

# EW\_Drifts-Faraday-Imaging September 2017 Campaign Report

This is an analysis of RTIs during EW\_Drifts-Faraday-Imaging campaign from September 05 to 11, 2017. We show the RTIs and results.

## EW\_DRIFT-FARADAY-IMAGING:

September, 05:

\_ Start the campaign from 16:25 hours.

\_ Spread F from 19 to 24 hours.

\_ % Operation/8h: 100.0

Log:

\_ 05 Sep 16:40 Start campaign.

\_ 05 Sep 16:40 Start Imaging.

Staff in charge

08-20: K. Kuyeng. 20-24: A. Váldez.

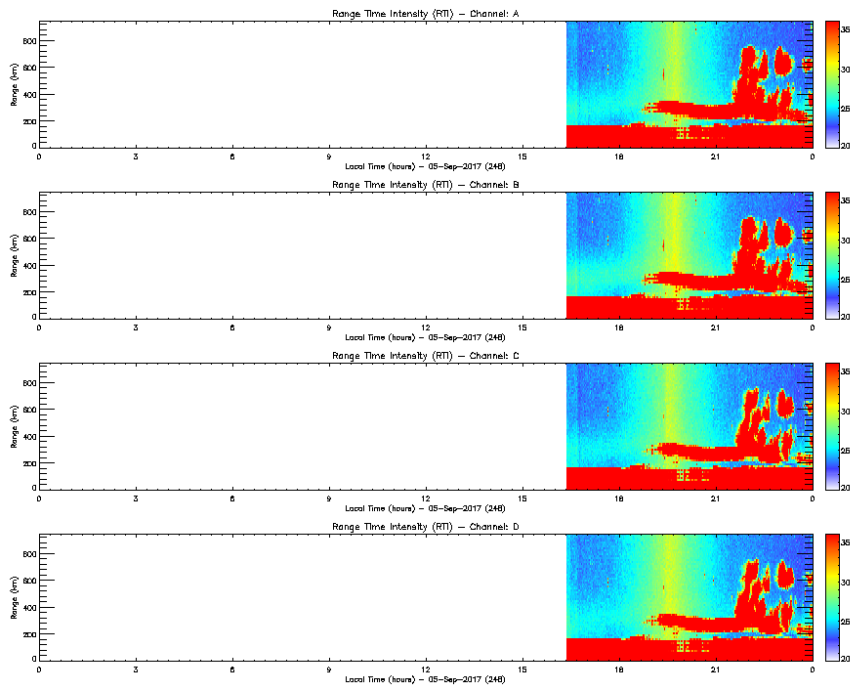
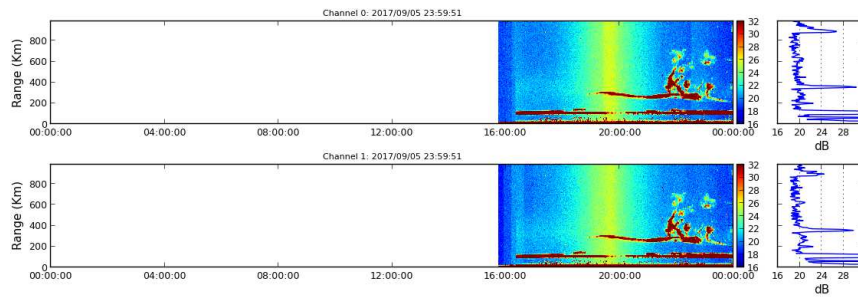
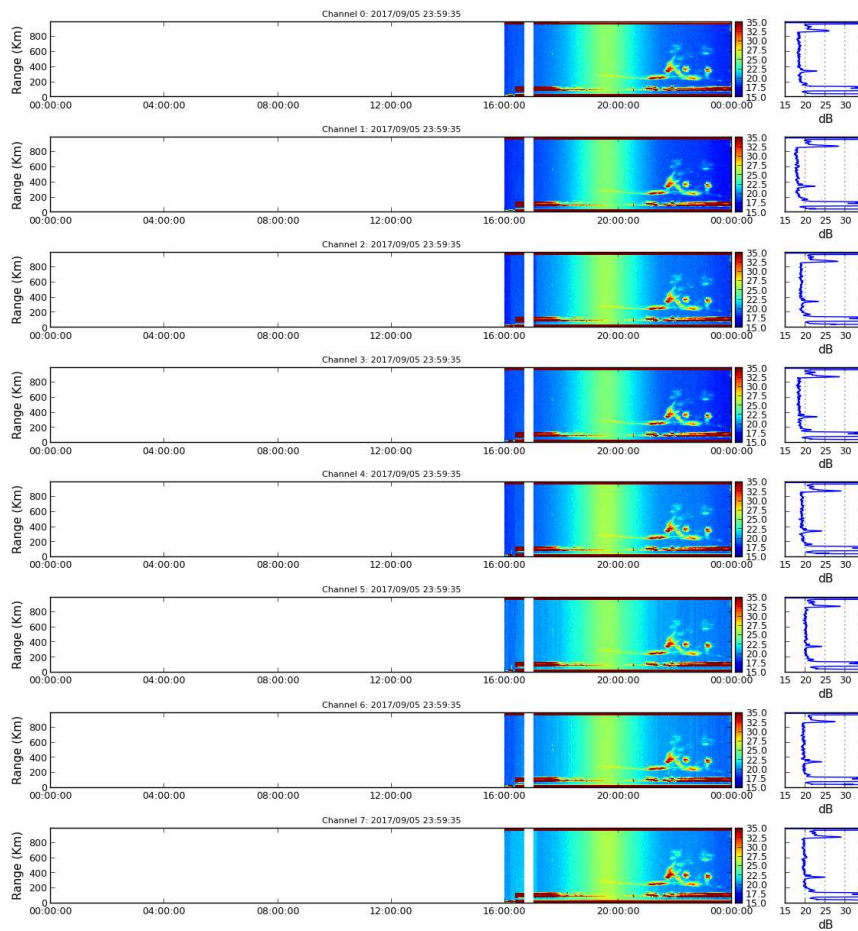


Figure 1.Rti EW\_DRIFT 2017-09-05.



**Figure 2. Rti FARADAY 2017-09-05.**



**Figure 3. RTI IMAGING 2017-09-05.**

Drifts obtained:

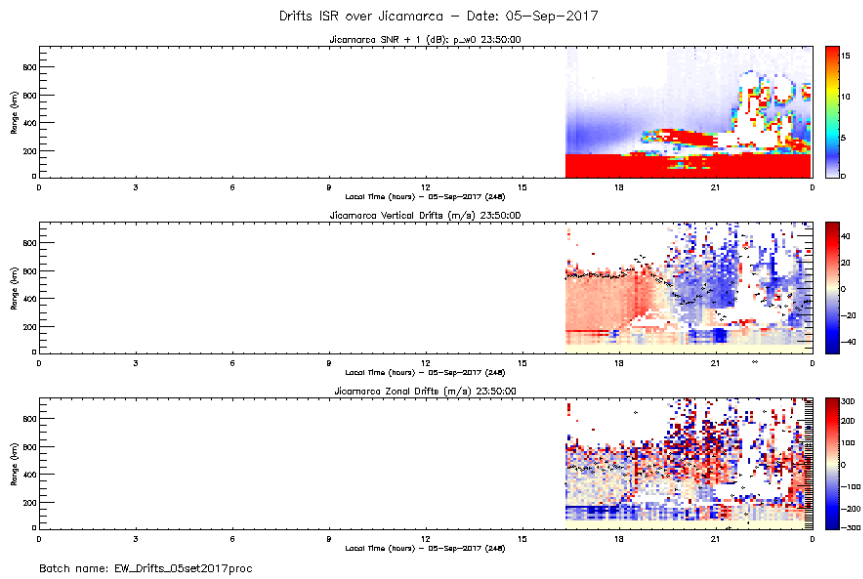


Figure 4. Drifts 2017-09-05.

Faraday Noise:

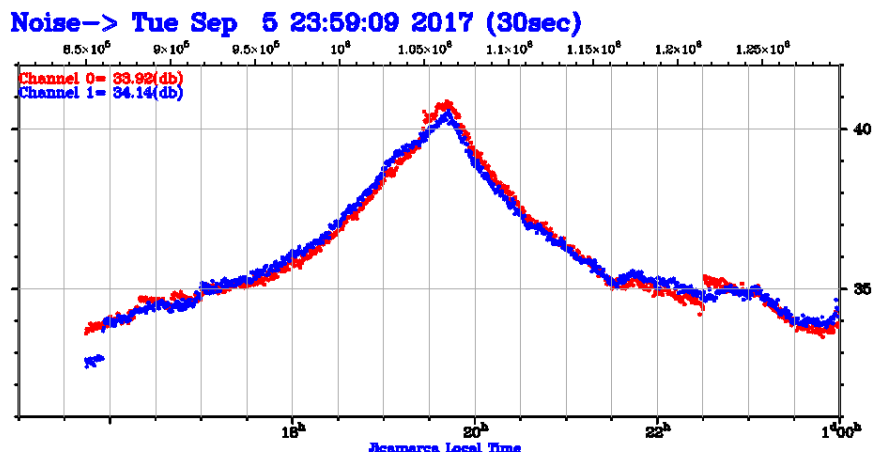


Figure 5. Faraday Noise 2017-09-05.

September, 06:

- \_ Spread F from 19 to 24 hours.
- \_ Problem with Faraday at 22 hours for few minutes.
- \_ % operation/24h: 100.0.

Log:

- \_ 06 Sep 17:30 Start Imaging.

Staff in charge

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

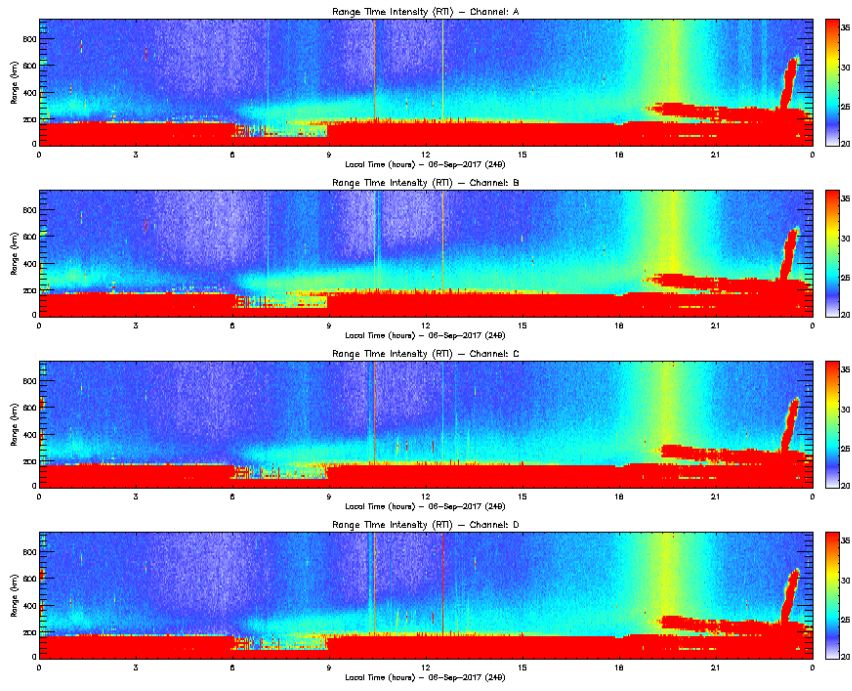


Figure 6. Rti EW\_DRIFT 2017-09-06.

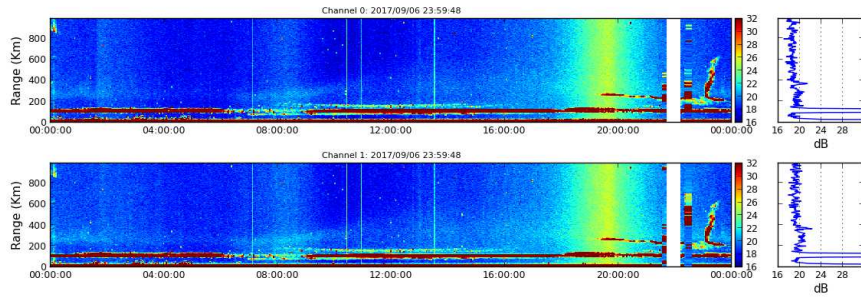


Figure 7. Rti FARADAY 2017-09-06.

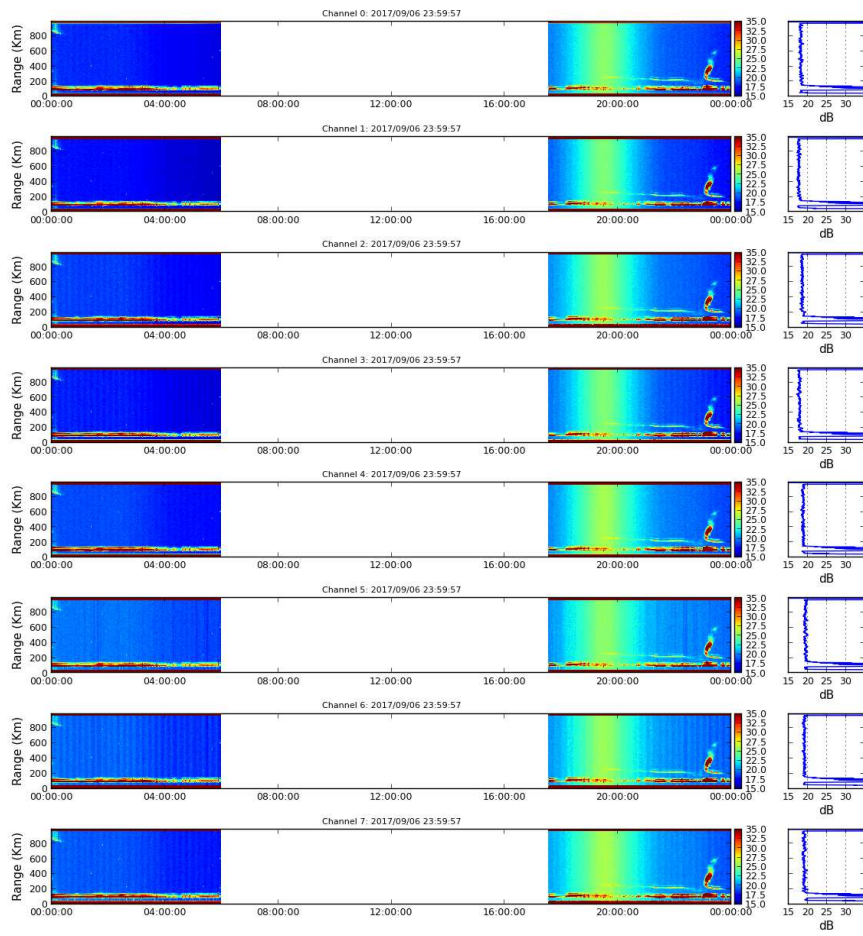


Figure 8. Rti IMAGING 2017-09-06.

Drifts obtained:

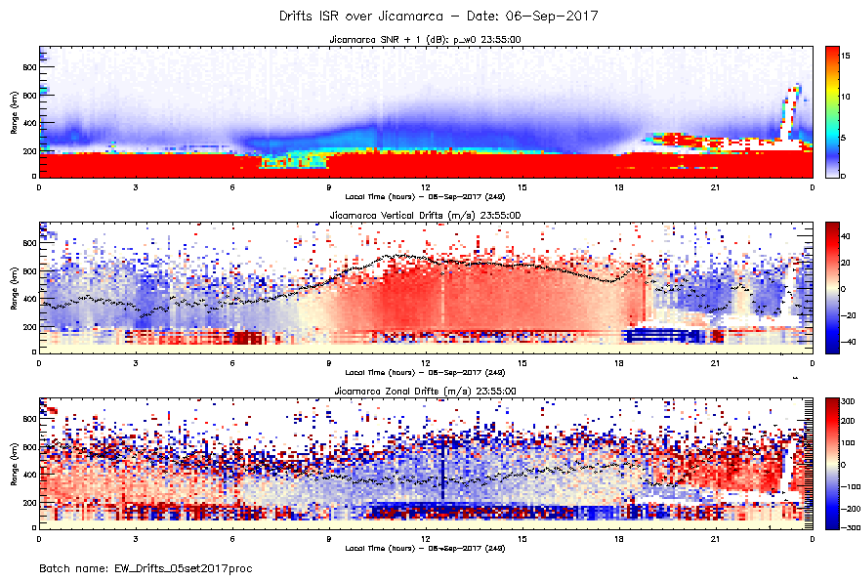


Figure 9. Drifts 2017-09-06.

Faraday Noise:

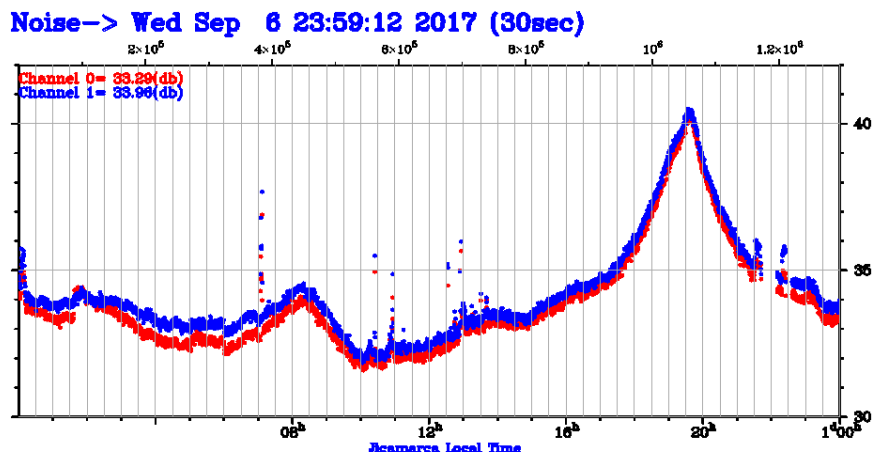


Figure 10. Faraday Noise 2017-09-06.

September, 07:

- \_ There is Spread F from 03 to 06 and from 19 to 24 hours.
- \_ Effects of Solar flares were observed.
- \_ Problems with transmitter at 15 hours for a lot of minutes.
- \_ There are problems with EW Drifts system at 02 hours.
- \_ % operation/24h: 98.13.

Log:

- \_ 07 Sep 06:32 Imaging off.
- \_ 07 Sep 18:00 Start Imaging.

Staff in charge:

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

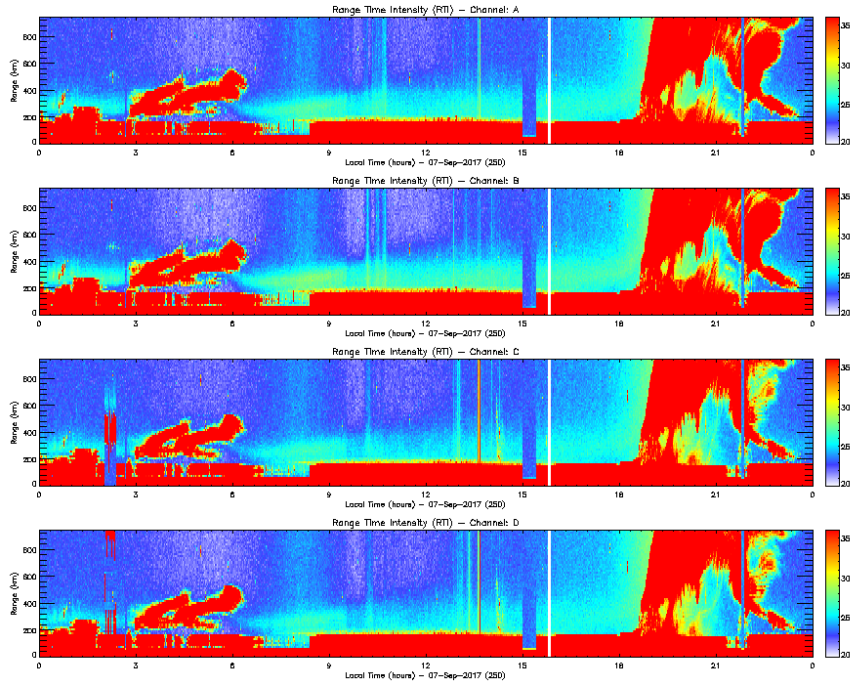


Figure 11. Rti EW\_DRIFT 2017-09-07.

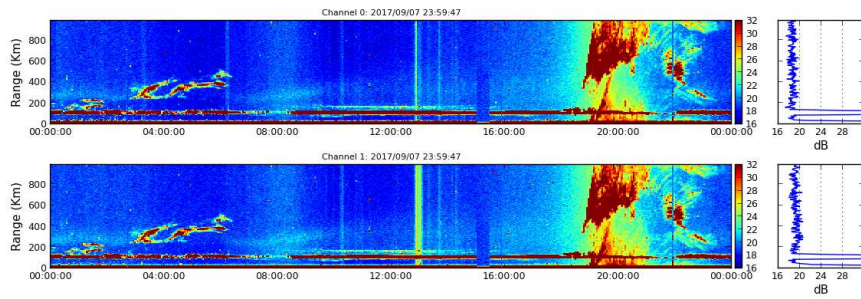
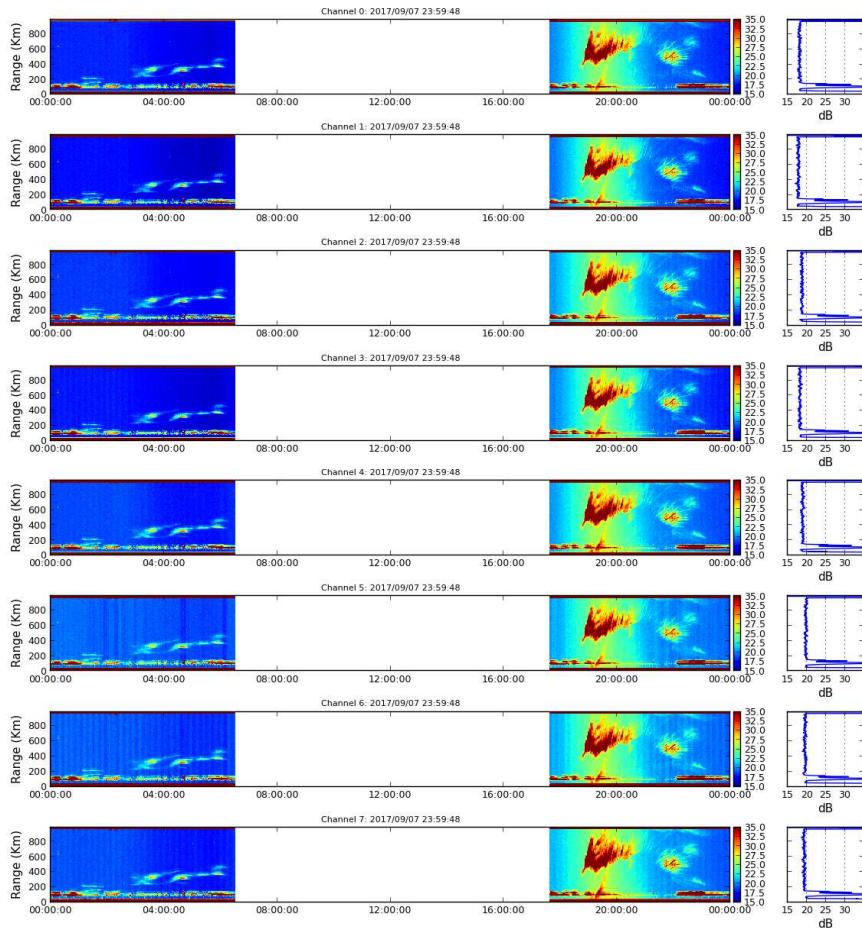


Figure 12. Rti FARADAY 2017-09-07.



**Figure 13. Rti IMAGING 2017-09-07.**

Drifts obtained:



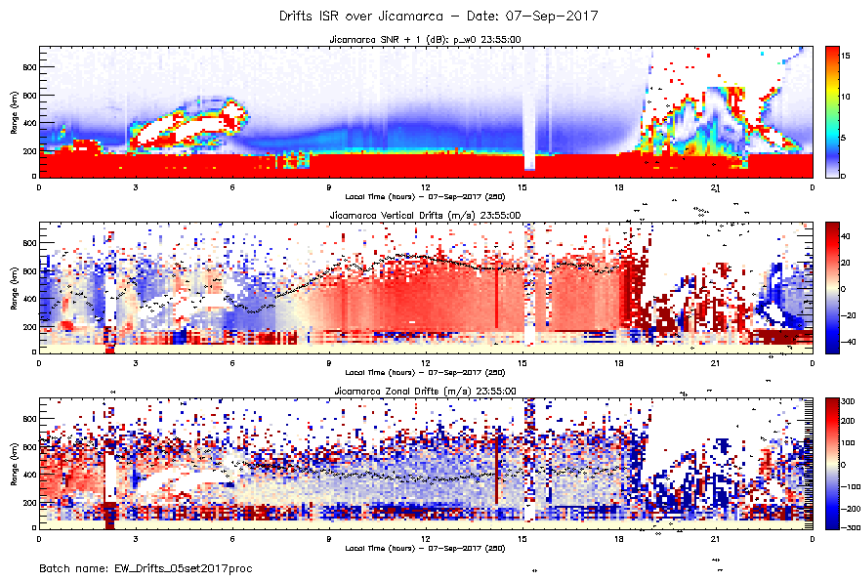


Figure 14. Drifts 2017-09-07.

Faraday Noise:

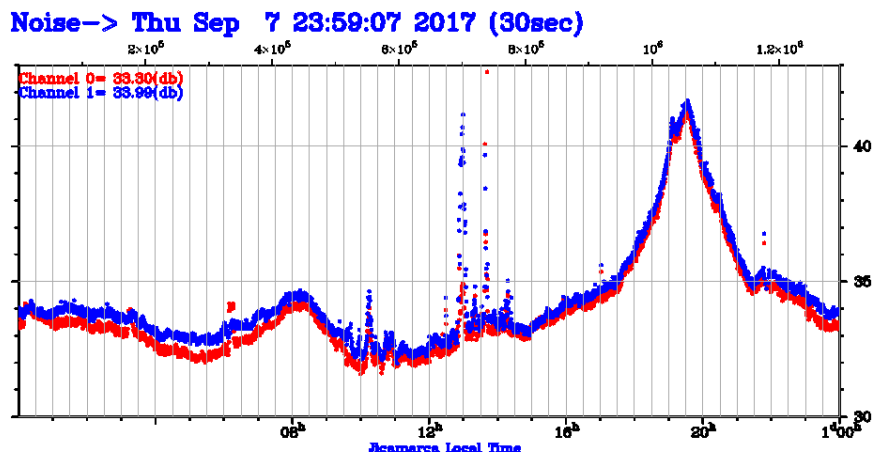


Figure 15. Faraday Noise 2017-09-07.

September, 08:

- \_ There is Spread F from 00 to 06 hours.
- \_ Effects of Solar Flares were observed.
- \_ Change of spark gaps at 17 hours. There are lost data for few minutes.

Log:

- \_ 08 Sep 07:50 Imaging off.
- \_ 08 Sep 17:20 Change of spark gaps.
- \_ 08 Sep 17:34 Transmitter on.
- \_ 08 Sep 17:35 Start Imaging.

\_ 08 Sep 18:04 Transmitter on after to repair one problem in spark gaps.

\_ % operation/8h: 96.88.

Staff in charge:

00-08: K. Kuyeng. 08-20: P. C3ndor. 20-24: A. Belleza.

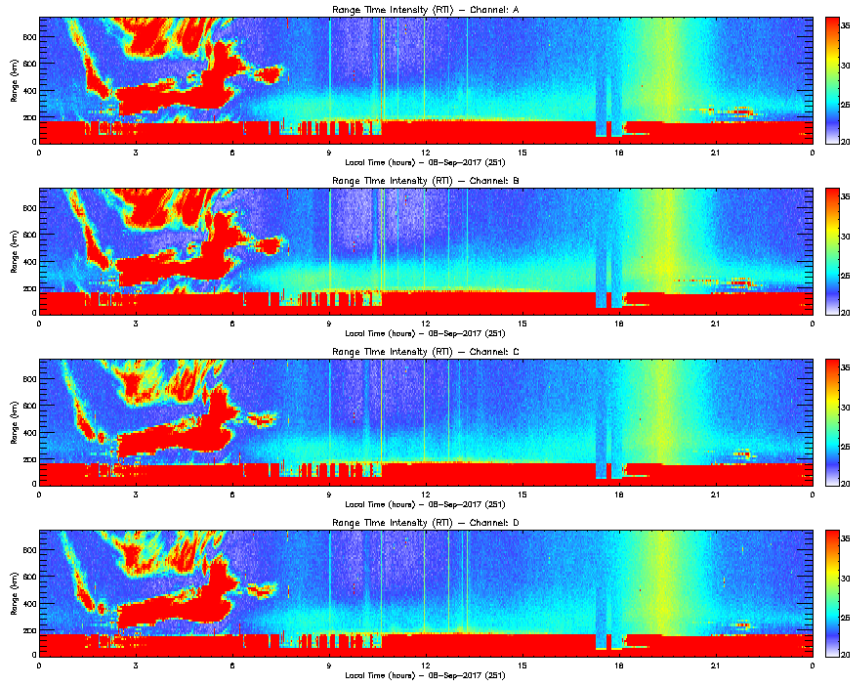


Figure 16. Rti EW\_DRIFT 2017-09-08.

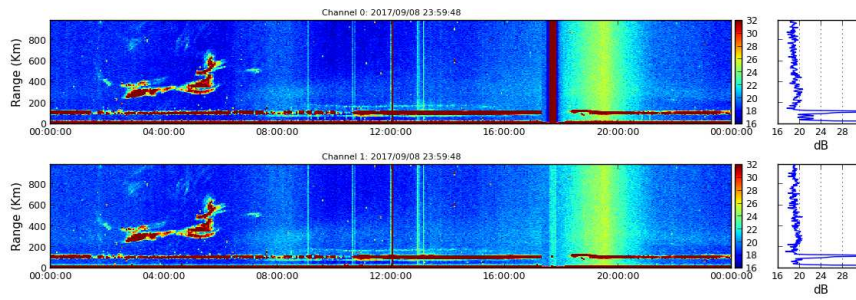


Figure 17. Rti FARADAY 2017-09-08.

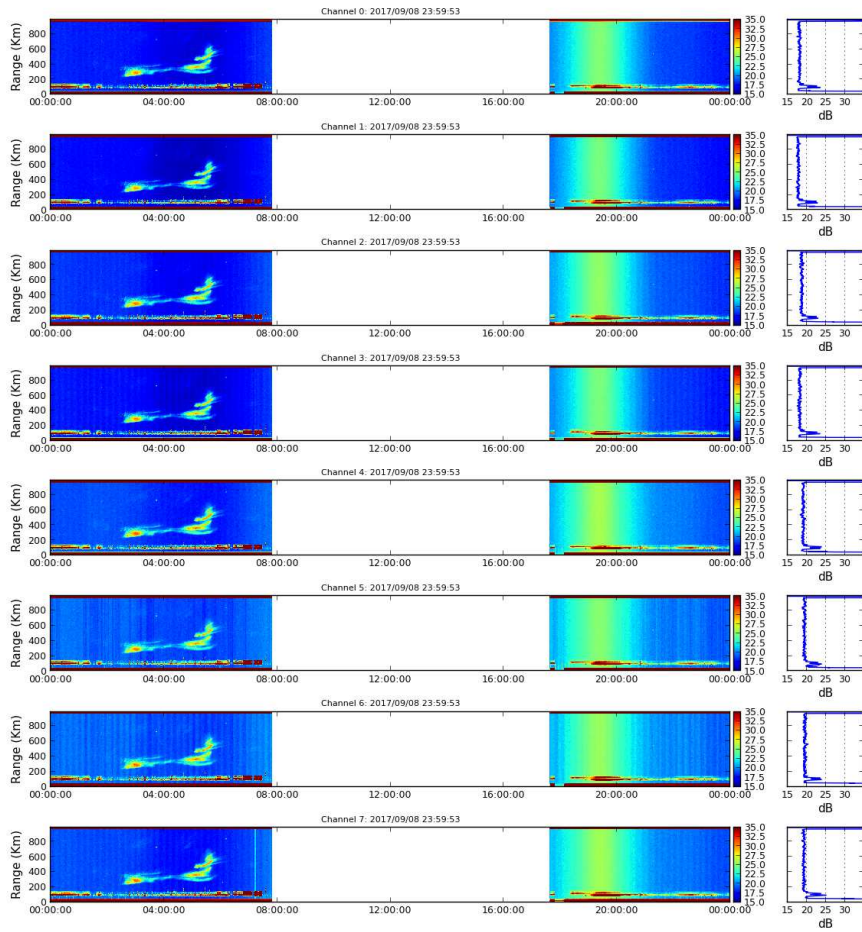


Figure 18. Rti IMAGING 2017-09-08.

Drifts obtained:

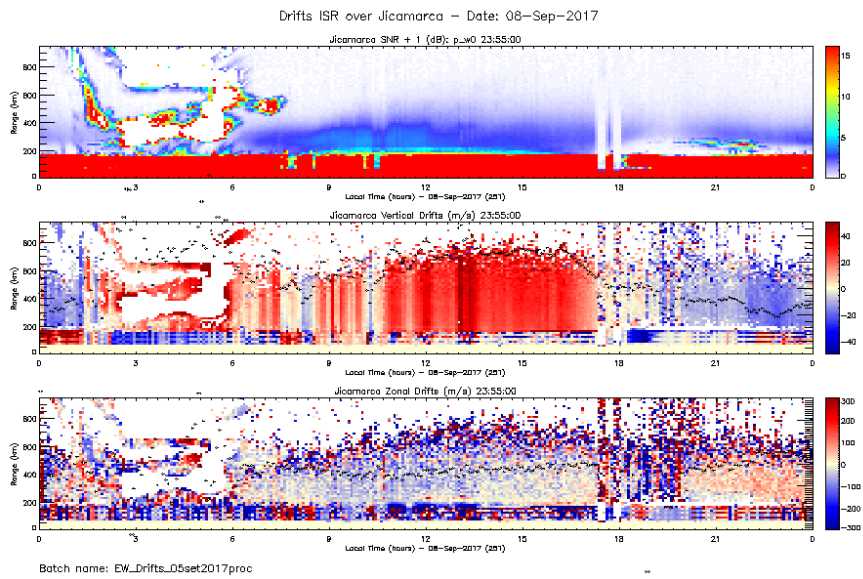


Figure 19. Drifts 2017-09-08.

Faraday Noise:

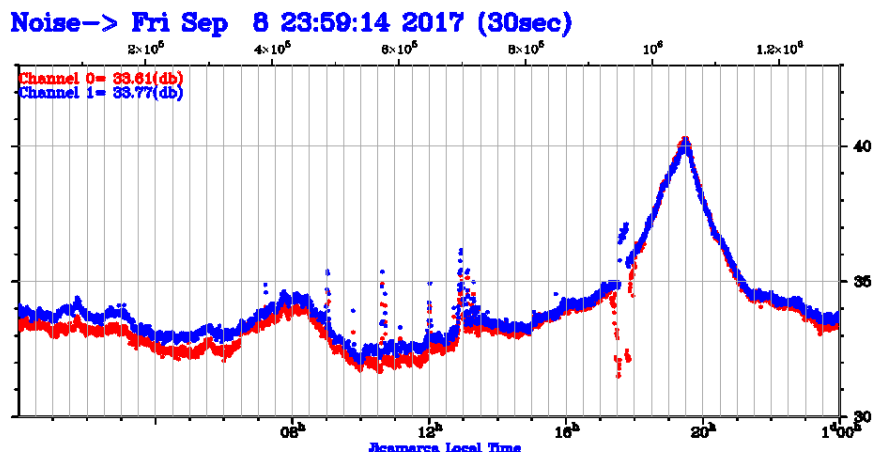


Figure 20. Faraday Noise 2017-09-08.

September, 09:

\_ There is Spread F from 19 to 22 hours.

Log:

\_ 09 Sep 06:26 Imaging off.

\_ 09 Sep 11:45 Adjustment at Faraday reception line.

\_ 09 Sep 19:00 Imaging start.

\_ % operation/8h: 100.

Staff in charge:

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

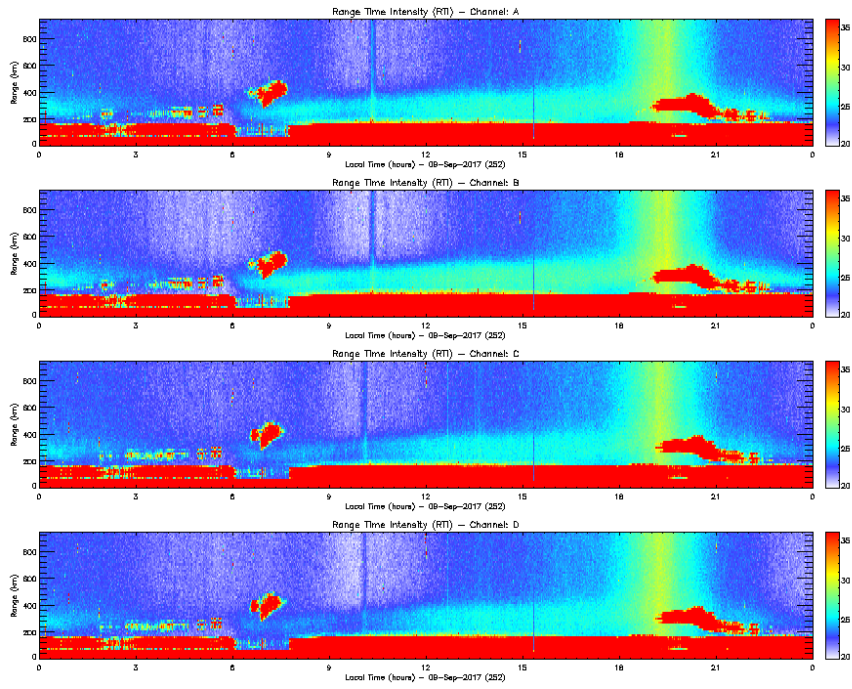


Figure 21. Rti EW\_DRIFT 2017-09-09.

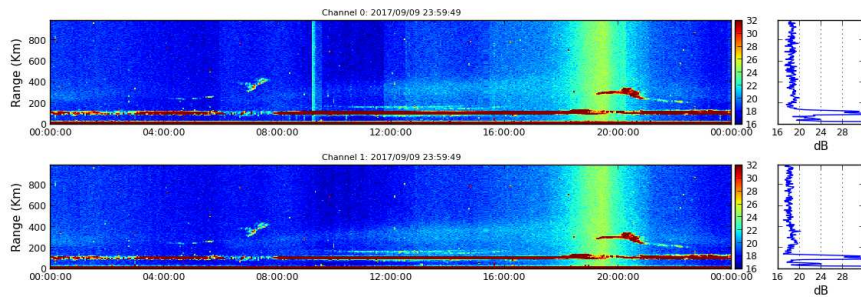
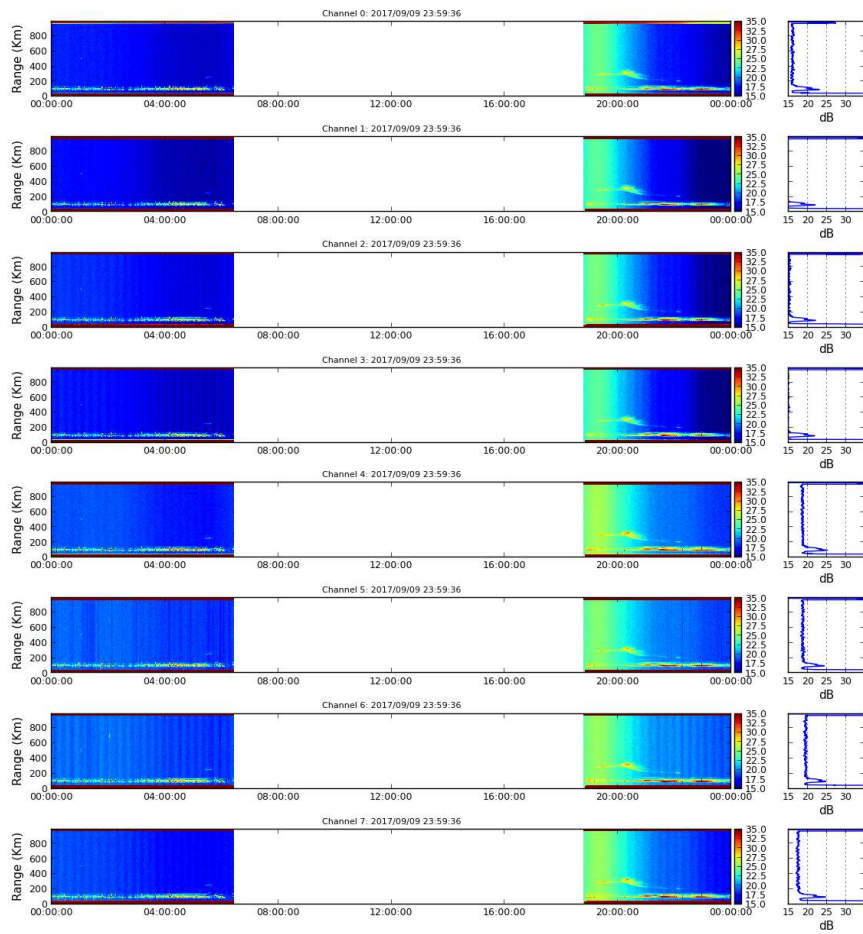


Figure 22. Rti FARADAY 2017-09-09.



**Figure 23. Rti IMAGING 2017-09-09.**

Drifts obtained:

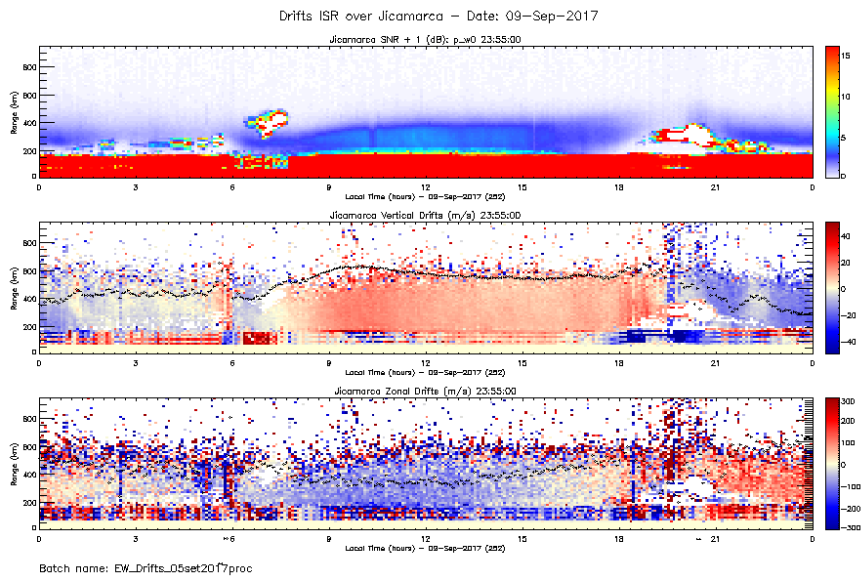


Figure 24. Drifts 2017-09-09.

Faraday Noise:

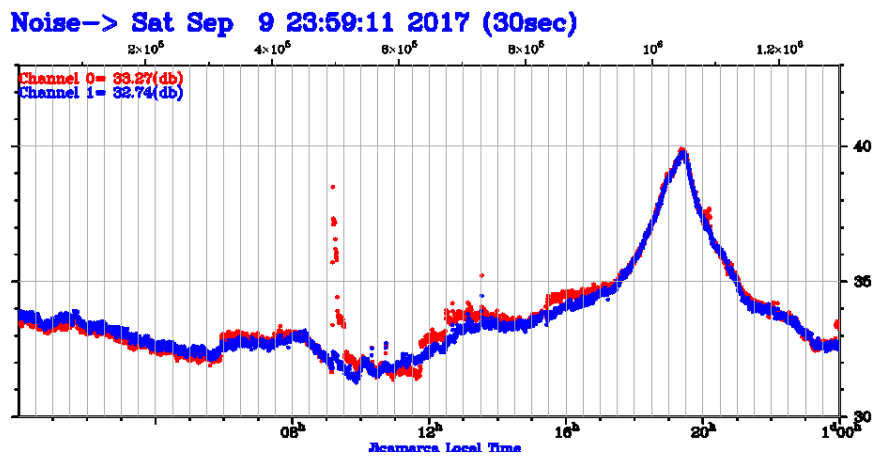


Figure 25. Faraday Noise 2017-09-09.

September, 10:

- \_ There is Spread F from 19 to 22 hours.
- \_ Transmitter off at 15 hours for few minutes.
- \_ Change of spark gaps at 19 hours.

Log:

- \_ 10 Sep 17:50 Imaging on.
- \_ 10 Sep 18:58 Change of spark gaps.
- \_ % operation/8h: 98.13.

Staff in charge:

00-08: A. Valdez. 08-20: K. Kuyeng. 20-24: P. C6ndor.

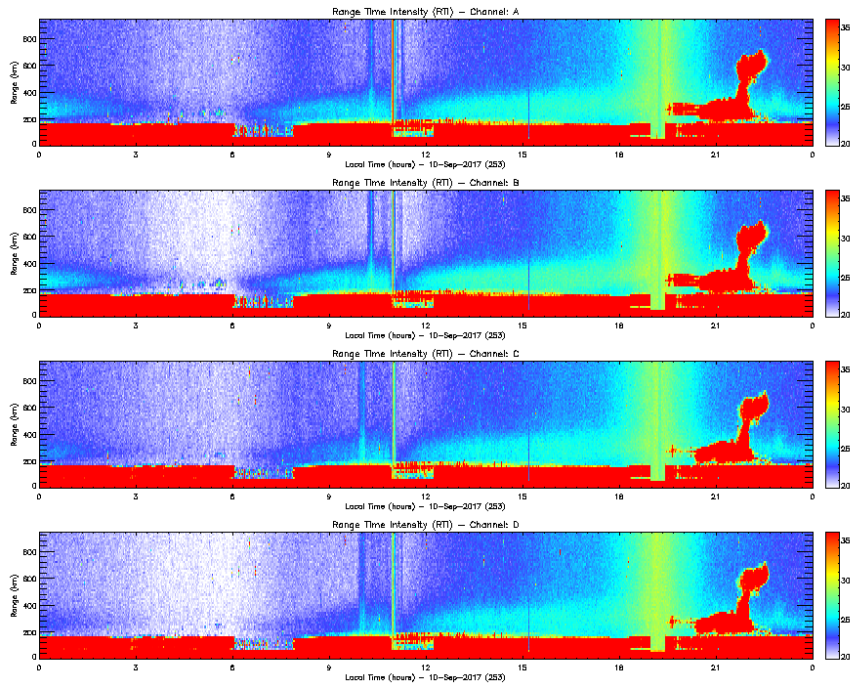


Figure 26. Rti EW\_DRIFT 2017-09-10.

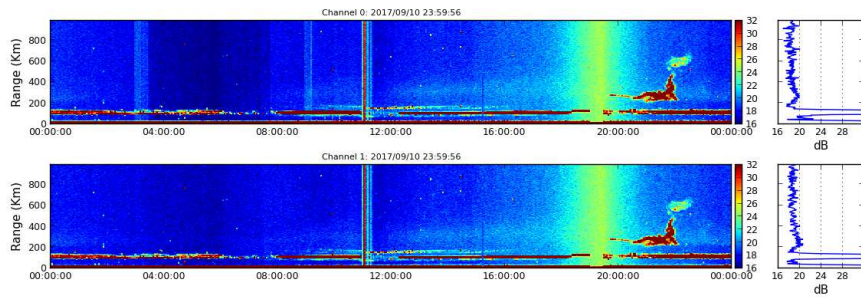
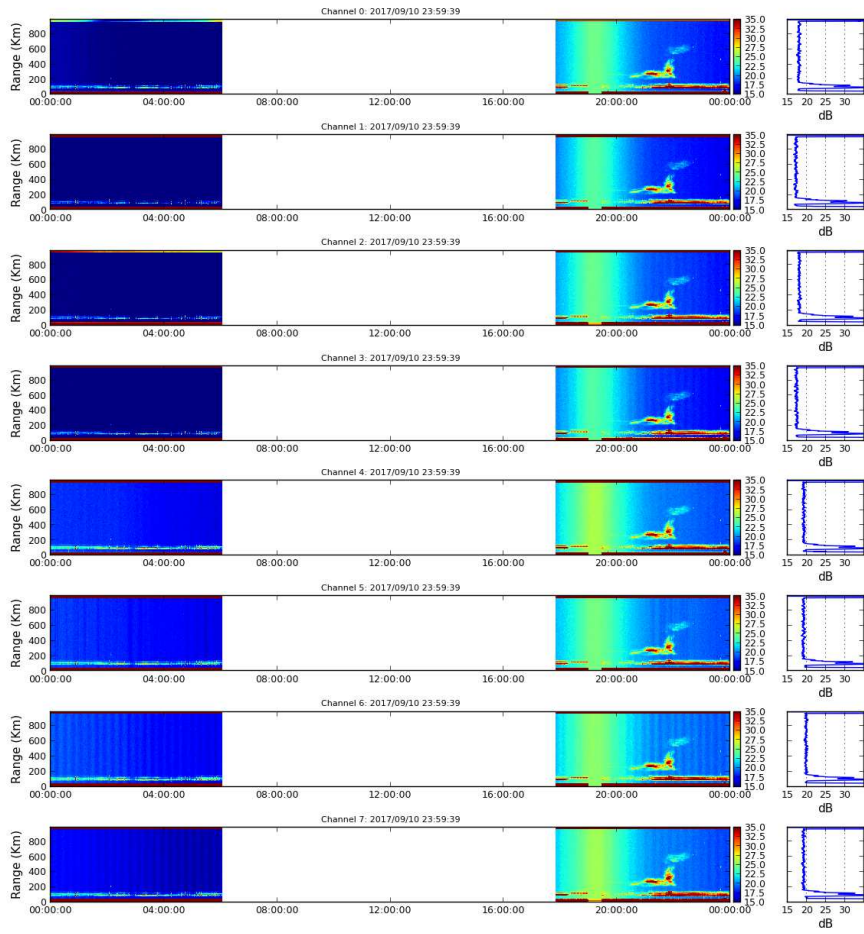


Figure 27. Rti FARADAY 2017-09-10.





**Figure 28. Rti IMAGING 2017-09-10.**

Drifts obtained:

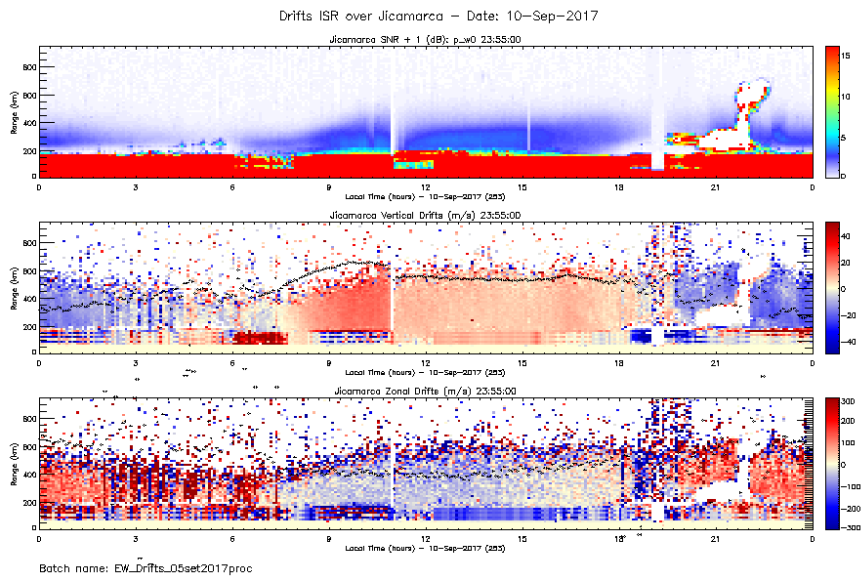


Figure 29. Drifts 2017-09-10.

Faraday Noise:

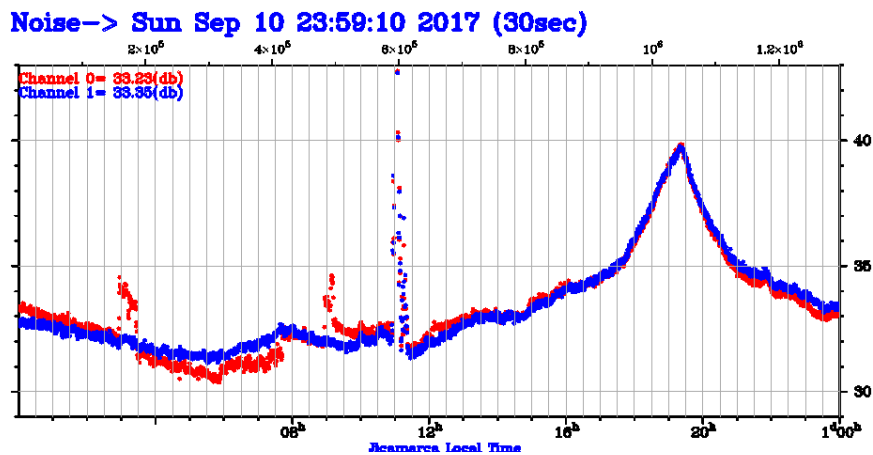


Figure 30. Faraday Noise 2017-09-10.

September, 11:

- \_ There is Spread F from 04 to 06 hours.
- \_ Problem with transmitter from 12:30 to 14:30 hours.
- \_ End campaign early at 19:15 hours for problem with transmitter.

Log:

- \_ 11 Sep 06:40 Imaging off.
- \_ 11 Sep 17:30 Imaging on.
- \_ 11 Sep 19:15 End of campaign.
- \_ % operation/8h: 84.85.

Staff in charge:

00-08: P. C3ndor. 08-20: K. Kuyeng.

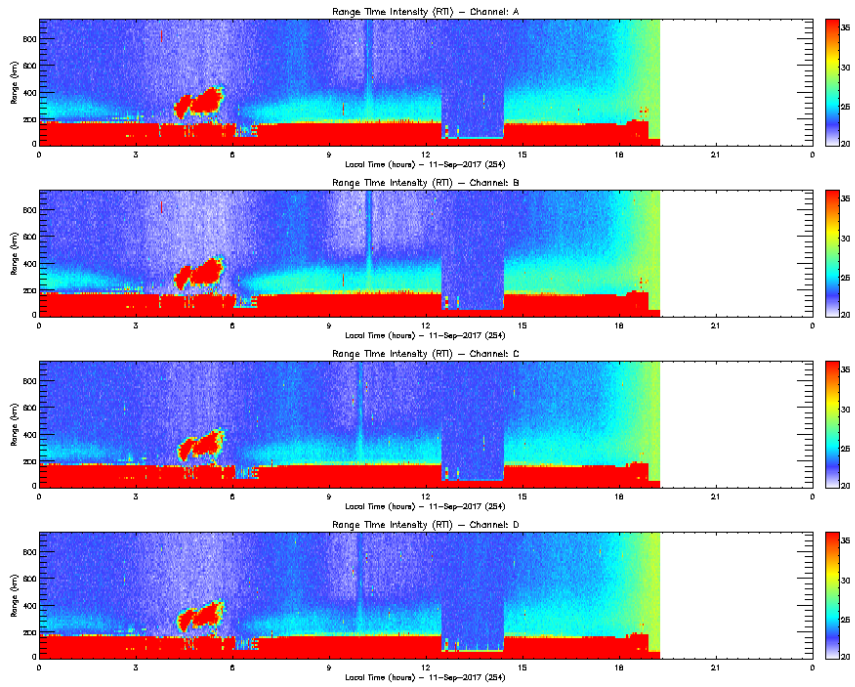


Figure 31. Rti EW\_DRIFT 2017-09-11.

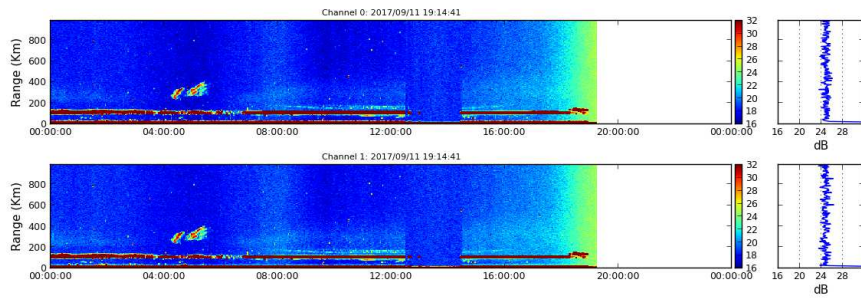


Figure 32. Rti FARADAY 2017-09-11.

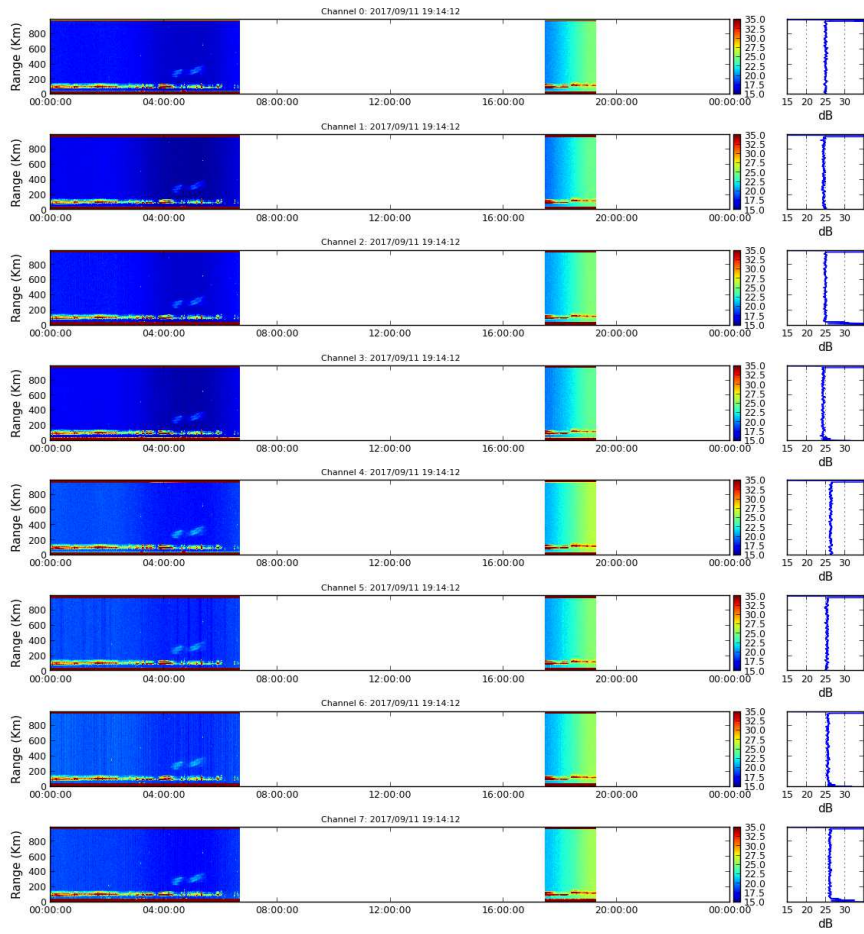


Figure 33. Rti IMAGING 2017-09-11.

Drifts obtained:

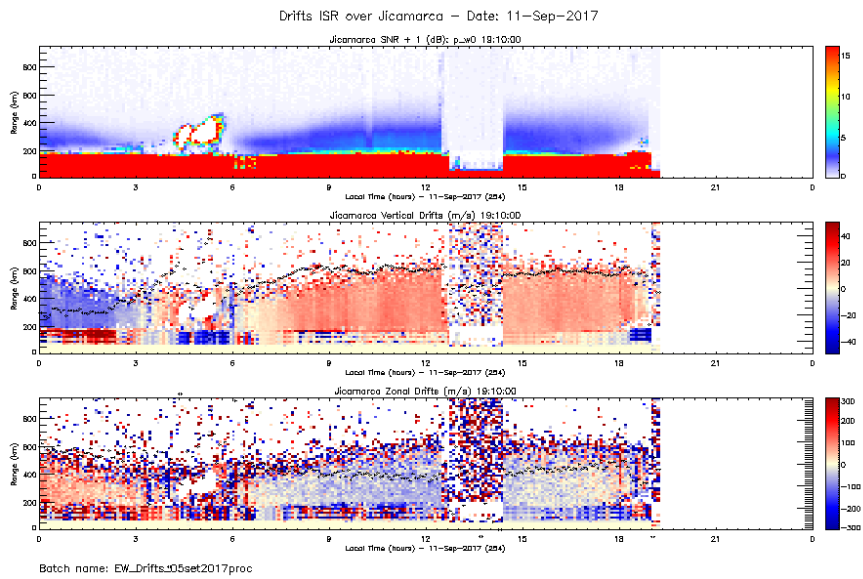


Figure 34. Drifts 2017-09-11.

Faraday Noise:

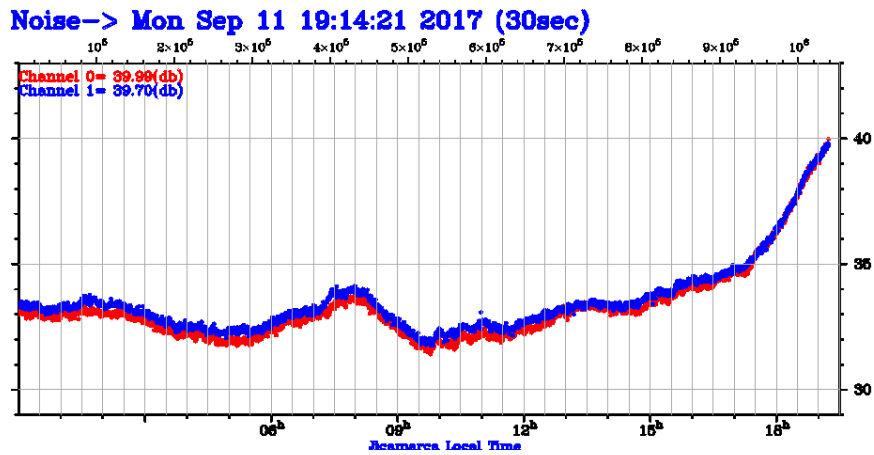


Figure 35. Faraday Noise 2017-09-11.

Annex:

Sky noise for September 05, 2017:

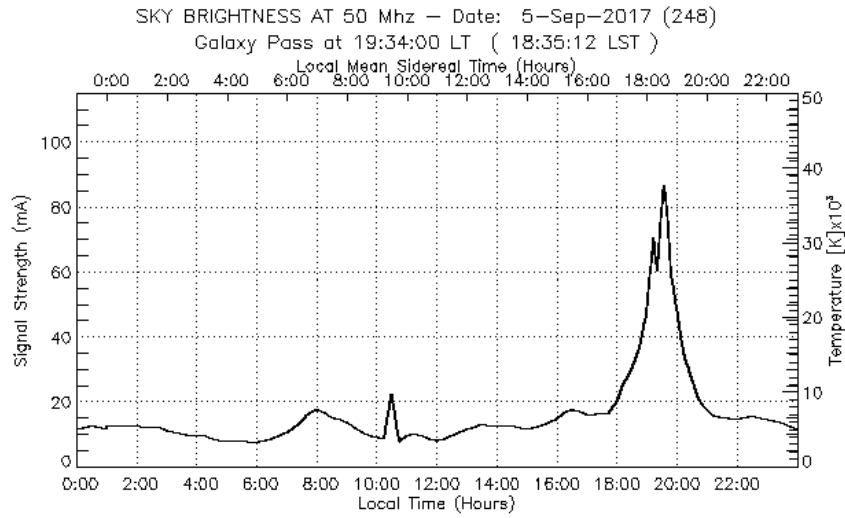


Figure 36. Sky noise.

Antenna pattern

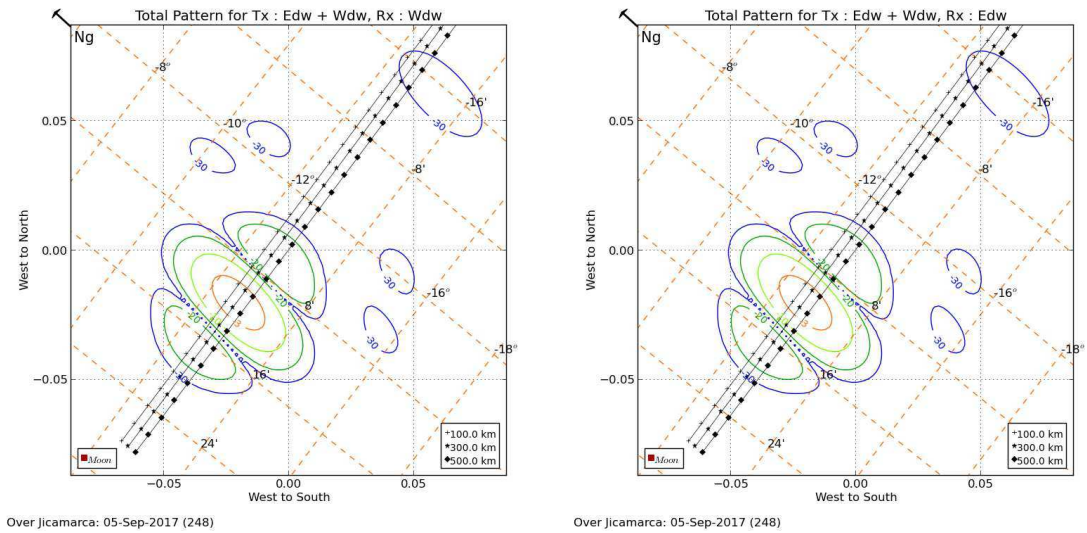
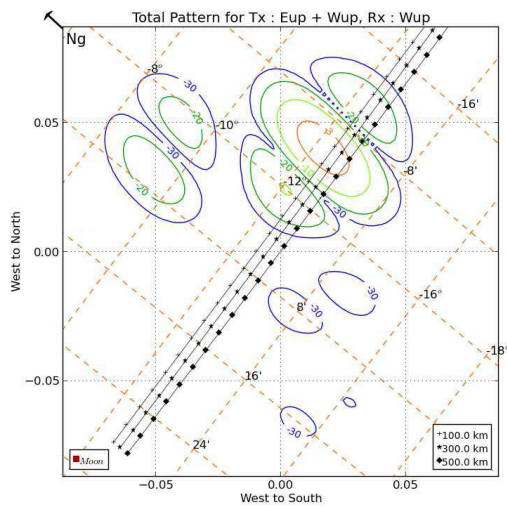
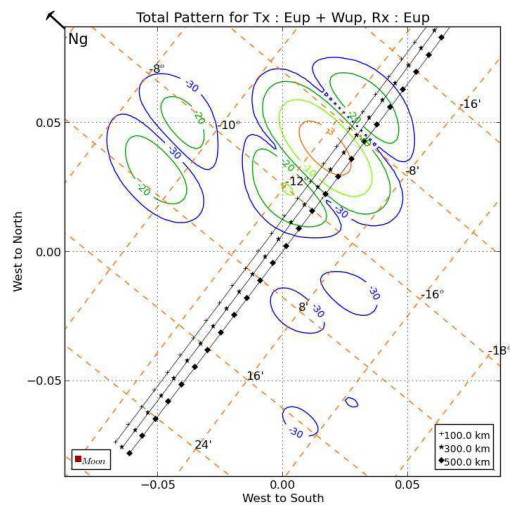


Figure 37. Antennas pattern EW\_Drifts: Ch A and Ch B.

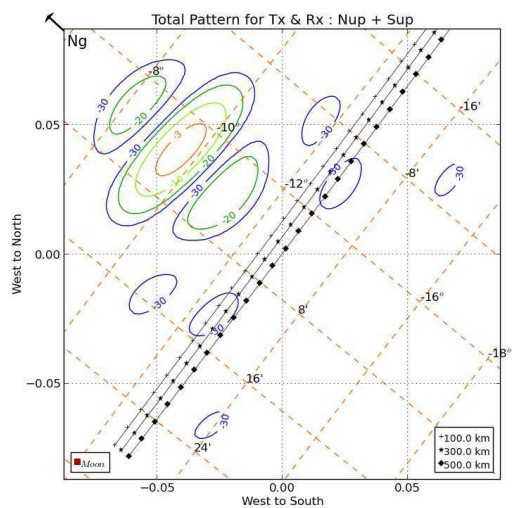


Over Jicamarca: 05-Sep-2017 (248)

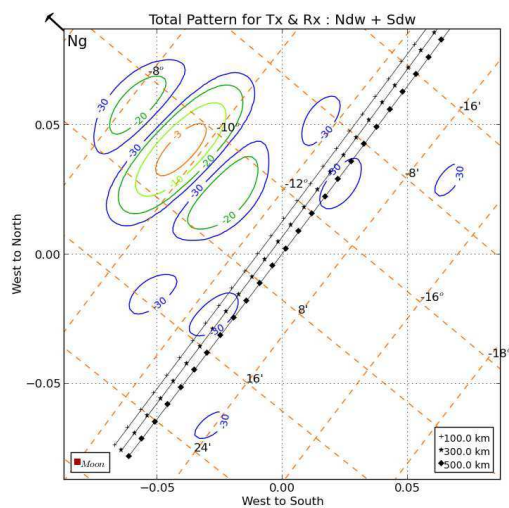


Over Jicamarca: 05-Sep-2017 (248)

**Figure 38. EW\_Drifts: Ch C and Ch D.**



Over Jicamarca: 05-Sep-2017 (248)



Over Jicamarca: 05-Sep-2017 (248)

**Figure 39. Faraday: Ch A and Ch B.**

**Observations:**

On Sunday 10 September 2017 during the morning the spark gap adjustment was not very good, some peaks occur. This also could be due to the rain.