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Tabulations of Ambient Ozone Data Obtained by GASP Airliners; March 1975 to July 1979

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PREFACE

This report contains part of the data, either obtained by the Global Air Sampling Program (GASP) or analyzed from existing ozonesonde measurements since the publication of Federal Aviation Administration (FAA) Report Number FAA-EQ-78-03, "Guidelines for Flight Planning During Periods of High Ozone Occurrence," in 1978.

The FAA has published Advisory Circular 120-38, "Transport Category Airplanes Cabin Ozone Concentrations" dated October 10, 1980. (Copies of this advisory circular may be obtained free of charge from the United States Department of Transportation, Publications Section M-443.1, Washington, D.C. 20590.) In this advisory circular, examples are presented for acceptable (but not the only) means for an air carrier to demonstrate compliance with the maximum permissible cabin ozone concentrations established by Section 121.578 of the Federal Aviation Regulations (FAR). In paragraph 6 and Appendix 2 of the advisory circular, it is stated that any ozone data set used to show compliance must have, as a minium, a resolution on a monthly basis of 2,000 feet in altitude and 5 degrees in latitude.

The data in this report have not been statistically compared with those published in the FAA Report Number FAA-EQ-78-03 to determine whether they are comparable. Hence, use of the data tabulated in this report, to show compliance with Section 121.578 of the FAR, is not acceptable.

Since the data sets have been compiled, however, the FAA would like to disseminate them at this time as information to the scientific community and other interested groups.

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TABULATIONS OF AMBIENT OZONE DATA OBTAINED BY GASP AIRLINERS: MARCH 1975 TO JULY 1979

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SUMMARY

Tabulations are given of GASP ambient ozone mean, standard deviation, median, 84th percentile, and 98th percentile values, by month, flight level, and geographical region. These data are tabulated to conform to the temporal and spatial resolution required by FAA Advisory Circular 120-38 (monthly by 2000 ft in altitude by 5° in latitude) for climatological data used to show compliance with cabin ozone regulations. In addition seasonal x 10° latitude tabulations are included which are directly comparable to and supersede the interim GASP ambient ozone tabulations given in appendix B of FAA-EE-80-43. Selected probability variations are highlighted to illustrate the spatial and temporal variability of ambient ozone and to compare results from the coarse and fine grid analyses.

INTRODUCTION

From March 1975 to July 1979, the NASA Global Atmospheric Sampling Program (GASP) obtained atmospheric trace-constituents data in the upper troposphere and lower stratosphere using fully automated sampling systems on several Boeing 747 airplanes in routine commercial service (ref. 1). GASP systems were operated on a United Airlines B747, two Pan American World Airways B747's, and a Qantas Airways of Australia B747. Data from the United airliner were over the contiguous United States and between the U.S. West Coast and Hawaii. Global coverage was provided by the Pan American and Qantas airliners on routes between U.S.A. and Europe, U.S.A. and South America, U.S.A. and Japan, U.S.A. and Australia, Australia and Africa, and Australia and Europe. The complete GASP dataset consists of 667 385 trace constituent and/or meteorological observations made on 6945 flights of these airliners between March 11, 1975, and July 12, 1979.

In response to government and public concern because of reports attributing illness of some people on long duration flights to excessive ozone exposure, measurements of ozone concentration in the cabins of two GASP-equipped B747's were made from March 1977 to June 1979. Results from these measurements are reported in references 2 to 7.

In addition to the simultaneous cabin and ambient ozone measurements, GASP acquired over 160 000 ambient ozone observations around the world at airliner cruise altitudes from March 1975 to June 1979. These have added considerably to the climatological data base over what was previously available from ozonesondes, and have provided data in geographical regions where none were previously extant.

Early GASP ambient ozone tabulations and ozonesonde ambient ozone tabulations were published in 1978 (ref. 8). Considerably expanded, but still interim

GASP ambient ozone tabulations were published in reference 9. This report includes all available GASP ambient ozone data, tabulated to conform to the temporal and spatial resolution specified in reference 10, for climatological data used to show compliance with cabin ozone regulations. In addition, tabulations are included for a coarser temporal and spatial grid; these data are directly comparable to and supercede the interim tables in appendix B of reference 9.

INSTRUMENTATION

Ozone was measured on all aircraft by commercially available ultraviolet absorption photometers modified and repackaged to operate in the airborne environment (ref. 11). Readings are continuous, updating every 20 seconds, with data recorded nominally eight times per hour. The instrument range is from 0.003 to 20 ppmv (parts per million by volume). Operational procedures, set up to insure the integrity of the data, included in-flight instrument health checks, instrument calibration techniques, measurement of ozone loss in the GASP air sample inlet line and pressurization system and periodic instrument maintenance.

All flight instruments were calibrated before installation in the aircraft and periodically thereafter using a secondary transfer standard. This standard is a laboratory-type ultraviolet (UV) photometer which was initially calibrated using a 1 percent neutral buffered potassium iodide (KI) method. Later in the GASP program, the standard was calibrated at the NASA Jet Propulsion Laboratory (JPL). This calibration is traceable to the JPL 5-meter UV photometer described in reference 12. The KI calibration was found to be 9 percent higher than the UV photometer calibration. Thus, all published GASP ozone data are 9 percent higher than the JPL calibrations. This is a systematic difference and the tabulated data can be easily corrected if the KI method is determined to be incorrect and another method, such as the UV photometer, is adopted as the standard.

The random error of the GASP ozone measuring system was found to be less than 4 percent of reading or 0.003 ppmv, whichever is greater. A complete description of the ozone measurement system is given in reference 11.

PRESENTATION OF DATA

Availability

All GASP data are available to the public on magnetic computer tape from the National Climatic Center, Federal Building, Asheville, North Carolina 28801. The data tabulated here are from GASP tapes VL0001 to VL0031. These tapes include all data obtained by GASP-equipped aircraft (March 11, 1975, to July 12, 1979). Flight routes and dates, instrumentation, data processing procedures, data tape specifications, and selected analysis are reported in references 13 to 24.

Explanation of Data Tables

In this report ozone amounts are expressed as a volumetric mixing ratio, parts per million by volume (ppmv). Since ozone levels in the literature may be expressed in any of several commonly used units, the inter-relationship among these is given in appendix A (p. 103). Note that several of these relations require that temperature and/or pressure be known or assumed and that the conversion of averaged values will be an approximation because of the non-linearity of the conversion.

The GASP data are summarized by month for 2000-ft altitude increments (from FL290 to FL430) in geographical regions of 5° latitude by 45° longitude in tables I to XII (pp. 4 to 99). The geographical grid used is shown in figure 1 (p. 100). This grid was selected so that regions, or combinations of adjacent regions, coincide with major flight routes as nearly as possible (e.g., contiguous States = 27.5° to 47.5° N, 75° to 120° W; and U.S.A. to Europe = 37.5° to 57.5° N, 15° E to 75° W). For each region the tabulation includes mean, standard deviation, median (50th percentile), 84th percentile, and 98th percentile ozone amounts, in addition to the number of observations. For applications in which a coarser spatial and temporal grid is acceptable, seasonal x 10° latitude tabulations are provided in appendix B (p. 104). Note that, because the number of observations in the tabulated regions is greater here than in tables I to XII, the statistical confidence level is greater in most intervals.

Selected Graphical Presentations

It is well known that ozone levels increase with latitude and altitude, that they are maximum in the spring, and that the probability of encountering high ozone levels follows the same trends (e.g., refs. 2, 6, and 9). These variations are quantified in the tables herein, with selected empirical probability variations highlighted in figures 2 to 5 (pp. 101 and 102). These figures are examples of the types of curves that can readily be plotted from, and that might be appropriate in specific analyses of, the tabulated data.

In figure 2 the variation of the mean ozone mixing ratio with latitude is shown for low, medium, and high cruise altitudes in the spring (part (a)), and for each spring month at flight level 370 (part (b)). The seasonal variation in mean ambient ozone near 45° N is shown in figure 3 for flight levels 370 and 410.

In figure 4 four-point cumulative frequency distributions (cfd's) for the spring have been plotted from the tabulated data for Northern Hemisphere latitudes at flight level 370 (part (a)) and for flight levels 290 to 430 at 40° to 50° N latitude (part (b)). These curves show the fraction of observations (on the ordinate) in which the ozone level exceeded any given ozone level (on the abscissa). For example, at flight level 370 and 40° to 50° N latitude, the probability of encountering ambient ozone greater than 0.3 ppmv would be about 37 percent.

Figure 5 shows the zonal latitude-flight level cross section of the 84th percentile ozone values for spring. The constant mixing ratio contours define regions where the probability is greater than 16 percent that the ozone will exceed the contour value on any independent observation; that is, the probability of encountering ozone above, say 0.2 ppmv, is greater than 16 percent in all regions where the 84th percentile value is greater than 0.2 ppmv. In figure 6, the same data used in figure 5 are crossplotted to show the vertical distributions of the 84th percentile values at selected latitudes.

CONCLUDING REMARKS

Tabulations are given of GASP ambient ozone mean, standard deviation, median, 84th percentile, and 98th percentile values, by month, flight level, and geographical region. These data are tabulated to conform to the temporal and spatial resolution specified in FAA-AC-120-38, and supersede those in appendix B of FAA-EQ-78-03 (ref. 8) and appendix B of FAA-EE-80-45 (ref. 9). Selected probability variations are shown herein to highlight the spatial and temporal variability of ambient ozone and to illustrate and compare the results from the coarse and fine grid analyses.

TABLE I. - GASP AMBIENT OZONE DATA BY LATITUDE FOR JANUARY

(a) Flight level 290

CODE:

MEAN	ST. DEV.	N
50%	84%	98%

JANUARY
FL 290

LAT	15E	60E	105E	150E	165W	120W	75W	30W	15E	MEAN
70N										
65										
60										
55								.077 .049 6 .061 .099 .171		.077 .049 6 .061 .099 .171
50						.043 .010 3 .038 .051 .056		.073 .055 18 .056 .091 .214		.068 .052 21 .055 .068 .212
45	.084 .039 28 .071 .108 .192				.041 1	.047 .020 10 .042 .045 .093	.054 .016 3 .060 .067 .071	.108 .058 5 .072 .177 .179		.076 .042 47 .064 .104 .191
40	.072 .038 14 .057 .123 .145				.026 .024 4 .027 .050 .052	.101 .088 9 .062 .197 .276	.048 .036 4 .036 .078 .103			.071 .061 31 .052 .111 .257
35	.062 .018 19 .056 .081 .102		.154 .099 2 .154 .221 .249		.038 .019 5 .035 .050 .071	.045 .016 20 .042 .046 .088				.056 .035 46 .041 .073 .120
30	.057 .015 16 .062 .067 .087	.041 1								.056 .015 17 .061 .067 .086
25	.043 .016 18 .045 .056 .072	.048 .001 2 .048 .049 .049	.027 1		.032 .010 9 .037 .040 .043					.039 .015 30 .034 .053 .067
20		.055 .011 9 .051 .059 .080	.051 1		.052 .034 11 .038 .083 .123					.053 .026 21 .050 .067 .119
15		.058 .019 11 .067 .069 .069			.025 .007 20 .024 .032 .039	.041 1				.037 .020 32 .031 .067 .069
10		.061 .012 9 .065 .067 .073		.029 .002 2 .029 .030 .031		.042 .011 4 .039 .052 .059				.052 .016 15 .060 .066 .072
5		.029 .007 2 .029 .034 .036								.029 .007 2 .029 .034 .036
0		.032 1	.026 .005 2 .026 .029 .031							.028 .005 3 .031 .032 .032
5			.029 .007 7 .028 .031 .044							.029 .007 7 .028 .031 .044
10			.039 .003 7 .039 .041 .043							.039 .003 7 .039 .041 .043
15			.060 1	.010 .005 2 .010 .013 .014						.026 .024 3 .014 .045 .058
20				.006 1						.006 1
25	.061 1			.042 .003 4 .043 .045 .046						.046 .008 5 .043 .051 .060
30			.039 1	.038 .011 12 .038 .048 .056						.038 .010 13 .038 .047 .056
35			.042 1	.040 .013 7 .040 .053 .056						.041 .012 8 .040 .053 .056
40										
45S										

LONGITUDE

TABLE I. - Continued. GASP AMBIENT OZONE DATA BY LATITUDE FOR JANUARY

(b) Flight level 310

CODE:

MEAN	ST. DEV.	N
50%	84%	98%

JANUARY
FL 310

LAT	15E	60E	105E	150E	165W	120W	75W	30W	15E	MEAN
70N										
65										
60										
55								.081 .062 .056 .140 22 .190		.081 .062 .056 .140 22 .190
50					.145 .167 .085 .240 11 .276			.071 .039 .071 .158 26 .242		.093 .047 .082 .192 37 .285
45	.127 .101 .066 .142 7 .265				.073 .030 .077 .139 18 .249	.095 .069 .067 .149 28 .287	.073 .038 .069 .175 24 .210	.075 .033 .086 .105 20 .322		.084 .054 .075 .159 97 .290
40	.086 .093 .038 .123 25 .159				.071 .026 .093 .112 13 .302	.077 .047 .063 .127 36 .251	.083 .064 .064 .124 8 .207			.079 .047 .063 .123 82 .263
35	.080 .079 .033 .122 31 .137		.068 .055 .035 .103 19 .145		.040 .032 .026 .047 34 .134	.064 .045 .066 .057 22 .270				.062 .037 .044 .100 106 .153
30	.061 .052 .035 .081 39 .156	.039 .040 .007 .046 10 .050	.042 .016 .037 .084 20 .108		.032 .028 .013 .045 30 .065	.041 .041 .005 .044 2 .046				.046 .040 .031 .073 101 .127
25	.086 .075 .032 .114 17 .156	.060 .054 .025 .061 12 .124	.019 .012 .013 .036 16 .040		.033 .032 .010 .037 13 .056					.050 .040 .035 .074 58 .146
20		.043 .043 .011 .051 31 .064	.018 .017 .009 .026 13 .037	.052 .050 .012 .061 18 .077	.045 .043 .019 .053 23 .097	.046 1				.042 .026 .017 .053 86 .083
15		.046 .046 .017 .064 23 .071	.022 .021 .005 .027 6 .028		.016 .015 .009 .023 12 .033	.059 1				.034 .030 .020 .058 42 .071
10				.028 .029 .004 .031 15 .033	.020 .019 .006 .027 6 .029	.045 .045 .005 .048 2 .049	.040 .040 .005 .044 6 .048			.030 .029 .009 .040 29 .048
5		.039 .042 .017 .060 13 .064		.019 .018 .006 .023 29 .033						.025 .020 .014 .038 42 .061
0				.014 .014 .003 .017 21 .018						.014 .014 .003 .017 21 .018
5				.012 .012 .002 .014 15 .016						.012 .012 .002 .014 15 .016
10				.020 .018 .006 .026 7 .032						.020 .018 .006 .026 7 .032
15			.041 .041 .005 .045 6 .048				.049 .048 .003 .052 5 .053			.044 .046 .006 .049 11 .053
20	.011 1	.055 1	.100 1	.017 .022 .010 .025 5 .029			.031 .039 .013 .040 3 .041			.031 .023 .026 .047 11 .091
25	.048 .041 .024 .078 15 .093	.070 .070 .012 .083 8 .084		.042 1						.055 .044 .023 .084 24 .092
30			.064 .065 .021 .082 27 .096	.025 .022 .009 .032 3 .036						.060 .061 .023 .081 30 .096
35			.132 .081 .099 .275 12 .288	.036 .031 .010 .043 4 .052						.108 .076 .095 .257 16 .287
40										
45S										

LONGITUDE

TABLE I. - Continued. GASP AMBIENT OZONE DATA BY LATITUDE FOR JANUARY

(c) Flight level 330

CODE:

MEAN	ST. DEV.	N
50%	84%	98%

JANUARY
FL 330

LAT	15E	60E	105E	150E	165W	120W	75W	30W	15E	MEAN
70N										
65										
60							.282 .304 25 .422	.163 .163 20 .241		.229 .199 45 .404
55				.302 .283 41 .452	.243 .239 25 .366		.192 .215 60 .417	.098 .079 60 .253		.193 .151 166 .429
50				.298 .318 27 .390	.092 .038 14 .272	.233 .226 12 .517	.126 .099 48 .341	.075 .032 38 .290		.151 .115 139 .395
45	.137 .099 4 .278		.268 .188 7 .424	.358 .374 17 .524	.041 .036 7 .059	.191 .145 9 .380	.069 .041 51 .181	.084 .030 20 .293		.137 .064 115 .428
40	.104 .068 34 .291		.198 .227 21 .389	.087 .057 11 .232	.067 .052 10 .213	.144 .136 45 .403	.043 .036 23 .152			.117 .060 144 .370
35	.101 .084 17 .163		.128 .096 26 .341	.111 .088 17 .255	.065 .045 87 .210	.139 .105 17 .389				.091 .059 164 .315
30	.096 .076 10 .233	.095 .088 6 .135	.051 .053 9 .064		.050 .043 92 .128	.070 .065 23 .140				.059 .048 140 .152
25	.044 1	.074 .062 7 .161	.028 .029 7 .034		.042 .036 66 .113	.052 .049 24 .089				.046 .041 105 .114
20		.065 .056 5 .103	.011 1	.039 .026 27 .085	.055 .041 16 .155	.043 .041 24 .063				.045 .040 73 .118
15		.057 .060 9 .073				.047 .045 17 .068				.050 .049 26 .072
10		.074 .069 11 .088				.038 .038 2 .054	.029 .029 2 .032			.063 .069 15 .087
5		.047 .047 22 .078				.013 1	.019 .018 11 .028			.037 .034 34 .077
0		.027 .029 13 .038					.018 .018 7 .023			.024 .022 20 .037
5		.027 .028 14 .035		.012 .012 14 .015						.019 .016 28 .034
10		.032 .030 18 .061		.014 .013 28 .025						.021 .016 46 .052
15		.042 .040 17 .063		.020 .013 15 .037						.032 .034 32 .060
20	.071 .079 8 .089	.042 .041 10 .046	.056 .062 8 .077	.031 .031 38 .045			.044 1			.041 .038 65 .085
25	.067 .069 13 .107	.106 .106 3 .129	.056 .059 19 .096	.042 .033 47 .093						.051 .038 82 .111
30		.061 .059 20 .096	.069 .073 21 .123	.042 .034 67 .101						.051 .038 108 .113
35			.091 .104 7 .230	.026 .023 20 .067						.042 .027 27 .178
40			.041 1	.039 .036 25 .063						.039 .036 26 .063
45S										

LONGITUDE

TABLE I. - Continued. GASP AMBIENT OZONE DATA BY LATITUDE FOR JANUARY

(d) Flight level 350

CODE:

MEAN	ST. DEV.	N
50%	84%	98%

JANUARY
FL 350

LAT	15E	60E	105E	150E	165W	120W	75W	30W	15E	MEAN
70N										
65					.360 .369 .108 .456 35 .577	.312 .304 .131 .366 13 .600				.347 .335 .117 .453 48 .614
60						.305 .310 .103 .371 49 .583	.176 .148 .075 .262 10 .312	.294 .313 .087 .350 6 .393		.284 .306 .108 .353 65 .560
55				.370 .367 .018 .385 3 .393	.348 .371 .054 .387 5 .411	.273 .259 .142 .423 69 .537	.315 .319 .129 .444 65 .531	.084 .042 .096 .137 28 .353		.262 .159 .152 .422 170 .536
50				.332 .314 .099 .430 14 .511	.395 .387 .024 .417 7 .434	.258 .230 .169 .412 59 .652	.175 .049 .193 .462 25 .523	.183 .134 .152 .366 76 .509		.226 .209 .168 .414 181 .530
45	.230 .224 .117 .340 74 .450			.309 .441 .181 .474 15 .540	.156 .166 .097 .260 33 .371	.223 .233 .112 .329 113 .468	.087 .048 .108 .158 82 .480	.191 .125 .124 .340 9 .380		.187 .119 .132 .324 326 .478
40	.147 .111 .098 .270 91 .382		.294 .390 .222 .509 14 .553	.277 .299 .092 .345 9 .374	.135 .090 .116 .298 56 .387	.207 .187 .160 .369 78 .559	.161 .072 .185 .313 16 .615			.175 .111 .144 .342 264 .545
35	.157 .097 .124 .282 34 .450		.134 .106 .097 .171 14 .378	.127 .084 .090 .213 14 .347	.120 .068 .128 .219 209 .464	.082 .052 .080 .113 31 .329				.121 .071 .122 .244 302 .458
30	.097 .059 .090 .227 27 .303	.038 .033 .016 .054 23 .073	.050 .050 .010 .059 4 .063	.040 .036 .013 .055 25 .070	.092 .053 .095 .171 260 .404	.047 .047 .010 .052 20 .069				.083 .049 .060 .144 359 .343
25	.066 .073 .028 .081 10 .102	.051 .042 .028 .066 32 .128	.022 1	.034 .034 .010 .046 37 .052	.054 .047 .031 .080 276 .149	.037 .037 .009 .045 24 .051				.051 .042 .029 .074 380 .134
20	.079 .083 .008 .085 4 .085	.054 .055 .025 .080 41 .092		.013 .013 .002 .014 2 .014	.039 .037 .014 .050 60 .074	.045 .035 .023 .074 28 .084				.046 .039 .021 .074 135 .088
15		.044 .048 .016 .056 17 .067			.035 .029 .013 .054 21 .060	.038 .040 .008 .046 26 .049	.048 .043 .007 .055 7 .058			.039 .040 .013 .054 71 .062
10		.052 .050 .018 .062 18 .092		.011 .011 .001 .012 4 .012	.026 .024 .011 .035 23 .054	.039 .039 .006 .045 4 .046	.040 .034 .009 .050 7 .052			.036 .033 .018 .051 56 .064
5		.060 .067 .021 .078 16 .082		.009 .007 .004 .013 7 .015	.032 1		.039 .038 .013 .052 10 .058			.042 .031 .025 .074 34 .081
0		.032 .030 .015 .041 6 .060	.035 .043 .016 .047 10 .050	.012 .011 .005 .017 12 .020			.029 .032 .015 .044 9 .050			.026 .028 .016 .044 37 .054
5		.029 .029 .004 .031 2 .032	.031 .030 .013 .042 14 .055	.011 .006 .010 .018 12 .033			.033 .034 .006 .038 13 .042			.025 .026 .014 .038 41 .051
10			.032 .032 .021 .050 14 .074	.013 .012 .005 .017 20 .024			.042 .039 .013 .055 14 .066			.027 .017 .018 .046 48 .070
15		.042 .042 .017 .053 2 .057	.047 .043 .016 .065 15 .066	.017 .015 .007 .026 34 .032			.050 .046 .008 .057 9 .064			.031 .022 .019 .056 60 .065
20		.055 .054 .005 .059 5 .063	.055 .050 .017 .066 25 .099	.032 .028 .023 .039 46 .104						.041 .035 .023 .058 76 .103
25			.068 .070 .020 .085 22 .104	.037 .035 .030 .047 52 .114						.046 .041 .030 .075 74 .114
30			.076 .081 .023 .088 8 .115	.044 .037 .022 .068 56 .095						.048 .039 .024 .078 64 .106
35			.069 .063 .039 .106 40 .150	.037 .034 .016 .055 36 .071						.053 .032 .034 .091 76 .125
40				.028 .027 .011 .036 15 .051						.028 .027 .011 .036 15 .051
45S										

LONGITUDE

TABLE I. - Continued. GASP AMBIENT OZONE DATA BY LATITUDE FOR JANUARY

(e) Flight level 370

CODE:

MEAN	ST. DEV.	N
50%	84%	98%

JANUARY
FL 370

LAT	15E	60E	105E	150E	165W	120W	75W	30W	15E	MEAN	LAT
70N											70N
65					.325 .171 11 .211 .524 .547					.325 .171 11 .211 .524 .547	65
60				.263 .185 5 .143 .433 .572	.305 .134 66 .343 .436 .525	.280 .089 12 .290 .365 .402				.299 .133 83 .319 .426 .537	60
55				.422 .164 63 .396 .545 .662	.416 .131 31 .442 .556 .617	.430 .118 7 .422 .473 .658	.294 .142 17 .300 .365 .610	.301 .159 36 .335 .448 .591		.379 .163 154 .305 .520 .784	55
50				.511 .135 35 .512 .661 .764	.176 .092 27 .147 .276 .383	.374 .063 7 .359 .455 .477	.112 .125 115 .053 .222 .434	.279 .169 115 .250 .437 .720		.235 .190 299 .192 .437 .684	50
45	.199 .085 13 .174 .261 .372		.479 .022 3 .485 .497 .501	.378 .210 45 .445 .579 .700	.140 .100 46 .104 .229 .417	.246 .097 17 .219 .367 .416	.160 .129 79 .118 .295 .481	.175 .117 34 .197 .300 .387		.212 .165 237 .164 .409 .606	45
40	.187 .027 4 .183 .213 .222		.414 .188 21 .365 .638 .772	.306 .115 34 .301 .409 .535	.162 .112 58 .156 .268 .428	.233 .162 644 .224 .419 .577	.137 .104 31 .149 .211 .399	.159 .128 15 .083 .316 .375		.230 .161 807 .211 .408 .579	40
35	.066 .030 6 .063 .089 .116		.189 .099 32 .194 .311 .324	.186 .176 75 .086 .378 .590	.169 .101 432 .157 .278 .363	.193 .132 222 .189 .338 .511				.177 .120 769 .158 .307 .495	35
30	.051 .039 10 .029 .105 .117		.045 .017 30 .040 .063 .085	.057 .008 17 .060 .062 .067	.100 .070 581 .090 .177 .263	.028 1				.095 .069 639 .083 .173 .257	30
25	.049 .030 8 .029 .076 .105	.055 .015 9 .062 .067 .074	.027 .005 15 .027 .029 .039		.070 .036 406 .062 .100 .168					.068 .036 438 .061 .098 .162	25
20		.022 .020 18 .016 .040 .068			.050 .023 28 .044 .076 .093	.078 .029 4 .065 .101 .124				.042 .028 50 .034 .072 .090	20
15					.020 .006 14 .019 .023 .034	.049 .015 17 .052 .061 .074				.036 .018 31 .029 .059 .072	15
10				.014 .008 6 .009 .024 .027	.015 .009 12 .012 .020 .034	.046 .007 11 .048 .052 .053	.042 .005 6 .044 .045 .047			.029 .017 35 .030 .048 .053	10
5				.010 .003 22 .010 .013 .015	.019 .007 29 .018 .026 .034					.015 .008 51 .013 .024 .034	5
0				.012 .006 25 .010 .017 .024	.026 .009 21 .023 .033 .045		.023 .008 7 .025 .027 .034			.019 .010 53 .017 .027 .040	0
5				.015 .006 33 .012 .022 .028	.024 .009 9 .021 .029 .043		.019 .004 13 .018 .023 .025			.017 .007 55 .015 .023 .031	5
10				.021 .013 26 .019 .034 .049	.023 .004 2 .023 .026 .027		.018 .007 10 .017 .025 .027			.020 .011 38 .017 .027 .049	10
15				.026 .014 27 .023 .031 .060			.026 .012 12 .027 .038 .044			.026 .014 39 .023 .037 .060	15
20				.026 .005 14 .026 .029 .036			.034 .023 10 .034 .060 .061			.029 .016 24 .023 .054 .061	20
25				.026 .003 19 .025 .029 .030						.026 .003 19 .025 .029 .030	25
30				.027 .004 8 .025 .030 .034						.027 .004 8 .025 .030 .034	30
35			.101 .069 46 .069 .203 .245	.051 1						.099 .069 47 .068 .202 .245	35
40			.058 .011 2 .058 .063 .069	.033 .006 6 .035 .038 .039						.039 .013 8 .037 .046 .066	40
45S											45S

LONGITUDE

TABLE I. - Continued. GASP AMBIENT OZONE DATA BY LATITUDE FOR JANUARY

(f) Flight level 390

CODE:

MEAN	ST. DEV.	N
50%	84%	98%

JANUARY
FL 390

LAT	15E	60E	105E	150E	165W	120W	75W	30W	15E	MEAN	LAT
70N											70N
65				.556 .064 5 .536 .620 .654	.497 .200 80 .486 .652 .938					.501 .195 85 .492 .653 .933	65
60				.458 .125 58 .432 .583 .750	.416 .136 30 .381 .570 .642	.440 1	.432 .040 6 .426 .471 .495	.467 .072 12 .445 .537 .623		.446 .122 107 .431 .573 .700	60
55				.568 .251 71 .497 .884 1.066	.423 .112 17 .424 .549 .581		.449 .137 16 .435 .583 .712	.417 .195 26 .422 .655 .716		.504 .225 130 .376 .736 1.050	55
50				.401 .090 7 .353 .523 .554	.366 .126 19 .378 .486 .555		.328 .188 26 .378 .512 .564	.317 .061 29 .318 .387 .415		.339 .133 81 .351 .461 .563	50
45	.090 1			.255 .118 27 .304 .342 .479	.086 .049 12 .065 .116 .197	.439 .235 102 .425 .573 1.185	.187 .205 50 .078 .430 .625	.364 .164 23 .357 .535 566		.328 .236 215 .333 .549 .919	45
40			.455 .036 5 .468 .478 .487	.212 .096 15 .147 .357 .365	.144 .131 7 .085 .231 .406	.321 .181 462 .310 .510 .719	.180 .125 11 .240 .295 .360			.313 .180 500 .307 .500 .718	40
35			.237 .055 8 .213 .310 .329	.188 .138 61 .130 .316 .568	.169 .082 140 .179 .214 .342	.189 .128 97 .141 .319 .492				.181 .111 306 .162 .267 .510	35
30				.037 .016 12 .032 .041 .077	.142 .098 124 .115 .265 .354	.197 .082 21 .228 .262 .308				.141 .099 157 .114 .262 .351	30
25	.104 1			.029 .002 3 .029 .031 .032	.098 .105 47 .069 .142 .474	.023 .003 9 .023 .024 .029				.083 .097 60 .049 .126 .445	25
20			.015 .014 3 .005 .025 .034		.054 .028 18 .053 .085 .090	.026 .005 4 .025 .030 .033				.045 .029 25 .040 .063 .090	20
15			.009 .003 7 .008 .012 .014		.049 .022 20 .051 .074 .076					.039 .026 27 .048 .073 .076	15
10		.009 .003 9 .007 .012 .016	.015 .002 7 .015 .018 .018	.038 .012 6 .035 .053 .055	.045 .016 23 .049 .057 .076					.032 .020 45 .028 .054 .075	10
5		.020 1		.019 .008 8 .020 .026 .029	.038 .006 8 .038 .042 .047					.026 .011 17 .030 .040 .046	5
0			.037 .007 3 .036 .043 .046	.023 .005 4 .024 .026 .028	.045 .011 8 .051 .053 .055					.038 .013 15 .036 .053 .054	0
5			.032 .014 7 .037 .040 .044		.035 .015 23 .033 .053 .062					.035 .015 30 .032 .051 .060	5
10			.014 1	.022 .007 15 .020 .029 .033	.025 .008 9 .028 .031 .032					.022 .008 25 .024 .030 .033	10
15				.022 .007 20 .019 .028 .037						.022 .007 20 .019 .028 .037	15
20				.019 .005 20 .019 .024 .026						.019 .005 20 .019 .024 .026	20
25				.034 .020 18 .028 .043 .067						.034 .020 18 .028 .043 .087	25
30				.080 .040 15 .062 .107 .178						.080 .040 15 .062 .107 .178	30
35				.074 .034 20 .056 .108 .150						.074 .034 20 .056 .108 .150	35
40				.033 .001 3 .034 .034 .034						.033 .001 3 .034 .034 .034	40
45S											45S

LONGITUDE

TABLE I. - Continued. GASP AMBIENT OZONE DATA BY LATITUDE FOR JANUARY

(g) Flight level 410

CODE:

MEAN	ST. DEV.	N
50%	84%	98%

JANUARY
FL 410

LAT	15E	60E	105E	150E	165W	120W	75W	30W	15E	MEAN
70N										
65										
60				.530 .108 2 .530 .603 .634	.420 .115 13 .443 .534 .562	.550 .140 14 .568 .657 .752	.472 .079 6 .479 .523 .592			.467 .134 35 .485 .638 .729
55				.907 .300 74 .926 1.221 1.421	.624 1	.582 .230 39 .502 .865 1.040	.619 .042 7 .609 .617 .706			.783 .310 121 .805 1.133 1.386
50				.742 .301 85 .726 1.073 1.289	.380 .209 17 .309 .680 .730	.561 .172 39 .518 .738 .687	.048 .017 18 .038 .066 .082	.331 .220 11 .469 .545 .565		.564 .333 170 .379 .889 1.237
45			.613 .148 20 .620 .717 .889	.641 .251 91 .617 .855 1.254	.448 .236 86 .416 .557 1.160	.475 .183 37 .436 .639 .904	.069 .016 15 .066 .093 .097			.513 .265 249 .498 .734 1.177
40	.296 .193 9 .240 .544 .629		.485 .173 67 .473 .961 .897	.388 .144 20 .346 .456 .789	.335 .175 132 .318 .517 .701	.476 .283 60 .422 .693 1.273	.042 1			.401 .214 239 .334 .594 .905
35	.282 .178 23 .284 .465 .590		.099 .022 6 .092 .116 .141	.408 .200 26 .398 .675 .755	.143 .088 44 .132 .207 .406	.139 .040 9 .124 .136 .233				.234 .181 108 .156 .449 .740
30	.139 .099 17 .109 .160 .418		.046 .013 9 .042 .059 .070		.145 .125 42 .103 .245 .510					.131 .115 68 .077 .203 .499
25	.085 .021 6 .077 .092 .127	.074 .008 3 .070 .081 .085	.032 .003 9 .032 .035 .037		.068 .015 31 .067 .084 .101					.064 .022 49 .067 .082 .110
20		.058 .017 17 .066 .073 .078	.027 .004 4 .027 .031 .032		.081 .023 20 .077 .107 .117					.066 .026 41 .065 .099 .114
15			.025 .004 6 .026 .028 .029		.059 .012 7 .053 .071 .081					.043 .019 13 .048 .060 .079
10			.025 .004 5 .025 .028 .031		.041 .013 7 .049 .052 .054					.034 .013 12 .026 .051 .054
5			.029 .009 5 .026 .038 .042		.039 .002 2 .039 .040 .041					.032 .009 7 .035 .041 .043
0										
5										
10				.025 .003 2 .025 .026 .027						.025 .003 2 .025 .026 .027
15				.022 .003 7 .022 .026 .027						.022 .003 7 .022 .026 .027
20				.029 .005 4 .029 .034 .034						.029 .005 4 .029 .034 .034
25				.134 .076 5 .183 .199 .210						.134 .076 5 .183 .199 .210
30				.152 .014 4 .149 .165 .174						.152 .014 4 .149 .165 .174
35				.190 .067 7 .225 .243 .246						.190 .067 7 .225 .243 .246
40										
45S										

LONGITUDE

TABLE I. - Concluded. GASP AMBIENT OZONE DATA BY LATITUDE FOR JANUARY

(h) Flight level 430

CODE:	MEAN	ST. DEV.	N
	50%	84%	98%

JANUARY
FL 430

LAT	15E	60E	105E	150E	165W	120W	75W	30W	15E	MEAN	LAT
70N											70N
65											65
60											60
55							.644 1			.644 1	55
50				.927 .370 2 .927 1.178 1.281			.368 .249 9 .324 .687 .752			.469 .350 11 .331 .747 1.188	50
45			.381 .174 4 .300 .511 .655	.764 .446 10 .712 1.307 1.426			.500 .198 17 .458 .678 .918			.570 .330 31 .481 .909 1.414	45
40			.377 .093 13 .346 .425 .589		.529 .101 24 .538 .632 .682	.140 .027 3 .131 .162 .175	.568 .251 2 .568 .739 .809			.456 .156 .42 .464 .616 .733	40
35			.424 .148 2 .424 .525 .566		.266 .049 8 .250 .331 .345	.106 .053 9 .088 .098 .229				.207 .126 19 .238 .284 .491	35
30											30
25	.104 .048 25 .085 .143 .242	.071 .008 7 .070 .077 .083								.097 .045 32 .083 .139 .236	25
20		.063 .013 27 .066 .074 .083								.063 .013 27 .066 .074 .083	20
15											15
10											10
5											5
0											0
5											5
10											10
15											15
20											20
25											25
30											30
35				.112 .062 53 .101 .186 .264						.112 .062 53 .101 .186 .264	35
40											40
45S											45S

LONGITUDE

TABLE II. - GASP AMBIENT OZONE DATA BY LATUTUDE FOR FEBRUARY

(a) Flight level 290

CODE:

MEAN	ST. DEV.	N
50%	84%	98%

FEBRUARY
FL 290

LAT	15E	60E	105E	150E	165W	120W	75W	30W	15E	MEAN	LAT
70N											70N
65											65
60											60
55						.059 .016 6 .051 .068 .091		.052 .004 3 .054 .055 .055		.056 .014 9 .051 .059 .069	55
50					.052 1	.057 .004 2 .057 .060 .061		.078 1		.061 .010 4 .037 .070 .077	50
45						.224 1				.224 1	45
40	.053 .014 3 .050 .054 .070					.054 .045 10 .036 .106 .134	.071 .035 4 .054 .096 .127			.056 .039 17 .060 .104 .137	40
35	.047 .043 2 .047 .076 .088		.106 .072 6 .068 .152 .245		.092 .087 8 .060 .139 .281	.049 .014 8 .050 .064 .072				.076 .066 24 .044 .101 .282	35
30		.051 1				.092 1				.077 .016 2 .077 .087 .091	30
25	.115 .052 5 .107 .158 .198		.050 1		.049 .014 17 .053 .054 .071					.063 .038 23 .054 .075 .172	25
20		.046 1	.044 .014 7 .036 .060 .069		.032 .016 16 .028 .050 .064					.036 .018 24 .029 .052 .069	20
15					.030 .009 22 .030 .037 .049					.030 .009 22 .029 .037 .049	15
10		.021 .005 3 .018 .025 .028	.040 1	.078 .006 2 .078 .082 .084	.056 1					.045 .024 7 .040 .072 .083	10
5		.028 .002 6 .028 .027 .031								.026 .002 6 .025 .027 .031	5
0		.026 1								.026 1	0
5			.014 .006 3 .018 .020 .021							.014 .006 3 .018 .020 .021	5
10			.019 .003 6 .020 .021 .023							.019 .003 6 .019 .021 .023	10
15			.025 .011 7 .022 .033 .045	.024 .004 2 .024 .026 .027						.024 .010 9 .022 .031 .045	15
20			.027 .004 3 .025 .030 .033							.027 .004 3 .025 .030 .033	20
25				.031 1						.031 1	25
30		.054 1	.054 .017 6 .054 .064 .082	.058 .009 10 .056 .066 .076						.056 .013 17 .055 .067 .082	30
35			.035 .030 2 .035 .055 .064	.063 .020 16 .061 .083 .105						.060 .023 18 .061 .079 .104	35
40			.152 1							.152 1	40
45S											45S

LONGITUDE

TABLE II. - Continued. GASP AMBIENT OZONE DATA BY LATITUDE FOR FEBRUARY

(b) Flight level 310

CODE:

MEAN	ST. DEV.	N
50%	84%	98%

FEBRUARY
FL 310

LAT	15E	60E	105E	150E	165W	120W	75W	30W	15E	MEAN
70N										
65										
60							.053 .052 10 .068	.056 .059 .006 .060 19 .067		.055 .048 .007 .060 20 .070
55							.176 .145 .099 .293 8 .323	.056 .059 .006 .061 12 .064		.104 .061 .086 .153 20 .316
50								.069 .049 .044 .097 23 .194		.069 .049 .044 .097 23 .194
45	.077 .073 .023 .101 10 .118				.117 1	.151 .149 .068 .218 24 .305		.085 .079 .028 .114 10 .139		.119 .102 .063 .163 45 .268
40	.073 .074 .007 .079 3 .081			.072 .066 .020 .095 9 .102	.094 .050 .082 .153 7 .255	.089 .070 .068 .130 33 .269	.119 .061 .092 .253 8 .269			.090 .054 .069 .132 60 .270
35	.066 .066 .010 .072 2 .075		.112 .052 .095 .173 13 .338	.078 .064 .025 .098 3 .112	.058 .044 .039 .087 37 .183	.069 .056 .072 .080 15 .256				.071 .049 .063 .095 70 .281
30		.084 .076 .034 .100 14 .167			.097 .062 .093 .144 56 .387	.047 1				.094 .067 .084 .125 71 .384
25	.069 .070 .022 .075 19 .126	.074 .063 .035 .076 33 .173	.057 .056 .018 .072 5 .083	.075 .075 .002 .076 2 .076	.060 .060 .025 .078 36 .124					.067 .063 .029 .076 95 .169
20		.040 .041 .012 .051 31 .061	.030 .029 .008 .038 13 .043		.036 .031 .027 .064 25 .097					.037 .038 .019 .051 69 .074
15		.030 .037 .012 .041 18 .043	.030 .035 .015 .042 8 .042		.041 .031 .023 .068 40 .084					.037 .027 .020 .064 66 .062
10				.028 .021 .020 .049 34 .079	.035 .031 .014 .051 8 .059					.029 .022 .019 .053 42 .076
5		.020 1		.027 .024 .018 .037 47 .080						.027 .022 .018 .036 48 .080
0		.019 1	.057 1	.023 .017 .015 .036 41 .062						.023 .018 .016 .037 43 .062
5			.031 .030 .005 .035 3 .038	.021 .018 .011 .035 34 .041						.022 .022 .011 .036 37 .041
10			.037 .032 .010 .044 6 .056	.030 .031 .015 .048 19 .050						.032 .032 .014 .048 25 .054
15			.028 .021 .013 .038 3 .045	.016 .016 .011 .025 22 .035						.017 .016 .012 .026 25 .044
20	.044 .041 .014 .058 5 .059	.049 1	.044 .041 .011 .050 5 .063	.019 .023 .010 .027 13 .035						.031 .027 .017 .044 24 .062
25	.047 .038 .022 .056 15 .102		.065 .090 .018 .098 6 .107	.032 .030 .004 .035 3 .038						.055 .042 .026 .068 24 .111
30		.087 .091 .015 .102 10 .105	.084 .089 .019 .099 12 .107	.030 .024 .021 .040 9 .077						.069 .083 .031 .098 31 .106
35			.070 .059 .028 .101 6 .115	.051 .050 .021 .074 27 .094						.054 .051 .024 .077 33 .106
40			.075 .052 .040 .106 3 .129							.075 .052 .040 .106 3 .129
45S										

LONGITUDE

TABLE II. - Continued. GASP AMBIENT OZONE DATA BY LATITUDE FOR FEBRUARY

(c) Flight level 330

CODE:

MEAN	ST. DEV.	N
50%	84%	98%

FEBRUARY
FL 330

LAT	15E	60E	105E	150E	165W	120W	75W	30W	15E	MEAN
70N						.273 .032 2 .273 .294 .303	.150 .116 18 .092 .314 .342			.162 .116 20 .125 .311 .341
65						.151 .045 8 .143 .199 .236	.116 .039 6 .117 .159 .166	.188 .041 6 .178 .240 .241		.151 .051 20 .123 .205 .241
60						.105 .041 6 .101 .143 .169		.185 .056 5 .217 .236 .241		.141 .063 11 .125 .223 .240
55				.475 .019 2 .475 .437 .492				.106 .035 8 .094 .140 .175		.180 .151 10 .096 .335 .486
50				.327 .132 9 .361 .453 .467			.201 .072 10 .236 .256 .286	.162 .143 56 .081 .335 .421		.187 .144 75 .119 .362 .466
45	.095 .040 21 .080 .153 .164			.217 .112 16 .167 .362 .410		.199 .083 3 .212 .267 .290	.189 .151 77 .189 .312 .563	.085 .072 6 .053 .136 .221		.172 .138 123 .132 .300 .389
40	.088 .072 14 .049 .165 .252		.232 .109 16 .226 .332 .379	.110 .055 48 .107 .145 .261	.066 .026 29 .054 .090 .122	.114 .085 33 .068 .257 .317	.181 .089 16 .209 .264 .305			.120 .089 156 .087 .211 .327
35	.104 .061 24 .079 .178 .227		.112 .109 12 .099 .160 .360	.072 .003 4 .072 .075 .075	.079 .078 115 .051 .123 .318	.101 .093 32 .067 .176 .374	.317 1			.089 .083 168 .054 .151 .351
30	.094 .021 8 .106 .114 .114	.057 .011 19 .055 .070 .077		.068 .036 25 .050 .118 .143	.052 .026 96 .047 .076 .127	.065 .060 2 .085 .125 .142				.058 .029 150 .047 .082 .142
25	.081 .058 19 .061 .115 .159	.073 .030 17 .058 .105 .135	.034 .011 12 .031 .048 .055	.087 .055 9 .052 .157 .187	.032 .026 105 .021 .051 .091					.045 .037 162 .036 .076 .157
20		.040 .012 35 .036 .048 .072	.038 .028 12 .029 .055 .106		.061 .042 31 .055 .116 .134					.048 .032 78 .025 .081 .122
15		.038 .006 15 .037 .044 .048	.021 .002 6 .021 .022 .023							.033 .009 21 .036 .042 .047
10			.025 .008 10 .020 .034 .040							.025 .008 10 .020 .034 .040
5		.019 1	.023 .007 11 .020 .029 .035	.116 1						.030 .026 13 .023 .033 .097
0			.020 .013 14 .020 .025 .052							.020 .013 14 .020 .025 .032
5			.030 .009 16 .031 .039 .045	.029 .008 5 .034 .035 .035						.030 .009 21 .032 .038 .044
10			.030 .017 17 .024 .046 .064	.022 .009 17 .024 .028 .039						.026 .014 34 .019 .038 .063
15			.040 .007 8 .041 .048 .049	.026 .014 19 .026 .042 .055						.030 .014 27 .028 .045 .054
20	.075 1		.034 .002 4 .033 .036 .037	.026 .020 41 .020 .039 .080						.028 .020 46 .022 .039 .079
25	.048 .013 14 .046 .066 .070		.038 .009 7 .036 .039 .056	.048 .034 62 .042 .094 .110						.047 .030 83 .042 .076 .109
30		.077 .017 8 .083 .089 .095	.074 .005 3 .075 .078 .080	.062 .027 88 .062 .085 .118						.064 .026 99 .066 .085 .115
35			.080 .025 10 .074 .107 .125	.077 .030 68 .075 .109 .123						.077 .029 78 .072 .108 .126
40			.044 1	.081 .038 34 .077 .120 .162						.080 .038 35 .076 .117 .162
45S										

LONGITUDE

TABLE II. - Continued. GASP AMBIENT OZONE DATA BY LATITUDE FOR FEBRUARY

(d) Flight level 350

CODE:

MEAN	ST. DEV.	N
50%	84%	98%

FEBRUARY
FL 350

LAT	15E	60E	105E	150E	165W	120W	75W	30W	15E	MEAN
70N						.331 1	.211 .085 13 .236 .253 .361			.219 .088 14 .237 .280 .372
65					.419 .057 8 .439 .461 .498	.336 .141 16 .280 .470 .631				.363 .126 24 .340 .475 .613
60					.200 .112 13 .182 .288 .457	.408 .150 75 .434 .538 .658				.377 .162 88 .397 .508 .655
55				.363 .070 22 .350 .429 .480	.396 .078 33 .390 .456 .563	.372 .152 100 .404 .501 .650	.422 .044 3 .437 .458 .467	.178 1		.375 .130 159 .396 .490 .606
50				.442 .169 33 .476 .605 .715	.301 .133 47 .337 .415 .501	.393 .169 84 .423 .559 .682	.267 .098 25 .275 .367 .412	.178 .150 41 .123 .354 .481		.329 .176 230 .316 .510 .677
45	.260 .104 35 .271 .342 .395		.442 .042 7 .453 .485 .487	.269 .213 24 .173 .497 .660	.155 .136 56 .107 .289 .529	.337 .163 78 .380 .504 .565	.126 .104 47 .070 .275 .336	.194 .067 4 .194 .261 .271		.240 .169 251 .238 .433 .560
40	.273 .131 62 .292 .405 .463		.105 .087 13 .063 .244 .269	.246 .128 19 .281 .376 .423	.201 .157 74 .196 .397 .451	.151 .120 207 .101 .285 .438	.135 .144 8 .089 .155 .454	.065 .012 2 .065 .072 .076		.183 .139 385 .142 .362 .453
35	.159 .100 71 .120 .276 .367		.133 .095 33 .082 .253 .329	.143 .084 44 .140 .254 .273	.093 .100 232 .060 .139 .421	.096 .075 43 .067 .171 .272	.227 .168 9 .158 .427 .545			.115 .103 432 .068 .205 .303
30	.079 .046 79 .064 .103 .250	.057 .017 19 .054 .073 .096	.061 .011 18 .058 .075 .080	.111 .041 12 .104 .168 .184	.077 .060 403 .063 .108 .286					.077 .056 531 .063 .106 .279
25	.060 .012 17 .059 .072 .083	.056 .013 23 .059 .067 .078	.039 .009 23 .036 .043 .061	.065 .001 7 .065 .066 .066	.063 .043 361 .054 .098 .171					.062 .040 431 .054 .093 .169
20		.050 .016 16 .042 .066 .077	.048 .017 14 .043 .063 .083	.050 .010 10 .056 .059 .060	.042 .024 87 .041 .067 .092					.044 .022 127 .043 .066 .085
15		.042 .005 11 .042 .046 .047	.030 .019 11 .040 .046 .048	.012 .015 39 .003 .032 .039	.027 .020 22 .020 .057 .063					.022 .019 83 .021 .044 .061
10		.026 .007 12 .024 .033 .039	.020 .005 9 .018 .025 .029	.030 .007 3 .027 .036 .039	.028 .014 16 .028 .038 .054					.026 .011 40 .020 .036 .054
5		.022 .008 4 .020 .028 .033	.020 .003 9 .019 .023 .025	.034 .023 14 .029 .041 .095	.032 .014 14 .037 .045 .050					.029 .017 41 .026 .040 .063
0			.024 .019 22 .019 .038 .069	.044 .033 29 .029 .103 .112	.038 .005 4 .038 .042 .043					.036 .028 55 .028 .047 .110
5			.022 .009 29 .025 .030 .035	.026 .006 24 .026 .031 .037						.024 .008 53 .025 .031 .038
10			.018 .008 15 .018 .022 .033	.021 .008 47 .023 .027 .031						.020 .008 62 .020 .026 .035
15			.033 .011 22 .031 .047 .054	.023 .012 75 .021 .033 .056						.026 .012 97 .024 .036 .058
20		.028 1	.036 .010 38 .035 .048 .054	.042 .026 80 .034 .072 .103						.040 .022 119 .035 .059 .096
25		.027 .005 12 .029 .032 .035	.056 .023 37 .045 .082 .106	.048 .021 88 .049 .064 .099						.049 .022 137 .045 .068 .101
30		.031 1	.072 .017 27 .069 .090 .102	.070 .030 77 .072 .099 .124						.070 .027 105 .069 .095 .119
35			.080 .038 41 .077 .099 .157	.092 .047 58 .080 .140 .217						.087 .044 99 .080 .121 .222
40			.168 .092 11 .108 .278 .305	.080 .031 63 .076 .112 .139						.093 .055 74 .082 .115 .279
45S										

LONGITUDE

TABLE II. - Continued. GASP AMBIENT OZONE DATA BY LATITUDE FOR FEBRUARY

(e) Flight level 370

CODE:

MEAN	ST. DEV.	N
50%	84%	98%

FEBRUARY
FL 370

LAT	15E	60E	105E	150E	165W	120W	75W	30W	15E	MEAN
70N							.311 1			.311 1
65					.576 .571 .100 .649 62 .786	.546 .530 .091 .632 13 .725	.360 .360 .004 .362 2 .363	.330 .321 .019 .339 5 .364		.551 .555 .115 .646 82 .736
60				.291 .295 .115 .430 17 .468	.530 .544 .141 .672 72 .746	.482 .525 .213 .703 38 .745		.186 .155 .106 .310 8 .332		.466 .507 .191 .668 135 .742
55				.360 .339 .182 .543 111 .710	.401 .404 .193 .566 51 .850	.410 .401 .125 .556 20 .607	.460 .467 .029 .490 16 .495	.520 .576 .168 .660 69 .702		.419 .449 .183 .610 267 .712
50				.464 .475 .238 .678 60 .907	.426 .442 .168 .550 46 .837	.439 .426 .084 .498 15 .608	.063 .034 .096 .037 112 .444	.340 .298 .217 .605 126 .775		.290 .246 .241 .566 359 .802
45	.388 1		.218 .214 .006 .223 3 .226	.411 .377 .156 .623 59 .686	.406 .390 .218 .654 68 .822	.373 .441 .143 .481 11 .503	.078 .050 .107 .062 126 .506	.259 .311 .174 .436 92 .517		.252 .133 .212 .476 360 .699
40	.338 .344 .042 .354 49 .398		.343 .287 .159 .577 28 .618	.401 .359 .138 .535 40 .664	.239 .232 .163 .443 48 .518	.264 .251 .152 .441 634 .548	.132 .038 .151 .342 64 .469	.328 .384 .161 .481 46 .559		.269 .264 .158 .445 909 .576
35	.254 .274 .152 .440 65 .456		.266 .279 .074 .324 89 .394	.169 .147 .117 .293 191 .476	.137 .082 .131 .308 280 .487	.162 .147 .120 .246 213 .514	.548 .524 .052 .587 11 .664			.178 .134 .136 .319 849 .509
30	.066 .060 .020 .080 36 .119	.049 .046 .007 .056 23 .065	.101 .057 .095 .211 35 .345	.101 .078 .065 .153 287 .250	.174 .115 .133 .351 479 .424	.029 .029 .001 .029 2 .029				.139 .065 .115 .301 862 .406
25	.074 1	.060 .057 .007 .069 58 .076	.061 .059 .008 .068 18 .077	.117 .087 .052 .201 108 .226	.095 .092 .064 .155 397 .271					.095 .073 .059 .151 582 .250
20		.044 .046 .017 .059 30 .069	.084 .040 .090 .123 5 .246		.084 .078 .063 .125 58 .242	.044 .044 .021 .057 2 .063				.071 .055 .058 .104 95 .243
15		.027 .026 .005 .031 17 .035	.011 .005 .014 .029 22 .042		.030 .024 .022 .049 61 .095					.025 .019 .020 .038 100 .093
10		.017 .011 .011 .026 3 .032	.016 1	.018 .017 .006 .024 25 .031	.024 .021 .015 .033 40 .069					.022 .020 .012 .031 69 .064
5		.019 .015 .005 .025 5 .026		.021 .020 .011 .030 52 .051	.046 .038 .015 .061 5 .070					.023 .020 .013 .032 62 .055
0				.020 .020 .010 .028 55 .036	.032 .029 .013 .036 8 .058					.021 .023 .011 .031 63 .039
5				.022 .022 .012 .032 61 .045	.038 .039 .008 .044 6 .048					.023 .024 .012 .034 67 .048
10			.023 .022 .007 .031 8 .036	.020 .015 .012 .030 41 .048	.054 .052 .014 .067 4 .073					.023 .022 .015 .036 53 .059
15			.031 .031 .012 .039 13 .055	.028 .025 .014 .046 17 .052	.085 1					.031 .027 .016 .048 31 .058
20	.034 .035 .005 .038 8 .040	.024 .024 .005 .028 3 .030	.049 .047 .013 .059 18 .079	.075 .075 .016 .085 2 .089						.044 .041 .016 .058 31 .086
25		.030 .030 .005 .034 18 .042	.047 .048 .010 .054 14 .061	.048 .044 .010 .058 6 .067						.039 .029 .012 .053 38 .063
30		.048 .042 .016 .045 9 .085	.091 .095 .049 .148 17 .166	.040 .042 .003 .043 7 .043						.068 .043 .043 .124 33 .160
35			.088 .084 .029 .118 32 .153	.097 .075 .055 .116 9 .222						.090 .084 .037 .122 41 .193
40			.126 .126 .032 .148 2 .157	.107 .102 .027 .129 3 .140						.115 .102 .030 .148 5 .157
45S										

LONGITUDE

TABLE II. - Continued. GASP AMBIENT OZONE DATA BY LATITUDE FOR FEBRUARY

(f) Flight level 390

CODE:

MEAN	ST. DEV.	N
50%	84%	98%

FEBRUARY
FL 390

LAT	15E	60E	105E	150E	165W	120W	75W	30W	15E	MEAN
70N										
65				.646 .310 2 .646 .856 .943	.630 .184 105 .618 .796 1.018	.597 .024 2 .597 .612 .619				.630 .186 109 .618 .797 1.015
60				.624 .190 100 .623 .829 .923	.545 .182 69 .516 .718 .920		.515 .025 4 .526 .535 .535	.462 .055 17 .465 .514 .521		.578 .185 190 .445 .784 .926
55				.608 .227 144 .594 .829 1.114	.565 .172 36 .551 .715 .866		.509 .096 13 .534 .603 .624	.472 .082 23 .458 .538 .654		.580 .207 216 .469 .799 1.048
50				.708 .270 57 .784 1.004 1.096	.497 .312 40 .385 .833 1.241		.474 .171 18 .526 .614 .692	.364 .213 78 .448 .573 .727		.504 .280 193 .463 .817 1.102
45	.524 .081 78 .549 .601 .657		.791 .213 14 .850 .973 1.040	.509 .289 73 .427 .794 1.181	.366 .185 59 .351 .541 .821	.368 .102 17 .339 .474 .571	.666 .256 16 .639 .990 1.088	.427 .054 14 .423 .488 .498		.493 .224 271 .458 .693 1.054
40	.499 .088 79 .514 .572 .592		.664 .212 44 .730 .840 .967	.565 .320 226 .507 .782 1.343	.186 .173 25 .096 .343 .626	.274 .188 352 .219 .473 .739	.596 1	.349 .037 14 .347 .385 .424		.409 .275 741 .386 .634 1.296
35			.367 .160 35 .364 .442 .782	.182 .119 135 .140 .316 .465	.147 .133 96 .090 .273 .476	.302 .259 177 .217 .653 .758				.236 .207 445 .140 .437 .741
30			.105 .047 21 .078 .168 .182	.062 .013 9 .057 .065 .092	.129 .103 166 .091 .218 .372	.052 .001 2 .052 .053 .053				.122 .097 198 .082 .209 .367
25			.051 .018 7 .059 .065 .070	.110 .046 16 .096 .167 .186	.081 .052 107 .079 .140 .187					.083 .051 130 .076 .142 .189
20			.017 .013 22 .015 .035 .043		.056 .039 24 .052 .092 .138					.037 .036 46 .016 .081 .135
15			.016 .013 31 .012 .037 .043		.024 .016 7 .021 .034 .053					.017 .014 38 .011 .037 .049
10			.040 .006 15 .042 .046 .048		.059 .002 2 .059 .060 .061					.043 .008 17 .043 .048 .060
5		.040 .011 4 .035 .049 .057	.037 .011 6 .036 .048 .050		.002 .002 4 .001 .003 .005					.028 .019 14 .018 .047 .056
0		.039 1			.040 1					.040 .001 2 .040 .040 .040
5		.030 1	.024 .004 5 .023 .026 .030	.038 .007 4 .039 .044 .047	.031 .009 4 .031 .040 .040					.030 .008 14 .026 .040 .045
10			.012 .007 5 .010 .018 .023	.054 .003 2 .054 .056 .057	.029 .008 6 .026 .034 .045					.026 .016 13 .024 .047 .056
15			.016 .006 2 .016 .020 .022		.058 .010 11 .057 .065 .078					.051 .018 13 .053 .064 .078
20				0.000 1	.057 .014 15 .053 .072 .083					.054 .019 16 .051 .072 .082
25				.013 .018 7 .008 .014 .051	.039 .015 16 .041 .052 .058					.031 .020 23 .033 .052 .058
30		.058 .024 11 .044 .089 .093	.093 .005 5 .095 .098 .098	.091 .054 16 .084 .112 .226	.053 1					.079 .044 33 .084 .098 .203
35			.086 .027 32 .076 .109 .162	.107 .058 32 .093 .174 .225						.096 .047 64 .071 .141 .204
40			.122 1							.122 1
45S										

LONGITUDE

TABLE II. - Continued. GASP AMBIENT OZONE DATA BY LATITUDE FOR FEBRUARY

(g) Flight level 410

CODE:

MEAN	ST. DEV.	N
50%	84%	98%

FEBRUARY
FL 410

LAT	15E	60E	105E	150E	165W	120W	75W	30W	15E	MEAN
70N										
65					.760 .318 11 .693 1.174 1.288	.747 .015 3 .752 .759 .763				.757 .282 14 .678 1.116 1.284
60				.562 1	.722 .229 20 .699 .929 1.154	.700 .168 22 .752 .789 1.037	.724 .069 6 .743 .773 .815			.709 .188 49 .748 .868 1.145
55				.775 .256 65 .807 .997 1.315		.664 .164 52 .658 .805 1.054	.784 .118 10 .804 .857 .970			.730 .221 127 .722 .938 1.214
50				.647 .244 117 .610 .907 1.148	.494 .087 5 .476 .567 .618	.763 .221 57 .761 .938 1.254	.755 .243 30 .695 .872 1.475	.480 .149 17 .486 .589 .794		.675 .244 226 .484 .888 1.247
45			.589 .172 17 .608 .749 .837	.633 .305 61 .638 .900 1.492	.418 .234 51 .426 .660 .849	.546 .278 95 .599 .804 1.015	.697 .315 19 .665 .919 1.387	.564 .041 2 .564 .592 .603		.556 .285 245 .573 .805 1.167
40	.378 .179 13 .307 .648 .716		.419 .195 91 .406 .599 .828	.411 .197 66 .514 .583 .692	.453 .196 121 .465 .630 .833	.364 .246 61 .259 .633 .955	.286 .065 2 .286 .329 .347	.425 .112 9 .362 .569 .603		.418 .205 363 .447 .607 .840
35	.349 .184 64 .385 .508 .792		.293 .115 72 .300 .389 .541	.157 .027 8 .154 .188 .197	.272 .205 40 .185 .519 .706	.163 .006 2 .163 .167 .169				.300 .167 186 .297 .459 .702
30	.103 .069 30 .084 .109 .335		.102 .060 5 .082 .142 .208		.061 .068 25 .044 .122 .215	.098 1				.086 .070 61 .078 .121 .322
25	.063 .008 2 .063 .068 .071				.035 .025 18 .046 .060 .062	.092 .005 5 .092 .097 .100				.049 .031 25 .055 .086 .098
20			.045 .026 8 .044 .063 .091		.014 .015 12 .006 .036 .038					.027 .025 20 .012 .050 .083
15			.035 .020 12 .033 .050 .071		.018 .012 8 .016 .032 .035					.028 .019 20 .018 .050 .067
10	.050 1		.039 .015 11 .041 .051 .068		.008 .002 5 .008 .010 .010					.030 .019 17 .029 .049 .066
5		.042 .005 2 .042 .045 .047	.033 .006 7 .032 .037 .042							.035 .006 9 .036 .041 .046
0										
5										
10										
15										
20										
25										
30				.074 .038 9 .056 .105 .154	.074 1					.074 .036 10 .065 .100 .153
35				.163 .058 27 .190 .211 .236						.163 .058 27 .190 .211 .236
40										
45S										

LONGITUDE

TABLE II. - Concluded. GASP AMBIENT OZONE DATA BY LATITUDE FOR FEBRUARY

(h) Flight level 430

CODE:

MEAN	ST. DEV.	N
50%	84%	98%

FEBRUARY
FL 430

LAT	15E	60E	105E	150E	165W	120W	75W	30W	15E	MEAN
70N										
65										
60										
55										
50				1.009 .354 6 1.170 1.330 1.339			.735 .117 7 .764 .839 .844			.862 .290 13 .825 1.276 1.337
45			.796 .278 10 .904 .993 1.191	.751 .353 30 .738 1.195 1.377			.742 .059 6 .745 .791 .831			.760 .315 46 .724 1.035 1.376
40			.591 .195 53 .573 .812 .927		.213 .188 12 .157 .215 .698					.521 .243 65 .553 .805 .916
35			.578 .305 7 .447 .684 1.187		.594 .066 10 .566 .666 .710					.587 .202 17 .563 .665 1.086
30			.052 .017 24 .044 .074 .081		.311 .103 8 .309 .402 .460					.117 .124 32 .057 .262 .429
25			.040 .017 29 .031 .061 .070							.040 .017 29 .031 .061 .070
20			.028 .013 6 .025 .038 .050							.028 .013 6 .025 .038 .050
15			.020 .007 2 .020 .024 .026							.020 .007 2 .020 .024 .026
10			.023 .006 6 .024 .029 .030							.023 .006 6 .024 .029 .030
5			.031 .002 7 .031 .032 .035							.031 .002 7 .031 .032 .035
0										
5										
10										
15										
20										
25										
30										
35				.168 .028 10 .166 .199 .201						.168 .028 10 .166 .199 .201
40										
45S										

LONGITUDE

TABLE III. - GASP AMBIENT OZONE DATA BY LATITUDE FOR MARCH

(a) Flight level 290

CODE:

MEAN	ST. DEV.	N
50%	84%	98%

MARCH
FL 290

LAT	15E	60E	105E	150E	165W	120W	75W	30W	15E	MEAN	LAT
70N											70N
65											65
60						.162 .053 11 .156 .216 .245	.254 .107 29 .266 .336 .501	.286 .112 11 .340 .372 .391		.241 .108 51 .250 .347 .487	60
55						.156 .103 6 .150 .264 .271		.202 .090 22 .215 .269 .383		.192 .095 28 .213 .269 .381	55
50						.056 .013 14 .058 .063 .083	.099 .053 17 .073 .153 .210	.101 .100 26 .073 .117 .438		.089 .076 57 .064 .117 .402	50
45	.055 .011 4 .050 .062 .072				.137 1	.008 1	.176 .101 8 .160 .271 .350	.053 1		.122 .097 15 .085 .212 .339	45
40	.070 .022 21 .057 .096 .109		.060 .020 6 .050 .074 .098	.049 1	.003 1	.079 .086 17 .055 .078 .324	.136 .105 12 .076 .282 .344	.043 1		.083 .074 59 .057 .099 .348	40
35	.095 .064 15 .082 .171 .229		.114 .082 12 .083 .185 .289	.172 1	.050 .021 13 .043 .057 .103	.114 .096 10 .075 .167 .333	.090 .102 7 .041 .105 .306			.092 .078 58 .054 .166 .331	35
30	.058 .006 4 .059 .064 .065	.058 .006 4 .057 .063 .066	.061 .016 12 .057 .070 .097		.071 .030 13 .063 .093 .134	.098 .069 10 .058 .173 .231	.036 .001 3 .036 .037 .038			.070 .041 46 .056 .092 .186	30
25		.052 .002 3 .051 .053 .054	.026 .014 14 .022 .046 .050		.084 .030 13 .087 .102 .140	.037 .006 7 .036 .038 .048	.040 .000 3 .040 .041 .041			.050 .031 40 .042 .087 .114	25
20			.030 .005 3 .026 .033 .037		.057 .019 9 .056 .069 .094	.026 .007 4 .023 .031 .036				.044 .021 18 .033 .059 .090	20
15		.062 1	.059 .017 5 .069 .073 .073							.059 .015 6 .050 .073 .073	15
10											10
5						.035 1				.035 1	5
0											0
5											5
10											10
15											15
20	.013 1	.027 1					.017 1			.019 .006 3 .017 .024 .027	20
25	.043 1									.043 1	25
30			.025 1							.025 1	30
35			.039 .005 6 .038 .043 .047	.055 1						.041 .007 7 .040 .048 .054	35
40											40
45S											45S

LONGITUDE

TABLE III. - Continued. GASP AMBIENT OZONE DATA BY LATITUDE FOR MARCH

(b) Flight level 310

CODE:

MEAN	ST. DEV.	N
50%	84%	98%

MARCH
FL 310

LAT	15E	60E	105E	150E	165W	120W	75W	30W	15E	MEAN	LAT
70N								.218 .121 8 .278 .318 .364		.218 .121 8 .278 .318 .364	70N
65								.168 .074 12 .173 .245 .260		.168 .074 12 .173 .245 .260	65
60								.152 .069 12 .165 .225 .237		.152 .069 12 .165 .225 .237	60
55						.387 .052 4 .379 .431 .461		.146 .125 16 .102 .303 .417		.194 .149 20 .118 .374 .454	55
50					.341 .137 8 .405 .440 .444	.145 .100 4 .103 .226 .301		.190 .139 26 .128 .410 .441		.217 .150 38 .170 .413 .445	50
45	.107 .038 2 .107 .132 .143			.114 .029 5 .120 .144 .145	.095 .118 10 .073 .097 .377	.173 .129 27 .116 .326 .433	.239 .193 18 .166 .485 .534			.173 .152 62 .098 .409 .491	45
40	.090 .063 6 .054 .134 .211		.166 .005 2 .166 .169 .171	.207 .072 11 .166 .284 .333	.094 .137 10 .030 .162 .416	.074 .085 83 .051 .089 .419	.130 .131 8 .074 .195 .414			.094 .100 120 .055 .166 .445	40
35	.137 .122 6 .061 .266 .348		.119 .105 14 .079 .159 .391	.203 .021 2 .203 .217 .223	.140 .177 13 .066 .220 .581	.103 .103 7 .051 .215 .295				.129 .133 42 .044 .228 .479	35
30		.050 .003 3 .049 .052 .054	.086 .010 10 .090 .094 .099		.040 1	.026 .018 7 .020 .023 .064				.059 .030 21 .070 .093 .096	30
25		.058 .009 2 .058 .064 .067	.072 .021 9 .060 .094 .106		.082 .069 17 .064 .137 .236	.055 1				.077 .055 20 .060 .094 .232	25
20		.049 .011 3 .047 .059 .063	.048 .019 11 .038 .066 .083		.068 .022 13 .059 .095 .107	.011 .002 9 .011 .013 .013				.046 .028 36 .030 .073 .104	20
15		.032 .013 10 .027 .038 .062	.038 .018 10 .035 .058 .070			.049 .022 4 .061 .063 .064				.037 .016 24 .026 .062 .069	15
10							.038 .005 2 .038 .041 .043			.038 .005 2 .038 .041 .043	10
5											5
0											0
5											5
10											10
15											15
20	.033 .009 6 .035 .039 .043						.065 1			.037 .014 7 .036 .044 .062	20
25	.050 .008 16 .051 .058 .060									.050 .008 16 .051 .058 .060	25
30											30
35			.050 1	.058 .017 10 .057 .069 .094						.058 .017 11 .057 .067 .094	35
40			.034 1							.034 1	40
45S											45S

LONGITUDE

TABLE III. - Continued. GASP AMBIENT OZONE DATA BY LATITUDE FOR MARCH

(c) Flight level 330

CODE:

MEAN	ST. DEV.	N
50%	84%	98%

MARCH
FL 330

LAT	15E	60E	105E	150E	165W	120W	75W	30W	15E	MEAN
70N							.115 1	.247 .136 8 .224 .395 .428		.233 .135 9 .152 .392 .427
65						.287 .088 8 .255 .360 .447	.494 .045 15 .498 .535 .553	.402 .049 4 .422 .442 .442		.419 .110 27 .455 .529 .551
60						.417 .103 29 .433 .527 .589	.304 .223 16 .226 .577 .629	.310 .146 23 .340 .471 .500		.354 .162 68 .313 .519 .604
55					.456 .056 7 .473 .513 .517	.339 .150 23 .374 .509 .573	.215 .155 63 .178 .381 .587	.169 .151 80 .094 .351 .508		.220 .167 173 .169 .419 .573
50				.079 .046 10 .062 .109 .185	.256 .161 15 .226 .451 .544	.244 .141 9 .182 .429 .447	.128 .131 123 .076 .217 .493	.196 .180 121 .104 .423 .634		.167 .161 278 .065 .384 .588
45	.234 .105 7 .179 .354 .386			.131 .119 37 .063 .323 .362	.276 .211 14 .150 .525 .591	.219 .125 15 .230 .305 .459	.123 .119 155 .064 .210 .484	.139 .073 18 .131 .221 .261		.143 .131 246 .075 .265 .496
40	.162 .077 22 .147 .224 .356		.053 .005 5 .053 .057 .060	.156 .136 21 .106 .248 .470	.096 .072 20 .074 .094 .309	.123 .101 84 .073 .244 .352	.250 .172 35 .241 .444 .543	.114 1		.150 .127 188 .079 .275 .490
35	.178 .119 28 .203 .327 .351		.208 .186 15 .097 .411 .583	.527 1	.111 .113 91 .074 .191 .532	.128 .116 33 .081 .166 .478				.137 .130 168 .078 .248 .567
30	.097 .061 10 .069 .127 .242	.067 .016 17 .066 .071 .108	.162 .012 3 .164 .172 .176		.074 .034 71 .059 .100 .172	.051 .015 22 .049 .069 .076	.213 .053 2 .213 .249 .264			.075 .041 125 .061 .100 .185
25		.074 .014 3 .070 .085 .091			.081 .063 53 .064 .132 .251	.037 .010 14 .036 .046 .057	.060 .026 5 .044 .091 .093			.071 .057 75 .055 .099 .233
20		.056 .015 2 .056 .066 .070	.036 .017 8 .041 .049 .057	.065 .029 30 .061 .088 .134	.073 .040 29 .069 .110 .162	.041 .016 18 .040 .055 .068				.060 .033 87 .054 .084 .150
15		.012 .002 4 .012 .014 .014	.035 .018 19 .043 .051 .063	.039 .016 26 .034 .061 .070	.035 .002 6 .035 .036 .037	.043 .024 16 .044 .064 .085	.046 .004 3 .046 .049 .051			.037 .019 74 .035 .059 .077
10		.045 .002 4 .046 .047 .047	.040 .012 11 .038 .054 .060	.031 .000 4 .031 .032 .032	.031 .002 3 .031 .032 .033		.050 .004 6 .049 .054 .057			.041 .010 28 .034 .051 .059
5			.027 .002 4 .027 .029 .030	.031 .003 4 .031 .034 .036		.034 .003 2 .034 .035 .036	.040 .008 9 .039 .046 .055			.035 .008 19 .032 .043 .053
0			.029 .002 7 .028 .032 .032	.027 .003 6 .027 .029 .030			.023 .012 8 .024 .032 .043			.026 .008 21 .027 .032 .040
5			.038 .005 5 .036 .044 .045	.025 .007 7 .024 .028 .038			.026 .004 3 .026 .029 .030			.030 .008 15 .028 .038 .044
10			.043 .018 2 .043 .055 .060	.025 .010 5 .024 .032 .042						.030 .015 7 .025 .045 .059
15				.033 .005 5 .031 .037 .040						.033 .005 5 .031 .037 .040
20	.025 .016 6 .018 .046 .049	.046 .009 2 .046 .051 .054		.025 .002 6 .025 .027 .027						.028 .013 14 .023 .044 .053
25	.015 .008 10 .017 .023 .026	.042 .007 14 .044 .047 .054		.041 .016 8 .035 .062 .068						.033 .016 32 .030 .046 .067
30		.045 .008 21 .044 .050 .064	.046 .012 4 .045 .055 .062	.072 1						.046 .010 26 .044 .052 .071
35			.051 .010 3 .057 .059 .060	.119 .048 25 .123 .174 .188						.112 .050 28 .115 .172 .188
40			.045 .008 2 .045 .050 .053	.082 .063 7 .051 .112 .213						.074 .058 9 .051 .095 .208
45S										

LONGITUDE

TABLE III. - Continued. GASP AMBIENT OZONE DATA BY LATITUDE FOR MARCH

(d) Flight level 350

CODE:

MEAN	ST. DEV.	N
50%	84%	98%

MARCH
FL 350

LAT	15E	60E	105E	150E	165W	120W	75W	30W	15E	MEAN
70N						.597 .056 13 .593 .649 .686				.597 .056 13 .593 .649 .686
65					.516 .035 8 .516 .554 .563	.570 .074 16 .570 .655 .661	.481 .021 7 .474 .512 .514			.536 .068 31 .521 .600 .659
60				.177 .111 4 .166 .285 .319		.475 .131 42 .503 .599 .675	.345 .146 15 .377 .485 .535	.298 .109 17 .266 .415 .455		.396 .158 78 .372 .558 .665
55				.378 .189 35 .392 .557 .683	.641 .062 26 .643 .706 .751	.398 .211 38 .463 .637 .680	.304 .226 24 .198 .638 .714	.280 .228 72 .216 .524 .744		.372 .234 195 .395 .642 .730
50				.498 .149 32 .473 .621 .844	.298 .102 14 .279 .407 .462	.289 .194 44 .211 .509 .606	.125 .126 58 .058 .252 .485	.158 .141 39 .087 .284 .568		.247 .201 187 .192 .479 .671
45	.271 .158 16 .298 .418 .482		.549 .009 2 .549 .554 .557	.327 .223 44 .318 .591 .718	.208 .191 33 .113 .442 .644	.369 .195 84 .396 .596 .677	.211 .195 54 .100 .483 .551	.388 .149 5 .420 .536 .561		.298 .210 238 .166 .520 .665
40	.230 .176 23 .148 .429 .528		.544 .119 27 .575 .644 .727	.286 .207 20 .236 .555 .585	.115 .082 102 .078 .224 .279	.168 .141 236 .103 .288 .545	.240 .193 3 .158 .395 .492	.263 .047 4 .244 .303 .335		.190 .169 415 .113 .380 .619
35	.244 .137 33 .183 .387 .452		.243 .203 18 .150 .457 .638	.150 .056 3 .160 .195 .210	.160 .153 223 .094 .273 .619	.146 .119 23 .100 .205 .501				.173 .156 300 .107 .354 .620
30	.157 .064 21 .147 .209 .299	.098 .066 42 .067 .171 .262	.050 .031 17 .033 .089 .099	.055 .012 11 .054 .068 .070	.105 .066 281 .085 .158 .272	.038 .025 18 .033 .069 .075				.100 .067 390 .079 .159 .271
25		.054 .016 40 .053 .071 .090	.060 .005 2 .060 .063 .065	.066 .007 5 .068 .072 .073	.091 .047 189 .084 .132 .207	.035 .017 18 .042 .048 .056	.032 .001 3 .032 .033 .033			.080 .045 257 .072 .121 .200
20		.055 .017 20 .055 .069 .088	.032 .003 4 .032 .035 .037	.077 .018 4 .070 .089 .105	.087 .056 33 .070 .182 .201	.027 .014 9 .024 .043 .046				.066 .046 70 .049 .093 .196
15		.014 .015 4 .009 .027 .036	.034 .020 43 .029 .056 .066	.054 .034 46 .043 .108 .111		.039 .009 12 .037 .051 .054				.042 .028 104 .035 .059 .110
10		.041 .002 5 .041 .042 .044	.033 .003 8 .033 .035 .038			.032 .005 12 .032 .036 .040	.037 .008 8 .039 .045 .047			.035 .006 33 .035 .041 .046
5							.036 .004 6 .035 .041 .042			.036 .004 6 .035 .041 .042
0							.040 .005 5 .038 .044 .048			.040 .005 5 .038 .044 .048
5							.031 .006 8 .030 .036 .040			.031 .006 8 .030 .036 .040
10							.032 .013 14 .035 .042 .054			.032 .013 14 .035 .042 .054
15							.050 .009 14 .049 .058 .067			.050 .009 14 .049 .058 .067
20			.066 1				.047 .022 5 .042 .066 .083			.051 .021 6 .048 .070 .084
25		.043 .028 9 .041 .059 .096	.068 .005 5 .068 .072 .076							.052 .026 14 .047 .069 .096
30		.153 1	.091 .011 6 .092 .103 .106							.100 .024 7 .094 .108 .147
35			.065 .050 10 .045 .084 .184							.065 .050 10 .045 .084 .184
40			.029 .001 2 .029 .030 .030	.251 .031 11 .256 .281 .294						.217 .085 13 .251 .275 .294
45S										

LONGITUDE

TABLE III. - Continued. GASP AMBIENT OZONE DATA BY LATITUDE FOR MARCH

(e) Flight level 370

CODE:

MEAN	ST. DEV.	N
50%	84%	98%

MARCH
FL 370

LAT	15E	60E	105E	150E	165W	120W	75W	30W	15E	MEAN	LAT
70N						.693 .068 2 .693 .739 .758				.693 .068 2 .693 .739 .758	70N
65				.288 .097 3 .275 .368 .407	.565 .089 58 .574 .638 .701	.628 .114 17 .645 .696 .803	.627 .007 2 .627 .631 .633			.569 .113 80 .576 .659 .717	65
60				.355 .213 11 .351 .617 .697	.543 .123 52 .586 .658 .722	.576 .135 45 .586 .682 .864	.377 .191 22 .339 .586 .618	.447 .130 17 .490 .577 .636		.503 .168 147 .546 .652 .766	60
55				.518 .150 68 .523 .661 .810	.649 .091 25 .673 .726 .781	.546 .156 32 .597 .688 .764	.378 .205 28 .307 .611 .695	.360 .210 73 .413 .550 .705		.468 .201 226 .373 .663 .775	55
50				.466 .243 35 .427 .710 .919	.420 .194 57 .481 .634 .719	.527 .167 20 .564 .653 .761	.196 .230 138 .061 .503 .825	.333 .202 357 .350 .560 .757		.324 .226 607 .310 .580 .766	50
45	.518 .113 24 .505 .623 .760		.610 .055 2 .610 .647 .663	.457 .225 30 .553 .680 .729	.359 .248 83 .333 .643 .760	.409 .229 47 .364 .674 .890	.095 .148 95 .042 .078 .565	.586 .279 17 .635 .712 1.169		.320 .265 298 .153 .635 .803	45
40	.543 .094 7 .528 .644 .661		.493 .137 14 .500 .650 .664	.334 .224 60 .305 .604 .680	.249 .185 79 .183 .445 .644	.348 .191 685 .370 .549 .680	.090 .095 24 .039 .215 .315	.493 .033 3 .505 .520 .526		.335 .196 672 .346 .548 .673	40
35	.389 .135 11 .447 .480 .490		.345 .188 29 .308 .572 .695	.237 .198 43 .154 .534 .683	.193 .203 225 .097 .339 .768	.294 .162 384 .258 .510 .652				.261 .197 692 .159 .501 .710	35
30	.181 .131 11 .130 .226 .501	.066 .020 67 .056 .095 .119	.116 .024 6 .111 .145 .154	.076 .020 13 .074 .099 .106	.122 .103 603 .096 .178 .466	.104 .090 32 .073 .149 .315				.116 .099 732 .091 .155 .462	30
25		.073 .016 63 .071 .085 .105	.091 .015 7 .095 .100 .103	.078 .016 5 .079 .089 .100	.092 .058 438 .084 .116 .274	.065 .002 19 .064 .067 .069	.041 1			.088 .054 533 .080 .109 .262	25
20		.048 .027 79 .045 .080 .092	.029 .021 8 .026 .051 .069	.048 .028 19 .032 .085 .089	.086 .034 52 .090 .116 .120	.052 .009 2 .052 .057 .060	.034 .005 2 .034 .037 .038			.059 .035 162 .057 .091 .116	20
15		.022 .014 22 .023 .030 .056	.046 .022 25 .055 .066 .080	.029 .005 17 .029 .034 .036		.032 .004 2 .032 .034 .035				.033 .019 66 .028 .059 .075	15
10						.033 .006 14 .032 .039 .042	.030 .008 7 .030 .037 .043			.032 .007 21 .032 .039 .043	10
5											5
0							.026 .005 5 .025 .030 .035			.026 .005 5 .025 .030 .035	0
5							.042 .013 11 .035 .058 .062			.042 .013 11 .035 .058 .062	5
10			.046 .011 5 .051 .052 .055				.043 .010 13 .039 .050 .063			.043 .011 18 .043 .052 .063	10
15			.054 .006 13 .056 .060 .063				.048 .015 11 .040 .067 .069			.052 .012 24 .050 .062 .069	15
20			.051 .012 11 .053 .060 .062				.042 .012 6 .038 .054 .062			.048 .013 17 .052 .060 .063	20
25			.062 .002 5 .062 .064 .065							.062 .002 5 .062 .064 .065	25
30		.073 .030 19 .063 .108 .127	.070 .028 10 .055 .091 .129							.072 .029 29 .062 .107 .134	30
35			.065 .024 17 .058 .086 .117							.065 .024 17 .058 .086 .117	35
40			.095 .019 2 .095 .108 .113							.095 .019 2 .095 .108 .113	40
45S											45S

LONGITUDE

TABLE III. - Continued. GASP AMBIENT OZONE DATA BY LATITUDE FOR MARCH

(f) Flight level 390

CODE:

MEAN	ST. DEV.	N
50%	84%	98%

MARCH
FL 390

LAT	15E	60E	105E	150E	165W	120W	75W	30W	15E	MEAN
70N										
65				.844 .000 2 .844 .844 .844	.711 .125 52 .741 .826 .910					.716 .126 54 .744 .836 .909
60				.695 .124 66 .703 .805 .900	.651 .169 59 .630 .800 1.099	.644 .154 32 .699 .781 .885	.377 .025 21 .371 .396 .437			.634 .170 178 .643 .795 .933
55				.632 .152 119 .633 .785 .935	.599 .143 39 .635 .729 .791	.614 .124 33 .563 .771 .860	.361 .098 70 .333 .473 .601	.541 .098 27 .520 .655 .748		.551 .172 288 .543 .719 .873
50				.571 .255 122 .610 .776 1.041	.461 .263 42 .404 .721 .984	.674 .202 18 .560 .947 1.016	.178 .185 106 .136 .250 .826	.382 .108 45 .396 .519 .551		.412 .279 333 .407 .716 .992
45	.184 .105 14 .225 .278 .329		.644 .198 21 .716 .792 .923	.543 .227 95 .613 .753 .843	.383 .209 59 .446 .597 .683	.680 .193 68 .682 .888 1.004	.159 .133 190 .137 .222 .597	.293 1 .293		.369 .276 456 .212 .689 .922
40	.079 .048 23 .074 .088 .210		.472 .256 93 .457 .756 .873	.402 .236 43 .450 .631 .798	.209 .196 55 .105 .462 .649	.432 .202 687 .488 .616 .786	.128 .191 26 .030 .509 .532			.404 .226 927 .455 .624 .802
35	.063 .005 2 .063 .066 .067		.110 .102 9 .065 .127 .350	.155 .061 15 .146 .225 .243	.328 .202 96 .326 .531 .684	.357 .241 354 .312 .655 .734				.339 .233 476 .226 .629 .729
30			.015 .004 4 .014 .019 .021		.171 .136 359 .131 .262 .599	.206 .230 47 .078 .631 .652				.174 .150 410 .124 .277 .650
25	.157 1		.023 .016 20 .014 .046 .054		.099 .062 286 .084 .160 .288	.078 .039 26 .076 .094 .191				.093 .062 333 .081 .157 .264
20			.037 .023 14 .026 .073 .075	.092 .003 5 .092 .094 .097	.088 .018 25 .091 .105 .109	.075 .033 16 .094 .099 .102				.073 .031 60 .074 .099 .106
15			.049 .018 10 .045 .070 .079	.032 .003 8 .032 .036 .037						.041 .016 18 .033 .060 .078
10			.036 .006 5 .035 .040 .045			.032 1				.035 .005 6 .034 .038 .045
5			.028 .002 6 .028 .029 .029			.043 .003 2 .043 .045 .046	.034 .005 6 .033 .036 .044			.032 .006 14 .030 .039 .046
0			.030 .005 6 .029 .033 .039				.049 .014 8 .044 .063 .074			.041 .014 14 .035 .054 .073
5			.044 .008 4 .049 .049 .049				.058 .012 6 .060 .067 .075			.053 .012 10 .045 .065 .074
10			.040 .001 2 .040 .041 .041							.040 .001 2 .040 .041 .041
15										
20										
25										
30										
35			.060 .008 7 .058 .067 .075							.060 .008 7 .058 .067 .075
40										
45S										

LONGITUDE

TABLE III. - Continued. GASP AMBIENT OZONE DATA BY LATITUDE FOR MARCH

(g) Flight level 410

CODE:

MEAN	ST. DEV.	N
50%	84%	98%

MARCH
FL 410

LAT	15E	60E	105E	150E	165W	120W	75W	30W	15E	MEAN
70N										
65										
60					.580 1	.838 .261 9 .794 1.133 1.329		.961 .106 6 .966 1.074 1.086		.868 .227 16 .737 1.081 1.316
55				.737 .132 8 .729 .883 .935		.729 .174 15 .726 .912 1.011	.616 .127 11 .586 .720 .884	.964 .136 9 .939 1.126 1.157		.751 .190 43 .740 .940 1.140
50				.679 .235 11 .647 .930 .953		.719 .126 15 .759 .855 .883	.411 .085 9 .445 .489 .519			.627 .206 35 .607 .864 .940
45	.325 .086 7 .323 .411 .441		.660 .333 2 .660 .886 .979	.676 .054 5 .655 .706 .773		.636 .126 17 .622 .771 .815	.405 .049 3 .422 .444 .453	.561 .181 8 .583 .733 .801		.559 .187 42 .522 .741 .849
40	.437 .315 12 .300 .805 .835		1.039 .443 5 1.348 1.404 1.476		.234 .161 20 .165 .369 .638	.468 .201 130 .445 .697 .795		.814 .198 8 .859 .977 1.009		.471 .261 175 .431 .722 .999
35	.580 .260 6 .627 .783 .932		.687 .071 2 .687 .735 .755		.698 1	.264 .211 36 .152 .550 .673				.334 .255 45 .232 .615 .786
30	.184 .078 6 .145 .267 .318					.090 .016 3 .085 .103 .110				.153 .078 9 .129 .224 .313
25										
20										
15										
10										
5										
0										
5										
10										
15										
20										
25										
30										
35										
40										
45S										

LONGITUDE

TABLE III. - Concluded. GASP AMBIENT OZONE DATA BY LATITUDE FOR MARCH

(h) Flight level 430

CODE:

MEAN	ST. DEV.	N
50%	84%	98%

MARCH
FL 430

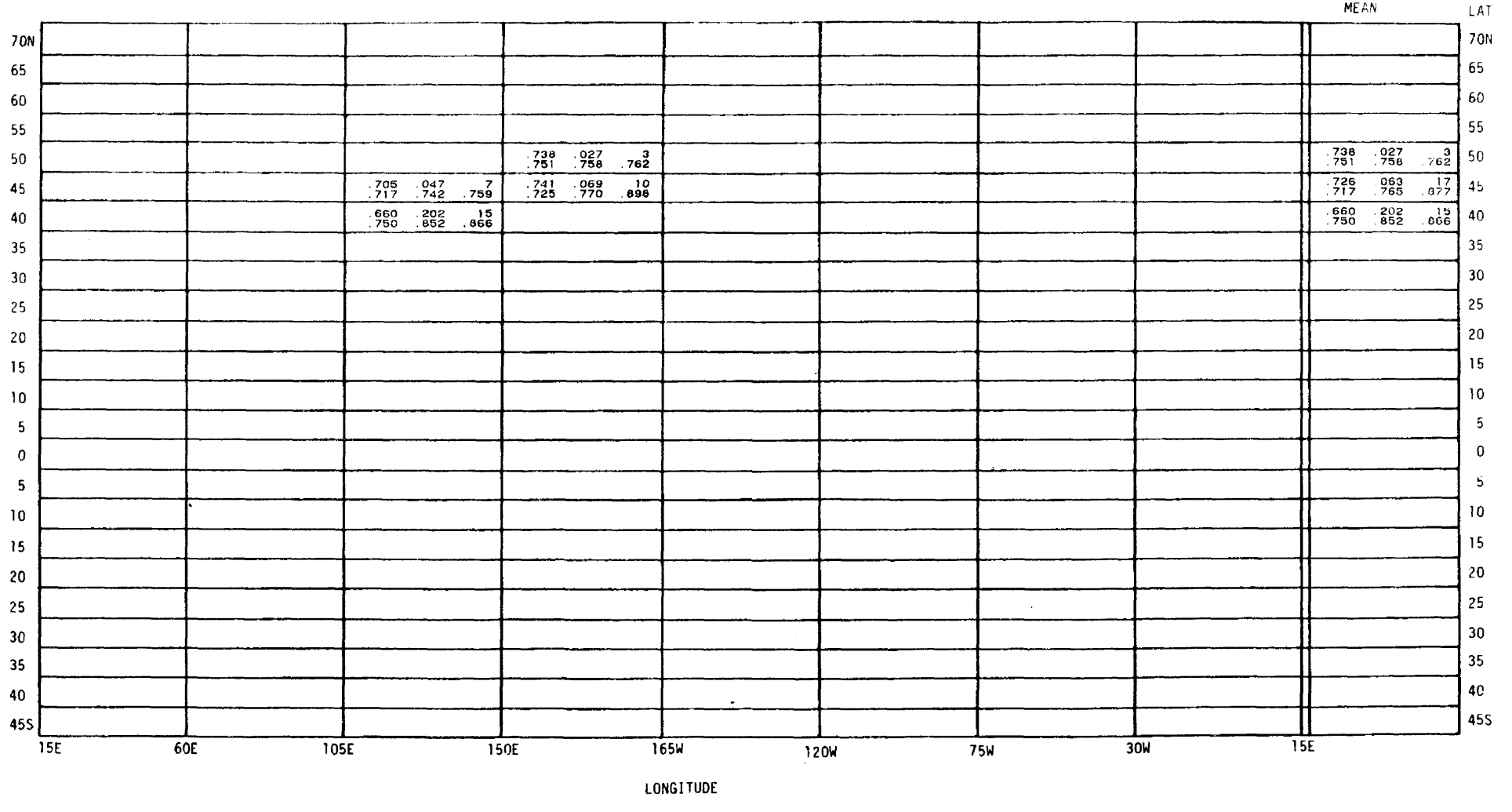

TABLE IV. - GASP AMBIENT OZONE DATA BY LATITUDE FOR APRIL

(a) Flight level 290

CODE:

MEAN	ST. DEV.	N
50%	84%	98%

APRIL
FL 290

LAT	15E	60E	105E	150E	165W	120W	75W	30W	15E	MEAN	LAT
70N											70N
65					.112 1					.112 1	65
60											60
55								.191 .107 7 .224 .319 .324		.191 .107 7 .224 .319 .324	55
50						.150 .059 2 .150 .190 .207	.093 .081 13 .060 .105 .297	.089 .077 27 .061 .094 .336		.093 .078 42 .061 .103 .327	50
45	.110 .112 17 .045 .269 .331				.128 .095 12 .080 .249 .310	.463 1	.122 .078 17 .089 .183 .317	.054 .005 4 .053 .059 .061		.121 .105 51 .079 .231 .376	45
40	.096 .063 35 .065 .182 .243			.041 .002 2 .041 .042 .043	.071 .053 18 .063 .072 .215	.083 .105 29 .057 .088 .457	.082 .020 11 .074 .104 .122			.085 .074 95 .064 .109 .301	40
35	.071 .030 9 .062 .088 .138		.050 .026 26 .057 .062 .107	.017 .003 2 .017 .018 .019	.065 .030 23 .071 .090 .121	.103 .054 6 .080 .170 .181				.062 .035 66 .036 .090 .161	35
30	.057 .017 6 .050 .078 .083				.059 .021 21 .067 .077 .085	.076 .006 8 .075 .082 .087				.063 .019 35 .071 .077 .089	30
25		.045 1			.071 .013 17 .073 .082 .090	.075 .008 4 .071 .081 .088				.070 .013 22 .070 .084 .090	25
20		.042 .011 7 .041 .049 .060			.072 .038 24 .071 .098 .154					.065 .037 31 .061 .095 .151	20
15		.057 .033 4 .056 .081 .100	.011 .005 5 .010 .016 .019		.030 .021 12 .016 .062 .067	.041 1				.031 .026 22 .015 .060 .088	15
10		.025 .007 3 .023 .030 .034		.016 .002 5 .017 .017 .018	.014 .003 3 .013 .016 .018		.064 .033 2 .064 .086 .096			.025 .022 13 .018 .031 .082	10
5		.024 .003 4 .023 .026 .028		.019 0.000 2 .019 .019		.051 .005 2 .051 .054 .056	.032 .002 5 .032 .034 .036			.030 .010 13 .030 .037 .053	5
0			.021 0.000 2 .021 .021 .021							.021 0.000 2 .021 .021 .021	0
5			.022 .004 7 .021 .026 .029							.022 .004 7 .021 .026 .029	5
10			.025 .005 6 .025 .031 .033							.025 .005 6 .025 .031 .033	10
15			.027 .001 6 .027 .027 .028	.008 1						.024 .007 7 .026 .027 .028	15
20			.028 .004 7 .027 .031 .034	.023 .009 6 .021 .026 .039			.031 1			.026 .007 14 .025 .031 .039	20
25			.037 .006 6 .035 .040 .047	.042 .013 19 .042 .058 .062						.041 .012 25 .038 .054 .062	25
30			.035 1	.036 .010 38 .037 .045 .056						.036 .010 39 .037 .045 .056	30
35			.033 1	.047 .051 9 .027 .041 .167						.046 .049 10 .030 .040 .164	35
40				.025 1						.025 1	40
45S											45S

LONGITUDE

TABLE IV. - Continued. GASP AMBIENT OZONE DATA BY LATITUDE FOR APRIL

(b) Flight level 310

CODE:

MEAN	ST. DEV.	N
50%	84%	98%

APRIL
FL 310

LAT	15E	60E	105E	150E	165W	120W	75W	30W	15E	MEAN
70N										
65										
60				.142 .139 .009 .142 7 .159	.113 1			.065 .064 .008 .072 4 .075		.114 .136 .036 .141 12 .157
55				.131 .128 .035 .170 7 .184	.146 .113 .131 .354 16 .366	.074 .078 .010 .080 4 .082		.155 .086 .126 .326 14 .404		.140 .097 .113 .302 41 .379
50				.106 .104 .016 .124 8 .132	.132 .082 .125 .335 27 .357	.145 .145 .027 .163 2 .170	.292 .292 .008 .297 2 .300	.149 .072 .128 .318 8 .373		.138 .093 .114 .317 47 .364
45	.050 .050 .006 .054 2 .056		.023 .024 .002 .025 4 .025	.074 .049 .043 .107 3 .131	.084 .083 .056 .114 36 .260	.097 .085 .041 .116 24 .204	.274 .228 .181 .393 6 .603			.099 .084 .088 .124 73 .305
40	.153 .159 .063 .221 10 .223		.030 .029 .007 .031 7 .045		.046 .035 .030 .078 22 .103	.122 .084 .105 .215 73 .447	.095 .070 .067 .126 6 .226			.104 .077 .094 .190 118 .397
35	.118 .091 .074 .212 13 .266		.056 .045 .054 .079 23 .209	.020 1	.076 .070 .047 .094 28 .201	.097 .055 .078 .140 5 .239				.078 .040 .062 .105 70 .272
30	.049 .049 .010 .059 13 .067	.069 .068 .024 .081 16 .125			.078 .075 .011 .092 15 .094	.109 .110 .014 .125 8 .126				.073 .060 .025 .095 52 .126
25	.041 .039 .009 .041 14 .063	.066 .047 .033 .112 14 .129	.067 .090 .039 .096 3 .099		.070 .076 .021 .093 15 .098					.060 .044 .027 .093 46 .121
20		.039 .040 .011 .048 21 .058	.052 .050 .010 .060 3 .064	.024 .014 .028 .015 8 .087	.069 .064 .042 .104 36 .151					.054 .030 .037 .087 68 .114
15		.040 .042 .010 .047 15 .057	.037 .051 .023 .059 7 .062		.037 .042 .015 .053 18 .055	.036 .039 .002 .040 3 .040				.038 .042 .015 .053 43 .059
10		.029 .027 .007 .036 11 .039	.053 .052 .006 .059 5 .062	.017 .017 .002 .018 12 .020	.020 .018 .006 .025 3 .028		.027 .029 .005 .030 4 .031			.027 .025 .013 .039 35 .059
5		.023 .022 .009 .031 10 .041	.052 .052 .001 .053 2 .053	.016 .016 .005 .020 13 .021			.031 1			.022 .018 .012 .031 26 .052
0			.027 .025 .005 .030 3 .033	.015 .016 .005 .019 16 .021			.033 .032 .004 .036 5 .039			.020 .017 .009 .031 24 .037
5			.026 .024 .006 .031 16 .035	.017 .017 .005 .023 12 .026			.031 .032 .005 .034 5 .037			.023 .022 .007 .031 33 .036
10			.027 .029 .004 .032 14 .032	.017 .018 .007 .024 11 .027			.033 .033 .004 .035 6 .039			.025 .026 .008 .032 31 .036
15			.037 .037 .007 .043 5 .046	.017 .018 .005 .023 12 .024			.031 .031 .003 .032 7 .036			.025 .021 .010 .034 24 .044
20			.035 .035 .006 .038 2 .040	.019 1			.039 1			.032 .034 .009 .040 4 .040
25			.032 .032 .005 .035 15 .041							.032 .032 .005 .035 15 .041
30			.036 .034 .006 .044 15 .047	.039 .047 .017 .053 10 .053						.037 .035 .012 .048 25 .053
35			.031 .030 .012 .039 26 .061	.032 .031 .010 .046 15 .051						.032 .030 .011 .044 41 .055
40			.025 .025 0.000 .025 2 .025	.029 .029 .005 .034 10 .038						.029 .027 .004 .033 12 .038
45S										

LONGITUDE

TABLE IV. - Continued. GASP AMBIENT OZONE DATA BY LATITUDE FOR APRIL

(c) Flight level 330

CODE:

MEAN	ST. DEV.	N
50%	84%	98%

APRIL
FL 330

LAT	15E	60E	105E	150E	165W	120W	75W	30W	15E	MEAN
70N										
65						.434 1	.211 .137 12 .139 .339 .461	.120 .051 10 .108 .162 .228		.181 .126 23 .120 .298 .473
60						.223 .110 17 .223 .322 .440	.307 .090 9 .276 .371 .489	.160 .106 28 .116 .273 .400		.204 .118 54 .138 .342 .454
55				.320 .193 22 .217 .552 .623	.089 .168 10 .023 .088 .500	.364 .175 18 .355 .572 .600	.095 .068 18 .078 .094 .285	.204 .175 58 .103 .460 .575		.223 .190 126 .099 .483 .605
50				.498 .220 9 .613 .659 .680		.178 .117 14 .108 .323 .336	.231 .171 29 .113 .455 .533	.121 .115 21 .083 .186 .440		.222 .192 73 .107 .454 .655
45	.070 .081 8 .041 .046 .252			.047 .043 22 .029 .084 .155	.176 .172 17 .075 .443 .490	.257 .181 23 .238 .464 .656	.251 .222 46 .143 .560 .703	.131 .083 3 .081 .195 .241		.189 .194 119 .096 .438 .685
40	.168 .135 28 .100 .303 .437		.068 .022 14 .068 .085 .113	.063 .051 38 .056 .121 .173	.132 .101 30 .093 .245 .346	.233 .209 61 .112 .513 .649	.137 .104 12 .102 .185 .394			.152 .157 183 .084 .280 .631
35	.073 .044 35 .049 .105 .185		.092 .097 24 .073 .105 .346	.063 .023 25 .069 .087 .104	.093 .065 131 .074 .134 .324	.128 .109 17 .079 .168 .430				.089 .069 232 .067 .115 .330
30	.051 .007 13 .054 .058 .059	.054 .017 24 .046 .072 .088	.077 .003 3 .077 .080 .081	.075 .007 7 .071 .083 .084	.067 .024 141 .068 .089 .112	.102 .047 28 .091 .142 .211				.070 .030 216 .065 .090 .145
25	.045 .004 3 .045 .048 .050	.050 .014 16 .046 .057 .083	.069 .010 8 .075 .077 .078	.103 .016 8 .096 .125 .131	.074 .038 120 .074 .097 .169	.054 .022 39 .048 .084 .098				.069 .034 194 .064 .094 .162
20		.042 .009 10 .044 .049 .054	.055 .011 3 .052 .064 .069	.039 .049 40 .015 .064 .185	.079 .051 28 .069 .122 .213	.044 .011 19 .045 .050 .065	.049 .005 2 .049 .052 .053			.052 .044 102 .025 .086 .185
15		.040 .016 7 .050 .056 .057	.019 .009 2 .019 .025 .028	.014 .008 14 .014 .022 .026	.021 .015 7 .014 .037 .050	.050 .005 5 .050 .054 .057	.046 .007 4 .046 .054 .058			.028 .018 39 .022 .051 .057
10		.026 .005 17 .026 .032 .034		.014 .001 3 .014 .015 .016	.013 .001 4 .013 .014 .014	.043 1	.035 .004 5 .036 .039 .042			.025 .009 30 .024 .033 .042
5		.032 .009 20 .030 .043 .051		.019 .004 13 .020 .022 .025	0.000 1		.024 .004 8 .024 .029 .031			.026 .010 42 .022 .034 .047
0		.025 .010 10 .021 .037 .041	.028 .004 3 .027 .032 .034	.016 .003 16 .016 .019 .022			.037 .010 8 .036 .048 .054			.024 .011 37 .021 .035 .051
5		.028 .004 4 .027 .031 .035		.010 .006 21 .012 .015 .021			.049 .013 9 .040 .062 .069			.023 .019 34 .013 .039 .065
10		.035 .001 6 .036 .036 .036		.018 .008 31 .015 .026 .032			.048 .008 7 .049 .055 .058			.025 .014 44 .020 .036 .055
15		.037 .004 6 .038 .039 .041	.032 .004 2 .032 .035 .036	.022 .008 24 .024 .029 .034			.052 1			.026 .010 33 .025 .036 .045
20		.035 .008 5 .031 .043 .046	.033 .004 9 .035 .036 .038	.023 .006 31 .022 .031 .033			.038 1			.026 .008 46 .025 .035 .042
25			.034 1	.025 .013 44 .023 .037 .058						.025 .013 45 .023 .037 .057
30			.030 1	.033 .014 62 .032 .046 .059						.033 .014 63 .032 .046 .059
35			.035 .009 16 .033 .044 .051	.041 .021 24 .034 .068 .078						.039 .018 40 .029 .057 .075
40			.035 .004 2 .035 .038 .039	.035 .008 11 .033 .045 .047						.035 .008 13 .033 .045 .047
45S										

LONGITUDE

TABLE IV. - Continued. GASP AMBIENT OZONE DATA BY LATITUDE FOR APRIL

(d) Flight level 350

CODE:

MEAN	ST. DEV.	N
50%	84%	98%

APRIL
FL 350

LAT	15E	60E	105E	150E	165W	120W	75W	30W	15E	MEAN	LAT
70N						.616 .060 4 .633 .686 .702	.547 .106 31 .560 .657 .690			.555 .106 35 .563 .663 .698	70N
65					.299 .225 52 .172 .561 .695	.504 .159 43 .572 .643 .683	.340 .161 36 .370 .507 .590	.258 .144 10 .189 .435 .449		.369 .207 141 .388 .589 .682	65
60				.150 .130 10 .087 .270 .412	.378 .295 17 .123 .733 .795	.454 .178 100 .499 .632 .709		.166 .051 3 .167 .208 .225		.414 .213 130 .466 .632 .761	60
55				.498 .205 49 .557 .662 .786	.249 .176 25 .178 .422 .587	.377 .191 129 .415 .564 .664	.412 .216 19 .448 .611 .656	.270 .220 30 .120 .577 .633		.378 .212 252 .404 .603 .708	55
50				.459 .193 57 .512 .629 .741	.292 .225 36 .167 .574 .663	.303 .225 119 .209 .588 .713	.328 .230 98 .307 .622 .722	.147 .109 63 .102 .246 .467		.306 .225 373 .225 .589 .723	50
45	.251 .149 23 .209 .415 .464		.153 .137 4 .122 .285 .338	.329 .228 66 .361 .599 .702	.270 .244 66 .160 .618 .757	.253 .179 153 .240 .430 .709	.418 .211 30 .505 .619 .664	.161 .138 17 .118 .291 .462		.278 .209 359 .245 .513 .709	45
40	.237 .143 34 .227 .380 .480		.138 .170 32 .064 .328 .572	.186 .133 38 .162 .343 .538	.195 .205 70 .084 .505 .675	.211 .183 205 .143 .458 .634	.263 .158 13 .210 .450 .571			.204 .180 392 .094 .420 .633	40
35	.082 .059 38 .065 .093 .290		.084 .052 13 .072 .122 .203		.090 .073 282 .074 .118 .384	.184 .160 30 .118 .321 .640	.275 .102 3 .252 .359 .403			.098 .087 366 .075 .125 .408	35
30	.049 .013 17 .047 .062 .072			.090 .023 25 .094 .109 .121	.086 .050 354 .075 .123 .236	.077 .040 2 .077 .104 .115	.165 .069 6 .170 .222 .262			.086 .050 404 .075 .122 .236	30
25			.066 .008 4 .065 .073 .077	.090 .033 33 .087 .121 .154	.095 .056 258 .085 .131 .271	.093 .029 18 .095 .127 .145	.044 .006 5 .042 .048 .053			.093 .052 318 .085 .126 .249	25
20			.061 .007 2 .061 .066 .068	.053 .043 61 .042 .091 .165	.090 .057 66 .082 .143 .230	.047 .019 21 .039 .069 .094	.058 .002 4 .058 .060 .060			.068 .051 154 .030 .112 .206	20
15		.029 1	.023 .025 33 .008 .058 .071	.022 .013 60 .021 .033 .053	.019 .009 12 .019 .028 .036	.050 .016 23 .046 .058 .096				.027 .020 129 .025 .047 .071	15
10		.016 .004 10 .016 .020 .022		.010 .001 4 .010 .011 .011	.023 .006 7 .026 .026 .029	.050 .007 15 .051 .056 .062	.043 .009 9 .045 .051 .053			.033 .017 45 .035 .052 .061	10
5		.025 .009 12 .022 .037 .039		.015 .005 6 .015 .020 .021	.026 .002 5 .027 .028 .028	.052 .005 2 .052 .055 .056	.033 .005 16 .031 .038 .044			.028 .010 41 .028 .038 .049	5
0		.031 .007 7 .031 .036 .040	.018 .006 9 .017 .021 .031	.019 .004 10 .019 .022 .026			.034 .005 14 .036 .039 .041			.026 .009 40 .023 .036 .041	0
5		.026 .006 9 .026 .033 .034	.013 .002 2 .013 .014 .015	.017 .006 17 .015 .023 .029			.031 .005 13 .032 .035 .039			.023 .009 41 .023 .032 .038	5
10		.023 .002 5 .022 .025 .025		.017 .005 19 .017 .022 .023			.043 .006 13 .043 .048 .059			.027 .014 37 .022 .043 .058	10
15		.024 .003 5 .022 .027 .029	.018 .003 6 .018 .020 .022	.016 .007 17 .014 .023 .026			.038 .015 15 .042 .048 .051			.025 .014 43 .022 .042 .049	15
20			.017 .002 7 .016 .020 .021	.023 .017 45 .020 .026 .075			.051 .005 2 .051 .054 .055			.023 .017 54 .018 .027 .075	20
25			.027 .003 7 .026 .030 .033	.022 .018 47 .016 .046 .062						.023 .017 54 .019 .042 .062	25
30			.043 .004 7 .045 .047 .047	.042 .027 36 .043 .065 .097						.042 .025 43 .045 .065 .092	30
35			.031 .017 5 .028 .041 .059	.070 .021 25 .073 .089 .101						.063 .025 30 .070 .087 .100	35
40											40
45S											45S

LONGITUDE

TABLE IV. - Continued. GASP AMBIENT OZONE DATA BY LATITUDE FOR APRIL

(e) Flight level 370

CODE:

MEAN	ST. DEV.	N
50%	84%	98%

APRIL
FL 370

LAT	15E	60E	105E	150E	165W	120W	75W	30W	15E	MEAN	LAT
70N						.585 .092 8 .565 .614 .776	.616 .065 12 .611 .698 .709			.603 .078 20 .585 .694 .767	70N
65					.485 .227 81 .542 .712 .792	.631 .078 29 .637 .690 .777	.434 .118 20 .443 .559 .606	.516 .080 6 .553 .589 .597		.510 .196 136 .381 .695 .792	65
60				.408 .223 21 .379 .631 .827	.513 .234 125 .561 .780 .853	.496 .155 77 .531 .648 .714	.579 .153 28 .606 .716 .807	.388 .160 24 .436 .539 .599		.496 .206 275 .537 .688 .839	60
55				.573 .173 68 .581 .767 .864	.448 .197 60 .485 .646 .746	.413 .202 37 .429 .616 .789	.317 .239 11 .203 .556 .780	.352 .224 72 .347 .596 .768		.443 .221 248 .281 .675 .826	55
50				.477 .262 46 .565 .727 .827	.278 .199 72 .204 .502 .698	.435 .248 29 .591 .645 .703	.395 .125 50 .402 .505 .625	.279 .179 69 .296 .441 .633		.352 .217 266 .235 .597 .740	50
45	.367 .074 10 .397 .421 .456		.654 .036 2 .654 .678 .689	.261 .219 111 .141 .547 .699	.230 .230 93 .144 .550 .700	.404 .257 72 .450 .664 .822	.240 .196 64 .153 .497 .633	.320 .163 31 .369 .449 .603		.286 .230 383 .191 .594 .753	45
40	.452 .012 2 .452 .460 .464		.175 .130 34 .116 .263 .558	.231 .198 151 .156 .471 .719	.230 .205 142 .137 .430 .696	.246 .201 594 .157 .474 .753	.161 .170 11 .092 .253 .538	.365 .072 5 .381 .423 .423		.239 .199 939 .152 .465 .747	40
35	.075 .002 4 .076 .077 .077		.184 .145 86 .107 .308 .601	.347 .198 37 .357 .505 .733	.163 .153 459 .096 .349 .608	.237 .213 78 .145 .528 .755				.184 .169 664 .103 .374 .678	35
30	.127 .030 5 .131 .159 .159	.101 .007 4 .104 .107 .107	.102 .048 29 .090 .128 .235		.110 .078 515 .089 .138 .330					.110 .076 553 .090 .138 .329	30
25		.087 .031 17 .103 .111 .124	.061 .025 19 .059 .080 .108		.105 .050 398 .099 .146 .225					.103 .050 434 .098 .139 .223	25
20		.040 .012 6 .039 .050 .059	.006 .004 7 .005 .007 .013	.031 .034 46 .012 .076 .118	.082 .062 61 .079 .109 .275	.053 .015 20 .049 .067 .089				.055 .052 140 .030 .096 .187	20
15		.029 .004 4 .029 .034 .035	.022 .023 36 .009 .052 .063		.023 .015 34 .019 .037 .062	.060 .021 38 .059 .079 .101				.035 .027 112 .027 .061 .094	15
10		.042 .002 4 .043 .045 .045		.015 .007 10 .013 .019 .030	.018 .011 28 .013 .032 .039	.059 .013 28 .060 .072 .084	.054 .013 26 .058 .067 .074			.040 .022 96 .043 .064 .075	10
5				.011 .004 28 .011 .013 .019	.028 .004 8 .028 .029 .036		.027 .005 13 .028 .031 .032			.018 .009 49 .014 .028 .032	5
0			.033 .002 3 .032 .035 .036	.016 .015 17 .012 .017 .057	.033 .005 15 .032 .037 .042		.035 .011 16 .034 .042 .060			.028 .014 51 .030 .038 .061	0
5			.022 .004 8 .022 .024 .028	.017 .011 27 .016 .028 .040	.028 .003 11 .028 .029 .034		.048 .026 17 .040 .060 .117			.028 .020 63 .026 .040 .061	5
10			.026 .007 7 .024 .033 .036	.013 .009 25 .017 .020 .024	.024 .004 3 .022 .027 .029		.037 .003 15 .037 .042 .043			.023 .013 50 .014 .037 .042	10
15		.026 1		.014 .009 17 .019 .022 .026			.039 .006 18 .039 .046 .055			.027 .015 36 .015 .043 .054	15
20		.045 .008 4 .047 .051 .053		.010 .004 6 .012 .012 .013			.041 .013 12 .042 .053 .062			.033 .018 22 .030 .052 .061	20
25			.042 .002 5 .041 .044 .045	.017 .007 7 .013 .020 .031						.027 .013 12 .026 .042 .045	25
30			.035 1							.035 1	30
35			.026 .008 4 .030 .032 .034							.026 .008 4 .030 .032 .034	35
40											40
45S											45S

LONGITUDE

TABLE IV. - Continued. GASP AMBIENT OZONE DATA BY LATITUDE FOR APRIL

(f) Flight level 390

CODE:

MEAN	ST. DEV.	N
50%	84%	98%

APRIL
FL 390

LAT	15E	60E	105E	150E	165W	120W	75W	30W	15E	MEAN	LAT
70N											70N
65				.619 .624 .075 .684 4 .715	.588 .596 .128 .712 130 .810	.611 1				.589 .601 .126 .713 135 .809	65
60				.626 .665 .177 .802 135 .888	.491 .427 .310 .835 64 .960	.571 .630 .170 .731 14 .790	.590 .605 .068 .634 13 .693	.607 .624 .140 .663 30 .890		.585 .461 .219 .797 256 .914	60
55				.656 .668 .195 .821 143 1.116	.591 .638 .186 .712 40 .906	.622 .670 .125 .725 17 .793	.554 .497 .172 .713 55 .936	.497 .479 .151 .635 70 .866		.595 .612 .189 .778 325 .965	55
50				.643 .658 .170 .819 68 .916	.311 .288 .189 .487 43 .725	.367 .406 .232 .601 32 .738	.506 .499 .175 .656 36 .837	.443 .419 .192 .608 19 .814		.482 .344 .230 .715 198 .877	50
45	.513 .566 .068 .578 3 .583		.576 .637 .283 .853 14 .892	.422 .432 .239 .723 138 .859	.374 .352 .232 .636 110 .819	.436 .364 .322 .805 129 .995	.436 .412 .164 .640 47 .666			.421 .416 .262 .730 441 .927	45
40			.397 .395 .270 .701 46 .857	.375 .414 .234 .600 80 .793	.386 .401 .235 .635 176 .789	.282 .201 .212 .551 545 .832	.461 .393 .136 .542 6 .724			.320 .229 .228 .594 853 .821	40
35			.298 .283 .187 .505 11 .577	.342 .328 .171 .443 8 .679	.189 .152 .114 .274 129 .550	.245 .192 .182 .393 121 .817				.223 .184 .158 .355 269 .729	35
30			.067 .063 .009 .072 5 .083	.119 .109 .031 .154 22 .184	.135 .115 .064 .211 129 .270	.120 .124 .031 .150 16 .171				.129 .110 .059 .198 172 .266	30
25	.049 1		.076 .078 .007 .083 17 .087		.167 .145 .100 .251 112 .445	.081 .092 .031 .115 14 .116				.147 .115 .097 .238 144 .417	25
20			.083 .073 .015 .100 7 .105	.083 .084 .007 .088 4 .091	.147 .141 .058 .213 22 .251	.100 .107 .022 .114 8 .115	.051 .053 .007 .056 5 .058			.113 .099 .055 .170 46 .245	20
15		.047 .047 .013 .056 2 .059				.052 .041 .017 .065 3 .076	.052 .051 .002 .054 5 .055			.051 .045 .012 .058 10 .074	15
10					.045 .045 .006 .048 10 .055		.044 .049 .008 .050 3 .050			.045 .045 .006 .049 13 .055	10
5		.017 1		.038 .037 .007 .047 7 .048	.037 .035 .010 .048 5 .051		.038 .036 .006 .042 6 .049			.037 .037 .009 .047 19 .051	5
0				.050 .048 .007 .055 3 .059	.024 .023 .001 .024 3 .025		.035 .035 .003 .038 7 .040			.036 .035 .010 .042 13 .056	0
5					.066 .082 .026 .085 7 .086		.043 .044 .002 .045 4 .045			.058 .045 .024 .083 11 .086	5
10				.072 .073 .004 .074 5 .075	.051 .037 .026 .082 5 .086		.041 .043 .003 .043 6 .045			.054 .041 .019 .075 16 .084	10
15				.069 .068 .004 .072 5 .075	.038 .038 .011 .047 5 .054		.036 .036 .003 .037 2 .038			.050 .049 .017 .068 12 .074	15
20		.049 .049 .004 .052 2 .053			.025 .025 .002 .027 8 .028					.030 .026 .010 .038 10 .052	20
25			.045 1	.019 .019 .004 .021 6 .026	.024 .024 .003 .026 2 .027					.023 .019 .009 .027 9 .042	25
30			.040 .040 .001 .040 2 .040	.018 .018 .002 .020 4 .021						.025 .020 .010 .039 6 .040	30
35				.056 .040 .051 .114 22 .141						.056 .040 .051 .114 22 .141	35
40											40
45S											45S

LONGITUDE

TABLE IV. - Continued. GASP AMBIENT OZONE DATA BY LATITUDE FOR APRIL

(g) Flight level 410

CODE:

MEAN	ST. DEV.	N
50%	84%	98%

APRIL
FL 410

LAT	15E	60E	105E	150E	165W	120W	75W	30W	15E	MEAN
70N										
65				.418 1	.460 .040 2 .460 .486 .497					.446 .038 3 .420 .474 .496
60				.698 .154 13 .764 .836 .916		.461 .130 6 .456 .561 .675				.623 .184 19 .648 .803 .909
55				.690 .170 80 .669 .868 1.016		.342 .205 15 .193 .595 .636	.455 .086 14 .419 .515 .669	.416 .043 11 .424 .456 .472		.594 .211 120 .601 .772 1.002
50				.765 .192 123 .776 .967 1.098		.666 .263 22 .630 .899 1.230	.361 .130 29 .362 .471 .662	.549 .221 41 .538 .794 .995		.659 .246 215 .640 .935 1.100
45	.604 .100 7 .675 .677 .688		.614 .193 23 .602 .749 1.079	.676 .209 106 .645 .886 1.121	.397 .201 104 .433 .587 .735	.442 .258 107 .363 .741 1.005	.416 .141 42 .415 .520 .730	.471 .073 16 .454 .537 .600		.503 .240 405 .515 .723 1.035
40	.576 .060 10 .593 .620 .681		.449 .251 101 .438 .729 .924	.468 .045 9 .458 .486 .565	.435 .247 117 .440 .644 1.035	.342 .181 181 .328 .499 .769	.280 .115 3 .355 .363 .367			.401 .223 421 .397 .619 .921
35	.375 .191 21 .411 .608 .655		.188 .181 29 .096 .405 .632		.443 .333 7 .309 .702 1.107	.346 .262 12 .191 .625 .860				.298 .240 69 .203 .547 .854
30	.085 .020 14 .080 .099 .133		.103 .011 18 .106 .109 .116		.141 .034 22 .131 .173 .222					.114 .034 54 .106 .135 .201
25	.061 1		.074 .019 20 .073 .086 .119		.150 .043 24 .138 .182 .258					.114 .051 45 .108 .167 .255
20		.109 .018 8 .104 .122 .145	.071 .024 13 .063 .089 .120		.096 .009 9 .096 .105 .107					.089 .025 30 .078 .107 .135
15		.060 .013 4 .058 .073 .078	.045 .013 12 .041 .059 .071		.053 .022 7 .047 .068 .092					.050 .017 23 .047 .066 .083
10			.032 .010 7 .030 .041 .050		.040 .007 3 .038 .046 .050					.035 .010 10 .032 .046 .051
5		.017 1	.018 .003 2 .018 .019 .020							.017 .002 3 .017 .019 .020
0										
5										
10										
15				.060 1						.060 1
20				.036 .005 6 .038 .041 .041						.036 .005 6 .038 .041 .041
25				.026 .004 2 .026 .028 .029	.052 .022 7 .046 .079 .085					.046 .022 9 .034 .074 .085
30				.079 .012 9 .074 .095 .096	.078 1					.079 .011 10 .076 .095 .096
35				.126 .048 31 .108 .193 .199						.126 .048 31 .108 .193 .199
40										
45S										

LONGITUDE

TABLE IV. - Concluded. GASP AMBIENT OZONE DATA BY LATITUDE FOR APRIL

(h) Flight level 430

APRIL
FL 430

CODE:	MEAN	ST. DEV.	N
	50%	84%	98%

LAT	15E	60E	105E	150E	165W	120W	75W	30W	15E	MEAN
70N										
65										
60										
55				.530 .515 .099 .577 9 .734						.530 .515 .099 .577 9 .734
50				.695 .667 .114 .803 13 .901			.378 .345 .074 .430 4 .497			.620 .633 .171 .786 17 .900
45			.675 .630 .127 .812 15 .906	.704 .715 .153 .831 15 .976		.384 .401 .105 .486 42 .562	.294 .308 .038 .326 9 .340			.487 .469 .195 .718 81 .906
40			.490 .511 .136 .654 41 .765		.409 .438 .063 .459 10 .462	.260 .236 .127 .404 45 .543	.356 1			.373 .347 .174 .553 .97 .709
35			.289 .248 .127 .374 5 .506		.270 .267 .067 .332 4 .358					.280 .248 .105 .345 9 .499
30					.315 .295 .097 .434 10 .461					.315 .295 .097 .434 10 .461
25					.190 .190 .011 .197 2 .201					.190 .190 .011 .197 2 .201
20			.072 .068 .006 .076 3 .080							.072 .068 .006 .076 3 .060
15		.081 .080 .002 .082 4 .083	.076 .077 .006 .081 4 .082							.078 .080 .005 .082 8 .083
10										
5										
0										
5										
10										
15										
20										
25				.073 1						.073 1
30										
35				.184 .218 .061 .236 24 .250						.184 .218 .061 .236 24 .250
40										
45S										

LONGITUDE

TABLE V. - GASP AMBIENT OZONE DATA BY LATITUDE FOR MAY

(a) Flight level 290

CODE:

MEAN	ST. DEV.	N
50%	84%	98%

MAY
FL 290

LAT	15E	60E	105E	150E	165W	120W	75W	30W	15E	MEAN	LAT
70N											70N
65											65
60											60
55								.068 .047 8 .048 .064 .173		.068 .047 8 .048 .064 .173	55
50								.050 .021 22 .058 .068 .084		.050 .021 22 .055 .068 .084	50
45	.077 .040 21 .060 .109 .170				.024 1	.070 1	.095 1	.072 .025 8 .089 .094 .096		.075 .036 32 .059 .102 .148	45
40	.055 .038 35 .038 .100 .135				.042 .025 3 .058 .061 .062	.100 .058 16 .079 .194 .198	.054 .043 12 .049 .062 .160			.065 .048 66 .037 .101 .198	40
35	.045 .023 12 .041 .068 .085		.062 .020 3 .055 .079 .089		.073 .035 8 .077 .112 .126	.071 .031 3 .055 .096 .113	.062 .011 7 .066 .073 .076			.059 .028 33 .055 .081 .120	35
30						.074 .027 3 .071 .097 .107	.063 .012 3 .067 .072 .075			.069 .022 6 .057 .082 .106	30
25		.035 1	.041 .009 3 .037 .049 .053		.056 .017 3 .068 .069 .069	.064 1	.047 .005 4 .047 .052 .053			.048 .013 12 .047 .065 .069	25
20		.036 1	.076 .012 3 .081 .085 .087		.052 .023 21 .049 .074 .098					.055 .023 25 .053 .078 .097	20
15		.046 .003 4 .046 .049 .049	.045 .010 11 .050 .052 .055			.023 1				.044 .010 16 .046 .052 .055	15
10		.027 .010 6 .022 .036 .045	.026 .003 5 .025 .026 .031			.027 .001 2 .027 .028 .028	.036 .021 5 .021 .061 .064			.029 .013 18 .025 .037 .062	10
5			.018 .004 4 .016 .021 .025			.017 1				.018 .004 5 .016 .020 .025	5
0			.014 .003 7 .013 .015 .019							.014 .003 7 .013 .015 .019	0
5			.024 .007 5 .019 .031 .034							.024 .007 5 .019 .031 .034	5
10			.029 .002 3 .028 .031 .032							.029 .002 3 .028 .031 .032	10
15				.031 .003 2 .031 .033 .034	.001 1					.021 .014 3 .028 .032 .034	15
20				.034 .009 2 .034 .040 .043			.022 1			.030 .009 3 .025 .037 .042	20
25							.010 .000 2 .010 .010 .010			.010 .000 2 .010 .010 .010	25
30			.017 1							.017 1	30
35			.022 .002 2 .022 .023 .023	.025 .011 4 .028 .035 .036						.024 .009 6 .015 .034 .036	35
40											40
45S											45S

LONGITUDE

TABLE V. - Continued. GASP AMBIENT OZONE DATA BY LATITUDE FOR MAY

(b) Flight level 310

CODE:

MEAN	ST. DEV.	N
50%	84%	98%

MAY
FL 310

	15E	60E	105E	150E	165W	120W	75W	30W	15E	MEAN
70N										
65					.199 1					.199 1
60							.021 .019 9 .003 .023 .027	.064 .045 10 .040 .119 .126		.044 .024 19 .037 .083 .125
55							.028 .019 6 .016 .042 .056	.153 .053 28 .168 .401 .456		.131 .050 34 .160 .398 .453
50					.121 .121 2 .109 .195 .226		.170 .185 12 .086 .251 .305	.079 .072 33 .045 .104 .198		.104 .074 47 .073 .186 .279
45					.016 .015 3 .002 .018 .019	.092 .092 2 .019 .105 .110	.105 .097 12 .039 .143 .177	.097 .094 4 .007 .102 .108		.089 .093 21 .043 .111 .174
40	.082 .076 .025 .106 15 .132				.021 .016 .026 .023 16 .092	.088 .076 .063 .133 51 .277	.077 .070 .043 .102 5 .147			.074 .068 .057 .099 87 .235
35	.055 .057 .022 .078 16 .089		.111 .103 .030 .133 8 .170	.116 .087 .053 .158 3 .187	.052 .043 .046 .074 44 .193	.091 .063 .063 .137 4 .190				.064 .055 .047 .087 75 .195
30	.047 .044 .018 .061 11 .085	.075 .071 .023 .101 18 .115			.056 .061 .026 .080 27 .096	.039 .038 .011 .048 3 .052				.059 .055 .025 .084 59 .112
25	.043 .044 .003 .045 7 .048	.042 .042 .009 .052 8 .054		.052 .045 .026 .055 19 .127	.047 .050 .016 .059 19 .075		.036 1			.047 .043 .019 .055 54 .105
20			.073 1		.047 .050 .023 .073 28 .091		.035 .035 .001 .036 2 .036			.047 .049 .023 .073 31 .090
15		.043 1	.043 .045 .014 .055 19 .068		.031 .030 .015 .044 20 .065	.024 .021 .016 .044 12 .053				.034 .035 .017 .051 52 .072
10		.041 .041 .001 .042 4 .042		.009 .008 .006 .016 3 .020	.020 .021 .003 .022 3 .023	.020 .019 .005 .025 7 .029	.017 .020 .008 .023 12 .025			.021 .020 .011 .027 29 .042
5		.020 .014 .012 .029 3 .035		.019 .027 .013 .028 3 .029		.008 1				.018 .014 .012 .029 7 .035
0										
5		.037 .035 .005 .041 4 .045								.037 .035 .005 .041 4 .045
10		.032 .032 .004 .036 5 .037					.021 .021 .005 .024 4 .027			.027 .027 .007 .034 9 .037
15		.029 .027 .011 .032 6 .050		.034 .034 .004 .036 2 .037	.030 .030 .002 .031 2 .032		.022 .023 .005 .026 6 .027			.027 .026 .008 .031 16 .048
20		.040 .040 .006 .047 5 .050	.027 .028 .002 .030 7 .031				.018 .018 .005 .021 2 .022			.031 .029 .009 .040 14 .049
25			.033 .032 .006 .039 21 .044							.033 .032 .006 .039 21 .044
30			.039 .041 .012 .052 16 .057	.027 .026 .006 .031 5 .036						.036 .037 .012 .047 21 .057
35			.036 .027 .032 .034 29 .143	.064 .035 .058 .136 27 .185			.036 1			.049 .029 .048 .078 57 .180
40			.027 1							.027 1
45S										

LONGITUDE

TABLE V. - Continued. GASP AMBIENT OZONE DATA BY LATITUDE FOR MAY

(c) Flight level 330

CODE:

MEAN	ST. DEV.	N
50%	84%	98%

MAY
FL 330

LAT	15E	60E	105E	150E	165W	120W	75W	30W	15E	MEAN	LAT
70N											70N
65					.265 1					.265 1	65
60											60
55						.536 .024 4 .542 .557 .559	.211 .174 41 .108 .392 .568	.358 .185 37 .399 .553 .592		.293 .197 82 .165 .531 .584	55
50					.063 .088 10 .020 .123 .258	.485 .055 6 .470 .555 .558	.063 .032 32 .055 .107 .130	.068 .029 42 .061 .089 .154		.093 .113 90 .042 .116 .506	50
45	.053 .018 4 .047 .068 .080		.036 .023 8 .030 .049 .088	.079 .085 24 .067 .129 .304	.250 .172 15 .138 .492 .525	.115 .111 92 .070 .186 .404			.117 .122 143 .074 .207 .496	45
40	.106 .041 27 .101 .150 .187		.176 .114 42 .131 .326 .428	.108 .144 18 .045 .195 .463	.130 .112 44 .097 .188 .494	.113 .092 23 .082 .198 .331			.133 .109 154 .074 .191 .491	40
35	.084 .039 12 .089 .126 .132		.063 .031 15 .068 .091 .098	.050 .037 31 .022 .092 .104	.081 .079 94 .061 .093 .387	.084 .055 22 .066 .103 .240	.088 .024 8 .085 .108 .132		.075 .065 182 .061 .098 .341	35
30	.042 .017 8 .033 .064 .068	.062 .016 24 .059 .083 .094	.057 .018 15 .052 .076 .081		.071 .038 99 .073 .101 .145	.094 .078 37 .077 .121 .365	.042 .015 3 .032 .054 .063		.071 .047 186 .054 .101 .186	30
25		.095 1	.067 .010 21 .065 .076 .088	.058 .006 17 .055 .062 .075	.073 .094 98 .057 .093 .249	.056 .028 26 .048 .090 .114	.031 .001 2 .031 .032 .032		.067 .074 165 .057 .089 .180	25
20		.130 .010 2 .130 .137 .140	.075 1	.061 .025 45 .052 .094 .107	.056 .025 26 .054 .075 .111	.048 .036 13 .030 .076 .133	.050 .019 9 .045 .071 .075		.059 .028 96 .033 .090 .130	20
15			.036 .019 39 .037 .053 .071	.040 .023 66 .034 .066 .092		.027 .007 4 .031 .031 .031	.030 .006 8 .029 .038 .040		.038 .021 117 .032 .059 .087	15
10		.014 1			.025 1	.038 .002 2 .038 .039 .039	.040 .014 5 .035 .048 .065		.035 .013 9 .035 .038 .063	10
5		.017 .003 5 .017 .020 .021		.033 1		.014 0.000 2 .014 .014 .014	.024 .003 5 .024 .028 .029		.021 .006 13 .020 .027 .032	5
0		.023 .004 6 .024 .026 .027					.028 1		.024 .004 7 .024 .027 .028	0
5		.034 1							.034 1	5
10		.017 1							.017 1	10
15			.038 .007 6 .042 .044 .045	.033 .004 2 .033 .035 .036	.030 .005 14 .030 .034 .038				.032 .007 22 .031 .040 .045	15
20			.038 .010 5 .042 .046 .050	.032 .017 8 .024 .056 .060			.014 .008 4 .013 .021 .026		.029 .016 17 .025 .047 .060	20
25			.027 1	.038 .012 24 .038 .051 .057					.037 .012 25 .037 .051 .057	25
30			.022 0.000 2 .022 .022 .022	.050 .025 35 .043 .067 .125					.048 .025 37 .042 .063 .125	30
35			.047 .008 3 .044 .054 .057	.073 .065 26 .038 .145 .230					.070 .062 29 .039 .144 .227	35
40											40
45S											45S

LONGITUDE

TABLE V. - Continued. GASP AMBIENT OZONE DATA BY LATITUDE FOR MAY

(d) Flight level 350

CODE:

MEAN	ST. DEV.	N
50%	84%	98%

MAY
FL 350

LAT	15E	60E	105E	150E	165W	120W	75W	30W	15E	MEAN
70N								.604 .038 6 .605 .643 .655		.604 .038 6 .605 .643 .655
65					.584 .009 4 .585 .592 .594	.636 .010 2 .636 .643 .646		.626 .014 4 .630 .638 .641		.611 .026 10 .615 .638 .645
60					.552 .185 9 .646 .673 .690	.500 .110 19 .485 .627 .658		.623 .070 8 .634 .690 .695		.540 .135 36 .535 .663 .694
55				.299 .167 21 .303 .509 .577	.331 .246 55 .260 .649 .661	.337 .195 18 .465 .504 .543	.282 .164 55 .248 .484 .611	.229 .192 100 .125 .530 .631		.277 .203 249 .213 .553 .653
50					.267 .225 38 .253 .541 .636	.193 .162 23 .126 .374 .577	.174 .151 122 .118 .290 .655	.206 .172 86 .138 .414 .575		.199 .174 269 .129 .357 .625
45	.031 .018 19 .038 .043 .065			.101 .097 10 .062 .146 .323	.263 .213 45 .182 .534 .669	.129 .097 33 .087 .249 .364	.213 .168 69 .128 .400 .601	.337 .249 15 .429 .613 .616		.196 .186 191 .098 .407 .631
40	.073 .064 37 .053 .131 .238		.315 .004 3 .340 .384 .401	.212 .176 13 .128 .325 .596	.087 .048 60 .080 .102 .262	.152 .137 218 .095 .229 .592	.150 .111 6 .078 .293 .323	.113 .022 2 .113 .127 .133		.136 .126 339 .088 .202 .565
35	.059 .045 16 .044 .115 .148		.066 .011 2 .066 .073 .076	.055 .036 11 .082 .089 .096	.078 .061 150 .058 .119 .259	.139 .109 36 .088 .252 .433	.116 .015 4 .115 .130 .136			.086 .073 219 .064 .124 .339
30	.075 .051 16 .067 .128 .161	.033 .021 33 .019 .061 .074		.033 .025 8 .021 .056 .079	.080 .050 234 .077 .102 .261	.090 .005 2 .090 .093 .094				.074 .049 293 .069 .101 .245
25		.008 .005 10 .006 .014 .017		.059 .024 89 .057 .087 .100	.072 .034 201 .071 .103 .148	.037 .005 10 .038 .041 .044				.065 .033 310 .058 .097 .132
20		.006 .002 3 .005 .008 .009	.057 .008 7 .058 .064 .065	.050 .024 94 .048 .072 .103	.067 .033 61 .060 .104 .133	.045 .013 10 .040 .058 .072	.027 1			.055 .029 176 .041 .080 .129
15		.042 .011 6 .041 .054 .056	.050 .026 57 .052 .064 .113	.046 .026 40 .044 .076 .101	.032 .016 19 .027 .035 .078	.016 .011 24 .013 .027 .042	.027 .003 8 .028 .030 .032			.040 .025 154 .034 .059 .112
10		.024 .008 5 .028 .031 .032	.025 .004 4 .026 .029 .030	.015 .000 3 .015 .015 .015	.026 .008 23 .027 .032 .043	.012 .006 16 .015 .017 .021	.020 .015 12 .014 .023 .058			.021 .011 53 .019 .029 .043
5		.016 .001 6 .015 .016 .018	.018 .002 5 .017 .019 .022	.017 .005 5 .016 .022 .023	.027 .012 16 .023 .036 .054		.013 .006 6 .014 .017 .019			.020 .010 38 .016 .026 .047
0		.018 .007 10 .017 .021 .034	.014 .001 4 .015 .016 .016	.026 .010 18 .027 .036 .044	.035 .001 2 .035 .036 .036		.015 .004 6 .014 .018 .022			.022 .010 40 .015 .034 .042
5		.025 .005 6 .023 .030 .033	.022 .005 9 .020 .029 .029	.026 .011 16 .031 .038 .039	.046 .003 2 .046 .048 .049		.021 .008 8 .022 .030 .031			.025 .010 43 .025 .035 .044
10		.024 .004 6 .024 .027 .029	.028 .005 14 .026 .030 .038	.024 .012 16 .024 .033 .048	.040 .006 6 .041 .044 .049		.022 .010 16 .018 .031 .040			.026 .010 58 .025 .034 .049
15		.027 .005 6 .028 .031 .031	.032 .007 12 .031 .039 .046	.024 .011 12 .022 .035 .042	.046 0.000 2 .046 .046 .046		.017 .008 15 .015 .027 .029			.025 .011 47 .026 .034 .046
20		.031 .005 7 .029 .037 .040	.044 .005 11 .044 .049 .051	.030 .019 20 .025 .035 .078			.013 .008 9 .015 .021 .025			.030 .017 47 .027 .045 .077
25			.029 .008 8 .028 .033 .042	.033 .017 27 .032 .048 .071						.032 .016 35 .030 .044 .068
30			.025 .005 4 .024 .029 .032	.036 .015 25 .032 .045 .075						.035 .015 29 .031 .043 .074
35			.033 .010 8 .032 .039 .053	.102 .095 6 .053 .197 .268			.053 1			.062 .069 15 .033 .071 .250
40										
45S										

LONGITUDE

TABLE V. - Continued. GASP AMBIENT OZONE DATA BY LATITUDE FOR MAY

(e) Flight level 370

CODE:

MEAN	ST. DEV.	N
50%	84%	98%

MAY
FL 370

LAT	15E–60E	60E–105E	105E–150E	150E–165W	165W–120W	120W–75W	75W–30W	30W–15E	MEAN
70N									
65				.393 .037 2 .393 .418 .429	.653 .021 5 .659 .669 .684	.504 .122 8 .550 .586 .678	.596 .080 6 .639 .662 .669	.555 .118 21 .569 .660 .690	65
60			.589 .112 17 .591 .717 .740	.499 .148 55 .514 .639 .665	.522 .212 9 .636 .692 .720	.365 .205 19 .362 .624 .677	.615 .050 16 .619 .644 .700	.508 .170 116 .502 .650 .727	60
55			.400 .275 54 .482 .680 .766	.503 .247 31 .604 .715 .854	.493 .183 24 .546 .694 .725	.289 .120 50 .266 .357 .632	.216 .156 43 .151 .336 .563	.360 .232 202 .246 .638 .768	55
50			.382 .293 25 .347 .676 .865	.461 .250 18 .612 .655 .718	.454 .190 13 .583 .603 .641	.232 .131 96 .223 .354 .570	.274 .178 114 .240 .449 .642	.291 .198 266 .183 .560 .679	50
45	.182 .161 15 .125 .376 .465		.267 .271 35 .089 .713 .795	.324 .219 30 .303 .637 .664	.290 .213 34 .186 .599 .671	.257 .175 61 .200 .406 .702	.236 .192 21 .091 .484 .564	.267 .212 196 .176 .513 .739	45
40	.183 .118 23 .156 .279 .466	.079 .020 15 .080 .100 .104	.211 .224 64 .092 .504 .771	.103 .110 59 .059 .163 .455	.211 .180 361 .129 .431 .667	.398 .206 17 .464 .606 .661		.201 .184 539 .120 .419 .673	40
35	.085 .025 12 .093 .105 .117	.110 .069 48 .090 .177 .305	.141 .061 8 .111 .225 .246	.119 .091 218 .093 .169 .391	.133 .095 66 .114 .190 .445	.058 .014 7 .055 .067 .085		.119 .087 359 .094 .170 .385	35
30	.042 .020 15 .042 .065 .071	.043 .012 15 .045 .053 .058	.143 .080 23 .165 .219 .274	.092 .083 350 .071 .109 .368	.109 .100 17 .089 .133 .381			.091 .080 454 .069 .111 .361	30
25	.078 1	.063 .021 24 .054 .080 .108	.093 .039 18 .090 .109 .196	.043 .039 11 .016 .081 .117	.068 .028 272 .063 .099 .124	.025 .019 26 .026 .035 .069	.085 .013 2 .085 .094 .097	.065 .031 354 .061 .097 .124	25
20		.065 .014 18 .064 .080 .092	.053 .024 13 .062 .077 .088	.065 .034 37 .061 .099 .138	.066 .032 64 .063 .088 .143	.038 .041 44 .030 .048 .143	.092 .005 4 .092 .097 .098	.059 .035 180 .044 .085 .141	20
15		.063 .006 21 .064 .070 .075	.046 .020 34 .034 .070 .080	.077 .031 14 .076 .104 .133	.051 .033 26 .033 .089 .107	.033 .016 51 .034 .049 .057	.062 .021 3 .061 .079 .087	.048 .026 149 .043 .071 .104	15
10				.043 .027 40 .027 .078 .097	.026 .016 22 .021 .043 .050	.038 .020 24 .047 .054 .065		.037 .023 86 .026 .054 .096	10
5				.033 .016 46 .030 .042 .089	.011 .003 2 .011 .012 .013	.016 .014 35 .013 .029 .053		.026 .017 83 .025 .036 .069	5
0			.027 .004 4 .026 .030 .032	.031 .006 34 .031 .035 .048		.010 .009 48 .008 .019 .032		.019 .013 86 .021 .032 .044	0
5			.035 .017 12 .032 .048 .065	.036 .010 26 .034 .045 .059		.015 .009 32 .014 .024 .036		.026 .015 70 .026 .043 .060	5
10			.041 .019 22 .036 .063 .070	.022 .024 10 .018 .042 .069		.018 .009 30 .019 .025 .037		.027 .019 62 .011 .045 .070	10
15			.033 .014 29 .028 .044 .070	.019 .008 14 .023 .024 .025		.023 .012 27 .020 .037 .041		.026 .013 70 .024 .037 .064	15
20			.037 .019 19 .029 .058 .077			.024 .014 25 .027 .037 .047		.030 .017 44 .022 .045 .071	20
25		.027 .005 3 .023 .030 .034	.030 .005 7 .028 .032 .040			.040 .002 5 .040 .042 .045		.033 .007 15 .032 .040 .044	25
30		.028 .004 5 .028 .031 .035	.045 .012 7 .046 .051 .065			.037 .008 4 .038 .045 .047		.037 .012 16 .033 .048 .062	30
35		.044 .029 19 .030 .058 .120	.096 .030 5 .093 .130 .131					.055 .036 24 .038 .087 .136	35
40		.135 .003 2 .135 .137 .138						.135 .003 2 .135 .137 .138	40
45S									45S
	15E	60E	105E	150E	165W	120W	75W	30W	15E

LONGITUDE

TABLE V. - Continued. GASP AMBIENT OZONE DATA BY LATITUDE FOR MAY

(f) Flight level 390

CODE:

MEAN	ST. DEV.	N
50%	84%	98%

MAY
FL 390

LAT	15E	60E	105E	150E	165W	120W	75W	30W	15E	MEAN
70N						.724 .034 6 .727 .757 .766				.724 .034 6 .727 .757 .766
65				.560 1	.706 .086 13 .726 .768 .842	.624 .041 11 .621 .654 .704	.596 .107 27 .631 .710 .751	.502 1		.626 .102 53 .632 .727 .783
60				.620 .119 24 .634 .749 .819	.594 .148 38 .617 .706 .765	.672 .099 18 .630 .793 .874	.412 .054 4 .416 .457 .479	.483 .082 8 .500 .523 .599		.598 .139 92 .601 .721 .837
55				.647 .096 63 .649 .754 .809	.256 .084 6 .248 .341 .363	.644 .018 6 .642 .660 .673	.444 .104 43 .456 .548 .586	.569 .146 28 .591 .695 .750		.556 .152 146 .520 .686 .769
50				.485 .173 53 .537 .660 .708	.345 .019 4 .345 .359 .369	.626 1	.341 .154 61 .328 .519 .622	.566 .133 21 .621 .668 .702		.432 .179 140 .400 .628 .697
45	.110 .079 5 .060 .186 .239		.311 .225 16 .329 .581 .651	.342 .227 106 .339 .620 .708	.386 .233 80 .388 .627 .711	.385 .203 103 .404 .619 .754	.253 .213 71 .141 .533 .649	.425 .197 13 .408 .641 .654		.345 .225 394 .220 .614 .738
40			.125 .128 26 .085 .269 .458	.127 .118 39 .067 .295 .413	.249 .235 30 .137 .627 .702	.286 .181 270 .223 .505 .683	.114 .148 17 .067 .091 .526			.248 .186 382 .183 .488 .680
35			.126 .094 15 .096 .143 .371	.074 .019 18 .082 .089 .102	.143 .094 40 .102 .237 .376	.162 .103 98 .165 .263 .473	.164 .047 2 .164 .195 .208			.157 .100 173 .117 .244 .444
30			.081 .035 5 .067 .101 .144	.078 .027 6 .063 .107 .125	.128 .115 142 .093 .191 .528	.147 .122 49 .094 .264 .479	.066 .041 6 .061 .104 .129			.128 .114 208 .082 .192 .505
25			.069 .027 3 .082 .089 .093		.097 .062 91 .085 .163 .261	.042 .030 38 .043 .059 .101	.025 .012 3 .032 .035 .036			.079 .060 135 .067 .135 .239
20			.041 .024 25 .030 .060 .105		.053 .033 23 .039 .067 .127	.028 .019 33 .028 .050 .070	.029 .016 9 .026 .026 .065			.038 .026 90 .031 .062 .103
15			.029 .011 9 .033 .039 .046	.036 .009 8 .038 .043 .047	.033 .012 24 .031 .037 .067	.027 .009 10 .026 .034 .043	.057 .031 6 .050 .096 .098			.034 .017 57 .031 .043 .092
10					.029 .008 29 .030 .038 .044		.035 .025 16 .028 .065 .085			.031 .017 45 .029 .040 .078
5		.030 1		.054 .009 2 .054 .059 .062	.033 .012 26 .032 .046 .053		.018 .019 28 .009 .048 .057			.026 .018 57 .027 .047 .060
0				.022 .015 5 .019 .033 .044	.031 .010 28 .030 .037 .053		.011 .010 28 .008 .024 .032			.021 .014 61 .022 .033 .046
5				.062 1	.035 .016 38 .031 .049 .078		.014 .013 20 .010 .034 .039			.028 .018 59 .028 .044 .076
10				.037 .010 31 .035 .044 .062	.031 .007 17 .028 .038 .044		.023 .012 14 .020 .038 .047			.032 .011 62 .027 .044 .059
15				.040 .018 34 .035 .060 .072	.040 .008 6 .044 .046 .048		.023 .012 13 .016 .031 .047			.036 .018 53 .033 .053 .070
20				.048 .017 31 .051 .064 .083	.047 .004 6 .049 .049 .051		.015 .006 6 .018 .020 .021			.043 .018 43 .046 .059 .082
25				.056 .052 43 .037 .086 .203	.061 .005 4 .058 .064 .068		.025 1			.055 .049 48 .039 .080 .191
30				.084 .072 49 .058 .124 .308						.084 .072 49 .058 .124 .308
35				.133 .100 81 .095 .231 .397						.133 .100 81 .095 .231 .397
40										
45S										

LONGITUDE

TABLE V. - Continued. GASP AMBIENT OZONE DATA BY LATITUDE FOR MAY

(g) Flight level 410

CODE:

MEAN	ST. DEV.	N
50%	84%	98%

MAY
FL 410

LAT	15E	60E	105E	150E	165W	120W	75W	30W	15E	MEAN
70N										
65								.577 1		.577 1
60					.598 .595 .690 4 .716	.535 .452 .661 5 .883	.680 .700 .724 16 .755	.706 .718 .149 .836 15 .930		.663 .668 .153 .804 40 .915
55				.640 .632 .044 .675 4 .705		.660 .725 .163 .781 25 .834	.488 .476 .098 .555 24 .717	.654 .673 .190 .855 23 .939		.603 .564 .170 .779 76 .924
50				.527 .562 .200 .685 35 .782	.319 .241 .192 .550 16 .608	.686 .670 .171 .867 17 .977	.474 .477 .087 .520 8 .622	.499 .505 .039 .536 11 .560		.511 .535 .206 .684 87 .958
45			.405 .500 .226 .633 11 .689	.512 .560 .202 .658 46 .820	.399 .348 .234 .704 67 .847	.386 .390 .175 .578 48 .698	.482 .561 .176 .589 16 .726			.431 .382 .213 .646 188 .606
40	.333 .323 .027 .363 6 .375		.372 .417 .217 .590 41 .666	.059 .056 .009 .065 5 .075	.368 .304 .235 .647 44 .918	.361 .320 .176 .584 82 .652	.328 .328 .384 2 .407	.326 1		.355 .323 .202 .567 181 .758
35	.228 .231 .049 .248 9 .322		.202 .137 .134 .307 23 .503		.530 .617 .273 .800 26 .848	.274 .213 .171 .525 75 .643	.218 .218 .060 .277 7 .287			.304 .197 .213 .595 140 .821
30	.208 .218 .055 .263 6 .268		.130 .118 .057 .198 21 .231		.234 .150 .175 .420 59 .622	.278 .269 .069 .320 6 .402	.107 .107 .004 .111 4 .112			.207 .122 .150 .386 96 .612
25			.079 .079 .015 .092 17 .112		.130 .113 .069 .194 46 .318		.091 .098 .013 .101 6 .106			.115 .097 .061 .171 71 .291
20			.068 .072 .014 .081 11 .085		.076 .072 .036 .107 29 .143		.088 .095 .013 .098 7 .099			.076 .079 .030 .104 47 .136
15			.054 .051 .010 .064 11 .075		.047 .038 .025 .076 24 .101		.100 1			.050 .039 .023 .076 36 .102
10			.039 .040 .010 .051 14 .053		.039 .033 .021 .064 27 .079					.039 .035 .018 .052 41 .079
5			.036 .030 .009 .042 3 .047		.030 .029 .014 .040 21 .058					.030 .029 .013 .043 24 .057
0				.032 .034 .013 .042 16 .051	.043 .040 .008 .049 4 .054					.034 .035 .013 .044 20 .055
5				.031 .031 .010 .039 13 .047						.031 .031 .010 .039 13 .047
10				.032 .032 .010 .036 14 .054						.032 .032 .010 .036 14 .054
15				.030 .028 .011 .039 4 .046	.031 .030 .007 .036 24 .048					.031 .029 .008 .036 28 .050
20				.023 .024 .005 .026 6 .027						.023 .024 .005 .026 6 .027
25				.037 .033 .019 .049 5 .070			.053 .045 .028 .081 6 .094			.045 .027 .025 .073 10 .092
30				.113 .104 .038 .159 6 .166			.088 .084 .016 .106 6 .113			.101 .081 .031 .127 12 .165
35				.163 .145 .074 .251 52 .293						.163 .145 .074 .251 52 .293
40										
45S										

LONGITUDE

TABLE V. - Concluded. GASP AMBIENT OZONE DATA BY LATITUDE FOR MAY

(h) Flight level 430

CODE:

MEAN	ST. DEV.	N
50%	84%	98%

MAY
FL 430

LAT	15E	60E	105E	150E	165W	120W	75W	30W	15E	MEAN
70N										
65										
60										
55							.463 1			.463 1
50						.954 .055 5 .978 1.005 1.011	.388 .085 10 .339 .459 .555			.577 .277 15 .444 .960 1.009
45			.527 .032 2 .527 .549 .556	.499 .027 7 .498 .517 .550	.241 .073 6 .249 .285 .359	.575 .107 12 .582 .673 .724	.491 .116 9 .503 .611 .640			.481 .145 36 .449 .619 .710
40			.589 .065 7 .571 .682 .690		.193 .131 17 .129 .311 .515	.367 .212 50 .309 .594 .980				.348 .214 74 .285 .580 .907
35			.539 1		.316 .124 12 .298 .358 .602	.299 .129 30 .277 .404 .604				.309 .131 43 .295 .403 .660
30			.054 .012 5 .053 .066 .066		.217 .021 12 .222 .233 .251					.169 .077 17 .203 .230 .249
25			.054 .004 8 .055 .057 .059		.137 .032 10 .131 .171 .193					.100 .048 18 .100 .152 .191
20			.065 .009 4 .065 .072 .077		.039 .019 3 .031 .054 .064					.054 .019 7 .064 .066 .076
15			.049 .017 8 .046 .068 .078		.027 .003 3 .025 .029 .031					.043 .017 11 .037 .060 .077
10			.040 .008 14 .040 .050 .053							.040 .008 14 .040 .050 .053
5		.048 .001 3 .049 .049 .049	.047 .005 5 .045 .051 .054							.047 .004 8 .045 .050 .053
0				.032 1						.032 1
5				.023 .017 3 .031 .036 .038						.023 .017 3 .031 .036 .038
10				.042 .017 5 .030 .063 .065						.042 .017 5 .030 .063 .065
15				.038 .008 8 .039 .044 .048	.043 .022 30 .037 .061 .102					.042 .020 38 .036 .051 .102
20										
25										
30										
35				.187 .068 22 .154 .269 .332						.187 .068 22 .154 .269 .332
40										
45S										

LONGITUDE

TABLE VI. - GASP AMBIENT OZONE DATA BY LATITUDE FOR JUNE

(a) Flight level 290

CODE:

MEAN	ST. DEV.	N
50%	84%	98%

JUNE
FL 290

LAT	15E	60E	105E	150E	165W	120W	75W	30W	15E	MEAN	LAT
70N											70N
65											65
60											60
55								.072 .015 12 .077 .085 .090		.072 .015 12 .077 .085 .090	55
50					.079 1	.001 1		.104 .092 19 .068 .152 .346		.098 .090 21 .068 .144 .346	50
45	.066 .021 13 .061 .085 .105			.050 .010 6 .048 .063 .064		.080 .006 5 .082 .085 .086	.075 .019 8 .079 .095 .098	.068 .050 7 .060 .109 .157		.066 .028 39 .062 .092 .121	45
40	.118 .041 21 .112 .153 .207		.082 .037 6 .071 .106 .150	.075 .040 6 .067 .106 .141	.055 .037 5 .046 .092 .129	.090 .068 15 .079 .139 .243	.060 .035 9 .076 .088 .096			.091 .052 62 .065 .135 .222	40
35	.103 .050 11 .095 .160 .178		.083 .045 15 .072 .098 .198		.063 .020 8 .058 .081 .097	.059 .019 13 .056 .074 .102				.078 .041 47 .066 .106 .183	35
30	.083 .016 11 .089 .097 .105	.079 .014 10 .080 .092 .096	.050 .004 7 .053 .053 .054							.073 .019 28 .063 .095 .103	30
25	.057 .011 7 .055 .066 .074	.059 .025 8 .055 .089 .102	.056 .016 12 .052 .073 .079		.050 .018 5 .060 .065 .070					.056 .019 32 .049 .073 .097	25
20		.041 .010 12 .038 .045 .064	.059 .026 4 .069 .080 .082		.042 .017 17 .037 .055 .081					.044 .017 33 .038 .059 .086	20
15		.024 1								.024 1	15
10		.026 .001 7 .026 .027 .028								.026 .001 7 .026 .027 .028	10
5		.025 .002 6 .026 .027 .027								.025 .002 6 .026 .027 .027	5
0		.026 1	.009 1							.018 .009 2 .018 .023 .026	0
5			.019 1							.019 1	5
10				.026 .006 2 .026 .029 .031						.026 .006 2 .026 .029 .031	10
15				.034 .005 2 .034 .037 .039						.034 .005 2 .034 .037 .039	15
20		.029 .006 4 .029 .033 .037	.038 .001 2 .038 .039 .039	.035 1						.032 .006 7 .035 .037 .039	20
25			.036 .002 7 .036 .039 .039	.045 1						.037 .003 8 .036 .039 .044	25
30			.047 .007 4 .049 .053 .055	.047 .011 10 .044 .058 .067						.047 .010 14 .044 .056 .067	30
35			.054 .025 21 .043 .072 .118	.039 .006 4 .041 .043 .043						.051 .024 25 .042 .071 .117	35
40											40
45S											45S

LONGITUDE

TABLE VI. - Continued. GASP AMBIENT OZONE DATA BY LATITUDE FOR JUNE

(b) Flight level 310

CODE:

MEAN	ST. DEV.	N
50%	84%	98%

JUNE
FL 310

LAT	15E	60E	105E	150E	165W	120W	75W	30W	15E	MEAN
70N						.536 .004 2 .536 .539 .540	.261 .188 7 .176 .532 .538			.322 .202 9 .304 .537 .540
65						.424 .098 5 .483 .501 .501	.104 .117 9 .043 .191 .361	.064 .020 3 .075 .078 .080		.191 .181 17 .075 .428 .501
60							.218 .170 11 .087 .433 .507	.252 .222 28 .102 .526 .596		.242 .209 39 .097 .495 .594
55						.242 .043 4 .243 .282 .297	.075 .009 17 .073 .084 .090	.124 .117 42 .082 .256 .431		.118 .104 63 .062 .225 .418
50					.047 .005 2 .047 .050 .052	.345 .124 7 .377 .486 .490	.085 .037 41 .078 .125 .166	.154 .127 46 .105 .260 .458		.136 .119 96 .071 .247 .486
45	.114 .052 22 .100 .181 .220				.108 .067 16 .075 .187 .246	.111 .080 43 .079 .191 .306	.068 .011 7 .071 .078 .086	.146 .166 24 .094 .372 .518		.116 .100 112 .081 .197 .444
40	.101 .047 42 .089 .119 .256				.133 .106 22 .100 .214 .408	.077 .064 50 .060 .092 .287	.111 .083 17 .083 .130 .333			.099 .074 131 .080 .126 .320
35	.080 .027 24 .082 .113 .120		.048 .027 20 .035 .080 .099	.033 .004 3 .032 .037 .039	.069 .043 41 .060 .094 .164	.108 .095 16 .056 .249 .285				.072 .053 104 .059 .103 .276
30	.058 .024 15 .065 .070 .090	.053 .041 27 .071 .093 .106		.046 .019 30 .039 .068 .084	.070 .051 40 .050 .098 .204	.063 1				.058 .040 113 .056 .084 .154
25	.063 .006 7 .066 .068 .069	.068 .011 9 .066 .082 .085	.067 .026 3 .074 .088 .094	.050 .018 20 .048 .064 .090	.055 .031 34 .043 .095 .119					.057 .025 73 .053 .084 .106
20		.061 .011 8 .064 .068 .073	.074 .027 4 .067 .099 .112		.051 .023 32 .045 .074 .106					.055 .023 44 .050 .075 .110
15		.054 1	.035 .006 14 .035 .039 .049	.028 1	.035 .005 6 .035 .039 .041					.036 .007 22 .034 .040 .053
10		.030 .004 7 .031 .035 .035	.032 .009 15 .034 .041 .047	.024 .003 8 .025 .025 .025	.029 .006 3 .026 .034 .038					.029 .008 33 .026 .038 .045
5		.022 .005 6 .021 .024 .029		.025 .004 6 .026 .029 .031						.023 .005 12 .019 .028 .031
0		.023 .006 5 .019 .028 .032		.027 .002 2 .027 .028 .028						.024 .005 7 .025 .028 .032
5			.024 1	.026 .005 5 .023 .032 .033						.026 .005 6 .024 .031 .033
10										
15				.036 .016 5 .036 .047 .062						.036 .016 5 .036 .047 .062
20	.053 1			.039 1						.046 .007 2 .046 .051 .053
25			.047 .004 5 .046 .052 .053	.059 1						.049 .006 6 .049 .054 .058
30			.052 .016 8 .048 .051 .087	.079 .030 5 .058 .110 .127						.062 .026 13 .051 .093 .122
35			.056 .046 10 .048 .061 .164	.053 .028 9 .043 .064 .117						.055 .039 19 .043 .067 .164
40			.063 1							.063 1
45S										

LONGITUDE

TABLE VI. - Continued. GASP AMBIENT OZONE DATA BY LATITUDE FOR JUNE

(c) Flight level 330

CODE:

MEAN	ST. DEV.	N
50%	84%	98%

JUNE
FL 330

LAT	15E	60E	105E	150E	165W	120W	75W	30W	15E	MEAN
70N										
65					.486 1	.327 1	.490 .113 22 .521 .575 .583			.483 .113 24 .516 .575 .583
60				.310 .239 8 .216 .600 .606	.324 .148 10 .407 .448 .483	.420 .067 12 .433 .466 .494	.456 .037 7 .467 .486 .506			.377 .153 37 .434 .489 .602
55				.200 .206 9 .092 .410 .618	.462 .167 9 .444 .611 .628	.299 .131 7 .307 .397 .484	.069 .014 15 .068 .084 .091	.172 .132 35 .152 .262 .558		.202 .176 75 .103 .414 .626
50				.151 .071 18 .123 .212 .298	.071 .042 18 .067 .123 .138	.068 .075 9 .038 .112 .233	.103 .092 71 .074 .139 .453	.135 .139 68 .087 .166 .567		.115 .109 184 .071 .164 .511
45	.144 .054 8 .118 .189 .254			.119 .077 35 .098 .183 .318	.071 .037 29 .069 .104 .155	.084 .060 13 .064 .107 .221	.132 .148 80 .072 .255 .539	.048 .005 7 .046 .053 .054		.113 .113 172 .059 .158 .507
40	.103 .065 30 .091 .151 .280		.053 .015 20 .050 .072 .078	.059 .025 12 .064 .083 .095	.059 .047 17 .051 .068 .183	.123 .117 32 .072 .229 .406	.100 .100 16 .060 .221 .300	.085 .021 2 .085 .099 .105		.090 .082 129 .064 .134 .375
35	.075 .034 33 .061 .113 .155		.072 .067 29 .057 .084 .250	.071 .032 20 .070 .082 .158	.074 .043 86 .061 .105 .202	.065 .035 29 .064 .088 .152				.073 .044 197 .061 .093 .192
30	.066 .026 18 .054 .106 .110	.069 .018 34 .066 .069 .106	.074 .009 8 .075 .082 .088	.184 1	.087 .061 135 .068 .108 .295	.044 .015 7 .037 .047 .075				.081 .053 203 .066 .103 .280
25	.054 .004 6 .051 .059 .059	.054 .018 31 .050 .061 .109	.075 .017 33 .077 .093 .098		.057 .031 120 .050 .083 .109	.077 .017 5 .072 .096 .102				.060 .028 195 .056 .084 .108
20		.058 .014 21 .062 .072 .076	.059 .019 4 .062 .077 .079	.037 .010 17 .039 .047 .049	.058 .026 23 .062 .075 .117					.052 .021 65 .050 .073 .082
15		.042 .015 15 .032 .061 .070	.050 1	.045 .006 6 .046 .051 .051	.048 .015 12 .040 .064 .076					.045 .014 34 .040 .031 .075
10		.031 .005 9 .032 .035 .035			.027 .018 3 .016 .041 .052					.030 .010 12 .032 .035 .049
5		.028 .010 9 .030 .040 .043		.022 .001 4 .022 .023 .024						.026 .009 13 .024 .033 .043
0		.020 1	.014 1	.026 .003 5 .027 .028 .029						.024 .005 7 .027 .028 .029
5		.032 .007 7 .030 .041 .042	.023 .005 6 .022 .029 .032	.025 .007 22 .027 .032 .038						.026 .008 35 .027 .034 .041
10		.025 .005 6 .025 .029 .033	.032 .009 11 .029 .039 .051	.032 .009 25 .036 .042 .044						.031 .009 42 .025 .041 .046
15		.031 .006 7 .034 .035 .035	.047 .004 7 .047 .048 .053	.028 .005 17 .028 .033 .036						.033 .009 31 .032 .043 .050
20			.048 .018 2 .048 .060 .065	.034 .012 25 .030 .040 .065						.035 .013 27 .030 .043 .066
25			.048 .020 15 .040 .051 .102	.039 .016 34 .034 .059 .068						.042 .018 49 .040 .058 .070
30			.084 .009 6 .088 .092 .093	.068 .045 42 .055 .085 .205						.070 .043 48 .058 .090 .205
35			.066 .033 10 .062 .090 .133	.064 .032 35 .053 .090 .142						.064 .032 45 .054 .090 .145
40										
45S										

LONGITUDE

TABLE VI. - Continued. GASP AMBIENT OZONE DATA BY LATITUDE FOR JUNE

(d) Flight level 350

CODE:

MEAN	ST. DEV.	N
50%	84%	98%

JUNE
FL 350

LAT	15E	60E	105E	150E	165W	120W	75W	30W	15E	MEAN
70N							.587 .017 5 .583 .598 .614	.602 .015 4 .597 .615 .625		.593 .018 9 .588 .613 .624
65					.412 .114 20 .381 .537 .573	.566 .033 12 .566 .593 .607	.596 1	.564 .103 14 .595 .655 .673		.500 .122 47 .545 .603 .670
60				.390 1	.304 .184 26 .272 .547 .618	.479 .134 50 .486 .607 .656		.333 .202 23 .270 .604 .622		.399 .184 100 .449 .604 .632
55				.408 .211 11 .546 .585 .622	.373 .189 51 .413 .566 .646	.356 .173 34 .407 .535 .617	.084 .043 14 .067 .120 .184	.161 .114 65 .116 .263 .449		.270 .192 175 .216 .531 .624
50				.232 .182 56 .128 .490 .610	.223 .176 69 .120 .438 .555	.218 .160 49 .113 .414 .564	.151 .147 112 .081 .317 .523	.194 .164 93 .114 .358 .637		.195 .167 379 .110 .390 .585
45	.128 .035 25 .114 .170 .201			.081 .059 29 .056 .160 .216	.155 .170 57 .065 .364 .566	.201 .164 92 .111 .446 .529	.153 .130 65 .134 .225 .543	.155 .088 3 .110 .224 .271		.160 .146 271 .105 .294 .561
40	.221 .138 47 .173 .356 .527		.046 .021 33 .039 .072 .090	.058 .034 14 .048 .069 .136	.128 .123 128 .075 .266 .480	.103 .080 282 .077 .145 .415	.124 .074 8 .105 .163 .267	.311 .222 19 .172 .598 .672		.123 .116 531 .079 .197 .511
35	.168 .118 39 .119 .278 .443		.090 .094 37 .053 .139 .414	.105 .086 42 .064 .191 .315	.090 .085 190 .065 .110 .462	.089 .040 60 .087 .125 .181				.100 .088 368 .067 .140 .420
30	.064 .014 12 .063 .076 .089	.073 .012 19 .076 .083 .090	.094 .047 24 .073 .150 .186	.052 .030 36 .044 .068 .136	.070 .046 299 .059 .093 .185	.088 1				.070 .044 391 .060 .093 .181
25	.053 .005 4 .053 .058 .059	.077 .018 31 .081 .090 .102	.061 .022 18 .064 .085 .093	.031 .014 27 .026 .047 .063	.057 .034 248 .051 .082 .159	.072 1				.057 .032 329 .052 .085 .141
20		.052 .020 32 .048 .072 .091	.069 .009 7 .070 .072 .080	.033 1	.051 .025 43 .050 .068 .105					.053 .022 83 .050 .072 .097
15		.053 .021 25 .048 .077 .090	.061 .009 6 .082 .089 .091		.038 .007 27 .038 .045 .050					.049 .020 58 .037 .077 .091
10		.034 .010 18 .030 .046 .050		.043 .017 6 .044 .061 .065	.031 .016 17 .029 .046 .061					.034 .014 41 .030 .048 .064
5		.025 .004 2 .025 .028 .029		.035 .014 26 .031 .051 .058	.020 .009 10 .019 .029 .035					.031 .014 38 .026 .050 .058
0		.024 .002 3 .025 .026 .027		.026 .010 42 .023 .037 .050	.010 1					.026 .010 46 .023 .037 .050
5		.018 .001 3 .019 .019 .019	.028 .011 24 .025 .030 .057	.026 .015 30 .023 .029 .063						.026 .013 57 .024 .030 .070
10		.021 .002 6 .021 .023 .026	.036 .010 11 .032 .045 .058	.029 .011 47 .025 .041 .057						.029 .011 64 .026 .041 .059
15		.027 .003 6 .027 .030 .032	.049 .010 13 .046 .059 .068	.034 .012 48 .029 .047 .058						.036 .013 67 .032 .050 .060
20	.054 .010 7 .056 .061 .065	.032 .006 4 .035 .037 .037	.044 .010 23 .040 .054 .061	.035 .021 33 .030 .049 .086						.040 .017 67 .037 .057 .078
25	.072 .015 8 .071 .081 .097		.046 .018 22 .037 .062 .093	.066 .023 41 .066 .088 .107						.060 .023 71 .061 .084 .106
30			.069 .013 10 .065 .083 .092	.084 .035 48 .078 .108 .176						.081 .033 58 .073 .105 .168
35			.110 .066 14 .114 .173 .195	.065 .027 26 .058 .102 .123						.081 .049 40 .061 .137 .183
40										
45S										

LONGITUDE

TABLE VI. - Continued. GASP AMBIENT OZONE DATA BY LATITUDE FOR JUNE

(e) Flight level 370

CODE:

MEAN	ST. DEV.	N
50%	84%	98%

JUNE
FL 370

LAT	15E	60E	105E	150E	165W	120W	75W	30W	15E	MEAN
70N						.660 1	.597 .103 18 .629 .662 .668	.566 .014 6 .560 .581 .590		.592 .089 25 .613 .660 .668
65					.493 .101 50 .525 .592 .614	.595 .068 31 .613 .649 .670	.486 .134 19 .553 .625 .634	.455 .175 24 .538 .599 .670		.510 .128 124 .502 .623 .667
60				.501 .079 18 .523 .568 .581	.382 .184 80 .440 .568 .646	.375 .210 69 .482 .580 .627	.501 .102 33 .504 .606 .671	.242 .193 46 .194 .545 .564		.379 .197 246 .250 .569 .648
55				.447 .156 96 .481 .593 .652	.401 .167 50 .452 .583 .680	.341 .138 110 .355 .491 .589	.378 .143 21 .382 .532 .592	.234 .179 38 .220 .459 .564		.372 .171 315 .386 .557 .638
50				.266 .159 42 .289 .405 .527	.355 .111 132 .389 .416 .514	.229 .154 62 .177 .406 .518	.164 .143 79 .093 .316 .512	.226 .202 57 .131 .537 .605		.262 .165 392 .192 .413 .572
45	.162 .036 2 .162 .186 .196		.460 .079 2 .460 .514 .536	.370 .134 146 .396 .487 .545	.192 .136 83 .148 .363 .509	.133 .101 113 .088 .239 .404	.252 .210 45 .191 .559 .651	.345 .238 16 .288 .658 .706		.253 .174 407 .214 .457 .637
40	.064 .034 15 .042 .105 .119		.173 .125 19 .104 .344 .356	.129 .100 103 .091 .205 .451	.144 .152 135 .071 .309 .597	.167 .149 909 .104 .333 .600	.124 .096 7 .096 .135 .324	.214 .199 17 .133 .409 .679		.161 .147 1205 .100 .310 .599
35	.038 .002 2 .038 .039 .039		.107 .068 28 .078 .140 .288	.085 .076 49 .068 .105 .309	.109 .108 408 .077 .132 .525	.095 .074 129 .071 .128 .343				.104 .098 616 .074 .133 .514
30			.140 .088 34 .109 .184 .363	.102 .075 37 .074 .178 .324	.081 .062 677 .064 .119 .268					.085 .065 748 .065 .125 .302
25		.037 .004 3 .039 .040 .041	.060 .015 7 .048 .078 .079	.046 .019 34 .045 .054 .092	.063 .031 511 .057 .083 .157	.051 .001 2 .051 .052 .052				.062 .031 557 .056 .082 .146
20		.035 .012 16 .035 .046 .054	.047 .017 17 .050 .062 .074	.049 .013 11 .047 .063 .070	.055 .024 80 .047 .079 .112	.044 .004 5 .042 .048 .050				.050 .022 129 .045 .072 .111
15		.041 .011 12 .040 .051 .058	.036 .010 13 .034 .048 .059		.038 .020 44 .035 .051 .091	.029 .009 5 .033 .037 .037				.038 .017 74 .031 .050 .079
10		.032 .009 22 .034 .040 .047	.042 .006 15 .042 .048 .051	.022 .002 7 .022 .024 .026	.034 .010 45 .034 .040 .056					.034 .010 89 .034 .043 .056
5		.023 .003 5 .023 .025 .026		.030 .015 21 .022 .053 .059	.031 .011 41 .035 .042 .047					.030 .012 67 .028 .043 .058
0				.033 .013 24 .032 .046 .059	.035 .009 22 .034 .044 .050					.034 .011 46 .026 .046 .054
5				.026 .012 25 .025 .037 .049	.036 .008 20 .035 .046 .050					.031 .012 45 .029 .043 .050
10				.030 .014 21 .026 .043 .056	.047 .013 6 .050 .058 .058					.034 .015 27 .032 .052 .058
15		.030 .003 2 .030 .031 .032		.029 .012 16 .027 .043 .051						.029 .012 18 .027 .038 .051
20				.030 .011 29 .030 .041 .051						.030 .011 29 .030 .041 .051
25				.022 .015 32 .021 .034 .059						.022 .015 32 .021 .034 .059
30		.044 .004 8 .044 .047 .050	.068 .016 13 .072 .082 .088	.082 .032 21 .088 .109 .148						.071 .029 42 .054 .093 .144
35			.097 .052 31 .086 .143 .220	.106 .053 11 .101 .140 .212						.100 .053 42 .077 .146 .229
40			.257 1							.257 1
45S										

LONGITUDE

TABLE VI. - Continued. GASP AMBIENT OZONE DATA BY LATITUDE FOR JUNE

(f) Flight level 390

CODE:

MEAN	ST. DEV.	N
50%	84%	98%

JUNE
FL 390

LAT	15E	60E	105E	150E	165W	120W	75W	30W	15E	MEAN
70N						.590 .094 40 .628 .667 .683	.562 .114 97 .603 .658 .691	.477 .103 6 .521 .556 .568		.566 .111 143 .601 .659 .691
65				.603 .162 5 .698 .739 .746	.549 .064 108 .531 .623 .724	.558 .092 109 .577 .638 .697	.552 .094 111 .571 .636 .682	.431 .152 46 .493 .581 .606		.539 .105 379 .549 .630 .708
60				.533 .106 47 .523 .664 .699	.562 .092 89 .587 .630 .681	.535 .113 137 .550 .643 .691	.529 .117 56 .545 .637 .673	.381 .161 69 .434 .541 .614		.513 .133 398 .519 .635 .686
55				.432 .216 52 .484 .650 .699	.299 .134 22 .306 .476 .494	.529 .124 104 .579 .633 .669	.484 .224 3 .626 .647 .656	.434 .108 43 .450 .523 .611		.465 .167 224 .426 .626 .689
50				.463 .191 33 .532 .675 .729	.177 .104 41 .151 .294 .397	.365 .168 55 .381 .544 .620	.110 .040 16 .105 .145 .194	.425 .131 12 .465 .550 .594		.315 .194 157 .290 .546 .690
45			.445 .177 8 .492 .590 .647	.335 .163 67 .343 .515 .633	.328 .198 69 .328 .526 .648	.270 .159 70 .224 .410 .592	.082 .039 28 .075 .100 .199	.117 .035 20 .113 .144 .194		.275 .183 262 .174 .503 .644
40			.294 .176 25 .326 .439 .577	.136 .130 75 .088 .243 .491	.330 .167 50 .395 .497 .592	.196 .171 527 .118 .359 .667	.172 .112 5 .125 .256 .367	.458 .047 2 .458 .490 .503		.203 .173 684 .121 .411 .659
35			.108 .127 28 .062 .146 .486	.062 .026 31 .056 .085 .118	.082 .073 61 .061 .096 .307	.112 .075 284 .086 .187 .295				.103 .078 404 .076 .159 .310
30			.074 .021 6 .079 .094 .096	.042 .023 55 .036 .054 .116	.108 .117 96 .075 .155 .458	.051 .007 7 .049 .057 .061				.083 .096 164 .038 .096 .451
25			.078 .004 7 .075 .081 .086	.021 .008 4 .020 .026 .031	.084 .075 82 .058 .126 .368	.051 .006 7 .051 .058 .060				.078 .070 100 .057 .118 .355
20		.006 .006 3 .004 .011 .015	.084 .002 3 .085 .086 .086		.084 .042 22 .081 .134 .163	.024 .007 6 .026 .029 .034				.067 .045 34 .056 .108 .162
15		.070 1			.041 .017 26 .037 .064 .073	.012 .005 2 .012 .015 .016				.040 .019 29 .037 .065 .073
10				.037 .002 3 .037 .039 .040	.030 .009 31 .028 .039 .048					.030 .009 34 .029 .039 .048
5				.039 1	.037 .014 26 .037 .045 .069					.037 .014 27 .038 .045 .068
0				.019 .005 3 .018 .023 .026	.031 .013 29 .029 .043 .055					.030 .013 32 .027 .042 .055
5				.029 1	.039 .011 22 .040 .049 .058					.038 .010 23 .039 .049 .057
10				.029 .012 27 .027 .037 .060	.031 .005 7 .030 .035 .039					.030 .011 34 .027 .037 .056
15		.031 .004 5 .031 .034 .037		.036 .013 37 .032 .047 .069						.035 .013 42 .032 .045 .069
20	.030 1	.027 .001 2 .027 .028 .028		.049 .015 21 .049 .062 .079						.047 .016 24 .047 .061 .079
25				.057 .010 8 .055 .056 .078						.057 .010 8 .055 .056 .078
30				.064 .022 10 .058 .086 .106						.064 .022 10 .056 .086 .106
35			.131 .025 4 .132 .156 .159	.174 .086 79 .166 .250 .381						.172 .084 83 .176 .248 .380
40										
45S										

LONGITUDE

TABLE VI. - Continued. GASP AMBIENT OZONE DATA BY LATITUDE FOR JUNE

(g) Flight level 410

CODE:

MEAN	ST. DEV.	N
50%	84%	98%

JUNE
FL 410

LAT	15E	60E	105E	150E	165W	120W	75W	30W	15E	MEAN	LAT
70N						.538 .108 11 .509 .634 .740	.629 .140 17 .660 .735 .778			.593 .136 28 .627 .729 .771	70N
65						.523 .136 21 .577 .661 .687	.471 .185 68 .485 .667 .705	.434 .177 27 .498 .620 .645		.472 .177 116 .494 .653 .703	65
60				.561 .098 30 .528 .706 .758		.538 .127 41 .564 .664 .723	.466 .163 76 .491 .657 .731	.440 .162 127 .436 .632 .696		.480 .158 274 .386 .644 .731	60
55				.476 .173 43 .488 .651 .743		.483 .147 63 .515 .624 .670	.629 1	.445 .112 78 .465 .570 .626		.466 .142 185 .474 .617 .699	55
50				.503 .122 47 .513 .611 .708	.429 .050 18 .407 .493 .528	.401 .144 132 .400 .570 .659	.525 .144 13 .573 .683 .705	.242 .074 2 .242 .291 .312		.432 .142 212 .425 .581 .700	50
45	.564 .068 8 .578 .634 .639		.096 .059 9 .069 .156 .213	.272 .186 32 .217 .533 .626	.219 .122 51 .170 .369 .467	.369 .149 133 .376 .537 .623	.335 .141 4 .334 .473 .505	.421 .021 2 .421 .434 .440		.320 .169 239 .346 .506 .632	45
40	.601 .091 12 .604 .674 .686		.148 .186 36 .061 .313 .624	.198 .181 15 .063 .411 .471	.303 .177 63 .316 .498 .563	.290 .187 97 .282 .506 .643				.281 .203 223 .265 .517 .656	40
35	.124 .078 7 .101 .113 .288		.259 .193 36 .231 .467 .567	.078 1	.099 .051 10 .101 .149 .156	.243 .190 14 .178 .485 .564				.215 .180 68 .111 .460 .573	35
30	.057 .006 4 .055 .062 .065		.210 .180 21 .180 .426 .636		.085 .043 32 .087 .120 .171					.129 .130 57 .098 .185 .601	30
25			.090 .022 22 .097 .119 .119		.082 .086 42 .042 .131 .360					.085 .072 64 .054 .119 .303	25
20		.015 .004 4 .014 .019 .022	.086 .013 9 .090 .096 .102		.046 .018 18 .042 .055 .091					.054 .028 31 .047 .090 .102	20
15		.023 .005 11 .023 .027 .033	.079 .008 2 .079 .084 .086		.030 .006 7 .028 .031 .041					.031 .017 20 .023 .034 .080	15
10					.027 1					.027 1	10
5											5
0											0
5											5
10											10
15											15
20				.063 .008 3 .061 .070 .073						.063 .008 3 .061 .070 .073	20
25				.073 .015 15 .071 .090 .093						.073 .015 15 .071 .090 .093	25
30				.123 .039 10 .111 .119 .218						.123 .039 10 .111 .119 .218	30
35				.264 .111 45 .252 .385 .463						.264 .111 45 .252 .385 .463	35
40											40
45S											45S

LONGITUDE

TABLE VI. - Concluded. GASP AMBIENT OZONE DATA BY LATITUDE FOR JUNE

(h) Flight level 430

CODE:

MEAN	ST. DEV.	N
50%	84%	98%

JUNE
FL 430

LAT	15E	60E	105E	150E	165W	120W	75W	30W	15E	MEAN
70N										
65										
60						.613 .104 23 .641 .710 .791	.643 .004 2 .643 .646 .647			.615 .100 25 .641 .705 .790
55				.454 .075 31 .472 .505 .509		.405 .159 15 .455 .566 .663				.438 .112 46 .457 .507 .621
50				.375 .111 45 .431 .459 .471	.434 .147 8 .405 .596 .617	.345 .196 6 .254 .614 .618				.380 .129 59 .425 .462 .617
45			.213 .174 17 .096 .442 .558	.200 .151 44 .118 .338 .569		.322 .179 13 .236 .544 .677	.476 .105 8 .476 .583 .605			.249 .179 82 .140 .456 .622
40			.164 .176 57 .079 .488 .539	.105 .007 9 .100 .115 .116	.213 .095 4 .215 .300 .334	.256 .110 27 .238 .356 .488	.139 .006 2 .139 .142 .144			.185 .154 99 .098 .351 .541
35			.101 .047 13 .082 .094 .227	.094 1	.059 .003 5 .059 .062 .064	.122 .049 11 .129 .171 .185				.101 .048 30 .074 .154 .214
30					.188 .110 13 .167 .211 .440	.475 1				.209 .129 14 .171 .393 .469
25										
20			.094 .002 2 .094 .095 .096							.094 .002 2 .094 .095 .096
15		.074 1	.078 .010 8 .075 .085 .097							.078 .009 9 .074 .084 .097
10										
5										
0										
5										
10										
15										
20										
25				.096 1						.096 1
30				.101 .012 7 .103 .109 .118						.101 .012 7 .103 .109 .118
35				.115 .012 3 .108 .124 .131						.115 .012 3 .108 .124 .131
40										
45S										

LONGITUDE

TABLE VII. - GASP AMBIENT OZONE DATA BY LATITUDE FOR JULY

(a) Flight level 290

CODE:

MEAN	ST. DEV.	N
50%	84%	98%

JULY
FL 290

LAT	15E	60E	105E	150E	165W	120W	75W	30W	15E	MEAN
70N										
65					.097 1		.086 .016 6 .080 .093 .116	.082 .015 4 .079 .095 .103		.085 .015 11 .080 .100 .116
60							.130 .013 2 .130 .138 .142	.068 .004 3 .066 .071 .073		.092 .031 5 .073 .126 .140
55								.095 .022 4 .093 .116 .126		.095 .022 4 .093 .116 .126
50								.093 .089 18 .072 .089 .344		.093 .089 18 .072 .089 .344
45	.078 .026 20 .080 .095 .132				.055 .029 4 .042 .076 .101	.079 .006 2 .079 .083 .085	.110 .004 2 .110 .112 .113	.074 .016 8 .070 .082 .104		.076 .025 36 .066 .103 .123
40	.082 .030 15 .067 .122 .135				.082 .028 4 .094 .100 .105	.079 .018 13 .076 .095 .113	.083 .043 6 .103 .114 .126			.081 .029 38 .056 .111 .131
35	.061 .030 37 .054 .067 .144		.081 1		.058 .018 8 .059 .076 .082	.077 .035 11 .066 .120 .135				.064 .030 57 .055 .076 .136
30	.068 .004 4 .067 .072 .075									.068 .004 4 .067 .072 .075
25	.056 .019 7 .048 .076 .089	.045 .013 2 .045 .053 .057	.056 .005 3 .055 .060 .063		.040 .013 7 .042 .054 .055					.049 .017 19 .050 .058 .085
20		.033 .008 19 .032 .041 .044			.042 .014 12 .044 .056 .063					.037 .012 31 .039 .046 .060
15		.022 .003 4 .022 .025 .025	.040 .006 10 .041 .044 .050	.027 1		.019 1				.033 .010 16 .036 .043 .049
10		.028 .006 9 .027 .032 .040	.026 .012 7 .033 .040 .040							.027 .009 16 .027 .037 .041
5		.023 .004 6 .025 .025 .027	.013 .001 6 .013 .014 .014							.018 .006 12 .015 .025 .027
0		.029 1	.013 .003 8 .012 .016 .017							.014 .006 9 .012 .017 .027
5			.016 .002 18 .017 .018 .020							.016 .002 18 .017 .018 .020
10			.019 .004 8 .018 .023 .026							.019 .004 8 .018 .023 .026
15			.027 .004 7 .026 .026 .036	.019 1						.026 .005 8 .024 .026 .035
20										
25			.052 .007 13 .052 .060 .063							.052 .007 13 .052 .060 .063
30			.048 .019 12 .049 .053 .092							.048 .019 12 .049 .053 .092
35			.045 .009 2 .045 .051 .054	.076 .019 4 .083 .091 .093						.065 .022 6 .061 .089 .093
40										
45S										

LONGITUDE

TABLE VII. - Continued. GASP AMBIENT OZONE DATA BY LATITUDE FOR JULY

(b) Flight level 310

CODE:

MEAN	ST. DEV.	N
50%	84%	98%

JULY
FL 310

LAT	15E	60E	105E	150E	165W	120W	75W	30W	15E	MEAN
70N										
65							.088 .006 2 .088 .092 .094	.090 .015 8 .091 .104 .108		.089 .014 10 .088 .103 .108
60							.107 .014 5 .103 .122 .128	.099 .020 15 .102 .114 .137		.101 .019 20 .095 .118 .137
55						.057 .004 5 .057 .061 .062	.089 .011 3 .096 .097 .098	.126 .077 35 .102 .175 .324		.115 .073 43 .096 .148 .322
50					.079 .022 8 .083 .098 .105	.075 .030 3 .056 .098 .116	.127 .063 14 .117 .184 .228	.089 .026 32 .086 .113 .146		.096 .042 57 .084 .123 .219
45	.212 .091 3 .252 .283 .296				.052 .008 4 .051 .060 .063	.094 .033 48 .083 .127 .189	.063 .031 20 .069 .089 .110	.084 .003 2 .084 .086 .087		.088 .046 77 .079 .114 .221
40	.086 .030 9 .081 .098 .146				.099 .010 2 .099 .105 .108	.073 .028 75 .074 .103 .128	.086 .047 7 .006 .101 .162	.070 .003 2 .070 .072 .073		.075 .030 95 .075 .103 .140
35	.056 .021 38 .052 .065 .108		.058 .028 10 .054 .089 .102		.065 .029 27 .061 .093 .123	.092 1				.060 .025 76 .044 .079 .123
30	.058 .008 25 .058 .065 .070	.051 .013 32 .051 .060 .078			.048 .019 20 .042 .072 .085					.052 .014 77 .051 .064 .084
25	.056 .012 15 .058 .065 .080	.043 .027 26 .035 .055 .119		.052 .007 8 .052 .061 .064	.042 .018 27 .036 .051 .092					.046 .021 76 .035 .061 .092
20		.034 .010 17 .032 .039 .058	.013 1	.054 .017 45 .051 .073 .091	.038 .012 29 .035 .052 .067					.045 .017 92 .039 .064 .079
15			.022 .011 7 .021 .030 .041	.022 1	.017 .003 6 .019 .019 .020	.053 1				.022 .012 15 .019 .028 .050
10		.029 1	.009 1		.021 .001 2 .021 .021 .021					.020 .007 4 .015 .025 .029
5										
0		.024 .002 3 .024 .025 .026					.028 .003 4 .028 .030 .032			.026 .003 7 .026 .028 .032
5		.025 .004 6 .025 .026 .031	.026 .005 4 .023 .029 .033				.033 .001 2 .033 .033 .033			.026 .005 12 .023 .032 .034
10		.026 .004 10 .027 .030 .033	.021 .003 8 .022 .024 .025							.024 .005 18 .021 .028 .033
15		.036 .006 13 .037 .043 .048	.024 .005 18 .024 .029 .034							.029 .008 31 .029 .037 .046
20		.047 .012 12 .045 .062 .067	.030 .005 37 .030 .035 .041	.024 .005 5 .024 .027 .030						.033 .011 54 .031 .040 .063
25			.042 .021 47 .036 .061 .092	.025 .002 7 .024 .026 .028						.040 .020 54 .034 .058 .087
30			.063 .023 40 .059 .092 .110	.045 .025 8 .034 .069 .094						.060 .024 48 .055 .090 .108
35			.087 .061 20 .057 .151 .238	.044 .022 3 .059 .060 .060						.081 .059 23 .057 .146 .234
40			.095 1							.095 1
45S										

LONGITUDE

TABLE VII. - Continued. GASP AMBIENT OZONE DATA BY LATITUDE FOR JULY

(c) Flight level 330

CODE:

MEAN	ST. DEV.	N
50%	84%	98%

JULY
FL 330

LAT	15E	60E	105E	150E	165W	120W	75W	30W	15E	MEAN	LAT
70N							.417 .504 163 .584 9 .590			.417 .504 163 .584 9 .590	70N
65							.196 .107 153 .314 3 .400	.188 .188 .015 .198 2 .202		.193 .173 .119 .278 5 .395	65
60						.150 .135 .061 .182 11 .289	.220 .214 .056 .276 8 .317	.147 .089 .105 .237 19 .392		.163 .132 .090 .232 38 .375	60
55				.193 .077 .165 .314 3 .412	.082 1	.056 .056 .001 .056 2 .056	.211 .150 .130 .397 40 .457	.239 .134 .170 .464 60 .565		.222 .109 .156 .422 106 .546	55
50				.088 .077 .025 .106 14 .147		.088 .092 .013 .100 5 .105	.160 .118 .109 .225 75 .433	.193 .148 .118 .346 44 .427		.161 .112 .109 .311 138 .432	50
45	.092 1			.110 .087 .065 .174 26 .263	.071 .058 .022 .100 6 .105	.090 .083 .039 .102 24 .197	.129 .127 .029 .153 36 .188			.110 .101 .048 .146 93 .249	45
40	.093 .083 .048 .130 31 .216		.070 .065 .039 .089 28 .175	.090 .064 .062 .174 8 .199	.123 .112 .040 .169 9 .183	.090 .081 .046 .113 34 .197	.102 .098 .018 .117 10 .140	.073 1		.090 .082 .046 .125 121 .213	40
35	.060 .054 .025 .081 28 .125		.069 .062 .043 .112 14 .164	.115 .115 .020 .129 2 .134	.067 .056 .042 .095 99 .162	.077 .078 .034 .105 14 .145				.067 .056 .039 .099 157 .161	35
30	.057 .055 .010 .064 23 .072	.055 .056 .011 .062 43 .078			.058 .044 .039 .089 145 .166	.121 .127 .021 .136 14 .152				.061 .053 .036 .090 225 .159	30
25		.040 .038 .009 .050 39 .056		.064 1	.051 .042 .033 .078 120 .141	.109 .107 .017 .125 14 .144				.053 .041 .033 .089 174 .142	25
20		.037 .038 .005 .040 10 .042	.030 .016 .030 .043 5 .084	.035 .029 .021 .055 48 .098	.049 .050 .016 .062 17 .074	.100 .102 .016 .114 8 .124				.043 .030 .027 .065 88 .111	20
15		.030 .030 .006 .034 7 .041	.025 .026 .009 .033 11 .043	.038 .030 .023 .054 41 .100		.063 .060 .012 .071 5 .082				.037 .026 .021 .055 64 .094	15
10		.025 .025 .006 .029 17 .037	.018 .017 .001 .018 3 .019				.041 1			.025 .024 .007 .030 21 .041	10
5		.027 .028 .006 .033 8 .034	.019 .019 .005 .024 5 .027							.024 .026 .007 .029 13 .034	5
0		.025 .025 .007 .033 13 .034	.017 .017 .002 .019 10 .021	.024 .024 .005 .029 4 .031						.022 .019 .006 .030 27 .034	0
5		.029 .025 .006 .036 7 .038	.022 .019 .004 .026 9 .026	.018 .019 .002 .019 8 .019						.023 .019 .006 .026 24 .037	5
10		.029 .029 .005 .032 9 .035	.024 .025 .005 .030 12 .033	.024 .021 .008 .034 10 .037						.025 .026 .007 .032 31 .036	10
15		.028 .029 .004 .031 5 .033	.026 .023 .005 .031 8 .034	.028 .031 .005 .031 5 .032						.027 .027 .005 .031 18 .034	15
20		.031 .033 .007 .035 12 .041	.038 .035 .014 .055 18 .065	.030 .024 .009 .041 8 .044						.034 .029 .012 .042 38 .063	20
25			.055 .056 .022 .066 26 .111	.050 .051 .017 .069 15 .078						.053 .053 .020 .070 41 .109	25
30			.076 .072 .019 .098 24 .114	.069 .057 .029 .102 25 .131						.072 .066 .025 .101 49 .122	30
35			.071 .062 .027 .097 32 .138	.148 .081 .148 .220 8 .464						.087 .059 .077 .106 40 .288	35
40			.091 .091 .026 .109 2 .116							.091 .091 .026 .109 2 .116	40
45S											45S

LONGITUDE

TABLE VII. - Continued. GASP AMBIENT OZONE DATA BY LATITUDE FOR JULY

(d) Flight level 350

CODE:

MEAN	ST. DEV.	N
50%	84%	98%

JULY
FL 350

LAT	15E	60E	105E	150E	165W	120W	75W	30W	15E	MEAN	LAT
70N							.559 .555 11 .637			.559 .555 11 .637	70N
65				.117 1	.388 .413 .094 .451 28 .461	.309 .422 .182 .490 13 .501	.306 .346 .133 .428 14 .461	.317 .424 .192 .509 13 .548		.339 .411 .150 .466 69 .522	65
60				.377 .375 .145 .533 12 .576	.075 .073 .008 .083 6 .088	.385 .454 .183 .561 62 .600	.212 .222 .080 .278 6 .315	.231 .158 .159 .396 63 .608		.300 .268 .165 .529 149 .604	60
55				.173 .140 .078 .261 15 .326	.219 .101 .195 .458 17 .567	.323 .297 .168 .514 72 .589	.297 .404 .177 .453 22 .490	.135 .101 .101 .185 75 .497		.230 .154 .168 .464 201 .561	55
50				.071 .050 .067 .125 14 .234	.280 .232 .179 .523 12 .532	.178 .103 .145 .380 73 .489	.225 .139 .156 .448 84 .510	.205 .143 .156 .429 93 .554		.200 .118 .156 .428 276 .546	50
45	.157 .097 .129 .294 60 .535			.068 .047 .054 .097 38 .208	.203 .137 .176 .445 22 .538	.106 .081 .081 .148 78 .357	.136 .114 .083 .144 47 .472	.299 .318 .160 .456 6 .468		.131 .091 .115 .200 251 .505	45
40	.098 .083 .058 .137 93 .278		.061 .057 .017 .076 13 .094	.126 .083 .084 .225 11 .278	.123 .095 .092 .185 99 .423	.086 .077 .053 .113 152 .231	.117 .103 .047 .144 11 .219			.099 .081 .069 .141 379 .319	40
35	.054 .050 .017 .074 43 .087		.075 .087 .034 .104 10 .123	.055 .051 .007 .063 9 .068	.079 .068 .050 .120 198 .233	.078 .064 .037 .115 39 .147				.075 .063 .045 .113 299 .223	35
30	.074 .071 .016 .089 13 .107	.062 .057 .013 .075 9 .086	.091 .091 .002 .093 8 .094	.078 .072 .026 .111 15 .122	.055 .047 .038 .081 311 .164					.058 .052 .037 .085 356 .181	30
25	.038 .037 .003 .041 5 .043	.080 .081 .008 .088 9 .092	.073 .077 .026 .093 12 .108	.068 .052 .037 .106 24 .151	.050 .044 .030 .077 265 .115	.131 .128 .011 .137 6 .150				.055 .047 .032 .087 321 .131	25
20		.034 .026 .018 .046 16 .076	.042 .025 .036 .093 7 .100	.044 .039 .020 .067 60 .084	.040 .032 .020 .056 62 .098	.088 .105 .033 .119 10 .121				.044 .036 .025 .067 155 .118	20
15		.031 .030 .007 .038 26 .044	.034 .036 .013 .045 62 .062	.029 .028 .009 .042 34 .046	.042 .037 .020 .056 22 .092	.049 .048 .007 .057 19 .064				.035 .034 .014 .047 163 .068	15
10		.026 .026 .006 .031 22 .042	.022 .021 .007 .030 11 .034	.018 .018 .002 .020 3 .021	.033 .033 .004 .036 11 .043	.052 .053 .006 .058 8 .060	.045 .044 .016 .056 10 .079			.032 .030 .013 .046 65 .059	10
5		.026 .027 .004 .029 21 .032	.023 .023 .003 .025 9 .029	.019 .019 .002 .020 4 .021	.056 .064 .017 .069 7 .072		.024 .024 .002 .026 4 .028			.029 .025 .014 .031 45 .069	5
0		.027 .027 .008 .032 18 .045	.020 .018 .007 .030 19 .033	.019 .020 .002 .020 7 .021	.029 .029 .006 .035 7 .039		.026 .024 .004 .029 3 .031			.024 .021 .008 .031 54 .040	0
5		.022 .023 .006 .028 21 .034	.015 .016 .003 .019 22 .021	.018 .018 .003 .020 6 .022	.030 .030 .004 .033 2 .034					.019 .018 .006 .025 51 .034	5
10		.021 .021 .003 .023 12 .027	.018 .017 .004 .022 26 .028	.021 .021 .000 .021 3 .021						.019 .019 .004 .022 41 .028	10
15		.028 .026 .008 .032 16 .047	.027 .028 .006 .033 29 .034	.048 .048 .028 .067 12 .094						.031 .028 .016 .035 57 .091	15
20		.033 .033 .006 .035 14 .047	.033 .028 .013 .044 17 .065	.059 .057 .037 .094 17 .131						.042 .031 .026 .062 48 .116	20
25			.052 .053 .015 .066 20 .079	.046 .047 .030 .083 26 .107						.049 .031 .025 .068 46 .103	25
30			.097 .090 .042 .135 17 .199	.081 .078 .064 .145 41 .230						.086 .062 .059 .142 58 .229	30
35			.098 .065 .082 .130 73 .391	.172 .141 .094 .305 21 .335						.114 .069 .091 .189 94 .385	35
40			.111 .114 .025 .132 3 .140							.111 .114 .025 .132 3 .140	40
45S											45S

LONGITUDE

TABLE VII. - Continued. GASP AMBIENT OZONE DATA BY LATITUDE FOR JULY

(e) Flight level 370

CODE:

MEAN	ST. DEV.	N
50%	84%	98%

JULY
FL 370

LAT	15E	60E	105E	150E	165W	120W	75W	30W	15E	MEAN	LAT
70N						.507 .102 17 .533 .581 .612	.428 .144 28 .463 .585 .635			.458 .135 45 .507 .586 .630	70N
65					.322 .167 55 .320 .522 .573	.528 .086 21 .545 .596 .620	.382 .129 43 .408 .513 .582	.322 .164 30 .315 .518 .551		.368 .163 149 .377 .534 .604	65
60				.394 .153 20 .465 .509 .620	.353 .168 70 .369 .532 .570	.452 .106 33 .476 .564 .614	.374 .145 33 .433 .502 .549	.305 .192 33 .314 .490 .616		.370 .165 189 .414 .531 .613	60
55				.262 .167 59 .247 .460 .535	.176 .149 26 .105 .381 .469	.454 .111 45 .494 .527 .572	.389 .143 67 .433 .519 .554	.302 .139 45 .292 .460 .522		.331 .169 242 .254 .516 .355	55
50				.205 .160 75 .129 .373 .554	.249 .201 49 .137 .511 .616	.196 .137 44 .167 .311 .534	.268 .153 46 .211 .466 .527	.197 .106 24 .225 .316 .327		.224 .162 238 .112 .432 .564	50
45			.090 1	.178 .155 79 .109 .426 .517	.168 .157 29 .096 .382 .493	.144 .081 73 .116 .228 .343	.159 .121 68 .127 .247 .528	.112 .022 8 .118 .123 .143		.160 .127 258 .094 .269 .510	45
40	.128 .069 12 .096 .194 .282	.047 1	.070 .032 37 .069 .099 .139	.130 .102 27 .096 .153 .407	.097 .081 52 .071 .138 .340	.092 .064 395 .083 .121 .300	.142 .099 14 .109 .185 .402			.095 .069 538 .081 .124 .339	40
35	.088 .029 5 .105 .112 .116		.117 .064 17 .114 .158 .263	.077 .025 12 .074 .103 .122	.072 .044 238 .066 .100 .175	.098 .068 57 .092 .142 .286				.080 .051 329 .071 .113 .270	35
30	.081 .006 5 .079 .087 .088	.071 .007 3 .070 .077 .080		.066 .031 16 .062 .076 .146	.065 .047 447 .053 .090 .235	.050 .017 3 .047 .065 .072				.065 .046 474 .054 .086 .228	30
25		.043 .012 14 .047 .053 .057	.049 .012 4 .047 .061 .064	.084 .059 12 .059 .175 .191	.048 .030 387 .040 .075 .129					.048 .031 417 .041 .074 .148	25
20		.037 .016 19 .036 .048 .077	.042 .006 15 .042 .049 .050	.069 .037 54 .060 .097 .139	.048 .028 66 .044 .071 .098	.082 .022 5 .068 .102 .119				.054 .032 159 .048 .081 .122	20
15		.026 .007 7 .024 .034 .038	.039 .012 39 .038 .050 .066	.041 .016 4 .034 .053 .067	.034 .014 13 .042 .047 .056	.055 .010 18 .054 .065 .075	.030 .007 3 .030 .036 .039			.040 .014 84 .033 .055 .070	15
10		.016 1		.023 .007 3 .022 .029 .032	.025 .013 25 .027 .037 .051	.066 .013 11 .062 .077 .093	.063 .022 14 .060 .083 .105			.043 .025 54 .023 .067 .096	10
5		.021 .002 13 .021 .023 .024		.027 .008 13 .022 .034 .041	.043 .019 24 .041 .057 .082					.033 .017 50 .023 .051 .068	5
0				.032 .008 6 .037 .038 .041	.048 .016 15 .040 .066 .077					.043 .016 21 .037 .065 .077	0
5				.034 .004 6 .035 .037 .040	.028 .012 26 .028 .036 .055					.029 .012 32 .029 .036 .054	5
10				.042 .014 21 .048 .055 .058	.038 .013 7 .042 .053 .055					.041 .014 28 .041 .054 .058	10
15				.039 .012 17 .043 .048 .061						.039 .012 17 .043 .048 .061	15
20			.025 .003 2 .025 .027 .028	.042 .008 11 .045 .049 .053						.040 .010 13 .043 .047 .053	20
25			.025 .004 6 .024 .027 .032	.051 .004 6 .051 .054 .058						.038 .013 12 .034 .051 .058	25
30			.063 .030 6 .053 .094 .113	.158 1						.077 .043 7 .054 .118 .153	30
35			.139 .063 64 .127 .204 .281	.264 .188 40 .184 .337 .720						.187 .140 104 .115 .270 .695	35
40			.103 .042 4 .082 .132 .170							.103 .042 4 .082 .132 .170	40
45S											45S

LONGITUDE

TABLE VII. - Continued. GASP AMBIENT OZONE DATA BY LATITUDE FOR JULY

(f) Flight level 390

CODE:

MEAN	ST. DEV.	N
50%	84%	98%

JULY
FL 390

LAT	15E	60E	105E	150E	165W	120W	75W	30W	15E	MEAN
70N						.577 .093 9 .578 .674 .679	.574 .074 12 .584 .652 .665			.575 .083 21 .581 .664 .678
65				.414 .016 3 .418 .428 .431	.399 .165 95 .469 .549 .602	.540 .106 41 .564 .626 .680	.441 .171 29 .517 .601 .629	.593 .004 3 .593 .596 .598		.444 .163 171 .503 .589 .654
60				.419 .146 92 .460 .555 .620	.355 .155 65 .338 .534 .608	.509 .103 62 .504 .602 .698	.476 .129 89 .503 .614 .670	.370 .174 30 .342 .582 .610		.434 .150 338 .407 .578 .657
55				.364 .155 66 .366 .534 .614	.315 .115 36 .311 .417 .557	.448 .166 81 .529 .585 .641	.326 .163 49 .315 .526 .633	.280 .107 100 .292 .373 .485		.348 .156 332 .325 .538 .630
50				.255 .185 128 .180 .494 .562	.333 .182 95 .348 .540 .594	.315 .185 45 .287 .545 .588	.182 .128 51 .163 .316 .517	.292 .111 48 .315 .403 .443		.277 .176 367 .254 .505 .577
45			.099 .021 4 .104 .118 .121	.184 .145 96 .115 .378 .539	.197 .135 52 .157 .340 .476	.252 .190 14 .135 .491 .554	.163 .120 62 .127 .226 .542	.389 .095 6 .395 .482 .534		.191 .144 236 .124 .381 .543
40	.062 .009 10 .064 .067 .078		.085 .024 17 .083 .114 .118	.108 .063 55 .089 .179 .268	.140 .101 24 .077 .253 .313	.124 .080 167 .097 .180 .370	.154 .048 5 .137 .211 .213			.118 .077 278 .089 .187 .339
35	.092 .011 4 .086 .100 .110		.098 .068 19 .086 .107 .282	.082 .086 28 .069 .081 .290	.082 .034 23 .061 .128 .136	.097 .052 62 .085 .158 .225	.119 .023 6 .127 .136 .145			.093 .060 142 .063 .125 .226
30	.085 .011 3 .081 .094 .099	.065 .017 5 .057 .079 .094			.107 .093 87 .078 .179 .411	.129 .016 14 .127 .143 .159	.078 .002 3 .078 .079 .080			.107 .083 112 .077 .165 .398
25		.051 .005 8 .051 .052 .061	.045 .008 8 .046 .046 .061		.073 .089 46 .052 .076 .436	.133 .008 8 .134 .139 .144				.074 .076 70 .050 .127 .341
20		.067 .002 2 .067 .068 .069	.042 .008 16 .041 .050 .057		.031 .018 11 .018 .052 .060	.117 1				.042 .021 30 .038 .055 .089
15			.030 .006 8 .029 .037 .040		.055 .022 15 .054 .064 .103					.047 .022 23 .043 .063 .095
10					.041 .011 23 .038 .049 .066					.041 .011 23 .038 .049 .066
5					.049 .010 25 .049 .058 .070					.049 .010 25 .049 .058 .070
0					.035 .025 31 .027 .062 .090					.035 .025 31 .027 .062 .090
5					.035 .018 26 .042 .050 .053					.035 .016 26 .042 .050 .053
10				.026 .017 23 .026 .045 .053	.038 .020 5 .049 .055 .058					.028 .018 28 .027 .049 .056
15				.026 .015 17 .028 .035 .058						.026 .015 17 .028 .035 .058
20				.046 .038 12 .031 .086 .125						.046 .038 12 .031 .086 .125
25				.061 .070 11 .011 .151 .161						.061 .070 11 .011 .151 .161
30			.139 .027 16 .144 .162 .176	.045 .037 7 .050 .069 .109						.110 .053 23 .137 .153 .175
35			.210 .119 6 .147 .350 .403	.116 .091 22 .098 .231 .252						.136 .105 28 .091 .235 .370
40										
45S										

LONGITUDE

TABLE VII. - Continued. GASP AMBIENT OZONE DATA BY LATITUDE FOR JULY

(g) Flight level 410

CODE:

MEAN	ST. DEV.	N
50%	84%	98%

JULY
FL 410

LAT	15E	60E	105E	150E	165W	120W	75W	30W	15E	MEAN
70N										
65					.188 .131 .107 .256 6 .394	.502 1				.233 .140 .148 .418 7 .491
60				.386 .386 .077 .438 2 .459		.428 .422 .137 .570 14 .623	.487 .511 .117 .605 50 .684	.358 .345 .125 .491 25 .595		.441 .457 .134 .571 91 .679
55				.311 .315 .162 .520 36 .558		.483 .520 .105 .567 36 .601	.413 .507 .140 .576 48 .607	.460 .511 .145 .574 63 .646		.430 .501 .157 .566 103 .642
50				.228 .228 .098 .320 65 .456	.183 .133 .140 .179 8 .494	.309 .270 .183 .550 111 .602	.283 .246 .158 .434 24 .598	.341 .346 .091 .400 16 .541		.280 .170 .159 .481 224 .598
45	.350 .337 .112 .464 7 .508		.152 .115 .094 .239 14 .374	.209 .207 .110 .288 78 .476	.267 .231 .155 .477 79 .561	.207 .166 .118 .316 96 .533	.362 .362 .110 .436 2 .467	.091 .090 .007 .093 8 .106		.223 .160 .132 .357 264 .540
40	.209 .167 .135 .312 11 .499		.100 .089 .041 .116 56 .248	.268 .223 .190 .504 14 .510	.193 .168 .117 .274 52 .494	.159 .130 .103 .244 80 .451	.314 1			.162 .101 .115 .250 214 .507
35	.058 .056 .009 .069 6 .071		.079 .083 .021 .099 14 .110		.076 .050 .035 .114 11 .132	.127 .093 .079 .170 23 .338				.096 .067 .061 .128 54 .277
30	.053 .051 .004 .057 6 .059				.066 .059 .022 .090 31 .117					.063 .057 .020 .085 37 .116
25					.065 .061 .020 .089 29 .106					.065 .061 .020 .089 29 .106
20					.059 .064 .023 .077 27 .105					.059 .064 .023 .077 27 .105
15					.038 .039 .016 .054 14 .068					.038 .037 .016 .054 14 .068
10					.037 .036 .003 .039 4 .041					.037 .036 .003 .039 4 .041
5										
0										
5										
10										
15				.038 .040 .009 .047 4 .049						.038 .040 .009 .047 4 .049
20				.048 .051 .022 .063 8 .078						.048 .051 .022 .063 8 .078
25				.088 .077 .034 .098 16 .175						.088 .076 .034 .098 16 .175
30				.135 .121 .053 .189 15 .203						.135 .121 .053 .189 15 .203
35				.211 .187 .108 .265 32 .474						.211 .187 .108 .265 32 .474
40										
45S										

LONGITUDE

TABLE VII. - Concluded. GASP AMBIENT OZONE DATA BY LATITUDE FOR JULY

(h) Flight level 430

CODE:

MEAN	ST. DEV.	N
50%	84%	98%

JULY
FL 430

LAT	15E	60E	105E	150E	165W	120W	75W	30W	15E	MEAN	LAT
70N											70N
65											65
60											60
55				.303 .077 3 .258 .362 .405			.296 .029 6 .302 .324 .333			.298 .050 9 .295 .331 .399	55
50				.217 .060 13 .232 .281 .298			.245 .078 27 .269 .319 .340			.236 .073 40 .229 .308 .339	50
45			.259 .186 6 .165 .509 .526	.263 .138 15 .233 .427 .517	.327 .078 9 .368 .379 .392	.205 .070 9 .159 .280 .328	.286 .126 28 .263 .444 .523			.273 .129 67 .262 .412 .528	45
40			.236 .141 30 .243 .372 .544	.197 .096 14 .151 .341 .362	.256 1	.147 .074 7 .132 .154 .296				.215 .126 52 .126 .341 .542	40
35			.188 .126 4 .166 .302 .368			.120 .016 3 .123 .133 .136				.159 .102 7 .123 .227 .358	35
30											30
25											25
20											20
15											15
10											10
5											5
0											0
5											5
10											10
15											15
20											20
25											25
30											30
35				.340 .182 54 .328 .503 .720						.340 .182 54 .328 .503 .720	35
40											40
45S											45S

LONGITUDE

TABLE VIII. - GASP AMBIENT OZONE DATA BY LATITUDE FOR AUGUST

(a) Flight level 290

CODE:

MEAN	ST. DEV.	N
50%	84%	98%

AUGUST
FL 290

LAT	15E	60E	105E	150E	165W	120W	75W	30W	15E	MEAN
70N										
65										
60										
55								.071 1		.071 1
50				.037 .002 2 .037 .038 .039	.067 .025 10 .075 .090 .099		.081 .010 18 .082 .089 .099	.078 .020 47 .076 .091 .115		.076 .020 77 .077 .090 .110
45	.062 .013 20 .080 .093 .106			.046 .008 6 .046 .053 .056	.060 .008 7 .065 .067 .068	.054 .002 3 .055 .056 .056	.064 .005 10 .064 .069 .072	.083 .003 3 .081 .085 .087		.069 .016 49 .067 .085 .101
40	.099 .038 26 .092 .118 .193		.049 .011 5 .051 .058 .063	.058 .005 2 .058 .061 .062	.073 .017 4 .076 .089 .089	.071 .035 7 .081 .107 .110	.067 .015 11 .061 .077 .101			.081 .035 55 .076 .111 .127
35	.067 .015 54 .068 .083 .096		.042 .009 5 .043 .051 .051		.064 .038 8 .048 .098 .137	.066 .016 8 .063 .075 .098	.079 .012 5 .082 .089 .096			.066 .020 30 .060 .083 .106
30	.067 .028 34 .058 .082 .160	.062 .013 26 .065 .072 .090	.050 1			.058 .002 2 .058 .059 .059	.087 .013 4 .094 .096 .096			.066 .023 67 .059 .081 .135
25	.072 .028 5 .052 .101 .114	.024 .013 14 .022 .030 .055	.047 .002 3 .047 .049 .050		.031 1	.104 1				.040 .028 24 .026 .056 .110
20		.034 .010 20 .034 .040 .052	.039 .009 4 .039 .046 .050		.035 .012 10 .041 .047 .049	.063 1				.036 .011 35 .037 .047 .056
15		.022 .010 18 .024 .034 .038	.022 .008 3 .017 .028 .032		.025 1	.060 1				.024 .012 23 .025 .034 .051
10		.029 .007 17 .031 .035 .040	.013 1			.044 1				.029 .008 19 .031 .035 .043
5		.026 .007 23 .025 .032 .041				.041 1				.027 .008 24 .025 .034 .042
0		.032 .009 10 .035 .040 .041	.019 .004 6 .018 .021 .025							.027 .010 16 .024 .040 .041
5			.018 .003 8 .017 .022 .023							.018 .003 8 .017 .022 .023
10			.025 .006 2 .025 .028 .030	.018 1						.022 .005 3 .019 .026 .030
15		.072 .014 5 .073 .065 .093	.018 1	.027 .003 5 .025 .030 .031						.047 .025 11 .031 .076 .091
20		.047 .008 6 .043 .054 .061	.040 1	.019 1			.048 .014 2 .048 .057 .060			.043 .012 10 .042 .057 .062
25			.063 .024 11 .049 .087 .104	.025 .001 4 .025 .026 .027						.053 .027 15 .042 .081 .103
30			.065 .028 15 .056 .092 .112							.065 .028 15 .056 .092 .112
35			.054 .017 7 .058 .067 .079	.050 .010 8 .055 .059 .061						.052 .014 15 .057 .064 .077
40										
45S										

LONGITUDE

TABLE VIII. - Continued. GASP AMBIENT OZONE DATA BY LATITUDE FOR AUGUST

(b) Flight level 310

CODE:

MEAN	ST. DEV.	N
50%	84%	98%

AUGUST
FL 310

LAT	15E	60E	105E	150E	165W	120W	75W	30W	15E	MEAN
70N										
65										
60										
55					.134 .113 .050 .202 9 .204		.097 .090 .034 .108 14 .177	.096 .084 .040 .102 14 .204		.106 .088 .044 .135 37 .211
50				.044 1	.196 .185 .033 .232 10 .258		.076 .075 .002 .078 3 .079	.084 .074 .043 .092 54 .255		.100 .078 .057 .168 68 .260
45	.075 .072 .018 .089 17 .116					.048 .046 .005 .052 3 .055		.083 .085 .018 .101 10 .107		.075 .066 .020 .097 30 .114
40	.069 .064 .017 .084 75 .115		.053 .056 .007 .059 3 .060	.045 .046 .006 .051 6 .052	.072 .074 .026 .081 7 .117	.063 .068 .021 .090 14 .095	.085 .091 .013 .096 7 .098	.085 .082 .010 .093 3 .097		.068 .065 .019 .089 115 .118
35	.064 .062 .017 .079 32 .100		.055 .053 .016 .065 13 .090		.067 .061 .036 .103 32 .143	.057 .057 .010 .067 4 .070				.064 .060 .026 .084 81 .131
30	.066 .068 .013 .075 21 .091	.047 .046 .010 .054 50 .073	.052 .052 .004 .055 3 .057		.065 .072 .026 .092 9 .098	.066 1				.054 .049 .016 .070 84 .092
25	.047 .047 .008 .053 15 .065	.034 .034 .009 .041 26 .050	.043 .041 .008 .052 8 .055	.042 .042 .002 .044 4 .044	.041 .041 .004 .044 2 .045					.040 .039 .010 .050 55 .061
20		.027 .028 .006 .031 31 .038	.041 .042 .003 .043 5 .046	.038 .037 .009 .044 12 .057	.032 .035 .012 .037 14 .046					.031 .020 .010 .037 62 .052
15		.026 .024 .008 .032 35 .045	.020 .018 .008 .025 7 .035	.017 .016 .009 .018 13 .038	.026 .026 .007 .034 18 .035	.067 1				.024 .022 .010 .032 74 .045
10		.030 .027 .006 .039 27 .043		.022 1	.019 .019 .003 .019 8 .023	.041 .041 .010 .047 2 .050	.042 1			.028 .026 .008 .039 39 .046
5		.025 .023 .007 .036 21 .038		.014 .013 .006 .019 6 .024						.023 .021 .009 .035 27 .037
0		.041 .041 .003 .044 7 .044	.031 .029 .008 .034 8 .047				.066 1			.038 .031 .010 .044 16 .061
5		.034 .034 .005 .039 10 .041	.024 .023 .006 .029 22 .037				.062 .063 .002 .064 4 .064			.031 .027 .013 .039 35 .064
10		.033 .035 .008 .042 11 .046	.023 .020 .006 .029 25 .034	.036 1			.071 .070 .002 .073 4 .074			.031 .027 .015 .039 41 .072
15			.027 .027 .005 .031 16 .035	.032 1			.066 .065 .001 .067 5 .068			.036 .027 .017 .065 22 .067
20		.042 1	.028 .028 .004 .031 19 .036	.056 1			.057 .055 .005 .060 7 .066			.037 .029 .014 .055 28 .063
25			.042 .037 .022 .066 40 .090	.027 1			.061 1			.042 .037 .022 .064 42 .090
30			.059 .059 .022 .080 35 .106							.059 .059 .022 .080 35 .106
35			.099 .070 .088 .108 8 .294	.085 .083 .031 .102 6 .144						.092 .060 .066 .108 16 .272
40										
45S										

LONGITUDE

TABLE VIII. - Continued. GASP AMBIENT OZONE DATA BY LATITUDE FOR AUGUST

(c) Flight level 330

CODE:

MEAN	ST. DEV.	N
50%	84%	98%

AUGUST
FL 330

LAT	15E–60E	60E–105E	105E–150E	150E–165W	165W–120W	120W–75W	75W–30W	30W–15E	MEAN
70N									
65									
60			.086 .077 .024 .117 6 .119	.115 1	.153 .088 .090 .262 5 .267	.369 .354 .040 .404 5 .434			.191 .117 .130 .346 17 .421
55			.072 .070 .018 .096 11 .098	.130 .132 .023 .143 6 .163	.142 .113 .072 .198 11 .296	.211 .239 .125 .343 18 .414	.112 .080 .093 .126 57 .369		.129 .084 .099 .230 103 .398
50			.084 .086 .020 .094 18 .133		.070 .071 .010 .079 4 .082	.142 .109 .084 .242 37 .333	.093 .085 .036 .117 48 .142		.107 .091 .061 .121 107 .324
45	.094 .082 .031 .139 32 .165		.083 .072 .035 .116 12 .159		.068 .067 .021 .092 13 .101	.096 .094 .027 .119 70 .167	.076 .072 .010 .085 6 .095		.091 .086 .029 .118 133 .172
40	.100 .083 .053 .143 77 .262		.089 .096 .038 .127 5 .134 .063 .045 .037 .097 20 .146	.094 1	.060 .056 .024 .086 18 .107	.078 .079 .021 .092 14 .117	.056 .056 .013 .064 2 .068		.086 .075 .047 .117 137 .231
35	.062 .061 .015 .076 75 .090		.049 .046 .018 .068 26 .090	.070 .061 .040 .086 44 .217	.091 .097 .034 .111 8 .137				.063 .059 .028 .081 153 .134
30	.068 .067 .016 .035 22 .097	.053 .048 .012 .065 38 .079	.040 .040 .018 .052 32 .079	.046 .042 .015 .057 85 .083	.051 .043 .020 .076 21 .094	.060 1			.049 .046 .018 .068 199 .090
25	.042 .043 .004 .046 20 .047	.043 .041 .013 .056 68 .070	.043 .044 .015 .057 40 .070 .078 .083 .024 .101 12 .117	.043 .042 .018 .063 48 .078	.070 .073 .021 .089 14 .103	.076 .069 .014 .087 5 .100			.048 .044 .019 .066 207 .101
20		.032 .030 .008 .040 77 .049	.031 .030 .010 .038 10 .050 .032 .035 .011 .041 22 .047	.026 .019 .013 .036 12 .054	.058 .060 .007 .064 4 .066	.054 .056 .013 .066 5 .069			.033 .028 .012 .043 130 .063
15		.030 .028 .008 .038 39 .045	.024 .025 .007 .029 15 .034 .031 .031 .002 .033 6 .035	.025 .023 .002 .026 3 .028	.068 .071 .013 .081 13 .083	.026 .024 .015 .043 5 .044			.034 .029 .017 .045 81 .081
10		.026 .026 .005 .030 15 .039	.018 .018 .001 .019 4 .019	.030 .024 .013 .045 5 .046		.046 .045 .006 .047 8 .058			.031 .023 .012 .045 32 .052
5		.032 .027 .014 .050 17 .058	.017 .017 .003 .020 5 .023		.042 .038 .009 .045 7 .060	.039 .039 .007 .047 17 .050			.035 .030 .012 .046 46 .059
0		.027 .026 .006 .033 11 .036	.018 .019 .005 .022 19 .027			.053 .052 .012 .062 17 .078			.033 .028 .018 .053 47 .071
5		.041 .043 .006 .044 6 .045	.019 .019 .006 .022 23 .033			.048 .046 .005 .052 7 .056			.028 .021 .014 .044 36 .054
10		.040 .038 .005 .043 6 .049	.023 .022 .007 .031 27 .033 .028 .027 .003 .031 5 .033			.046 .048 .004 .049 5 .050			.029 .030 .010 .039 43 .050
15		.038 .039 .004 .041 8 .044	.027 .028 .008 .036 34 .041 .026 .027 .005 .029 9 .032	.042 .044 .010 .051 14 .053		.058 .058 .002 .059 8 .062			.034 .031 .013 .048 73 .059
20		.055 .050 .014 .073 7 .073	.036 .034 .014 .043 52 .071 .036 .032 .011 .048 17 .051			.055 .055 .000 .055 2 .055			.038 .034 .014 .050 78 .073
25			.073 .064 .052 .082 32 .227 .060 .044 .040 .096 51 .187						.065 .053 .045 .094 83 .223
30			.077 .068 .024 .112 22 .126 .101 .082 .057 .154 65 .275						.095 .075 .052 .132 87 .266
35			.094 .079 .076 .112 38 .333 .138 .121 .071 .218 21 .286						.109 .086 .077 .171 59 .324
40			.183 .130 .101 .305 9 .375						.183 .130 .101 .305 9 .375
45S			.372 1						.372 1

LONGITUDE

TABLE VIII. - Continued. GASP AMBIENT OZONE DATA BY LATITUDE FOR AUGUST

(d) Flight level 350

CODE:

MEAN	ST. DEV.	N
50%	84%	98%

AUGUST
FL 350

LAT	15E	60E	105E	150E	165W	120W	75W	30W	15E	MEAN
70N										
65					.050 .010 4 .045 .057 .066	.061 .012 4 .062 .073 .075	.207 .066 10 .210 .276 .313	.212 .092 9 .229 .263 .375		.164 .097 27 .137 .262 .356
60					.296 .074 11 .314 .335 .364	.275 .118 67 .299 .392 .460		.132 .085 24 .097 .225 .337		.243 .123 102 .266 .369 .453
55				.119 1		.221 .114 52 .212 .340 .437	.229 .136 28 .202 .381 .427	.161 .094 65 .131 .256 .400		.195 .115 146 .137 .331 .425
50				.113 .068 48 .085 .171 .303	.047 .009 10 .050 .054 .059	.161 .115 50 .111 .277 .400	.111 .082 114 .079 .171 .373	.119 .075 132 .088 .165 .358		.119 .084 354 .080 .191 .375
45	.132 .067 32 .105 .201 .301		.178 .049 3 .149 .216 .243	.096 .065 81 .063 .145 .284	.072 .044 39 .055 .102 .192	.101 .070 77 .077 .146 .315	.147 .102 55 .091 .296 .365	.118 .045 8 .100 .127 .219		.109 .076 295 .086 .164 .356
40	.143 .078 35 .124 .226 .314		.060 .017 36 .061 .072 .096	.080 .041 34 .065 .125 .163	.077 .045 245 .068 .105 .189	.075 .045 150 .068 .099 .217	.089 .010 10 .090 .095 .108	.118 .042 3 .101 .152 .173		.080 .049 513 .070 .109 .228
35	.062 .023 137 .057 .077 .122		.065 .019 12 .068 .077 .100	.067 .027 6 .060 .076 .118	.064 .037 113 .056 .091 .177	.058 .034 6 .052 .101 .102				.063 .029 274 .042 .087 .130
30	.050 .016 64 .051 .068 .084	.039 .018 35 .034 .059 .076			.057 .032 185 .054 .080 .144	.067 .010 10 .066 .075 .083				.054 .028 294 .047 .073 .121
25	.042 .007 37 .042 .049 .053	.038 .008 15 .034 .045 .053	.030 1	.058 .010 7 .057 .066 .075	.046 .021 162 .042 .066 .093	.061 .011 18 .063 .070 .081				.046 .018 240 .040 .064 .093
20		.038 .009 38 .036 .047 .061	.026 .009 6 .023 .029 .044	.044 .017 60 .038 .054 .079	.052 .034 52 .046 .065 .187	.072 .016 15 .078 .081 .101				.047 .024 171 .039 .065 .102
15		.031 .009 18 .031 .037 .049	.025 .006 27 .025 .032 .036	.029 .010 10 .026 .042 .044	.030 .012 27 .027 .036 .062	.060 .006 11 .062 .066 .067				.032 .014 93 .028 .044 .067
10		.025 .015 32 .021 .041 .062	.016 .003 4 .017 .018 .019	.025 .004 5 .024 .030 .030	.025 .008 21 .023 .032 .042	.062 .012 17 .061 .070 .088	.050 .016 9 .042 .065 .073			.034 .020 88 .024 .060 .076
5		.024 .012 23 .019 .040 .045	.015 .002 7 .015 .017 .018	.027 .004 9 .025 .031 .031	.027 .014 26 .021 .042 .058	.043 .001 3 .043 .044 .045	.052 .010 15 .052 .060 .072			.030 .016 83 .023 .047 .063
0		.028 .011 21 .028 .040 .046	.020 .007 28 .020 .027 .032	.021 .010 39 .019 .034 .041	.029 .018 6 .019 .052 .058		.056 .009 18 .055 .065 .075			.028 .016 112 .019 .046 .066
5		.028 .004 8 .028 .030 .033	.022 .007 39 .020 .027 .037	.021 .008 34 .020 .026 .040			.063 .011 21 .059 .074 .083			.030 .018 102 .022 .052 .075
10		.026 .000 4 .026 .027 .027	.024 .006 35 .022 .030 .040	.026 .008 36 .026 .032 .045			.077 .015 20 .075 .093 .101			.036 .023 95 .026 .068 .095
15		.028 .004 13 .026 .034 .036	.026 .007 38 .026 .034 .039	.025 .007 25 .027 .032 .036	.032 .004 12 .033 .034 .039		.072 .017 18 .074 .084 .101			.035 .019 106 .029 .042 .085
20		.033 .005 12 .033 .039 .041	.029 .010 35 .025 .042 .047	.037 .011 37 .034 .050 .058			.071 .016 6 .065 .084 .101			.036 .015 90 .025 .048 .068
25			.060 .051 34 .048 .091 .191	.059 .033 46 .049 .086 .175			.090 .042 3 .066 .123 .147			.061 .042 83 .049 .088 .177
30			.071 .026 42 .064 .101 .130	.090 .046 64 .078 .141 .199			.352 .038 7 .356 .384 .398			.099 .076 113 .068 .142 .368
35			.128 .056 44 .123 .190 .256	.173 .093 32 .159 .227 .385			.157 .046 3 .147 .195 .215			.147 .076 79 .139 .217 .282
40				.179 .058 11 .158 .233 .301						.179 .058 11 .158 .233 .301
45S										

LONGITUDE

TABLE VIII. - Continued. GASP AMBIENT OZONE DATA BY LATITUDE FOR AUGUST

(e) Flight level 370

CODE:

MEAN	ST. DEV.	N
50%	84%	98%

AUGUST
FL 370

LAT	15E	60E	105E	150E	165W	120W	75W	30W	15E	MEAN	LAT
70N							.437 .476 .072 .484 11 .486			.437 .476 .072 .484 11 .486	70N
65				.118 .105 .060 .187 13 .230	.194 .134 .137 .376 77 .467	.307 .295 .147 .444 7 .506	.412 .477 .122 .511 11 .519	.117 .110 .024 .135 8 .165		.208 .130 .147 .392 116 .514	65
60				.244 .219 .121 .387 34 .451	.254 .264 .113 .366 45 .460	.242 .210 .075 .320 17 .386	.296 .309 .115 .405 13 .470	.159 .130 .073 .219 8 .294		.247 .244 .112 .374 117 .467	60
55				.258 .255 .119 .392 58 .433	.205 .187 .081 .263 12 .367	.197 .152 .121 .290 35 .511	.270 .225 .170 .467 36 .529	.220 .159 .136 .411 39 .458		.237 .170 .136 .402 180 .503	55
50				.118 .071 .106 .214 82 .401	.192 .200 .134 .331 116 .470	.143 .123 .108 .285 34 .333	.194 .130 .121 .365 88 .421	.130 .126 .048 .174 76 .244		.161 .070 .116 .290 396 .446	50
45	.166 .151 .060 .244 24 .260		.247 .247 .007 .252 2 .254	.130 .087 .109 .250 182 .409	.127 .089 .104 .250 67 .357	.109 .094 .069 .170 47 .316	.097 .091 .050 .121 69 .203	.134 .121 .050 .178 31 .236		.125 .056 .092 .209 422 .379	45
40	.094 .073 .061 .146 22 .241		.061 .058 .026 .092 63 .128	.081 .056 .078 .107 110 .420	.087 .067 .064 .113 54 .313	.069 .062 .035 .095 240 .163	.096 .092 .016 .107 14 .135			.074 .061 .052 .098 503 .252	40
35	.055 .055 .011 .061 15 .076		.049 .047 .015 .061 53 .094	.056 .053 .022 .066 25 .116	.066 .060 .034 .090 76 .142	.081 .087 .026 .101 49 .129	.099 .101 .011 .108 5 .114			.064 .058 .029 .090 223 .127	35
30	.072 .075 .014 .085 17 .094	.054 .053 .019 .076 18 .085	.034 .040 .014 .046 14 .051		.055 .049 .027 .079 203 .117	.087 .088 .002 .088 3 .088	.112 .125 .025 .131 3 .134			.056 .050 .027 .082 258 .124	30
25	.042 1	.067 .065 .013 .082 14 .083	.061 .061 .009 .064 11 .080		.047 .042 .018 .066 179 .083	.065 .062 .010 .074 3 .078	.092 .092 .026 .118 6 .122			.050 .048 .020 .068 214 .089	25
20		.038 .037 .013 .057 18 .062	.044 .043 .016 .060 19 .077	.044 .041 .011 .053 9 .062	.037 .035 .014 .052 38 .064	.073 .077 .010 .081 7 .083	.077 .072 .012 .085 4 .096			.043 .039 .018 .063 95 .081	20
15		.026 .027 .011 .038 34 .043	.025 .026 .007 .030 18 .035		.027 .024 .014 .037 33 .063	.066 .069 .012 .074 7 .083	.065 .064 .005 .068 4 .072			.031 .025 .017 .043 96 .072	15
10		.028 .028 .004 .031 16 .036	.021 .021 .005 .027 15 .028	.021 .014 .011 .037 11 .041	.025 .021 .011 .036 43 .053	.067 .070 .014 .079 15 .089	.060 .059 .005 .065 4 .068			.032 .021 .019 .053 104 .079	10
5		.025 .026 .007 .030 12 .038		.021 .016 .012 .031 38 .050	.026 .024 .012 .036 38 .052		.067 1			.024 .023 .012 .033 89 .055	5
0		.039 1		.022 .022 .009 .029 39 .044	.029 .032 .007 .034 17 .041		.064 .069 .011 .075 8 .075			.029 .025 .016 .041 65 .075	0
5				.028 .025 .011 .035 51 .054	.056 .060 .010 .062 7 .071		.074 .082 .016 .085 21 .098			.043 .032 .024 .076 79 .086	5
10			.017 .017 .003 .019 10 .021	.029 .027 .009 .035 42 .051	.056 1		.070 .066 .014 .088 21 .095			.039 .028 .022 .061 74 .089	10
15			.027 .028 .006 .033 4 .034	.034 .029 .014 .047 34 .069			.067 .063 .012 .079 16 .096			.043 .032 .020 .063 54 .089	15
20			.020 .018 .007 .022 6 .034	.039 .039 .011 .049 17 .056			.059 .058 .010 .068 11 .074			.042 .039 .017 .058 34 .071	20
25			.039 .036 .012 .052 16 .061	.106 1			.218 .218 .125 .302 2 .337			.061 .037 .070 .067 19 .257	25
30			.132 .062 .129 .337 33 .433	.124 .110 .033 .149 10 .198			.483 .484 .023 .502 4 .512			.160 .100 .147 .354 47 .490	30
35			.172 .138 .111 .310 70 .473	.175 .159 .077 .262 16 .313			.223 1			.173 .153 .105 .294 87 .456	35
40											40
45S											45S

LONGITUDE

TABLE VIII. - Continued. GASP AMBIENT OZONE DATA BY LATITUDE FOR AUGUST

(f) Flight level 390

CODE:

MEAN	ST. DEV.	N
50%	84%	98%

AUGUST
FL 390

LAT	15E	60E	105E	150E	165W	120W	75W	30W	15E	MEAN	LAT
70N						.529 .016 6 .536 .541 .546	.513 .047 2 .513 .545 .558			.525 .028 8 .536 .546 .558	70N
65					.270 .118 96 .292 .393 .455	.380 .106 38 .377 .489 .521	.462 .093 19 .483 .540 .569			.321 .132 153 .340 .462 .539	65
60				.291 .115 54 .306 .397 .475	.294 .129 76 .323 .432 .481	.364 .105 41 .391 .501 .563	.432 .033 19 .433 .467 .490	.297 .120 27 .360 .408 .433		.323 .125 217 .360 .444 .518	60
55				.304 .097 59 .302 .394 .483	.328 .133 19 .273 .468 .500	.373 .112 26 .400 .466 .528	.340 .120 28 .406 .447 .470	.298 .070 38 .300 .371 .431		.322 .106 170 .315 .440 .507	55
50				.194 .140 148 .144 .382 .499	.172 .116 111 .142 .287 .458	.234 .113 28 .194 .342 .485	.300 .092 20 .282 .396 .416	.137 .055 35 .129 .190 .272		.190 .127 342 .133 .351 .488	50
45	.213 .088 8 .171 .329 .348		.102 .004 2 .102 .105 .106	.125 .110 125 .078 .210 .444	.207 .146 61 .158 .421 .515	.106 .063 46 .094 .137 .308	.134 .080 45 .106 .212 .370	.171 .063 27 .157 .215 .340		.145 .111 314 .091 .239 .471	45
40	.060 .009 13 .060 .067 .078		.113 .051 13 .093 .140 .244	.080 .090 107 .044 .110 .330	.106 .036 27 .096 .151 .184	.084 .038 236 .077 .123 .160	.107 .005 10 .108 .111 .114			.085 .057 406 .063 .121 .278	40
35	.037 .003 2 .037 .039 .040		.065 .032 36 .066 .097 .121	.056 .019 78 .056 .070 .105	.081 .043 19 .078 .119 .173	.076 .027 47 .076 .093 .139				.066 .029 182 .056 .093 .135	35
30			.057 .024 62 .055 .073 .112	.061 .007 14 .061 .066 .076	.082 .027 28 .086 .108 .135	.127 .013 7 .127 .135 .147				.068 .030 111 .063 .096 .133	30
25	.071 .009 7 .068 .083 .086	.076 1	.043 .019 30 .037 .066 .081		.067 .025 26 .076 .092 .101	.085 .024 6 .072 .118 .119				.059 .026 70 .044 .083 .112	25
20		.053 .008 9 .055 .060 .064	.060 .024 14 .065 .087 .096		.029 .015 24 .027 .048 .055					.043 .023 47 .046 .064 .091	20
15			.027 .014 16 .028 .038 .057		.029 .015 28 .030 .045 .060					.028 .015 44 .023 .039 .061	15
10		.017 .008 16 .019 .025 .029	.018 .006 15 .015 .025 .027	.030 .009 4 .028 .037 .044	.030 .017 31 .029 .047 .070					.024 .014 66 .015 .034 .057	10
5		.020 .004 9 .022 .023 .024		.035 .005 3 .035 .039 .041	.013 .010 9 .010 .025 .030	.047 .011 3 .048 .056 .060	.079 .011 4 .064 .086 .087			.030 .024 28 .017 .056 .086	5
0		.023 1	.024 1		.035 .016 24 .035 .052 .062		.078 .003 4 .078 .081 .083			.040 .021 30 .036 .061 .080	0
5					.032 .015 24 .029 .052 .061					.032 .016 24 .029 .052 .061	5
10				.027 .010 23 .023 .038 .050	.031 .005 4 .028 .035 .039					.028 .009 27 .024 .039 .049	10
15			.016 .002 5 .017 .018 .020	.035 .013 14 .035 .041 .062						.030 .014 19 .026 .041 .061	15
20			.018 .002 8 .017 .020 .020	.031 .009 5 .037 .039 .040						.023 .009 13 .019 .037 .040	20
25			.022 .002 7 .022 .023 .025							.022 .002 7 .022 .023 .025	25
30			.050 .021 12 .064 .067 .070							.050 .021 12 .045 .067 .070	30
35			.178 .034 3 .200 .203 .204	.265 .140 43 .276 .424 .547						.259 .137 46 .242 .422 .546	35
40											40
45S											45S

LONGITUDE

TABLE VIII. - Continued. GASP AMBIENT OZONE DATA BY LATITUDE FOR AUGUST

(g) Flight level 410

CODE:

MEAN	ST. DEV.	N
50%	84%	98%

AUGUST
FL 410

LAT	15E	60E	105E	150E	165W	120W	75W	30W	15E	MEAN
70N										
65						.489 1				.489 1
60				.366 .062 7 .398 .408 .452	.396 .035 6 .404 .423 .438	.370 .082 19 .402 .456 .493	.451 .100 30 .444 .548 .599	.448 .079 15 .442 .536 .578		.418 .093 77 .422 .519 .581
55				.381 .100 39 .403 .470 .510		.317 .113 41 .299 .451 .504	.367 .125 47 .407 .461 .536	.363 .114 95 .375 .493 .528		.358 .116 222 .376 .478 .530
50				.232 .125 65 .208 .377 .452	.157 .074 46 .174 .226 .294	.300 .124 77 .301 .431 .484	.303 .130 54 .281 .464 .492	.235 .167 14 .146 .483 .498		.254 .133 256 .176 .423 .489
45	.173 .022 10 .177 .192 .199		.142 .087 8 .106 .256 .295	.142 .075 56 .113 .221 .315	.194 .144 125 .155 .353 .569	.223 .112 102 .212 .370 .445	.139 .056 47 .119 .189 .288	.361 .071 12 .347 .450 .465		.191 .120 360 .105 .314 .474
40	.092 .033 23 .081 .122 .178		.088 .046 29 .097 .108 .204	.071 .014 12 .069 .085 .101	.157 .094 98 .133 .261 .401	.086 .062 78 .068 .120 .278	.138 .052 13 .118 .159 .272			.116 .079 253 .091 .171 .369
35	.085 .008 12 .085 .091 .100		.059 .025 12 .053 .096 .103		.072 .025 22 .068 .096 .121	.134 .057 16 .117 .204 .243				.088 .045 62 .072 .114 .217
30	.080 .018 11 .084 .100 .107				.062 .020 22 .064 .081 .097					.068 .021 33 .067 .089 .106
25		.114 .018 2 .114 .126 .131	.011 .019 9 .004 .011 .055		.050 .017 21 .044 .065 .082					.043 .030 32 .039 .065 .110
20		.075 .012 8 .077 .085 .089	.042 .021 13 .032 .066 .086		.036 .008 7 .036 .045 .047					.050 .023 28 .040 .080 .089
15			.020 .006 26 .020 .026 .031		.018 .008 8 .019 .023 .031					.020 .006 34 .019 .026 .031
10		.020 .003 6 .019 .021 .025	.020 .004 27 .020 .023 .029		.034 1					.020 .005 34 .020 .025 .031
5		.027 .004 2 .027 .029 .030	.022 .010 8 .021 .026 .039							.023 .009 10 .021 .029 .039
0										
5										
10				.026 .000 5 .026 .026 .026						.026 .000 5 .026 .026 .026
15				.032 .006 7 .030 .038 .041						.032 .006 7 .030 .038 .041
20				.037 .010 12 .035 .045 .058						.037 .010 12 .035 .045 .058
25				.054 .019 24 .047 .066 .105						.054 .019 24 .047 .066 .105
30				.144 .080 25 .121 .252 .317						.144 .080 25 .121 .252 .317
35				.270 .142 15 .267 .421 .546						.270 .142 15 .267 .421 .546
40										
45S										

LONGITUDE

TABLE VIII. - Concluded. GASP AMBIENT OZONE DATA BY LATITUDE FOR AUGUST

(h) Flight level 430

CODE:

MEAN	ST. DEV.	N
50%	84%	98%

AUGUST
FL 430

LAT	15E	60E	105E	150E	165W	120W	75W	30W	15E	MEAN
70N										
65										
60										
55				.170 .003 2 .170 .172 .173				.277 .070 8 .240 .368 .403		.256 .076 10 .225 .337 .402
50				.176 .048 12 .187 .210 .219		.245 .149 5 .216 .331 .507	.190 .018 4 .191 .206 .212			.195 .087 21 .191 .215 .408
45			.110 .083 10 .096 .144 .293	.138 .069 23 .133 .202 .273		.142 .087 24 .119 .268 .321	.297 .056 9 .285 .357 .396			.157 .095 66 .088 .270 .359
40			.076 .043 43 .066 .118 .168	.084 .019 15 .078 .093 .133		.118 .029 11 .114 .148 .167	.313 1			.088 .048 70 .062 .126 .222
35			.071 .009 6 .070 .082 .085		.156 .036 7 .144 .200 .217	.111 .029 4 .101 .135 .154				.115 .046 17 .111 .151 .213
30					.104 .019 8 .096 .124 .142					.104 .019 8 .096 .124 .142
25			.042 .009 6 .039 .054 .056							.042 .009 6 .039 .054 .056
20			.048 .014 7 .044 .061 .065							.048 .014 7 .044 .061 .065
15			.032 .014 18 .032 .044 .056							.032 .014 18 .032 .044 .056
10			.027 .015 19 .026 .037 .055							.027 .015 19 .026 .037 .055
5		.018 .004 4 .018 .022 .022	.021 .007 8 .021 .027 .031							.020 .006 12 .018 .027 .031
0										
5										
10										
15										
20										
25										
30										
35				.209 .025 7 .202 .242 .246						.209 .025 7 .202 .242 .246
40										
45S										

LONGITUDE

TABLE IX. - GASP AMBIENT OZONE DATA BY LATITUDE FOR SEPTEMBER

(a) Flight level 290

CODE:

MEAN	ST. DEV.	N
50%	84%	98%

SEPTEMBER
FL 290

LAT	15E	60E	105E	150E	165W	120W	75W	30W	15E	MEAN
70N										
65										
60										
55								.074 .074 .014 .084 2 .087	.074 .074 .014 .084 2 .087	55
50								.080 .073 .036 .089 25 .189	.080 .073 .036 .089 25 .189	50
45	.085 .081 .021 .107 20 .127						.040 .039 .004 .043 3 .045	.088 .087 .010 .100 6 .102	.081 .080 .023 .102 29 .123	45
40	.084 .080 .027 .103 21 .152				.038 .038 .011 .045 2 .049	.046 .039 .017 .058 13 .081	.050 .046 .017 .062 20 .091		.062 .055 .027 .085 56 .141	40
35	.053 .050 .012 .065 7 .069		.034 .024 .021 .050 5 .070		.030 .031 .011 .037 13 .046	.023 .020 .012 .033 3 .038			.036 .032 .017 .049 28 .071	35
30	.055 .063 .013 .065 3 .066	.065 .064 .007 .071 13 .075			.043 .042 .009 .054 9 .056				.056 .058 .013 .069 25 .074	30
25	.073 1		.070 .070 .006 .073 2 .075		.027 .031 .014 .040 6 .042				.041 .039 .024 .070 9 .075	25
20		.042 .040 .006 .046 8 .053	.048 .049 .021 .070 6 .074		.017 .018 .014 .024 7 .041				.035 .039 .019 .052 21 .072	20
15		.031 .030 .001 .032 3 .033				.029 .030 .002 .031 3 .032			.030 .030 .002 .032 6 .033	15
10		.029 .029 .004 .031 6 .035				.041 1			.030 .030 .006 .035 7 .040	10
5		.028 1							.028 1	5
0			.026 .027 .003 .029 3 .030						.026 .027 .003 .029 3 .030	0
5			.021 .021 .002 .022 7 .024						.021 .021 .002 .022 7 .024	5
10			.022 .022 .000 .022 6 .022						.022 .022 .000 .022 6 .022	10
15			.019 .019 .001 .019 2 .019	.012 .012 .012 .020 2 .024					.015 .019 .009 .022 4 .024	15
20		.078 1		.013 .012 .006 .013 9 .027					.020 .013 .020 .023 10 .069	20
25			.083 .082 .007 .088 6 .094	.037 .038 .013 .050 4 .052			.077 1		.066 .077 .024 .084 11 .093	25
30			.092 .092 .011 .099 2 .103	.082 .077 .021 .103 11 .119					.084 .080 .020 .103 13 .118	30
35			.082 .068 .037 .091 8 .164	.084 .048 .092 .149 4 .229					.083 .064 .061 .113 12 .226	35
40			.121 1						.121 1	40
45S										45S

LONGITUDE

TABLE IX. - Continued. GASP AMBIENT OZONE DATA BY LATITUDE FOR SEPTEMBER

(b) Flight level 310

CODE:

MEAN	ST. DEV.	N
50%	84%	98%

SEPTEMBER
FL 310

LAT	15E	60E	105E	150E	165W	120W	75W	30W	15E	MEAN
70N										
65										
60							.083 .039 15 .068 .102 .179	.088 .049 16 .080 .101 .215		.086 .045 31 .072 .103 .202
55							.187 .101 26 .158 .288 .365	.070 .032 46 .061 .099 .147		.112 .087 72 .080 .194 .358
50							.068 .023 36 .060 .094 .104	.069 .029 49 .056 .094 .153		.069 .026 85 .056 .095 .136
45					.103 .052 6 .089 .145 .196	.119 .021 2 .119 .132 .138	.065 .020 39 .061 .065 .107	.079 .021 13 .088 .098 .106		.073 .029 60 .062 .097 .137
40	.111 .015 2 .111 .121 .125		.032 .002 3 .033 .034 .034	.081 .039 11 .071 .122 .155	.059 .020 7 .053 .085 .089	.051 .027 41 .050 .077 .104	.067 .019 11 .058 .087 .104			.059 .030 75 .052 .090 .134
35	.078 .018 12 .073 .095 .114		.047 .020 20 .043 .061 .089	.116 .018 2 .116 .128 .133	.034 .018 12 .030 .055 .062	.043 .019 9 .042 .063 .069				.053 .027 55 .052 .072 .118
30	.058 .012 13 .054 .066 .086	.021 1								.056 .015 14 .054 .066 .086
25	.045 .005 2 .045 .048 .050				.020 .001 2 .020 .021 .021					.032 .013 4 .030 .045 .049
20			.054 .014 4 .052 .065 .075		.014 .005 3 .014 .018 .020					.037 .023 7 .036 .055 .073
15			.019 1		.009 .005 8 .007 .014 .018	.044 1				.014 .011 10 .007 .019 .040
10			.013 1	.010 .015 8 .005 .010 .044	.016 .013 5 .008 .028 .037		.035 1			.014 .015 15 .007 .032 .046
5		.030 1		.009 .003 16 .010 .012 .013						.010 .005 17 .010 .012 .025
0		0.000 1		.011 .002 14 .012 .013 .015						.011 .004 15 .012 .013 .015
5				.009 .001 9 .010 .010 .011						.009 .001 9 .010 .010 .011
10										
15			.019 1	.008 .011 3 0.000 .016 .022						.011 .011 4 .010 .021 .023
20			.023 .001 4 .023 .024 .024	.056 .008 2 .056 .061 .064			.053 1			.037 .016 7 .024 .053 .063
25			.030 .011 5 .023 .044 .045	.067 .010 5 .063 .072 .084						.049 .021 10 .040 .064 .082
30			.061 .014 5 .059 .075 .082	.086 .019 8 .083 .099 .124						.077 .021 13 .078 .087 .122
35				.088 .019 6 .096 .105 .106			.046 1			.082 .023 7 .089 .105 .106
40										
45S										

LONGITUDE

TABLE IX. - Continued. GASP AMBIENT OZONE DATA BY LATITUDE FOR SEPTEMBER

(c) Flight level 330

CODE:

MEAN	ST. DEV.	N
50%	84%	98%

SEPTEMBER
FL 330

LAT	15E	60E	105E	150E	165W	120W	75W	30W	15E	MEAN
70N										
65						.369 1	.179 .067 17 .155 .199 .351	.240 .028 5 .222 .272 .279		.201 .073 23 .174 .273 .361
60				.107 .034 6 .092 .124 .173	.120 1	.199 .132 14 .210 .371 .383	.160 .032 6 .173 .187 .191	.112 .098 15 .083 .244 .311		.147 .106 42 .075 .263 .379
55				.123 .066 8 .095 .200 .227	.095 .047 14 .063 .147 .178	.084 .036 11 .073 .114 .157	.107 .071 20 .062 .194 .205	.100 .066 55 .069 .211 .248		.101 .063 108 .045 .188 .246
50				.097 .023 25 .098 .122 .133	.221 .015 10 .226 .232 .237	.076 .017 7 .084 .090 .093	.086 .070 129 .053 .180 .289	.080 .040 94 .066 .109 .182		.090 .061 265 .064 .152 .236
45			.055 .004 3 .052 .058 .061	.100 .059 24 .065 .163 .208	.064 .020 9 .067 .079 .088	.056 .034 25 .060 .078 .133	.086 .069 93 .057 .125 .324	.077 .045 24 .054 .145 .163		.081 .060 178 .055 .125 .268
40	.092 .018 11 .083 .112 .118		.053 .016 21 .051 .069 .087	.150 .055 18 .145 .194 .272	.042 .012 7 .037 .050 .066	.053 .030 34 .045 .079 .131	.061 .021 16 .055 .091 .102			.074 .048 107 .056 .117 .199
35	.071 .021 13 .066 .084 .114		.046 .016 19 .047 .061 .069		.033 .015 34 .032 .042 .073	.068 .039 11 .049 .107 .134	.079 .008 6 .062 .064 .084			.050 .027 83 .043 .080 .113
30	.053 .012 9 .047 .066 .076	.062 .011 15 .066 .072 .079	.043 .018 16 .039 .063 .073		.043 .013 24 .045 .056 .062	.050 .016 7 .047 .069 .075	.092 .006 3 .088 .096 .100			.051 .018 74 .038 .068 .086
25		.038 .007 9 .041 .042 .049	.055 .017 23 .063 .068 .078		.023 .012 21 .025 .034 .043	.050 .015 8 .055 .059 .066	.058 .009 7 .058 .067 .070			.042 .020 68 .038 .065 .076
20		.032 .003 7 .033 .036 .036	.041 .020 6 .040 .053 .075		.027 .005 4 .028 .031 .033	.066 .005 6 .066 .070 .071	.051 .008 2 .051 .056 .058			.043 .018 25 .036 .066 .075
15		.032 .005 9 .034 .037 .041	.026 .009 6 .029 .035 .038			.062 .003 4 .063 .064 .065				.037 .015 19 .034 .059 .064
10		.030 .006 16 .028 .036 .040	.029 .003 8 .030 .032 .033							.029 .005 24 .028 .032 .040
5		.025 .002 12 .025 .028 .030	.012 .010 5 .016 .020 .024	.035 1						.022 .009 18 .025 .028 .033
0		.027 .003 10 .027 .031 .031	.017 .018 6 .012 .036 .043	.019 .009 4 .018 .028 .032						.023 .012 20 .024 .031 .040
5		.025 .002 10 .026 .028 .028	.039 .004 6 .039 .042 .045	.020 .010 15 .024 .029 .030						.025 .010 31 .027 .032 .043
10		.032 .004 6 .030 .037 .039	.040 .005 2 .040 .043 .044	.016 .009 20 .015 .024 .034						.021 .011 28 .019 .033 .041
15		.041 .003 6 .040 .043 .045	.018 .001 11 .018 .020 .021	.012 .008 8 .014 .022 .024			.059 .010 4 .055 .066 .075			.027 .017 29 .019 .044 .065
20		.050 .005 5 .050 .055 .056	.024 .004 3 .021 .027 .030	.020 .013 10 .018 .029 .048			.076 .011 5 .079 .084 .088			.039 .025 23 .033 .065 .085
25				.041 .022 14 .035 .059 .081			.064 .025 4 .062 .088 .092			.046 .024 18 .036 .077 .089
30			.161 1	.062 .035 18 .056 .101 .112			.043 .012 5 .041 .053 .060			.062 .038 24 .054 .101 .141
35			.136 .071 9 .117 .152 .294	.101 .034 2 .101 .124 .134						.130 .067 11 .117 .150 .288
40										
45S										

LONGITUDE

TABLE IX. - Continued. GASP AMBIENT OZONE DATA BY LATITUDE FOR SEPTEMBER

(d) Flight level 350

CODE:

MEAN	ST. DEV.	N
50%	84%	98%

SEPTEMBER
FL 350

LAT	15E	60E	105E	150E	165W	120W	75W	30W	15E	MEAN
70N										
65					.285 .008 2 .285 .290 .293		.286 .017 2 .286 .297 .301	.205 .125 15 .195 .368 .382		.222 .116 19 .264 .347 .382
60					.169 .109 8 .161 .303 .311	.148 .094 62 .120 .249 .339		.152 .151 17 .059 .359 .386		.151 .109 87 .105 .278 .375
55					.315 .018 4 .321 .329 .332	.124 .084 82 .085 .244 .313	.103 .064 114 .077 .171 .310	.108 .067 161 .085 .158 .302		.112 .074 361 .085 .179 .317
50				.058 .031 13 .045 .066 .127	.163 .102 36 .141 .305 .368	.128 .096 78 .076 .239 .333	.097 .068 189 .062 .171 .266	.102 .047 108 .094 .162 .203		.109 .076 424 .075 .177 .329
45	.117 .045 14 .101 .175 .200			.069 .038 56 .058 .107 .127	.106 .094 36 .072 .163 .342	.075 .038 95 .061 .096 .204	.079 .042 86 .062 .101 .214	.058 .017 19 .057 .073 .087		.080 .051 306 .062 .105 .223
40	.087 .037 43 .078 .117 .183		.043 .011 20 .047 .049 .065	.157 .059 13 .159 .219 .229	.070 .066 83 .046 .098 .323	.067 .057 96 .047 .089 .267	.064 .031 24 .054 .099 .128	.099 .010 5 .100 .108 .111		.073 .057 284 .044 .112 .267
35	.064 .022 9 .051 .065 .100		.050 .012 15 .050 .061 .070	.053 .020 8 .045 .074 .093	.058 .024 199 .057 .077 .109	.085 .064 4 .059 .138 .184				.058 .025 235 .056 .078 .110
30	.042 .008 3 .046 .049 .050	.041 .008 11 .042 .048 .056	.047 1	.060 .011 18 .060 .070 .082	.036 .019 97 .039 .054 .072					.040 .019 130 .041 .060 .073
25		.046 .009 12 .044 .050 .069	.079 1		.032 .019 86 .030 .050 .074	.054 .001 3 .054 .055 .055				.035 .019 102 .034 .053 .075
20		.040 .005 8 .042 .044 .047	.060 .024 2 .060 .075 .082		.024 .011 25 .025 .035 .042	.060 .006 7 .062 .063 .071				.035 .018 42 .030 .052 .074
15		.027 .008 7 .033 .033 .033	.020 .002 5 .021 .022 .022		.027 .005 6 .027 .031 .032	.046 .007 12 .046 .055 .058				.034 .012 30 .030 .046 .057
10		.031 .006 5 .028 .034 .041	.014 .001 4 .014 .015 .015			.045 .007 8 .046 .053 .054				.034 .014 17 .031 .048 .054
5		.028 .003 6 .028 .031 .033	.014 .002 5 .013 .015 .017	.029 .007 5 .026 .034 .041						.024 .008 16 .020 .030 .039
0		.022 1	.015 .000 4 .015 .016 .016	.034 .005 6 .037 .037 .039						.026 .010 11 .024 .037 .039
5		.031 .005 4 .031 .035 .038	.018 .002 3 .019 .020 .020	.022 .015 8 .025 .038 .038			.044 .005 6 .043 .050 .051			.029 .014 21 .036 .042 .051
10		.030 .003 6 .029 .033 .035	.019 .001 7 .019 .021 .021	.015 .012 18 .009 .030 .039			.051 .006 13 .050 .057 .060			.028 .018 44 .019 .050 .059
15		.035 .014 6 .029 .037 .061	.022 0.000 2 .022 .022 .022	.005 .003 14 .005 .007 .009			.052 .002 6 .053 .055 .058			.022 .021 28 .014 .051 .060
20		.081 .005 7 .083 .085 .086	.022 .001 6 .022 .023 .025	.016 .016 15 .009 .028 .049			.050 1			.034 .029 29 .022 .078 .085
25			.046 .027 12 .026 .080 .083	.032 .019 10 .029 .048 .066						.039 .025 22 .024 .074 .083
30			.076 .045 11 .063 .135 .147	.034 1						.072 .044 12 .061 .133 .147
35			.098 .026 15 .092 .112 .159							.098 .026 15 .092 .112 .159
40			.189 1							.189 1
45S										

LONGITUDE

TABLE IX. - Continued. GASP AMBIENT OZONE DATA BY LATITUDE FOR SEPTEMBER

(e) Flight level 370

CODE:

MEAN	ST. DEV.	N
50%	84%	98%

SEPTEMBER
FL 370

LAT	15E	60E	105E	150E	165W	120W	75W	30W	15E	MEAN
70N							.400 .031 12 .392 .432 .443			.400 .031 12 .392 .432 .443
65					.238 .097 60 .238 .349 .374	.336 .043 6 .354 .366 .383	.308 .067 24 .294 .412 .459	.342 .063 13 .363 .391 .444		.273 .098 103 .289 .370 .455
60				.197 .101 14 .219 .292 .336	.260 .091 48 .276 .352 .375	.256 .107 55 .293 .357 .398	.256 .124 30 .286 .396 .424	.198 .096 25 .219 .301 .335		.244 .107 172 .205 .352 .404
55				.249 .100 82 .264 .343 .378	.336 .054 21 .350 .384 .395	.158 .098 44 .125 .266 .369	.207 .126 80 .188 .352 .423	.157 .098 87 .141 .235 .413		.206 .116 314 .136 .343 .412
50				.093 .082 118 .065 .139 .386	.257 .104 57 .289 .367 .390	.178 .085 64 .173 .261 .366	.111 .088 67 .069 .205 .323	.091 .048 78 .090 .149 .193		.134 .101 384 .087 .244 .379
45				.087 .065 157 .065 .152 .306	.086 .054 53 .077 .149 .214	.082 .054 43 .070 .131 .204	.080 .050 134 .063 .120 .230	.060 .020 19 .062 .078 .100		.083 .056 406 .053 .129 .255
40	.104 .009 6 .102 .109 .120		.049 .044 78 .036 .059 .212	.083 .057 114 .065 .120 .250	.075 .055 74 .061 .125 .246	.075 .050 227 .065 .111 .216	.069 .023 23 .064 .098 .105	.120 .048 16 .126 .160 .219		.075 .052 538 .043 .112 .240
35	.146 .008 2 .146 .151 .153		.048 .022 62 .047 .063 .105	.043 .018 3 .048 .058 .061	.056 .032 170 .049 .085 .132	.069 .036 26 .068 .112 .116				.056 .032 263 .049 .087 .133
30		.071 .011 4 .073 .081 .082	.062 .014 10 .063 .072 .082	.058 .036 10 .046 .082 .138	.038 .022 181 .033 .058 .092	.067 1				.041 .024 206 .035 .066 .095
25		.053 .008 14 .054 .061 .066			.026 .014 121 .024 .042 .056	.043 1				.029 .016 136 .027 .043 .063
20		.045 .009 16 .044 .054 .061	.038 .004 4 .038 .042 .045		.025 .016 15 .026 .046 .054		.083 .006 2 .083 .087 .089			.038 .018 37 .037 .053 .080
15		.038 .006 11 .038 .044 .047	.030 .003 6 .029 .033 .035		.016 .009 21 .014 .021 .039		.079 .011 5 .082 .088 .093			.031 .021 43 .028 .044 .086
10		.037 .001 7 .037 .038 .038	.036 .003 7 .036 .036 .040	.017 .009 8 .020 .025 .027	.018 .010 17 .018 .023 .041	.056 .005 3 .057 .060 .062	.056 .007 11 .058 .063 .067			.033 .018 53 .035 .054 .065
5				.017 .009 17 .018 .026 .031	.025 .002 2 .025 .026 .027		.054 .007 10 .056 .060 .061			.030 .019 29 .024 .056 .060
0				.022 .006 12 .024 .028 .030			.061 .008 9 .059 .065 .078			.039 .020 21 .028 .060 .075
5				.017 .004 6 .019 .020 .021			.061 .004 11 .061 .064 .070			.046 .021 17 .058 .063 .069
10				.034 .005 4 .036 .038 .039			.046 .008 6 .042 .057 .060			.042 .009 10 .039 .051 .059
15			.020 .003 2 .020 .022 .023	.023 .002 5 .024 .024 .025			.047 .006 7 .050 .052 .053			.035 .013 14 .029 .051 .053
20			.018 .003 4 .020 .021 .021	.029 .012 6 .030 .039 .046			.052 .005 5 .052 .057 .058			.034 .016 15 .035 .052 .058
25			.016 .003 4 .016 .018 .019	.073 .034 13 .061 .106 .145						.060 .038 17 .058 .097 .142
30			.054 .032 6 .047 .075 .114	.129 .047 9 .144 .168 .193						.099 .056 15 .090 .163 .189
35			.243 .120 9 .267 .387 .424	.255 .090 3 .301 .323 .333						.246 .113 12 .208 .354 .423
40			.212 1							.212 1
45S										

LONGITUDE

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TABLE IX. - Continued. GASP AMBIENT OZONE DATA BY LATITUDE FOR SEPTEMBER

(g) Flight level 410

CODE:

MEAN	ST. DEV.	N
50%	84%	98%

SEPTEMBER
FL 410

LAT	15E	60E	105E	150E	165W	120W	75W	30W	15E	MEAN	LAT
70N											70N
65					.250 .024 9 .241 .278 .262	.294 1				.254 .026 10 .254 .281 .292	65
60				.366 .043 27 .359 .414 .440	.335 .071 38 .333 .411 .454	.249 .065 30 .231 .318 .377	.259 .156 21 .242 .442 .518	.159 .088 13 .134 .277 .319		.291 .108 129 .298 .401 .488	60
55				.278 .112 97 .286 .390 .470	.113 .036 15 .108 .146 .177	.271 .099 63 .279 .355 .450	.292 .098 56 .286 .415 .459	.288 .098 65 .304 .380 .437		.273 .108 296 .270 .382 .459	55
50				.261 .128 133 .241 .403 .516	.135 .095 81 .121 .191 .414	.228 .109 104 .205 .352 .429	.221 .104 89 .180 .357 .418	.247 .113 39 .232 .378 .453		.221 .120 446 .139 .365 .475	50
45	.182 .058 8 .190 .236 .265		.227 .110 16 .225 .336 .426	.180 .115 167 .150 .297 .456	.169 .087 139 .157 .264 .377	.171 .104 70 .127 .274 .411	.163 .090 37 .119 .250 .375	.165 .037 4 .163 .196 .216		.176 .102 441 .156 .282 .427	45
40	.124 .033 12 .115 .130 .209		.113 .065 70 .102 .174 .274	.107 .089 90 .076 .238 .327	.173 .105 100 .134 .259 .441	.132 .083 55 .096 .210 .342	.183 .090 5 .134 .290 .301			.134 .092 332 .065 .223 .412	40
35	.059 .005 6 .061 .062 .065		.079 .027 38 .066 .102 .114	.086 .011 3 .080 .095 .101	.093 .043 17 .088 .124 .169	.064 .024 19 .058 .075 .126				.077 .031 83 .077 .102 .144	35
30	.062 .004 5 .063 .065 .067		.102 .006 7 .103 .106 .108		.070 .009 8 .069 .080 .083					.079 .018 20 .077 .103 .107	30
25	.062 .007 7 .060 .067 .075	.090 .005 2 .090 .093 .095	.040 .030 45 .029 .069 .107	.036 .011 4 .040 .046 .047	.063 .017 15 .064 .071 .100					.048 .028 73 .063 .072 .108	25
20		.075 .003 8 .076 .078 .079	.052 .024 30 .047 .082 .100		.026 .002 5 .024 .027 .030					.053 .024 43 .047 .078 .099	20
15			.027 .015 25 .022 .048 .052		.023 .005 6 .022 .025 .031					.026 .014 31 .022 .046 .052	15
10		.020 .012 5 .017 .032 .036	.022 .006 25 .023 .028 .035		.029 .005 5 .026 .034 .037					.023 .008 35 .023 .030 .037	10
5		.031 .016 5 .037 .044 .045	.032 .014 8 .028 .043 .055		.049 .002 5 .050 .050 .051					.036 .015 18 .036 .050 .055	5
0											0
5					.046 1					.046 1	5
10				.032 .005 5 .031 .036 .040	.040 1					.034 .005 6 .033 .040 .040	10
15				.031 .002 7 .032 .033 .033						.031 .002 7 .032 .033 .033	15
20				.035 .003 6 .036 .038 .038						.035 .003 6 .036 .038 .038	20
25				.062 .024 5 .053 .090 .092						.062 .024 5 .053 .090 .092	25
30				.159 .040 4 .163 .191 .208						.159 .040 4 .163 .191 .208	30
35				.154 .082 17 .112 .252 .316						.154 .082 17 .112 .252 .316	35
40											40
45S											45S

LONGITUDE

TABLE IX. - Concluded. GASP AMBIENT OZONE DATA BY LATITUDE FOR SEPTEMBER

(h) Flight level 430

CODE:

MEAN	ST. DEV.	N
50%	84%	98%

SEPTEMBER
FL 430

LAT	15E–60E	60E–105E	105E–150E	150E–165W	165W–120W	120W–75W	75W–30W	30W–15E	MEAN
70N									
65									
60			.300 .286 .073 .366 4 .404						.300 .286 .073 .366 4 .404
55			.375 .420 .114 .479 10 .499		.282 .324 .081 .347 6 .363	.443 .439 .044 .484 7 .491			.372 .405 .108 .478 23 .498
50			.258 .281 .127 .373 16 .455	.134 1	.122 .137 .035 .150 16 .168	.370 .371 .105 .461 14 .525			.243 .187 .139 .393 47 .518
45		.118 .081 .079 .223 12 .270	.195 .190 .118 .311 33 .411	.198 .186 .070 .265 19 .322	.137 .130 .040 .157 51 .220	.142 .122 .047 .208 25 .242			.158 .129 .080 .250 140 .378
40		.091 .084 .055 .130 55 .216	.042 .030 .020 .068 29 .082	.152 .107 .092 .301 22 .327	.092 .092 .018 .106 30 .129	.074 1			.090 .082 .062 .121 137 .309
35		.057 .058 .024 .074 30 .107	.074 .075 .014 .084 8 .092	.115 .089 .068 .170 3 .203					.064 .066 .032 .078 41 .156
30									
25	.090 .088 .009 .099 8 .108	.084 .084 .006 .088 2 .090							.089 .088 .009 .096 10 .107
20		.042 .039 .006 .049 8 .052	.037 .039 .019 .056 6 .059						.040 .039 .013 .052 14 .058
15			.016 .017 .009 .021 17 .035						.016 .017 .009 .021 17 .035
10			.026 .024 .011 .034 20 .050						.026 .024 .011 .034 20 .050
5		.018 .016 .003 .020 5 .024	.017 .016 .004 .020 6 .025						.017 .016 .004 .020 11 .026
0									
5									
10									
15									
20									
25									
30									
35									
40									
45S									

LONGITUDE

TABLE X. - GASP AMBIENT OZONE DATA BY LATITUDE FOR OCTOBER

(a) Flight level 290

CODE:

MEAN	ST. DEV.	N
50%	84%	98%

OCTOBER
FL 290

LAT	15E	60E	105E	150E	165W	120W	75W	30W	15E	MEAN
70N										
65										
60										
55								.111 .075 .087 .148 9 .310	.111 .075 .087 .148 9 .310	
50					.027 1	.079 1		.050 .047 .010 .062 24 .073	.050 .047 .012 .064 26 .076	
45	.046 .046 .006 .051 8 .055				.030 1	.056 .053 .008 .063 3 .066	.056 .047 .025 .076 11 .115	.043 .040 .010 .045 7 .063	.050 .042 .018 .060 30 .097	
40	.064 .067 .018 .077 17 .097				.046 .045 .010 .048 7 .066	.060 .070 .032 .086 13 .117	.061 .050 .026 .081 4 .102		.059 .061 .024 .081 41 .109	
35	.047 .046 .012 .052 6 .067		.041 .040 .014 .056 7 .065		.042 .032 .016 .055 5 .070	.047 .048 .017 .061 6 .073			.044 .037 .015 .060 24 .074	
30	.042 .041 .003 .046 7 .047	.042 .044 .011 .047 13 .056			.098 .098 .006 .101 2 .103				.047 .041 .018 .051 22 .098	
25	.048 .057 .017 .060 3 .062				.033 .033 .003 .035 3 .036				.040 .030 .014 .058 6 .062	
20			.041 1		.031 .031 .019 .040 10 .071				.032 .033 .018 .041 11 .070	
15				.012 1	.012 .012 .002 .013 2 .013				.012 .012 .001 .013 3 .013	
10										
5										
0			.023 1						.023 1	
5										
10										
15										
20				.073 1					.073 1	
25										
30			.053 1	.058 .060 .011 .070 7 .072					.057 .054 .011 .070 8 .072	
35				.054 .060 .018 .066 4 .069					.054 .060 .018 .066 4 .069	
40										
45S										

LONGITUDE

TABLE X. - Continued. GASP AMBIENT OZONE DATA BY LATITUDE FOR OCTOBER

(b) Flight level 310

CODE:

MEAN	ST. DEV.	N
50%	84%	98%

OCTOBER
FL 310

LAT	15E	60E	105E	150E	165W	120W	75W	30W	15E	MEAN
70N						.228 .003 3 .229 .231 .232	.156 .091 10 .166 .252 .261			.172 .085 13 .229 .243 .261
65						.257 .028 4 .268 .280 .280	.058 .009 12 .056 .071 .072	.127 .051 9 .123 .186 .202		.115 .077 25 .072 .203 .280
60							.048 .002 4 .049 .049 .049	.090 .059 21 .060 .169 .212		.083 .056 25 .056 .164 .209
55					.056 .017 9 .044 .074 .088		.166 .066 11 .201 .210 .224	.074 .045 35 .057 .101 .208		.089 .061 55 .068 .192 .226
50					.072 .043 4 .053 .107 .139	.213 .024 4 .213 .235 .241	.109 .023 5 .118 .130 .134	.064 .029 49 .052 .079 .154		.078 .047 62 .055 .120 .221
45	.052 .005 8 .053 .057 .057			.038 .005 5 .040 .041 .044	.051 .017 23 .049 .062 .092	.076 .049 28 .059 .112 .215	.072 .035 3 .078 .100 .110	.054 1		.062 .036 68 .042 .092 .173
40	.100 .047 10 .092 .148 .181		.047 .003 5 .046 .051 .051	.044 .010 12 .042 .054 .060	.066 .040 23 .058 .094 .169	.082 .066 31 .047 .156 .246	.061 .032 11 .054 .072 .137	.047 .002 3 .048 .049 .050		.070 .050 95 .051 .111 .218
35	.049 .015 5 .053 .061 .070		.063 .029 10 .055 .093 .118		.044 .036 19 .033 .057 .145	.035 .014 10 .036 .049 .057				.047 .030 44 .039 .062 .126
30	.054 .011 11 .059 .062 .070			.100 .042 9 .126 .140 .147	.025 .005 18 .026 .029 .036					.051 .037 38 .034 .068 .144
25	.044 .002 3 .044 .046 .047			.050 .011 10 .050 .062 .067	.033 .013 15 .032 .046 .056					.040 .014 28 .031 .055 .066
20		.053 1	.026 .005 7 .029 .031 .032		.037 .016 18 .039 .049 .069					.035 .015 26 .033 .047 .068
15		.060 .060 6 .031 .079 .179	.027 .011 15 .033 .036 .040		.015 .001 7 .015 .016 .016					.031 .033 28 .015 .036 .116
10		.041 .002 5 .042 .043 .044	.041 .003 6 .040 .045 .045	.015 .001 7 .014 .016 .017	.014 .004 2 .014 .017 .018					.029 .013 20 .027 .043 .045
5				.016 .004 7 .015 .017 .023						.016 .004 7 .015 .017 .023
0				.019 .005 8 .021 .021 .022						.019 .005 8 .021 .021 .022
5										
10										
15				.016 .016 2 .016 .027 .031						.016 .016 2 .016 .027 .031
20			.073 .023 9 .083 .089 .091	.123 1						.078 .026 10 .085 .091 .117
25			.091 .017 6 .086 .112 .116							.091 .017 6 .086 .112 .116
30			.074 .022 15 .083 .098 .102							.074 .022 15 .083 .098 .102
35	.028 0.000 2 .028 .028 .028		.057 .028 6 .052 .082 .101	.071 .060 9 .058 .076 .206						.061 .049 17 .057 .078 .190
40				.064 1						.064 1
45S										

LONGITUDE

TABLE X. - Continued. GASP AMBIENT OZONE DATA BY LATITUDE FOR OCTOBER

(c) Flight level 330

CODE:

MEAN	ST. DEV.	N
50%	84%	98%

OCTOBER
FL 330

LAT	15E	60E	105E	150E	165W	120W	75W	30W	15E	MEAN
70N						.325 1	.152 .096 17 .130 .261 .303			.161 .102 18 .141 .283 .320
65						.151 .129 17 .055 .333 .345	.137 .112 26 .057 .303 .331	.108 .085 19 .061 .249 .266		.132 .111 62 .057 .293 .340
60					.300 1	.146 .100 23 .127 .296 .322	.287 .027 17 .296 .312 .320	.160 .093 27 .149 .263 .308		.189 .103 68 .218 .303 .322
55				.113 .035 10 .107 .156 .168	.238 .067 6 .280 .281 .284	.092 .047 17 .065 .164 .183	.163 .095 46 .149 .283 .320	.100 .065 88 .072 .187 .256		.122 .080 167 .086 .221 .293
50				.085 .062 15 .062 .166 .196	.121 .088 22 .094 .213 .336	.121 .052 11 .123 .127 .235	.084 .040 87 .069 .112 .195	.081 .042 45 .067 .102 .207		.090 .053 180 .072 .127 .237
45				.069 .028 14 .051 .101 .116	.041 .008 6 .039 .047 .053	.106 .092 5 .044 .193 .257	.082 .035 77 .071 .119 .164	.094 .036 5 .091 .122 .157		.079 .040 107 .068 .118 .173
40	.086 .041 12 .072 .122 165		.081 .034 12 .074 .123 .126	.078 .036 5 .066 .120 .123	.048 .017 14 .039 .069 .074	.066 .030 40 .064 .086 .153	.070 .021 10 .069 .078 .115			.069 .032 93 .064 .107 .153
35	.060 .026 26 .056 .067 .125		.037 .020 15 .034 .052 .080		.062 .034 51 .051 .090 .156	.056 .054 5 .032 .103 .148				.057 .033 97 .049 .082 .154
30	.045 .003 7 .044 .046 .050	.063 .002 2 .063 .064 .065			.046 .027 67 .044 .072 .098	.079 .006 2 .079 .083 .085				.047 .026 78 .045 .072 .096
25	.067 .004 5 .066 .071 .074	.066 0.000 2 .066 .066 .066	.035 1	.033 .006 14 .033 .036 .042	.040 .026 58 .036 .053 .134					.041 .024 80 .036 .062 .117
20		.057 .016 11 .057 .068 .084	.040 .009 4 .037 .048 .052		.035 .025 10 .029 .043 .092					.045 .022 25 .042 .065 .096
15		.027 .003 6 .028 .030 .032	.047 .002 2 .047 .048 .049							.032 .009 8 .029 .043 .048
10			.043 1							.043 1
5		.025 1	.019 .004 6 .021 .022 .022							.019 .004 7 .021 .022 .025
0			.014 .007 8 .011 .013 .029							.014 .007 8 .011 .013 .029
5			.027 .014 17 .028 .038 .055	.021 .005 14 .020 .027 .030						.024 .011 31 .025 .030 .053
10			.031 .006 16 .028 .038 .042	.022 .009 14 .022 .030 .036						.027 .009 30 .026 .036 .042
15			.028 .012 8 .029 .039 .044	.026 .008 7 .022 .035 .040						.027 .011 15 .027 .039 .044
20		.067 .013 6 .072 .077 .082	.059 .022 22 .062 .079 .099	.020 .013 10 .017 .037 .042						.050 .026 38 .046 .076 .099
25			.084 .024 30 .084 .100 .133	.078 .048 25 .074 .096 .202						.081 .037 55 .083 .100 .175
30			.074 .015 12 .079 .085 .088	.104 .058 42 .091 .149 .262						.097 .053 54 .084 .130 .255
35	.036 .005 4 .035 .040 .042			.094 .081 18 .071 .103 .321						.084 .076 22 .063 .097 .300
40										
45S										

LONGITUDE

TABLE X. - Continued. GASP AMBIENT OZONE DATA BY LATITUDE FOR OCTOBER

(d) Flight level 350

CODE:

MEAN	ST. DEV.	N
50%	84%	98%

OCTOBER
FL 350

LAT	15E	60E	105E	150E	165W	120W	75W	30W	15E	MEAN
70N						.326 .025 13 .327 .353 .368	.187 .089 23 .217 .277 .300	.284 .025 6 .279 .312 .321		.244 .093 42 .267 .326 .360
65					.227 .065 39 .244 .288 .310	.268 .071 37 .274 .335 .354	.291 .062 13 .314 .335 .379	.295 .007 6 .295 .299 .307		.256 .070 95 .267 .325 .358
60				.294 .067 17 .273 .380 .386	.279 .079 12 .317 .333 .348	.184 .087 80 .210 .262 .330	.163 .076 21 .177 .232 .258	.120 .112 27 .058 .286 .320		.189 .102 157 .213 .300 .378
55				.263 .066 32 .261 .328 .363	.232 .055 14 .254 .286 .298	.127 .082 75 .117 .226 .294	.103 .077 25 .094 .111 .306	.107 .085 66 .057 .222 .292		.145 .098 212 .086 .267 .338
50				.169 .122 20 .173 .338 .357	.176 .043 20 .188 .201 .210	.096 .070 52 .071 .185 .254	.118 .071 100 .093 .193 .294	.072 .034 89 .059 .102 .161		.108 .075 281 .077 .189 .302
45	.055 .011 15 .053 .059 .079		.080 .012 2 .080 .088 .092	.110 .090 25 .084 .165 .318	.134 .087 49 .156 .224 .239	.102 .090 82 .057 .227 .297	.095 .066 79 .080 .116 .347	.037 .003 9 .038 .039 .040		.101 .081 261 .072 .206 .306
40	.065 .025 36 .059 .082 .125		.063 .017 14 .069 .074 .096	.102 .048 6 .117 .145 .153	.064 .041 71 .048 .116 .142	.073 .071 155 .041 .135 .293	.084 .019 8 .081 .106 .108	.049 .018 4 .050 .067 .070		.070 .057 294 .038 .116 .280
35	.057 .021 44 .054 .082 .101		.058 .049 44 .044 .086 .194	.050 .015 15 .043 .062 .084	.056 .031 143 .048 .079 .150	.056 .040 27 .056 .073 .175		.066 .024 17 .058 .067 .117		.057 .033 290 .043 .079 .152
30	.059 .018 18 .056 .075 .093	.088 .020 7 .091 .107 .108	.043 .034 26 .036 .044 .145	.053 .019 40 .053 .071 .091	.053 .043 201 .041 .070 .193	.079 1		.051 .011 34 .052 .063 .073		.053 .037 327 .043 .072 .180
25	.072 .023 12 .083 .095 .097	.057 .018 37 .052 .075 .093	.040 .012 31 .040 .053 .059	.032 .011 10 .033 .039 .048	.037 .025 191 .034 .055 .101			.052 .005 27 .051 .057 .061		.042 .024 308 .039 .058 .097
20		.047 .016 40 .042 .066 .087	.047 .012 5 .043 .060 .065		.027 .018 95 .026 .045 .073			.054 .003 9 .052 .056 .060		.035 .020 149 .033 .056 .074
15		.031 .006 24 .032 .035 .041	.048 .011 12 .049 .057 .066	.017 .005 3 .019 .022 .023	.013 .008 51 .015 .019 .029					.022 .015 90 .019 .035 .057
10		.027 .009 17 .025 .032 .046	.027 .013 9 .022 .040 .052	.010 .008 11 .010 .016 .023	.013 .009 20 .012 .018 .034					.019 .012 57 .017 .029 .047
5		.027 .004 6 .029 .030 .032	.015 .002 5 .015 .017 .018	.010 .009 17 .010 .018 .028	.007 .003 7 .008 .009 .012					.013 .010 35 .013 .025 .031
0			.014 .010 14 .017 .021 .032	.016 .010 19 .019 .026 .027	.013 .004 8 .013 .017 .019					.015 .010 39 .017 .025 .029
5			.014 .016 16 .008 .025 .049	.019 .003 11 .018 .020 .027						.016 .013 27 .017 .025 .047
10			.026 .021 16 .029 .050 .058	.019 .005 13 .019 .025 .027						.023 .016 29 .019 .040 .055
15			.033 .020 15 .030 .044 .078	.025 .012 29 .023 .039 .051						.028 .015 44 .025 .042 .059
20			.036 .026 22 .030 .061 .084	.041 .029 40 .037 .066 .117						.040 .028 62 .032 .064 .112
25			.064 .034 16 .084 .096 .107	.091 .070 72 .084 .141 .300						.087 .066 88 .078 .117 .292
30			.164 .111 4 .112 .250 .340	.126 .089 52 .102 .229 .349						.129 .092 56 .102 .230 .353
35			.080 .066 19 .058 .118 .263	.114 .111 45 .070 .136 .456						.104 .101 64 .066 .128 .440
40	.045 .011 31 .041 .056 .071		.055 0.000 2 .055 .055 .055	.094 1						.047 .014 34 .043 .056 .089
45S	.051 .007 22 .050 .058 .062									.051 .007 22 .050 .058 .062

LONGITUDE

TABLE X. - Continued. GASP AMBIENT OZONE DATA BY LATITUDE FOR OCTOBER

(e) Flight level 370

CODE:

MEAN	ST. DEV.	N
50%	84%	98%

OCTOBER
FL 370

LAT	15E	60E	105E	150E	165W	120W	75W	30W	15E	MEAN	LAT
70N					.298 .287 .039 .339 23 .367		.227 .227 .012 .235 2 .239			.292 .286 .042 .337 25 .367	70N
65					.256 .262 .059 .299 85 .386	.223 .247 .050 .261 16 .266	.197 .164 .043 .250 12 .262	.238 .252 .022 .256 5 .259		.245 .237 .059 .295 118 .384	65
60				.246 .246 .100 .313 2 .341	.246 .247 .050 .271 41 .369	.168 .148 .089 .277 29 .327	.217 .186 .076 .319 9 .328	.169 .210 .093 .263 7 .267		.211 .217 .082 .285 86 .351	60
55				.287 .294 .077 .377 40 .393	.219 .236 .041 .256 46 .263	.184 .197 .089 .276 37 .317	.252 .246 .088 .337 22 .361	.129 .112 .070 .185 33 .295		.215 .207 .091 .303 178 .388	55
50				.209 .201 .091 .319 64 .368	.116 .107 .092 .209 82 .351	.132 .097 .082 .233 29 .304	.171 .148 .112 .326 120 .394	.128 .117 .082 .219 116 .305		.151 .138 .100 .255 411 .371	50
45	.028 .029 .002 .029 8 .030		.218 .195 .047 .251 4 .293	.148 .118 .107 .284 104 .366	.074 .059 .050 .129 37 .194	.090 .084 .060 .136 93 .260	.121 .094 .079 .195 150 .327	.106 .119 .033 .133 34 .135		.115 .071 .083 .193 430 .347	45
40	.129 .126 .036 .163 11 .195		.134 .122 .084 .220 32 .275	.082 .060 .052 .142 97 .220	.061 .052 .038 .093 78 .168	.106 .083 .070 .179 558 .276	.161 .125 .080 .260 17 .316	.143 .147 .012 .156 26 .163		.103 .082 .068 .173 819 .274	40
35	.093 .077 .030 .112 4 .141		.049 .041 .022 .066 26 .107	.061 .067 .023 .086 38 .094	.064 .055 .037 .090 416 .160	.071 .057 .052 .113 84 .205		.139 .139 .008 .147 7 .151		.065 .055 .039 .094 575 .176	35
30	.100 .110 .022 .120 9 .123		.040 1	.039 .037 .012 .050 32 .065	.056 .048 .037 .079 481 .186	.091 .095 .017 .105 3 .108				.055 .047 .036 .079 526 .175	30
25		.115 1		.031 .032 .003 .032 7 .034	.040 .035 .022 .058 283 .091					.040 .035 .023 .058 291 .092	25
20		.071 .094 .030 .096 7 .101		.074 .069 .020 .098 11 .104	.041 .026 .045 .052 25 .174			.049 .049 .002 .050 2 .051		.054 .041 .040 .094 45 .141	20
15		.035 .028 .018 .041 6 .071	.022 1		.015 .016 .008 .023 20 .028					.020 .018 .014 .028 27 .053	15
10		.032 .035 .014 .042 7 .044		.019 .018 .009 .029 8 .031	.013 .017 .010 .022 34 .027					.017 .018 .012 .029 49 .042	10
5		.011 .001 .020 .026 9 .056		.022 .022 .006 .024 23 .037	.010 .013 .009 .018 25 .026					.015 .016 .012 .024 57 .039	5
0				.022 .022 .005 .026 24 .031	.007 .002 .010 .015 23 .032					.015 .019 .011 .025 47 .032	0
5				.020 .020 .007 .024 21 .035	.012 .008 .011 .028 34 .034					.015 .017 .011 .026 55 .037	5
10				.019 .019 .010 .028 50 .048	.011 .007 .012 .019 11 .038					.018 .016 .011 .027 61 .047	10
15			.044 .047 .013 .057 5 .061	.018 .015 .008 .025 71 .040	.047 1					.020 .015 .011 .029 77 .051	15
20			.069 .073 .011 .078 3 .081	.030 .016 .024 .062 61 .086						.032 .016 .025 .062 64 .086	20
25			.082 .103 .048 .113 4 .121	.059 .018 .057 .129 38 .192						.062 .019 .057 .125 42 .190	25
30			.236 .160 .151 .420 10 .423	.118 .113 .031 .156 39 .165						.142 .113 .088 .160 49 .421	30
35			.289 .277 .122 .419 12 .445	.154 .135 .086 .239 21 .349						.203 .165 .120 .344 33 .444	35
40				.267 1						.267 1	40
45S											45S

LONGITUDE

TABLE X. - Continued. GASP AMBIENT OZONE DATA BY LATITUDE FOR OCTOBER

(f) Flight level 390

CODE:

MEAN	ST. DEV.	N
50%	84%	98%

OCTOBER
FL 390

LAT	15E	60E	105E	150E	165W	120W	75W	30W	15E	MEAN
70N						.353 .077 12 .365 .438 .452	.357 .052 10 .372 .404 .435			.355 .067 22 .324 .428 .450
65				.401 .111 6 .435 .470 .488	.296 .098 74 .288 .401 .477	.318 .050 13 .316 .380 .404				.305 .097 93 .316 .413 .483
60				.292 .080 79 .310 .359 .428	.346 .089 35 .350 .430 .506	.300 .087 22 .307 .387 .425	.160 .092 27 .142 .259 .326	.281 .066 17 .283 .355 .372		.283 .100 180 .172 .376 .467
55				.262 .092 114 .256 .367 .423	.308 .105 30 .366 .398 .434	.235 .080 30 .220 .327 .377	.293 .096 88 .312 .383 .433	.220 .069 143 .219 .315 .384		.255 .097 405 .259 .367 .416
50				.254 .082 29 .260 .340 .424	.214 .096 58 .189 .331 .383	.172 .079 30 .166 .265 .306	.192 .119 59 .179 .345 .375	.202 .125 33 .141 .330 .450		.206 .107 209 .187 .328 .410
45	.090 .016 9 .087 .110 .118		.130 .021 8 .123 .149 .168	.154 .078 57 .145 .219 .353	.105 .062 31 .070 .155 .236	.164 .065 124 .159 .228 .297	.140 .073 68 .116 .200 .334	.119 .059 29 .105 .194 .207		.145 .070 326 .113 .219 .318
40	.139 .022 4 .141 .159 .163		.079 .064 34 .062 .147 .230	.115 .042 50 .118 .163 .175	.079 .041 41 .096 .113 .155	.110 .075 674 .083 .179 .320	.088 .026 7 .069 .117 .123	.047 .012 2 .047 .055 .059		.107 .072 812 .083 .167 .314
35			.029 .021 12 .022 .041 .078	.030 .019 34 .027 .037 .081	.084 .021 7 .075 .105 .117	.088 .043 141 .076 .127 .196				.074 .046 194 .068 .116 .196
30				.228 .051 8 .235 .282 .286	.036 .021 16 .033 .041 .093	.089 .018 9 .097 .105 .108				.097 .083 33 .070 .216 .285
25	.070 .013 2 .070 .079 .082			.106 .021 3 .104 .124 .132	.071 .034 29 .075 .109 .129					.074 .034 34 .074 .114 .131
20					.047 .044 5 .020 .076 .125			.047 .001 16 .048 .048 .049		.047 .021 21 .047 .048 .099
15		.016 1			.018 .017 18 .013 .031 .054			.050 .001 21 .050 .051 .053		.035 .019 40 .049 .050 .065
10		.034 .016 4 .039 .047 .050	.043 1		.011 .011 27 .007 .024 .030			.054 .004 28 .054 .058 .060		.033 .022 60 .022 .055 .060
5					.011 .014 39 .007 .028 .043			.047 .009 29 .047 .058 .060		.027 .021 68 .015 .048 .060
0					.015 .013 59 .015 .025 .048			.050 .006 33 .050 .053 .055		.028 .020 92 .012 .051 .054
5				.001 .001 6 .001 .002 .004	.017 .009 68 .016 .026 .035			.048 .001 19 .048 .048 .048		.022 .016 93 .016 .047 .048
10				.020 .011 61 .016 .032 .040	.019 .007 25 .016 .026 .032			.046 .001 14 .046 .046 .048		.023 .013 100 .016 .040 .047
15				.022 .012 40 .024 .032 .043	.036 .009 4 .037 .043 .048					.023 .012 44 .024 .036 .045
20				.029 .025 27 .021 .048 .092						.029 .025 27 .021 .048 .092
25				.067 .040 24 .074 .102 .147						.067 .040 24 .074 .102 .147
30	.151 1			.138 .073 23 .108 .223 .273						.139 .072 24 .110 .220 .272
35			.143 .081 31 .097 .230 .338	.215 .107 49 .197 .330 .476						.187 .104 80 .147 .282 .472
40				.324 1						.324 1
45S										

LONGITUDE

TABLE X. - Continued. GASP AMBIENT OZONE DATA BY LATITUDE FOR OCTOBER

(g) Flight level 410

CODE:

MEAN	ST. DEV.	N
50%	84%	98%

OCTOBER
FL 410

LAT	15E	60E	105E	150E	165W	120W	75W	30W	15E	MEAN
70N								.522 .089 24 .562 .598 .624		.522 .089 24 .555 .598 .624
65								.395 .031 26 .397 .428 .452		.395 .031 26 .397 .428 .452
60				.530 .074 6 .517 .595 .646	.255 .073 14 .277 .319 .365	.234 .059 3 .228 .283 .306	.273 .104 51 .256 .353 .484	.216 .093 56 .201 .324 .374		.257 .114 132 .206 .353 .557
55				.309 .108 50 .303 .443 .504	.234 .087 9 .285 .319 .333	.202 .063 20 .177 .280 .331	.275 .144 67 .202 .429 .610	.145 .093 34 .123 .253 .340		.250 .130 180 .184 .393 .573
50				.264 .120 100 .248 .411 .465	.103 .087 24 .092 .184 .308	.192 .108 84 .163 .298 .469	.231 .117 126 .204 .365 .469	.247 .122 116 .221 .378 .500		.228 .122 452 .197 .365 .492
45	.071 .037 8 .061 .090 .147		.180 .103 13 .160 .255 .411	.167 .074 86 .166 .240 .320	.166 .099 74 .146 .259 .376	.142 .099 96 .133 .230 .415	.245 .151 41 .277 .386 .547	.030 .003 4 .029 .033 .036		.166 .107 322 .128 .276 .427
40	.122 .040 27 .114 .146 .227		.109 .059 45 .092 .182 .272	.144 .077 21 .126 .184 .340	.111 .074 67 .104 .194 .300	.207 .118 233 .167 .366 .397	.076 1			.170 .110 394 .108 .300 .390
35	.076 .023 11 .068 .091 .128		.102 .042 17 .093 .151 .184	.059 .022 9 .053 .080 .097	.113 .043 67 .116 .154 .196	.146 .084 31 .125 .233 .280				.112 .052 135 .112 .155 .247
30	.055 .012 14 .054 .062 .083				.075 .050 118 .061 .119 .234	.134 .044 4 .119 .166 .203				.075 .049 136 .061 .119 .229
25	.053 .020 13 .058 .076 .083	.019 .013 6 .019 .032 .036			.060 .038 96 .055 .104 .157					.057 .037 115 .054 .084 .149
20		.012 .010 19 .011 .022 .032			.050 .022 77 .055 .068 .084					.042 .026 96 .045 .067 .082
15					.026 .017 57 .026 .043 .051					.026 .017 57 .026 .043 .051
10				.020 .002 5 .020 .021 .022	.017 .007 41 .019 .022 .023					.017 .007 46 .020 .022 .023
5					.017 .004 37 .017 .018 .022					.017 .004 37 .017 .018 .022
0					.025 .005 26 .023 .032 .035					.025 .005 26 .023 .032 .035
5										
10								.062 .015 2 .062 .072 .076		.062 .015 2 .062 .072 .076
15				.056 .027 5 .057 .075 .100						.056 .027 5 .057 .075 .100
20				.053 .052 20 .026 .130 .149						.053 .052 20 .026 .130 .149
25				.041 .042 22 .025 .101 .116						.041 .042 22 .025 .101 .116
30	.138 1			.083 .032 18 .093 .111 .123						.086 .033 19 .100 .112 .134
35			.342 .023 2 .342 .358 .364	.263 .150 79 .222 .390 .659						.264 .149 81 .233 .387 .650
40										
45S				.573 .030 2 .573 .593 .601						.573 .030 2 .573 .593 .601

LONGITUDE

TABLE X. - Concluded. GASP AMBIENT OZONE DATA BY LATITUDE FOR OCTOBER

(h) Flight level 430

CODE:

MEAN	ST. DEV.	N
50%	84%	98%

OCTOBER
FL 430

LAT	15E	60E	105E	150E	165W	120W	75W	30W	15E	MEAN
70N										
65										
60							.759 1	.366 .039 6 .383 .385 .385		.422 .142 7 .384 .400 .714
55							.391 .125 23 .384 .495 .679	.360 .041 39 .360 .399 .450		.372 .084 62 .359 .411 .589
50				.361 .056 3 .360 .407 .426			.310 .157 48 .231 .473 .675			.313 .153 51 .254 .473 .672
45			.256 .103 8 .252 .332 .422	.278 .069 17 .271 .333 .388	.262 .077 7 .229 .350 .351	.329 .144 7 .348 .388 .507	.191 .139 51 .144 .388 .502			.230 .131 90 .137 .377 .507
40			.135 .057 47 .121 .196 .238		.141 .045 23 .122 .185 .244	.077 .121 7 .016 .133 .330	.089 .028 5 .072 .116 .133			.129 .064 82 .097 .190 .268
35			.056 1		.078 .012 12 .081 .085 .095	.003 .002 3 .002 .004 .005				.063 .031 16 .076 .085 .094
30										
25	.029 .023 13 .021 .060 .071	.009 .005 5 .011 .012 .013								.023 .022 18 .013 .051 .070
20		.020 .009 15 .019 .028 .038								.020 .009 15 .019 .028 .038
15										
10										
5										
0										
5										
10								.086 .002 6 .087 .088 .089		.086 .002 6 .087 .088 .089
15								.076 .015 28 .084 .088 .089		.076 .015 28 .083 .088 .089
20								.055 .005 26 .054 .056 .067		.055 .005 26 .054 .056 .067
25				.077 1				.074 .010 24 .074 .087 .090		.074 .010 25 .075 .086 .090
30	.093 .012 20 .093 .104 .119			.098 .022 4 .099 .118 .124						.094 .014 24 .090 .111 .124
35				.307 .184 38 .291 .507 .578						.307 .184 38 .291 .507 .578
40				.326 .095 22 .306 .436 .507						.326 .095 22 .306 .436 .507
45S				.398 .186 22 .343 .551 .848						.398 .186 22 .343 .551 .848

LONGITUDE

TABLE XI. - GASP AMBIENT OZONE DATA BY LATITUDE FOR NOVEMBER

(a) Flight level 290

CODE:

MEAN	ST. DEV.	N
50%	84%	98%

NOVEMBER
FL 290

LAT	15E	60E	105E	150E	165W	120W	75W	30W	15E	MEAN
70N										
65										
60										
55								.064 .046 .034 .101 8 .128		.064 .046 .034 .101 8 .128
50							.003 .067 .039 .103 9 .166	.070 .050 .052 .092 16 .201		.075 .055 .048 .102 25 .198
45	.053 .042 .026 .072 4 .094				.041 .037 .013 .051 5 .061		.066 .066 .028 .098 16 .108	.052 .041 .045 .053 7 .147		.057 .038 .032 .096 32 .130
40	.053 .058 .013 .060 9 .073				.044 .039 .010 .052 3 .057	.034 .037 .008 .041 11 .043	.054 .038 .023 .084 11 .094			.046 .038 .018 .060 34 .093
35	.057 .047 .018 .071 3 .081		.058 .067 .013 .068 5 .071		.070 .063 .022 .087 4 .104	.062 .055 .021 .079 8 .101				.062 .055 .019 .079 20 .105
30										
25	.067 .074 .014 .076 4 .077	.073 .073 .001 .073 2 .073			.023 1					.062 .073 .019 .075 7 .077
20		.061 .068 .014 .072 9 .078	.022 .022 .003 .023 2 .024		.034 .032 .010 .043 10 .053					.044 .041 .019 .068 21 .077
15			.024 1		.035 .038 .007 .041 6 .041					.034 .034 .008 .041 7 .041
10					.009 1					.009 1
5		.031 .031 .011 .038 2 .041								.031 .031 .011 .038 2 .041
0										
5			.026 .026 .016 .037 2 .041							.026 .026 .016 .037 2 .041
10			.051 1	.061 1						.056 .056 .005 .059 2 .061
15				.054 1	.051 1					.053 .053 .002 .054 2 .054
20										
25										
30										
35			.072 .072 .026 .090 2 .097	.106 1						.083 .098 .027 .103 3 .106
40										
45S										

LONGITUDE

TABLE XI. - Continued. GASP AMBIENT OZONE DATA BY LATITUDE FOR NOVEMBER

(b) Flight level 310

CODE:

MEAN	ST. DEV.	N
50%	84%	98%

NOVEMBER
FL 310

LAT	15E	60E	105E	150E	165W	120W	75W	30W	15E	MEAN
70N										
65										
60							.212 .257 13 .277 .083 .270	.070 .056 13 .161 .036 .091		.141 .073 26 .276 .096 .266
55							.192 .233 53 .315 .093 .280	.049 .045 54 .184 .039 .055		.120 .055 107 .310 .101 .264
50					.024 .025 7 .034 .007 .032		.118 .053 28 .319 .105 .249	.061 .048 36 .213 .042 .063		.080 .047 71 .299 .080 .170
45	.083 .080 10 .132 .030 .117				.030 .032 3 .037 .006 .035		.091 .073 15 .279 .073 .111	.093 .069 24 .235 .058 .139		.087 .055 52 .253 .059 .132
40	.059 .048 21 .119 .027 .096		.112 .125 3 .131 .023 .129	.116 .116 2 .116 .001 .116	.047 .048 10 .059 .007 .051	.060 .041 14 .193 .051 .090	.089 .046 13 .145 .041 .094			.061 .047 63 .145 .038 .099
35	.068 .061 12 .139 .034 .091		.069 .057 9 .144 .034 .077		.056 .050 14 .096 .022 .077	.054 .043 4 .102 .031 .079				.062 .057 39 .152 .030 .090
30	.047 .046 8 .069 .010 .049				.077 .081 12 .097 .015 .090					.065 .064 20 .096 .020 .085
25	.049 .045 8 .072 .014 .066	.068 .075 3 .083 .016 .080			.042 .039 6 .068 .017 .059					.050 .046 17 .080 .018 .071
20		.047 .055 10 .064 .015 .060	.017 1		.073 .038 7 .233 .076 .087					.055 .041 18 .195 .051 .062
15		.034 .031 10 .063 .013 .037			.026 .022 16 .054 .013 .036					.029 .022 26 .063 .013 .038
10		.026 .026 10 .036 .005 .030			.016 .016 12 .030 .007 .021					.021 .015 22 .035 .008 .028
5		.036 .036 6 .043 .005 .038			.016 .015 10 .022 .005 .021					.023 .020 16 .042 .011 .036
0										
5										
10			.062 1							.062 1
15				.004 1						.004 1
20				.043 .028 10 .114 .033 .073						.043 .026 10 .114 .033 .073
25			.098 .098 7 .104 .005 .102	.054 .060 9 .075 .018 .071						.073 .074 16 .103 .026 .100
30			.078 .079 8 .099 .014 .090				.054 1			.075 .076 9 .099 .015 .089
35			.082 .088 15 .122 .024 .103	.082 .068 5 .176 .052 .111						.082 .076 20 .162 .033 .105
40			.057 1							.057 1
45S				.079 1						.079 1

LONGITUDE

TABLE XI. - Continued. GASP AMBIENT OZONE DATA BY LATITUDE FOR NOVEMBER

(c) Flight level 330

CODE:

MEAN	ST. DEV.	N
50%	84%	98%

NOVEMBER
FL 330

LAT	15E	60E	105E	150E	165W	120W	75W	30W	15E	MEAN	LAT
70N							.271 .056 10 .297 .312 .321	.277 1		.271 .054 11 .291 .312 .320	70N
65							.217 .036 3 .237 .244 .247	.280 .042 15 .291 .318 .331		.269 .047 18 .275 .317 .331	65
60				.267 .044 7 .255 .324 .341			.118 .106 19 .053 .274 .294	.230 .086 13 .274 .310 .320		.182 .111 39 .226 .296 .328	60
55					.223 .082 12 .236 .315 .322	.275 .026 6 .287 .292 .294	.194 .103 27 .258 .278 .315	.138 .077 18 .135 .225 .238		.194 .096 65 .227 .285 .318	55
50				.057 .002 2 .057 .058 .059	.039 1	.138 .112 17 .064 .302 .331	.183 .106 57 .198 .306 .357	.056 .045 79 .043 .065 .226		.111 .100 156 .044 .238 .350	50
45	.097 .048 11 .074 .133 .206			.119 .026 7 .132 .138 .143	.041 .001 2 .041 .042 .042	.071 .045 35 .053 .101 .190	.084 .068 86 .064 .118 .281	.069 .033 12 .066 .095 .138		.082 .059 153 .065 .119 .273	45
40	.052 .018 34 .052 .072 .085		.063 .012 3 .062 .074 .078	.067 .040 11 .053 .107 .140	.039 .011 14 .038 .043 .065	.075 .049 48 .056 .106 .203	.058 .053 15 .045 .067 .195			.062 .041 125 .053 .077 .201	40
35	.064 .020 18 .057 .087 .105		.079 .026 26 .076 .102 .138	.091 .007 4 .089 .098 .101	.047 .023 22 .042 .069 .095	.075 .050 15 .067 .098 .187				.067 .032 65 .066 .096 .152	35
30	.061 .015 12 .058 .081 .086	.049 .007 11 .053 .057 .058	.061 .020 7 .055 .069 .101	.094 1	.063 .030 40 .061 .073 .139	.058 1				.061 .025 72 .048 .072 .123	30
25			.034 .014 8 .034 .043 .057		.053 .034 33 .043 .077 .132					.049 .032 41 .042 .073 .116	25
20		.033 .006 2 .033 .037 .039	.020 .006 3 .019 .024 .027		.058 .026 6 .060 .079 .096		.056 1			.044 .025 12 .035 .071 .094	20
15		.025 .011 9 .027 .037 .041	.025 .003 2 .025 .027 .028				.037 .004 5 .039 .039 .040			.029 .010 16 .024 .039 .041	15
10		.021 .005 12 .021 .027 .028					.037 .001 4 .037 .038 .038			.025 .008 16 .023 .036 .038	10
5		.026 .007 8 .023 .035 .038	.003 .002 2 .003 .004 .004		.030 .007 2 .030 .035 .037		.034 .005 2 .034 .037 .039			.024 .011 14 .022 .037 .039	5
0			.015 .004 5 .013 .019 .020		.041 .011 17 .038 .046 .071					.035 .015 22 .036 .045 .069	0
5			.025 .005 4 .027 .029 .030	.047 .037 11 .046 .067 .130	.052 .025 5 .050 .071 .089					.044 .032 20 .029 .065 .124	5
10			.058 .028 7 .045 .092 .096	.037 .026 14 .036 .061 .093			.024 .004 4 .024 .027 .029			.041 .027 25 .032 .069 .099	10
15			.067 .031 13 .065 .101 .111	.058 .030 4 .044 .079 .105	.032 .011 13 .030 .045 .048		.041 .024 5 .041 .057 .078			.049 .029 35 .041 .083 .111	15
20			.060 .023 10 .068 .076 .082	.038 .001 6 .038 .038 .040			.066 .020 4 .067 .080 .091			.054 .022 20 .039 .075 .089	20
25			.108 1	.059 .017 14 .057 .077 .084			.062 .028 5 .071 .088 .097			.062 .023 20 .061 .083 .104	25
30				.117 .049 17 .110 .159 .229			.078 .012 3 .070 .086 .093			.112 .048 20 .108 .134 .226	30
35			.064 .002 2 .064 .065 .065	.135 .081 30 .097 .238 .311			.050 1			.128 .080 33 .095 .222 .305	35
40				.131 .106 4 .141 .235 .241						.131 .106 4 .141 .235 .241	40
45S				.069 .002 2 .069 .070 .071						.069 .002 2 .069 .070 .071	45S

LONGITUDE

TABLE XI. - Continued. GASP AMBIENT OZONE DATA BY LATITUDE FOR NOVEMBER

(d) Flight level 350

CODE:

MEAN	ST. DEV.	N
50%	84%	98%

NOVEMBER
FL 350

LAT	15E	60E	105E	150E	165W	120W	75W	30W	15E	MEAN	LAT
70N						.260 .051 13 .257 .312 .321	.270 .046 10 .268 .319 .331			.264 .049 23 .266 .315 .328	70N
65					.219 .041 20 .217 .263 .282	.243 .047 21 .240 .283 .310				.232 .046 41 .223 .283 .307	65
60				.329 1	.172 .055 6 .191 .224 .235	.185 .084 68 .202 .261 .341	.235 .026 11 .229 .259 .283	.271 .039 7 .256 .307 .342		.198 .080 93 .215 .266 .347	60
55				.181 .061 25 .164 .251 .302	.208 .019 7 .209 .225 .231	.196 .090 65 .219 .271 .358	.146 .113 53 .107 .277 .371	.126 .076 56 .127 .198 .308		.163 .094 206 .102 .254 .366	55
50				.131 .086 38 .111 .237 .338	.092 .070 15 .068 .091 .266	.158 .088 62 .155 .244 .358	.145 .099 96 .123 .258 .339	.072 .061 78 .051 .127 .277		.124 .091 289 .098 .236 .339	50
45	.059 .054 23 .050 .064 .212		.265 .023 2 .265 .280 .286	.121 .091 34 .093 .162 .345	.023 .006 8 .025 .029 .030	.174 .089 65 .189 .266 .337	.086 .057 53 .068 .154 .199	.051 .031 7 .044 .089 .090		.115 .088 202 .087 .222 327	45
40	.080 .035 62 .078 .122 .138		.132 .091 24 .094 .212 .346	.093 .064 23 .067 .139 .263	.072 .106 16 .030 .055 .355	.070 .082 67 .038 .083 .299	.062 .031 6 .050 .080 .120			.083 .074 198 .044 .125 .309	40
35	.083 .025 23 .083 .112 .128		.083 .041 9 .092 .114 .149	.030 .008 12 .030 .037 .046	.044 .030 69 .036 .053 .155	.046 .020 15 .041 .057 .094				.053 .033 128 .038 .084 .142	35
30	.033 .011 19 .032 .045 .055			.048 .019 20 .047 .064 .086	.043 .024 130 .036 .061 .113					.042 .023 169 .036 .060 .108	30
25	.058 .009 2 .058 .064 .067			.039 .011 18 .037 .047 .065	.037 .019 110 .031 .058 .080					.037 .018 130 .032 .057 .079	25
20		.032 .008 2 .032 .037 .039	.021 1	.040 1	.049 .057 22 .037 .063 .202					.046 .053 26 .033 .056 .184	20
15					.038 .014 8 .042 .052 .052					.038 .014 8 .042 .052 .052	15
10					.053 .008 4 .051 .059 .065					.053 .008 4 .051 .059 .065	10
5			.032 .003 2 .032 .034 .035		.041 .012 6 .048 .049 .049		.021 .004 5 .023 .024 .024			.032 .012 13 .029 .048 .049	5
0			.045 .018 9 .038 .066 .071	.022 .011 19 .017 .038 .043	.019 .010 3 .012 .026 .032		.024 .003 5 .022 .027 .029			.028 .016 36 .021 .041 .068	0
5			.051 .018 12 .052 .071 .082	.024 .013 18 .024 .040 .047			.016 .001 4 .016 .017 .018			.033 .020 34 .026 .053 .077	5
10			.068 .025 11 .056 .095 .100	.031 .011 15 .032 .039 .052			.013 1			.045 .026 27 .038 .084 .098	10
15			.062 .018 13 .061 .074 .100	.029 .022 7 .021 .027 .076	.052 1					.051 .024 21 .051 .072 .097	15
20			.075 .029 12 .066 .118 .127	.054 .044 5 .027 .088 .131			.100 1			.071 .035 18 .058 .118 .134	20
25			.080 .032 7 .068 .112 .128	.102 .013 14 .104 .111 .118						.094 .024 21 .102 .111 .126	25
30			.091 .014 7 .086 .107 .112	.091 .029 39 .098 .122 .138						.091 .027 46 .086 .120 .137	30
35			.187 .008 2 .187 .192 .194	.100 .029 28 .103 .137 .148						.107 .035 28 .104 .142 .186	35
40			.088 .028 2 .088 .106 .114							.088 .028 2 .088 .106 .114	40
45S			.065 .005 8 .067 .068 .072							.065 .005 8 .064 .068 .072	45S

LONGITUDE

TABLE XI. - Continued. GASP AMBIENT OZONE DATA BY LATITUDE FOR NOVEMBER

(e) Flight level 370

CODE:

MEAN	ST. DEV.	N
50%	84%	98%

NOVEMBER
FL 370

LAT	15E	60E	105E	150E	165W	120W	75W	30W	15E	MEAN
70N										
65					.249 .261 .108 .354 45 .426					.249 .261 .108 .354 45 .426
60				.189 .168 .064 .249 10 .318	.227 .228 .079 .305 51 .416	.199 .202 .097 .309 29 .370		.408 .418 .043 .439 5 .460		.224 .213 .094 .315 95 .429
55				.235 .246 .088 .336 50 .358	.221 .250 .095 .304 17 .353	.251 .265 .109 .353 29 .463	.224 .196 .146 .377 30 .528	.120 .107 .079 .189 65 .292		.195 .189 .115 .312 191 .445
50				.185 .179 .085 .277 68 .339	.194 .188 .084 .285 33 .362	.324 .307 .094 .396 19 .505	.134 .123 .109 .252 71 .399	.067 .045 .058 .112 94 .179		.143 .119 .110 .265 285 .403
45	.105 .063 .099 .242 36 .320		.096 .097 .017 .111 4 .119	.120 .110 .077 .181 62 .326	.076 .053 .056 .119 72 .260	.112 .090 .066 .191 154 .273	.125 .080 .103 .263 79 .351	.145 .098 .133 .252 30 .444		.111 .076 .085 .207 437 .327
40	.098 .080 .069 .135 43 .331		.077 .066 .051 .102 32 .209	.100 .075 .067 .174 36 .258	.063 .041 .040 .112 33 .154	.070 .044 .064 .114 104 .290	.125 .111 .070 .166 13 .286	.086 .083 .028 .113 14 .142		.082 .063 .063 .131 275 .308
35	.160 .172 .031 .183 13 .198		.043 .043 .033 .063 19 .124	.070 .063 .033 .095 18 .155	.046 .044 .019 .063 93 .088	.131 .127 .089 .209 39 .336	.031 .032 .009 .040 20 .045			.070 .044 .061 .126 202 .223
30	.082 .072 .031 .109 9 .138	.069 .064 .019 .094 8 .100	.023 .016 .013 .040 6 .040		.046 .045 .021 .067 99 .080	.067 .060 .016 .080 3 .088	.029 .037 .015 .042 15 .044			.048 .043 .025 .069 140 .104
25	.053 .060 .019 .068 3 .072	.084 .087 .020 .104 19 .117	.017 .018 .004 .019 7 .021		.051 .051 .031 .075 95 .122		.027 .030 .009 .033 22 .042			.050 .043 .031 .076 146 .119
20		.069 .057 .029 .098 9 .120	.037 .037 .004 .040 4 .043		.048 .036 .033 .085 15 .101		.027 .027 .013 .038 19 .048			.042 .036 .029 .074 47 .106
15		.041 .041 .000 .041 5 .041	.039 .038 .008 .046 6 .052		.025 .022 .013 .034 6 .049		.037 .023 .028 .059 14 .093			.036 .037 .021 .051 31 .092
10				.017 .017 .002 .018 2 .019	.026 .024 .008 .032 12 .043		.042 .049 .025 .065 14 .075			.033 .022 .020 .054 28 .075
5			.002 1	.029 .027 .004 .034 5 .035	.031 .037 .015 .046 10 .048		.049 .045 .030 .085 12 .088			.037 .026 .024 .059 26 .087
0				.033 .035 .006 .037 5 .038	.043 .047 .010 .052 7 .056		.050 .043 .030 .085 6 .089			.042 .032 .020 .058 18 .087
5				.016 .016 .001 .017 3 .018	.047 .048 .005 .051 6 .053		.023 .025 .007 .029 6 .031			.031 .029 .014 .049 15 .052
10					.046 .045 .003 .048 5 .050		.020 1			.041 .044 .010 .048 6 .050
15					.052 1					.052 1
20			.025 .024 .011 .035 4 .041	.082 .082 .015 .092 2 .096			.046 .037 .022 .063 4 .080			.045 .033 .027 .076 10 .094
25			.035 .015 .035 .056 5 .099	.092 .086 .014 .107 9 .119						.072 .083 .036 .104 14 .118
30			.076 .080 .017 .086 6 .097	.083 .083 .017 .094 2 .098						.078 .080 .017 .096 8 .099
35			.165 .168 .018 .186 28 .193							.165 .168 .018 .186 28 .193
40			.257 .265 .017 .268 4 .271							.257 .265 .017 .268 4 .271
45S			.182 .182 .015 .192 2 .196	.291 .279 .061 .360 11 .391						.274 .264 .069 .346 13 .391

LONGITUDE —

TABLE XI. - Continued. GASP AMBIENT OZONE DATA BY LATITUDE FOR NOVEMBER

(f) Flight level 390

CODE:

MEAN	ST. DEV.	N
50%	84%	98%

NOVEMBER
FL 390

LAT	15E	60E	105E	150E	165W	120W	75W	30W	15E	MEAN
70N										
65				.308 .094 10 .280 .409 .478	.272 .101 104 .266 .355 .515	.164 .026 2 .164 .161 .188				.280 .101 116 .265 .355 .513
60				.357 .114 51 .388 .465 .521	.348 .133 58 .357 .510 .579	.355 .079 9 .336 .420 .509				.353 .122 118 .318 .496 .565
55				.337 .106 91 .344 .458 .503	.303 .084 25 .311 .384 .445	.318 .136 18 .323 .490 .529	.288 .099 10 .257 .388 .475	.152 .137 23 .080 .326 .418		.302 .127 167 .309 .441 .524
50				.173 .087 29 .160 .256 .386	.240 .107 44 .210 .353 .486	.241 .101 16 .236 .262 .486	.141 .092 27 .137 .242 .273	.069 .071 18 .048 .062 .272		.183 .112 134 .153 .276 .481
45	.319 .124 12 .290 .504 .528			.191 .114 48 .142 .330 .358	.193 .120 22 .197 .328 .376	.281 .153 18 .315 .433 .496	.166 .093 17 .103 .279 .313	.012 1		.213 .131 118 .123 .347 .506
40	.102 .033 9 .093 .110 .168		.055 1	.102 .047 37 .090 .157 .220	.065 .014 8 .067 .079 .079	.119 .085 191 .100 .189 .381	.063 .051 8 .047 .048 .175			.112 .078 254 .088 .178 .346
35	.146 .085 5 .119 .194 .295		.048 .011 8 .045 .047 .072	.068 .004 7 .068 .069 .075	.055 .021 29 .055 .079 .088	.191 .143 113 .159 .405 .445	.022 .012 7 .015 .032 .047			.148 .135 169 .086 .351 .441
30	.091 .044 10 .086 .131 .169	.088 1	.053 .009 4 .057 .059 .059	.040 .008 19 .040 .050 .053	.064 .017 48 .060 .085 .099	.066 .011 4 .062 .073 .083	.075 .019 6 .072 .096 .105			.062 .025 92 .053 .086 .127
25	.055 .022 17 .055 .078 .088	.068 .008 3 .065 .075 .078		.041 .011 17 .043 .051 .062	.055 .022 61 .059 .072 .102		.020 .005 4 .018 .024 .028			.052 .021 102 .051 .072 .092
20		.064 .013 20 .064 .078 .086	.032 .008 5 .029 .039 .044		.085 .043 18 .076 .122 .191		.026 .003 12 .026 .029 .031			.060 .035 55 .054 .082 .151
15			.033 .010 4 .031 .042 .047		.045 .024 14 .034 .072 .092		.038 .014 17 .039 .047 .067			.040 .019 35 .037 .053 .089
10			.025 .011 4 .030 .033 .034		.021 1		.047 .014 26 .043 .065 .076			.044 .016 31 .041 .063 .076
5			.023 .006 3 .021 .028 .031				.064 .014 19 .067 .077 .092			.059 .020 22 .062 .076 .091
0							.075 .019 21 .075 .093 .106			.075 .019 21 .075 .093 .106
5							.063 .018 16 .068 .079 .088			.063 .018 16 .068 .079 .088
10							.054 .016 26 .056 .068 .081			.054 .016 26 .056 .068 .081
15				.050 .028 10 .043 .081 .102			.052 .013 26 .056 .064 .073			.052 .019 36 .054 .066 .096
20				.086 1			.047 .013 13 .046 .059 .071			.050 .016 14 .048 .065 .082
25							.068 .012 4 .067 .078 .085			.068 .012 4 .067 .078 .085
30				.028 1			.148 .043 5 .136 .192 .209			.128 .060 6 .127 .188 .208
35				.155 .014 4 .156 .167 .173						.155 .014 4 .156 .167 .173
40			.196 .045 6 .210 .226 .234							.196 .045 6 .210 .226 .234
45S				.231 .024 2 .231 .247 .264						.231 .024 2 .231 .247 .254

LONGITUDE

TABLE XI. - Continued. GASP AMBIENT OZONE DATA BY LATITUDE FOR NOVEMBER

(g) Flight level 410

CODE:

MEAN	ST. DEV.	N
50%	84%	98%

NOVEMBER
FL 410

LAT	15E	60E	105E	150E	165W	120W	75W	30W	15E	MEAN
70N										
65					.398 .426 .091 .482 13 .496	.135 1				.379 .424 .111 .480 14 .496
60				.395 .385 .121 .514 27 .590	.304 .232 .192 .544 40 .653	.309 .257 .146 .479 38 .606				.329 .306 .165 .532 105 .647
55				.405 .390 .116 .524 66 .632	.528 .521 .090 .627 11 .688	.362 .337 .105 .504 33 .542	.290 .319 .069 .348 7 .357			.398 .385 .120 .531 117 .652
50				.340 .344 .137 .493 88 .603	.192 .191 .116 .238 32 .552	.203 .167 .117 .364 40 .448	.317 .373 .089 .394 9 .398	.116 .090 .049 .158 10 .217		.269 .234 .145 .424 179 .589
45			.211 .161 .124 .387 7 .412	.259 .236 .105 .379 38 .460	.162 .112 .142 .266 49 .596	.246 .171 .152 .430 64 .578	.046 .013 .075 .096 21 .251	.040 .032 .014 .054 7 .064		.195 .093 .149 .365 186 .572
40	.081 .072 .029 .092 17 .159		.148 .118 .097 .249 39 .382	.339 .333 .170 .495 18 .621	.102 .050 .121 .195 56 .410	.133 .089 .104 .250 43 .374				.143 .089 .133 .270 173 .521
35	.110 .106 .050 .144 13 .213		.064 .054 .032 .081 19 .144	.081 .072 .022 .093 10 .132	.040 .036 .020 .060 4 .068	.031 1				.078 .069 .042 .107 47 .206
30	.034 .032 .010 .043 12 .052		.044 .042 .012 .059 10 .063		.072 .073 .008 .078 6 .084		.024 1			.045 .040 .018 .064 29 .080
25	.050 .053 .022 .072 11 .080	.050 .055 .018 .063 5 .067	.059 .059 .006 .065 4 .066		.066 .066 .008 .069 2 .071		.032 .030 .007 .039 5 .042			.049 .053 .019 .068 27 .079
20		.053 .056 .009 .060 15 .065	.009 1				.054 .051 .019 .079 8 .084			.051 .052 .016 .061 24 .083
15							.106 .104 .011 .111 6 .127			.106 .104 .011 .111 6 .127
10							.065 .065 .020 .078 2 .083			.065 .065 .020 .078 2 .083
5		.013 1	.011 1				.062 .063 .012 .074 7 .075			.051 .063 .023 .072 9 .075
0							.077 .070 .019 .101 12 .108			.077 .070 .019 .101 12 .108
5							.074 .073 .017 .093 18 .101			.074 .073 .017 .093 18 .101
10							.059 .055 .013 .072 17 .081			.059 .055 .013 .072 17 .081
15							.054 .051 .015 .070 16 .079			.054 .051 .015 .070 16 .079
20							.065 .065 .016 .082 15 .096			.065 .065 .016 .082 15 .096
25										
30										
35										
40										
45S										

LONGITUDE

TABLE XI. - Concluded. GASP AMBIENT OZONE DATA BY LATITUDE FOR NOVEMBER

(h) Flight level 430

CODE:

MEAN	ST. DEV.	N
50%	84%	98%

NOVEMBER
FL 430

LAT	15E	60E	105E	150E	165W	120W	75W	30W	15E	MEAN	LAT
70N											70N
65											65
60				.291 1						.291 1	60
55				.675 1		.373 .017 5 .372 .386 .397				.424 .113 6 .375 .454 .647	55
50				.507 .208 18 .426 .690 .940		.321 .132 23 .314 .481 .523	.138 .091 15 .169 .211 .297			.332 .208 56 .295 .505 .859	50
45			.274 .132 21 .287 .364 .570	.431 .162 36 .403 .553 .868		.284 .166 54 .206 .519 .638	.215 .088 26 .249 .307 .328			.308 .167 137 .289 .518 .652	45
40			.251 .174 68 .200 .448 .649		.025 .002 6 .025 .027 .029	.327 .083 8 .315 .392 .464	.232 .128 9 .212 .308 .482			.241 .169 91 .208 .433 .641	40
35			.106 .058 4 .091 .161 .186		.037 .002 2 .037 .038 .039		.079 .036 22 .080 .119 .144			.080 .041 28 .080 .126 .168	35
30							.050 .014 20 .052 .061 .076			.050 .014 20 .052 .061 .076	30
25	.045 .019 8 .036 .060 .080	.057 1					.047 .013 16 .044 .061 .067			.046 .015 25 .042 .060 .076	25
20		.043 .001 2 .043 .044 .044	.010 .002 2 .010 .011 .011				.041 .012 7 .044 .053 .054			.035 .015 11 .041 .051 .054	20
15			.010 .009 6 .008 .015 .026				.040 .009 2 .040 .046 .049			.017 .016 8 .009 .031 .046	15
10			.002 .002 7 0.000 .003 .006							.002 .002 7 0.000 .003 .006	10
5		.037 .030 2 .037 .057 .066	.002 .002 2 .002 .003 .003							.019 .028 4 .005 .038 .063	5
0											0
5											5
10											10
15											15
20											20
25											25
30											30
35											35
40											40
45S											45S

LONGITUDE

TABLE XII. - GASP AMBIENT OZONE DATA BY LATITUDE FOR DECEMBER

(a) Flight level 290

CODE:

MEAN	ST. DEV.	N
50%	84%	98%

DECEMBER
FL 290

LAT	15E	60E	105E	150E	165W	120W	75W	30W	15E	MEAN
70N										
65										
60								.094 .096 7 .031 .127 139		.094 .096 7 .031 .127 139
55								.071 .063 8 .034 .116 127		.071 .063 8 .034 .116 127
50						.176 .176 2 .029 .195 203	.035 .034 7 .010 .047 048	.088 .055 15 .055 .141 205		.080 .050 24 .058 .146 209
45	.062 .044 18 .036 .115 132					.033 .032 5 .003 .036 039	.098 .054 43 .081 .221 274	.093 .086 16 .023 .116 142		.085 .056 82 .065 .117 266
40	.042 .037 36 .019 .058 079				.037 1	.057 .052 10 .022 .070 108	.070 .057 12 .037 .130 134			.050 .044 59 .027 .065 132
35	.043 .044 10 .014 .056 064		.062 1		.049 .035 3 .027 .070 085	.053 .047 11 .025 .079 093				.049 .045 25 .021 .073 091
30	.038 .039 6 .006 .043 044	.056 .056 12 .007 .062 064			.056 1					.050 .054 19 .011 .060 064
25	.030 .030 4 .001 .032 032	.030 .030 2 .003 .031 032			.064 1					.035 .031 7 .012 .033 060
20			.055 .059 4 .021 .071 081	.065 .052 7 .027 .073 119	.055 .056 9 .008 .061 069					.059 .051 20 .020 .071 109
15		.026 .029 3 .006 .030 031	.038 .036 6 .025 .061 075		.032 1					.034 .016 10 .020 .051 073
10		.037 .035 6 .010 .050 052								.037 .035 6 .010 .050 052
5										
0										
5										
10										
15				.053 1	.029 .029 2 .006 .033 038					.037 .035 3 .012 .047 052
20										
25			.044 .051 5 .013 .054 057							.044 .051 5 .013 .054 057
30			.021 .021 2 .006 .024 026							.021 .021 2 .006 .024 026
35			.032 .032 2 .003 .034 035	.089 .107 3 .039 .119 124						.066 .035 5 .041 .113 124
40			.022 1	.027 1						.025 .025 2 .003 .026 027
45S										

LONGITUDE

TABLE XII. - Continued. GASP AMBIENT OZONE DATA BY LATITUDE FOR DECEMBER

(b) Flight level 310

CODE:

MEAN	ST. DEV.	N
50%	84%	98%

DECEMBER
FL 310

LAT	15E	60E	105E	150E	165W	120W	75W	30W	15E	MEAN
70N										
65										
60								.183 .011 4 .186 .192 .195		.183 .011 4 .186 .192 .195
55				.048 .027 4 .050 .074 .076			.205 .043 6 .209 .237 .273	.127 .081 42 .091 .219 .264		.130 .082 52 .095 .225 .275
50				.084 .041 13 .086 .123 .152	.075 1		.119 .089 14 .066 .237 .265	.060 .029 13 .045 .092 .112		.088 .064 41 .068 .132 .261
45	.035 .014 15 .031 .044 .072			.111 .083 23 .060 .216 .281	.074 .009 2 .074 .080 .083	.056 .066 8 .034 .037 .203	.110 .064 20 .091 .194 .226	.096 .055 13 .094 .127 .209		.088 .070 81 .057 .157 .274
40	.043 .010 7 .050 .051 .052		.059 .021 12 .052 .063 .112	.110 .042 9 .113 .149 .169	.035 .011 13 .033 .045 .053	.091 .070 50 .055 .167 .267	.075 .043 17 .059 .117 .163			.076 .057 108 .039 .124 .253
35	.044 .019 10 .043 .051 .086		.078 .021 9 .077 .100 .109		.045 .033 37 .038 .060 .128	.068 .044 23 .059 .069 .198	.037 .008 13 .034 .045 .052			.053 .034 92 .035 .070 .136
30	.039 .008 5 .042 .046 .047				.055 .037 35 .045 .082 .155		.039 .002 3 .040 .041 .041	.022 .009 9 .019 .033 .037		.047 .033 52 .038 .060 .132
25	.050 .031 6 .046 .066 .106		.045 .004 5 .046 .047 .048		.045 .017 30 .042 .051 .094					.046 .019 41 .043 .052 .111
20			.031 .011 18 .031 .040 .054	.049 .008 16 .053 .056 .059	.047 .018 20 .048 .067 .083					.042 .016 54 .030 .056 .080
15		.058 1	.024 .008 11 .022 .030 .041		.026 .007 11 .026 .031 .041					.027 .010 23 .025 .036 .051
10				.024 .005 2 .024 .027 .028	.030 .007 6 .029 .037 .041					.028 .007 8 .025 .035 .041
5				.028 .008 5 .031 .033 .034						.028 .008 5 .031 .033 .034
0				.023 .003 8 .024 .025 .026						.023 .003 8 .024 .025 .026
5		.008 1		.026 .003 5 .025 .028 .032						.023 .007 6 .025 .027 .031
10		.014 .001 4 .015 .015 .015		.025 .002 5 .025 .027 .028						.020 .006 9 .023 .026 .028
15		.013 .004 3 .011 .016 .018		.029 .009 4 .032 .038 .039						.022 .011 7 .018 .036 .039
20			.009 1	.048 .001 2 .048 .049 .049						.035 .018 3 .047 .048 .049
25			.031 .010 2 .031 .038 .041							.031 .010 2 .031 .038 .041
30										
35				.078 .022 6 .072 .105 .109						.078 .022 6 .072 .105 .109
40				.041 .019 3 .039 .057 .065						.041 .019 3 .039 .057 .065
45S				.044 .010 4 .043 .053 .058						.044 .010 4 .043 .053 .058

LONGITUDE

TABLE XII. - Continued. GASP AMBIENT OZONE DATA BY LATITUDE FOR DECEMBER

(c) Flight level 330

CODE:

MEAN	ST. DEV.	N
50%	84%	98%

DECEMBER
FL 330

	15E	60E	105E	150E	165W	120W	75W	30W	15E	MEAN	LAT
70N							.215 .214 / .022 .233 / 3 .241			.215 .214 / .022 .233 / 3 .241	70N
65					.312 / 1		.092 .108 / .038 .129 / 5 .132	.159 .142 / .054 .227 / 12 .249		.149 .121 / .069 .227 / 18 .291	65
60						.236 .242 / .043 .260 / 20 .291	.224 .236 / .095 .297 / 41 .456	.312 / 1		.229 .225 / .082 .291 / 62 .414	60
55				.190 / 1		.226 .229 / .045 .274 / 14 .287	.119 .081 / .093 .247 / 35 .315	.167 .188 / .099 .274 / 60 .349		.160 .108 / .097 .269 / 110 .345	55
50				.206 .210 / .037 .235 / 7 .254	.181 / 1	.269 .296 / .051 .313 / 15 .347	.276 .298 / .105 .377 / 20 .428	.125 .107 / .076 .196 / 46 .321		.190 .188 / .105 .307 / 89 .408	50
45	.044 .049 / .013 .056 / 11 .059			.055 .056 / .007 .062 / 11 .066	.046 .034 / .027 .068 / 13 .112	.109 .083 / .066 .156 / 33 .287	.112 .067 / .086 .205 / 50 .317	.119 .089 / .072 .216 / 9 .234		.094 .062 / .073 .160 / 127 .297	45
40	.077 .077 / .024 .092 / 2 .099		.134 .128 / .059 .188 / 6 .218	.126 .102 / .058 .196 / 24 .225	.042 .034 / .023 .049 / 6 .087	.082 .062 / .065 .109 / 69 .321	.044 .038 / .023 .054 / 14 .101			.087 .064 / .064 .134 / 121 .227	40
35	.030 .031 / .008 .035 / 7 .046		.075 .051 / .050 .117 / 21 .198	.047 .041 / .011 .055 / 3 .061	.054 .047 / .031 .066 / 40 .129	.065 .060 / .027 .079 / 22 .139				.059 .048 / .036 .079 / 93 .173	35
30	.039 .026 / .031 .047 / 6 .099	.022 .022 / .002 .024 / 3 .025			.064 .055 / .034 .106 / 40 .139	.050 / 1				.058 .048 / .034 .103 / 50 .135	30
25	.072 / 1	.028 .024 / .016 .029 / 10 .065	.045 .058 / .020 .062 / 5 .066		.056 .044 / .027 .082 / 35 .124					.050 .041 / .027 .073 / 51 .123	25
20		.039 .024 / .027 .060 / 3 .075	.063 .065 / .032 .094 / 7 .098	.075 .074 / .015 .090 / 24 .105	.041 .037 / .011 .055 / 11 .058					.062 .062 / .024 .089 / 45 .102	20
15		.040 / 1	.032 .031 / .015 .044 / 23 .069	.080 .079 / .011 .091 / 12 .098						.048 .031 / .027 .077 / 36 .097	15
10											10
5		.033 .033 / .001 .034 / 7 .035			.032 / 1					.033 .033 / .001 .034 / 8 .035	5
0		.028 .027 / .010 .039 / 6 .041								.028 .027 / .010 .039 / 6 .041	0
5		.007 .007 / .003 .010 / 4 .011		.021 .021 / .001 .022 / 4 .023						.014 .012 / .007 .021 / 8 .023	5
10				.027 .020 / .012 .043 / 9 .048						.027 .020 / .012 .043 / 9 .048	10
15				.024 .021 / .010 .033 / 3 .037	.034 .033 / .016 .056 / 13 .057					.032 .027 / .016 .052 / 16 .057	15
20				.072 .072 / .006 .076 / 5 .079						.072 .072 / .006 .076 / 5 .079	20
25				.070 .079 / .025 .096 / 16 .098						.070 .079 / .025 .096 / 16 .098	25
30				.102 .097 / .032 .123 / 37 .193						.102 .097 / .032 .123 / 37 .193	30
35			.056 / 1	.104 .096 / .044 .137 / 12 .198						.101 .095 / .044 .126 / 13 .198	35
40			.048 / 1							.048 / 1	40
45S											45S

LONGITUDE

TABLE XII. - Continued. GASP AMBIENT OZONE DATA BY LATITUDE FOR DECEMBER

(d) Flight level 350

CODE:

MEAN	ST. DEV.	N
50%	84%	98%

DECEMBER
FL 350

LAT	15E	60E	105E	150E	165W	120W	75W	30W	15E	MEAN	LAT
70N						.299 .054 8 .295 .361 .385	.285 .067 23 .290 .347 .408			.289 .064 31 .290 .357 .406	70N
65					.258 .035 15 .252 .280 .336	.163 .007 2 .163 .168 .170	.193 1			.244 .046 18 .243 .273 .335	65
60				.146 1	.202 .075 10 .214 .284 .296	.160 .082 32 .126 .280 .302				.169 .081 43 .146 .281 .301	60
55				.077 .045 15 .071 .099 .186	.185 .053 28 .189 .239 .275	.175 .093 54 .172 .282 .337	.252 .123 16 .289 .365 .431	.170 .063 9 .183 .217 .256		.175 .095 122 .127 .269 .381	55
50				.054 .031 9 .063 .085 .104	.144 .102 34 .105 .202 .375	.187 .113 44 .189 .314 .379	.176 .130 31 .137 .353 .380	.136 .079 46 .112 .217 .283		.155 .108 164 .084 .293 .376	50
45	.103 .054 42 .097 .160 .236			.110 .059 22 .102 .132 .267	.145 .089 59 .116 .251 .336	.233 .102 140 .239 .335 .396	.144 .109 65 .102 .276 .360	.108 .094 23 .054 .247 .279		.170 .108 351 .156 .298 .382	45
40	.093 .051 64 .071 .141 .217		.115 .095 13 .065 .189 .327	.176 .101 24 .202 .289 .334	.088 .080 88 .062 .154 .328	.090 .060 248 .066 .149 .244	.183 .184 19 .074 .402 .495			.099 .060 456 .056 .163 .355	40
35	.081 .053 38 .068 .106 .262		.075 .058 5 .052 .102 .179	.062 .031 21 .049 .105 .125	.079 .058 189 .055 .136 .244	.100 .054 57 .085 .143 .241				.082 .056 310 .059 .133 .249	35
30	.064 .028 51 .060 .089 .132	.096 .030 4 .081 .116 .144	.049 .004 3 .050 .052 .053		.063 .041 232 .051 .087 .220	.066 .006 7 .064 .068 .078				.064 .038 297 .053 .087 .215	30
25		.071 .015 13 .070 .077 .104	.059 1		.051 .022 219 .045 .069 .113					.052 .022 333 .047 .071 .112	25
20		.055 1	.018 .002 6 .018 .019 .021	.065 .019 21 .061 .064 .103	.044 .019 58 .039 .064 .089					.047 .022 86 .040 .069 .096	20
15		.033 .004 3 .031 .036 .039	.049 .017 5 .047 .066 .070	.054 .020 23 .055 .074 .083	.049 .015 18 .045 .065 .079					.050 .018 49 .046 .071 .034	15
10		.045 .004 5 .045 .048 .050			.037 .012 8 .034 .051 .053					.040 .010 13 .045 .050 .053	10
5		.035 .008 7 .034 .042 .047			.019 .004 4 .019 .022 .025					.029 .010 11 .027 .040 .047	5
0		.034 .003 7 .035 .036 .038		.021 .000 3 .021 .022 .022	.024 .008 2 .024 .029 .031					.029 .007 12 .031 .036 .038	0
5		.019 .006 5 .017 .023 .028		.024 .004 3 .025 .027 .028						.021 .006 6 .017 .028 .029	5
10		.021 .008 4 .018 .027 .034		.028 .009 6 .027 .034 .043						.025 .009 10 .021 .034 .042	10
15		.046 .004 6 .045 .049 .052			.041 .017 2 .041 .053 .057					.045 .009 8 .045 .052 .057	15
20				.044 .014 9 .042 .047 .074						.044 .014 9 .042 .047 .074	20
25				.073 .025 20 .082 .095 .101	.019 1					.071 .027 21 .078 .095 .101	25
30				.064 .029 29 .073 .084 .119	.023 1					.062 .030 30 .073 .083 .118	30
35			.049 .012 18 .054 .060 .061	.077 .038 12 .081 .114 .139						.060 .029 30 .048 .087 .135	35
40			.063 1							.063 1	40
45S											45S

LONGITUDE

TABLE XII. - Continued. GASP AMBIENT OZONE DATA BY LATITUDE FOR DECEMBER

(e) Flight level 370

CODE:

MEAN	ST. DEV.	N
50%	84%	98%

DECEMBER
FL 370

LAT	15E	60E	105E	150E	165W	120W	75W	30W	15E	MEAN
70N										
65					.204 .069 18 .174 .285 .336	.268 .080 20 .267 .353 .393				.237 .082 38 .199 .312 .390
60				.211 .162 18 .240 .393 .416	.159 .092 48 .140 .252 .382	.248 .117 33 .302 .382 .396				.198 .122 99 .181 .349 .400
55				.224 .130 55 .230 .303 .513	.173 .071 40 .164 .206 .415	.276 .156 18 .238 .444 .541	.317 .059 17 .324 .380 .410	.317 .125 17 .354 .430 .464		.238 .125 147 .221 .367 .502
50				.358 .163 35 .298 .536 .682	.139 .085 33 .109 .266 .315	.213 .152 2 .213 .316 .358	.288 .101 22 .294 .407 .459	.234 .160 36 .265 .409 .515		.252 .158 128 .158 .409 .594
45				.155 .095 61 .144 .257 .369	.132 .101 33 .149 .216 .329	.165 .100 26 .179 .273 .340	.202 .186 38 .097 .479 .581	.171 .120 76 .149 .300 .423		.166 .125 234 .094 .290 .483
40	.117 .026 13 .107 .139 .165		.102 .056 9 .103 .155 .196	.152 .064 36 .158 .243 .283	.088 .062 81 .068 .163 .220	.125 .104 574 .100 .206 .447	.282 .142 4 .255 .397 .492	.219 .109 16 .251 .331 .358		.125 .101 733 .103 .205 .431
35	.102 .038 3 .082 .132 .152		.058 .031 24 .045 .087 .128	.132 .038 24 .121 .157 .234	.090 .067 293 .062 .156 .270	.151 .064 114 .150 .227 .243				.105 .070 458 .069 .192 .246
30	.148 .065 7 .191 .205 .219	.116 .058 7 .093 .203 .206	.054 .035 42 .041 .097 .127	.115 .002 3 .115 .116 .117	.073 .054 222 .059 .101 .243					.073 .054 281 .060 .109 .240
25	.044 .029 10 .032 .079 .096	.067 .027 12 .071 .084 .114	.038 .017 27 .046 .056 .061	.043 .011 30 .041 .059 .064	.068 .033 188 .067 .098 .145					.061 .032 267 .059 .092 .144
20		.047 .020 17 .052 .071 .080	.039 .006 7 .036 .041 .052	.063 .016 24 .063 .077 .089	.053 .027 38 .040 .085 .120					.054 .023 86 .048 .077 .106
15		.065 .001 3 .064 .065 .066	.034 .016 13 .030 .050 .063	.044 .007 11 .042 .049 .058	.032 .010 40 .031 .040 .057					.036 .013 67 .033 .049 .065
10				.028 1	.029 .007 43 .031 .034 .044					.029 .007 44 .031 .034 .044
5		.026 1		.030 .007 12 .031 .036 .040	.029 .005 34 .029 .032 .039					.029 .006 47 .029 .034 .040
0				.024 .006 13 .025 .028 .033	.029 .006 27 .028 .036 .039					.027 .007 40 .026 .033 .039
5				.022 .007 12 .023 .027 .028	.032 .007 28 .033 .040 .040					.029 .008 40 .026 .039 .040
10				.031 .011 29 .027 .043 .051	.031 .009 14 .033 .037 .050					.031 .011 43 .028 .041 .051
15				.041 .014 34 .038 .054 .072	.023 .002 3 .021 .024 .026					.039 .015 37 .037 .053 .071
20				.051 .025 26 .045 .057 .120	.020 .005 7 .020 .021 .029					.044 .026 33 .044 .057 .116
25				.061 .022 11 .058 .083 .105	.014 .003 7 .013 .017 .018					.043 .029 18 .043 .066 .104
30				.116 .014 4 .121 .126 .129						.116 .014 4 .121 .126 .129
35			.149 .007 3 .154 .154 .154	.183 .112 15 .101 .337 .360						.177 .103 18 .124 .329 .359
40			.042 .016 6 .036 .058 .067							.042 .016 6 .036 .058 .067
45S			.128 .032 6 .136 .154 .154							.128 .032 6 .136 .154 .154

LONGITUDE

TABLE XII. - Continued. GASP AMBIENT OZONE DATA BY LATITUDE FOR DECEMBER

(f) Flight level 390

CODE:

MEAN	ST. DEV.	N
50%	84%	98%

DECEMBER
FL 390

LAT	15E	60E	105E	150E	165W	120W	75W	30W	15E	MEAN	LAT
70N											70N
65				.179 1	.286 .149 56 .241 .461 .540					.284 .149 57 .217 .460 .540	65
60				.418 .151 52 .435 .587 .632	.290 .130 66 .281 .422 .569	.121 .024 11 .121 .133 .173	.277 .075 12 .262 .333 .427	.282 .156 32 .286 .450 .517		.315 .156 173 .303 .485 .607	60
55				.283 .189 93 .246 .484 .702	.307 .142 17 .269 .488 .544	.279 .105 4 .230 .361 .444	.267 .162 41 .255 .438 .653	.216 .145 40 .193 .365 .480		.268 .172 195 .238 .450 .674	55
50				.297 .116 80 .287 .393 .555	.213 .136 34 .196 .339 .470	.234 .031 3 .216 .257 .275	.390 .103 10 .393 .501 .543	.125 .063 12 .126 .185 .224		.267 .132 139 .264 .369 .550	50
45	.182 .035 6 .173 .210 .243		.219 .086 7 .162 .333 .359	.243 .145 101 .242 .393 .489	.121 .107 59 .106 .210 .360	.217 .151 124 .184 .363 .570	.489 1			.207 .146 298 .132 .358 .518	45
40			.207 .115 21 .170 .313 .492	.147 .102 40 .113 .241 .381	.122 .096 58 .096 .229 .380	.148 .091 327 .132 .256 .332	.113 1	.210 .158 24 .259 .375 .425		.150 .101 471 .132 .261 .403	40
35	.192 1		.187 .100 23 .172 .267 .393	.126 .059 17 .100 .192 .239	.091 .046 149 .080 .126 .218	.161 .136 83 .126 .247 .546		.001 1		.123 .096 274 .086 .181 .450	35
30			.095 .044 16 .069 .151 .177	.054 .027 9 .038 .090 .102	.079 .042 173 .067 .104 .227			.031 1		.079 .042 199 .066 .106 .220	30
25	.025 .024 10 .023 .031 .080	.015 1	.050 .012 4 .052 .059 .064	.024 .008 3 .028 .029 .030	.063 .029 108 .060 .090 .126					.059 .030 126 .056 .089 .125	25
20		.025 .008 9 .025 .034 .036	.041 .012 6 .046 .048 .052		.059 .021 26 .059 .082 .092					.049 .023 41 .047 .072 .091	20
15			.044 .016 4 .039 .058 .068		.036 .015 33 .033 .047 .075					.037 .015 37 .033 .047 .074	15
10			.027 .005 7 .026 .028 .037		.029 .008 44 .030 .036 .047					.029 .007 51 .028 .036 .046	10
5		.015 .009 5 .014 .024 .026	.028 .004 2 .028 .030 .031		.028 .008 64 .027 .035 .042					.027 .009 71 .027 .034 .042	5
0				.036 .011 8 .036 .048 .051	.028 .008 52 .028 .035 .044					.029 .009 60 .029 .037 .048	0
5				.038 .010 9 .037 .047 .056	.027 .006 35 .027 .031 .044					.029 .008 44 .027 .036 .051	5
10				.027 .006 23 .027 .031 .039	.026 .006 18 .026 .031 .033					.026 .006 41 .027 .031 .038	10
15				.031 .015 22 .028 .048 .057	.026 .012 17 .022 .040 .050					.029 .014 39 .024 .046 .056	15
20				.044 .022 11 .056 .066 .070						.044 .022 11 .056 .066 .070	20
25				.094 .002 7 .094 .095 .098						.094 .002 7 .094 .095 .098	25
30				.096 .006 5 .095 .103 .104						.096 .006 5 .095 .103 .104	30
35			.100 .044 10 .074 .150 .173	.148 .070 48 .128 .231 .274						.140 .068 58 .115 .227 .271	35
40											40
45S											45S

LONGITUDE

TABLE XII. - Continued. GASP AMBIENT OZONE DATA BY LATITUDE FOR DECEMBER

(g) Flight level 410

CODE:

MEAN	ST. DEV.	N
50%	84%	98%

DECEMBER
FL 410

LAT	15E	60E	105E	150E	165W	120W	75W	30W	15E	MEAN	LAT
70N											70N
65											65
60				.453 .103 7 .492 .533 .540	.255 .175 15 .224 .485 .492	.467 .019 2 .467 .480 .485				.331 .178 24 .336 .492 .537	60
55				.447 .193 43 .487 .610 .834	.287 .158 16 .286 .423 .637	.499 .172 43 .822 .646 .927	.478 .076 5 .509 .545 .570			.445 .189 107 .477 .602 .840	55
50				.364 .227 83 .372 .573 .855	.202 .103 30 .177 .323 .384	.428 .179 58 .407 .607 .755	.332 .177 9 .273 .467 .713			.356 .207 180 .330 .577 .841	50
45			.236 .189 16 .156 .292 .732	.369 .225 40 .314 .633 .846	.131 .098 47 .089 .248 .361	.381 .248 93 .325 .544 .944	.155 .025 5 .145 .169 .201			.303 .235 201 .229 .579 .859	45
40	.172 .049 10 .179 .218 .241		.163 .134 55 .114 .264 .541		.158 .084 31 .160 .225 .309	.268 .209 95 .226 .429 .858	.150 1	.280 .114 6 .241 .327 .499		.216 .175 198 .123 .333 .744	40
35	.124 .050 60 .119 .167 .252		.124 .095 19 .112 .174 .369	.079 .003 2 .079 .081 .082	.129 .084 50 .107 .166 .376	.271 .185 20 .236 .389 .747				.145 .107 151 .114 .189 .417	35
30	.050 .039 34 .041 .084 .143		.049 .004 6 .049 .052 .054		.164 .088 77 .154 .214 .461					.125 .092 117 .113 .201 .432	30
25	.075 .012 16 .075 .086 .095	.061 .007 9 .060 .069 .073	.061 1	0.000 0.000 8 0.000 0.000 0.000	.098 .057 67 .090 .151 .266					.083 .054 101 .079 .119 .265	25
20		.051 .013 22 .055 .062 .069	.027 .013 12 .022 .043 .050	.000 .001 9 0.000 .001 .002	.068 .049 36 .040 .111 .187					.049 .041 79 .038 .087 .169	20
15			.015 .011 28 .011 .031 .039	.004 .005 10 .003 .007 .015	.046 .023 41 .041 .063 .100					.030 .025 79 .026 .054 .098	15
10			.014 .010 27 .012 .026 .034		.028 .006 30 .027 .033 .044					.021 .011 57 .024 .030 .042	10
5		.010 .008 3 .009 .016 .020	.014 .008 11 .012 .023 .026		.025 .007 19 .024 .031 .039					.020 .010 33 .022 .030 .039	5
0				.025 .009 17 .026 .035 .037	.034 .010 5 .038 .042 .045					.027 .010 22 .026 .037 .043	0
5				.033 .014 19 .034 .047 .056	.027 .005 9 .027 .033 .038					.031 .012 28 .026 .044 .056	5
10				.031 .014 27 .032 .047 .051	.035 .002 2 .035 .036 .037					.031 .013 29 .033 .046 .051	10
15				.038 .017 21 .032 .058 .065	.045 .026 31 .037 .087 .097					.042 .023 52 .030 .066 .096	15
20				.051 .022 23 .054 .062 .110						.051 .022 23 .054 .062 .110	20
25				.076 .055 24 .042 .140 .169						.076 .055 24 .042 .140 .169	25
30				.112 .056 18 .126 .159 .213						.112 .056 18 .124 .159 .213	30
35				.184 .082 56 .165 .278 .322						.184 .082 56 .165 .278 .322	35
40											40
45S											45S

LONGITUDE

TABLE XII. - Concluded. GASP AMBIENT OZONE DATA BY LATITUDE FOR DECEMBER

(h) Flight level 430

CODE:

MEAN	ST. DEV.	N
50%	84%	98%

DECEMBER
FL 430

LAT	15E	60E	105E	150E	165W	120W	75W	30W	15E	MEAN
70N										
65										
60										
55				.478 .018 4 .487 .490 .492			.575 .147 4 .540 .716 .777			.527 .116 8 .468 .623 .766
50				.602 .157 20 .542 .779 .968		.651 .079 3 .643 .716 .747	.477 .174 16 .439 .669 .732			.555 .173 39 .541 .738 .896
45			.372 .106 11 .411 .474 .514	.454 .055 17 .468 .501 .520		.836 .037 7 .852 .865 .884	.204 .190 22 .136 .475 .554			.389 .238 57 .422 .527 .663
40			.277 .156 38 .231 .420 .652			.106 .060 41 .101 .154 .249	.360 .228 2 .360 .514 .578			.192 .149 81 .148 .307 .605
35			.073 .077 9 .031 .134 .241		.164 .041 21 .150 .211 .256	.093 .042 21 .110 .129 .138				.119 .063 51 .126 .159 .256
30			.017 .005 9 .018 .021 .026		.103 .048 21 .106 .157 .187					.077 .057 30 .070 .144 .185
25	.069 .010 21 .070 .080 .088	.073 .010 8 .075 .080 .088	.034 .024 14 .018 .066 .071		.033 .004 10 .032 .037 .040					.054 .023 53 .061 .075 .089
20		.053 .011 26 .052 .064 .066	.044 .024 14 .047 .067 .077		.059 .006 3 .057 .064 .067					.050 .017 43 .054 .065 .074
15			.022 .008 13 .021 .031 .036		.024 .003 5 .024 .027 .028					.022 .007 18 .020 .029 .036
10			.011 .012 20 .011 .016 .041							.011 .012 20 .011 .016 .041
5		.018 .015 8 .010 .030 .049	.006 .005 10 .009 .012 .014		.020 .002 6 .020 .021 .023					.014 .011 24 .012 .020 .043
0				.025 .004 5 .025 .029 .030	.019 1					.024 .004 6 .023 .028 .030
5				.025 .001 4 .026 .026 .026						.025 .001 4 .025 .026 .026
10				.023 .003 6 .024 .025 .025						.023 .003 6 .024 .025 .025
15				.037 .022 14 .027 .065 .076	.044 .022 52 .037 .065 .086					.042 .022 66 .035 .065 .085
20										
25				.111 .008 4 .109 .118 .124						.111 .008 4 .109 .118 .124
30				.111 .006 2 .111 .114 .116						.111 .006 2 .111 .114 .116
35				.187 .099 49 .148 .323 .433						.187 .099 49 .148 .323 .433
40										
45S										

LONGITUDE

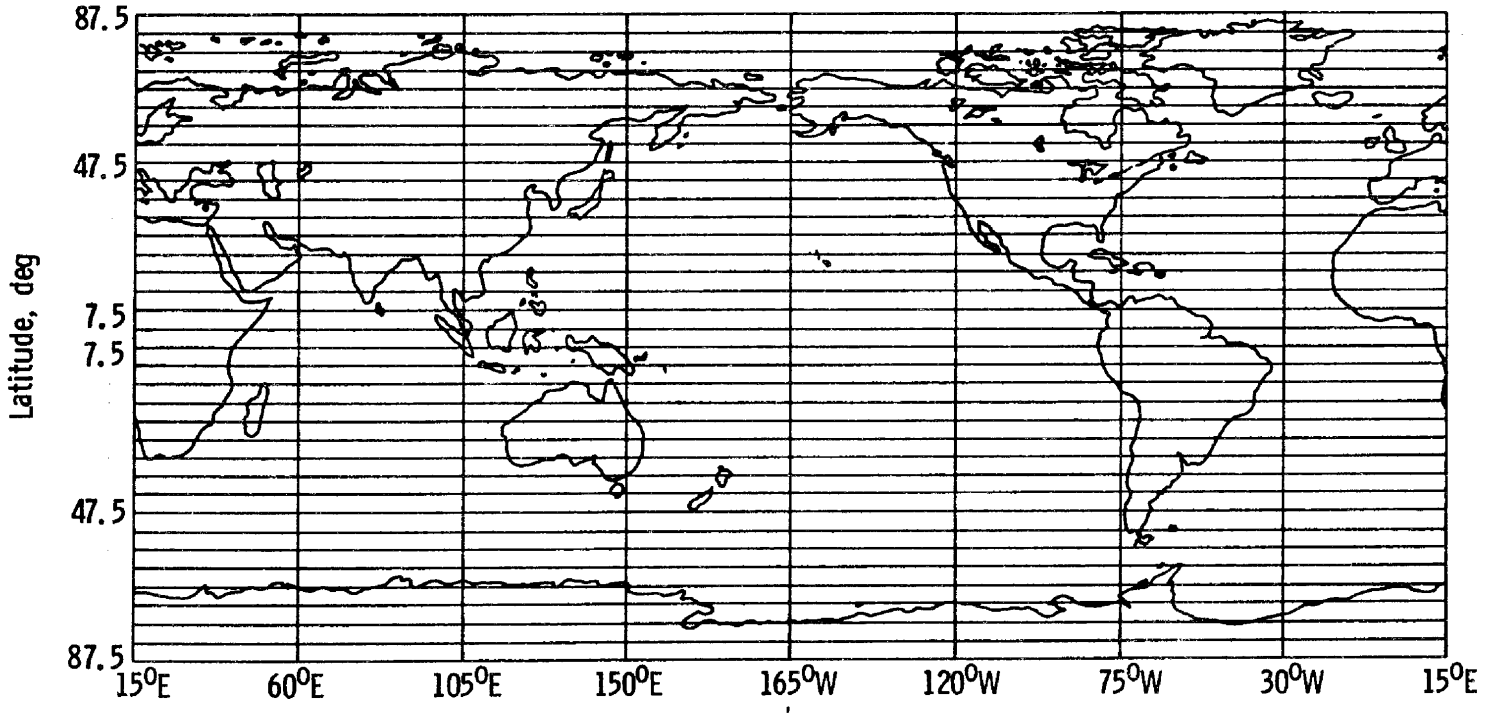


Figure 1. - Geographical grid for ozone tabulations in tables I to XII.

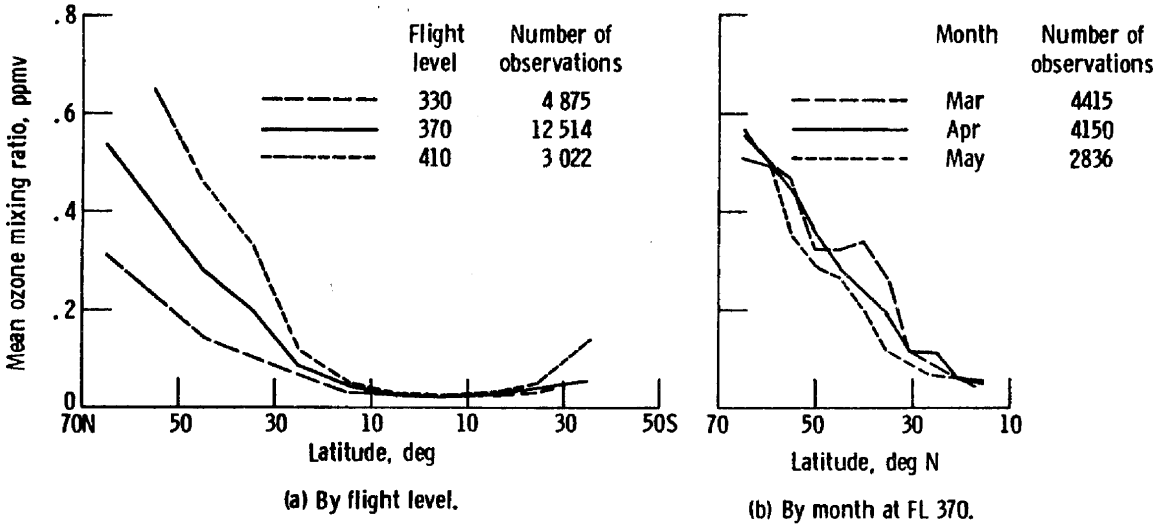


Figure 2. - Variation of mean ambient ozone with latitude in the spring (M-A-M).

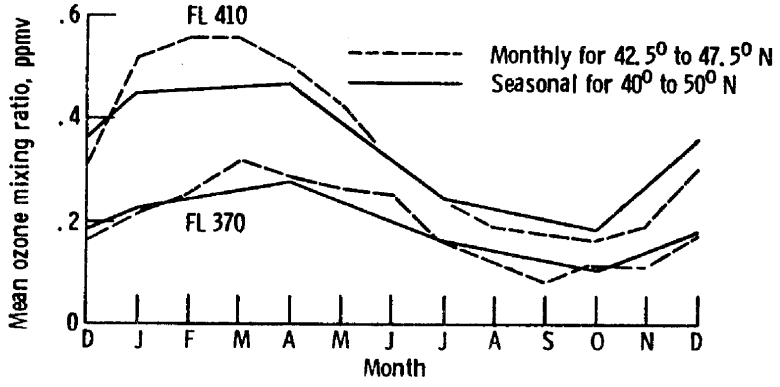
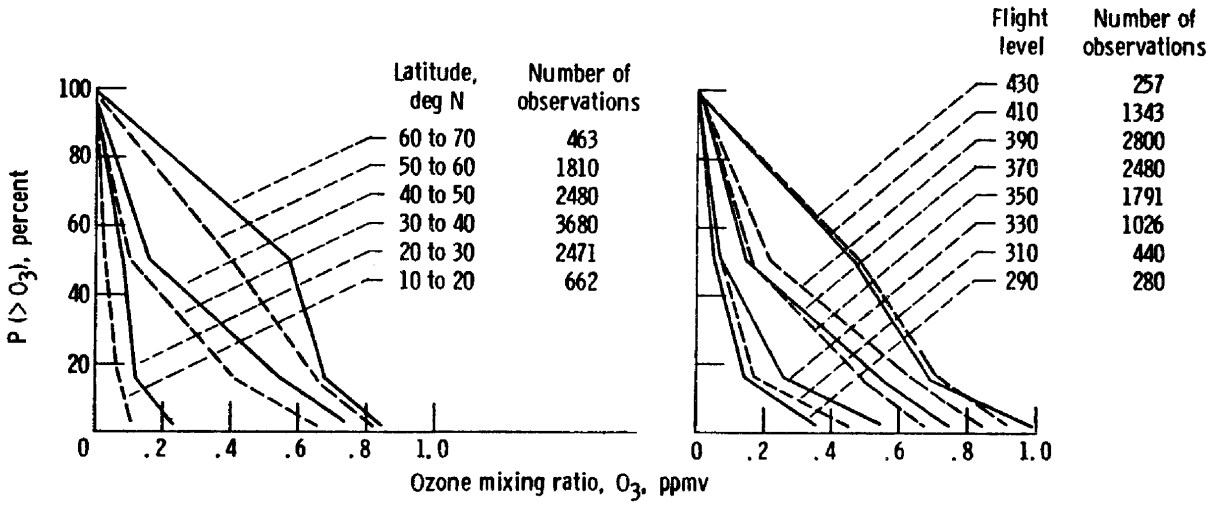


Figure 3. - Seasonal variation of mean ambient ozone near 45° N for flight levels 370 and 410.



(a) Flight level, 370.

(b) 40° to 50° N latitude.

Figure 4. - Ambient ozone cumulative frequency distributions for spring (M-A-M).

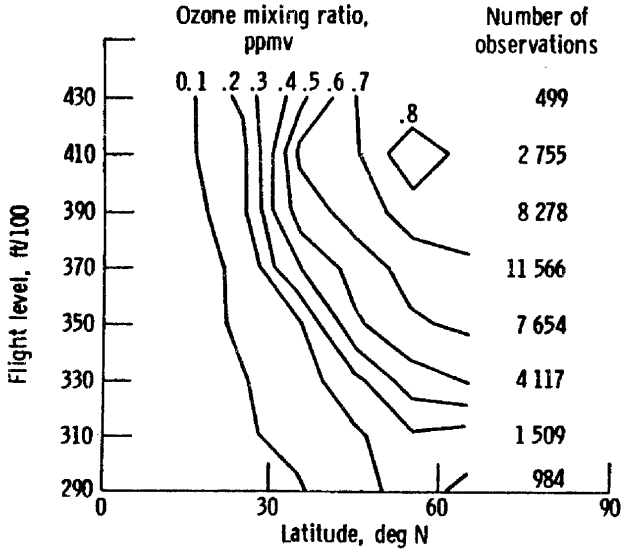


Figure 5. - Northern Hemisphere latitude - flight level cross sections of zonal 84th percentile ozone mixing ratios in the spring.

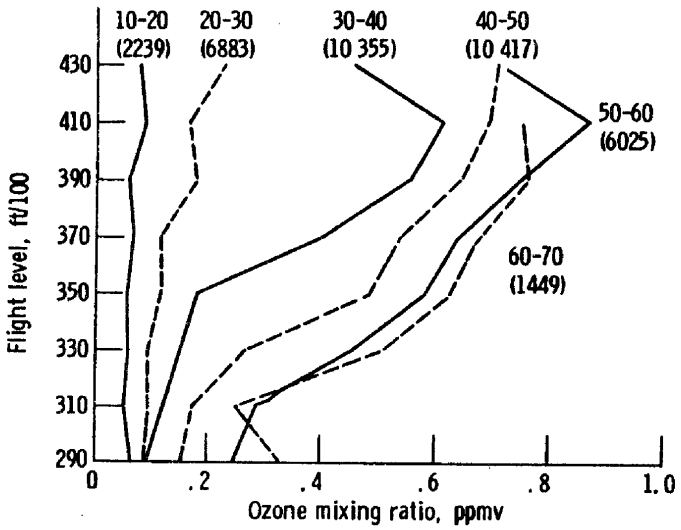


Figure 6. - Vertical profiles of zonal 84th percentile ozone mixing ratios for selected latitudes (deg N). Number of observations for each latitude is given in parentheses.

APPENDIX A

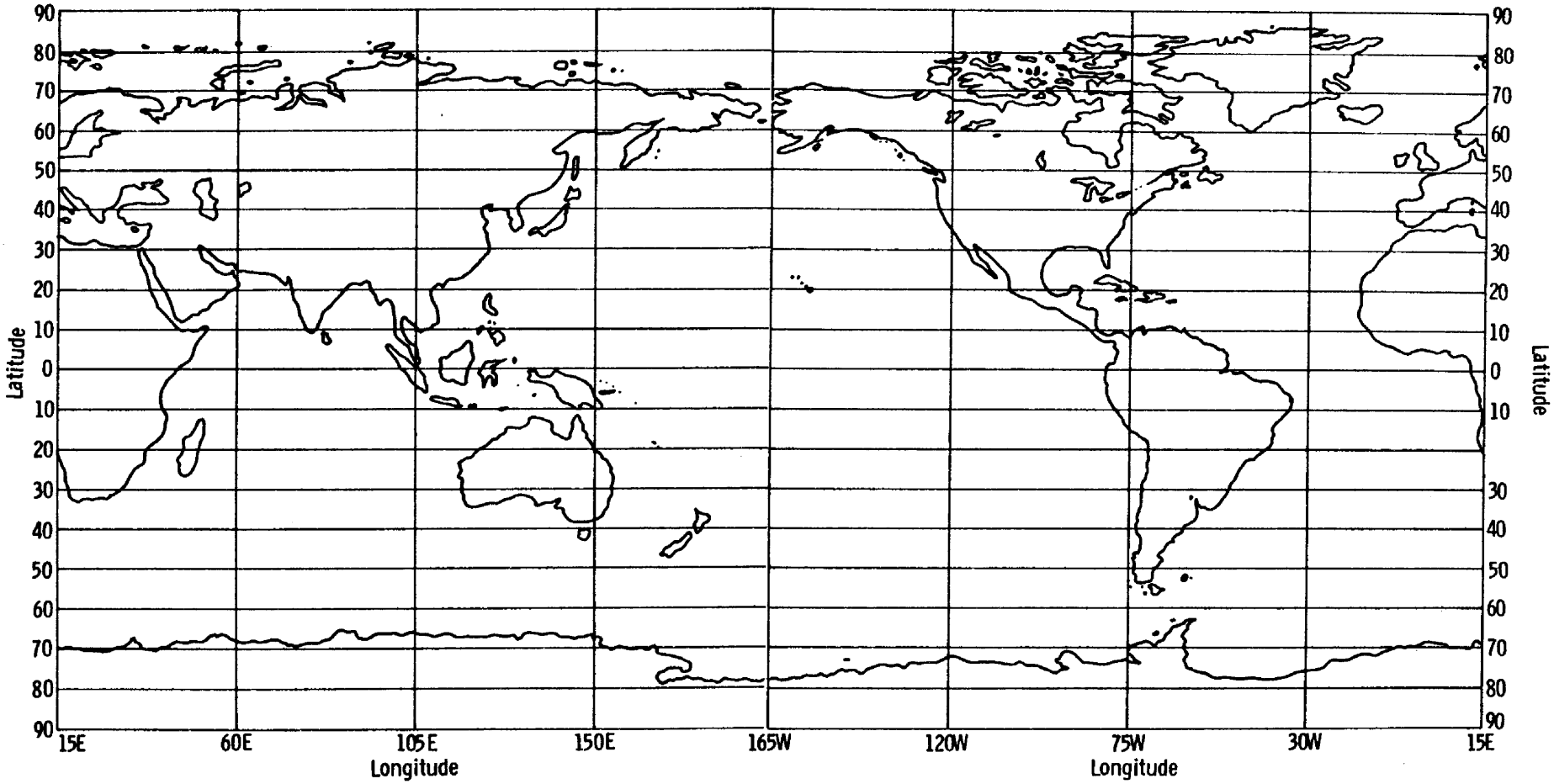
OZONE UNIT CONVERSION FACTORS

[Multiply "From" units by this factor to get "To" units. All temperatures are in K and all pressures in hectopascals (hPa).]

From	To						
	$\mu g/m^3$	10^{-3} cm SPT/km	mol/cm^3	hPa	$\mu g/g$	ppm v	ppm v SLE
$\mu g/m^3$	1	0.0467	1.26×10^{10}	1.73×10^{-3} T/P	2.87×10^{-3} T/P	1.73×10^{-3} T/P	5.09×10^{-4}
10^{-3} cm STP/km	21.4	1	2.69×10^{11}	0.037 QT	0.614 T/P	0.0370 T/P	0.0109
Molecules	7.97×10^{-11}	3.72×10^{-12}	1	1.38×10^{-13}	2.29×10^{-13} T/P	1.38×10^{-13} T/P	4.06×10^{-14}
$\mu g/g$ (ppmw)	348 P/T	16.3 P/T	4.37×10^{12} P/T	0.603 P	1	0.603	0.177 P/T
Partial pressure, hPa (mbar)	578/T	27.0/T	7.25×10^{12} P/T	1	1.66/P	1/P	0.294/T
Parts per million by volume (ppmv)	578 P/T	27.0 P/T	7.25×10^{12} P/T	P	1.66	1	0.294 P/T
Parts per million by volume, sea level equivalent (ppmv SLE)	1.96×10^3	91.8	2.46×10^{13}	3.40T	5.64 T/P	340 T/P	1

APPENDIX B

TABULATIONS OF GASP AMBIENT OZONE DATA BY SEASON AND LATITUDE FOR 2000-FOOT ALTITUDE INTERVALS

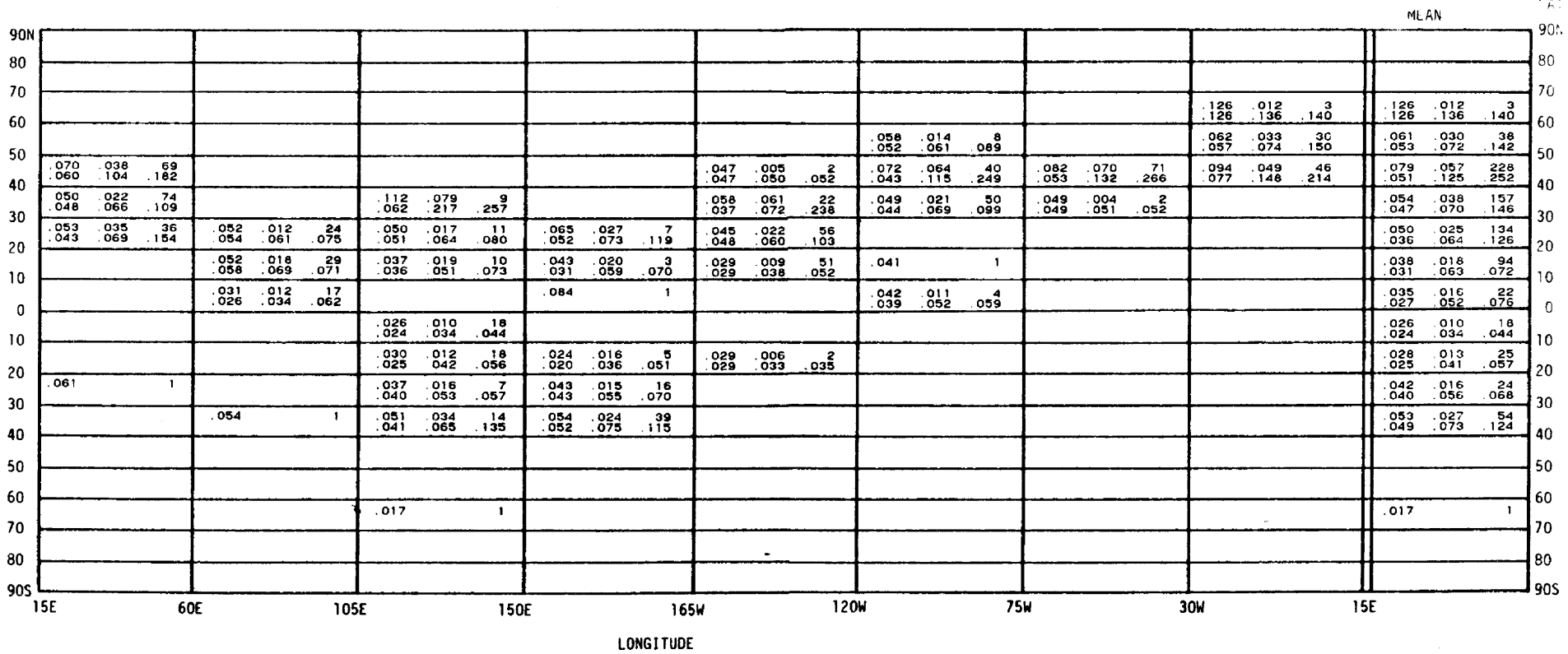


Geographical grid used for appendix B ozone tabulations.

CODE:

MEAN	ST. DEV.	N
50%	84%	98%

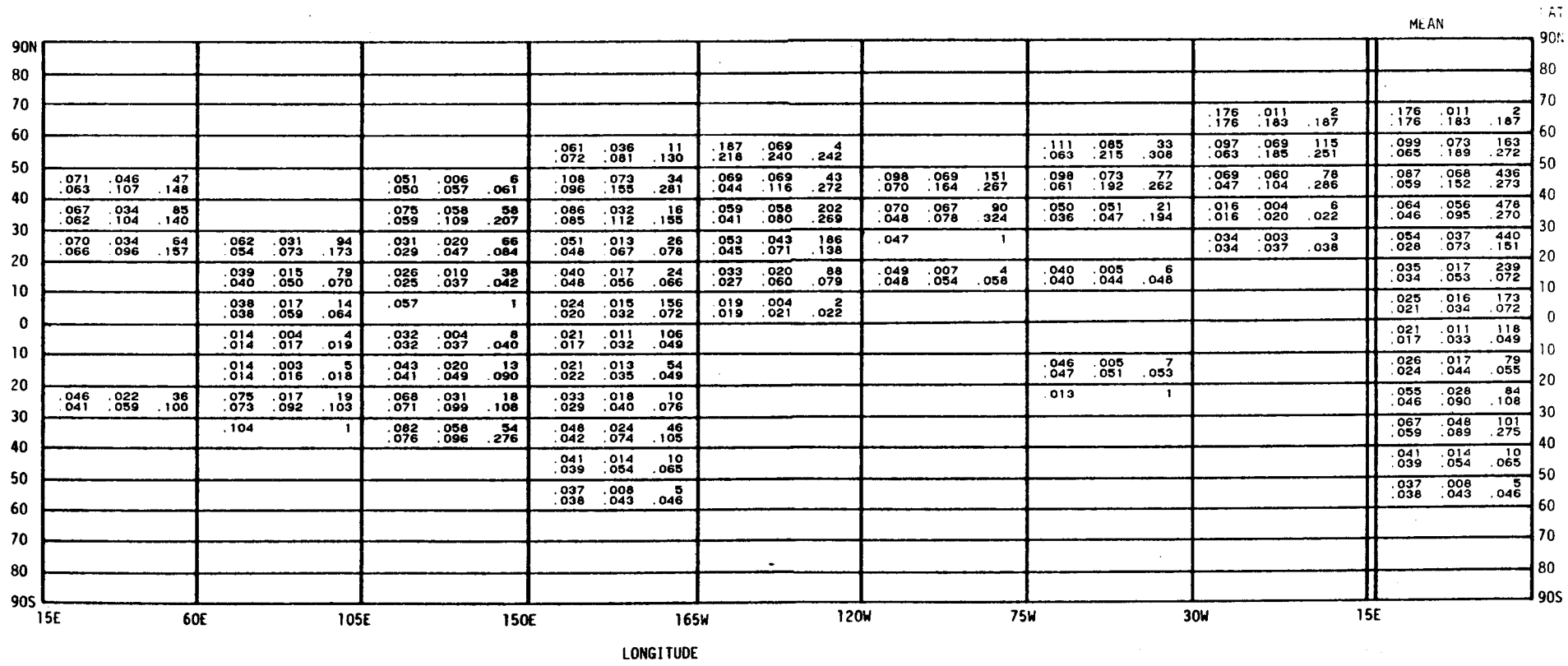
WINTER
FL 290



CODE:

MEAN	ST. DEV.	N
50%	84%	98%

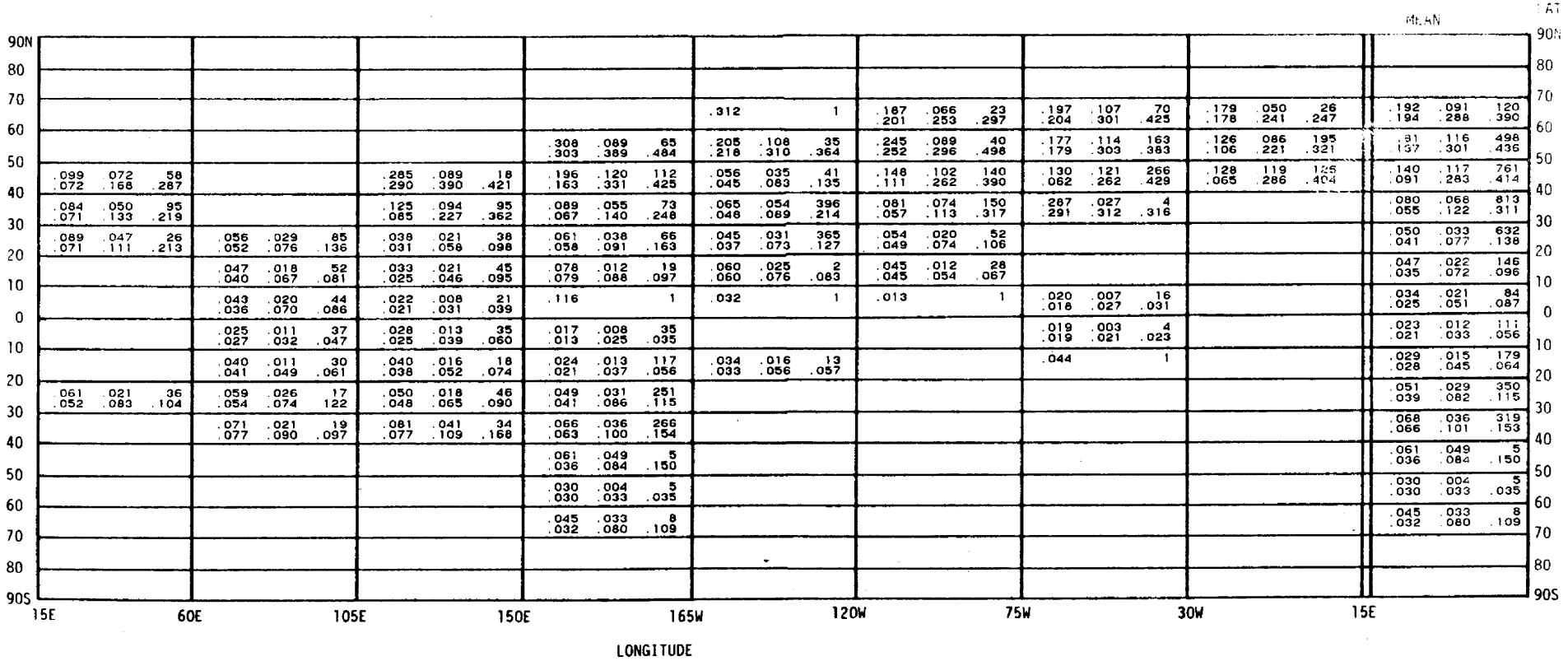
WINTER
FL 310



CODE:

MEAN	ST. DEV.	N
50%	84%	98%

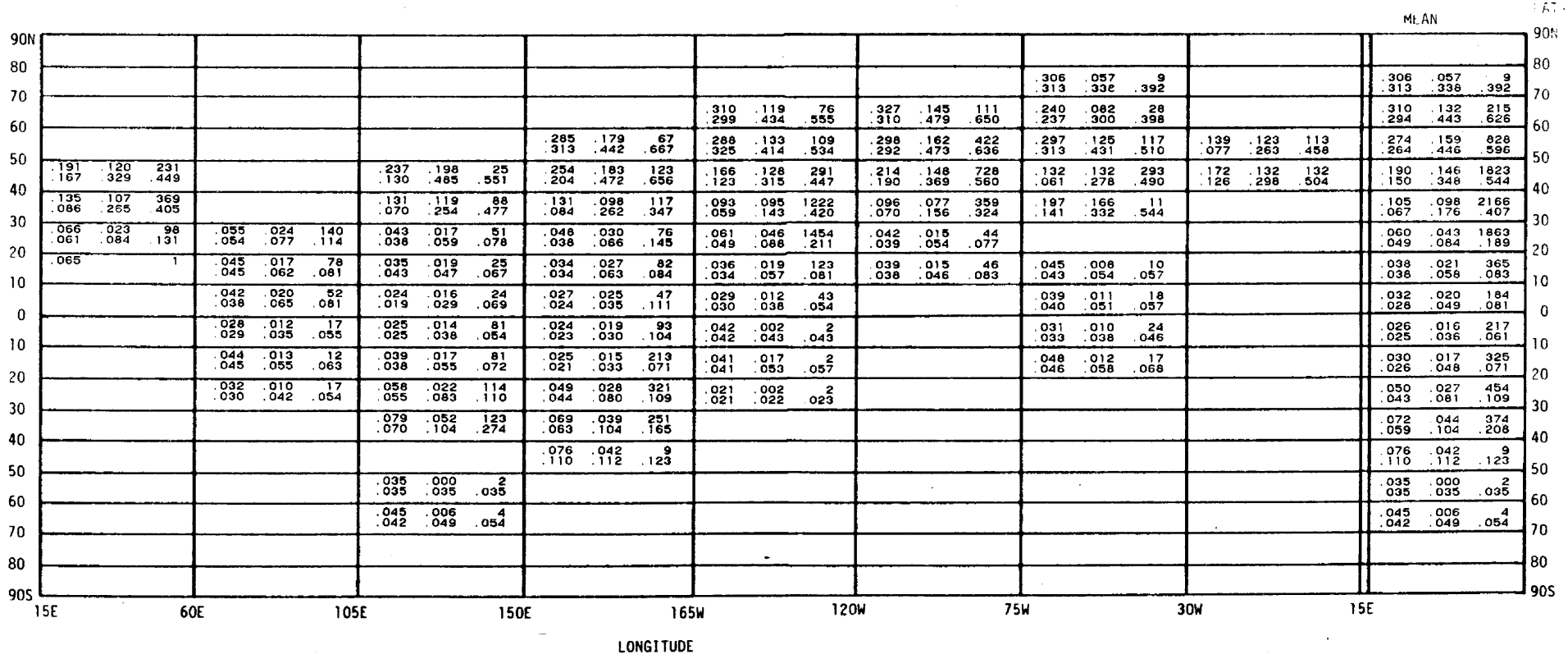
WINTER
FL 330



CODE:

MEAN	ST. DEV.	N
50%	84%	98%

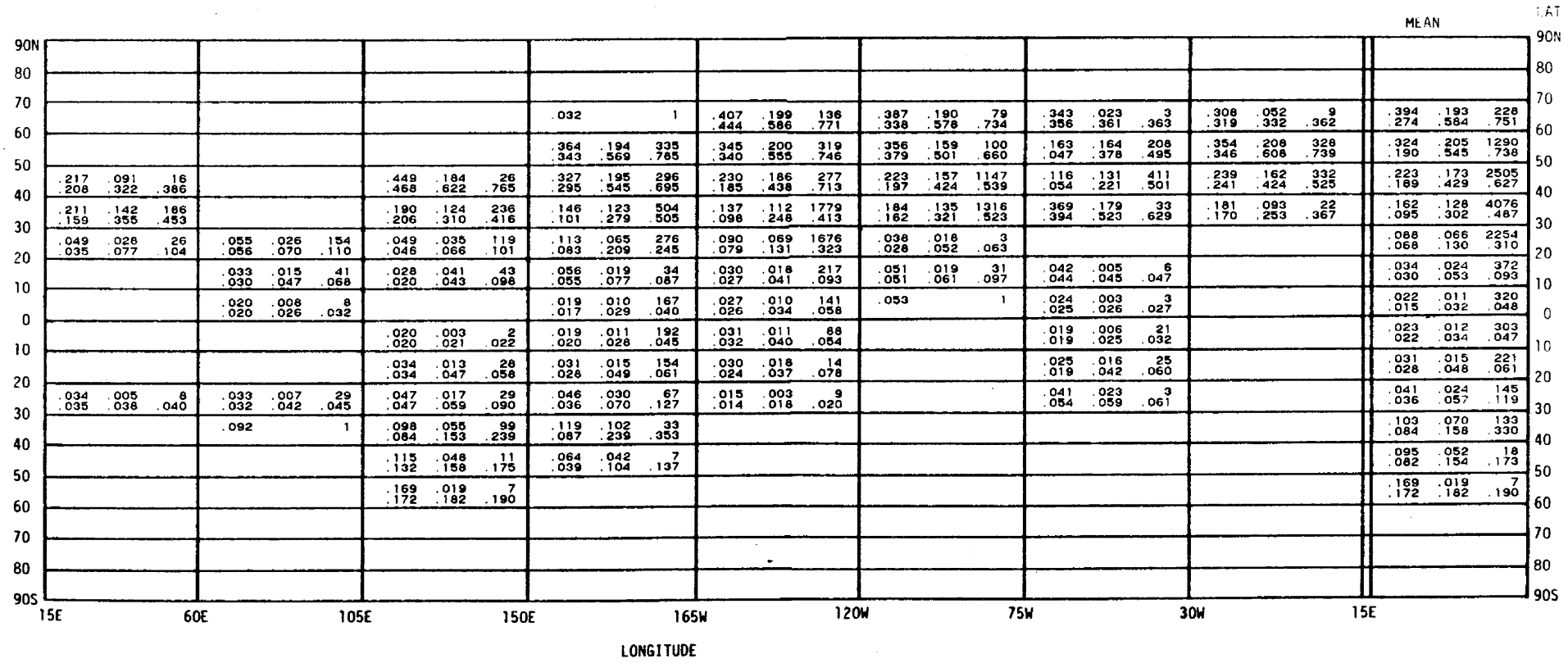
WINTER
FL 350



WINTER
FL 370

CODE:

MEAN	ST. DEV.	N
50%	84%	98%

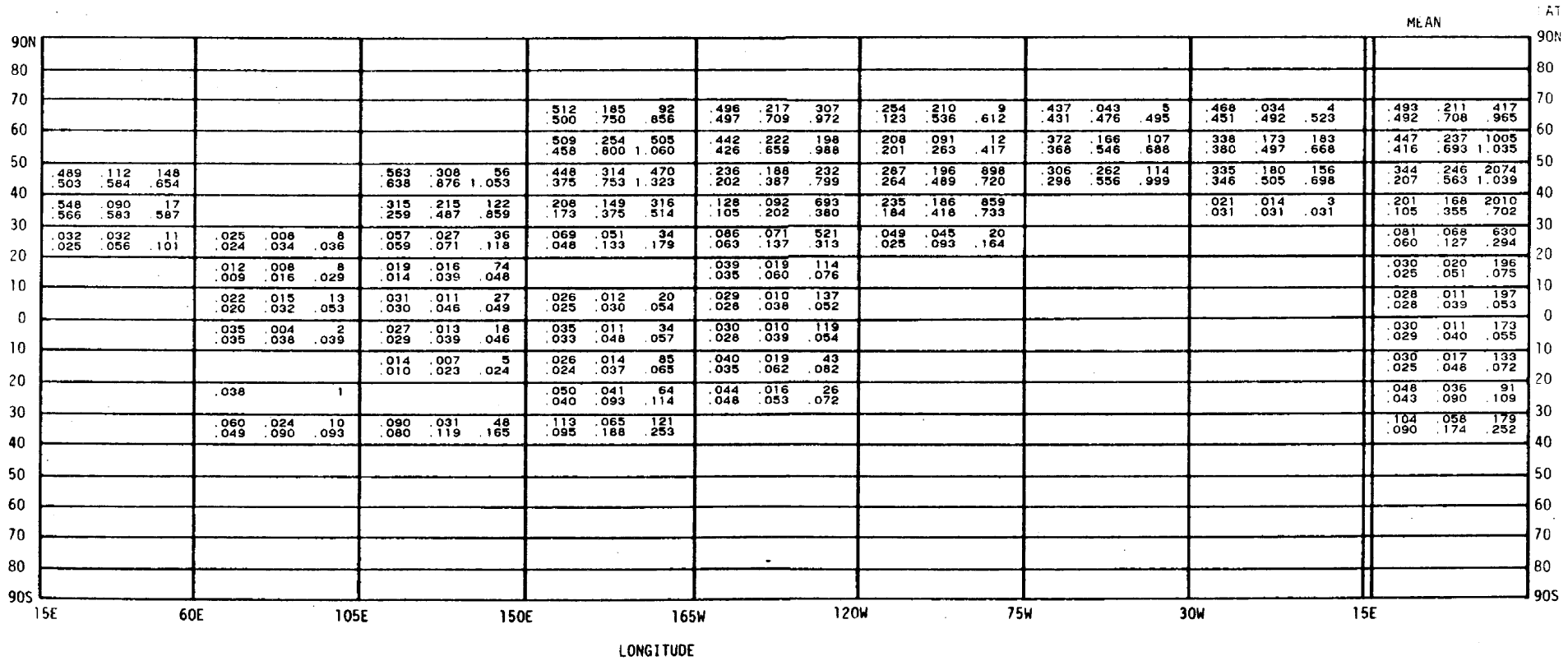


LAT	15E–60E	60E–105E	105E–150E	150E–165W	165W–120W	120W–75W	75W–30W	30W–15E	MEAN
90N									
80									
70				.032 1	.407 .199 136 .444 .586 .771	.387 .190 79 .338 .578 .734	.343 .023 3 .356 .361 .363	.308 .052 9 .319 .332 .362	.394 .193 228 .274 .584 .751
60				.364 .194 335 .343 .569 .785	.345 .200 319 .340 .555 .746	.356 .159 100 .379 .501 .660	.163 .164 208 .047 .378 .495	.354 .208 328 .346 .608 .739	.324 .205 1290 .190 .545 .738
50	.217 .091 16 .208 .322 .386		.449 .184 26 .468 .622 .765	.327 .195 296 .295 .545 .695	.230 .186 277 .185 .438 .713	.223 .157 1147 .197 .424 .539	.116 .131 411 .054 .221 .501	.239 .162 332 .241 .424 .525	.223 .173 2505 .189 .429 .627
40	.211 .142 186 .159 .355 .453		.190 .124 236 .206 .310 .416	.146 .123 504 .101 .279 .505	.137 .112 1779 .098 .248 .413	.184 .135 1316 .162 .321 .523	.369 .179 33 .394 .523 .629	.181 .093 22 .170 .253 .367	.162 .128 4076 .095 .302 .487
30	.049 .028 26 .035 .077 .104	.055 .026 154 .056 .070 .110	.049 .035 119 .046 .066 .101	.113 .065 276 .083 .209 .245	.090 .069 1676 .079 .131 .323	.038 .018 3 .028 .052 .063			.068 .066 2254 .068 .130 .310
20		.033 .015 41 .030 .047 .068	.028 .041 43 .020 .043 .098	.056 .019 34 .055 .077 .087	.030 .018 217 .027 .041 .093	.051 .019 31 .051 .061 .097	.042 .005 6 .044 .045 .047		.034 .024 372 .030 .053 .093
10		.020 .008 8 .020 .026 .032		.019 .010 167 .017 .029 .040	.027 .010 141 .026 .034 .058	.053 1	.024 .003 3 .025 .026 .027		.022 .011 320 .015 .032 .048
0			.020 .003 2 .020 .021 .022	.019 .011 192 .020 .028 .045	.031 .011 88 .032 .040 .054		.019 .006 21 .019 .025 .032		.023 .012 303 .022 .034 .047
10			.034 .013 28 .034 .047 .058	.031 .015 154 .028 .049 .061	.030 .018 14 .024 .037 .078		.025 .016 25 .019 .042 .060		.031 .015 221 .028 .048 .061
20	.034 .005 8 .035 .038 .040	.033 .007 29 .032 .042 .045	.047 .017 29 .047 .059 .090	.046 .030 67 .036 .070 .127	.015 .003 9 .014 .018 .020		.041 .023 3 .054 .059 .061		.041 .024 145 .036 .057 .119
30		.092 1	.098 .055 99 .084 .153 .239	.119 .102 33 .087 .239 .353					.103 .070 133 .084 .158 .330
40			.115 .048 11 .132 .158 .175	.064 .042 7 .039 .104 .137					.095 .052 18 .082 .154 .173
50			.169 .019 7 .172 .182 .190						.169 .019 7 .172 .182 .190
60									
70									
80									
90S									

CODE:

MEAN	ST. DEV.	N
50%	84%	98%

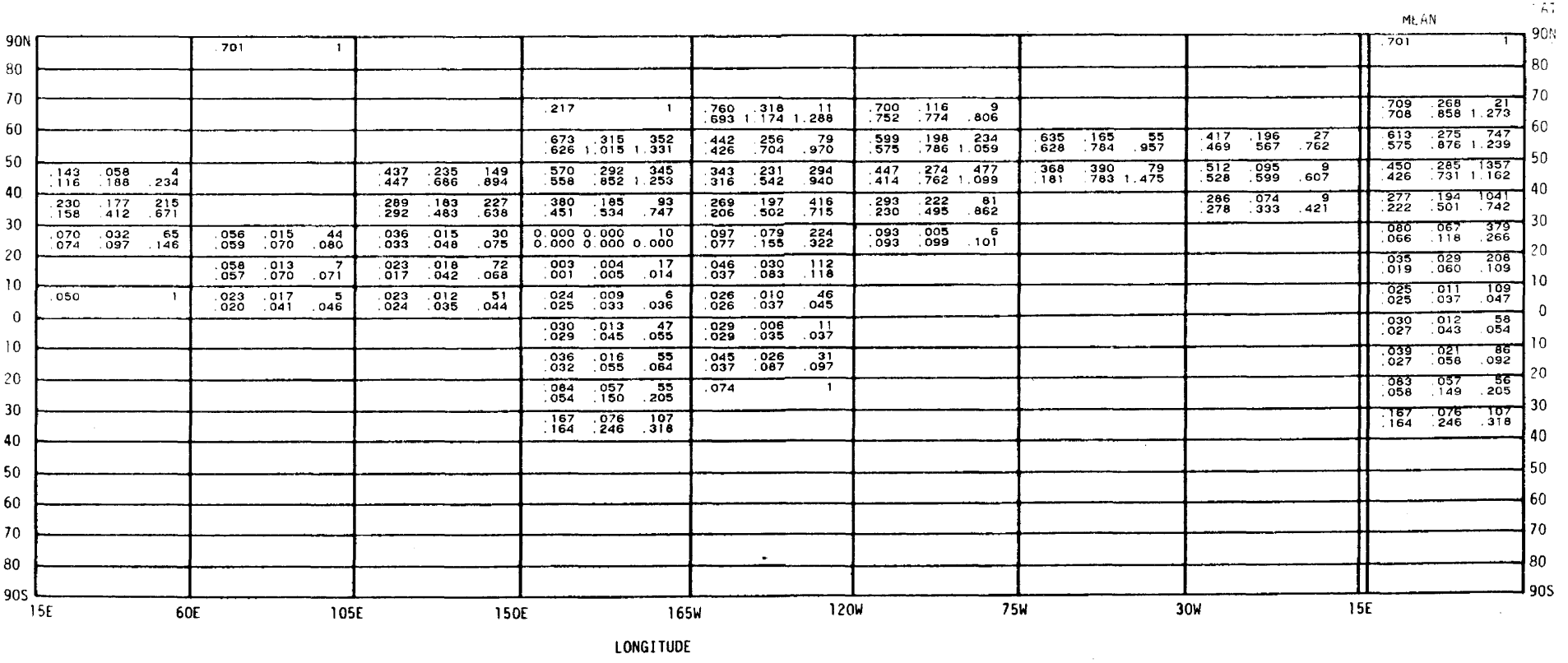
WINTER
FL 390



WINTER
FL 410

CODE:

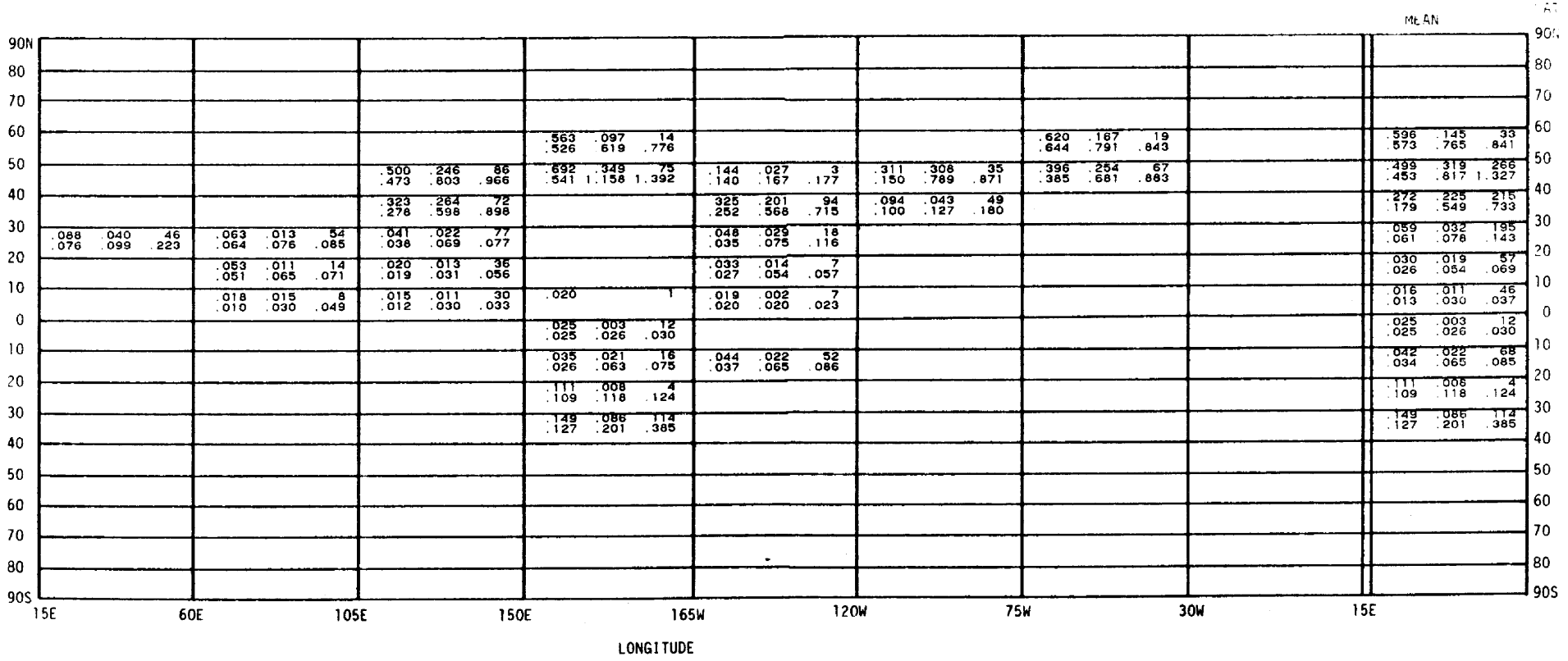
MEAN	ST. DEV.	N
50%	84%	98%



CODE:

MEAN	ST. DEV.	N
50%	84%	98%

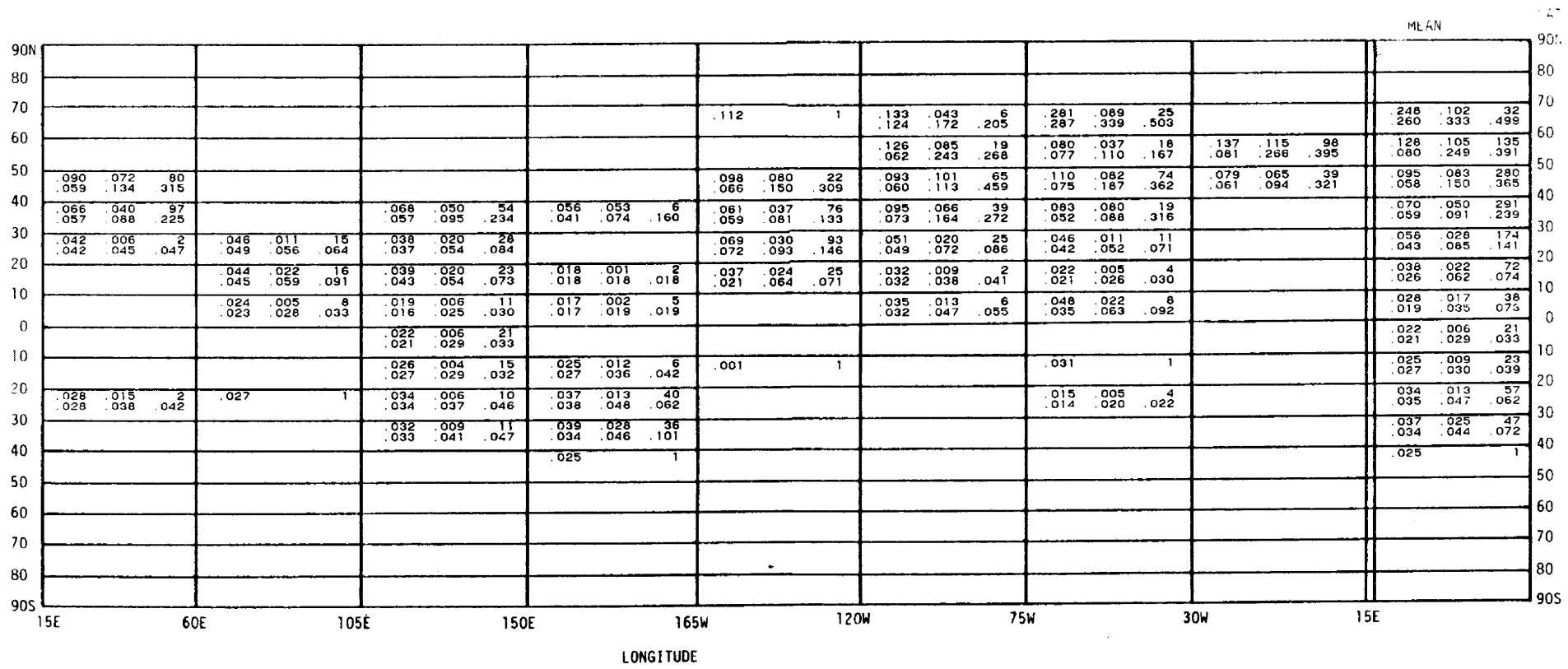
WINTER
FL 430



CODE:

MEAN	ST. DEV.	N
50%	84%	98%

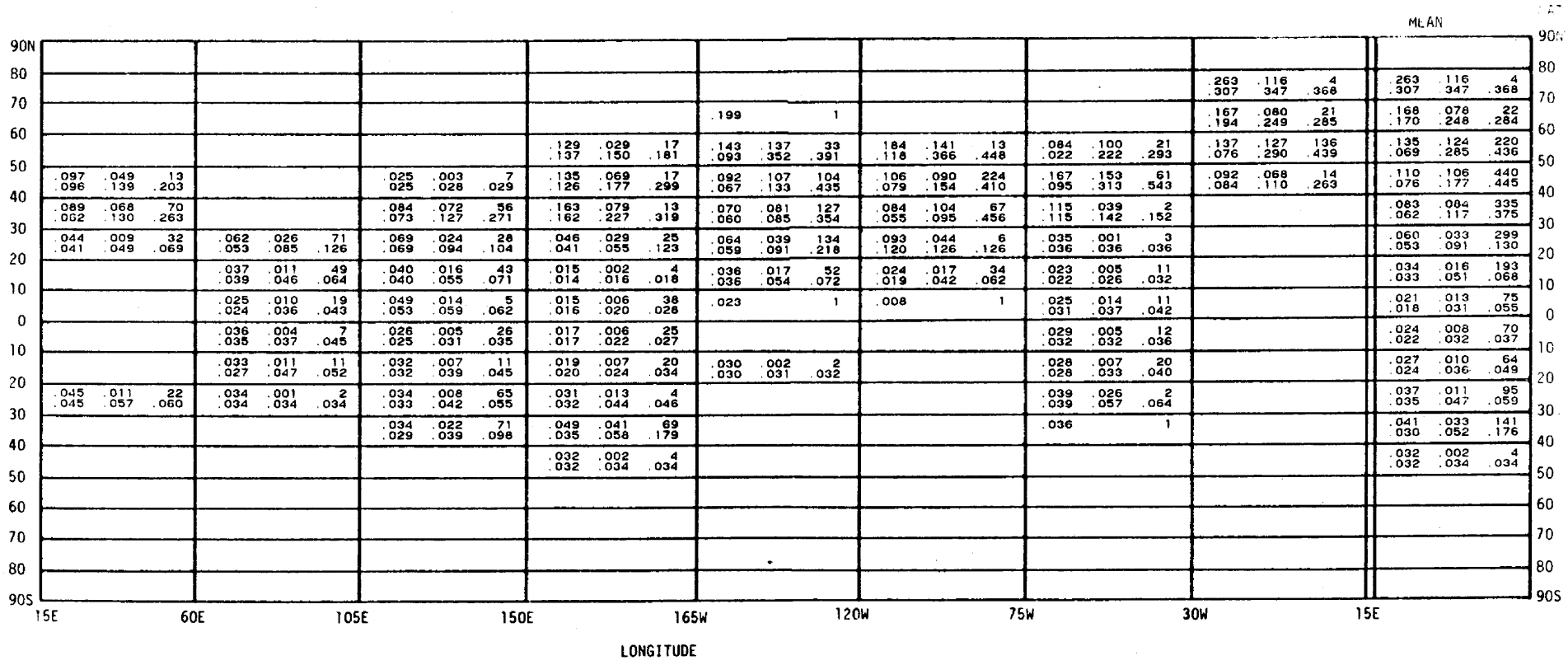
SPRING
FL 290



CODE:

MEAN	S1. DEV.	N
50%	84%	98%

SPRING
FL 310

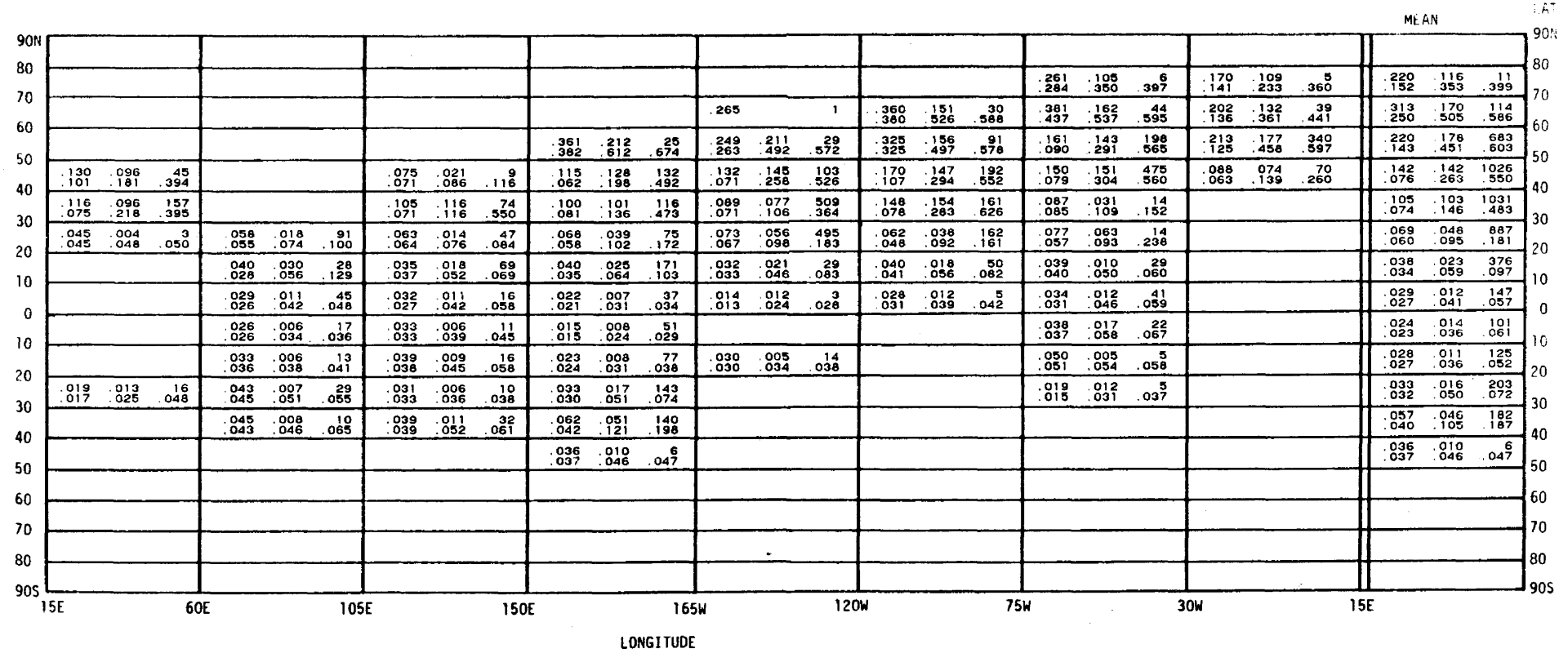


15E–60E	60E–105E	105E–150E	150E–165W	165W–120W	120W–75W	75W–30W	30W–15E	MEAN
						.263 .307 / .116 .347 / 4 .368		.263 .307 / .116 .347 / 4 .368
			.199 / 1			.167 .194 / .080 .249 / 21 .285		.168 .170 / .078 .248 / 22 .284
		.129 .137 / .029 .150 / 17 .181	.143 .093 / .137 .352 / 33 .391	.184 .118 / .141 .366 / 13 .448	.084 .022 / .100 .222 / 21 .293	.137 .076 / .127 .290 / 136 .439		.135 .069 / .124 .285 / 220 .436
.097 .096 / .049 .139 / 13 .203		.025 .025 / .003 .028 / 7 .029	.135 .126 / .069 .177 / 17 .299	.092 .067 / .107 .133 / 104 .435	.106 .079 / .090 .154 / 224 .410	.167 .095 / .153 .313 / 61 .543	.092 .084 / .068 .110 / 14 .263	.110 .076 / .106 .177 / 440 .445
.089 .082 / .068 .130 / 70 .263		.084 .073 / .072 .127 / 56 .271	.163 .162 / .079 .227 / 13 .319	.070 .060 / .081 .085 / 127 .354	.084 .055 / .104 .095 / 67 .456	.115 .115 / .039 .142 / 2 .152		.083 .062 / .084 .117 / 335 .375
.044 .041 / .009 .049 / 32 .069	.062 .053 / .026 .085 / 71 .126	.069 .069 / .024 .094 / 28 .104	.046 .041 / .029 .055 / 25 .123	.064 .059 / .039 .091 / 134 .218	.093 .120 / .044 .126 / 6 .126	.035 .036 / .001 .036 / 3 .036		.060 .053 / .033 .091 / 299 .130
	.037 .039 / .011 .046 / 49 .064	.040 .040 / .016 .055 / 43 .071	.015 .014 / .002 .016 / 4 .018	.036 .036 / .017 .054 / 52 .072	.024 .019 / .017 .042 / 34 .062	.023 .022 / .005 .026 / 11 .032		.034 .033 / .016 .051 / 193 .068
	.025 .024 / .010 .036 / 19 .043	.049 .053 / .014 .059 / 5 .062	.015 .016 / .006 .020 / 38 .028	.023 / 1	.008 / 1	.025 .031 / .014 .037 / 11 .042		.021 .018 / .013 .031 / 75 .055
	.036 .035 / .004 .037 / 7 .045	.026 .025 / .005 .031 / 26 .035	.017 .017 / .006 .022 / 25 .027			.029 .032 / .005 .032 / 12 .036		.024 .022 / .008 .032 / 70 .037
	.033 .027 / .011 .047 / 11 .052	.032 .032 / .007 .039 / 11 .045	.019 .020 / .007 .024 / 20 .034	.030 .030 / .002 .031 / 2 .032		.028 .028 / .007 .033 / 20 .040		.027 .024 / .010 .036 / 64 .049
.045 .045 / .011 .057 / 22 .060	.034 .034 / .001 .034 / 2 .034	.034 .033 / .008 .042 / 65 .055	.031 .032 / .013 .044 / 4 .046			.039 .039 / .026 .057 / 2 .064		.037 .035 / .011 .047 / 95 .059
		.034 .029 / .022 .039 / 71 .098	.049 .035 / .041 .058 / 69 .179			.036 / 1		.041 .030 / .033 .052 / 141 .176
			.032 .032 / .002 .034 / 4 .034					.032 .032 / .002 .034 / 4 .034

CODE:

MEAN	ST. DEV.	N
50%	84%	98%

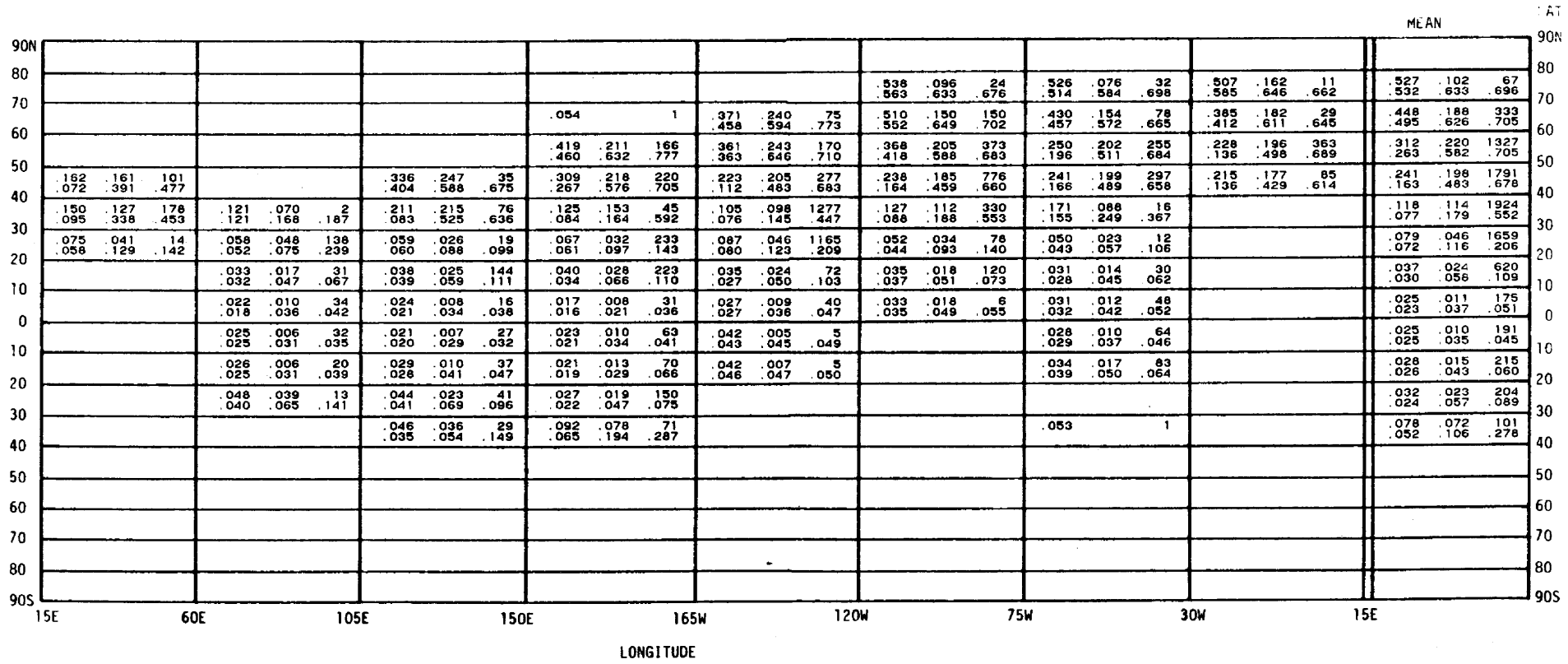
SPRING
FL 330



CODE:

MEAN	ST. DEV.	N
50%	84%	98%

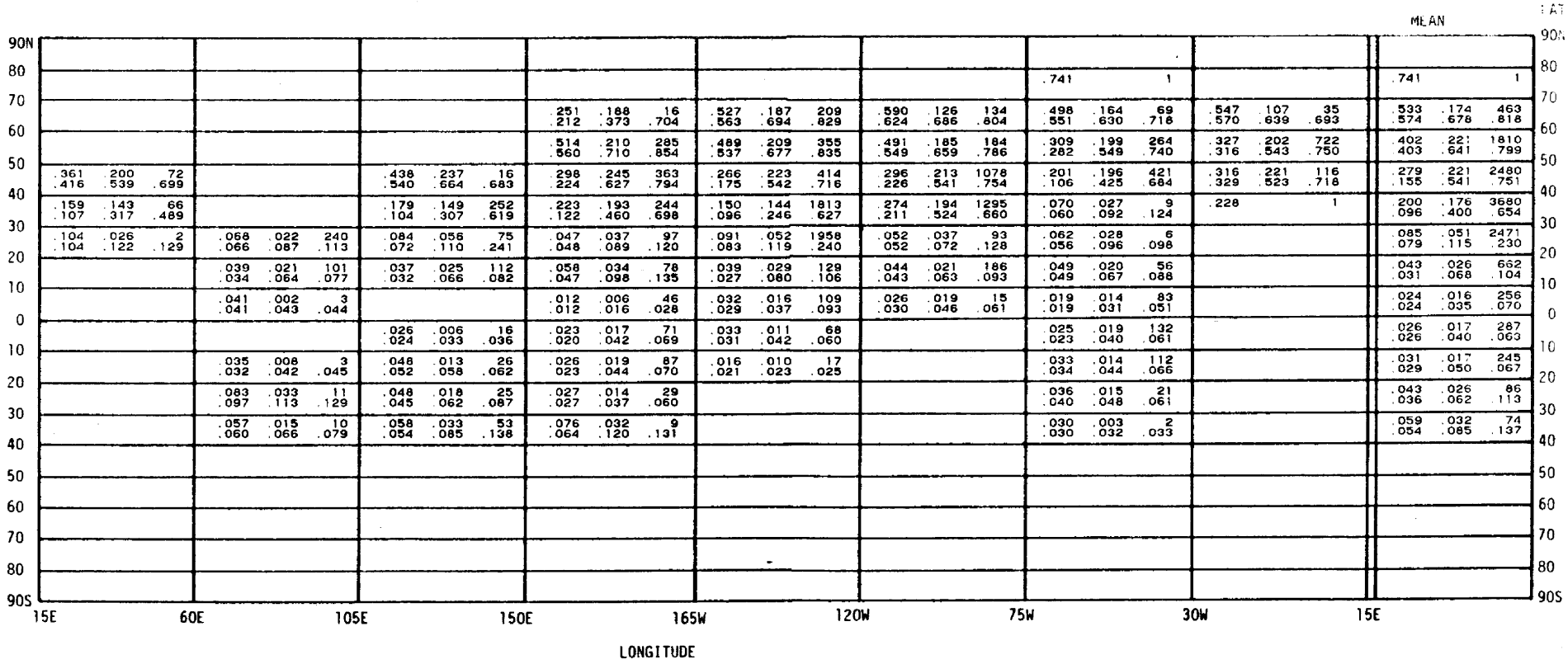
SPRING
FL 350



SPRING
FL 370

CODE:

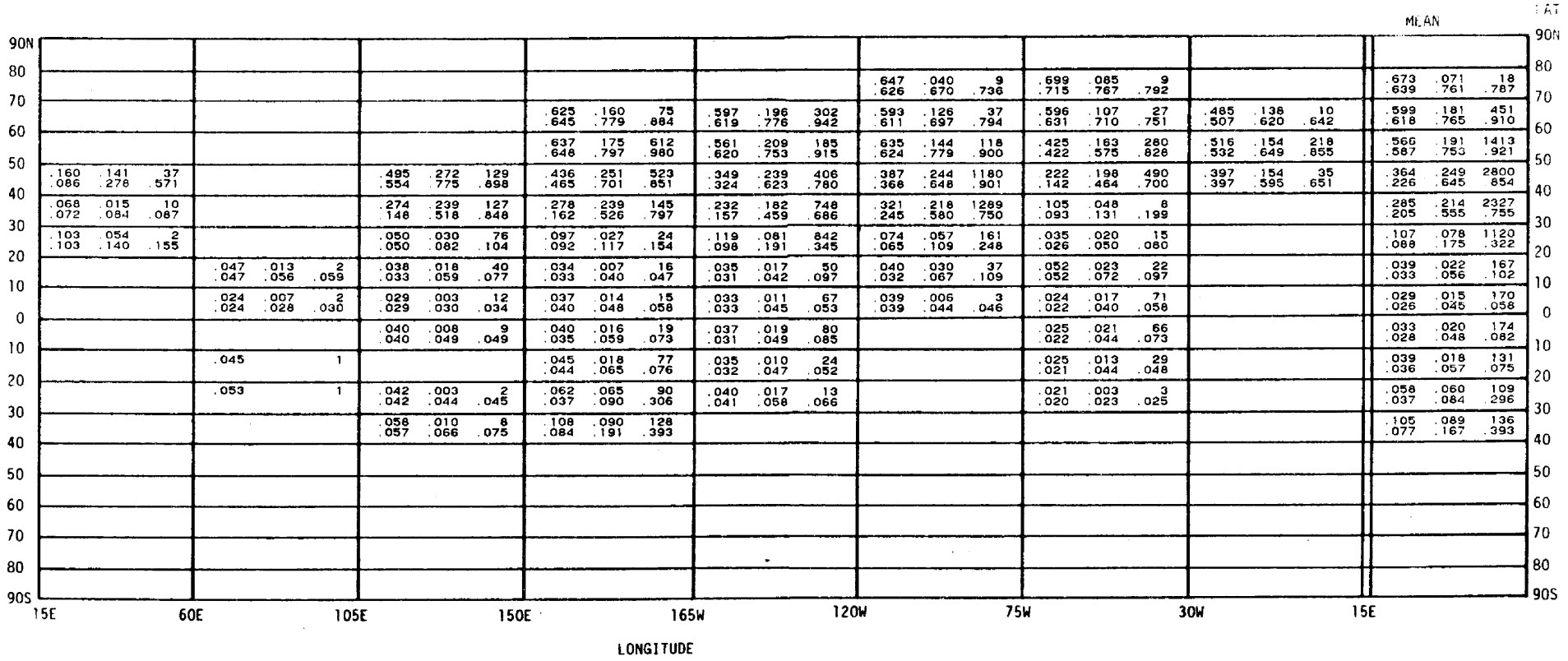
MEAN	ST. DEV.	N
50%	84%	98%



CODE:

MEAN	ST. DEV.	N
50%	84%	98%

SPRING
FL 390



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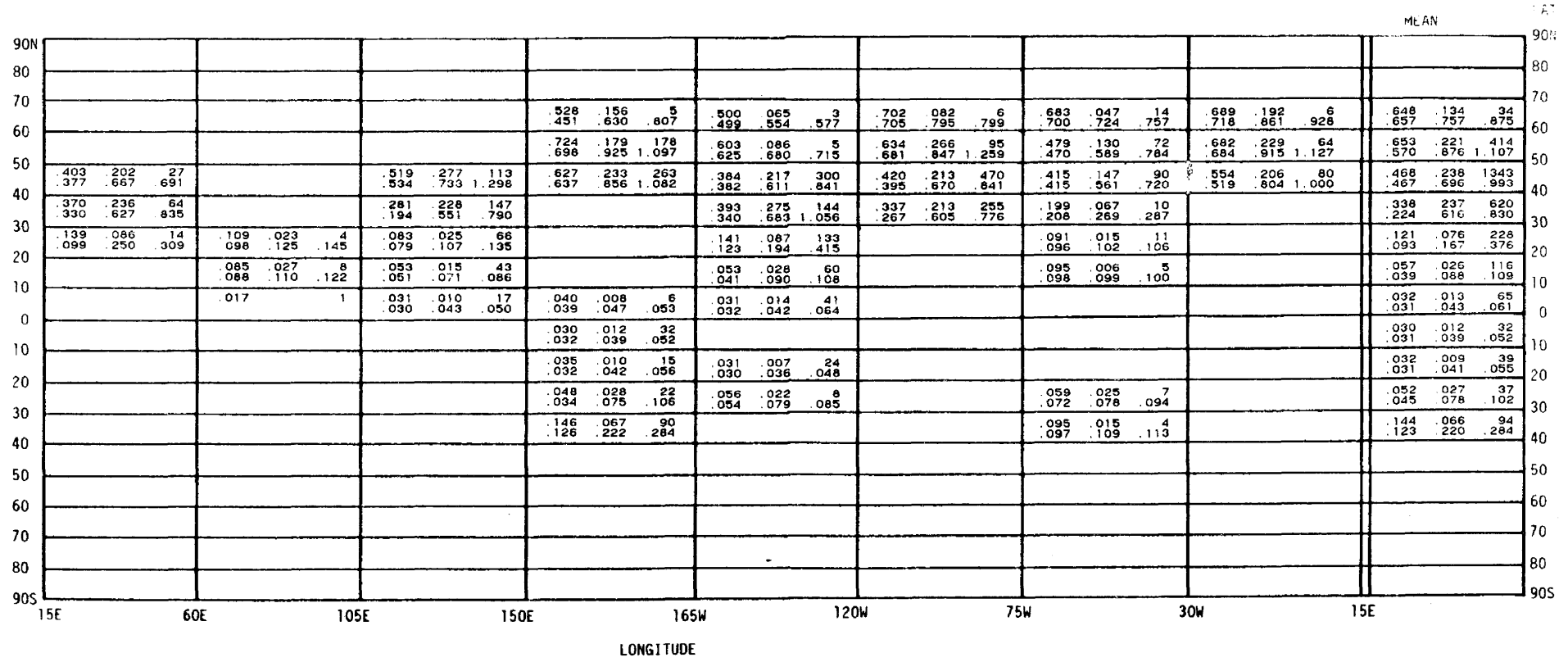

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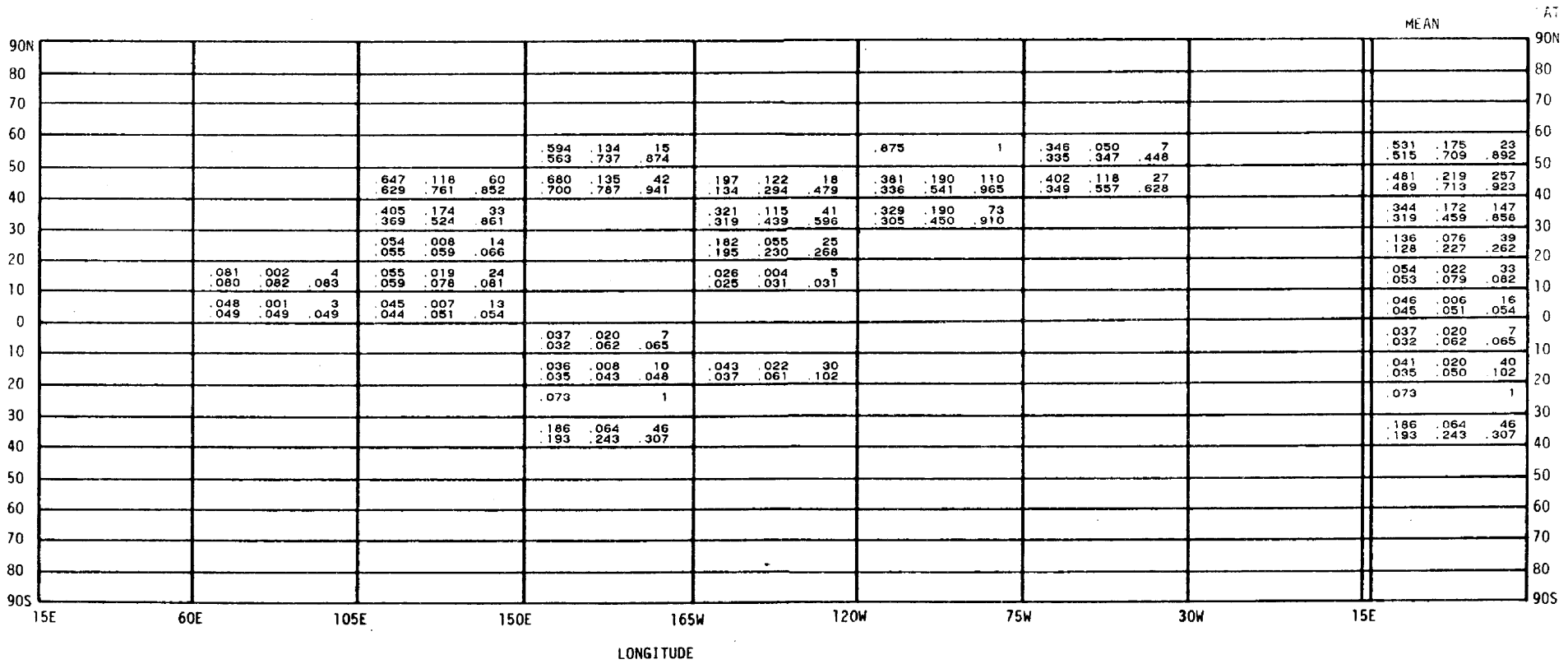

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SUMMER
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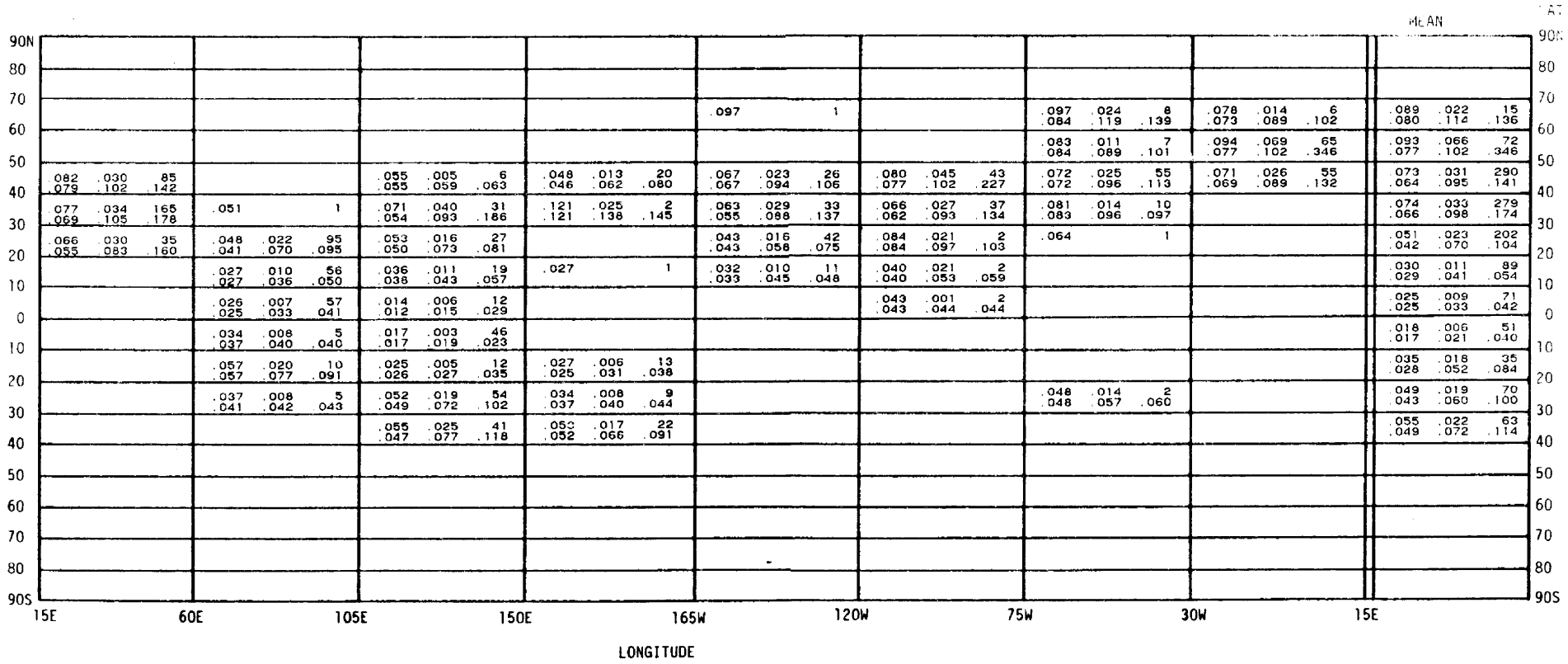

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SUMMER
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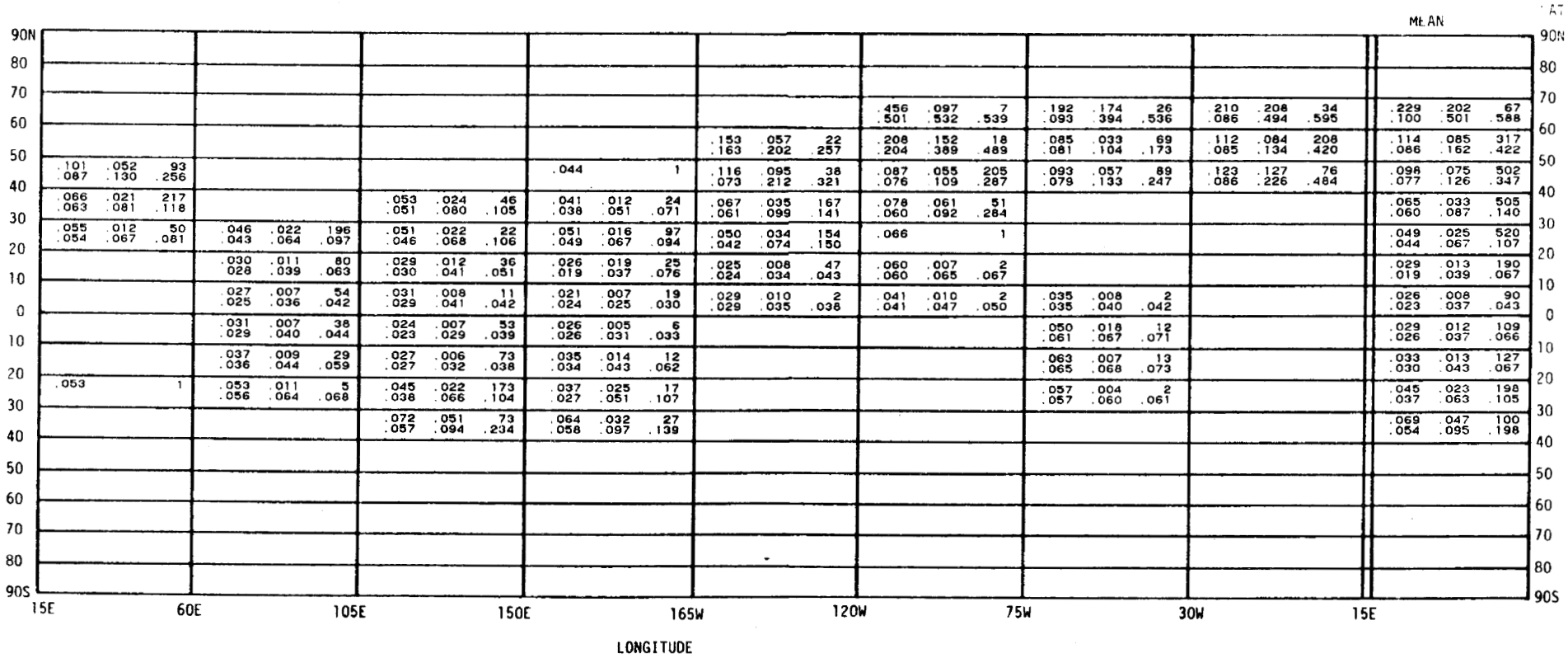

SUMMER
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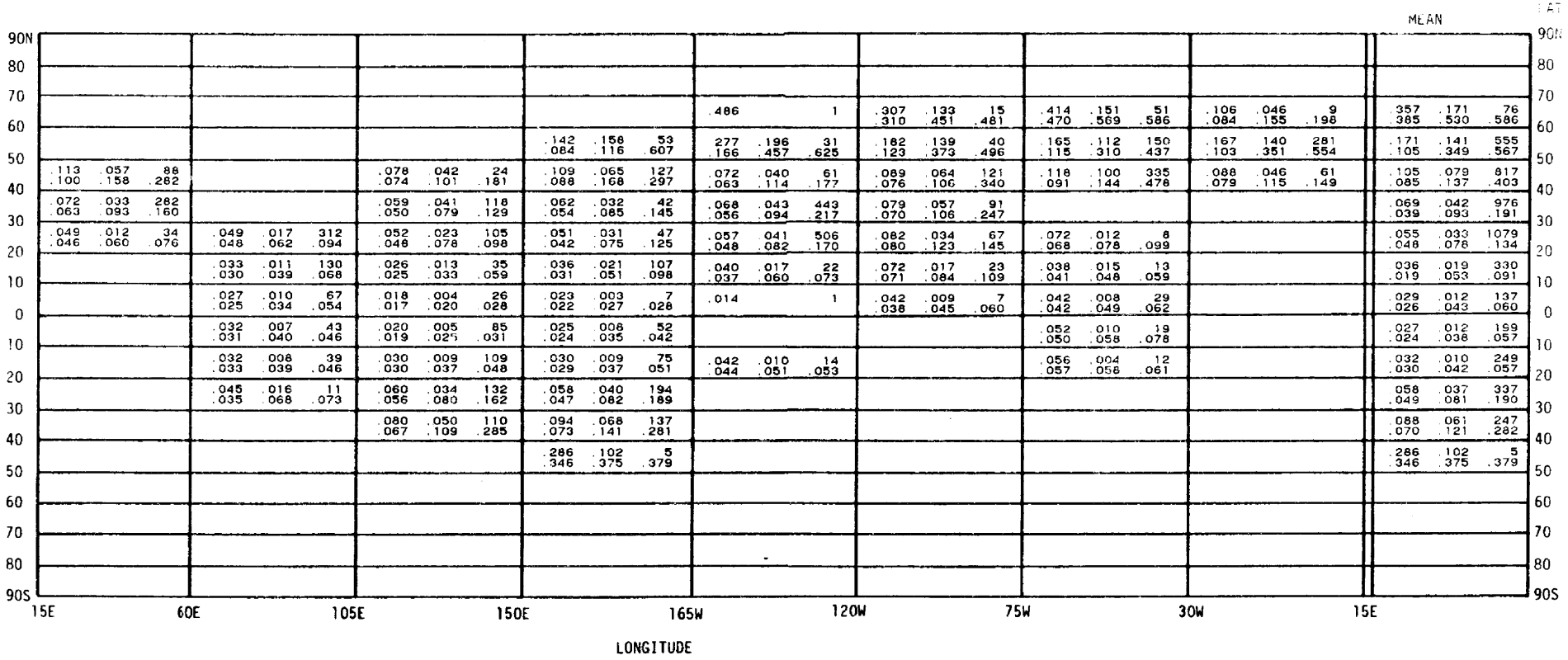


CODE:	MEAN	ST. DEV.	N
	50%	84%	98%

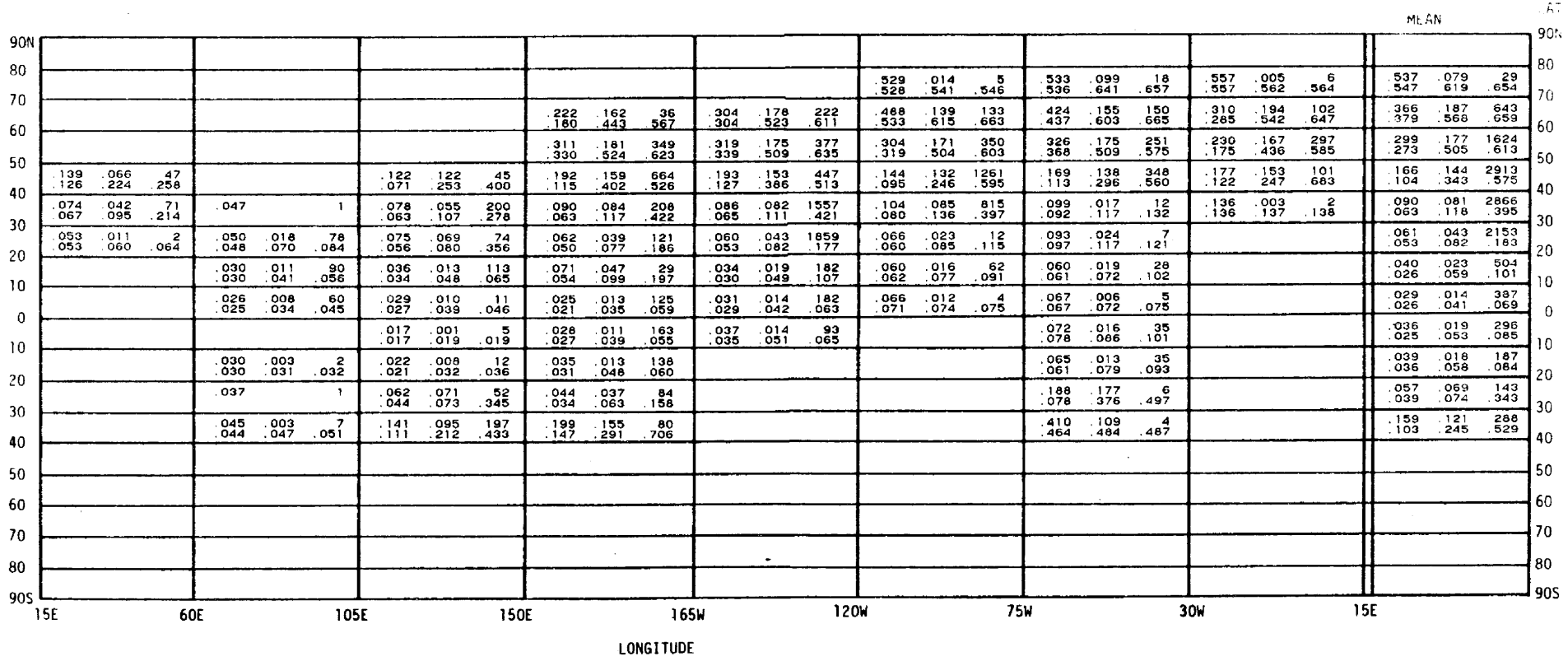
SUMMER
FL 350

LAT	15E	60E	105E	150E	165W	120W	75W	30W	15E	MEAN
90N										
80										
70							.590 .590	.023 .612	10 .629	.590 .590 .612 .629
60				.157 .153	.033 .187	4 .204	.333 .385	.164 .466	71 .576	.357 .422	.183 .549	117 .600	.351 .357	.170 .536	34 .629	.343 .323	.213 .604	81 .663	.344 .376	.187 .555	307 .626
50				.260 .200	.184 .528	83 .607	.297 .299	.189 .537	133 .634	.300 .297	.173 .502	336 .618	.179 .102	.147 .389	244 .505	.163 .109	.127 .268	511 .554	.221 .145	.166 .431	1307 .606
40	.143 .109	.091 .208	195 .433			.071 .064	.044 .088	29 .192	.098 .068	.085 .150	261 .316	.137 .080	.140 .256	321 .550	.120 .081	.107 .176	668 .491	.144 .101	.116 .224	331 .502	.199 .128	.159 .374	118 .605	.130 .088	.117 .200	1923 .521
30	.090 .062	.086 .110	384 .417			.073 .056	.059 .094	131 .224	.080 .058	.065 .125	103 .313	.078 .062	.063 .103	1244 .302	.085 .076	.050 .114	359 .242	.053		1	.119 .119	.021 .133	2 .139	.081 .062	.065 .107	2224 .314
20	.046 .043	.011 .057	67 .071	.056 .055	.023 .082	164 .101	.067 .070	.027 .092	58 .126	.050 .044	.027 .076	147 .117	.053 .047	.030 .079	1164 .131	.080 .069	.028 .120	39 .138							.054 .048	.029 .080	1639 .125
10				.036 .031	.016 .050	147 .083	.034 .028	.018 .045	111 .082	.035 .035	.015 .046	99 .083	.038 .035	.016 .053	144 .079	.059 .057	.017 .067	70 .116	.055 .054	.017 .072	9 .083				.039 .030	.018 .057	580 .084
0				.025 .024	.010 .032	101 .047	.020 .021	.006 .026	38 .032	.028 .024	.013 .043	95 .056	.029 .022	.016 .046	73 .067	.044 .044	.002 .046	4 .047	.045 .046	.015 .060	41 .073				.029 .019	.014 .045	352 .065
10				.025 .024	.007 .031	67 .042	.021 .020	.008 .029	147 .036	.024 .022	.010 .030	158 .043	.030 .030	.007 .036	6 .040				.065 .063	.014 .077	40 .101				.027 .017	.016 .035	418 .076
20				.028 .027	.006 .035	59 .044	.029 .028	.011 .039	159 .060	.033 .028	.016 .049	159 .079	.032 .033	.004 .034	12 .039				.073 .074	.016 .089	34 .105				.034 .029	.017 .049	423 .086
30	.063 .061	.016 .077	15 .095	.034 .034	.006 .039	14 .047	.054 .048	.033 .071	148 .132	.062 .051	.041 .091	246 .194							.230 .273	.127 .357	7 .370				.061 .041	.046 .088	430 .196
40						.103 .079	.068 .158	170 .290	.115 .101	.076 .172	161 .312								.267 .282	.115 .386	6 .398				.112 .090	.076 .171	337 .340
50									.188 .151	.073 .275	6 .306														.188 .151	.073 .275	6 .306
60																											
70																											
80																											
90S																											

LONGITUDE

SUMMER
FL 370

CODE:	MEAN	ST. DEV.	N
	50%	84%	98%



CODE:	MEAN	ST. DEV.	N
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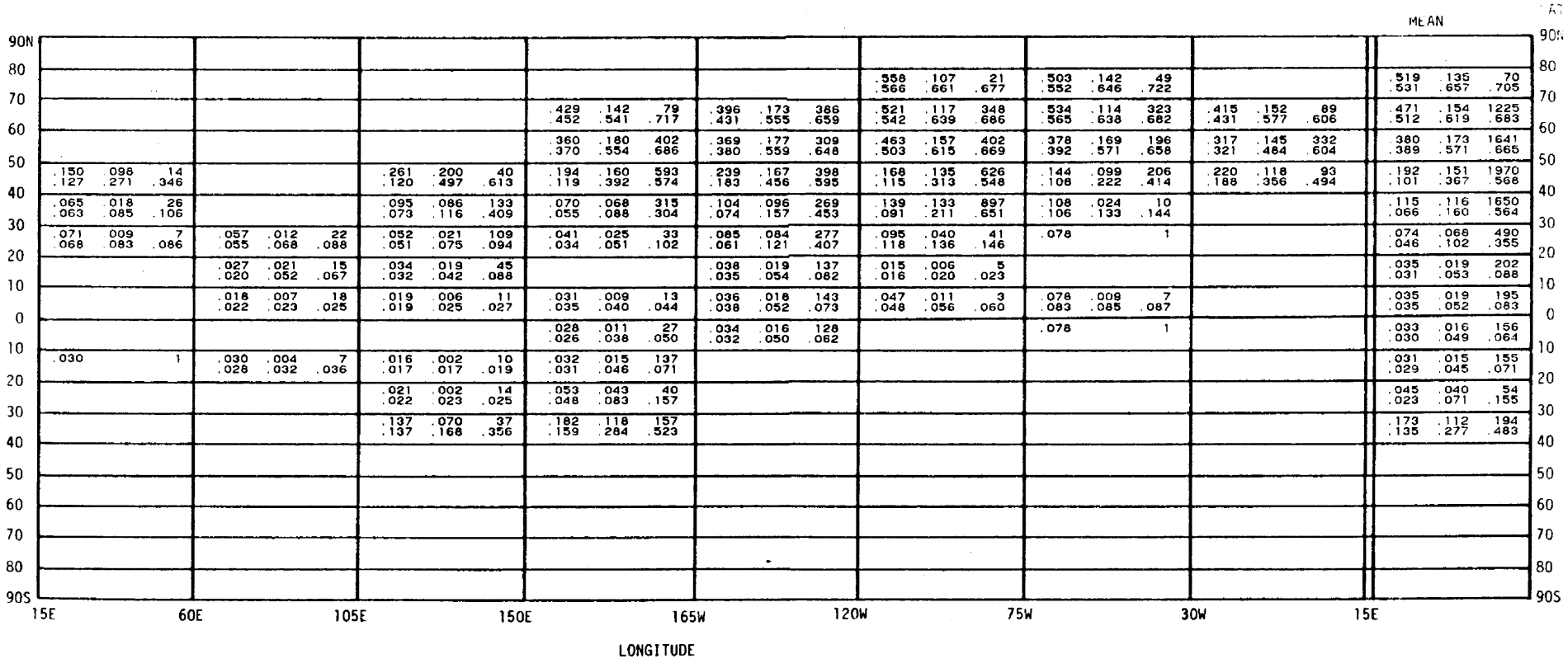
SUMMER
FL 390



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SUMMER
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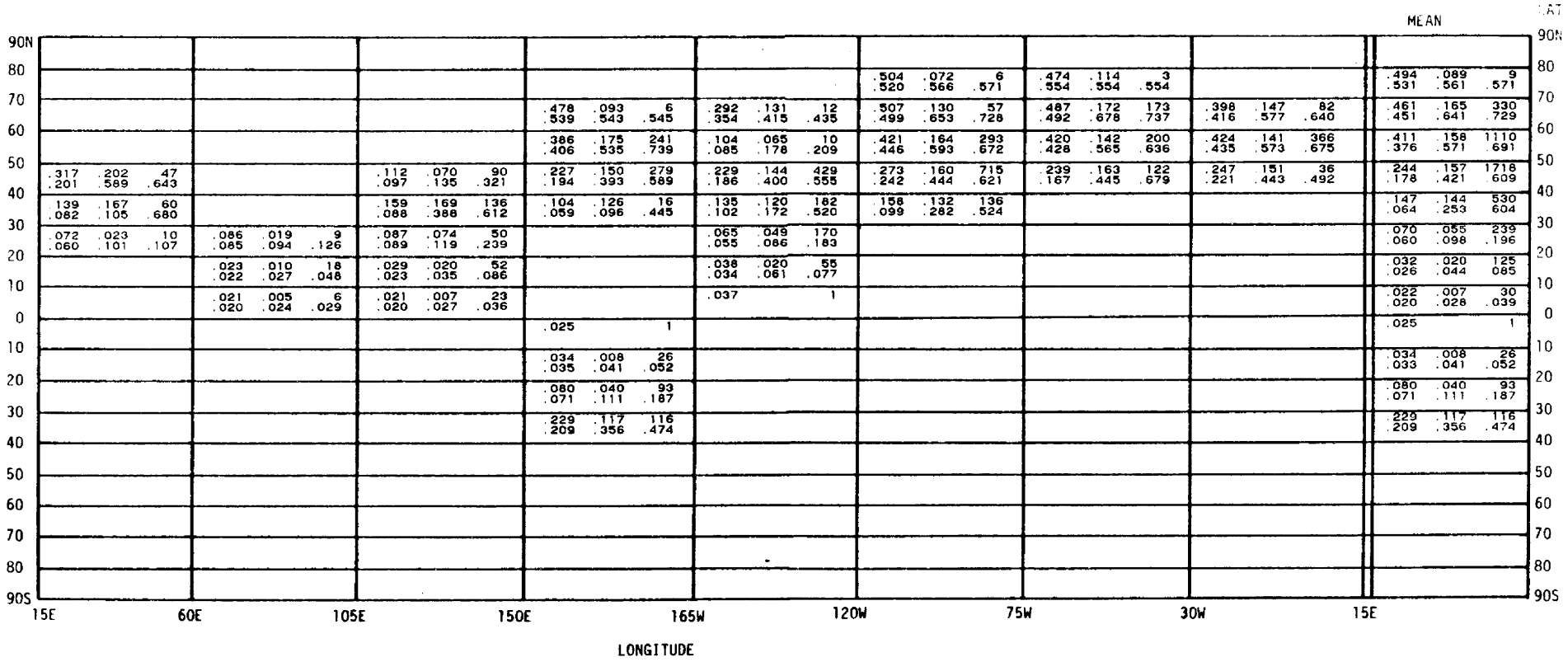

SUMMER
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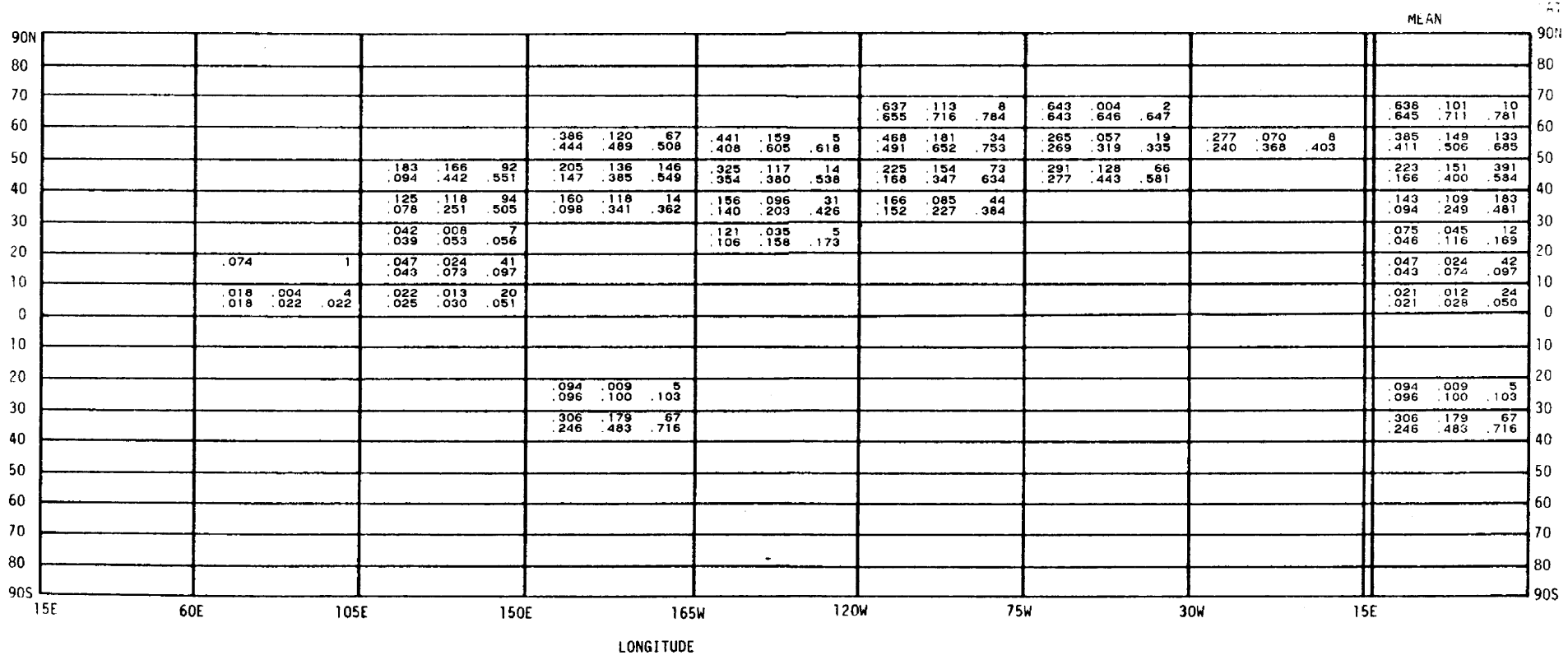
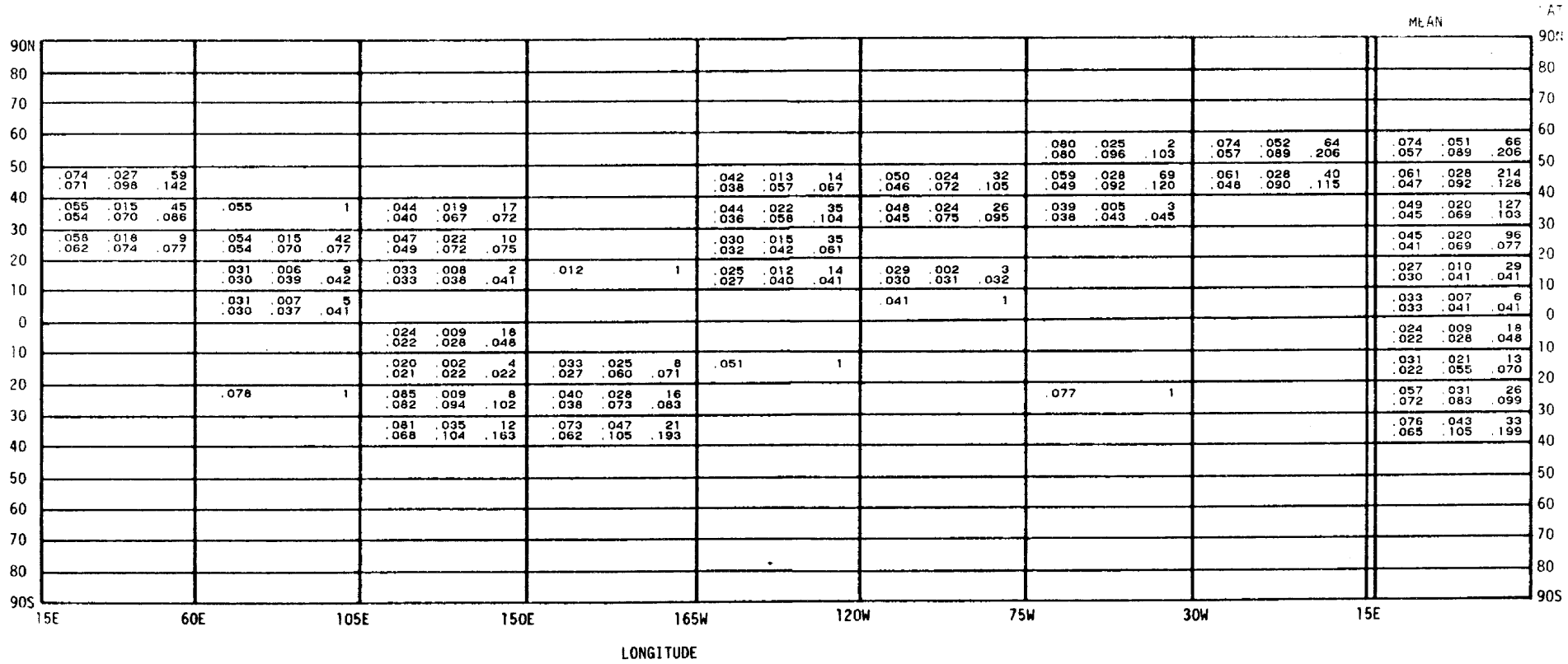


CODE:

MEAN	ST. DEV.	N
50%	84%	98%

AUTUMN
FL 290



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AUTUMN
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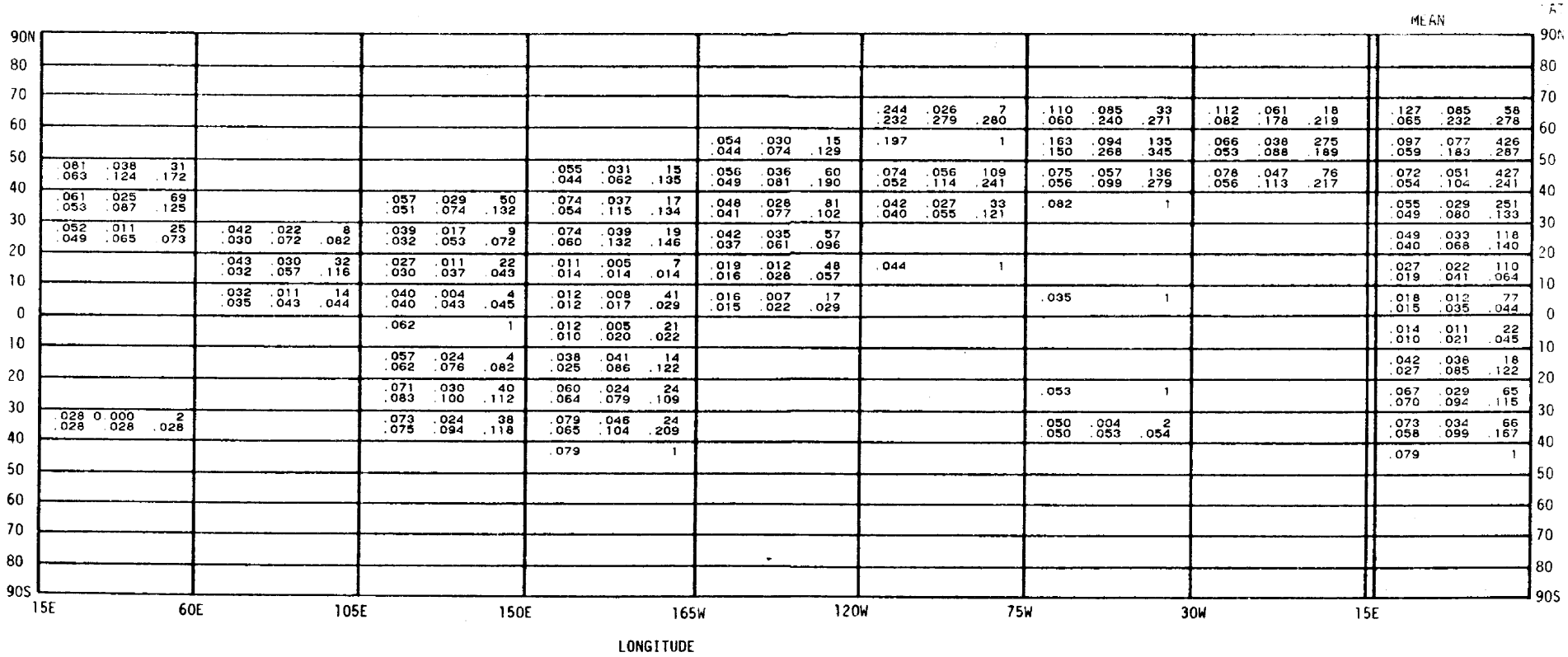

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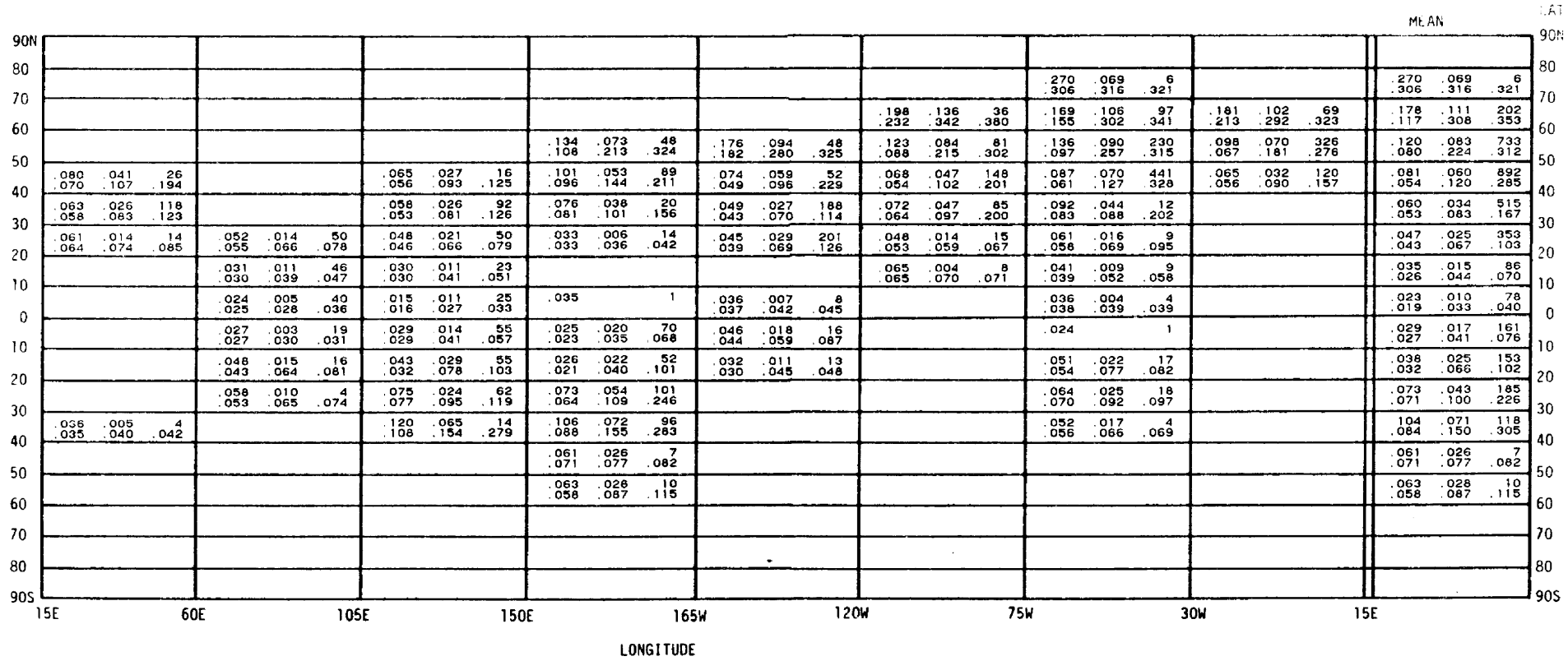

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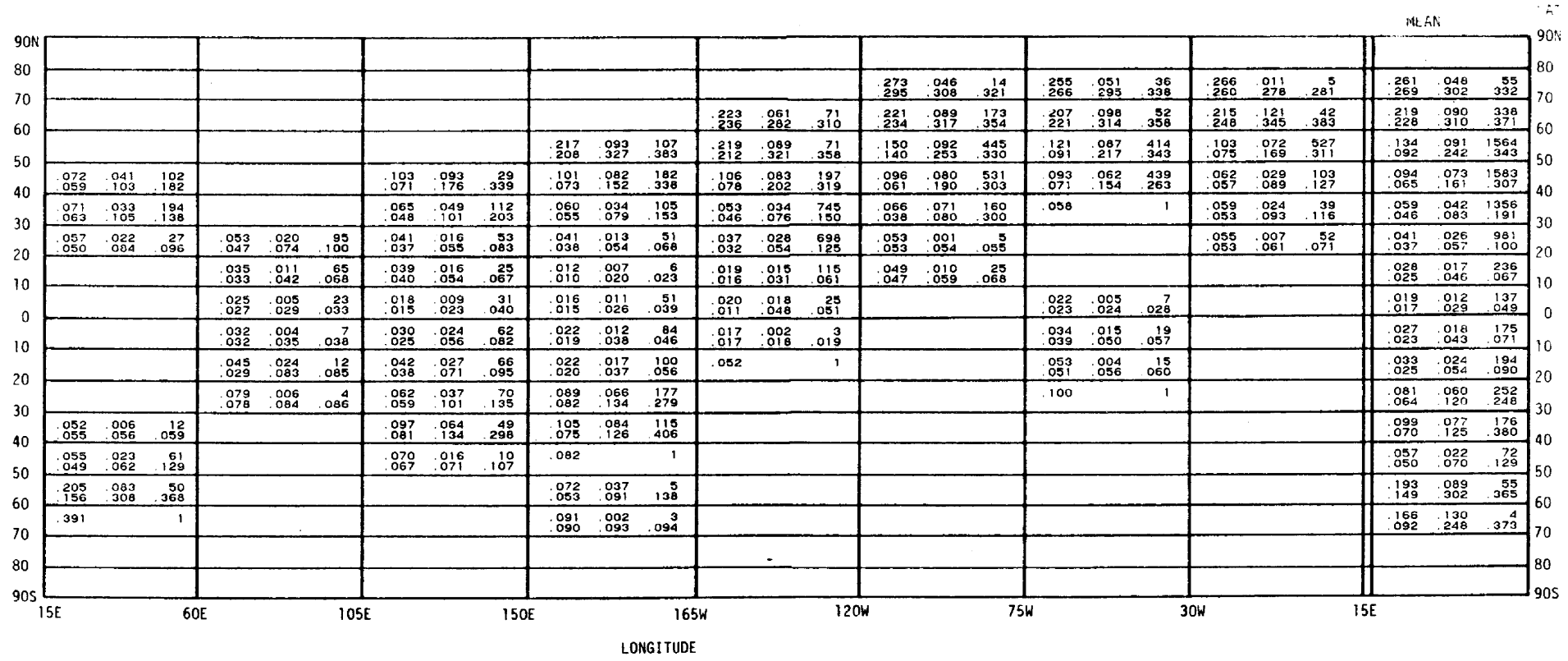

AUTUMN
FL 370

CODE:	MEAN	ST. DEV.	N
	50%	84%	98%

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90N					.280 .287 .292 4 .292					.280 .287 .292 4 .292
80					.298 .306 .330 .035 50 .356	.359 1				.299 .307 .334 .036 51 .359
70				.167 .177 .183 .022 4 .185	.254 .266 .334 .084 250 .395	.234 .258 .337 .099 97 .386	.288 .293 .394 .106 70 .453	.254 .254 .364 .097 38 .418		.254 .262 .352 .093 459 .420
60				.227 .243 .339 .103 290 .390	.220 .223 .312 .088 246 .382	.198 .195 .307 .109 212 .449	.188 .160 .337 .123 261 .428	.126 .107 .205 .089 435 .389		.184 .125 .307 .109 1444 .405
50	.088 .050 .168 .093 64 .326		.092 .064 .188 .075 42 .291	.112 .084 .192 .084 612 .340	.110 .070 .194 .096 349 .370	.103 .081 .174 .069 966 .278	.117 .089 .205 .089 561 .362	.095 .083 .133 .072 177 .344		.108 .080 .182 .081 2771 .342
40	.119 .115 .165 .041 71 .198		.060 .047 .083 .051 225 .252	.066 .058 .092 .041 198 .177	.057 .051 .082 .034 1186 .155	.083 .065 .145 .065 417 .272	.044 .032 .041 .056 31 .220	.146 .149 .157 .011 24 .163		.066 .052 .101 .047 2152 .210
30	.081 .072 .119 .030 9 .123	.071 .065 .100 .023 63 .118	.034 .027 .062 .022 18 .079	.047 .038 .068 .023 33 .103	.042 .036 .063 .029 892 .111	.043 1	.027 .030 .035 .011 37 .047	.049 .049 .050 .002 2 .051		.044 .037 .066 .029 1055 .116
20		.039 .038 .044 .013 47 .077	.034 .034 .038 .007 21 .050		.017 .017 .026 .010 99 .043	.056 .057 .060 .005 3 .062	.045 .047 .076 .027 45 .093			.030 .026 .047 .020 215 .088
10		.020 .002 .038 .021 13 .056	.029 .037 .039 .016 4 .040	.021 .022 .028 .008 86 .037	.017 .017 .032 .015 83 .048		.053 .056 .071 .022 43 .088			.025 .021 .047 .020 229 .082
0				.021 .021 .027 .009 70 .039	.017 .008 .041 .017 65 .052		.046 .056 .062 .018 27 .068			.024 .010 .043 .018 162 .063
10			.041 .039 .058 .019 10 .071	.021 .016 .030 .015 142 .070	.048 .049 .051 .003 4 .052		.047 .047 .052 .006 14 .056			.025 .018 .043 .017 170 .071
20			.051 .028 .098 .045 33 .152	.068 .062 .130 .053 116 .172			.048 .041 .067 .021 5 .081			.064 .048 .113 .051 154 .173
30			.215 .176 .345 .106 64 .438	.139 .123 .191 .074 54 .333						.180 .124 .272 .100 118 .425
40			.182 .182 .192 .015 2 .196	.280 .262 .333 .055 15 .391						.269 .258 .319 .061 17 .390
50				.104 .088 .116 .053 22 .253						.104 .086 .116 .053 22 .253
60	.402 .401 .430 .027 50 .447			.082 .077 .100 .015 10 .106						.348 .396 .424 .122 60 .447
70	.321 .335 .382 .055 54 .390									.321 .335 .382 .055 54 .390
80	.258 .254 .281 .020 18 .292									.258 .253 .281 .020 18 .292
90S										

LONGITUDE

CODE:

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50%	84%	98%

AUTUMN
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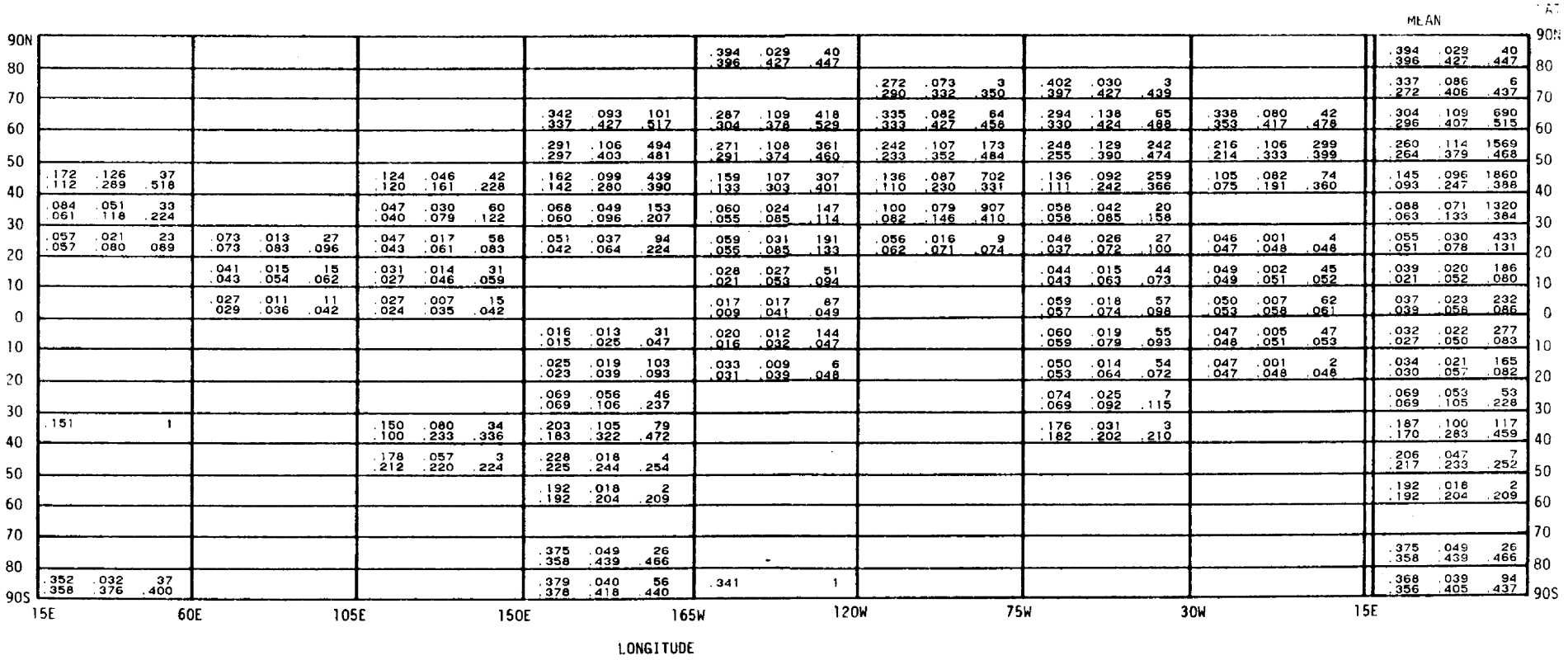

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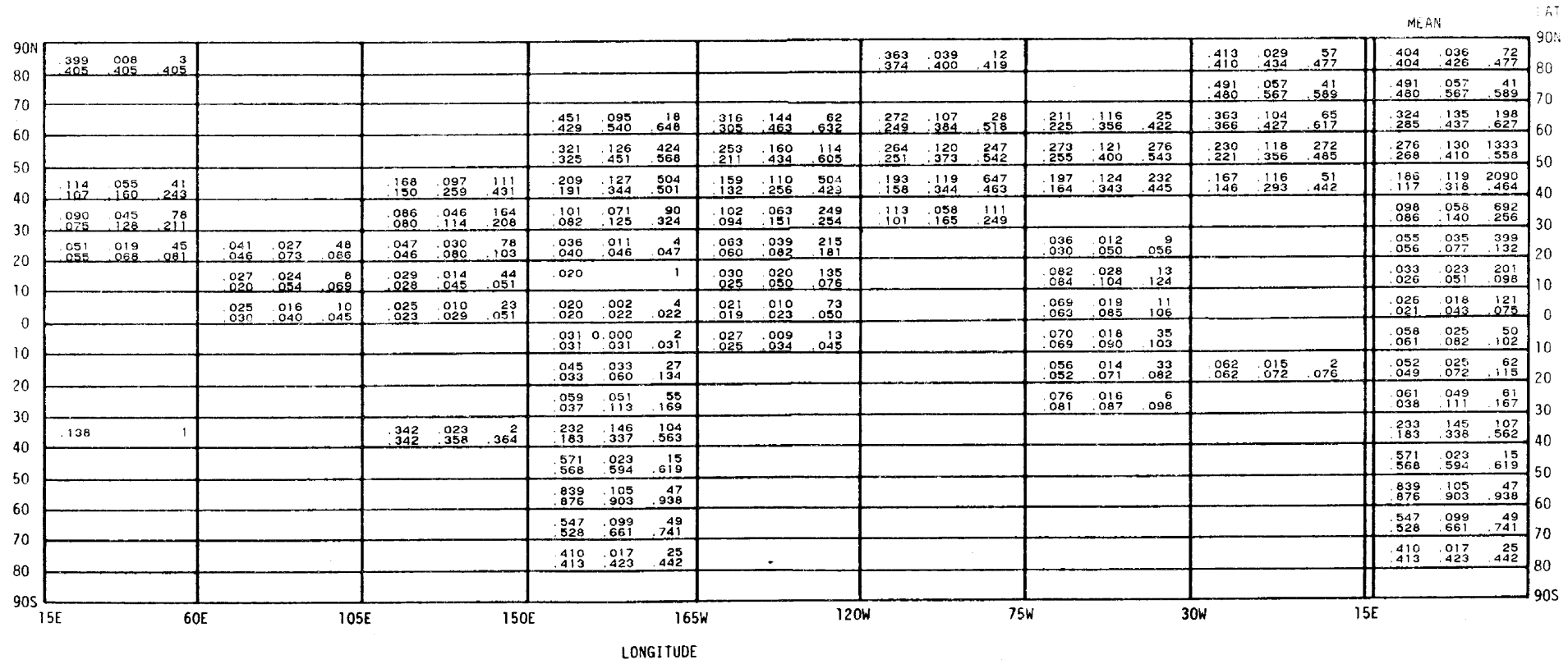

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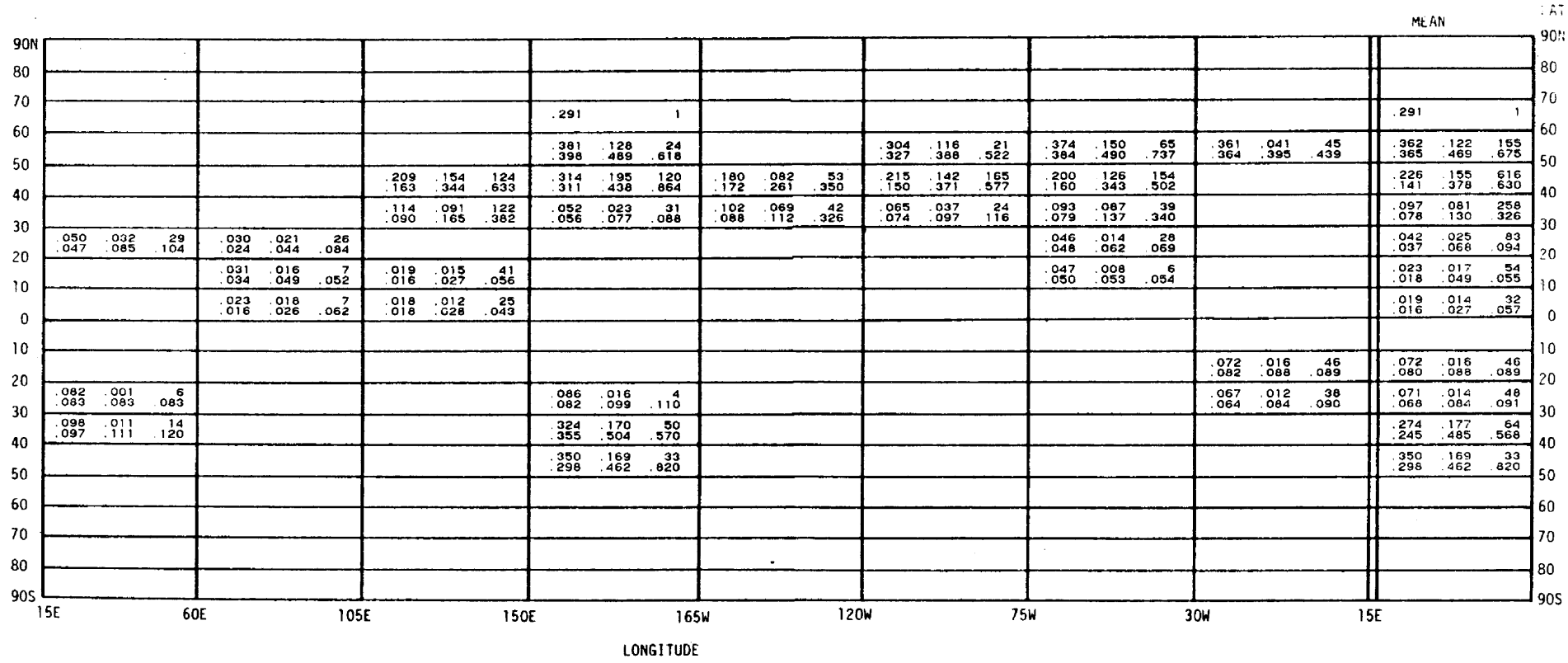

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7. Author(s) William H. Jasperson and James D. Holdeman	8. Performing Organization Report No. E-1055
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15. Supplementary Notes

William H. Jasperson, Control Data Corp., Minneapolis, Minnesota; James D. Holdeman, Lewis Research Center; work partly supported by FAA through interagency agreement DOT-FA78WAI-893.

16. Abstract

Tabulations are given of GASP ambient ozone mean, standard deviation, median, 84th percentile, and 98th percentile values, by month, flight level, and geographical region. These data are tabulated to conform to the temporal and spatial resolution required by FAA Advisory Circular 120-38 (monthly by 2000 ft in altitude by 5^{o} in latitude) for climatological data used to show compliance with cabin ozone regulations. In addition seasonal x 10^{o} latitude tabulations are included which are directly comparable to and supersede the interim GASP ambient ozone tabulations given in appendix B of FAA-EE-80-43 (NASA TM-81528). Selected probability variations are highlighted to illustrate the spatial and temporal variability of ambient ozone and to compare results from the coarse and fine grid analyses.

17. Key Words (Suggested by Author(s))	18. Distribution Statement
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