LNBF Testing Comparison

Satellite AV., LLC

Location: Sacramento, CA **Conditions: Clear / 65° F / 10am PDT**
Dish: GEOSATpro 90cm **Satellite: Galaxy 19 @ 97w**

INVACOM SNH031: Universal LO 9750/10600 - 1 Output - DRO

TP Freq	Polarity	SR	Level	Quality	C/N	Eb/No	Es/No	LNB Drift mhz	LNB vdc	LNB mA
11706	V	7161	67.8	55	6.9	8.7	8.2	1.438	13.4	100
11789	V	28125	73.8	81	10.4	11	11.7	1.057	13.4	100
11836	V	20765	73.9	79	10.1	10.2	11.4	1.058	13.4	95
11842	H	22000	75.2	90	11.9	12	13.2	1.563	18.4	100
11874	H	22000	75	92	12.2	12.8	13.5	0.562	18.4	100
11898	V	22000	75.9	92	12.2	12.3	13.5	1.061	13.4	100
11929	V	22000	76	83	10.8	10.9	12.1	1.054	13.4	95
11936	H	20000	76.9	96	13.5	13.6	14.8	0.554	18.4	95
11967	H	22000	76.7	94	12.6	12.7	13.9	0.558	18.4	100
11991	V	22000	77	76	9.6	9.7	10.9	1.051	13.4	95
12022	V	22000	76.4	74	9.2	9.3	10.5	1.048	13.4	100
12028	H	21991	77.4	79	10	10.1	11.3	1.55	18.4	100
12053	V	22000	76.8	86	11.3	11.4	12.6	1.044	13.4	100
12060	H	22000	77.3	96	13.3	13.4	14.6	0.544	18.4	100
12084	V	22000	77.4	91	12	12.1	13.3	1.035	13.4	95
12091	H	20000	77.8	96	13.6	13.7	14.9	0.539	18.4	100
12146	V	22000	77.2	88	11.6	11.7	12.9	1.024	13.4	95
12115	V	22425	76.4	76	9.5	9.6	10.8	1.027	13.4	95
12122	H	20000	77.3	80	10.3	10.4	11.6	0.532	18.4	95
12153	H	20000	77.7	80	10.3	10.4	11.6	0.529	18.4	100
12177	V	23000	76.9	82	10.6	10.7	11.9	1.019	13.4	95
Average			**76.04**	**84.10**	**11.04**	**11.27**	**12.34**	**0.95**		

GEOSATpro SL1B: Standard LO 10750 / 1 Output - DRO

TP Freq	Polarity	SR	Level	Quality	C/N	Eb/No	Es/No	LNB Drift mhz	LNB vdc	LNB mA
11706	V	7161	78.3	55	6.8	8.6	8.1	0.707	13.4	80
11789	V	28125	85.2	80	10.2	10.8	11.5	0.323	13.4	80
11836	V	20765	83.8	75	9.4	9.5	10.7	0.322	13.4	80
11842	H	22000	85.3	87	11.4	11.5	12.7	0.829	18.4	85
11874	H	22000	82.8	88	11.6	12.2	12.9	-0.173	18.4	85
11898	V	22000	83.3	87	11.4	11.5	12.7	0.324	13.4	80
11929	V	22000	80.7	81	10.4	10.5	11.7	0.319	13.4	80
11936	H	20000	84.2	96	12.9	13	14.2	-0.177	18.4	85
11967	H	22000	82.2	85	11.1	11.2	12.4	-0.172	18.4	80
11991	V	22000	83.3	73	9	9.1	10.3	0.32	13.4	80
12022	V	22000	80.3	70	8.6	8.7	9.9	0.321	13.4	80
12028	H	21991	83.6	70	8.6	8.7	9.9	0.828	18.4	80
12053	V	22000	82.3	83	10.7	10.8	12	0.323	13.4	80
12060	H	22000	83.3	93	12.4	12.5	13.7	-0.17	18.4	80
12084	V	22000	82.3	86	11.2	11.3	12.5	0.323	13.4	80
12091	H	20000	84.2	93	12.4	12.5	13.7	-0.166	18.4	80
12146	V	22000	82.5	83	10.7	10.8	12	0.325	13.4	80
12115	V	22425	80.6	72	8.8	8.9	10.1	0.322	13.4	80
12122	H	20000	82.8	72	8.8	8.9	10.1	-0.168	18.4	85
12153	H	20000	84.7	71	8.7	8.8	10	-0.164	18.4	80
12177	V	23000	80	75	9.4	9.5	10.7	0.325	13.4	80
Average			**82.65**	**79.76**	**10.21**	**10.44**	**11.51**	**0.22**		

GEOSATpro SL2B: Standard LO 10750 / 2 Output - DRO

TP Freq	Polarity	SR	Level	Quality	C/N	Eb/No	Es/No	LNB Drift mhz	LNB vdc	LNB mA
11706	V	7161	68.7	56	6.9	8.7	8.2	0.2	13.4	110
11789	V	28125	77.2	82	10.5	11.1	11.8	-0.184	13.4	110
11836	V	20765	76.4	77	9.7	9.8	11	-0.185	13.4	110
11842	H	22000	76.4	87	11.4	11.5	12.7	0.313	18.4	110
11874	H	22000	75.4	88	11.6	12.2	12.9	-0.69	18.4	110
11898	V	22000	75.7	88	11.6	11.7	12.9	-0.187	13.4	110
11929	V	22000	75.8	83	10.8	10.9	12.1	-0.195	13.4	110
11936	H	20000	76.9	95	13	13.1	14.3	-0.7	18.4	110
11967	H	22000	75.3	87	11.4	11.5	12.7	-0.696	18.4	110
11991	V	22000	76.5	74	9.2	9.3	10.5	-0.196	13.4	110
12022	V	22000	75.9	73	9	9.1	10.3	-0.198	13.3	110
12028	H	21991	77.2	73	9	9.1	10.3	0.301	18.4	110
12053	V	22000	76.9	85	11	11.1	12.3	-0.198	13.4	110
12060	H	22000	77.2	94	12.6	12.7	13.9	-0.698	18.4	110
12084	V	22000	77.9	88	11.6	11.7	12.9	-0.201	13.4	110
12091	H	20000	78.1	95	12.7	12.8	14	-0.697	18.4	110
12146	V	22000	77.9	85	11.1	11.2	12.4	-0.2	13.4	110
12115	V	22425	76.4	73	9.1	9.2	10.4	-0.202	13.4	110
12122	H	20000	77.4	72	8.8	8.9	10.1	-0.701	18.4	110
12153	H	20000	77.6	72	8.8	8.9	10.1	-0.698	18.4	110
12177	V	23000	76.6	78	9.9	10	11.2	-0.203	13.4	110
Average			**76.35**	**81.19**	**10.46**	**10.69**	**11.76**	**-0.30**		

DMSI Spitfire / GK411-60I: Universal LO 9750/10600 - 1 Output - DRO

TP Freq	Polarity	SR	Level	Quality	C/N	Eb/No	Es/No	LNB Drift mhz	LNB vdc	LNB mA
11706	V	7161	70.1	57	7.2	9	8.5	0.189	13.4	80
11789	V	28125	75.7	79	10.1	10.7	11.4	-0.196	13.4	80
11836	V	20765	76	77	9.7	9.8	11	-0.198	13.4	80
11842	H	22000	77.2	85	11.1	11.2	12.4	0.245	18.4	80
11874	H	22000	77.6	88	11.6	12.2	12.9	-0.758	18.4	80
11898	V	22000	78.6	90	11.9	12	13.2	-0.199	13.4	80
11929	V	22000	78.7	76	9.5	9.6	10.8	-0.208	13.4	80
11936	H	20000	77.8	96	13.5	13.6	14.8	-0.768	18.4	80
11967	H	22000	79.4	83	10.8	10.9	12.1	-0.764	18.4	80
11991	V	22000	79.4	72	8.8	8.9	10.1	-0.211	13.4	80
12022	V	22000	79.9	60	7.5	7.6	8.8	-0.213	13.4	75
12028	H	21991	79	70	8.6	8.7	9.9	0.229	18.4	80
12053	V	22000	79.8	82	10.5	10.6	11.8	-0.215	13.4	80
12060	H	22000	79.8	95	12.8	12.9	14.1	-0.772	18.4	80
12084	V	22000	79.3	85	11.1	11.2	12.4	-0.218	13.4	80
12091	H	20000	79.5	96	13.5	13.6	14.8	-0.771	18.4	80
12146	V	22000	80.2	88	11.5	11.6	12.8	-0.221	13.4	80
12115	V	22425	79.1	73	8.9	9	10.2	-0.222	13.4	80
12122	H	20000	81	62	7.7	7.8	9	-0.775	18.4	80
12153	H	20000	81.1	60	7.5	7.6	8.8	-0.776	18.4	80
12177	V	23000	78.3	76	9.5	9.6	10.8	-0.226	13.4	80
Average			**78.45**	**78.57**	**10.16**	**10.39**	**11.46**	**-0.34**		

DMSI JSC321S: Standard LO 10750 / 1 Output - DRO

TP Freq	Polarity	SR	Level	Quality	C/N	Eb/No	Es/No	LNB Drift mhz	LNB vdc	LNB mA
11706	V	7161	70	47	6.1	7.9	7.4	-0.244	13.4	80
11789	V	28125	78.6	75	9.4	10	10.7	-0.626	13.4	80
11836	V	20765	79.8	74	9.3	9.4	10.6	-0.625	13.4	85
11842	H	22000	78.1	86	11.3	11.4	12.6	-0.145	18.4	85
11874	H	22000	76.8	89	11.7	12.3	13	-1.149	18.4	85
11898	V	22000	76.2	87	11.4	11.5	12.7	-0.624	13.4	85
11929	V	22000	75.6	73	8.9	9	10.2	-0.629	13.4	85
11936	H	20000	76.8	96	13.4	13.5	14.7	-1.152	18.4	85
11967	H	22000	76.1	85	11.1	11.2	12.4	-1.148	18.4	85
11991	V	22000	76.3	69	8.5	8.6	9.8	-0.628	13.4	85
12022	V	22000	75.9	56	7.1	7.2	8.4	-0.626	13.4	85
12028	H	21991	76.4	71	8.7	8.8	10	-0.146	18.4	85
12053	V	22000	77.1	79	10	10.1	11.3	-0.624	13.4	85
12060	H	22000	77.3	94	12.5	12.6	13.8	-1.145	18.4	85
12084	V	22000	76.9	82	10.6	10.7	11.9	-0.625	13.4	85
12091	H	20000	77.4	95	13.1	13.2	14.4	-1.142	18.4	85
12146	V	22000	77.2	82	10.5	10.6	11.8	-0.623	13.4	85
12115	V	22425	76.5	66	8.2	8.3	9.5	-0.626	13.4	85
12122	H	20000	77.3	64	7.9	8	9.2	-1.143	18.4	85
12153	H	20000	77.9	64	7.9	8	9.2	-1.141	18.4	85
12177	V	23000	75.8	73	8.9	9	10.2	-0.625	13.4	85
Average			**76.67**	**76.52**	**9.83**	**10.06**	**11.13**	**-0.74**		

WSI ESX521: Standard LO 10750 / 1 Output - DRO

TP Freq	Polarity	SR	Level	Quality	C/N	Eb/No	Es/No	LNB Drift mhz	LNB vdc	LNB mA
11706	V	7161	81.2	56	7	8.8	8.3	-0.95	13.4	85
11789	V	28125	86.9	79	10	10.6	11.3	-1.336	13.4	85
11836	V	20765	86	76	9.6	9.7	10.9	-1.339	13.4	85
11842	H	22000	85.1	74	9.3	9.4	10.6	-0.898	18.4	85
11874	H	22000	83.8	79	10.1	10.7	11.4	-1.906	18.4	85
11898	V	22000	85.1	90	11.9	12	13.2	-1.349	13.4	85
11929	V	22000	84.8	76	9.5	9.6	10.8	-1.357	13.4	85
11936	H	20000	84.8	88	11.5	11.6	12.8	-1.919	18.4	85
11967	H	22000	84.9	79	10.1	10.2	11.4	-1.919	18.4	85
11991	V	22000	85.5	73	9	9.1	10.3	-1.368	13.4	85
12022	V	22000	85.1	62	7.7	7.8	9	-1.37	13.4	85
12028	H	21991	85.4	65	8	8.1	9.3	-0.928	18.4	85
12053	V	22000	85.9	82	10.5	10.6	11.8	-1.376	13.4	85
12060	H	22000	86.1	85	11.1	11.2	12.4	-1.934	18.4	85
12084	V	22000	85.8	86	11.3	11.4	12.6	-1.383	13.4	85
12091	H	20000	86.1	94	12.6	12.7	13.9	-1.937	18.4	85
12146	V	22000	86.6	85	11.1	11.2	12.4	-1.391	13.4	85
12115	V	22425	85.6	72	8.8	8.9	10.1	-1.389	13.4	85
12122	H	20000	86.6	54	6.8	6.9	8.1	-1.942	18.4	85
12153	H	20000	87.7	53	6.7	6.8	8	-1.945	18.4	85
12177	V	23000	86.3	79	10	10.1	11.3	-1.396	13.4	85
Average			**85.49**	**75.57**	**9.65**	**9.88**	**10.95**	**-1.49**		

WSI ESX522: Standard LO 10750 / 2 Output - DRO

TP Freq	Polarity	SR	Level	Quality	C/N	Eb/No	Es/No	LNB Drift mhz	LNB vdc	LNB mA
11706	V	7161	73.8	50	6.4	8.2	7.7	-0.949	13.4	140
11789	V	28125	80.3	76	9.5	10.1	10.8	-1.333	13.4	140
11836	V	20765	80	76	9.6	9.7	10.9	-1.332	13.4	140
11842	H	22000	83.4	89	11.8	11.9	13.1	-0.835	18.4	140
11874	H	22000	81.8	92	12.2	12.8	13.5	-1.839	18.4	140
11898	V	22000	80.1	88	11.5	11.6	12.8	-1.331	13.4	140
11929	V	22000	80.1	73	9.1	9.2	10.4	-1.337	13.4	140
11936	H	20000	83.4	96	13.7	13.8	15	-1.843	18.4	145
11967	H	22000	82.1	88	11.6	11.7	12.9	-1.84	18.4	140
11991	V	22000	82.9	72	8.8	8.9	10.1	-1.337	13.4	140
12022	V	22000	82.5	60	7.5	7.6	8.8	-1.337	13.4	140
12028	H	21991	84.1	76	9.6	9.7	10.9	-0.841	18.4	145
12053	V	22000	83.8	78	9.9	10	11.2	-1.337	13.4	140
12060	H	22000	84.3	95	13.2	13.3	14.5	-1.841	18.4	145
12084	V	22000	84.4	82	10.6	10.7	11.9	-1.338	13.4	140
12091	H	20000	84.6	95	13.2	13.3	14.5	-1.838	18.4	140
12146	V	22000	85.3	81	10.4	10.5	11.7	-1.337	13.4	140
12115	V	22425	83.7	68	8.4	8.5	9.7	-1.339	13.4	140
12122	H	20000	84.4	75	9.4	9.5	10.7	-1.839	18.4	145
12153	H	20000	85.1	75	9.4	9.5	10.7	-1.838	18.4	145
12177	V	23000	83.6	74	9.3	9.4	10.6	-1.339	13.4	140
Average			**82.56**	**79.00**	**10.24**	**10.47**	**11.54**	**-1.44**		

Alps Universal: Universal LO 9750/10600 - 1 Output - DRO

TP Freq	Polarity	SR	Level	Quality	C/N	Eb/No	Es/No	LNB Drift mhz	LNB vdc	LNB mA
11706	V	7161	68.3	54	6.8	8.6	8.1	1.74	13.4	85
11789	V	28125	76.7	74	9.2	9.8	10.5	1.35	13.4	85
11836	V	20765	76.1	76	9.5	9.6	10.8	1.346	13.4	85
11842	H	22000	77.1	73	9.1	9.2	10.4	1.853	18.4	85
11874	H	22000	77.2	77	9.7	10.3	11	0.849	18.4	85
11898	V	22000	77.9	86	11.3	11.4	12.6	1.341	13.4	85
11929	V	22000	77.4	65	8.1	8.2	9.4	1.334	13.4	85
11936	H	20000	77.2	82	10.6	10.7	11.9	0.839	18.4	85
11967	H	22000	78.1	79	10.1	10.2	11.4	0.842	18.4	85
11991	V	22000	77.8	66	8.2	8.3	9.5	1.329	13.4	85
12022	V	22000	77.8	50	6.4	6.5	7.7	1.329	13.4	85
12028	H	21991	77.4	61	7.6	7.7	8.9	1.837	18.4	85
12053	V	22000	78.1	76	9.6	9.7	10.9	1.326	13.4	85
12060	H	22000	78.2	82	10.6	10.7	11.9	0.834	18.4	85
12084	V	22000	77.5	79	10.1	10.2	11.4	1.323	13.4	85
12091	H	20000	77.8	89	11.8	11.9	13.1	0.835	18.4	85
12146	V	22000	77.8	83	10.7	10.8	12	1.32	13.4	85
12115	V	22425	77.3	66	8.2	8.3	9.5	1.32	13.4	85
12122	H	20000	77.6	52	6.6	6.7	7.9	0.832	18.4	85
12153	H	20000	78.7	53	6.7	6.8	8	0.832	18.4	85
12177	V	23000	77.1	72	8.8	8.9	10.1	1.318	13.4	85
Average			**77.10**	**71.19**	**9.03**	**9.26**	**10.33**	**1.23**		

Sample: #1: Standard LO 10750 / 1 Output - PLL

TP Freq	Polarity	SR	Level	Quality	C/N	Eb/No	Es/No	LNB Drift mhz	LNB vdc	LNB mA
11706	V	7161	72.1	56	7	8.8	8.3	0.219	13.4	160
11789	V	28125	79.2	76	9.6	10.2	10.9	-0.165	13.4	160
11836	V	20765	78.8	77	9.7	9.8	11	-0.166	13.4	160
11842	H	22000	79.2	86	11.2	11.3	12.5	0.332	18.4	160
11874	H	22000	79.5	88	11.5	12.1	12.8	-0.671	18.4	160
11898	V	22000	78.6	89	11.8	11.9	13.1	-0.168	13.4	160
11929	V	22000	78.7	74	9.3	9.4	10.6	-0.175	13.4	160
11936	H	20000	79.6	95	12.7	12.8	14	-0.68	18.4	160
11967	H	22000	80.2	87	11.4	11.5	12.7	-0.677	18.4	160
11991	V	22000	79.2	83	10.8	10.9	12.1	-0.179	13.4	160
12022	V	22000	79.9	60	7.5	7.6	8.8	-0.18	13.4	160
12028	H	21991	81	73	9	9.1	10.3	0.317	18.4	160
12053	V	22000	81.1	79	10.1	10.2	11.4	-0.182	13.4	160
12060	H	22000	82.2	94	12.5	12.6	13.8	-0.684	18.4	160
12084	V	22000	81.1	85	11	11.1	12.3	-0.186	13.4	160
12091	H	20000	81.7	96	13.3	13.4	14.6	-0.683	18.4	160
12146	V	22000	81	82	10.6	10.7	11.9	-0.189	13.4	160
12115	V	22425	80.8	69	8.5	8.6	9.8	-0.189	13.4	160
12122	H	20000	82.4	69	8.5	8.6	9.8	-0.687	18.4	160
12153	H	20000	82.3	66	8.2	8.3	9.5	-0.688	18.4	160
12177	V	23000	80	76	9.6	9.7	10.9	-0.194	13.4	160
Average			**79.93**	**79.05**	**10.18**	**10.41**	**11.48**	**-0.28**		

Sample: #2: Standard LO 10750 / 1 Output - PLL

TP Freq	Polarity	SR	Level	Quality	C/N	Eb/No	Es/No	LNB Drift mhz	LNB vdc	LNB mA
11706	V	7161	72	55	6.9	8.7	8.2	0.482	13.4	85
11789	V	28125	78.2	76	9.5	10.1	10.8	0.097	13.4	85
11836	V	20765	77.9	77	9.7	9.8	11	0.096	13.4	85
11842	H	22000	79	83	10.8	10.9	12.1	0.594	18.4	85
11874	H	22000	79.1	86	11.3	11.9	12.6	-0.409	18.4	85
11898	V	22000	78.4	89	11.7	11.8	13	0.092	13.4	85
11929	V	22000	78.5	74	9.2	9.3	10.5	0.085	13.4	85
11936	H	20000	79.2	94	12.6	12.7	13.9	-0.419	18.4	85
11967	H	22000	79.7	87	11.4	11.5	12.7	-0.417	18.4	85
11991	V	22000	78.9	83	10.8	10.9	12.1	0.08	13.4	85
12022	V	22000	79.6	60	7.5	7.6	8.8	0.078	13.4	85
12028	H	21991	80.5	72	8.8	8.9	10.1	0.576	18.4	85
12053	V	22000	80.7	80	10.3	10.4	11.6	0.076	13.4	85
12060	H	22000	81.7	92	12.3	12.4	13.6	-0.426	18.4	85
12084	V	22000	80.8	84	10.9	11	12.2	0.071	13.4	85
12091	H	20000	81.2	95	13.2	13.3	14.5	-0.425	18.4	85
12146	V	22000	80.6	85	11.1	11.2	12.4	0.067	13.4	85
12115	V	22425	80.4	70	8.6	8.7	9.9	0.067	13.4	85
12122	H	20000	81.7	65	8.1	8.2	9.4	-0.43	18.4	85
12153	H	20000	81.8	65	8	8.1	9.3	-0.431	18.4	85
12177	V	23000	79.8	76	9.5	9.6	10.8	0.062	13.4	85
Average			**79.51**	**78.48**	**10.10**	**10.33**	**11.40**	**-0.02**		

Sample: #3: Standard LO 10750 / 2 Output - DRO

TP Freq	Polarity	SR	Level	Quality	C/N	Eb/No	Es/No	LNB Drift mhz	LNB vdc	LNB mA
11706	V	7161	74.7	60	7.5	9.3	8.8	-0.355	13.4	145
11789	V	28125	83.4	78	9.9	10.5	11.2	-0.738	13.4	145
11836	V	20765	83.2	78	9.9	10	11.2	-0.738	13.4	145
11842	H	22000	83.9	86	11.3	11.4	12.6	-0.246	18.4	145
11874	H	22000	82	91	12	12.6	13.3	-1.251	18.4	145
11898	V	22000	81.8	90	11.9	12	13.2	-0.742	13.4	145
11929	V	22000	79.9	73	9.1	9.2	10.4	-0.748	13.4	145
11936	H	20000	81.4	96	13.4	13.5	14.7	-1.259	18.4	145
11967	H	22000	79.4	88	11.5	11.6	12.8	-1.258	18.4	150
11991	V	22000	80.4	83	10.8	10.9	12.1	-0.753	13.4	145
12022	V	22000	80.1	60	7.5	7.6	8.8	-0.754	13.4	145
12028	H	21991	80.2	72	8.8	8.9	10.1	-0.262	18.4	145
12053	V	22000	81.9	80	10.2	10.3	11.5	-0.757	13.4	145
12060	H	22000	80.6	96	12.9	13	14.2	-1.266	18.4	145
12084	V	22000	82.6	85	11.1	11.2	12.4	-0.761	13.4	145
12091	H	20000	81.1	96	13.5	13.6	14.8	-1.265	18.4	145
12146	V	22000	82.8	88	11.5	11.6	12.8	-0.766	13.4	145
12115	V	22425	81.5	73	8.9	9	10.2	-0.766	13.4	145
12122	H	20000	80.8	64	7.9	8	9.2	-1.27	18.4	145
12153	H	20000	80.5	62	7.7	7.8	9	-1.272	18.4	150
12177	V	23000	81	76	9.6	9.7	10.9	-0.771	13.4	145
Average			**81.10**	**79.76**	**10.33**	**10.56**	**11.63**	**-0.86**		

Sample: #4: Standard LO 10750 / 2 Output - PLL

TP Freq	Polarity	SR	Level	Quality	C/N	Eb/No	Es/No	LNB Drift mhz	LNB vdc	LNB mA
11706	V	7161	71.4	54	6.8	8.6	8.1	0.55	13.4	175
11789	V	28125	77.4	77	9.8	10.4	11.1	0.164	13.4	180
11836	V	20765	77.3	74	9.2	9.3	10.5	0.164	13.4	180
11842	H	22000	75.7	87	11.4	11.5	12.7	0.663	18.4	180
11874	H	22000	76.3	90	11.9	12.5	13.2	-0.341	18.4	180
11898	V	22000	76.5	88	11.6	11.7	12.9	0.161	13.4	180
11929	V	22000	76.7	72	8.8	8.9	10.1	0.153	13.4	180
11936	H	20000	76.2	96	13.4	13.5	14.7	-0.35	18.4	180
11967	H	22000	76.5	87	11.4	11.5	12.7	-0.348	18.4	180
11991	V	22000	76.5	70	8.6	8.7	9.9	0.148	13.4	180
12022	V	22000	76.8	56	7.1	7.2	8.4	0.147	13.4	180
12028	H	21991	76.8	73	9	9.1	10.3	0.645	18.4	180
12053	V	22000	77.4	80	10.2	10.3	11.5	0.144	13.4	180
12060	H	22000	77.5	95	13.1	13.2	14.4	-0.357	18.4	180
12084	V	22000	77.6	82	10.6	10.7	11.9	0.14	13.4	180
12091	H	20000	77.5	96	13.5	13.6	14.8	-0.356	18.4	180
12146	V	22000	78.1	84	10.9	11	12.2	0.136	13.4	175
12115	V	22425	77.4	71	8.7	8.8	10	0.136	13.4	180
12122	H	20000	78	66	8.2	8.3	9.5	-0.361	18.4	180
12153	H	20000	78.3	65	8	8.1	9.3	-0.362	18.4	180
12177	V	23000	77.4	74	9.3	9.4	10.6	0.131	13.4	180
Average			**76.82**	**77.95**	**10.07**	**10.30**	**11.37**	**0.05**		

Sample: #5: Standard LO 10750 / 1 Output - PLL

TP Freq	Polarity	SR	Level	Quality	C/N	Eb/No	Es/No	LNB Drift mhz	LNB vdc	LNB mA
11706	V	7161	74.6	54	6.8	8.6	8.1	0.509	13.4	150
11789	V	28125	83.2	80	10.2	10.8	11.5	0.123	13.4	150
11836	V	20765	83	78	9.9	10	11.2	0.122	13.4	150
11842	H	22000	83.9	86	11.3	11.4	12.6	0.621	18.4	150
11874	H	22000	83.6	89	11.7	12.3	13	-0.383	18.4	155
11898	V	22000	82.6	91	12	12.1	13.3	0.119	13.4	150
11929	V	22000	82.7	78	9.9	10	11.2	0.111	13.4	150
11936	H	20000	83.8	95	13.1	13.2	14.4	-0.393	18.4	150
11967	H	22000	83.6	86	11.3	11.4	12.6	-0.391	18.4	150
11991	V	22000	83.7	73	9	9.1	10.3	0.105	13.4	150
12022	V	22000	83.7	64	7.9	8	9.2	0.104	13.4	150
12028	H	21991	84.3	72	8.8	8.9	10.1	0.602	18.4	150
12053	V	22000	84.1	83	10.8	10.9	12.1	0.101	13.4	150
12060	H	22000	84.5	94	12.5	12.6	13.8	-0.401	18.4	150
12084	V	22000	84.6	87	11.4	11.5	12.7	0.096	13.4	150
12091	H	20000	84.6	95	13.1	13.2	14.4	-0.401	18.4	150
12146	V	22000	85.2	87	11.4	11.5	12.7	0.091	13.4	150
12115	V	22425	84.1	73	9.1	9.2	10.4	0.092	13.4	150
12122	H	20000	84.8	68	8.4	8.5	9.7	-0.406	18.4	150
12153	H	20000	85.7	66	8.2	8.3	9.5	-0.407	18.4	150
12177	V	23000	84.4	78	9.9	10	11.2	0.086	13.4	150
Average			**83.56**	**79.86**	**10.32**	**10.55**	**11.62**	**0.00**		

Sample: #6: Standard LO 10750 / 1 Output - DRO

TP Freq	Polarity	SR	Level	Quality	C/N	Eb/No	Es/No	LNB Drift mhz	LNB vdc	LNB mA
11706	V	7161	78.6	54	6.8	8.6	8.1	-0.326	13.4	85
11789	V	28125	85.9	78	9.9	10.5	11.2	-0.708	13.4	85
11836	V	20765	84.7	73	9.1	9.2	10.4	-0.705	13.4	85
11842	H	22000	85.2	86	11.2	11.3	12.5	-0.173	18.4	85
11874	H	22000	82	89	11.7	12.3	13	-1.174	18.4	85
11898	V	22000	83.9	88	11.6	11.7	12.9	-0.699	13.4	85
11929	V	22000	82.1	74	9.2	9.3	10.5	-0.704	13.4	85
11936	H	20000	83.8	95	13	13.1	14.3	-1.175	18.4	85
11967	H	22000	81.5	85	11	11.1	12.3	-1.17	18.4	85
11991	V	22000	84	70	8.6	8.7	9.9	-0.7	13.4	85
12022	V	22000	81.8	61	7.6	7.7	8.9	-0.698	13.4	85
12028	H	21991	83.4	70	8.6	8.7	9.9	-0.167	18.4	85
12053	V	22000	83.6	80	10.3	10.4	11.6	-0.695	13.4	85
12060	H	22000	83.4	93	12.4	12.5	13.7	-1.164	18.4	85
12084	V	22000	83.5	83	10.7	10.8	12	-0.693	13.4	85
12091	H	20000	84.2	95	12.8	12.9	14.1	-1.157	18.4	85
12146	V	22000	83.7	83	10.8	10.9	12.1	-0.684	13.4	85
12115	V	22425	81.9	70	8.6	8.7	9.9	-0.69	13.4	85
12122	H	20000	82.8	65	8.1	8.2	9.4	-1.155	18.4	85
12153	H	20000	84.5	65	8	8.1	9.3	-1.149	18.4	85
12177	V	23000	80.3	76	9.6	9.7	10.9	-0.681	13.4	85
Average			**83.09**	**77.76**	**9.98**	**10.21**	**11.28**	**-0.78**		

LNBF Testing Comparison

Location: Sacramento, CA
Dish: GEOSATpro 90cm

Conditions: Clear / 65° F / 10am PDT
Satellite: Galaxy 19 @ 97w

Model Performance Summary

	Level	Quality	C/N	Eb/No	Es/No	Drift mhz
INVACOM SNH031 - DRO	76.04	**84.10**	**11.04**	**11.27**	**12.34**	0.95
GEOSATpro SL1B - DRO	82.65	79.76	10.21	10.44	11.51	0.22
GEOSATpro SL2B - DRO	76.35	81.19	10.46	10.69	11.76	-0.30
DMSI Spitfire / GK411-60l - DRO	78.45	78.57	10.16	10.39	11.46	-0.34
DMSI JSC321S - DRO	76.67	76.52	9.83	10.06	11.13	-0.74
WSI ESX521 - DRO	85.49	75.57	9.65	9.88	10.95	-1.49
WSI ESX522 - DRO	82.56	79.00	10.24	10.47	11.54	-1.44
Alps Universal - DRO	77.10	71.19	9.03	9.26	10.33	1.23
Sample: 1 - PLL	79.93	79.05	10.18	10.41	11.48	-0.28
Sample: 2 - PLL	79.51	78.48	10.10	10.33	11.40	-0.02
Sample: 3 - DRO	81.10	79.76	10.33	10.56	11.63	-0.86
Sample: 4 - PLL	76.82	77.95	10.07	10.30	11.37	0.05
Sample: 5 - PLL	83.56	79.86	10.32	10.55	11.62	0.00
Sample: 6 - DRO	83.09	77.76	9.98	10.21	11.28	-0.78
Samples Average	**79.95**	**78.48**	**10.12**	**10.34**	**11.42**	**-0.27**