# #Team Mopra

How Catherine Lost Her Mind

& Gained a Community

#### How NOT to do science!

 CSIRO Budget cuts in 2014 meant that Mopra would be shut down at the end of 2015 (and Parkes soon after).



- ALMA, CTA, ASKAP, other next-gen telescopes all need guide surveys to find objects.
- Mopra is the only telescope can survey the South.



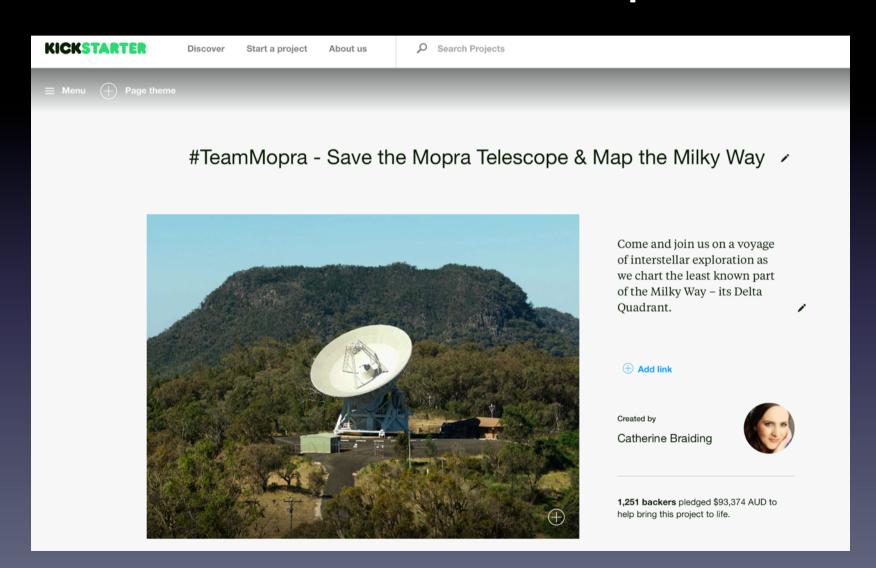
- So late last year, I jokingly suggested,
   "Well, what if we opened the Mopra
   Telescope Consortium beyond the people on the then-potential LIEF?"
- "What if we asked everyone to join in?"



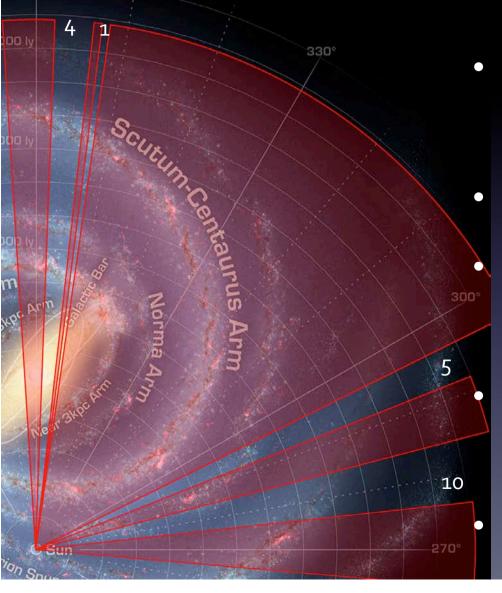
#### Enter #Team Mopra

- Get the internet to rally around our telescope and save it from closure!
- Get some neat swag and warm fuzzy feelings
- Get the science out there.
- Start a blog.

## Enter #TeamMopra



# Mopra Southern GP CO Survey



• ¹²CO, ¹³CO, C¹8O and C¹7O *J* = 1-0

•  $l = 270 - 360^{\circ}, |b| < 0.5^{\circ}$ 

o.6' Beam @ o.1 km/s resolution

Fast mapping = 2 sq deg every 4 nights.

Still need 20 square degrees!

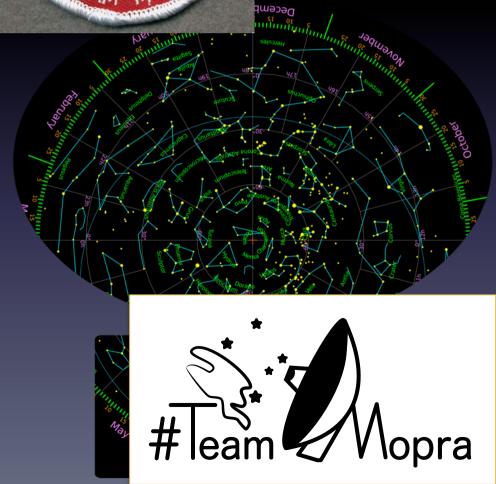
## #Team Mopra Results!

- \$93,374 (before fees)
- \$85,000 (after fees, before goodies)
- >\$60,000 (after goodies)
- 1.5 months of observing time. (enough to fill in those gaps.)





# #TeamMopra swag





# #TeamMopra catalogue





# #TeamMopra – Thanks

#### **Team Members**

The backers from our kickstarter campaign who chose to be publicly acknowledged (by name or alias) are being lis  ${f 5}$   ${f ACKNOWLEDGEMENTS}$ are the people who have made the completion of the vey possible, and we owe them greatly.

- Alex and Ro
- algoxart
- Andrea
- Joseph Auyeung
- Benjamin B.
- Bryan Bachterajaya
- David Bailly
- Rob Barnett
- Daniel Barr

The Mopra radio telescope is currently part of the Australia Telescope National Facility. Operations support was provided by the University of New South Wales and the University of Adelaide. Many staff of the ATNF have contributed to the success of the remote operations at Mopra. We particularly wish to acknowledge the contributions of David Brodrick, Philip Edwards, Brett Hiscock, Balt Indermuehle and Peter Mirtschin. We are indebted also to the financial support of the #TeamMopra kickstarter contributors, listed at mopra.org. The University of New South Wales Digital Filter Bank used for the observations with the Mopra Telescope (the UNSW-MOPS) was provided with support from the Australian Research Council (ARC). We also acknowledge ARC support through Discovery Project DP120101585.

Finally, we thank the anonymous referee whose thoughtful comments have improved the clarity and accessibility of this paper.

# #TeamMopra – Next Year

- We have ~10 people wanting to join in and watch observations with us (some via Skype).
- We have ~15 public talks (some booked, some via Skype).
- Open Day: June Long Weekend, Coona Starfest?
- "We" have promised accessible science:
  - Tutorials on data use
  - AladinLite maps for the public.



# #TeamMopra - Legal

- Team Mopra Incorporated
  - Incorporated Association in NSW (Michael, Gavin, Catherine, Anne and Balt on board)
  - Charity for tax purposes (get GST refund, no income tax for employees) – ACNC
  - Tax Deductable Gift Status ongoing paperwork,
     may be able to backdate for KS backers.

# #TeamMopra - Tomorrow

- Current Status: 152 / 1005 rewards sent.
- Still awaiting: tshirts, patches, certificates.
- Need ~800 postcards autographed.
- Need 99 boxes assembled.
- Meet 10.30 am upstairs.

(I'll buy lunch.)

