

ISR+Imaging January-February 2023 Campaign Report

This is an analysis of RTIs during ISR+Imaging campaign from January 27 to February 1, 2023. We show the RTIs and results.

ISR+Imaging:

January, 27:

- _ Start the campaign at 15 hours.
- _ There is Spread F from 20 to 22 hours.
- _ % Operation/15h: 88.89

Log:

- _ 27 Jan 09:00 Start campaign.
- _ 27 Jan 18:00 Imaging is on.
- _ 27 Jan Problem with transmitter from 22:20 to 24:00

Staff in charge

09-20: R. Flores. 20-24: J. Rojas.

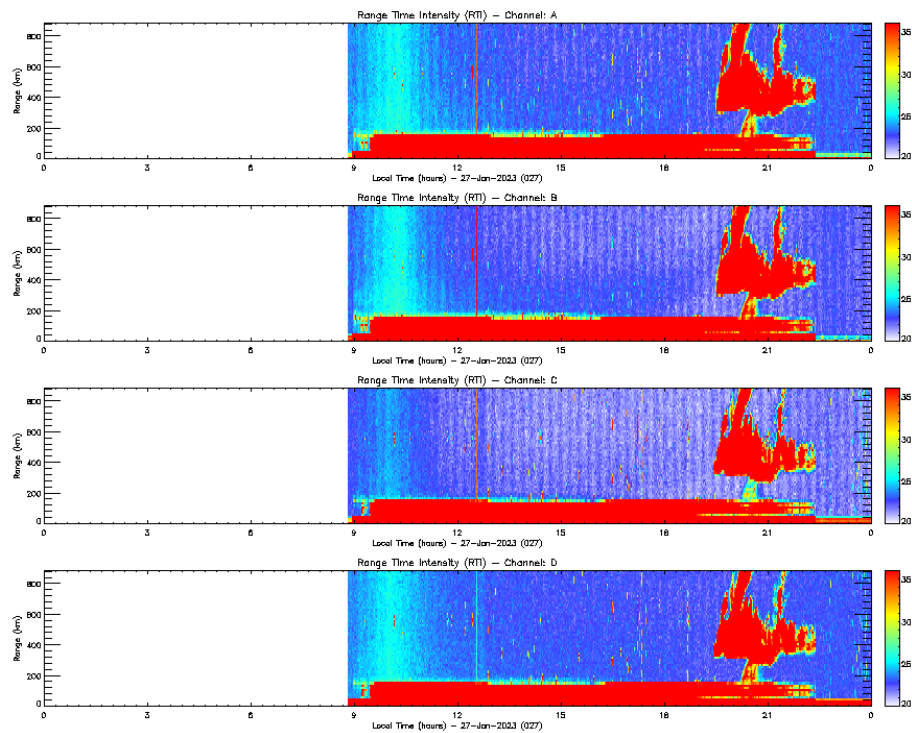


Figure 1.Rti EW_Drifts 2023-01-27.

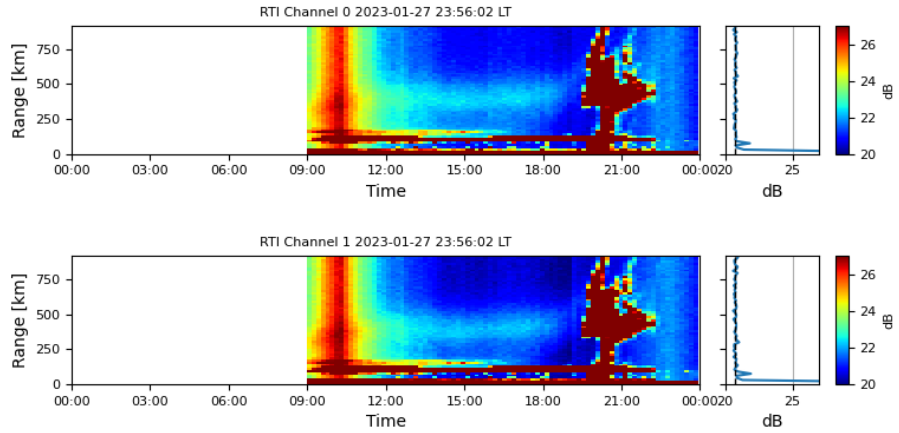


Figure 2. Rti FARADAY 2023-01-27.

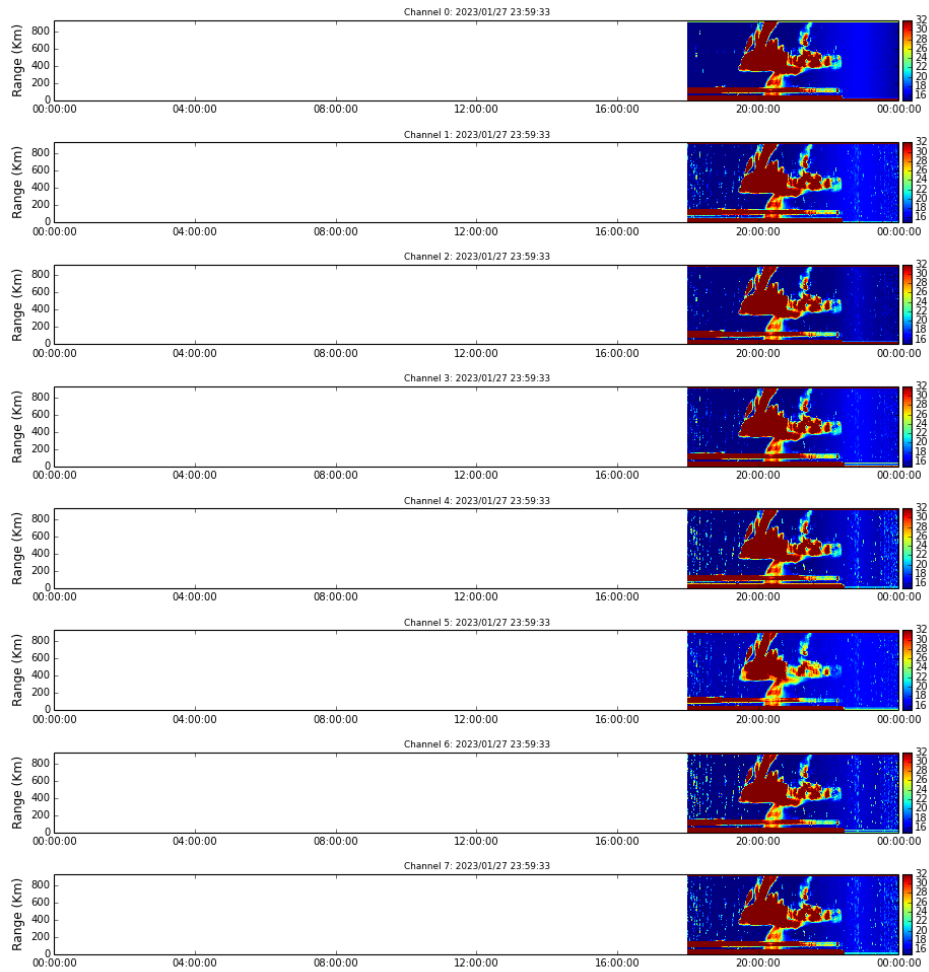


Figure 3. RTI IMAGING 2023-01-27.

Drifts obtained:

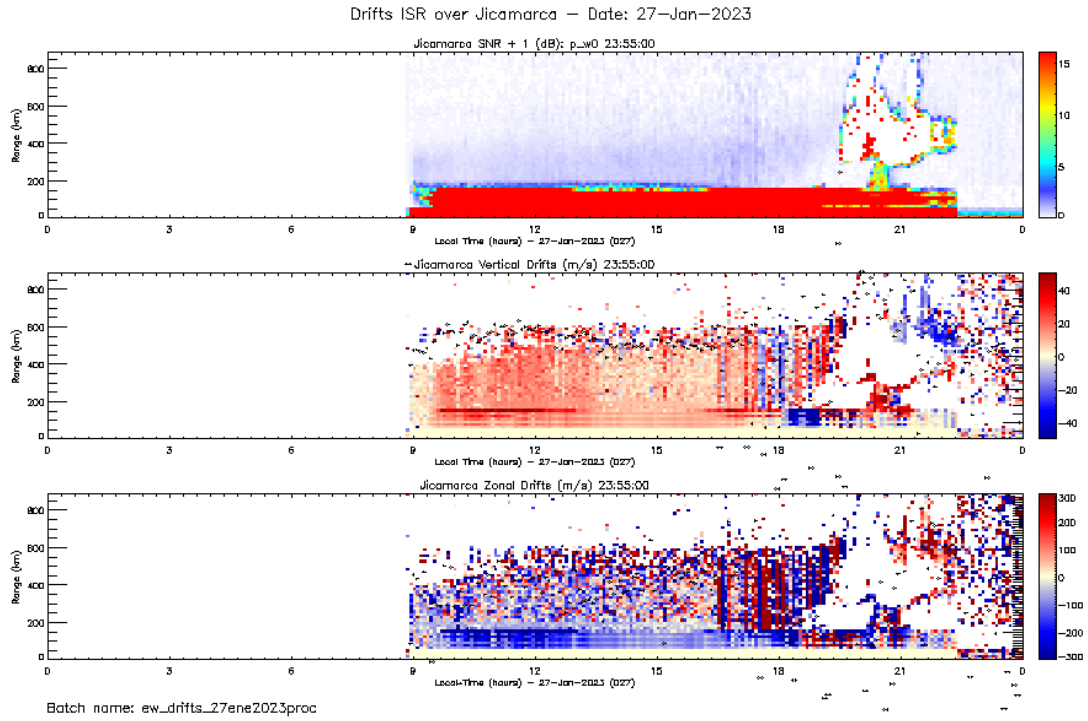


Figure 4. Drifts 2023-01-27.

Noise obtained:

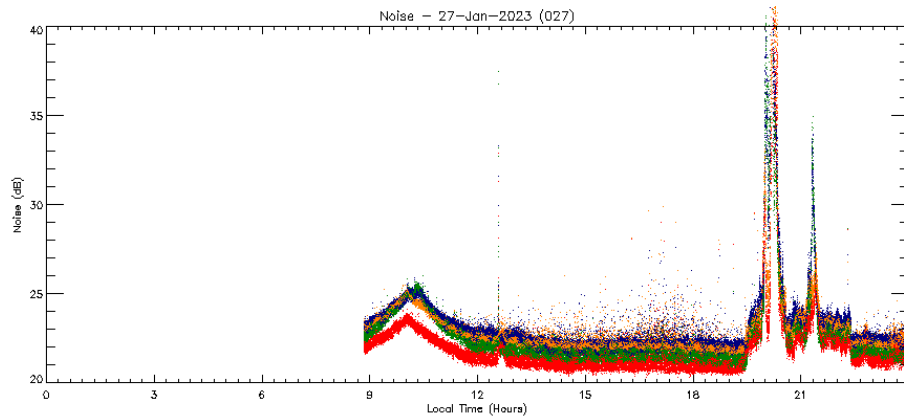


Figure 5. Noise 2023-01-27.

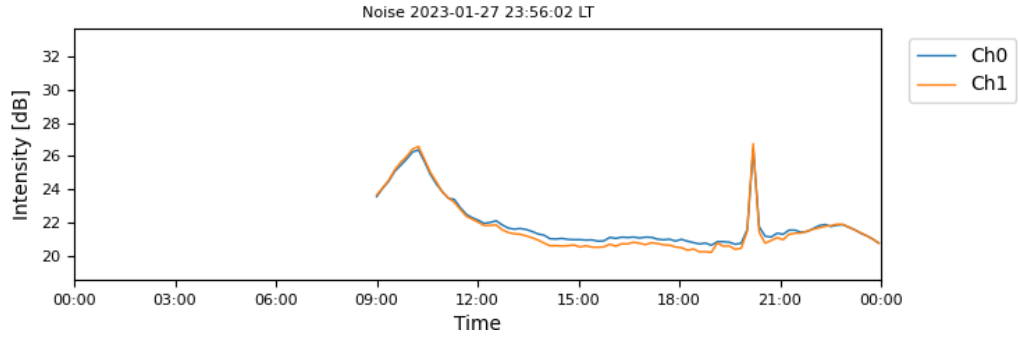


Figure 6. Faraday Noise 2023-01-27.

January, 28:

_ There is Spread F from 19 to 23 hours.

_ % Operation/24h: 97.92

Log:

_ 28 Jan 06:42 Imaging is off.

_ 28 Jan 17:55 Imaging is on.

_ 28 Jan Problem with transmitter from 00:00 to 00:29

Staff in charge

00-08: J. Rojas. 08-20: P. Condor. 20-24: A. Belleza.

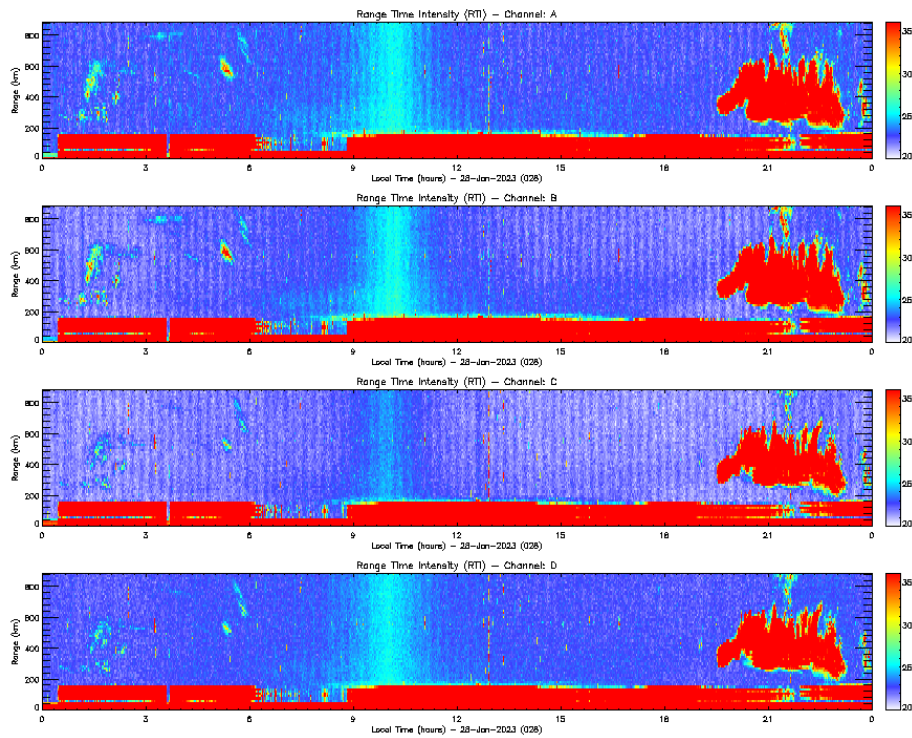


Figure 7. Rti EW_Drifts 2023-01-28.

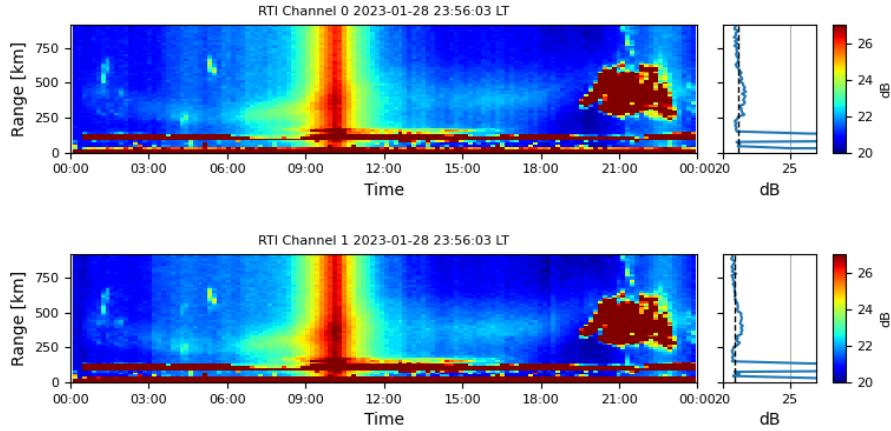


Figure 8. Rti FARADAY 2023-01-28.

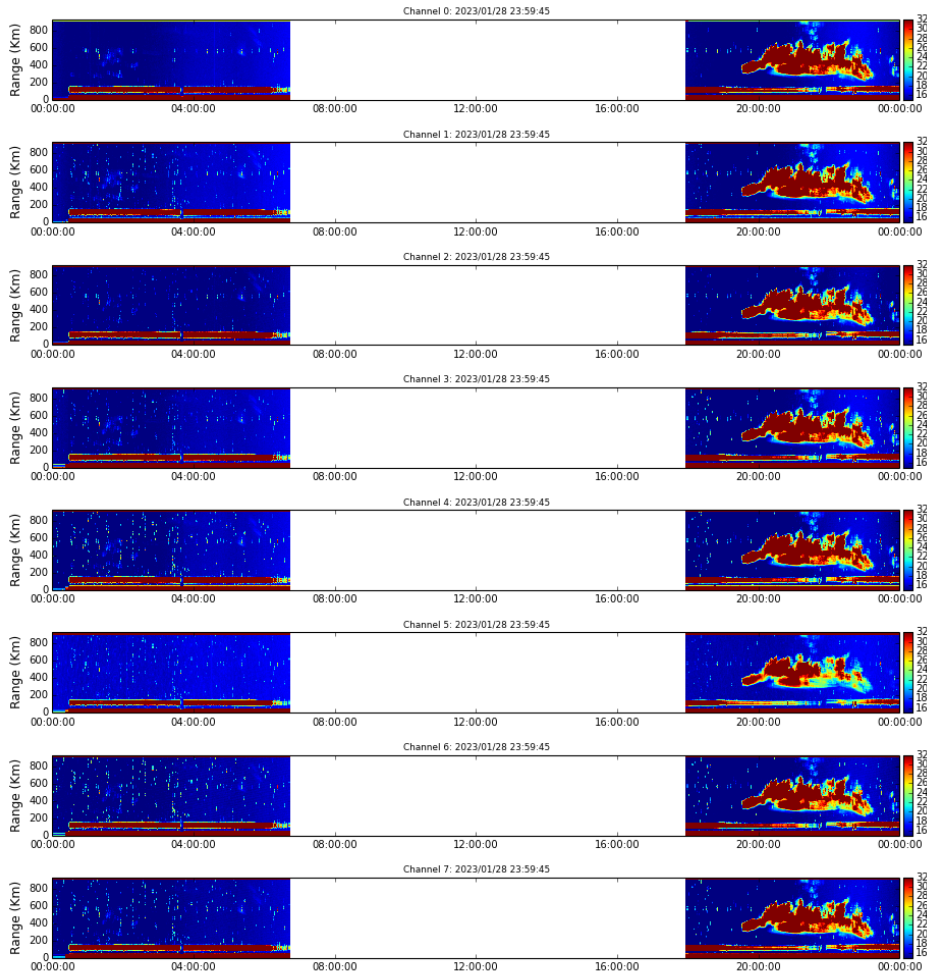


Figure 9. RTI IMAGING 2023-01-28.

Drifts obtained:

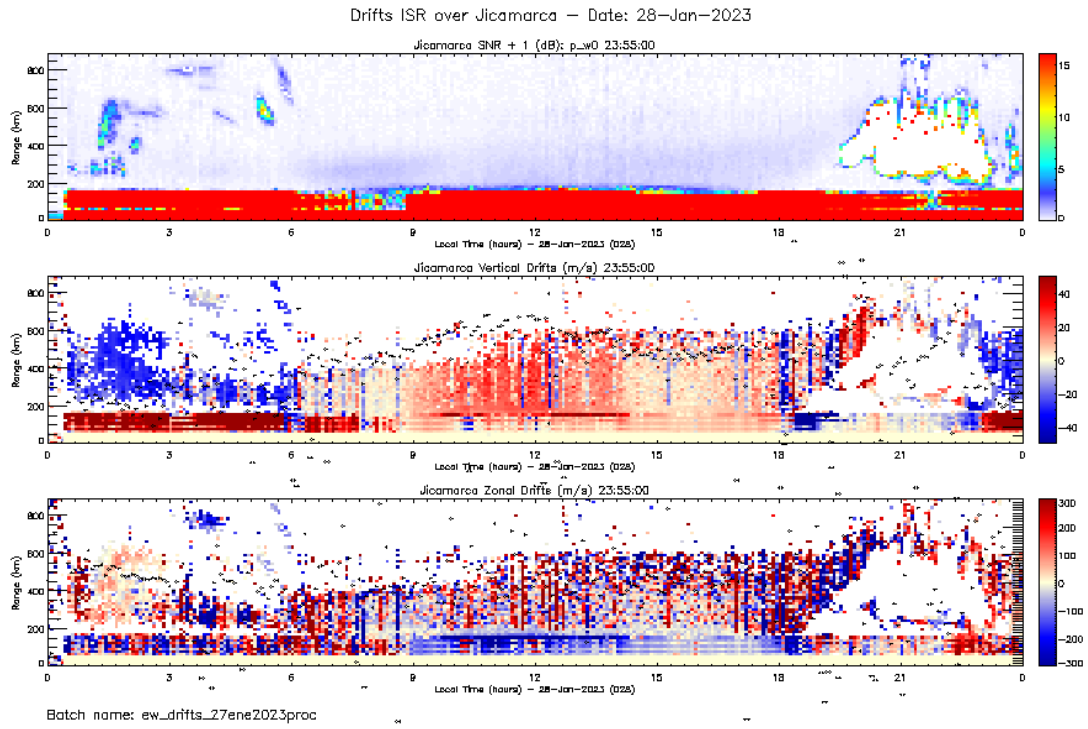


Figure 10. Drifts 2023-01-28.

Noise obtained:

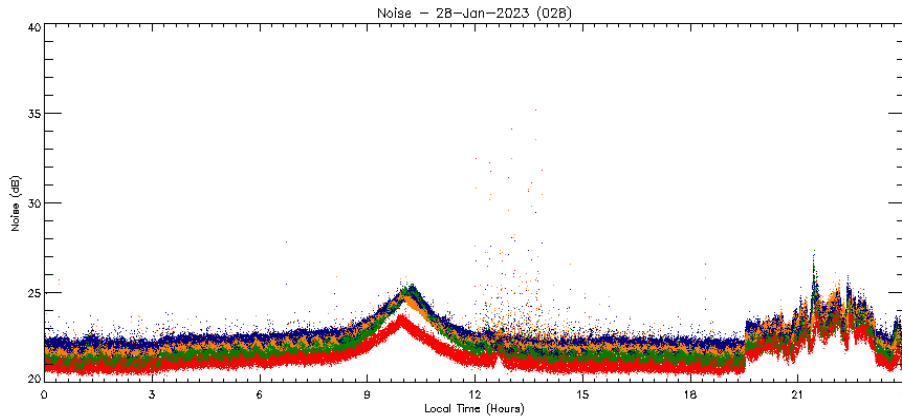


Figure 11. Noise 2023-01-28.

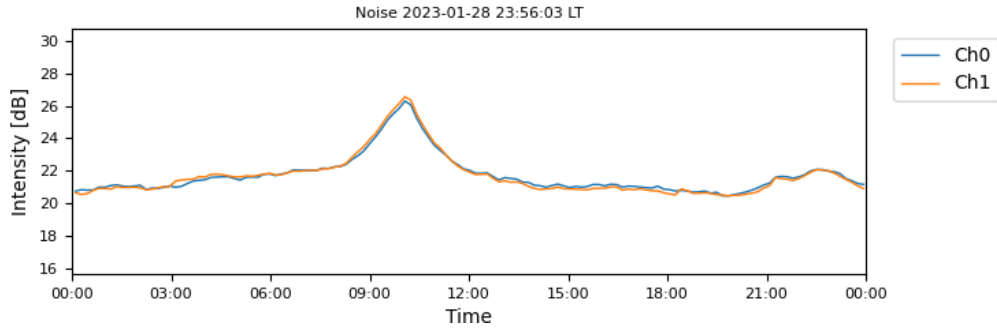


Figure 12. Faraday Noise 2023-01-28.

January, 29:

_ There is Spread F from 19 to 24 hours.

_ Data loss for 5 minutes. At 3 o'clock for 2 minutes and at 9 o'clock for 3 minutes.

_ % Operation/24h: 99.65

Log:

_ 29 Jan 06:29 Imaging is off.

_ 29 Jan 17:31 Imaging is on.

Staff in charge

00-08: A. Belleza. 08-20: K. Kuyeng. 20-24: R. Flores.

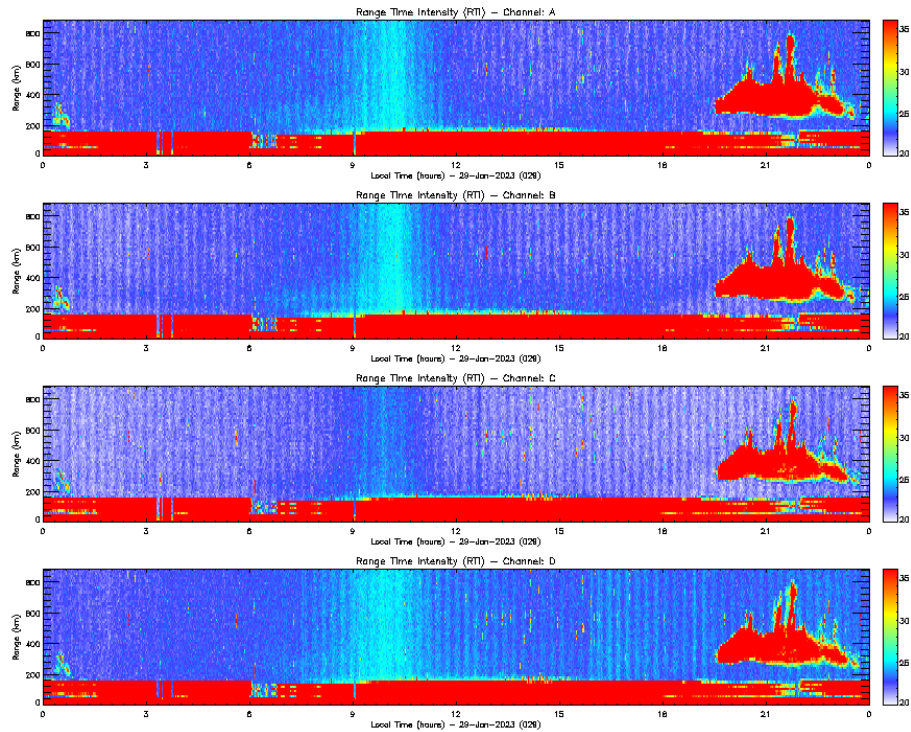


Figure 13. Rti EW_Drifts 2023-01-29.

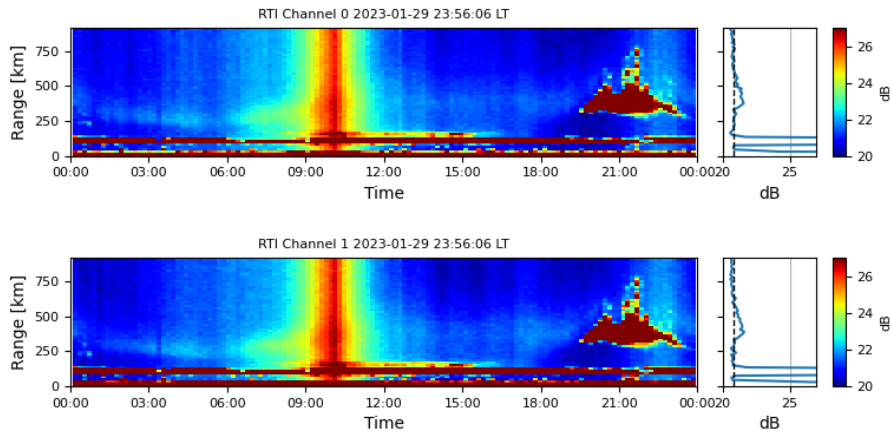


Figure 14. Rti FARADAY 2023-01-29.

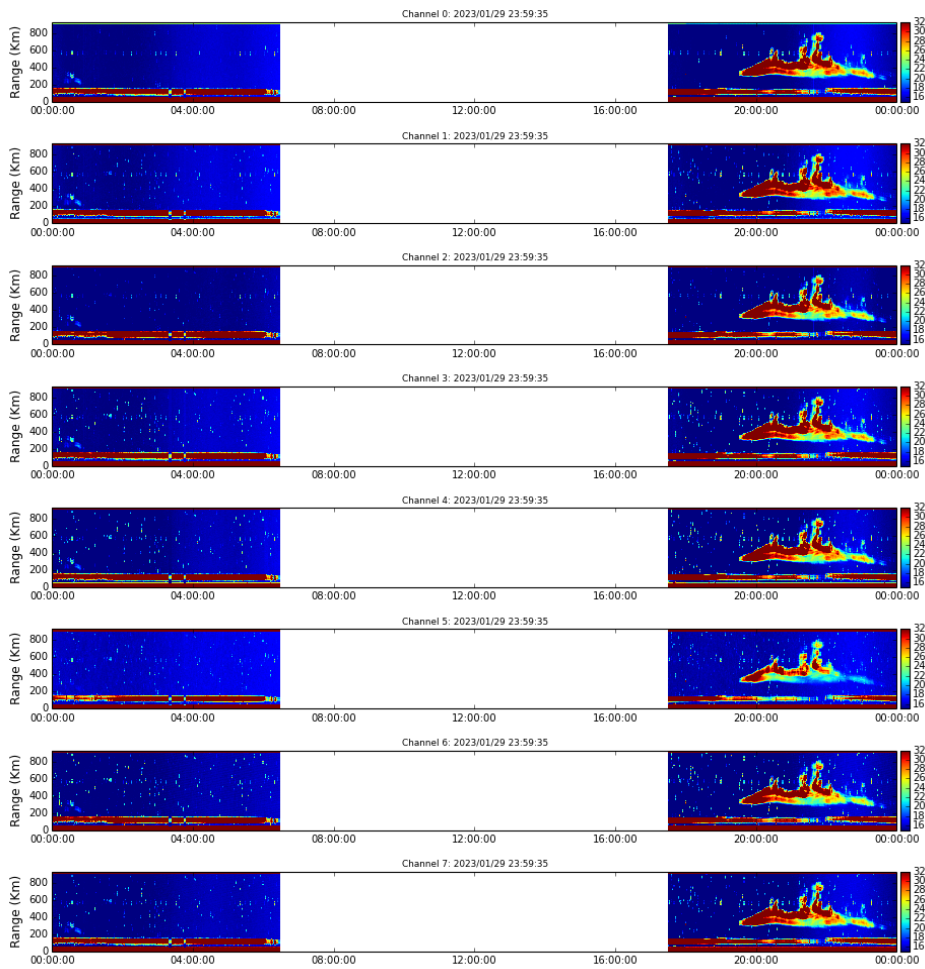


Figure 15. RTI IMAGING 2023-01-29.

Drifts obtained:

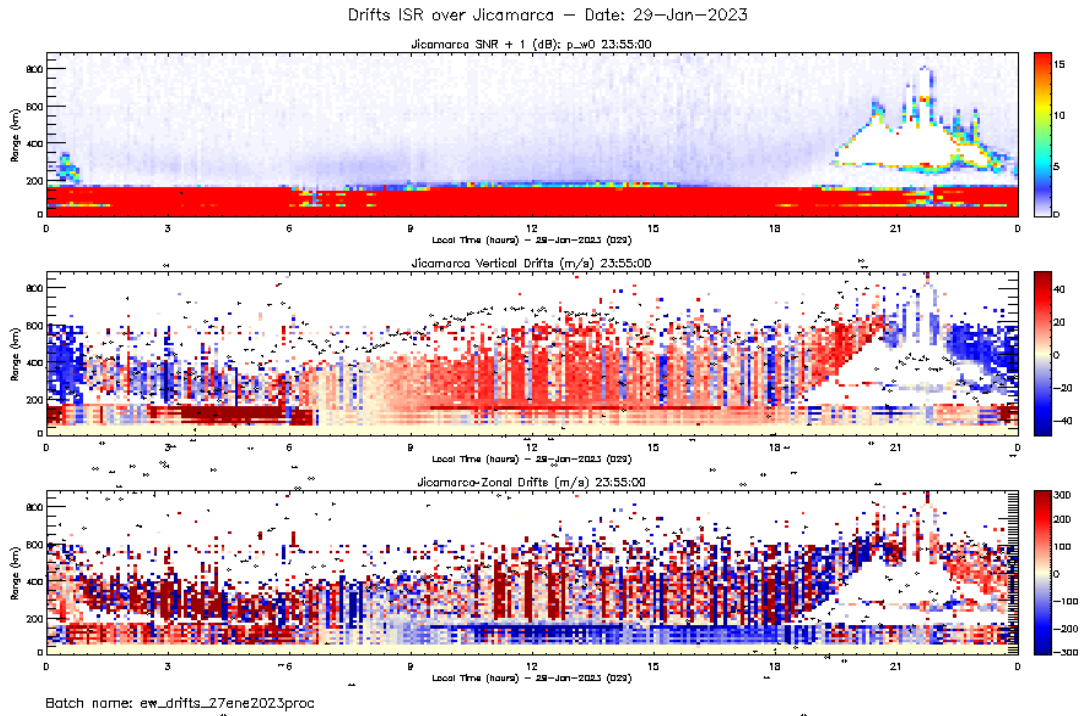


Figure 16. Drifts 2023-01-29.

Noise obtained:

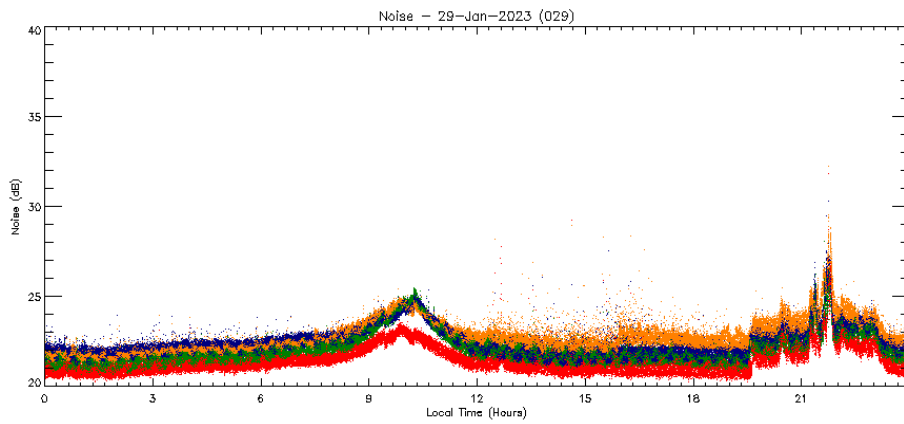


Figure 17. Noise 2023-01-29.

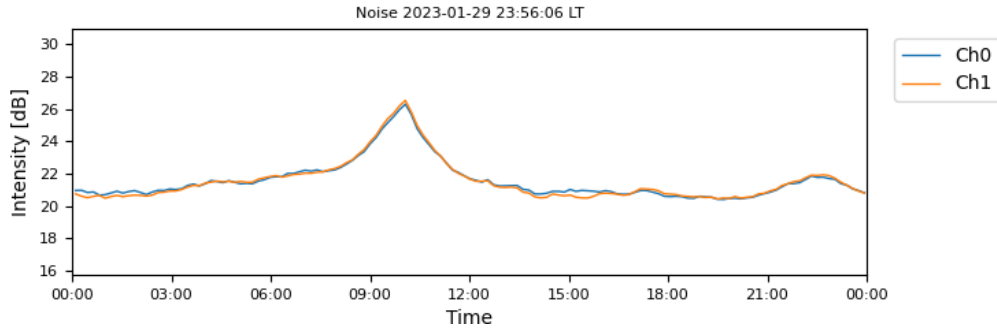


Figure 18. Faraday Noise 2023-01-29.

January, 30:

- _ There is Spread F from 20 to 24 hours.
- _ Data loss for 31 minutes. At 9 hours and 25 minutes.
- _ % Operation/24h: 97.85

Log:

- _ 30 Jan 06:00 Imaging is off.
- _ 30 Jan 17:50 Imaging is on.

Staff in charge

00-08: R. Flores. 08-20: I. Manay. 20:24: J. Rojas.

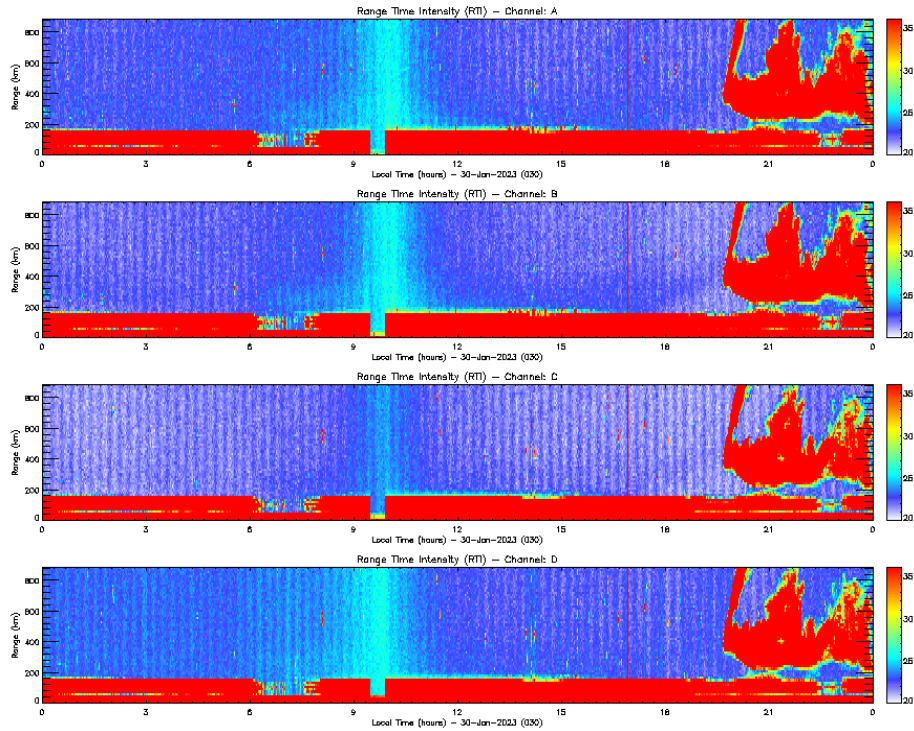


Figure 19. Rti EW_Drifts 2023-01-30.

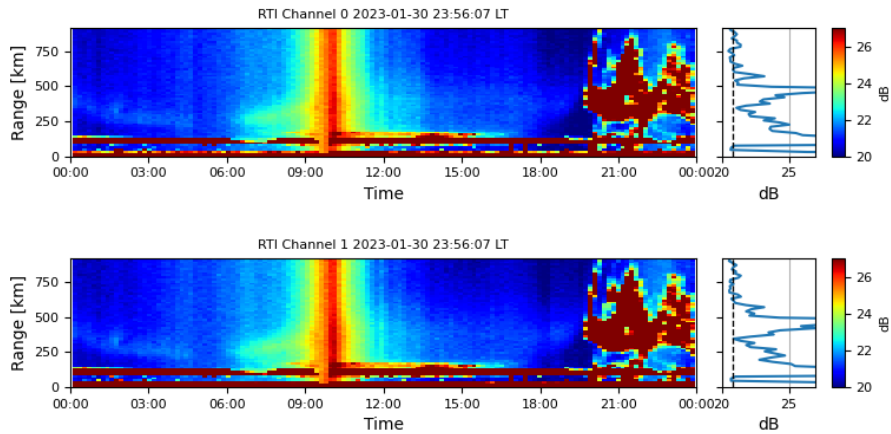


Figure 20. Rti FARADAY 2023-01-30.

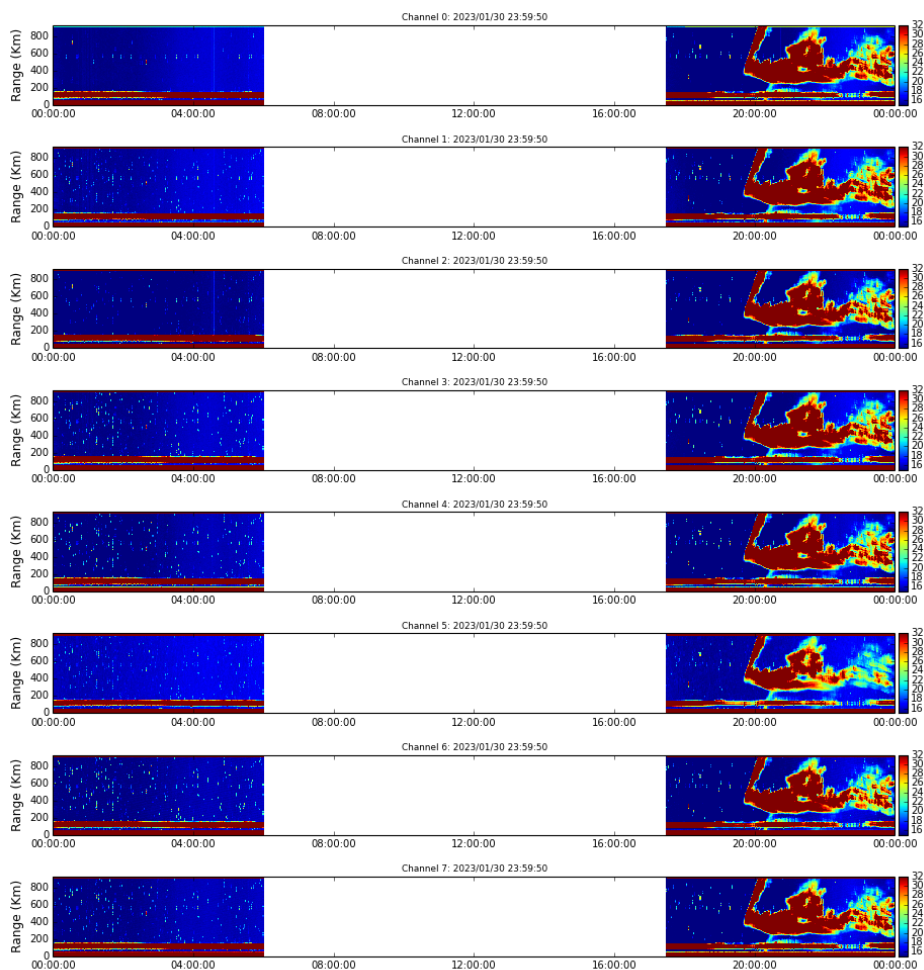


Figure 21. RTI IMAGING 2023-01-30.

Drifts obtained:

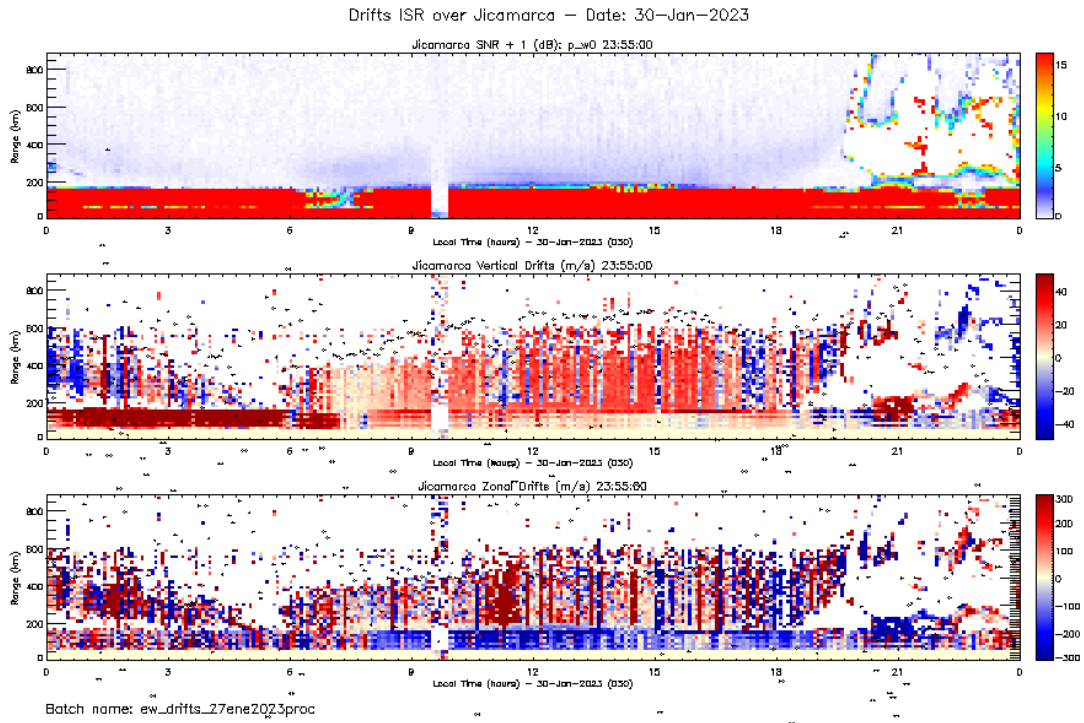


Figure 22. Drifts 2023-01-30.

Noise obtained:

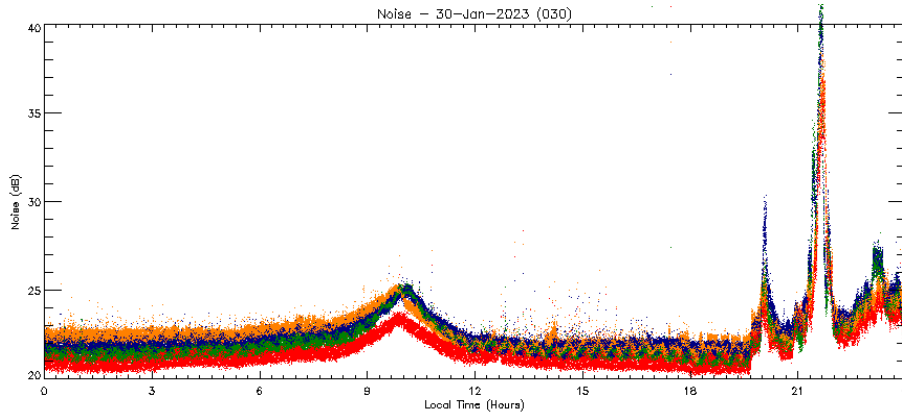


Figure 23. Noise 2023-01-30.

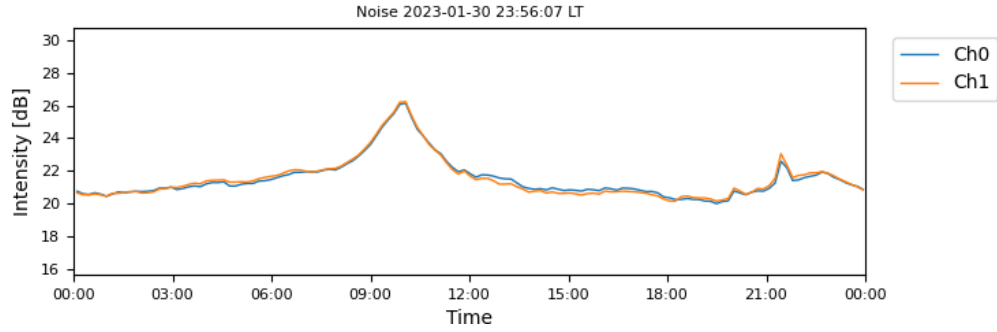


Figure 24. Faraday Noise 2023-01-30.

January, 31:

_ There is Spread F from 0 to 2 and 20 to 24 hours.

_ % Operation/24h: 100

Log:

_ 31 Jan 06:12 Imaging is off.

_ 31 Jan 17:45 Imaging is on.

Staff in charge

00-08: J. Rojas. 08-20: K.Kuyeng. 20:24: A. Belleza.

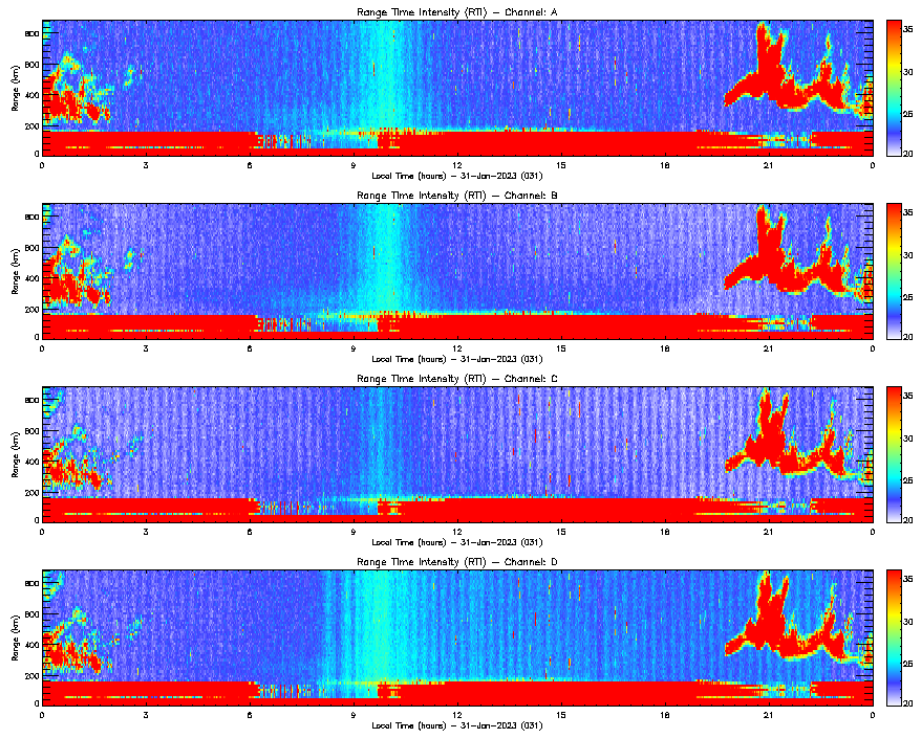


Figure 25. Rti EW_Drifts 2023-01-31.

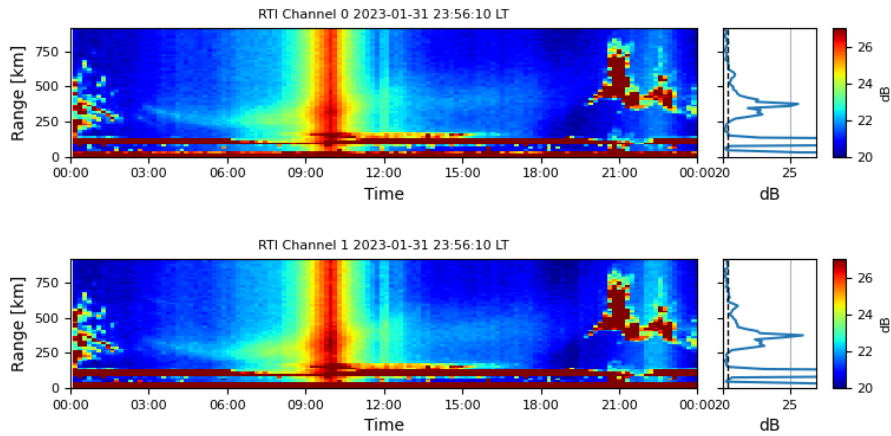


Figure 26. Rti FARADAY 2023-01-31.

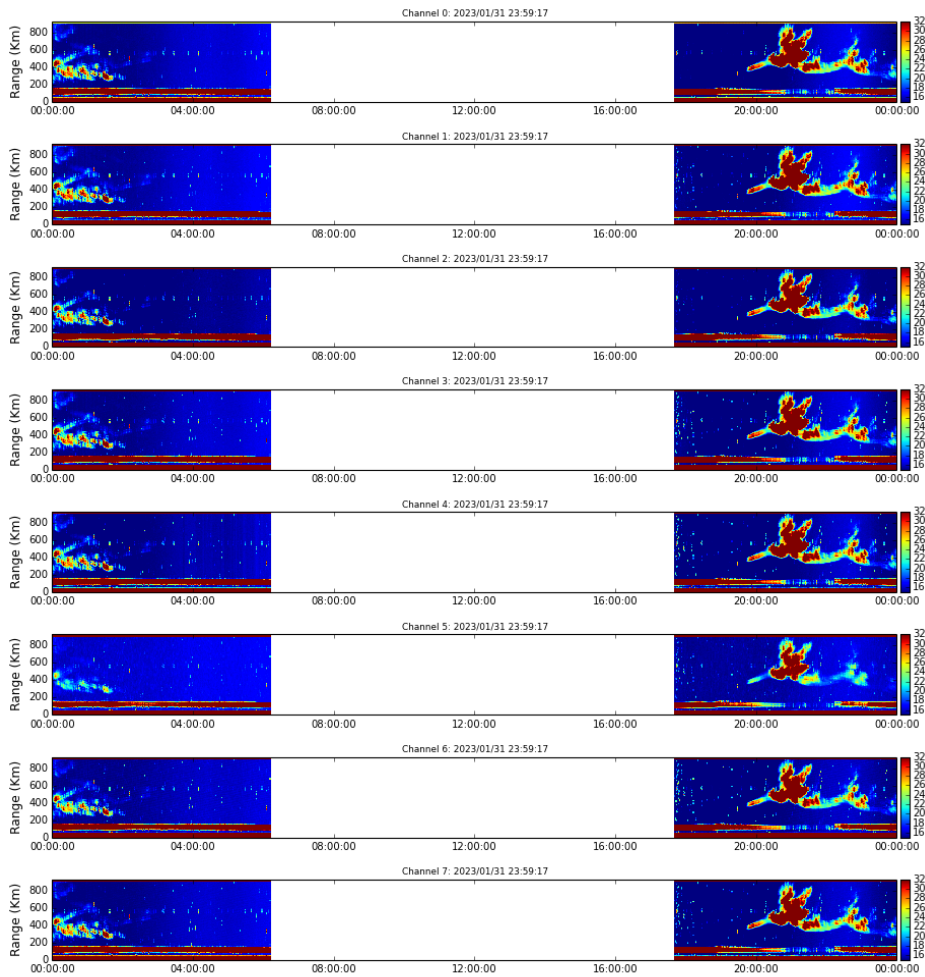


Figure 27. RTI IMAGING 2023-01-31.

Drifts obtained:

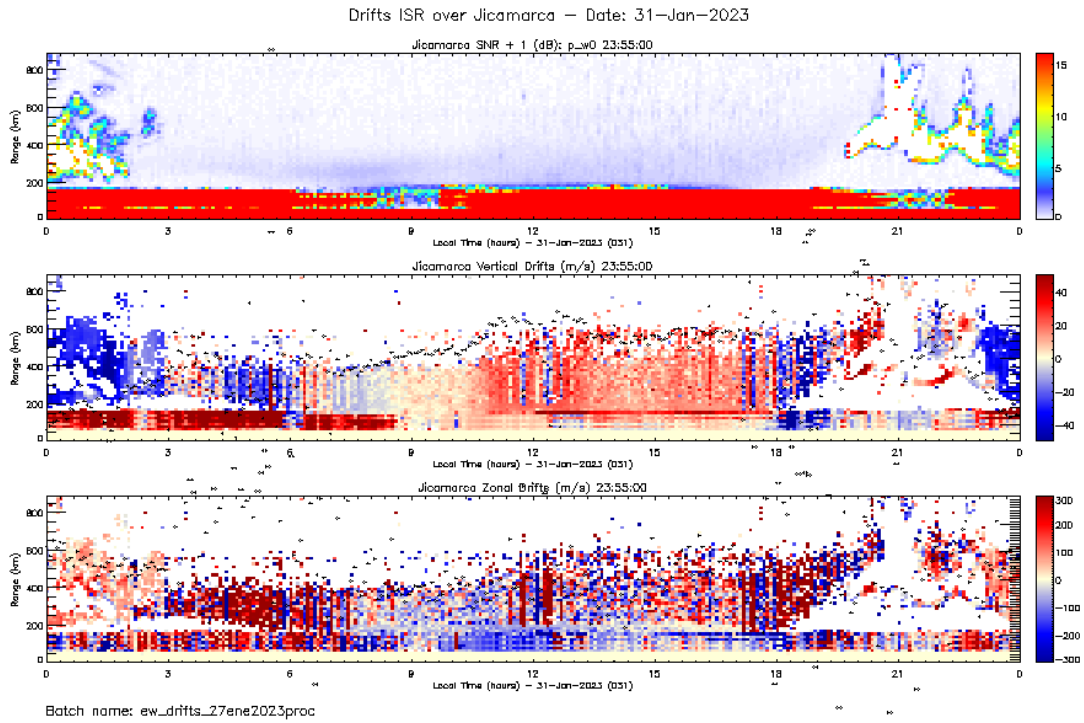


Figure 28. Drifts 2023-01-31.

Noise obtained:

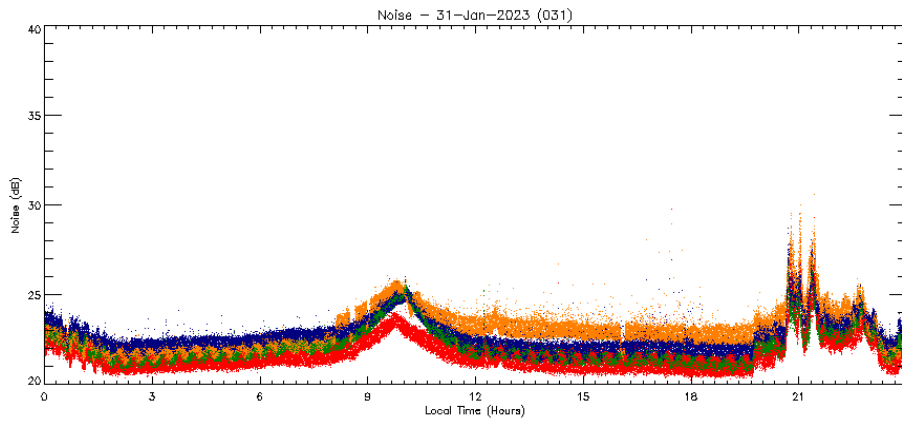


Figure 29. Noise 2023-01-31.

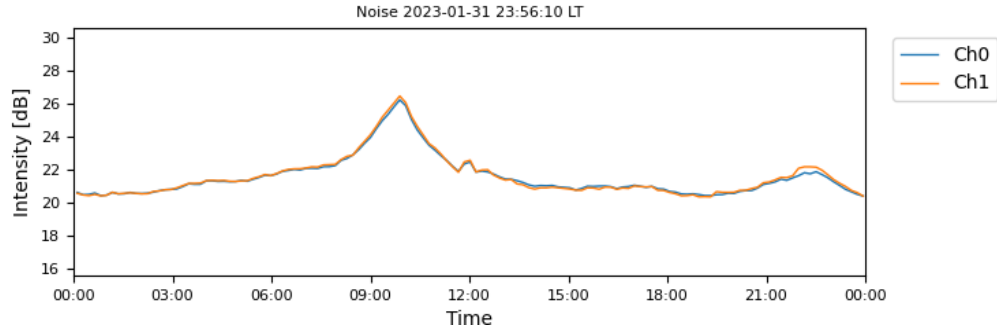


Figure 30. Faraday Noise 2023-01-31.

February, 01:

_ There is Spread F from 0 to 1 hour.

_ Radar controller failure, so the acquisition system failed for 01 hour and 05 minutes. At 3 o'clock.

_ % Operation/8h: 86.46

Log:

_ 01 Feb 06:17 Imaging is off.

Staff in charge

00-08: A. Belleza.

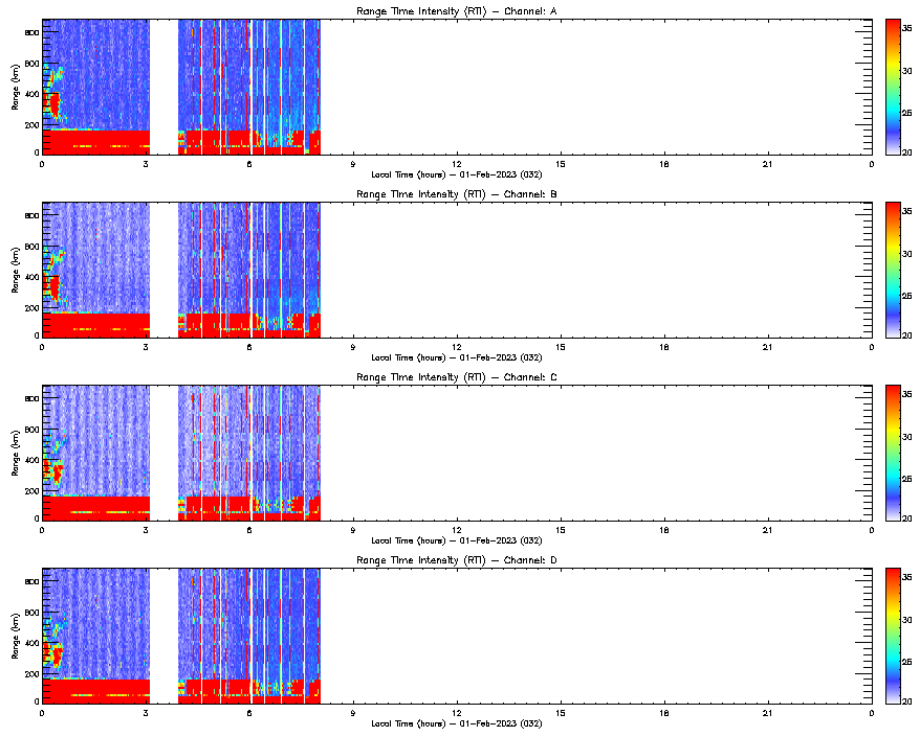


Figure 31. Rti EW_Drifts 2023-02-01.

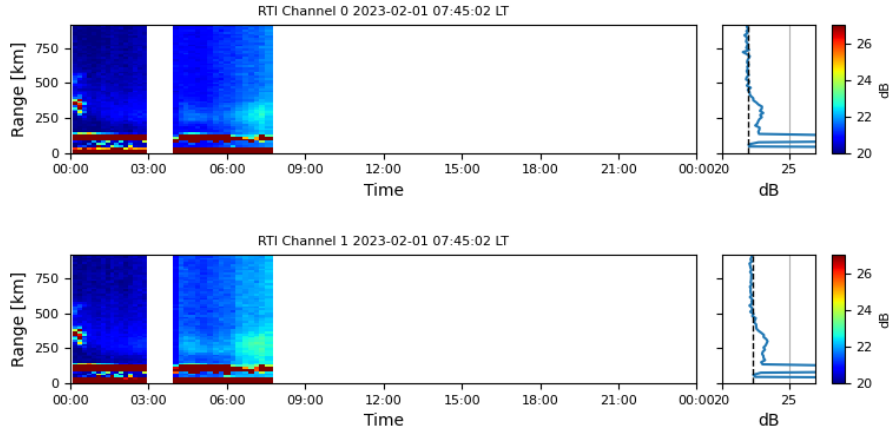


Figure 32. Rti FARADAY 2023-02-01.

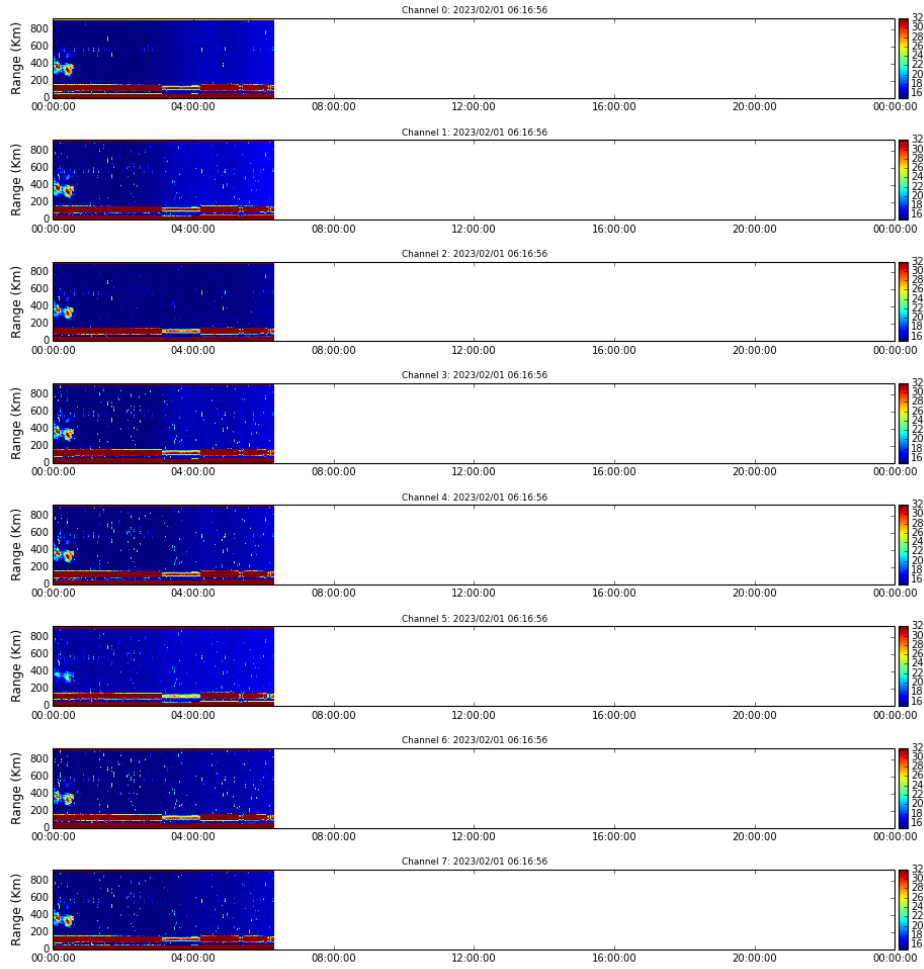


Figure 33. RTI IMAGING 2023-02-01.

Drifts obtained:

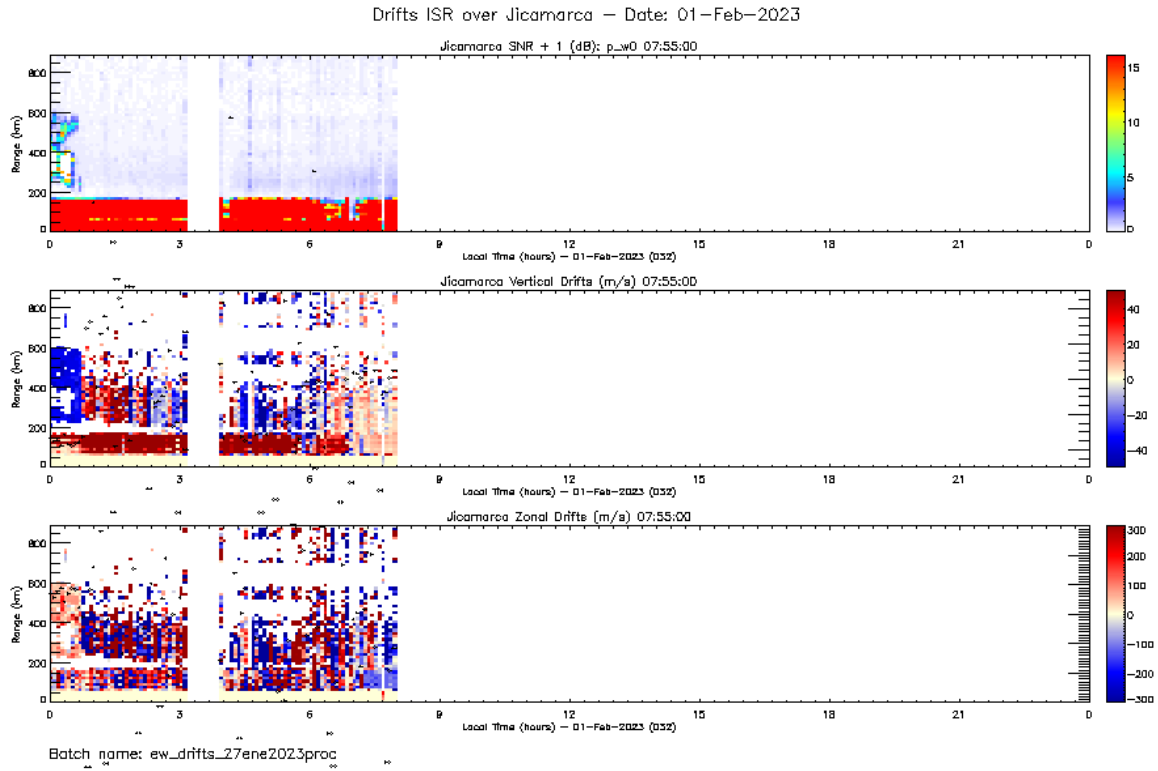


Figure 34. Drifts 2023-02-01.

Noise obtained:

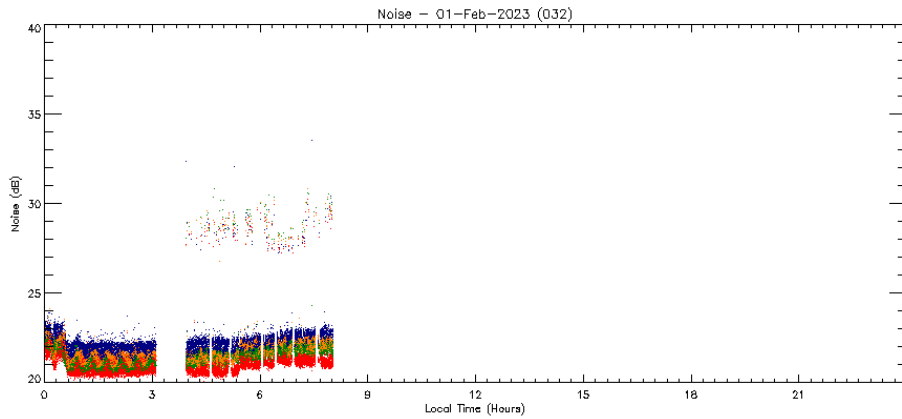


Figure 35. Noise 2023-02-01.

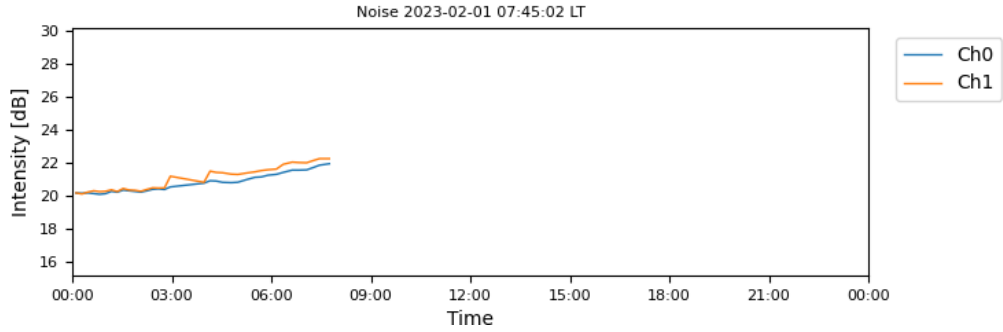


Figure 36. Faraday Noise 2023-02-01.

Annex:

Sky noise for January 27, 2023:

SKY BRIGHTNESS AT 50Mhz - Date: 27-Jan-2023 (027)
Galaxy Pass at 10:16:25 LT (18:35:32 LST)

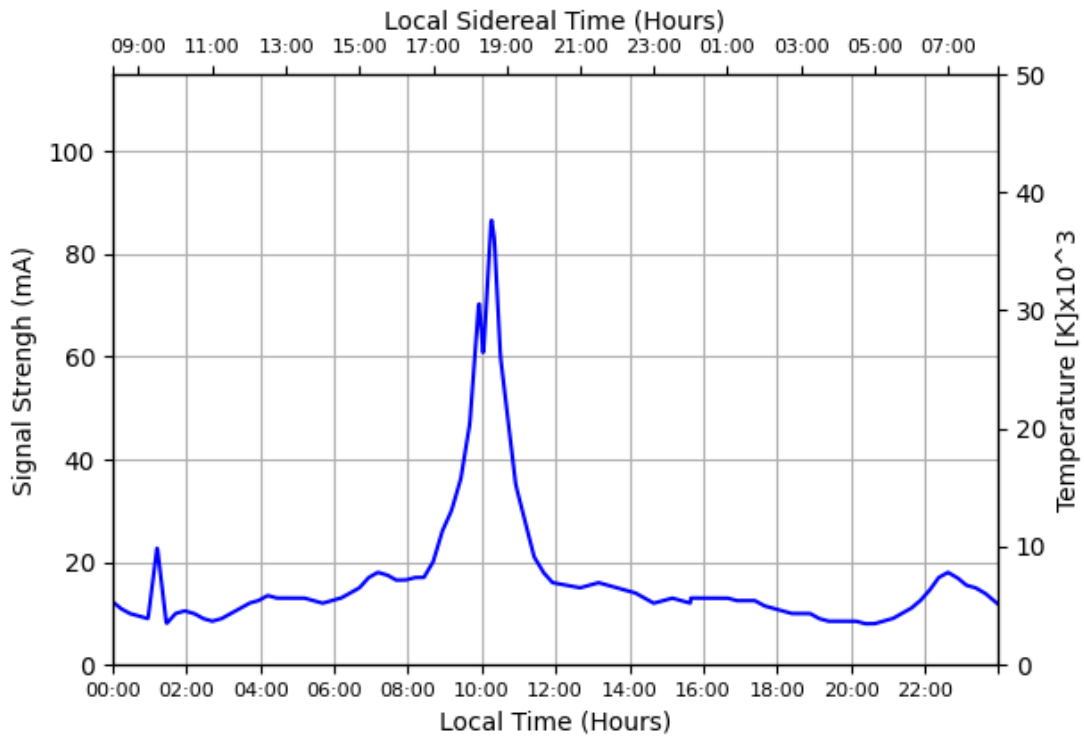


Figure 37. Sky noise.

Antenna pattern

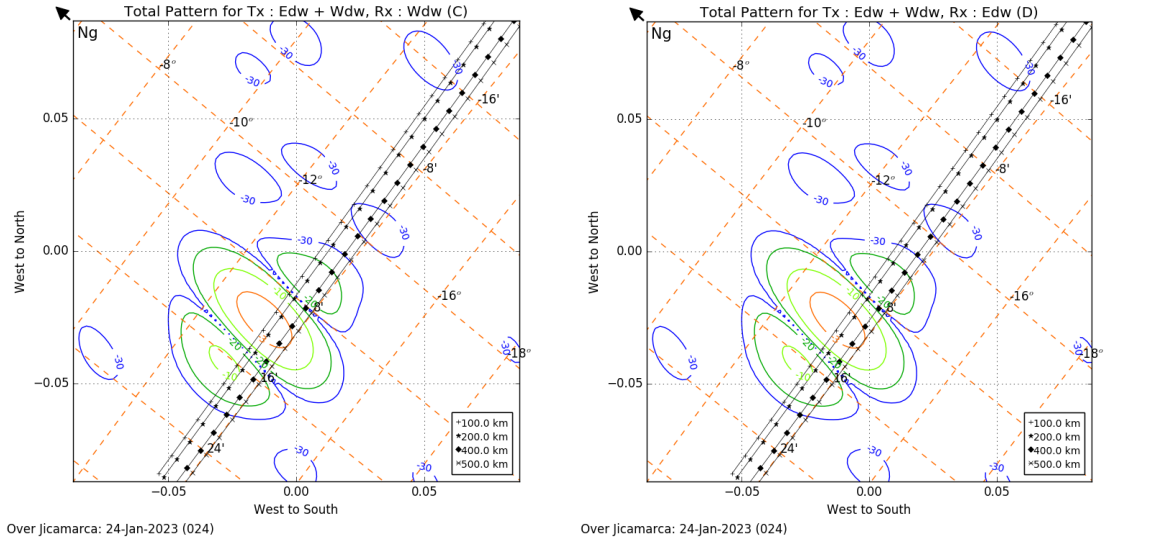


Figure 38. Antennas pattern EW_Drifts modo ISR: Ch A and Ch B.

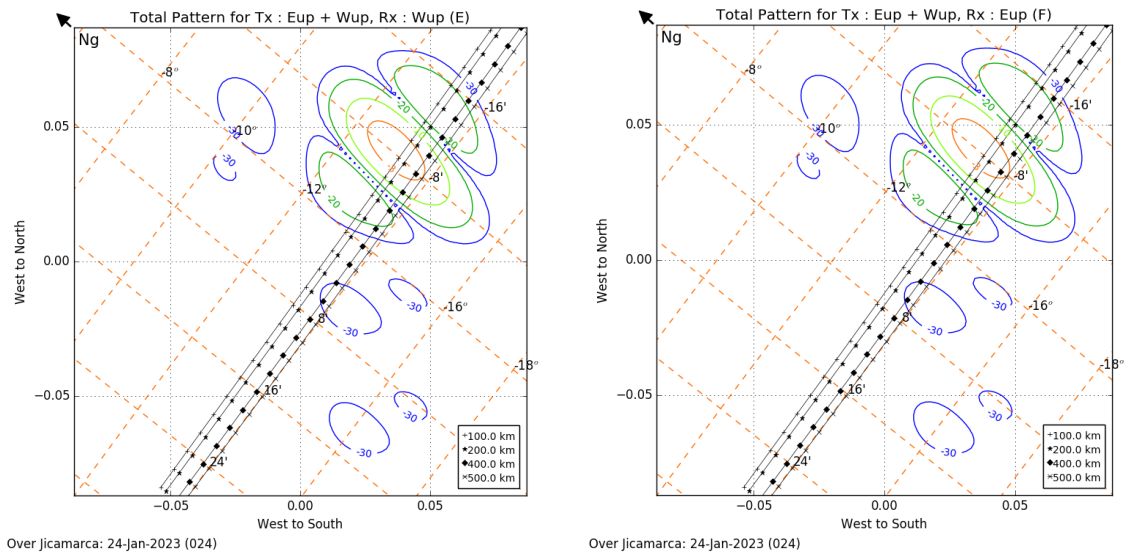
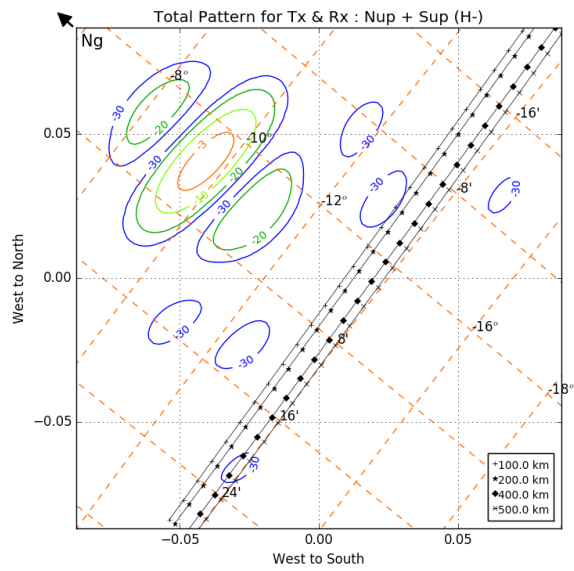
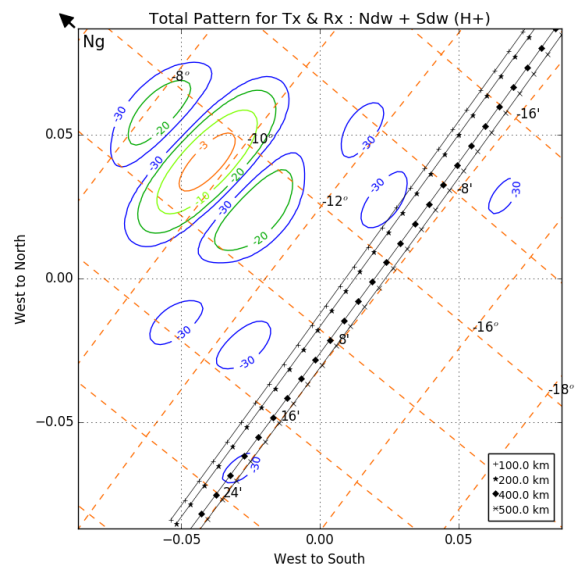


Figure 39. EW_Drifts modo ISR: Ch C and Ch D.



Over Jicamarca: 24-Jan-2023 (024)



Over Jicamarca: 24-Jan-2023 (024)

Figure 40. Faraday : Ch A and Ch B.