

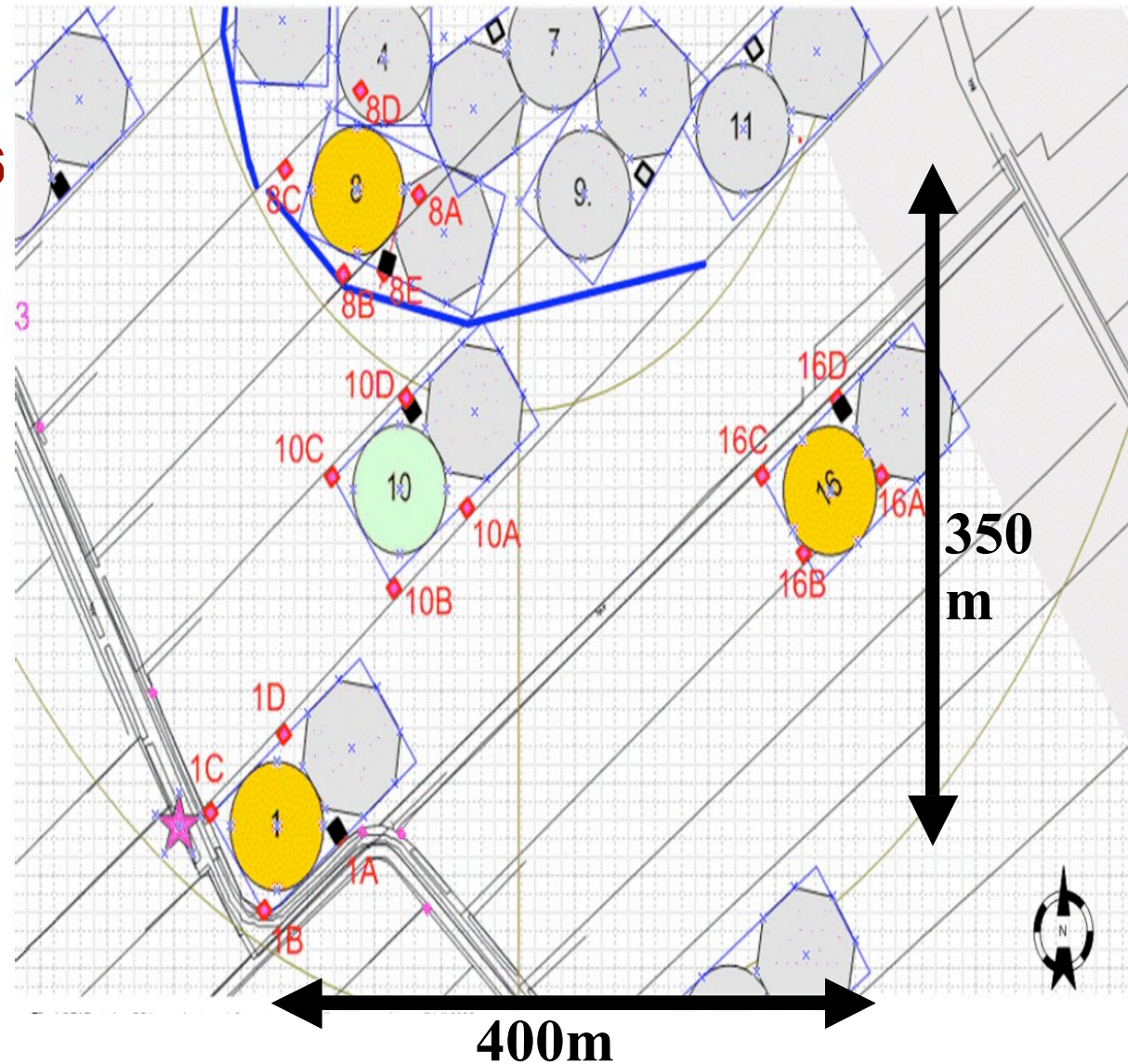
CS1 Data Analysis Update - Stability Issues

24th January, 2007

**Inspected by:
Pandey, Gianni, Ger deBruyn**

CS1 - Configuration

- 96 dipoles
- 24 Micro stations
- 4 Stations 1,8,10,16
- Presently Obsvsn:
16 Microstns
- *Stn 1 – 4 microstns*
- *Stn 8 – 4 microstns*
- *Stn 10 – 4 microstns*
- *Stn 16 – 4 microstns*

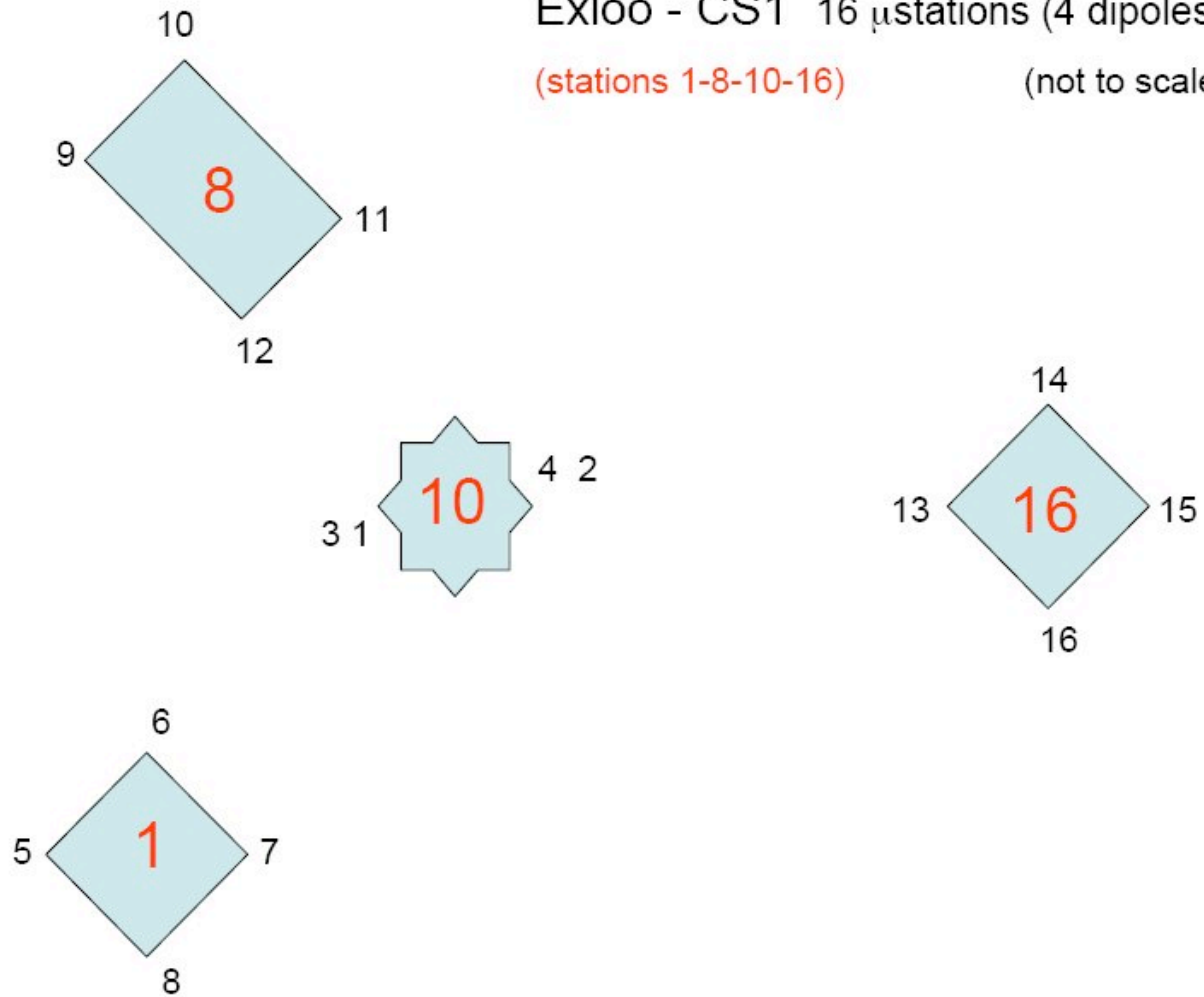


CS1 - Layout

Exloo - CS1 16 μ stations (4 dipoles)

(stations 1-8-10-16)

(not to scale)



Measurements Sets Inspected

L2006_0583.MS to L2007_00777.MS
(Dec 15, 2006) to (Jan 15, 2007)

New Observations

L2006_0856.MS to L2007_00999.MS
(Jan 16, 2006) to (Jan 22, 2007)

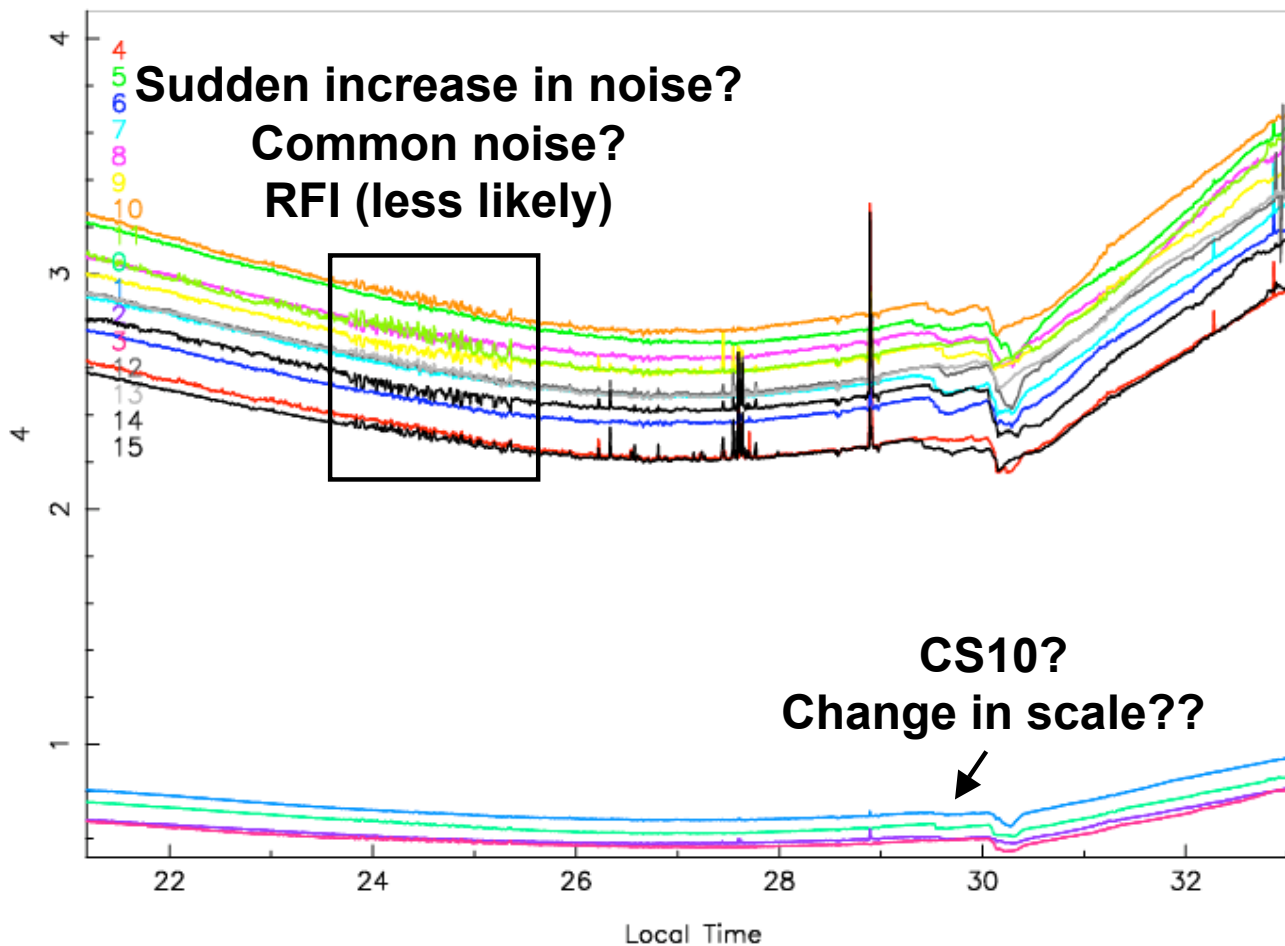
- **Micro stations 16 (1) (4 in each CS1, CS8, CS10, CS16).**
- **Frequency 60MHz, Sub band 156.25 Khz, 256 channels**
- **~0.6KHz resolution**
- **Integration time 60s**
- **MS740 onwards tracking working**
- **MS890 - 10 subbands from 23-75 MHz**
- **Integraton time 60s**

MS777 - Avg(all channels) all microstns

Auto Correlation (ALL Channels averaged 6:250) L2007_00777_S6.MS_LT All micro stations

Recap

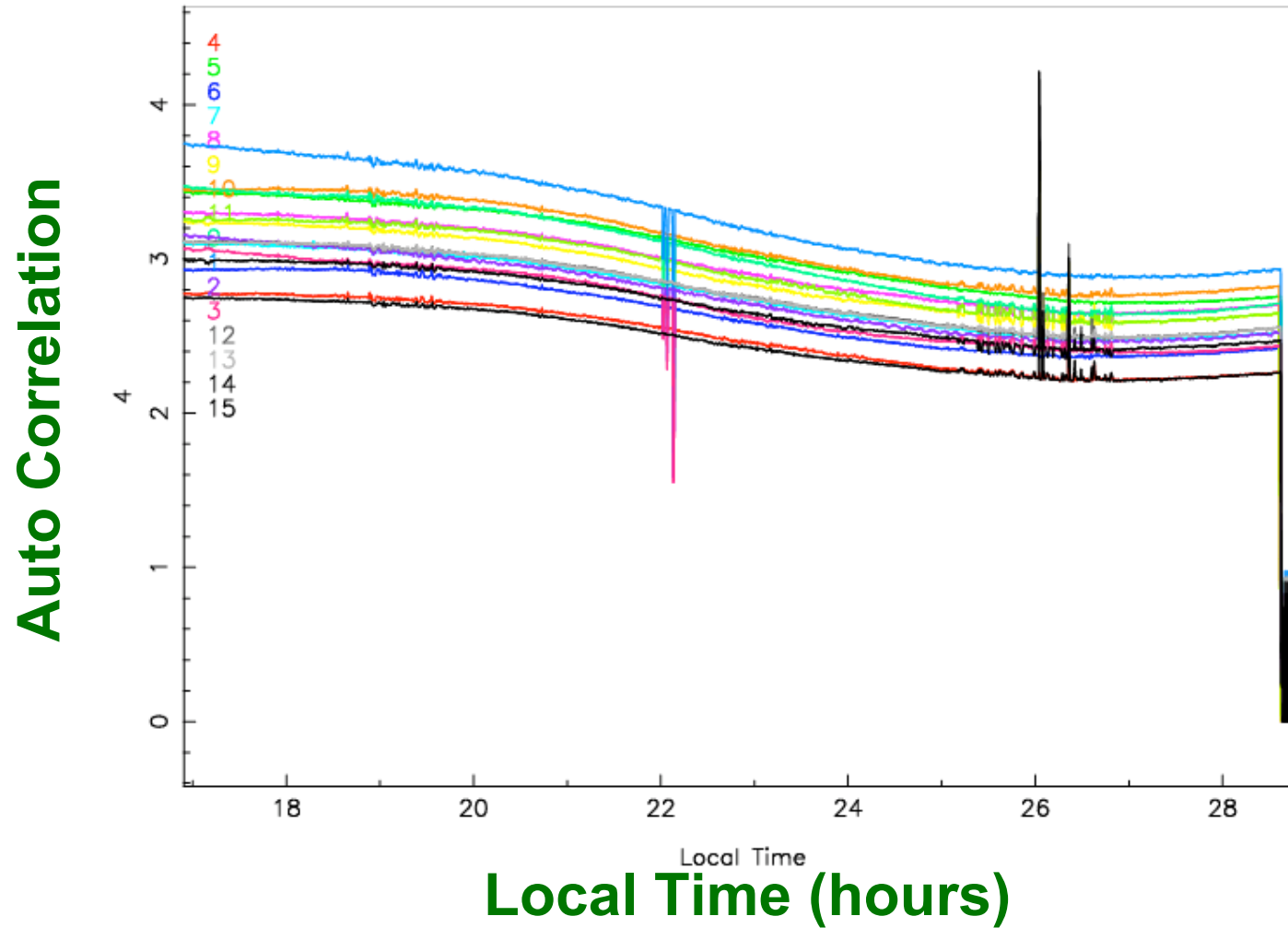
Auto Correlation



Local Time (hours)

MS770 - Avg(channels) all microstn

Auto Correlation (ALL Channels averaged 6:250) L2007_00770_S6.MS_LT All micro stations

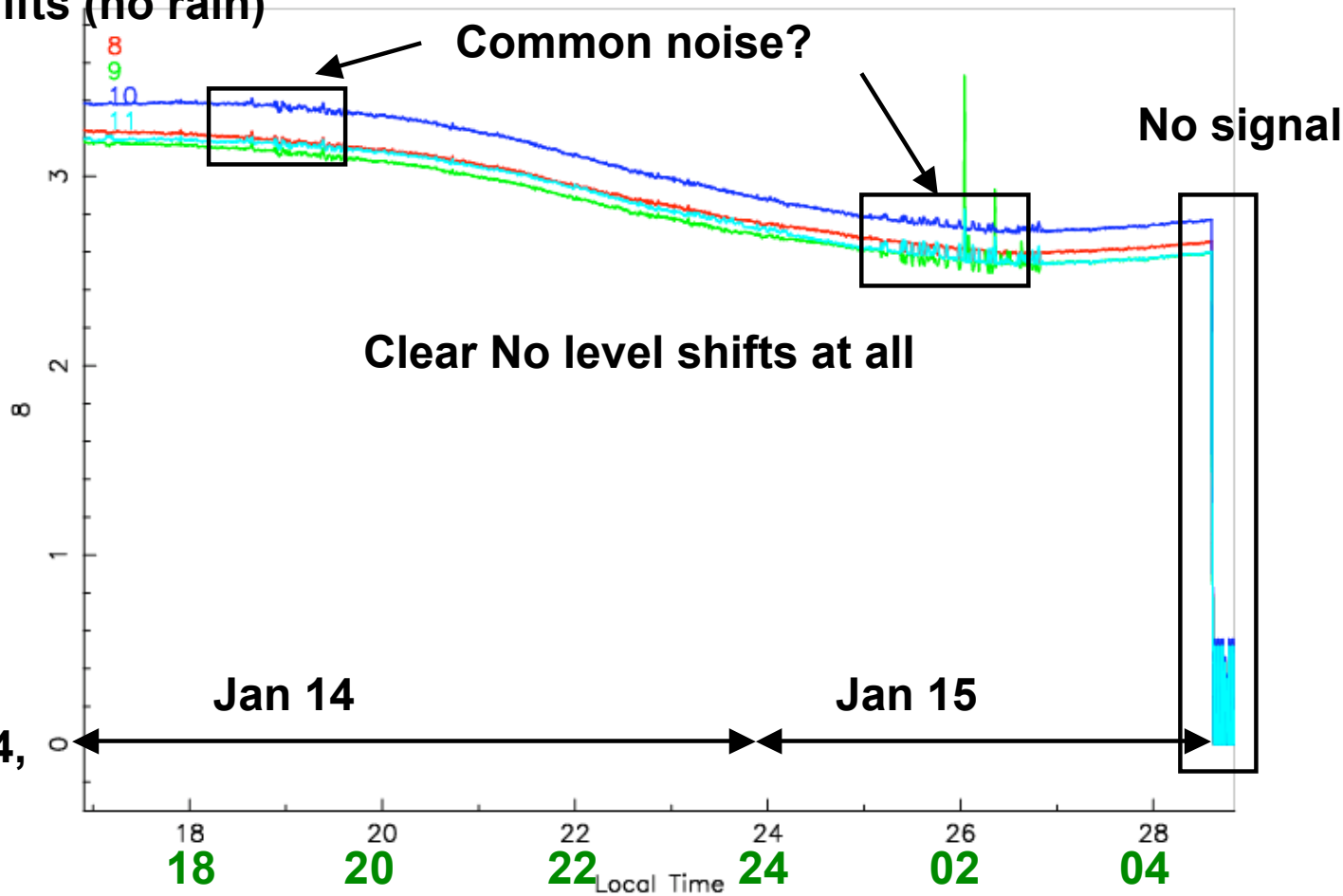


MS770 - Avg(channels) CS8

Auto Correlation (ALL Channels averaged 6:250) L2007_00770_S6.MS_LT All micro stations in CS8

No level Shifts (no rain)

Auto Correlation



Start Jan 14,
16:55hrs

Jan 14

Jan 15

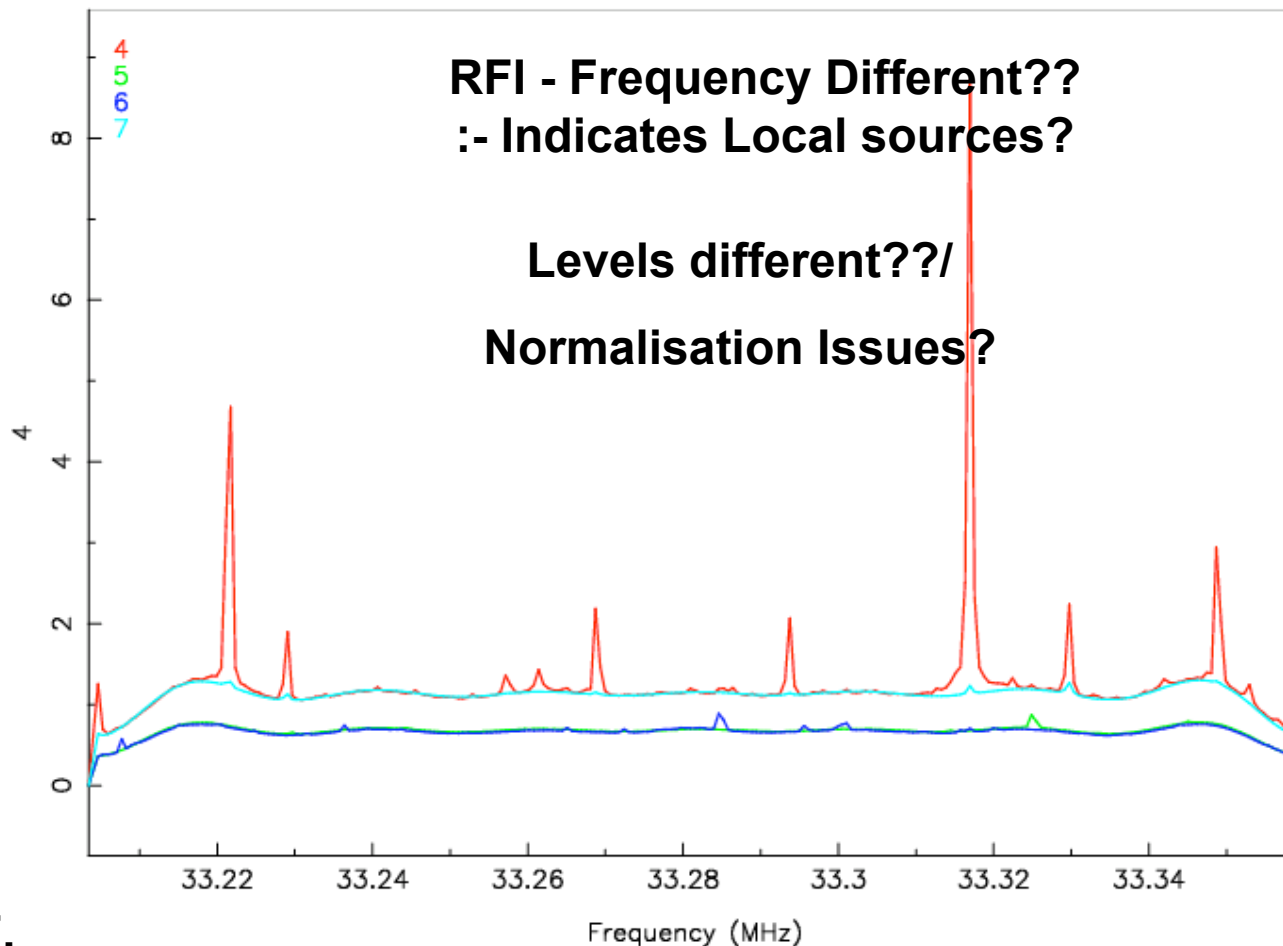
Local Time (hours)

ALL SUBBANDS seem to be affected - complicated
Different microstations affected differently
We are looking into it...!!

MS890S0 - Avg(channels 6:250) CS1

Auto Correlation (ALL Time averaged) L2007_00890_SB0-1.MS_LT All micro stations in CS1

Auto Correlation (XX)



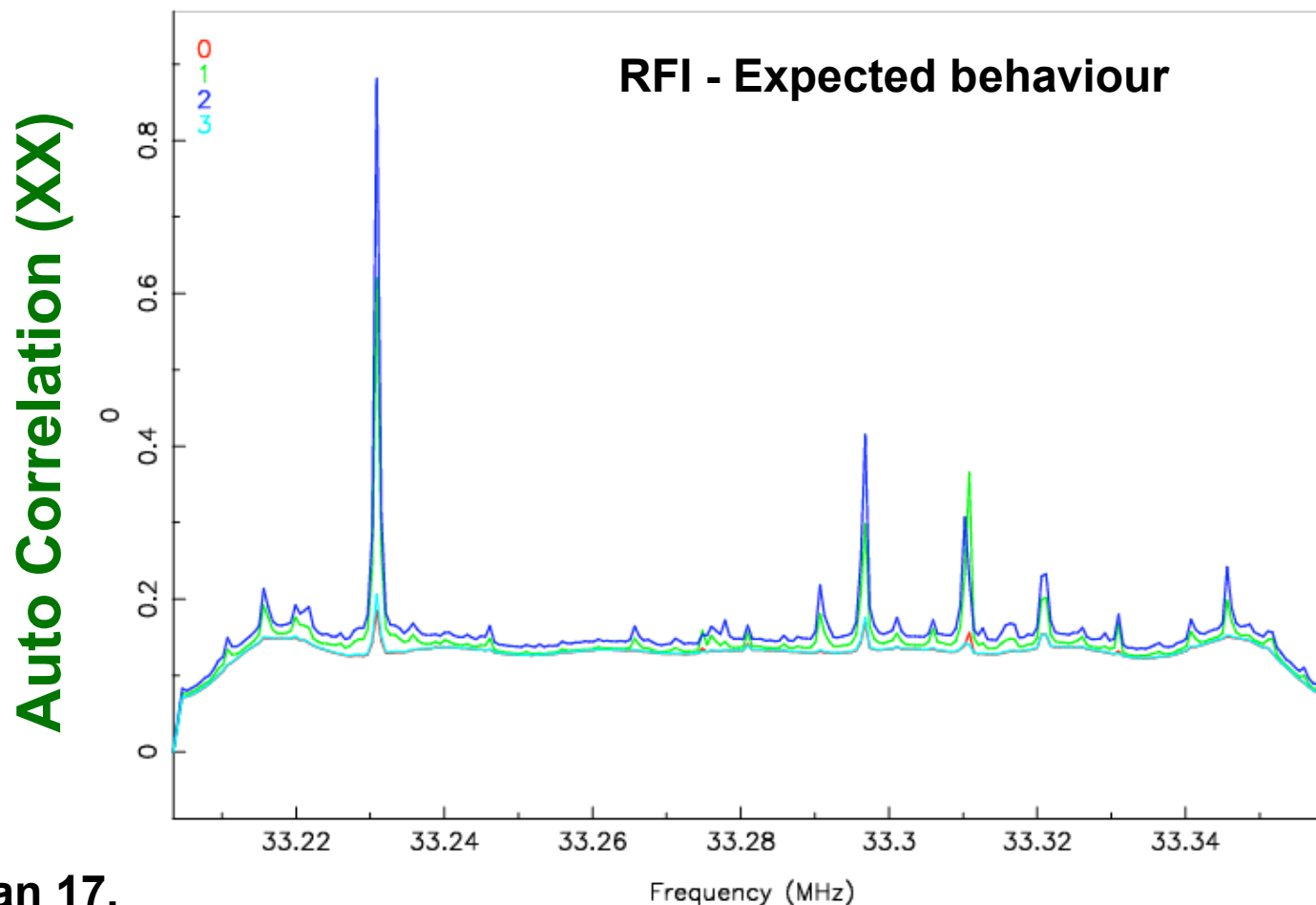
Jan 17,
18:10hrs-09:06hrs
~15 hours

Frequency (MHz)

33 MHz
156KHz wide

MS890S0 - Avg(channels 6:250) CS10

Auto Correlation (ALL Time averaged) L2007_00890_SB0-1.MS_LT All micro stations in CS10



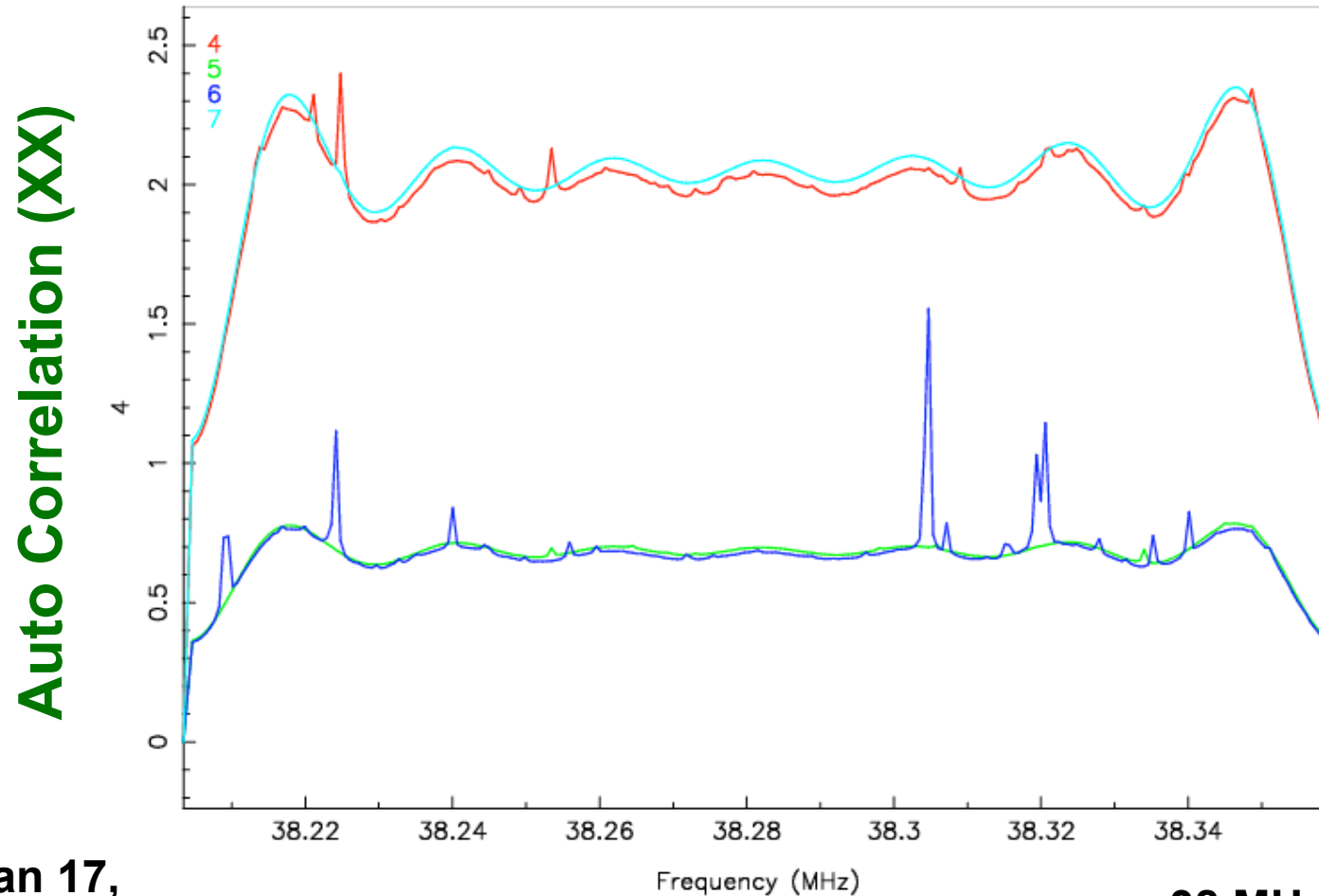
Jan 17,
18:10hrs-09:06hrs
~15 hours

Frequency (MHz)

33 MHz
156KHz wide

MS890S1 - Avg(channels 6:250) CS1

Auto Correlation (ALL Time averaged) L2007_00890_SB0-1.MS_LT All micro stations in CS1



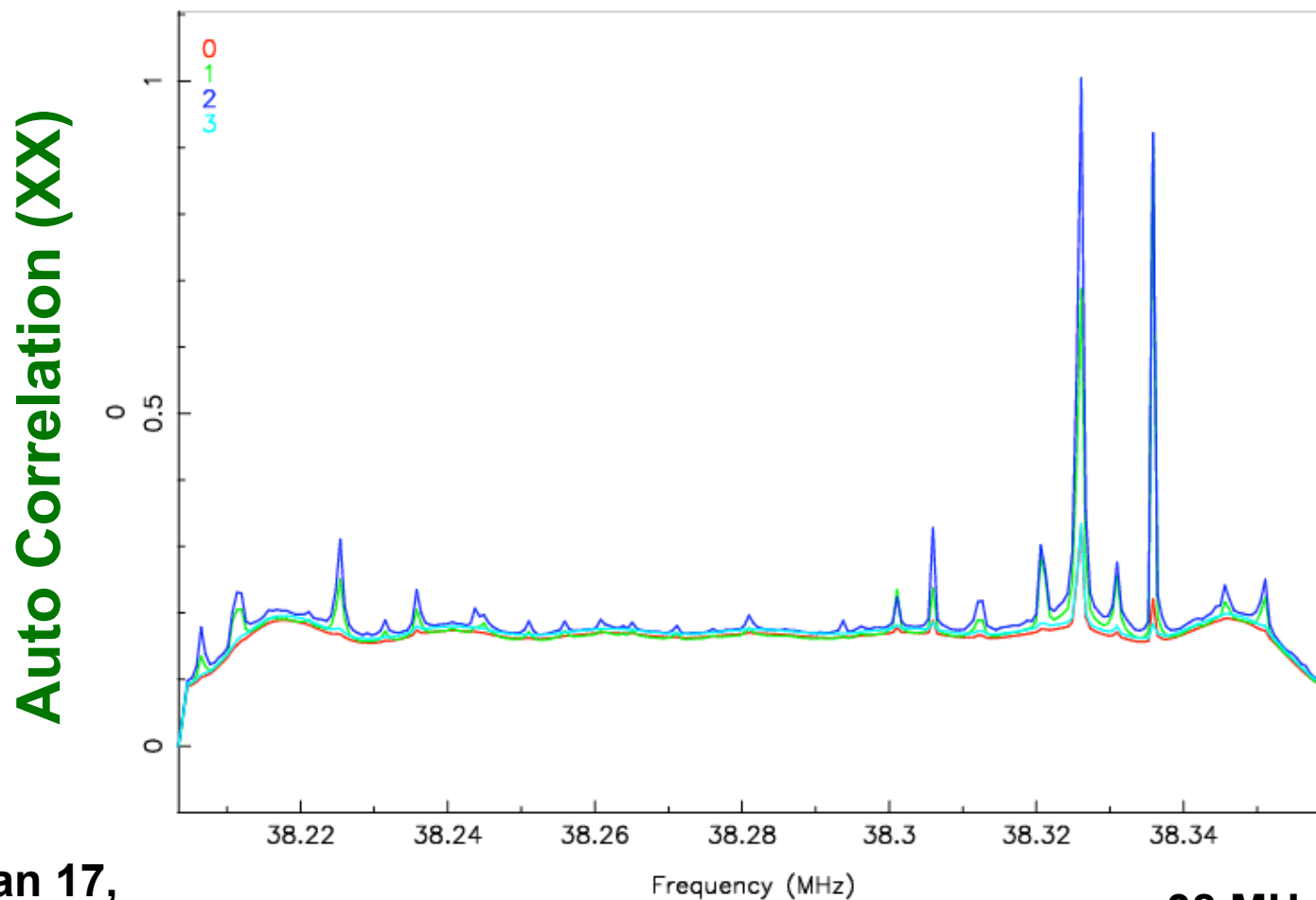
Jan 17,
18:10hrs-09:06hrs
~15 hours

Frequency (MHz)

38 MHz
156KHz wide

MS890S1 - Avg(channels 6:250) CS10

Auto Correlation (ALL Time averaged) L2007_00890_SB0-1.MS_LT All micro stations in CS10



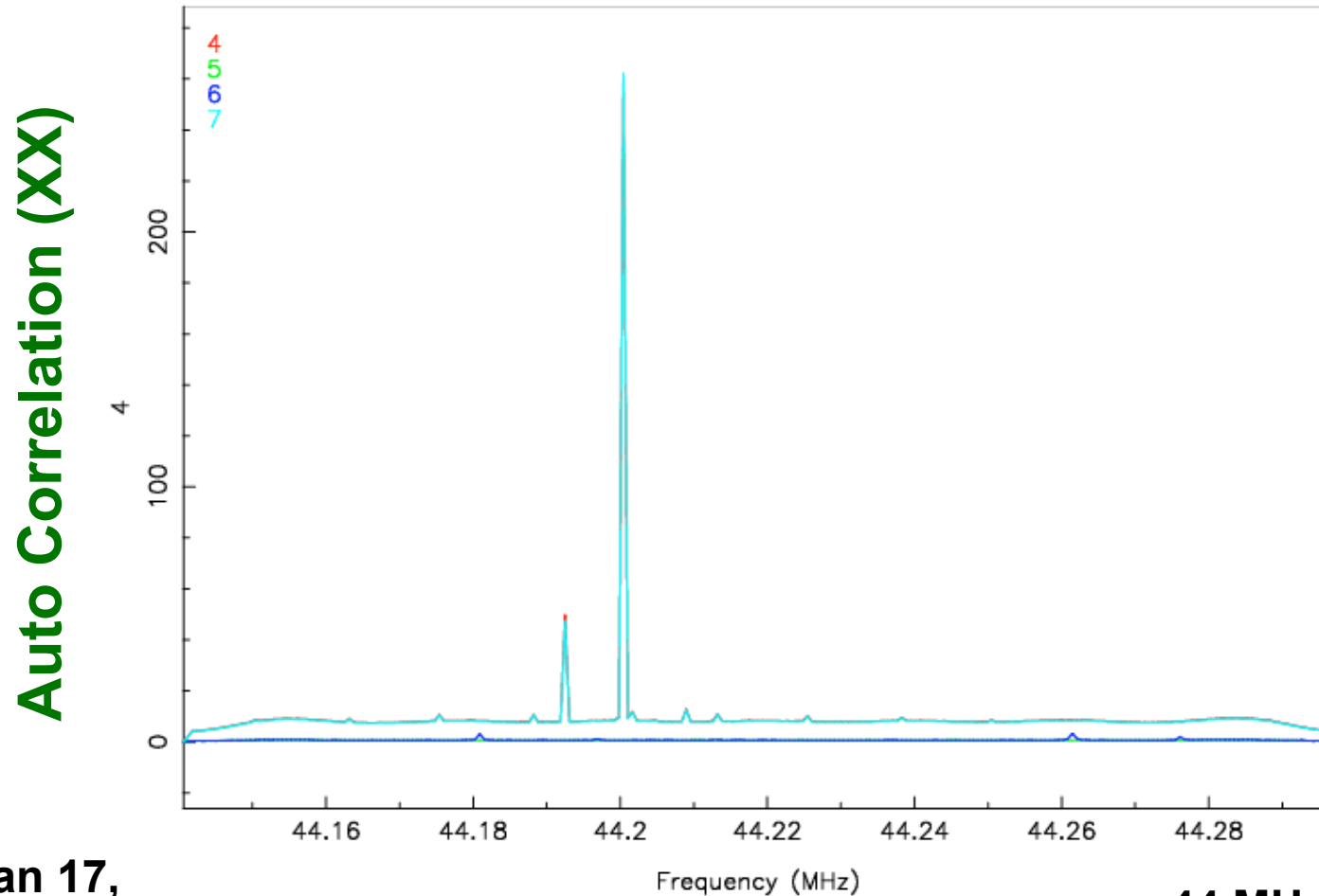
Jan 17,
18:10hrs-09:06hrs
~15 hours

Frequency (MHz)

38 MHz
156KHz wide

MS890S2 - Avg(channels 6:250) CS1

Auto Correlation (ALL Time averaged) L2007_00890_SB2-3.MS_LT All micro stations in CS1



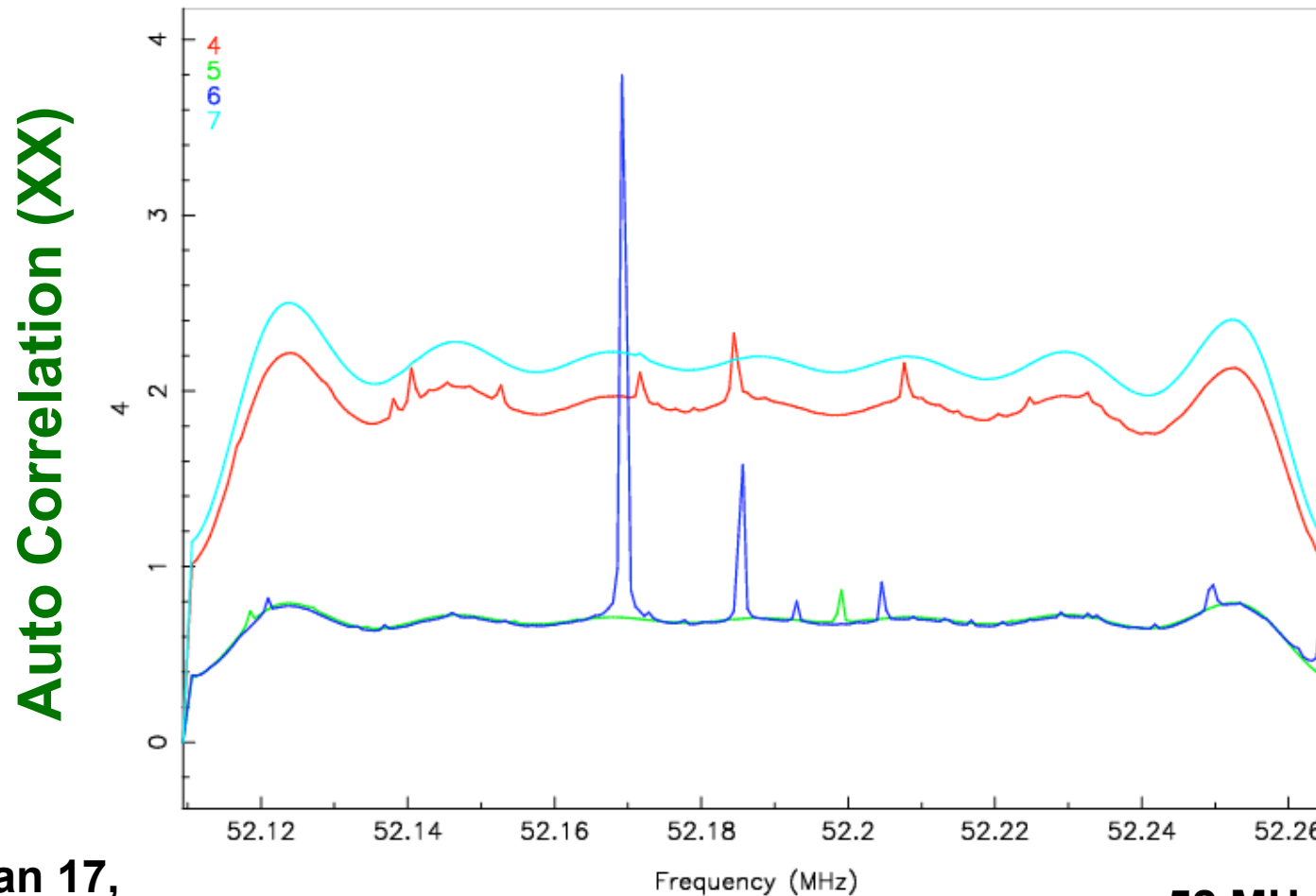
Jan 17,
18:10hrs-09:06hrs
~15 hours

Frequency (MHz)

44 MHz
156KHz wide

MS890S3 - Avg(channels 6:250) CS1

Auto Correlation (ALL Time averaged) L2007_00890_SB2-3.MS_LT All micro stations in CS1



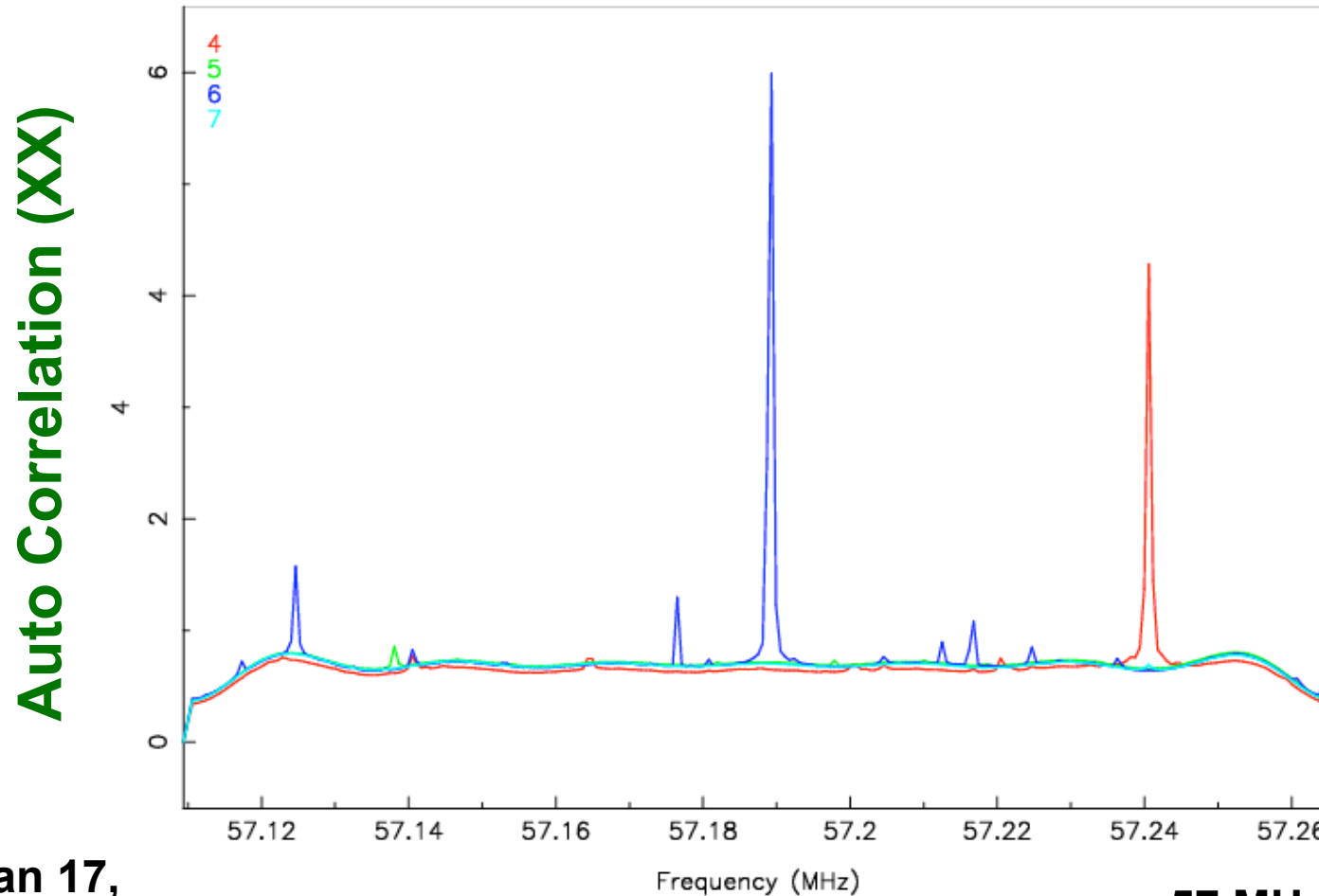
Jan 17,
18:10hrs-09:06hrs
~15 hours

Frequency (MHz)

52 MHz
156KHz wide

MS890S4 - Avg(channels 6:250) CS1

Auto Correlation (ALL Time averaged) L2007_00890_SB4-5.MS_LT All micro stations in CS1



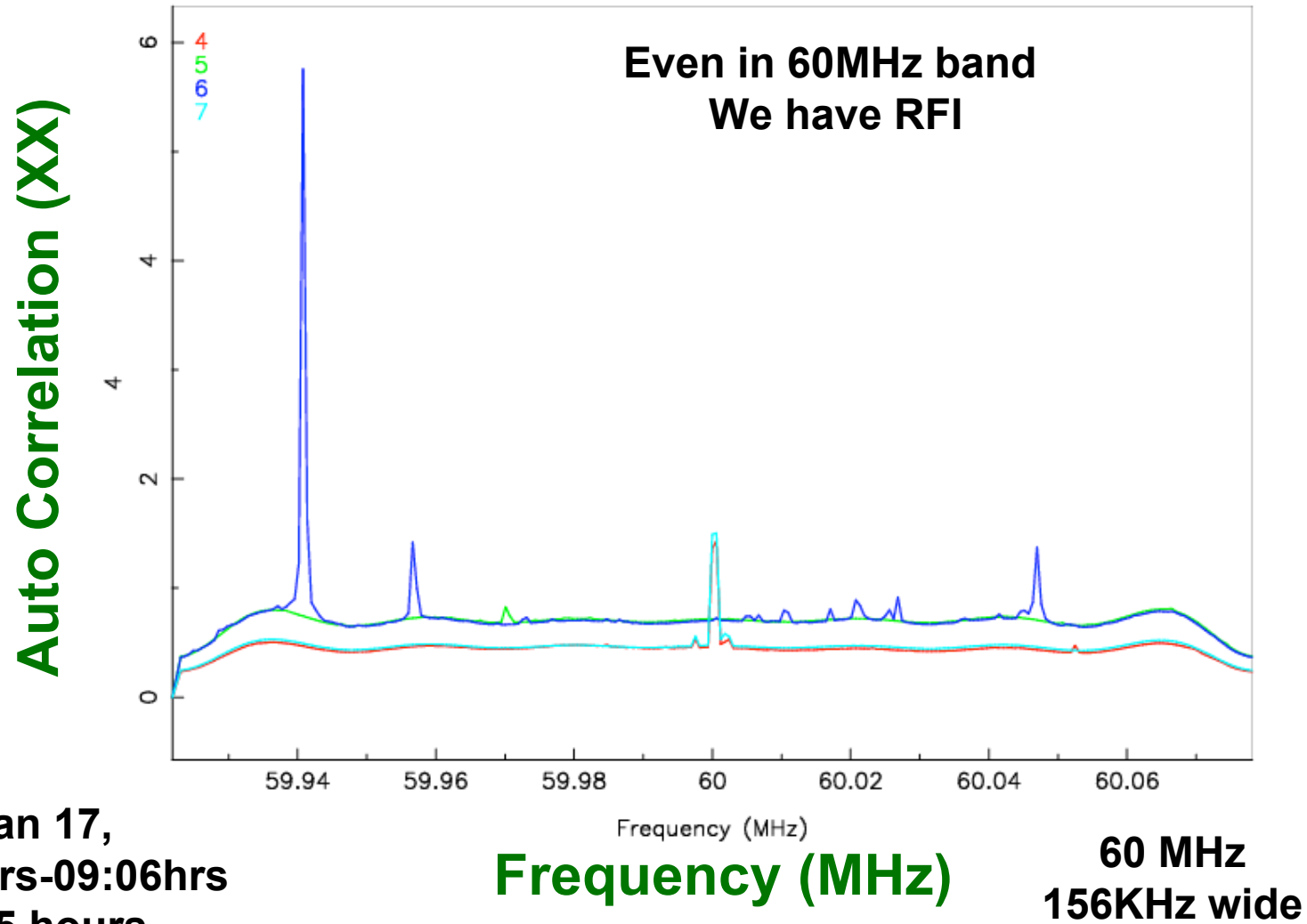
Jan 17,
18:10hrs-09:06hrs
~15 hours

Frequency (MHz)

57 MHz
156KHz wide

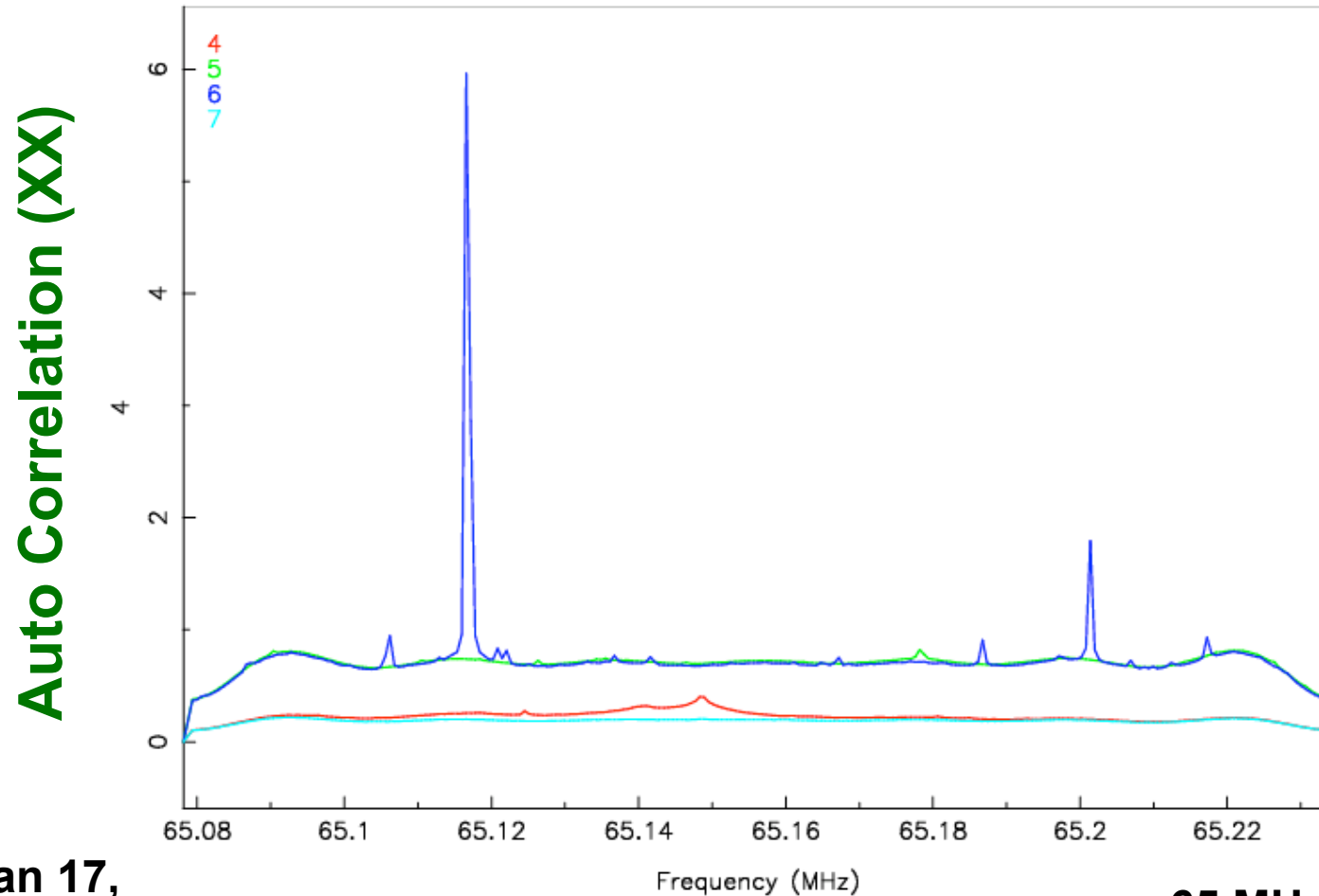
MS890S5 - Avg(channels 6:250) CS1

Auto Correlation (ALL Time averaged) L2007_00890_SB4-5.MS_LT All micro stations in CS1



MS890S6 - Avg(channels 6:250) CS1

Auto Correlation (ALL Time averaged) L2007_00890_SB6-7.MS_LT All micro stations in CS1



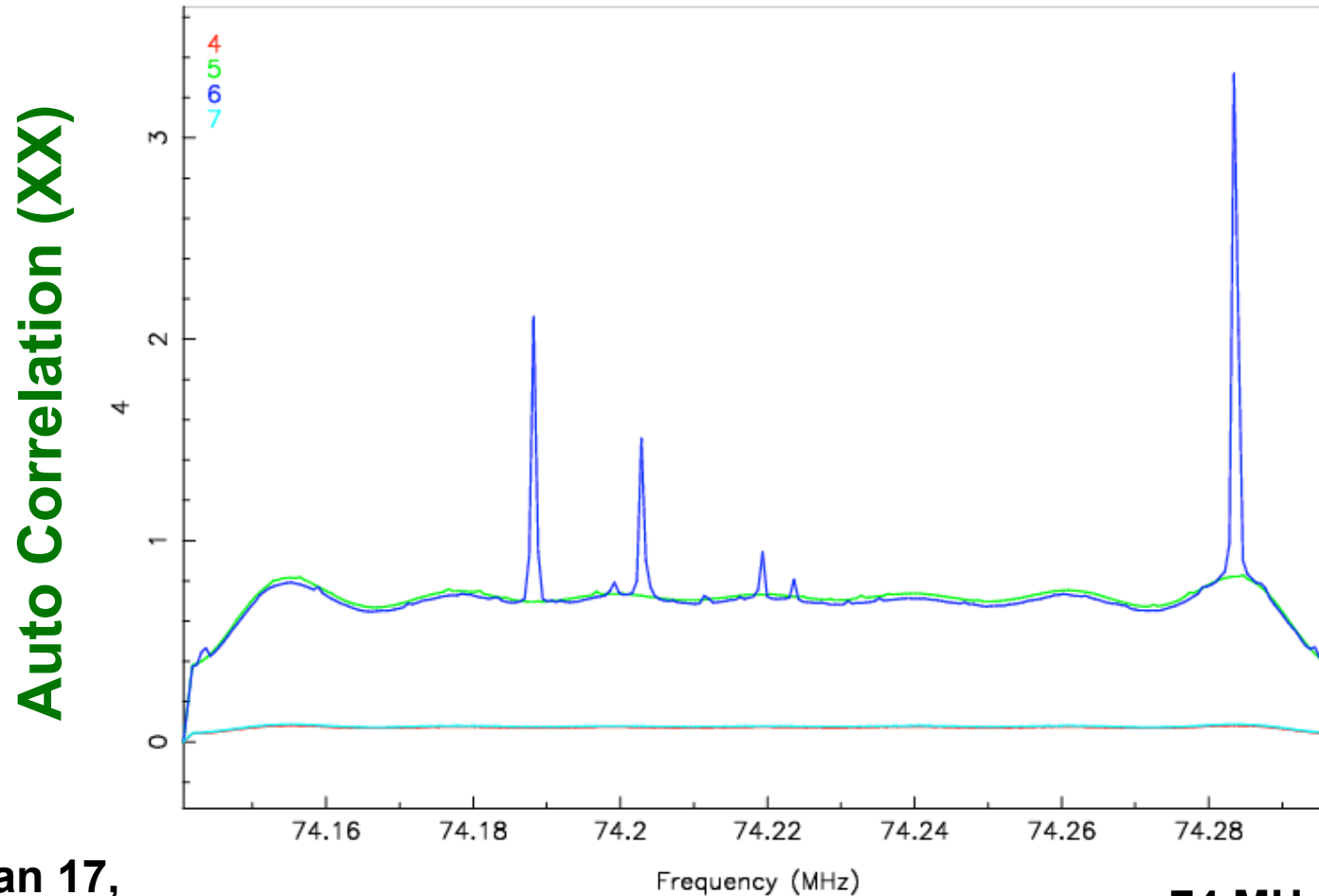
Jan 17,
18:10hrs-09:06hrs
~15 hours

Frequency (MHz)

65 MHz
156KHz wide

MS890S7 - Avg(channels 6:250) CS1

Auto Correlation (ALL Time averaged) L2007_00890_SB6-7.MS_LT All micro stations in CS1



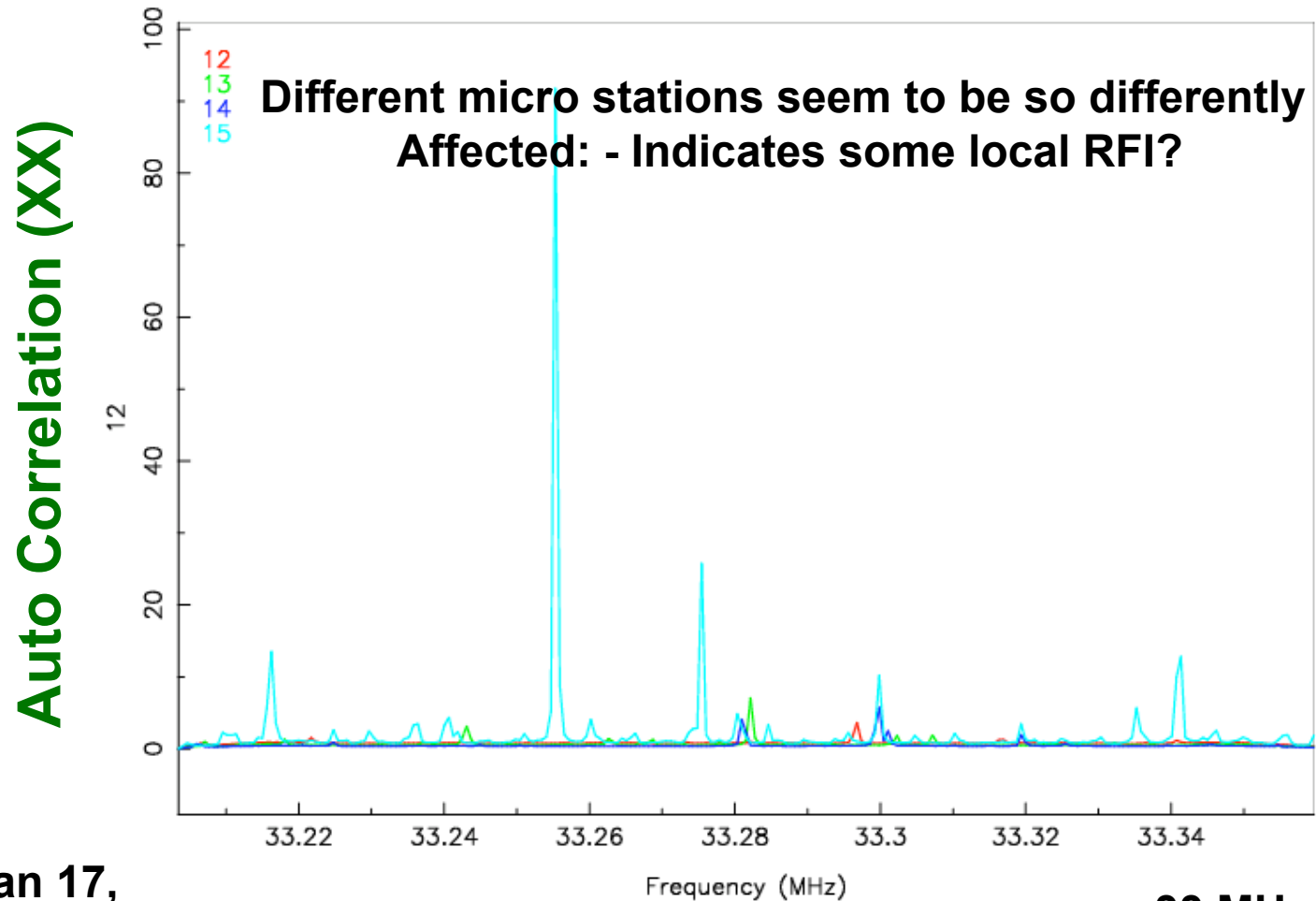
Jan 17,
18:10hrs-09:06hrs
~15 hours

Frequency (MHz)

74 MHz
156KHz wide

MS999S1 - Avg(channels 6:250) CS1

Auto Correlation (ALL Time averaged) L2007_00999_SB0-1.MS_LT All micro stations in CS16



Jan 17,
16:44hrs-08:40hrs
~16 hours

Frequency (MHz)

**33 MHz
156KHz wide**