Pinemont Technology Australia Pty Ltd
Airborne Survey PTEM
R7 & R8 Survey Grids
ATP 794

Contents

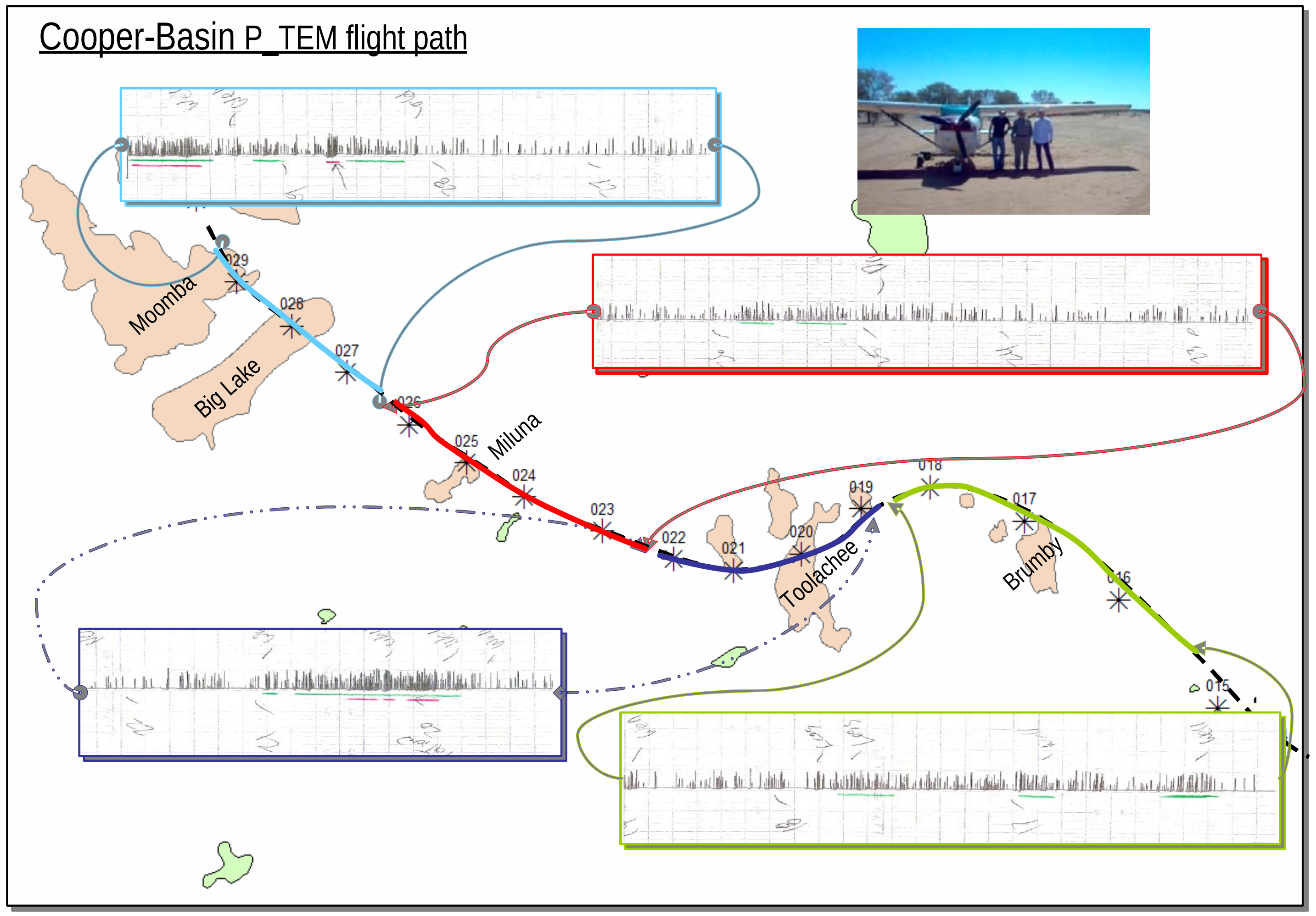
Text underlined in blue are hyperlinks to the referenced slide

Introduction

Description: The survey is described as a magnetic impulse survey (P_TEM) and measures naturally occurring increases in magnetic component electromagnetic impulses associated with the secondary magnetic fields over a hydrocarbon reservoir. The instrument incorporates precision gain with an amplitude detector that counts the impulse activity, and compares it against the overall background activity count for the area being surveyed.

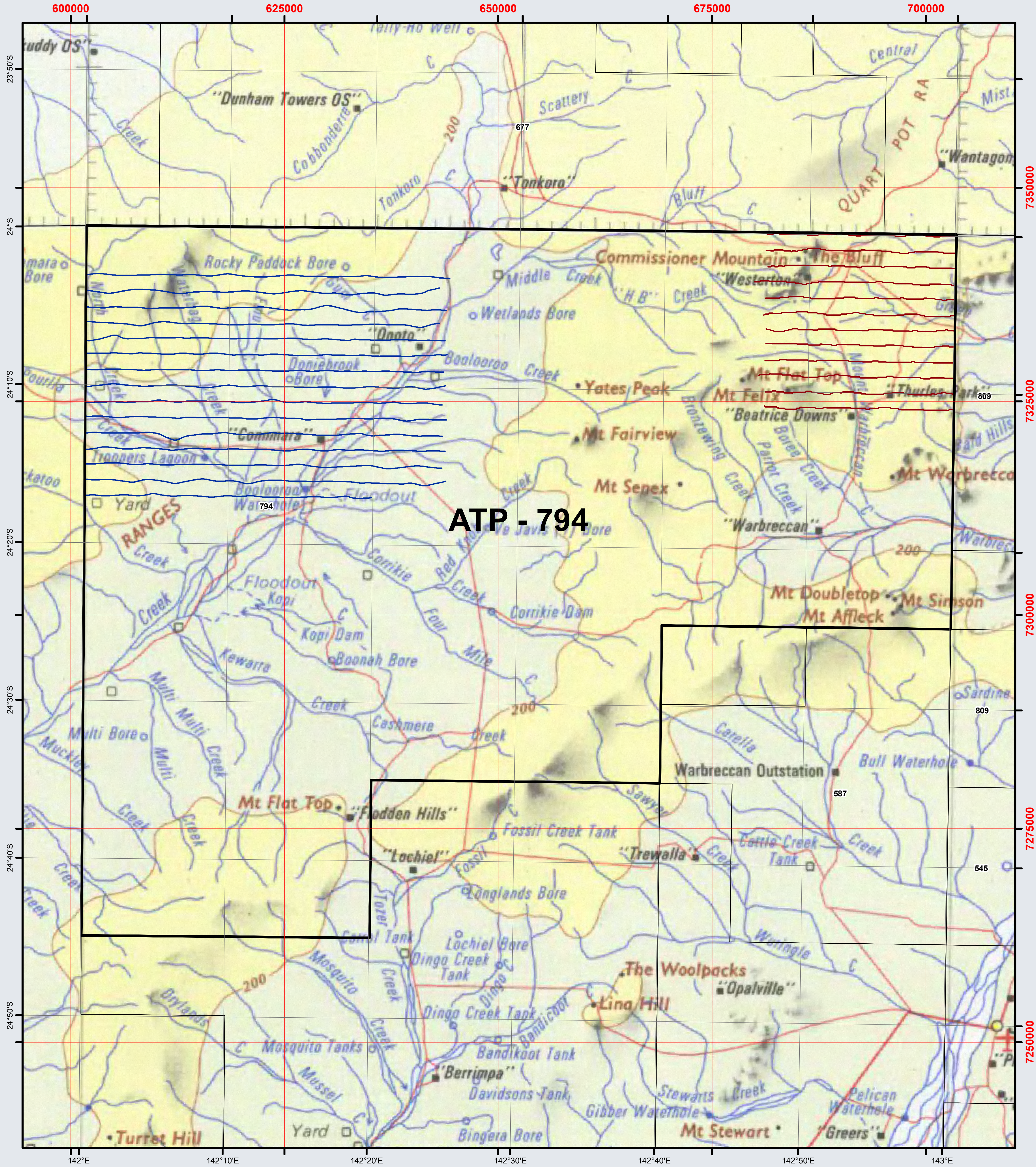
Conducting the survey: Pinemont has developed an economic method of conducting the survey utilizing, in most cases, a small plane (Cessna) flying low and slow, in a grid pattern. GPS coordinates are downloaded to a computer and then mapped using mapping software, anomalous areas are high lighted for map reference. Digital data is recorded as a CSV txt file format X,Y,Z data set, that is compatible with most mapping software packages. Data is poled every 100 milliseconds, averaged and recorded every second.

Survey Results: More than 200,000 nautical miles of survey lines have been run in productive areas, both on land and over the sea. Pinemont Technologies developed the survey in 2001, and first employed the survey in 2002. Since then, data has been acquired on a confidential basis in the United States, Canada, Australia, and New Zealand. More than 30 discovery wells have been documented as being associated with our P_TEM anomalies, providing us with a success rate exceeding 85%.



Example shows P_TEM field data over several Permian fields in the South Australia portion of the Cooper Basin.

Permit Location Map ATP 794



Legend

- Permit Outline
- R7 060911
- R8 060910

Background: Topographic Map 1:1M

10 5 0 10

km

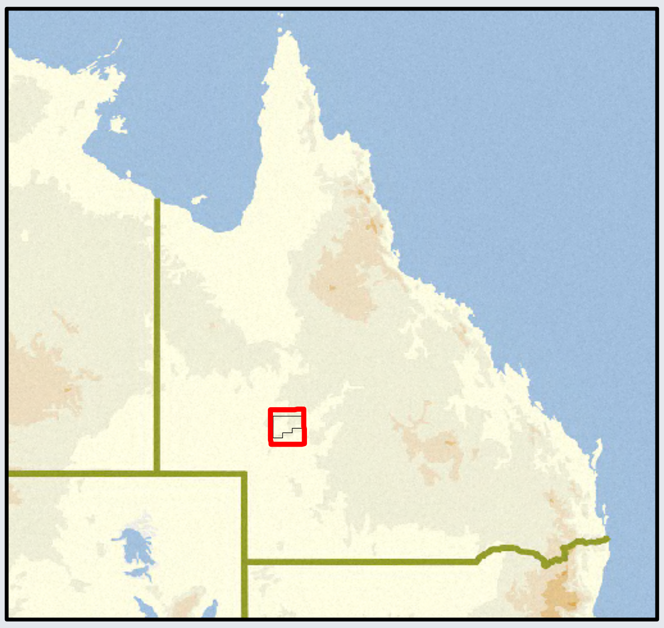
Date: September 2006

Projection Information:

Name: GDA 1994 MGA Zone 54

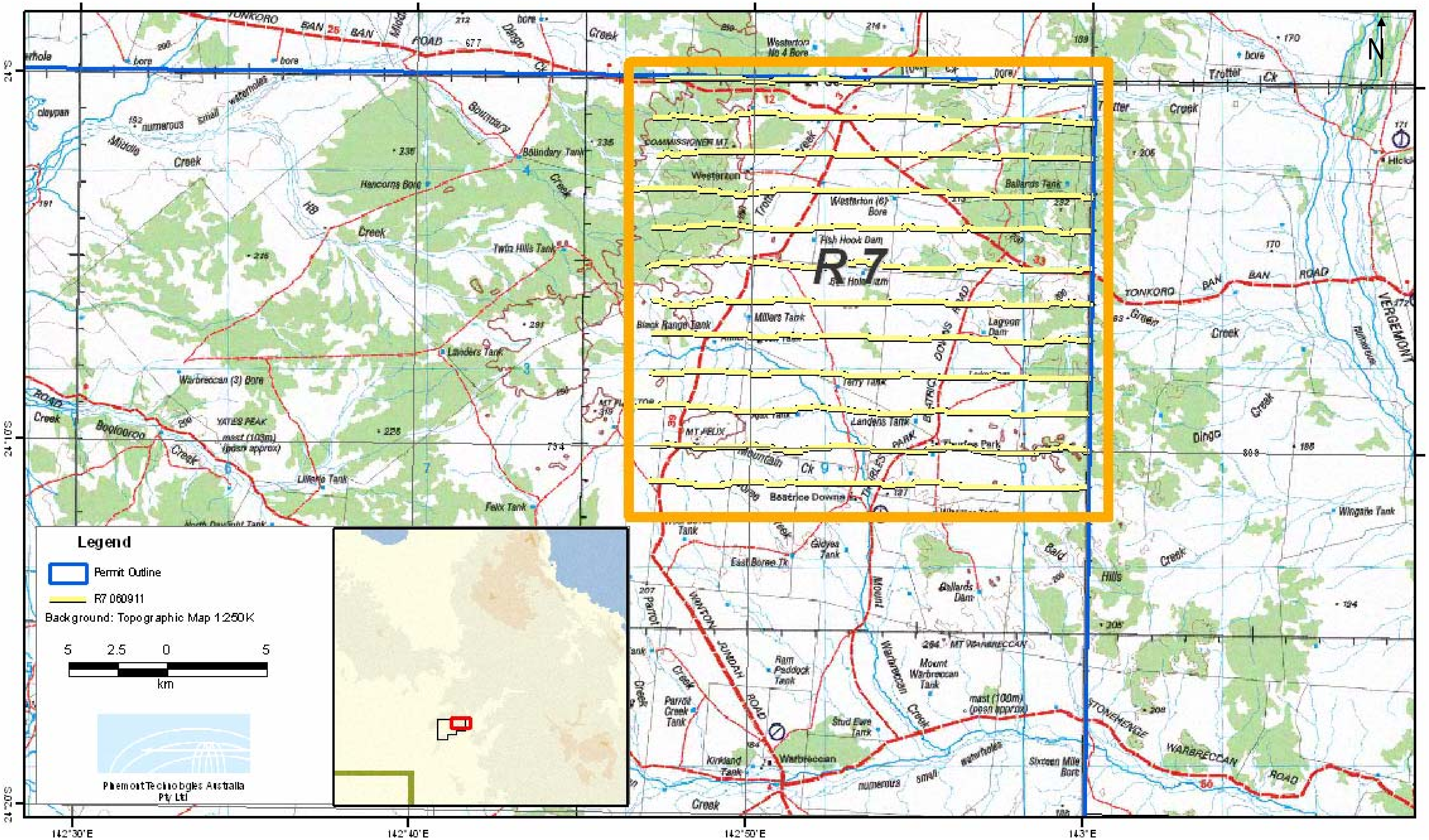
File: atp_794.mxd

Pinemont Technologies Australia Pty Ltd



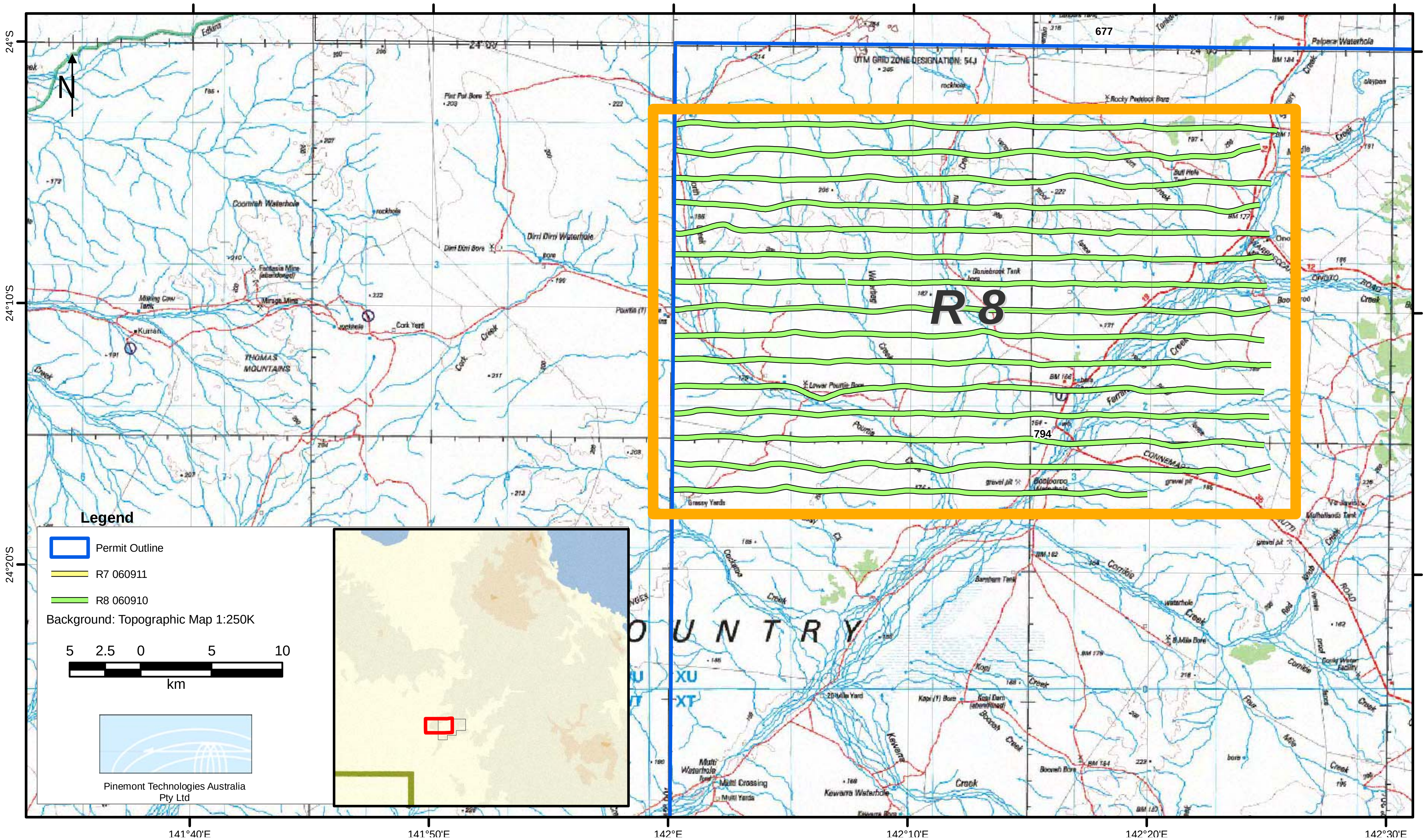
Survey R7

In September 2006 PTEM data was acquired over the ATP 794 area using Pinemont Technologies' Patented airborne micromagnetics technique. A grid of east-west flight lines (~ 1 nautical mile spacing) was acquired. The location of the flight lines are shown below. Digital data from the survey was used to create profile data and maps. Images of the maps and profiles are summarised in this document.

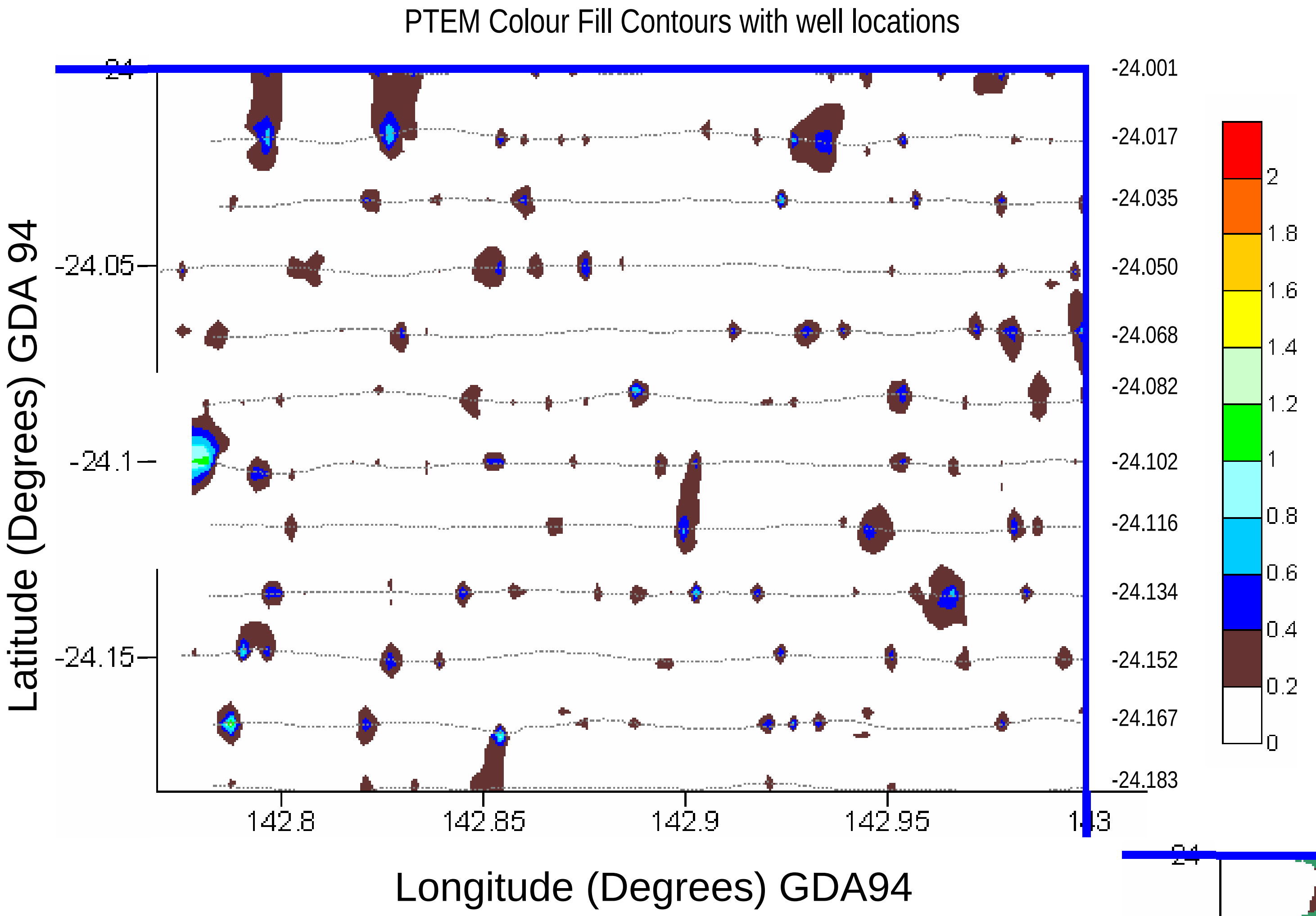


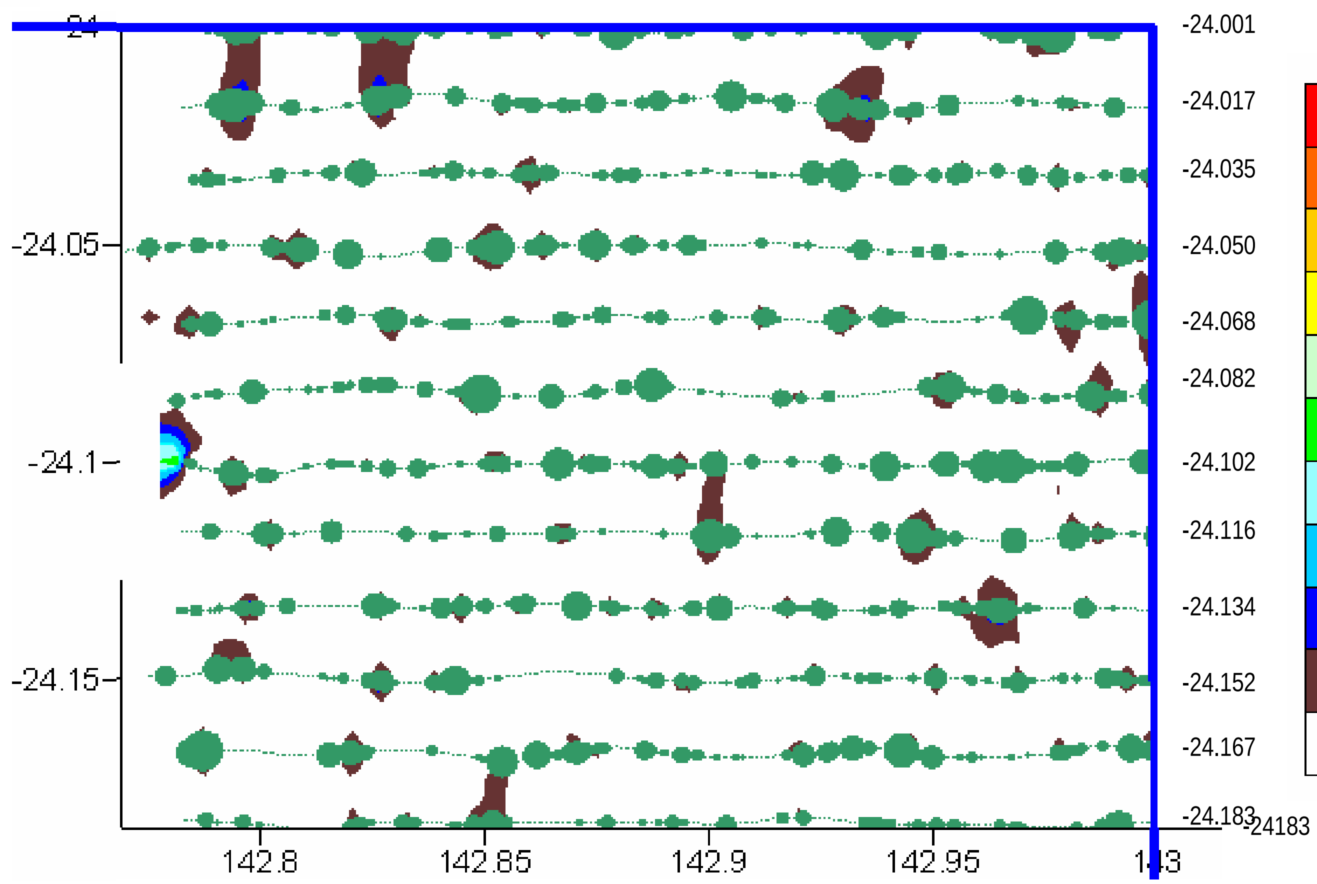
Survey R8

In September 2006 PTEM data was acquired over the ATP 794 area using Pinemont Technologies' Patented airborne micromagnetics technique. A grid of east-west flight lines (~ 1 nautical mile spacing) was acquired. The location of the flight lines are shown below. Digital data from the survey was used to create profile data and maps. Images of the maps and profiles are summarised in this document.



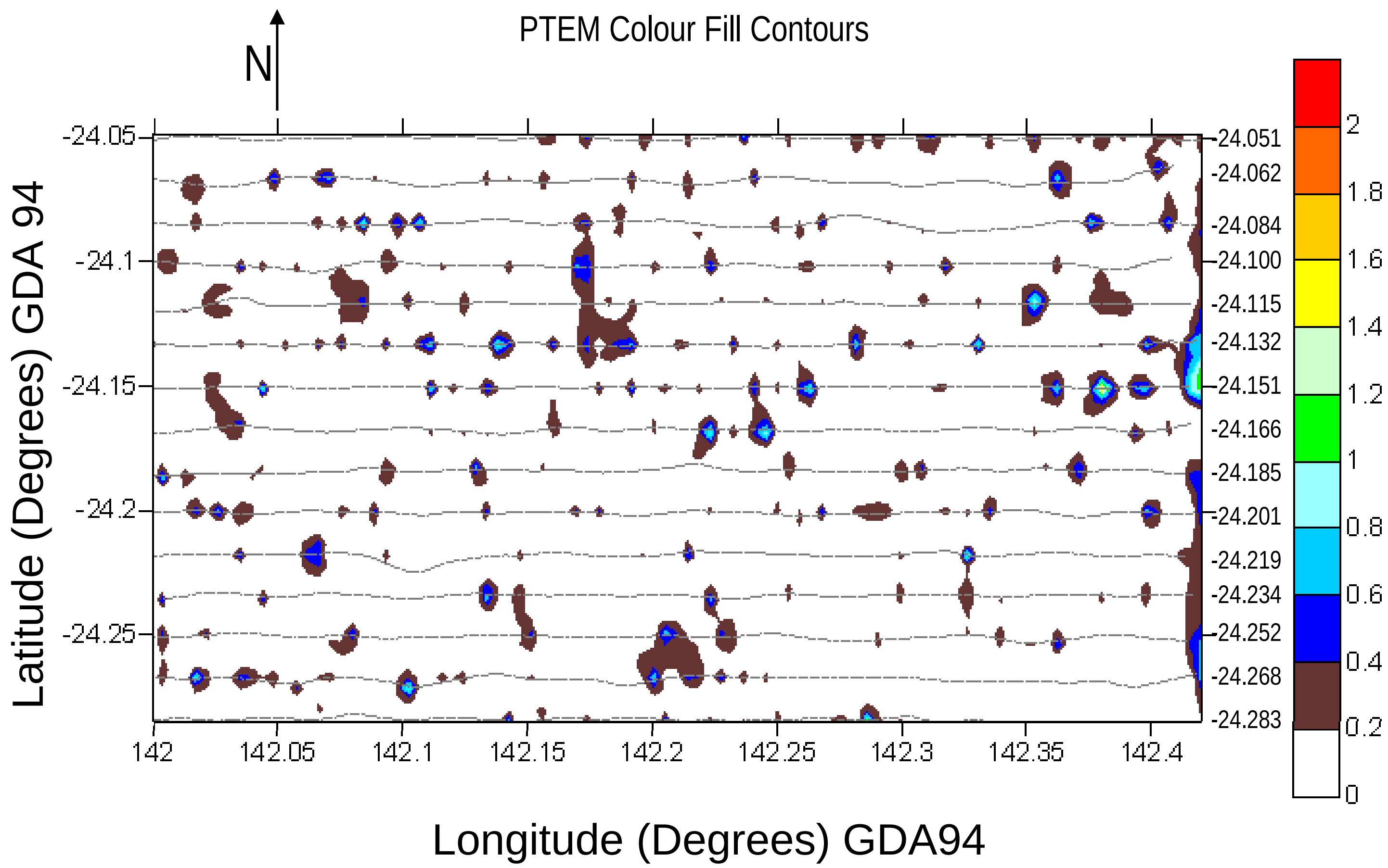
Summary of Results – R7

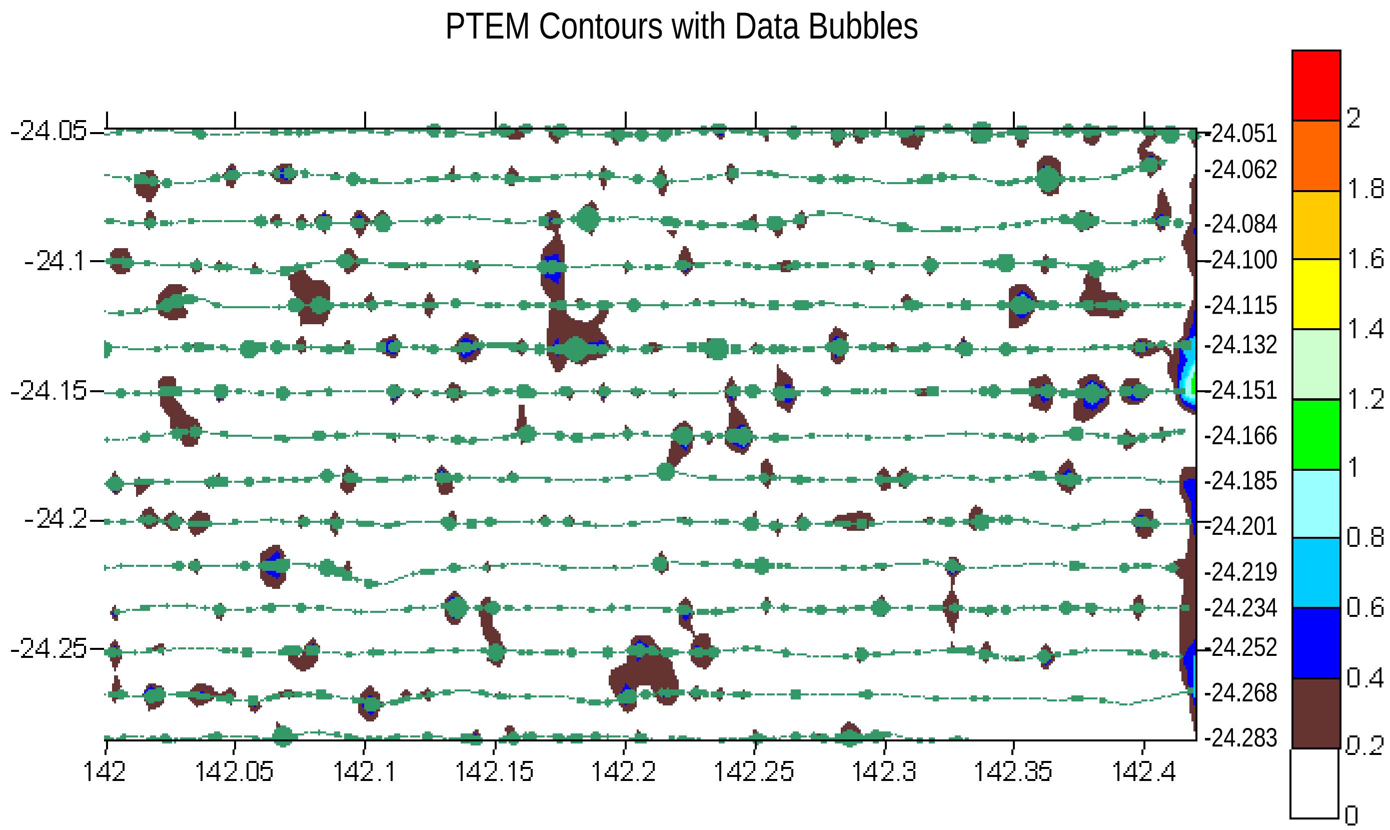




- Flight Path track points
- Bubble map showing data value (larger value ~ larger bubble)
- Data value contour fill (Red to Blue ~ High to Low).
- Data shown is Raw Data after the removal of the mean value calculated for each flight line.

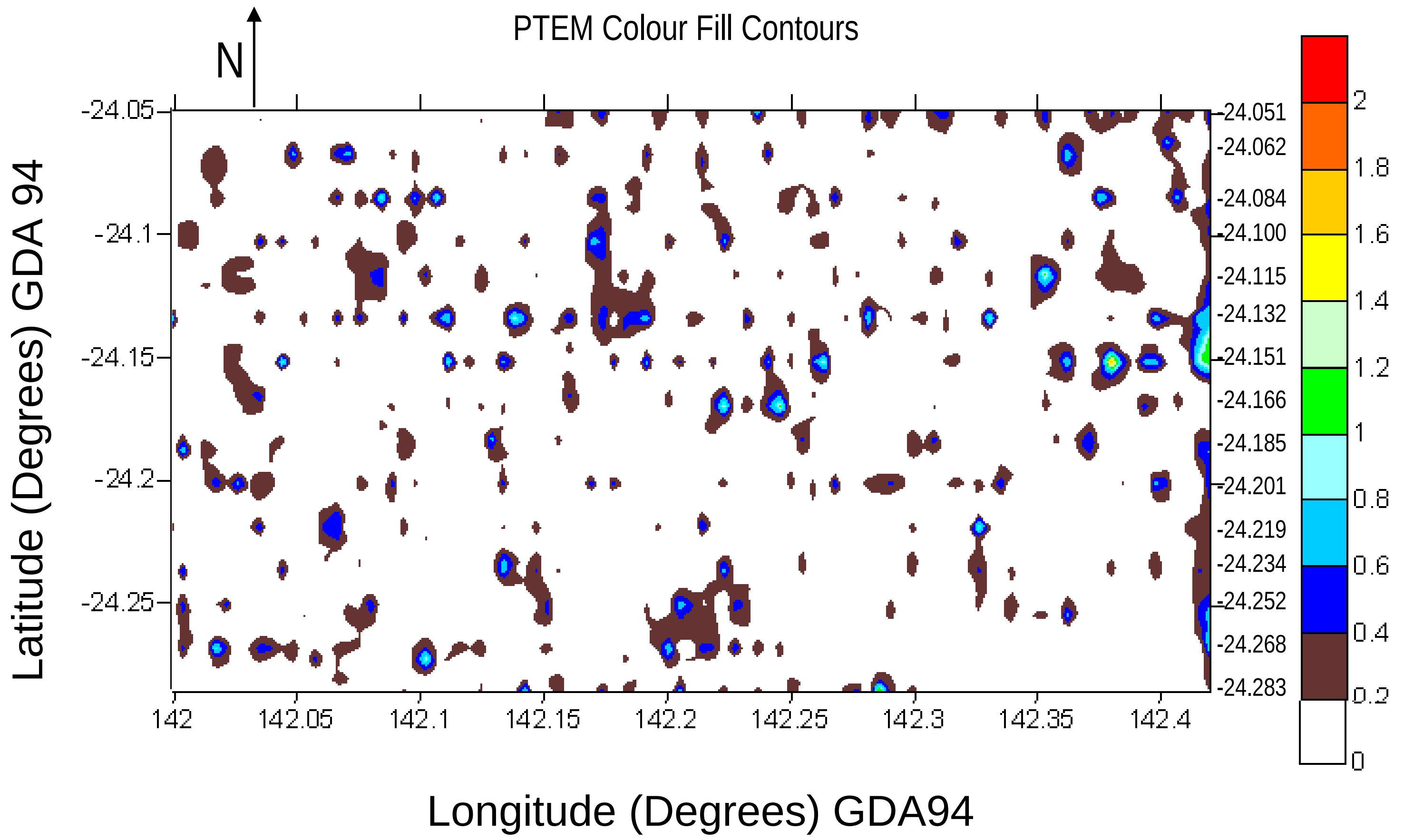
Summary of Results – R8



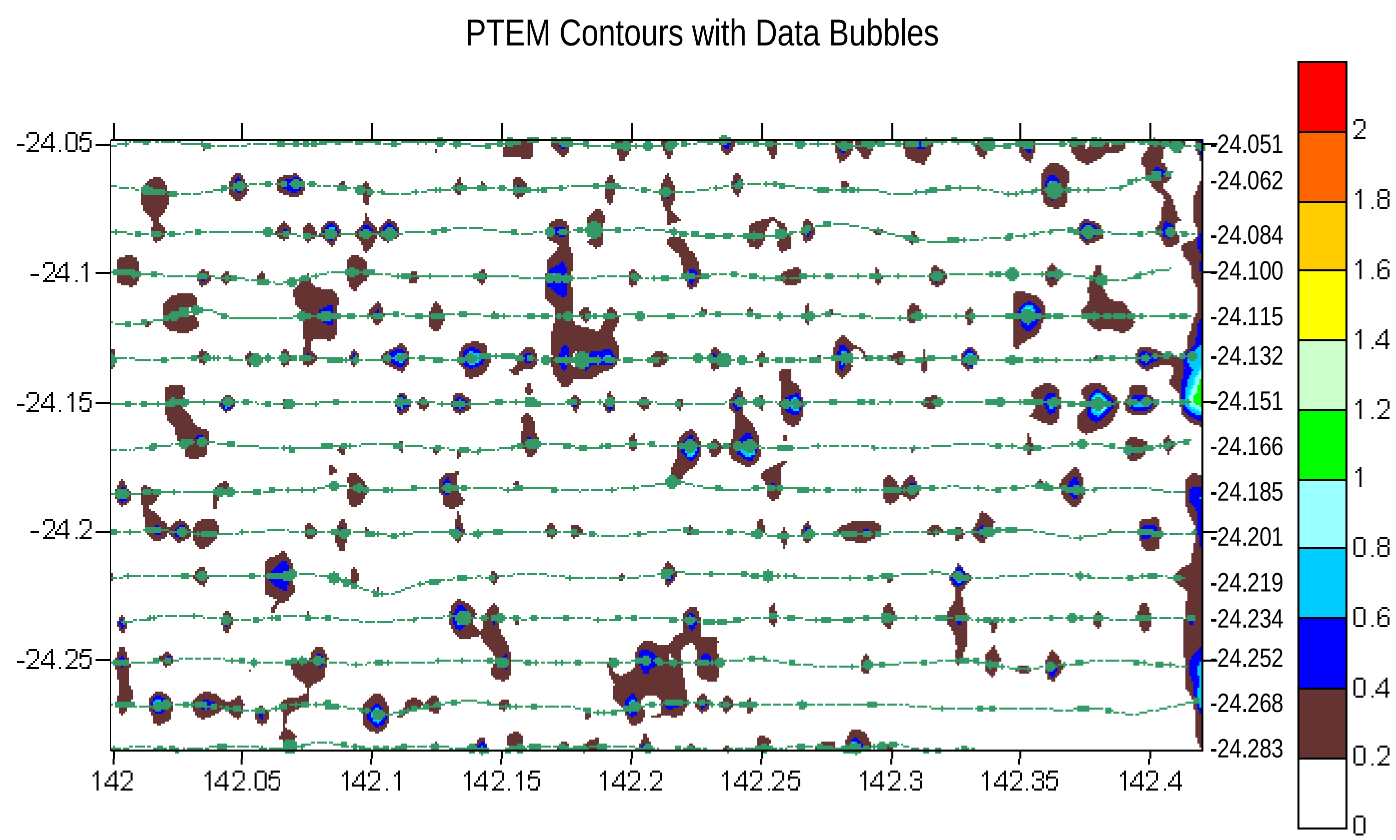


- Flight Path track points
- Bubble map showing data value (larger value ~ larger bubble)
- Data value contour fill (Red to Blue ~ High to Low).
- Data shown is Raw Data after the removal of the mean value calculated for each flight line.

Summary of Results – R8 – Median Filtered



- Due to the spiky nature of the PTEM response recorded over the R8 flight grid, an additional grid was created using data after median filtering (5 points) as input.



- •••••• Flight Path track points
- Bubble map showing data value (larger value ~ larger bubble)
- Data value contour fill (Red to Blue ~ High to Low).
- Data shown is Raw Data after the removal of the mean value calculated for each flight line.

Appendix A

Poster Summary

- R7

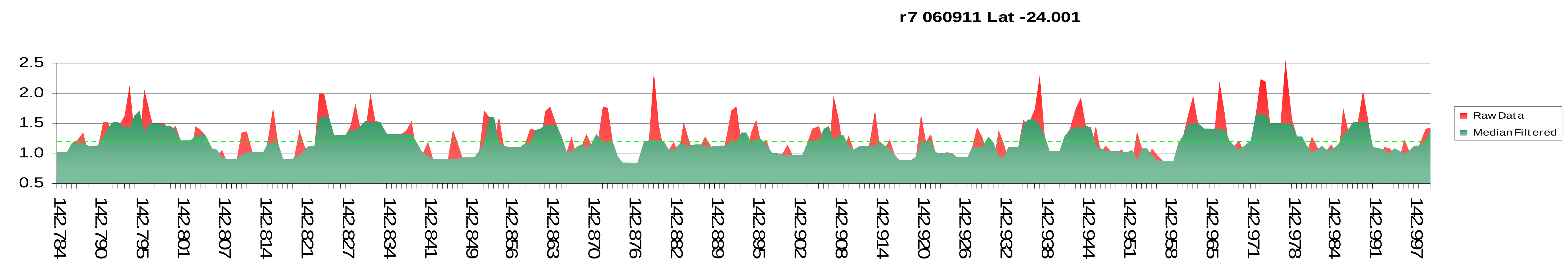
- R8

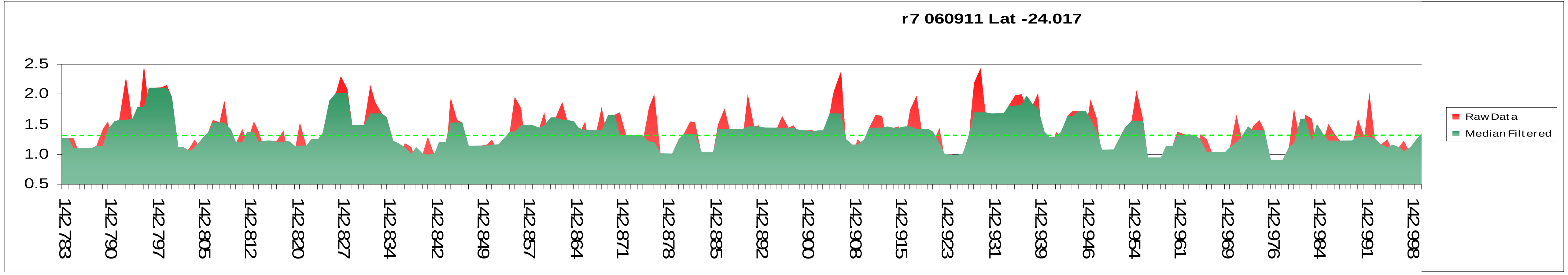
Appendix B

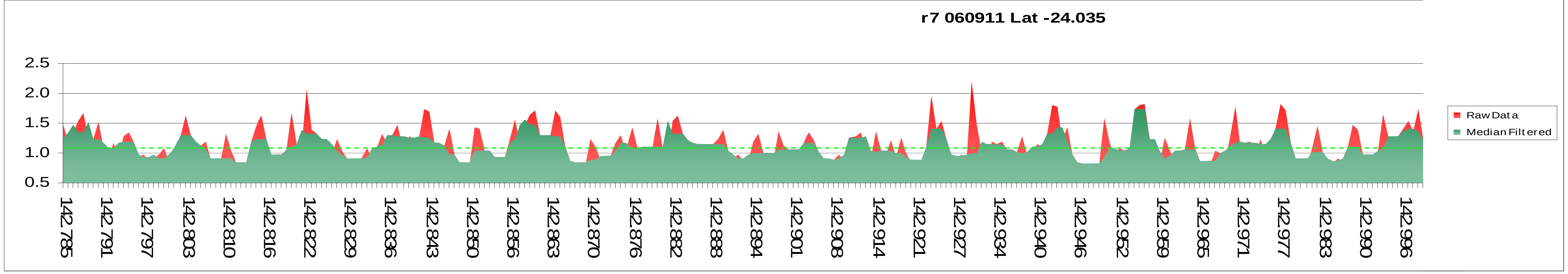
Data Profiles

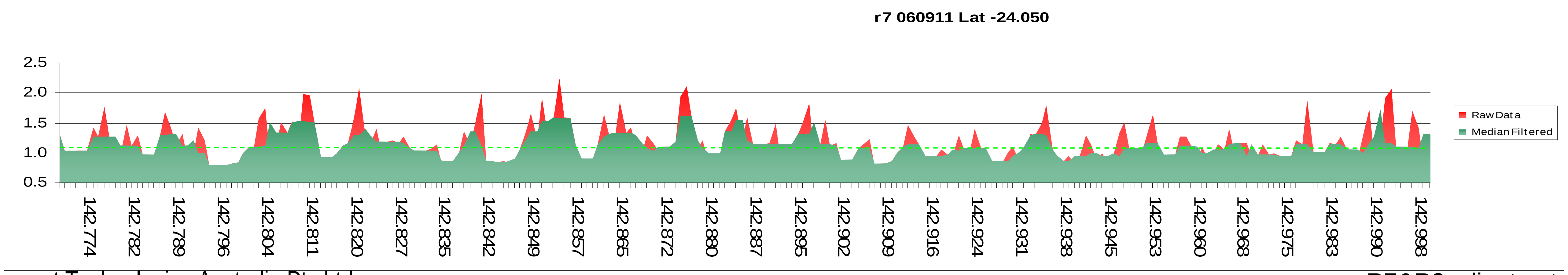
- R7

Data Profiles – R7 (longitude on X-axis)

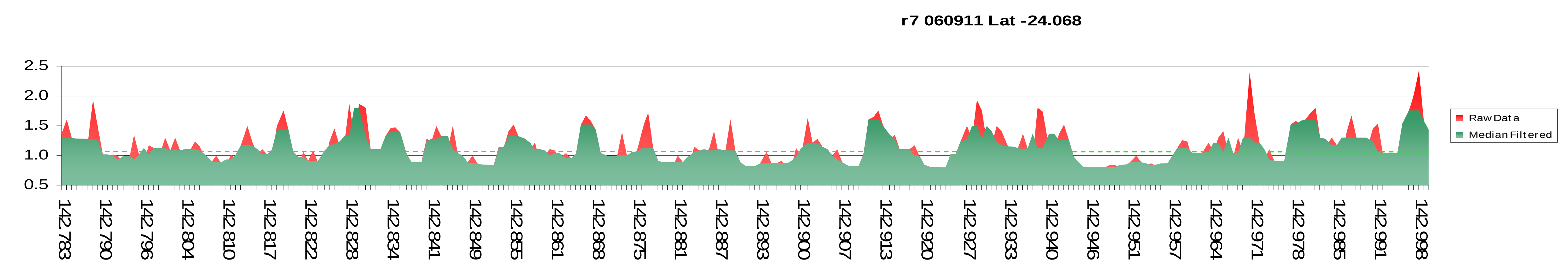


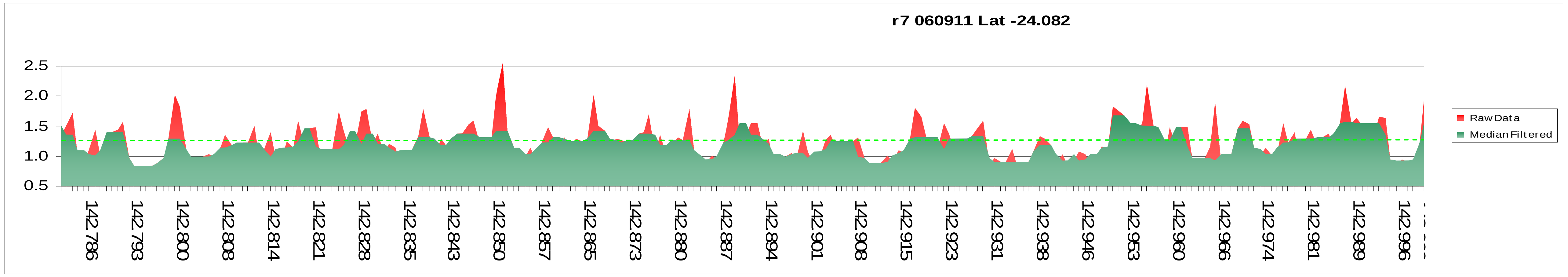


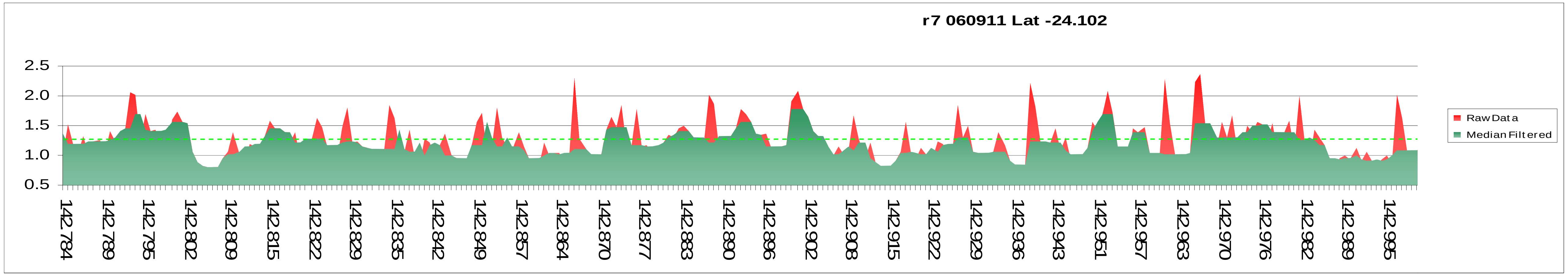


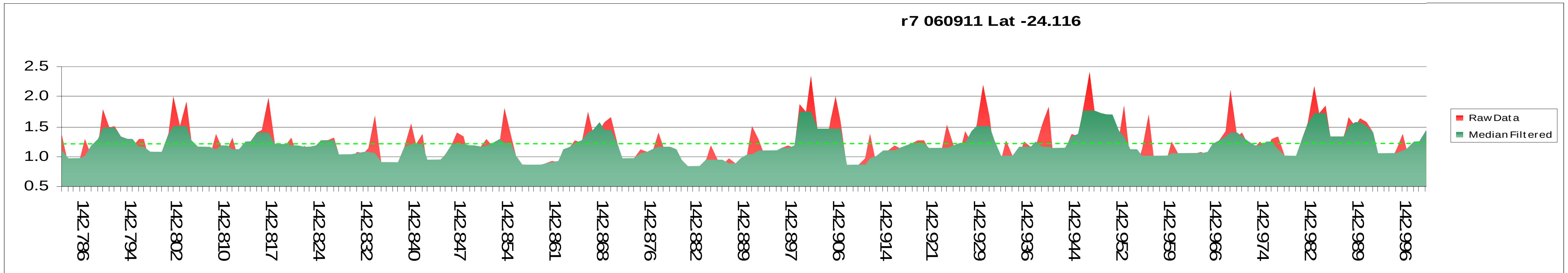


Data Profiles – R7 cont… (longitude on X-axis)

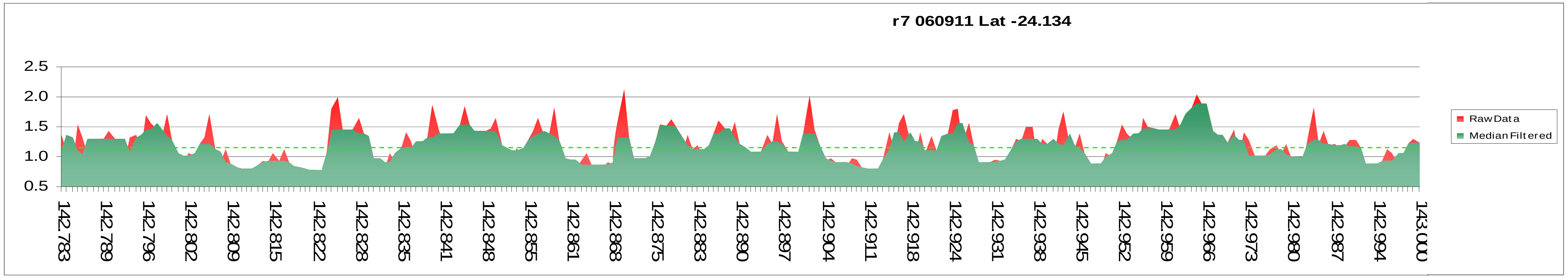


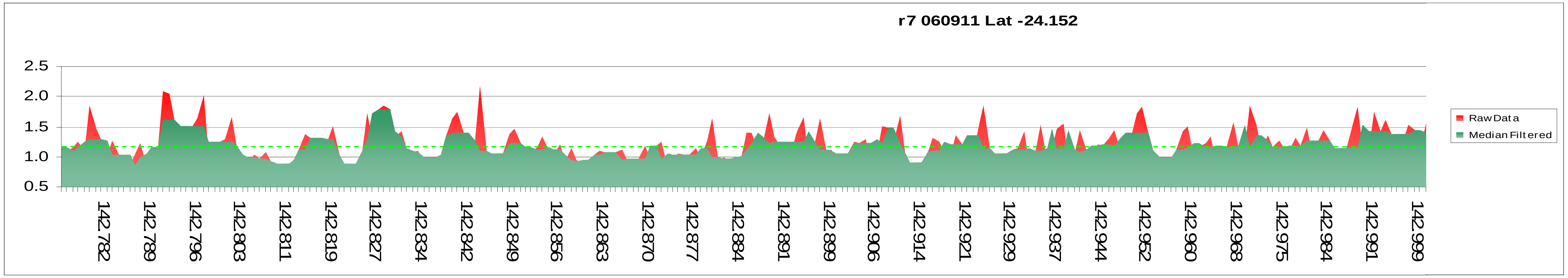


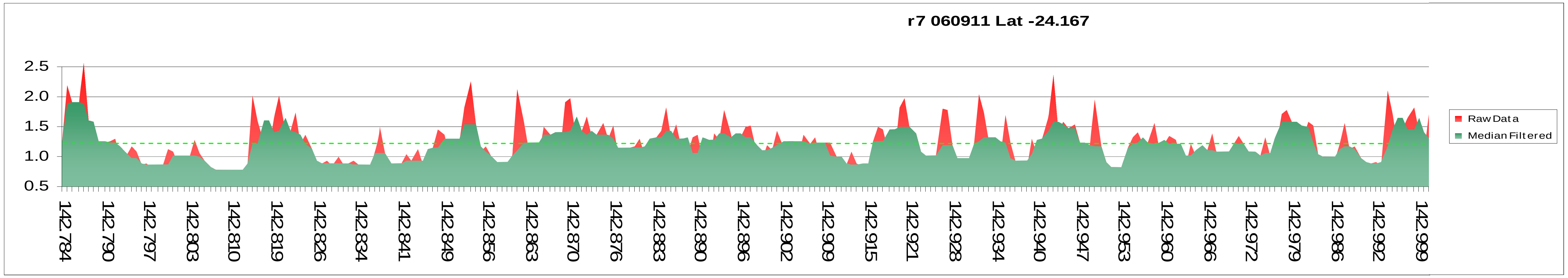


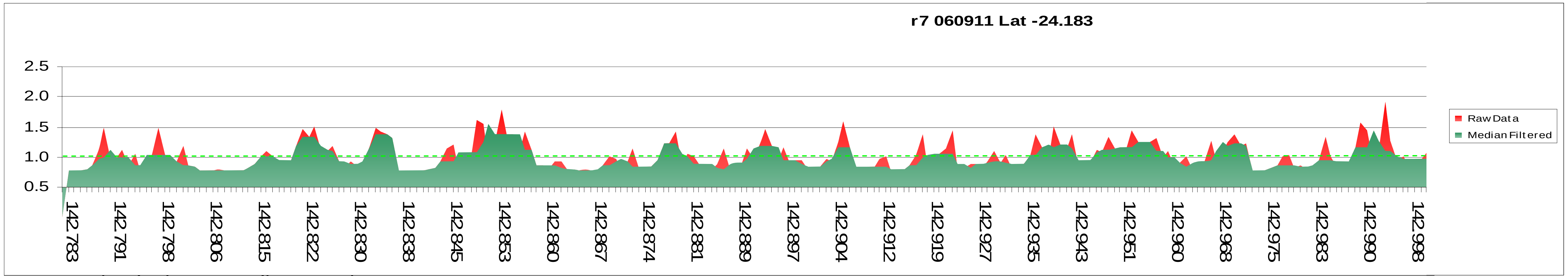


Data Profiles – R7 cont… (longitude on X-axis)





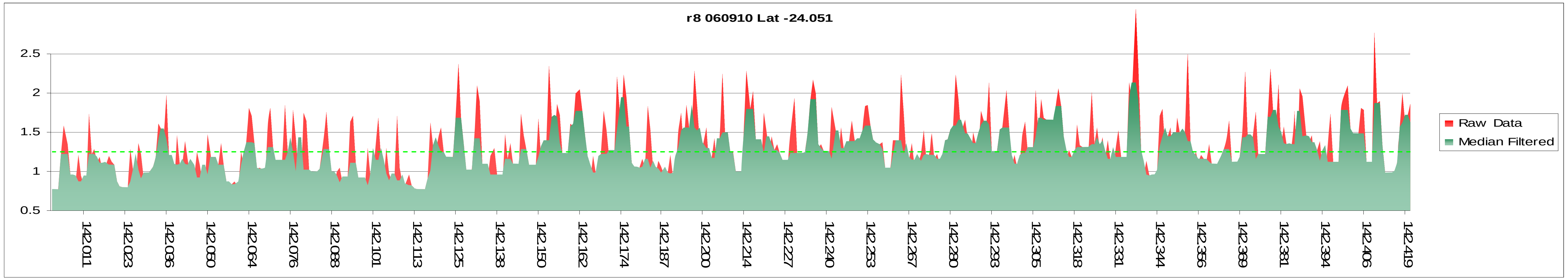


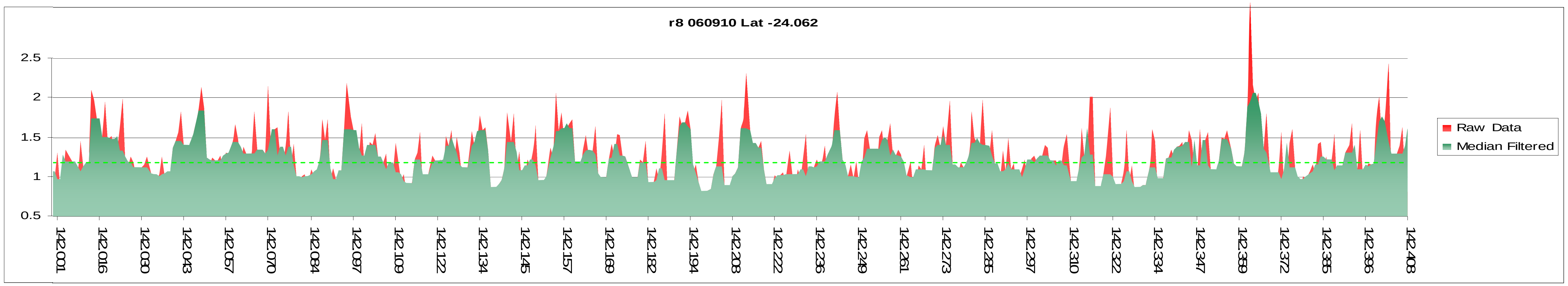


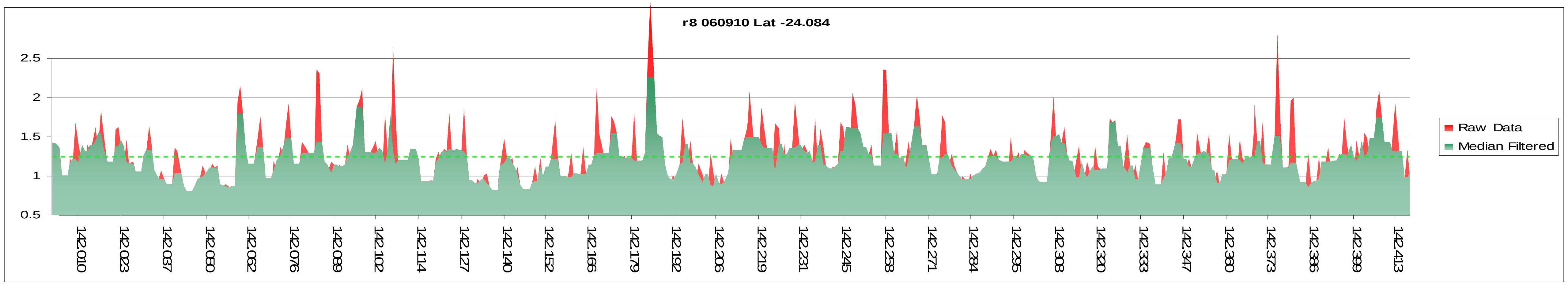
- R8

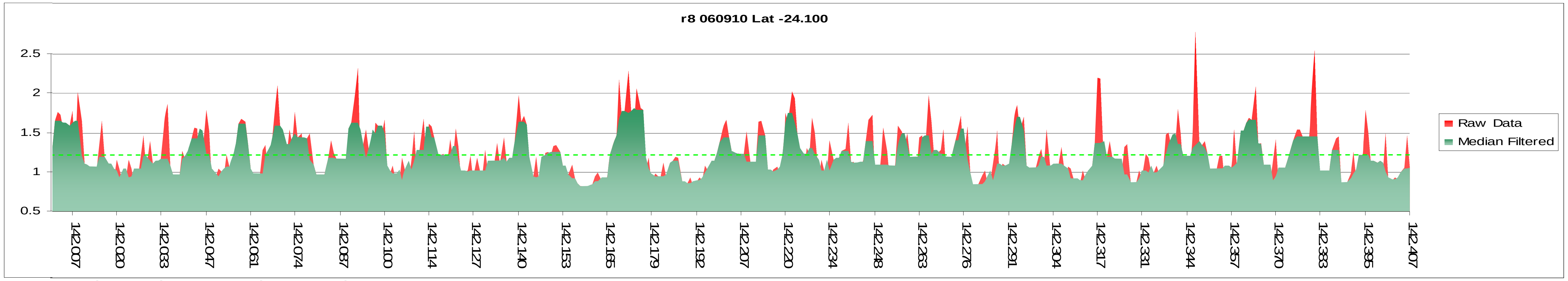
Data Profiles – R8 (longitude on X-axis)

Background (median value)



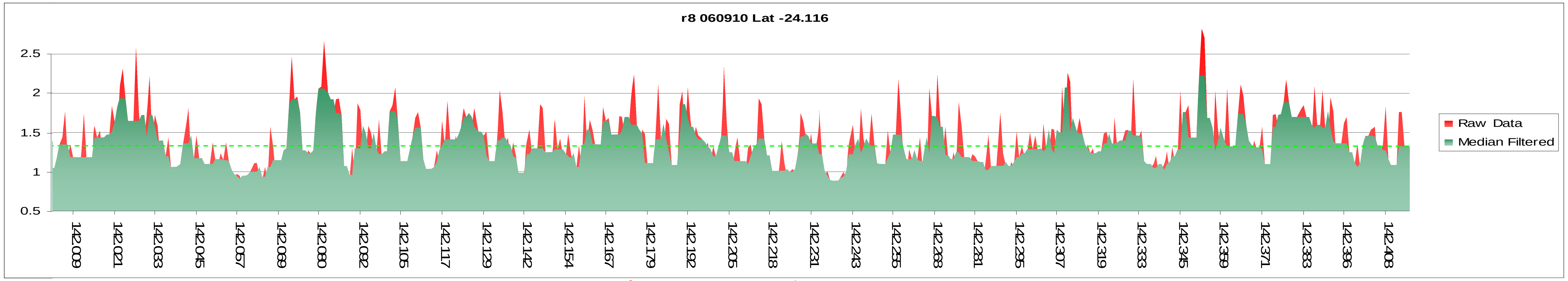


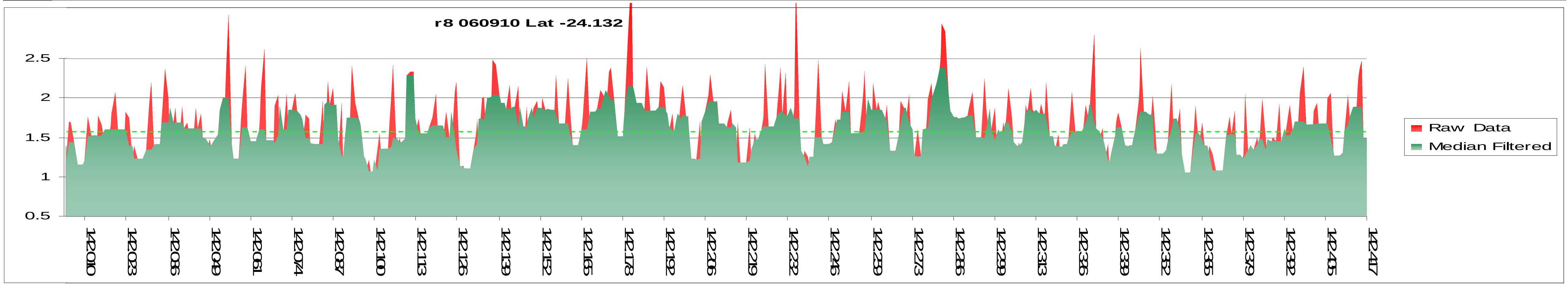


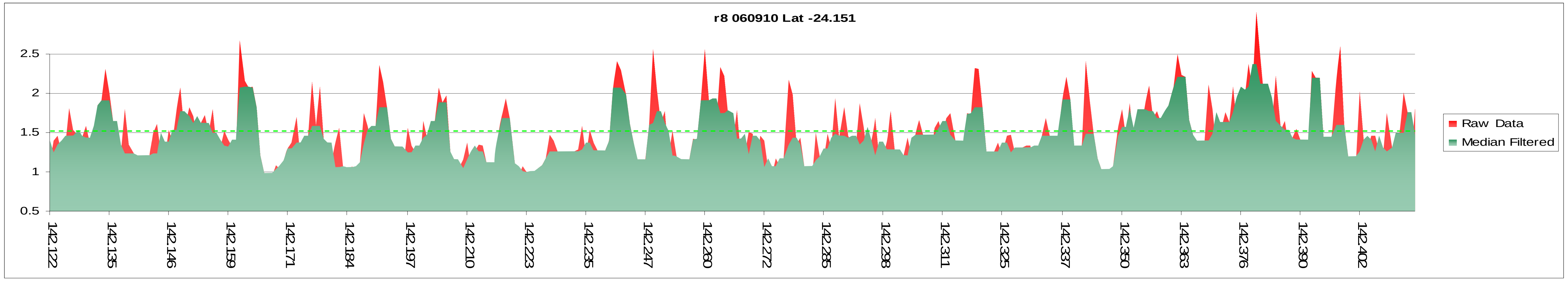


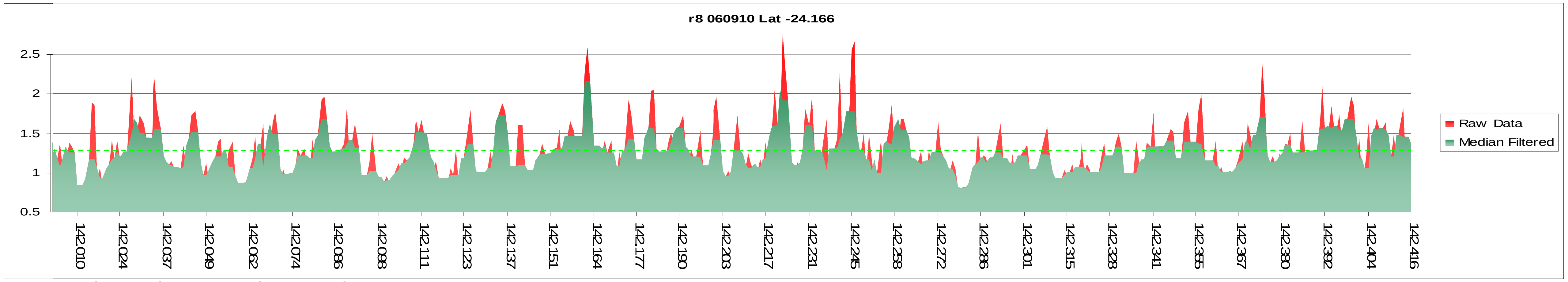
Data Profiles – R8 cont… (longitude on X-axis)

Background (median value)



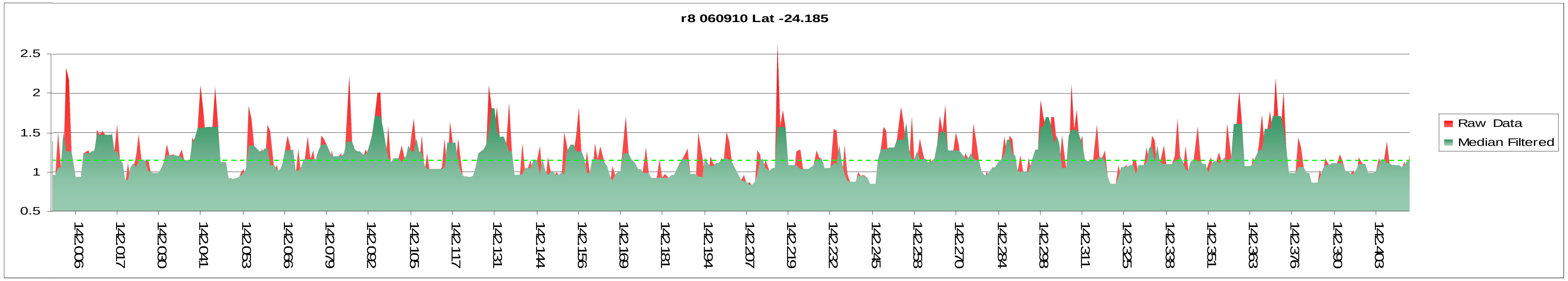


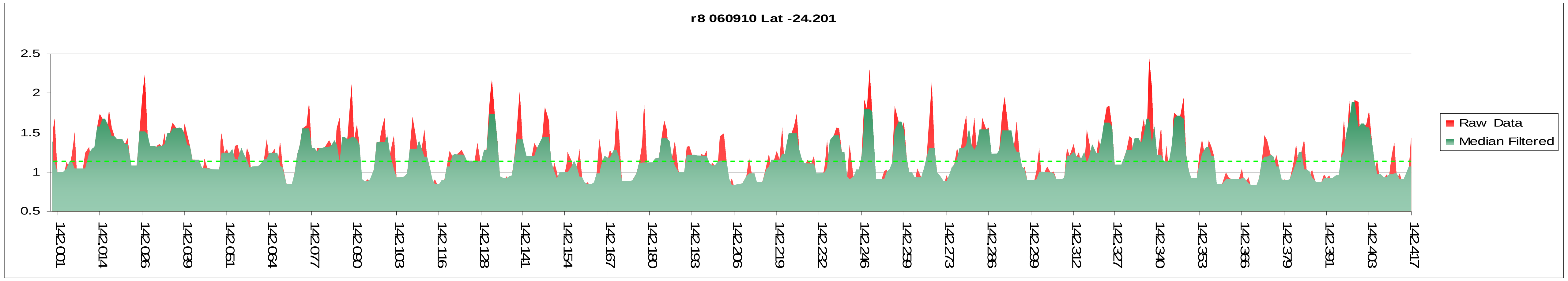


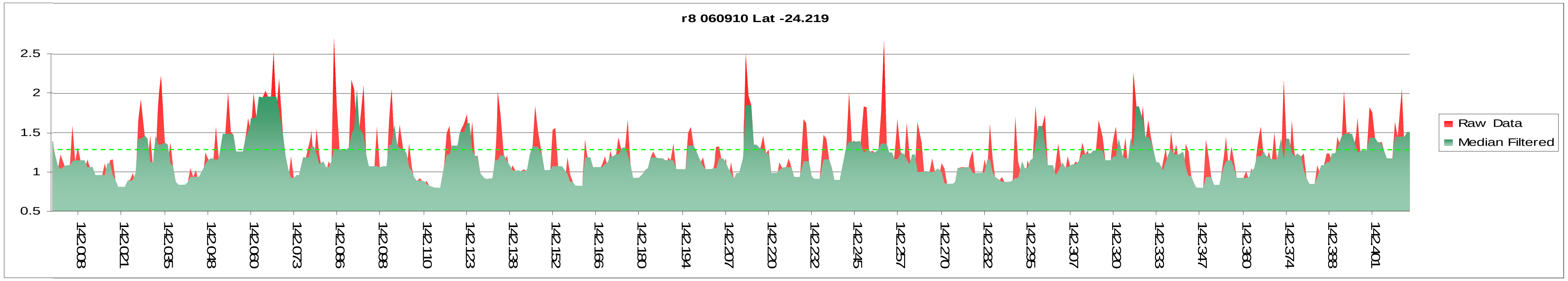


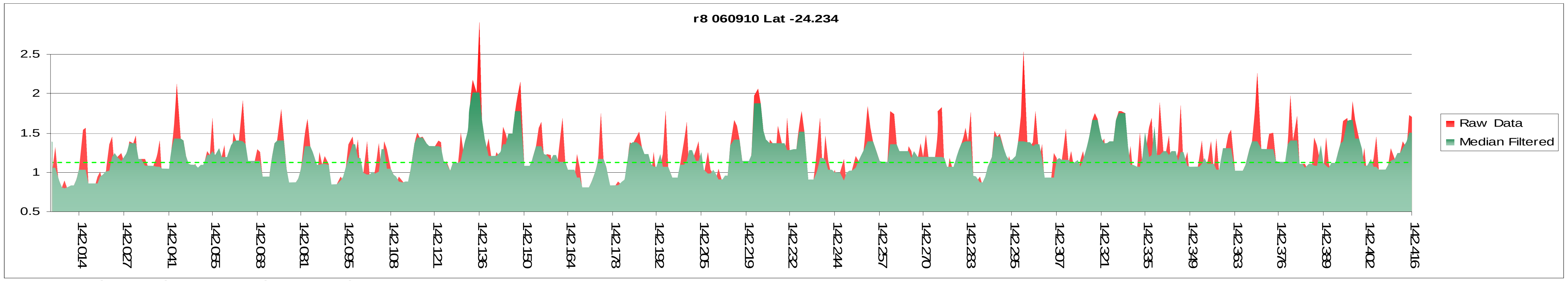
Data Profiles – R8 cont… (longitude on X-axis)

Background (median value)



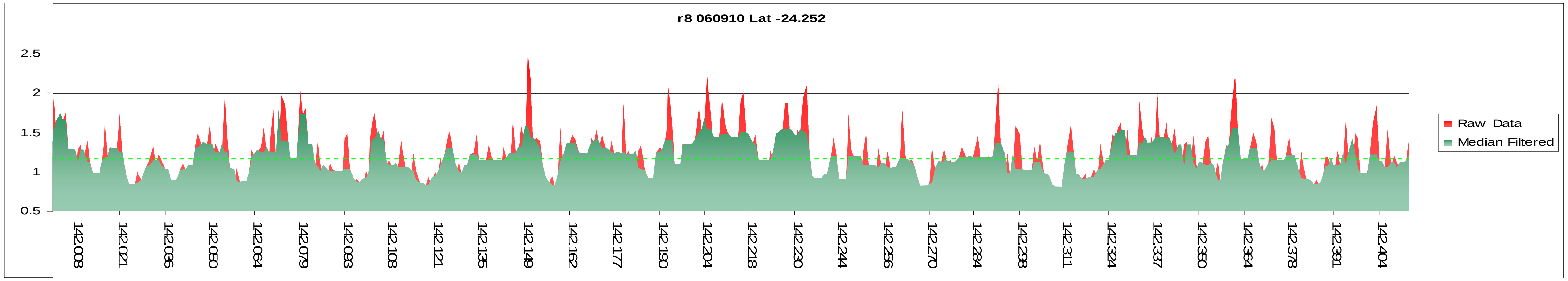


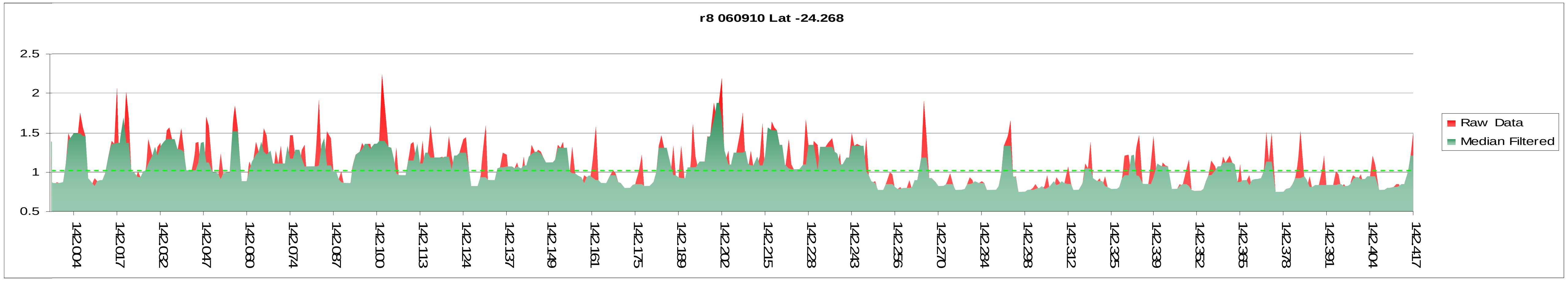


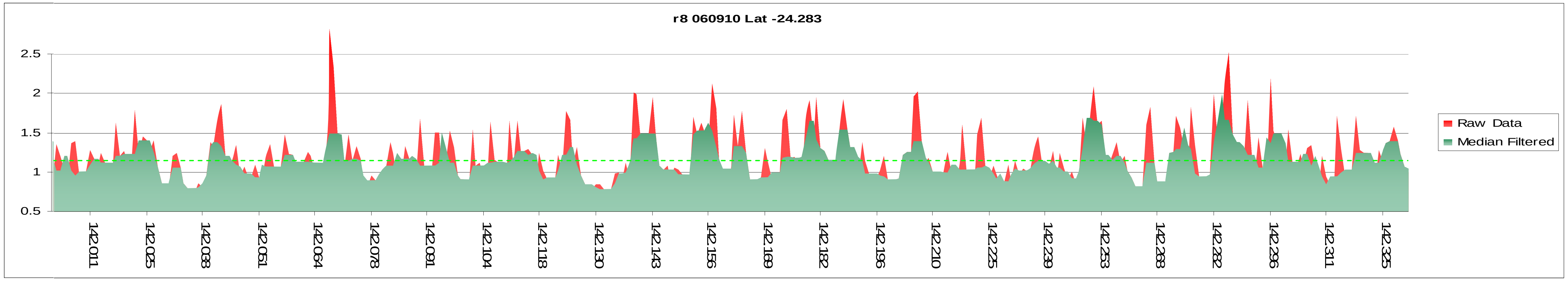


Data Profiles – R8 cont… (longitude on X-axis)

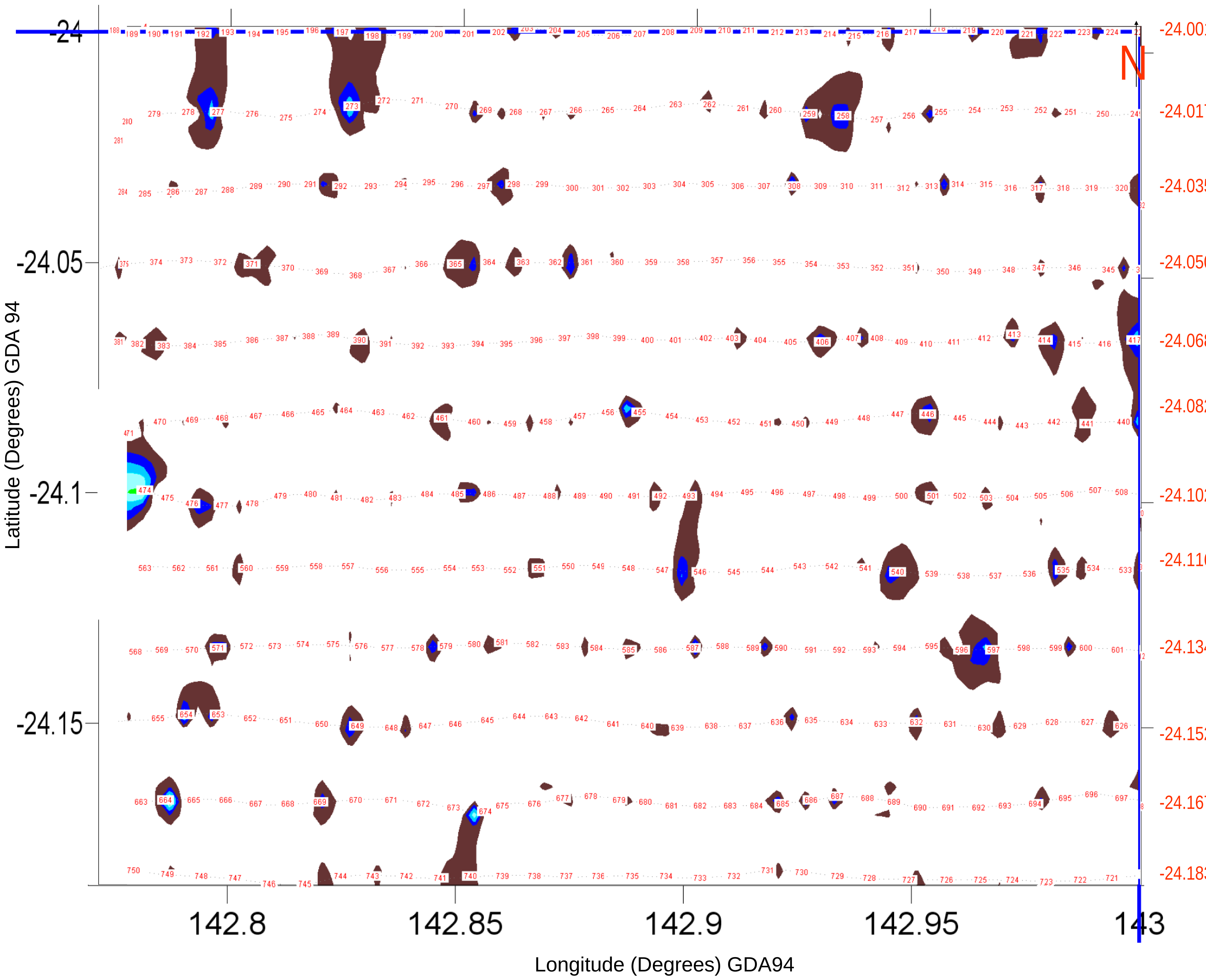
Background (median value)

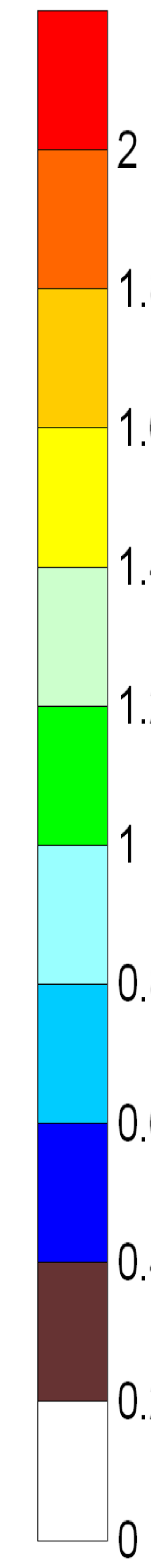






PTEM Data Map – ATP 752 (flight Box R7)

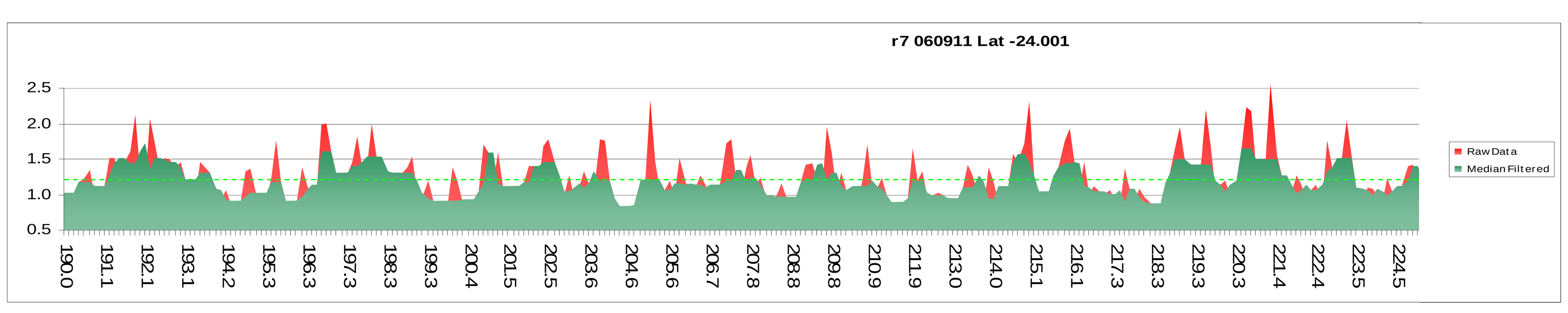


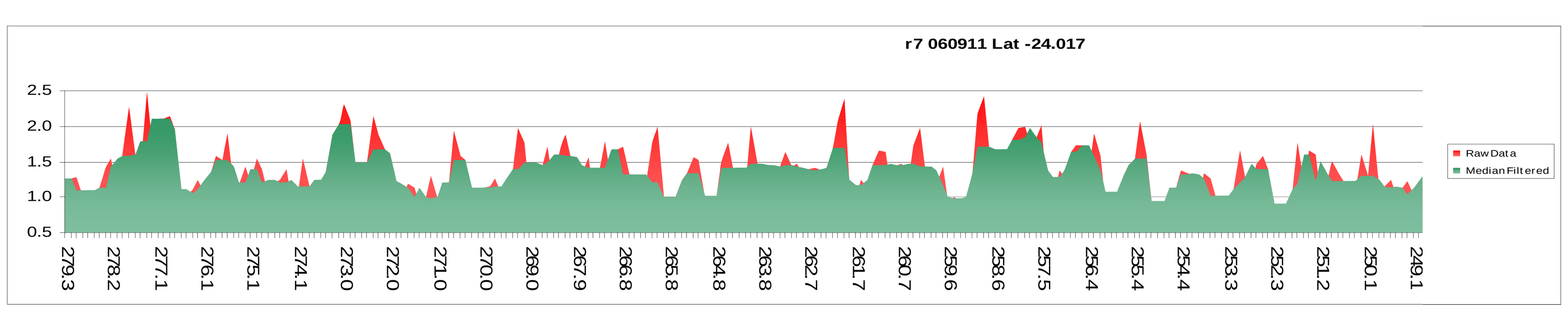


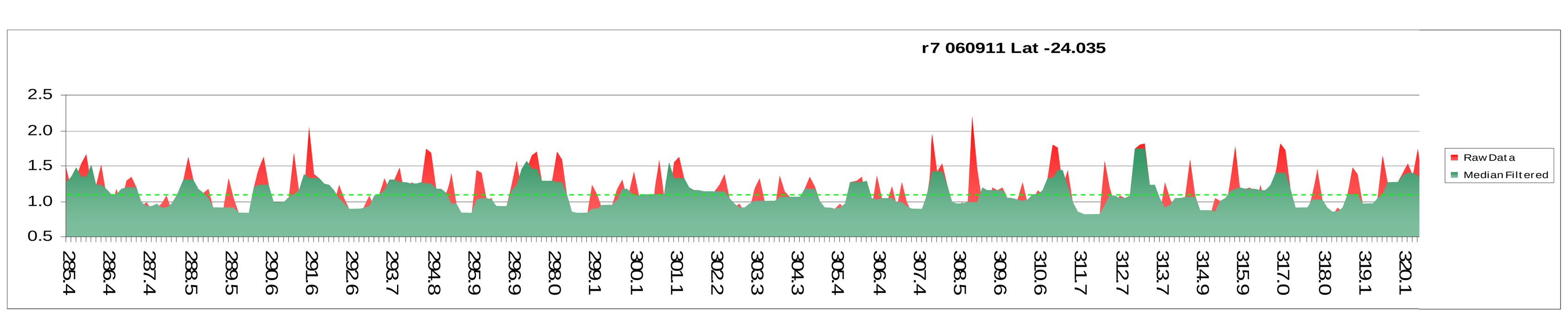
Annotation in red of map corresponds to numbers shown on x-axis of the data profiles.

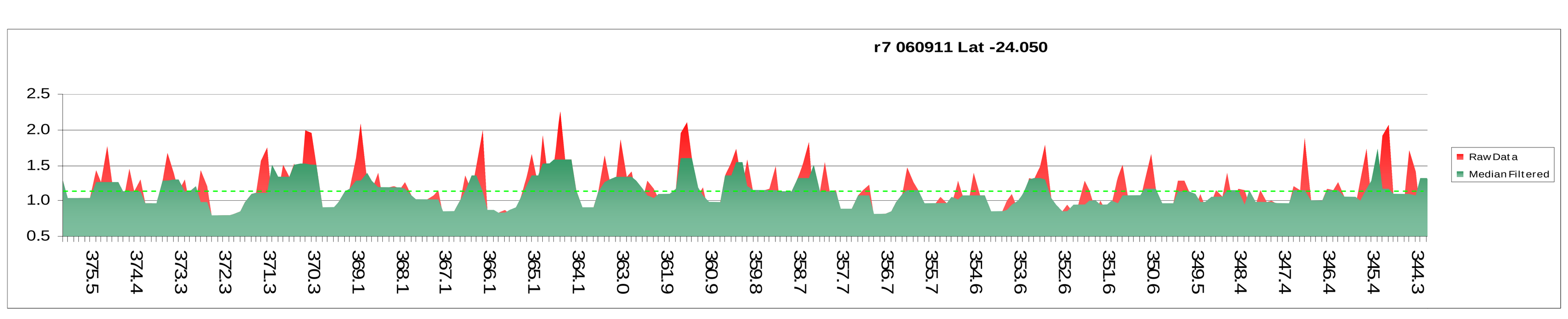
Colour filled contour map was created from the raw data after the removal of the median calculated for each flight line. The data profiles charts shown below plot both the raw data values (red) and the raw data values after application of a 5 point median filter (green).

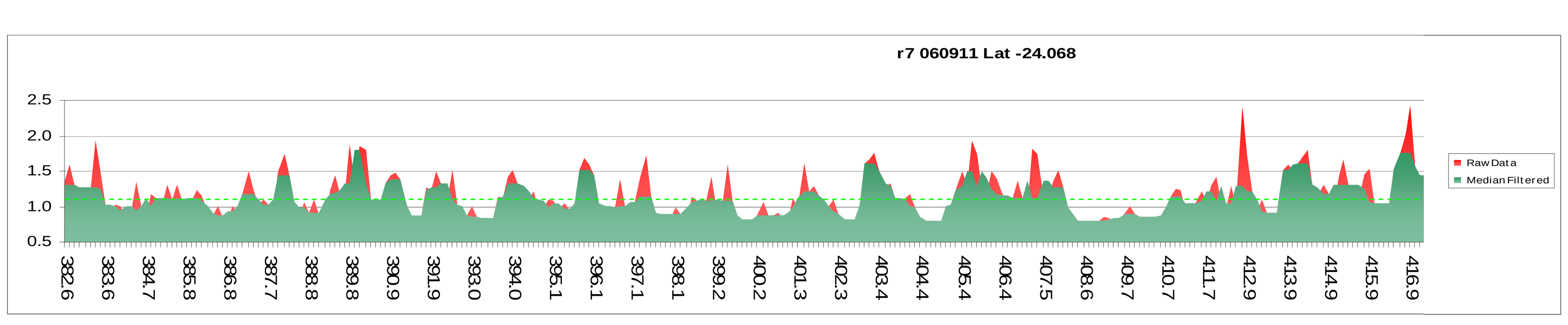
Background (median value)

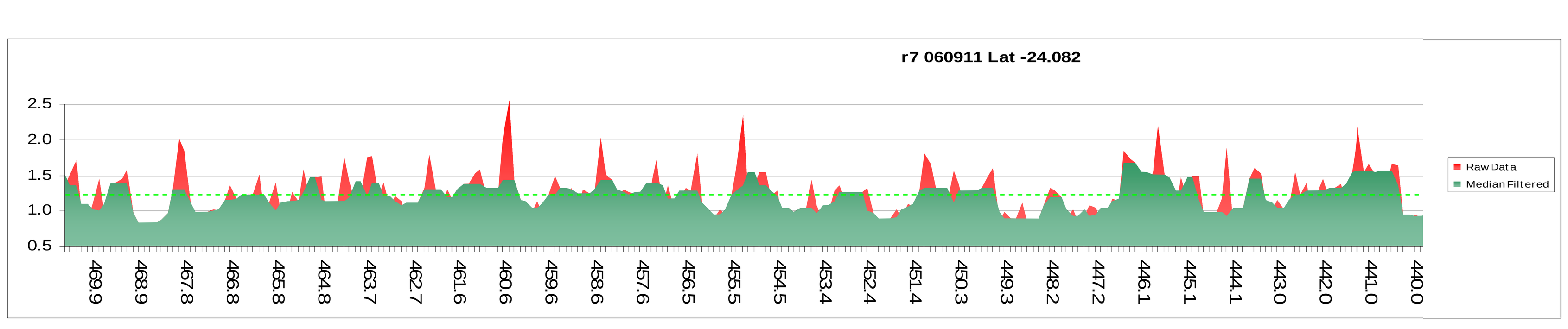


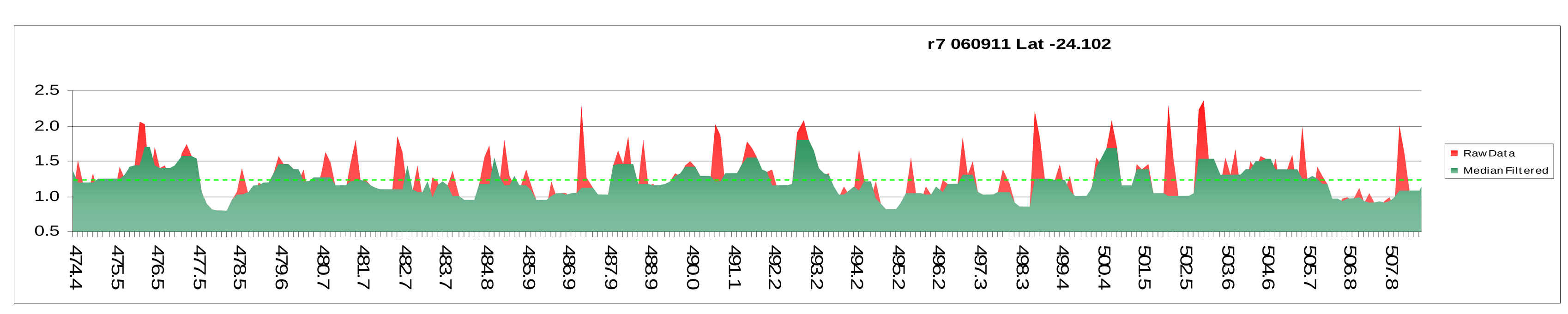


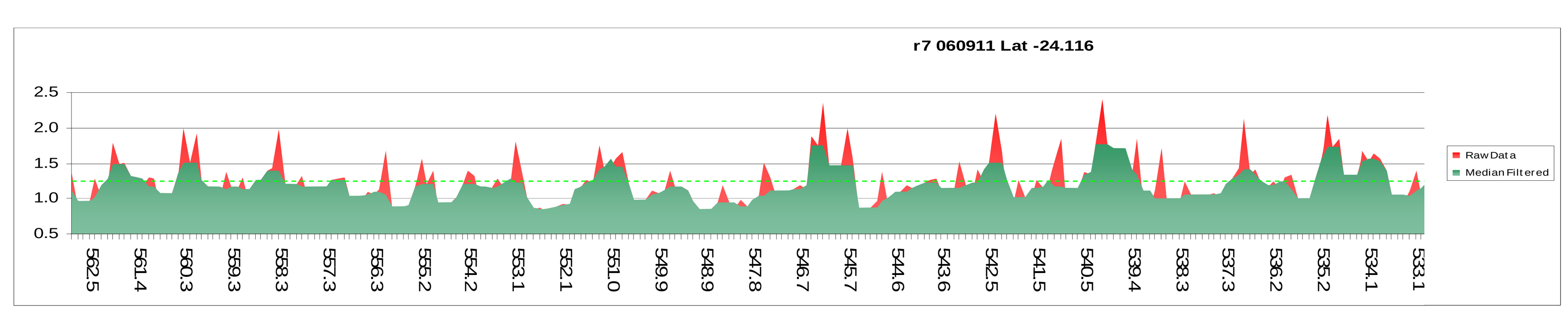


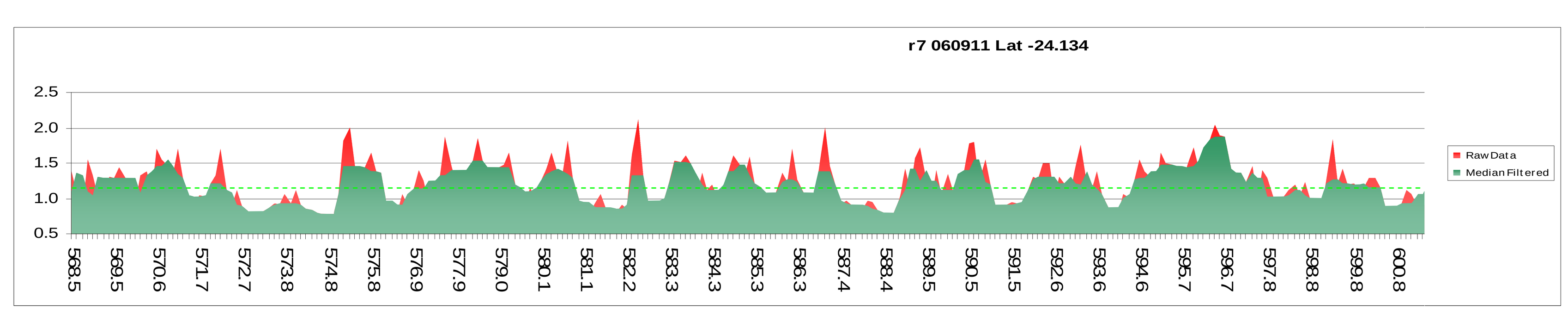


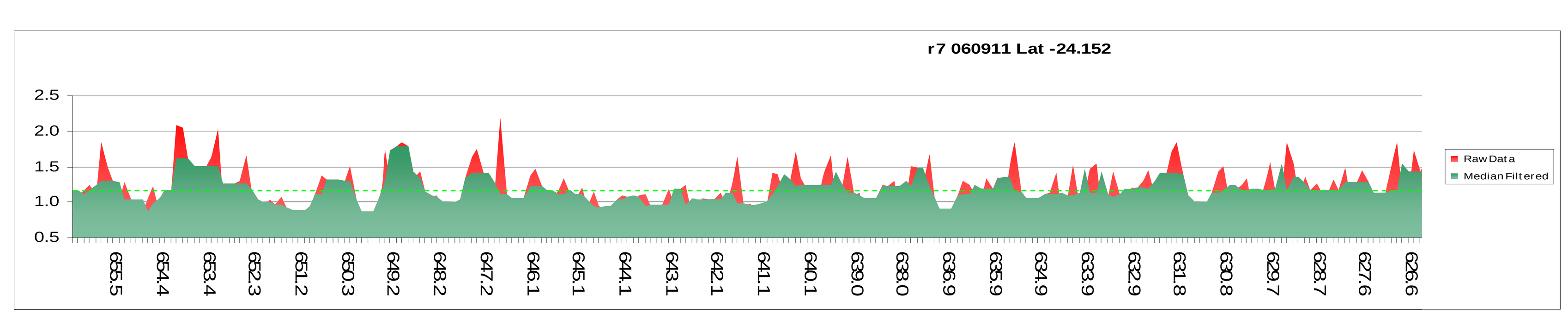


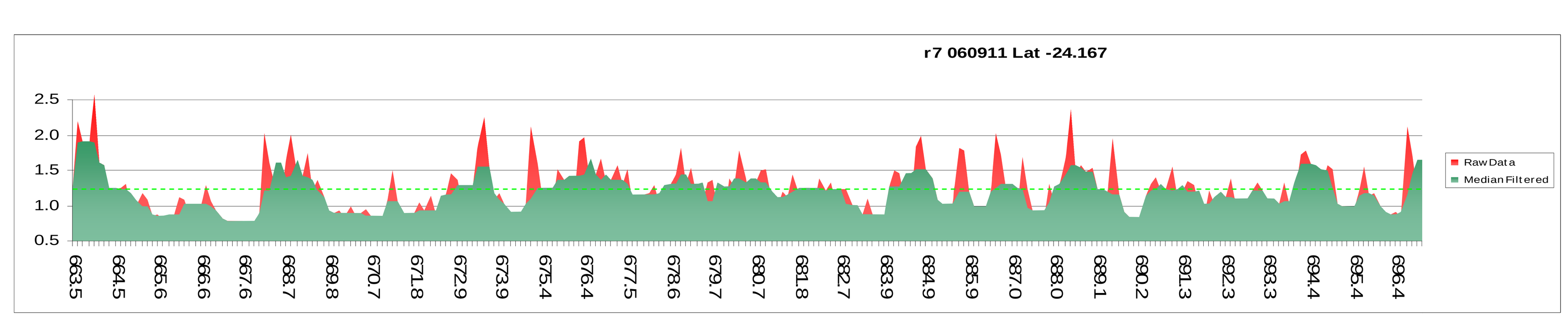


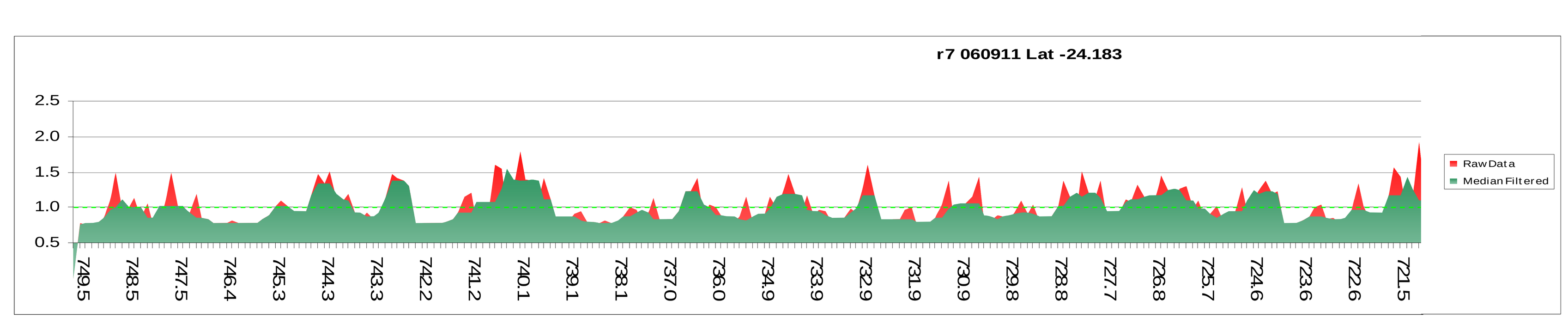












PTEM Data Map – ATP 794 (flight Box R8)

Colour filled contour map was created from the raw data after the removal of the median calculated for each flight line. The data profiles charts shown below plot both the raw data values (red) and the raw data values after application of a 5 point median filter (green).