



Mopra Update

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CSIRO Astronomy and Space Science
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Status

- Antipodean Hibernation (I see neither moths nor balls...)
- Receiver systems switched off
- Cryogenics switched off
- MOPS/Computers/Air conditioners ON
- Observation monitoring: Off

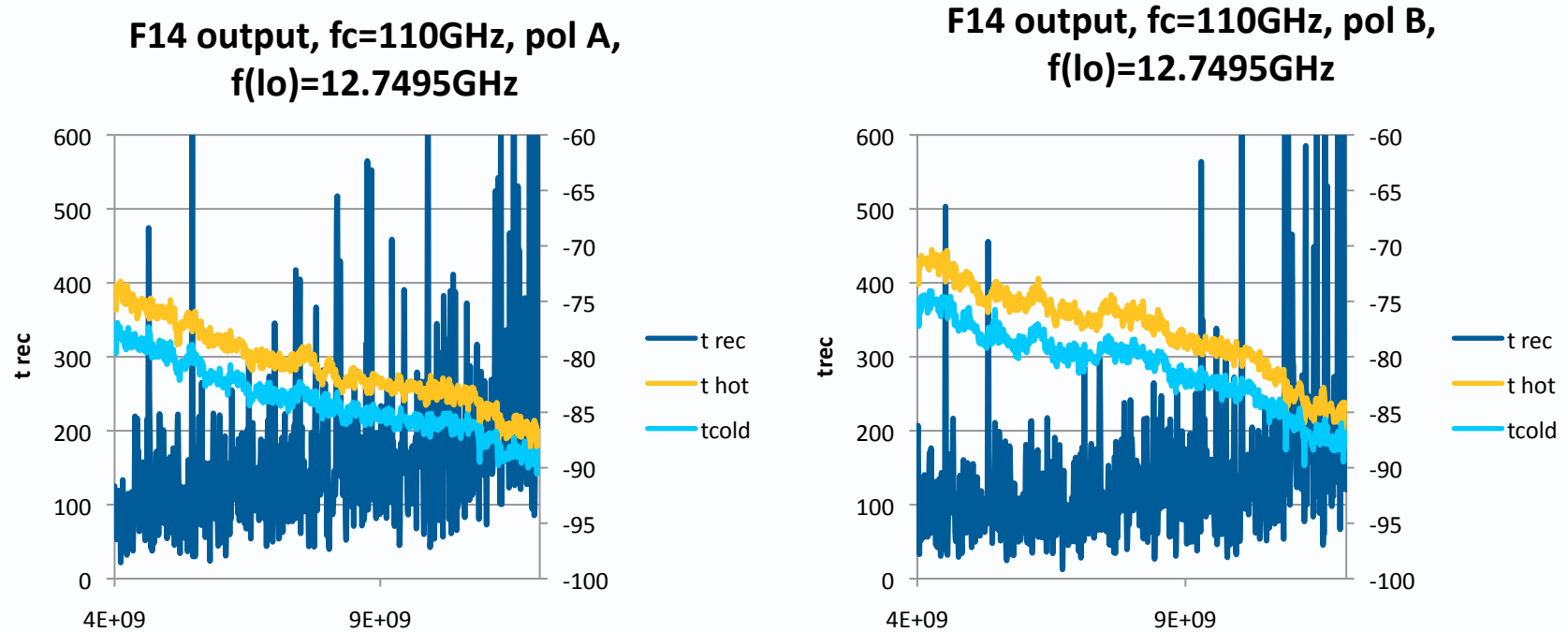


Just outright broken stuff

- L/S and C/X RX
 - L/S suffered a failure of one polarisation earlier in 2015, switched off since then.
 - **UPDATE TODAY:** Was just a loose cable, plus a cryo failure
 - C/X suffered a cryo fridge failure at the end of the season
 - Repair status unclear, might have damaged cold finger
- Bad for VLBI, good for the power bill

Receiver characteristics

- Uneven T_{sys} in Pol A/B
- Receiver measurements reveal this is a feature of the Mopra mm package. F14 engineering measurements for 3mm:



Partial malfunctions, challenges and conundra

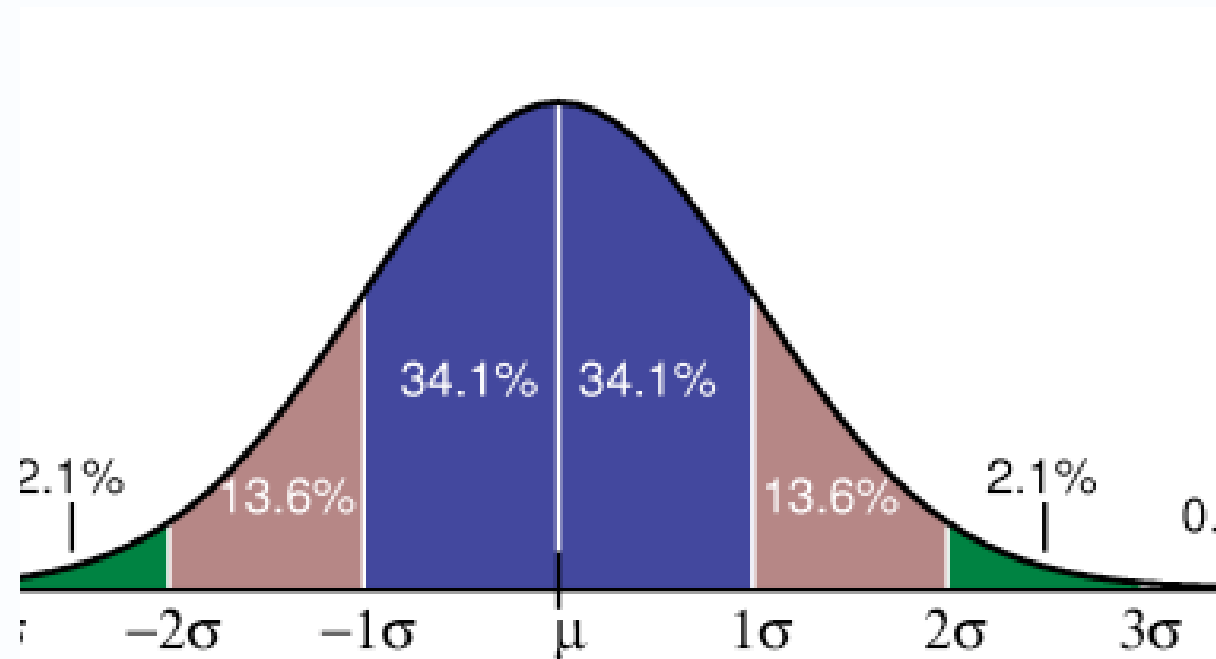
- MOPS:
 - Tsys variations
 - Sampler statistics
 - Possibly linked problems
- RX system
 - 12mm flux scale variability remains

Partial malfunctions, challenges and conundra

Neg.	Pos.	ATTEN
045: 27.29%	fa5: 27.22%	11
860: 27.39%	7b1: 27.44%	8
822: 26.82%	78e: 26.75%	9
836: 26.57%	7af: 26.67%	4
869: 26.86%	7a6: 26.79%	2
87c: 26.54%	7cd: 26.67%	0
85d: 27.01%	7a3: 26.79%	0
891: 27.33%	7de: 27.34%	0

level counts

Partial malfunctions, challenges and conundra



A large white radio telescope dish is the central focus, set against a backdrop of dark, forested mountains under a clear blue sky. The dish is supported by a complex white metal structure. The entire scene is captured in a wide-angle, fisheye perspective, creating a circular frame around the central subject.

Thank you

CASS

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