EW_Drift-Faraday-Imaging July-August 2017 Campaign Report

This is an analysis of RTIs during EWDrift-Faraday-Imaging campaign from July 24 to July 25, 2017 and July 31 to August 03, 2017. We show the RTIs and results.

EW_DRIFT-FARADAY-IMAGING:

July, 24:

- _ Start the campaign from 17:00 hours.
- _ At 20 hours lost data by change of amplifier in Imaging.
- _ % Operation/6h: 91.67

Log:

- _ 24 Jul 18:30 Start campaign.
- _ 24 Jul 20:49 Change of amplifier in Imaging.
- _ 24 Jul 21:33 Restart Faraday.

Staff in charge

08-20: I. Manay. 20-24: P. Cóndor.

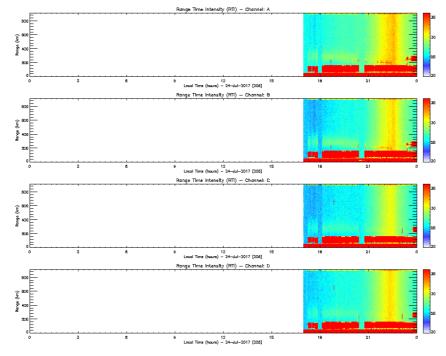


Figure 1.Rti EW_DRIFT 2017-07-24.

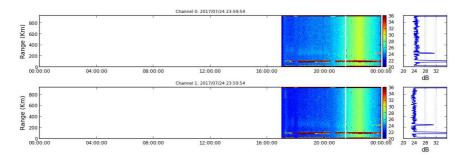


Figure 2. Rti FARADAY 2017-07-24.

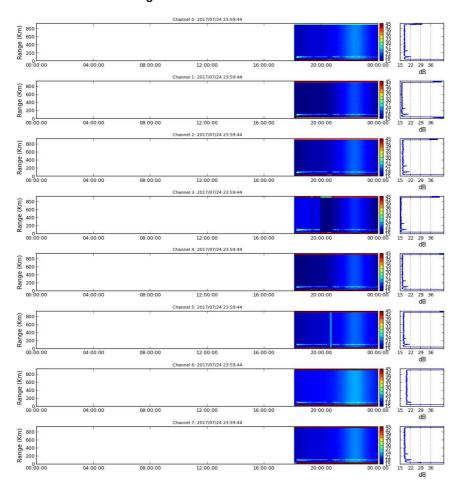


Figure 3. RTI IMAGING 2017-07-24.

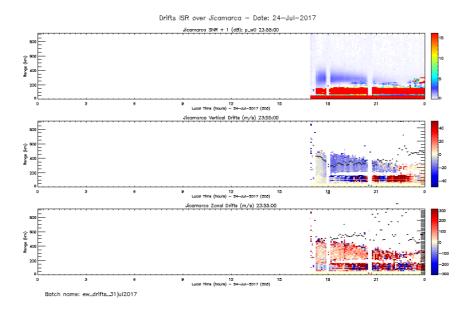


Figure 4. Drifts 2017-07-24.

July, 25:

- _ Weak Spread F from 00 to 06 hours.
- _ Campaign end at 17 hours for blackout.
- _ % operation/9h: 99.07.

Log:

- _ 25 Jul 00:57, 04:58, 05:15, 07:06 Restart of Faraday.
- $_$ 25 Jul 01:55 Problem with transmitter for few minutes..

Staff in charge

00-08: P. Cóndor. 08-20: K. Kuyeng.

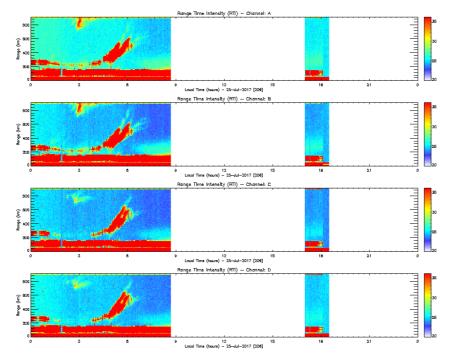


Figure 5. Rti EW_DRIFT 2017-07-25.

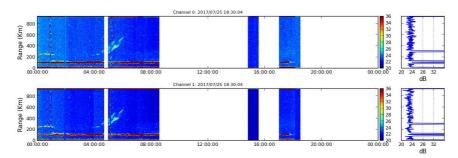


Figure 6. Rti FARADAY 2017-07-25.

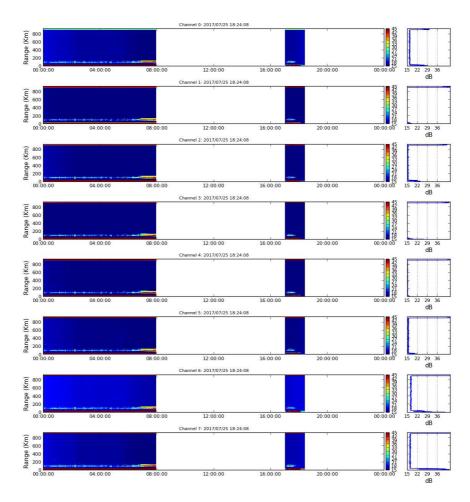


Figure 7. Rti IMAGING 2017-07-25.

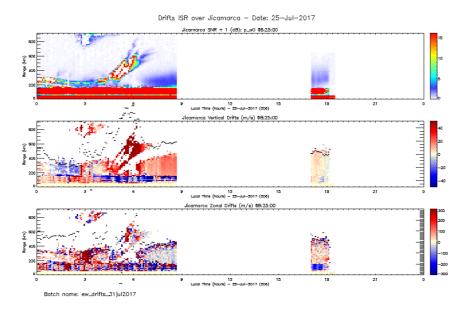


Figure 8. Drifts 2017-07-25.

July, 31:

- _ Start campaign at 16 hours.
- _ There is no Spread F.
- _ There are problems with Faraday PC.
- _ % operation/7h: 99.52.

Log:

- _ 31 Jul 16:30 Start campaign.
- _ 31 Jul 17:40, 20:57 Problem with Faraday.

Staff in charge:

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

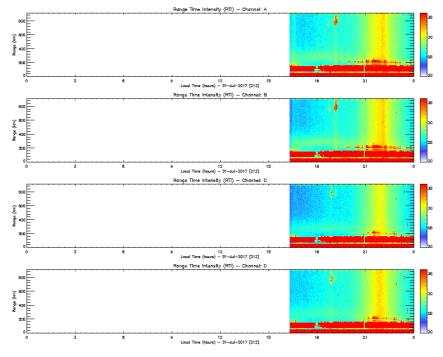


Figure 9. Rti EW_DRIFT 2017-07-31.

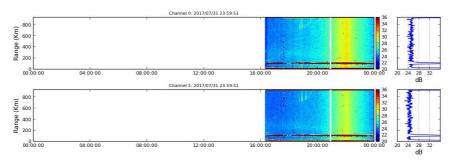


Figure 10. Rti FARADAY 2017-07-31.

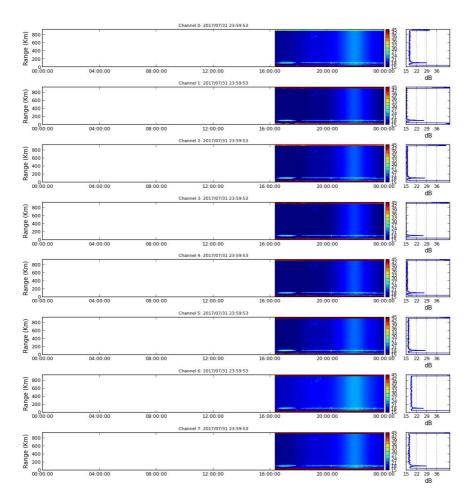


Figure 11. Rti IMAGING 2017-07-31.

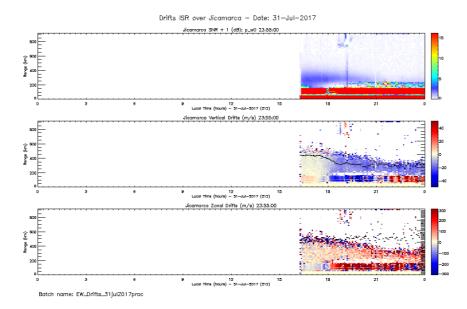


Figure 12. Drifts 2017-07-31.

August, 01:

- _ There are no data from 01:15 to 2:35 hours.
- _ Spread F from 00 to 06 and 18 to 24 hours.
- _ Lost of data at 10:10 and 13:50 for few minutes.

Log:

- _ 01 Aug 02:34 EW Drifts fails
- _ 01 Aug 02:58 Problem with Faraday.
- _ 01 Aug 16:20 Imaging on.
- _ 01 Aug 10:34, 13:50, 17:09 TR adjustment.
- _01 Aug 13:50 Attenuation of Faraday channels.
- _ 01 Aug 17:54, 21:44 Problem with Faraday system.
- _ % operation/24h: 93.75

Staff in charge:

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

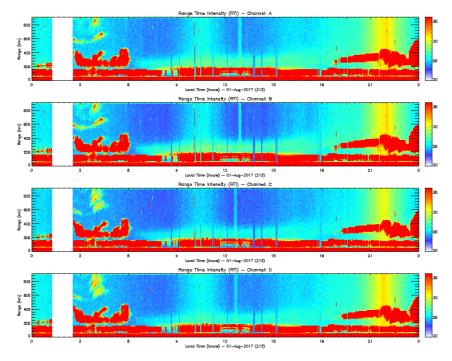


Figure 13. Rti EW_DRIFT 2017-08-01.

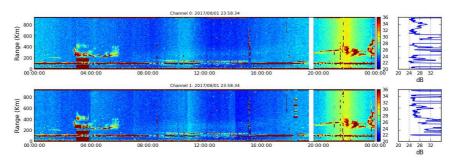


Figure 14. Rti FARADAY 2017-08-01.

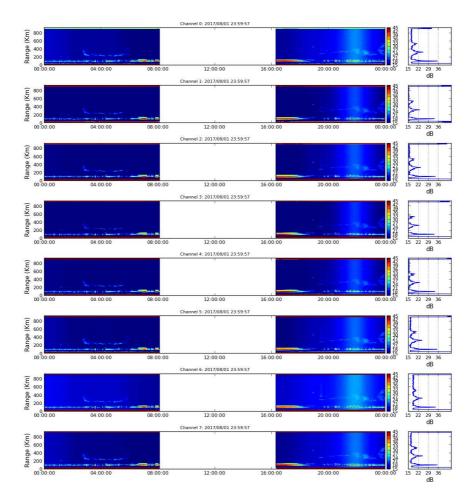


Figure 15. Rti IMAGING 2017-08-01.

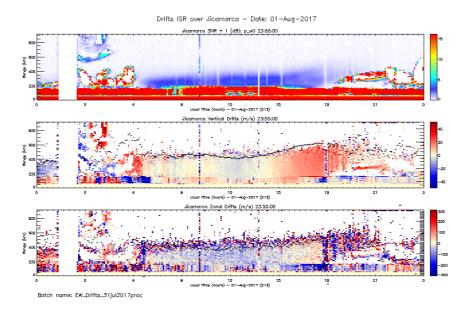


Figure 16. Drifts 2017-08-01.

August, 02:

- _ Spread F from 0 to 06 and 21 to 24 hours.
- _ There are problems with Faraday system .
- _ Lost data for 15 minutes at 20 hours.

Log:

- _ 02 Aug 01:47, 04:06, 05:18, 05:36, 05:56, 06:24, 06:43, 09:57, 13:38 Problems with Faraday system.
- _02 Aug 13:50, 14:55, 18:24, 18:44. 18:57, 19:51, 20:04, 21:19, 23:07, 23:27 Problem with Faraday system.
- _ 02 Aug 19:45 Problem with Ew Drifts Pc.
- _ % operation/24h: 98.61.

Staff in charge:

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

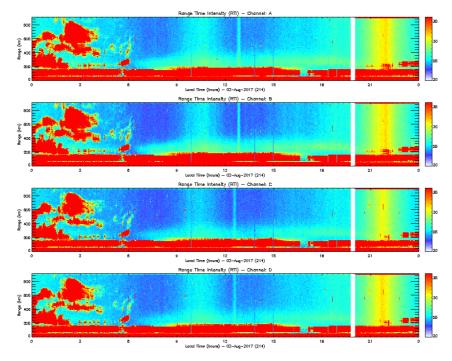


Figure 17. Rti EW_DRIFT 2017-08-02.

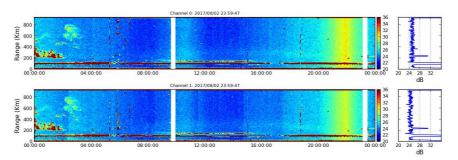


Figure 18. Rti FARADAY 2017-08-02.

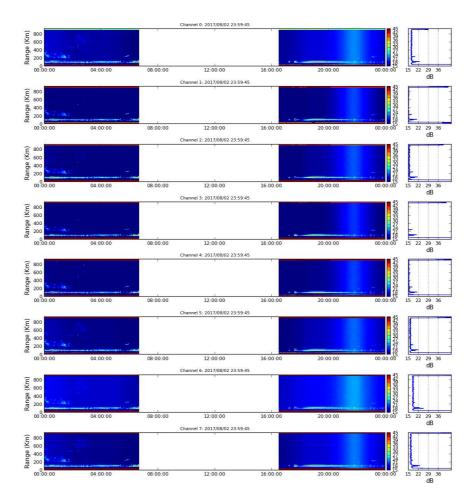


Figure 19. Rti IMAGING 2017-08-02.

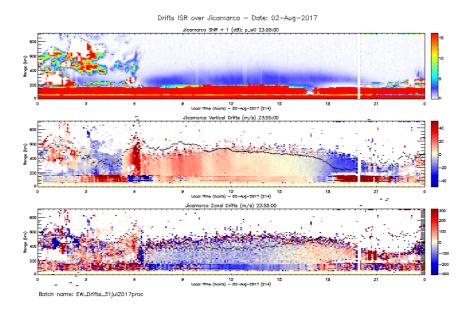


Figure 20. Drifts 2017-08-02.

August, 03:

- _ Spread F from 00 to 06 hours.
- _ There are many problems with Faraday system.

Log:

- _ 03 Aug 00:48, 01:47, 02:56, 03:42, 05:31, 07:12 Problem with Faraday system.
- _ 03 Aug 08:00 End campaign.
- _ % operation/24h: 100.

Staff in charge:

00-08: A. Valdez.

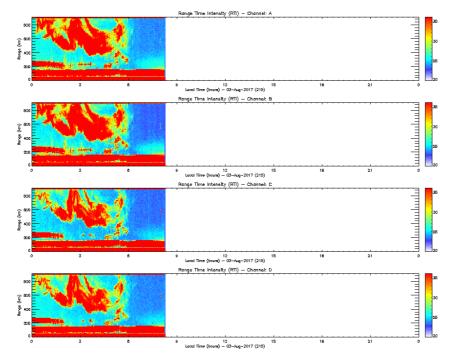


Figure 21. Rti EW_DRIFT 2017-08-03.

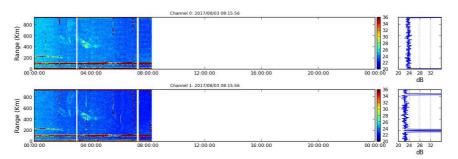


Figure 22. Rti FARADAY 2017-08-03.

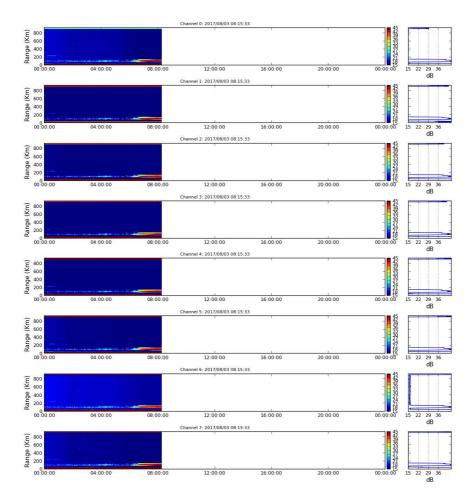


Figure 23. Rti IMAGING 2017-08-03.

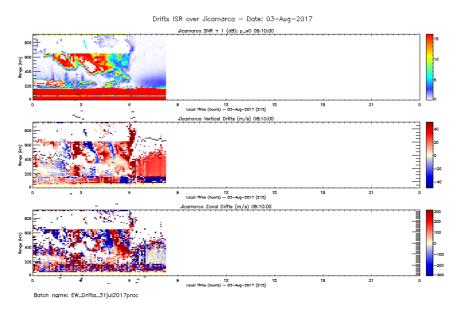


Figure 24. Drifts 2017-08-03.

Observations:

- There was lost of EW Drift data before Spread F on August 1 2017
- Due to the reset of the Faraday system, the Faraday system will share monitor with JULIA System.
- Faraday noise is needed in these reports

Annex:

Sky noise for Jjuly 24, 2017:

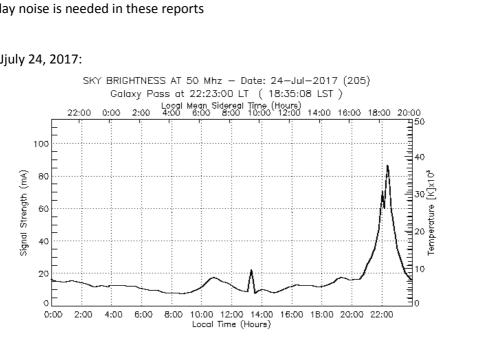


Figure 25. Sky noise.

Antenna pattern

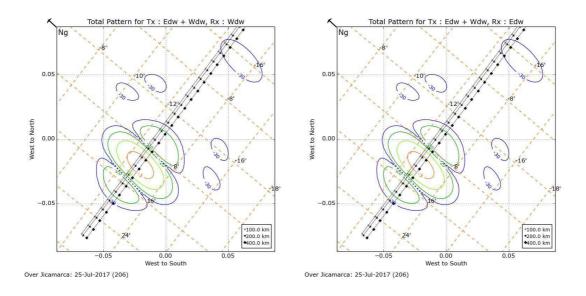


Figure 26. Antennas pattern EW_Drifts: Ch A and Ch B.

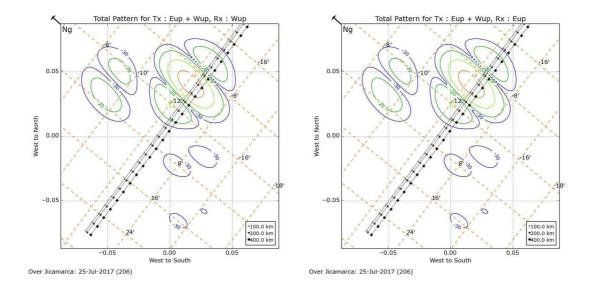


Figure 27. EW_Drifts: Ch C and Ch D.

