

I.

H = 6 km

Statistics Summary:

T	[°C]		6.70(24)	29.70(34)	52.40(08)
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P	[torr] [kPa]		353.90(23)	354.00(14) 47.187	353.90(31)
$\sigma_x(\Delta\alpha)$	[dB/km]		0.147	0.144	0.141

H = 6.0 km

6.7°C		29.7°C		52.4°C	
f_x [GHz]	$\alpha_x(\delta\alpha)$	f_x [GHz]	$\alpha_x(\delta\alpha)$	f_x [GHz]	$\alpha_x(\delta\alpha)$
P [torr]	$\alpha_M(\pm\Delta\alpha)$	P [torr]	$\alpha_M(\pm\Delta\alpha)$	P [torr]	$\alpha_M(\pm\Delta\alpha)$
dB/km		dB/km		dB/km	
53.88908	0.56(.03)	53.88953	0.64(.02)	53.88994	0.65(.03)
354.2	0.70(0.14)	353.9	0.66(0.02)	354.1	0.64(-0.01)
53.98781	0.74(.02)	53.98825	0.65(.02)	53.98867	0.83(.02)
354.4	0.76(0.02)	353.7	0.73(0.08)	353.2	0.70(-0.13)
54.08641	0.74(.02)	54.08689	0.69(.03)	54.08722	0.81(.03)
353.8	0.83(0.09)	353.9	0.79(0.10)	354.0	0.77(-0.04)
54.18515	1.04(.03)	54.18582	0.79(.02)	54.18592	0.79(.03)
353.9	0.90(-0.14)	353.9	0.86(0.07)	353.8	0.83(0.04)
54.28377	0.79(.02)	54.28416	0.87(.02)	54.28456	1.05(.04)
353.8	0.97(0.18)	353.9	0.92(0.05)	353.9	0.89(-0.16)
54.38117	1.19(.02)	54.38160	1.02(.03)	54.38324	0.98(.03)
353.7	1.05(-0.14)	353.9	1.00(-0.02)	354.0	0.95(-0.03)
54.42270	1.21(.02)	54.42406	1.04(.02)	54.42542	0.86(.03)
354.0	1.09(-0.12)	354.2	1.03(-0.01)	353.9	0.98(0.12)
54.52383	1.45(.03)	54.52532	1.24(.02)	54.52568	1.10(.04)
353.7	1.18(-0.27)	353.7	1.12(-0.12)	353.9	1.07(-0.03)
54.62475	1.08(.02)	54.62521	1.30(.03)	54.62563	1.24(.03)
354.2	1.29(0.21)	353.9	1.22(-0.08)	354.1	1.16(-0.08)
54.72483	1.41(.03)	54.72527	1.18(.03)	54.72570	1.27(.02)
354.4	1.39(-0.02)	353.7	1.31(0.13)	353.2	1.25(-0.02)
54.82478	1.48(.03)	54.82527	1.49(.03)	54.82561	1.25(.04)
353.8	1.50(0.02)	353.8	1.41(-0.08)	354.0	1.33(0.08)
54.92487	1.67(.03)	54.92555	1.39(.03)	54.92567	1.33(.04)
354.0	1.61(-0.06)	353.9	1.51(0.12)	353.8	1.41(0.08)
55.02485	1.81(.04)	55.02524	1.82(.03)	55.02565	1.41(.06)
353.8	1.74(-0.07)	353.9	1.62(-0.20)	353.9	1.52(0.11)
55.12358	2.05(.03)	55.12413	1.71(.04)	55.12568	1.48(.04)
353.8	1.88(-0.17)	353.8	1.75(0.04)	354.1	1.64(0.16)
55.15565	1.95(.03)	55.15703	1.96(.03)	55.15840	1.84(.04)
354.1	1.93(-0.02)	354.2	1.80(-0.16)	353.9	1.68(-0.16)
55.25814	2.15(.04)	55.25965	1.77(.04)	55.26003	1.99(.04)
353.7	2.08(-0.07)	353.7	1.93(0.16)	353.9	1.80(-0.19)
55.36042	2.13(.03)	55.36089	2.14(.04)	55.36131	1.97(.04)
354.2	2.23(0.10)	353.9	2.06(-0.08)	354.1	1.90(-0.07)
55.46185	2.66(.03)	55.46231	2.33(.03)	55.46275	2.10(.05)
354.3	2.39(-0.27)	353.7	2.19(-0.14)	353.3	2.01(-0.09)
55.56316	2.50(.03)	55.56366	2.37(.04)	55.56400	2.17(.03)
353.8	2.57(0.07)	353.9	2.34(-0.03)	354.0	2.14(-0.03)

H = 6.0 km

6.7°C		29.7°C		52.4°C	
f_x [GHz]	$\alpha_x(\delta\alpha)$	f_x [GHz]	$\alpha_x(\delta\alpha)$	f_x [GHz]	$\alpha_x(\delta\alpha)$
P [torr]	$\alpha_M(\pm\Delta\alpha)$	P [torr]	$\alpha_M(\pm\Delta\alpha)$	P [torr]	$\alpha_M(\pm\Delta\alpha)$
dB/km		dB/km		dB/km	
55.66459	3.00(.03)	55.66529	2.36(.04)	55.66541	2.33(.04)
354.0	2.76(-0.24)	353.9	2.51(0.15)	353.8	2.30(-0.03)
55.76592	3.02(.03)	55.76632	2.57(.04)	55.76674	2.37(.04)
353.8	2.97(-0.05)	353.9	2.69(0.12)	353.9	2.46(0.09)
55.86599	3.26(.03)	55.86643	3.01(.03)	55.86813	2.53(.05)
353.8	3.16(-0.10)	353.9	2.85(-0.16)	354.0	2.60(0.07)
55.88860	3.35(.04)	55.89000	3.03(.03)	55.89139	2.71(.03)
354.1	3.20(-0.15)	354.1	2.89(-0.14)	353.9	2.63(-0.08)
55.99245	3.36(.03)	55.99399	3.07(.04)	55.99435	2.65(.04)
353.7	3.39(0.03)	353.7	3.05(-0.02)	355.0	2.75(0.10)
56.09610	3.78(.04)	56.09657	3.32(.04)	56.09700	2.92(.04)
354.2	3.60(-0.18)	353.9	3.22(-0.10)	354.1	2.89(-0.03)
56.19888	3.80(.03)	56.19934	3.34(.05)	56.19979	2.91(.04)
354.3	3.81(0.01)	353.8	3.40(0.06)	353.4	3.06(0.15)
56.30153	4.12(.03)	56.30204	3.55(.03)	56.30238	3.10(.03)
353.8	4.02(-0.10)	353.8	3.59(0.04)	354.0	3.22(0.12)
56.40432	4.01(.03)	56.40503	3.56(.04)	56.40514	3.33(.05)
353.9	4.21(0.20)	353.9	3.74(0.18)	353.8	3.35(0.02)
56.50700	4.36(.04)	56.50740	3.91(.04)	56.50783	3.43(.04)
353.8	4.37(0.01)	353.9	3.87(-0.04)	354.0	3.44(0.01)
56.62155	4.58(.03)	56.62297	3.77(.03)	56.62438	3.52(.04)
354.0	4.54(-0.04)	354.0	3.99(0.22)	353.9	3.52(0.00)
56.72676	4.77(.04)	56.72832	4.19(.04)	56.72871	3.69(.05)
353.7	4.70(-0.07)	353.7	4.12(-0.07)	355.0	3.63(-0.06)
56.83178	4.75(.04)	56.83226	4.42(.05)	56.83271	3.81(.06)
354.3	4.89(0.14)	353.9	4.27(-0.15)	354.1	3.75(-0.06)
56.93591	5.04(.05)	56.93637	4.24(.04)	56.93682	3.69(.05)
354.3	5.06(0.02)	353.8	4.42(0.18)	354.3	3.88(0.19)
57.03991	5.16(.06)	57.04043	4.63(.05)	57.04078	3.87(.05)
353.8	5.22(0.06)	353.8	4.54(-0.09)	354.0	3.97(0.10)
57.14406	5.39(.04)	57.14478	4.46(.05)	57.14490	4.12(.05)
353.8	5.35(-0.04)	353.9	4.62(0.16)	353.8	4.03(-0.09)
57.24809	5.10(.06)	57.24851	4.83(.06)	57.24894	3.94(.05)
353.8	5.48(0.38)	353.9	4.71(-0.12)	354.0	4.08(0.14)
57.35450	5.74(.05)	57.35140	4.93(.04)	57.35738	4.31(.05)
354.0	5.63(-0.11)	353.9	4.82(-0.11)	353.9	4.18(-0.13)
57.46110	5.72(.07)	57.46267	4.95(.06)	57.46305	4.07(.07)
353.7	5.81(0.09)	353.7	4.98(0.03)	354.2	4.30(0.23)

H = 6.0 km

6.7°C		29.7°C		52.4°C	
f _x [GHz]	α _x (δα)	f _x [GHz]	α _x (δα)	f _x [GHz]	α _x (δα)
P [torr]	α _M (±Δα)	P [torr]	α _M (±Δα)	P [torr]	α _M (±Δα)
dB/km		dB/km		dB/km	
57.56747	6.10(.06)	57.56796	5.06(.05)	57.56842	4.42(.06)
354.2	5.99(-0.11)	353.9	5.12(0.06)	354.1	4.42(0.00)
57.67296	6.15(.05)	57.67344	5.10(.04)	57.67390	4.70(.07)
354.4	6.14(-0.01)	353.8	5.23(0.13)	353.8	4.50(-0.20)
57.77832	6.07(.06)	57.77884	5.11(.07)	57.77921	4.51(.05)
353.8	6.27(0.20)	353.9	5.31(0.20)	354.0	4.55(0.04)
57.88382	6.47(.06)	57.88455	5.23(.06)	57.88466	4.41(.04)
353.8	6.40(-0.07)	353.9	5.40(0.17)	353.8	4.60(0.19)
57.98919	6.36(.04)	57.98961	5.42(.04)	57.99005	4.47(.05)
353.8	6.57(0.21)	354.0	5.53(0.11)	353.9	4.70(0.23)
58.09280	6.87(.03)	58.08895	5.67(.04)	58.09457	4.66(.04)
354.2	6.79(-0.08)	354.2	5.70(0.03)	354.3	4.85(0.19)
58.18184	6.79(.04)	58.19703	5.84(.06)	58.18427	4.91(.02)
354.1	6.99(0.20)	353.7	5.91(0.07)	353.9	5.01(0.10)
58.28767	7.02(.05)	58.30366	5.85(.04)	58.30412	5.30(.05)
354.1	7.21(0.19)	353.9	6.09(0.24)	354.1	5.20(-0.10)
58.37088	6.99(.03)	58.37201	5.92(.04)	58.37257	5.02(.03)
354.0	7.33(0.34)	354.1	6.17(0.25)	354.3	5.26(0.24)
58.41001	7.12(.06)	58.41048	5.92(.04)	58.41095	5.12(.05)
354.4	7.37(0.25)	353.7	6.19(0.27)	353.4	5.27(0.15)
58.46400	7.07(.05)	58.46475	6.01(.03)	58.46542	4.98(.02)
354.2	7.40(0.33)	354.1	6.21(0.20)	353.9	5.27(0.29)
58.51670	7.36(.04)	58.51723	5.95(.04)	58.51759	4.90(.05)
353.8	7.42(0.06)	353.9	6.21(0.26)	354.0	5.26(0.36)
58.55657	7.06(.03)	58.55729	6.02(.02)	58.55812	4.90(.03)
354.1	7.42(0.36)	354.1	6.19(0.17)	353.9	5.24(0.34)
58.62355	7.34(.04)	58.62428	5.91(.05)	58.62440	4.84(.04)
353.8	7.41(0.07)	353.9	6.17(0.26)	353.9	5.19(0.35)
58.73027	7.29(.06)	58.73069	5.99(.04)	58.73113	4.84(.04)
353.8	7.40(0.11)	354.0	6.13(0.14)	354.0	5.13(0.29)
58.83566	7.22(.03)	58.83625	5.98(.03)	58.82337	5.07(.05)
353.7	7.42(0.20)	353.9	6.13(0.15)	354.0	5.12(0.05)
58.91599	7.20(.03)	58.91827	6.17(.02)		
354.1	7.46(0.26)	354.0	6.16(-0.01)		
59.02316	7.04(.03)	59.02385	6.23(.02)	59.03978	5.07(.03)
354.1	7.53(0.49)	354.2	6.22(-0.01)	354.1	5.22(0.15)
59.10742	7.08(.02)	59.14750	6.06(.04)	59.14796	5.19(.03)
354.0	7.60(0.52)	353.7	6.30(0.24)	353.3	5.28(0.09)

H = 6.0 km

6.7°C		29.7°C		52.4°C	
f_x [GHz]	$\alpha_x(\delta\alpha)$	f_x [GHz]	$\alpha_x(\delta\alpha)$	f_x [GHz]	$\alpha_x(\delta\alpha)$
P [torr]	$\alpha_M(\pm\Delta\alpha)$	P [torr]	$\alpha_M(\pm\Delta\alpha)$	P [torr]	$\alpha_M(\pm\Delta\alpha)$
dB/km		dB/km		dB/km	
59.20173	7.41(.02)	59.20248	6.16(.02)	59.20316	5.21(.02)
354.2	7.66(0.25)	354.0	6.33(0.17)	353.9	5.30(0.09)
59.25505	7.58(.04)	59.25560	6.12(.03)	59.25595	5.05(.05)
353.8	7.69(0.11)	353.8	6.35(0.23)	354.0	5.32(0.27)
59.29546	7.65(.03)	59.29618	6.22(.02)	59.29703	5.00(.01)
354.1	7.71(0.06)	354.0	6.36(0.14)	353.9	5.33(0.33)
59.36324	7.77(.04)	59.36399	6.08(.03)	59.36411	5.12(.04)
353.8	7.74(-0.03)	353.9	6.39(0.31)	353.9	5.34(0.22)
59.39122	7.58(.02)	59.39173	6.25(.01)	59.39279	5.22(.01)
353.9	7.76(0.18)	354.1	6.39(0.14)	354.3	5.34(0.12)
59.47131	7.68(.03)	59.47174	6.29(.03)	59.47219	5.14(.03)
353.8	7.80(0.12)	354.0	6.42(0.13)	354.0	5.36(0.22)
59.55882	7.60(.02)	59.56018	6.23(.01)	59.56065	5.16(.01)
354.1	7.85(0.25)	353.8	6.46(0.23)	354.3	5.38(0.22)
59.57803	7.58(.03)	59.57851	6.13(.03)	59.58031	5.18(.04)
353.7	7.86(0.28)	353.9	6.47(0.34)	354.0	5.39(0.21)
59.65012	7.66(.02)	59.66564	6.33(.04)	59.66604	5.23(.05)
354.0	7.91(0.25)	353.7	6.51(0.18)	353.9	5.42(0.19)
59.75865	7.84(.02)	59.75933	6.33(.02)	59.75996	5.24(.01)
354.1	7.99(0.15)	354.1	6.56(0.23)	354.3	5.45(0.21)
59.84395	7.80(.02)	59.84512	6.42(.02)	59.84569	5.33(.01)
354.0	8.07(0.27)	354.1	6.62(0.20)	354.3	5.50(0.17)
59.93944	8.05(.02)	59.94020	6.37(.01)	59.94089	5.34(.01)
354.1	8.19(0.14)	354.0	6.73(0.36)	353.9	5.59(0.25)
60.03434	8.09(.02)	60.03508	6.55(.01)	60.03594	5.42(.01)
354.0	8.34(0.25)	354.0	6.87(0.32)	353.9	5.73(0.31)
60.13130	8.58(.02)	60.13182	6.72(.01)	60.13289	5.56(.01)
353.9	8.52(-0.06)	354.1	7.04(0.32)	354.3	5.89(0.33)
60.21236	8.37(.11)	60.29323	6.95(.01)	60.21326	5.67(.11)
353.8	8.65(0.28)	353.8	7.28(0.33)	353.9	6.03(0.36)
60.29186	8.51(.02)			60.29371	5.81(.01)
354.2	8.75(0.24)			354.3	6.13(0.32)
60.32044	8.78(.11)	60.32105	6.95(.09)	60.32277	6.24(.09)
353.7	8.77(-0.01)	353.8	7.30(0.35)	354.0	6.16(-0.08)
60.38428	8.59(.02)	60.38662	7.01(.01)	60.38682	5.93(.01)
354.0	8.80(0.21)	354.0	7.33(0.32)	353.9	6.19(0.26)
60.49414	8.39(.02)	60.49484	6.92(.01)	60.49549	5.75(.01)
354.1	8.75(0.36)	354.2	7.28(0.36)	354.2	6.14(0.39)

H = 6.0 km

6.7°C		29.7°C		52.4°C	
f_x [GHz]	$\alpha_x(\delta\alpha)$	f_x [GHz]	$\alpha_x(\delta\alpha)$	f_x [GHz]	$\alpha_x(\delta\alpha)$
P [torr]	$\alpha_M(\pm\Delta\alpha)$	P [torr]	$\alpha_M(\pm\Delta\alpha)$	P [torr]	$\alpha_M(\pm\Delta\alpha)$
dB/km		dB/km		dB/km	
60.58051	8.49(.02)	60.58168	6.85(.01)	60.58226	5.60(.01)
354.0	8.64(0.15)	354.1	7.18(0.33)	354.3	6.04(0.44)
60.67716	8.29(.02)	60.67794	6.87(.01)	60.67863	5.62(.01)
354.2	8.49(0.20)	354.0	7.04(0.17)	353.9	5.91(0.29)
60.77324	8.09(.01)	60.77399	6.75(.01)	60.77485	5.59(.01)
354.1	8.35(0.26)	353.9	6.92(0.17)	353.9	5.80(0.21)
60.87139	8.00(.01)	60.87191	6.67(.01)	60.87299	5.59(.01)
353.9	8.25(0.25)	354.1	6.84(0.17)	354.4	5.74(0.15)
61.02489	7.99(.01)	61.02628	6.62(.01)	61.02676	5.46(.01)
354.1	8.16(0.17)	353.8	6.80(0.18)	354.3	5.73(0.27)
61.11842	7.83(.03)	61.12080	6.67(.02)	61.12106	5.38(.02)
354.0	8.11(0.28)	354.1	6.78(0.11)	354.3	5.73(0.35)
61.22967	8.03(.02)	61.23035	6.49(.01)	61.23099	5.42(.02)
353.9	8.03(0.00)	354.1	6.72(0.23)	354.2	5.69(0.27)
61.31702	7.89(.02)	61.31824	6.45(.01)	61.31881	5.42(.01)
353.9	7.95(0.06)	354.1	6.66(0.21)	354.1	5.64(0.22)
61.41490	7.83(.02)	61.41571	6.35(.01)	61.41635	5.33(.01)
354.1	7.87(0.04)	354.2	6.59(0.24)	353.9	5.59(0.26)
61.51212	7.67(.01)	61.51287	6.47(.02)	61.51373	5.31(.01)
354.0	7.82(0.15)	354.1	6.57(0.10)	353.9	5.58(0.27)
61.61148	7.76(.01)	61.61200	6.40(.02)	61.61309	5.46(.01)
353.9	7.81(0.05)	354.1	6.59(0.19)	354.2	5.62(0.16)
61.75791	7.76(.01)	61.75948	6.58(.01)	61.75978	5.53(.01)
354.2	7.82(0.06)	353.8	6.63(0.05)	354.1	5.69(0.16)
61.85256	7.75(.01)	61.85498	6.50(.01)	61.85524	5.54(.01)
354.0	7.79(0.04)	354.1	6.63(0.13)	354.2	5.71(0.17)
61.96516	7.70(.01)	61.96584	6.58(.01)	61.96650	5.44(.01)
353.9	7.73(0.03)	354.1	6.60(0.02)	354.2	5.68(0.24)
62.05357	7.72(.01)	62.05479	6.58(.01)	62.05538	5.57(.01)
353.9	7.68(-0.04)	353.8	6.56(-0.02)	354.1	5.66(0.09)
62.15263	7.55(.01)	62.15344	6.45(.00)	62.15409	5.54(.01)
354.0	7.63(0.08)	354.1	6.54(0.09)	353.9	5.66(0.12)
62.25101	7.54(.01)	62.25177	6.49(.02)	62.25264	5.44(.01)
354.1	7.57(0.03)	354.0	6.53(0.04)	353.9	5.68(0.24)
62.35160	7.25(.01)	62.35210	6.43(.01)	62.35320	5.55(.01)
354.0	7.47(0.22)	354.0	6.47(0.04)	354.2	5.66(0.11)
62.49094	7.05(.01)	62.49252	6.28(.01)	62.49283	5.36(.01)
354.2	7.20(0.15)	353.8	6.26(-0.02)	354.1	5.50(0.14)

H = 6.0 km

6.7°C		29.7°C		52.4°C	
f_x [GHz]	$\alpha_x(\delta\alpha)$	f_x [GHz]	$\alpha_x(\delta\alpha)$	f_x [GHz]	$\alpha_x(\delta\alpha)$
P [torr]	$\alpha_M(\pm\Delta\alpha)$	P [torr]	$\alpha_M(\pm\Delta\alpha)$	P [torr]	$\alpha_M(\pm\Delta\alpha)$
dB/km		dB/km		dB/km	
62.58672	6.88(.01)	62.58916	5.96(.01)	62.58943	5.00(.01)
353.9	6.93(0.05)	354.1	6.03(0.07)	354.2	5.29(0.29)
62.70065	6.58(.01)	62.70135	5.45(.01)	62.70201	4.90(.01)
353.9	6.56(-0.02)	354.0	5.72(0.27)	354.1	5.02(0.12)
62.79011	6.21(.01)	62.79136	5.31(.01)	62.79195	4.75(.01)
353.9	6.27(0.06)	353.8	5.47(0.16)	354.1	4.82(0.07)
62.89035	5.92(.01)	62.89117	5.15(.01)	62.89183	4.64(.01)
354.0	5.94(0.02)	354.1	5.21(0.06)	353.9	4.61(-0.03)
62.98990	5.64(.01)	62.99067	4.95(.01)	62.99155	4.35(.01)
354.0	5.61(-0.03)	354.0	4.94(-0.01)	353.9	4.39(0.04)
63.09169	5.37(.01)	63.09220	4.66(.01)	63.09331	4.18(.01)
354.0	5.26(-0.11)	354.0	4.65(-0.01)	354.2	4.13(-0.05)
63.22396	4.80(.01)	63.22557	4.36(.01)	63.22588	3.82(.01)
354.2	4.82(0.02)	353.8	4.26(-0.10)	354.2	3.80(-0.02)
63.32086	4.50(.01)	63.32335	3.95(.01)	63.32361	3.67(.01)
353.9	4.53(0.03)	354.1	4.02(0.07)	354.2	3.60(-0.07)
63.43615	4.10(.01)	63.43685	3.77(.01)	63.43752	3.33(.01)
353.9	4.23(0.13)	354.0	3.78(0.01)	354.2	3.41(0.08)
63.52665	4.04(.01)	63.52791	3.65(.01)	63.52851	3.20(.01)
353.9	4.01(-0.03)	353.8	3.60(-0.05)	354.1	3.27(0.07)
63.62806	3.81(.01)	63.62890	3.28(.01)	63.62957	3.10(.01)
354.0	3.76(-0.05)	354.1	3.40(0.12)	353.9	3.09(-0.01)
63.72879	3.42(.01)	63.72957	3.19(.01)	63.73046	2.84(.01)
354.0	3.51(0.09)	354.0	3.18(-0.01)	353.9	2.90(0.06)
63.83176	3.19(.00)	63.83229	2.88(.01)	63.83342	2.79(.01)
354.0	3.27(0.08)	354.0	2.98(0.10)	354.2	2.72(-0.07)
63.95698	2.83(.01)	63.95860	2.70(.01)	63.95893	2.60(.01)
354.2	3.02(0.19)	353.8	2.76(0.06)	354.2	2.54(-0.06)
64.05500	2.72(.01)	64.05751	2.65(.01)	64.05779	2.56(.01)
353.9	2.84(0.12)	354.1	2.61(-0.04)	354.2	2.42(-0.14)
64.17162	2.58(.01)	64.17234	2.32(.01)	64.17298	2.21(.02)
353.8	2.63(0.05)	354.1	2.44(0.12)	354.2	2.27(0.06)
64.26318	2.43(.00)	64.26447	2.19(.01)	64.26505	2.17(.01)
353.9	2.46(0.03)	353.8	2.28(0.09)	354.2	2.13(-0.04)
64.36576	2.40(.01)	64.36658	2.28(.01)	64.36728	2.02(.01)
354.0	2.28(-0.12)	354.1	2.12(-0.16)	353.9	1.98(-0.04)
64.46759	2.16(.01)	64.46843	* 2.13(.01)	64.46935	1.91(.01)
354.1	2.12(-0.04)	354.1	1.98(-0.15)	353.9	1.86(-0.05)

H = 6.0 km

6.7°C		29.7°C		52.4°C	
f_x [GHz]	$\alpha_x(\delta\alpha)$	f_x [GHz]	$\alpha_x(\delta\alpha)$	f_x [GHz]	$\alpha_x(\delta\alpha)$
P [torr]	$\alpha_M(\pm\Delta\alpha)$	P [torr]	$\alpha_M(\pm\Delta\alpha)$	P [torr]	$\alpha_M(\pm\Delta\alpha)$
dB/km		dB/km		dB/km	
64.57183	2.02(.01)	64.57234	2.02(.01)	64.57351	1.61(.01)
354.0	1.97(-0.05)	354.1	1.85(-0.17)	354.2	1.75(0.14)
64.69014	1.85(.01)	64.69161	1.74(.01)	64.69193	1.67(.01)
354.0	1.82(-0.03)	353.8	1.71(-0.03)	354.2	1.63(-0.04)
64.78876	1.62(.01)	64.79143	1.62(.00)	64.79192	1.65(.01)
354.1	1.68(0.06)	354.1	1.59(-0.03)	354.2	1.51(-0.14)
64.90710	1.54(.01)	64.90780	1.47(.00)	64.90849	1.42(.01)
354.0	1.53(-0.01)	354.1	1.45(-0.02)	354.3	1.38(-0.04)
64.99973	1.42(.01)	65.00098	1.37(.00)	65.00160	1.39(.01)
354.1	1.42(0.00)	354.1	1.35(-0.02)	354.2	1.29(-0.10)
65.10348	1.27(.00)	65.10432	1.27(.01)	65.10500	1.31(.01)
354.0	1.32(0.05)	354.1	1.25(-0.02)	353.9	1.21(-0.10)
65.20647	1.32(.01)	65.20732	1.12(.00)	65.20825	1.09(.01)
354.0	1.22(-0.10)	354.1	1.17(0.05)	353.9	1.13(0.04)
65.31190	1.08(.01)	65.31242	1.07(.01)	65.31358	0.95(.01)
354.0	1.12(0.04)	354.1	1.07(0.00)	354.3	1.04(0.09)
65.42316	1.01(.01)	65.42464	1.02(.01)	65.42496	1.07(.01)
354.0	1.02(0.01)	353.8	0.97(-0.05)	354.2	0.94(-0.13)
65.52289	0.97(.01)	65.52560	0.80(.01)	65.52610	0.98(.01)
354.1	0.94(-0.03)	354.1	0.89(0.09)	354.3	0.86(-0.12)
65.64259	0.90(.01)	65.64329	0.79(.01)	65.64398	0.85(.01)
354.0	0.85(-0.05)	354.1	0.82(0.03)	354.2	0.79(-0.06)
65.73626	0.77(.00)	65.73755	0.65(.00)	65.73817	0.63(.01)
354.0	0.79(0.02)	354.1	0.76(0.11)	354.2	0.74(0.11)
65.84119	0.62(.01)	65.84203	0.64(.01)	65.84274	0.67(.01)
353.9	0.73(0.11)	354.1	0.70(0.06)	353.9	0.68(0.01)
65.94535	0.62(.01)	65.94622	0.50(.00)	65.94716	0.43(.01)
354.0	0.67(0.05)	354.1	0.64(0.14)	353.9	0.62(0.19)
66.05199	0.37(.01)	66.05252	0.49(.01)	66.05368	0.40(.01)
353.9	0.61(0.24)	354.1	0.58(0.09)	354.2	0.56(0.16)
66.15617	0.52(.00)	66.15768	0.58(.01)	66.15801	0.41(.01)
354.0	0.56(0.04)	353.8	0.53(-0.05)	354.2	0.52(0.11)
66.25703	0.49(.00)	66.25977	0.44(.01)	66.26028	0.41(.01)
354.1	0.52(0.03)	354.1	0.49(0.05)	354.2	0.48(0.07)

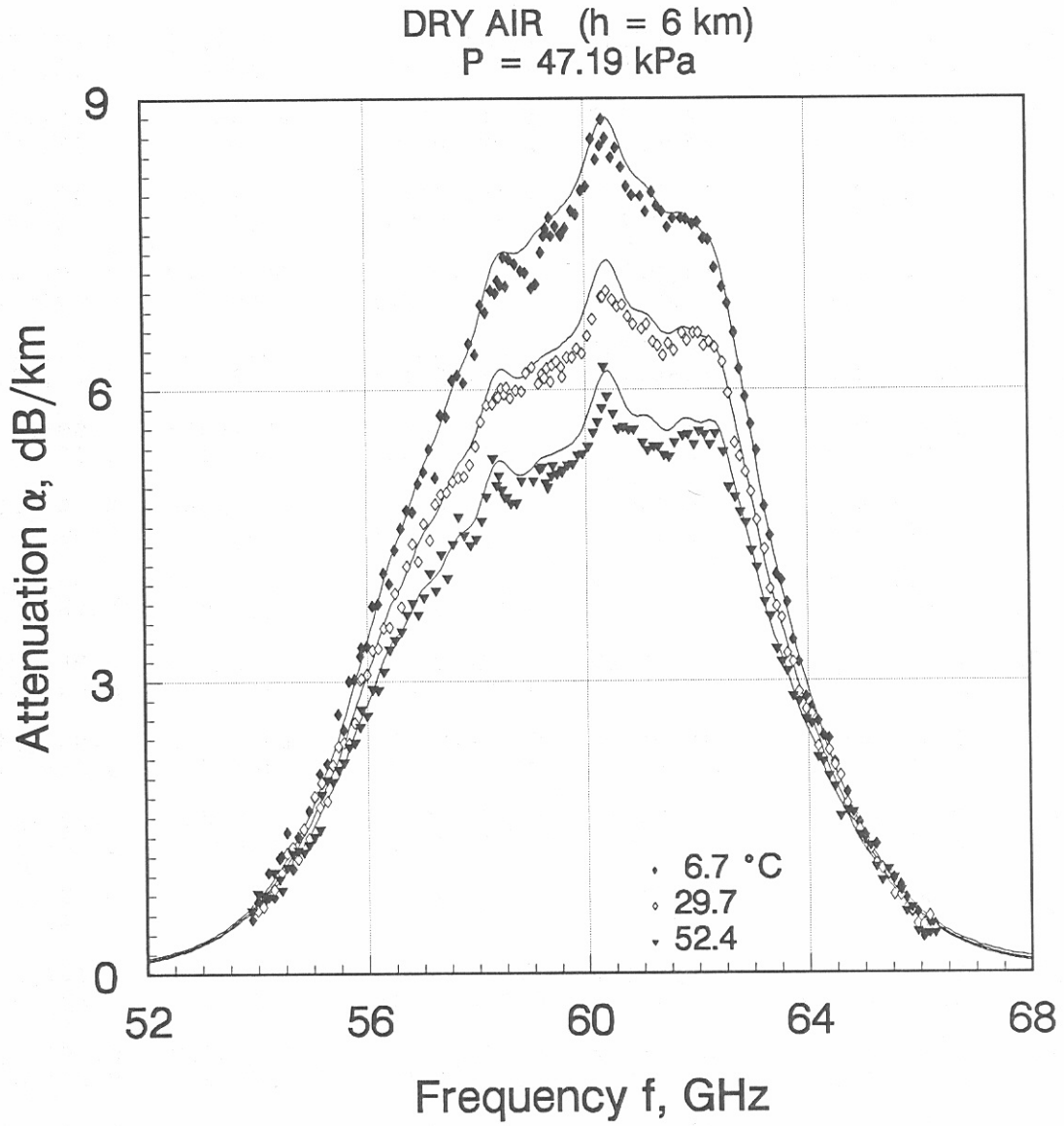


Figure A-9a. Predicted and measured attenuation rates of dry air, α_M and α_x , at H = 6 km (see I.) for frequencies between 52 and 68 GHz.

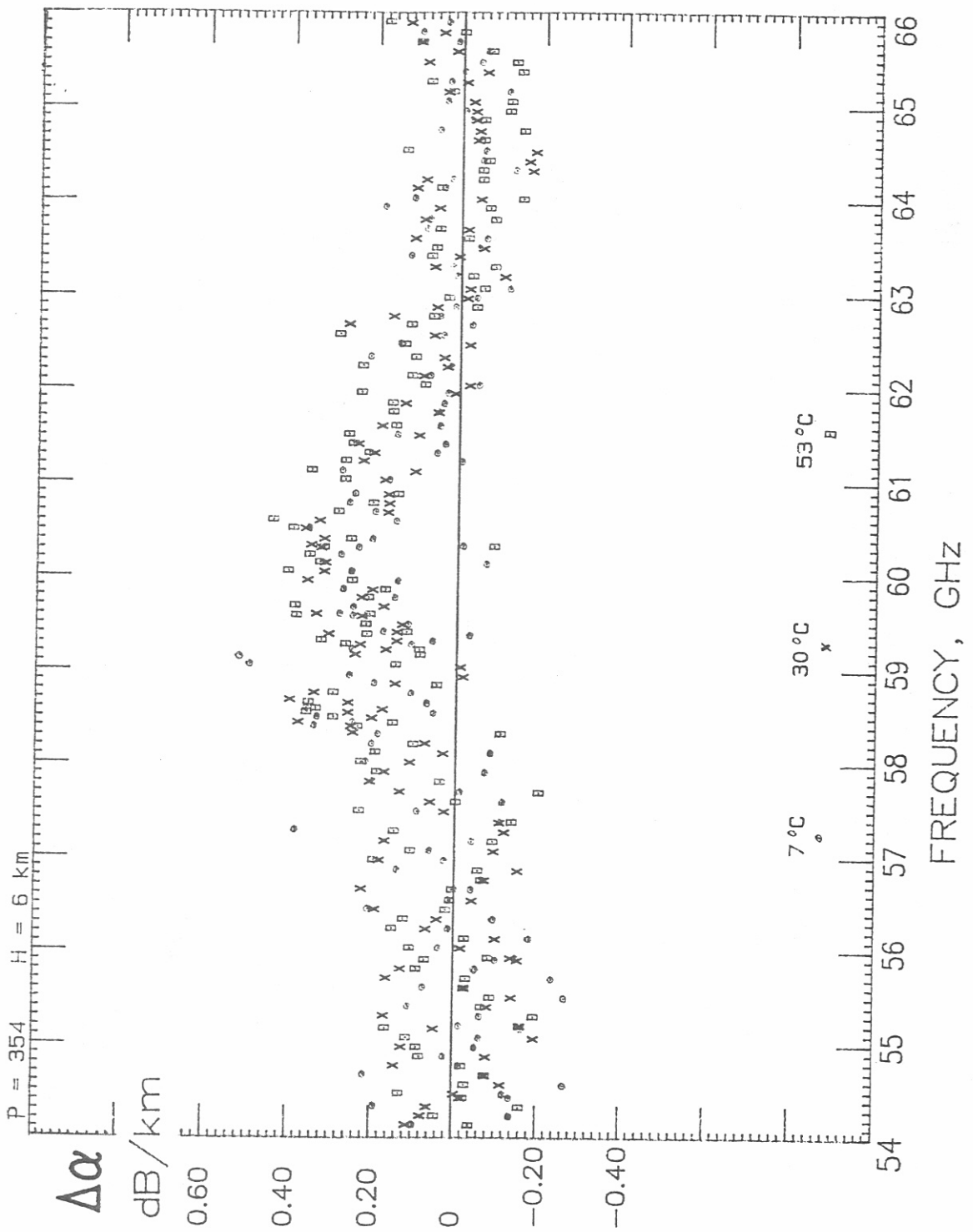


Figure A-9b. Differences $\Delta\alpha = \alpha_M - \alpha_x$ between predicted and measured attenuation for the results listed under I.