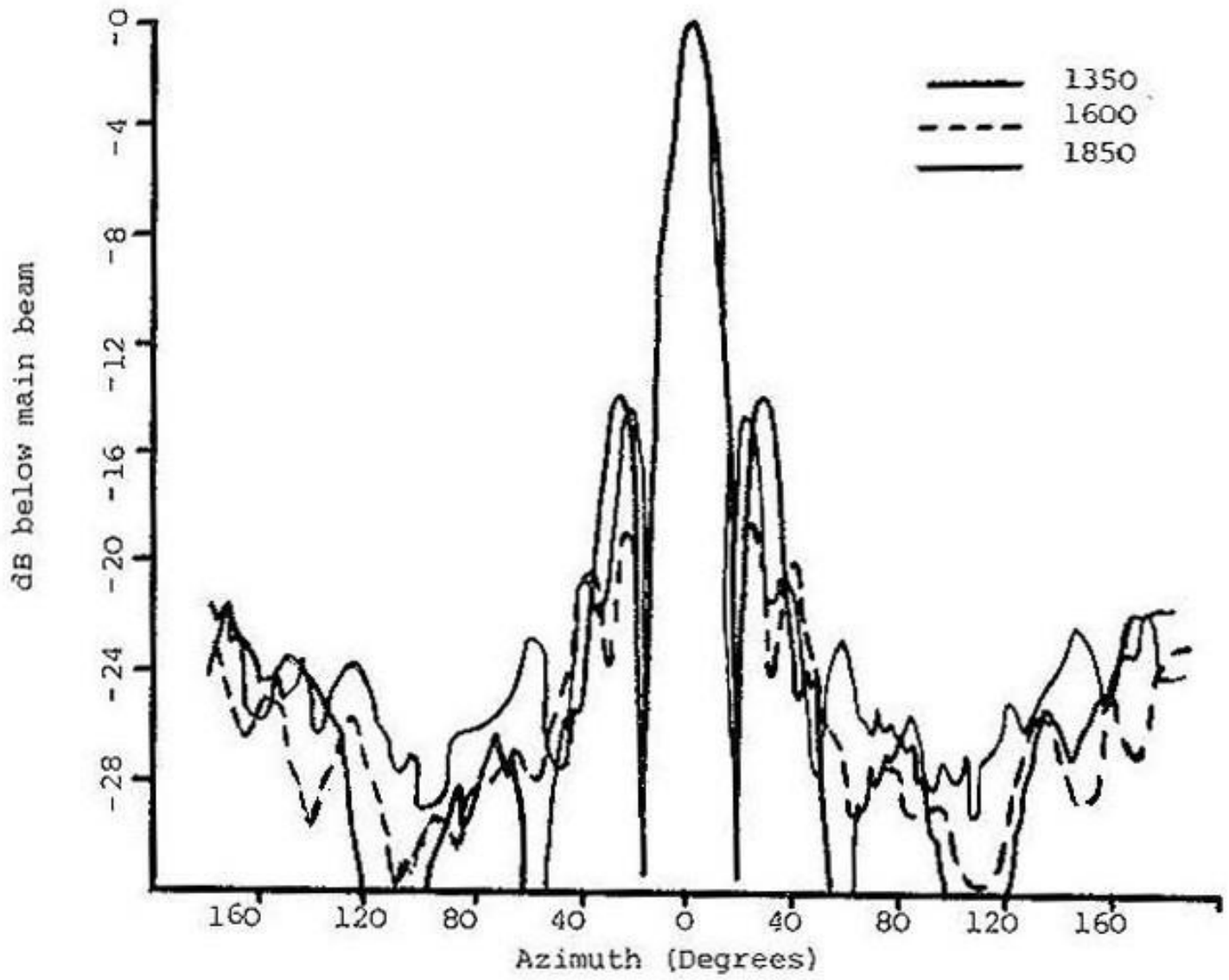
Questions I would like to ask



Triffid Antenna Band 3 Radiation Pattern

Design specs Triffid Aerials' beamwidth: However, cannot be certain which design aerial refers to (from Collins' paper on Ptarmigan Triffid aerials)

Is this interpretation of beamwidth of my array (86cm square) Correct?

Your plots are improving. 86 cm is not too bad. I wanted a 3m dish too, but it was just too expensive. 😫 Even the MIT student dish is only 1.8 m.

My 1.3 m dish was a fiver off ebay, which seemed like a deal.

1.22 x 21cm/86cm is about .3 Radians or 17 degrees. That's the resolution of your scan. You can see how @ZiHao has widened his antenna with struts and wire. You could do the same.

Good luck,

Steve.

Improving the mount

I have purchased 800mm Lazy Susan bearing – weather hardened, 250kg load capacity, to provide movement in azimuth

Improving the

t

d

r

e

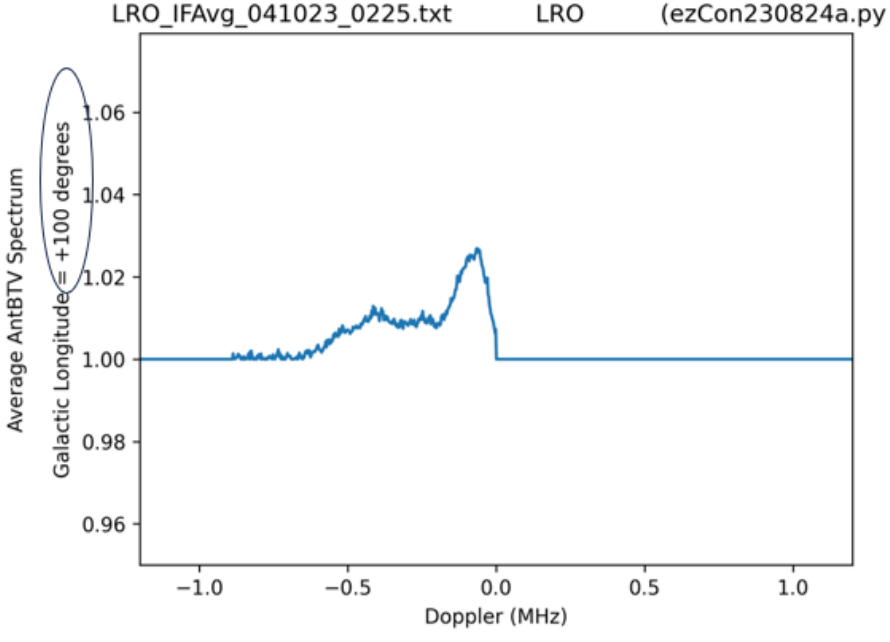
movement in azimuth

Does adding in Lazy Susan Bearing help or is just pointing in one direction in azimuth sufficient and if so which is best direction?

What is best way to keep my computer under array dry?

From my data, can I determine spiral structure of Milky Way?

My data at +100 degrees longitude:



In practice, what does beamwidth mean in radio terms? Is it full height, half maximum?

So, does that mean I can sample Maximum of 10 sample points in 180 Degrees of sky from horizon to horizon? (180/17 = 10.58)

Other Questions I would like to ask?

- Is the frequency I am obtaining correct? Suggestion on SARA that it is not.
- Any advice you wish to give me today about the project as it stands?
- What sized dish is this array equivalent to?
- How long should each data point be? Currently IFAverage set to 902000 samples per dat point = 394 seconds.
- How far can I go with this set-up as it currently is – i.e. what can I detect?
- On forums members talk about LOCAL STANDARD OF REST and also discuss findings and back in terms of Celsius – what are these and how do I use them?
- Is it worth adding any wings to the array – will this increase sensitivity or resolution?
- Is it possible to create an interferometer using the array and the communications aerial recommended in SARA Scope in a Box package together? If so, how do I do it and what software or hardware do I need to do so?

How can I make calibration semi-automatic?

Idea on right is from Alex Pettit In a talk given to SARA https://www.youtube.com/watch?v=C6NCefVxNL8