EMIR Observing Tools: Optimised Slit Positioner

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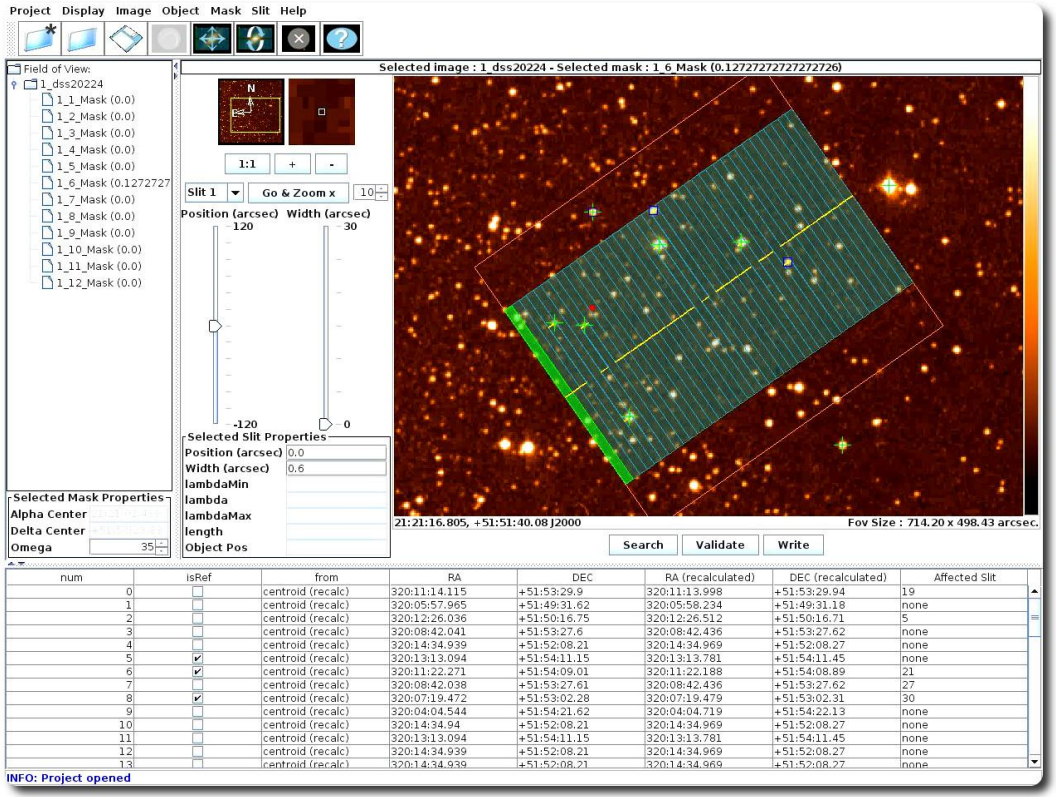
Outline

- Presentation of the EMIR-OSP
- When to use ...
- How to use ...
  - With Gaia coordinates
  - With EMIR pre-imaging



EMIR Optimised Slit Positioner

- Developed by software group at Institut de Recherche en Astrophysique et Planétologie

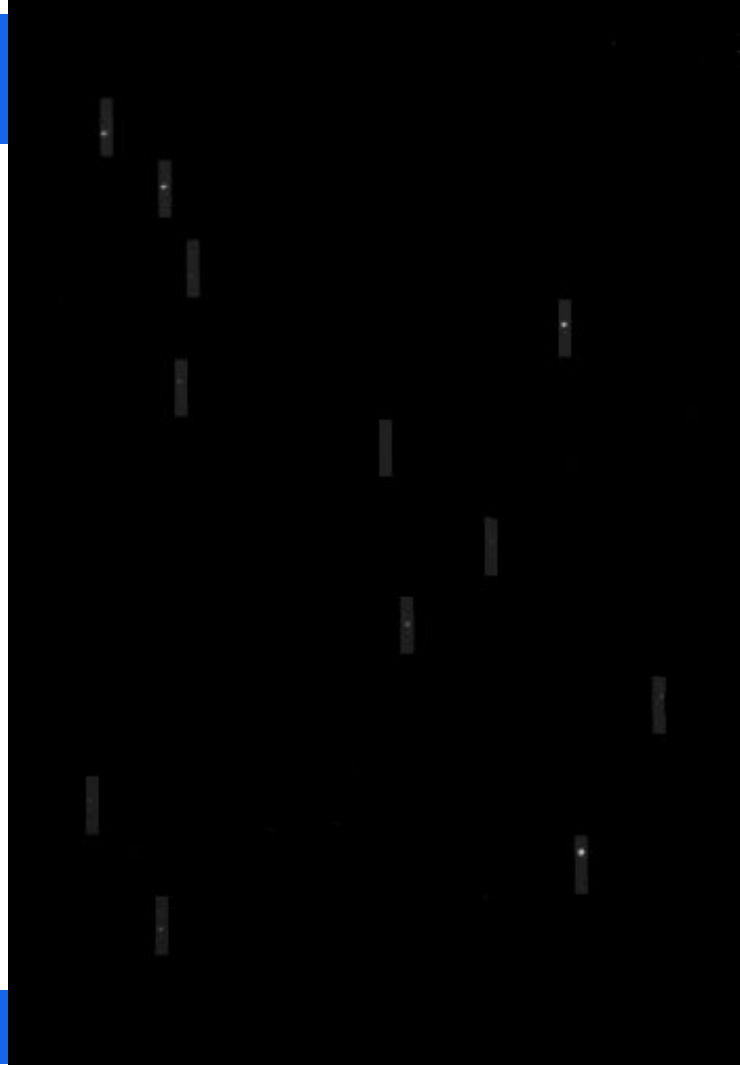
- Simulates MOS observations with EMIR

- Essential for EMIR-MOS mode Phase II

EMIR Optimised Slit Positioner

- Java application that creates masks for EMIR

- Takes in an image and input catalogue and creates a configuration of slits that are used as input for the GTC



Working Example: Gaia astrometry

Go now to the OSP …

Working Example: Gaia astrometry

ID

RA DEC

File Edit Selection Find View Goto Tools Project Preferences H

OSP_testcat.txt

```
1  f401 03:55:03.5778 +43:39:44.3393
2  f402 03:55:05.8118 +43:39:06.2576
3  f403 03:55:08.3735 +43:39:39.9636
4  f404 03:55:04.1982 +43:37:18.0055
5  f405 03:55:02.4807 +43:35:48.0999
6  f406 03:55:08.6791 +43:36:53.0466
7  f407 03:55:18.3025 +43:36:58.8878
8  f408 03:55:19.1221 +43:36:35.0399
9  f409 03:55:00.2729 +43:43:53.3603
```

Notes:
String format only!

Other information allowed in file but not used by OSP

Working Example: User catalogue

- Load image and catalogue using the specified format
- Select the position of mask
- Assign targets to slits (manually or using search facility)
- Validate then Save

Notes:
String format only!

Remember the Reference targets!

Always do both before exiting! Each adds information to .XML file

Working Example: EMIR pre-imaging

Go now to the OSP …

Working Example: Pre-imaging

- Load image and catalogue using the specified format
- Manually add targets
- Select the position of mask
- Assign targets to slits (manually or using search facility)
- Validate then Save

Notes:
Either use your favourite tool to create the catalogue then load it, or create on fly

Remember the Reference targets!

Always do both before exiting! Each adds information to .XML file

Conclusions

- Presentation of EMIR OSP v2.4.4
- Walkthrough of “How to Use”
  - Gaia astrometry
  - EMIR pre-imaging
- Tutorial and User guide available on web
- Consistent astrometry is vital!