

# Spectral Index as Calculated from Fourpoint Data

## Preliminary Summary

11/11/2015

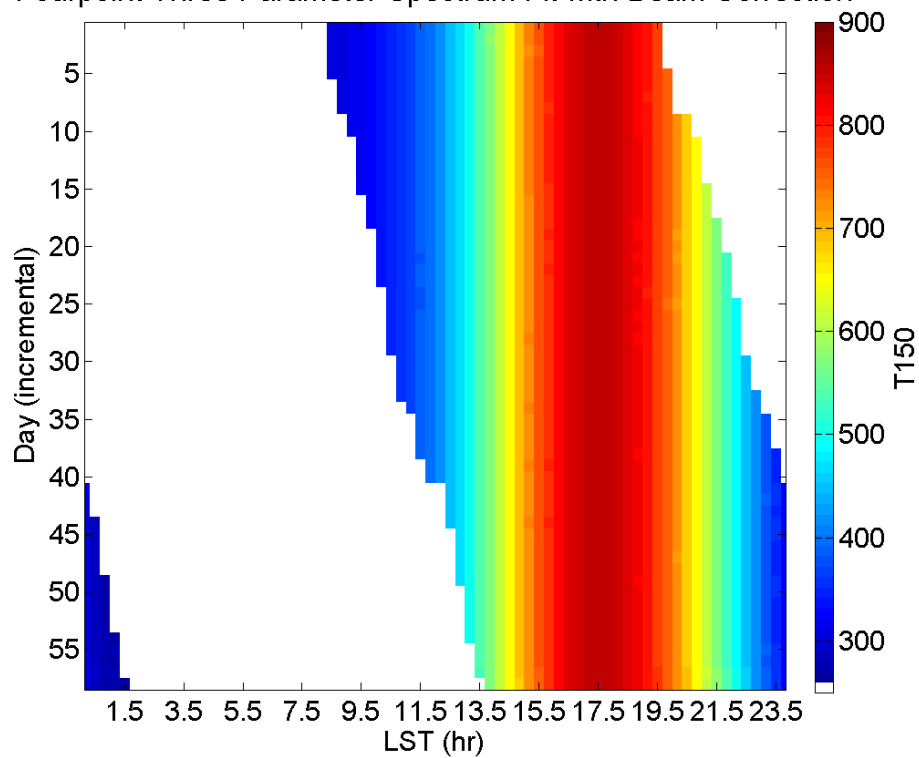
Tom Mozdzen

The three parameter spectral index fit values (T150, Beta, and Gamma) are shown in the waterfall plots (day count vs LST) below for the fourpoint antenna with beam correction. Daytime data is zeroed out and not shown. Average values across all days vs LST are shown for both beam corrected and uncorrected values. A list of the days for which data was used is listed at the end of this document.

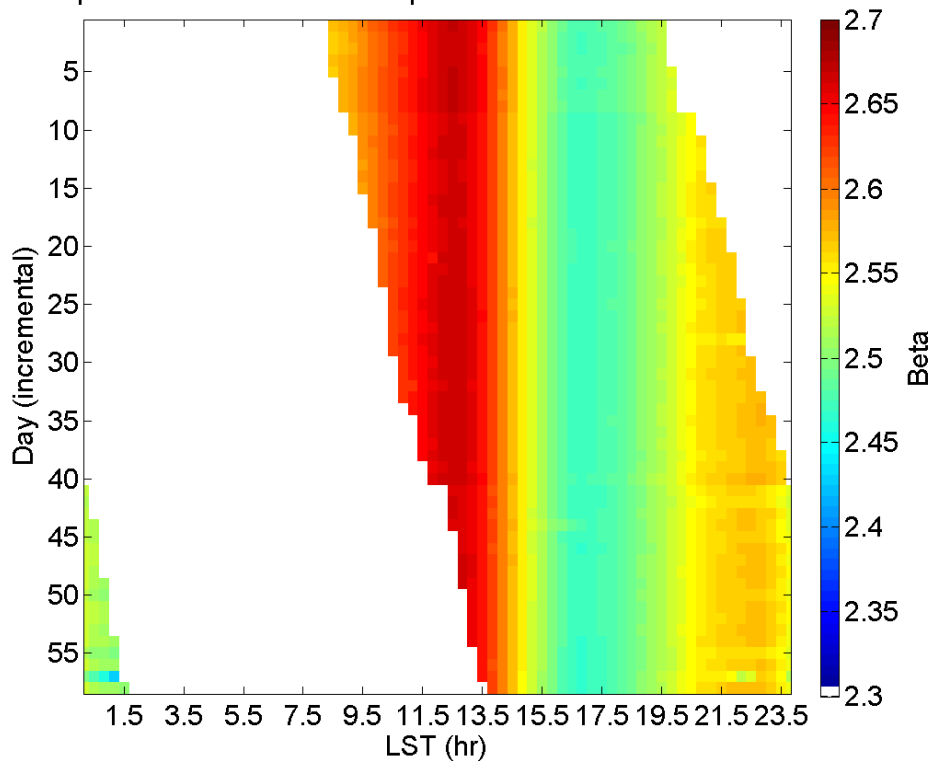
A few days were excluded because the RMS error fit was abnormally high even though the T150 and Beta values did not stand out as outliers.

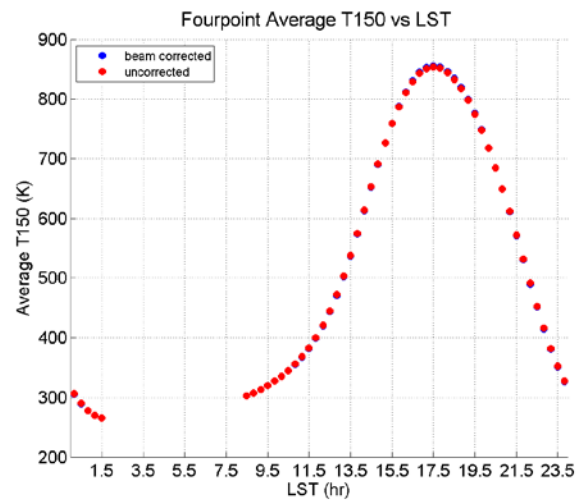
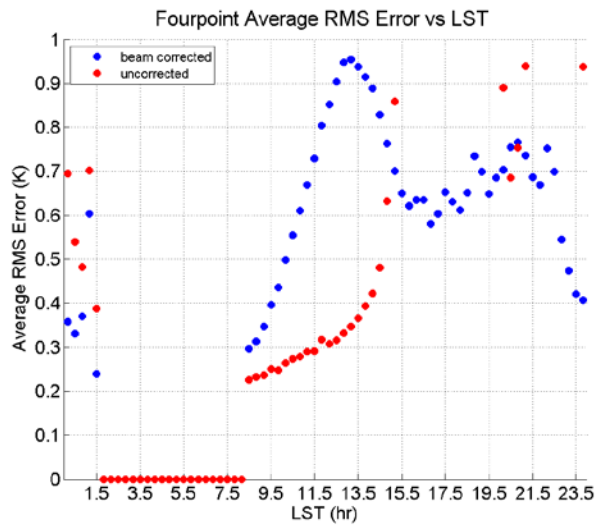
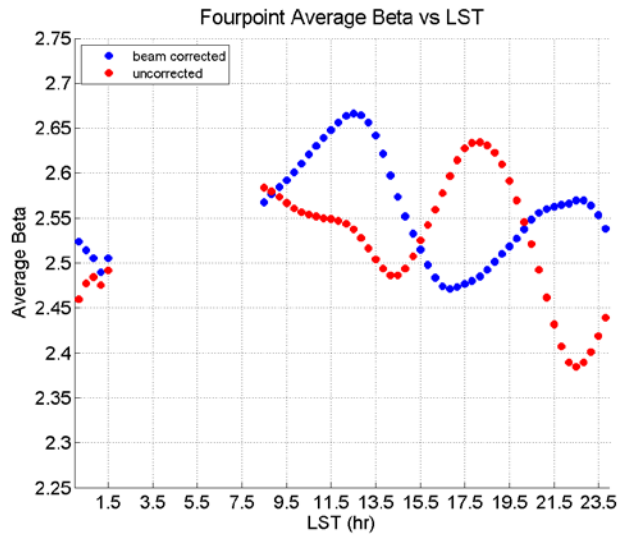
The beam correction for the fourpoint antenna appears to be off for LST values between 9-14 hrs. This isn't understood yet, but will be investigated in the future.

Fourpoint Three Parameter Spectrum Fit with Beam Correction



Fourpoint Three Parameter Spectrum Fit with Beam Correction





# Fourpoint data dates

2015 APRIL

2015 APRIL							SUNDAY
CALENDAR YEAR / MONTH							FIRST DAY OF WEEK
Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday	
29	30	31	April 01	02	03	04	
05	06	07	08	09	10	11	
12	13	14	15	16	17	18	
19	20	21	22	23	24	25	
	Day 110	Day 111	Day 112		Day 114	Day 115	
26	27	28	29	30	May 01	02	
Day 116	Day 117	Day 118					
03	04	05	06	07	08	09	
			Day 126	Day 127	Day 128	Day 129	
10	11	12	13	14	15	16	
Day 130	Day 131		Day 133	Day 134	Day 135		
17	18	19	20	21	22	23	
		Day 139	Day 140	Day 141	Day 142	Day 143	
24	25	26	27	28	29	30	
Day 144	Day 145	Day 146	Day 147	Day 148	Day 149	Day 150	

2015 JUNE

2015 JUNE							SUNDAY
CALENDAR YEAR / MONTH							FIRST DAY OF WEEK
Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday	
31	June 01	02	03	04	05	06	
Day 151	Day 152		Day 154	Day 155	Day 156		
07	08	09	10	11	12	13	
				Day 162	Day 163	Day 164	
14	15	16	17	18	19	20	
Day 165	Day 166	Day 167					
21	22	23	24	25	26	27	
			Day 175		Day 177	Day 178	
28	29	30	July 01	02	03	04	
Day 179	Day 180	Day 181	Day 182	Day 183	Day 184	Day 185	
03	04	05	06	07	08	09	
Day 186	Day 187	Day 188	Day 189	Day 190	Day 191		
12	13	14	15	16	17	18	
Day 193					Day 198		
19	20	21	22	23	24	25	
26	27	28	29	30	01	02	

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 2015\_111\_00\_LST\_data\_v1  
 2015\_112\_00\_LST\_data\_v1  
 2015\_114\_00\_LST\_data\_v1  
 2015\_115\_00\_LST\_data\_v1  
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