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First Two Years of Observations NASA ACTS Propagation Experiment Central Oklahoma Site

Robert K. Crane
School of Meteorology
University of Oklahoma
Norman, OK 73019
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Introduction

Continuous observations from December 1, 1993 through November 30, 1995 were made at the ACTS Propagation Terminal on the roof of the Sarkeys Energy Center at the University of Oklahoma in Norman, Oklahoma. Beacon and radiometer observations were combined to calibrate the beacon system for the estimation of total attenuation (attenuation relative to free space) and attenuation relative to clear sky (gaseous absorption component removed). Empirical cumulative distributions (edf's) were compiled for each month of observation and for each year. The annual edf's are displayed in the figures, the monthly and annual edf's are listed in the tables. The tables are organized by blocks and pages within a block. The blocks correspond to the headings in the .edf files generated by the ACTS Preprocessing (actspp) software and contained in the fourth disk in the set of ACTS Propagation Experiment CD-ROMs generated by the University of Texas.

Site Characteristics

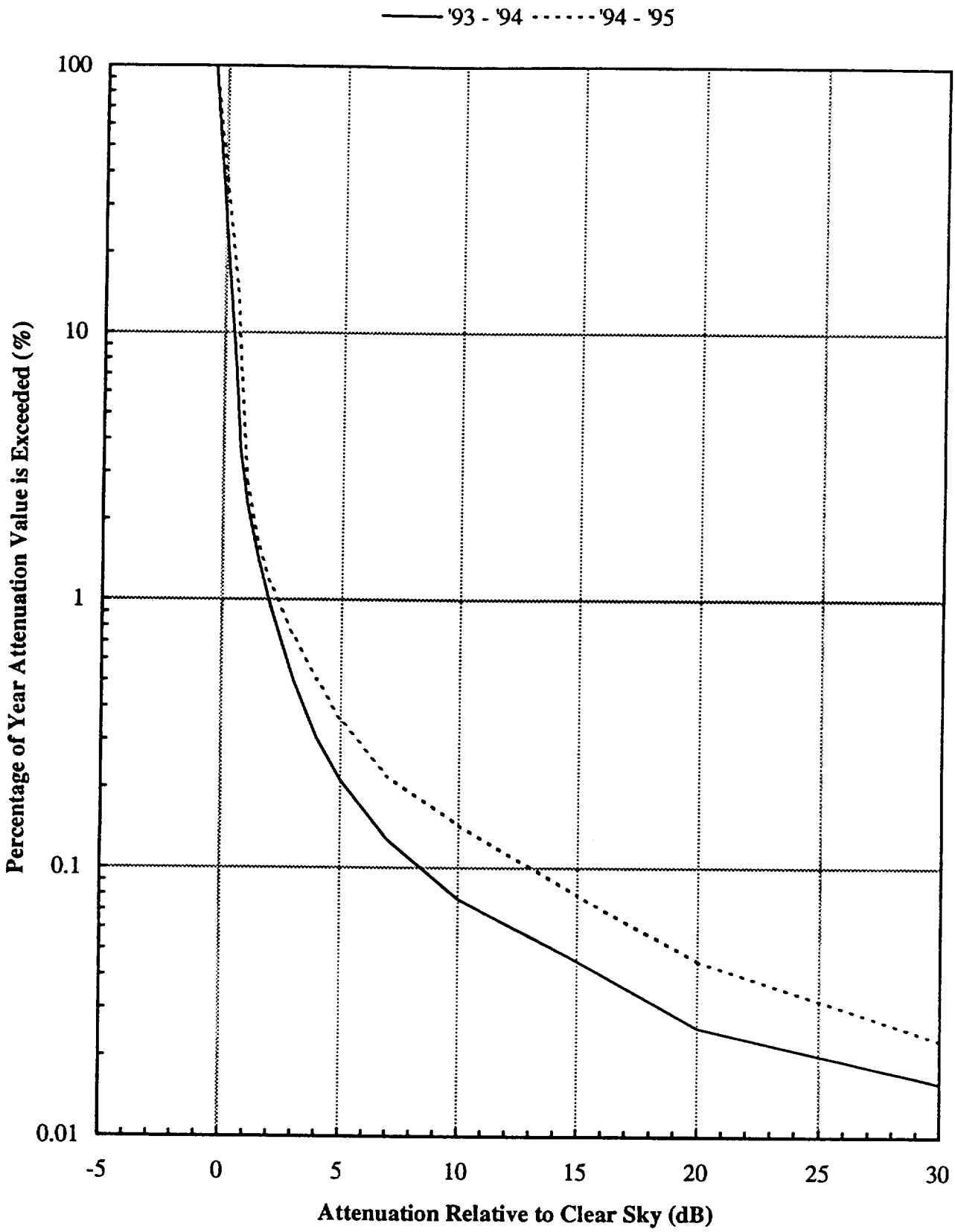
Latitude	35.21° North
Longitude	97.44° West
Altitude	422 m
Frequencies	20.2 and 27.5 Ghz
Elevation Angle	49.06°
Azimuth Angle	184.44°
Polarization	Linear, 4° from vertical
Dynamic Range for attenuation measurements	20 dB
Meteorological observations	At site on roof.
Crane Rain Climate Zone	D2
ITU-R Rain Climate Zone	E

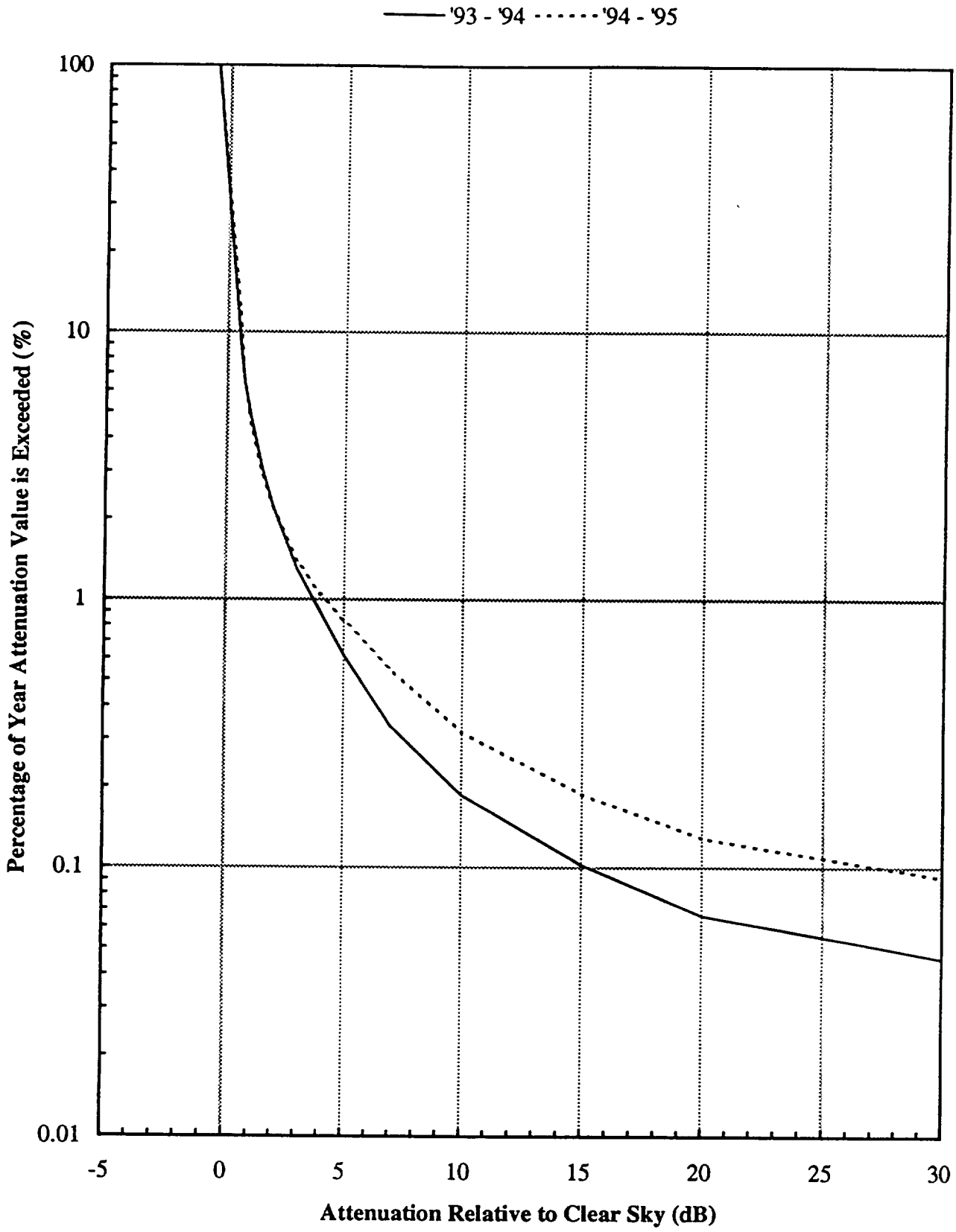
The Data

The attenuation, standard deviation, sky temperature and rain-rate distributions shown in the figures are for one-minute observation or integration intervals. The attenuation distributions in the block 1 tables are for one-second integration times. The fade duration and inter-fade interval distributions are obtained from the one-second integration time data. For the fade and inter-fade interval observations, the data were extrapolated across calibration intervals using frequency scaling and the observations at the other frequency. The frequency scaling coefficients were obtained from observations for the minute before the calibration interval.

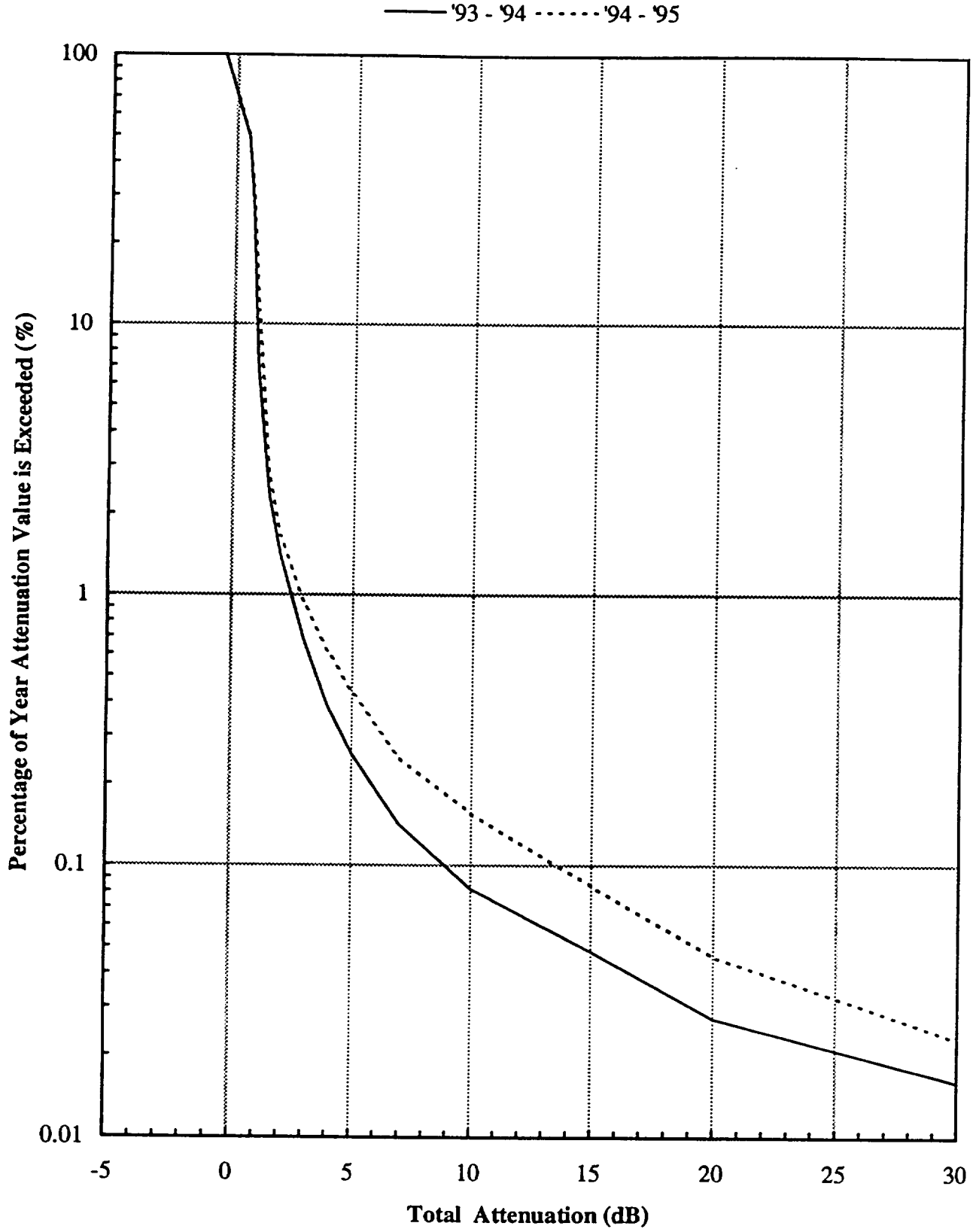
The time base for the distribution estimates was the time for simultaneous observations (including calibration intervals). Assuming random occurrences of equipment failures, the times when the equipment was not operable were excluded from the time base. The edf's therefore can be used for frequency scaling.

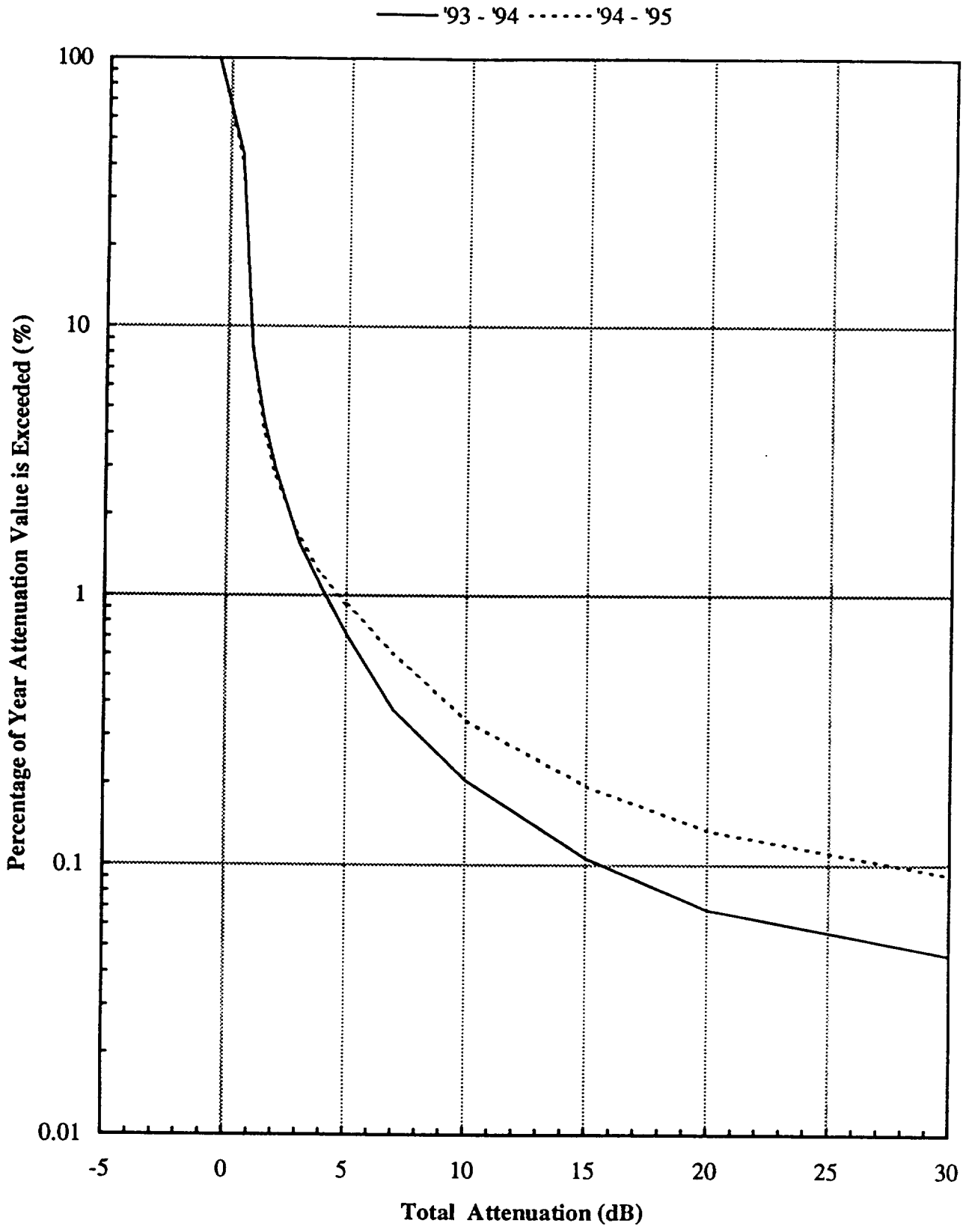
The capacitor rain gauge was used for the first year of observations. A tipping bucket rain gauge was used for the second year. The capacitor gauge was sent to the Florida site for the second year. Because the rain-rate measurements were made on the roof of a 15 story building, the rain rate data should be taken as an estimate of the times when rain actually fell on the antenna. The Oklahoma Mesonet rain-rate distributions from the two closest sites, Norman, OK and Washington, OK, should be used to estimate the rain-rate distribution for modeling purposes. The mesonet data are for a five-minute integration time. These data are identical to one-minute integration time observations for rates less than 80 mm/h. At higher rates the one-minute observations show a slight increase in rate for the same probability (less than 5%). The statistical uncertainty in the observations (compare Norman, OK and Washington, OK) is much larger.

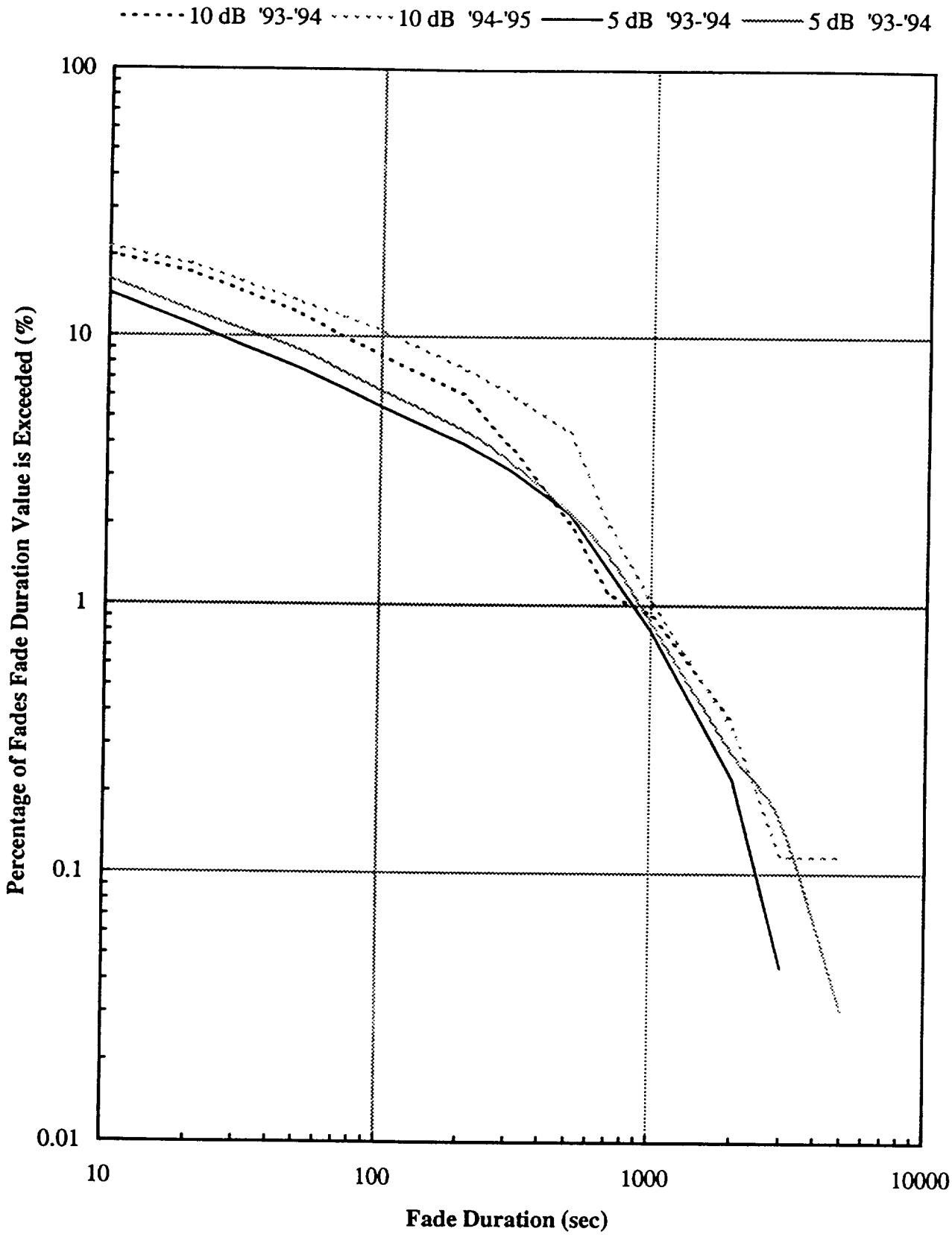

'93 - '94
'94 - '95
100
10
1
0.1
0.01
Percentage of Year Attenuation Value is Exceeded (%)
-5
0
5
10
15
20
25
30
Attenuation Relative to Clear Sky (dB)

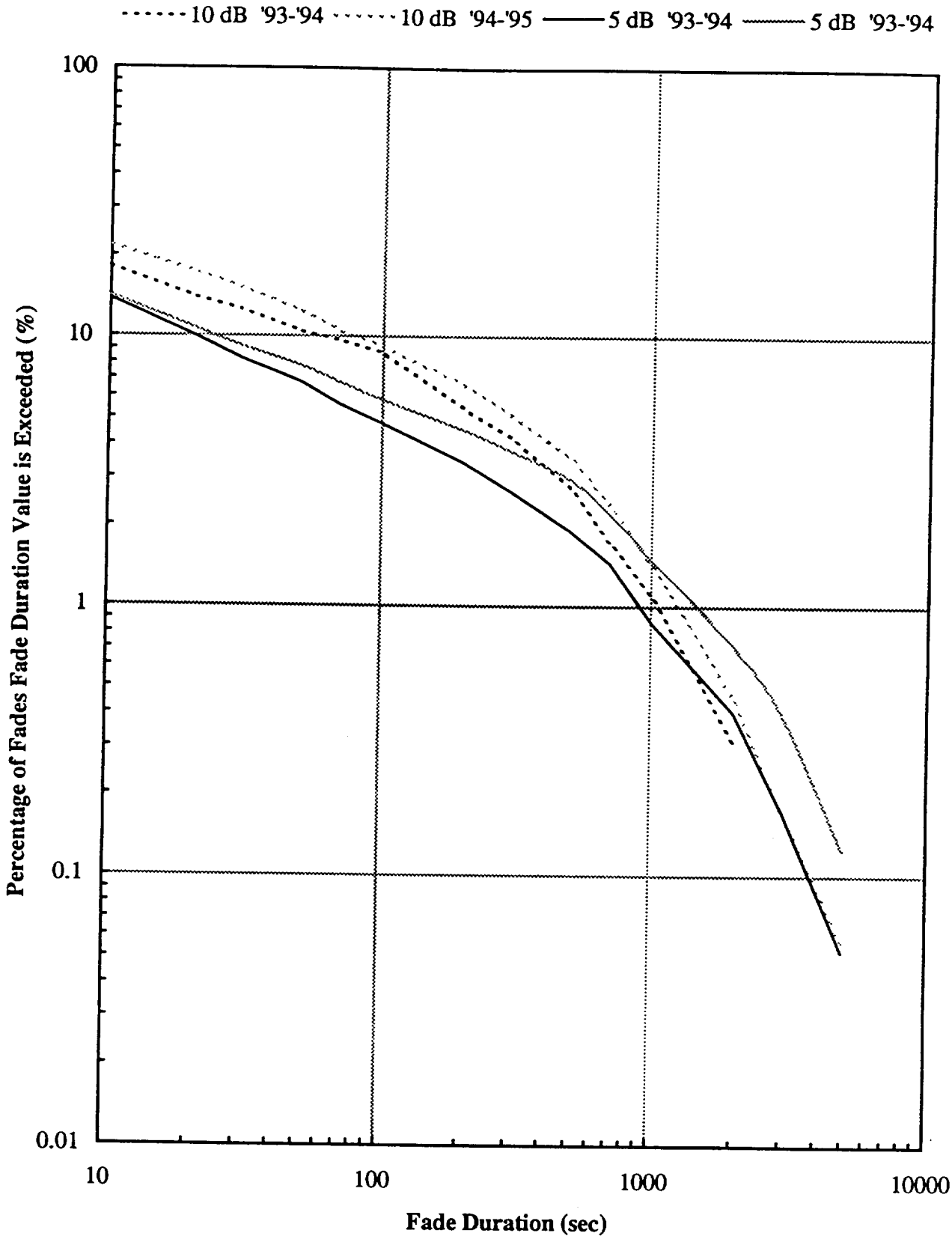

'93 - '94
'94 - '95
100
10
1
0.1
0.01
Percentage of Year Attenuation Value is Exceeded (%)
-5
0
5
10
15
20
25
30
Attenuation Relative to Clear Sky (dB)

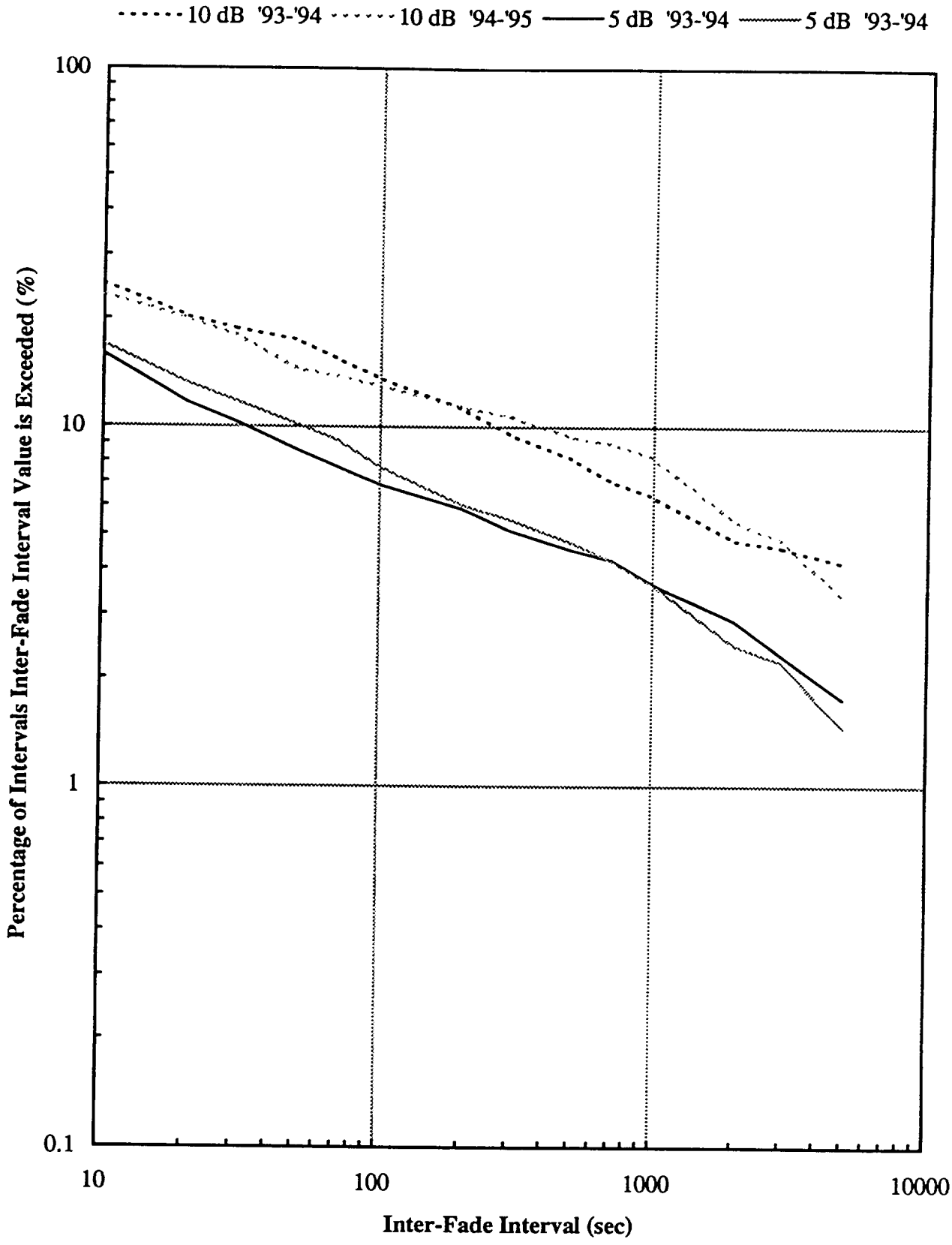
20 GHz Beacon Data **Attenuation Relative to Free Space** ACTS Propagation Experiment
Norman, OK

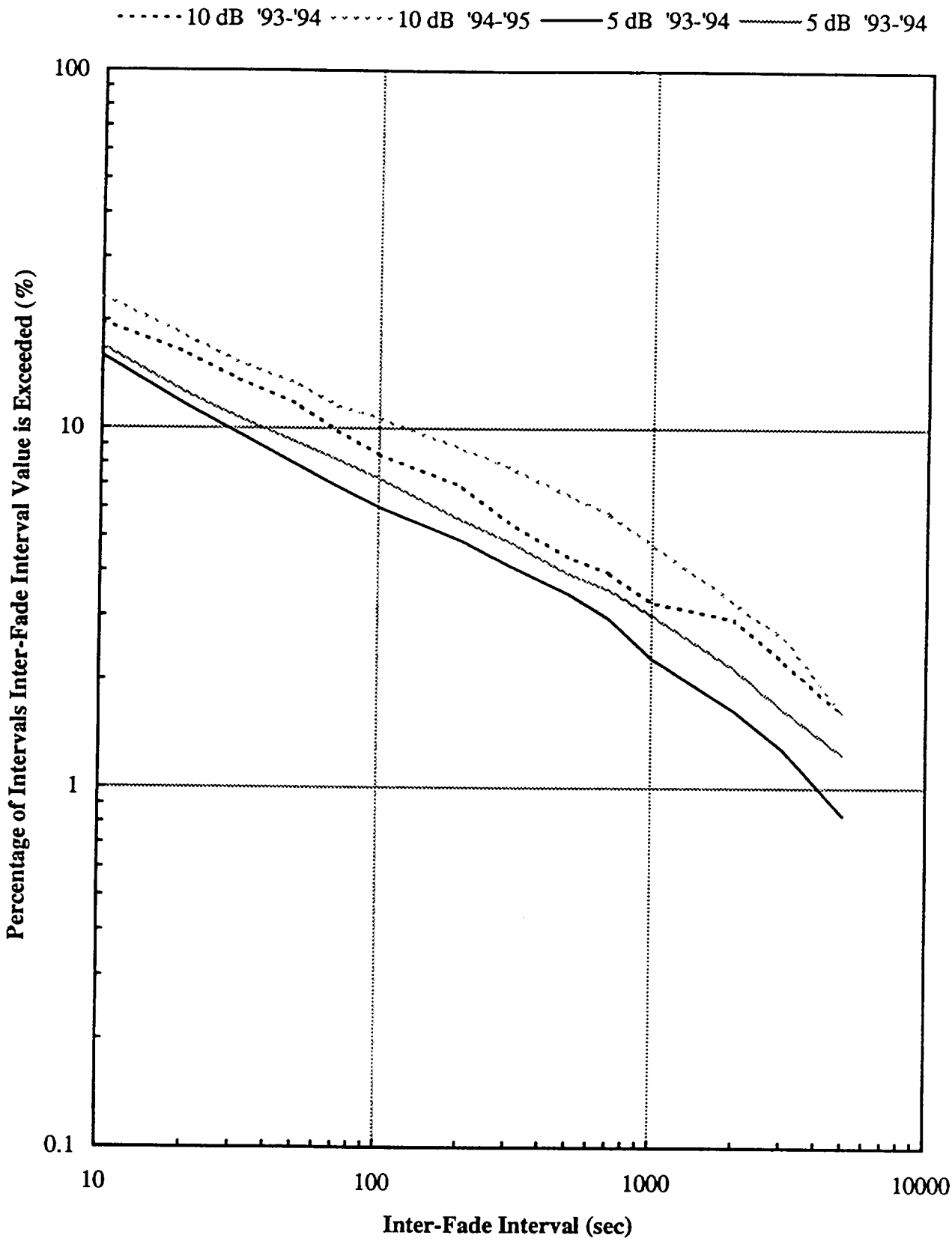



'93 - '94
'94 - '95
100
10
1
0.1
0.01
Percentage of Year Attenuation Value is Exceeded (%)
-5
0
5
10
15
20
25
30
Total Attenuation (dB)

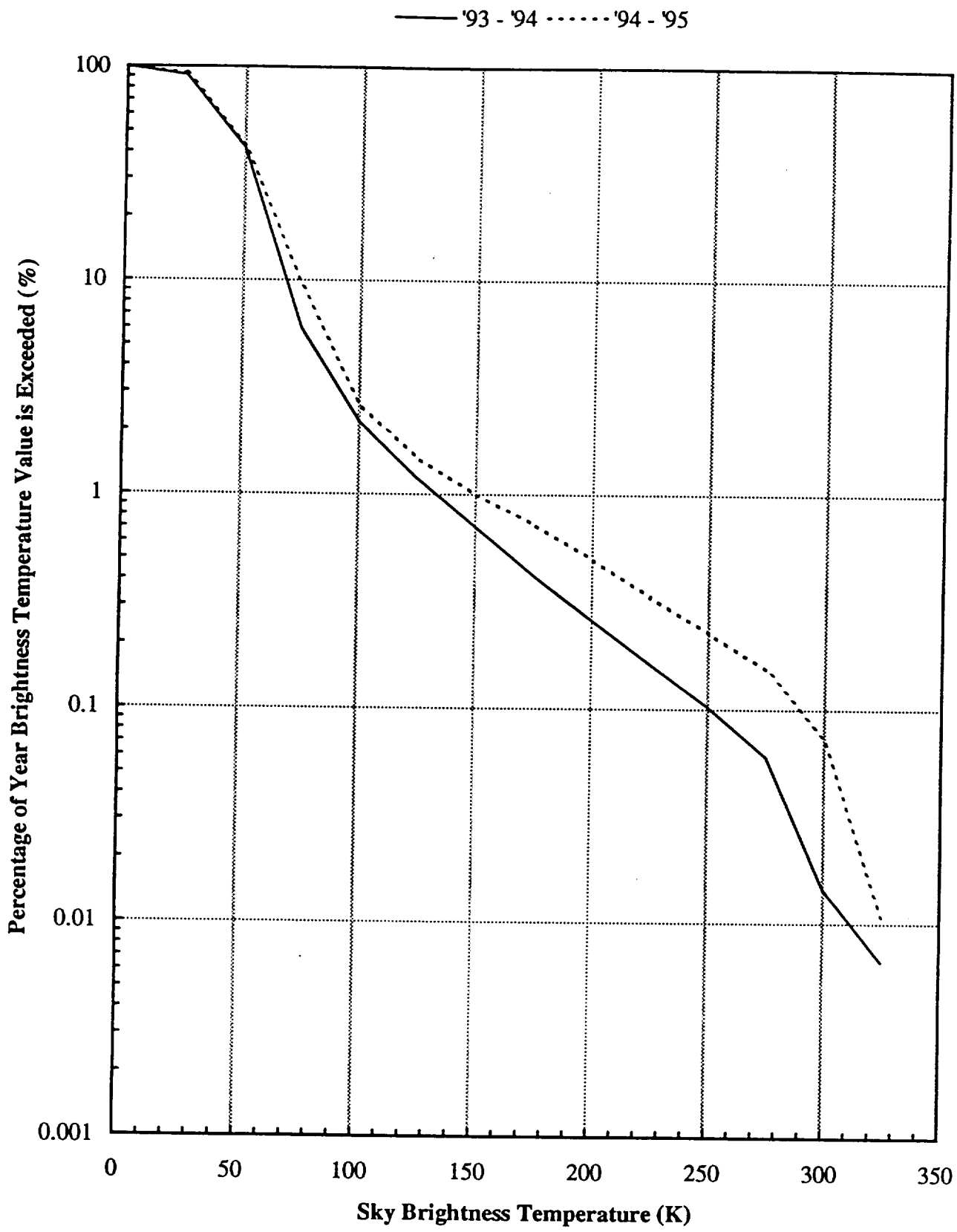

10 dB '93-'94
10 dB '94-'95
5 dB '93-'94
5 dB '93-'94
100
10
1
0.1
0.01
Percentage of Fades Fade Duration Value is Exceeded (%)
10
100
1000
10000
Fade Duration (sec)


10 dB '93-'94
10 dB '94-'95
5 dB '93-'94
5 dB '93-'94
100
10
1
0.1
0.01
10
100
1000
10000
Percentage of Fades Fade Duration Value is Exceeded (%)
Fade Duration (sec)

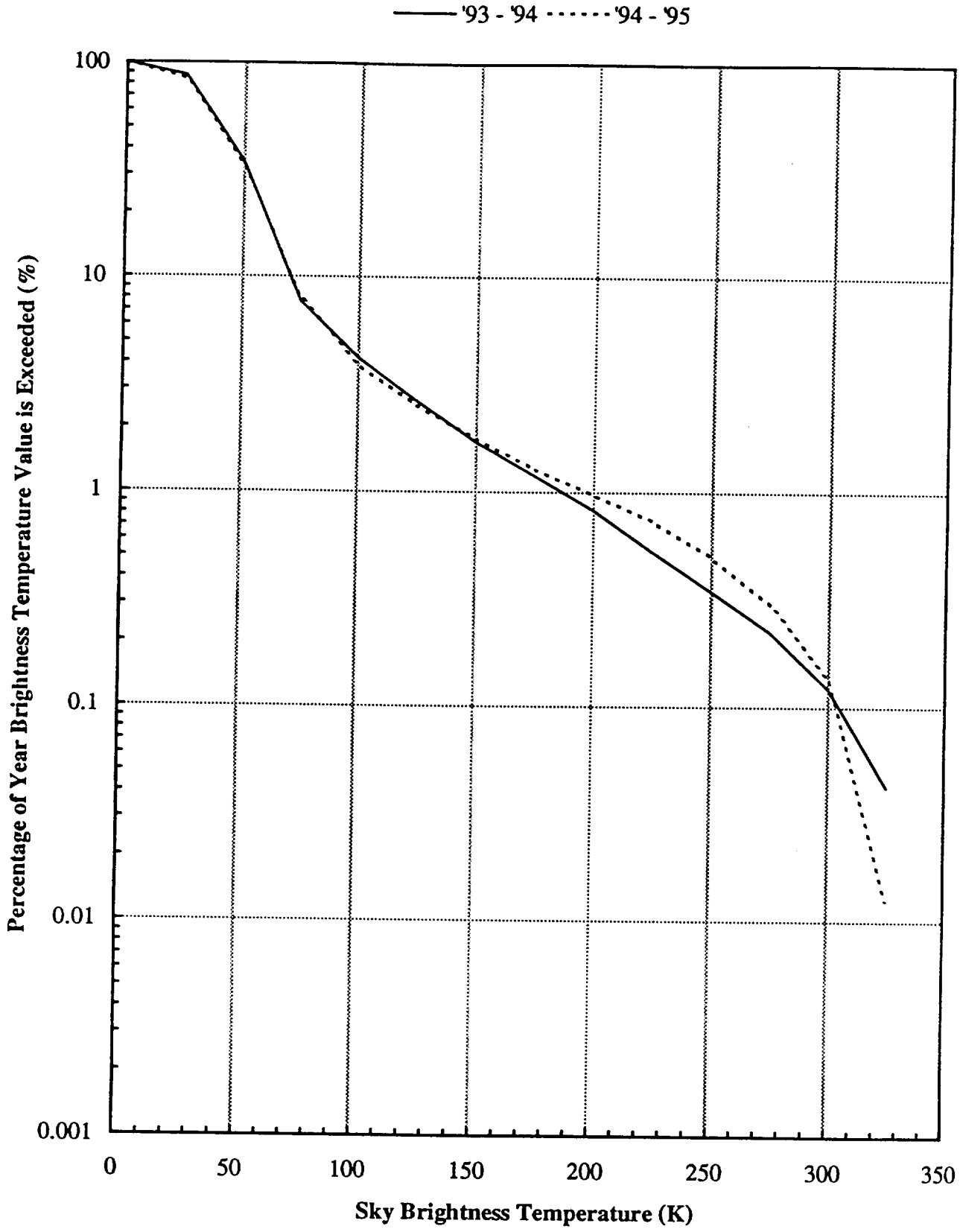

10 dB '93-'94
10 dB '94-'95
5 dB '93-'94
5 dB '93-'94
100
10
1
0.1
Percentage of Intervals Inter-Fade Interval Value is Exceeded (%)
10
100
1000
10000
Inter-Fade Interval (sec)


10 dB '93-'94
10 dB '94-'95
5 dB '93-'94
5 dB '93-'94
100
10
1
0.1
10
100
1000
10000
Percentage of Intervals Inter-Fade Interval Value is Exceeded (%)
Inter-Fade Interval (sec)

20 GHz Radiometer Data **Sky Brightness Temperature** ACTS Propagation Experiment
Norman, OK



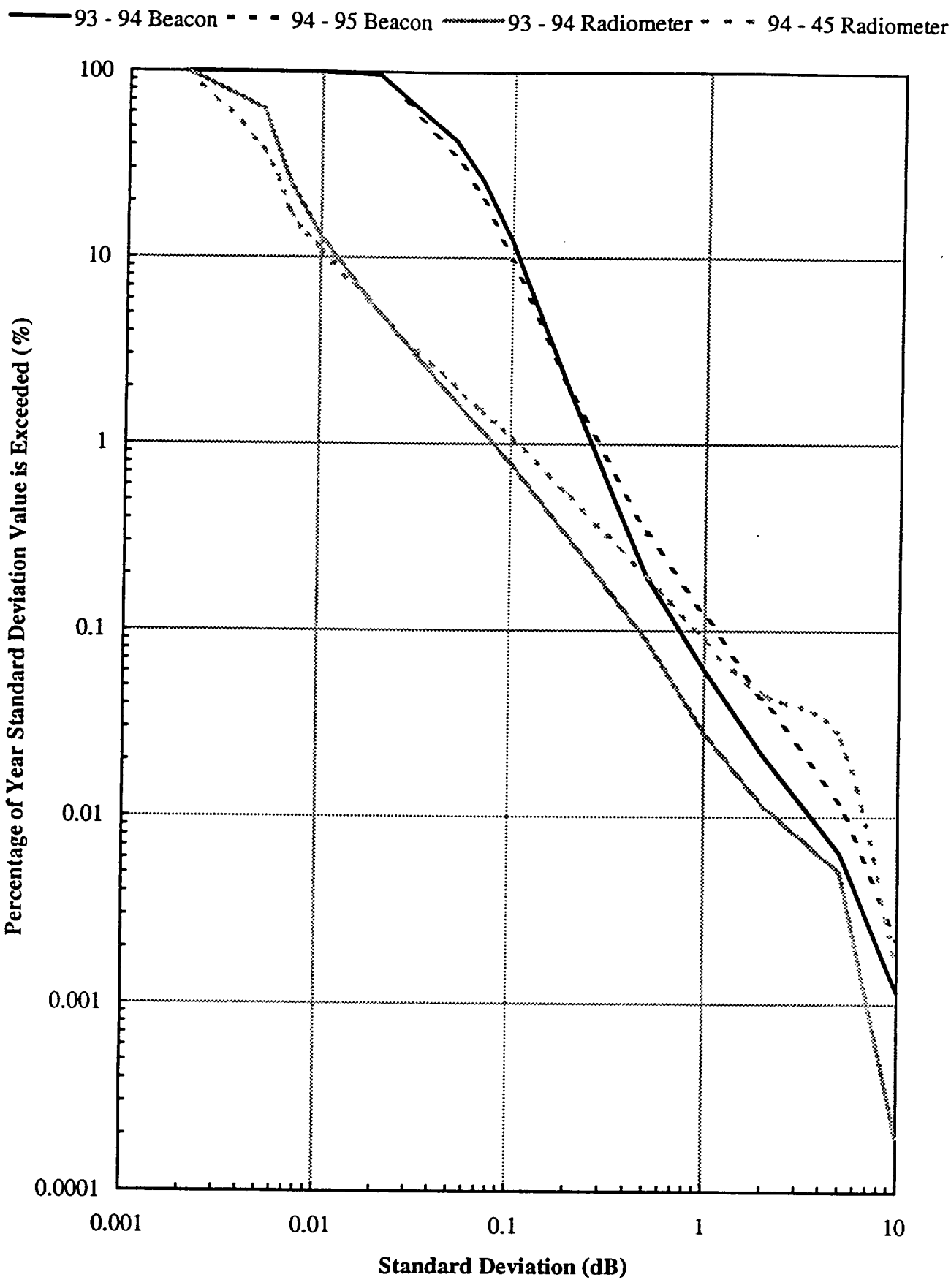
Sky Brightness Temperature



20 GHz Beacon and Radiometer Data

Standard Deviation

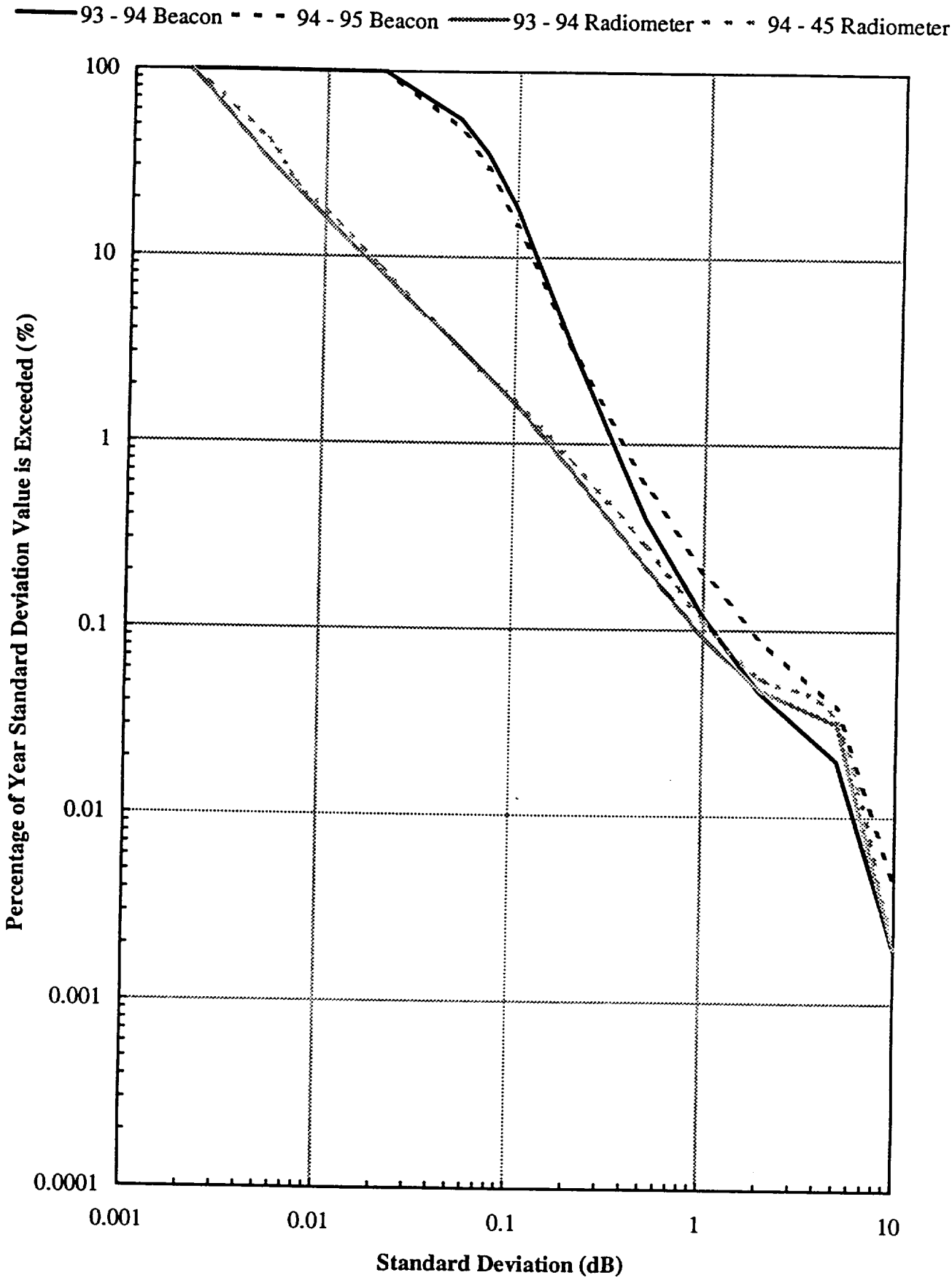
ACTS Propagation Experiment
Norman, OK



27 GHz Beacon and Radiometer Data

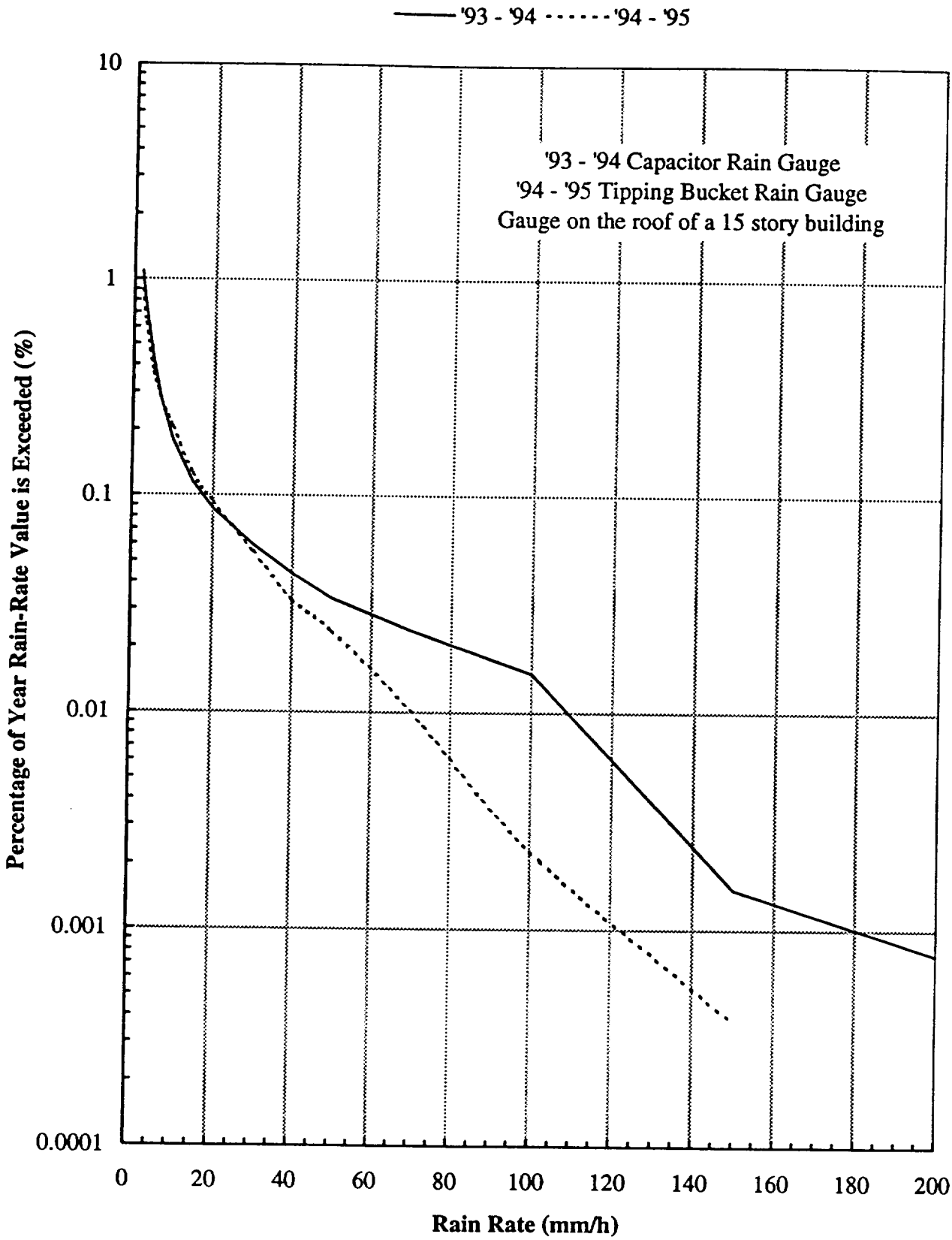
Standard Deviation

ACTS Propagation Experiment
Norman, OK



Rain Rate

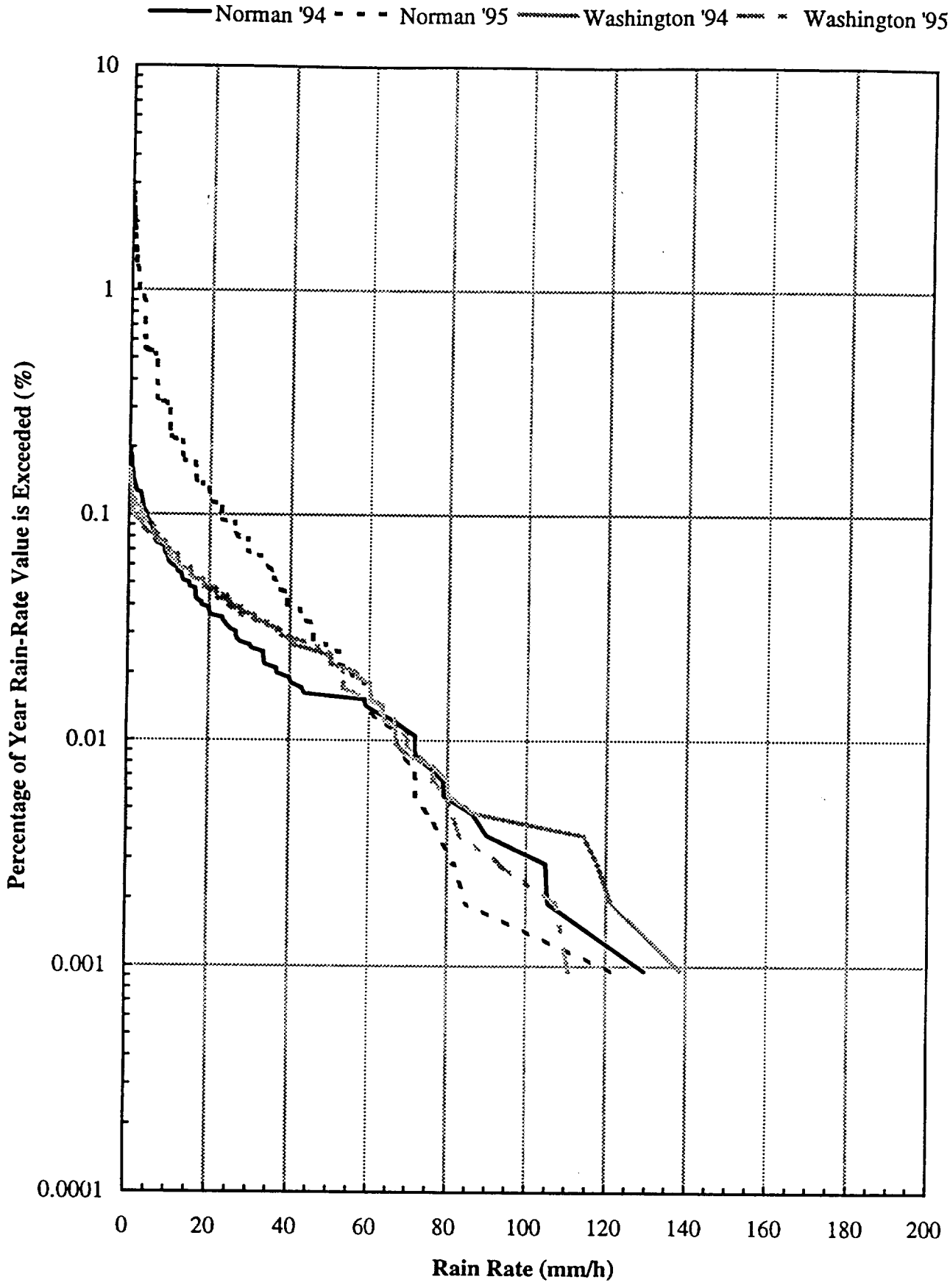
ACTS Propagation Experiment
Norman, OK



Oklahoma Mesonet
Rain Gauge Sites

Rain Rate

Norman, OK
Washington, OK



20 GHz Beacon Attenuation Distribution obtained from Seconds above threshold (% of interval)

Year	Month	-0.5	0.5	0.7	1	1.5	2	3	4	5	7	10	15	20	30 dB
93	12	99.84	12.55	8.488	4.795	2.979	1.62	0.709	0.407	0.229	0.057	0.019	0.001		
94	1	99.99	11.21	4.809	1.45	0.255	0.031	0.004							
94	2	99.38	18.57	8.942	4.699	2.184	1.319	0.55	0.228	0.153	0.09	0.042	0.019	0.014	0.011
94	3	99.99	28.04	12.85	7.595	3.262	1.868	0.82	0.335	0.065	0.017	0.013	0.007	0.005	0.003
94	4	99.95	36.41	12.3	5.356	2.582	1.81	0.837	0.354	0.204	0.107	0.042	0.009	0.007	0.002
94	5	99.98	65.31	29.98	8.333	2.72	1.261	0.595	0.325	0.236	0.17	0.131	0.084	0.044	0.015
94	6	99.99	98.2	79.08	15.81	1.183	0.652	0.338	0.19	0.151	0.117	0.081	0.065	0.058	0.044
94	7	99.99	88.45	62.36	10.68	2.676	1.903	1.295	0.986	0.752	0.421	0.274	0.163	0.104	0.069
94	8	100	71.09	34.25	4.939	1.266	0.656	0.426	0.315	0.244	0.157	0.135	0.112	0.059	0.039
94	9	99.98	54.94	37.9	10.01	2.866	1.745	1.005	0.715	0.528	0.31	0.115	0.048	0.015	0.004
94	10	99.98	51.93	27.87	8.296	2.398	0.914	0.285	0.18	0.15	0.097	0.055	0.017	0.012	0.004
94	11	99.98	39.69	24.02	9.343	4.434	3.287	1.282	0.602	0.367	0.171	0.075	0.037	0.011	1E-04
94	12	99.99	37.35	15.4	4.544	1.142	0.51	0.247	0.153	0.104	0.044	0.013	0.004	1E-04	
95	1	99.97	13.44	5.579	2.028	0.984	0.69	0.398	0.219	0.132	0.056	0.02	0.013	0.009	0.006
95	2	99.97	9.692	3.771	1.603	0.483	0.227	0.067	0.037	0.011	2E-04	5E-05			
95	3	100	51.07	22.77	9.546	3.924	1.503	0.519	0.254	0.157	0.084	0.037	0.011	0.003	0.001
95	4	99.99	24.35	12.16	6.407	2.837	1.629	0.851	0.542	0.386	0.247	0.16	0.089	0.039	0.029
95	5	99.98	75.72	48.81	17.99	6.289	4.665	3.142	2.254	1.739	1.055	0.693	0.332	0.187	0.071
95	6	99.97	88.58	56.67	18.53	7.002	4.403	2.49	1.527	1.129	0.804	0.539	0.303	0.184	0.096
95	7	99.99	95.37	68	22.47	1.822	1.232	1.035	0.734	0.446	0.209	0.146	0.1	0.064	0.038
95	8	99.99	94.2	77.46	28.76	2.611	1.251	0.572	0.355	0.25	0.161	0.11	0.056	0.035	0.011
95	9	99.99	89.93	70.64	24.91	7.133	4.039	2.064	1.449	0.998	0.481	0.259	0.177	0.115	0.054
95	10	99.99	30.94	9.305	2.169	0.716	0.464	0.207	0.127	0.101	0.087	0.067	0.047	0.025	0.002
95	11	99.03	4.537	1.866	1.261	0.728	0.429	0.213	0.13	0.056	0.027	2E-04			
Ann	93 - 94	99.93	48.48	28.87	7.635	2.395	1.418	0.679	0.388	0.258	0.144	0.083	0.048	0.028	0.016
Ann	94 - 95	99.91	50.51	32.22	11.58	2.877	1.684	0.941	0.623	0.44	0.256	0.16	0.088	0.051	0.023

20 GHz Radiometer Attenuation Distribution obtained from Seconds above threshold (% of interval)

Year	Month	-0.5	0.5	0.7	1	1.5	2	3	4	5	7	10	15	20	30 dB
93	12	99.84	12.32	8.488	4.68	3.095	1.564	0.718	0.401	0.223	0.053	0.022	0.003	0.002	0.001
94	1	99.99	11.22	4.792	1.273	0.205	0.031	0.003							
94	2	99.97	17.96	8.034	4.138	2.032	1.311	0.547	0.226	0.146	0.087	0.039	0.018	0.017	0.017
94	3	99.99	27.58	12.32	7.601	3.319	1.829	0.854	0.294	0.048	0.014	0.01	0.006	0.003	0.001
94	4	99.95	36.98	11.84	5.165	2.55	1.735	0.767	0.307	0.156	0.081	0.019	0.006	0.002	3E-04
94	5	99.98	65.14	29.28	7.657	2.684	1.22	0.571	0.295	0.211	0.144	0.12	0.06	0.032	0.013
94	6	100	99.57	85.24	10.65	1.005	0.594	0.279	0.165	0.133	0.089	0.061	0.047	0.044	0.044
94	7	99.99	90.67	64.18	7.704	2.565	1.805	1.213	0.921	0.649	0.364	0.233	0.138	0.056	0.035
94	8	100	73.75	30.77	3.37	1.152	0.595	0.413	0.265	0.179	0.141	0.121	0.07	0.042	0.042
94	9	99.98	54.59	38.2	9.499	2.858	1.671	0.925	0.634	0.435	0.18	0.052	0.004	8E-05	
94	10	99.98	52.89	28.07	8.112	2.351	0.758	0.235	0.172	0.135	0.07	0.023	5E-04	8E-05	
94	11	99.98	38.82	23.87	8.975	4.428	3.261	1.115	0.504	0.279	0.147	0.056	0.004		
94	12	99.99	36.82	15.28	4.624	1.045	0.476	0.229	0.142	0.086	0.028	0.013	0.005	0.003	0.001
95	1	99.97	13.05	5.748	1.967	0.97	0.66	0.306	0.185	0.106	0.033	0.014	0.005		
95	2	99.97	8.694	3.431	0.974	0.439	0.202	0.05	0.023	9E-05					
95	3	100	52.14	22.33	9.609	3.96	1.548	0.545	0.296	0.188	0.098	0.054	0.019	0.013	0.011
95	4	100	24.31	12.02	6.388	2.781	1.584	0.859	0.573	0.395	0.252	0.175	0.124	0.11	0.104
95	5	99.98	76.45	49.4	17.28	6.223	4.614	3.102	2.248	1.763	1.117	0.75	0.498	0.401	0.361
95	6	99.97	88.48	57.69	17.24	6.774	4.28	2.453	1.472	1.066	0.65	0.438	0.308	0.254	0.24
95	7	100	98.08	68.65	21.06	1.484	1.192	1.015	0.73	0.45	0.198	0.133	0.079	0.062	0.055
95	8	99.99	94.68	79.27	29.22	2.2	1.191	0.557	0.33	0.208	0.149	0.081	0.042	0.028	0.026
95	9	99.99	90.73	73.18	22.82	6.864	4.044	2.03	1.421	1.022	0.491	0.275	0.185	0.153	0.144
95	10	99.99	30.85	8.544	2.236	0.724	0.484	0.221	0.139	0.108	0.093	0.066	0.059	0.054	0.053
95	11	99.99	3.198	1.417	0.939	0.55	0.334	0.218	0.132	0.054	0.03	0.006			
Ann	93 - 94	99.97	48.92	29.06	6.579	2.349	1.361	0.637	0.35	0.217	0.115	0.064	0.03	0.017	0.013
Ann	94 - 95	99.99	50.72	32.58	11.13	2.742	1.651	0.923	0.618	0.437	0.252	0.16	0.105	0.085	0.079

27 GHz Beacon Attenuation Distribution obtained from Seconds above threshold (% of interval)

Year	Month	-0.5	0.5	0.7	1	1.5	2	3	4	5	7	10	15	20	30 dB
93	12	99.84	22.82	12.63	8.053	5.535	3.965	1.928	1.077	0.735	0.384	0.112	0.03	0.005	
94	1	99.99	21.85	12.68	6.512	3.322	1.25	0.065	0.015	0.006	4E-05				
94	2	99.08	16.58	10.28	5.706	3.803	2.853	1.529	0.964	0.603	0.21	0.113	0.07	0.034	0.02
94	3	99.99	20.55	11.78	8.438	5.609	3.546	1.838	1.179	0.736	0.151	0.028	0.025	0.023	0.016
94	4	99.95	36.14	15.84	7.585	4.617	3.381	2.07	1.422	0.979	0.385	0.148	0.066	0.018	0.009
94	5	99.97	41.82	20.15	9.528	5.664	3.654	1.453	0.961	0.639	0.323	0.205	0.141	0.115	0.071
94	6	99.98	76.17	38	5.856	1.686	0.927	0.584	0.43	0.315	0.175	0.13	0.089	0.072	0.065
94	7	99.99	73.17	37.76	8.616	3.944	2.772	1.923	1.558	1.32	0.997	0.624	0.335	0.229	0.155
94	8	99.99	69.04	37	8.34	2.425	1.412	0.754	0.514	0.438	0.327	0.231	0.144	0.129	0.107
94	9	99.98	54.08	34.81	12.31	5.19	3.45	1.942	1.439	1.084	0.733	0.443	0.211	0.093	0.044
94	10	99.98	54.23	31.4	14.23	6.637	3.944	1.414	0.615	0.32	0.174	0.125	0.068	0.036	0.015
94	11	99.98	32.57	21.83	11.6	6.259	4.883	3.576	2.545	1.507	0.641	0.281	0.113	0.064	0.028
94	12	99.94	27.08	14.74	8.203	3.077	1.508	0.565	0.356	0.249	0.145	0.08	0.021	0.008	0.003
95	1	99.97	13.93	8.376	5.122	2.093	1.275	0.842	0.598	0.471	0.336	0.117	0.051	0.024	0.013
95	2	99.97	12.31	4.647	2.394	1.144	0.568	0.315	0.199	0.127	0.041	0.011			
95	3	100	32.71	17.1	9.904	5.923	4.133	1.604	0.767	0.469	0.236	0.115	0.055	0.025	0.008
95	4	99.99	23.01	13.44	9.188	5.643	3.475	1.815	1.168	0.87	0.539	0.334	0.192	0.139	0.085
95	5	99.98	51.05	27.99	13.05	7.883	6.228	4.608	3.649	3.074	2.205	1.459	0.845	0.593	0.33
95	6	99.97	61.38	30.81	14.77	8.605	6.165	4.08	3.1	2.403	1.463	0.98	0.687	0.485	0.376
95	7	99.99	77.83	44.35	8.259	1.938	1.425	1.207	1.113	1.034	0.695	0.267	0.164	0.124	0.1
95	8	99.98	84.87	54.55	12.54	2.946	1.742	1.088	0.742	0.558	0.346	0.186	0.14	0.092	0.068
95	9	99.99	79.54	51.75	19.73	8.986	6.059	3.625	2.57	2.025	1.387	0.749	0.331	0.221	0.183
95	10	99.99	19.69	6.496	2.825	1.267	0.738	0.438	0.267	0.202	0.122	0.096	0.071	0.058	0.049
95	11	98.31	9.142	4.39	2.617	1.518	1.032	0.565	0.326	0.244	0.162	0.04	0.015		
Ann	93 - 94	99.9	43.55	23.82	8.901	4.549	2.991	1.583	1.057	0.723	0.377	0.205	0.109	0.069	0.045
Ann	94 - 95	99.84	40.68	23.17	8.956	4.157	2.787	1.667	1.185	0.936	0.616	0.353	0.201	0.138	0.093

27 GHz Radiometer Attenuation Distribution obtained from Seconds above threshold (% of interval)

Year	Month	-0.5	0.5	0.7	1	1.5	2	3	4	5	7	10	15	20	30 dB
93	12	99.86	20.76	12.52	7.932	5.454	3.873	2.036	1.226	0.884	0.562	0.307	0.15	0.095	0.086
94	1	99.99	21.61	12.44	6.241	3.343	1.362	0.085	0.024	0.012	1E-04				
94	2	99.97	14.81	9.604	5.501	3.505	2.653	1.535	0.977	0.655	0.254	0.139	0.098	0.091	0.089
94	3	99.99	17.27	11.04	8.447	5.547	3.513	1.886	1.153	0.768	0.241	0.02	0.011	0.01	0.01
94	4	99.95	36.13	14.72	7.357	4.403	3.402	1.994	1.431	1.02	0.47	0.19	0.092	0.072	0.069
94	5	99.98	41.57	19.28	9.252	5.423	3.444	1.381	0.967	0.654	0.341	0.204	0.146	0.133	0.13
94	6	100	80.23	35.03	4.099	1.515	0.873	0.566	0.37	0.285	0.162	0.106	0.083	0.077	0.075
94	7	99.99	73.82	35.61	7.157	3.847	2.697	1.925	1.537	1.294	1.046	0.758	0.504	0.445	0.429
94	8	100	71.13	33.66	6.238	2.365	1.442	0.733	0.521	0.443	0.366	0.242	0.158	0.152	0.15
94	9	99.98	50.96	33.49	11.03	5.072	3.326	1.948	1.423	1.139	0.768	0.546	0.338	0.283	0.266
94	10	99.98	56.43	30.39	13.62	6.795	3.878	1.307	0.549	0.284	0.169	0.125	0.088	0.071	0.065
94	11	99.98	32.86	20.57	11.15	6.317	4.767	3.7	2.723	1.726	0.757	0.39	0.24	0.207	0.199
94	12	99.99	23.29	13.81	8.281	3.065	1.441	0.57	0.371	0.262	0.179	0.108	0.062	0.05	0.046
95	1	99.97	13.26	8.34	5.172	2.009	1.242	0.822	0.577	0.45	0.264	0.175	0.091	0.065	0.055
95	2	99.97	9.384	4.2	2.477	0.781	0.548	0.36	0.183	0.09	0.039	0.007			
95	3	100	30.18	15.85	9.617	5.944	4.044	1.561	0.679	0.444	0.226	0.117	0.051	0.037	0.032
95	4	100	21.75	13.25	9.14	5.618	3.477	1.724	1.149	0.823	0.548	0.318	0.211	0.176	0.167
95	5	99.98	50.53	26.93	12.74	7.67	6.127	4.478	3.551	2.99	2.105	1.471	0.92	0.797	0.758
95	6	99.97	62.02	29.07	13.85	8.66	6.05	3.902	2.927	2.222	1.255	0.723	0.466	0.42	0.405
95	7	100	81.55	44.7	6.432	1.806	1.353	1.166	1.07	0.984	0.64	0.252	0.139	0.118	0.11
95	8	99.99	89.11	55.57	10.23	2.739	1.724	1.037	0.678	0.492	0.278	0.14	0.066	0.051	0.043
95	9	99.99	83.1	50.64	18.37	8.665	5.919	3.555	2.459	1.9	1.301	0.714	0.332	0.281	0.261
95	10	99.99	17.36	6.066	2.694	1.121	0.722	0.442	0.251	0.191	0.112	0.09	0.078	0.072	0.07
95	11	99.96	7.53	3.269	1.809	1.108	0.8	0.468	0.307	0.236	0.151	0.04	0.023	0.012	0.009
Ann	93 - 94	99.97	43.45	22.49	8.164	4.458	2.925	1.585	1.072	0.762	0.429	0.254	0.16	0.137	0.132
Ann	94 - 95	99.98	40.37	22.63	8.311	3.999	2.713	1.615	1.134	0.886	0.573	0.337	0.196	0.167	0.156

Capacitor Rain Rate Distribution obtained from Number of Minutes Rain Rate Above Threshold (% of interval)

Year	Month	2	3	5	7	10	15	20	30	40	50	70	100	150	200	300 mm/h
93	12	1.426	0.906	0.417	0.23	0.105	0.056	0.04	0.028	0.023	0.023	0.012	0.005	0.002		
94	1	0.103	0.043	0.007												
94	2	1.015	0.777	0.459	0.256	0.109	0.052	0.04	0.022	0.01	0.007					
94	3	1.636	1.118	0.58	0.325	0.159	0.045	0.02	0.009	0.009	0.009	0.007	0.002			
94	4	2.063	1.485	0.847	0.48	0.26	0.116	0.046	0.012							
94	5	0.775	0.489	0.253	0.19	0.155	0.123	0.117	0.099	0.074	0.045	0.016	0.002			
94	6	0.292	0.218	0.141	0.097	0.069	0.049	0.042	0.032	0.028	0.023	0.019	0.012			
94	7	1.047	0.811	0.524	0.424	0.368	0.3	0.242	0.177	0.11	0.061	0.038	0.009	0.009	0.009	
94	8	0.819	0.59	0.394	0.326	0.267	0.233	0.213	0.186	0.176	0.163	0.133	0.1	0.007		
94	9	1.036	0.749	0.492	0.376	0.271	0.144	0.086	0.028	0.009	0.007	0.005				
94	10	0.661	0.423	0.227	0.165	0.126	0.094	0.085	0.069	0.06	0.055	0.053	0.048			
94	11	2.246	1.597	0.773	0.453	0.261	0.159	0.103	0.044	0.019	0.005	0.002	0.002			
94	12	0.677	0.46	0.229	0.126	0.061	0.031	0.022	0.016	0.009	0.009	0.004				
95	1	1.556	0.772	0.222	0.092	0.047	0.022	0.013	0.004	0.002	0.002					
95	2	0.129	0.02													
95	3															
95	4															
95	5															
95	6															
95	7															
95	8															
95	9															
95	10															
95	11															
Ann	93 - 94	1.089	0.764	0.425	0.276	0.18	0.115	0.087	0.059	0.044	0.034	0.024	0.015	0.002	8E-04	
Ann	94 - 95	0.889	0.622	0.366	0.276	0.205	0.125	0.093	0.055	0.033	0.024	0.01	0.002	4E-04		

Tippng Bucket Rain Rate Distribution obtained from Number of Minutes Rain Rate Above Threshold (%)

Year	Month	0.5	1	2	3	5	7	10	15	20	30	40	50	70	100	150 mm/h
93	12															
94	1															
94	2															
94	3															
94	4															
94	5															
94	6															
94	7															
94	8															
94	9															
94	10															
94	11															
94	12															
95	1															
95	2															
95	3	3.779	2.576	1.353	0.594	0.148	0.121	0.074	0.025	0.016	0.009	0.007	0.004	0.002		
95	4	2.607	1.828	1.209	0.908	0.579	0.401	0.313	0.174	0.118	0.065	0.046	0.039	0.019	0.009	0.005
95	5	4.166	3.42	2.679	2.215	1.539	1.212	0.919	0.536	0.412	0.223	0.142	0.101	0.027	0.007	
95	6	2.497	1.809	1.049	0.818	0.581	0.505	0.41	0.276	0.208	0.118	0.06	0.046	0.035	0.009	
95	7	0.775	0.677	0.455	0.408	0.184	0.103	0.072	0.049	0.038	0.031	0.022	0.02	0.007		
95	8	0.365	0.269	0.217	0.188	0.126	0.112	0.085	0.058	0.043	0.029	0.013	0.007			
95	9	1.276	1.077	0.993	0.84	0.627	0.509	0.37	0.255	0.183	0.123	0.072	0.039	0.023	0.002	
95	10	0.213	0.213	0.157	0.128	0.108	0.101	0.09	0.058	0.052	0.036	0.02	0.013	0.004		
95	11	0.228	0.118	0.094	0.043	0.019	0.012	0.007	0.002							

		#	20 GHz - 3 dB Fade Duration Distribution (% of total number of fades)													
Year	Month	Fades	10	20	30	50	70	100	200	300	500	700	1000	2000	3000	5000 sec
93	12	342	17.49	11.95	9.913	6.414	4.956	4.665	2.624	2.332	2.041	1.749	1.458	0.583	0.292	
94	1	97	8.163	3.061	3.061	2.041	1.02	1.02								
94	2	476	13.42	9.224	7.966	5.87	5.031	4.193	2.935	2.516	1.887	1.048	0.839	0.419	0.21	
94	3	815	10.91	7.598	6.25	5.147	4.657	4.167	2.696	1.838	1.348	0.858	0.613	0.368	0.368	
94	4	931	12.12	8.798	6.974	4.721	3.863	3.541	2.146	1.717	1.18	1.073	0.215	0.107		
94	5	701	9.687	5.556	4.843	3.561	2.991	2.279	1.709	1.709	1.425	0.712	0.427	0.285	0.142	
94	6	571	8.392	5.07	4.021	2.622	2.448	2.448	1.399	1.224	0.699	0.35	0.175	0.175		
94	7	789	9.873	6.709	5.316	4.684	4.304	3.924	2.785	2.405	1.899	1.519	0.886	0.633	0.38	0.253
94	8	389	10	6.154	3.846	2.821	2.564	2.564	2.051	1.538	1.026	0.769	0.513	0.513	0.256	
94	9	805	9.926	6.079	4.963	4.094	3.598	2.978	2.233	1.861	1.489	1.117	0.744	0.372	0.248	
94	10	453	9.251	5.947	4.405	3.304	2.643	1.542	1.322	1.101	0.881	0.881	0.661			
94	11	1485	11.71	8.345	6.797	5.316	4.374	3.297	2.019	1.413	1.009	0.74	0.538	0.135		
94	12	398	9.023	6.266	5.514	4.511	3.759	3.509	2.256	1.253	0.752	0.752				
95	1	297	8.054	6.376	5.369	3.356	3.02	2.685	2.349	2.013	2.013	1.342	1.342	0.671	0.671	0.336
95	2	205	7.767	4.854	2.913	0.971	0.971	0.971	0.971	0.971	0.485	0.485				
95	3	416	15.83	11.75	9.592	7.674	6.954	5.995	4.796	4.077	2.638	1.199	0.24			
95	4	725	10.47	7.713	7.025	5.372	4.408	3.719	3.03	2.617	2.066	1.102	0.551	0.138		
95	5	1721	11.5	8.014	6.736	5.11	4.297	3.775	2.962	2.555	1.916	1.452	1.161	0.639	0.407	0.116
95	6	1695	9.316	6.663	5.66	4.481	3.833	3.243	2.3	1.887	1.179	0.767	0.472	0.118	0.118	
95	7	430	10.21	7.193	5.8	4.176	3.944	3.712	3.48	3.248	3.016	2.088	2.088	0.696	0.464	0.232
95	8	638	8.607	6.886	5.164	4.069	3.599	2.817	2.347	1.721	1.721	0.939	0.626	0.313		
95	9	1230	10.24	7.311	5.849	4.712	4.305	3.656	2.843	2.437	1.95	1.787	1.462	0.569	0.244	0.081
95	10	199	6.5	6	5.5	4.5	3	3	2	1.5	1	1	0.5	0.5		
95	11	100	9.901	6.931	5.941	4.95	4.95	4.95	4.95	4.95	2.97	1.98	1.98	0.99		
Ann	93 - 94	7854	10.99	7.346	5.933	4.494	3.832	3.246	2.151	1.731	1.299	0.942	0.586	0.293	0.153	0.025
Ann	94 - 95	8054	10.2	7.374	6.133	4.73	4.097	3.551	2.781	2.334	1.763	1.241	0.881	0.372	0.199	0.062

		#	20 GHz - 5 dB Fade Duration Distribution (% of total number of fades)													
Year	Month	Fades	10	20	30	50	70	100	200	300	500	700	1000	2000	3000	5000 sec
93	12	143	20.14	15.28	13.19	9.722	8.333	6.25	4.861	3.472	2.083	0.694	0.694			
94	1	30	6.452	3.226												
94	2	122	12.2	9.756	8.943	8.13	6.504	5.691	4.065	3.252	0.813	0.813	0.813			
94	3	141	11.27	9.155	7.042	5.634	4.93	4.225	1.408	0.704						
94	4	185	18.82	12.9	11.29	8.602	6.989	4.839	3.763	2.688	2.688	0.538				
94	5	110	17.12	12.61	9.91	8.108	8.108	7.207	4.505	4.505	3.604	0.901	0.901	0.901	0.901	
94	6	106	10.28	9.346	5.607	4.673	3.738	3.738	3.738	2.804	0.935	0.935	0.935	0.935		
94	7	462	14.25	10.8	8.855	8.207	6.911	5.616	4.32	3.888	2.808	2.16	1.08	0.432		
94	8	182	9.836	8.743	8.197	6.011	5.464	4.918	3.279	1.639	1.093	1.093	1.093	0.546		
94	9	384	15.32	10.39	9.351	7.792	6.494	5.455	3.636	3.117	2.597	1.818	1.039			
94	10	97	15.31	12.24	8.163	7.143	6.122	6.122	6.122	5.102	3.061	2.041				
94	11	266	13.86	11.61	10.49	7.865	7.116	6.367	4.869	3.745	2.622	1.498	1.124			
94	12	101	21.57	16.67	14.71	12.75	8.824	5.882	3.922	2.941	0.98					
95	1	147	14.19	10.14	8.784	8.108	6.757	5.405	4.73	4.054	1.351	1.351	0.676	0.676	0.676	0.676
95	2	113	7.895	5.263	3.509	0.877	0.877	0.877								
95	3	96	30.93	24.74	21.65	18.56	13.4	12.37	10.31	4.124						
95	4	191	17.19	14.06	13.02	10.42	8.854	7.813	6.25	5.208	2.604	2.604	1.563			
95	5	738	20.03	15.43	13.67	11.91	10.01	8.119	5.413	4.601	3.518	2.436	1.759	0.406	0.271	
95	6	411	13.83	10.68	9.709	8.01	7.282	6.068	4.369	2.913	2.427	0.971	0.728	0.485	0.243	
95	7	480	14.35	10.19	7.692	6.029	4.574	3.95	3.326	1.663	0.832	0.624	0.416			
95	8	220	13.57	8.597	7.24	6.335	5.882	4.977	4.072	4.072	2.715	1.81	0.452			
95	9	615	15.26	12.01	10.23	8.442	7.63	6.656	4.383	3.571	2.435	1.786	0.649	0.325	0.162	
95	10	28	10.34	10.34	10.34	10.34	10.34	10.34	3.448	3.448	3.448	3.448	3.448	3.448		
95	11	83	9.524	8.333	5.952	3.571	2.381	2.381	1.19	1.19	1.19	1.19				
Ann	93 - 94	2228	14.45	10.99	9.242	7.582	6.505	5.473	3.993	3.185	2.198	1.346	0.808	0.224	0.045	
Ann	94 - 95	3223	16.25	12.38	10.64	8.871	7.475	6.297	4.498	3.412	2.202	1.52	0.868	0.279	0.155	0.031

		#	20 GHz - 7 dB Fade Duration Distribution (% of total number of fades)													
Year	Month	Fades	10	20	30	50	70	100	200	300	500	700	1000	2000	3000	5000 sec
93	12	30	32.26	22.58	16.13	16.13	16.13	12.9	9.677	3.226						
94	1	27	3.571													
94	2	53	12.96	11.11	11.11	11.11	11.11	11.11	5.556	5.556	3.704	1.852				
94	3	34	5.714	5.714	5.714	5.714	5.714	5.714	2.857	2.857						
94	4	74	24	16	14.67	14.67	13.33	9.333	6.667	5.333	1.333					
94	5	73	22.97	17.57	14.86	12.16	9.459	5.405	4.054	2.703	2.703	1.351	1.351	1.351		
94	6	69	14.29	11.43	10	8.571	5.714	4.286	2.857	2.857	1.429	1.429	1.429	1.429		
94	7	249	17.2	14.4	12	9.2	8.8	7.6	6.4	4.8	3.2	1.6	0.4	0.4		
94	8	46	12.77	12.77	12.77	10.64	8.511	6.383	4.255	4.255	4.255	4.255	4.255	2.128		
94	9	172	18.5	16.18	13.87	10.98	8.671	8.092	6.358	6.358	2.89	1.734	0.578			
94	10	55	12.5	10.71	10.71	10.71	10.71	10.71	8.929	5.357	3.571					
94	11	125	19.05	12.7	11.9	10.32	8.73	8.73	6.349	3.968	2.381	0.794				
94	12	77	15.38	12.82	10.26	6.41	2.564	2.564	1.282	1.282						
95	1	171	14.53	6.977	6.395	4.07	4.07	4.07	2.326	1.744	0.581	0.581	0.581	0.581	0.581	0.581
95	2	71														
95	3	41	40.48	38.1	38.1	30.95	26.19	21.43	7.143	2.381						
95	4	147	16.22	14.86	12.84	10.81	10.14	6.757	6.757	5.405	3.378	2.027				
95	5	398	21.05	17.04	14.04	11.03	9.273	8.521	5.764	5.013	4.261	3.509	2.506	0.501	0.251	
95	6	262	17.49	14.83	12.17	9.506	8.745	7.605	4.943	3.802	1.901	1.141	0.76	0.76	0.38	
95	7	101	14.71	10.78	10.78	9.804	9.804	8.824	4.902	4.902	2.941	1.961	1.961			
95	8	51	25	19.23	19.23	17.31	17.31	17.31	17.31	13.46	3.846	1.923				
95	9	354	15.77	12.68	10.14	8.732	7.042	6.197	4.507	3.099	2.254	0.563	0.282	0.282		
95	10	26	14.81	14.81	14.81	11.11	7.407	7.407	3.704	3.704	3.704	3.704	3.704			
95	11	48	10.2	10.2	10.2	6.122	4.082	4.082	4.082							
Ann	93 - 94	1007	17.56	13.89	12.2	10.42	9.127	7.837	5.853	4.563	2.579	1.29	0.595	0.397		
Ann	94 - 95	1747	17.22	13.84	11.9	9.497	8.181	7.208	4.977	3.833	2.403	1.545	0.973	0.343	0.172	0.057

		#	20 GHz - 10 dB Fade Duration Distribution (% of total number of fades)													
Year	Month	Fades	10	20	30	50	70	100	200	300	500	700	1000	2000	3000	5000 sec
93	12	16	41.18	29.41	17.65	11.76	11.76	11.76								
94	1	55	5.357	3.571	3.571	1.786	1.786	1.786	1.786							
94	2	53	12.96	7.407	7.407	7.407	7.407	3.704	1.852	1.852	1.852					
94	3	30	6.452	6.452	6.452	6.452	6.452	6.452	3.226							
94	4	43	29.55	25	15.91	11.36	9.091	6.818	4.545							
94	5	50	17.65	15.69	13.73	7.843	5.882	5.882	3.922	3.922	1.961	1.961	1.961	1.961		
94	6	6	28.57	28.57	28.57	28.57	28.57	28.57	28.57	14.29	14.29	14.29	14.29			
94	7	106	26.17	21.5	20.56	16.82	14.02	11.21	10.28	8.411	3.738	0.935	0.935	0.935		
94	8	20	9.524	9.524	9.524	9.524	9.524	9.524	9.524	9.524	9.524	9.524	9.524			
94	9	85	22.09	19.77	17.44	15.12	11.63	8.14	4.651	2.326	1.163	1.163				
94	10	36	16.22	16.22	13.51	13.51	13.51	13.51	8.108	5.405						
94	11	40	26.83	26.83	21.95	19.51	12.2	12.2	9.756	4.878	2.439					
94	12	16	17.65	17.65	17.65	5.882	5.882	5.882	5.882							
95	1	76	9.091	6.494	2.597	2.597	2.597	2.597	2.597	2.597	1.299	1.299	1.299	1.299	1.299	1.299
95	2	50														
95	3	36	32.43	27.03	24.32	18.92	10.81	8.108	5.405							
95	4	70	15.49	14.08	14.08	14.08	14.08	14.08	9.859	7.042	5.634	1.408				
95	5	232	24.89	22.75	20.17	18.03	15.88	14.59	10.73	10.3	7.725	3.863	1.288			
95	6	157	25.95	19.62	17.09	12.03	10.13	8.861	6.329	4.43	3.165	1.266	1.266	0.633		
95	7	37	28.95	26.32	23.68	18.42	18.42	15.79	13.16	13.16	5.263	5.263	2.632			
95	8	53	29.63	29.63	24.07	18.52	16.67	11.11	9.259	5.556	3.704					
95	9	94	24.21	20	17.89	16.84	16.84	14.74	8.421	6.316	5.263	1.053	1.053	1.053		
95	10	27	14.29	7.143	7.143	7.143	7.143	3.571	3.571	3.571	3.571	3.571	3.571			
95	11	14														
Ann	93 - 94	540	20.15	17.19	14.79	12.2	10.17	8.503	6.1	3.882	2.033	1.109	0.924	0.37		
Ann	94 - 95	862	21.55	18.42	16.11	13.44	12.05	10.54	7.648	6.141	4.403	1.97	1.043	0.348	0.116	0.116

		#	27 GHz - 3 dB Fade Duration Distribution (% of total number of fades)													
Year	Month	Fades	10	20	30	50	70	100	200	300	500	700	1000	2000	3000	5000 sec
93	12	1229	8.699	5.122	4.715	3.089	2.52	2.195	1.626	1.22	1.138	0.894	0.65	0.407	0.325	0.163
94	1	381	4.45	3.141	3.141	2.094	1.571	1.047	1.047	0.262						
94	2	534	14.02	10.28	8.411	6.542	6.168	5.421	3.364	3.364	2.991	2.617	1.869	0.935	0.748	
94	3	1254	10.44	6.932	5.817	4.462	3.665	2.948	1.992	1.753	1.275	1.036	0.717	0.478	0.398	0.08
94	4	1486	10.49	6.59	5.245	3.833	3.497	3.295	2.219	1.748	1.21	0.941	0.74	0.336	0.269	0.067
94	5	1869	7.433	4.118	3.262	2.513	2.032	1.551	1.123	1.016	0.695	0.588	0.535	0.267	0.16	0.053
94	6	720	7.351	3.745	3.051	1.803	1.803	1.387	1.248	1.11	1.11	0.693	0.416	0.416	0.139	
94	7	1418	8.457	5.567	4.369	3.805	3.242	2.467	1.973	1.762	1.268	0.846	0.705	0.493	0.423	0.141
94	8	940	7.12	4.676	3.188	2.444	2.125	1.7	1.063	0.85	0.744	0.531	0.425	0.213	0.213	0.106
94	9	1265	9.242	6.319	5.055	3.791	3.397	2.923	1.975	1.738	1.422	1.343	1.185	0.395	0.316	0.237
94	10	2059	9.029	6.359	4.806	3.689	3.155	2.573	1.845	1.505	0.874	0.631	0.388	0.049		
94	11	1614	10.71	7.616	6.068	5.015	4.334	3.591	2.724	2.229	1.672	1.486	1.053	0.681	0.495	0.248
94	12	627	10.67	8.28	7.166	6.051	5.096	3.662	2.548	1.911	0.955	0.637	0.478	0.159		
95	1	385	10.36	7.772	5.959	5.181	5.181	4.922	3.886	3.368	2.85	2.332	1.554	0.777	0.777	0.777
95	2	422	6.147	3.546	3.073	2.128	1.891	1.418	1.182	0.946	0.709	0.473	0.473	0.236		
95	3	1428	10.5	7.418	6.158	4.969	3.849	3.569	2.449	1.889	1.47	1.19	0.77	0.28	0.21	
95	4	1708	10.42	6.729	5.091	3.979	3.218	2.575	1.814	1.58	1.346	1.229	0.644	0.293	0.117	
95	5	2105	11.3	7.597	6.078	4.226	3.561	3.086	2.422	2.089	1.519	1.14	0.95	0.712	0.57	0.237
95	6	2239	8.571	6.205	5.045	4.107	3.527	2.723	1.83	1.518	1.071	0.848	0.67	0.357	0.223	0.045
95	7	399	9	6.5	4.25	3.25	2.75	2.5	2.5	2.25	2.25	2	1.5	0.75	0.5	0.5
95	8	1017	8.35	5.305	4.617	3.733	3.045	2.456	2.161	1.67	1.179	0.982	0.589	0.295	0.295	0.098
95	9	2485	8.367	5.551	4.747	3.902	3.379	2.896	2.172	1.73	1.368	1.046	0.805	0.483	0.282	0.121
95	10	424	10.35	7.294	5.882	4	3.765	3.059	1.882	1.412	0.941	0.706	0.706	0.471	0.235	
95	11	578	5.699	3.8	2.591	2.073	1.554	1.554	1.209	1.209	1.036	1.036	0.691	0.518	0.173	
Ann	93 - 94	14769	9.079	5.931	4.753	3.629	3.135	2.6	1.862	1.564	1.171	0.941	0.711	0.372	0.278	0.102
Ann	94 - 95	13817	9.386	6.426	5.203	4.082	3.438	2.88	2.135	1.759	1.339	1.078	0.774	0.434	0.282	0.109

		#	27 GHz - 5 dB Fade Duration Distribution (% of total number of fades)													
Year	Month	Fades	10	20	30	50	70	100	200	300	500	700	1000	2000	3000	5000 sec
93	12	274	16.36	13.45	10.91	8.364	7.273	6.545	4.364	3.636	2.909	2.545	1.818	1.091	0.364	0.364
94	1	75	11.84	6.579	5.263	5.263	3.947	2.632	1.316							
94	2	411	14.81	11.41	9.466	7.767	6.068	5.583	3.641	2.913	2.184	1.699	0.971	0.243		
94	3	642	14	10.42	8.709	6.532	5.132	4.51	3.11	2.644	1.711	1.244	0.778	0.156		
94	4	608	17.73	14.12	11.99	9.688	7.389	6.24	3.941	2.791	2.627	2.463	0.821	0.164		
94	5	541	11.62	8.672	6.458	5.166	4.613	3.506	2.952	2.214	1.661	1.107	0.554	0.369	0.185	
94	6	263	14.39	10.61	8.333	5.303	4.924	4.924	3.03	2.652	1.894	0.758	0.379	0.379		
94	7	569	10	6.842	6.14	5.965	5.439	4.035	3.509	3.158	2.281	1.754	1.228	0.877	0.702	0.175
94	8	315	12.34	7.278	5.696	4.114	3.165	2.532	1.899	1.582	0.949	0.633	0.633	0.633	0.316	0.316
94	9	606	12.52	8.567	6.59	6.096	4.942	4.613	3.789	2.636	1.977	1.483	0.988	0.659	0.494	
94	10	342	10.79	8.455	7.58	5.539	4.665	3.499	2.041	1.749	1.458	1.166	0.875			
94	11	1058	15.11	10.95	8.876	7.554	6.327	5.571	4.06	3.116	1.7	1.228	0.85	0.283		
94	12	214	16.74	13.95	10.23	8.837	6.512	5.581	3.721	3.256	1.395	1.395				
95	1	126	8.661	6.299	6.299	5.512	5.512	4.724	4.724	4.724	4.724	3.15	2.362	2.362	2.362	1.575
95	2	119	11.67	10	6.667	5	4.167	4.167	3.333	2.5	1.667	0.833				
95	3	304	15.08	12.46	10.82	10.49	8.852	7.541	6.23	4.918	3.279	1.967	0.656			
95	4	388	15.17	12.6	11.57	9.512	8.74	6.941	5.398	4.627	4.113	2.828	1.542	0.257	0.257	
95	5	1064	15.02	11.36	9.577	8.169	6.385	6.009	4.977	3.85	3.005	2.347	1.878	1.033	0.751	0.188
95	6	930	14.18	9.989	8.915	7.304	6.66	5.478	3.437	3.008	2.256	1.719	0.967	0.215	0.215	
95	7	273	16.42	11.31	9.854	8.759	8.029	6.569	5.839	5.474	5.109	3.65	3.65	1.46	0.365	0.365
95	8	300	12.96	10.96	8.97	8.306	7.641	6.645	4.319	3.987	3.987	2.326	1.661	0.664		
95	9	785	13.49	10.18	8.651	6.616	5.98	5.089	4.071	3.562	2.672	2.417	1.781	1.145	0.509	0.127
95	10	101	14.71	9.804	8.824	7.843	7.843	6.863	6.863	2.941	1.961	0.98	0.98	0.98		
95	11	181	5.495	5.495	3.846	3.297	2.747	2.747	2.747	2.747	1.648	1.648	1.099	0.549		
Ann	93 - 94	5704	13.72	10.1	8.273	6.748	5.574	4.768	3.418	2.682	1.911	1.455	0.876	0.403	0.175	0.053
Ann	94 - 95	4785	14.06	10.76	9.173	7.752	6.728	5.809	4.513	3.782	2.967	2.215	1.504	0.71	0.397	0.125

		#	27 GHz - 7 dB Fade Duration Distribution (% of total number of fades)													
Year	Month	Fades	10	20	30	50	70	100	200	300	500	700	1000	2000	3000	5000 sec
93	12	205	20.39	13.11	11.17	7.767	5.825	5.825	3.883	2.427	1.456	0.971	0.971	0.971	0.485	
94	1	27	17.86	10.71	10.71	7.143	7.143	3.571	3.571							
94	2	84	22.35	20	15.29	14.12	10.59	9.412	5.882	5.882	2.353	1.176	1.176	1.176		
94	3	183	19.57	12.5	10.87	7.065	5.435	5.435	2.717	1.087						
94	4	285	17.48	11.89	11.19	9.091	8.392	5.944	4.196	2.797	2.098	1.748	0.699			
94	5	131	18.18	13.64	10.61	9.091	8.333	7.576	6.061	6.061	3.03	2.273	0.758	0.758	0.758	
94	6	117	13.56	10.17	9.322	6.78	5.085	4.237	3.39	3.39	0.847	0.847	0.847	0.847		
94	7	442	12.19	8.804	8.126	6.998	6.546	5.869	4.289	3.612	2.257	1.129	1.129	0.903	0.677	
94	8	159	11.88	9.375	6.25	5	5	4.375	3.75	3.125	2.5	1.25	1.25	1.25	0.625	
94	9	263	18.18	14.77	13.26	11.36	10.61	7.955	6.061	5.303	3.788	2.273	2.273	1.136		
94	10	69	17.14	14.29	14.29	11.43	11.43	8.571	7.143	7.143	5.714	4.286	1.429			
94	11	337	20.41	15.38	14.2	13.02	10.65	7.692	4.734	4.142	2.663	2.663	1.479			
94	12	139	19.29	12.14	10.71	8.571	7.143	5	3.571	3.571	1.429	0.714				
95	1	203	12.25	7.843	7.843	6.373	5.882	5.882	4.412	4.412	3.431	1.961	1.471	0.98	0.49	0.49
95	2	24	8	8	8	8	8	8	8	8	4					
95	3	119	26.67	20.83	17.5	16.67	16.67	15.83	9.167	8.333	1.667					
95	4	254	20.78	13.73	12.16	10.98	10.2	8.235	5.098	3.922	3.529	2.353	1.569			
95	5	587	20.92	16.67	14.8	11.73	9.694	8.844	6.122	5.102	3.912	3.401	2.721	1.19	0.68	0.17
95	6	533	15.17	11.42	9.738	8.052	7.491	6.367	4.307	2.809	2.247	1.498	0.749	0.375	0.375	
95	7	421	15.64	11.37	8.768	7.346	6.635	6.161	4.976	4.028	2.37	1.422	0.948			
95	8	193	16.49	12.89	10.82	9.278	8.247	8.247	5.67	5.155	3.608	2.577	1.031			
95	9	570	16.81	12.61	11.56	9.807	8.581	7.18	4.904	4.904	3.853	3.152	1.401	0.525	0.35	
95	10	68	18.84	13.04	10.14	5.797	5.797	4.348	2.899	1.449	1.449	1.449	1.449	1.449		
95	11	136	10.22	9.489	6.569	5.839	4.38	4.38	3.65	3.65	1.46	1.46	0.73			
Ann	93 - 94	2302	17.11	12.55	11.07	9.119	7.946	6.47	4.559	3.734	2.301	1.607	1.129	0.608	0.261	
Ann	94 - 95	3247	17.36	12.96	11.21	9.36	8.313	7.358	5.111	4.372	3.017	2.186	1.324	0.462	0.277	0.062

		#	27 GHz - 10 dB Fade Duration Distribution (% of total number of fades)													
Year	Month	Fades	10	20	30	50	70	100	200	300	500	700	1000	2000	3000	5000 sec
93	12	115	18.1	14.66	13.79	11.21	9.483	7.759	5.172	1.724	0.862	0.862	0.862			
94	1	19	5													
94	2	37	23.68	21.05	13.16	10.53	10.53	10.53	7.895	5.263	2.632	2.632	2.632			
94	3	8	22.22	22.22	22.22	11.11	11.11	11.11								
94	4	137	14.49	9.42	7.971	6.522	5.797	5.797	4.348	3.623	2.174					
94	5	58	25.42	25.42	22.03	20.34	18.64	16.95	6.78	5.085	3.39	1.695	1.695	1.695		
94	6	58	15.25	11.86	11.86	8.475	8.475	8.475	3.39	3.39	1.695	1.695	1.695	1.695		
94	7	325	16.26	12.27	11.04	8.896	8.282	7.669	5.215	4.294	2.454	1.84	0.92	0.307		
94	8	117	13.56	11.86	11.02	9.322	8.475	7.627	3.39	2.542	1.695	1.695	1.695	0.847		
94	9	182	17.49	15.3	14.21	12.02	11.48	9.29	6.557	6.557	5.464	3.279	2.186			
94	10	58	20.34	16.95	13.56	13.56	10.17	10.17	8.475	6.78	5.085	1.695				
94	11	150	25.83	15.89	14.57	11.92	11.92	10.6	6.623	4.636	2.649	1.987	0.662			
94	12	57	32.76	27.59	27.59	18.97	13.79	8.621	3.448	1.724	1.724					
95	1	99	19	14	12	9	9	7	6	5	3	1	1	1	1	1
95	2	25	11.54	7.692	7.692	7.692	3.846	3.846								
95	3	62	36.51	28.57	26.98	22.22	15.87	15.87	11.11	4.762						
95	4	118	18.49	16.81	14.29	11.76	10.08	10.08	8.403	7.563	4.202	4.202	2.521			
95	5	513	23.35	18.29	15.37	13.42	11.48	9.728	7.198	5.642	3.891	3.307	2.335	0.584	0.195	
95	6	231	21.98	18.53	15.95	13.36	10.34	9.483	6.034	4.741	3.448	1.293	1.293	0.862	0.431	
95	7	146	19.05	14.29	12.93	9.524	7.483	7.483	5.442	3.401	2.721	1.361	1.361			
95	8	94	14.74	13.68	12.63	10.53	9.474	8.421	8.421	8.421	4.211	3.158				
95	9	333	21.86	17.37	14.37	11.68	10.48	8.683	6.587	5.09	4.491	2.695	0.898	0.299		
95	10	11	25	25	25	25	25	25	8.333	8.333	8.333	8.333	8.333	8.333		
95	11	51	5.769	3.846	3.846	1.923	1.923	1.923	1.923	1.923	1.923	1.923				
Ann	93 - 94	1264	18.1	14.07	12.57	10.43	9.644	8.696	5.455	4.269	2.767	1.739	1.107	0.316		
Ann	94 - 95	1740	21.71	17.46	15.16	12.46	10.45	9.133	6.663	5.169	3.561	2.412	1.436	0.46	0.172	0.057

		#	20 GHz - 3 dB Inter Fade Interval Distribution (% of total number of intervals)													
Year	Month	Intervals	10	20	30	50	70	100	200	300	500	700	1000	2000	3000	5000 sec
93	12	337	17.75	11.24	8.58	7.101	6.805	6.509	5.03	4.734	3.846	3.55	2.071	0.888	0.296	0.296
94	1	91	21.74	17.39	16.3	9.783	8.696	7.609	7.609	5.435	5.435	4.348	4.348	4.348	4.348	4.348
94	2	457	13.97	11.14	10.26	8.952	8.515	7.205	6.114	5.677	5.459	5.022	4.367	3.275	2.402	2.183
94	3	790	16.43	10.24	9.102	7.08	6.321	5.183	3.666	3.287	2.781	2.528	2.276	1.391	1.011	0.632
94	4	911	18.2	11.84	9.649	7.675	6.689	6.031	5.154	4.825	3.838	3.838	2.412	1.425	1.206	0.658
94	5	688	14.95	9.724	8.273	7.112	6.241	5.515	4.79	3.919	3.483	3.338	2.177	1.451	1.161	0.435
94	6	559	15.36	9.643	7.679	5.536	4.643	4.286	3.036	2.679	2.143	1.964	1.607	1.25	1.071	0.893
94	7	775	13.66	9.665	6.83	5.155	4.639	4.381	3.479	2.835	2.448	2.062	1.675	1.031	1.031	1.031
94	8	382	8.616	6.789	4.7	3.133	2.611	2.35	2.35	2.35	2.35	1.828	1.828	1.567	1.305	0.783
94	9	792	14	9.458	7.314	5.17	4.288	4.161	3.026	2.522	2.018	1.765	1.639	1.135	0.757	0.378
94	10	440	13.15	9.751	7.483	6.576	5.896	5.215	4.535	4.308	3.401	2.721	2.494	2.268	1.814	1.587
94	11	1469	15.24	10.95	9.184	7.551	6.735	5.986	4.762	4.286	3.333	2.789	2.585	1.701	1.429	0.884
94	12	382	16.45	11.23	9.661	7.833	7.05	6.266	5.222	4.439	3.655	3.133	2.35	1.828	1.567	1.567
95	1	279	6.429	3.571	3.214	2.857	2.857	2.5	2.5	2.5	2.143	2.143	2.143	1.786	1.786	1.786
95	2	176	23.16	19.77	19.21	17.51	17.51	16.95	16.38	16.38	16.38	15.82	12.43	11.86	11.3	10.17
95	3	400	13.22	10.22	9.476	7.731	6.983	6.234	4.988	4.489	3.491	3.491	2.244	1.746	1.496	1.247
95	4	705	14.87	10.76	9.348	7.79	6.941	6.516	5.807	5.382	4.391	4.108	2.975	1.558	1.275	1.275
95	5	1706	11.72	7.791	6.678	4.921	4.335	3.866	2.988	2.812	2.226	1.992	1.64	1.172	0.879	0.644
95	6	1687	15.4	10.6	8.649	6.813	5.983	4.976	3.791	3.258	2.547	2.014	1.718	1.54	1.007	0.711
95	7	419	13.33	7.619	5.476	3.333	2.857	2.381	1.905	1.905	1.905	1.905	1.905	1.429	0.952	0.952
95	8	623	20.99	16.03	13.3	10.58	9.455	8.494	6.25	5.769	4.647	3.846	3.365	2.404	1.923	1.122
95	9	1215	13.65	9.375	7.73	5.921	4.77	4.112	3.372	2.961	2.467	2.303	1.809	1.234	0.905	0.493
95	10	186	18.72	12.83	10.7	9.626	8.556	7.487	6.417	5.348	3.743	3.743	3.209	2.674	2.674	2.674
95	11	93	23.4	15.96	14.89	13.83	13.83	13.83	13.83	12.77	11.7	11.7	11.7	8.511	6.383	6.383
Ann	93 - 94	7691	15.09	10.34	8.424	6.669	5.915	5.291	4.264	3.796	3.172	2.834	2.301	1.573	1.261	0.884
Ann	94 - 95	7871	14.61	10.19	8.613	6.822	6.047	5.361	4.383	3.989	3.303	2.985	2.439	1.855	1.474	1.194

		#	20 GHz - 5 dB Inter Fade Interval Distribution (% of total number of intervals)													
Year	Month	Intervals	10	20	30	50	70	100	200	300	500	700	1000	2000	3000	5000 sec
93	12	138	12.23	6.475	6.475	5.755	5.755	5.036	3.597	2.878	1.439	1.439	1.439	1.439	0.719	0.719
94	1	26	48.15	40.74	37.04	33.33	33.33	22.22	22.22	18.52	14.81	14.81	14.81	14.81	14.81	14.81
94	2	105	17.92	15.09	15.09	14.15	14.15	12.26	12.26	11.32	11.32	11.32	10.38	10.38	8.491	7.547
94	3	120	21.49	14.05	12.4	8.264	7.438	7.438	6.612	5.785	4.959	4.959	3.306	2.479	1.653	0.826
94	4	168	19.53	17.16	14.79	13.02	11.83	11.24	10.06	9.467	8.284	8.284	7.101	3.55	2.959	1.775
94	5	99	24	19	17	14	11	9	7	7	7	7	5	3	3	2
94	6	102	8.738	4.854	4.854	2.913	1.942	1.942	1.942	1.942	0.971	0.971	0.971			
94	7	452	12.8	9.272	7.726	6.402	5.298	4.857	3.091	2.649	2.428	1.987	1.766	1.104	0.662	0.662
94	8	177	13.48	7.303	6.18	5.618	5.618	5.056	3.933	2.247	2.247	2.247	2.247	1.685	1.685	1.124
94	9	373	12.57	8.021	7.487	6.15	5.08	4.278	4.011	2.674	2.674	2.406	1.872	1.604	1.07	0.535
94	10	89	11.11	10	10	10	7.778	6.667	5.556	5.556	4.444	3.333	2.222	2.222	2.222	2.222
94	11	251	21.83	18.25	14.68	11.51	11.11	10.71	9.921	9.524	8.333	7.54	6.746	6.349	5.159	3.571
94	12	92	27.96	23.66	21.51	20.43	20.43	18.28	13.98	11.83	9.677	9.677	8.602	4.301	3.226	3.226
95	1	134	17.04	9.63	7.407	4.444	3.704	3.704	2.963	2.963	2.222	0.741	0.741	0.741	0.741	0.741
95	2	88	22.47	19.1	19.1	19.1	17.98	17.98	17.98	17.98	17.98	17.98	15.73	13.48	13.48	12.36
95	3	88	23.6	22.47	21.35	15.73	15.73	14.61	13.48	13.48	7.865	5.618	4.494	1.124		
95	4	175	20.45	17.61	16.48	16.48	15.91	13.07	12.5	11.36	11.36	9.659	7.386	5.114	4.545	2.273
95	5	726	17.19	12.65	11.14	8.941	7.428	5.502	4.127	3.851	3.439	3.301	3.164	1.651	1.376	0.413
95	6	403	17.08	13.86	12.38	10.64	10.15	8.663	6.683	6.436	5.693	5.198	4.208	3.713	3.465	1.485
95	7	475	15.97	12.39	10.5	9.034	7.143	5.252	3.151	2.311	1.891	1.471	1.261	0.42	0.42	0.42
95	8	216	12.44	8.756	7.834	6.452	5.991	5.53	4.608	4.147	3.687	3.687	3.226	3.226	2.765	2.304
95	9	603	13.91	10.6	9.768	8.609	7.947	6.788	4.305	3.808	2.815	2.318	1.821	1.159	1.159	0.828
95	10	20	9.524	9.524	4.762	4.762	4.762	4.762	4.762	4.762	4.762	4.762				
95	11	75	21.05	19.74	15.79	15.79	14.47	14.47	14.47	13.16	13.16	11.84	11.84	9.211	7.895	6.579
Ann	93 - 94	2100	15.94	11.71	10.33	8.615	7.711	6.901	5.902	5.14	4.569	4.284	3.665	2.903	2.332	1.761
Ann	94 - 95	3095	16.96	13.24	11.79	10.17	9.173	7.72	6.04	5.523	4.78	4.264	3.65	2.487	2.229	1.453

		#	20 GHz - 7 dB Inter Fade Interval Distribution (% of total number of intervals)													
Year	Month	Intervals	10	20	30	50	70	100	200	300	500	700	1000	2000	3000	5000 sec
93	12	26	33.33	22.22	22.22	22.22	22.22	22.22	11.11	11.11	7.407	3.704				
94	1	23	45.83	33.33	33.33	29.17	29.17	16.67	16.67	12.5	12.5	12.5	12.5	12.5	12.5	12.5
94	2	39	22.5	20	20	20	20	17.5	17.5	17.5	17.5	17.5	17.5	17.5	15	15
94	3	18	21.05	10.53	10.53	10.53	10.53	10.53	10.53	10.53	10.53	10.53	10.53	5.263	5.263	5.263
94	4	60	21.31	16.39	14.75	14.75	13.11	13.11	9.836	9.836	9.836	9.836	8.197	6.557	6.557	3.279
94	5	64	15.38	10.77	9.231	7.692	7.692	6.154	3.077	3.077	3.077	3.077	3.077	3.077	1.538	1.538
94	6	65	12.12	4.545	3.03	1.515	1.515	1.515	1.515							
94	7	239	16.67	13.75	12.08	9.167	7.5	6.667	5	4.167	2.5	2.083	1.667	1.667	1.25	0.833
94	8	40	9.756	9.756	9.756	7.317	7.317	7.317	4.878	4.878	4.878	4.878	4.878	4.878	2.439	2.439
94	9	164	19.39	12.73	12.12	11.52	10.91	9.697	7.879	6.667	5.455	4.242	3.636	3.03	2.424	0.606
94	10	47	16.67	10.42	10.42	10.42	10.42	10.42	6.25	6.25	6.25	4.167	4.167	2.083	2.083	2.083
94	11	114	18.26	15.65	14.78	13.04	12.17	12.17	12.17	10.43	9.565	7.826	6.957	6.087	6.087	6.087
94	12	69	27.14	24.29	24.29	21.43	20	20	15.71	14.29	12.86	12.86	11.43	4.286	2.857	2.857
95	1	159	10.63	5	5	1.875	1.875	1.875	1.25	1.25	0.625	0.625	0.625	0.625	0.625	0.625
95	2	52	26.42	26.42	22.64	22.64	22.64	22.64	22.64	22.64	22.64	22.64	18.87	18.87	18.87	16.98
95	3	35	30.56	30.56	30.56	27.78	25	22.22	22.22	22.22	19.44	19.44	16.67	5.556		
95	4	133	15.67	14.18	11.19	8.955	8.209	7.463	5.97	5.224	5.224	5.224	4.478	3.731	3.731	1.493
95	5	388	23.39	20.31	17.22	15.42	14.14	12.6	8.997	7.969	6.427	5.141	4.113	2.571	2.314	1.028
95	6	255	15.23	11.72	10.16	9.766	9.375	7.813	6.641	6.641	5.859	5.859	5.078	4.297	4.297	2.734
95	7	96	13.4	7.216	6.186	5.155	5.155	5.155	5.155	5.155	4.124	4.124	3.093	1.031	1.031	1.031
95	8	48	22.45	16.33	14.29	14.29	14.29	14.29	12.24	12.24	12.24	12.24	10.2	10.2	8.163	6.122
95	9	345	15.03	11.85	10.69	10.12	8.671	7.514	6.069	5.491	4.624	3.468	2.023	0.578	0.578	0.289
95	10	20	14.29	9.524	9.524	9.524	9.524	4.762	4.762	4.762	4.762	4.762				
95	11	40	14.63	14.63	14.63	12.2	12.2	12.2	12.2	12.2	12.2	12.2	12.2	9.756	9.756	9.756
Ann	93 - 94	899	18.78	13.89	12.89	11.33	10.56	9.556	7.667	6.778	5.889	5.111	4.556	4	3.444	2.778
Ann	94 - 95	1640	18.1	14.75	13.04	11.64	10.79	9.75	7.983	7.495	6.581	6.033	4.875	3.291	2.986	2.072

		#	20 GHz - 10 dB Inter Fade Interval Distribution (% of total number of intervals)													
Year	Month	Intervals	10	20	30	50	70	100	200	300	500	700	1000	2000	3000	5000 sec
93	12	13	21.43	14.29	14.29	14.29	14.29	7.143								
94	1	52	15.09	11.32	11.32	11.32	11.32	7.547	5.66	3.774	3.774	3.774	3.774	3.774	3.774	3.774
94	2	40	41.46	29.27	29.27	26.83	26.83	21.95	19.51	17.07	17.07	17.07	17.07	17.07	17.07	14.63
94	3	16	17.65	11.76	11.76	11.76	11.76	11.76	11.76	11.76	11.76	11.76	11.76	5.882	5.882	5.882
94	4	33	29.41	26.47	23.53	20.59	20.59	20.59	17.65	17.65	14.71	14.71	11.76	8.824	8.824	8.824
94	5	43	25	15.91	13.64	13.64	6.818	4.545	4.545	2.273	2.273	2.273	2.273	2.273		
94	6	4														
94	7	99	22	20	19	16	15	14	13	8	6	3	3	2	2	1
94	8	15														
94	9	77	29.49	26.92	23.08	21.79	17.95	16.67	11.54	11.54	7.692	5.128	3.846	1.282	1.282	1.282
94	10	29	13.33	10	6.667	6.667	6.667	6.667	6.667	6.667	6.667	6.667	6.667	3.333	3.333	3.333
94	11	31	37.5	31.25	31.25	31.25	25	25	18.75	18.75	18.75	18.75	15.63	12.5	12.5	12.5
94	12	12	23.08	23.08	23.08	23.08	23.08	23.08	23.08	23.08	23.08	23.08	23.08	23.08	23.08	15.38
95	1	64	9.231	6.154	6.154	1.538										
95	2	33	35.29	35.29	35.29	35.29	35.29	35.29	35.29	35.29	35.29	35.29	29.41	29.41	29.41	26.47
95	3	30	35.48	35.48	32.26	25.81	25.81	22.58	19.35	19.35	19.35	19.35	19.35	6.452		
95	4	56	26.32	19.3	17.54	14.04	14.04	14.04	12.28	12.28	8.772	8.772	7.018	5.263	5.263	3.509
95	5	222	23.32	20.18	17.94	12.56	12.11	10.31	8.072	7.623	5.83	5.381	4.933	2.242	1.345	0.897
95	6	150	21.19	15.89	13.91	11.26	10.6	10.6	8.609	8.609	8.609	7.947	7.285	5.96	5.298	3.311
95	7	32	15.15	12.12	12.12	12.12	12.12	12.12	12.12	9.091	9.091	9.091	9.091	3.03	3.03	3.03
95	8	50	25.49	21.57	17.65	11.76	11.76	11.76	11.76	9.804	9.804	9.804	9.804	7.843	7.843	3.922
95	9	86	21.84	21.84	19.54	18.39	17.24	16.09	13.79	11.49	8.046	6.897	6.897	2.299	2.299	
95	10	22	21.74	17.39	13.04	13.04	8.696	8.696	4.348	4.348	4.348	4.348				
95	11	8	55.56	55.56	55.56	55.56	55.56	55.56	55.56	55.56	44.44	44.44	44.44	33.33	33.33	33.33
Ann	93 - 94	452	24.94	20.31	18.76	17.44	15.45	13.69	11.26	9.492	8.168	7.064	6.402	4.857	4.636	4.194
Ann	94 - 95	765	23.24	19.97	18.02	14.49	13.84	13.05	11.36	10.7	9.399	9.008	8.225	5.483	4.83	3.394

		#	27 GHz - 3 dB Inter Fade Interval Distribution (% of total number of intervals)													
Year	Month	Intervals	10	20	30	50	70	100	200	300	500	700	1000	2000	3000	5000 sec
93	12	1204	13.94	9.129	8.133	6.805	6.058	5.394	3.651	2.656	1.66	1.162	0.913	0.249	0.249	0.166
94	1	373	19.25	13.37	9.358	6.15	5.348	4.011	2.139	1.604	1.337	0.802	0.535	0.535	0.535	0.535
94	2	527	15.15	11.93	10.23	8.523	7.955	7.197	6.25	5.492	3.788	3.598	3.03	1.326	0.947	0.568
94	3	1246	12.03	8.019	5.934	4.33	3.849	3.128	2.406	1.925	1.443	1.443	1.123	0.642	0.481	0.321
94	4	1467	13.56	9.196	7.561	6.199	5.45	4.428	3.27	2.725	2.452	2.044	1.703	0.886	0.545	0.272
94	5	1855	10.29	6.735	5.119	3.556	2.909	2.64	1.886	1.616	1.131	1.024	0.647	0.485	0.323	0.269
94	6	709	13.94	8.732	6.479	4.789	3.803	3.099	2.535	2.254	1.549	1.268	1.127	0.845	0.704	0.704
94	7	1403	13.89	7.906	5.627	4.274	3.704	3.205	2.279	1.781	1.425	1.282	1.068	0.926	0.926	0.783
94	8	925	12.96	8.423	6.695	4.86	4.32	4.104	3.348	3.024	2.7	2.16	1.836	1.512	1.08	0.864
94	9	1256	12.97	8.751	6.762	5.33	4.773	4.216	3.341	2.944	2.387	2.228	1.989	1.114	0.796	0.557
94	10	2047	11.96	7.373	6.152	4.59	3.76	3.174	2.295	2.051	1.318	1.123	0.977	0.684	0.635	0.488
94	11	1608	14.05	9.882	8.39	6.65	5.469	4.786	4.102	3.418	2.672	1.989	1.554	1.243	0.808	0.373
94	12	618	14.54	9.208	7.916	6.3	6.139	5.493	4.362	3.716	2.908	2.585	2.262	1.292	1.131	0.808
95	1	377	12.96	8.466	7.143	5.82	4.762	4.762	3.704	3.439	3.175	2.91	2.646	2.116	1.323	1.323
95	2	412	15.01	9.685	8.232	6.78	6.295	5.811	4.843	4.358	3.874	3.39	3.148	1.937	1.453	1.211
95	3	1420	14.99	9.641	7.882	5.63	5.208	4.363	3.448	2.815	2.463	2.252	1.83	1.337	0.985	0.422
95	4	1696	11.67	8.368	7.012	5.598	5.186	4.714	3.83	3.123	2.416	2.121	1.709	1.237	1.002	0.707
95	5	2086	13.56	9.487	7.379	5.798	5.127	4.456	3.498	3.162	2.492	2.156	1.773	1.198	1.054	0.671
95	6	2230	14.48	9.547	7.71	6.32	5.289	4.348	3.407	2.689	2.062	1.658	1.524	0.941	0.762	0.538
95	7	386	13.7	7.752	6.977	5.168	4.393	3.618	2.842	2.584	2.584	2.584	2.326	1.809	1.034	1.034
95	8	1005	18.49	12.72	10.24	7.455	6.759	5.765	4.672	3.777	3.28	2.883	2.783	1.491	1.193	0.696
95	9	2470	12.55	7.527	5.787	4.614	3.926	3.157	2.55	2.104	1.7	1.497	1.214	0.769	0.567	0.324
95	10	418	13.13	9.785	7.876	6.205	5.489	4.296	2.864	1.909	1.193	1.193	1.193	0.716	0.477	0.239
95	11	562	33.93	27	22.2	17.41	14.39	12.26	8.703	7.815	6.394	5.506	5.151	4.085	3.552	2.842
Ann	93 - 94	14620	13.05	8.577	6.839	5.253	4.521	3.905	2.968	2.49	1.888	1.594	1.3	0.841	0.643	0.458
Ann	94 - 95	13680	14.71	9.912	8.026	6.279	5.519	4.715	3.699	3.106	2.529	2.215	1.93	1.294	1.023	0.694

		#	27 GHz - 5 dB Inter Fade Interval Distribution (% of total number of intervals)													
Year	Month	Intervals	10	20	30	50	70	100	200	300	500	700	1000	2000	3000	5000 sec
93	12	261	18.7	13.74	13.74	11.45	9.16	8.015	5.725	5.725	4.962	4.198	3.817	2.29	0.763	0.763
94	1	70	19.72	14.08	11.27	8.451	7.042	4.225	4.225	4.225	4.225	2.817	2.817	2.817	2.817	2.817
94	2	406	13.76	10.32	8.845	7.862	6.388	5.897	5.16	4.668	4.423	3.931	3.194	2.211	1.474	0.983
94	3	635	17.3	11.01	8.962	6.289	5.346	5.189	3.616	2.673	2.044	1.887	1.572	1.415	1.101	0.472
94	4	592	15.51	13.49	11.64	9.444	9.106	7.757	6.745	6.239	4.89	4.553	2.867	1.855	1.349	0.675
94	5	532	15.38	10.88	9.006	6.942	6.379	5.629	4.69	3.565	2.627	2.439	1.501	1.126	0.938	0.188
94	6	256	17.9	11.28	8.56	4.669	3.891	3.502	1.946	1.556	1.167	1.167	1.167	0.778	0.778	0.778
94	7	559	12.5	8.929	7.321	6.25	4.821	4.107	3.75	3.214	3.036	2.857	2.321	1.429	1.429	1.429
94	8	308	7.767	6.149	4.854	3.236	2.913	2.265	2.265	2.265	1.942	1.942	1.294	1.294	1.294	0.647
94	9	596	13.57	10.39	8.375	7.37	6.198	5.025	3.685	2.68	2.513	2.01	1.675	1.34	0.838	0.503
94	10	333	21.26	16.17	11.98	10.48	9.581	7.485	6.587	6.587	5.689	4.192	3.293	2.395	2.096	1.796
94	11	1051	18.73	13.5	12.07	10.08	8.935	8.175	6.559	5.323	4.183	3.232	2.662	1.806	1.521	0.951
94	12	206	20.77	14.49	12.08	9.179	8.696	8.213	5.797	4.348	2.899	1.932	1.449	0.483	0.483	0.483
95	1	120	13.22	7.438	7.438	5.785	5.785	4.959	3.306	3.306	2.479	2.479	2.479	2.479	2.479	2.479
95	2	114	15.65	12.17	12.17	10.43	10.43	7.826	5.217	4.348	3.478	3.478	2.609	2.609	2.609	2.609
95	3	299	20.67	15	13	11	9.667	8.667	7	6	5	5	3.333	2.667	2.333	1.667
95	4	378	17.94	13.72	12.66	10.29	9.499	8.971	7.124	6.86	5.541	5.277	4.485	1.847	1.319	0.792
95	5	1051	13.78	10.55	9.221	7.795	6.654	5.798	4.753	4.373	3.422	3.042	2.471	1.616	1.331	0.951
95	6	922	17.01	13.33	10.83	9.101	7.909	6.501	5.092	4.334	3.359	2.709	2.6	2.059	1.408	0.975
95	7	267	14.55	8.209	4.851	2.985	2.239	1.866	1.493	1.493	1.493	1.493	1.493	1.119	0.746	0.746
95	8	296	15.15	11.11	10.1	9.428	9.428	8.754	6.734	6.397	5.724	5.387	5.051	4.714	3.367	2.357
95	9	773	13.82	10.08	8.269	7.235	6.977	6.331	4.651	3.747	3.23	3.101	2.584	1.68	1.292	0.775
95	10	97	15.31	10.2	9.184	8.163	7.143	6.122	5.102	4.082	3.061	3.061	3.061	3.061	2.041	2.041
95	11	169	45.29	37.65	35.88	31.18	25.88	24.12	17.06	14.12	11.76	10	8.235	5.882	4.706	4.118
Ann	93 - 94	5599	15.93	11.64	9.804	7.911	6.893	6.018	4.875	4.161	3.464	2.964	2.304	1.643	1.286	0.839
Ann	94 - 95	4692	16.88	12.59	10.85	9.141	8.182	7.245	5.561	4.858	3.942	3.558	3.026	2.152	1.662	1.236

		#	27 GHz - 7 dB Inter Fade Interval Distribution (% of total number of intervals)													
Year	Month	Intervals	10	20	30	50	70	100	200	300	500	700	1000	2000	3000	5000 sec
93	12	194	22.56	14.36	12.82	10.77	8.718	7.179	6.154	5.641	3.59	3.59	3.59	3.077	1.538	0.513
94	1	23	33.33	29.17	29.17	25	25	12.5	12.5	8.333	8.333	8.333	8.333	8.333	8.333	8.333
94	2	78	22.78	17.72	17.72	16.46	15.19	15.19	11.39	11.39	11.39	8.861	8.861	8.861	5.063	3.797
94	3	176	22.03	19.21	16.38	14.69	12.43	11.86	8.475	6.78	3.955	3.955	3.955	2.26	2.26	1.695
94	4	272	24.91	17.95	16.48	13.19	11.72	10.62	8.425	6.593	6.227	5.128	4.762	2.564	1.465	0.366
94	5	123	13.71	9.677	9.677	8.871	8.065	8.065	6.452	6.452	6.452	5.645	4.839	3.226	3.226	2.419
94	6	112	13.27	8.85	8.85	7.08	7.08	6.195	4.425	1.77	0.885					
94	7	433	14.52	9.908	8.525	7.604	5.3	5.069	4.147	3.456	2.995	2.765	2.535	1.613	1.382	1.152
94	8	153	9.74	8.442	6.494	5.844	5.195	5.195	3.247	2.597	2.597	2.597	1.948	1.948	1.948	1.299
94	9	252	13.04	10.28	9.091	8.3	7.51	7.115	6.324	5.534	5.534	3.953	2.372	1.976	1.581	1.186
94	10	63	25	18.75	15.63	14.06	10.94	10.94	9.375	7.813	7.813	6.25	3.125	3.125	3.125	3.125
94	11	331	25.3	21.69	18.98	15.66	13.86	13.25	11.45	9.94	7.831	6.627	5.422	3.916	3.012	1.807
94	12	134	18.52	14.81	13.33	12.59	11.85	9.63	6.667	5.185	4.444	3.704	2.222	0.741		
95	1	198	8.04	6.03	5.025	3.518	3.015	2.513	0.503	0.503	0.503	0.503	0.503	0.503	0.503	0.503
95	2	19	35	20	20	15	10	10	10	10	10	10	5	5	5	5
95	3	116	23.08	17.95	16.24	15.38	14.53	13.68	11.11	10.26	5.983	5.983	5.128	1.709	0.855	0.855
95	4	246	21.86	17	14.57	11.74	10.53	9.312	7.287	6.478	6.073	4.858	4.858	2.429	1.619	0.81
95	5	576	20.62	16.64	14.21	11.61	10.57	8.319	7.106	6.586	5.546	4.853	4.333	2.426	2.08	1.04
95	6	525	17.68	13.88	11.79	9.886	8.745	8.175	7.605	6.654	5.323	4.753	3.802	3.422	2.662	1.331
95	7	415	12.98	9.856	8.413	6.49	5.769	5.048	2.644	2.163	1.202	1.202	0.962	0.481	0.481	0.481
95	8	189	16.84	13.16	11.58	9.474	8.947	8.421	7.368	5.789	5.263	4.737	4.737	4.737	4.211	3.684
95	9	559	15.71	11.79	9.464	7.857	7.321	6.071	5.179	4.286	3.036	2.679	2.321	1.429	1.071	0.714
95	10	64	12.31	9.231	9.231	7.692	6.154	6.154	4.615	3.077	3.077	3.077	1.538	1.538		
95	11	123	34.68	27.42	25.81	21.77	21.77	20.16	12.9	12.9	11.29	11.29	9.677	5.645	4.839	4.032
Ann	93 - 94	2210	19	14.47	12.89	11.08	9.498	8.82	7.146	6.015	5.111	4.342	3.709	2.714	2.081	1.402
Ann	94 - 95	3164	17.88	13.9	11.97	9.921	9.068	7.899	6.224	5.466	4.392	3.949	3.381	2.212	1.738	1.137

		#	27 GHz - 10 dB Inter Fade Interval Distribution (% of total number of intervals)													
Year	Month	Intervals	10	20	30	50	70	100	200	300	500	700	1000	2000	3000	5000 sec
93	12	105	22.64	19.81	16.04	13.21	9.434	7.547	6.604	3.774	0.943					
94	1	18	42.11	42.11	36.84	36.84	36.84	26.32	21.05	15.79	10.53	10.53	10.53	10.53	10.53	10.53
94	2	33	38.24	29.41	23.53	23.53	23.53	20.59	17.65	14.71	14.71	14.71	11.76	11.76	8.824	8.824
94	3	4														
94	4	124	18.4	16	12.8	11.2	6.4	5.6	4.8	3.2	2.4	2.4	2.4	2.4	2.4	1.6
94	5	52	28.3	26.42	24.53	16.98	11.32	7.547	7.547	7.547	5.66	5.66	5.66	3.774	3.774	1.887
94	6	53	7.407	5.556	3.704	3.704	3.704	3.704								
94	7	316	14.51	11.36	9.148	7.571	6.94	5.994	5.047	4.101	3.155	2.524	1.893	1.577	1.262	0.631
94	8	111	11.61	9.821	8.929	8.929	7.143	6.25	5.357	4.464	3.571	3.571	2.679	1.786	1.786	0.893
94	9	172	21.39	17.34	16.18	10.98	9.827	8.671	6.358	4.624	4.046	4.046	2.89	2.312	1.156	0.578
94	10	52	15.09	9.434	7.547	5.66	3.774	3.774	3.774	3.774	3.774	1.887				
94	11	145	29.45	23.29	20.55	19.86	18.49	16.44	13.7	11.64	10.27	9.589	8.904	8.904	6.164	4.795
94	12	52	45.28	32.08	26.42	26.42	24.53	20.75	16.98	13.21	13.21	11.32	9.434	1.887		
95	1	94	14.74	10.53	9.474	8.421	7.368	7.368	5.263	5.263	3.158	3.158	3.158	2.105	1.053	1.053
95	2	21	27.27	18.18	9.091	4.545	4.545	4.545	4.545	4.545	4.545	4.545	4.545	4.545	4.545	4.545
95	3	59	36.67	31.67	30	28.33	23.33	23.33	23.33	20	13.33	10	8.333	5	1.667	1.667
95	4	112	17.7	15.04	12.39	11.5	9.735	9.735	8.85	8.85	8.85	7.965	7.965	5.31	4.425	1.77
95	5	504	24.55	19.41	15.45	12.28	10.3	8.713	5.941	5.347	4.158	3.762	3.366	1.98	1.584	0.594
95	6	224	20.44	16.44	15.11	13.33	11.56	11.11	8.889	8.444	7.556	7.556	6.222	5.333	5.333	2.667
95	7	141	23.94	17.61	14.79	11.97	10.56	10.56	9.155	7.746	6.338	5.634	3.521	2.113	0.704	0.704
95	8	90	14.29	13.19	13.19	12.09	12.09	10.99	9.89	8.791	7.692	7.692	6.593	6.593	5.495	4.396
95	9	325	21.78	15.95	14.42	12.58	11.04	10.12	8.589	7.055	5.828	4.294	2.761	1.84	1.84	1.227
95	10	8	11.11	11.11	11.11	11.11	11.11	11.11	11.11	11.11	11.11	11.11				
95	11	43	29.55	22.73	20.45	20.45	15.91	15.91	15.91	15.91	13.64	13.64	13.64	11.36	9.091	9.091
Ann	93 - 94	1185	19.73	16.19	13.83	11.72	9.865	8.432	6.914	5.481	4.384	3.963	3.288	2.951	2.277	1.602
Ann	94 - 95	1673	23.18	18.04	15.47	13.38	11.59	10.69	8.781	7.826	6.511	5.795	4.779	3.286	2.628	1.613

20 GHz Beacon Attenuation Distribution obtained from Minutes above threshold (%)

Year	Month	-0.5	0.5	0.7	1	1.5	2	3	4	5	7	10	15	20	30 dB
93	12	99.84	12.36	8.487	4.741	3	1.62	0.701	0.406	0.233	0.055	0.017			
94	1	99.99	11.03	4.732	1.401	0.255	0.027	0.005							
94	2	99.38	18.52	8.786	4.673	2.17	1.322	0.549	0.223	0.151	0.092	0.039	0.021	0.013	0.01
94	3	99.95	27.95	12.31	7.587	3.244	1.865	0.824	0.338	0.066	0.016	0.011	0.009	0.005	0.005
94	4	99.96	37.24	11.47	5.3	2.526	1.794	0.819	0.348	0.199	0.107	0.039	0.01	0.007	0.002
94	5	99.98	65.73	28.96	7.779	2.649	1.23	0.573	0.323	0.232	0.169	0.129	0.083	0.041	0.014
94	6	100	99.49	84.58	10.93	0.988	0.624	0.327	0.188	0.148	0.121	0.081	0.067	0.058	0.046
94	7	100	90.92	65.1	8.442	2.553	1.863	1.293	0.985	0.76	0.412	0.27	0.166	0.106	0.067
94	8	100	73.88	32.36	3.46	1.161	0.637	0.426	0.317	0.249	0.154	0.136	0.111	0.059	0.041
94	9	99.98	54.88	37.99	9.422	2.821	1.715	1.006	0.724	0.541	0.308	0.114	0.052	0.012	
94	10	99.95	53	27.61	7.804	2.37	0.889	0.274	0.171	0.149	0.091	0.055	0.017	0.012	0.002
94	11	99.99	39.16	24.32	9.056	4.427	3.333	1.293	0.593	0.361	0.164	0.077	0.03	0.009	
94	12	99.99	37.6	15.14	4.463	1.109	0.494	0.236	0.151	0.106	0.035	0.012	0.002		
95	1	99.97	13.19	5.56	2.022	0.994	0.69	0.396	0.219	0.134	0.051	0.017	0.012	0.007	0.005
95	2	99.97	9.269	3.73	1.602	0.48	0.223	0.065	0.034	0.008					
95	3	99.96	51.04	22.32	9.471	3.921	1.49	0.519	0.254	0.155	0.085	0.034	0.009		
95	4	100	24.5	11.89	6.199	2.757	1.585	0.836	0.528	0.383	0.245	0.156	0.091	0.037	0.026
95	5	99.98	76.93	49.78	17.79	6.174	4.59	3.099	2.206	1.722	1.021	0.689	0.315	0.173	0.072
95	6	99.97	88.82	58.13	17.27	6.743	4.232	2.423	1.477	1.091	0.801	0.523	0.282	0.168	0.095
95	7	100	97.82	68.5	21.17	1.532	1.218	1.038	0.729	0.454	0.208	0.145	0.095	0.053	0.038
95	8	99.99	94.84	79.42	29.06	2.179	1.175	0.574	0.356	0.251	0.157	0.108	0.056	0.029	0.011
95	9	99.99	90.75	73.28	23.42	6.915	4.019	2.06	1.428	0.968	0.467	0.248	0.167	0.104	0.053
95	10	99.95	31.31	8.737	2.142	0.698	0.451	0.202	0.123	0.099	0.083	0.063	0.049	0.027	0.002
95	11	99.03	4.087	1.815	1.258	0.72	0.431	0.214	0.129	0.056	0.029				
Ann	93 - 94	99.92	49.16	29.21	6.728	2.341	1.406	0.675	0.386	0.259	0.142	0.082	0.048	0.027	0.016
Ann	94 - 95	99.9	50.93	32.68	11.25	2.76	1.65	0.93	0.612	0.435	0.25	0.156	0.084	0.046	0.023

20 GHz Radiometer Attenuation Distribution obtained from Minutes above threshold (%)

Year	Month	-0.5	0.5	0.7	1	1.5	2	3	4	5	7	10	15	20	30 dB
93	12	99.85	12.27	8.471	4.661	3.087	1.555	0.718	0.396	0.226	0.058	0.024	0.002	0.002	
94	1	99.99	11.27	4.8	1.273	0.219	0.03	0.005							
94	2	99.97	18.02	8.129	4.129	2.046	1.322	0.542	0.223	0.141	0.085	0.036	0.021	0.018	0.015
94	3	99.95	27.69	12.37	7.628	3.335	1.858	0.871	0.32	0.057	0.018	0.009	0.007	0.002	
94	4	99.96	37.23	11.94	5.188	2.538	1.726	0.776	0.306	0.153	0.078	0.019	0.007	0.002	
94	5	99.98	65.3	29.41	7.678	2.685	1.23	0.566	0.289	0.217	0.144	0.124	0.063	0.034	0.007
94	6	100	99.61	85.57	10.85	1.004	0.591	0.278	0.165	0.128	0.09	0.06	0.049	0.046	0.044
94	7	99.99	90.76	64.55	7.738	2.564	1.813	1.206	0.931	0.659	0.362	0.229	0.142	0.065	0.027
94	8	100	73.9	31	3.383	1.161	0.603	0.41	0.272	0.175	0.141	0.122	0.07	0.043	0.043
94	9	99.98	54.69	38.26	9.569	2.883	1.663	0.923	0.636	0.429	0.183	0.05	0.005		
94	10	99.95	53.01	28.21	8.136	2.368	0.774	0.238	0.171	0.135	0.072	0.019			
94	11	99.99	38.97	23.93	8.976	4.441	3.268	1.115	0.494	0.281	0.148	0.052	0.005		
94	12	99.99	36.94	15.34	4.647	1.045	0.487	0.229	0.142	0.078	0.026	0.012	0.005	0.002	
95	1	99.97	13.09	5.754	1.973	0.972	0.656	0.309	0.19	0.1	0.032	0.012	0.005		
95	2	99.97	8.75	3.432	0.985	0.43	0.197	0.052	0.023						
95	3	99.96	52.32	22.41	9.658	3.959	1.562	0.553	0.306	0.198	0.115	0.052	0.02	0.016	0.007
95	4	100	24.31	12.04	6.392	2.769	1.581	0.847	0.56	0.395	0.245	0.173	0.128	0.114	0.098
95	5	99.98	76.54	49.55	17.34	6.186	4.574	3.059	2.213	1.748	1.098	0.734	0.502	0.43	0.325
95	6	99.97	88.59	57.97	17.27	6.727	4.205	2.389	1.446	1.049	0.618	0.427	0.294	0.259	0.225
95	7	100	98.12	68.84	21.19	1.479	1.193	1.015	0.729	0.451	0.196	0.128	0.08	0.063	0.048
95	8	99.99	94.69	79.5	29.38	2.19	1.188	0.563	0.334	0.217	0.148	0.076	0.04	0.029	0.025
95	9	99.99	90.77	73.34	22.91	6.866	4.045	2.023	1.409	1.017	0.481	0.276	0.186	0.158	0.135
95	10	99.95	30.97	8.547	2.243	0.723	0.485	0.224	0.137	0.108	0.088	0.065	0.058	0.056	0.049
95	11	99.99	3.202	1.411	0.927	0.543	0.333	0.219	0.124	0.054	0.029	0.007			
Ann	93 - 94	99.97	49.04	29.2	6.613	2.355	1.366	0.638	0.352	0.218	0.116	0.063	0.032	0.018	0.012
Ann	94 - 95	99.98	50.78	32.67	11.18	2.733	1.644	0.916	0.612	0.435	0.247	0.156	0.105	0.09	0.072

27 GHz Beacon Attenuation Distribution obtained from Minutes above threshold (%)

Year	Month	-0.5	0.5	0.7	1	1.5	2	3	4	5	7	10	15	20	30 dB
93	12	99.85	22.18	12.45	7.919	5.542	3.951	1.915	1.078	0.732	0.377	0.113	0.036	0.007	
94	1	99.99	21.56	12.46	6.433	3.31	1.248	0.062	0.014	0.007					
94	2	99.06	16.29	10.11	5.669	3.774	2.863	1.53	0.965	0.598	0.213	0.113	0.067	0.033	0.018
94	3	99.96	19.91	11.47	8.411	5.602	3.567	1.84	1.18	0.735	0.15	0.029	0.023	0.02	0.018
94	4	99.96	36.79	15.18	7.33	4.573	3.333	2.047	1.43	0.972	0.372	0.143	0.066	0.017	0.007
94	5	99.98	41.41	19.24	9.187	5.595	3.603	1.464	0.968	0.627	0.325	0.203	0.135	0.115	0.072
94	6	100	80.03	35.82	3.902	1.565	0.886	0.573	0.429	0.318	0.176	0.134	0.083	0.072	0.065
94	7	100	75.52	36.04	7.356	3.802	2.717	1.926	1.559	1.325	1.008	0.632	0.331	0.225	0.162
94	8	100	71.32	34.92	6.679	2.276	1.363	0.746	0.512	0.44	0.324	0.231	0.143	0.129	0.113
94	9	99.98	53.55	34.58	11.64	5.139	3.438	1.929	1.435	1.077	0.736	0.444	0.202	0.095	0.045
94	10	99.97	54.72	30.75	13.71	6.643	3.913	1.406	0.613	0.31	0.173	0.12	0.065	0.034	0.014
94	11	99.99	32.43	21.73	11.3	6.224	4.87	3.591	2.544	1.499	0.616	0.286	0.112	0.061	0.028
94	12	99.94	26.84	14.53	8.153	3.026	1.477	0.555	0.373	0.251	0.149	0.076	0.019	0.009	0.002
95	1	99.97	13.68	8.301	5.113	2.08	1.264	0.841	0.595	0.467	0.34	0.112	0.051	0.022	0.012
95	2	99.97	12.02	4.393	2.317	1.125	0.56	0.314	0.192	0.124	0.041	0.013			
95	3	99.97	32.08	16.79	9.8	5.908	4.159	1.589	0.757	0.461	0.24	0.115	0.052	0.02	
95	4	100	22.33	13.22	9.03	5.603	3.406	1.812	1.132	0.864	0.535	0.325	0.194	0.145	0.086
95	5	99.98	51.28	26.9	12.6	7.775	6.137	4.567	3.604	3.038	2.166	1.426	0.832	0.582	0.337
95	6	99.97	61.44	29.48	14.06	8.49	5.972	3.972	3.041	2.339	1.404	0.939	0.649	0.458	0.37
95	7	100	80.76	43.5	6.016	1.85	1.394	1.196	1.113	1.025	0.694	0.266	0.155	0.125	0.095
95	8	99.99	88.27	54.28	10.66	2.791	1.688	1.065	0.742	0.56	0.35	0.188	0.141	0.087	0.067
95	9	99.99	81.85	51.67	18.73	8.768	5.986	3.606	2.552	2.004	1.389	0.736	0.325	0.209	0.181
95	10	99.97	19.14	6.241	2.82	1.228	0.723	0.433	0.258	0.195	0.119	0.092	0.07	0.058	0.049
95	11	98.61	9.013	4.335	2.608	1.508	1.01	0.543	0.311	0.241	0.161	0.039	0.015		
Ann	93 - 94	99.9	44.13	23.03	8.289	4.494	2.967	1.579	1.058	0.72	0.374	0.206	0.106	0.069	0.046
Ann	94 - 95	99.86	41.21	22.79	8.401	4.084	2.743	1.648	1.171	0.924	0.61	0.344	0.196	0.134	0.092

27 GHz Radiometer Attenuation Distribution obtained from Minutes above threshold (%)

Year	Month	-0.5	0.5	0.7	1	1.5	2	3	4	5	7	10	15	20	30 dB
93	12	99.86	20.78	12.46	7.909	5.439	3.872	2.028	1.215	0.888	0.559	0.3	0.156	0.103	0.074
94	1	99.99	21.61	12.47	6.231	3.344	1.358	0.089	0.025	0.009					
94	2	99.97	14.9	9.641	5.52	3.497	2.65	1.535	0.981	0.66	0.254	0.139	0.1	0.098	0.085
94	3	99.96	17.34	11.04	8.474	5.572	3.546	1.906	1.166	0.79	0.247	0.018	0.014	0.011	0.009
94	4	99.96	36.27	14.82	7.337	4.403	3.384	1.998	1.442	1.014	0.472	0.187	0.092	0.075	0.061
94	5	99.98	41.73	19.39	9.268	5.417	3.438	1.374	0.963	0.654	0.343	0.205	0.151	0.14	0.126
94	6	100	80.46	35.12	4.111	1.512	0.869	0.563	0.371	0.288	0.162	0.104	0.081	0.079	0.074
94	7	99.99	74.12	35.77	7.151	3.847	2.695	1.935	1.539	1.309	1.051	0.767	0.52	0.454	0.416
94	8	100	71.26	33.77	6.253	2.36	1.44	0.726	0.517	0.447	0.367	0.243	0.161	0.154	0.147
94	9	99.98	51.07	33.57	11.06	5.073	3.326	1.936	1.414	1.146	0.769	0.548	0.349	0.289	0.249
94	10	99.97	56.54	30.49	13.68	6.857	3.896	1.332	0.55	0.293	0.171	0.125	0.089	0.072	0.053
94	11	99.99	32.93	20.6	11.15	6.325	4.774	3.715	2.738	1.71	0.74	0.389	0.246	0.208	0.185
94	12	99.99	23.41	13.87	8.299	3.073	1.423	0.567	0.388	0.262	0.189	0.118	0.064	0.054	0.035
95	1	99.97	13.31	8.332	5.193	2.007	1.242	0.819	0.571	0.45	0.262	0.175	0.087	0.063	0.049
95	2	99.97	9.445	4.212	2.468	0.78	0.547	0.36	0.181	0.088	0.036	0.008			
95	3	99.97	30.35	15.92	9.618	5.962	4.06	1.58	0.697	0.461	0.229	0.115	0.065	0.04	0.022
95	4	100	21.87	13.29	9.138	5.594	3.462	1.718	1.137	0.805	0.549	0.315	0.208	0.182	0.154
95	5	99.98	50.69	27.01	12.78	7.633	6.086	4.429	3.496	2.947	2.071	1.449	0.911	0.802	0.727
95	6	99.97	62.26	29.14	13.85	8.639	6.052	3.877	2.862	2.179	1.213	0.683	0.458	0.427	0.389
95	7	100	81.67	44.94	6.462	1.81	1.361	1.166	1.073	0.978	0.637	0.243	0.138	0.12	0.105
95	8	99.99	89.24	55.82	10.3	2.733	1.715	1.042	0.675	0.495	0.285	0.137	0.069	0.052	0.04
95	9	99.99	83.21	50.83	18.41	8.668	5.903	3.553	2.452	1.886	1.303	0.708	0.327	0.286	0.237
95	10	99.97	17.52	6.082	2.701	1.136	0.739	0.456	0.26	0.2	0.114	0.088	0.076	0.072	0.067
95	11	99.96	7.629	3.274	1.815	1.095	0.81	0.467	0.304	0.238	0.148	0.039	0.022	0.012	0.007
Ann	93 - 94	99.97	43.58	22.56	8.174	4.463	2.927	1.588	1.074	0.766	0.429	0.253	0.164	0.141	0.124
Ann	94 - 95	99.98	40.49	22.72	8.328	3.994	2.709	1.611	1.127	0.879	0.569	0.331	0.195	0.169	0.146

20 GHz Beacon Attenuation Relative to Clear Sky Distribution obtained from Minutes above threshold (%)

Year	Month	-0.5	0.5	0.7	1	1.5	2	3	4	5	7	10	15	20	30 dB
93	12	99.74	4.945	3.97	3.092	1.534	0.991	0.535	0.283	0.17	0.048	0.014			
94	1	99.96	1.797	0.968	0.36	0.043	0.009								
94	2	99.04	6.742	3.941	2.442	1.392	0.899	0.357	0.177	0.131	0.085	0.036	0.018	0.013	0.01
94	3	99.93	8.361	6.416	3.877	2.117	1.305	0.622	0.193	0.036	0.016	0.009	0.007	0.005	0.002
94	4	99.19	6.319	3.856	2.64	1.877	1.325	0.591	0.27	0.163	0.095	0.032	0.01	0.005	0.002
94	5	99.98	6.34	4.275	2.182	1.23	0.869	0.406	0.271	0.223	0.162	0.129	0.079	0.038	0.014
94	6	100	8.442	1.591	0.897	0.589	0.424	0.234	0.167	0.137	0.104	0.081	0.067	0.058	0.046
94	7	99.8	8.229	3.082	2.279	1.734	1.431	1.082	0.823	0.607	0.364	0.247	0.157	0.097	0.067
94	8	100	7.026	1.725	0.968	0.565	0.463	0.347	0.263	0.209	0.152	0.134	0.111	0.054	0.041
94	9	99.98	6.646	3.445	2.342	1.592	1.193	0.802	0.598	0.429	0.259	0.1	0.038	0.012	
94	10	99.95	7.28	3.61	1.94	0.798	0.385	0.204	0.161	0.13	0.084	0.053	0.014	0.012	0.002
94	11	99.99	10.79	6.2	4.554	3.504	2.239	0.82	0.445	0.302	0.152	0.073	0.028	0.005	
94	12	99.99	7.637	3.539	1.607	0.629	0.385	0.208	0.13	0.097	0.028	0.012	0.002		
95	1	99.97	3.946	1.949	1.162	0.753	0.525	0.328	0.199	0.112	0.049	0.015	0.01	0.007	0.005
95	2	99.97	2.605	1.744	0.677	0.319	0.119	0.057	0.031	0.005					
95	3	99.96	15.28	7.793	3.971	1.533	0.825	0.353	0.198	0.128	0.074	0.027	0.007		
95	4	100	6.967	5.006	3.121	1.735	1.167	0.675	0.453	0.327	0.219	0.149	0.079	0.037	0.026
95	5	99.95	19.76	8.137	6.001	4.487	3.548	2.538	1.914	1.433	0.923	0.631	0.297	0.168	0.07
95	6	99.97	10.46	7.727	5.514	3.865	2.942	1.698	1.217	0.965	0.698	0.481	0.275	0.164	0.095
95	7	100	31.86	13.88	1.722	1.203	1.105	0.865	0.567	0.283	0.198	0.135	0.093	0.053	0.038
95	8	99.99	38.9	17.31	2.363	0.917	0.628	0.386	0.265	0.186	0.146	0.09	0.047	0.029	0.011
95	9	99.99	30.64	14.44	5.917	3.574	2.522	1.635	1.126	0.778	0.381	0.239	0.165	0.102	0.053
95	10	99.95	4.991	1.293	0.721	0.442	0.276	0.162	0.101	0.097	0.081	0.063	0.047	0.022	0.002
95	11	98.78	1.589	1.204	0.905	0.523	0.324	0.178	0.085	0.032	0.017				
Ann	93-94	99.8	6.912	3.581	2.289	1.41	0.959	0.501	0.306	0.213	0.128	0.077	0.045	0.025	0.016
Ann	94-95	99.88	14.85	7.047	2.75	1.606	1.148	0.73	0.504	0.354	0.221	0.144	0.08	0.045	0.023

20 GHz Radiometer Sky Temperature Distribution obtained from Minutes above threshold (%)

Year	Month	0	25	50	75	100	125	150	175	200	225	250	275	300	325 deg K
93	12	99.86	68.84	10.58	4.394	2.826	1.359	0.78	0.475	0.264	0.115	0.038	0.012		
94	1	99.99	85.47	7.021	1.005	0.098	0.021	0.005							
94	2	99.97	86.92	12.56	3.905	1.915	1.107	0.585	0.267	0.151	0.098	0.077	0.028	0.013	
94	3	99.99	85.12	20.1	6.977	2.879	1.541	0.928	0.402	0.1	0.066	0.064	0.057	0.048	0.045
94	4	99.96	89.48	23.34	4.656	2.363	1.481	0.822	0.357	0.163	0.107	0.049	0.01	0.002	
94	5	99.98	99.98	54.67	7.335	2.5	1.117	0.652	0.352	0.223	0.169	0.131	0.108	0.005	
94	6	100	100	97.64	8.676	0.937	0.547	0.327	0.183	0.151	0.109	0.077	0.053	0.037	
94	7	100	99.99	85.88	6.936	2.572	1.705	1.294	1.037	0.792	0.493	0.326	0.207	0.009	
94	8	100	96.93	61.79	3.095	1.122	0.549	0.429	0.32	0.231	0.154	0.138	0.118	0.025	
94	9	99.98	99.71	47.42	9.004	2.785	1.53	1.056	0.759	0.534	0.32	0.157	0.047		
94	10	99.98	96.91	41.9	7.703	2.199	0.639	0.31	0.214	0.173	0.135	0.084	0.048	0.034	0.034
94	11	99.99	86.8	31.18	7.908	4.167	2.736	1.256	0.593	0.319	0.173	0.087	0.016		
94	12	99.99	99.82	23.72	3.725	0.844	0.399	0.217	0.144	0.085	0.031	0.014	0.005		
95	1	99.97	95.68	7.929	1.616	0.875	0.537	0.299	0.199	0.114	0.036	0.022	0.01		
95	2	99.97	83.99	5.342	0.772	0.334	0.119	0.049	0.023						
95	3	100	99.76	34.16	8.541	3.598	1.252	0.636	0.371	0.249	0.166	0.128	0.081	0.052	0.047
95	4	100	85.84	17.68	5.827	2.433	1.37	0.878	0.602	0.404	0.292	0.212	0.152	0.068	
95	5	99.98	97.85	65.51	15.64	5.997	4.242	3.246	2.524	1.898	1.393	0.977	0.696	0.269	
95	6	99.97	99.97	84.89	18.05	6.689	3.957	2.728	1.813	1.145	0.851	0.584	0.408	0.218	
95	7	100	100	90.28	14.82	1.431	1.166	1.06	0.857	0.597	0.271	0.178	0.118	0.05	0.03
95	8	99.99	99.99	92.83	23.92	2.37	1.161	0.684	0.446	0.291	0.177	0.143	0.094	0.036	
95	9	99.99	99.76	85.03	20.42	6.85	3.618	2.234	1.679	1.17	0.769	0.43	0.237	0.151	
95	10	99.99	93.73	18.07	1.848	0.727	0.424	0.274	0.2	0.148	0.137	0.121	0.106	0.083	0.045
95	11	99.99	62.09	1.821	0.864	0.516	0.31	0.241	0.178	0.076	0.036	0.023			
		99.98	91.46	41.65	5.975	2.192	1.192	0.704	0.415	0.26	0.163	0.103	0.06	0.014	0.007
		99.99	93.27	43.12	9.555	2.636	1.487	1.001	0.725	0.5	0.335	0.228	0.153	0.074	0.011

27 GHz Beacon Attenuation Relative to Clear Sky Distribution obtained from Minutes above threshold (%)

Year	Month	-0.5	0.5	0.7	1	1.5	2	3	4	5	7	10	15	20	30 db
93	12	99.85	8.843	7.112	5.85	4.213	2.972	1.416	0.893	0.626	0.319	0.089	0.024	0.005	
94	1	99.99	8.907	6.092	4.005	1.574	0.515	0.032	0.009	0.005					
94	2	98.65	7.659	5.366	4.028	3.094	2.208	1.266	0.814	0.472	0.187	0.103	0.064	0.033	0.018
94	3	99.59	9.509	8.052	6.341	4.034	2.729	1.55	1.048	0.604	0.109	0.029	0.023	0.02	0.018
94	4	99.93	9.795	6.729	4.955	3.562	2.674	1.789	1.228	0.834	0.333	0.129	0.061	0.017	0.007
94	5	99.98	8.973	7.567	5.67	3.621	2.572	1.13	0.844	0.526	0.302	0.196	0.133	0.115	0.07
94	6	100	4.264	2.288	1.584	0.883	0.686	0.51	0.371	0.269	0.162	0.128	0.083	0.072	0.065
94	7	99.94	7.918	5.016	3.604	2.612	2.178	1.676	1.415	1.219	0.922	0.56	0.322	0.223	0.16
94	8	100	11.09	4.33	2.396	1.335	0.966	0.576	0.472	0.401	0.302	0.215	0.143	0.129	0.113
94	9	99.81	11.27	6.952	4.952	3.31	2.339	1.639	1.217	0.963	0.681	0.418	0.192	0.081	0.045
94	10	99.97	15.87	9.71	6.845	3.882	2.3	0.899	0.418	0.262	0.166	0.113	0.065	0.029	0.014
94	11	99.88	14.29	9.681	6.723	5.022	4.268	3.235	2.111	1.256	0.562	0.244	0.108	0.059	0.028
94	12	99.61	11.45	7.396	4.132	1.841	0.941	0.487	0.324	0.232	0.132	0.076	0.017	0.007	0.002
95	1	99.97	7.392	5.254	2.979	1.468	1.132	0.765	0.535	0.452	0.294	0.1	0.051	0.022	0.012
95	2	99.63	4.03	2.317	1.656	0.762	0.5	0.267	0.179	0.096	0.039	0.01			
95	3	99.97	13.68	9.894	6.937	4.393	2.856	1.108	0.611	0.393	0.213	0.112	0.049	0.02	
95	4	99.8	10.29	8.274	6.229	3.999	2.552	1.492	1.032	0.773	0.483	0.311	0.184	0.138	0.086
95	5	99.98	13.53	9.949	7.986	6.219	5.342	4.038	3.3	2.793	2.038	1.334	0.806	0.554	0.337
95	6	99.97	12.24	10.03	8.147	5.808	4.697	3.408	2.652	2.007	1.267	0.897	0.622	0.454	0.37
95	7	100	15.33	3.795	1.868	1.399	1.276	1.151	1.085	0.968	0.607	0.233	0.153	0.12	0.095
95	8	99.99	22.34	4.186	2.293	1.558	1.246	0.832	0.601	0.471	0.296	0.17	0.132	0.083	0.067
95	9	99.99	27.39	14.38	8.64	5.944	4.7	3.012	2.243	1.797	1.245	0.664	0.316	0.204	0.181
95	10	99.97	3.996	2.425	1.488	0.752	0.613	0.323	0.231	0.184	0.108	0.092	0.063	0.056	0.049
95	11	87.87	3.501	2.418	1.725	1.209	0.878	0.46	0.277	0.224	0.131	0.032	0.012		
		99.81	9.856	6.566	4.736	3.082	2.191	1.305	0.902	0.62	0.339	0.187	0.103	0.066	0.046
		98.89	12.21	6.645	4.431	2.883	2.169	1.391	1.044	0.832	0.551	0.32	0.188	0.129	0.092

27 GHz Radiometer Sky Temperature Distribution obtained from Minutes above threshold (%)

Year	Month	0	25	50	75	100	125	150	175	200	225	250	275	300	325 deg K
93	12	99.86	99.57	14.64	7.491	4.954	3.528	2.16	1.373	0.948	0.672	0.456	0.23	0.065	0.022
94	1	99.99	92.03	16.71	5.55	2.779	0.873	0.084	0.027	0.014	0.002				
94	2	99.97	56.37	11.62	5.032	3.33	2.262	1.571	1.078	0.691	0.326	0.18	0.116	0.08	
94	3	99.99	69.83	13.27	7.957	5.06	2.968	1.938	1.277	0.835	0.374	0.079	0.048	0.045	0.029
94	4	99.96	83.79	24.99	6.797	4.143	3.054	2.122	1.515	1.033	0.562	0.243	0.102	0.034	0.005
94	5	99.98	92.64	32.45	9.059	5.23	3.172	1.674	1.056	0.736	0.435	0.253	0.178	0.122	0.014
94	6	100	100	63.13	3.842	1.435	0.798	0.601	0.431	0.327	0.213	0.139	0.09	0.067	0.042
94	7	100	99.83	60.28	6.997	3.78	2.585	2.072	1.683	1.404	1.195	1.001	0.736	0.423	0.164
94	8	100	98.42	57.99	5.478	2.242	1.347	0.846	0.583	0.476	0.399	0.333	0.231	0.147	0.122
94	9	99.98	94.85	42.95	10.47	4.997	3.132	2.114	1.63	1.267	0.925	0.712	0.52	0.263	0.069
94	10	99.98	90.12	44.43	12.8	6.35	3.478	1.675	0.776	0.387	0.238	0.171	0.132	0.072	0.031
94	11	99.99	64.24	26.66	10.16	6.02	4.476	3.739	2.907	1.794	0.97	0.55	0.283	0.131	
94	12	99.99	74.44	17.83	7.406	2.565	1.016	0.551	0.392	0.258	0.194	0.121	0.064	0.019	
95	1	99.97	71.1	9.751	4.403	1.65	1.108	0.816	0.595	0.442	0.27	0.197	0.1	0.036	0.01
95	2	99.97	65.41	4.966	1.972	0.682	0.505	0.342	0.184	0.08	0.036	0.01			
95	3	100	85.82	20.7	9.249	5.478	3.449	1.773	0.861	0.51	0.315	0.191	0.112	0.043	0.031
95	4	100	74.58	16.17	8.512	5.141	2.741	1.735	1.205	0.833	0.598	0.381	0.238	0.098	
95	5	99.98	96.96	40.87	11.89	7.355	5.805	4.658	3.767	3.127	2.489	1.879	1.271	0.633	
95	6	99.97	99.94	47.93	13.89	8.547	5.716	4.159	3.251	2.454	1.751	1.057	0.637	0.366	0.046
95	7	100	100	69.97	5.201	1.742	1.296	1.183	1.108	1.04	0.84	0.531	0.226	0.088	0.045
95	8	99.99	99.96	77.66	10	2.84	1.686	1.222	0.85	0.603	0.428	0.282	0.146	0.063	
95	9	99.99	97.91	69.37	17.37	8.401	5.538	3.903	2.749	2.064	1.618	1.133	0.664	0.223	
95	10	99.99	81.94	10	2.521	1.035	0.698	0.53	0.308	0.229	0.168	0.121	0.11	0.09	0.027
95	11	99.98	50.82	6.762	2.478	1.518	0.986	0.728	0.477	0.371	0.295	0.153	0.051	0.007	
		99.98	87.07	34.37	7.632	4.186	2.63	1.709	1.191	0.825	0.527	0.345	0.224	0.122	0.042
		99.99	83.88	33.14	7.954	3.873	2.512	1.768	1.28	0.976	0.734	0.499	0.3	0.136	0.013

20 GHz Beacon Standard Deviation Distribution obtained from Minutes above threshold (%)

Year	Month	0.002	0.005	0.007	0.01	0.02	0.05	0.07	0.1	0.2	0.5	1	2	5	10 dB
93	12	99.86	99.86	99.86	99.86	89.47	9.308	3.653	1.601	0.341	0.074	0.024	0.005		
94	1	99.99	99.99	99.99	99.99	85.94	8.443	2.8	0.95	0.1	0.002				
94	2	99.97	99.97	99.97	99.97	88.59	11.78	4.352	1.695	0.336	0.1	0.018	0.008	0.005	
94	3	99.99	99.99	99.99	99.99	96.98	23.86	9.867	3.271	0.372	0.045	0.018	0.014	0.005	
94	4	99.96	99.96	99.96	99.96	99.08	39.04	21.68	9.829	1.85	0.248	0.053	0.015	0.005	
94	4	100	100	100	100	98.91	32.78	17.12	7.699	1.523	0.264	0.089	0.03	0.007	0.005
94	5	99.98	99.98	99.98	99.98	99.82	52.04	30.81	14.03	2.135	0.232	0.113	0.034	0.009	
94	6	100	100	100	100	100	80.98	55.81	27.89	4.906	0.25	0.039	0.028	0.012	0.002
94	7	100	100	100	100	99.99	78.22	52.99	25.66	4.196	0.464	0.185	0.059	0.016	0.002
94	8	100	100	100	100	100	80.59	57.72	30.54	4.627	0.272	0.045	0.011	0.005	
94	9	99.98	99.98	99.98	99.98	99.81	47.5	25.67	11.63	1.76	0.27	0.116	0.045	0.012	0.007
94	10	99.98	99.98	99.98	99.98	99.19	46.67	24.68	9.567	1.243	0.147	0.036	0.014	0.007	0.002
94	11	99.99	99.99	99.99	99.99	98.82	28.62	15.72	6.821	1.387	0.241	0.082	0.023	0.002	
94	12	99.99	99.99	99.99	99.99	98.25	14.42	6.238	2.905	0.619	0.135	0.038	0.007		
95	1	99.97	99.97	99.97	99.97	97.45	3.883	1.618	0.666	0.177	0.046	0.024	0.01	0.002	0.002
95	2	99.97	99.97	99.97	99.97	95.26	7.118	2.141	0.793	0.194	0.029	0.005	0.003		
95	3	100	100	100	100	97	19.37	7.582	2.754	0.555	0.151	0.079	0.031	0.004	0.004
95	5	99.98	99.98	99.98	99.98	99.45	53.79	30.33	14.71	3.804	0.924	0.397	0.117	0.042	
95	6	99.97	99.97	99.97	99.97	99.87	63.74	42.52	24.17	6.518	1.176	0.428	0.157	0.046	0.008
95	7	100	100	100	100	100	80.81	53.43	24.57	3.784	0.389	0.11	0.04	0.008	
95	8	99.99	99.99	99.99	99.99	99.99	73.04	46.18	23.23	4.625	0.534	0.11	0.029	0.009	
95	9	99.99	99.99	99.99	99.99	99.62	63.59	36.69	16.27	2.801	0.537	0.221	0.105	0.033	0.009
95	10	99.99	99.99	99.99	99.99	88.17	19.3	7.897	2.482	0.373	0.106	0.049	0.02	0.004	
95	11	99.99	99.99	99.99	99.99	84.64	6.561	2.202	0.783	0.134	0.019				
Ann	93 - 94	99.98	99.98	99.98	99.98	96.54	42.7	25.82	12.13	1.964	0.197	0.062	0.021	0.006	0.001
Ann	94 - 95	99.99	99.99	99.99	99.99	96.45	35.87	20.56	9.674	1.962	0.336	0.121	0.043	0.012	0.002

20 GHz Radiometer Standard Deviation Distribution obtained from Minutes above threshold (%)

Year	Month	0.002	0.005	0.007	0.01	0.02	0.05	0.07	0.1	0.2	0.5	1	2	5	10 dB
93	12	99.86	26.33	16.63	9.047	3.502	1.318	0.955	0.646	0.24	0.065	0.019	0.007	0.002	
94	1	99.99	31.4	19.62	9.564	2.422	0.415	0.2	0.071	0.009					
94	2	99.97	35.74	22.54	13.3	5.375	1.672	1.045	0.678	0.221	0.082	0.01	0.005	0.005	
94	3	99.99	44.3	22.89	12.66	5.069	1.802	1.214	0.733	0.22	0.048	0.03	0.025	0.002	
94	4	99.96	60.87	28.36	16.41	7.451	3.117	2.186	1.378	0.494	0.097	0.022	0.005		
94	4	100	34.52	19.97	14.36	7.456	2.944	2.049	1.332	0.519	0.187	0.091	0.061	0.037	0.005
94	5	99.98	71.07	25.93	12.73	4.826	1.523	1.031	0.715	0.35	0.156	0.07	0.027	0.011	0.002
94	6	100	82.15	29.12	13.02	5.18	0.972	0.589	0.385	0.137	0.023	0.007	0.005	0.005	
94	7	100	82.63	29.05	13.96	6.466	2.225	1.663	1.192	0.634	0.247	0.099	0.036	0.029	
94	8	100	83.02	27.84	12.18	4.185	1.109	0.778	0.497	0.215	0.057	0.009	0.007	0.005	
94	9	99.98	77.82	22.15	10.82	4.733	2.005	1.526	1.08	0.479	0.107	0.024	0.002		
94	10	99.98	76.42	27.22	14.51	5.126	1.387	0.873	0.539	0.248	0.063	0.022	0.012		
94	11	99.99	72.3	27.98	17.76	8.365	3.394	2.3	1.565	0.553	0.134	0.021	0.005		
94	12	99.99	68.97	20.73	11.82	5.009	1.333	0.832	0.56	0.286	0.078	0.019	0.005	0.002	
95	1	99.97	62.49	15.97	8.308	2.911	0.651	0.416	0.267	0.104	0.032	0.007	0.002		
95	2	99.97	43.43	12.8	6.638	1.998	0.438	0.233	0.127	0.047	0.01	0.003			
95	3	100	43.1	24.49	16.13	6.712	1.868	1.245	0.821	0.461	0.193	0.112	0.058	0.018	0.002
95	5	99.98	41.42	26.43	18.66	10.29	5.404	4.228	3.232	1.781	0.696	0.354	0.199	0.131	0.007
95	6	99.97	33.76	22.46	16.93	10.74	5.889	4.531	3.311	1.625	0.558	0.222	0.084	0.046	0.008
95	7	100	28.67	12.52	7.165	3.22	1.54	1.269	0.943	0.436	0.15	0.068	0.03	0.018	
95	8	99.99	27.29	12.4	7.146	3.193	1.242	0.892	0.635	0.363	0.15	0.047	0.016	0.009	
95	9	99.99	36.26	22.55	15.65	8.046	3.524	2.669	1.867	0.895	0.321	0.133	0.074	0.049	
95	10	99.99	15.5	9.125	5.501	1.872	0.625	0.422	0.283	0.142	0.067	0.043	0.025	0.007	
95	11	99.99	12.8	8.488	5.744	2.304	0.645	0.382	0.212	0.061	0.012				
Ann	93 - 94	99.98	62.28	24.98	12.98	5.214	1.738	1.193	0.788	0.317	0.09	0.028	0.012	0.005	2E-04
Ann	94 - 95	99.99	37.35	17.23	11.05	5.173	2.069	1.512	1.069	0.53	0.195	0.088	0.046	0.026	0.002

27 GHz Beacon Standard Deviation Distribution obtained from Minutes above threshold (%)

Year	Month	0.002	0.005	0.007	0.01	0.02	0.05	0.07	0.1	0.2	0.5	1	2	5	10 dB
93	12	99.86	99.86	99.86	99.86	99.78	18.78	6.826	2.808	0.756	0.173	0.06	0.012		
94	1	99.99	99.99	99.99	99.99	99.79	18.01	6.484	2.367	0.335	0.011				
94	2	99.97	99.97	99.97	99.97	99.74	21.62	8.785	3.462	0.889	0.157	0.074	0.013	0.005	0.003
94	3	99.99	99.99	99.99	99.99	99.94	34.44	15.8	5.961	0.969	0.102	0.02	0.007	0.007	0.005
94	4	99.96	99.96	99.96	99.96	99.95	50.97	30.14	14.73	3.221	0.525	0.146	0.034	0.002	
94	4	100	100	100	100	100	47.75	25.16	12.1	3.046	0.533	0.199	0.096	0.047	0.002
94	5	99.98	99.98	99.98	99.98	99.98	69.04	42.51	20.95	3.429	0.363	0.153	0.093	0.038	
94	6	100	100	100	100	100	92.04	70.3	39.48	7.34	0.575	0.053	0.014	0.009	
94	7	100	100	100	100	100	90.71	69.52	37.76	6.565	0.797	0.284	0.14	0.061	0.002
94	8	100	100	100	100	100	93.38	74.21	44.82	7.563	0.506	0.088	0.036	0.018	
94	9	99.98	99.98	99.98	99.98	99.98	68.08	38.98	17.52	3.163	0.593	0.228	0.109	0.052	0.007
94	10	99.98	99.98	99.98	99.98	99.95	59.29	35.28	15.2	2.147	0.281	0.099	0.014	0.012	0.002
94	11	99.99	99.99	99.99	99.99	99.94	38.22	21.98	11.01	2.743	0.607	0.211	0.075	0.03	0.005
94	12	99.99	99.99	99.99	99.99	99.91	23.99	9.306	4.378	1.064	0.281	0.099	0.031	0.002	
95	1	99.97	99.97	99.97	99.97	99.79	8.481	3.247	1.482	0.462	0.122	0.049	0.024	0.015	0.002
95	2	99.97	99.97	99.97	99.97	99.86	14.09	4.673	1.83	0.482	0.07	0.018	0.005		
95	3	100	100	100	100	99.99	33.21	14.29	5.325	1.05	0.308	0.137	0.07	0.025	0.004
95	5	99.98	99.98	99.98	99.98	99.98	71.33	43.28	21.5	5.985	1.583	0.625	0.305	0.155	0.007
95	6	99.97	99.97	99.97	99.97	99.97	82.26	56.3	32.75	9.406	1.857	0.647	0.283	0.077	0.015
95	7	100	100	100	100	100	94.32	73.09	38.58	6.051	0.68	0.173	0.065	0.038	0.005
95	8	99.99	99.99	99.99	99.99	99.99	91.75	65.1	34.67	7.103	0.879	0.2	0.083	0.031	0.002
95	9	99.99	99.99	99.99	99.99	99.99	82.04	54.37	25.96	4.66	0.858	0.335	0.137	0.07	0.019
95	10	99.99	99.99	99.99	99.99	99.99	34.38	14.16	4.796	0.658	0.112	0.045	0.025	0.013	
95	11	99.99	99.99	99.99	99.99	99.96	15.21	5.308	2.197	0.783	0.265	0.075	0.01		
Ann	93 - 94	99.98	99.98	99.98	99.98	99.92	55.01	35.48	18.25	3.299	0.393	0.118	0.046	0.02	0.002
Ann	94 - 95	99.99	99.99	99.99	99.99	99.95	49.18	30.01	14.96	3.218	0.593	0.204	0.089	0.038	0.004

27 GHz Radiometer Standard Deviation Distribution obtained from Minutes above threshold (%)

Year	Month	0.002	0.005	0.007	0.01	0.02	0.05	0.07	0.1	0.2	0.5	1	2	5	10 dB
93	12	99.86	21.44	16.64	12.16	5.844	2.299	1.696	1.267	0.712	0.273	0.116	0.06	0.039	0.005
94	1	99.99	24.34	17.92	12.28	4.775	1.12	0.624	0.382	0.073	0.007				
94	2	99.97	22.04	17.82	13.96	7.718	2.958	2.045	1.308	0.492	0.118	0.058	0.032	0.021	
94	3	99.99	22.56	17.65	13.19	7.124	3.121	2.229	1.579	0.569	0.102	0.033	0.023	0.007	
94	4	99.96	28.68	22.8	17.55	10.4	5.132	3.882	2.763	1.247	0.32	0.086	0.032	0.032	0.002
94	4	100	37.1	25.38	18.17	10.53	4.583	3.236	2.235	0.905	0.245	0.098	0.056	0.04	0.002
94	5	99.98	30.99	22.65	16.34	7.317	2.714	1.901	1.222	0.556	0.204	0.091	0.045	0.027	0.005
94	6	100	28.63	18.14	11.11	4.896	1.776	1.191	0.736	0.334	0.077	0.035	0.014	0.012	
94	7	100	52.71	33.17	20.09	10.11	4.514	3.369	2.391	1.057	0.377	0.215	0.135	0.084	0.002
94	8	100	41.03	24.89	16.62	8.193	3.506	2.532	1.723	0.672	0.129	0.039	0.016	0.011	
94	9	99.98	35.95	21.24	14.04	7.539	3.641	2.725	1.931	0.996	0.381	0.188	0.098	0.074	
94	10	99.98	41.54	29.85	21.32	10.3	3.207	2.1	1.321	0.524	0.171	0.067	0.041	0.024	0.005
94	11	99.99	41.06	31.4	24.22	13.71	6.18	4.636	3.319	1.556	0.458	0.169	0.075	0.047	0.005
94	12	99.99	37.43	27.45	20.15	9.928	3.084	1.996	1.199	0.537	0.241	0.125	0.061	0.033	
95	1	99.97	38.85	30.62	22.47	9.137	1.435	0.846	0.53	0.289	0.126	0.058	0.039	0.022	0.002
95	2	99.97	36.28	25.68	17.76	7.235	1.073	0.604	0.334	0.119	0.026	0.008			
95	3	100	38.85	29.09	21.18	10.69	3.444	2.19	1.351	0.623	0.259	0.115	0.063	0.036	0.007
95	5	99.98	64.75	43.97	30.24	15.27	7.524	5.913	4.553	2.374	0.868	0.329	0.174	0.104	0.002
95	6	99.97	55.78	33	22.99	14.03	8.13	6.429	4.871	2.409	0.724	0.234	0.092	0.042	0.004
95	7	100	34.79	14.6	9.311	4.571	2.007	1.628	1.28	0.703	0.248	0.085	0.045	0.03	
95	8	99.99	44.11	15.05	9.724	4.862	1.944	1.417	1.005	0.505	0.179	0.067	0.025	0.018	0.004
95	9	99.99	59.23	31.11	22.44	12.06	5.371	3.933	2.932	1.45	0.507	0.198	0.1	0.061	0.002
95	10	99.99	35.77	13.34	8.539	3.636	1.081	0.701	0.467	0.207	0.083	0.04	0.016	0.002	
95	11	99.99	24.04	11.63	7.842	3.897	1.315	0.805	0.464	0.144	0.022	0.012	0.007	0.005	
Ann	93 - 94	99.98	32.75	22.92	16.09	8.149	3.342	2.407	1.66	0.731	0.218	0.091	0.048	0.031	0.002
Ann	94 - 95	99.99	41.93	24.82	17.39	8.67	3.284	2.361	1.678	0.81	0.282	0.111	0.056	0.033	0.002