

T106 Bistatic Experiment on DOY 296-297

Bistatic Calibration for 70-m

DSS-43

Operator Dustin/Elias

		Time	SLCP RSR2B	SRCP RSR2A	XLCP RSR1B	XRCP RSR1A	
1	X-band Out the horn (cold sky), diode OFF 000200 Reconfigure X-band	222800	-9.5	-9.7	-10.7	-11.4	
		000335	-18.9	-19.3	-22.5	-22.5	
		071800	-19.0	-19.4	-22.0	-22.0	
	Begin XRCP and XLCP 1 & 16 KHz recording						
	Att Auto XLCP and XRCP only						
	Team B until 0800, then Team D	222930	-9.5	-9.6	-9.9	-9.9	
		000450	-18.8	-19.2	-9.9	-9.8	
		Pre-Cal Att Setting		15.5	17.0	13.5	13.0
		Pre-Cal repeated (fgain was not set correctly)		25.0	26.5	13.5	13.0
	Post-Cal		25.0	26.5	25.5	25.0	
2	X-band in the ambient load	223530	-9.4	-9.6	-0.2	-0.1	
		000735	-18.9	-19.3	-0.1	-0.2	
		072450	-19.0	-19.5	-9.7	-9.5	
	Att auto (Final for XRCP and XLCP)						
		223620	-9.4	-9.6	-10.2	-10.2	
		000814	-18.9	-19.2	-9.7	-9.6	
	No Att Auto during post-cal						
	Att Setting		15.5	17.0	26.0	25.5	
			25.0	26.5	25.5	25.0	
	Monitor Att Setting from here on. It should not change		25.0	26.5	25.5	25.0	
3	Ambient Load Temp	Time: 223830	X1 22.12, S1 22.62, S2 24.00				
		Time: 001120	X1 21.94, S1 23.06, S2 24.69				
		Time: 072730	X1 22.06, S1 24.00, S2 26.44				
4	Weather	Time: 223835	T 19.78 de C, H 57.42, P 944.46, W 3.71 kph, Clear some light clouds				
		Time: 072630 (DSS-34)	T 25.3, H 50.0, P 938.5, W 2.5 kph, Sky overcast Temp, Humidity, Pressure, Wind Speed, Sky condition				
5	XRCP 12.5K diode ON Wait 1-2 minutes for next step	224130	-9.5	-9.6	-10.1	-9.8	
		001155	-18.9	-19.2	-9.7	-9.3	
		073130	-18.9	-19.4	-9.8	-9.2	
6	XLCP 12.5K diode ON	224615	-9.6	-9.7	-9.9	-9.8	
		001525	-18.9	-19.2	-9.6	-9.2	
		073610	-18.8	-19.4	-9.5	-9.3	
7	X-band Out the horn, diode ON	225145	-9.4	-9.7	-20.1	-18.8	
		001920	-18.8	-19.2	-19.8	-18.3	
		074100	-19.0	-19.4	-19.4	-18.0	
8	XRCP diode OFF Wait 1-2 minutes for next step	230115	-9.4	-9.7	-20.1	-22.4	
		002235	-18.8	-19.2	-19.6	-21.9	
		074510	-19.0	-19.6	-19.6	-21.8	
9	XLCP diode OFF	230525	-9.4	-9.7	-22.3	-22.5	
		002545	-18.9	-19.3	-21.9	-21.9	
		074935	-19.0	-19.4	-21.8	-21.6	

End X-band Calibrations

Pre-cal 230900. Second Pre-cal 030000. Post-cal 075500

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Operator Dustin/Elias

Begin SRCP Calibrations

		Time	SLCP RSR2B	SRCP RSR2A	XLCP RSR1B	XRCP RSR1A
10	Configure both DTTs for S-band	230920				
		075500				
11	SRCP Out the horn (cold sky), diode OFF Begin SRCP and SLCP 1 & 16 KHz recording Att Auto SRCP only No Att Auto during post-cal Att Setting	231315	-9.4	-9.7	-22.3	-22.4
		075650	-19.0	-19.4	-21.4	-21.4
		231533	-9.5	-9.5	-22.3	-22.4
			15.5	17.0	26.0	25.5
			25.0	26.5	25.5	25.0
12	SRCP in the ambient load Numbers didn't look right. Asked 43 to confirm they are in ambient load -> does that look better -> yes. Was it not in ambient load? -> Needed one more click Att auto (Final for SRCP) Att Setting Monitor Att Setting from here on. It should not change	233000	-9.4	-1.6	-22.3	-22.5
		080225	-19.0	-18.6	-21.8	-21.7
		080808	-19.1	-10.2	-21.7	-21.9
		232119	-9.5	-10.1	-22.4	-22.5
			15.5	26.5	26.0	25.5
			25.0	26.5	25.5	25.0
13	SRCP 12.5K diode ON	232430	-9.3	-9.9	-22.4	-22.5
		081235	-18.9	-10.1	-21.9	-21.9
14	SRCP Out the horn, diode ON	232905	-9.4	-17.9	-22.3	-22.6
		081645	-19.0	-18.1	-22.0	-22.0
15	SRCP diode OFF	233340	-9.4	-19.4	-22.3	-22.5
		082035	-18.9	-19.4	-21.7	-21.9

End SRCP Calibrations

Pre-cal 233800

Post-cal 082500

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Begin SLCP Calibrations

		Time	SLCP	SRCP	XLCP	XRCP
			RSR2B	RSR2A	RSR1B	RSR1A
16	SLCP Out the horn (cold sky), diode OFF	233900	-9.4	-19.4	-22.4	-22.6
	Continue SRCP and SLCP 1 & 16 KHz recording	82500	-19.0	-19.4	-21.9	-21.9
		Att Auto SLCP only	233945	-9.6	-19.3	-22.3
	No Att Auto during post-cal					
	Att Setting		16.0	26.5	26.0	25.5
			25.0	26.5	25.5	25.0
17	SLCP in the ambient load	234355	-1.9	-18.6	-22.4	-22.6
	Att auto (Final for SLCP)	82955	-9.9	-18.7	-22.0	-21.8
		234514	-9.9	-18.7	-22.4	-22.5
	No Att Auto during post-cal					
	Att Setting		25.0	26.5	26.0	25.5
		Monitor Att Setting from here on. It should not change		25.0	26.5	25.5
18	SLCP 12.5K diode ON	234810	-9.9	-18.8	-22.4	-22.4
		83500	-9.8	-18.7	-21.8	-21.8
19	SLCP Out the horn, diode ON	235305	-18.0	-19.1	-22.4	-22.4
		83910	-18.0	-18.7	-21.6	-21.7
20	SLCP diode OFF	235700	-18.8	-19.3	-22.5	-22.6
		84400	-19.0	-18.7	-21.8	-21.6

End SLCP Calibrations

Pre-cal 000100

Post-cal 084700

Minical #1

	Time	SLCP RSR2B	SRCP RSR2A	XLCP RSR1B	XRCP RSR1A
Start 1 & 16 KHz recordings (if not already started)	030830	-18.9	-19.3	-22.0	-21.7
Enable RCP Diodes ADC Amplitude	031030	-18.8	-18.0	-21.9	-18.1
Disable diodes. Configure Receivers for LCP	031230	-18.9	-19.3	-21.8	-21.8
Enable LCP Diodes ADC Amplitude	031325	-18.1	-19.3	-19.8	-21.8
Disable diodes. Re-configure receivers for RCP	031520	-18.9	-19.2	-22.0	-21.8
Complete reconfiguration for RCP	031600				

Minical #2

	Time	SLCP RSR2B	SRCP RSR2A	XLCP RSR1B	XRCP RSR1A
Start 1 & 16 KHz recordings (if not already started)	065700	-19.0	-19.2	-21.1	-21.0
Enable RCP Diodes ADC Amplitude	065900				
Disable diodes. Configure Receivers for LCP	070000	<- Disable early. Do again			
Enable LCP Diodes ADC Amplitude					
Disable diodes. Re-configure receivers for RCP					
Complete reconfiguration for RCP					

Minical #3

Minical #2 Repeat

	Time	SLCP RSR2B	SRCP RSR2A	XLCP RSR1B	XRCP RSR1A
Start 1 & 16 KHz recordings (if not already started)	070100	-19.0	-19.2	-21.3	-21.2
Enable RCP Diodes ADC Amplitude	070300	-19.0	-18.1	-21.5	-17.9
Disable diodes. Configure Receivers for LCP	070500	-19.0	-19.3	-21.3	-21.2
Enable LCP Diodes ADC Amplitude	070545	-18.2	-19.3	-19.5	-21.2
Disable diodes. Re-configure receivers for RCP	070745	-19.0	-19.2	-21.4	-21.3
Complete reconfiguration for RCP	070830				

SNT Measurement #1

Time	011300	eDMD
X-band Value	19.312	20.711
S-band Value	31.236	30.193

SNT Measurement #2

Time	060530	eDMD
X-band Value	19.452	19.600
S-band Value	29.767	30.631

SNT Measurement #3

Time	
X-band Value	
S-band Value	

Weather Update	Time: 0217 (DSS-34)	T 23.6 degC, H 52.0, P 941.2, W 6.2 kph, Sky high level clouds
	Time: 0344	T 26.3 degC, H 46.9, P 939.6, W 13.0 kph, Sky high thin clouds
	Time: 0506	T 28.28, H 35.25, P 938.26, W 13.59 kph, Sky cloud storm forming up

Ambient Load Temperature Update	Time:	
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