# MST-ISR-EEJ April 2015 Campaign Report

This is an analysis of RTIs during MST-ISR-EEJ campaign from April 14 to April 17, 2015.

#### MST-ISR-EEJ:

## April, 14:

- \_ Lost of data due to transmitter (2 minutes).
- \_ % Operation/17h: 99.9%

#### Log:

- \_ 14 April 07:15 Start campaign.
- \_ 14 April 07:43 Problem with transmitter.
- \_ 14 April 09:55 Adjustment of the vipir clock.
- \_14 April 14:42 Interference at Channel A.
- \_14 April 20:00 High noise in Channel B.

## Staff in charge

07-20: I. Manay. 20-24: P. Cóndor.

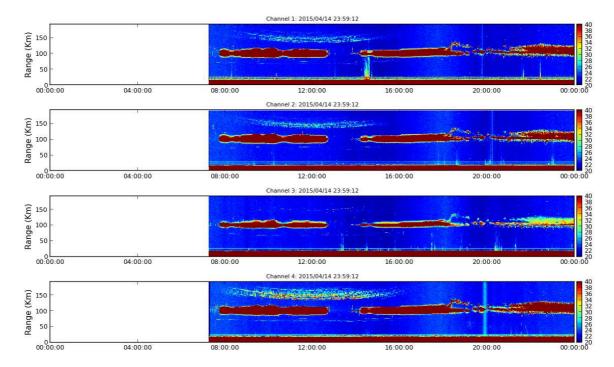


Figure 1 MST RTI Apr 14 2015

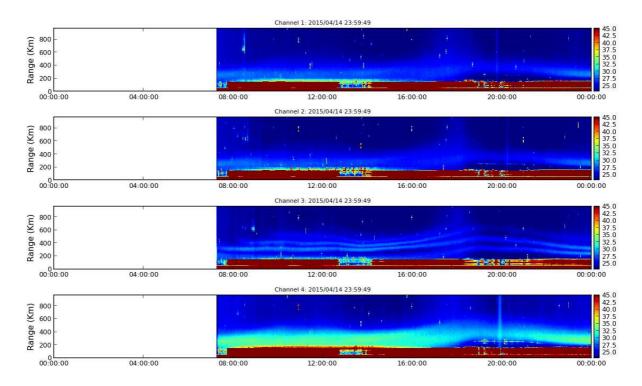


Figure 1. Rti ISR 2015-04-14.

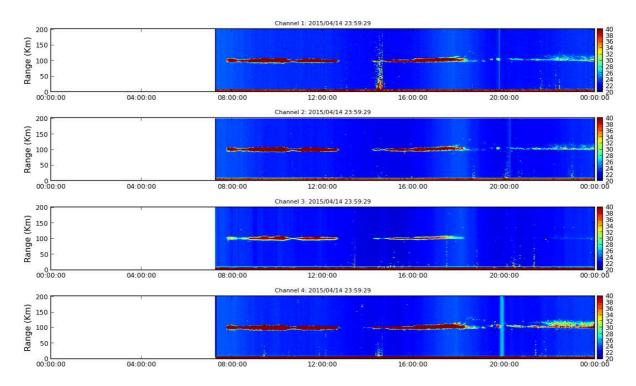


Figure 2. RTI EEJ 2015-04-14.

#### April, 15:

- \_ Lost of data due to transmitter (40 minutes).
- \_ Lost of data due to acquisition system and disk drive change (30 minutes )
- \_ % operation/24h: 95.14 %

#### Log:

- \_ 15 April 10:00 Vipir stopped for a few minutes.
- \_ 15 April 10:56 Transmitter turned off.
- \_ 15 April 11:38 Transmitter turned on.
- \_ 15 April 13:40 Acquisition software halted, processing software stopped for some minutes.
- \_ 15 April 14:00 Acquisition software halted, processing software stopped for some minutes.
- \_ 15 April 16:00 Acquisition system hard drive changed.
- \_ 15 April 16:10 End of hard drive change.
- \_15 April 19:30 Spark gaps problem detected, it caused the channel 2 attenuation.

## Staff in charge

00-08: P. Cóndor. 08-20: J. Verástegui. 20-24: J. Oscanoa.

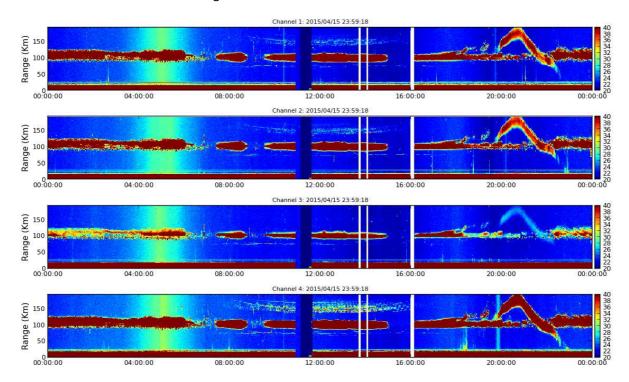


Figure 3. Rti MST 2015-04-15.

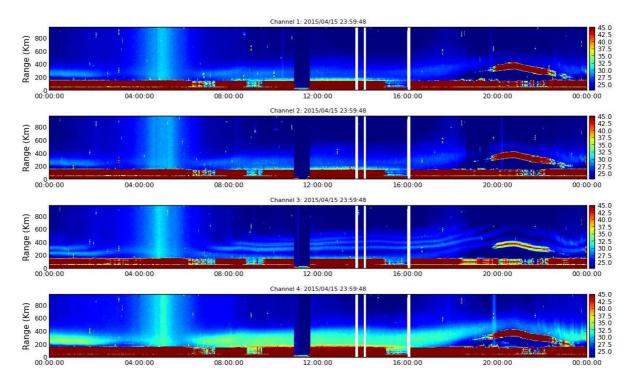


Figure 4. Rti ISR 2015-04-15.

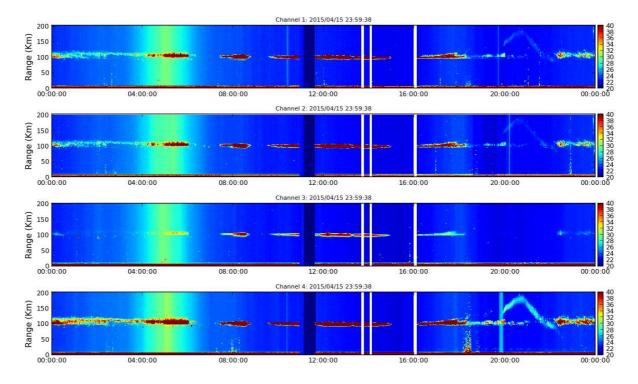


Figure 5. Rti EEJ 2015-04-15.

## April 16:

- \_ Problems due to line failure (30 minutes)
- \_ Problems due to transmitter (1h 03).
- \_ % operation/24h: 93.54 %

## Log:

- \_ 16 April 15:25 Problem with transmitter due to vaccum pump TX 4.
- \_ 16 April 15:55 Transmitter turned on.
- \_16 April 20:03 Problem with transmitter
- \_ 16 April 20:17 Transmitter turned on.
- \_17 April 00:28 Problem with transmitter
- \_ 17 April 00:57 Transmitter turned on.

## Staff in charge:

00-08: J. Oscanoa, 08-20: R. Yanque, 20-24: P. Cóndor.

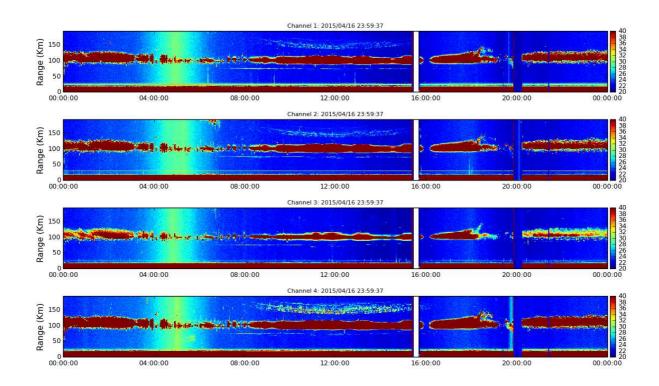


Figure 6. Rti MST 2015-04-16.

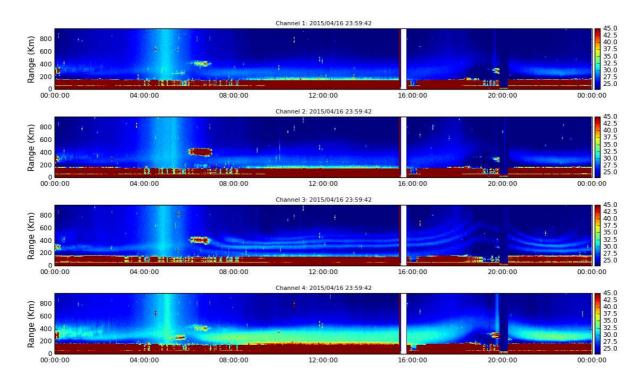


Figure 7. Rti ISR 2015-04-16

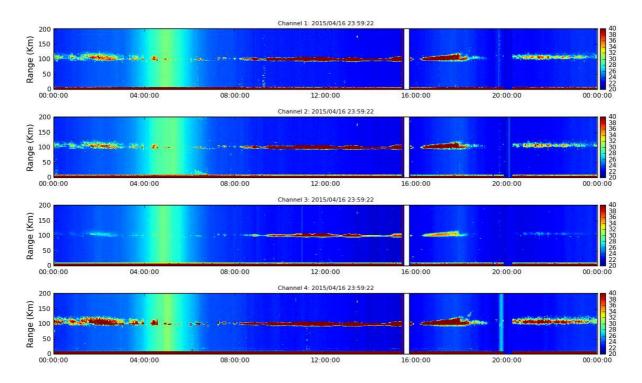


Figura 9. Rti EEJ 2015-04-16.

# April 17:

- \_ Lost of data due to transmitter (3 minutes).
- \_ % operation/12h: 99.58 %

# Log:

\_ 17 Jan 12:46 Problem with transmitter (3 minutes).

Total operativity: 96.98%

Staff in charge:

00-08: P. Condor, 08-20: I. Manay.

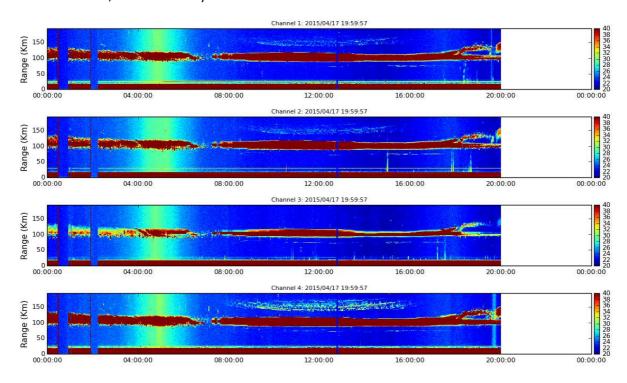


Figure 10. Rti MST 2015-04-17.

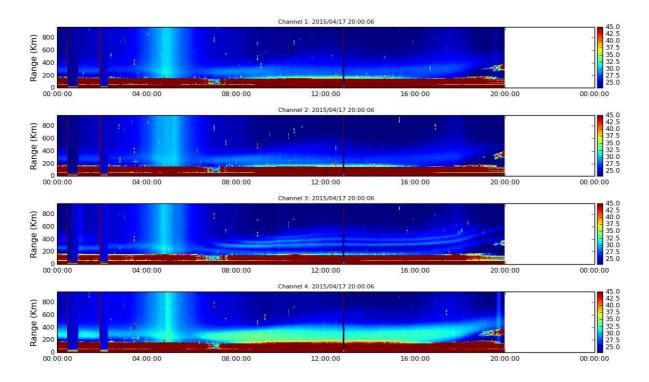


Figure 11 RTI ISR 2015-04-17

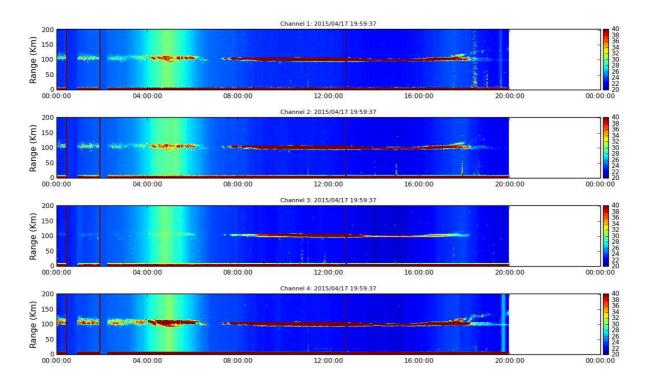


Figure 12 RTI EEJ 2015-04-17

#### Annex:

Sky noise for April 14, 2015:

SKY BRIGHTNESS AT 50 Mhz - Date: 14-Apr-2015 (104) Galaxy Pass at 05:06:00 LT ( 18:35:04 LST ) Local Mean Sidereal Time (Hours) 15:00 17:00 19:00 21:00 23:00 1:00 3:00 5:00 9:00 11:00 13:00 Lindhaithiliniadhariadhariadhariandhariann 0 0 0 0 0 0 Temperature [K]x10\* 100 Signal Strength (mA) 80 60 40 20 Ø 10:00 12:00 14:00 16:00 18:00 20:00 22:00 0:00 2:00 4:00 6:00 8:00 Local Time (Hours)

Figure 8. Sky noise.

# Antenna pattern

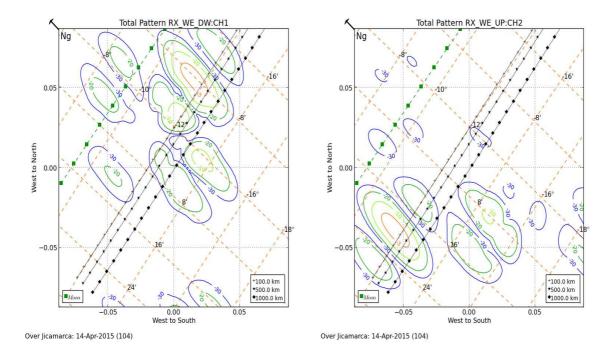


Figure 9. Antennas pattern.

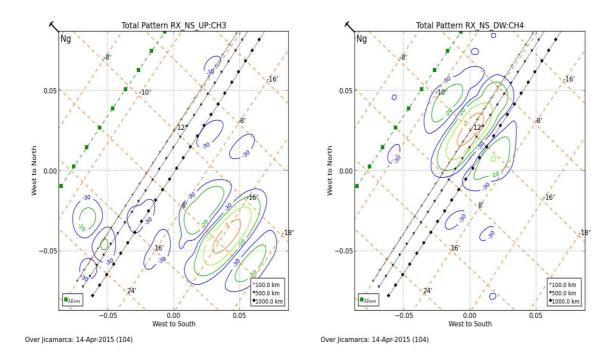


Figure 10. Antennas pattern.