

EW_Drift-Faraday-Imaging August 2017 Campaign Report

This is an analysis of RTIs during EWDrift-Faraday-Imaging campaign from August 20 to 23, 2017. We show the RTIs and results.

EW_DRIFT-FARADAY-IMAGING:

August, 20:

- _ Start the campaign from 16:15 hours.
- _ At 17 hours lost data by change of spark gap.
- _ There is no Spread F.
- _ % Operation/8h: 96.88

Log:

- _ 20 Aug 16:15 Start campaign.
- _ 20 Aug 17:08 Spark gap change.
- _ 20 Aug 17:55 Start Imaging.

Staff in charge

16-20: K. Kuyeng. 20-24: A. Váldez.

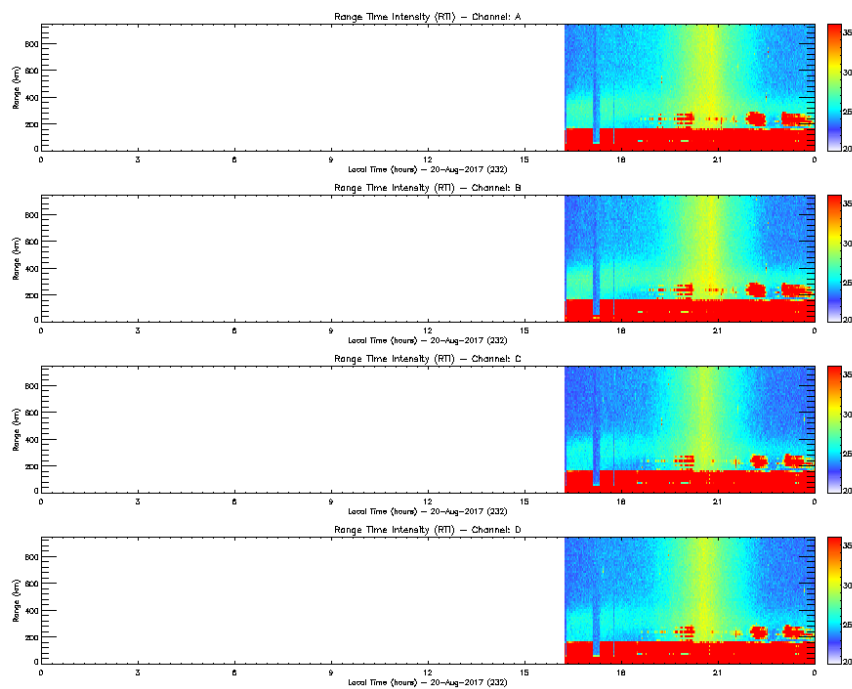


Figure 1.Rti EW_DRIFT 2017-08-20.

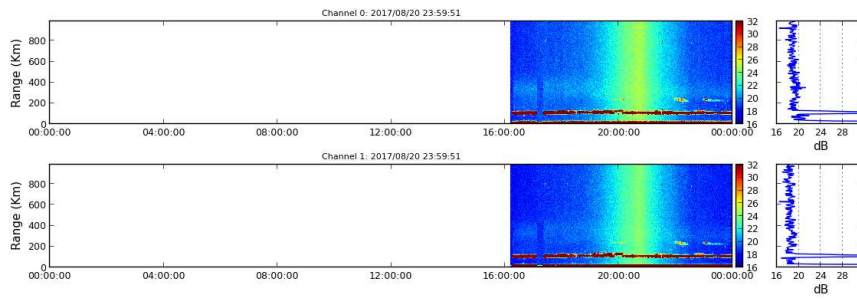


Figure 2. Rti FARADAY 2017-08-20.

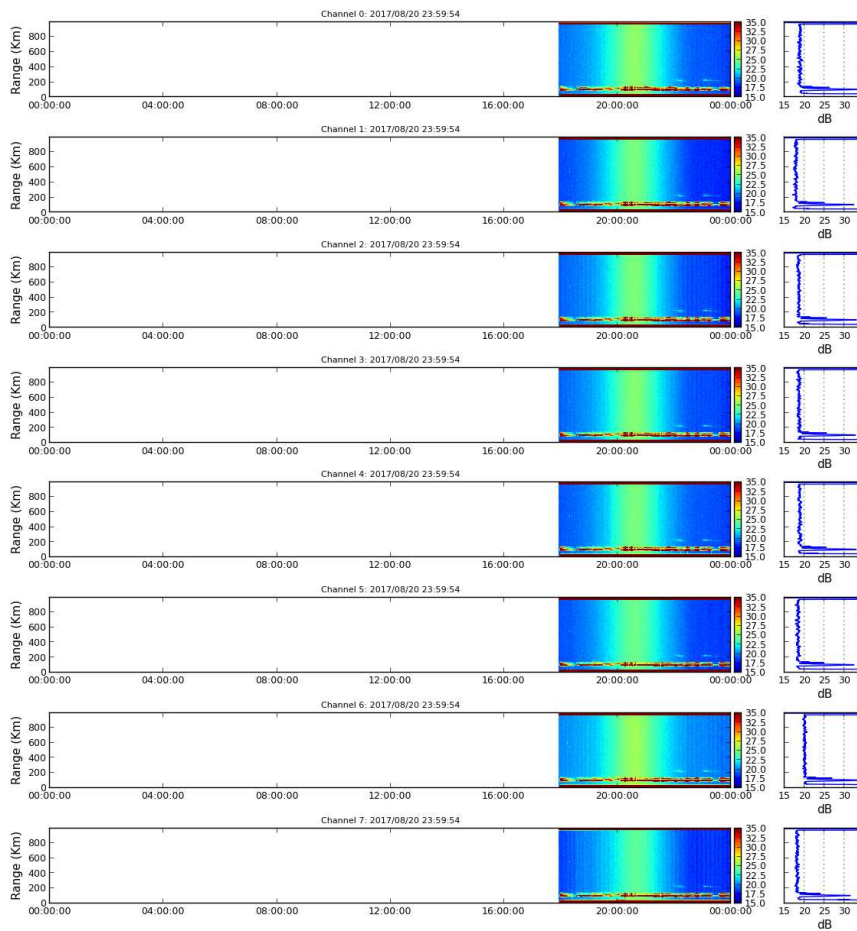


Figure 3. RTI IMAGING 2017-08-20.

Drifts obtained:

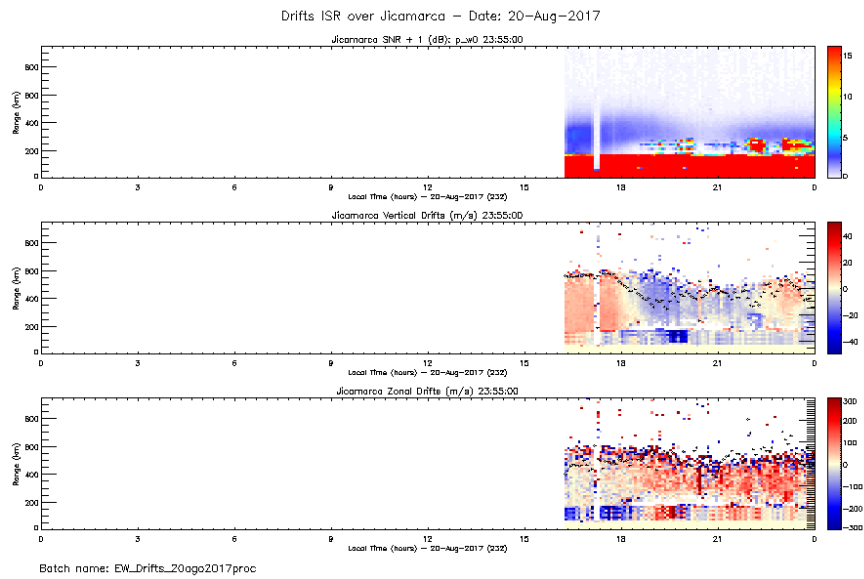


Figure 4. Drifts 2017-08-20.

Aug, 21:

_ Spread F from 21 to 00 hours.

_ Problem with transmitter at 17 and 20 hours.

_ % operation/24h: 99.17.

Log:

_ 21 Aug 13:40 Problem with transmitter for few minutes.

_ 21 Aug 17:25 Restart acquisition system.

_ 21 Aug 17:25 Start Imaging.

Staff in charge

00-08: A. Váldez. 08-20: I. Manay. 20-24: A. Belleza.

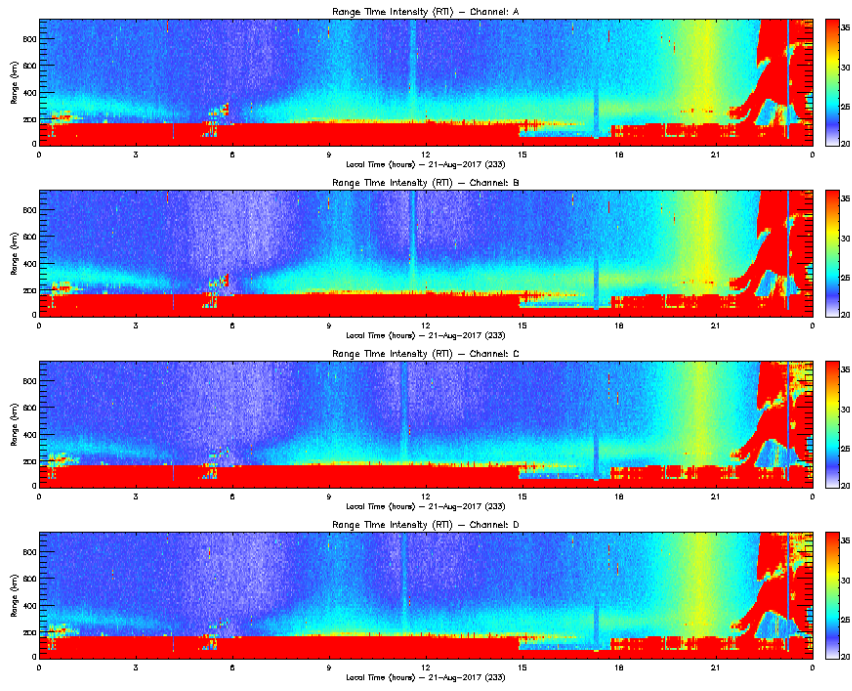


Figure 5. Rti EW_DRIFT 2017-08-21.

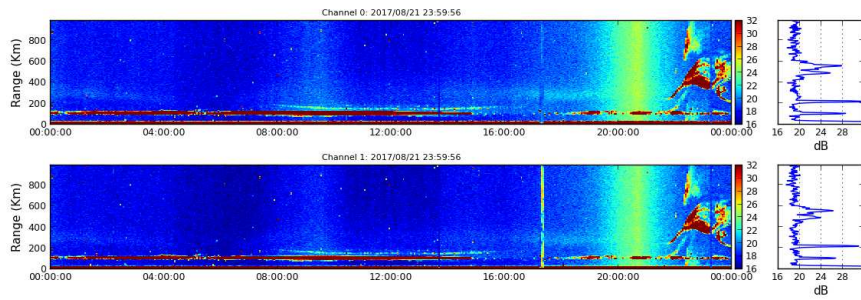


Figure 6. Rti FARADAY 2017-08-21.

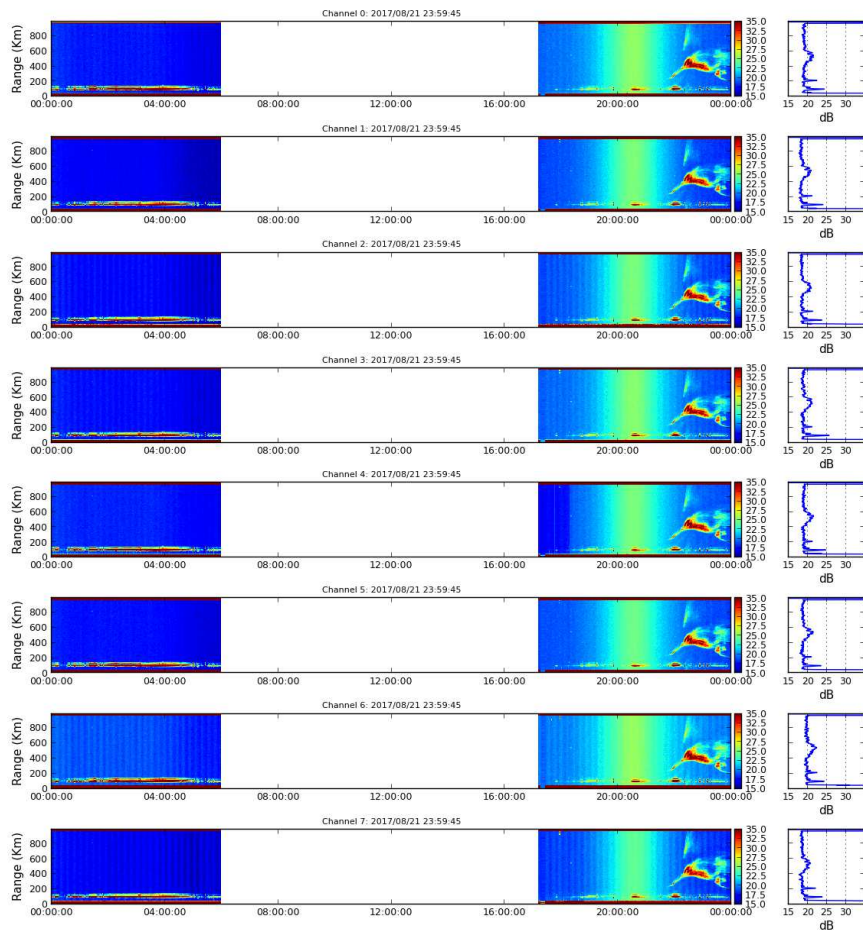


Figure 7. Rti IMAGING 2017-08-21.

Drifts obtained:

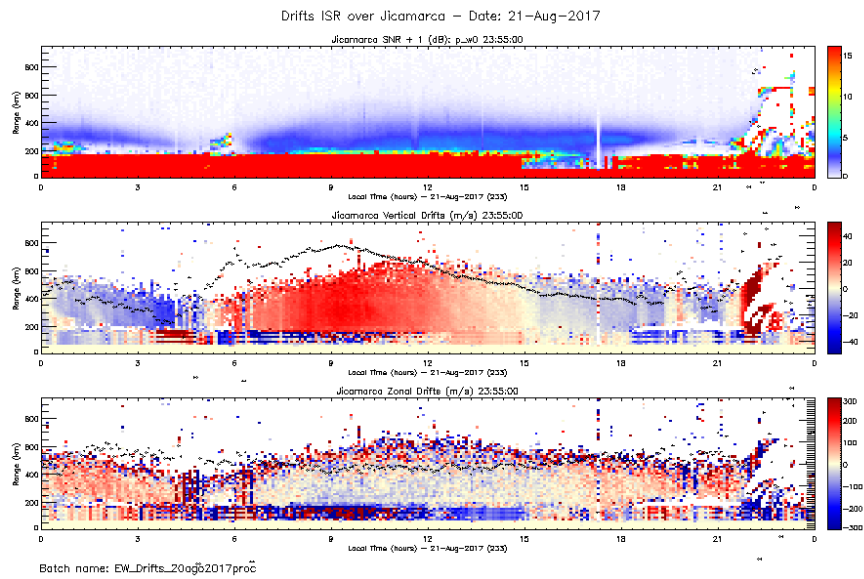


Figure 8. Drifts 2017-08-21.

August, 22:

- _ There is Spread F from 00 to 06 hours.
- _ Problems with transmitter at 09, 10 and 17 hours.
- _ There are problems with Faraday system from 03 to 05 hours.
- _ Faraday desynchronized from 18 hours until midnight.
- _ % operation/24h: 100.

Log:

- _ 22 Aug 17:05 Start Imaging.
- _ 22 Aug 11:36, 17:02, 18:10 Faraday restart.

Staff in charge:

00:08: A. Belleza 08-20: R. Yanque. 20-24: P. C6ndor.

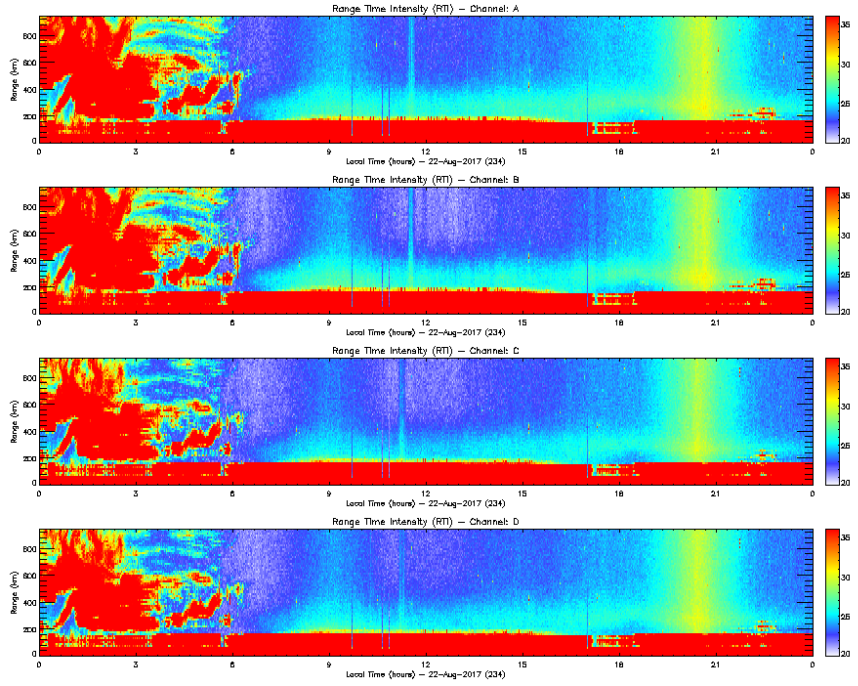


Figure 9. Rti EW_DRIFT 2017-08-22.

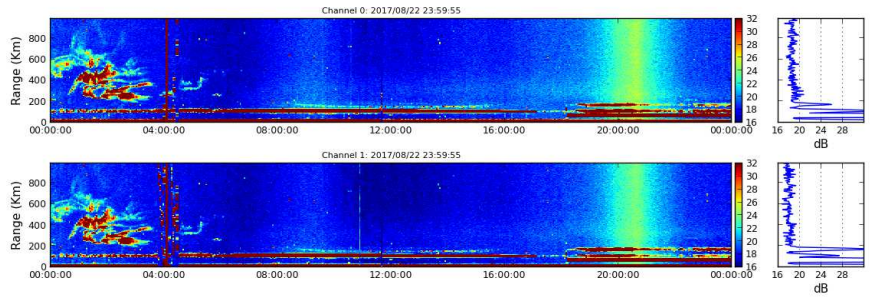


Figure 10. Rti FARADAY 2017-08-22.

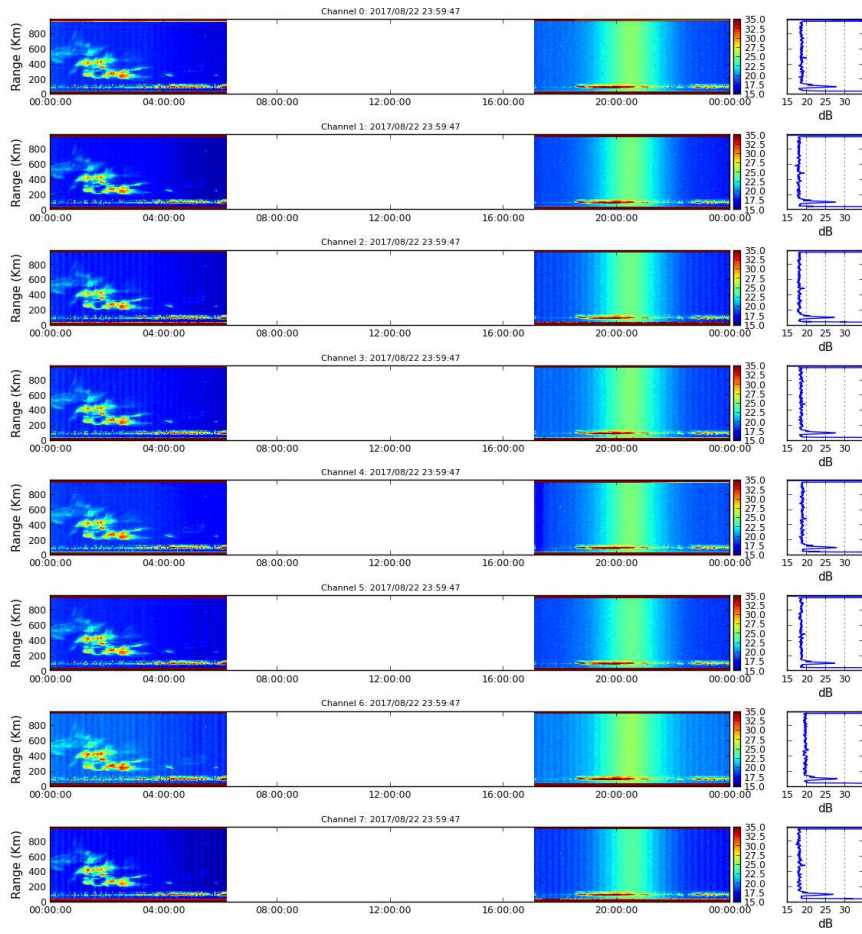


Figure 11. Rti IMAGING 2017-08-22.

Drifts obtained:

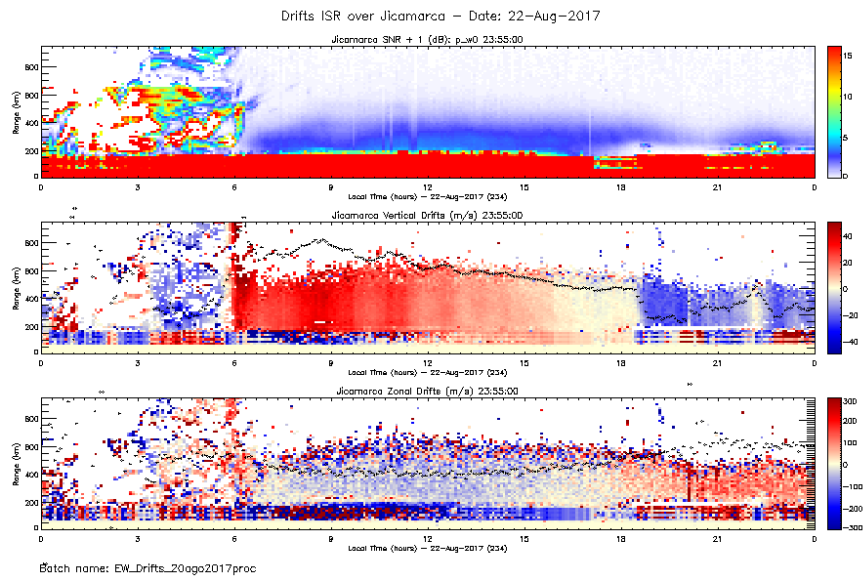


Figure 12. Drifts 2017-08-22.

August, 23:

_ There is no Spread F.

_ Faraday was desynchronized from 00:00 to 00:34 hours.

Log:

_ 23 Aug 00:34 Restart Faraday.

_ 23 Aug 06:09 Imaging off.

_ 23 Aug 08:00 End of campaign.

_ % operation/8h: 100.

Staff in charge:

00-08: P. C3ndor.

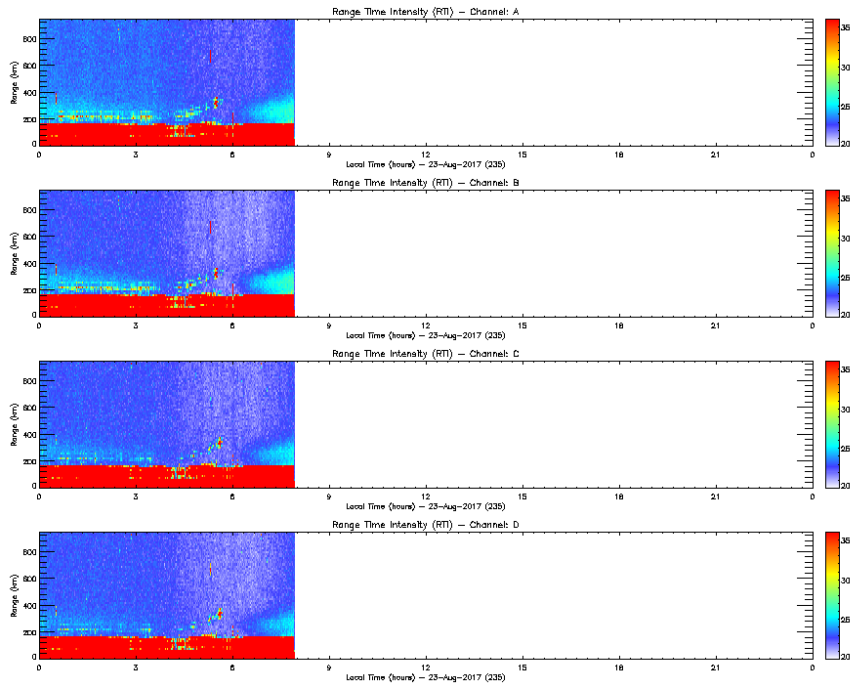


Figure 13. Rti EW_DRIFT 2017-08-23.

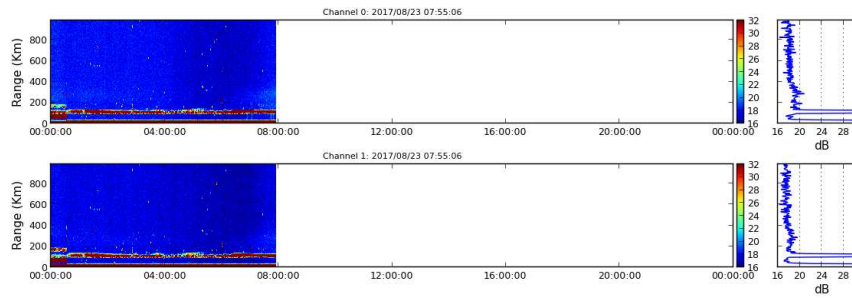


Figure 14. Rti FARADAY 2017-08-23.

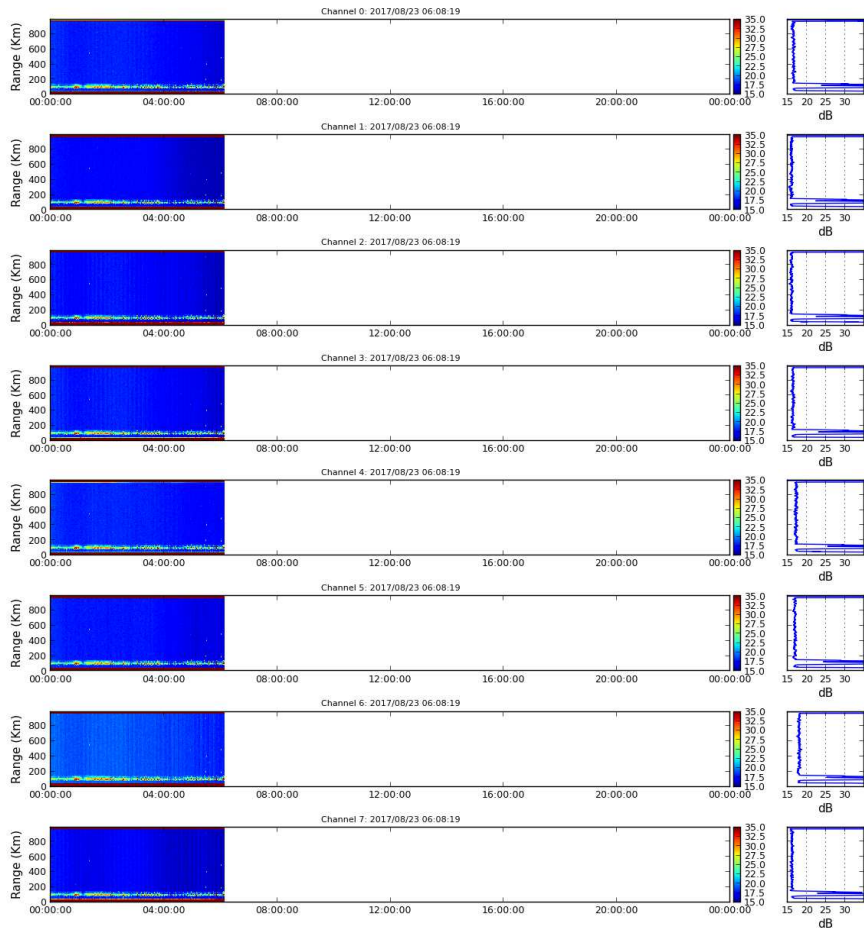


Figure 15. Rti IMAGING 2017-08-23.

Drifts obtained:

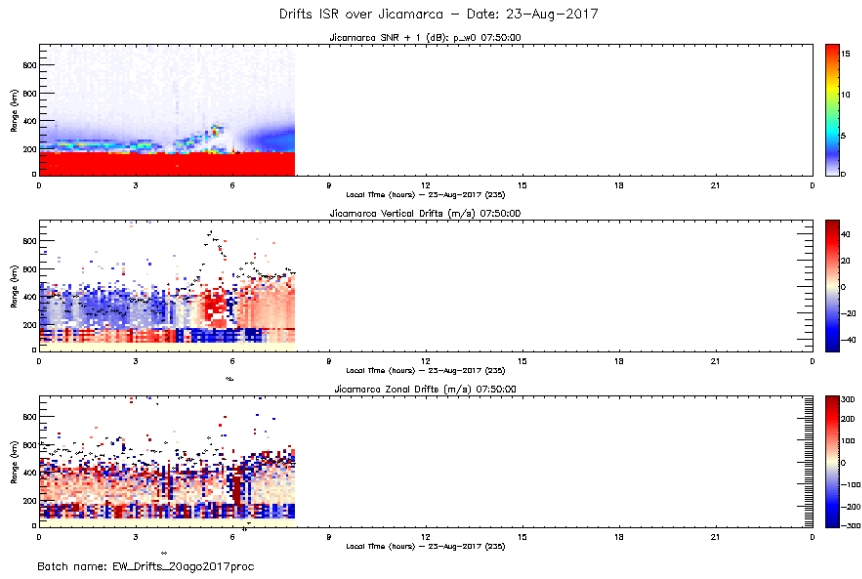


Figure 16. Drifts 2017-08-23.

Observations:

It looks like there is interference in Imaging channels.

Faraday noise will be included in next report

Annex:

Sky noise for August 20, 2017:

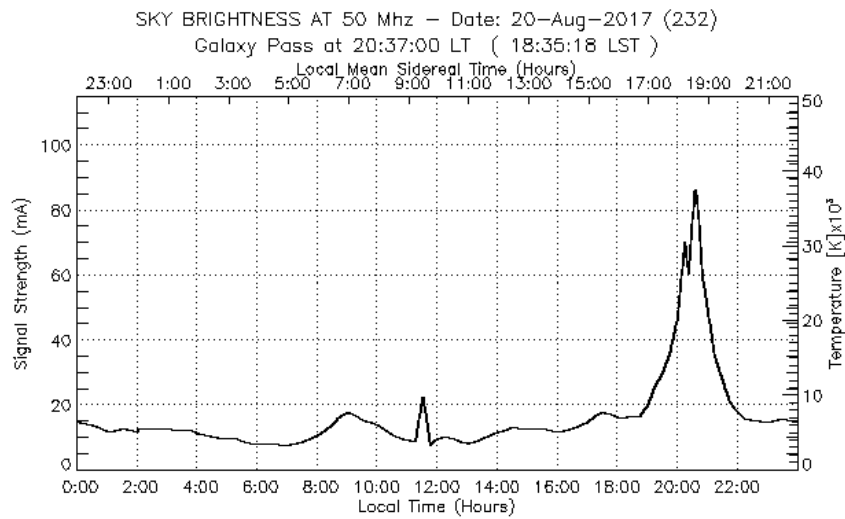
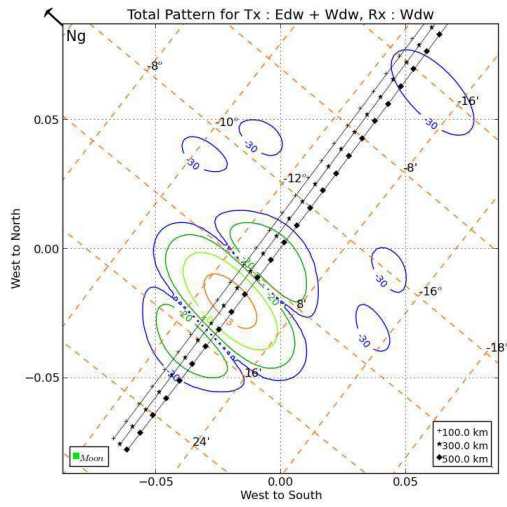
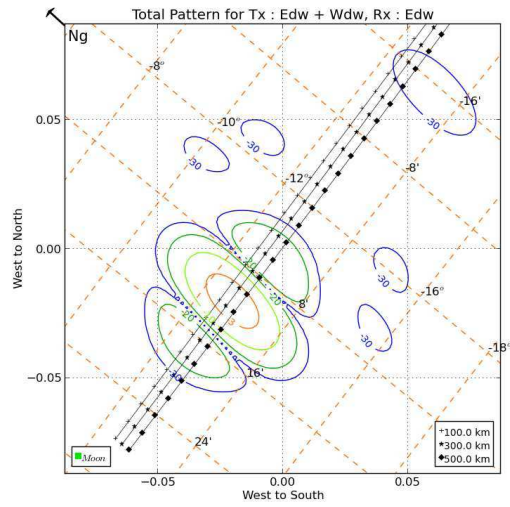


Figure 17. Sky noise.

Antenna pattern

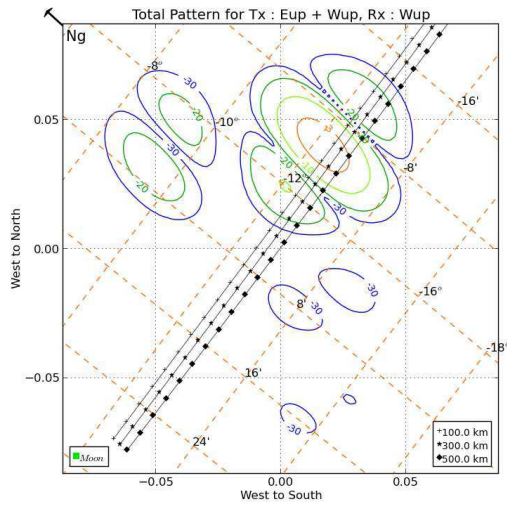


Over Jicamarca: 21-Aug-2017 (233)

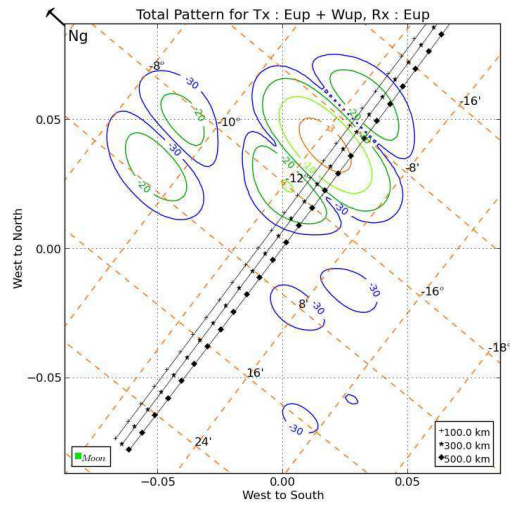


Over Jicamarca: 21-Aug-2017 (233)

Figure 18. Antennas pattern EW_Drifts: Ch A and Ch B.

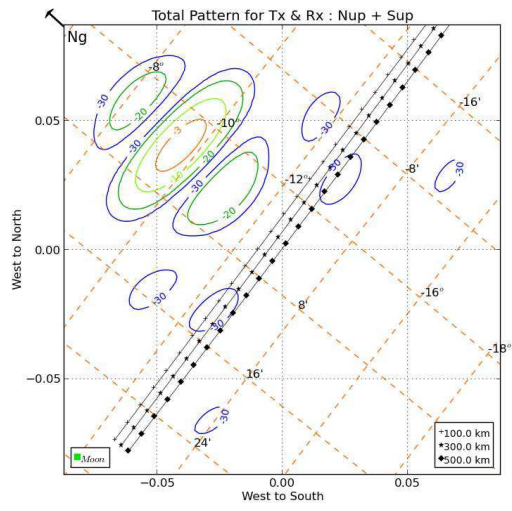


Over Jicamarca: 21-Aug-2017 (233)

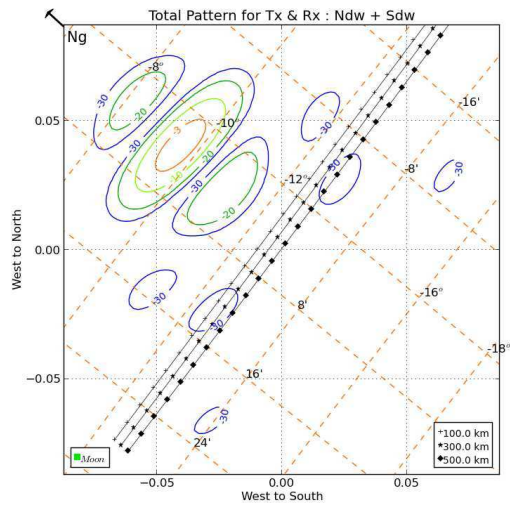


Over Jicamarca: 21-Aug-2017 (233)

Figure 19. EW_Drifts: Ch C and Ch D.



Over Jicamarca: 21-Aug-2017 (233)



Over Jicamarca: 21-Aug-2017 (233)

Figure 20. Faraday: Ch A and Ch B.