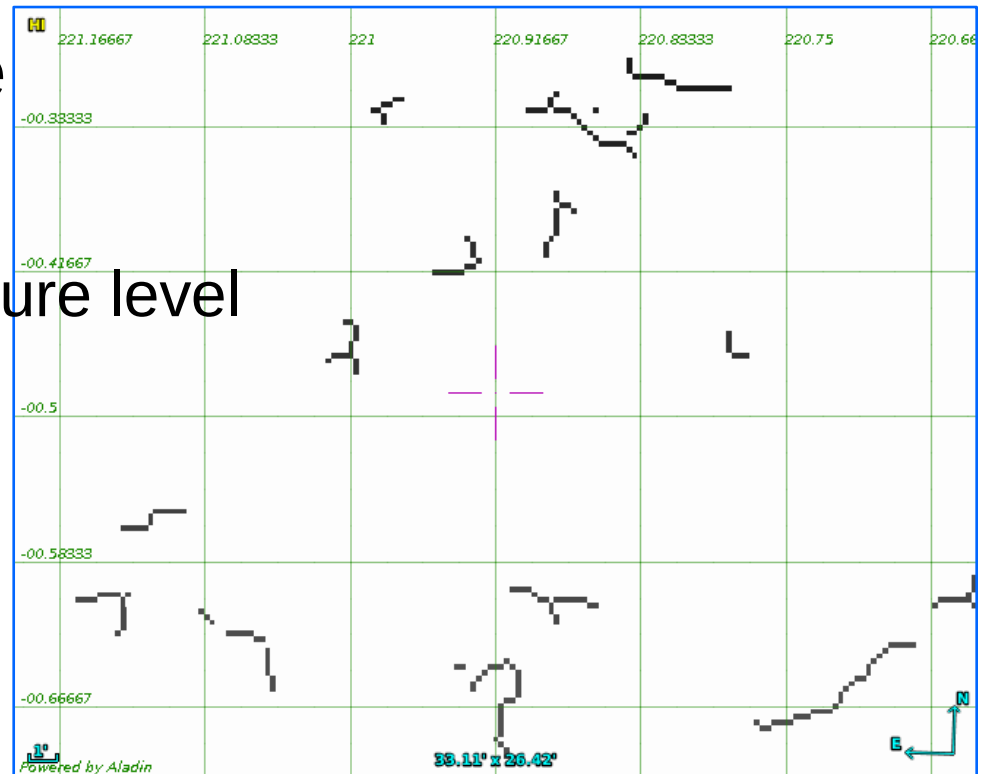


VIALACTEA filaments (and bubbles)



- Project outputs filamentary structures identified in HI-Gal (HERSCHEL) images

- Morphological structure
- Physical description
 - Global and at sub-structure level
 - Filaments
 - Branches
 - Spines
 - Nodes



“pixel saved” filamentary structure





Requirements

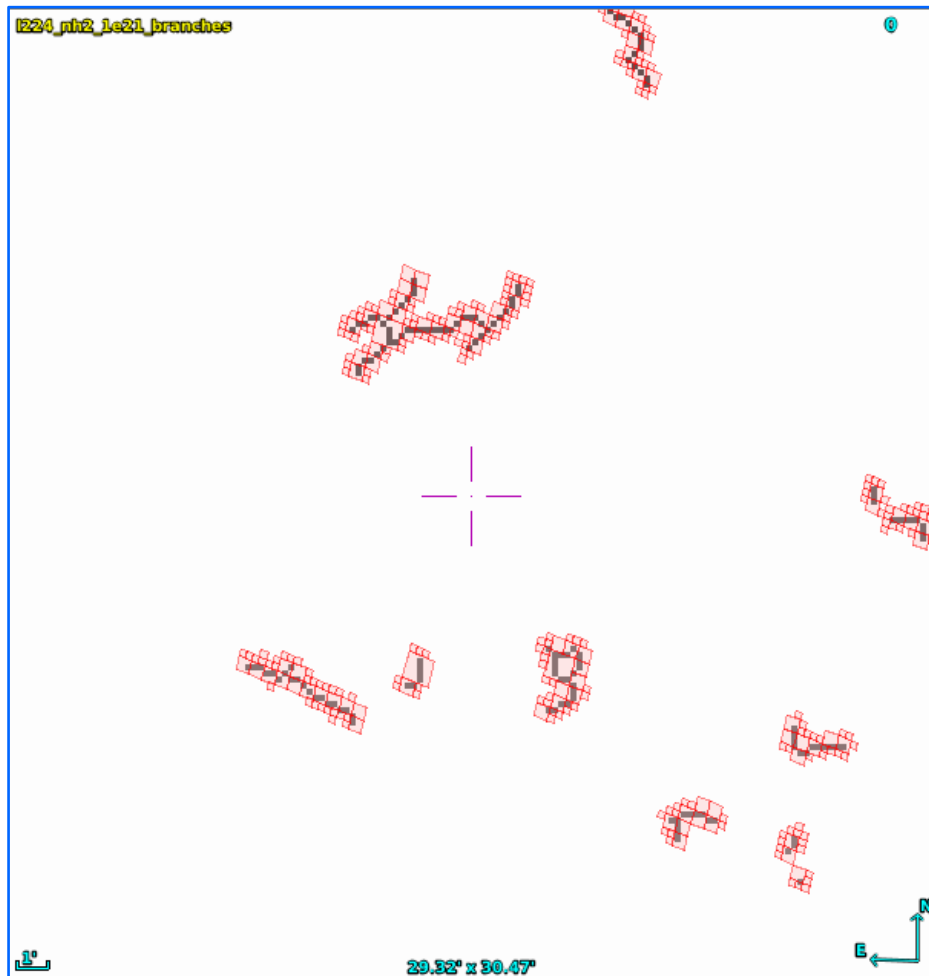


- Store information to be used for
 - Positional match
 - What source (compact/point-like or extended) intersects some filament/structure
 - Point to structure distance
 - What distance a given sky position is from the nearest extended source
 - Source discovery
 - Give me the filaments/bubbles with this characteristics
- No need, at discovery level, for an analytical description of the morphology





Tentative Solutions



- Tessellation
 - MOC
 - ICRS/Galactic issue
 - HealPix
 - Small objects – large file
 - Using partial maps
 - Recover pixel “slant”
- Save each pixel...





VO integration



- How to distribute these (100K – 1M) “mini”-coverage information
 - Datalink out of a TAP service, ...
- Export 1 monolithic MOC
 - How to identify the single extended source
- Extend MOC encodings (ICRS/Gal issue is not so critical) to include a DB one
 - From JSON/ASCII implementation

