

# Feedback from the NA, EU and EA communities

---

T. Cavalié and the CASA Users Committee

# Introduction

---

- Inputs from the CUC members and the community they represent
- Great diversity of responses : from (very) high to (very) low level
  - Organisational aspects (intra-CASA, inter-ARC, etc.)
  - CASA improvement suggestions: from a general level to a task specific level
  - Follow up to last year's recommendations of the CUC

# Outline

---

- Follow up to (some of) last year's recommendations of the CUC
- Current developments
- Operating CASA
- Sharing information and getting feedback

# Follow up to last's years recommendations

---

## ■ User survey

### ■ Results:

- Share the raw data with the CUC (even with ARC managers ?)
- Digested results should go public and be announced in CASA newsletter

### ■ Rumors (?) for Mac support end

- Find out first the real usage of CASA by Mac users
- Refine questions in next survey

### ■ Next survey:

- Involve the ARCs, particularly those who contributed to user survey editing in the past

# Follow up to last's years recommendations

---

- Helpdesk/JIRA ticket summary webpage
  - Positive feedback in general !
  - Some suggestions:
    - Give a short description of the main page (e.g. goal, philosophy, contents)
    - Ticket description:
      - History, statistics, and status of tickets
      - Add a « ticket endorsement » option (same bug/feature request, avoid redundancy of requests)
    - Improve visibility by checking access statistics and improving its advertisement

# Follow up to last's years recommendations

## ■ Documentation

- General and recurring comment: Not easy to locate a particular information in the many on-line documents
- General suggestions:
  - Master list of CASA on-line information and documents
  - Allow users keyword search throughout the listed sources
  - "best practices" or tips website ?
- Suggestion for task description:
  - Two levels of description (« help » vs. « explain » in AIPS)
  - Change-log of individual tasks with list of new/revised features:
    - Already given in each CASA release, could be sorted by task
    - Appending the change-log as a part of the on-line help

# Current developments

---

- Foreword: some items may already be taken into account or are in the short-to-mid-term plan
- Development process:
  - Add EA and EU voices (ARC member?) to the decision process of the CASA development priorities
  - Have a CASA person involved in big surveys ?
  - Keep informing the community about the CASA development direction, in particular about parallelization, visualization, and automation.

# Current developments

---

## ■ Pipeline:

- Discuss strategy for imaging pipelines and carry out a close dialog with the ARCs on heuristics (QA-ready versus science-ready). What the users will actually expect?

- Tweaking the pipeline is difficult and requires quite some expertise (maybe that's not the idea afterall...)

Is there any equivalent of the calibration/imaging scripts delivered with Cycle 0/1 data ? If it does not exist, would it be possible to have the script applied by the pipeline somewhere in the QA2 delivery ?

It would be very useful to the planetary science community.

# Current developments

---

- Parallelization:
  - The parallelization of certain portions (imaging & deconvolution especially) without added setup in 4.4 is excellent.
  - At what level does parallelization occur?
  - Are those settings accessible and changeable?
  - Is it possible to alter the cluster parameters default setup in CASA ?

# Current developments

---

- Publication-ready images:
  - General comments:
    - Many CASA users still make plots for publication by using AIPS and MIRIAD.
    - Publication-ready images from the viewer/CARTA: Many users think that a leading software should produce well-recognizable image products in publications to be visible (otherwise it will never be accepted actually as #1).
  - Detailed comment: Quality of channel maps is not usable for publication.

# Operating CASA

---

- Processing errors:
  - CASA usually returns None, True or False.
  - Is it possible to raise a python error instead ?
- More than 2 instances of CASA on the same CPU makes CASA extremely slow even though the CPU and memory usages are not near to the full capacity.
- Improve the scriptability of CASA (python modules), enable installing external packages inside CASA
- EU-specific: pathways to centralized computing networks (infrastructure) and cloud-based CASA ?

# Task-by-task improvement suggestions

---

- (Very) detailed and technical requests
- Example
  - Add an « undo » option to Clean
- I can send the list of suggestions

# Sharing information and getting feedback

---

- Several levels (CUC, ARCs, CASA, etc.)
- Two CUC-related webpages
  - <http://www.astro.uni-bonn.de/~karim/pmwiki/pmwiki.php?n=Main.CASA>
  - <https://safe.nrao.edu/wiki/bin/view/Software/CASA/CASAUUsersCommittee>
- More advertisement needed ?
- Lack of EU-wide communication channel
  - New EU-wide ALMA newsletter in the next months