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Experimental Determination of the Atmospheric Dispersion Parameters at the Karlsruhe Nuclear Research Center for 160 m and 195 m Emission Heights

Part 1: Measured Data

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Abstract

Diffusion experiments have been carried out at the Karlsruhe Nuclear Research Center in order to investigate the atmospheric diffusion of pollutants and to determine specifically the influence on atmospheric diffusion of topographic conditions specific to the site.

For this purpose, halogenated hydrocarbons are emitted at 160 m and 195 m height, their local concentration distribution is measured at ground level downwind of the source.

Part 1 of the report describes the diffusion experiments performed and presents the detailed data of measurements. These include the coordinates of the sampling positions, the measured concentrations and the relevant meteorological data recorded during the experiments. The stability classes prevailing during the experiments are derived from these data and are indicated.

Part 2 (KfK 3457) of the report contains the evaluation of the diffusion experiments and the dispersion parameters derived.

Experimentelle Bestimmung der atmosphärischen Ausbreitungsparameter für Emissionshöhen von 160 m und 195 m am Kernforschungszentrum Karlsruhe

Teil 1: Meßwerte

Zusammenfassung

Zur Erforschung der atmosphärischen Ausbreitung von Schadstoffen werden am Kernforschungszentrum Karlsruhe Experimente durchgeführt. Dabei soll insbesondere der Einfluß standortspezifischer Gegebenheiten untersucht werden.

Bei den Feldversuchen werden halogenierte Kohlenwasserstoffe in 160 m und 195 m Höhe emittiert und ihre bodennahe Konzentrationsverteilung in der Umgebung der Quelle gemessen.

In dem vorliegenden Berichtsteil werden die Feldversuche beschrieben und die Meßergebnisse ausführlich dargestellt. Die Datensammlung enthält die Koordinaten der Sammelstationen, die dort gemessenen Konzentrationen und die wichtigen zugehörigen meteorologischen Daten. Die während der Versuche herrschenden Ausbreitungskategorien sind aus den meteorologischen Daten abgeleitet und ebenfalls angegeben.

Die Auswertung der Ausbreitungsexperimente und die abgeleiteten Ausbreitungsparameter sind im zweiten Teil des Berichts (KfK 3457) enthalten.

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1. INTRODUCTION

Increasing attention is being devoted to the atmospheric dispersion of airborne pollutants, which is due, on the one hand, to the emission of pollutants still growing locally and, on the other hand, to the increased public awareness of the health impact. As the limits of regulatory guidelines are approached, higher reliability and accuracy of the numerical models and their input parameters are required to assess the atmospheric transport and dispersion of pollutants.

At the Karlsruhe Nuclear Research Center (KNRC), atmospheric dispersion experiments started in 1969. These experiments soon revealed that the widely accepted dispersion parameters of Pasquill/Gifford [1], which are based on the Prairie Grass Experiments, are not applicable to dispersion over rough terrain as found at the KNRC site. Here the surface roughness increases greatly the mechanically induced turbulence in the boundary layer. This effect exerts a considerable influence on the dispersion parameters σ_y and σ_z.

A research program was started in 1972 to establish dispersion parameters for the local scale diffusion as a function of stability class, surface roughness length, and emission height. The first series of experiments was completed in 1977. It covered the six stability classes A through F and the emission heights of 60 m and 100 m.

In [2, 3, 4, 5] not only the resulting series of dispersion parameters, but also the complete set of originally measured values (tracer emission rate, tracer concentrations, coordinates of sampling positions, meteorological information, etc.) were published in order to enable other experts to verify their dispersion models, and as a demonstration of the wide variation of concentration distributions, even under similar meteorological conditions.

Starting in September 1977, the diffusion experiments have been continued with emission heights of 160 m and 195 m. In a similar manner as described in [4] halogenated hydrocarbons are emitted from the 160 m and 195 m high platforms of the meteorological tower. The air samples are analyzed by gas chromatography. In this volume the measured values are documented, in a second volume [6] the evaluation technique and the dispersion parameters derived are published. The experimental technique is described in detail in [4]. Parts of it are recalled here for convenience.

2. SITE DESCRIPTION

Figs. A and B show a photograph and a map of the Karlsruhe Nuclear Research Center and its environment. The test field consists of open spaces and built-up as well as wooded areas. Buildings of 10 to 30 m height of the Research Center and the forest surrounding it characterize the surface roughness of the site. A roughness length of about 1.5 m has been determined by evaluating the wind profile measured at the meteorological tower.

3. METEOROLOGICAL MEASUREMENTS

The meteorological information system of the KNRC includes 48 instruments in total which measure the wind velocity, the horizontal wind direction, the wind vector, the temperature, the dew point, the solar and heat radiation, the precipitation and the atmospheric pressure. Most of the instruments are mounted at the 200 m high meteorological tower (Fig. C). A detailed description of the instrumentation is given in [7].

This comprehensive system furnishes data not only for experimental studies, e.g. diffusion experiments, but also for theoretical

studies of the atmospheric processes and for calculation of the radiological impact on the environment. Because of the great number of meteorological instruments employed and the frequent scans required, the data are averaged and recorded on-line [8]. The ten-minute average values are stored temporarily on magnetic disc, while long-term storage is on magnetic tape [9]. The signals of the cup anemometers, the wind vanes and the vector vanes (Fig. D) are scanned every four seconds and punched additionally on paper tape during a diffusion experiment. For reasons of space, these data are not published in this paper. They are provided for special evaluation techniques, such as non-steady-state models. The four-second data as well as the ten-minute average values are available upon request.

4. DESCRIPTION OF THE EXPERIMENTS

4.1 Performance of the Experiments

The following tracers were used:

- difluorodibromomethane CF_2Br_2, and
- Frigen-11 $CFCl_3$.

They were released from the 160-m- and 195-m-platforms of the 200 m high meteorological tower (Fig. C). The location of the meteorological tower can be seen in Fig. B. The Joint Research Center (JRC) Ispra participated in experiment No. 72 using the tracer SF_6. Details of the emission, sampling and analysis of this tracer are published in [10]. In this experiment the tracer $CFCl_3$, which had been emitted, sampled and analyzed by KNRC, was sampled and analyzed by JRC, too. Therefore, as indicated in Table A, for experiment No. 72 two series of concentration data are available for each emission height.

Air was sampled at 39 to 67 locations downwind of the source during two successive periods of 30 minutes duration each. The sampling area was different in each experiment, depending on the wind direction and on the stability class to be expected. The stability class determined the angular width of the area and the minimum and maximum downwind distances of the sampling stations. These were arranged close to five concentric arcs surrounding the source. Each following radius of the concentric arcs was twice as large as the radius of the preceding one.

The mean value of the $CFCl_3$ background concentration is subtracted from the $CFCl_3$ concentration measured in the downwind direction. As the other tracer, CF_2Br_2, is but scarcely used in industrial applications, no background was detectable.

The distribution of the sampling stations is left unchanged during the experiment. The arrangements of the sampling stations are shown in Figs. 1A through 21D.

4.2 Release of Tracers

The physical properties of the two tracers are shown in Table B. The two tracers are emitted simultaneously from two evaporating boilers (Fig. E). These boilers consist of double walled, thermally insulated aluminum tanks built at the KNRC. The boilers have capacities of about 60 l and 90 l, respectively. The tracers are emitted via a vertical connection pipe (inner diameter 40 mm) which is mounted on top.

In preliminary tests the decrease of the evaporating liquid was measured by weighing and was plotted as a function of the time for different levels of heating power in order to determine the relation between power level and rate of emission. The emission rates are determined by measurement of the decrease of weight

or of the filling level during the time of steady-state conditions of evaporation. The rate of emission of the evaporators was determined with an accuracy of about ± 3%. The respective rates of emission have been listed in Tables 1B through 21C.

It must be ensured that all sampling locations are exposed to the tracer plume generated at a constant rate of emission before sampling starts. Therefore, the evaporating boilers were heated up in due time before sampling of the tracers started. This time depends on the heating-up time of the respective evaporator, the prevailing wind velocity and the maximum distance of the sampling locations from the source.

4.3 Sampling Equipment

Each sampler comprises an electronic clock (Fig. F) connected by cables to two electromagnetic valves on top of their glass bottles (Fig. G). The electronic clock controls the electromagnetic valve which opens and closes a capillary tube. At the clock a time interval between zero and six hours can be preset in steps of 0.5 hours. Before each experiment the intervals are preset; the intervals of all clocks are identical and all clocks are started simultaneously. During the preset interval the samplers are brought on three trucks into the selected sampling area. At the end of the preset interval the valve of the first sampler receives a positive pulse and opens. During the automated sampling, ambient air is sucked via a calibrated capillary tube into the evacuated glass bottle of about 1 l volume. During the 30 minutes sampling interval the pressure in the bottle rises to about 0.4 atm. After 30 minutes the first sampler is closed by a negative pulse and the second is opened by a positive pulse. Each clock is capable of controlling up to four valves with successive sampling intervals of 30 minutes each.

For the electronic clocks a storing rack is provided (Fig. H). The clocks have a plug on their rear sides. By pushing the clock into the rack it is connected electrically to the rack via the plug. The clocks are stored in the rack and their batteries are charged. Just before the diffusion experiment the clocks are checked in the rack and set to start at the same time. During the check the rack simulates the electromagnetic valves and controls the correct time sequence of the electric opening and closing pulses. Any failure of the clocks is indicated by light emitting diodes.

4.4 Analysis by Gas Chromatography

At the laboratory the residual vacuum in the glass vessels is filled up by high-purity nitrogen. The final pressure in the vessels equals the barometric pressure. With a syringe a small volume of very carefully cleaned benzene or toluene is injected into the glass vessel through a septum. The tracers are dissolved in these solvents.

With the syringe a 0.1 - 50 µl sample of the solution is taken and introduced into a gas chromatograph. The O_2, the disturbing freons, the tracers and the solvent are separated under the following conditions:

injection temperature:	135 °C
temperature of the furnace:	70 °C
carrier gas:	20 ml Ar-H_2/min
column, solid support:	Chromosorb G
liquid phase:	5% FFAP
length:	300 cm
diameter:	0.3 cm.

After separation from the disturbing substances, the tracer concentrations are measured by an electron capture detection with Ni-63, operated at 105 °C. For detector calibration extremely diluted tracer concentrations are used.

4.5 Preparation of Air Samplers

The new and empty samplers are weighed and filled with distilled water to determine the volume. A glass capillary is shortened step by step until the pressure which is reached after 30 min, lies between 0.3 and 0.5 bar. On each sampler a label is attached, which shows the number, the final pressure and the volume of the sampler.

After gas chromatographic analysis the samplers used are emptied from the solvents injected before analysis. The septum, which is perforated twice by the two syringes, is discarded and replaced. Another septum, which acts as an expanding gasket between the glass capillary and the valve, is replaced too. The valve is cleaned and checked. About 20 samplers prepared as described above are connected to a ring tube and evacuated. At the final pressure of about 10^{-3} - 10^{-2} mbar a cooling trap operated with liquid nitrogen is used to freeze out residual fractions of tracers and solvents. The evacuated and cleaned samplers are connected to the electronic clocks. Then they are ready again for use.

5. MEASURED DATA

In Table A the diffusion experiments reported in this paper have been summarized. It indicates the consecutive number, date and hour of the experiment, the prevailing stability class, the size and location of the sampling field, the emission height and the tracer used.

5.1 Meteorological Data (Tables 1A - 21A)

Tables 1A to 21A show the relevant meteorological data measured during the experiment.

The wind direction is measured with a wind vane[1] whereas a cup anemometer[2] measures the wind speed. The standard deviation of the horizontal and vertical wind directions are generated electronically with a sampling time of 180 s from measured data originating in vector vanes[3] at 40 m, 100 m and 160 m heights. On the next line the standard deviation of the horizontal fluctuation of the wind direction is indicated. Unlike the preceding ones, this standard deviation is measured with an ordinary wind vane[1] at 100 m height. The temperature gradient results from the difference in air temperature[4] measured at 30 m and 100 m heights. A double pyrradiometer[5] is used to measure the net radiation 1.5 m above ground.

The stratification of the atmosphere is described by stability classes. They are determined by several methods using different meteorological parameters. The breakdown into six stability classes is based on the classification system by Pasquill [11].

The last four lines of Tables 1A to 21A show the stability classes which have been determined by four different methods. The first method is based on the standard deviation of the fluctuation of the vertical wind direction measured by a vector vane at 100 m height. The second method is based on the standard deviation of the fluctuation of the horizontal wind direction measured by a wind vane at 100 m height. The third method refers to the differences of temperature at 30 m and 100 m and the wind velocity at 40 m height. The fourth method is based on meteorological

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[1]Wind vane, type 1466H, Lambrecht
[2]Cup anemometer, type 114H, Rosenhagen
[3]Vector vane, model 1053 III-2, Meteorology Research, Inc.
[4]Ventilated double PT 100 measuring sensor, Friedrichs
[5]PD-type, Physikalisch-Meteorologisches Observatorium of Davos, Switzerland

observations and closely follows the classification recommended by Manier [12]. The information concerning the degree of cloudiness, the type of clouds and the wind velocity was taken from the daily weather report of the Karlsruhe Weather Station. This station records the observations at three hours intervals, but experimental periods often lie between the hours of observation. Consequently, the stability classes had to be defined by interpolation when the weather conditions changed with time. The stability classes listed in Tables 1A to 21A have been averaged over a sampling period. The stability classes indicated in Table A are based on the fluctuation of the vertical wind direction for all experiments. When the vector vane failed, the other methods were used in the order shown in Tables 1A to 21A. The choice of this sequence is the result of extensive studies and comparisons with other methods [13, 14]. In Tables 1A to 21A data have been marked by stars, if instruments failed or had not been installed during the experiment.

5.2 Sampling Locations, Concentrations and Emission Rates (Tabs.1B-21C)

Tables 1B through 21C show the polar coordinates of the sampling locations and the tracer concentrations measured at these locations. The concentration data and the polar coordinates R and ALPHA are expressed in ng/m^3, m, and degrees of arc, respectively. The angle ALPHA is measured relative to the northern direction and counted clockwise. The error of the angle ALPHA is less than one degree, the error of the downwind distance R lies between 10 and 30 m. The lower value applies to zones with small radii and to locations within the Nuclear Research Center.

The errors of the measured concentrations are omitted, they are of the same order of magnitude as indicated in [2] and [4]. In the course of data evaluation which has been described in [3] and

[5], it was realized that the error band of the dispersion parameters deduced is mainly due to the differences between the measured distribution and the Gaussian plume model applied. These differences are caused by changes of the meteorological situation during the sampling time and to variations between open spaces and built-up and wooded areas in the test field. The errors in the concentration measurement are small as compared to these differences and they are not considered in the evaluation of the dispersion parameters.

Bars in the column of concentration data refer to samples not evaluated. These samples had either been located too far from the center of the plume or the samplers had failed.

The limits of detection are indicated, if the measured concentrations are below these limits. The limits are twice the standard deviations of the measured concentrations. The standard deviations are calculated from errors in gas chromatographic analysis. The listed concentration of the tracer $CFCl_3$ is the difference between the concentration measured at this sampling location and the mean background concentration. Thus, for this tracer, scattering of the background is considered, too, in the standard deviation. For $CFCl_3$ the limits of detection are mentioned only if the measured concentration lays below the mean background concentration. This was done in order to have more $CFCl_3$ concentration data available for evaluating the dispersion parameters [6].

The tables show also the day and the time (Central European Time) at which sampling was carried out, as well as the type of tracer and the emission rate. As two or more tracers were released simultaneously in one experiment, the respective tables have been denoted by the letters B,C, D, E.

5.3 Local Distribution of Tracer Concentrations and Angular Distribution of Transport Directions (Figs. 1A-21D)

Figs. 1A through 21D show the local distribution of the measured concentrations. The letters A through D behind the same number refer to different sampling periods and tracers released. The isolines of constant concentration have been interpolated from measured data and plotted by a computer. The isolines are labeled by the concentration values in $\mu g/m^3$. The sampling locations are plotted as open squares. The downwind distances of the sampling locations are shown on the ordinate. The absolute azimuthal position of the test field is not indicated.

The step curve plotted on the periphery indicates the frequency distribution of transport direction. The transport direction refers to the mean wind direction measured during the sampling period at 100 m height above ground.

No concentrations have been plotted of experiments No. 54 and 71 (both tracers) and No. 61 and 63 ($CFCl_3$ only). In these cases none or only few sampling locations had tracer concentrations above the detection limit.

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No.	Date	Time MET	Stability class	Sampling field			Emission height in m	Tracer
				Sector in degree	Source distance in m			
					min	max		
52	28.09.1977	14.00-15.00	B	332- 89	170	2,130	160	CF_2Br_2
							195	$CFCl_3$
53	26.10.1977	14.00-15.00	D	165-241	305	5,880	160	CF_2Br_2
							195	$CFCl_3$
54	13.12.1977	14.00-15.00	D	26-105	300	4,970	160	CF_2Br_2
							195	$CFCl_3$
55	05.04.1978	14.00-15.00	C	183-261	300	5,060	160	CF_2Br_2
							195	$CFCl_3$
57	27.04.1978	14.00-15.00	A	344-114	295	2,850	160	CF_2Br_2
							195	$CFCl_3$
58	08.06.1978	14.00-15.00	D	42-121	340	5,300	160	CF_2Br_2
							195	$CFCl_3$
59	27.07.1978	14.00-15.00	A	5- 98	200	3,160	160	CF_2Br_2
							195	$CFCl_3$
60	05.09.1978	14.00-14.30	B	147-334	280	4,390	160	CF_2Br_2
							195	$CFCl_3$
61	27.09.1978	14.00-15.00	D	1- 99	495	8,525	160	CF_2Br_2
							195	$CFCl_3$
62	27.10.1978	14.00-15.00	C	176-320	390	5,275	160	CF_2Br_2
							195	$CFCl_3$
63	14.12.1978	14.00-15.00	D	5- 88	660	9,550	160	CF_2Br_2
							195	$CFCl_3$
64	15.05.1979	14.00-15.00	B	220-338	280	5,330	160	CF_2Br_2
							195	$CFCl_3$
65	07.06.1979	14.00-15.00	D	1- 96	335	6,050	160	CF_2Br_2
							195	$CFCl_3$
66	26.06.1979	14.00-15.00	C	19-102	245	4,080	160	CF_2Br_2
							195	$CFCl_3$
67	05.09.1979	14.00-15.00	B	191-322	135	3,440	160	CF_2Br_2
							195	$CFCl_3$
68	10.01.1980	14.00-15.00	C	200-275	280	5,580	160	CF_2Br_2
							195	$CFCl_3$
69	07.02.1980	14.00-15.00	D	1- 80	430	8,500	160	CF_2Br_2
							195	$CFCl_3$
70	11.03.1980	14.00-15.00	D	9- 99	365	5,600	160	$CFCl_3$
							195	CF_2Br_2
71	29.05.1980	13.00-14.00	D	8-102	180	3,350	160	$CFCl_3$
							195	CF_2Br_2
72	02.07.1980	13.00-14.00	D	21-100	465	8,500	160	$CFCl_3$/K
							160	$CFCl_3$/J
							195	CF_2Br_2
							195	SF_6
73	04.09.1980	13.00-14.00	C	341-103	110	2,800	160	$CFCl_3$
							195	CF_2Br_2

Table A: Compilation of the diffusion experiments.

Property		Dimension	$CFCl_3$	CF_2Br_2
Boiling point at 1 atm		°C	23.8	24 - 25
Freezing point		°C	-111	-141.5
Latent heat of vaporization	(boiling point)	cal/g	43.52	29.1
Specific heat of liquid	(boiling point)	cal/(g·K)	0.208	
Density	(20 °C)	g/cm³	1.49	2.27
Molecular weight		g/mol	137.38	209.83

Table B: Physical properties of the tracers

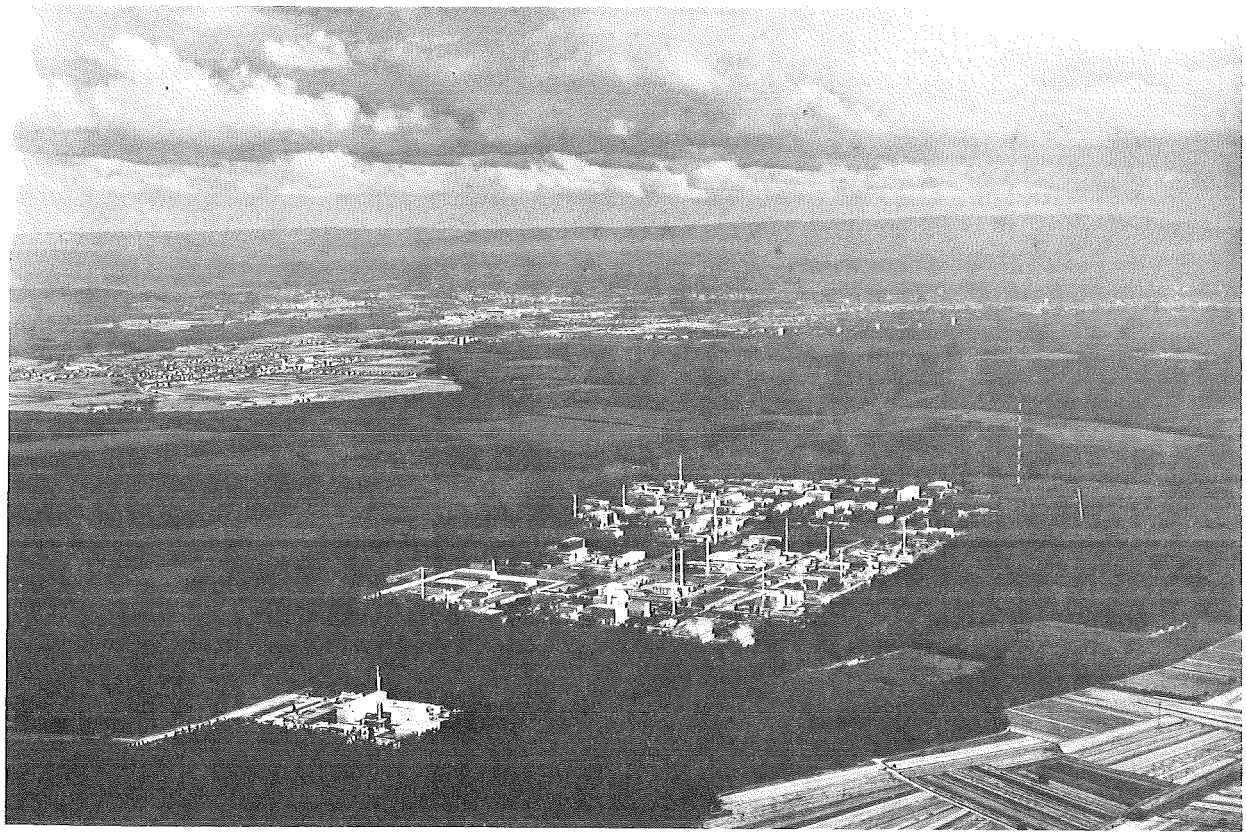

Fig. A: Aerial photo of the Karlsruhe Nuclear Research Center and its environment as seen from north-west.

Fig. B: Map of the Karlsruhe Nuclear Research Center and its environment, scale 1:50 000; ϕ: position of the meteorological tower.

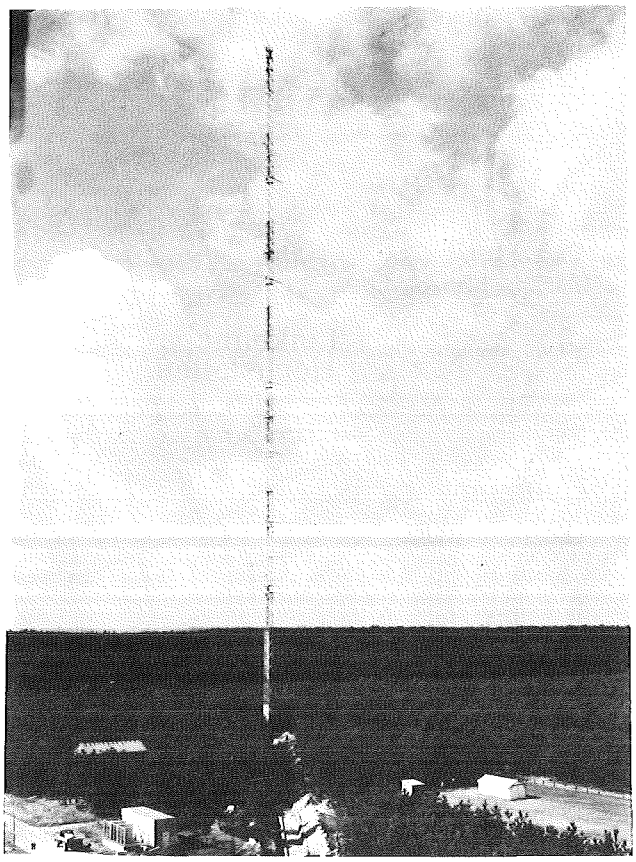

Fig. C: Meteorological tower.

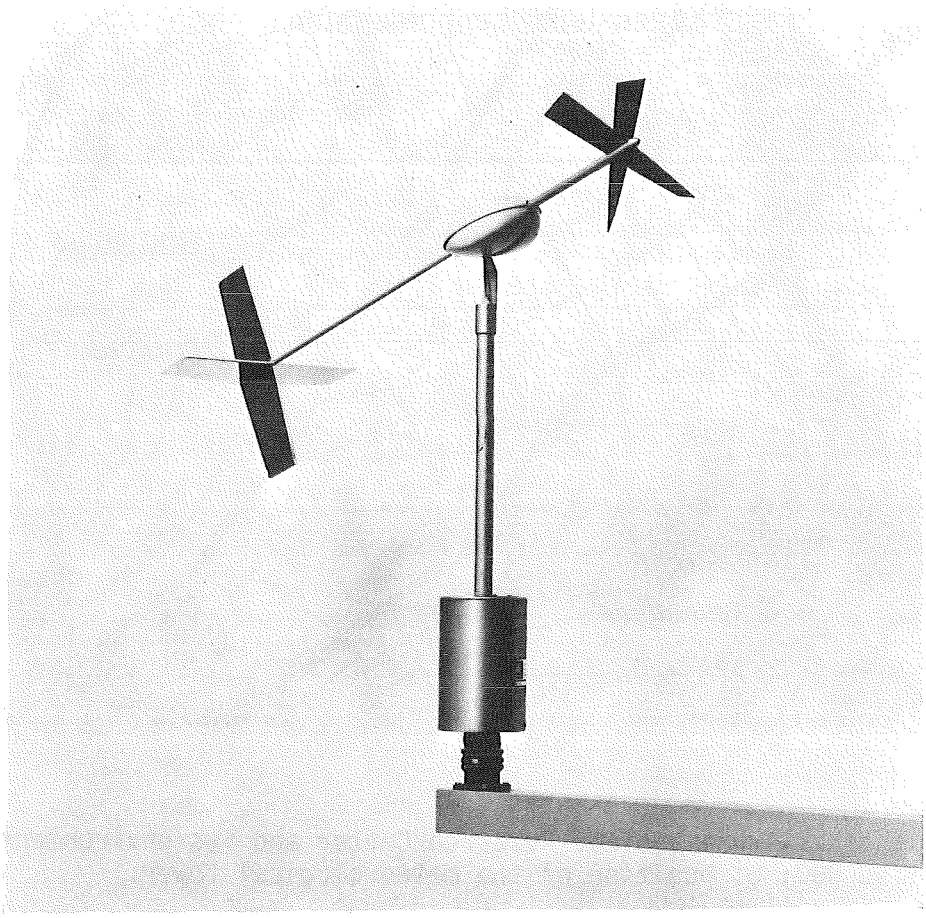

Fig. D: Vector vane.

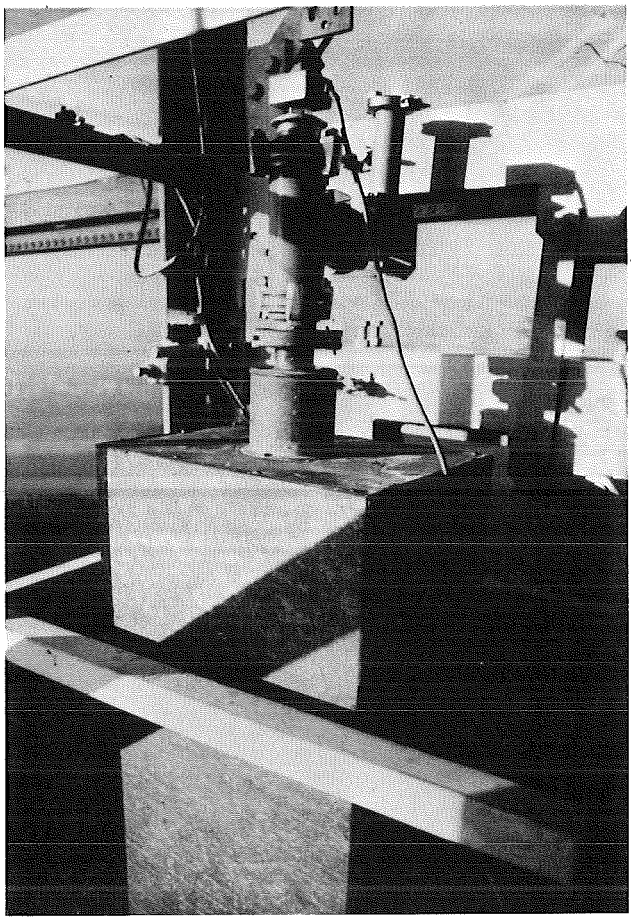

Fig. E: Evaporating boiler for the release of the tracers.

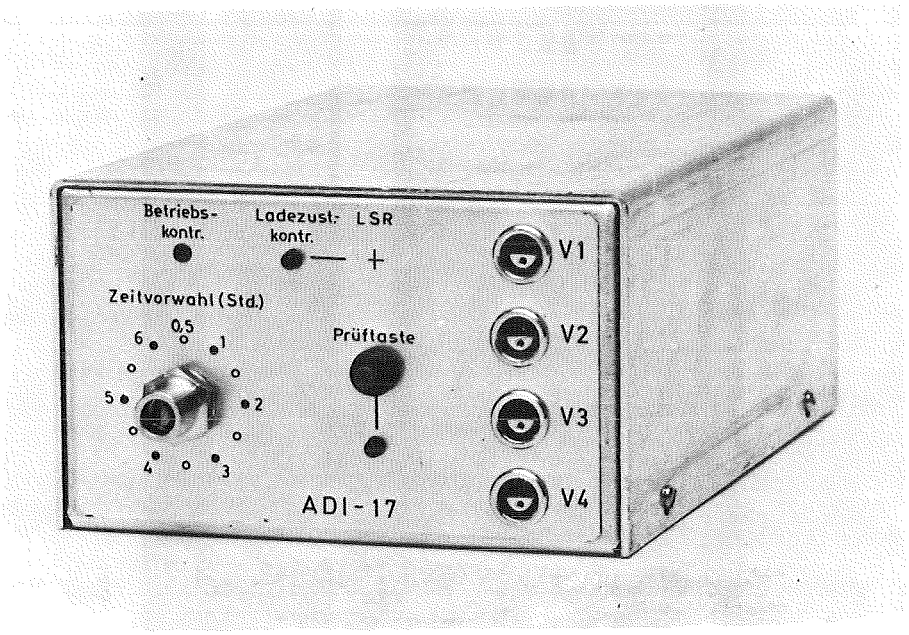

Fig. F: Electronic clock for the samplers.

Fig. G: Sampler.

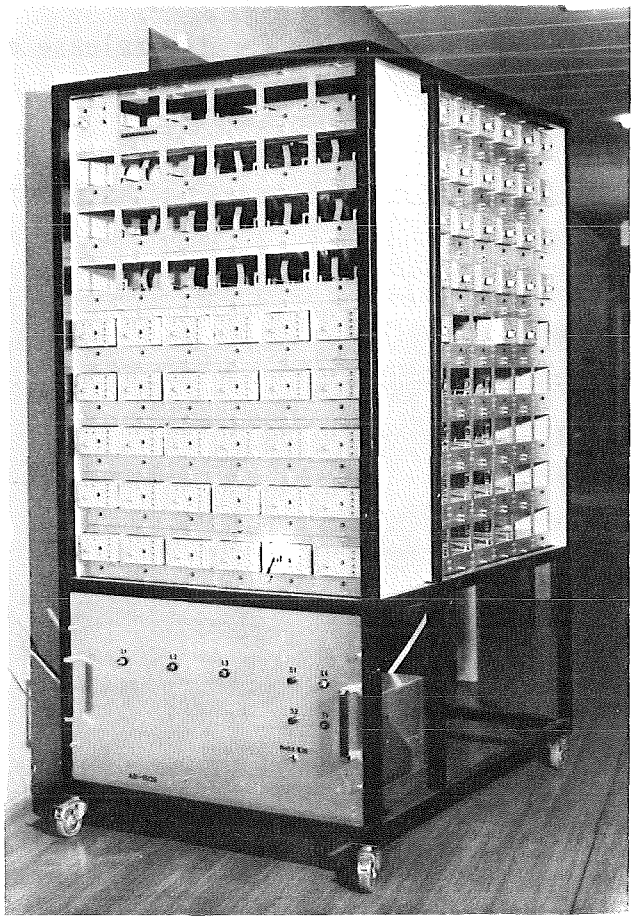

Fig. H: Storing rack for the electronic clocks.

TAB. 1A: METEOROLOGICAL DATA OF EXPERIMENT NO. 52

		HEIGHT	1. SAMPLING PERIOD			2. SAMPLING PERIOD		
		(M)	14.10	14.20	14.30	14.40	14.50	15.00
WIND DIRECTION (DEGREE)		40	229	238	252	242	236	216
		60	230	240	250	228	231	219
		100	227	241	241	221	226	220
		160	230	243	238	222	223	232
		200	234	242	238	224	223	235
WIND SPEED (M/S)		40	3.7	3.4	3.2	2.3	2.1	3.0
		60	3.8	3.6	3.4	2.5	2.4	3.2
		100	3.7	3.7	3.5	3.0	2.8	3.2
		160	3.7	3.5	3.3	3.2	2.9	3.2
		200	3.8	3.4	3.3	3.2	3.0	3.2
STANDARD DEVIATION OF	VER.	40	10.1	9.2	9.8	13.3	14.2	13.9
	HOR.		13.5	10.3	11.6	14.8	15.9	16.7
WIND DIR. VECTOR VANE (DEGREE)	VER.	100	10.3	8.9	8.5	10.9	12.3	11.7
	HOR.		10.7	8.4	8.4	9.4	10.7	10.9
	VER.	160	14.8	13.8	13.2	12.9	12.5	12.5
	HOR.		9.7	8.4	7.7	8.1	9.4	10.0
STAND. DEVIATION OF HOR. WIND DIRECTION WIND VANE (DEGREE)		100	9.5	9.6	15.9	15.3	15.6	15.5
TEMPERATURE GRADIENT (K/100M)		30/100	-1.1	-1.2	-1.2	-1.4	-1.5	-1.3
NET RADIATION (MW/CM**2)			23.5	21.8	22.1	20.2	19.7	17.7
DIFFUSION CATEGORY BASED ON ...	VER. FLUCTUATION		C			B		
	HOR. FLUCTUATION		D			C		
	TEMP. GRADIENT		C			A		
	SYNOP. OBSERV.		C			C		

TAB. 1B: EXPERIMENT 52 28. 9.77 14.00 - 15.00

TRACER AND EMISSION RATE: CF2BR2 5.18 G/S

POSITION		R (M)	ALPHA (DEGREE)	TRACER CONCENTRATION IN NG/M**3 SAMPL. PERIOD 1	SAMPL. PERIOD 2
I	A	225.	355.	-	≤ 20
	B	215.	5.	-	≤ 19
	C	208.	15.	≤ 18	≤ 15
	D	210.	25.	≤ 25	≤ 27
	E	215.	32.	≤ 19	-
	F	200.	42.	≤ 25	≤ 25
	G	193.	51.	≤ 16	≤ 17
	H	200.	60.	25	≤ 16
	I	170.	69.	≤ 27	42
	K	205.	77.	≤ 28	≤ 21
	L	200.	87.	≤ 20	≤ 18
II	A	470.	332.	≤ 24	-
	B	335.	347.	≤ 21	-
	C	440.	354.	≤ 28	-
	D	428.	3.	≤ 19	≤ 22
	E	408.	16.	≤ 19	≤ 19
	F	408.	31.	805	5236
	G	405.	43.	9569	14890
	H	405.	55.	4185	14312
	I	408.	65.	205	3138
	K	408.	77.	592	≤ 19
III	A	850.	359.	≤ 20	-
	B	788.	10.	≤ 23	≤ 21
	C	780.	19.	-	≤ 11
	D	760.	29.	1026	3615
	E	790.	42.	11625	11776
	F	820.	55.	13622	8697
	G	810.	68.	4691	9323
	H	810.	78.	511	1480
	I	800.	89.	72	≤ 22
IV	A	1810.	358.	≤ 26	≤ 20
	B	1740.	25.	51	≤ 21
	C	1815.	36.	2350	1591
	D	1800.	52.	7251	5004
	E	2130.	68.	4493	-
	F	2040.	78.	2440	272

TAB. 1C: EXPERIMENT 52 28. 9.77 14.00 - 15.00

TRACER AND EMISSION RATE: CFCL3 12.40 G/S

POSITION		R (M)	ALPHA (DEGREE)	TRACER CONCENTRATION IN NG/M**3 SAMPL. PERIOD 1	SAMPL. PERIOD 2
I	A	225.	355.	-	72
	B	215.	5.	-	474
	C	208.	15.	97	471
	D	210.	25.	10	380
	E	215.	32.	219	-
	F	200.	42.	≤ 433	≤ 435
	G	193.	51.	≤ 432	≤ 432
	H	200.	60.	1543	≤ 432
	I	170.	69.	269	772
	K	205.	77.	1021	≤ 433
	L	200.	87.	367	378
II	A	470.	332.	≤ 434	-
	B	335.	347.	5855	-
	C	440.	354.	6627	-
	D	428.	3.	3719	≤ 434
	E	408.	16.	823	138
	F	408.	31.	4234	2179
	G	405.	43.	3661	14172
	H	405.	55.	3323	18260
	I	408.	65.	1010	1121
	K	408.	77.	1137	≤ 436
III	A	850.	359.	175	-
	B	788.	10.	≤ 433	≤ 432
	C	780.	19.	-	454
	D	760.	29.	836	10241
	E	790.	42.	9408	21817
	F	820.	55.	22744	35988
	G	810.	68.	14064	4184
	H	810.	78.	1915	3953
	I	800.	89.	875	401
IV	A	1810.	358.	15	≤ 435
	B	1740.	25.	243	41
	C	1815.	36.	2159	3117
	D	1800.	52.	14730	12047
	E	2130.	68.	9640	-
	F	2040.	78.	5299	352

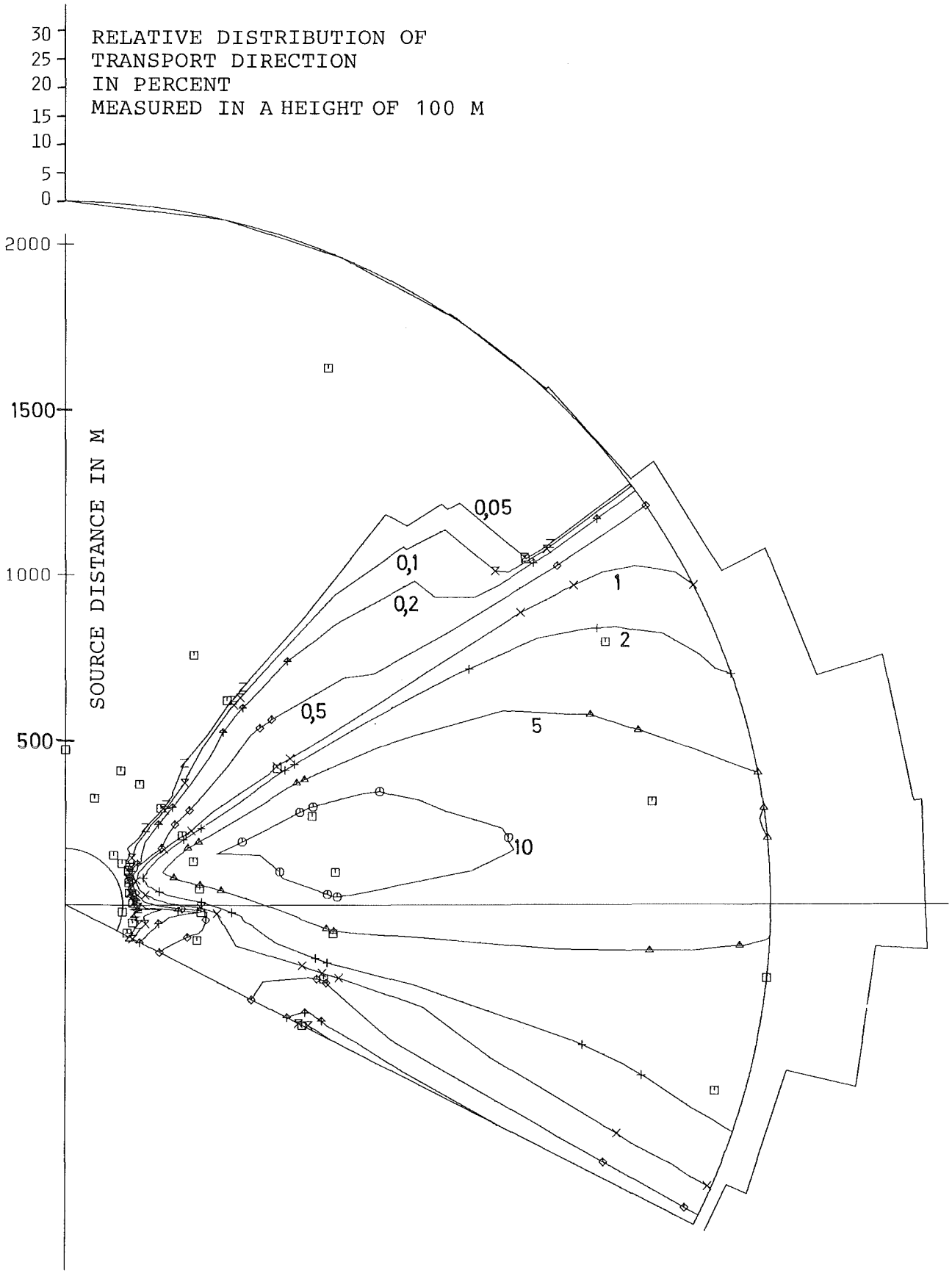

FIG. 1A: CONCENTRATION DISTRIBUTION IN 1/10**6 G/M**3

EXPERIMENT 52/1 CF2BR2 H=160 M

□ SAMPLING POSITIONS

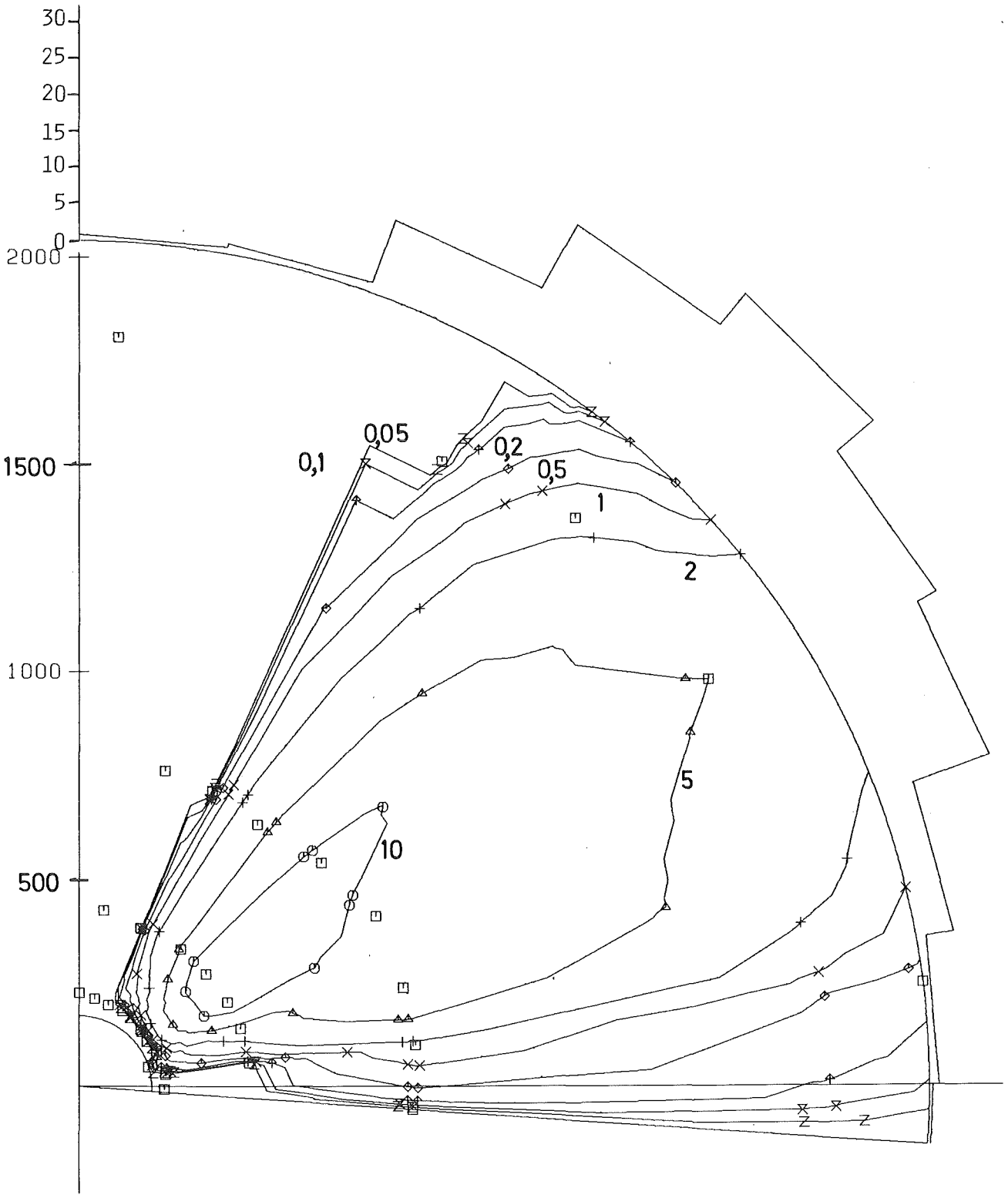

FIG. 1B: CONCENTRATION DISTRIBUTION IN 1/10**6 G/M**3
EXPERIMENT 52/2 CF2BR2 H=160 M
FOR DETAILED INFORMATION SEE FIGURE 1A

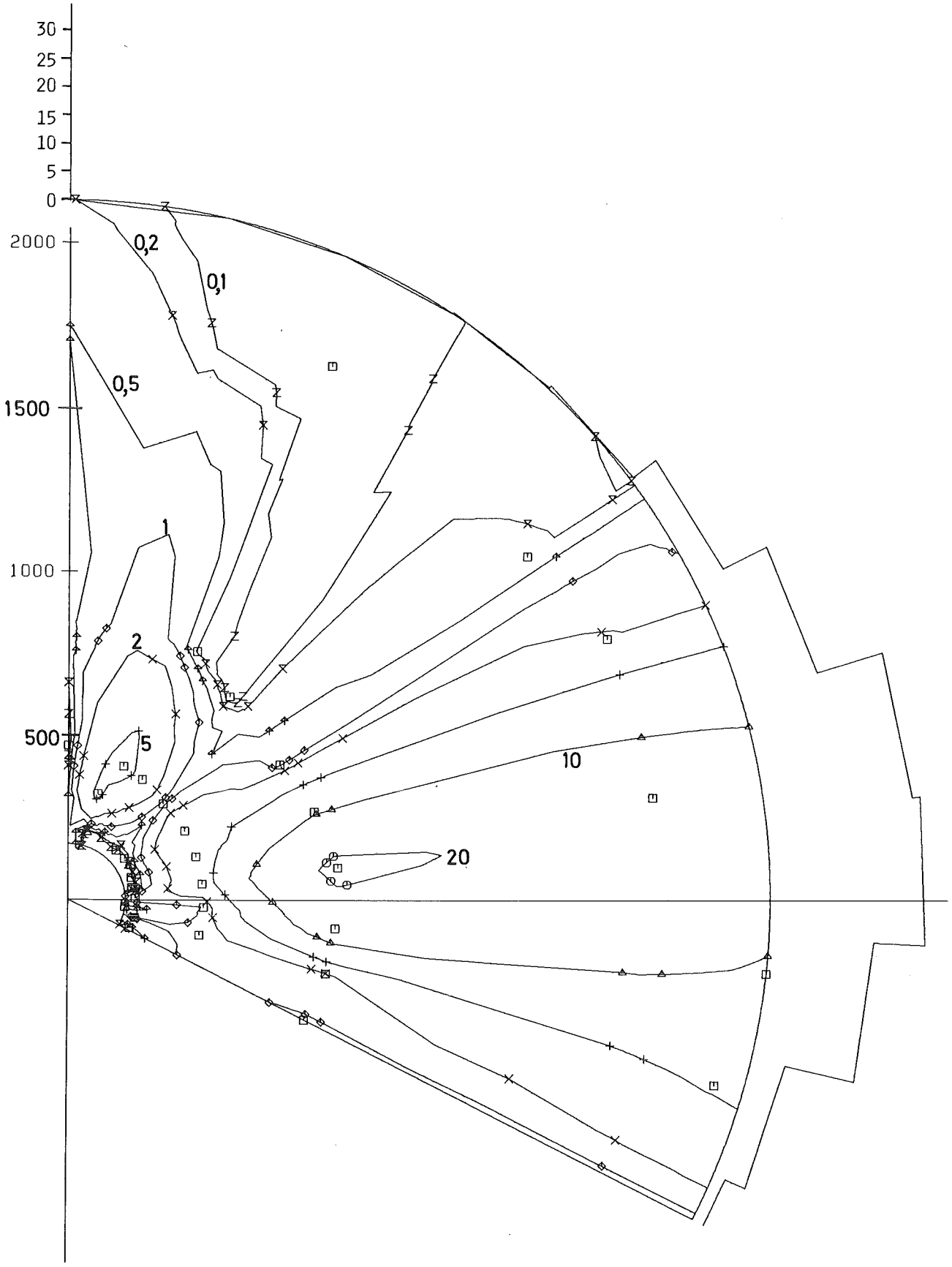

FIG. 1C: CONCENTRATION DISTRIBUTION IN 1/10××6 G/M××3
EXPERIMENT 52/1 CFCL3 H=195 M
FOR DETAILED INFORMATION SEE FIGURE 1A

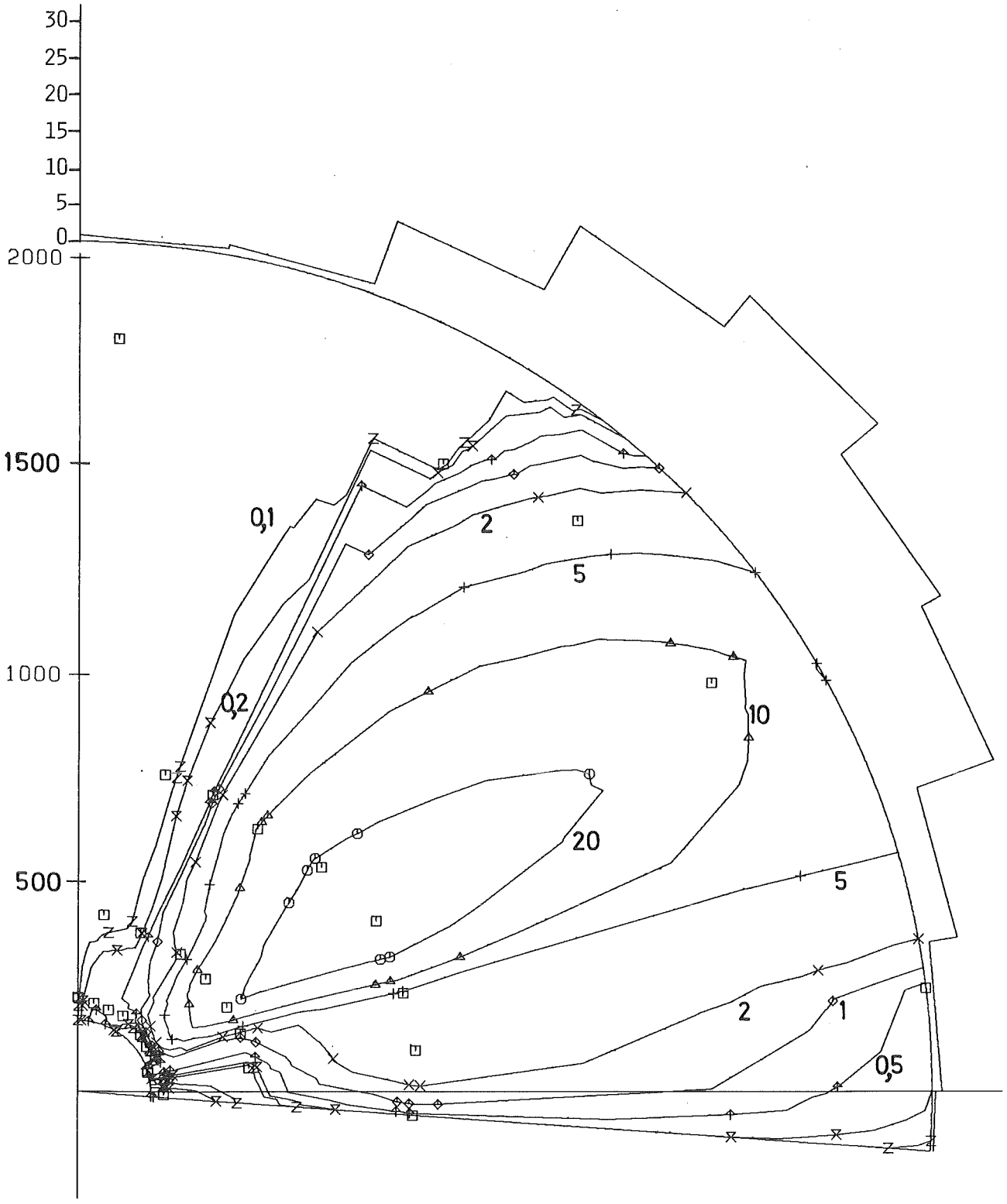

FIG. 1D: CONCENTRATION DISTRIBUTION IN 1/10**6 G/M**3
EXPERIMENT 52/2 CFCL3 H=195 M
FOR DETAILED INFORMATION SEE FIGURE 1A

TAB. 2A: METEOROLOGICAL DATA OF EXPERIMENT NO. 53

		HEIGHT (M)	1. SAMPLING PERIOD 14.10	14.20	14.30	2. SAMPLING PERIOD 14.40	14.50	15.00
WIND DIRECTION (DEGREE)		40	11	20	19	22	32	37
		60	11	15	16	20	28	29
		100	11	17	17	22	28	32
		160	17	20	21	26	30	35
		200	23	26	27	32	36	41
WIND SPEED (M/S)		40	2.7	2.6	3.3	3.4	2.9	3.4
		60	3.4	3.1	4.0	3.9	3.2	4.0
		100	4.2	3.7	4.5	4.0	3.9	4.2
		160	4.9	4.3	4.8	4.6	4.8	4.7
		200	5.3	5.0	5.2	5.2	5.5	5.3
STANDARD DEVIATION OF	VER.	40	9.4	9.3	9.0	8.4	9.1	9.0
	HOR.		12.4	12.4	11.3	11.0	12.4	11.1
WIND DIR. VECTOR VANE (DEGREE)	VER.	100	5.2	5.7	5.2	5.4	7.0	7.4
	HOR.		5.2	6.0	6.1	6.0	7.2	7.3
	VER.	160	****	****	****	****	****	****
	HOR.		3.3	3.8	3.7	4.1	4.7	5.4
STAND. DEVIATION OF HOR. WIND DIRECTION WIND VANE (DEGREE)		100	6.5	8.2	6.4	8.7	12.9	7.3
TEMPERATURE GRADIENT (K/100M)		30/100	-1.0	-1.0	-1.0	-1.0	-1.1	-1.1
NET RADIATION (MW/CM**2)			3.4	4.5	5.7	6.4	6.9	3.8
DIFFUSION CATEGORY BASED ON ...	VER. FLUCTUATION		D			D		
	HOR. FLUCTUATION		D			D		
	TEMP. GRADIENT		C			C		
	SYNOP. OBSERV.		C			C		

TAB. 2B: EXPERIMENT 53 26.10.77 14.00 - 15.00

TRACER AND EMISSION RATE: CF2BR2 4.90 G/S

POSITION		R (M)	ALPHA (DEGREE)	TRACER CONCENTRATION IN NG/M**3 SAMPL. PERIOD 1	SAMPL. PERIOD 2
I	A	305.	167.	≤ 20	≤ 16
	B	405.	186.	≤ 19	≤ 19
	C	400.	206.	≤ 22	≤ 17
	D	350.	212.	≤ 14	≤ 17
II	A	700.	165.	-	≤ 19
	B	710.	177.	≤ 19	≤ 19
	C	735.	186.	≤ 29	≤ 28
	D	715.	194.	≤ 35	36
	E	710.	203.	≤ 21	36
	F	700.	212.	≤ 20	28
	G	845.	226.	≤ 22	≤ 20
	H	805.	231.	-	≤ 22
III	A	1805.	169.	≤ 18	≤ 18
	B	1650.	185.	254	≤ 34
	C	1525.	195.	892	2713
	D	1655.	200.	502	4158
	E	1560.	205.	≤ 21	2295
	F	1465.	211.	≤ 23	1872
	G	1400.	217.	-	282
	H	1410.	225.	-	49
	I	1300.	239.	-	≤ 17
	K	1420.	241.	-	≤ 19
IV	A	3215.	181.	≤ 25	≤ 23
	B	3065.	186.	231	≤ 40
	C	2930.	192.	8419	1663
	D	2855.	198.	655	3135
	E	2765.	202.	156	2688
	F	2765.	206.	≤ 26	2818
	G	2750.	210.	≤ 23	2757
	H	2730.	212.	≤ 25	1362
	I	2670.	217.	-	≤ 32
	K	2625.	223.	≤ 26	≤ 22
V	A	5470.	172.	≤ 32	≤ 33
	B	5540.	180.	≤ 32	≤ 24
	C	5450.	186.	≤ 34	≤ 35
	D	5360.	194.	2868	1398
	E	5600.	204.	66	954
	F	5680.	211.	≤ 27	105
	G	5880.	219.	≤ 31	≤ 31
	H	5840.	225.	-	≤ 31

TAB. 2C: EXPERIMENT 53 26.10.77 14.00 - 15.00

TRACER AND EMISSION RATE: CFCL3 13.40 G/S

POSITION		R (M)	ALPHA (DEGREE)	TRACER CONCENTRATION IN NG/M**3 SAMPL. PERIOD 1	SAMPL. PERIOD 2
I	A	305.	167.	358	≤ 915
	B	405.	186.	432	372
	C	400.	206.	≤ 920	156
	D	350.	212.	≤ 912	107
II	A	700.	165.	-	1449
	B	710.	177.	701	776
	C	735.	186.	≤ 916	467
	D	715.	194.	476	587
	E	710.	203.	1322	≤ 913
	F	700.	212.	138	≤ 915
	G	845.	226.	≤ 915	565
	H	805.	231.	-	≤ 915
III	A	1805.	169.	≤ 920	628
	B	1650.	185.	559	454
	C	1525.	195.	29	1211
	D	1655.	200.	≤ 932	4013
	E	1560.	205.	≤ 920	1504
	F	1465.	211.	381	1331
	G	1400.	217.	-	426
	H	1410.	225.	-	15
	I	1300.	239.	-	≤ 920
	K	1420.	241.	-	≤ 915
IV	A	3215.	181.	≤ 918	127
	B	3065.	186.	1259	105
	C	2930.	192.	5896	296
	D	2855.	198.	296	2303
	E	2765.	202.	64	3622
	F	2765.	206.	814	4446
	G	2750.	210.	2509	7978
	H	2730.	212.	≤ 917	2564
	I	2670.	217.	-	604
	K	2625.	223.	≤ 915	≤ 914
V	A	5470.	172.	≤ 916	450
	B	5540.	180.	818	165
	C	5450.	186.	486	9
	D	5360.	194.	3293	1129
	E	5600.	204.	1833	1415
	F	5680.	211.	≤ 915	1134
	G	5880.	219.	≤ 920	≤ 915
	H	5840.	225.	-	312

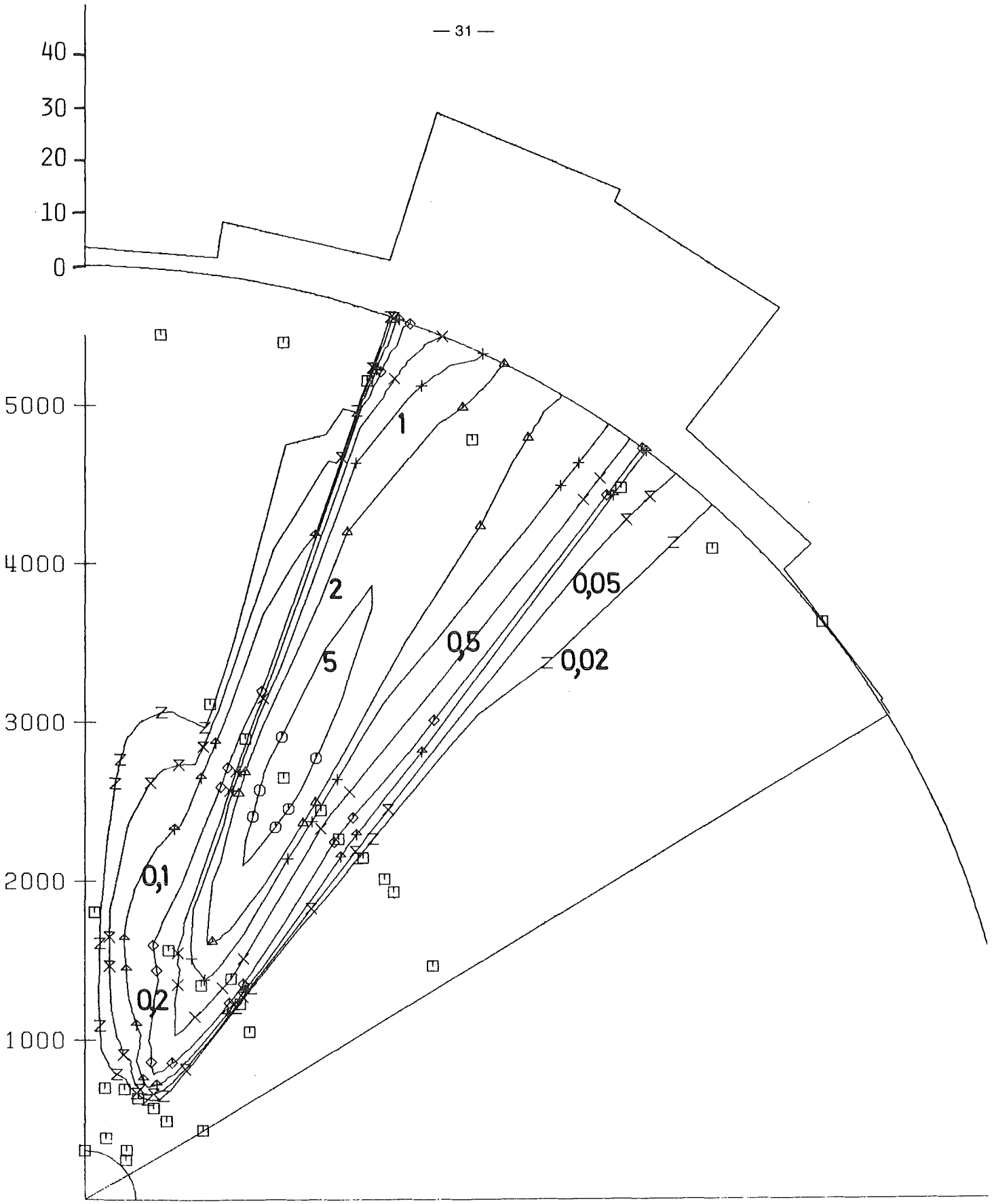

FIG. 2A: CONCENTRATION DISTRIBUTION IN 1/10**6 G/M**3

EXPERIMENT 53/1 CF2BR2 H=160 M

FOR DETAILED INFORMATION SEE FIGURE 1A

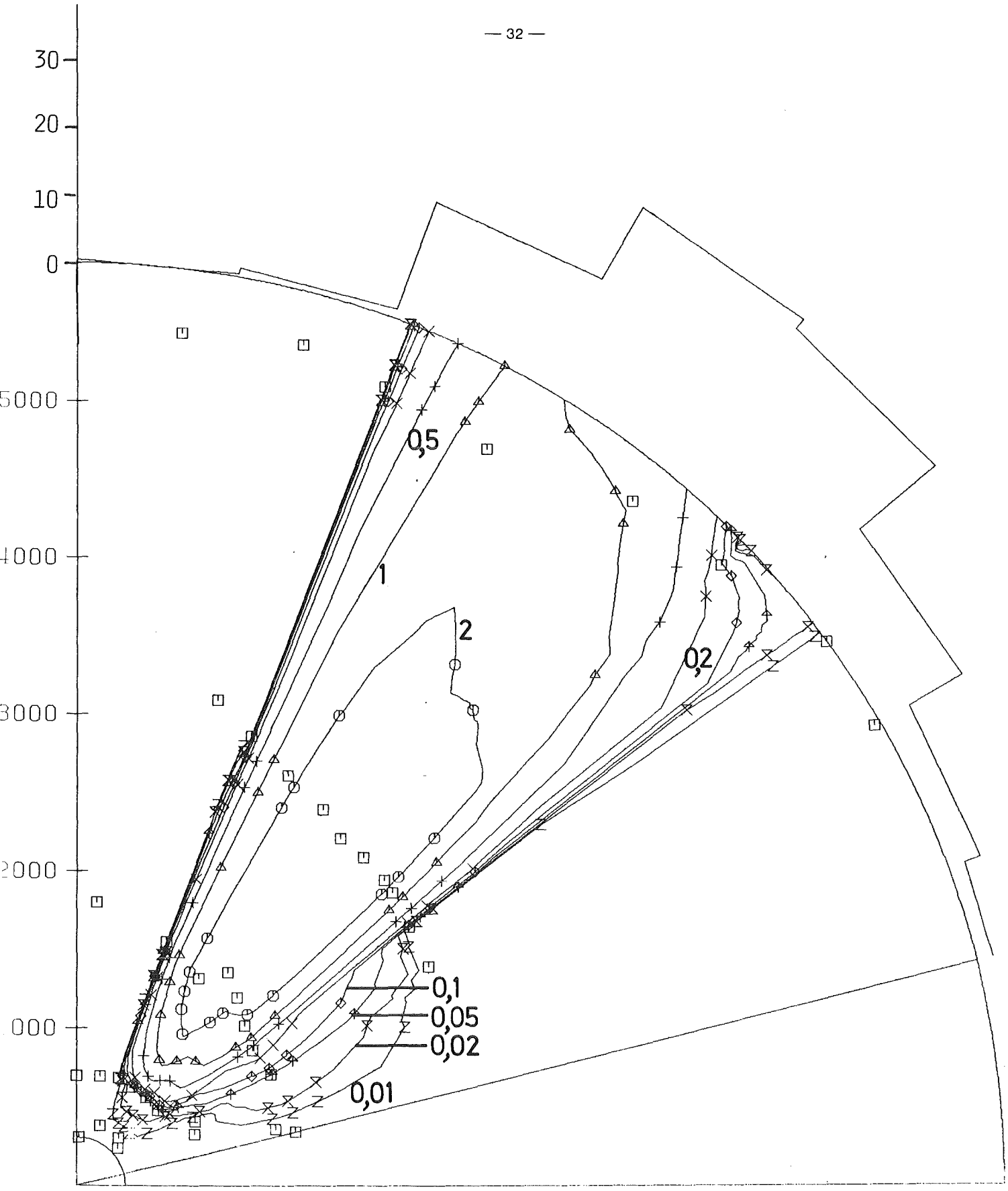

FIG. 2B: CONCENTRATION DISTRIBUTION IN 1/10**6 G/M**3

EXPERIMENT 53/2 CF2BR2 H=160 M

FOR DETAILED INFORMATION SEE FIGURE 1A

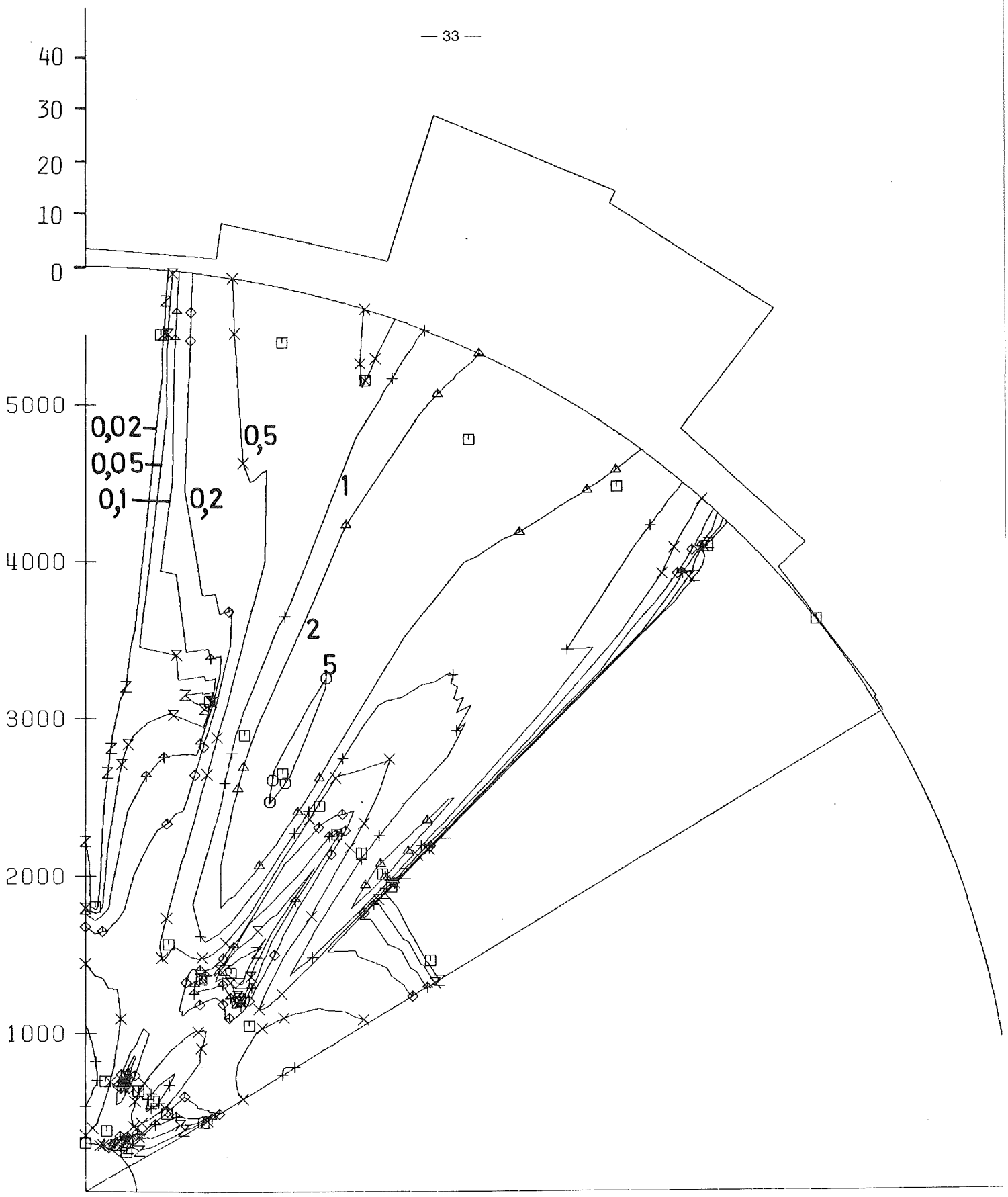

FIG. 2C: CONCENTRATION DISTRIBUTION IN 1/10**6 G/M**3
EXPERIMENT 53/1 CFCL3 H=195 M
FOR DETAILED INFORMATION SEE FIGURE 1A

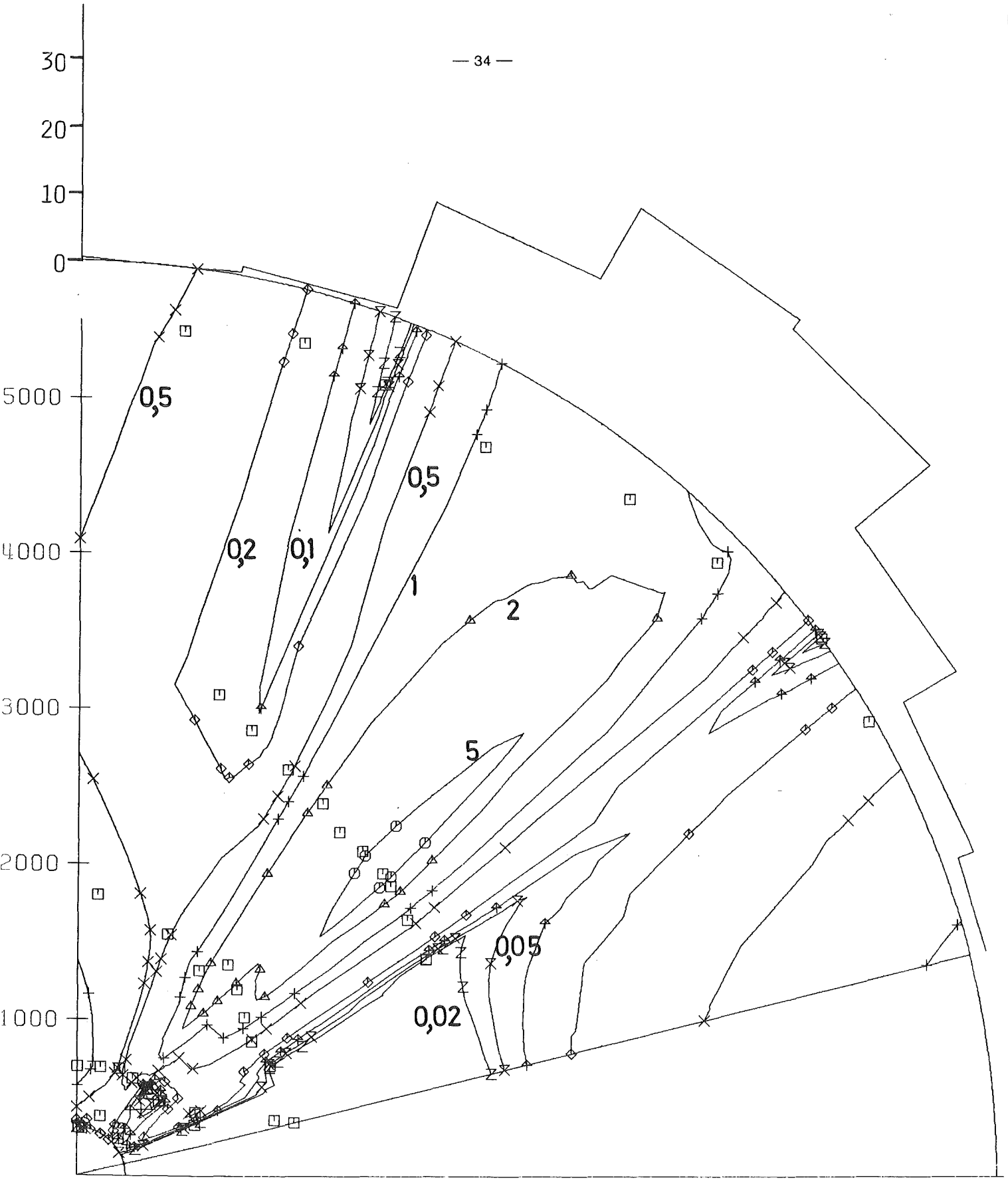

FIG. 2D: CONCENTRATION DISTRIBUTION IN 1/10**6 G/M**3
EXPERIMENT 53/2 CFCL3 H=195 M
FOR DETAILED INFORMATION SEE FIGURE 1A

TAB. 3A: METEOROLOGICAL DATA OF EXPERIMENT NO. 54

		HEIGHT	1. SAMPLING PERIOD			2. SAMPLING PERIOD		
		(M)	14.10	14.20	14.30	14.40	14.50	15.00
WIND DIRECTION (DEGREE)		40	213	218	218	219	218	221
		60	217	217	217	215	216	218
		100	220	221	219	218	216	220
		160	229	228	226	227	226	232
		200	240	238	235	237	238	241
WIND SPEED (M/S)		40	2.7	2.4	2.4	2.8	3.0	2.9
		60	3.0	3.0	3.0	3.4	3.7	3.5
		100	4.0	4.0	4.1	4.5	4.7	4.4
		160	4.7	4.8	4.9	4.9	4.9	4.6
		200	5.1	5.2	5.2	5.0	4.8	4.9
STANDARD DEVIATION OF WIND DIR. VECTOR VANE (DEGREE)	VER.	40	8.7	8.6	8.5	8.5	8.4	8.1
	HOR.		10.4	11.0	10.0	10.5	10.2	9.5
	VER.	100	3.6	3.6	3.6	3.5	3.2	3.1
	HOR.		4.1	4.4	4.3	4.2	3.4	3.1
	VER.	160	2.5	2.7	2.7	2.6	2.5	2.5
	HOR.		2.6	2.8	2.6	2.8	2.8	2.8
STAND. DEVIATION OF HOR. WIND DIRECTION WIND VANE (DEGREE)		100	5.9	5.3	5.2	3.8	3.5	3.3
TEMPERATURE GRADIENT (K/100M)		30/100	-0.7	-0.7	-0.7	-0.7	-0.7	-0.8
NET RADIATION (MW/CM**2)			2.6	2.4	2.7	2.0	2.3	2.3
DIFFUSION CATEGORY BASED ON ...	VER. FLUCTUATION		D			D		
	HOR. FLUCTUATION		E			F		
	TEMP. GRADIENT		D			D		
	SYNOP. OBSERV.		D			D		

TAB. 3B: EXPERIMENT 54 13.12.77 14.00 - 15.00

TRACER AND EMISSION RATE: CF2BR2 5.10 G/S

POSITION		R (M)	ALPHA (DEGREE)	TRACER CONCENTRATION IN NG/M**3 SAMPL. PERIOD 1	SAMPL. PERIOD 2
I	A	310.	37.	≤ 15	≤ 16
	B	310.	50.	≤ 20	≤ 16
	C	300.	63.	≤ 16	≤ 20
	D	305.	73.	≤ 17	≤ 16
	E	300.	84.	≤ 19	≤ 14
	F	320.	90.	≤ 14	≤ 16
	G	300.	105.	≤ 20	≤ 18
II	A	600.	41.	-	≤ 18
	B	600.	48.	≤ 22	≤ 20
	C	605.	57.	-	≤ 21
	D	600.	70.	≤ 22	≤ 17
	E	600.	80.	-	-
	F	615.	89.	≤ 21	≤ 22
	G	655.	92.	≤ 24	≤ 18
III	A	1280.	35.	≤ 12	≤ 11
	B	1370.	41.	-	≤ 19
	C	1550.	47.	≤ 19	≤ 17
	D	1220.	54.	≤ 17	≤ 21
	E	1500.	64.	≤ 18	≤ 16
	F	1420.	71.	≤ 19	≤ 18
	G	1360.	78.	≤ 14	≤ 11
	H	1310.	91.	≤ 11	≤ 9
IV	A	2290.	28.	≤ 27	≤ 23
	B	2350.	34.	≤ 25	≤ 20
	C	2330.	38.	≤ 21	≤ 20
	D	2400.	46.	197	370
	E	2525.	50.	≤ 24	≤ 26
	F	2370.	58.	≤ 26	≤ 15
V	A	4770.	26.	-	≤ 17
	B	4730.	34.	≤ 20	≤ 22
	C	4970.	41.	≤ 17	44
	D	4780.	51.	122	667
	E	4510.	57.	≤ 20	≤ 23
	F	4510.	64.	≤ 17	≤ 19

TAB. 3C: EXPERIMENT 54 13.12.77 14.00 - 15.00

TRACER AND EMISSION RATE: CFCL3 8.90 G/S

POSITION		R (M)	ALPHA (DEGREE)	TRACER CONCENTRATION IN NG/M**3 SAMPL. PERIOD 1	SAMPL. PERIOD 2
I	A	310.	37.	≤ 375	≤ 377
	B	310.	50.	≤ 370	348
	C	300.	63.	1622	1424
	D	305.	73.	916	434
	E	300.	84.	599	416
	F	320.	90.	552	416
	G	300.	105.	142	≤ 377
II	A	600.	41.	-	≤ 380
	B	600.	48.	≤ 379	475
	C	605.	57.	-	807
	D	600.	70.	54	1371
	E	600.	80.	-	-
	F	615.	89.	637	659
	G	655.	92.	≤ 380	95
III	A	1280.	35.	≤ 379	150
	B	1370.	41.	-	≤ 380
	C	1450.	47.	324	175
	D	1220.	54.	272	1697
	E	1500.	64.	≤ 379	177
	F	1420.	71.	≤ 379	≤ 380
	G	1360.	78.	300	≤ 379
	H	1310.	91.	≤ 379	≤ 375
IV	A	2290.	28.	≤ 380	≤ 380
	B	2350.	34.	≤ 379	146
	C	2330.	38.	1583	811
	D	2400.	46.	1041	1608
	E	2525.	50.	82	≤ 383
	F	2370.	58.	≤ 382	7
V	A	4770.	26.	-	≤ 379
	B	4730.	34.	≤ 378	≤ 380
	C	4970.	41.	≤ 376	415
	D	4786.	51.	19	251
	E	4510.	57.	≤ 376	≤ 380
	F	4510.	64.	156	314

TAB. 4A: METEOROLOGICAL DATA OF EXPERIMENT NO. 55

		HEIGHT	1. SAMPLING PERIOD			2. SAMPLING PERIOD		
		(M)	14.10	14.20	14.30	14.40	14.50	15.00
WIND DIRECTION (DEGREE)		40	59	58	54	52	51	55
		60	57	55	56	49	50	55
		100	58	55	55	52	52	53
		160	57	58	60	55	55	55
		200	63	64	63	60	60	59
WIND SPEED (M/S)		40	4.9	4.7	4.5	5.4	6.8	4.8
		60	5.5	5.5	5.6	6.4	7.7	5.7
		100	6.5	6.7	6.7	7.4	8.9	6.9
		160	7.1	8.1	7.9	8.6	9.7	8.2
		200	8.5	9.5	9.6	9.9	11.2	9.5
STANDARD DEVIATION OF WIND DIR. VECTOR VANE (DEGREE)	VER.	40	9.8	9.8	10.0	9.8	9.6	9.7
	HOR.		13.9	14.0	13.9	14.2	14.2	14.1
	VER.	100	8.1	9.2	9.0	8.3	7.3	7.4
	HOR.		9.0	9.5	9.4	9.0	8.3	8.1
	VER.	160	5.0	5.2	5.2	5.2	5.0	5.1
	HOR.		6.1	7.3	7.1	6.8	6.1	5.9
STAND. DEVIATION OF HOR. WIND DIRECTION WIND VANE (DEGREE)		100	13.9	9.1	9.1	9.5	6.5	11.3
TEMPERATURE GRADIENT (K/100M)		30/100	-1.0	-1.1	-1.1	-1.1	-1.1	-1.2
NET RADIATION (MW/CM**2)			4.1	3.9	5.5	11.9	12.6	8.7
DIFFUSION CATEGORY BASED ON ...	VER. FLUCTUATION		C			C		
	HOR. FLUCTUATION		D			D		
	TEMP. GRADIENT		C			C		
	SYNOP. OBSERV.		C			C		

TAB. 4B: EXPERIMENT 55 5. 4.78 14.00 - 15.00

TRACER AND EMISSION RATE: CF2BR2 22.40 G/S

POSITION		R (M)	ALPHA (DEGREE)	TRACER CONCENTRATION IN NG/M**3 SAMPL. PERIOD 1	SAMPL. PERIOD 2
I	A	320.	211.	≤ 30	≤ 28
	B	300.	244.	≤ 22	≤ 29
II	A	710.	209.	≤ 24	≤ 29
	B	600.	223.	≤ 39	≤ 36
	C	790.	230.	-	-
	D	770.	236.	6681	1222
	E	600.	240.	329	113
	F	590.	247.	≤ 25	≤ 28
	G	525.	255.	≤ 26	≤ 29
III	A	1280.	183.	≤ 37	-
	B	1120.	208.	-	≤ 40
	C	1510.	222.	-	211
	D	1565.	229.	5345	16808
	E	1370.	237.	21845	13270
	F	1270.	244.	10220	3016
	G	1180.	253.	≤ 33	≤ 24
	H	1120.	261.	≤ 32	≤ 32
IV	A	2355.	199.	≤ 34	-
	B	2325.	210.	≤ 37	≤ 38
	C	2420.	219.	≤ 36	≤ 32
	D	2580.	228.	2035	11153
	E	2270.	234.	18760	14012
	F	2460.	240.	7024	5913
	G	2455.	245.	3813	93
	H	2345.	250.	136	≤ 30
	I	2280.	257.	≤ 27	≤ 27
V	A	4780.	203.	-	≤ 35
	B	4740.	212.	-	≤ 23
	C	4790.	218.	≤ 27	≤ 29
	D	4810.	227.	≤ 19	2057
	E	4675.	235.	5582	-
	F	5060.	243.	1481	≤ 33
	G	4760.	248.	≤ 38	≤ 24
	H	4760.	254.	≤ 28	-

TAB. 4C: EXPERIMENT 55 5. 4.78 14.00 - 15.00

TRACER AND EMISSION RATE: CFCL3 12.70 G/S

POSITION		R (M)	ALPHA (DEGREE)	TRACER CONCENTRATION IN NG/M**3 SAMPL. PERIOD 1	SAMPL. PERIOD 2
I	A	320.	211.	53	≤ 332
	B	300.	244.	≤ 327	212
II	A	710.	209.	≤ 330	≤ 329
	B	600.	223.	170	160
	C	790.	230.	-	-
	D	770.	236.	544	265
	E	600.	240.	≤ 331	675
	F	590.	247.	≤ 330	151
	G	525.	255.	152	≤ 330
III	A	1280.	183.	≤ 327	-
	B	1120.	208.	-	≤ 330
	C	1510.	222.	-	68
	D	1565.	229.	1880	6582
	E	1370.	237.	8645	3221
	F	1270.	244.	3673	≤ 330
	G	1180.	253.	≤ 329	506
	H	1120.	261.	109	275
IV	A	2355.	199.	≤ 332	-
	B	2325.	210.	≤ 330	124
	C	2420.	219.	1380	≤ 329
	D	2580.	228.	2540	4987
	E	2270.	234.	8725	7082
	F	2460.	240.	2784	3668
	G	2455.	245.	1945	255
	H	2345.	250.	≤ 328	≤ 330
	I	2280.	257.	≤ 329	≤ 326
V	A	4780.	203.	-	≤ 329
	B	4740.	212.	-	≤ 328
	C	4790.	218.	≤ 330	1027
	D	4810.	227.	≤ 328	1555
	E	4675.	235.	3552	-
	F	5060.	243.	642	131
	G	4760.	248.	≤ 327	≤ 330
	H	4760.	254.	≤ 330	-

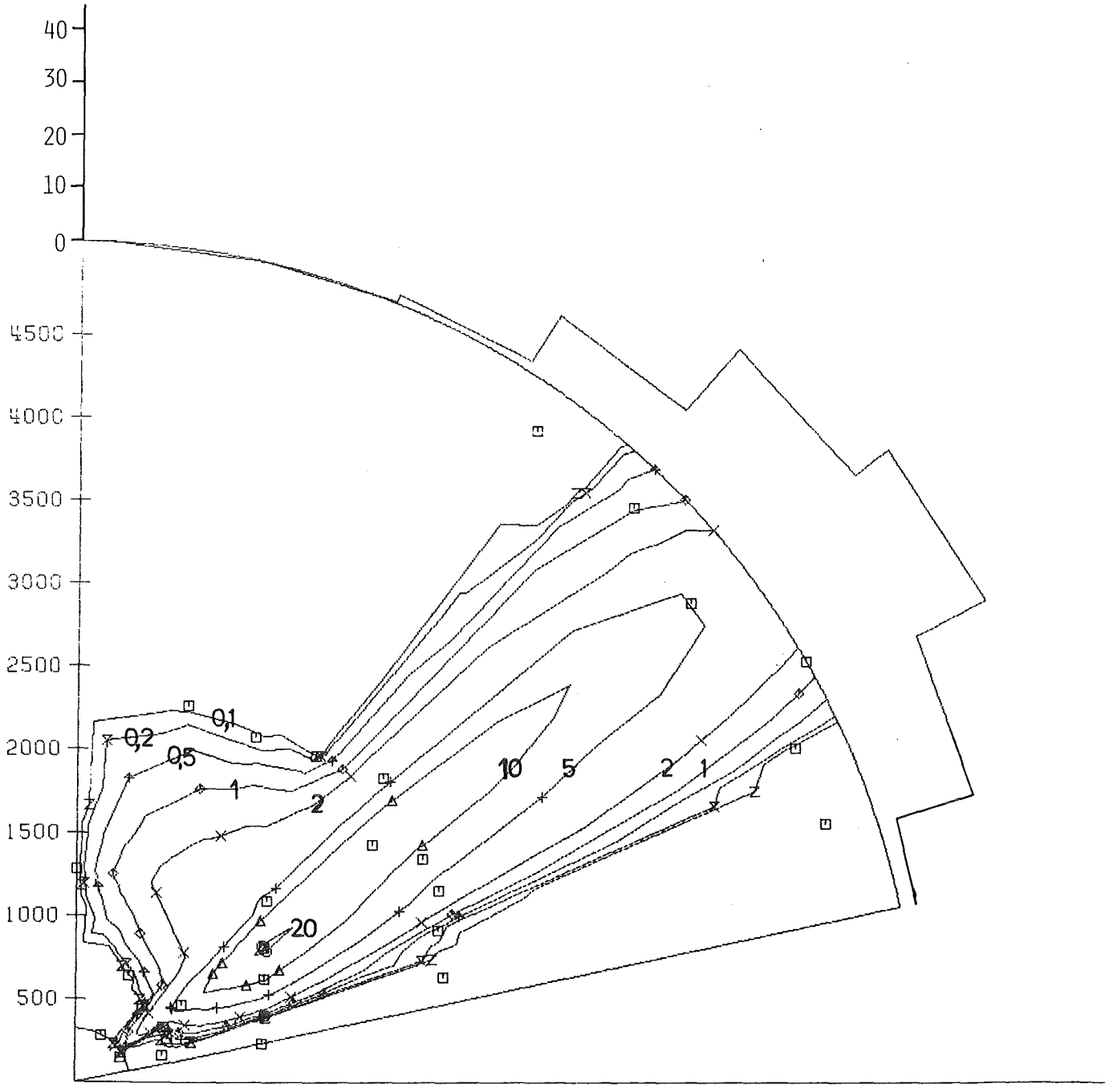

FIG. 4A: CONCENTRATION DISTRIBUTION IN 1/10xx6 G/Mxx3
EXPERIMENT 55/1 CF2BR2 H = 160 M
FOR DETAILED INFORMATION SEE FIGURE 1A

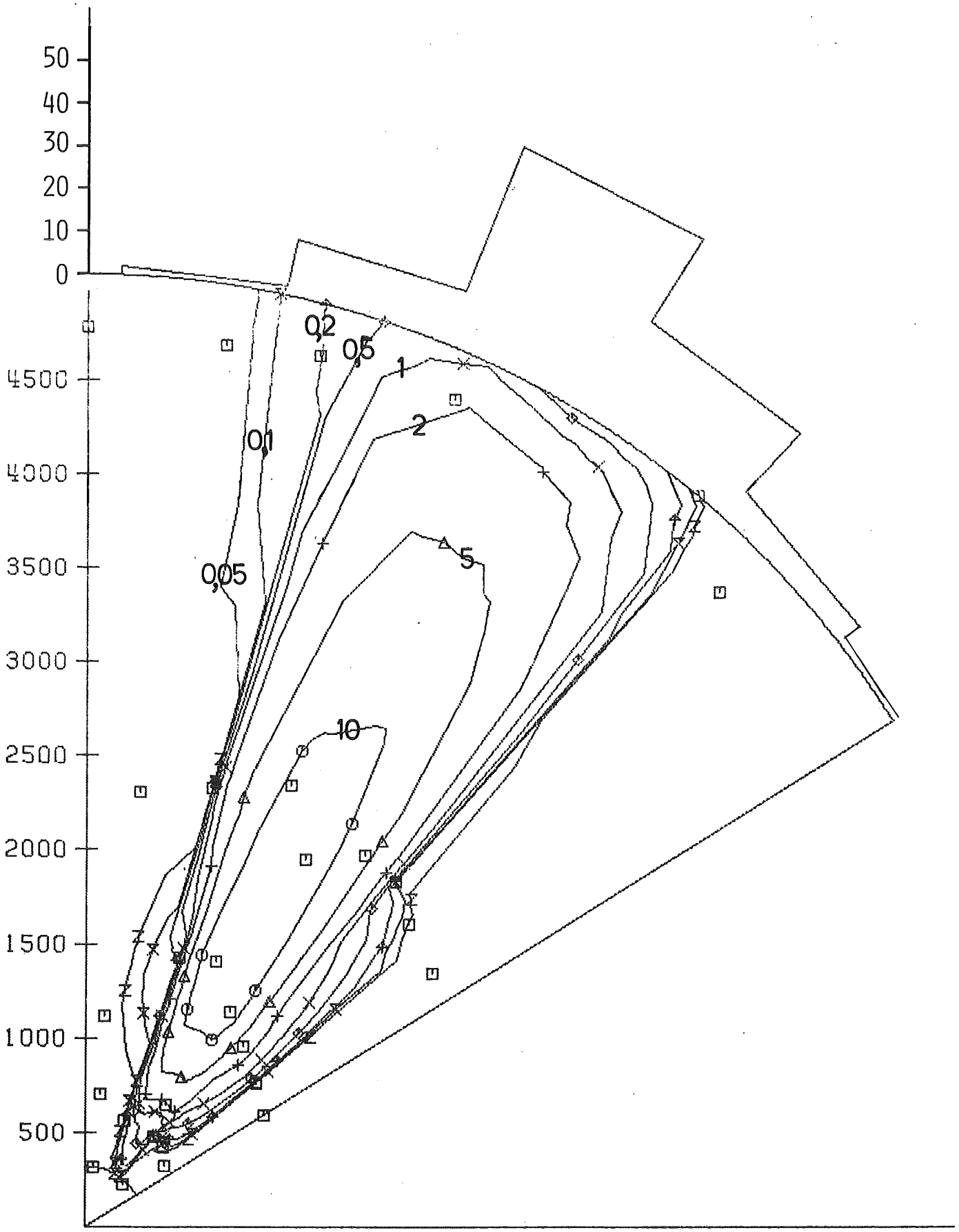

FIG. 4B: CONCENTRATION DISTRIBUTION IN 1/10××6 G/M××3
EXPERIMENT 55/2 CF2BR2 H = 160 M
FOR DETAILED INFORMATION SEE FIGURE 1A

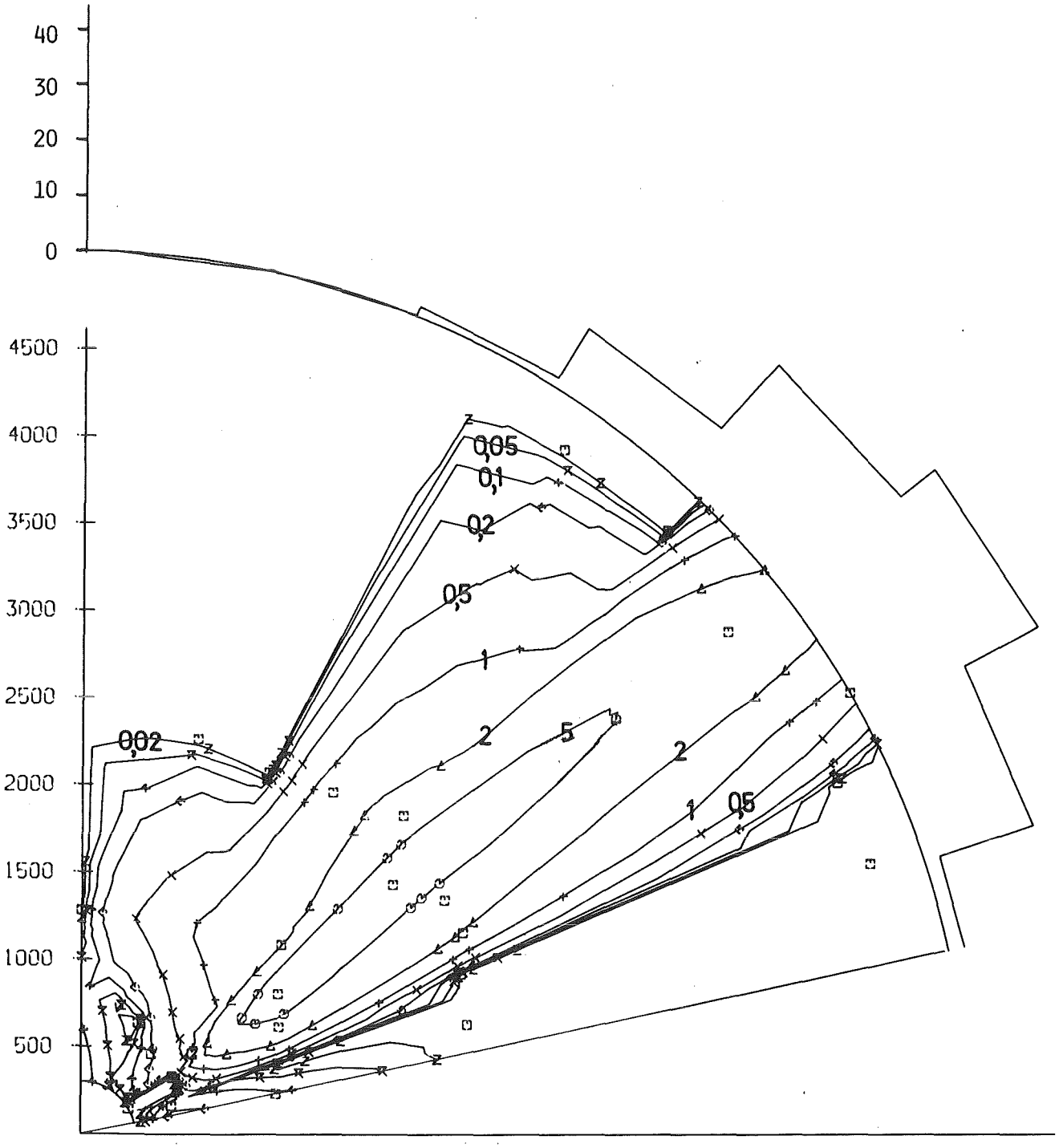

FIG. 4C: CONCENTRATION DISTRIBUTION IN 1/10xx6 G/Mxx3
EXPERIMENT 55/1 CFCL3 H = 195 M
FOR DETAILED INFORMATION SEE FIGURE 1A

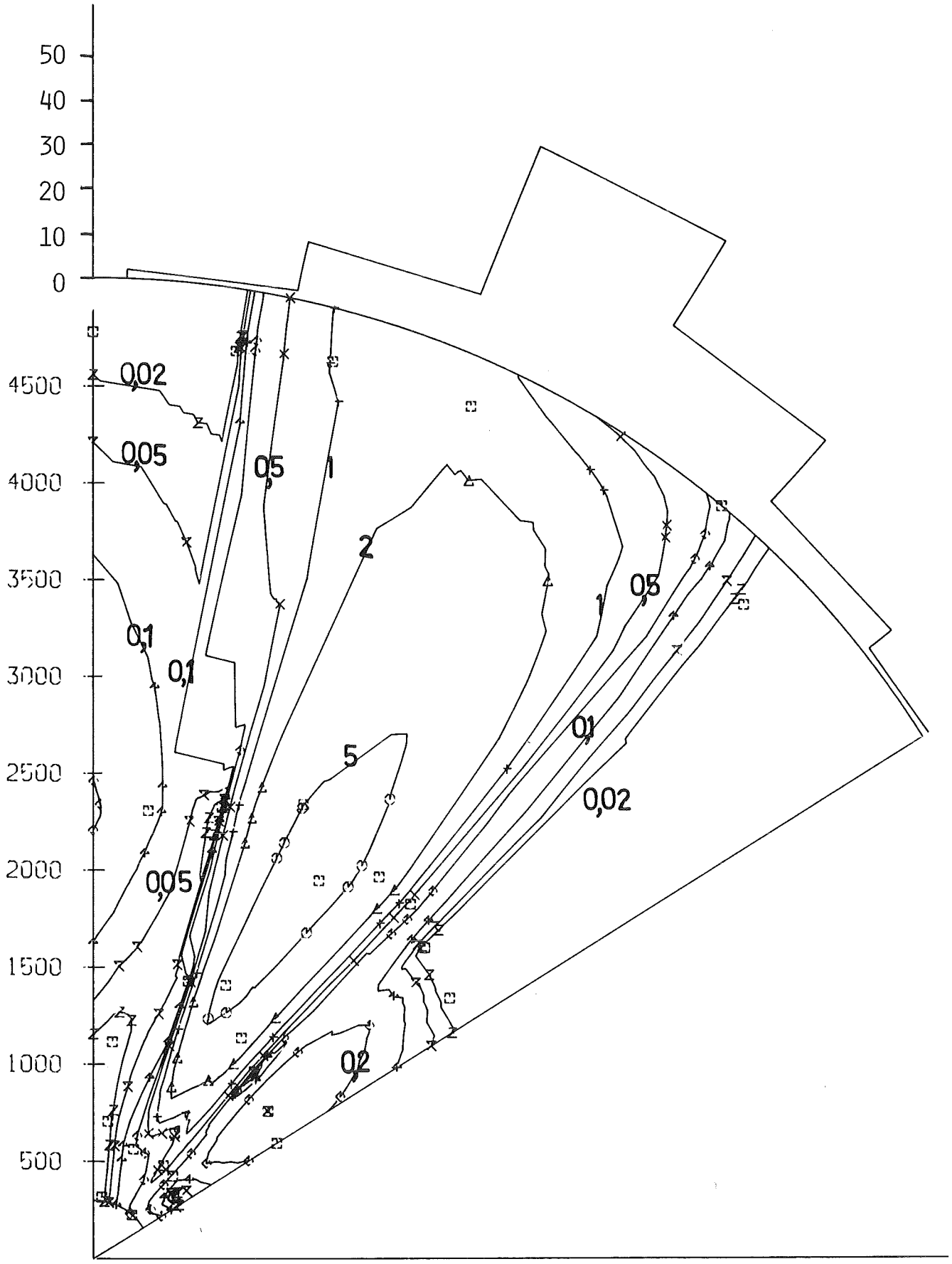

FIG. 4D: CONCENTRATION DISTRIBUTION IN 1/10××6 G/M××3
EXPERIMENT 55/2 CFCL3 H = 195 M
FOR DETAILED INFORMATION SEE FIGURE 1A

TAB. 5A: METEOROLOGICAL DATA OF EXPERIMENT NO. 57

		HEIGHT (M)	1. SAMPLING PERIOD 14.10	14.20	14.30	2. SAMPLING PERIOD 14.40	14.50	15.00
WIND DIRECTION (DEGREE)		40	219	261	253	245	247	243
		60	221	259	250	242	243	244
		100	220	253	254	251	243	240
		160	235	248	251	250	251	242
		200	243	248	254	255	244	247
WIND SPEED (M/S)		40	2.4	3.4	2.6	2.1	2.5	3.1
		60	2.6	3.6	2.8	2.2	2.5	3.2
		100	3.0	3.5	2.6	2.3	2.7	3.0
		160	3.0	3.6	2.8	2.5	2.5	3.0
		200	3.5	3.7	3.1	2.6	2.7	3.2
STANDARD DEVIATION OF WIND DIR. VECTOR VANE (DEGREE)	VER.	40	****	****	****	****	****	****
	HOR.		****	20.6	18.4	17.5	16.9	17.6
	VER.	100	13.9	16.7	14.6	14.1	14.4	16.2
	HOR.		21.6	20.7	17.5	16.7	18.9	18.6
	VER.	160	12.9	12.5	13.0	12.8	12.2	12.8
	HOR.		20.4	19.8	16.3	16.6	21.6	21.5
STAND. DEVIATION OF HOR. WIND DIRECTION WIND VANE (DEGREE)		100	24.9	11.8	23.7	30.7	17.5	22.7
TEMPERATURE GRADIENT (K/100M)		30/100	-1.0	-1.3	-1.2	-1.1	-1.0	-1.1
NET RADIATION (MW/CM**2)			35.9	36.4	31.5	22.3	20.5	20.9
DIFFUSION CATEGORY BASED ON ...	VER. FLUCTUATION		A			A		
	HOR. FLUCTUATION		B			B		
	TEMP. GRADIENT		C			C		
	SYNOP. OBSERV.		B			B		

TAB. 5B: EXPERIMENT 57 27. 4.78 14.00 - 15.00

TRACER AND EMISSION RATE: CF2BR2 18.00 G/S

POSITION		R (M)	ALPHA (DEGREE)	TRACER CONCENTRATION IN NG/M**3 SAMPL. PERIOD 1	SAMPL. PERIOD 2
I	A	305.	358.	≤ 18	-
	B	305.	11.	≤ 15	≤ 18
	C	330.	22.	≤ 23	≤ 17
	D	295.	36.	11942	17740
	E	310.	49.	5056	39241
	F	300.	62.	43428	138565
	G	310.	74.	41578	148285
	H	298.	95.	16267	45290
II	A	620.	344.	≤ 21	≤ 22
	B	590.	11.	≤ 20	≤ 20
	C	580.	26.	3098	471
	D	610.	36.	5286	14728
	E	610.	46.	7146	42427
	F	605.	53.	470	400
	G	610.	62.	17340	30486
	H	595.	74.	49274	43689
	I	585.	82.	48912	48692
	K	610.	92.	8957	15535
III	A	1280.	20.	-	≤ 22
	B	1200.	30.	≤ 24	≤ 21
	C	1380.	38.	≤ 27	166
	D	1485.	47.	87	-
	E	1520.	64.	1236	3818
	F	1390.	77.	1894	2067
	G	1325.	91.	1683	1666
	H	1230.	100.	36	1792
IV	A	2850.	23.	≤ 22	-
	B	2370.	36.	≤ 20	≤ 24
	C	2460.	45.	210	≤ 18
	D	2620.	57.	177	119
	E	2355.	73.	491	2230
	F	2810.	89.	-	-
	G	2550.	114.	≤ 27	≤ 26

TAB. 5C: EXPERIMENT 57 27.4.78 14.00 - 15.00

TRACER AND EMISSION RATE: CFCL3 16.00 G/S

POSITION		R (M)	ALPHA (DEGREE)	TRACER CONCENTRATION IN NG/M**3 SAMPL. PERIOD 1	SAMPL. PERIOD 2
I	A	305.	358.	≤ 614	-
	B	305.	11.	≤ 614	≤ 627
	C	330.	22.	1375	≤ 617
	D	295.	36.	21188	9747
	E	310.	49.	14586	22718
	F	300.	62.	26224	87664
	G	310.	74.	8937	38059
	H	298.	95.	6111	31037
II	A	620.	344.	≤ 615	≤ 622
	B	590.	11.	418	≤ 616
	C	580.	26.	2865	≤ 621
	D	610.	36.	8515	29059
	E	610.	46.	8720	30572
	F	605.	53.	673	≤ 614
	G	610.	62.	28686	33332
	H	595.	74.	28016	41999
	I	585.	82.	23779	34025
	K	610.	92.	2776	14406
III	A	1280.	20.	-	≤ 615
	B	1200.	30.	≤ 615	≤ 614
	C	1380.	38.	≤ 618	≤ 616
	D	1485.	47.	≤ 618	-
	E	1520.	64.	≤ 624	2516
	F	1390.	77.	800	≤ 623
	G	1325.	91.	≤ 617	15
	H	1230.	100.	≤ 617	559
IV	A	2850.	23.	≤ 617	-
	B	2370.	36.	≤ 615	≤ 615
	C	2460.	45.	42	≤ 616
	D	2620.	57.	≤ 627	69
	E	2355.	73.	≤ 619	3415
	F	2810.	89.	-	-
	G	2550.	114.	≤ 616	≤ 616

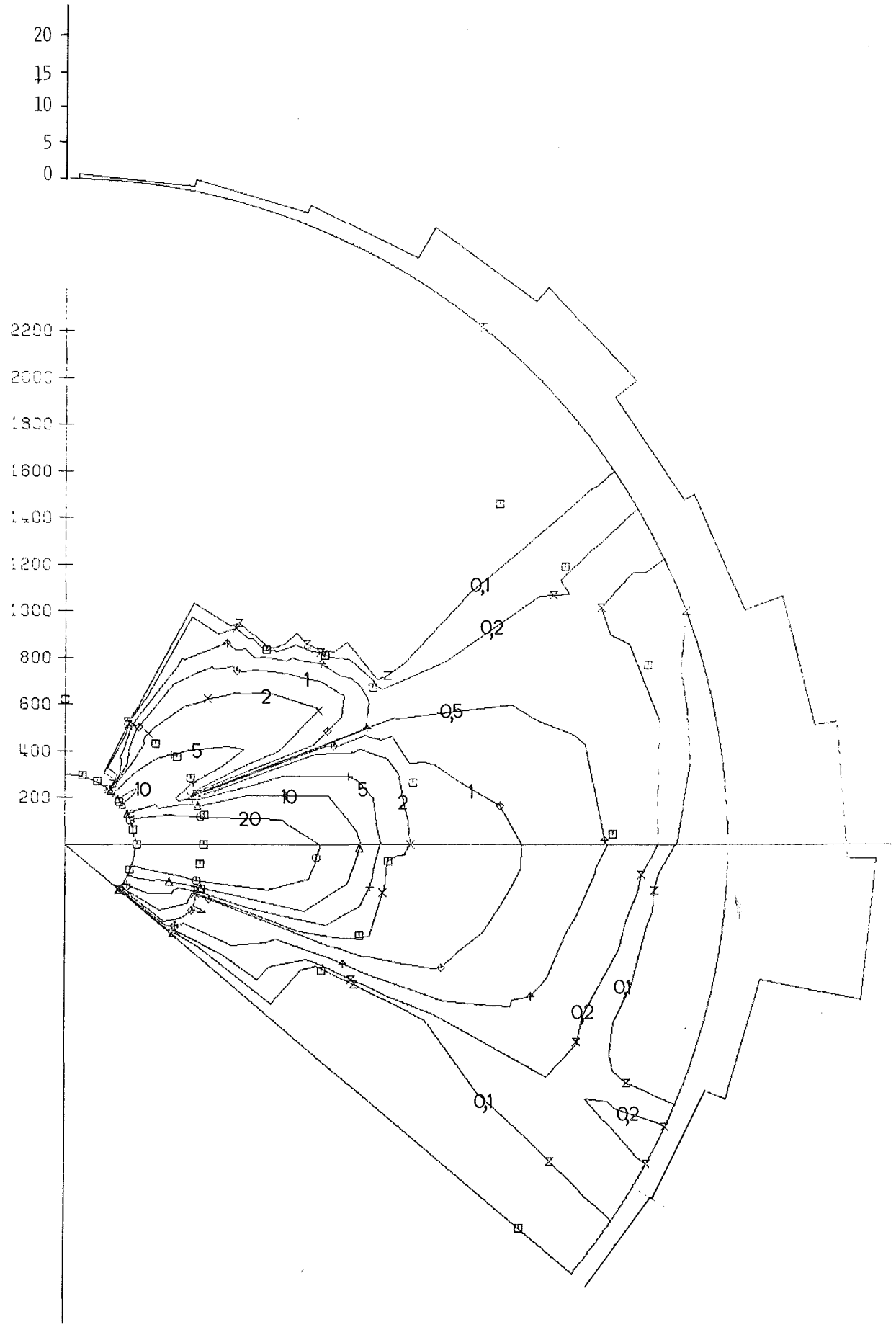

FIG. 5A: CONCENTRATION DISTRIBUTION IN 1/10××6 G/M××3
EXPERIMENT 57/1 CF2BR2 H = 160 M
FOR DETAILED INFORMATION SEE FIGURE 1A

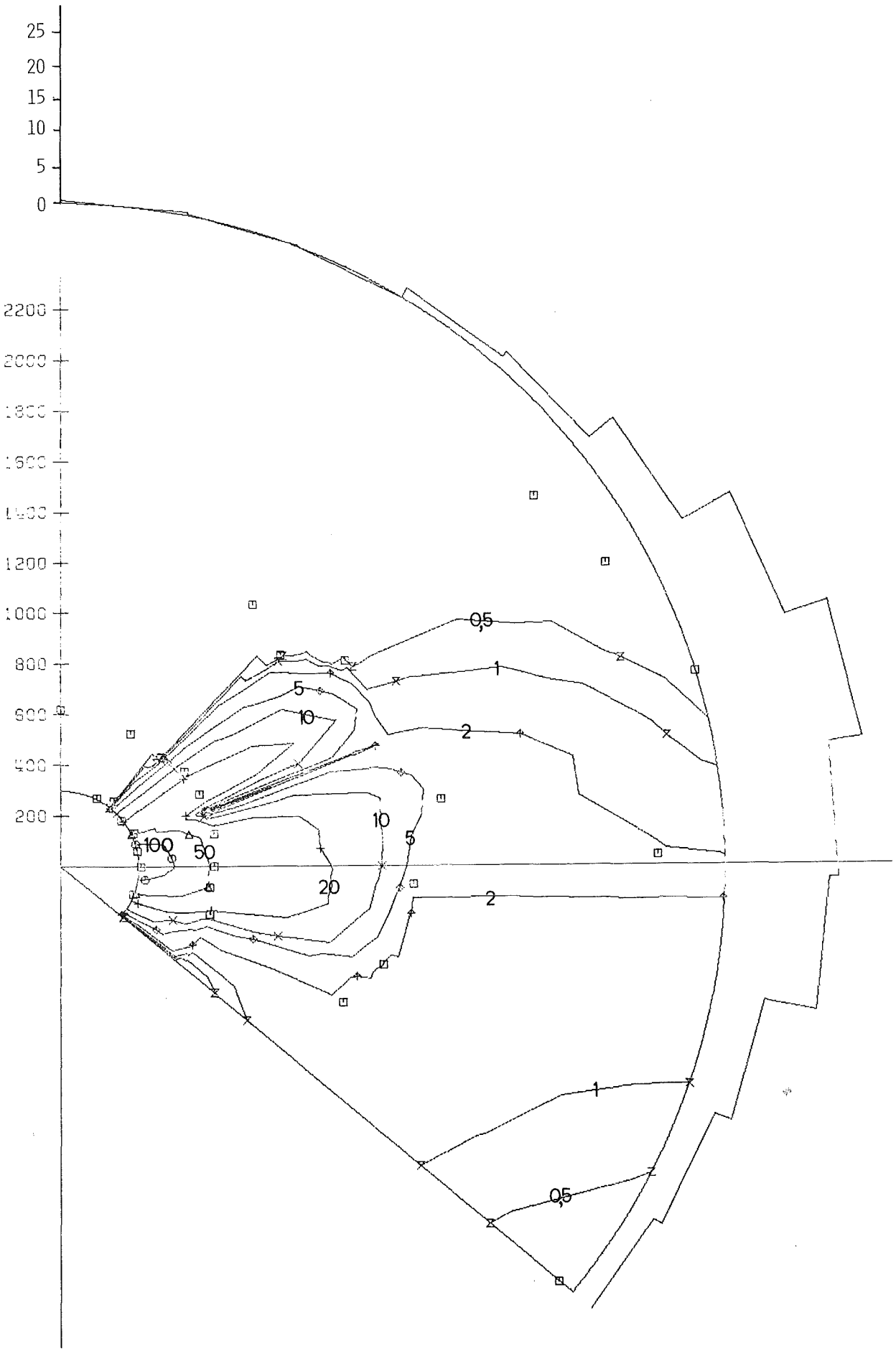

FIG. 5B: CONCENTRATION DISTRIBUTION IN 1/10**6 G/M**3
EXPERIMENT 57/2 CF2BR2 H = 160 M
FOR DETAILED INFORMATION SEE FIGURE 1A

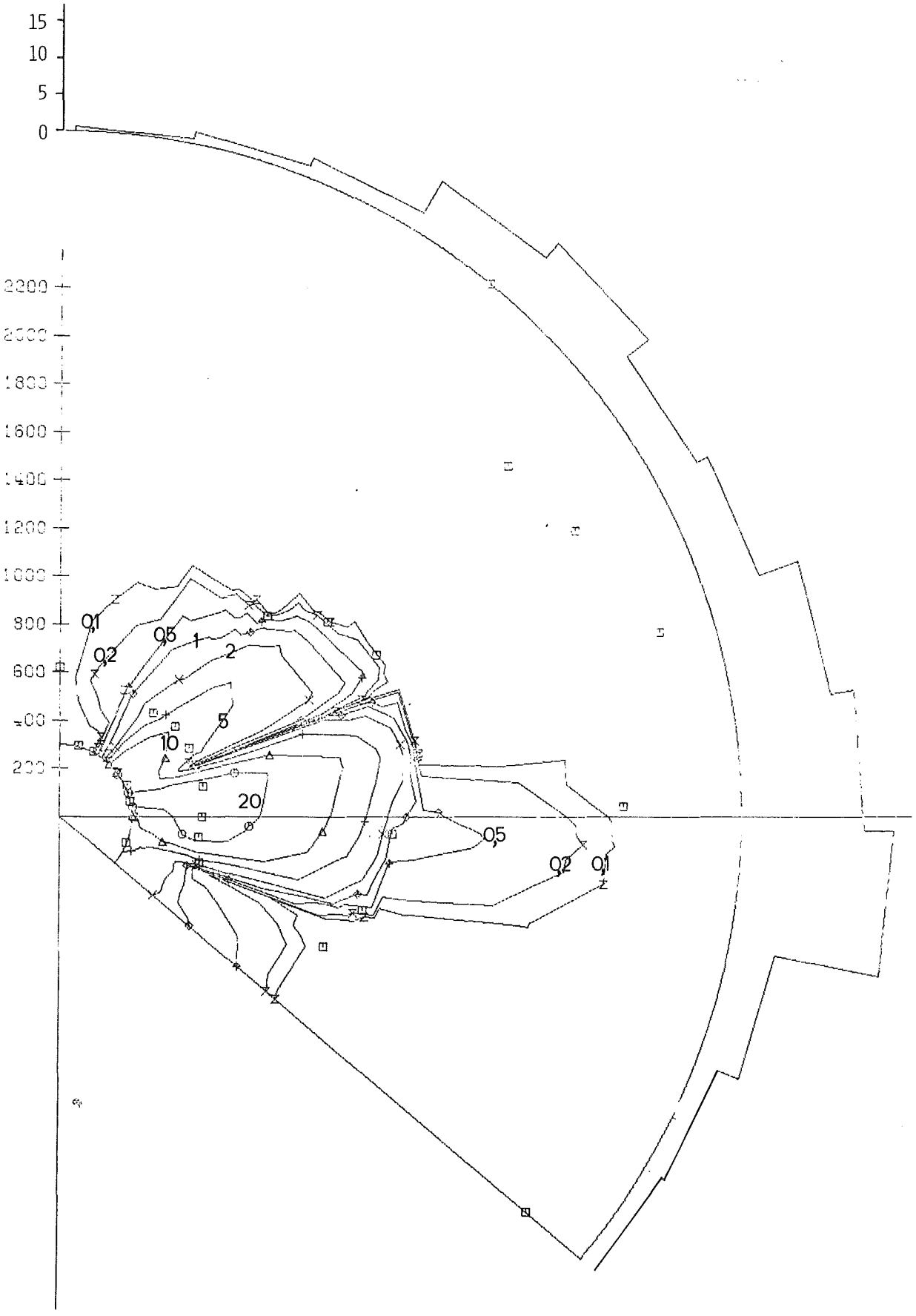

FIG. 5C: CONCENTRATION DISTRIBUTION IN 1/10**6 G/M**3
EXPERIMENT 57/1 CFCL3 H = 195 M
FOR DETAILED INFORMATION SEE FIGURE 1A

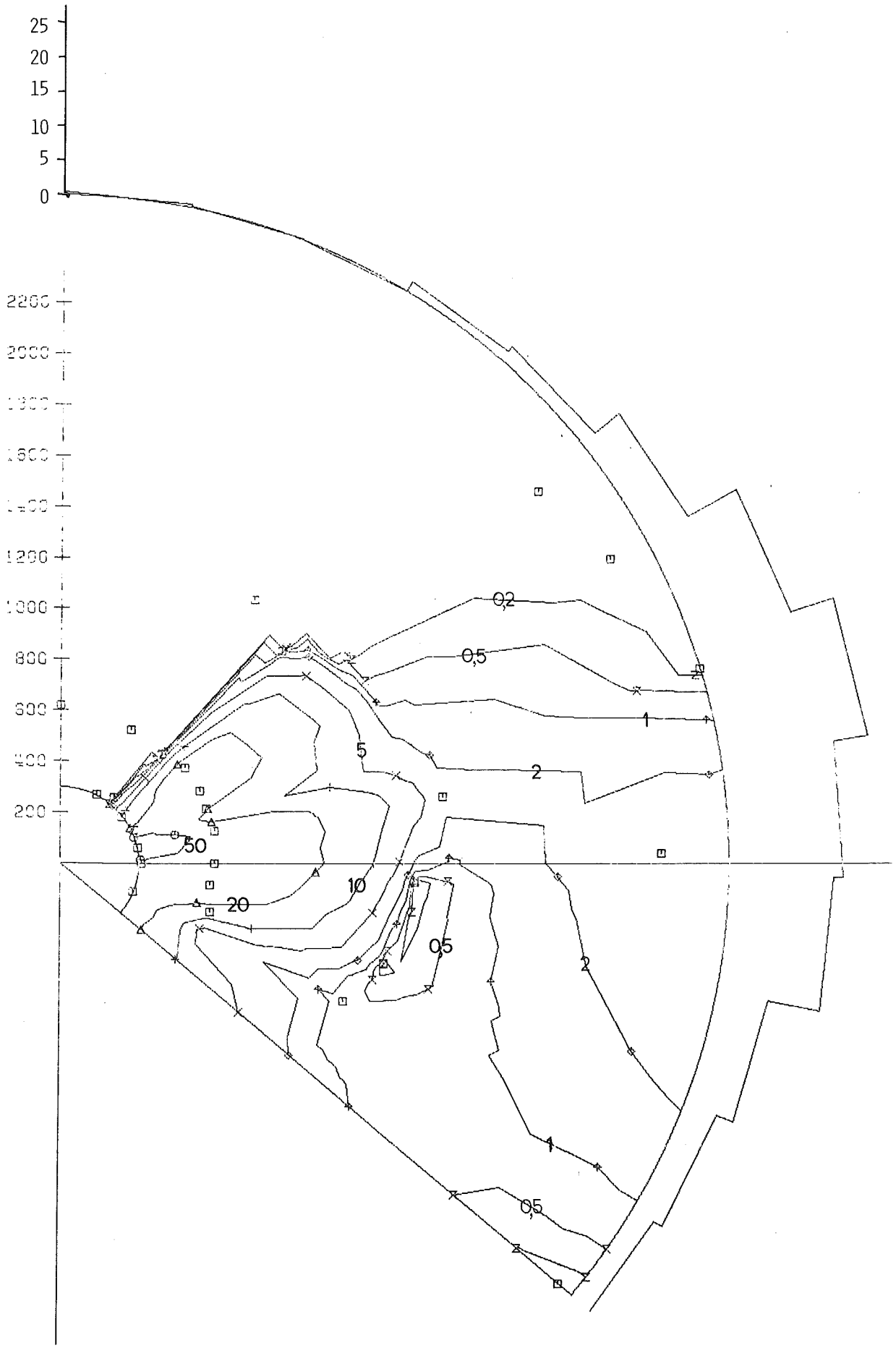

FIG. 5D: CONCENTRATION DISTRIBUTION IN 1/10××6 G/M××3
EXPERIMENT 57/2 CFCL3 H = 195 M
FOR DETAILED INFORMATION SEE FIGURE 1A

TAB. 6A: METEOROLOGICAL DATA OF EXPERIMENT NO. 58

		HEIGHT	1. SAMPLING PERIOD			2. SAMPLING PERIOD		
		(M)	14.10	14.20	14.30	14.40	14.50	15.00
WIND DIRECTION (DEGREE)		40	263	262	269	248	259	266
		60	260	259	271	252	259	266
		100	254	255	268	253	256	266
		160	258	258	268	256	261	268
		200	261	260	266	257	263	267
WIND SPEED (M/S)		40	4.2	4.4	4.4	4.8	5.3	5.6
		60	4.5	5.2	4.9	4.9	5.7	6.6
		100	4.7	5.7	5.3	5.0	6.1	7.4
		160	5.0	6.1	5.7	5.5	6.6	7.7
		200	5.5	6.4	6.0	6.1	7.1	8.1
STANDARD DEVIATION OF	VER.	40	9.0	9.1	8.6	8.5	8.3	8.4
	HOR.		12.3	12.5	11.9	10.1	10.9	11.6
WIND DIR. VECTOR VANE (DEGREE)	VER.	100	5.8	8.1	6.4	6.0	8.2	6.8
	HOR.		7.9	9.7	7.6	7.0	7.6	7.6
	VER.	160	6.1	6.3	5.2	5.6	5.9	5.5
	HOR.		9.6	9.6	7.4	6.5	7.0	6.2
STAND. DEVIATION OF HOR. WIND DIRECTION WIND VANE (DEGREE)		100	12.5	8.7	5.3	10.9	8.5	8.2
TEMPERATURE GRADIENT (K/100M)		30/100	-1.0	-1.3	-1.3	-1.1	-1.0	-1.4
NET RADIATION (MW/CM**2)			16.8	31.0	18.7	22.6	11.1	45.3
DIFFUSION CATEGORY BASED ON ...	VER. FLUCTUATION		D			D		
	HOR. FLUCTUATION		D			D		
	TEMP. GRADIENT		C			C		
	SYNOP. OBSERV.		C			C		

TAB. 6B: EXPERIMENT 58 8. 6.78 14.00 - 15.00

TRACER AND EMISSION RATE: CF2BR2 19.30 G/S

POSITION		R (M)	ALPHA (DEGREE)	TRACER CONCENTRATION IN NG/M**3 SAMPL. PERIOD 1	SAMPL. PERIOD 2
I	A	350.	45.	-	≤ 17
	B	347.	54.	-	≤ 17
	C	345.	64.	≤ 18	113
	D	345.	73.	≤ 20	690
	E	375.	83.	≤ 19	51
	F	385.	101.	≤ 16	19
	G	340.	108.	≤ 14	≤ 16
II	A	675.	42.	-	≤ 11
	B	692.	50.	≤ 16	105
	C	675.	59.	69	306
	D	695.	66.	1474	3435
	E	685.	75.	2978	8603
	F	685.	83.	11265	22608
	G	688.	95.	1647	626
	H	690.	102.	61	89
	I	675.	114.	≤ 16	60
	K	700.	121.	≤ 17	≤ 14
III	A	1890.	42.	≤ 17	≤ 20
	B	1310.	56.	158	707
	C	1465.	62.	328	2007
	D	1465.	68.	3405	3919
	E	1400.	73.	21335	15332
	F	1350.	80.	12350	23272
	G	1325.	89.	8502	6425
	H	1270.	93.	7218	5438
	I	1230.	100.	≤ 19	≤ 18
	K	1230.	119.	≤ 17	≤ 17
IV	A	2800.	43.	≤ 18	≤ 19
	B	2800.	54.	≤ 20	≤ 20
	C	2620.	68.	233	1688
	D	2700.	80.	7660	3523
	E	2970.	82.	11977	7569
	F	2810.	89.	2896	3044
	G	2910.	100.	546	1772
	H	2550.	107.	≤ 18	≤ 18
	I	2485.	118.	≤ 17	≤ 19
V	A	5150.	45.	-	≤ 16
	B	5125.	55.	≤ 17	≤ 17
	C	4988.	62.	≤ 18	183
	D	5150.	74.	629	979
	E	5000.	83.	1811	1099
	F	5712.	92.	284	64
	G	5300.	100.	≤ 15	≤ 18
	H	5150.	110.	≤ 17	≤ 17

TAB. 6C: EXPERIMENT 58 8.6.78 14.00 - 15.00

TRACER AND EMISSION RATE: CFCL3 13.30 G/S

POSITION		R (M)	ALPHA (DEGREE)	TRACER CONCENTRATION IN NG/M**3 SAMPL. PERIOD 1	SAMPL. PERIOD 2
I	A	350.	45.	-	314
	B	347.	54.	-	≤ 417
	C	345.	64.	≤ 417	450
	D	345.	73.	≤ 418	10
	E	375.	83.	≤ 420	≤ 417
	F	385.	101.	≤ 416	30
	G	340.	108.	≤ 418	≤ 417
II	A	675.	42.	-	≤ 417
	B	692.	50.	≤ 417	≤ 418
	C	675.	59.	1302	1831
	D	695.	66.	479	3912
	E	685.	75.	804	3411
	F	685.	83.	496	2192
	G	688.	95.	3246	≤ 417
	H	690.	102.	550	≤ 417
	I	675.	114.	≤ 417	307
	K	700.	121.	≤ 417	≤ 418
III	A	1890.	42.	≤ 418	≤ 418
	B	1310.	56.	≤ 419	181
	C	1465.	62.	≤ 417	1858
	D	1465.	68.	1069	2665
	E	1400.	73.	3342	5282
	F	1350.	80.	3209	9244
	G	1325.	89.	4585	3169
	H	1270.	93.	511	2560
	I	1230.	100.	≤ 419	≤ 419
	K	1230.	119.	≤ 417	≤ 18
IV	A	2800.	43.	≤ 418	306
	B	2800.	54.	≤ 417	≤ 417
	C	2620.	68.	≤ 418	628
	D	2700.	80.	4537	1445
	E	2970.	82.	7523	4546
	F	2810.	89.	1865	1639
	G	2910.	100.	≤ 418	717
	H	2550.	107.	≤ 417	≤ 417
	I	2485.	118.	≤ 417	≤ 418
V	A	5150.	45.	-	≤ 418
	B	5125.	55.	≤ 417	≤ 418
	C	4988.	62.	≤ 417	165
	D	5150.	74.	32	419
	E	5000.	83.	1083	473
	F	5712.	92.	≤ 417	535
	G	5300.	100.	≤ 417	≤ 418
	H	5150.	110.	≤ 418	≤ 419

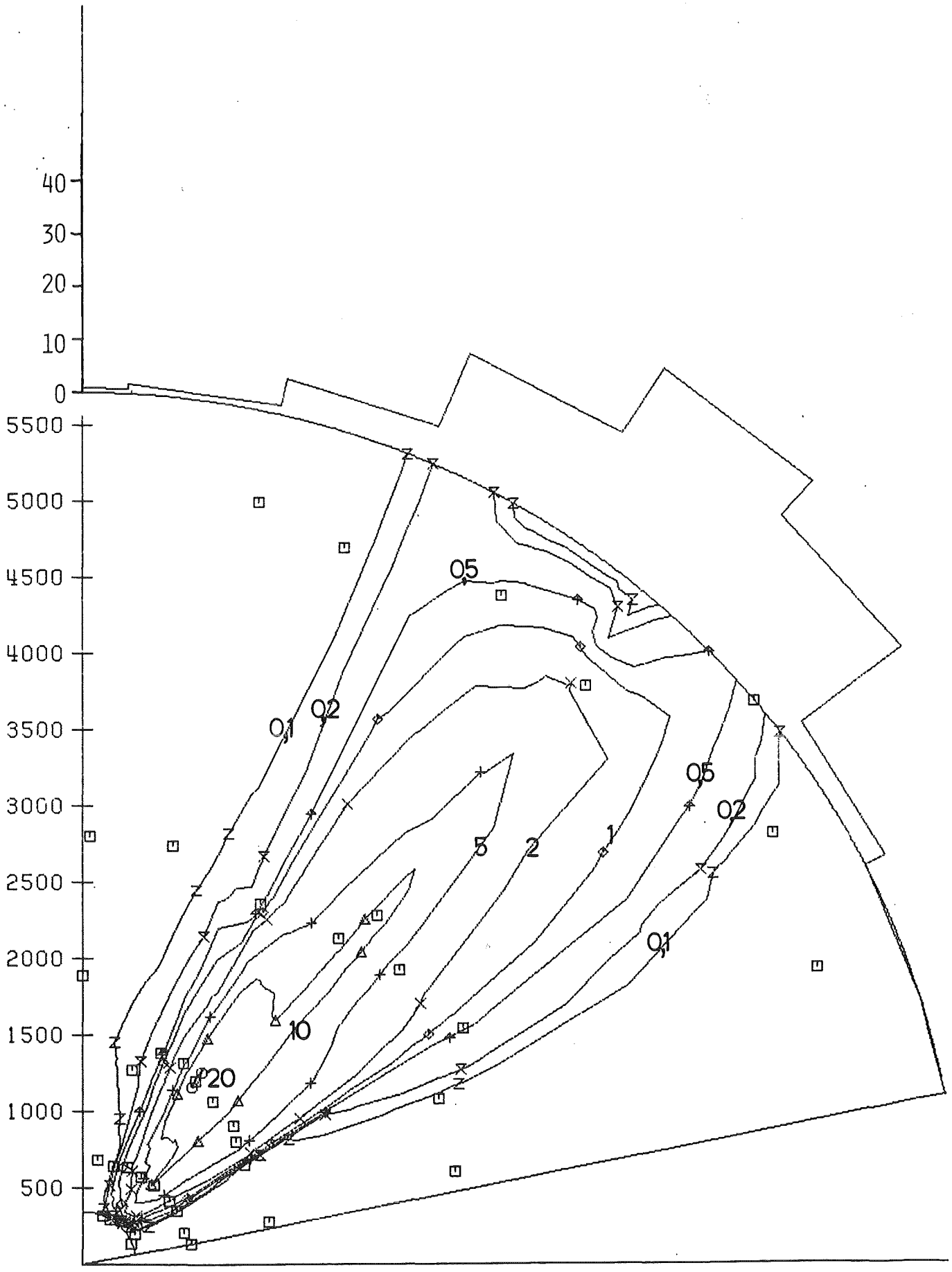

FIG. 6A: CONCENTRATION DISTRIBUTION IN 1/10**6 G/M**3
EXPERIMENT 58/1 CF2BR2 H = 160 M
FOR DETAILED INFORMATION SEE FIGURE 1A

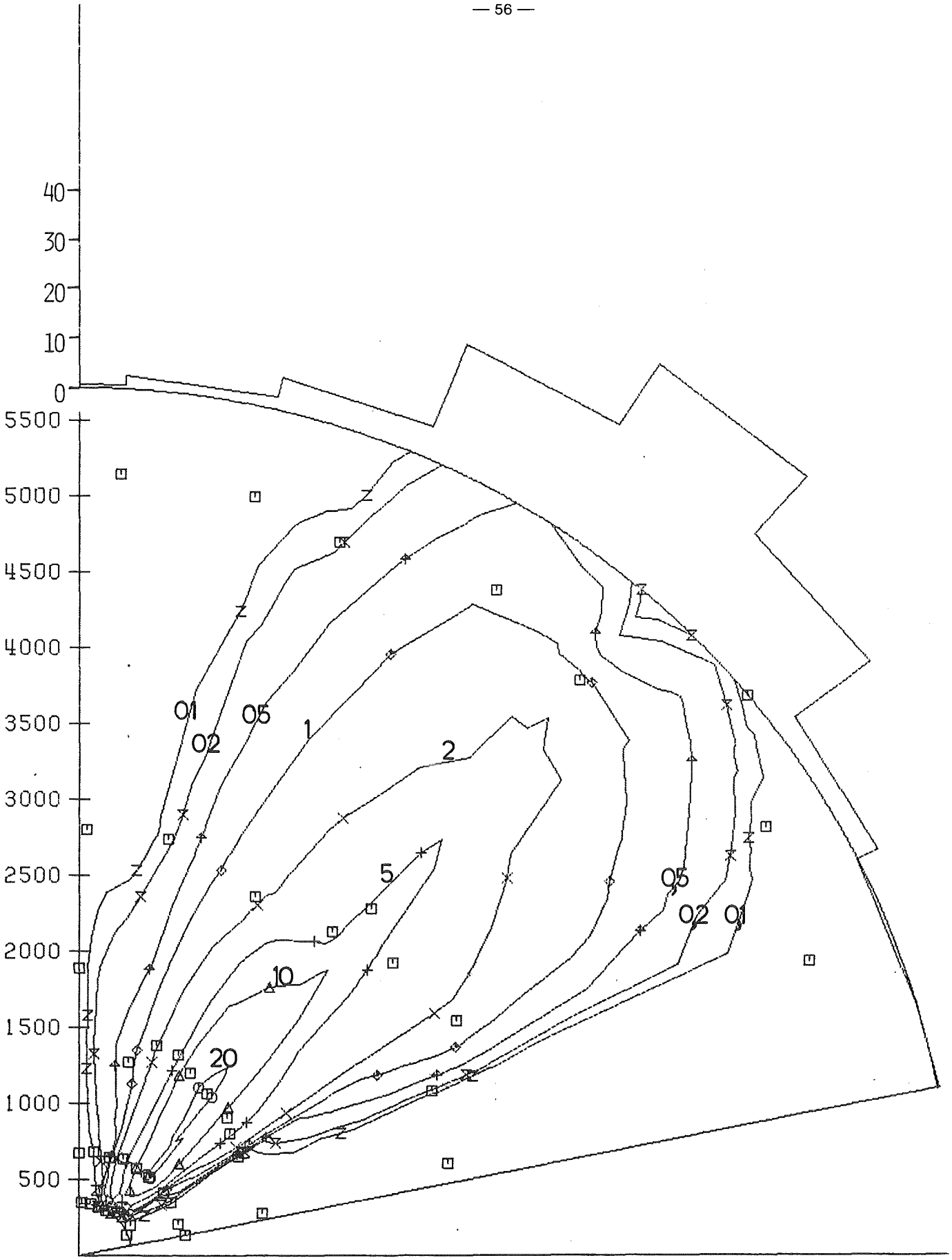

FIG. 6B: CONCENTRATION DISTRIBUTION IN 1/10**6 G/M**3
EXPERIMENT 58/2 CF2BR2 H = 160 M
FOR DETAILED INFORMATION SEE FIGURE 1A

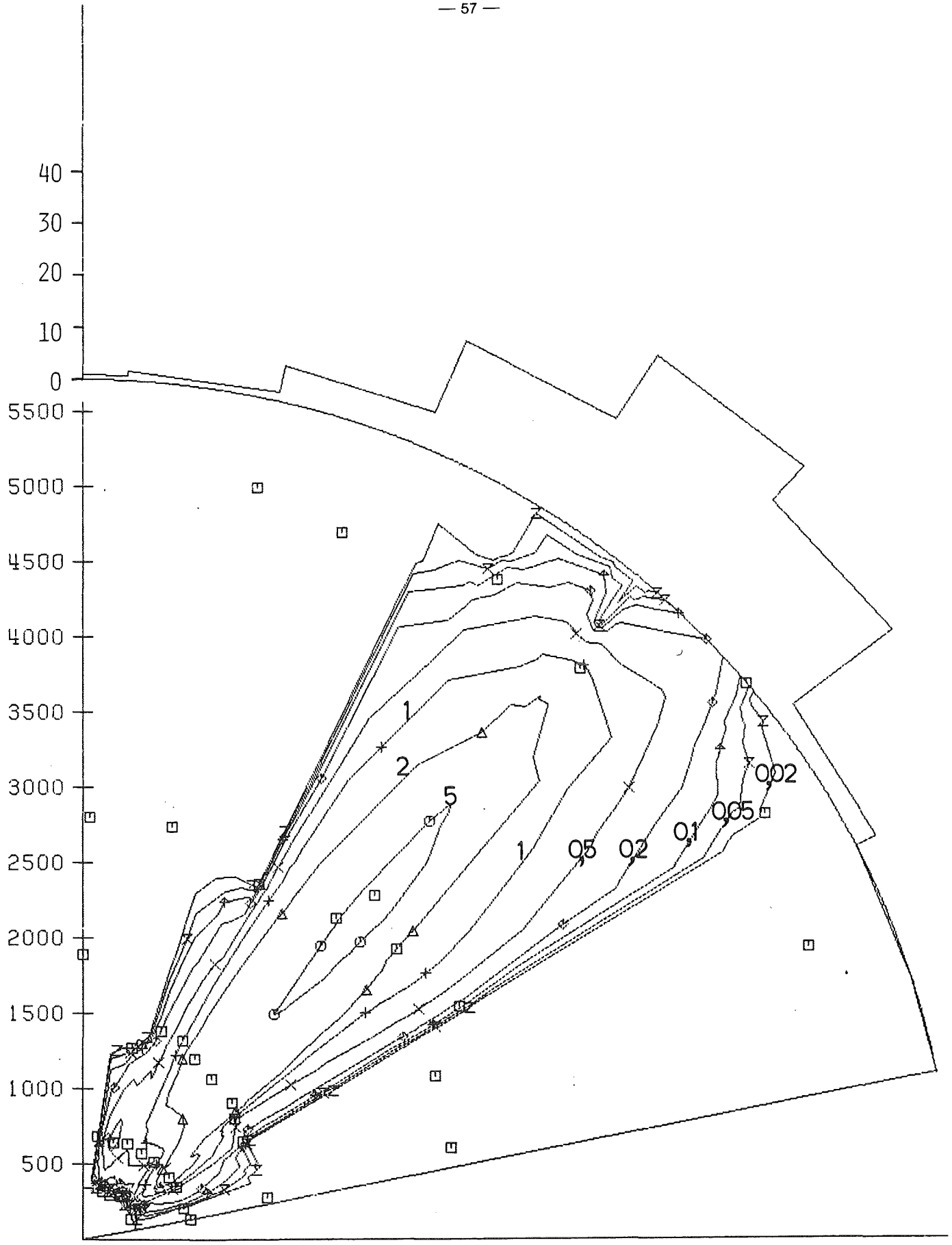

FIG. 6C: CONCENTRATION DISTRIBUTION IN 1/10**6 G/M**3
EXPERIMENT 58/1 CFCL3 H = 195 M
FOR DETAILED INFORMATION SEE FIGURE 1A

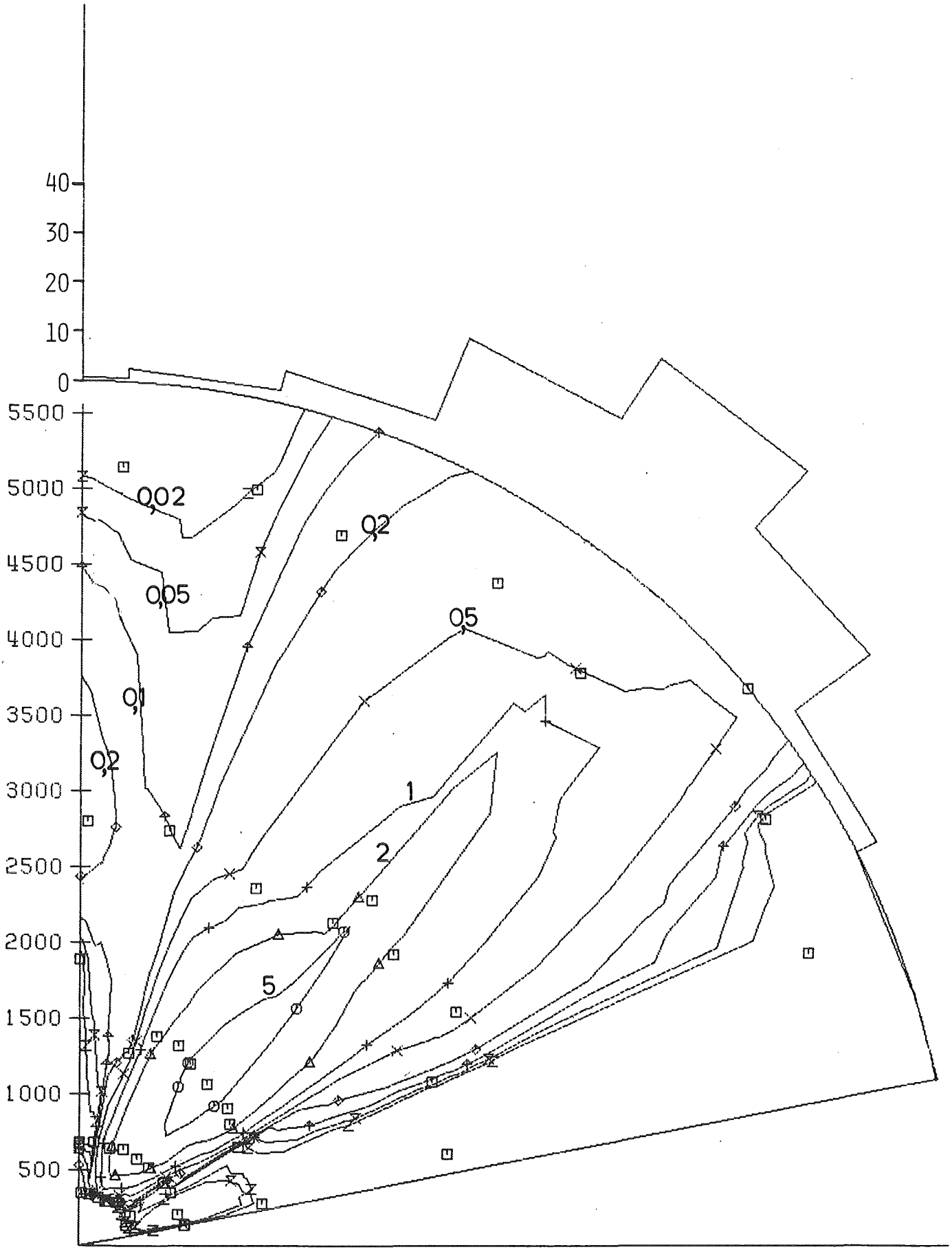

FIG. 6D: CONCENTRATION DISTRIBUTION IN 1/10**6 G/M**3
EXPERIMENT 58/2 CFCL3 H = 195 M
FOR DETAILED INFORMATION SEE FIGURE 1A

TAB. 7A: METEOROLOGICAL DATA OF EXPERIMENT NO. 59

		HEIGHT	1. SAMPLING PERIOD			2. SAMPLING PERIOD		
		(M)	14.10	14.20	14.30	14.40	14.50	15.00
WIND DIRECTION (DEGREE)		40	284	284	317	4	296	255
		60	281	293	321	352	293	260
		100	274	298	329	335	289	270
		160	263	299	325	326	289	278
		200	257	301	308	321	285	279
WIND SPEED (M/S)		40	2.0	2.7	2.2	2.1	2.6	1.8
		60	2.0	2.7	2.4	2.1	2.7	2.0
		100	1.9	2.8	2.4	1.9	2.8	1.6
		160	2.5	2.9	2.2	2.4	2.8	1.7
		200	3.0	3.0	2.4	2.7	3.1	1.8
STANDARD DEVIATION OF	VER.	40	18.1	17.1	17.7	18.4	17.6	18.1
	HOR.		24.2	19.6	22.7	22.6	20.8	19.4
WIND DIR. VECTOR VANE (DEGREE)	VER.	100	19.7	19.2	19.9	20.5	20.3	20.6
	HOR.		18.0	16.1	****	****	****	21.2
	VER.	160	22.0	20.2	21.0	22.0	22.4	20.7
	HOR.		15.9	17.6	17.0	16.9	16.2	14.0
STAND. DEVIATION OF HOR. WIND DIRECTION WIND VANE (DEGREE)		100	21.7	21.9	37.8	36.2	16.4	31.0
TEMPERATURE GRADIENT (K/100M)		30/100	-1.1	-1.4	-1.7	-1.1	-1.4	-1.4
NET RADIATION (MW/CM**2)			30.2	35.9	46.1	45.3	44.8	43.0
DIFFUSION CATEGORY BASED ON ...	VER. FLUCTUATION		A			A		
	HOR. FLUCTUATION		B			B		
	TEMP. GRADIENT		A			B		
	SYNOP. OBSERV.		B			B		

TAB. 7B: EXPERIMENT 59 27. 7.78 14.00 - 15.00

TRACER AND EMISSION RATE: CF2BR2 23.10 G/S

POSITION		R (M)	ALPHA (DEGREE)	TRACER CONCENTRATION IN NG/M**3 SAMPL. PERIOD 1	SAMPL. PERIOD 2
I	A	215.	8.	322	≤ 27
	B	210.	20.	59	≤ 28
	C	220.	33.	195	119
	D	210.	48.	127	3876
	E	205.	58.	2295	20086
	F	213.	72.	364	31690
	G	210.	84.	1474	43389
	H	200.	98.	1184	14149
II	A	405.	21.	≤ 28	≤ 31
	B	395.	47.	295	399
	C	400.	58.	-	2713
	D	395.	72.	9430	12288
	E	410.	84.	15024	34721
	F	400.	95.	44093	25942
III	A	800.	11.	≤ 66	≤ 36
	B	715.	23.	-	≤ 58
	C	845.	49.	1334	90
	D	765.	61.	14025	126
	E	830.	71.	166331	144
	F	815.	89.	13465	468
IV	A	1715.	15.	≤ 27	≤ 22
	B	1610.	26.	≤ 29	≤ 28
	C	1485.	38.	72	≤ 26
	D	1515.	47.	43	≤ 28
	E	1910.	57.	987	506
	F	1510.	64.	3125	207
	G	1360.	79.	3096	918
	H	1330.	91.	3995	1138
V	A	3080.	5.	293	-
	B	2840.	21.	22	61
	C	2910.	31.	29	-
	D	3160.	42.	752	259
	E	2990.	50.	552	290
	F	2920.	70.	613	-
	G	2950.	83.	≤ 25	472
	H	2650.	95.	35	456

TAB. 7C: EXPERIMENT 59 27.7.78 14.00 - 15.00

TRACER AND EMISSION RATE: CFCL3 14.60 G/S

POSITION		R (M)	ALPHA (DEGREE)	TRACER CONCENTRATION IN NG/M**3 SAMPL. PERIOD 1	SAMPL. PERIOD 2
I	A	215.	8.	495	≤ 1559
	B	210.	20.	≤ 1559	≤ 1559
	C	220.	33.	≤ 1559	≤ 1559
	D	210.	48.	≤ 1560	260
	E	205.	58.	251	7944
	F	213.	72.	≤ 1559	5038
	G	210.	84.	≤ 1563	4713
	H	200.	98.	≤ 1564	≤ 1564
II	A	405.	21.	60	68
	B	395.	47.	≤ 1559	293
	C	400.	58.	-	2626
	D	395.	72.	4060	4117
	E	410.	84.	16990	15853
	F	400.	95.	21411	5157
III	A	800.	11.	1345	2220
	B	715.	23.	-	≤ 1567
	C	845.	49.	673	≤ 1560
	D	765.	61.	5500	≤ 1563
	E	830.	71.	5502	≤ 1568
	F	815.	89.	11224	≤ 1564
IV	A	1715.	15.	≤ 1560	≤ 1558
	B	1610.	26.	≤ 1559	≤ 1558
	C	1485.	38.	≤ 1559	≤ 1560
	D	1515.	47.	≤ 1559	≤ 1561
	E	1910.	57.	285	≤ 1559
	F	1510.	64.	1190	≤ 1559
	G	1360.	79.	1147	416
	H	1330.	91.	1806	196
V	A	3080.	5.	1341	-
	B	2840.	21.	≤ 1560	≤ 1559
	C	2910.	31.	194	-
	D	3160.	42.	621	32
	E	2990.	50.	≤ 1559	≤ 1561
	F	2920.	70.	≤ 1560	-
	G	2950.	83.	≤ 1559	≤ 1560
	H	2650.	95.	78	≤ 1560

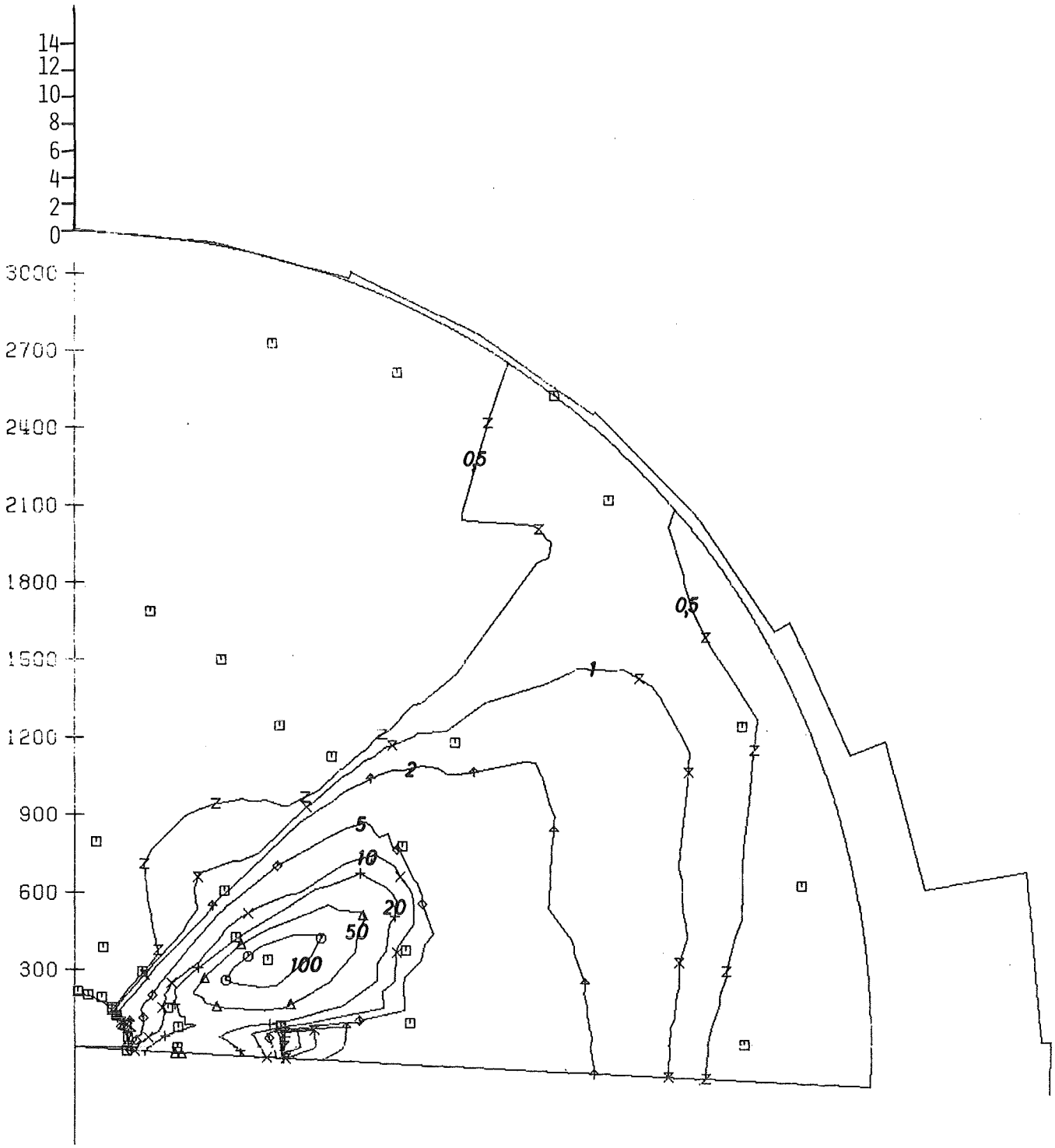

FIG. 7A: CONCENTRATION DISTRIBUTION IN 1/10**6 G/M**3
EXPERIMENT 59/1 CF2BR2 H = 160 M
FOR DETAILED INFORMATION SEE FIGURE 1A

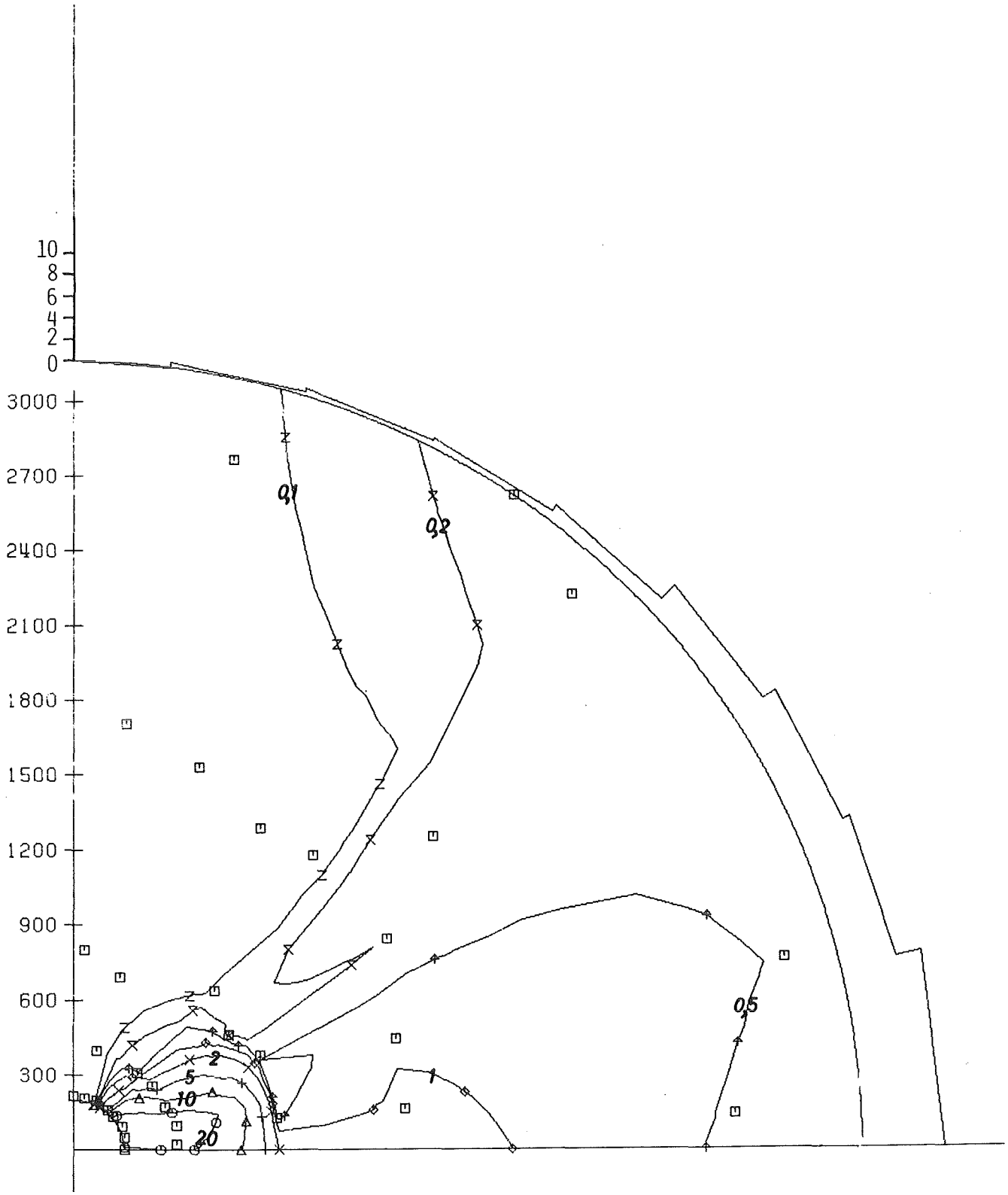

FIG. 7B: CONCENTRATION DISTRIBUTION IN 1/10**6 G/M**3
EXPERIMENT 59/2 CF2BR2 H = 160 M
FOR DETAILED INFORMATION SEE FIGURE 1A

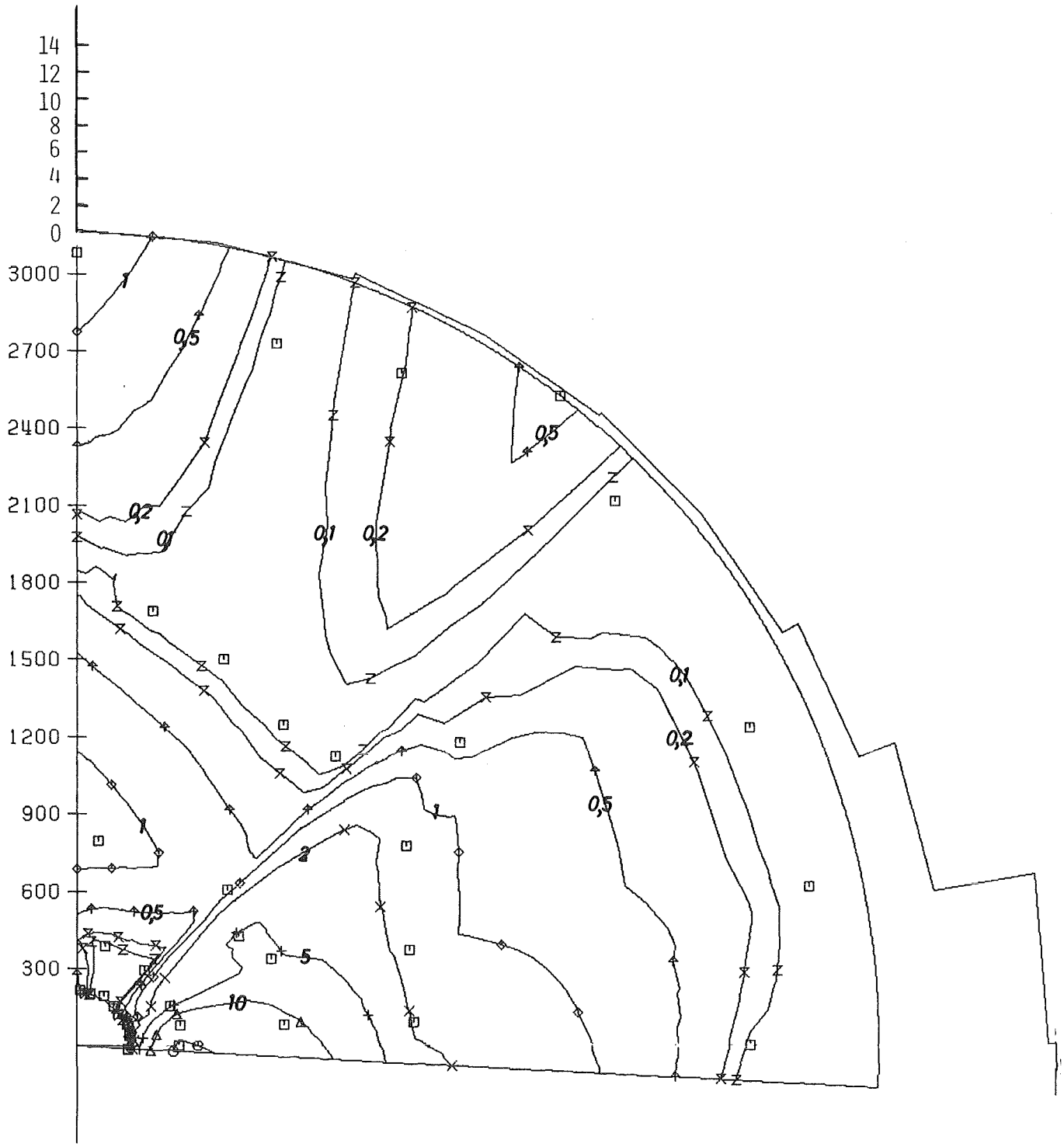

FIG. 7C: CONCENTRATION DISTRIBUTION IN 1/10××6 G/M××3
EXPERIMENT 59/1 CFCL3 H = 195 M
FOR DETAILED INFORMATION SEE FIGURE 1A

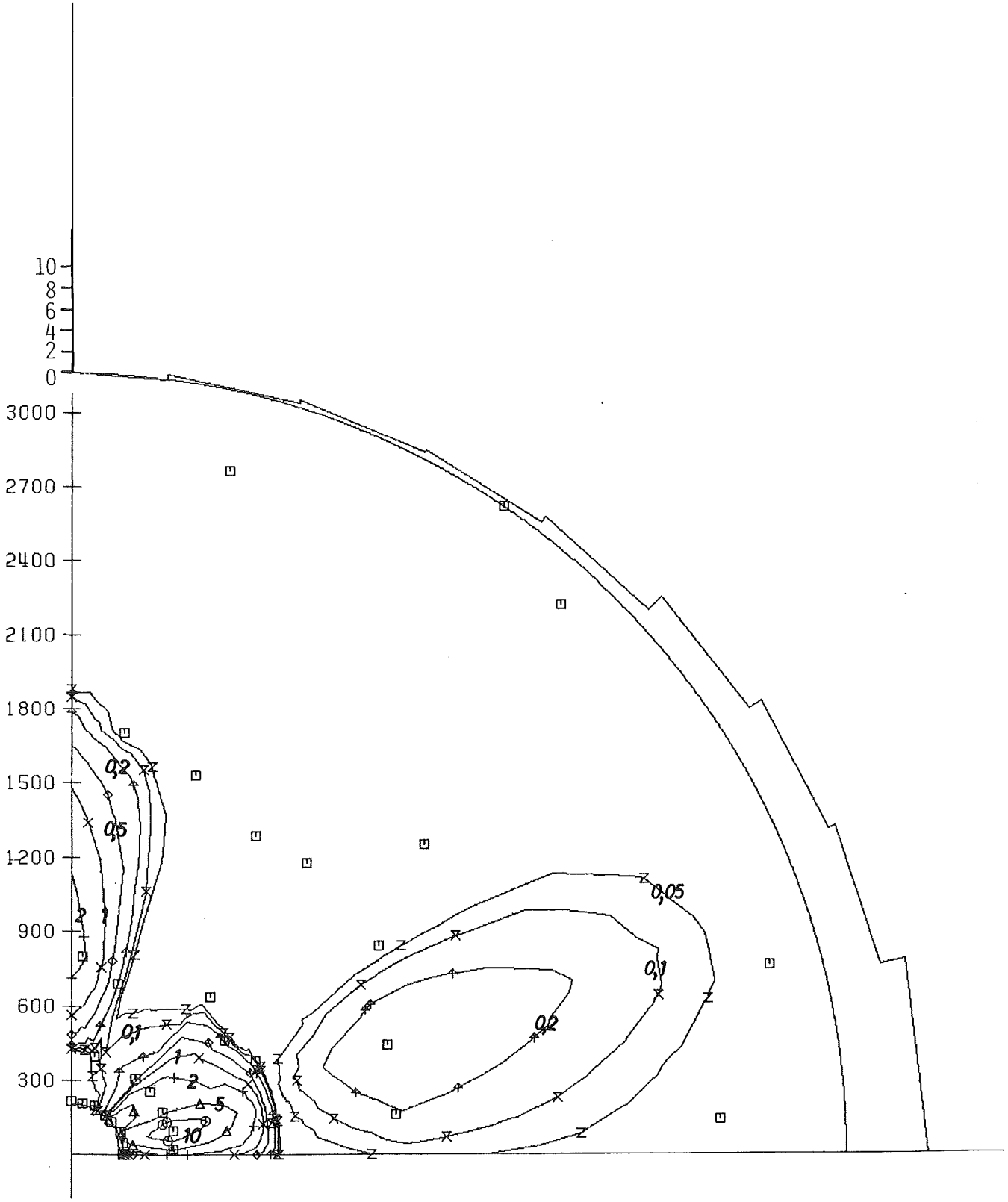

FIG. 7D: CONCENTRATION DISTRIBUTION IN 1/10××6 G/M××3
EXPERIMENT 59/2 CFCL3 H = 195 M
FOR DETAILED INFORMATION SEE FIGURE 1 A

TAB. 8A: METEOROLOGICAL DATA OF EXPERIMENT NO. 60

		HEIGHT (M)	SAMPLING PERIOD 14.10	14.20	14.30
WIND DIRECTION (DEGREE)		40	33	68	48
		60	38	69	45
		100	36	67	49
		160	34	50	48
		200	40	35	37
WIND SPEED (M/S)		40	1.9	2.0	1.9
		60	2.3	2.3	2.0
		100	2.7	2.6	2.1
		160	2.8	2.6	1.8
		200	3.1	2.4	1.2
STANDARD DEVIATION OF WIND DIR. VECTOR VANE (DEGREE)	VER.	40	11.9	12.0	12.5
	HOR.		****	****	****
	VER.	100	11.8	12.7	12.9
	HOR.		15.9	15.5	15.7
	VER.	160	12.8	14.3	13.8
	HOR.		****	****	****
STAND. DEVIATION OF HOR. WIND DIRECTION WIND VANE (DEGREE)		100	24.6	20.6	33.6
TEMPERATURE GRADIENT		30/100	-1.5	-1.4	-1.2
NET RADIATION (MW/CM**2)			32.6	31.3	27.9
DIFFUSION CATEGORY BASED ON ...	VER. FLUCTUATION		B		
	HOR. FLUCTUATION		B		
	TEMP. GRADIENT		A		
	SYNOP. OBSERV.		B		

TAB. 8B: EXPERIMENT 60 5.9.78 14.00 - 14.30

TRACER AND EMISSION RATE: CF2BR2 25.50 G/S

POSITION		R (M)	ALPHA (DEGREE)	TRACER CONCENTRATION IN NG/M**3 SAMPL. PERIOD 1	SAMPL. PERIOD 2
I	A	300.	176.	≤ 48	-
	B	300.	191.	23055	-
	C	295.	207.	6903	-
	D	305.	220.	3577	-
	E	295.	228.	106	-
	F	300.	242.	1855	-
	G	300.	258.	1004	-
	H	340.	278.	≤ 30	-
	I	280.	284.	≤ 27	-
	K	310.	301.	≤ 29	-
II	A	635.	147.	≤ 26	-
	B	615.	157.	≤ 23	-
	C	595.	195.	≤ 27	-
	D	710.	209.	14280	-
	E	700.	227.	14473	-
	F	590.	240.	18865	-
	G	600.	248.	83681	-
	H	600.	263.	10139	-
	I	635.	269.	134	-
	K	685.	282.	≤ 32	-
	L	610.	307.	≤ 27	-
	M	675.	334.	≤ 25	-
III	A	960.	176.	≤ 28	-
	B	895.	201.	6460	-
	C	1025.	219.	16446	-
	D	1000.	231.	8870	-
	E	1070.	243.	1802	-
	F	1025.	249.	≤ 26	-
	G	955.	262.	≤ 26	-
	H	925.	272.	≤ 91	-

TAB. 8B: EXPERIMENT 60 5.9.78 14.00 - 14.30

TRACER AND EMISSION RATE: CF2BR2 25.50 G/S

POSITION		R (M)	ALPHA (DEGREE)	TRACER CONCENTRATION IN NG/M**3 SAMPL. PERIOD 1	SAMPL. PERIOD 2
IV	A	2490.	183.	≤ 32	-
	B	2350.	201.	651	-
	C	2040.	211.	1991	-
	D	2140.	226.	980	-
	E	2000.	243.	≤ 39	-
	F	2070.	260.	173	-
	G	1950.	272.	≤ 42	-
	H	1910.	282.	≤ 33	-
	I	1930.	289.	≤ 41	-
V	A	4390.	181.	921	-
	B	3930.	187.	1282	-
	C	3310.	200.	475	-
	D	3310.	215.	2129	-
	E	3650.	245.	215	-
	F	3100.	251.	≤ 34	-
	G	3520.	258.	≤ 88	-
	H	3990.	270.	≤ 35	-
	I	3580.	285.	≤ 36	-
	K	4020.	303.	≤ 36	-

TAB. 8C: EXPERIMENT 60 5.9.78 14.00 - 14.30

TRACER AND EMISSION RATE: CFCL3 14.10 G/S

POSITION		R (M)	ALPHA (DEGREE)	TRACER CONCENTRATION IN NG/M**3 SAMPL. PERIOD 1	SAMPL. PERIOD 2
I	A	300.	176.	67	-
	B	300.	191.	6469	-
	C	295.	207.	7840	-
	D	305.	220.	3154	-
	E	295.	228.	≤ 342	-
	F	300.	242.	≤ 335	-
	G	300.	258.	1133	-
	H	340.	278.	1576	-
	I	280.	284.	≤ 331	-
	K	310.	301.	557	-
II	A	635.	147.	≤ 333	-
	B	615.	157.	≤ 333	-
	C	595.	195.	≤ 332	-
	D	710.	209.	9391	-
	E	700.	227.	7374	-
	F	590.	240.	17954	-
	G	600.	248.	35607	-
	H	600.	263.	3232	-
	I	635.	269.	≤ 336	-
	K	685.	282.	≤ 337	-
	L	610.	307.	≤ 335	-
	M	675.	334.	≤ 341	-
III	A	960.	176.	≤ 331	-
	B	895.	201.	2969	-
	C	1025.	219.	7039	-
	D	1000.	231.	3458	-
	E	1070.	243.	189	-
	F	1025.	249.	≤ 341	-
	G	955.	262.	1331	-
	H	925.	272.	≤ 336	-

TAB. 8C: EXPERIMENT 60 5.9.78 14.00 - 14.30

TRACER AND EMISSION RATE: CFCL3 14.10 G/S

POSITION		R (M)	ALPHA (DEGREE)	TRACER CONCENTRATION IN NG/M**3 SAMPL. PERIOD 1	SAMPL. PERIOD 2
IV	A	2490.	183.	≤ 350	-
	B	2350.	201.	1020	-
	C	2040.	211.	442	-
	D	2140.	226.	≤ 357	-
	E	2000.	243.	815	-
	F	2070.	260.	186	-
	G	1950.	272.	≤ 345	-
	H	1910.	282.	110	-
	I	1930.	289.	444	-
V	A	4390.	181.	51	-
	B	3930.	187.	794	-
	C	3310.	200.	25	-
	D	3310.	215.	650	-
	E	3650.	245.	984	-
	F	3100.	251.	≤ 338	-
	G	3520.	258.	≤ 342	-
	H	3990.	270.	≤ 370	-
	I	3580.	285.	≤ 356	-
	K	4020.	303.	104	-

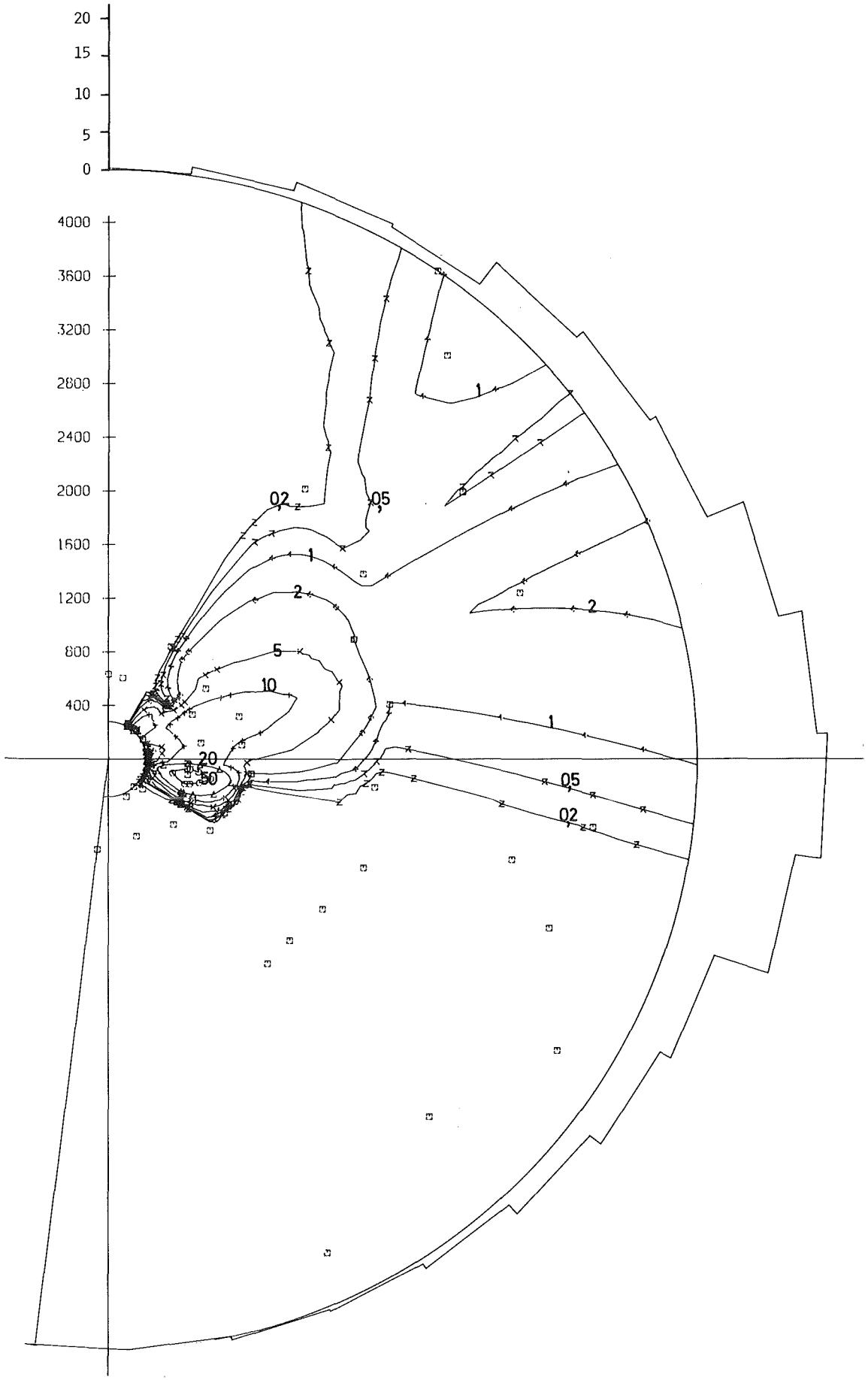

FIG. 8A: CONCENTRATION DISTRIBUTION IN 1/10××6 G/M××3
EXPERIMENT 60/1 CF2BR2 H = 160 M
FOR DETAILED INFORMATION SEE FIGURE 1A

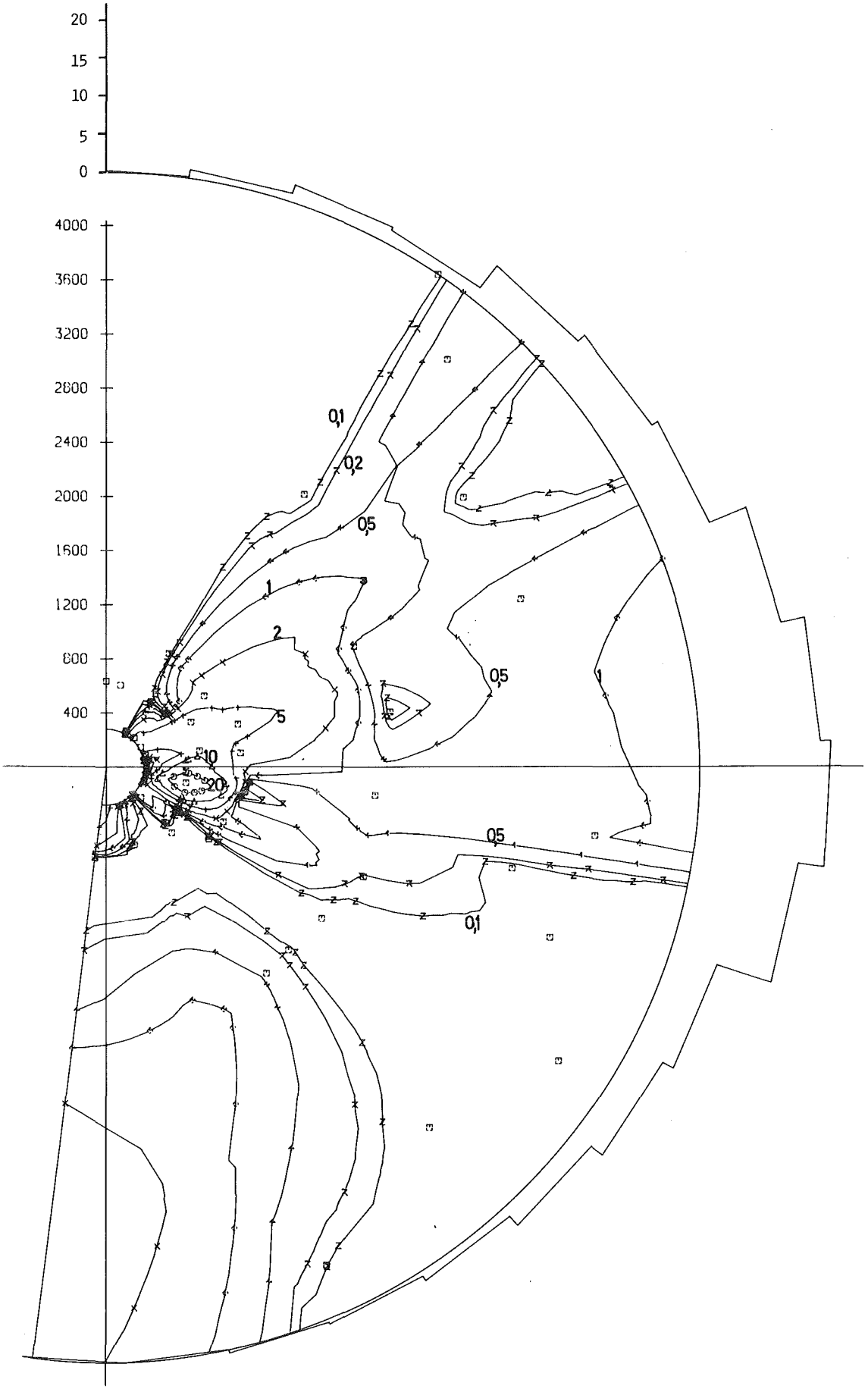

FIG. 8B: CONCENTRATION DISTRIBUTION IN 1/10××6 G/M××3
EXPERIMENT 60/1 CFCL3 H = 195 M
FOR DETAILED INFORMATION SEE FIGURE 1A

TAB. 9A: METEOROLOGICAL DATA OF EXPERIMENT NO. 61

		HEIGHT	1. SAMPLING PERIOD			2. SAMPLING PERIOD		
		(M)	14.10	14.20	14.30	14.40	14.50	15.00
WIND DIRECTION (DEGREE)		40	225	228	228	232	236	230
		60	219	225	227	233	230	228
		100	219	222	227	231	226	226
		160	223	228	230	234	227	228
		200	229	234	235	237	232	233
WIND SPEED (M/S)		40	4.3	3.8	4.4	5.0	6.5	5.7
		60	5.3	4.9	5.1	6.0	7.7	6.6
		100	6.6	6.3	6.3	7.3	8.4	7.6
		160	7.5	7.2	7.0	8.7	9.5	8.8
		200	8.3	7.9	7.8	9.2	10.1	9.9
STANDARD DEVIATION OF	VER.	40	11.7	11.7	11.7	11.9	11.8	11.9
	HOR.		10.6	11.0	12.2	12.3	12.6	12.1
WIND DIR. VECTOR VANE (DEGREE)	VER.	100	5.5	5.6	6.8	7.9	7.3	7.2
	HOR.		5.8	6.1	7.1	7.4	7.4	8.1
	VER.	160	4.0	4.6	6.1	6.9	6.3	7.2
	HOR.		4.8	4.8	4.9	4.9	5.1	5.5
STAND. DEVIATION OF HOR. WIND DIRECTION WIND VANE (DEGREE)		100	7.0	7.8	12.4	9.1	9.4	8.9
TEMPERATURE GRADIENT (K/100M)		30/100	-0.5	-0.7	-0.7	-0.8	-1.3	-1.2
NET RADIATION (MW/CM**2)			13.5	10.5	3.8	15.4	27.2	8.7
DIFFUSION CATEGORY BASED ON ...	VER. FLUCTUATION		D			C		
	HOR. FLUCTUATION		D			D		
	TEMP. GRADIENT		D			C		
	SYNOP. OBSERV.		D			D		

TAB. 9B: EXPERIMENT 61 27. 9.78 14.00 - 15.00

TRACER AND EMISSION RATE: CF2BR2 21.60 G/S

POSITION		R (M)	ALPHA (DEGREE)	TRACER CONCENTRATION IN NG/M**3 SAMPL. PERIOD 1	SAMPL. PERIOD 2
I	A	590.	6.	≤ 52	77
	B	595.	19.	94	≤ 32
	C	605.	30.	157	321
	D	640.	37.	201	-
	E	645.	44.	486	-
	F	575.	48.	621	1258
	G	700.	63.	943	1065
	H	565.	68.	≤ 30	34
	I	650.	72.	≤ 28	186
	K	600.	80.	≤ 33	≤ 25
	L	495.	84.	-	≤ 36
	M	850.	99.	129	≤ 36
II	A	1250.	12.	≤ 40	≤ 49
	B	1020.	13.	≤ 52	-
	C	1275.	22.	287	-
	D	1295.	26.	116	40
	E	1150.	30.	479	148
	F	1005.	35.	≤ 38	47
	G	1090.	46.	11813	7980
	H	950.	51.	4767	9698
	I	950.	57.	261	7268
	K	1040.	65.	256	1368
	L	900.	84.	125	≤ 38
III	A	1810.	9.	845	≤ 63
	B	1700.	14.	≤ 72	≤ 79
	C	1990.	24.	≤ 87	≤ 46
	D	1780.	34.	-	≤ 30
	E	1880.	41.	9311	3670
	F	1720.	44.	10926	6965
	G	2030.	62.	761	717
	H	2080.	68.	≤ 30	-
	I	2060.	76.	≤ 28	≤ 29
	K	2020.	83.	≤ 49	≤ 57
	L	2000.	88.	42	≤ 94

TAB. 9B: EXPERIMENT 61 27. 9.78 14.00 - 15.00

TRACER AND EMISSION RATE: CF2BR2 21.60 G/S

POSITION		R (M)	ALPHA (DEGREE)	TRACER CONCENTRATION IN NG/M**3 SAMPL. PERIOD 1	SAMPL. PERIOD 2
IV	A	4590.	2.	≤ 32	≤ 30
	B	4360.	8.	53	≤ 50
	C	4180.	14.	≤ 39	≤ 48
	D	4380.	20.	≤ 38	≤ 38
	E	4190.	27.	≤ 52	-
	F	4320.	34.	79	≤ 33
	G	4240.	41.	7863	1703
	H	4410.	52.	5310	5927
	I	4310.	60.	≤ 87	≤ 68
	K	3950.	68.	≤ 41	77
	L	4080.	78.	≤ 39	≤ 52
	M	3950.	87.	≤ 40	≤ 41
V	A	7200.	1.	≤ 26	≤ 29
	B	7478.	11.	≤ 24	≤ 29
	C	8000.	19.	≤ 25	≤ 30
	D	8175.	26.	≤ 46	≤ 46
	E	8425.	34.	≤ 47	≤ 48
	F	8525.	40.	243	1027
	G	8175.	45.	2565	5054
	H	8100.	51.	3486	5842
	I	8075.	57.	≤ 91	≤ 76
	K	7875.	63.	≤ 93	≤ 85
	L	7775.	71.	-	192
	M	7750.	79.	94	≤ 41

TAB. 9C: EXPERIMENT 61 27.9.78 14.00 - 15.00

TRACER AND EMISSION RATE: CFCL3 15.50 G/S

POSITION		R (M)	ALPHA (DEGREE)	TRACER CONCENTRATION IN NG/M**3 SAMPL. PERIOD 1	SAMPL. PERIOD 2
I	A	590.	6.	4055	3000
	B	595.	19.	4151	2275
	C	605.	30.	4790	5968
	D	640.	37.	5016	-
	E	645.	44.	5277	-
	F	575.	48.	4466	3917
	G	700.	63.	2862	4619
	H	565.	68.	3939	3855
	I	650.	72.	2448	4812
	K	600.	80.	3994	1740
	L	495.	84.	-	5783
	M	850.	99.	1849	1732
II	A	1250.	12.	3388	2094
	B	1020.	13.	5328	-
	C	1275.	22.	3619	-
	D	1295.	26.	4811	3619
	E	1155.	30.	6780	4245
	F	1005.	35.	1722	1704
	G	1090.	46.	4024	4436
	H	950.	51.	7775	5114
	I	950.	57.	1900	3250
	K	1040.	65.	3900	3094
	L	900.	84.	3306	1550
III	A	1810.	9.	11714	1659
	B	1700.	14.	2371	1902
	C	1990.	24.	3008	1480
	D	1780.	34.	-	2198
	E	1880.	41.	3935	3048
	F	1720.	44.	3739	2460
	G	2030.	62.	2458	1463
	H	2080.	68.	71659	-
	I	2060.	76.	3316	2049
	K	2020.	83.	831	1445
	L	2000.	88.	5342	29168

TAB. 9C: EXPERIMENT 61 27.9.78 14.00 - 15.00

TRACER AND EMISSION RATE: CFCL3 15.50 G/S

POSITION		R (M)	ALPHA (DEGREE)	TRACER CONCENTRATION IN NG/M**3 SAMPL. PERIOD 1	SAMPL. PERIOD 2
IV	A	4590.	2.	3262	3946
	B	4360.	8.	4937	1232
	C	4180.	14.	2461	1639
	D	4380.	20.	1986	1649
	E	4190.	27.	1873	-
	F	4320.	34.	2871	1200
	G	4240.	41.	6535	1860
	H	4410.	52.	6252	4648
	I	4310.	60.	2777	7541
	K	3950.	68.	1386	1699
	L	4080.	78.	3385	3761
	M	3950.	87.	3741	2046
V	A	7200.	1.	$\leq$ 373	206
	B	7475.	11.	3091	186
	C	8000.	19.	1133	3165
	D	8175.	26.	1742	3379
	E	8425.	34.	4684	3894
	F	8525.	40.	2865	2387
	G	8175.	45.	3615	7911
	H	8100.	51.	4333	4608
	I	8075.	57.	3646	5857
	K	7875.	63.	3165	6501
	L	7775.	71.	-	2322
	M	7750.	79.	2876	2484

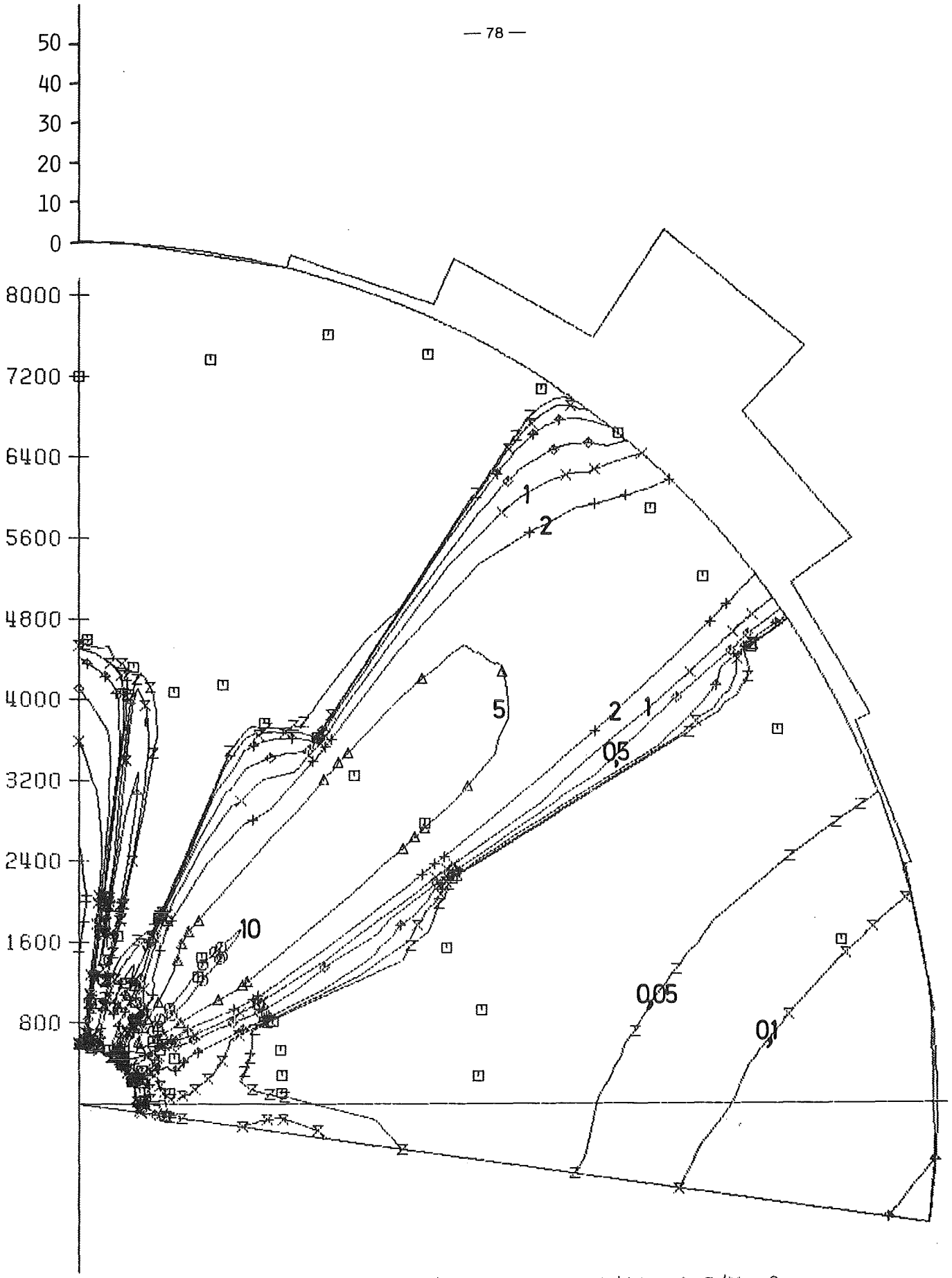

FIG. 9A: CONCENTRATION DISTRIBUTION IN 1/10××6 G/M××3
EXPERIMENT 61/1 CF2BR2 160 M
FOR DETAILED INFORMATION SEE FIGURE 1A

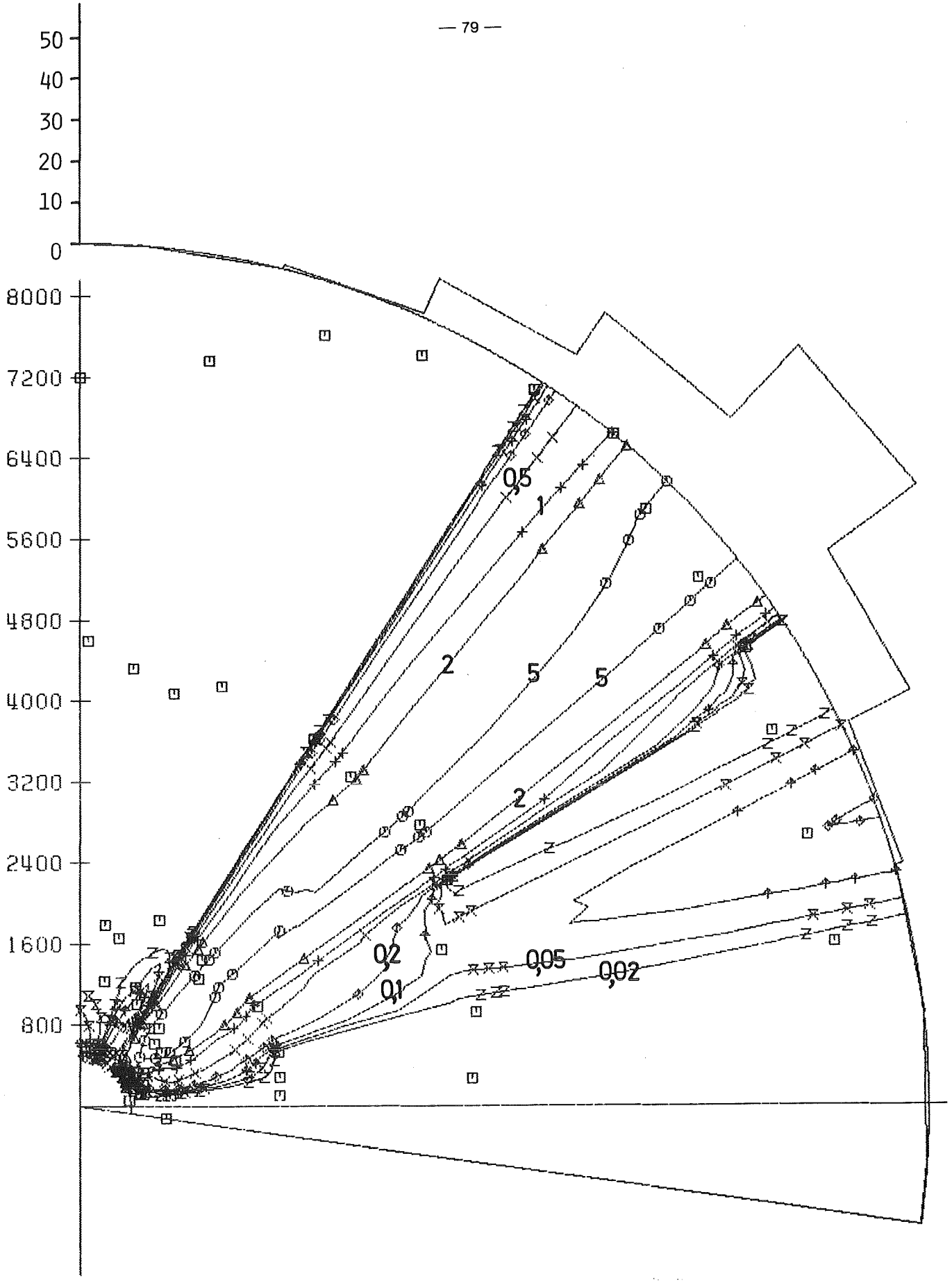

FIG. 9B: CONCENTRATION DISTRIBUTION IN 1/10xx6 G/Mxx3
EXPERIMENT 61/2 CF2BR2 160 M
FOR DETAILED INFORMATION SEE FIGURE 1A

TAB. 10A: METEOROLOGICAL DATA OF EXPERIMENT NO. 62

		HEIGHT	1. SAMPLING PERIOD			2. SAMPLING PERIOD		
		(M)	14.10	14.20	14.30	14.40	14.50	15.00
WIND DIRECTION (DEGREE)		40	82	61	63	53	68	67
		60	75	56	57	52	61	65
		100	71	57	57	50	59	61
		160	69	60	55	53	51	45
		200	70	67	57	53	52	43
WIND SPEED (M/S)		40	2.7	2.2	2.0	1.4	1.7	1.8
		60	2.8	2.6	2.2	1.6	1.9	1.9
		100	2.8	2.7	2.4	1.9	2.2	2.2
		160	2.9	2.7	2.5	2.1	2.4	2.1
		200	3.0	2.9	2.7	2.3	2.5	2.4
STANDARD DEVIATION OF WIND DIR. VECTOR VANE (DEGREE)	VER.	40	****	****	****	****	****	****
	HOR.		****	****	****	****	****	****
	VER.	100	12.2	11.0	6.3	7.9	10.5	10.1
	HOR.		9.3	8.5	7.3	7.3	8.6	7.4
	VER.	160	11.1	10.3	9.7	10.9	10.7	11.4
	HOR.		****	****	****	****	****	****
STAND. DEVIATION OF HOR. WIND DIRECTION WIND VANE (DEGREE)		100	10.2	7.9	7.4	16.6	10.5	9.5
TEMPERATURE GRADIENT (K/100M)		30/100	-1.1	-1.1	-0.9	-1.0	-1.0	-1.0
NET RADIATION (MW/CM**2)			10.6	8.9	7.1	7.0	6.4	6.4
DIFFUSION CATEGORY BASED ON ...	VER. FLUCTUATION		C			C		
	HOR. FLUCTUATION		D			D		
	TEMP. GRADIENT		C			C		
	SYNOP. OBSERV.		C			C		

TAB. 10B: EXPERIMENT 62 27.10.78 14.00 - 15.00

TRACER AND EMISSION RATE: CF2BR2 21.50 G/S

POSITION		R (M)	ALPHA (DEGREE)	TRACER CONCENTRATION IN NG/M**3 SAMPL. PERIOD 1	SAMPL. PERIOD 2
I	A	430.	176.	≤ 34	≤ 33
	B	410.	210.	≤ 33	≤ 28
	C	400.	221.	≤ 32	≤ 30
	D	400.	233.	≤ 25	3209
	E	390.	245.	20737	266
	F	760.	259.	42270	86656
	G	675.	266.	15743	97928
	H	400.	268.	336	≤ 32
	I	638.	286.	≤ 27	≤ 29
	K	605.	297.	≤ 32	≤ 32
	L	615.	305.	≤ 34	≤ 30
	M	600.	312.	≤ 29	≤ 32
	N	610.	319.	≤ 31	≤ 33
II	A	745.	188.	≤ 33	≤ 36
	B	770.	208.	≤ 35	65062
	C	1010.	220.	9786	24924
	D	968.	229.	15186	81142
	E	910.	242.	29510	87950
	F	930.	251.	70539	88594
	G	955.	260.	-	17742
	H	930.	270.	-	10898
	I	925.	282.	145	-
	K	795.	286.	≤ 31	≤ 34
	L	940.	290.	≤ 25	≤ 30
	M	765.	296.	-	≤ 23
III	A	1290.	193.	≤ 32	≤ 30
	B	1080.	206.	1048	1151
	C	1270.	213.	≤ 30	7623
	D	1650.	221.	2559	-
	E	1810.	233.	≤ 28	38901
	F	1650.	245.	11078	74526
	G	1520.	251.	20668	55102
	H	1540.	261.	15277	6886
	I	1430.	280.	≤ 35	≤ 33
	K	1400.	290.	≤ 39	237
	L	1400.	302.	≤ 38	≤ 31
	M	1460.	312.	≤ 39	≤ 41
	N	1670.	320.	≤ 35	≤ 38

TAB. 10B: EXPERIMENT 62 27.10.78 14.00 - 15.00

TRACER AND EMISSION RATE: CF2BR2 21.50 G/S

POSITION		R (M)	ALPHA (DEGREE)	TRACER CONCENTRATION IN NG/M**3 SAMPL. PERIOD 1	SAMPL. PERIOD 2
IV	A	2320.	207.	≤ 27	413
	B	2340.	217.	≤ 26	6395
	C	2440.	220.	≤ 28	10357
	D	2550.	228.	-	17924
	E	2120.	252.	8784	41384
	F	1950.	267.	6710	322
	G	2460.	276.	-	≤ 33
	H	2750.	284.	-	≤ 31
	I	2820.	296.	-	≤ 30
V	A	4425.	201.	-	146
	B	5275.	212.	≤ 25	486
	C	4725.	219.	≤ 91	2465
	D	4825.	225.	362	2792
	E	4600.	236.	1624	6142
	F	5000.	244.	2350	750
	G	4575.	252.	1083	≤ 28
	H	4750.	260.	791	-
	I	4750.	274.	≤ 31	-

TAB. 10C: EXPERIMENT 62 27.10.78 14.00 - 15.00

TRACER AND EMISSION RATE: CFCL3 16.90 G/S

POSITION		R (M)	ALPHA (DEGREE)	TRACER CONCENTRATION IN NG/M**3 SAMPL. PERIOD 1	SAMPL. PERIOD 2
I	A	430.	176.	≤ 186	≤ 172
	B	410.	210.	186	256
	C	400.	221.	≤ 184	≤ 180
	D	400.	233.	≤ 178	2398
	E	390.	245.	16737	301
	F	760.	259.	47344	34164
	G	675.	266.	9223	4800
	H	400.	268.	2967	465
	I	638.	286.	245	265
	K	605.	297.	225	246
	L	615.	305.	182	90
	M	600.	312.	60	99
	N	610.	319.	174	≤ 178
II	A	745.	188.	2259	≤ 183
	B	770.	208.	97	3161
	C	1010.	220.	1491	6475
	D	968.	229.	9538	54774
	E	910.	242.	48941	60127
	F	930.	251.	50890	64347
	G	955.	260.	-	5568
	H	930.	270.	-	5616
	I	925.	282.	1151	-
	K	795.	286.	≤ 181	2081
	L	940.	290.	≤ 171	≤ 183
	M	765.	296.	-	≤ 178
III	A	1290.	193.	257	≤ 186
	B	1080.	206.	2645	2798
	C	1270.	213.	≤ 175	2531
	D	1650.	221.	687	-
	E	1810.	233.	≤ 172	33170
	F	1650.	245.	12094	50482
	G	1520.	251.	16116	24025
	H	1540.	261.	6274	5540
	I	1430.	280.	471	793
	K	1400.	290.	≤ 176	1104
	L	1400.	302.	579	118
	M	1460.	312.	190	≤ 182
	N	1670.	320.	≤ 178	≤ 180

TAB. 10C: EXPERIMENT 62 27.10.78 14.00 - 15.00

TRACER AND EMISSION RATE: CFCL3 16.90 G/S

POSITION		R (M)	ALPHA (DEGREE)	TRACER CONCENTRATION IN NG/M**3 SAMPL. PERIOD 1	SAMPL. PERIOD 2
IV	A	2320.	207.	20	≤ 176
	B	2340.	217.	≤ 188	2708
	C	2440.	220.	≤ 186	7199
	D	2550.	228.	-	11907
	E	2120.	252.	8317	23655
	F	1950.	267.	234	474
	G	2460.	276.	-	37
	H	2750.	284.	-	≤ 189
	I	2820.	296.	-	≤ 174
V	A	4425.	201.	-	1670
	B	5275.	212.	43	≤ 176
	C	4725.	219.	14351	466
	D	4825.	225.	≤ 188	774
	E	4600.	236.	522	3556
	F	5000.	244.	466	108
	G	4575.	252.	≤ 177	≤ 172
	H	4750.	260.	≤ 181	-
	I	4750.	274.	≤ 178	-

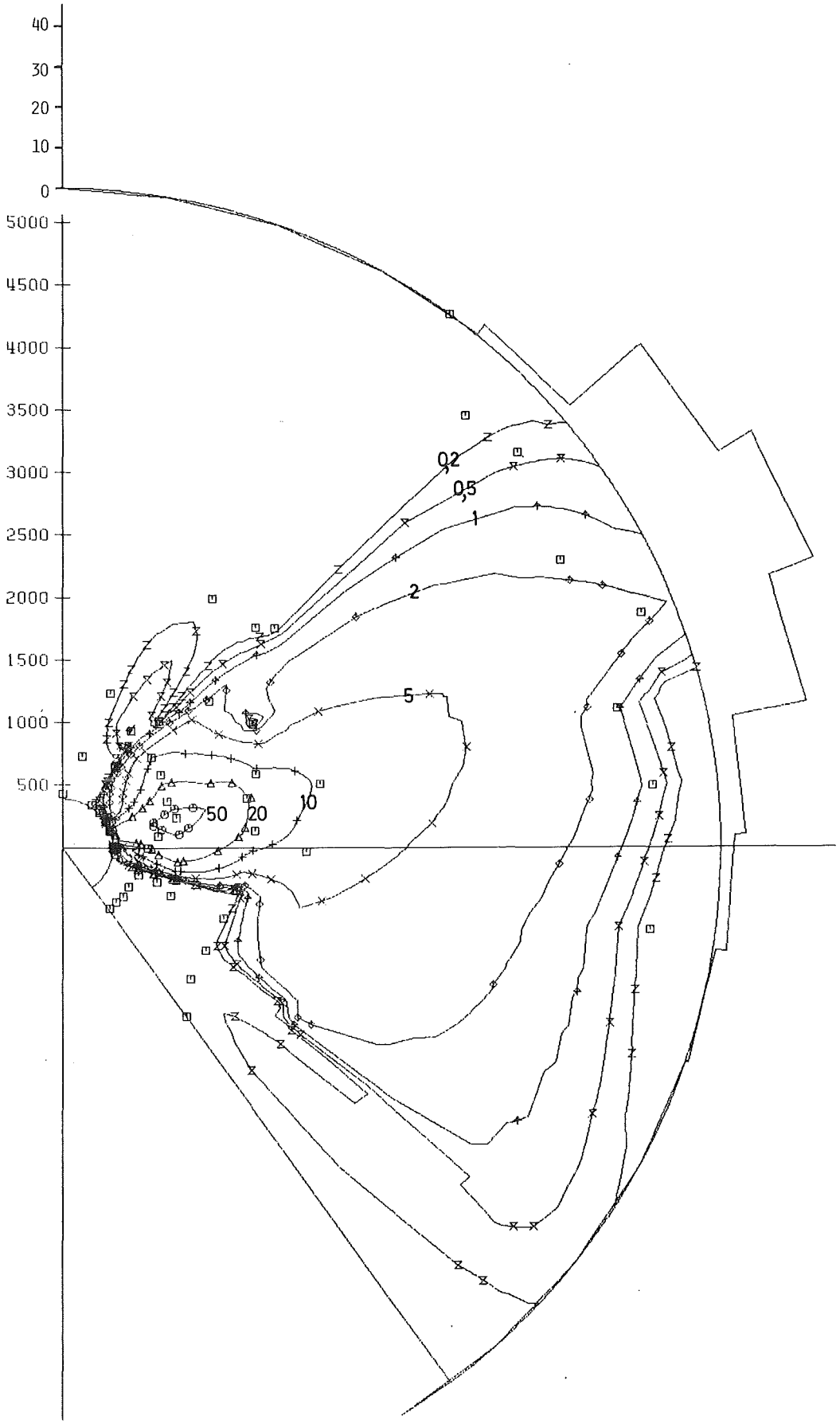

FIG. 10A: CONCENTRATION DISTRIBUTION IN 1/10xx6 G/Mxx3
EXPERIMENT 62/1 CF2BR2 160 M
FOR DETAILED INFORMATION SEE FIGURE 1A

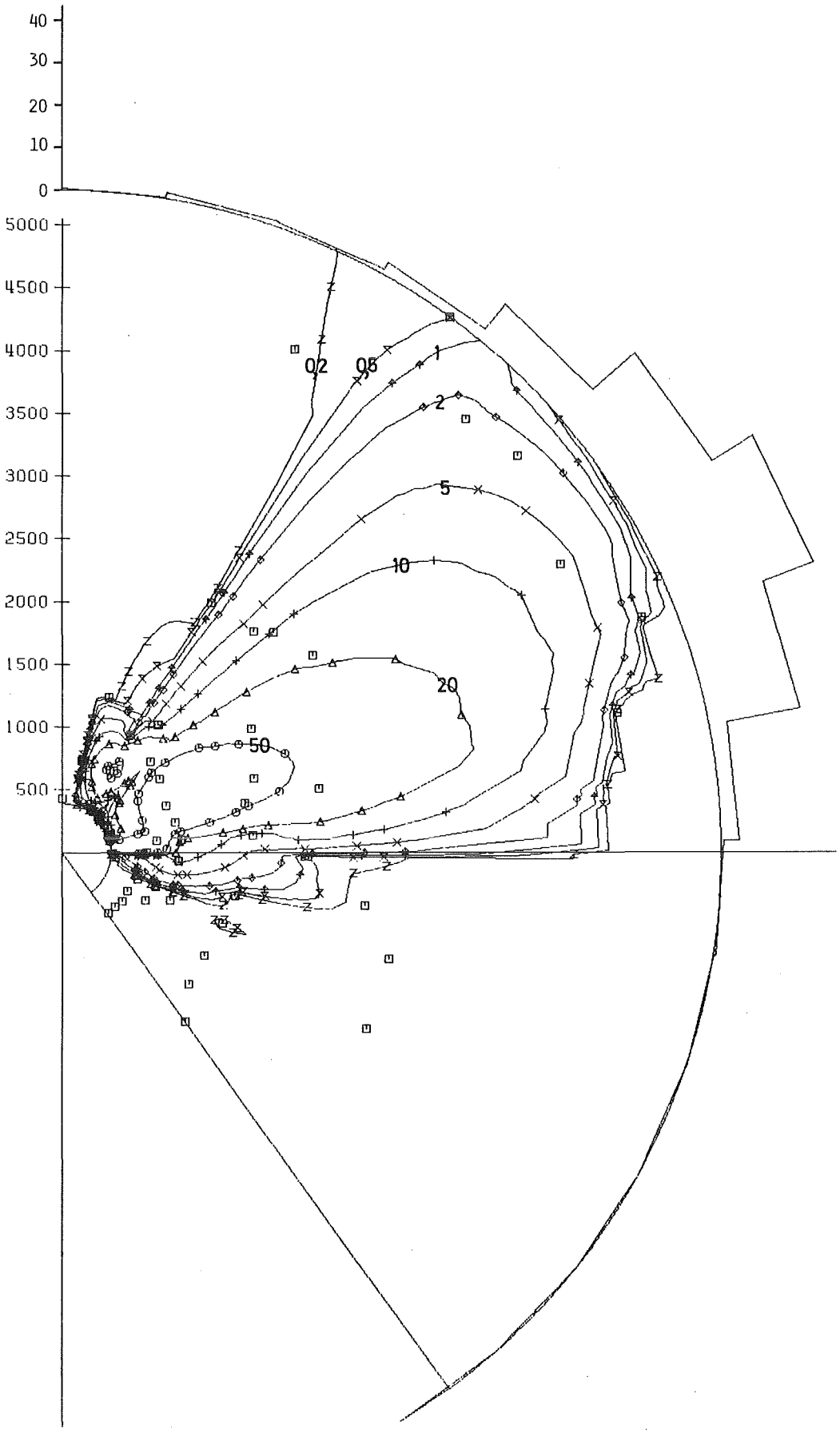

FIG. 10B: CONCENTRATION DISTRIBUTION IN 1/10××6 G/M××3
EXPERIMENT 62/2 CF2BR2 160 M
FOR DETAILED INFORMATION SEE FIGURE 1A

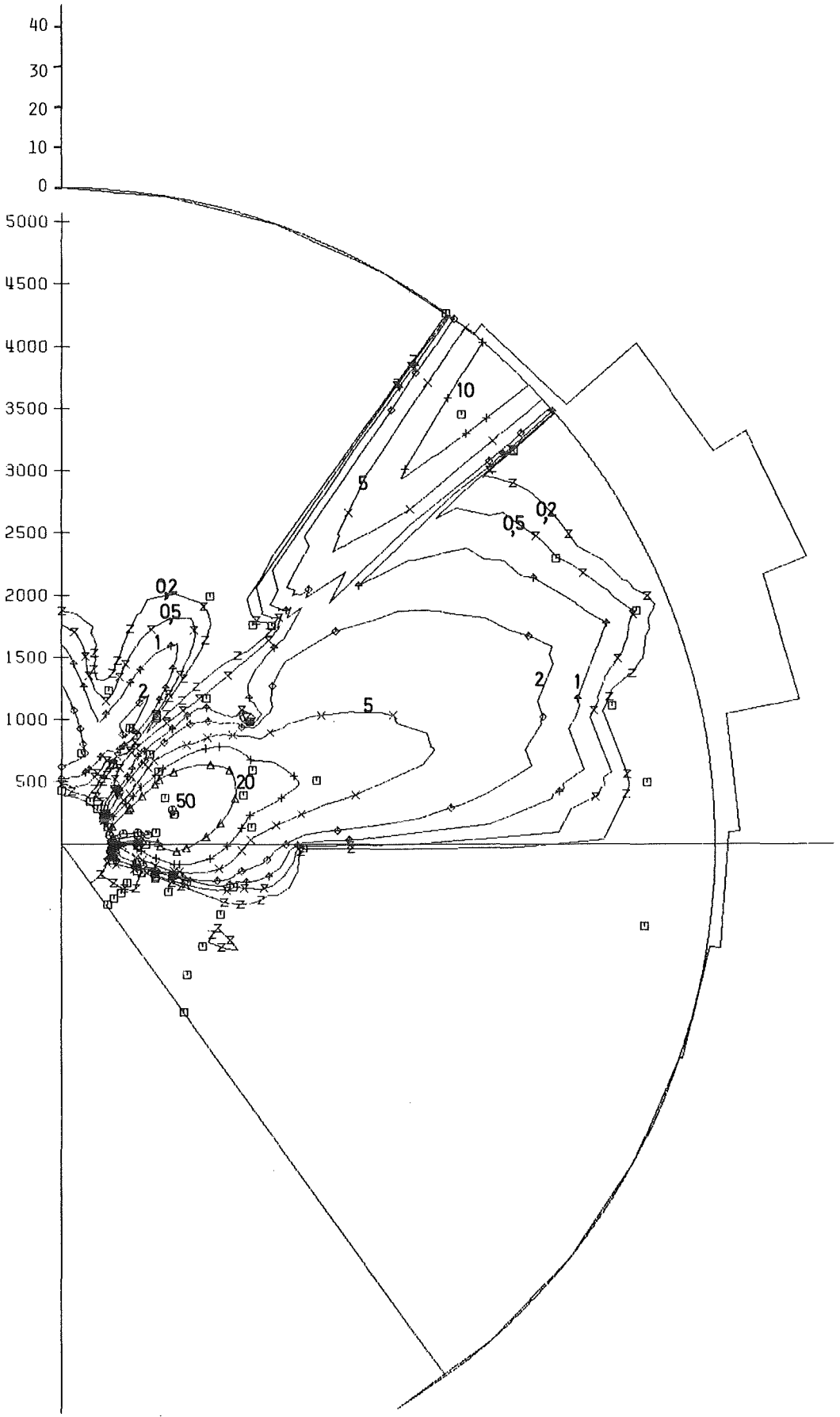

FIG. 10C: CONCENTRATION DISTRIBUTION IN 1/10xx6 G/Mxx3
EXPERIMENT 62/1 CFCL3 H=195 M
FOR DETAILED INFORMATION SEE FIGURE 1A

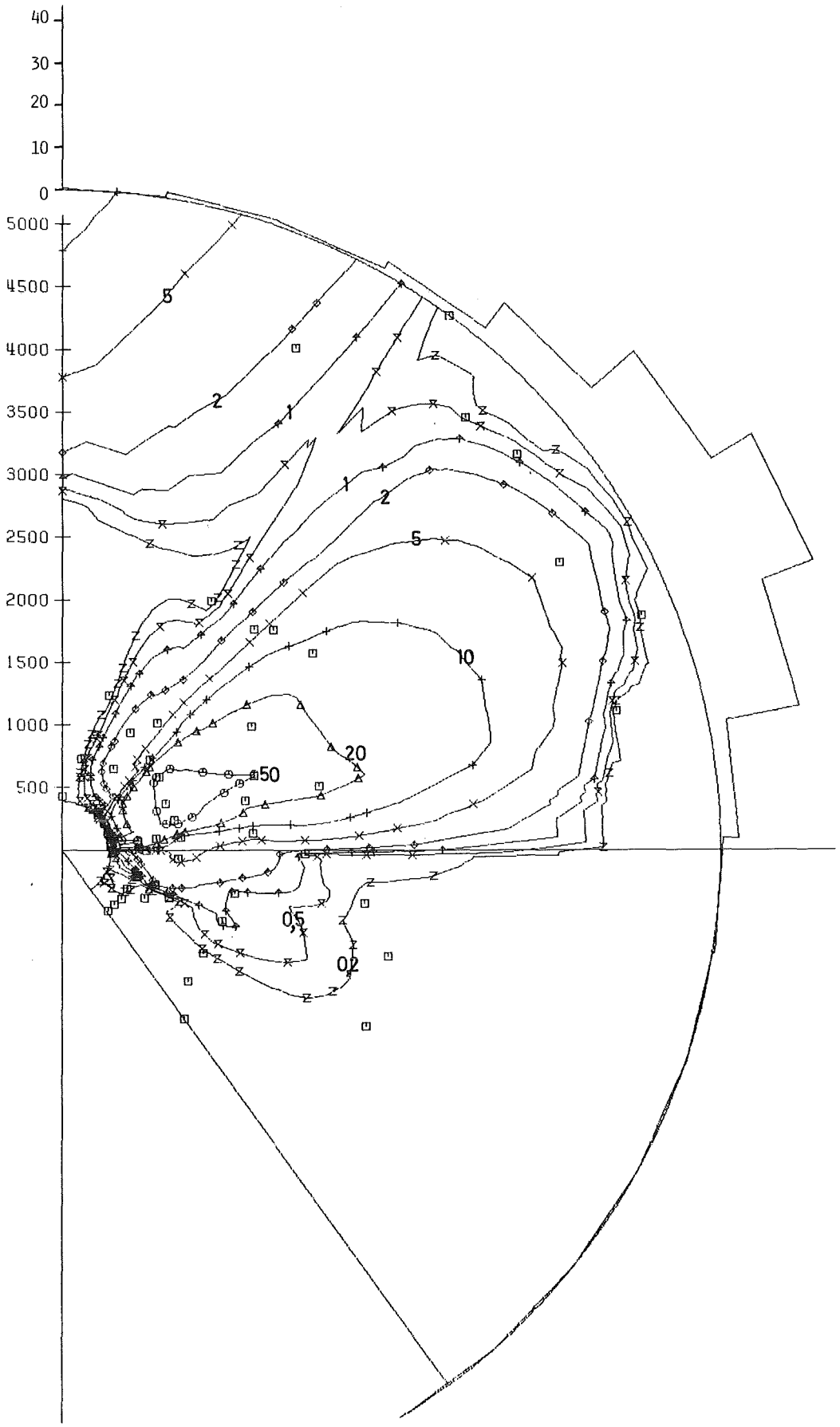

FIG. 10D: CONCENTRATION DISTRIBUTION IN 1/10xx6 G/Mxx3
EXPERIMENT 62/2 CFCL3 H=195 M
FOR DETAILED INFORMATION SEE FIGURE 1A

TAB. 11A: METEOROLOGICAL DATA OF EXPERIMENT NO. 63

		HEIGHT	1. SAMPLING PERIOD			2. SAMPLING PERIOD		
		(M)	14.10	14.20	14.30	14.40	14.50	15.00
WIND DIRECTION (DEGREE)		40	230	228	225	223	218	221
		60	227	223	223	220	215	217
		100	226	224	222	220	215	217
		160	231	230	226	223	221	220
		200	237	236	232	230	227	226
WIND SPEED (M/S)		40	7.6	6.1	6.0	5.8	5.8	7.1
		60	9.4	7.2	7.1	7.1	7.4	8.6
		100	11.2	9.3	8.9	8.6	9.4	11.0
		160	12.4	10.6	10.9	10.5	11.1	13.3
		200	13.2	11.2	11.8	11.7	12.2	14.4
STANDARD DEVIATION OF	VER.	40	12.0	11.8	11.2	11.9	12.4	12.9
	HOR.		15.0	15.0	14.3	15.1	15.1	15.1
WIND DIR. VECTOR VANE (DEGREE)	VER.	100	6.6	6.3	6.1	6.7	6.8	6.8
	HOR.		8.2	7.4	7.4	7.6	7.8	7.9
	VER.	160	4.6	4.5	4.4	4.8	5.0	4.4
	HOR.		6.2	5.7	5.8	6.2	6.3	5.8
STAND. DEVIATION OF HOR. WIND DIRECTION WIND VANE (DEGREE)		100	7.3	8.5	8.2	9.6	7.6	8.0
TEMPERATURE GRADIENT (K/100M)		30/100	-0.6	-0.7	-0.8	-0.9	-0.8	-0.9
NET RADIATION (MW/CM**2)			3.9	2.9	3.1	3.4	3.2	2.0
DIFFUSION CATEGORY BASED ON ...	VER. FLUCTUATION		D			D		
	HOR. FLUCTUATION		D			D		
	TEMP. GRADIENT		D			D		
	SYNOP. OBSERV.		D			D		

TAB. 11B: EXPERIMENT 63 14.12.78 14.00 - 15.00

TRACER AND EMISSION RATE: CF2BR2 25.20 G/S

POSITION		R (M)	ALPHA (DEGREE)	TRACER CONCENTRATION IN NG/M**3 SAMPL. PERIOD 1	SAMPL. PERIOD 2
I	A	710.	13.	≤ 28	≤ 50
	B	715.	19.	≤ 31	≤ 24
	C	725.	26.	≤ 33	≤ 32
	D	745.	33.	-	517
	E	705.	38.	≤ 34	2215
	F	680.	43.	285	263
	G	725.	50.	-	≤ 36
	H	770.	57.	277	≤ 34
	I	705.	62.	≤ 40	≤ 36
	K	660.	67.	≤ 39	≤ 28
	L	710.	74.	≤ 29	≤ 32
	M	700.	85.	≤ 30	-
II	A	1250.	3.	≤ 75	≤ 70
	B	1285.	12.	≤ 74	≤ 80
	C	1290.	19.	≤ 85	≤ 65
	D	1310.	26.	≤ 77	≤ 67
	E	1325.	33.	995	-
	F	1415.	40.	1071	13291
	G	1480.	46.	9488	8983
	H	1305.	50.	10466	1614
	I	1380.	58.	≤ 79	≤ 78
	K	1500.	69.	≤ 73	≤ 63
	L	1475.	76.	≤ 45	≤ 53
	M	1405.	83.	≤ 53	≤ 53
	N	1365.	88.	≤ 55	≤ 56
III	A	2960.	7.	≤ 53	≤ 53
	B	2880.	12.	≤ 53	≤ 50
	C	2840.	17.	≤ 61	-
	D	2480.	22.	≤ 48	≤ 61
	E	2730.	33.	47	-
	F	2370.	39.	550	5368
	G	2450.	45.	1281	13232
	H	2520.	50.	-	7287
	I	2620.	56.	2847	86
	K	2760.	62.	≤ 45	≤ 63
	L	2690.	67.	≤ 58	≤ 59
	M	2540.	77.	≤ 53	≤ 55
	N	2910.	83.	≤ 56	≤ 43

TAB. 11B: EXPERIMENT 63 14.12.78 14.00 - 15.00

TRACER AND EMISSION RATE: CF2BR2 25.20 G/S

POSITION		R (M)	ALPHA (DEGREE)	TRACER CONCENTRATION IN NG/M**3 SAMPL. PERIOD 1	SAMPL. PERIOD 2
IV	A	4420.	6.	≤ 57	≤ 42
	B	4380.	18.	≤ 52	≤ 57
	C	4760.	25.	≤ 51	≤ 43
	D	4730.	34.	≤ 59	242
	E	4890.	39.	≤ 50	320
	F	4800.	50.	6619	3640
	G	4620.	55.	4151	775
	H	4570.	63.	≤ 43	≤ 44
	I	4690.	68.	≤ 54	≤ 51
	K	4600.	72.	≤ 55	≤ 53
	L	4450.	77.	≤ 54	≤ 42
	M	4680.	82.	≤ 57	≤ 51
V	A	9500.	5.	≤ 54	≤ 54
	B	9550.	11.	≤ 45	≤ 43
	C	8700.	16.	≤ 54	≤ 52
	D	8125.	21.	≤ 53	≤ 59
	E	9100.	30.	-	≤ 56
	F	8875.	36.	≤ 59	≤ 55
	G	9175.	42.	≤ 59	610
	H	9300.	47.	522	997
	I	8625.	51.	530	-
	K	8050.	56.	1169	224
	L	8150.	63.	≤ 52	≤ 42
	M	7800.	71.	≤ 54	≤ 52
	N	7725.	76.	-	≤ 52
	O	7450.	87.	≤ 51	≤ 52

TAB. 11C: EXPERIMENT 63 14.12.78 14.00 - 15.00

TRACER AND EMISSION RATE: CFCL3 13.50 G/S

POSITION		R (M)	ALPHA (DEGREE)	TRACER CONCENTRATION IN NG/M**3 SAMPL. PERIOD 1	SAMPL. PERIOD 2
I	A	710.	13.	387	2521
	B	715.	19.	561	1668
	C	725.	26.	1503	1391
	D	745.	33.	-	1612
	E	705.	38.	2268	2306
	F	680.	43.	2091	1318
	G	725.	50.	-	1445
	H	770.	57.	1063	1166
	I	705.	62.	2959	2681
	K	660.	67.	707	907
	L	710.	74.	1242	1233
	M	700.	85.	1168	-
II	A	1250.	3.	673	1260
	B	1285.	12.	1217	416
	C	1290.	19.	888	1150
	D	1310.	26.	2088	2161
	E	1325.	33.	2678	-
	F	1415.	40.	2207	3779
	G	1480.	46.	2220	3841
	H	1305.	50.	1713	531
	I	1380.	58.	1496	618
	K	1500.	69.	1434	1734
	L	1475.	76.	274	1005
	M	1405.	83.	525	1008
	N	1365.	88.	110	952
III	A	2960.	7.	$\leq$ 249	$\leq$ 250
	B	2880.	12.	580	330
	C	2840.	17.	679	-
	D	2480.	22.	263	833
	E	2730.	33.	$\leq$ 247	-
	F	2370.	39.	590	2054
	G	2450.	45.	251	5367
	H	2520.	50.	-	3168
	I	2620.	56.	849	465
	K	2760.	62.	1383	780
	L	2690.	67.	348	682
	M	2540.	77.	$\leq$ 243	1044
	N	2910.	83.	351	839

TAB. 11C: EXPERIMENT 63 14.12.78 14.00 - 15.00

TRACER AND EMISSION RATE: CFCL3 13.50 G/S

POSITION		R (M)	ALPHA (DEGREE)	TRACER CONCENTRATION IN NG/M**3 SAMPL. PERIOD 1	SAMPL. PERIOD 2
IV	A	4420.	6.	≤ 240	≤ 243
	B	4380.	18.	≤ 243	17
	C	4760.	25.	≤ 244	≤ 242
	D	4730.	34.	125	1089
	E	4890.	39.	741	2136
	F	4800.	50.	7780	4129
	G	4620.	55.	1441	10808
	H	4570.	63.	98	≤ 241
	I	4690.	68.	1104	275
	K	4600.	72.	≤ 245	94
	L	4450.	77.	≤ 243	≤ 241
	M	4680.	82.	1070	323
V	A	9500.	5.	43	≤ 246
	B	9550.	11.	≤ 243	≤ 243
	C	8700.	16.	≤ 239	≤ 247
	D	8125.	21.	≤ 242	≤ 241
	E	9100.	30.	-	≤ 24
	F	8875.	36.	≤ 240	≤ 240
	G	9175.	42.	≤ 243	1391
	H	9300.	47.	6098	7950
	I	8625.	51.	515	-
	K	8050.	56.	618	691
	L	8150.	63.	575	411
	M	7800.	71.	220	498
	N	7725.	76.	-	205
	O	7450.	87.	≤ 242	96

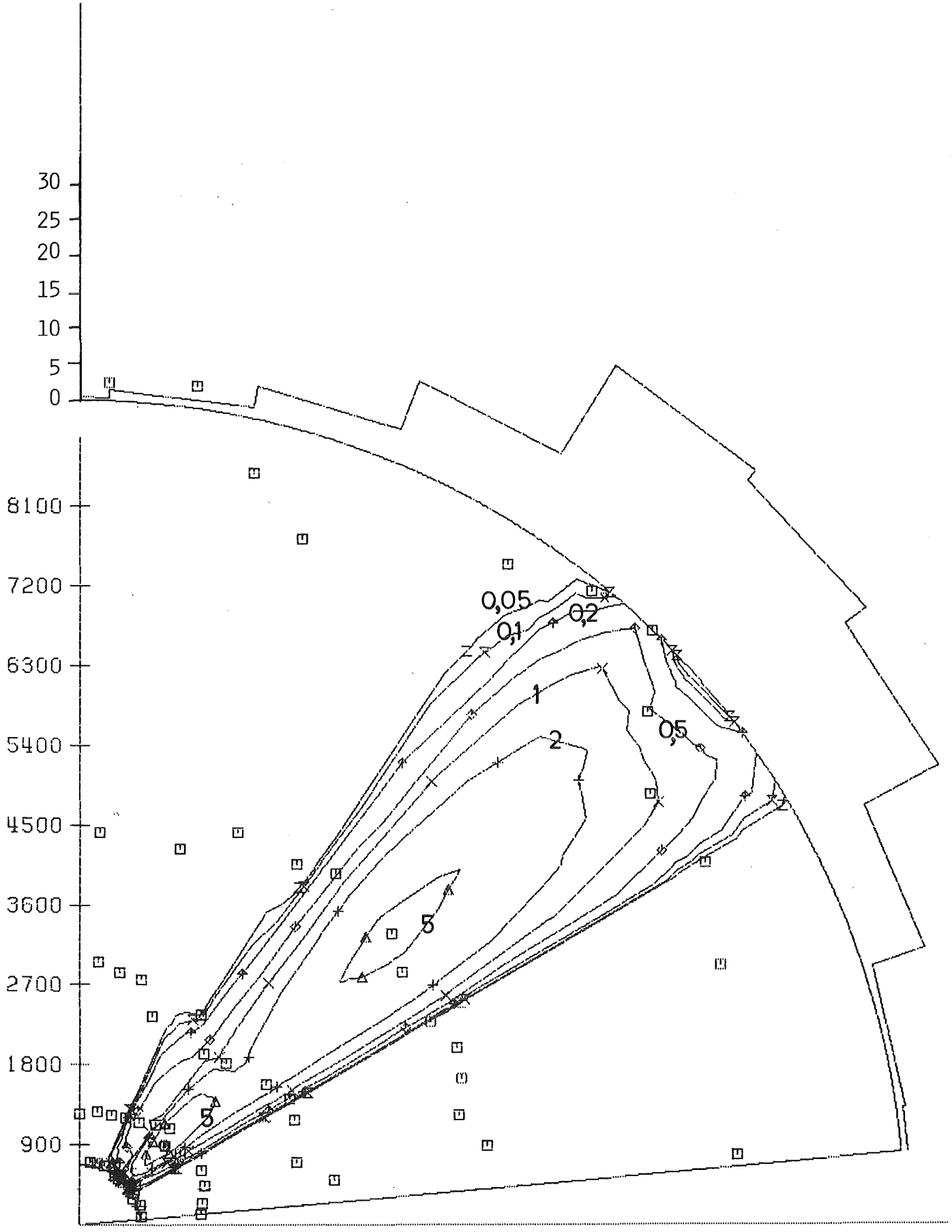

FIG. 11A: CONCENTRATION DISTRIBUTION IN 1/10xx6 G/Mxx3
EXPERIMENT 63/1 CF2BR2 H = 160 M
FOR DETAILED INFORMATION SEE FIGURE 1A

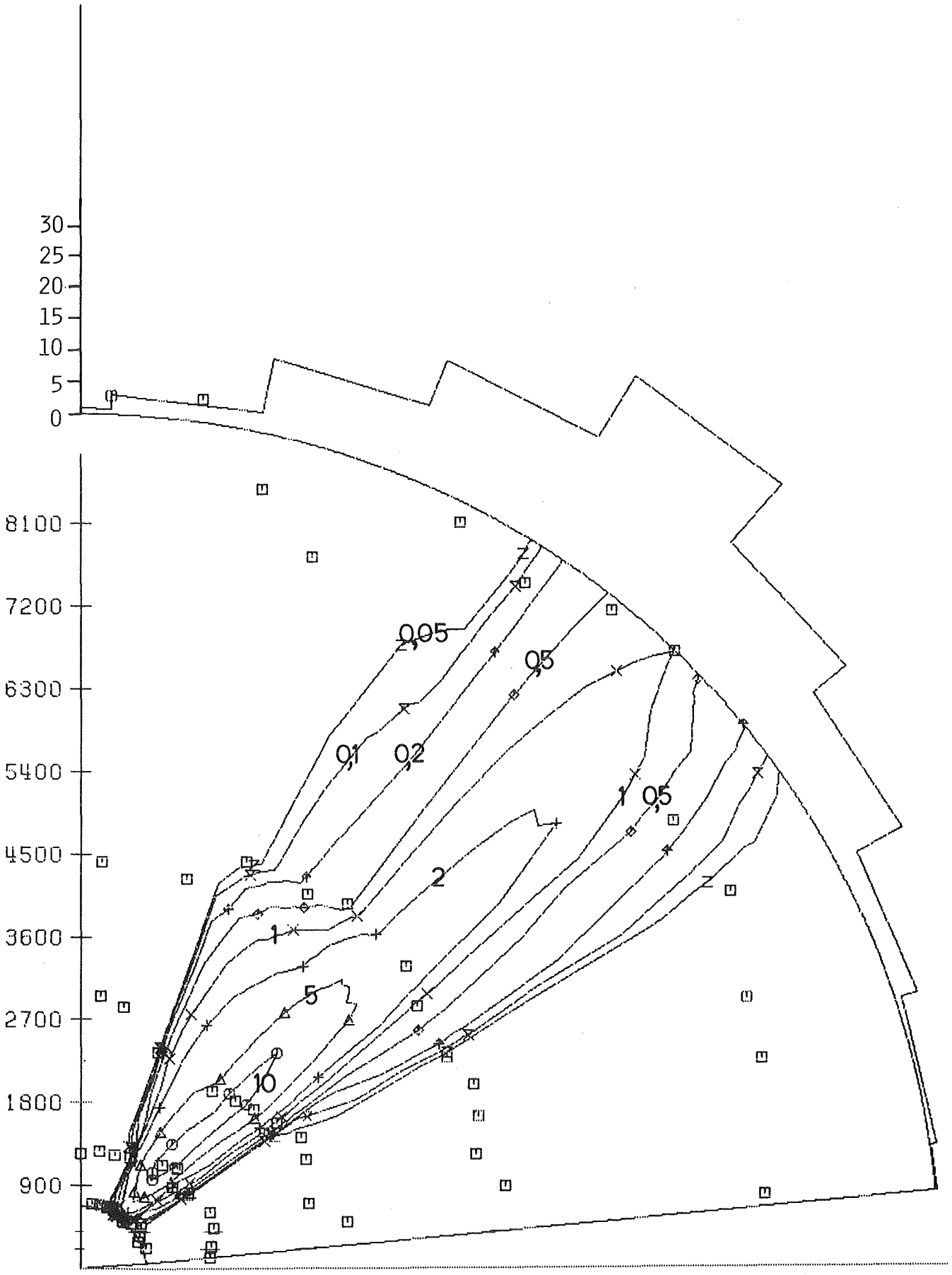

FIG. 11B: CONCENTRATION DISTRIBUTION IN 1/10**6 G/M**3
EXPERIMENT 63/2 CF2BR2 H = 160 M
FOR DETAILED INFORMATION SEE FIGURE 1A

TAB. 12A: METEOROLOGICAL DATA OF EXPERIMENT NO. 64

		HEIGHT	1. SAMPLING PERIOD			2. SAMPLING PERIOD		
		(M)	14.10	14.20	14.30	14.40	14.50	15.00
WIND DIRECTION (DEGREE)		40	99	119	68	72	86	101
		60	92	112	76	69	88	93
		100	87	112	85	73	101	89
		160	95	113	94	78	104	90
		200	104	115	100	85	107	94
WIND SPEED (M/S)		40	3.6	3.4	3.2	3.6	3.3	3.5
		60	3.7	3.6	3.4	4.1	3.6	4.1
		100	3.8	3.8	3.8	4.7	4.0	4.3
		160	4.2	4.1	4.0	5.0	3.9	4.5
		200	4.3	4.5	4.1	5.1	3.9	4.8
STANDARD DEVIATION OF	VER.	40	14.3	13.7	13.3	13.7	14.6	14.5
	HOR.		20.0	18.0	13.5	15.6	15.3	16.2
WIND DIR. VECTOR VANE (DEGREE)	VER.	100	14.0	14.3	13.1	13.8	14.5	14.2
	HOR.		18.4	17.0	14.2	14.9	16.1	14.3
	VER.	160	15.3	15.7	13.9	14.0	15.1	15.3
	HOR.		18.9	15.4	12.1	12.6	14.1	12.3
STAND. DEVIATION OF HOR. WIND DIRECTION WIND VANE (DEGREE)		100	18.2	13.0	18.0	13.3	23.0	24.9
TEMPERATURE GRADIENT (K/100M)		30/100	-1.4	-1.1	-1.3	-1.4	-1.1	-1.2
NET RADIATION (MW/CM**2)			43.1	41.8	41.5	40.7	39.7	38.3
DIFFUSION CATEGORY BASED ON ...	VER. FLUCTUATION		B			B		
	HOR. FLUCTUATION		C			B		
	TEMP. GRADIENT		C			C		
	SYNOP. OBSERV.		B			B		

TAB. 12B: EXPERIMENT 64 15. 5.79 14.00 - 15.00

TRACER AND EMISSION RATE: CF2BR2 26.70 G/S

POSITION		R (M)	ALPHA (DEGREE)	TRACER CONCENTRATION IN NG/M**3 SAMPL. PERIOD 1	SAMPL. PERIOD 2
I	A	285.	242.	29090	2467
	B	315.	263.	50691	4816
	C	290.	271.	125827	8720
	D	280.	282.	-	6074
	E	280.	292.	147793	29978
	F	290.	306.	21924	36534
	G	320.	320.	8385	101437
II	A	700.	227.	133	≤ 76
	B	585.	231.	2004	≤ 71
	C	580.	239.	7074	1784
	D	595.	247.	37856	24124
	E	600.	255.	29792	49799
	F	615.	263.	52140	108686
	G	635.	270.	36493	32656
	H	625.	281.	51575	17105
	I	630.	291.	39536	5791
	K	605.	300.	25061	1791
	L	600.	313.	624	≤ 98
	M	620.	324.	≤ 73	≤ 90
III	A	1210.	233.	≤ 72	≤ 77
	B	1370.	236.	≤ 85	≤ 89
	C	1240.	246.	924	≤ 98
	D	1110.	263.	6053	9983
	E	1090.	278.	6720	15368
	F	1130.	289.	18294	2842
	G	1140.	308.	3193	≤ 96
	H	1080.	320.	1425	≤ 89
	I	1220.	338.	≤ 95	-
IV	A	2450.	220.	≤ 75	≤ 93
	B	2290.	236.	≤ 76	≤ 80
	C	2550.	242.	≤ 72	≤ 72
	D	2580.	255.	≤ 94	966
	E	2340.	264.	392	1825
	F	2410.	278.	1408	1436
	G	2440.	289.	353	≤ 78
	H	2560.	298.	≤ 80	≤ 64
	I	2370.	307.	≤ 79	≤ 71
	K	2350.	321.	≤ 73	≤ 69
V	A	3800.	256.	-	≤ 85
	B	4810.	261.	-	≤ 82
	C	4750.	283.	≤ 76	≤ 84
	D	4110.	288.	≤ 78	≤ 74
	E	4720.	297.	≤ 90	≤ 75
	F	5160.	303.	≤ 89	-
	G	5330.	308.	≤ 97	≤ 87
	H	4340.	314.	≤ 100	≤ 78

TAB. 12C: EXPERIMENT 64 15.5.79 14.00 - 15.00

TRACER AND EMISSION RATE: CFCL3 17.50 G/S

POSITION		R (M)	ALPHA (DEGREE)	TRACER CONCENTRATION IN NG/M**3 SAMPL. PERIOD 1	SAMPL. PERIOD 2
I	A	285.	242.	1075	≤ 316
	B	315.	263.	7387	931
	C	290.	271.	59949	6211
	D	280.	282.	-	1167
	E	280.	292.	15348	1089
	F	290.	306.	10430	871
	G	320.	320.	8515	530
II	A	700.	227.	≤ 312	≤ 310
	B	585.	231.	446	≤ 311
	C	580.	239.	2284	≤ 324
	D	595.	247.	13723	8408
	E	600.	255.	8874	14642
	F	615.	263.	21141	13716
	G	635.	270.	13709	5812
	H	625.	281.	26363	4411
	I	630.	291.	15836	600
	K	605.	300.	3571	≤ 306
	L	600.	313.	1261	≤ 309
	M	620.	324.	318	≤ 317
III	A	1210.	233.	≤ 315	≤ 309
	B	1370.	236.	≤ 311	≤ 317
	C	1240.	246.	≤ 313	≤ 317
	D	1110.	263.	3007	2809
	E	1090.	278.	1100	3565
	F	1130.	289.	7389	633
	G	1140.	308.	≤ 316	≤ 313
	H	1080.	320.	843	≤ 312
	I	1220.	338.	≤ 308	-
IV	A	2450.	220.	≤ 315	≤ 311
	B	2290.	236.	304	≤ 311
	C	2550.	242.	≤ 324	1704
	D	2580.	255.	≤ 316	≤ 330
	E	2340.	264.	≤ 311	≤ 323
	F	2410.	278.	≤ 323	≤ 323
	G	2440.	289.	≤ 316	≤ 314
	H	2560.	298.	≤ 320	≤ 313
	I	2370.	307.	≤ 313	≤ 311
	K	2350.	321.	≤ 320	≤ 310
V	A	3800.	256.	-	≤ 329
	B	4810.	261.	-	≤ 322
	C	4750.	283.	346	≤ 318
	D	4110.	288.	1284	323
	E	4720.	297.	≤ 312	≤ 320
	F	5160.	303.	≤ 315	-
	G	5330.	308.	≤ 319	10
	H	4340.	314.	≤ 318	≤ 312

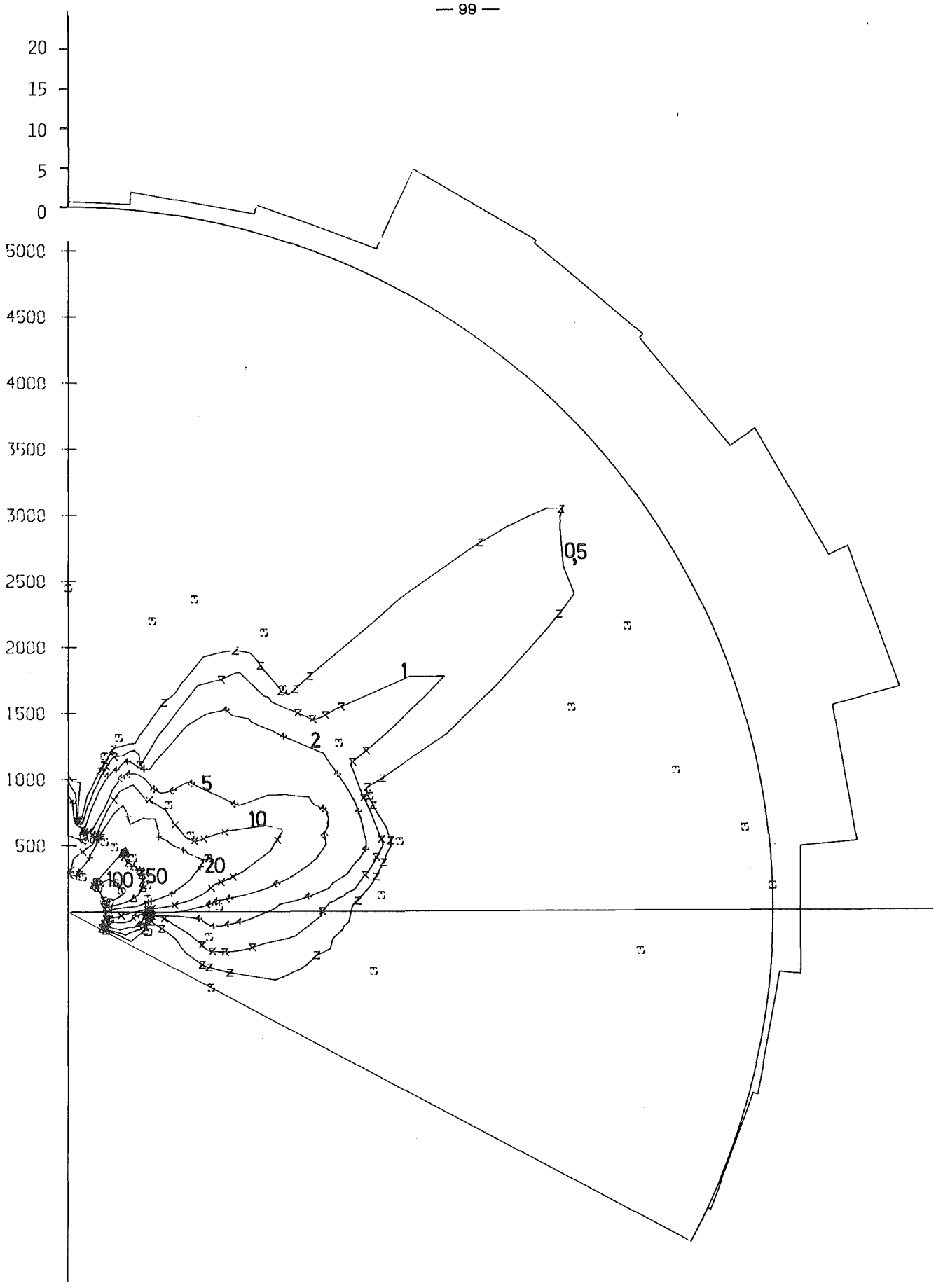

FIG. 12A: CONCENTRATION DISTRIBUTION IN 1/10**6 G/M**3
EXPERIMENT 64/1 CF2BR2 H = 160 M
FOR DETAILED INFORMATION SEE FIGURE 1A

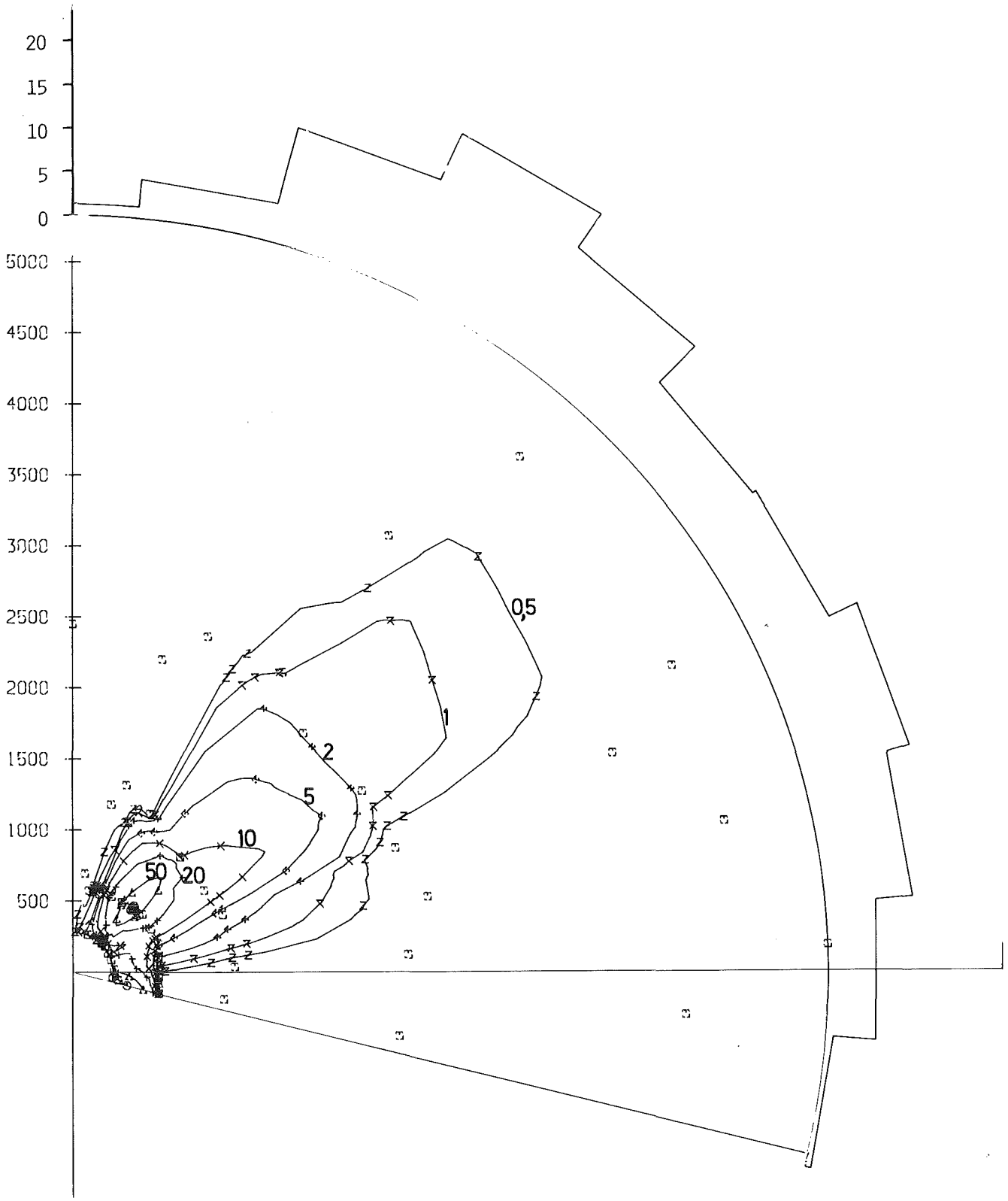

FIG. 12B: CONCENTRATION DISTRIBUTION IN 1/10××6 G/M××3
EXPERIMENT 64/2 CF2BR2 H = 160 M
FOR DETAILED INFORMATION SEE FIGURE 1A

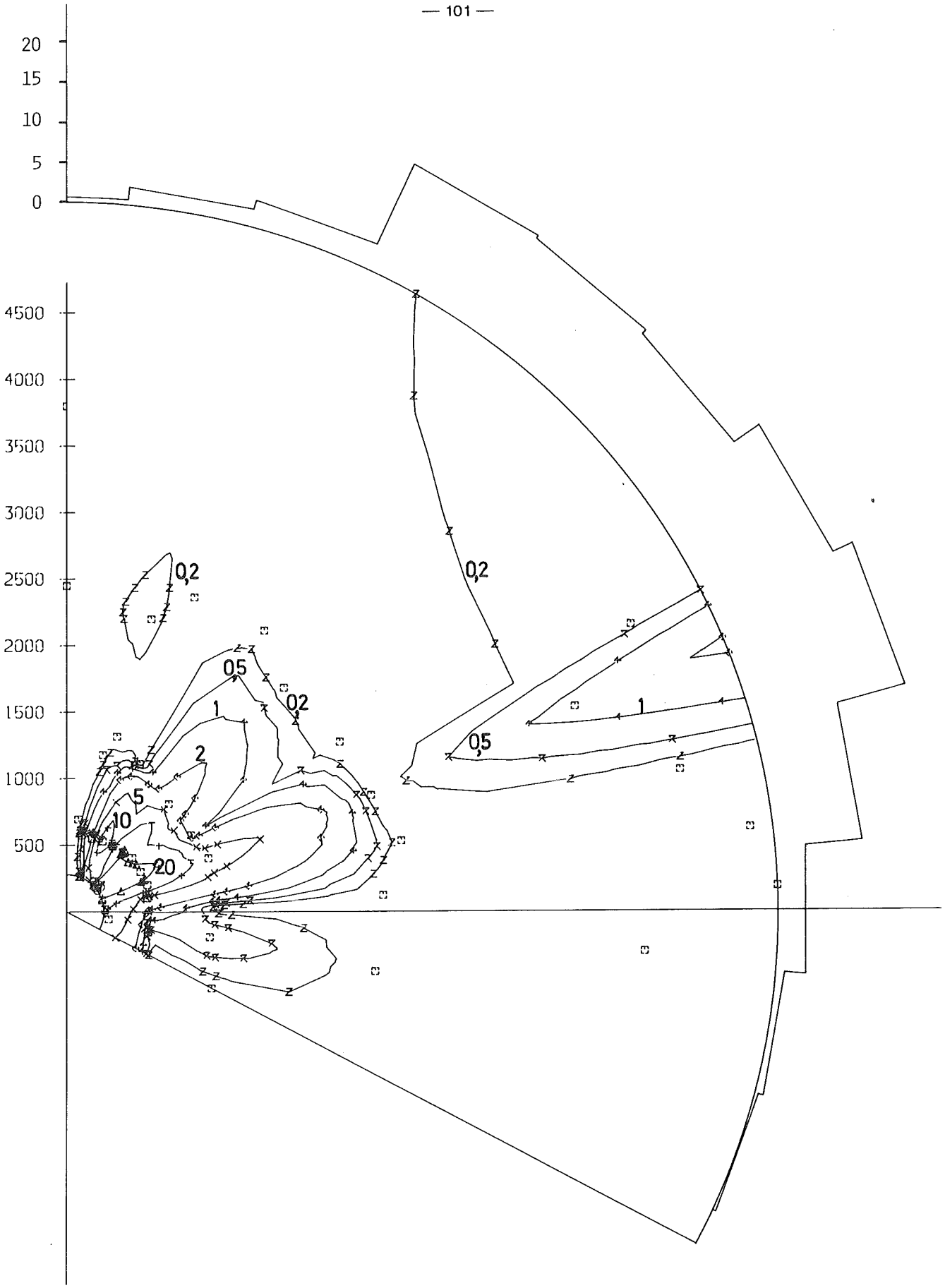

FIG. 12C: CONCENTRATION DISTRIBUTION IN 1/10××6 G/M××3
EXPERIMENT 64/1 CFCL3 H = 195 M
FOR DETAILED INFORMATION SEE FIGURE 1A

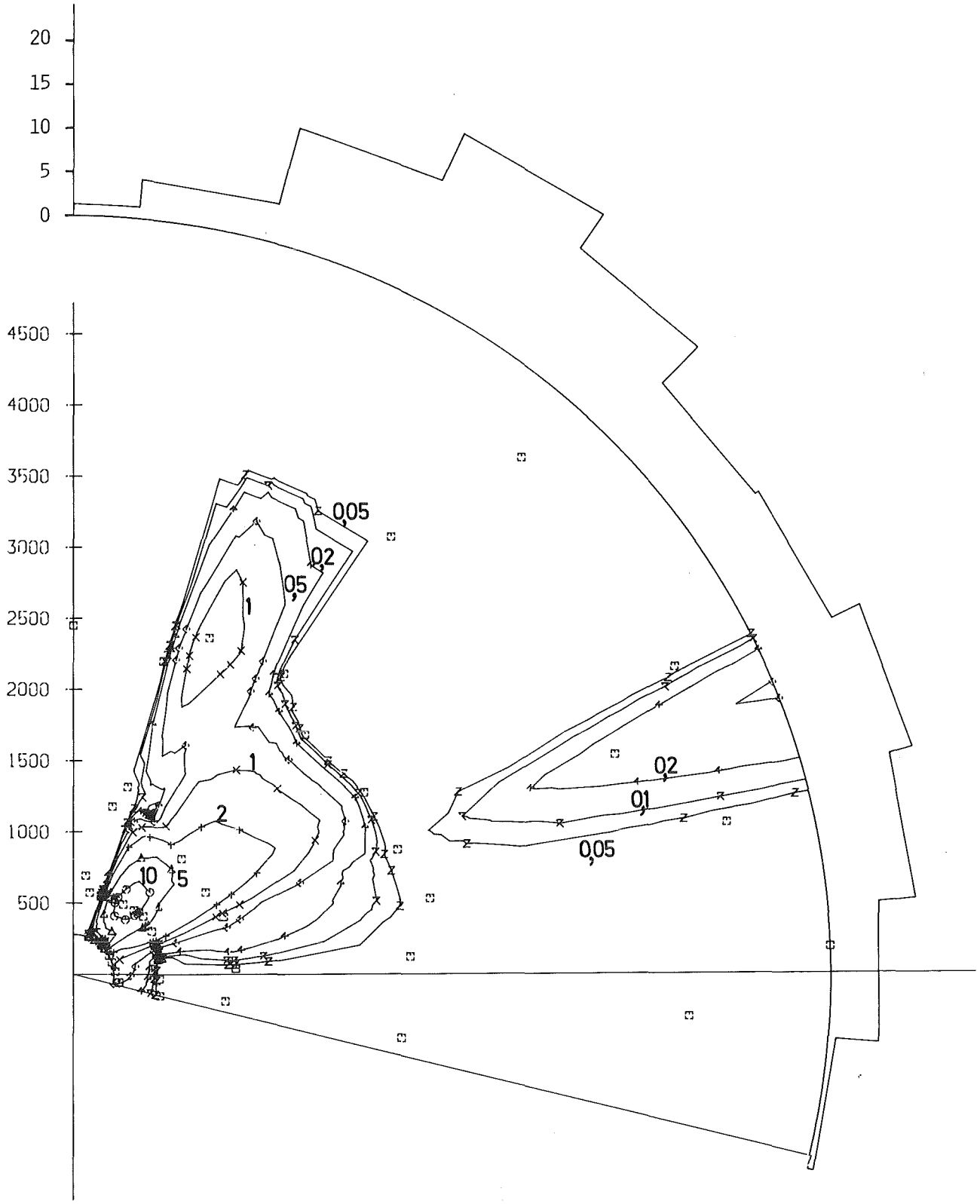

FIG. 12D: CONCENTRATION DISTRIBUTION IN 1/10xx6 G/Mxx3
EXPERIMENT 64/2 CFCL3 H = 195 M
FOR DETAILED INFORMATION SEE FIGURE 1A

TAB. 13A: METEOROLOGICAL DATA OF EXPERIMENT NO. 65

		HEIGHT	1. SAMPLING PERIOD			2. SAMPLING PERIOD		
		(M)	14.10	14.20	14.30	14.40	14.50	15.00
WIND DIRECTION (DEGREE)		40	199	208	209	200	186	177
		60	197	208	207	199	183	171
		100	201	206	206	199	187	178
		160	211	213	209	206	195	190
		200	221	222	215	215	207	200
WIND SPEED (M/S)		40	3.6	3.4	3.6	3.9	3.1	2.9
		60	4.4	4.1	4.2	4.6	3.6	3.4
		100	5.1	5.1	5.6	5.3	4.0	4.2
		160	5.2	5.6	6.2	5.4	4.3	4.9
		200	5.7	6.1	6.1	5.5	4.5	4.8
STANDARD DEVIATION OF WIND DIR. VECTOR VANE (DEGREE)	VER.	40	10.5	11.5	12.2	12.3	11.2	11.1
	HOR.		13.8	14.8	15.3	15.5	14.6	15.0
	VER.	100	5.7	5.9	6.0	5.5	5.7	6.2
	HOR.		5.7	6.4	6.1	5.9	5.4	6.6
	VER.	160	4.6	4.7	4.4	4.0	4.3	4.7
	HOR.		5.3	5.7	5.2	5.4	5.6	6.8
STAND. DEVIATION OF HOR. WIND DIRECTION WIND VANE (DEGREE)		100	9.4	8.1	9.8	5.9	8.8	10.4
TEMPERATURE GRADIENT (K/100M)		30/100	-1.3	-1.2	-1.2	-1.2	-1.2	-1.2
NET RADIATION (MW/CM**2)			11.4	8.7	10.3	8.7	9.0	10.7
DIFFUSION CATEGORY BASED ON ...	VER. FLUCTUATION		D			D		
	HOR. FLUCTUATION		D			D		
	TEMP. GRADIENT		C			C		
	SYNOP. OBSERV.		D			D		

TAB. 13B: EXPERIMENT 65 7. 6.79 14.00 - 15.00

TRACER AND EMISSION RATE: CF2BR2 22.70 G/S

POSITION		R (M)	ALPHA (DEGREE)	TRACER CONCENTRATION IN NG/M**3 SAMPL. PERIOD 1	SAMPL. PERIOD 2
I	A	350.	5.	≤ 62	≤ 54
	B	340.	12.	≤ 91	≤ 64
	C	350.	21.	≤ 51	≤ 63
	D	350.	35.	≤ 59	≤ 64
	E	350.	41.	≤ 59	≤ 56
	F	355.	55.	≤ 60	≤ 63
	G	335.	68.	≤ 59	-
	H	350.	77.	≤ 54	≤ 61
	I	345.	86.	≤ 64	≤ 64
	K	365.	95.	≤ 57	≤ 55
II	A	700.	7.	-	540
	B	700.	15.	≤ 63	1203
	C	700.	21.	-	2539
	D	690.	37.	≤ 57	≤ 52
	E	695.	45.	≤ 71	≤ 56
	F	700.	55.	≤ 81	≤ 97
	G	705.	65.	≤ 58	≤ 61
	H	695.	75.	≤ 62	≤ 55
	I	700.	88.	≤ 55	≤ 57
	K	695.	96.	≤ 58	≤ 59
III	A	1410.	3.	≤ 63	10442
	B	1425.	11.	-	8372
	C	1430.	23.	29129	26698
	D	1420.	43.	3530	≤ 67
	E	1400.	50.	≤ 76	≤ 82
	F	1510.	64.	≤ 79	≤ 65
IV	A	3175.	1.	≤ 79	≤ 83
	B	2900.	13.	≤ 72	≤ 81
	C	2830.	28.	34314	24856
	D	3050.	39.	-	2594
	E	2800.	55.	≤ 50	≤ 59
	F	2800.	67.	≤ 60	≤ 63
V	A	5750.	3.	≤ 49	≤ 40
	B	5925.	14.	≤ 55	≤ 38
	C	6050.	23.	≤ 49	≤ 53
	D	5825.	40.	10679	436
	E	5700.	48.	≤ 56	≤ 57
	F	5525.	60.	≤ 58	≤ 42
	G	5575.	68.	≤ 64	≤ 54

TAB. 13C: EXPERIMENT 65 7.6.79 14.00 - 15.00

TRACER AND EMISSION RATE: CFCL3 13.40 G/S

POSITION		R (M)	ALPHA (DEGREE)	TRACER CONCENTRATION IN NG/M**3 SAMPL. PERIOD 1	SAMPL. PERIOD 2
I	A	350.	5.	116	1123
	B	340.	12.	349	676
	C	350.	21.	533	714
	D	350.	35.	≤ 852	549
	E	350.	41.	570	581
	F	355.	55.	1706	435
	G	335.	68.	2877	-
	H	350.	77.	3202	4052
	I	345.	86.	936	424
	K	365.	95.	250	867
II	A	700.	7.	-	1158
	B	700.	15.	≤ 855	1467
	C	700.	21.	-	597
	D	690.	37.	1771	520
	E	695.	45.	1446	1664
	F	700.	55.	27337	2329
	G	705.	65.	198	1284
	H	695.	75.	≤ 853	374
	I	700.	88.	1043	653
	K	695.	96.	408	1499
III	A	1410.	3.	≤ 851	1346
	B	1425.	11.	-	1063
	C	1430.	23.	2013	2342
	D	1420.	43.	858	269
	E	1400.	50.	≤ 852	297
	F	1510.	64.	169	≤ 852
IV	A	3175.	1.	104	304
	B	2900.	13.	≤ 852	224
	C	2830.	28.	5025	8316
	D	3050.	39.	-	997
	E	2800.	55.	≤ 851	≤ 851
	F	2800.	67.	≤ 851	≤ 852
V	A	5750.	3.	561	220
	B	5925.	14.	79	≤ 852
	C	6050.	23.	≤ 852	≤ 851
	D	5825.	40.	3637	21
	E	5700.	48.	467	718
	F	5525.	60.	573	≤ 854
	G	5575.	68.	65	352

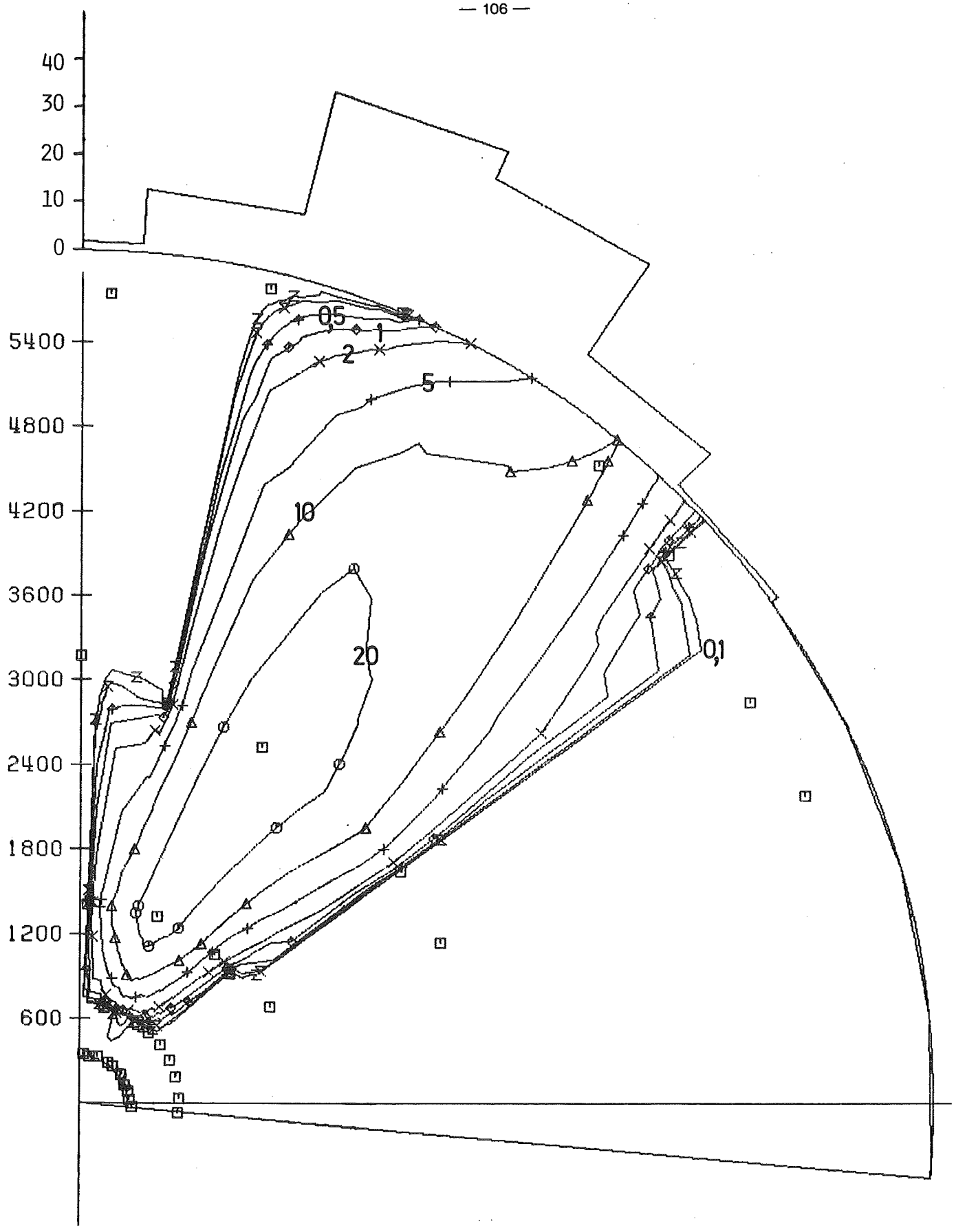

FIG. 13A: CONCENTRATION DISTRIBUTION IN 1/10xx6 G/Mxx3
EXPERIMENT 65/1 CF2BR2 H = 160 M
FOR DETAILED INFORMATION SEE FIGURE 1A

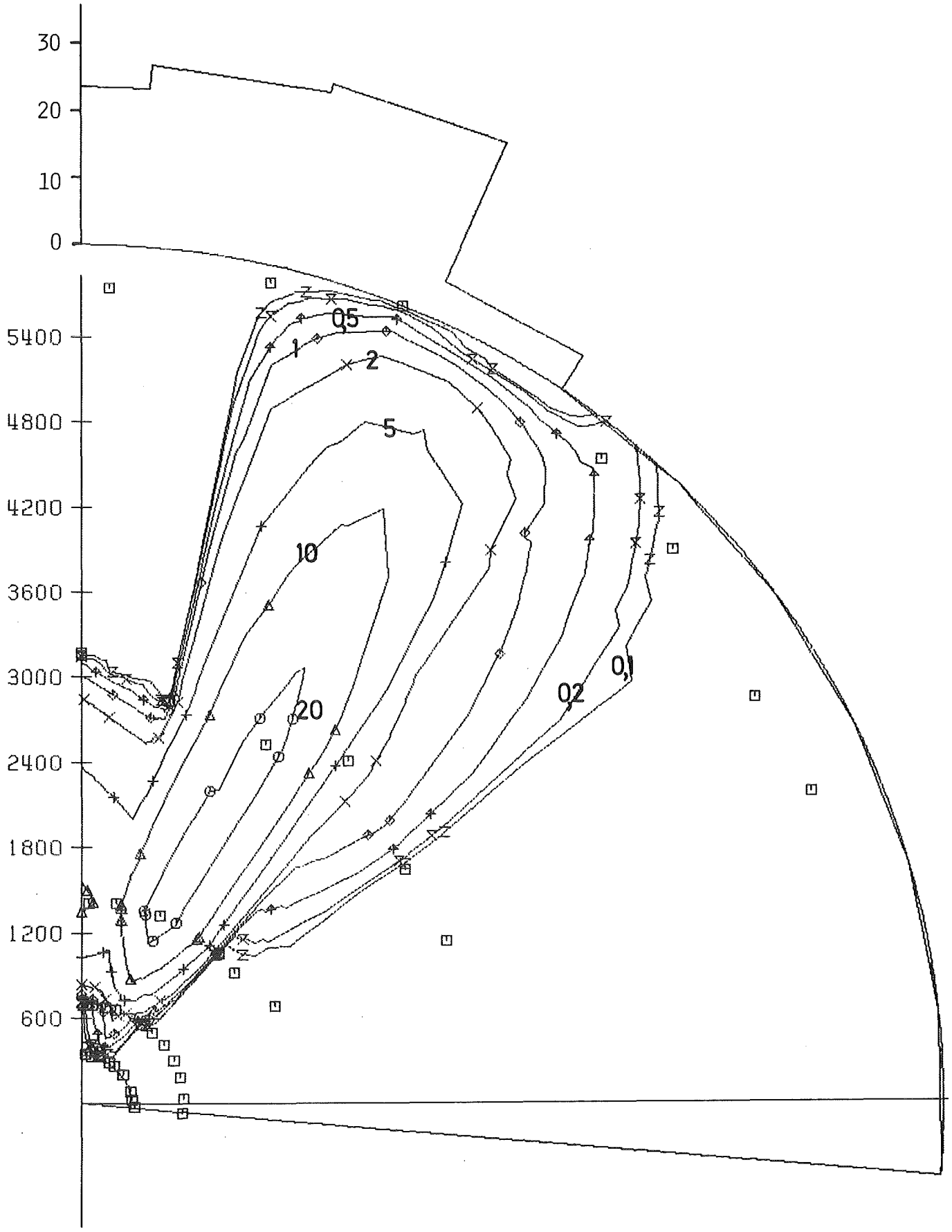

FIG. 13B: CONCENTRATION DISTRIBUTION IN 1/10××6 G/M××3
EXPERIMENT 65/2 CF2BR2 H = 160 M
FOR DETAILED INFORMATION SEE FIGURE 1A

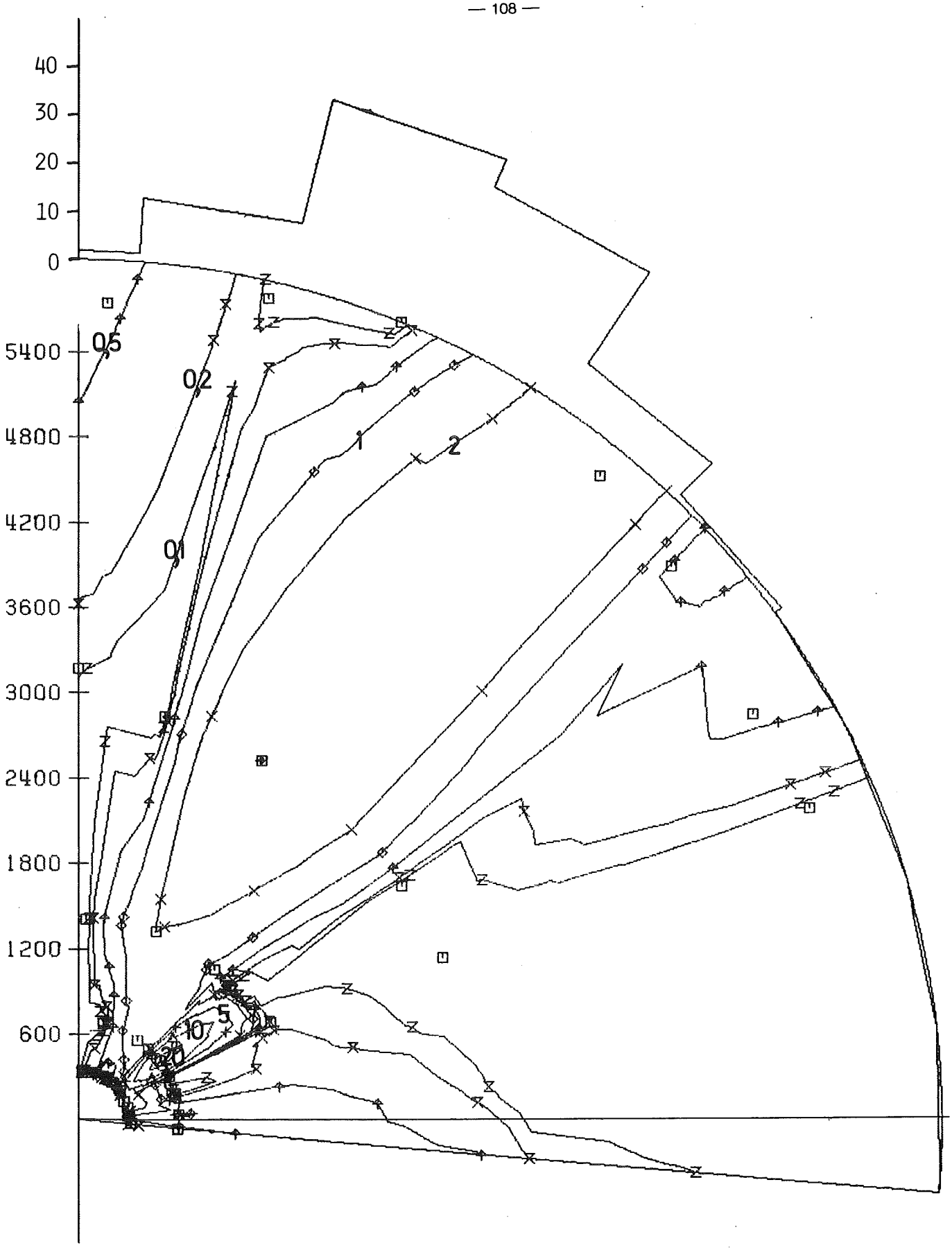

FIG. 13C: CONCENTRATION DISTRIBUTION IN 1/10**6 G/M**3
EXPERIMENT 65/1 CFCL3 H = 195 M
FOR DETAILED INFORMATION SEE FIGURE 1A

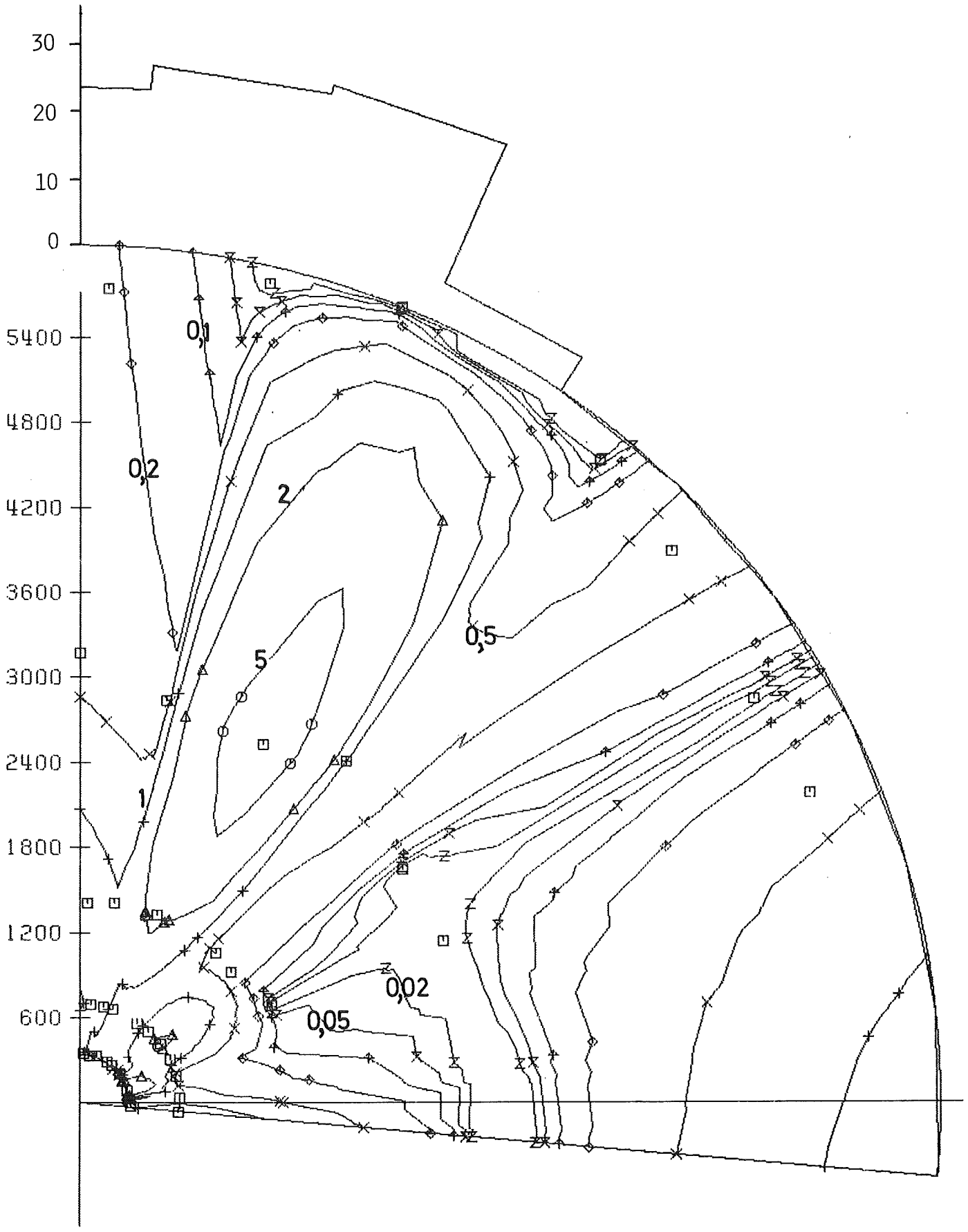

FIG. 13D: CONCENTRATION DISTRIBUTION IN 1/10××6 G/M××3
EXPERIMENT 65/2 CFCL3 H=195 M
FOR DETAILED INFORMATION SEE FIGURE 1A

TAB. 14A: METEOROLOGICAL DATA OF EXPERIMENT NO. 66

		HEIGHT (M)	1. SAMPLING PERIOD 14.10	14.20	14.30	2. SAMPLING PERIOD 14.40	14.50	15.00
WIND DIRECTION (DEGREE)		40	289	278	269	253	248	241
		60	286	275	265	253	246	244
		100	280	272	261	248	246	244
		160	277	273	259	246	244	246
		200	275	270	260	248	246	249
WIND SPEED (M/S)		40	3.6	4.0	4.5	3.2	4.0	4.3
		60	3.9	4.4	4.7	3.6	4.3	4.5
		100	4.5	4.5	4.7	3.7	4.4	4.8
		160	4.9	4.8	4.8	4.0	4.9	4.9
		200	5.0	5.2	5.0	4.1	5.3	5.1
STANDARD DEVIATION OF WIND DIR. VECTOR VANE (DEGREE)	VER.	40	14.2	14.4	12.8	12.1	13.5	12.5
	HOR.		16.5	17.3	15.6	13.6	17.4	17.5
	VER.	100	11.2	11.5	9.3	8.6	9.6	9.4
	HOR.		12.9	13.6	11.3	10.3	15.7	15.2
	VER.	160	10.1	10.5	9.4	8.5	9.2	9.2
	HOR.		7.9	9.1	8.2	7.6	9.8	9.9
STAND. DEVIATION OF HOR. WIND DIRECTION WIND VANE (DEGREE)		100	11.0	14.0	10.8	14.0	19.9	15.6
TEMPERATURE GRADIENT (K/100M)		30/100	-2.0	-1.6	-1.8	-1.6	-1.8	-1.7
NET RADIATION (MW/CM**2)			36.0	29.7	39.9	22.5	39.0	39.6
DIFFUSION CATEGORY BASED ON ...	VER. FLUCTUATION		B			C		
	HOR. FLUCTUATION		D			C		
	TEMP. GRADIENT		B			A		
	SYNOP. OBSERV.		B			B		

TAB. 14B: EXPERIMENT 66 26. 6.79 14.00 - 15.00

TRACER AND EMISSION RATE: CF2BR2 21.30 G/S

POSITION		R (M)	ALPHA (DEGREE)	TRACER CONCENTRATION IN NG/M**3 SAMPL. PERIOD 1	SAMPL. PERIOD 2
I	A	315.	31.	≤ 33	-
	B	250.	49.	≤ 35	≤ 35
	C	255.	59.	218	≤ 40
	D	270.	68.	216	5033
	E	245.	79.	124	7406
	F	250.	96.	≤ 37	166
II	A	485.	20.	≤ 30	≤ 37
	B	500.	50.	≤ 38	26987
	C	505.	60.	2492	94122
	D	515.	68.	3351	54422
	E	530.	78.	4841	36994
III	A	915.	19.	≤ 26	≤ 34
	B	1085.	26.	≤ 33	≤ 29
	C	1055.	33.	1783	≤ 36
	D	1120.	44.	≤ 38	27656
	E	1030.	50.	2971	33517
	F	1015.	60.	262	54368
	G	850.	81.	14726	119203
	H	980.	93.	39660	2969
IV	A	2030.	24.	-	≤ 37
	B	2010.	41.	≤ 34	≤ 25
	C	1830.	53.	≤ 26	1426
	D	1960.	62.	134	2420
	E	2170.	69.	≤ 27	4052
	F	2080.	76.	≤ 37	8918
	G	2010.	89.	1799	8547
	H	1840.	102.	4073	805
V	A	4010.	45.	≤ 36	≤ 40
	B	3970.	58.	≤ 42	≤ 39
	C	4080.	75.	≤ 32	1792
	D	4080.	83.	-	1059
	E	4070.	89.	454	772
	F	4040.	101.	≤ 36	≤ 36

TAB. 14C: EXPERIMENT 66 26.6.79 14.00 - 15.00

TRACER AND EMISSION RATE: CFCL3 13.70 G/S

POSITION		R (M)	ALPHA (DEGREE)	TRACER CONCENTRATION IN NG/M**3 SAMPL. PERIOD 1	SAMPL. PERIOD 2
I	A	315.	31.	≤ 308	-
	B	250.	49.	≤ 305	≤ 308
	C	255.	59.	≤ 311	≤ 317
	D	270.	68.	≤ 309	≤ 316
	E	245.	79.	≤ 311	≤ 309
	F	250.	96.	≤ 308	≤ 312
II	A	485.	20.	≤ 312	≤ 316
	B	500.	50.	≤ 323	7401
	C	505.	60.	533	14598
	D	515.	68.	≤ 312	9646
	E	530.	78.	≤ 315	7868
III	A	915.	19.	≤ 309	≤ 321
	B	1085.	26.	≤ 313	≤ 305
	C	1055.	33.	≤ 320	228
	D	1120.	44.	≤ 316	5713
	E	1030.	50.	1131	10434
	F	1015.	60.	≤ 313	24046
	G	850.	81.	2946	5913
	H	980.	93.	8189	1166
IV	A	2030.	24.	-	≤ 317
	B	2010.	41.	≤ 306	≤ 308
	C	1830.	53.	≤ 308	114
	D	1960.	62.	≤ 317	462
	E	2170.	69.	≤ 311	1285
	F	2080.	76.	≤ 313	3251
	G	2010.	89.	≤ 315	3058
	H	1840.	102.	1183	≤ 311
V	A	4010.	45.	≤ 307	≤ 306
	B	3970.	58.	≤ 315	≤ 309
	C	4080.	75.	≤ 313	296
	D	4080.	83.	-	≤ 314
	E	4070.	89.	≤ 315	284
	F	4040.	101.	≤ 309	≤ 311

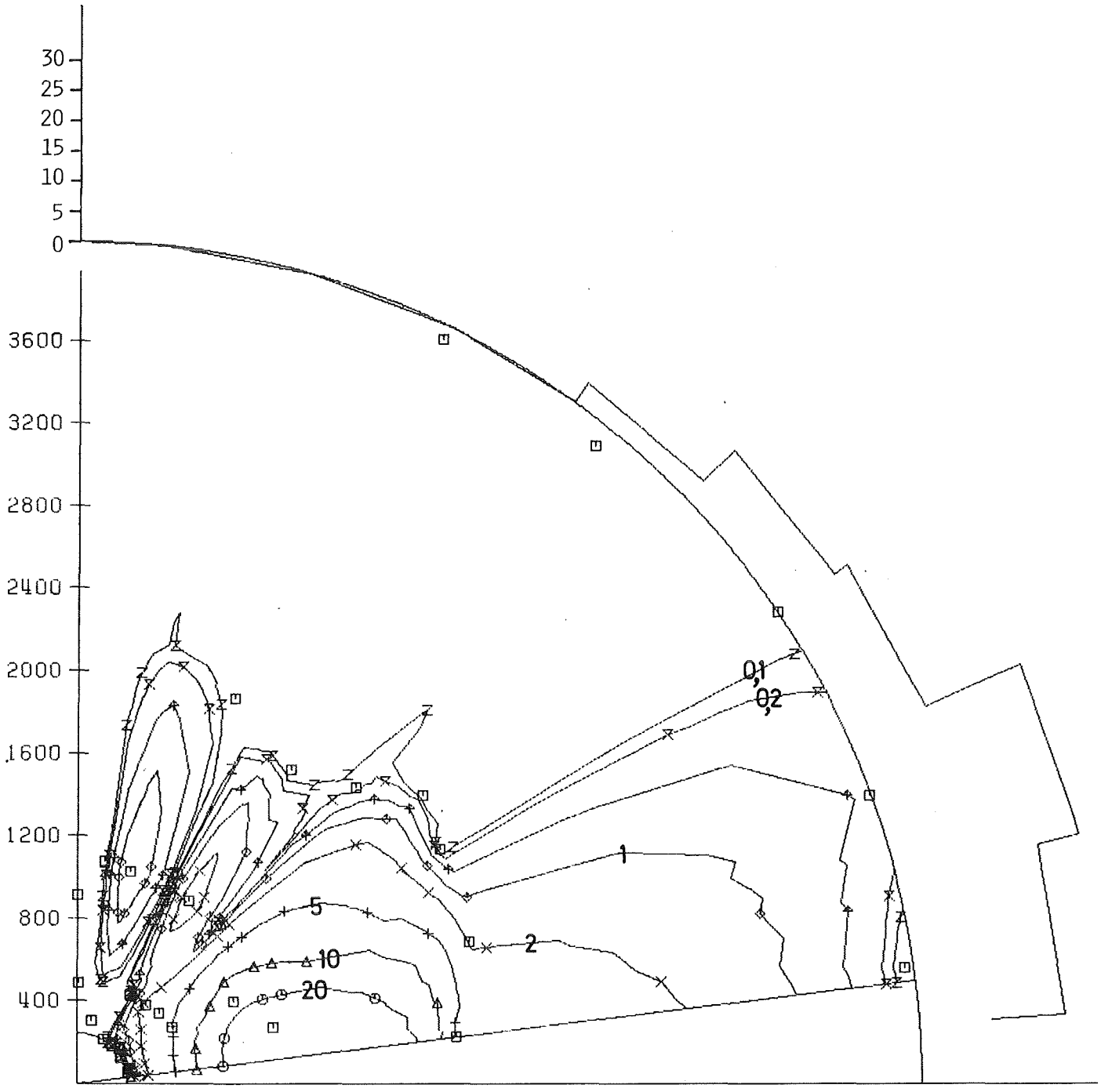

FIG. 14A: CONCENTRATION DISTRIBUTION IN 1/10××6 G/M××3
EXPERIMENT 66/1 CF2BR2 H = 160 M
FOR DETAILED INFORMATION SEE FIGURE 1A

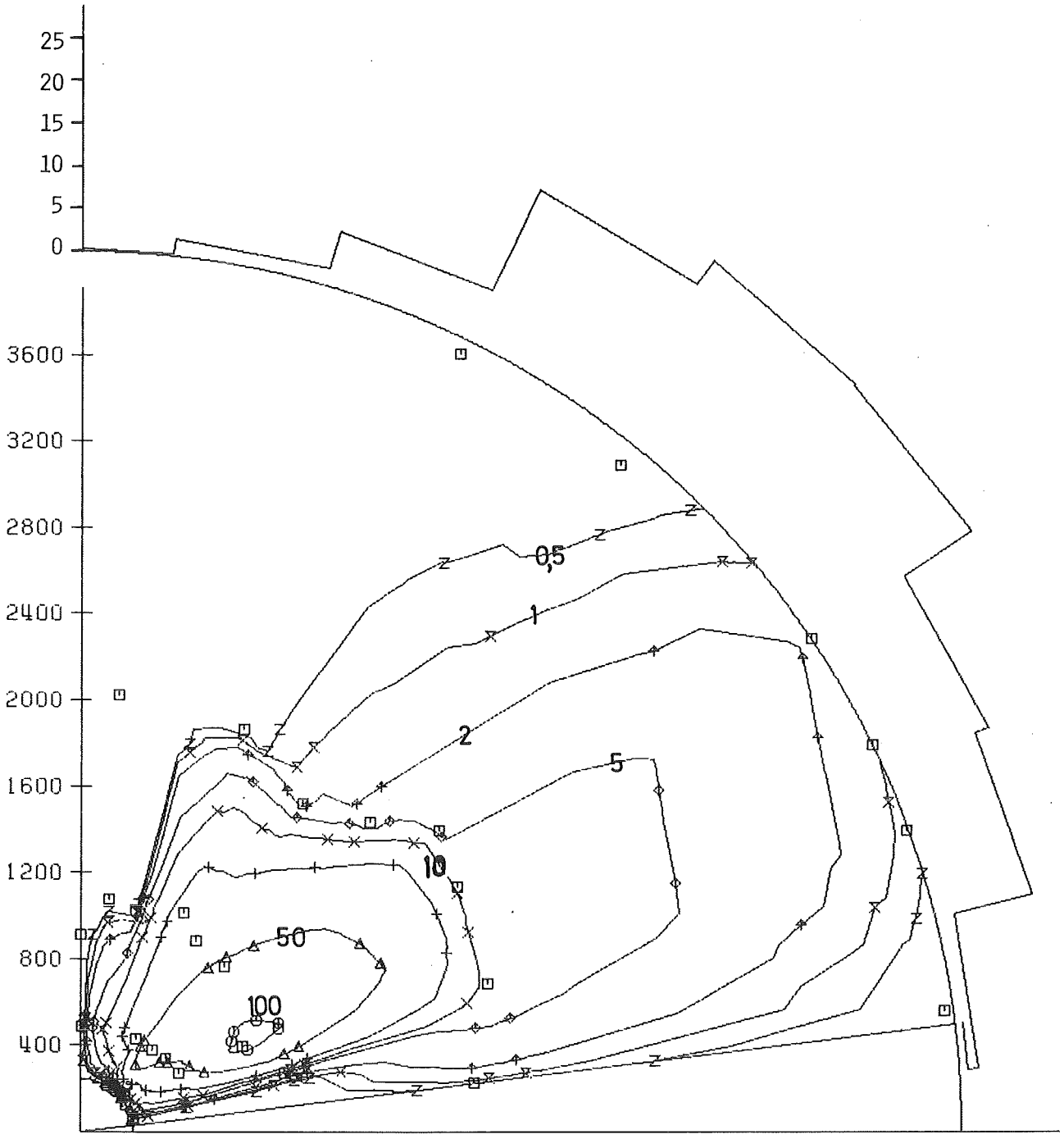

FIG. 14B: CONCENTRATION DISTRIBUTION IN 1/10**6 G/M**3
EXPERIMENT 66/2 CF2BR2 H=160 M
FOR DETAILED INFORMATION SEE FIGURE 1A

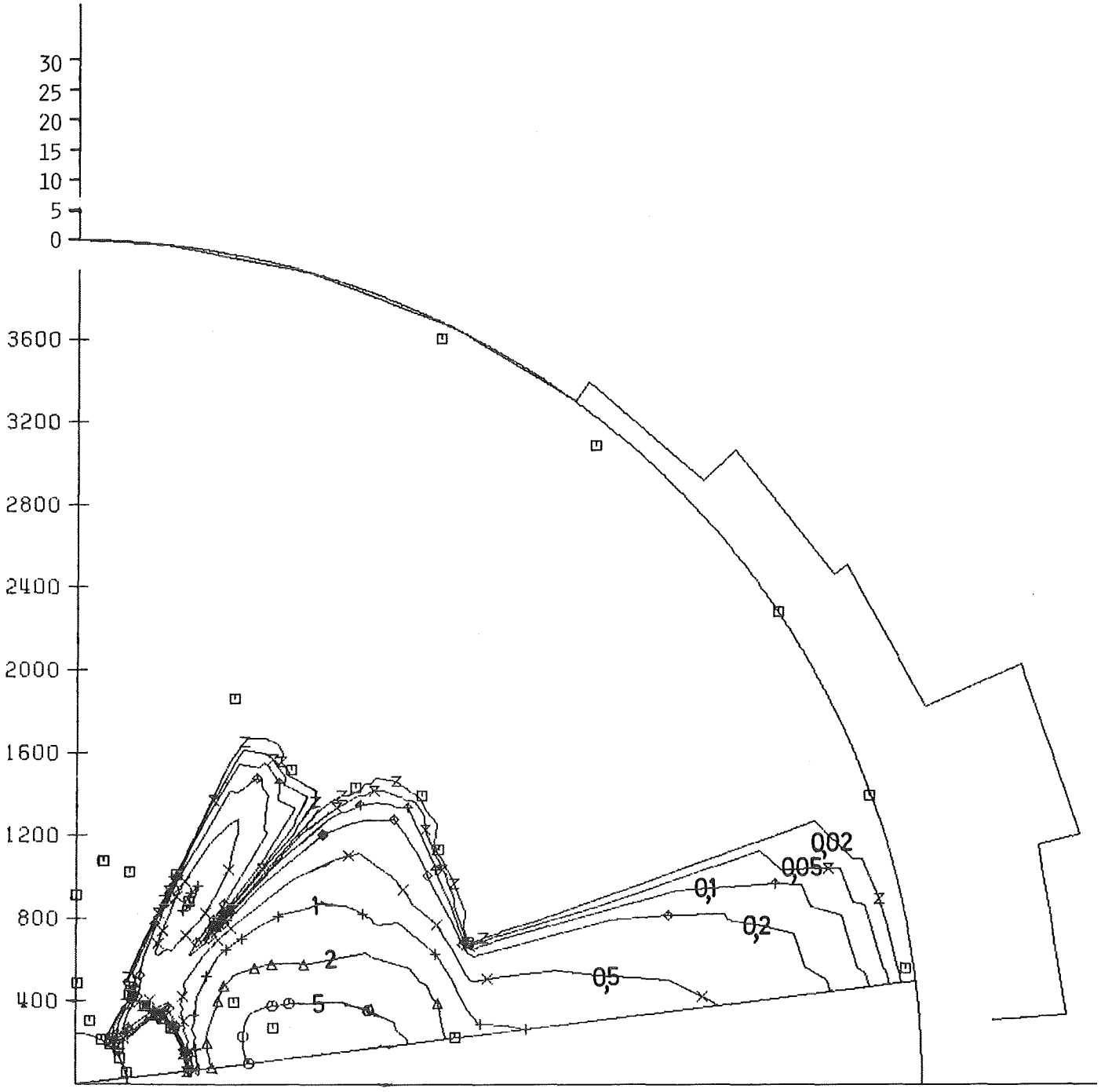

FIG. 14C: CONCENTRATION DISTRIBUTION IN 1/10××6 G/M××3
EXPERIMENT 66/1 CFCL3 H=195 M
FOR DETAILED INFORMATION SEE FIGURE 1A

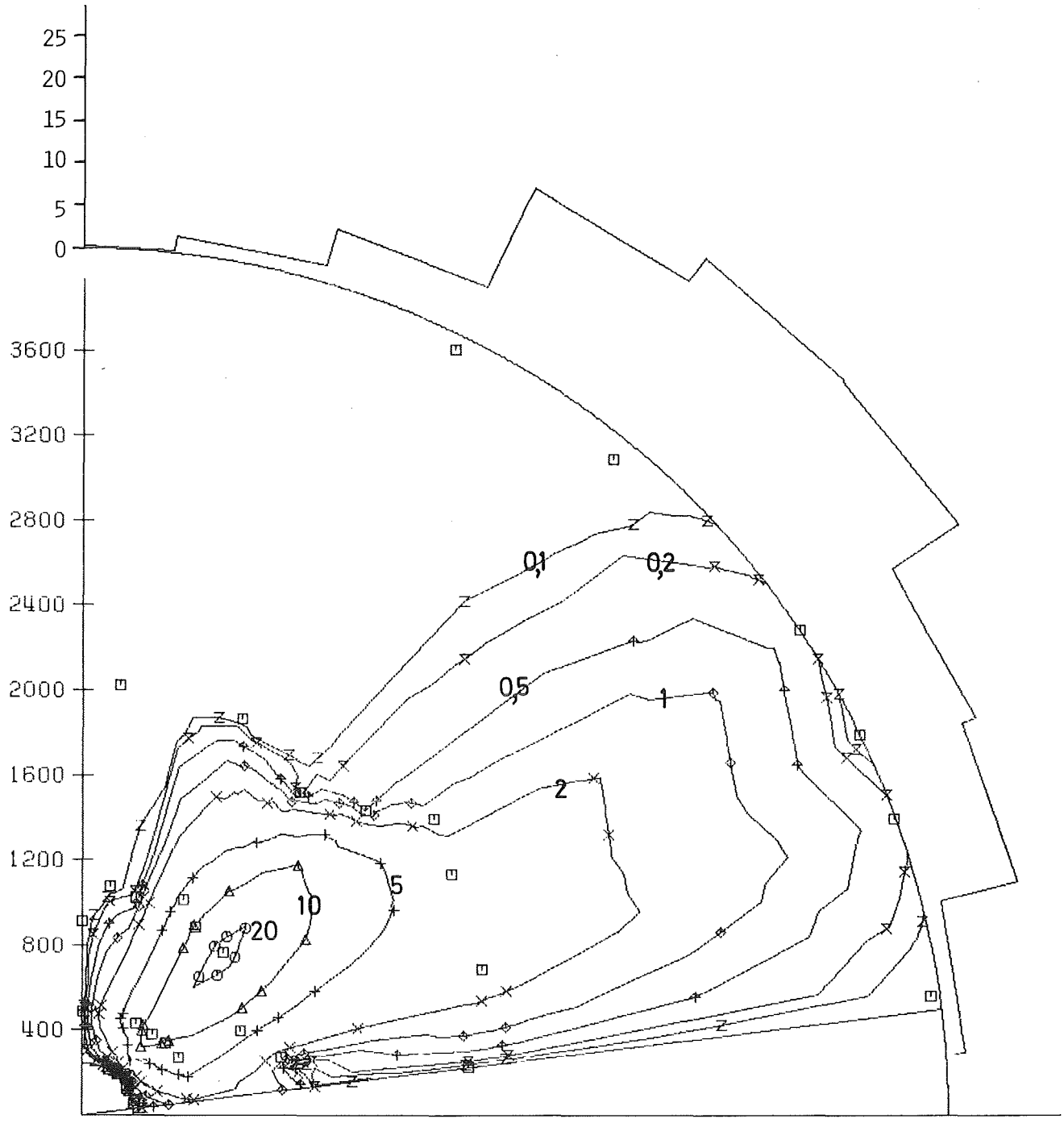

FIG. 14D: CONCENTRATION DISTRIBUTION IN 1/10××6 G/M××3
EXPERIMENT 66/2 CFCL3 H = 195 M
FOR DETAILED INFORMATION SEE FIGURE 1A

TAB. 15A: METEOROLOGICAL DATA OF EXPERIMENT NO. 67

		HEIGHT	1. SAMPLING PERIOD			2. SAMPLING PERIOD		
		(M)	14.10	14.20	14.30	14.40	14.50	15.00
WIND DIRECTION (DEGREE)		40	97	95	89	84	71	89
		60	96	91	85	86	67	84
		100	103	93	88	92	68	85
		160	104	94	89	85	74	84
		200	110	102	95	89	85	89
WIND SPEED (M/S)		40	5.8	4.8	5.3	3.2	4.2	5.2
		60	6.4	5.4	5.8	3.5	4.8	5.7
		100	6.6	5.8	6.0	3.8	5.3	6.2
		160	7.0	6.3	6.3	4.6	5.9	6.3
		200	7.4	7.0	7.0	5.1	6.1	6.8
STANDARD DEVIATION OF WIND DIR. VECTOR VANE (DEGREE)	VER.	40	13.2	13.1	12.9	14.4	15.9	14.7
	HOR.		16.8	14.6	15.6	16.3	21.2	24.8
	VER.	100	11.5	10.6	11.6	13.1	15.0	13.2
	HOR.		15.1	12.5	14.1	16.6	20.4	19.3
	VER.	160	12.4	10.8	11.0	12.5	13.3	13.1
	HOR.		11.0	8.7	9.6	11.4	14.2	13.2
STAND. DEVIATION OF HOR. WIND DIRECTION WIND VANE (DEGREE)		100	13.3	18.8	15.4	24.9	16.8	12.8
TEMPERATURE GRADIENT (K/100M)		30/100	-1.3	-1.6	-1.4	-1.5	-1.6	-1.4
NET RADIATION (MW/CM**2)			34.0	32.7	31.5	30.4	29.6	27.7
DIFFUSION CATEGORY BASED ON ...	VER. FLUCTUATION		B			B		
	HOR. FLUCTUATION		C			C		
	TEMP. GRADIENT		C			B		
	SYNOP. OBSERV.		B			B		

TAB. 15B: EXPERIMENT 67 5. 9.79 14.00 - 15.00

TRACER AND EMISSION RATE: CF2BR2 24.10 G/S

POSITION		R (M)	ALPHA (DEGREE)	TRACER CONCENTRATION IN NG/M**3 SAMPL. PERIOD 1	SAMPL. PERIOD 2
I	A	240.	191.	205	662
	B	250.	197.	-	752
	C	160.	210.	420	1035
	D	325.	211.	206	1136
	E	240.	219.	534	1370
	F	175.	237.	371	791
	G	235.	251.	1791	306
	H	145.	257.	336	953
	I	300.	263.	1822	618
	K	290.	274.	172	435
	L	135.	284.	524	-
	M	265.	297.	≤ 56	≤ 57
	N	180.	310.	104	≤ 54
II	A	350.	195.	719	582
	B	400.	204.	543	598
	C	425.	210.	595	474
	D	500.	227.	2520	2474
	E	415.	234.	1425	269
	F	455.	239.	1603	432
	G	400.	245.	800	959
	H	430.	250.	3699	1292
	I	390.	258.	603	295
	K	400.	266.	5204	635
	L	390.	272.	10320	7676
	M	440.	297.	≤ 61	≤ 60
	N	375.	306.	666	482
	O	335.	322.	≤ 57	≤ 55
III	A	710.	196.	≤ 55	≤ 62
	B	720.	209.	≤ 58	≤ 55
	C	1000.	217.	≤ 64	≤ 57
	D	980.	226.	≤ 58	≤ 56
	E	900.	239.	145	1294
	F	860.	249.	4871	821
	G	740.	261.	31751	2346
	H	710.	269.	48282	6822
	I	750.	285.	19859	1569
	K	760.	296.	132	1482
	L	740.	310.	314	134
	M	760.	321.	649	128

TAB. 15B: EXPERIMENT 67 5. 9.79 14.00 - 15.00

TRACER AND EMISSION RATE: CF2BR2 24.10 G/S

POSITION		R (M)	ALPHA (DEGREE)	TRACER CONCENTRATION IN NG/M**3 SAMPL. PERIOD 1	SAMPL. PERIOD 2
IV	A	1550.	196.	≤ 58	≤ 61
	B	1550.	205.	≤ 54	≤ 62
	C	1680.	218.	≤ 57	≤ 61
	D	1740.	224.	≤ 55	170
	E	1770.	235.	≤ 63	≤ 56
	F	1660.	244.	438	≤ 52
	G	1590.	250.	5491	563
	H	1580.	259.	1530	1033
	I	1590.	266.	12230	5190
	K	1690.	281.	4491	3974
	L	1700.	288.	7339	594
	M	1570.	295.	1481	208
	N	1650.	304.	514	394
	O	1620.	310.	129	170
V	A	3440.	196.	506	-
	B	3240.	207.	-	1030
	C	3120.	218.	2439	998
	D	3350.	225.	1786	1553
	E	3360.	239.	1885	3445
	F	3230.	245.	2379	-
	G	3160.	255.	2817	2134
	H	3240.	263.	1956	1759
	I	3080.	270.	-	3095
	K	2950.	277.	-	1858
	L	3040.	290.	1297	1700
	M	3320.	310.	-	381

TAB. 15C: EXPERIMENT 67 5.9.79 14.00 - 15.00

TRACER AND EMISSION RATE: CFCL3 15.30 G/S

POSITION		R (M)	ALPHA (DEGREE)	TRACER CONCENTRATION IN NG/M**3 SAMPL. PERIOD 1	SAMPL. PERIOD 2
I	A	240.	191.	41	669
	B	250.	197.	-	844
	C	160.	210.	341	1056
	D	325.	211.	136	849
	E	240.	219.	324	975
	F	175.	237.	≤ 637	306
	G	235.	251.	1396	523
	H	145.	257.	296	818
	I	300.	263.	563	451
	K	290.	274.	70	517
	L	135.	284.	821	-
	M	265.	297.	≤ 637	≤ 637
	N	180.	310.	≤ 638	≤ 635
II	A	350.	195.	450	332
	B	400.	204.	600	446
	C	425.	210.	194	391
	D	500.	227.	978	1244
	E	415.	234.	759	≤ 639
	F	455.	239.	883	98
	G	400.	245.	438	375
	H	430.	250.	98	≤ 639
	I	390.	258.	≤ 639	≤ 639
	K	400.	266.	≤ 638	≤ 638
	L	390.	272.	4934	7204
	M	440.	297.	391	≤ 639
	N	375.	306.	297	17
	O	335.	322.	≤ 637	≤ 640
III	A	710.	196.	277	-
	B	720.	209.	≤ 638	≤ 638
	C	1000.	217.	≤ 639	≤ 638
	D	980.	226.	≤ 639	33
	E	900.	239.	422	622
	F	860.	249.	140	192
	G	740.	261.	4009	692
	H	710.	269.	32263	824
	I	750.	285.	3488	313
	K	760.	296.	≤ 639	1111
	L	740.	310.	339	52
	M	760.	321.	662	≤ 640

TAB. 15C: EXPERIMENT 67 5.9.79 14.00 - 15.00

TRACER AND EMISSION RATE: CFCL3 15.30 G/S

POSITION		R (M)	ALPHA (DEGREE)	TRACER CONCENTRATION IN NG/M**3 SAMPL. PERIOD 1	SAMPL. PERIOD 2
IV	A	1550.	196.	251	3
	B	1550.	205.	179	171
	C	1680.	218.	≤ 640	≤ 638
	D	1740.	224.	≤ 637	82
	E	1770.	235.	≤ 637	≤ 635
	F	1660.	244.	487	≤ 637
	G	1590.	250.	1655	67
	H	1580.	259.	2356	728
	I	1590.	266.	7482	2096
	K	1690.	281.	2050	2108
	L	1700.	288.	4696	418
	M	1570.	295.	1994	741
	N	1650.	304.	308	352
	O	1620.	310.	≤ 636	86
V	A	3440.	196.	≤ 639	-
	B	3240.	207.	-	301
	C	3120.	218.	1405	185
	D	3350.	225.	584	588
	E	3360.	239.	850	1611
	F	3230.	245.	2248	-
	G	3160.	255.	1003	801
	H	3240.	263.	1540	588
	I	3080.	270.	-	1415
	K	2950.	277.	-	258
	L	3040.	290.	240	441
	M	3320.	310.	-	≤ 642

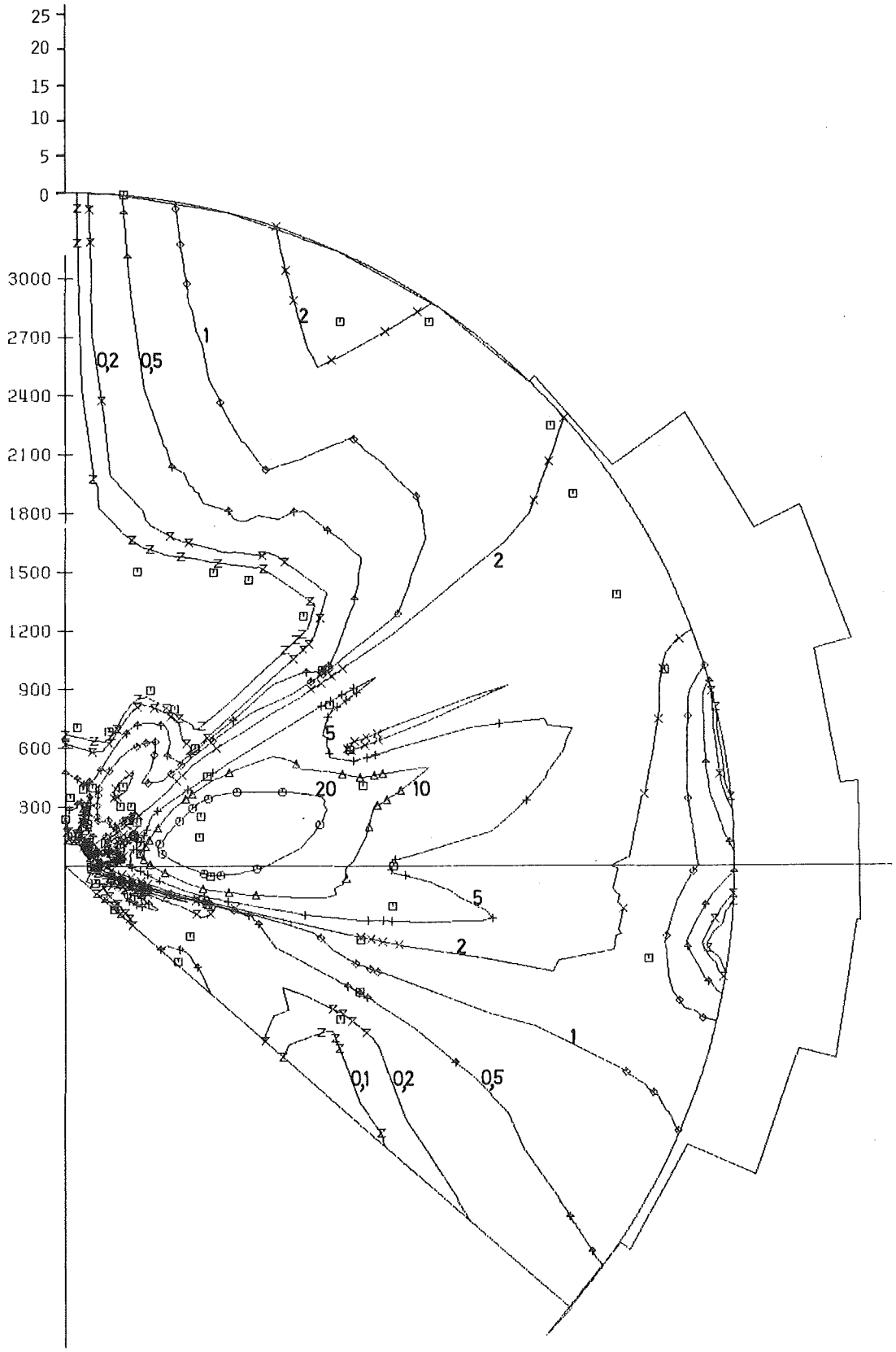

FIG. 15A: CONCENTRATION DISTRIBUTION IN 1/10xx6 G/Mxx3
EXPERIMENT 67/1 CF2BR2 H = 160 M
FOR DETAILED INFORMATION SEE FIGURE 1A

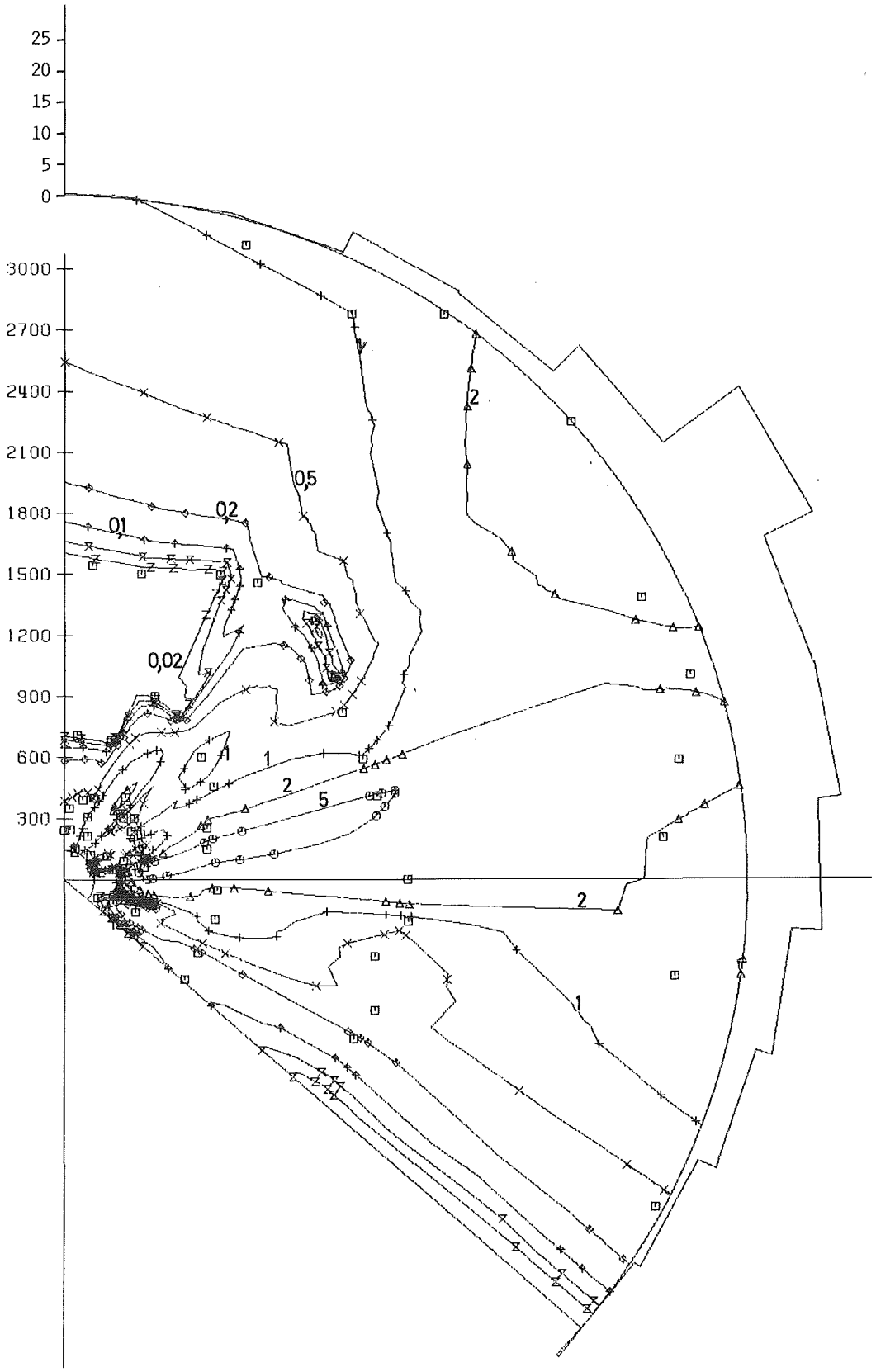

FIG. 15B: CONCENTRATION DISTRIBUTION IN 1/10××6 G/M××3
EXPERIMENT 67/2 CF2BR2 H = 160 M
FOR DETAILED INFORMATION SEE FIGURE 1A

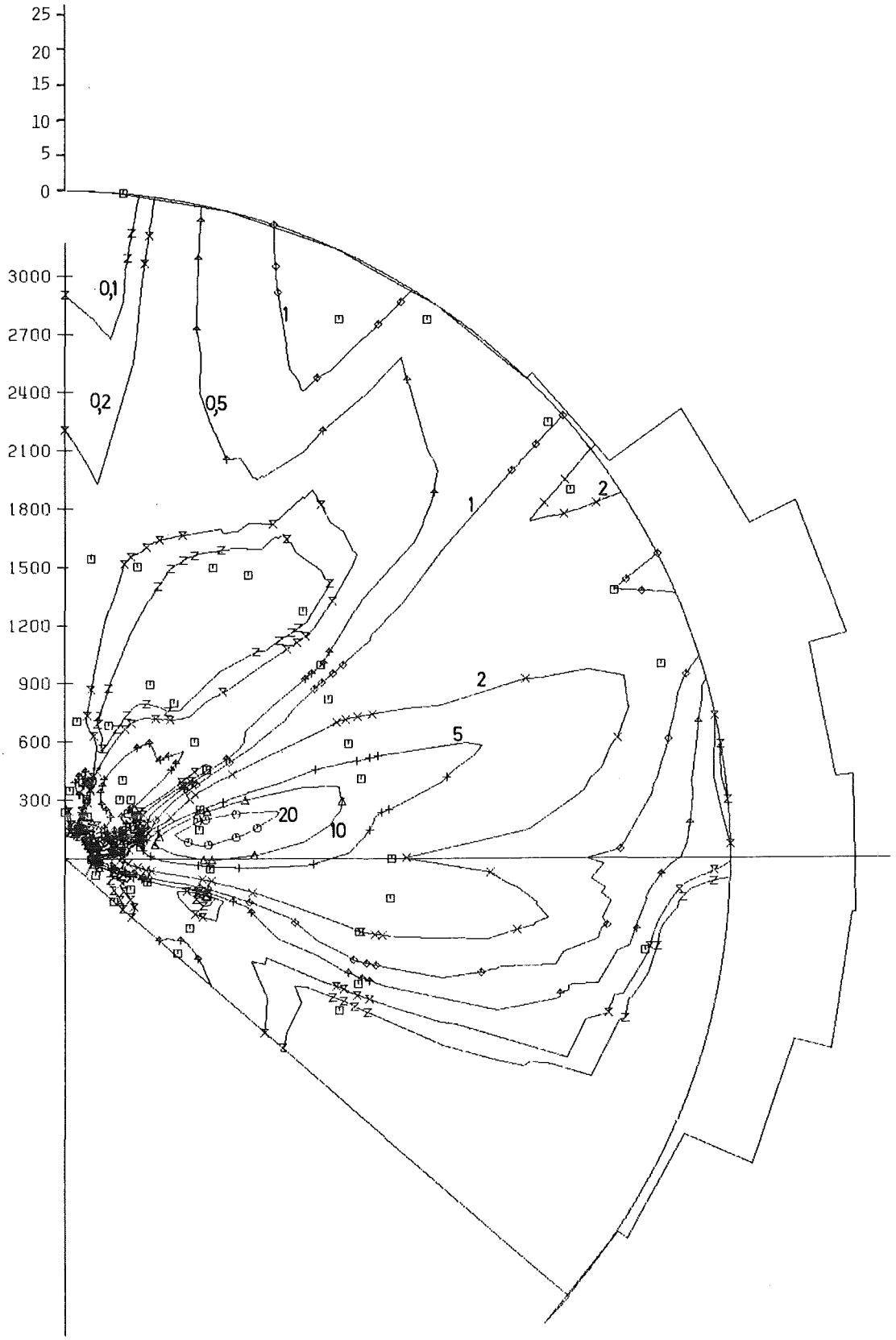

FIG. 15C: CONCENTRATION DISTRIBUTION IN 1/10**6 G/M**3
EXPERIMENT 67/1 CFCL3 H = 195 M
FOR DETAILED INFORMATION SEE FIGURE 1A

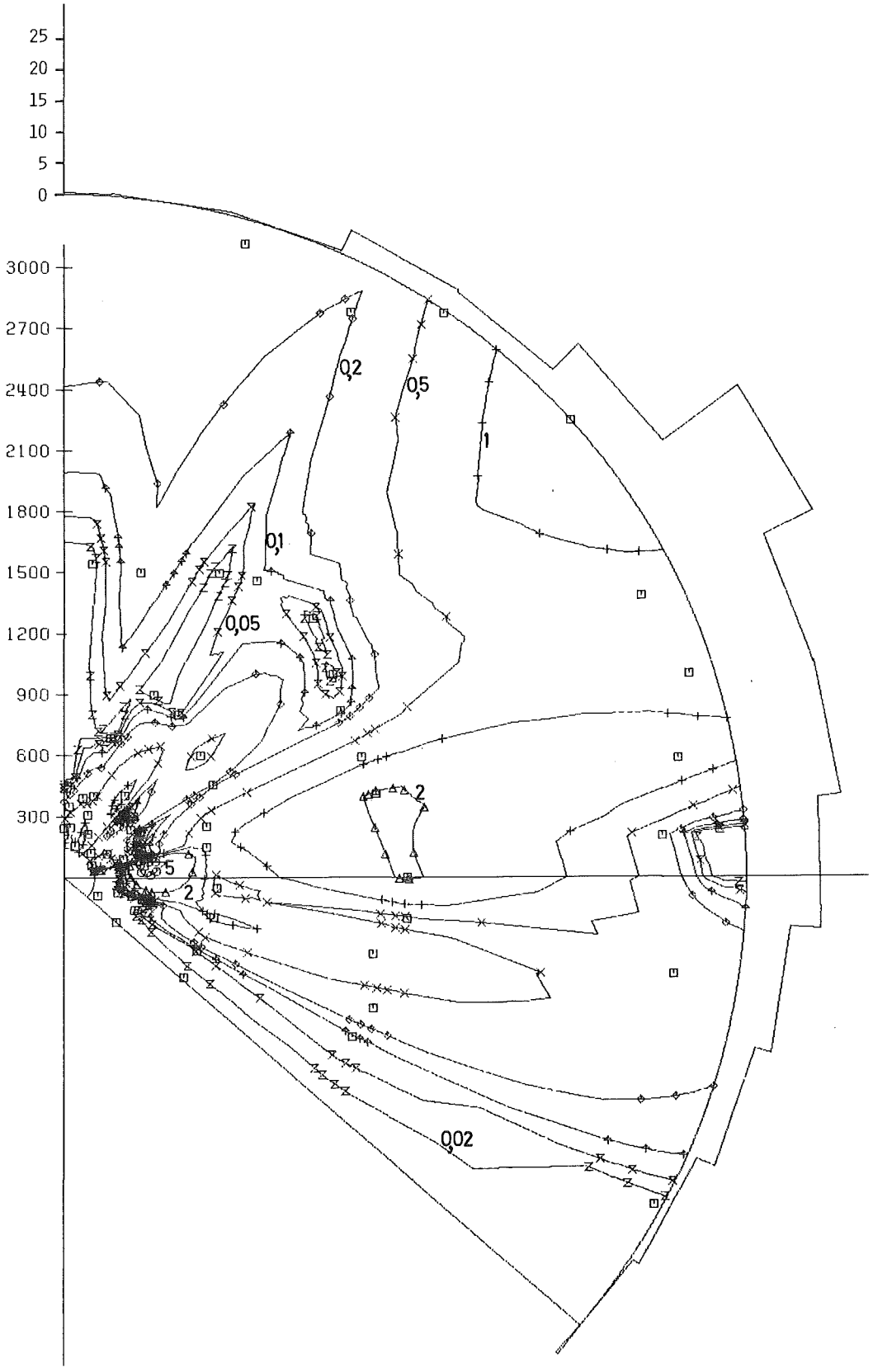

FIG. 15D: CONCENTRATION DISTRIBUTION IN 1/10xx6 G/Mxx3
EXPERIMENT 67/2 CFCL3 H = 195 M
FOR DETAILED INFORMATION SEE FIGURE 1A

TAB. 16A: METEOROLOGICAL DATA OF EXPERIMENT NO. 68

		HEIGHT (M)	1. SAMPLING PERIOD 14.10	14.20	14.30	2. SAMPLING PERIOD 14.40	14.50	15.00
WIND DIRECTION (DEGREE)		40	61	69	72	64	53	56
		60	60	67	68	59	52	54
		100	60	67	67	58	56	57
		160	63	70	66	55	57	58
		200	68	76	69	61	61	62
WIND SPEED (M/S)		40	3.1	4.2	3.6	2.8	3.9	4.0
		60	3.9	4.6	4.2	3.2	4.5	5.0
		100	4.6	5.4	4.8	3.7	5.1	5.9
		160	5.1	6.1	5.3	4.3	5.8	6.5
		200	6.0	6.6	5.8	5.0	6.4	7.3
STANDARD DEVIATION OF	VER.	40	13.4	13.0	12.4	11.5	10.7	11.2
	HOR.		12.1	12.4	12.0	10.6	10.4	10.4
WIND DIR. VECTOR VANE (DEGREE)	VER.	100	8.1	7.3	6.8	6.6	7.4	6.8
	HOR.		9.4	8.7	8.0	7.9	9.5	8.9
	VER.	160	6.5	5.7	4.8	4.6	5.2	4.8
	HOR.		6.0	6.0	4.8	4.9	6.4	5.8
STAND. DEVIATION OF HOR. WIND DIRECTION WIND VANE (DEGREE)		100	7.1	6.5	7.4	11.0	11.6	5.8
TEMPERATURE GRADIENT (K/100M)		30/100	-1.3	-1.2	-1.2	-1.1	-1.1	-1.1
NET RADIATION (MW/CM**2)			6.1	3.1	1.5	4.6	2.3	0.4
DIFFUSION CATEGORY BASED ON ...	VER. FLUCTUATION		C			D		
	HOR. FLUCTUATION		D			D		
	TEMP. GRADIENT		C			C		
	SYNOP. OBSERV.		C			C		

TAB. 16B: EXPERIMENT 68 10. 1.80 14.00 - 15.00

TRACER AND EMISSION RATE: CF2BR2 21.30 G/S

POSITION		R (M)	ALPHA (DEGREE)	TRACER CONCENTRATION IN NG/M**3 SAMPL. PERIOD 1	SAMPL. PERIOD 2
I	A	305.	227.	≤ 56	≤ 61
	B	300.	233.	≤ 56	≤ 64
	C	320.	242.	≤ 50	≤ 50
	D	280.	250.	≤ 62	≤ 71
	E	325.	256.	≤ 63	≤ 58
II	A	585.	200.	-	≤ 53
	B	600.	213.	≤ 61	≤ 63
	C	630.	224.	≤ 65	811
	D	645.	241.	1731	136
	E	620.	248.	517	≤ 61
	F	635.	255.	≤ 59	≤ 63
	G	755.	260.	≤ 62	≤ 60
III	A	1050.	212.	≤ 66	≤ 72
	B	1000.	219.	≤ 76	269
	C	980.	226.	≤ 77	5457
	D	1350.	235.	29274	27017
	E	1270.	241.	31651	26002
	F	1220.	245.	31585	11624
	G	1110.	255.	16595	742
	H	1160.	269.	1988	≤ 78
IV	A	2340.	212.	-	≤ 51
	B	2360.	216.	-	363
	C	2440.	221.	≤ 56	1741
	D	2550.	226.	≤ 53	4648
	E	2490.	232.	3697	7209
	F	2550.	238.	24947	10971
	G	2530.	244.	24810	27928
	H	2490.	248.	15521	17490
	I	2430.	259.	1842	-
	K	2320.	266.	≤ 58	≤ 50
	L	2350.	275.	≤ 53	≤ 50
V	A	4830.	203.	≤ 55	≤ 53
	B	4990.	211.	≤ 56	≤ 53
	C	4850.	226.	≤ 56	≤ 58
	D	4880.	232.	797	1351
	E	5250.	237.	3467	7484
	F	5230.	242.	17323	18988
	G	5430.	248.	4197	10232
	H	5420.	252.	552	1654
	I	5580.	256.	≤ 65	≤ 60
	K	4890.	264.	-	≤ 58
	L	4330.	269.	-	≤ 53

TAB. 16C: EXPERIMENT 68 10.1.80 14.00 - 15.00

TRACER AND EMISSION RATE: CFCL3 14.70 G/S

POSITION		R (M)	ALPHA (DEGREE)	TRACER CONCENTRATION IN NG/M**3 SAMPL. PERIOD 1	SAMPL. PERIOD 2
I	A	305.	227.	≤ 270	71
	B	300.	233.	37	≤ 269
	C	320.	242.	≤ 268	228
	D	280.	250.	≤ 270	≤ 272
	E	325.	256.	≤ 270	63
II	A	585.	200.	-	7
	B	600.	213.	≤ 271	199
	C	630.	224.	147	65
	D	645.	241.	192	≤ 270
	E	620.	248.	≤ 271	337
	F	635.	255.	61	167
	G	755.	260.	252	155
III	A	1050.	212.	20	44
	B	1000.	219.	≤ 267	≤ 269
	C	980.	226.	84	450
	D	1350.	235.	3081	6809
	E	1270.	241.	7058	5535
	F	1220.	245.	4430	2191
	G	1110.	255.	3617	497
	H	1160.	269.	474	905
IV	A	2340.	212.	-	≤ 267
	B	2360.	216.	-	27
	C	2440.	221.	≤ 270	469
	D	2550.	226.	≤ 270	2775
	E	2490.	232.	1714	3440
	F	2550.	238.	10849	4978
	G	2530.	244.	13240	10321
	H	2490.	248.	6631	4531
	I	2430.	259.	1427	-
	K	2320.	266.	184	18
	L	2350.	275.	32	303
V	A	4830.	203.	374	433
	B	4990.	211.	428	822
	C	4850.	226.	842	513
	D	4880.	232.	776	1439
	E	5250.	237.	2270	4484
	F	5230.	242.	10230	11822
	G	5430.	248.	3875	5999
	H	5420.	252.	993	2785
	I	5580.	256.	1182	753
	K	4890.	264.	-	763
	L	4330.	269.	-	456

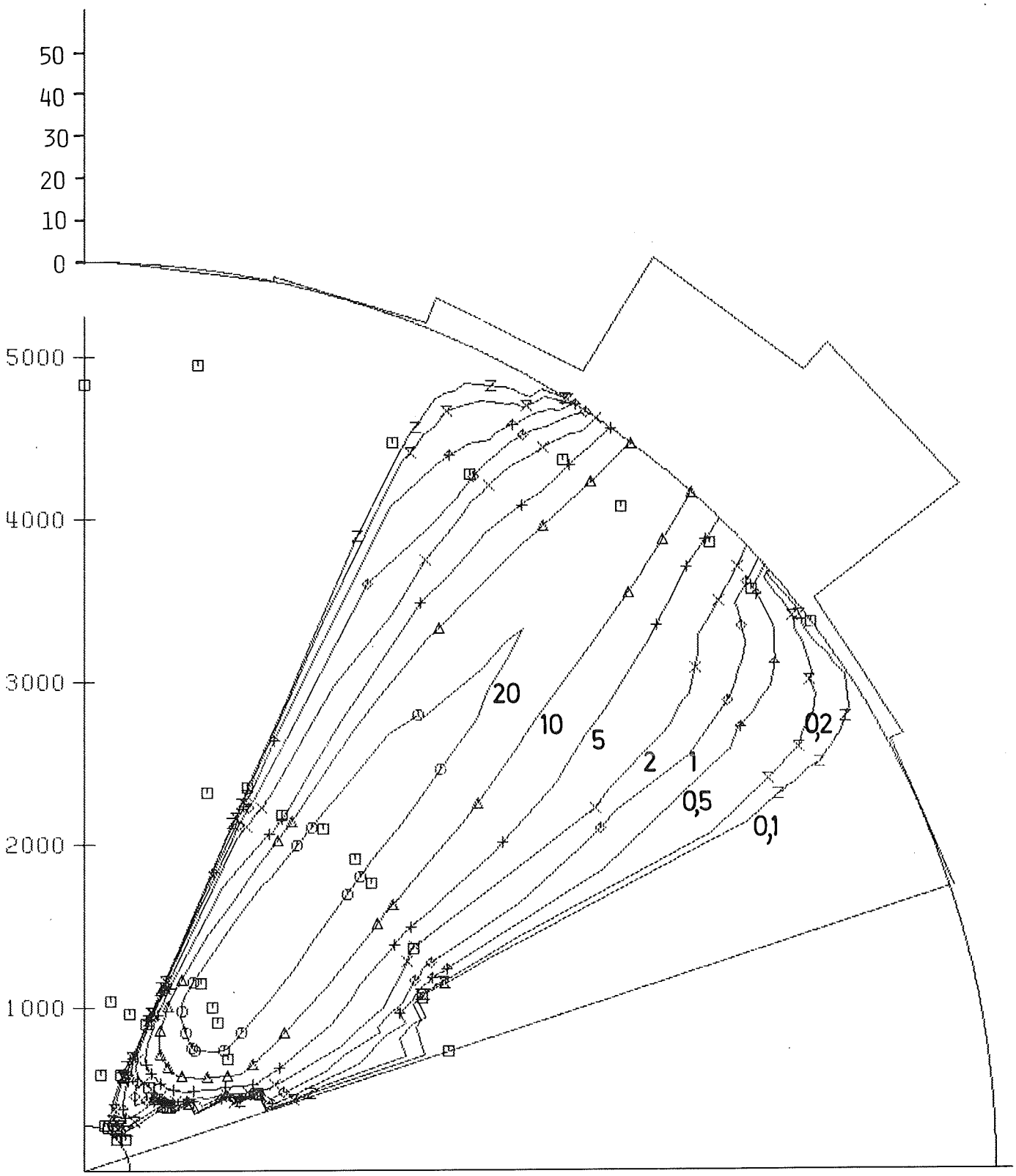

FIG. 16A: CONCENTRATION DISTRIBUTION IN 1/10xx6 G/Mxx3
EXPERIMENT 68/1 CF2BR2 H = 160 M
FOR DETAILED INFORMATION SEE FIGURE 1A

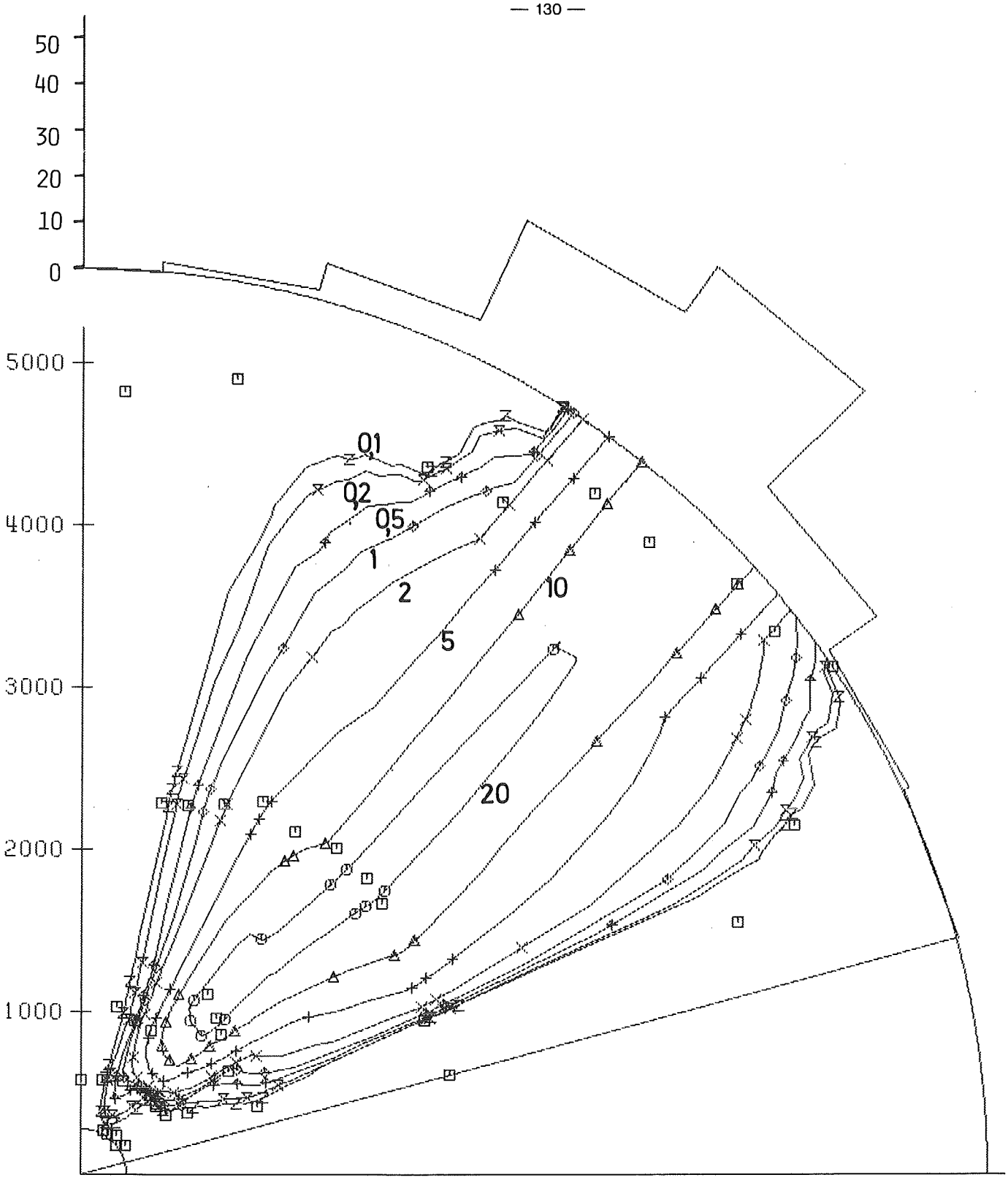

FIG. 16B: CONCENTRATION DISTRIBUTION IN 1/10××6 G/M××3
EXPERIMENT 68/2 CF2BR2 H = 160 M
FOR DETAILED INFORMATION SEE FIGURE 1A

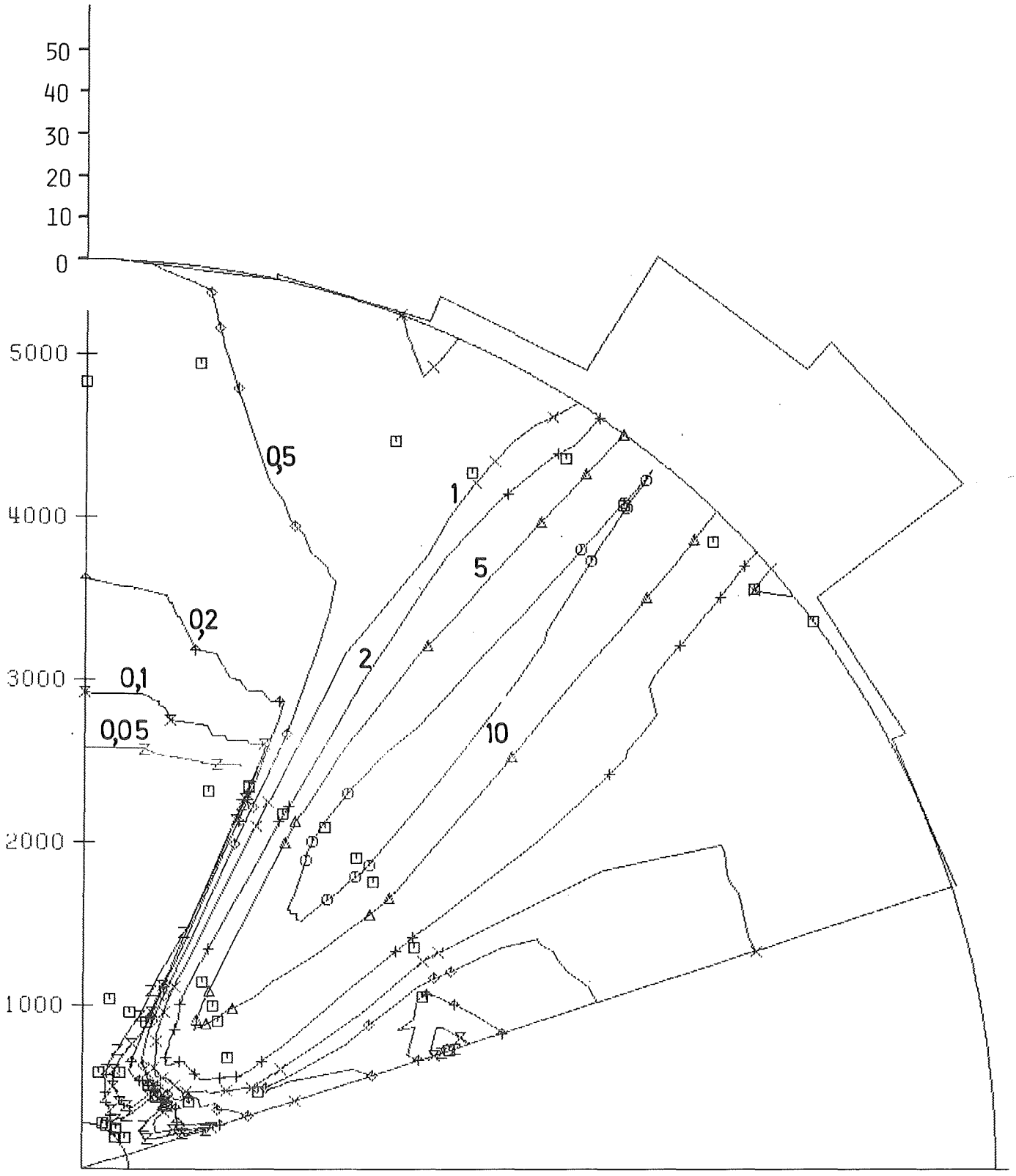

FIG. 16C: CONCENTRATION DISTRIBUTION IN 1/10××6 G/M××3
EXPERIMENT 68/1 CFCL3 H = 195 M
FOR DETAILED INFORMATION SEE FIGURE 1A

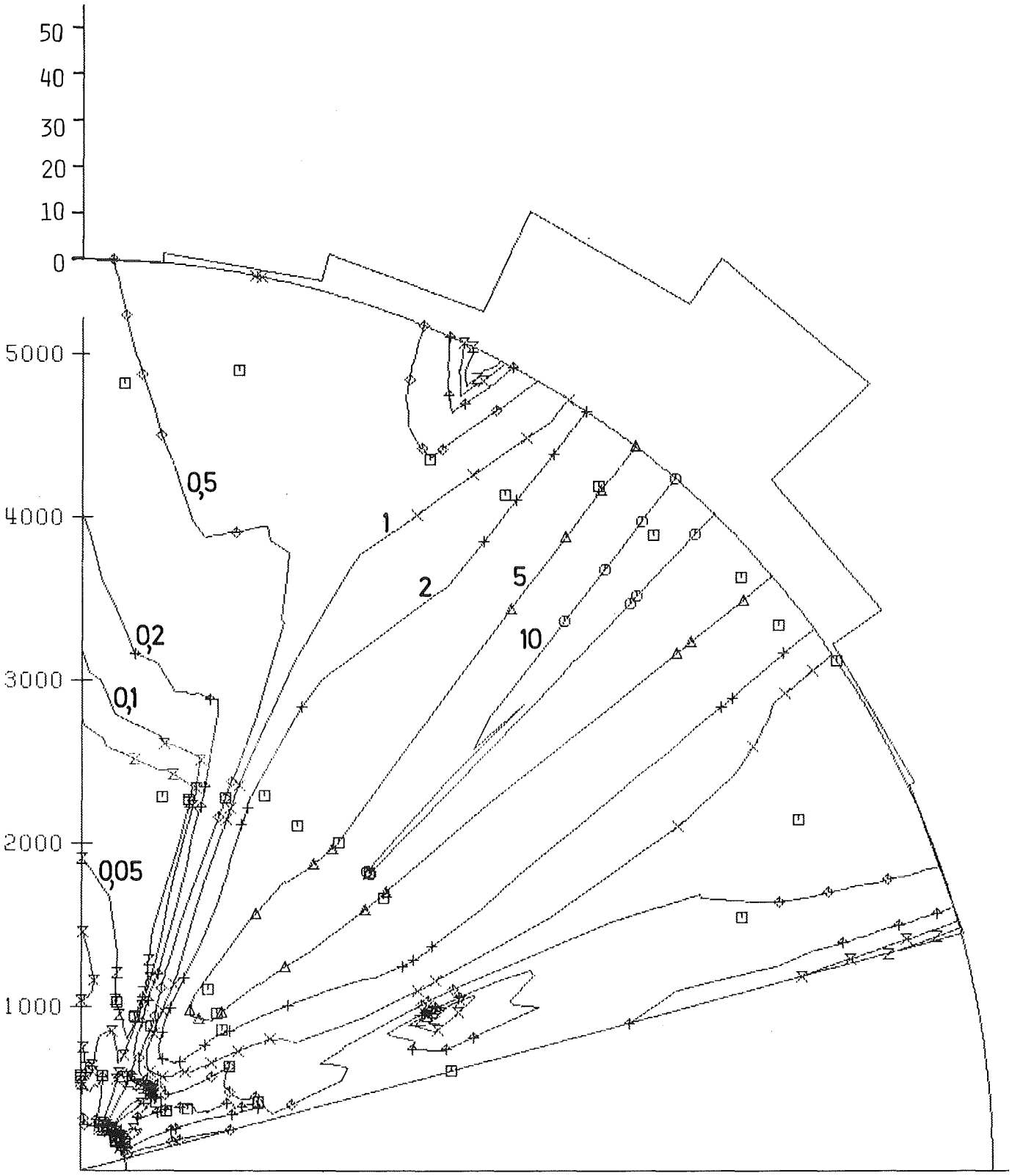

FIG. 16D: CONCENTRATION DISTRIBUTION IN 1/10××6 G/M××3
EXPERIMENT 68/2 CFCL3 H = 195 M
FOR DETAILED INFORMATION SEE FIGURE 1A

TAB. 17A: METEOROLOGICAL DATA OF EXPERIMENT NO. 69

		HEIGHT	1. SAMPLING PERIOD			2. SAMPLING PERIOD		
		(M)	14.10	14.20	14.30	14.40	14.50	15.00
WIND DIRECTION (DEGREE)		40	213	211	212	218	218	225
		60	210	210	210	216	216	220
		100	209	209	209	212	215	216
		160	211	210	211	215	218	217
		200	217	216	216	220	223	223
WIND SPEED (M/S)		40	5.5	4.5	4.4	5.9	5.6	5.5
		60	6.7	5.7	5.1	7.0	6.7	7.0
		100	8.4	7.1	7.2	8.8	8.8	9.2
		160	9.4	8.5	9.1	10.1	10.5	11.1
		200	9.9	9.2	10.0	10.8	11.3	12.2
STANDARD DEVIATION OF	VER.	40	12.6	12.7	13.0	12.5	11.7	11.5
	HOR.		16.5	16.3	17.2	17.3	15.8	15.9
WIND DIR. VECTOR VANE (DEGREE)	VER.	100	6.2	6.2	6.5	6.2	5.8	5.8
	HOR.		8.5	8.3	9.4	9.0	8.4	7.9
	VER.	160	4.4	4.5	4.8	4.7	4.4	4.4
	HOR.		5.3	5.1	5.3	5.1	4.9	4.8
STAND. DEVIATION OF HOR. WIND DIRECTION WIND VANE (DEGREE)		100	6.5	8.7	10.7	8.3	6.9	9.1
TEMPERATURE GRADIENT (K/100M)		30/100	-1.0	-1.0	-0.9	-0.9	-0.7	-0.6
NET RADIATION (MW/CM**2)			1.1	1.6	2.6	2.7	2.7	1.3
DIFFUSION CATEGORY BASED ON ...	VER. FLUCTUATION		D			D		
	HOR. FLUCTUATION		D			D		
	TEMP. GRADIENT		D			D		
	SYNOP. OBSERV.		D			D		

TAB. 17B: EXPERIMENT 69 7. 2.80 14.00 - 15.00

TRACER AND EMISSION RATE: CF2BR2 24.00 G/S

POSITION		R (M)	ALPHA (DEGREE)	TRACER CONCENTRATION IN NG/M**3 SAMPL. PERIOD 1	SAMPL. PERIOD 2
I	A	430.	1.	≤ 40	≤ 38
	B	605.	6.	≤ 38	≤ 39
	C	600.	13.	≤ 35	≤ 39
	D	470.	18.	≤ 33	≤ 40
	E	480.	26.	≤ 56	≤ 53
	F	490.	33.	≤ 54	≤ 58
	G	515.	43.	≤ 48	≤ 55
	H	500.	51.	≤ 34	≤ 37
	I	505.	59.	≤ 38	≤ 37
	K	485.	66.	≤ 41	≤ 40
	L	570.	76.	≤ 40	≤ 44
II	A	1015.	11.	≤ 41	≤ 47
	B	970.	25.	-	≤ 44
	C	995.	30.	-	242
	D	1005.	33.	-	1914
	E	1040.	45.	883	1436
	F	885.	51.	≤ 43	≤ 40
	G	990.	60.	≤ 47	≤ 43
	H	995.	65.	≤ 55	≤ 48
	I	930.	70.	≤ 57	≤ 55
	K	835.	80.	≤ 48	≤ 52
III	A	1990.	9.	≤ 58	≤ 47
	B	2330.	21.	861	≤ 46
	C	2270.	28.	8187	1845
	D	1870.	42.	8517	12042
	E	1730.	46.	922	4177
	F	1890.	58.	≤ 38	≤ 39
	G	2150.	69.	≤ 45	≤ 36

TAB. 17B: EXPERIMENT 69 7. 2.80 14.00 - 15.00

TRACER AND EMISSION RATE: CF2BR2 24.00 G/S

POSITION		R (M)	ALPHA (DEGREE)	TRACER CONCENTRATION IN NG/M**3 SAMPL. PERIOD 1	SAMPL. PERIOD 2
IV	A	3990.	11.	-	≤ 55
	B	4200.	14.	≤ 49	≤ 58
	C	4390.	16.	≤ 54	≤ 56
	D	4360.	20.	64	112
	E	4180.	27.	1024	504
	F	4390.	35.	10123	13108
	G	4160.	39.	17897	9620
	H	4570.	45.	469	3992
	I	3730.	55.	≤ 55	≤ 54
	K	3870.	59.	≤ 44	≤ 44
	L	3970.	63.	≤ 54	-
	M	3950.	70.	≤ 54	-
V	A	7125.	3.	≤ 49	≤ 53
	B	7300.	8.	≤ 57	≤ 59
	C	7650.	16.	≤ 58	105
	D	7325.	20.	≤ 58	≤ 48
	E	7925.	24.	248	≤ 50
	F	7900.	34.	7304	4710
	G	8500.	40.	3205	4390
	H	8175.	46.	≤ 48	939
	I	8050.	51.	1450	-
	K	8200.	54.	63	≤ 39
	L	8075.	58.	≤ 38	≤ 34
	M	7875.	68.	≤ 38	-

TAB. 17C: EXPERIMENT 69 7.2.80 14.00 - 15.00

TRACER AND EMISSION RATE: CFCL3 14.50 G/S

POSITION		R (M)	ALPHA (DEGREE)	TRACER CONCENTRATION IN NG/M**3 SAMPL. PERIOD 1	SAMPL. PERIOD 2
II	A	1015.	11.	-	529
	B	970.	25.	854	1258
	C	995.	30.	1232	404
	D	1005.	33.	391	408
	E	1040.	45.	1072	1391
	F	885.	51.	1790	1315
	G	990.	60.	489	2485
	H	995.	65.	192	392
	I	930.	70.	511	1519
	K	835.	80.	449	350
III	A	1990.	9.	168	55
	B	2330.	21.	218	797
	C	2270.	28.	2082	226
	D	1870.	42.	1969	3086
	E	1730.	46.	475	2070
	F	1890.	58.	≤ 117	267
	G	2150.	69.	770	479
IV	A	3990.	11.	-	76
	B	4200.	14.	358	165
	C	4390.	16.	185	550
	D	4360.	20.	≤ 249	325
	E	4180.	27.	330	104
	F	4390.	35.	4034	5859
	G	4160.	39.	7482	4258
	H	4570.	45.	166	1544
	I	3730.	55.	231	395
	K	3870.	59.	486	≤ 153
	L	3970.	63.	120	-
	M	3950.	70.	247	-
V	A	7125.	3.	440	239
	B	7300.	8.	133	576
	C	7650.	16.	349	368
	D	7325.	20.	552	476
	E	7925.	24.	516	395
	F	7900.	34.	4863	3554
	G	8500.	40.	2029	2290
	H	8175.	46.	136	1026
	I	8050.	51.	2793	-
	K	8200.	54.	340	257
	L	8075.	58.	≤ 396	≤ 397
	M	7875.	68.	≤ 396	-

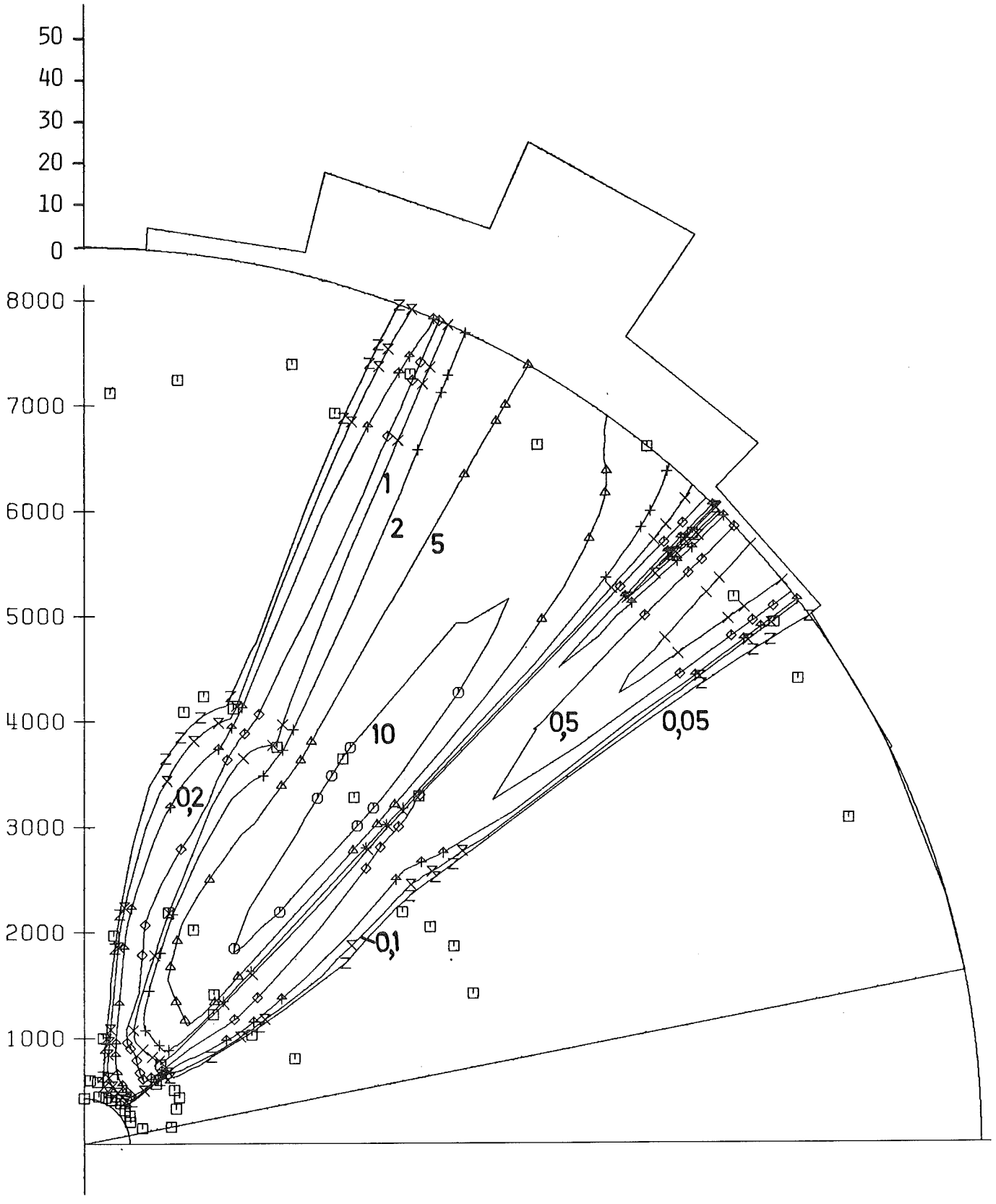

FIG. 17A: CONCENTRATION DISTRIBUTION IN 1/10xx6 G/Mxx3
EXPERIMENT 69/1 CF2BR2 H = 160 M
FOR DETAILED INFORMATION SEE FIGURE 1A

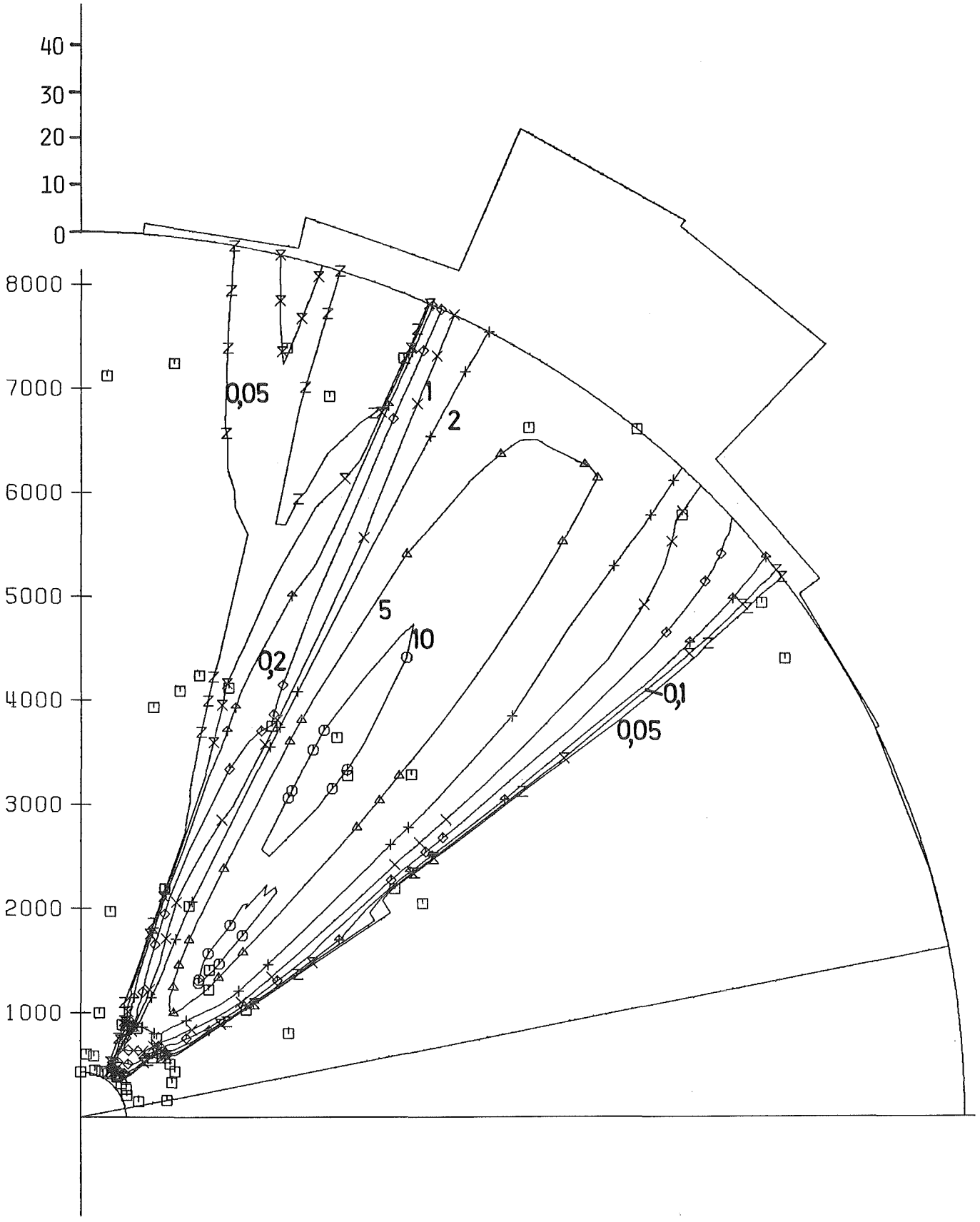

FIG. 17B: CONCENTRATION DISTRIBUTION IN 1/10xx6 G/Mxx3
EXPERIMENT 69/2 CF2BR2 H = 160 M
FOR DETAILED INFORMATION SEE FIGURE 1A

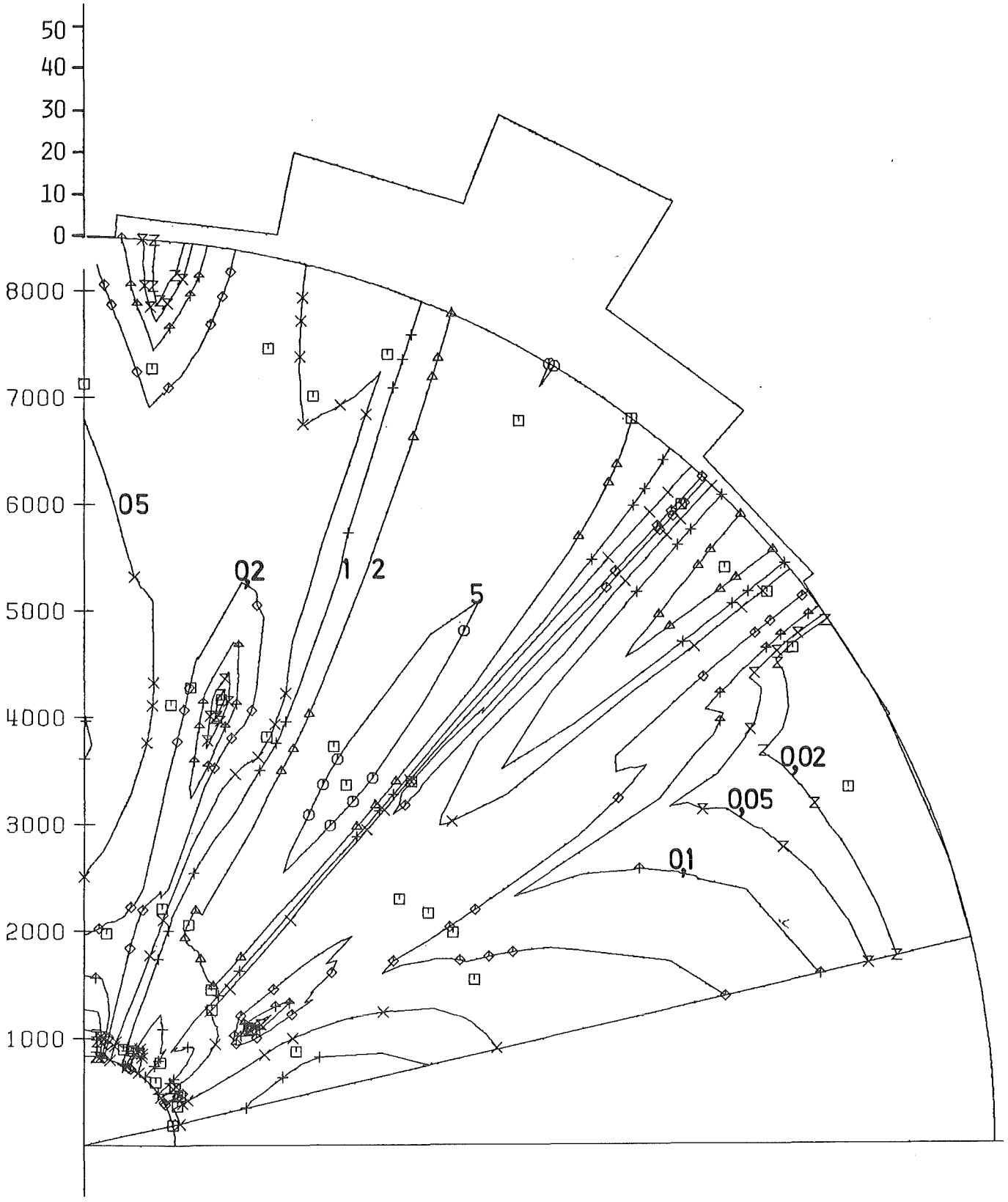

FIG. 17C: CONCENTRATION DISTRIBUTION IN 1/10xx6 G/Mxx3
EXPERIMENT 69/1 CFCL3 H = 195 M
FOR DETAILED INFORMATION SEE FIGURE 1A

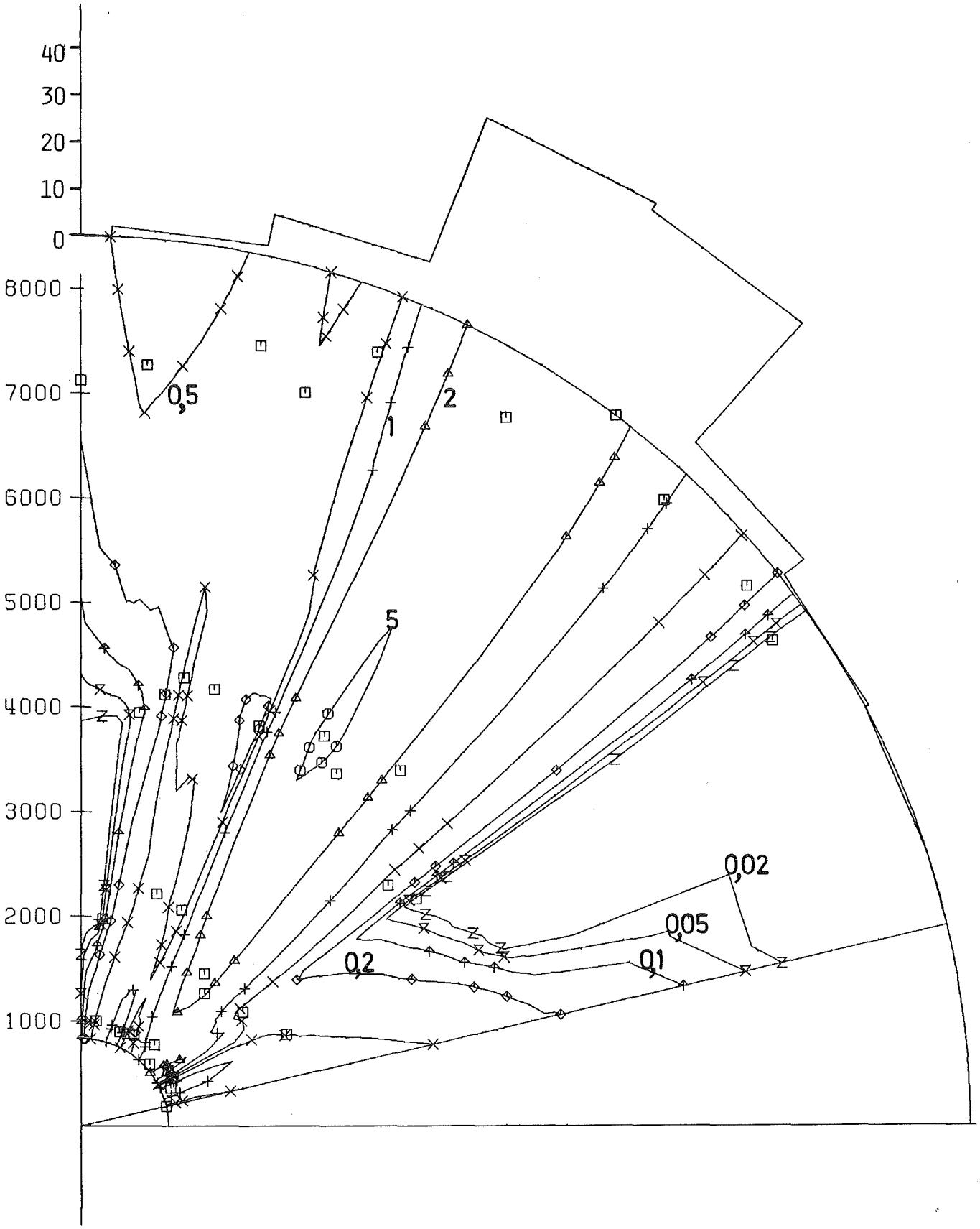

FIG. 17D: CONCENTRATION DISTRIBUTION IN 1/10××6 G/M××3
EXPERIMENT 69/2 CFCL3 H = 195 M
FOR DETAILED INFORMATION SEE FIGURE 1A

TAB. 18A: METEOROLOGICAL DATA OF EXPERIMENT NO. 70

		HEIGHT	1. SAMPLING PERIOD			2. SAMPLING PERIOD		
		(M)	14.10	14.20	14.30	14.40	14.50	15.00
WIND DIRECTION (DEGREE)		40	241	247	242	240	238	243
		60	239	244	241	240	238	238
		100	245	248	248	244	242	238
		160	261	256	261	256	257	248
		200	267	264	267	265	269	258
WIND SPEED (M/S)		40	2.2	2.2	2.4	2.1	1.8	1.6
		60	3.0	2.8	3.0	2.4	2.1	1.9
		100	3.8	3.5	3.6	3.0	2.4	2.3
		160	4.4	4.0	3.8	3.5	2.8	2.7
		200	4.7	4.3	3.9	3.5	3.1	3.2
STANDARD DEVIATION OF	VER.	40	9.4	9.6	10.0	10.6	12.0	11.8
	HOR.		11.1	11.3	11.6	12.1	12.3	11.9
WIND DIR. VECTOR VANE (DEGREE)	VER.	100	5.2	5.3	5.4	5.6	6.1	7.0
	HOR.		7.1	7.3	7.6	7.8	7.9	8.2
	VER.	160	4.2	4.3	4.4	4.6	4.1	4.0
	HOR.		5.4	5.3	6.2	5.9	5.6	5.2
STAND. DEVIATION OF HOR. WIND DIRECTION WIND VANE (DEGREE)		100	7.0	8.0	8.5	7.4	9.7	9.1
TEMPERATURE GRADIENT (K/100M)		30/100	-0.9	-0.9	-1.0	-1.1	-1.0	-1.1
NET RADIATION (MW/CM**2)			3.4	4.2	5.7	5.4	4.8	5.3
DIFFUSION CATEGORY BASED ON ...	VER. FLUCTUATION		D			D		
	HOR. FLUCTUATION		D			D		
	TEMP. GRADIENT		D			B		
	SYNOP. OBSERV.		D			D		

TAB. 18B: EXPERIMENT 70 11. 3.80 14.00 - 15.00

TRACER AND EMISSION RATE: CFCL3 15.80 G/S

POSITION		R (M)	ALPHA (DEGREE)	TRACER CONCENTRATION IN NG/M**3 SAMPL. PERIOD 1	SAMPL. PERIOD 2
I	A	365.	22.	≤ 951	≤ 956
	B	390.	35.	≤ 953	≤ 958
	C	410.	45.	931	≤ 953
	D	430.	50.	≤ 948	1053
	E	410.	59.	≤ 950	423
	F	380.	67.	47	69
	G	430.	77.	1365	1592
	H	420.	86.	42	1334
	I	420.	95.	≤ 952	85
II	A	750.	27.	217	≤ 968
	B	795.	33.	≤ 965	456
	C	780.	37.	≤ 970	614
	D	775.	41.	840	32
	E	805.	45.	≤ 962	204
	F	840.	49.	657	1586
	G	800.	55.	539	12038
	H	810.	60.	50	1493
	I	800.	67.	762	14327
	K	815.	79.	3239	7962
	L	810.	87.	702	202
	M	740.	90.	≤ 951	86
	N	675.	94.	≤ 956	≤ 957
III	A	1690.	9.	237	-
	B	1700.	16.	≤ 958	≤ 963
	C	1790.	25.	≤ 957	322
	D	1800.	43.	≤ 960	689
	E	1900.	48.	1189	≤ 964
	F	2050.	54.	4640	27750
	G	2170.	58.	5438	11200
	H	2050.	65.	20462	1893
	I	2020.	72.	≤ 955	≤ 957
	K	2000.	80.	48	≤ 948
	L	1840.	92.	664	≤ 952

TAB. 18B: EXPERIMENT 70 11. 3.80 14.00 - 15.00

TRACER AND EMISSION RATE: CFCL3 15.80 G/S

POSITION		R (M)	ALPHA (DEGREE)	TRACER CONCENTRATION IN NG/M**3 SAMPL. PERIOD 1	SAMPL. PERIOD 2
IV	A	3400.	9.	-	80
	B	3650.	19.	≤ 953	244
	C	3480.	25.	-	9
	D	3530.	32.	284	716
	E	3600.	37.	≤ 950	≤ 949
	F	3550.	43.	≤ 950	178
	G	3550.	49.	≤ 951	396
	H	3550.	56.	2381	8786
	I	3700.	63.	6844	3219
	K	3540.	70.	483	14
	L	3400.	78.	≤ 955	-
	M	3350.	88.	≤ 691	293
V	A	5600.	20.	162	20
	B	5425.	25.	≤ 953	≤ 954
	C	5250.	32.	909	565
	D	5175.	45.	≤ 956	87
	E	5500.	53.	≤ 951	1193
	F	5125.	57.	668	≤ 950
	G	5000.	65.	1289	3771
	H	5000.	70.	7145	6377
	I	5000.	80.	1064	2594
	K	4950.	85.	350	778
	L	4900.	90.	485	212
	M	5125.	99.	≤ 959	833

TAB. 18C: EXPERIMENT 70 11.3.80 14.00 - 15.00

TRACER AND EMISSION RATE: CF2BR2 22.70 G/S

POSITION		R (M)	ALPHA (DEGREE)	TRACER CONCENTRATION IN NG/M**3 SAMPL. PERIOD 1	SAMPL. PERIOD 2
I	A	365.	22.	≤ 29	≤ 28
	B	390.	35.	≤ 31	179
	C	410.	45.	319	≤ 29
	D	430.	50.	≤ 31	226
	E	410.	59.	≤ 300	255
	F	380.	67.	227	≤ 30
	G	430.	77.	55	163
	H	420.	86.	104	48
	I	420.	95.	56	35
II	A	750.	27.	58	44
	B	795.	33.	≤ 26	37
	C	780.	37.	≤ 32	113
	D	775.	41.	137	64
	E	805.	45.	≤ 32	140
	F	840.	49.	90	426
	G	800.	55.	216	554
	H	810.	60.	44	112
	I	800.	67.	155	512
	K	815.	79.	1298	986
	L	810.	87.	390	35
	M	740.	90.	45	52
	N	675.	94.	≤ 29	53
III	A	1690.	9.	≤ 30	-
	B	1700.	16.	≤ 30	≤ 36
	C	1790.	25.	135	≤ 37
	D	1800.	43.	182	172
	E	1900.	48.	293	125
	F	2050.	54.	951	15843
	G	2170.	58.	2755	10830
	H	2050.	65.	2934	1877
	I	2020.	72.	551	444
	K	2000.	80.	109	126
	L	1840.	92.	128	94

TAB. 18C: EXPERIMENT 70 11.3.80 14.00 - 15.00

TRACER AND EMISSION RATE: CF2BR2 22.70 G/S

POSITION		R (M)	ALPHA (DEGREE)	TRACER CONCENTRATION IN NG/M**3 SAMPL. PERIOD 1	SAMPL. PERIOD 2
IV	A	3400.	9.	-	≤ 33
	B	3650.	19.	≤ 37	≤ 35
	C	3480.	25.	-	≤ 37
	D	3530.	32.	64	235
	E	3600.	37.	≤ 35	≤ 37
	F	3550.	43.	≤ 36	≤ 39
	G	3550.	49.	164	88
	H	3550.	56.	798	6797
	I	3700.	63.	5100	4753
	K	3540.	70.	1506	801
	L	3400.	78.	33	-
	M	3350.	88.	142	479
V	A	5600.	20.	≤ 32	≤ 25
	B	5425.	25.	≤ 29	≤ 30
	C	5250.	32.	50	≤ 31
	D	5175.	45.	≤ 34	≤ 32
	E	5500.	53.	≤ 30	≤ 34
	F	5125.	57.	293	≤ 31
	G	5000.	65.	432	2554
	H	5000.	70.	3547	6284
	I	5000.	80.	2978	4566
	K	4950.	85.	875	1019
	L	4900.	90.	≤ 38	≤ 33
	M	5125.	99.	≤ 37	99

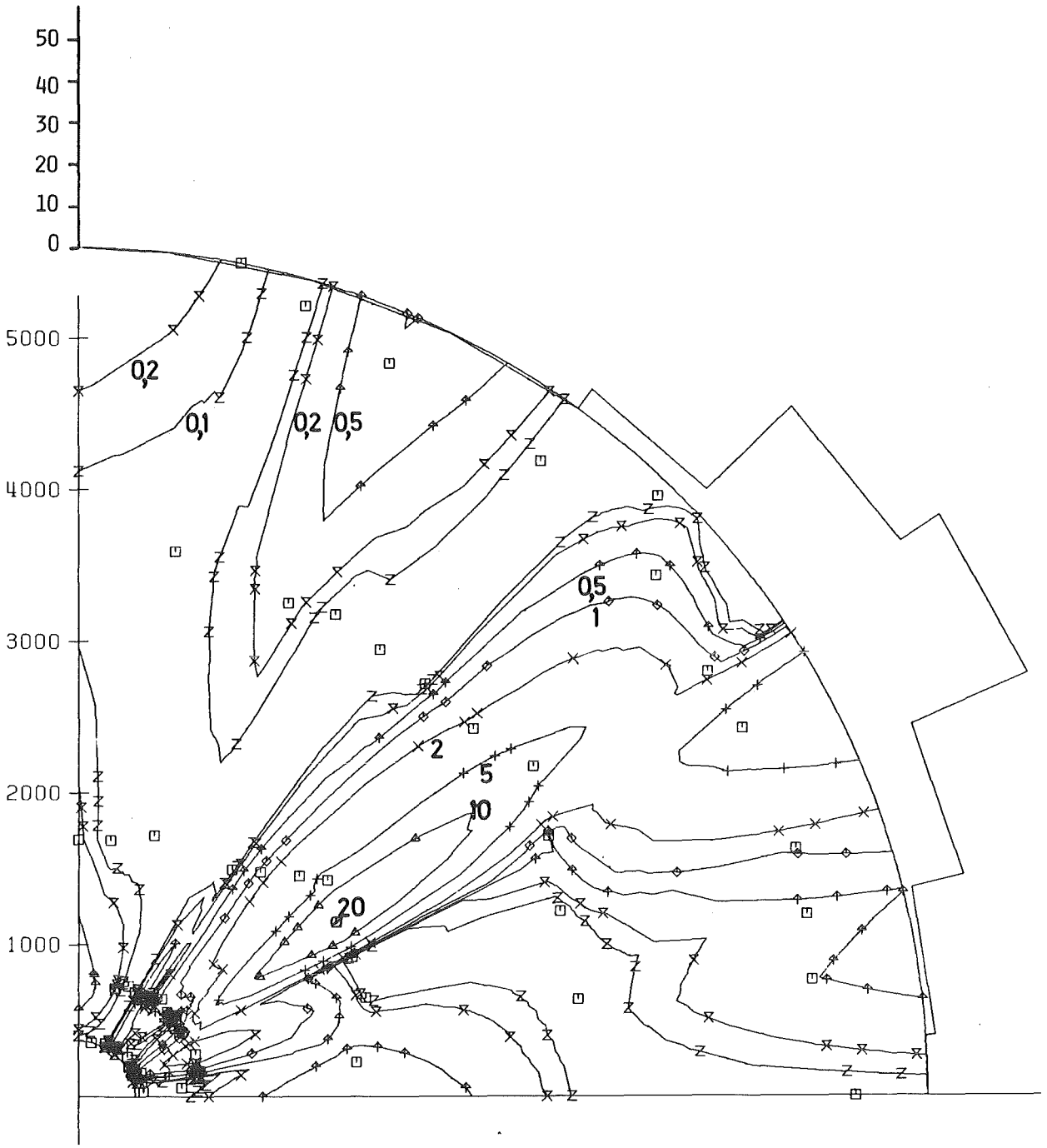

FIG. 18A: CONCENTRATION DISTRIBUTION IN 1/10××6 G/M××3
EXPERIMENT 70/1 CFCL3 H = 160 M
FOR DETAILED INFORMATION SEE FIGURE 1A

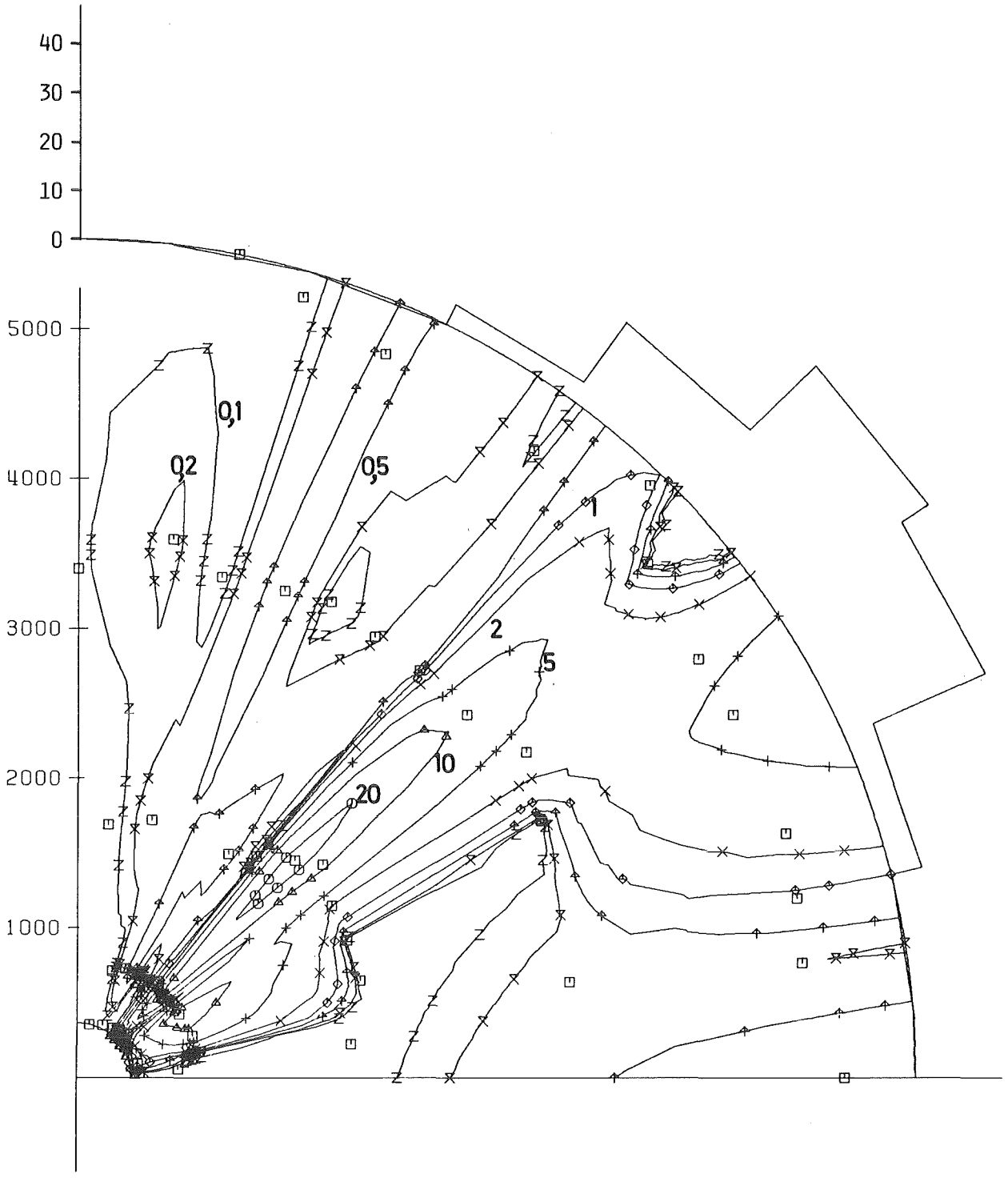

FIG. 18B: CONCENTRATION DISTRIBUTION IN 1/10××6 G/M××3
EXPERIMENT 70/2 CFCL3 H = 160 M
FOR DETAILED INFORMATION SEE FIGURE 1A

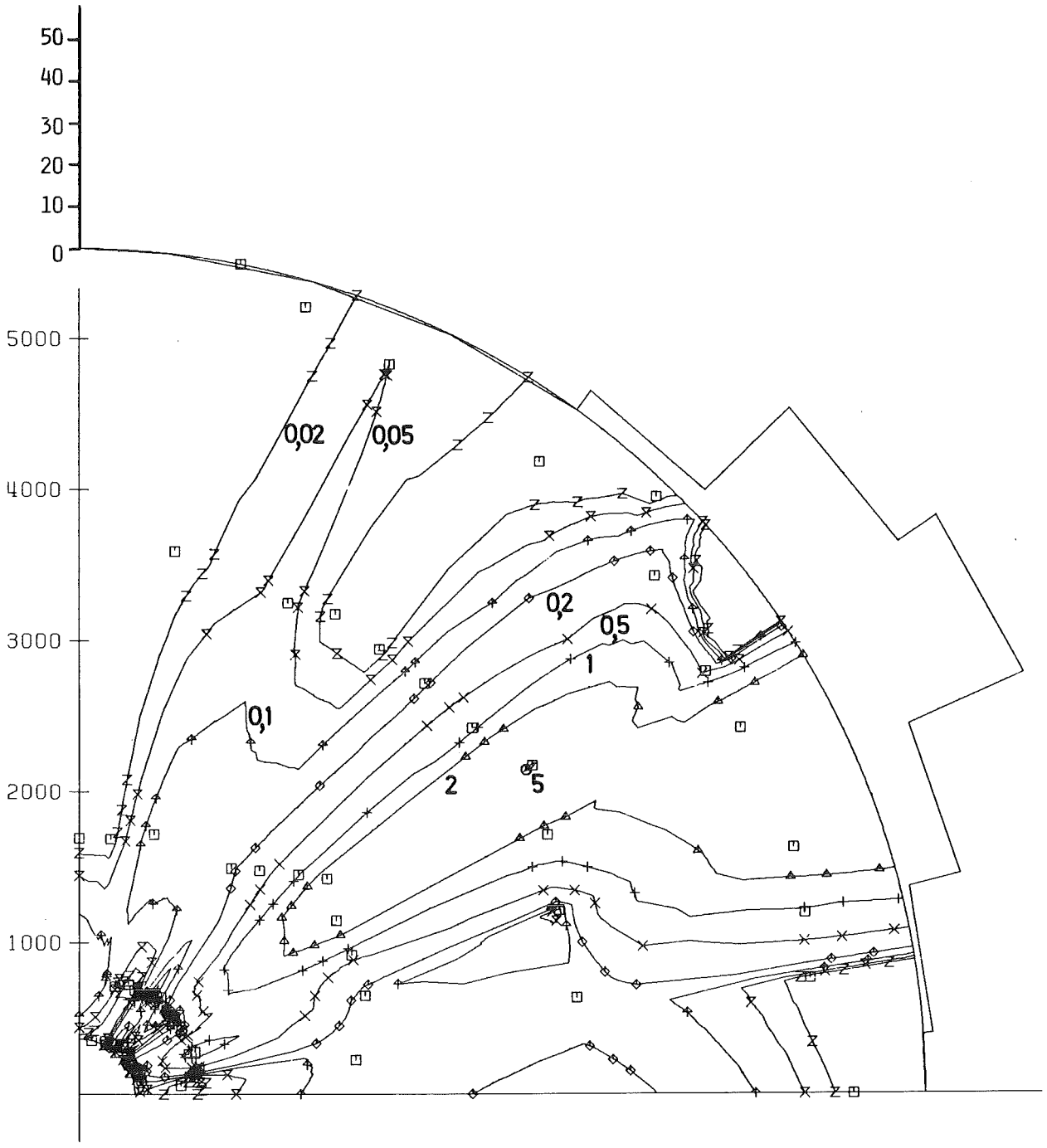

FIG. 18C: CONCENTRATION DISTRIBUTION IN 1/10××6 G/M××3
EXPERIMENT 70/1 CF2BR2 H = 195 M
FOR DETAILED INFORMATION SEE FIGURE 1A

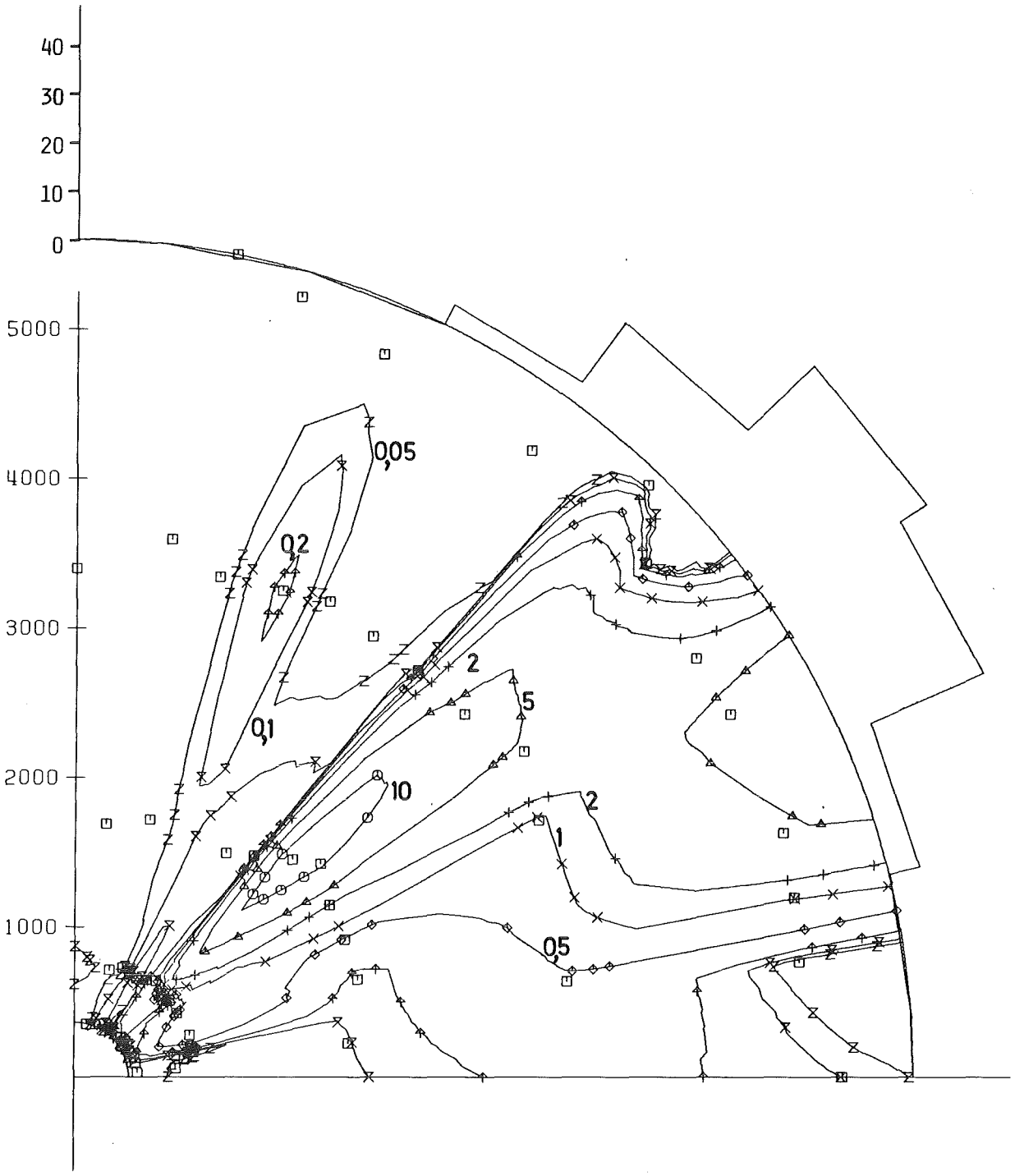

FIG. 18D: CONCENTRATION DISTRIBUTION IN 1/10××6 G/M××3
EXPERIMENT 70/2 CF2BR2 H = 195 M
FOR DETAILED INFORMATION SEE FIGURE 1A

TAB. 19A: METEOROLOGICAL DATA OF EXPERIMENT NO. 71

		HEIGHT	1. SAMPLING PERIOD			2. SAMPLING PERIOD		
		(M)	13.10	13.20	13.30	13.40	13.50	14.00
WIND DIRECTION (DEGREE)		40	219	213	209	216	211	212
		60	216	212	212	212	209	211
		100	213	211	210	214	212	213
		160	217	216	217	221	222	220
		200	221	224	225	227	226	228
WIND SPEED (M/S)		40	5.4	4.9	4.3	4.3	3.3	3.3
		60	6.7	6.0	5.4	5.5	4.4	4.8
		100	7.8	7.4	6.8	6.7	5.9	6.5
		160	8.4	8.4	8.5	7.8	7.6	8.2
		200	8.6	9.1	9.2	9.0	8.1	8.6
STANDARD DEVIATION OF	VER.	40	10.4	9.8	9.7	9.9	9.5	8.8
	HOR.		13.4	12.2	12.1	12.9	13.1	12.4
WIND DIR. VECTOR VANE (DEGREE)	VER.	100	4.9	4.4	4.6	4.1	3.6	3.1
	HOR.		4.9	4.3	4.5	4.4	3.7	3.4
	VER.	160	2.7	2.6	2.5	2.1	1.9	1.6
	HOR.		2.4	2.3	2.4	2.3	1.5	1.1
STAND. DEVIATION OF HOR. WIND DIRECTION WIND VANE (DEGREE)		100	5.2	4.4	5.7	3.6	4.1	2.8
TEMPERATURE GRADIENT (K/100M)		30/100	-0.8	-0.7	-0.8	-0.9	-0.5	-0.2
NET RADIATION (MW/CM**2)			2.9	2.1	2.0	1.5	2.2	3.6
DIFFUSION CATEGORY BASED ON ...	VER. FLUCTUATION		D				D	
	HOR. FLUCTUATION		E				F	
	TEMP. GRADIENT		D				D	
	SYNOP. OBSERV.		D				D	

TAB. 19B: EXPERIMENT 71 29. 5.80 13.00 - 14.00

TRACER AND EMISSION RATE: CFCL3 14.00 G/S

POSITION		R (M)	ALPHA (DEGREE)	TRACER CONCENTRATION IN NG/M**3 SAMPL. PERIOD 1	SAMPL. PERIOD 2
I	A	225.	51.	≤ 565	≤ 567
	B	200.	55.	≤ 566	≤ 565
	C	200.	64.	≤ 565	599
	D	180.	70.	-	≤ 566
	E	200.	83.	≤ 568	111
II	A	400.	28.	≤ 564	321
	B	400.	36.	≤ 579	366
	C	400.	46.	≤ 602	526
	D	400.	53.	1031	1229
	E	390.	64.	42	4114
	F	400.	73.	787	1116
	G	415.	84.	-	≤ 589
	H	400.	92.	-	≤ 603
	I	400.	100.	11	-
III	A	870.	28.	≤ 565	≤ 573
	B	770.	36.	173	≤ 584
	C	790.	45.	-	641
	D	870.	53.	≤ 578	≤ 579
	E	820.	61.	45	≤ 567
	F	790.	70.	≤ 572	-
IV	A	1700.	12.	≤ 575	≤ 584
	B	1680.	23.	≤ 582	≤ 611
	C	1750.	35.	2515	-
	D	1760.	44.	2032	6238
	E	1800.	53.	1254	1818
	F	1640.	62.	678	≤ 582
	G	1470.	67.	≤ 571	≤ 586
	H	1400.	76.	≤ 571	-
V	A	2970.	8.	≤ 568	≤ 564
	B	2830.	22.	225	≤ 564
	C	2930.	47.	893	7826
	D	3100.	56.	≤ 568	-
	E	3270.	62.	≤ 563	≤ 559
	F	3180.	78.	-	≤ 559
	G	3350.	102.	≤ 557	≤ 561

TAB. 19C: EXPERIMENT 71 29.5.80 13.00 - 14.00

TRACER AND EMISSION RATE: CF2BR2 23.80 G/S

POSITION		R (M)	ALPHA (DEGREE)	TRACER CONCENTRATION IN NG/M**3 SAMPL. PERIOD 1	SAMPL. PERIOD 2
I	A	225.	51.	≤ 38	≤ 38
	B	200.	55.	≤ 43	≤ 36
	C	200.	64.	≤ 41	≤ 38
	D	180.	70.	-	≤ 35
	E	200.	83.	≤ 43	≤ 44
II	A	400.	28.	≤ 48	≤ 55
	B	400.	36.	≤ 55	≤ 44
	C	400.	46.	≤ 44	≤ 43
	D	400.	53.	≤ 34	≤ 42
	E	390.	64.	≤ 45	≤ 48
	F	400.	73.	≤ 42	≤ 38
	G	415.	84.	-	≤ 42
	H	400.	92.	-	≤ 47
	I	400.	100.	≤ 42	-
III	A	870.	28.	≤ 39	≤ 34
	B	770.	36.	≤ 38	≤ 36
	C	790.	45.	-	≤ 40
	D	870.	53.	≤ 37	≤ 39
	E	820.	61.	≤ 38	≤ 38
	F	790.	70.	≤ 34	-
IV	A	1700.	12.	≤ 36	≤ 32
	B	1680.	23.	≤ 34	≤ 36
	C	1750.	35.	≤ 31	-
	D	1760.	44.	≤ 32	≤ 32
	E	1800.	53.	≤ 34	≤ 35
	F	1640.	62.	≤ 33	≤ 30
	G	1470.	67.	≤ 37	≤ 28
	H	1400.	76.	≤ 32	-
V	A	2970.	8.	≤ 45	≤ 36
	B	2830.	22.	≤ 44	≤ 42
	C	2930.	47.	663	1637
	D	3100.	56.	≤ 33	-
	E	3270.	62.	≤ 38	≤ 38
	F	3180.	78.	-	≤ 45
	G	3350.	102.	≤ 37	≤ 37

TAB. 20A: METEOROLOGICAL DATA OF EXPERIMENT NO. 72

		HEIGHT	1. SAMPLING PERIOD			2. SAMPLING PERIOD		
		(M)	13.10	13.20	13.30	13.40	13.50	14.00
WIND DIRECTION (DEGREE)		40	248	247	247	248	245	247
		60	246	244	243	245	242	243
		100	246	242	241	244	240	242
		160	250	246	245	246	245	245
		200	253	250	250	250	249	250
WIND SPEED (M/S)		40	7.1	7.9	7.3	6.9	7.1	6.5
		60	8.1	8.9	8.5	8.4	8.3	7.9
		100	9.4	10.5	10.4	9.9	10.1	9.6
		160	11.2	12.6	12.2	12.2	11.9	11.8
		200	12.2	13.4	13.3	13.3	13.0	13.0
STANDARD DEVIATION OF	VER.	40	10.4	9.8	9.8	10.3	10.6	10.5
	HOR.		13.5	13.0	13.2	14.0	13.9	13.9
WIND DIR. VECTOR VANE (DEGREE)	VER.	100	6.1	6.3	6.1	6.5	6.7	6.8
	HOR.		6.8	6.8	6.9	7.3	7.4	7.6
	VER.	160	4.1	4.0	3.8	3.9	3.8	3.8
	HOR.		4.8	4.5	4.3	4.5	4.3	4.3
STAND. DEVIATION OF HOR. WIND DIRECTION WIND VANE (DEGREE)		100	7.4	7.0	7.3	7.9	7.5	7.9
TEMPERATURE GRADIENT (K/100M)		30/100	-0.8	-0.7	-0.8	-0.6	-0.6	-0.7
NET RADIATION (MW/CM**2)			6.6	4.2	2.2	1.3	6.4	8.5
DIFFUSION CATEGORY BASED ON ...	VER. FLUCTUATION		D			D		
	HOR. FLUCTUATION		D			D		
	TEMP. GRADIENT		D			D		
	SYNOP. OBSERV.		D			D		

TAB. 20B: EXPERIMENT 72 2. 7.80 13.00 - 14.00

TRACER AND EMISSION RATE: CFCL3/K 13.30 G/S

POSITION		R (M)	ALPHA (DEGREE)	TRACER CONCENTRATION IN NG/M**3 SAMPL. PERIOD 1	SAMPL. PERIOD 2
I	A	500.	35.	-	-
	B	500.	54.	-	-
	C	500.	62.	≤ 1225	≤ 1226
	D	500.	68.	≤ 1225	≤ 1225
	E	550.	76.	281	≤ 1226
	F	500.	83.	≤ 1226	≤ 1224
	G	465.	87.	≤ 1225	≤ 1224
	H	500.	100.	-	-
II	A	1100.	21.	-	-
	B	1000.	34.	-	-
	C	1000.	54.	≤ 1227	39
	D	975.	59.	≤ 1226	≤ 1225
	E	985.	67.	5029	2075
	F	1015.	73.	3634	2339
	G	950.	79.	1754	1247
	H	985.	88.	-	≤ 1225
	I	1045.	93.	563	-
	K	1000.	100.	2	≤ 1224
III	A	1720.	28.	-	-
	B	1880.	41.	-	-
	C	1790.	48.	≤ 1227	≤ 1226
	D	1930.	57.	-	-
	E	1930.	57.	≤ 1224	-
	F	2050.	62.	2970	4631
	G	2140.	67.	10569	3959
	H	2140.	67.	7432	2994
	I	2050.	74.	1149	≤ 1228
	K	2020.	82.	≤ 1226	≤ 1225
	L	2000.	88.	≤ 1226	≤ 1226
IV	A	4300.	44.	≤ 1226	≤ 1224
	B	4370.	52.	-	≤ 1224
	C	4350.	56.	807	468
	D	4100.	65.	-	10460
	E	3820.	73.	3677	760
	F	3650.	79.	≤ 1224	≤ 1225
	G	3400.	88.	132	≤ 1224
V	A	8500.	37.	-	-
	B	8150.	48.	-	-
	C	8000.	54.	20	≤ 1224
	D	8175.	57.	≤ 1226	≤ 1224
	E	8425.	61.	341	1791
	F	7800.	68.	-	6069
	G	7750.	74.	1139	37
	H	7675.	78.	≤ 1226	758
	I	7500.	87.	9	≤ 1225
	K	7625.	94.	-	-

TAB. 20C: EXPERIMENT 72 2.7.80 13.00 - 14.00

TRACER AND EMISSION RATE: CFCL3/J 13.30 G/S

POSITION		R (M)	ALPHA (DEGREE)	TRACER CONCENTRATION IN NG/M**3 SAMPL. PERIOD 1	SAMPL. PERIOD 2
I	A	500.	35.	10	-
	B	500.	54.	≤ 1225	≤ 1225
	C	500.	68.	≤ 1225	≤ 1225
	D	500.	83.	≤ 1225	≤ 1225
	E	500.	100.	10	≤ 1225
II	A	1100.	21.	150	≤ 1225
	B	1000.	34.	≤ 1225	90
	C	1000.	54.	≤ 1225	≤ 1225
	D	975.	59.	180	520
	E	985.	67.	1290	3490
	F	1015.	73.	2750	2350
	G	1045.	93.	≤ 1225	≤ 1225
III	A	1720.	28.	≤ 1225	≤ 1225
	B	1880.	41.	≤ 1225	≤ 1225
	C	1930.	57.	≤ 1225	≤ 1225
	D	1930.	57.	≤ 1225	≤ 1225
	E	2050.	62.	2400	4000
	F	2140.	67.	8050	-
	G	2140.	67.	7590	2570
	H	2020.	82.	≤ 1225	≤ 1225
	I	2000.	88.	≤ 1225	-
IV	A	4300.	44.	≤ 1225	≤ 1225
	B	4370.	52.	-	≤ 1225
	C	4350.	56.	≤ 1225	70
	D	4100.	65.	2800	3600
	E	3820.	73.	2520	1210
	F	3650.	79.	100	≤ 1225
	G	3400.	88.	≤ 1225	≤ 1225
V	A	8500.	37.	≤ 1225	≤ 1225
	B	8150.	48.	≤ 1225	≤ 1225
	C	8175.	57.	≤ 1225	≤ 1225
	D	7800.	68.	3890	4060
	E	7675.	78.	≤ 1225	1210
	F	7625.	94.	≤ 1225	≤ 1225

TAB. 20D: EXPERIMENT 72 2.7.80 13.00 - 14.00

TRACER AND EMISSION RATE: CF2BR2 20.70 G/S

POSITION		R (M)	ALPHA (DEGREE)	TRACER CONCENTRATION IN NG/M**3 SAMPL. PERIOD 1	SAMPL. PERIOD 2
I	A	500.	35.	-	-
	B	500.	54.	-	-
	C	500.	62.	≤ 38	≤ 36
	D	500.	68.	≤ 45	≤ 42
	E	550.	76.	≤ 38	≤ 39
	F	500.	83.	≤ 40	≤ 42
	G	465.	87.	≤ 38	≤ 32
	H	500.	100.	-	-
II	A	1100.	21.	-	-
	B	1000.	34.	-	-
	C	1000.	54.	≤ 39	≤ 30
	D	975.	59.	≤ 33	≤ 35
	E	985.	67.	≤ 35	≤ 35
	F	1015.	73.	≤ 32	≤ 40
	G	950.	79.	≤ 35	≤ 38
	H	985.	88.	-	≤ 41
	I	1045.	93.	≤ 35	-
	K	1000.	100.	≤ 38	≤ 37
III	A	1720.	28.	-	-
	B	1880.	41.	-	-
	C	1790.	48.	≤ 37	≤ 34
	D	1930.	57.	-	-
	E	1930.	57.	≤ 36	-
	F	2050.	62.	1153	2213
	G	2140.	67.	8592	4511
	H	2140.	67.	6559	3697
	I	2050.	74.	1241	325
	K	2020.	82.	≤ 40	≤ 43
	L	2000.	88.	≤ 35	≤ 33
IV	A	4300.	44.	≤ 32	≤ 32
	B	4370.	52.	-	≤ 29
	C	4350.	56.	≤ 39	122
	D	4100.	65.	-	10883
	E	3820.	73.	4560	2094
	F	3650.	79.	≤ 36	≤ 35
	G	3400.	88.	≤ 31	≤ 35
V	A	8500.	37.	-	-
	B	8150.	48.	-	-
	C	8000.	54.	≤ 35	≤ 29
	D	8175.	57.	≤ 36	≤ 30
	E	8425.	61.	≤ 34	63
	F	7800.	68.	-	11107
	G	7750.	74.	1699	171
	H	7675.	78.	≤ 35	≤ 29
	I	7500.	87.	≤ 35	≤ 30
	K	7625.	94.	-	-

TAB. 20E: EXPERIMENT 72 2.7.80 13.00 - 14.00

TRACER AND EMISSION RATE: SF6 9.07 G/S

POSITION		R (M)	ALPHA (DEGREE)	TRACER CONCENTRATION IN NG/M**3 SAMPL. PERIOD 1	SAMPL. PERIOD 2
I	A	500.	35.	1680	-
	B	500.	54.	550	200
	C	500.	68.	12	21
	D	500.	83.	170	120
	E	500.	100.	31	24
II	A	1100.	21.	320	210
	B	1000.	34.	110	79
	C	1000.	54.	67	98
	D	975.	59.	160	98
	E	985.	67.	58	340
	F	1015.	73.	520	43
	G	1045.	93.	450	480
III	A	1720.	28.	36	30
	B	1880.	41.	240	460
	C	1930.	57.	260	170
	D	1930.	57.	61	230
	E	2050.	62.	700	1250
	F	2140.	67.	3230	-
	G	2140.	67.	3050	2100
	H	2020.	82.	100	290
	I	2000.	88.	190	-
IV	A	4300.	44.	320	120
	B	4370.	52.	-	18
	C	4350.	56.	480	450
	D	4100.	65.	1130	1710
	E	3820.	73.	1740	950
	F	3650.	79.	12	12
	G	3400.	88.	3360	530
V	A	8500.	37.	79	1830
	B	8150.	48.	12	58
	C	8175.	57.	320	430
	D	7800.	68.	3660	3660
	E	7675.	78.	240	21
	F	7625.	94.	60	12

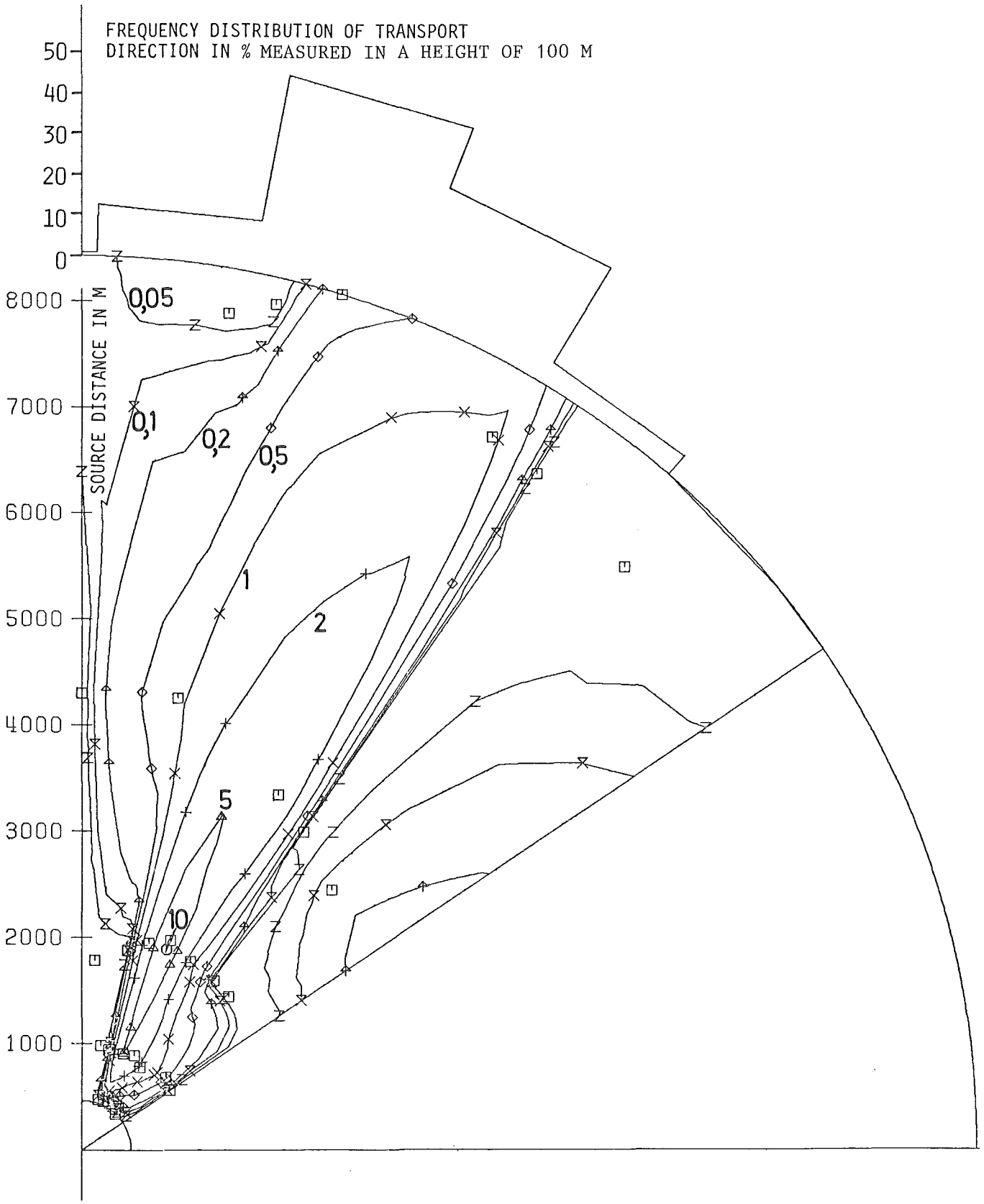

FIG. 20A: CONCENTRATION DISTRIBUTION IN 1/10**6 G/M**3

EXPERIMENT 72/1 CFCL3/K H=160 M

SAMPLING POSITION

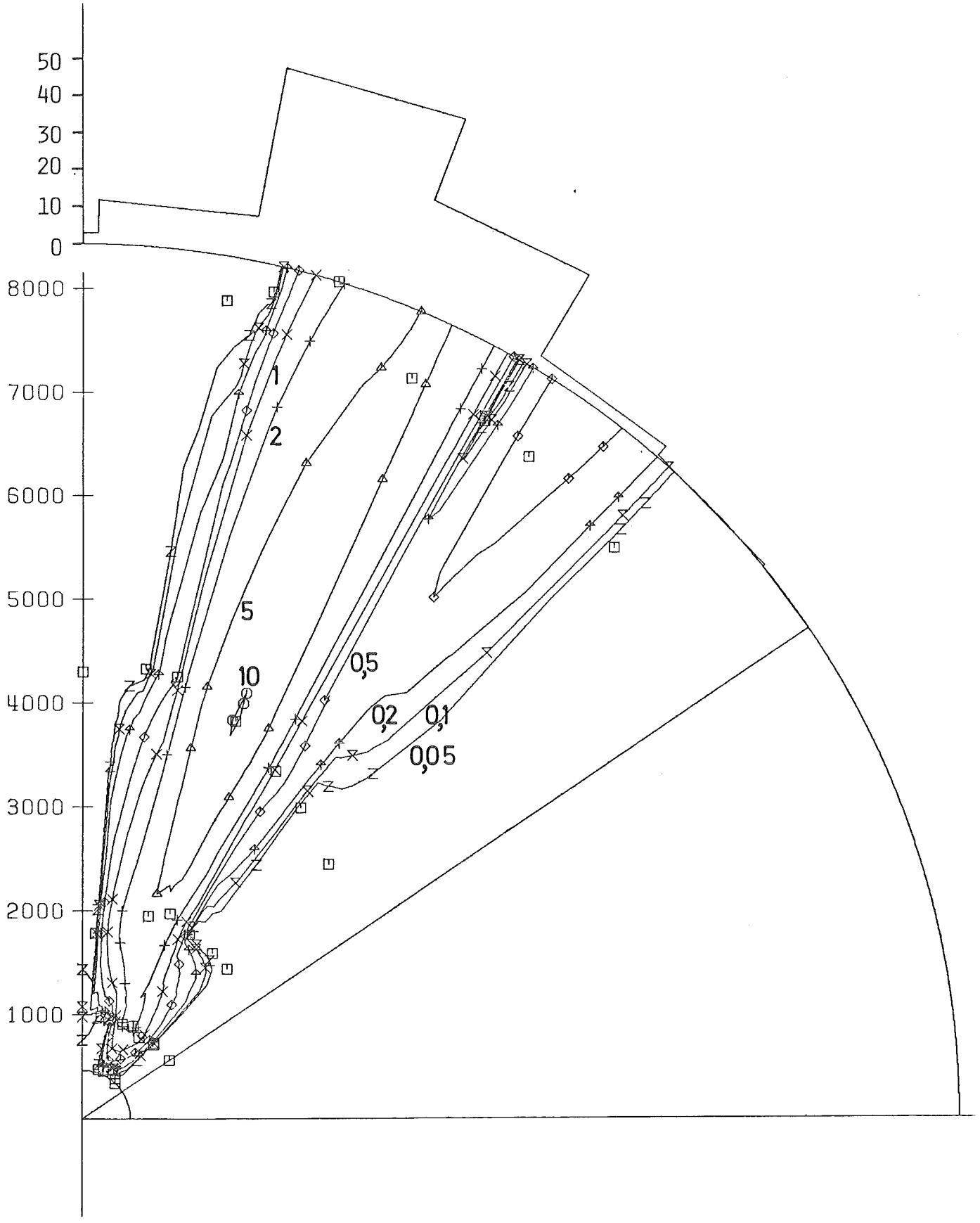

FIG. 20B: CONCENTRATION DISTRIBUTION IN 1/10**6 G/M**3
EXPERIMENT 72/2 CFCL3/K H=160 M
FOR DETAILED INFORMATION SEE FIGURE 1A

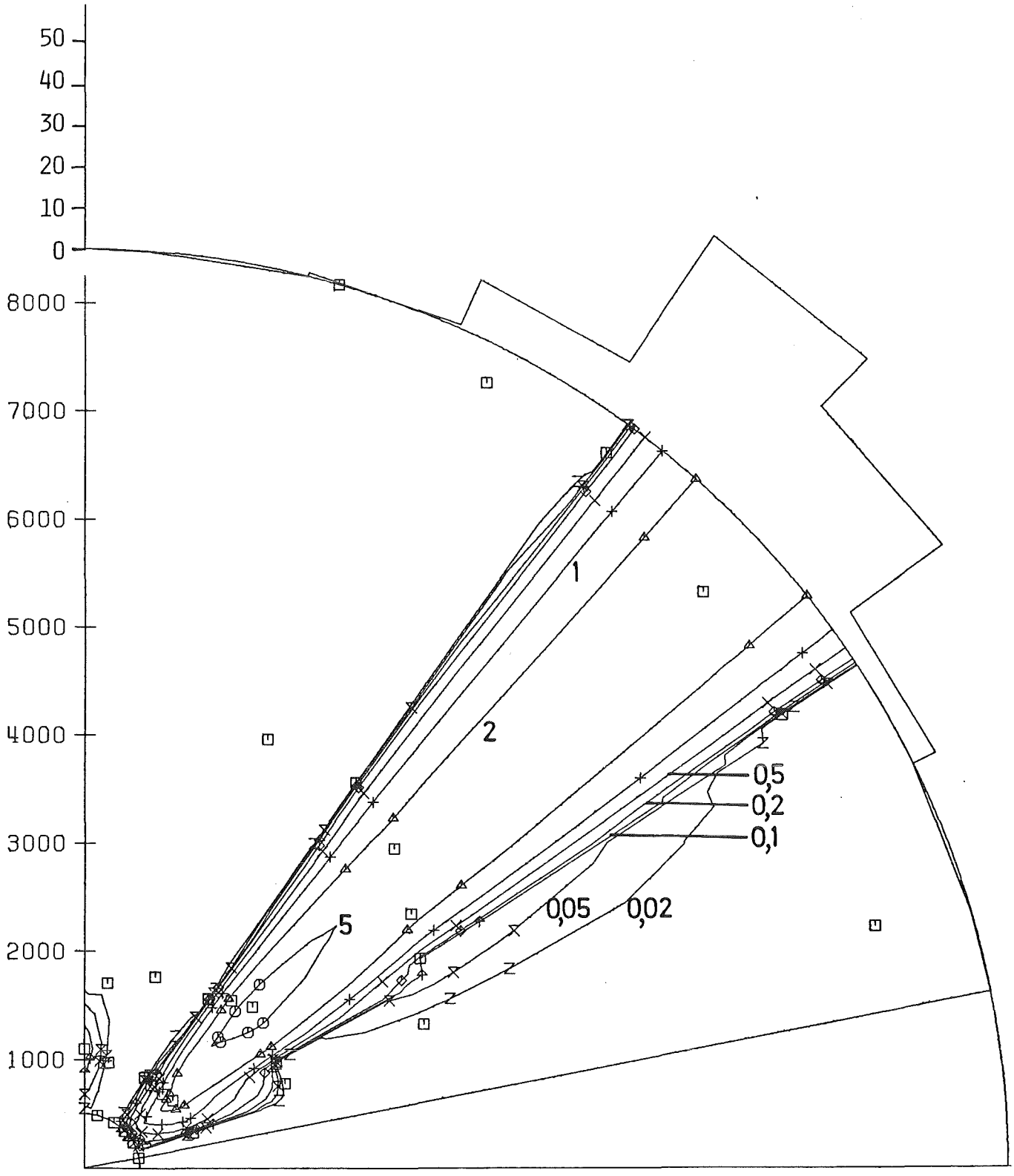

FIG. 20C: CONCENTRATION DISTRIBUTION IN 1/10**6 G/M**3
EXPERIMENT 72/1 CFCL3/J H=160 M
FOR DETAILED INFORMATION SEE FIGURE 1A

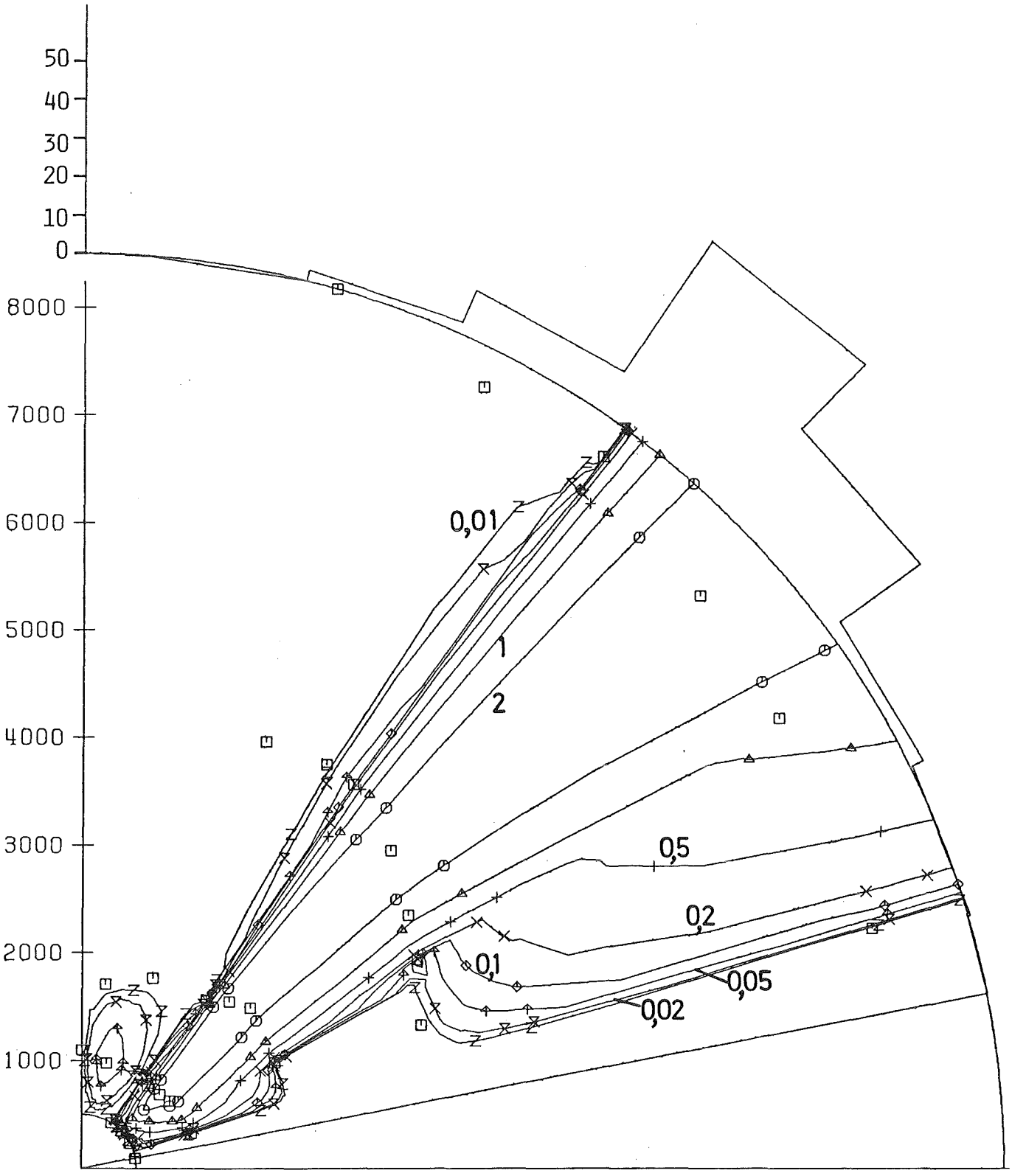

FIG. 20D: CONCENTRATION DISTRIBUTION IN 1/10**6 G/M**3
EXPERIMENT 72/2 CFCL3/ J H=160 M
FOR DETAILED INFORMATION SEE FIGURE 1A

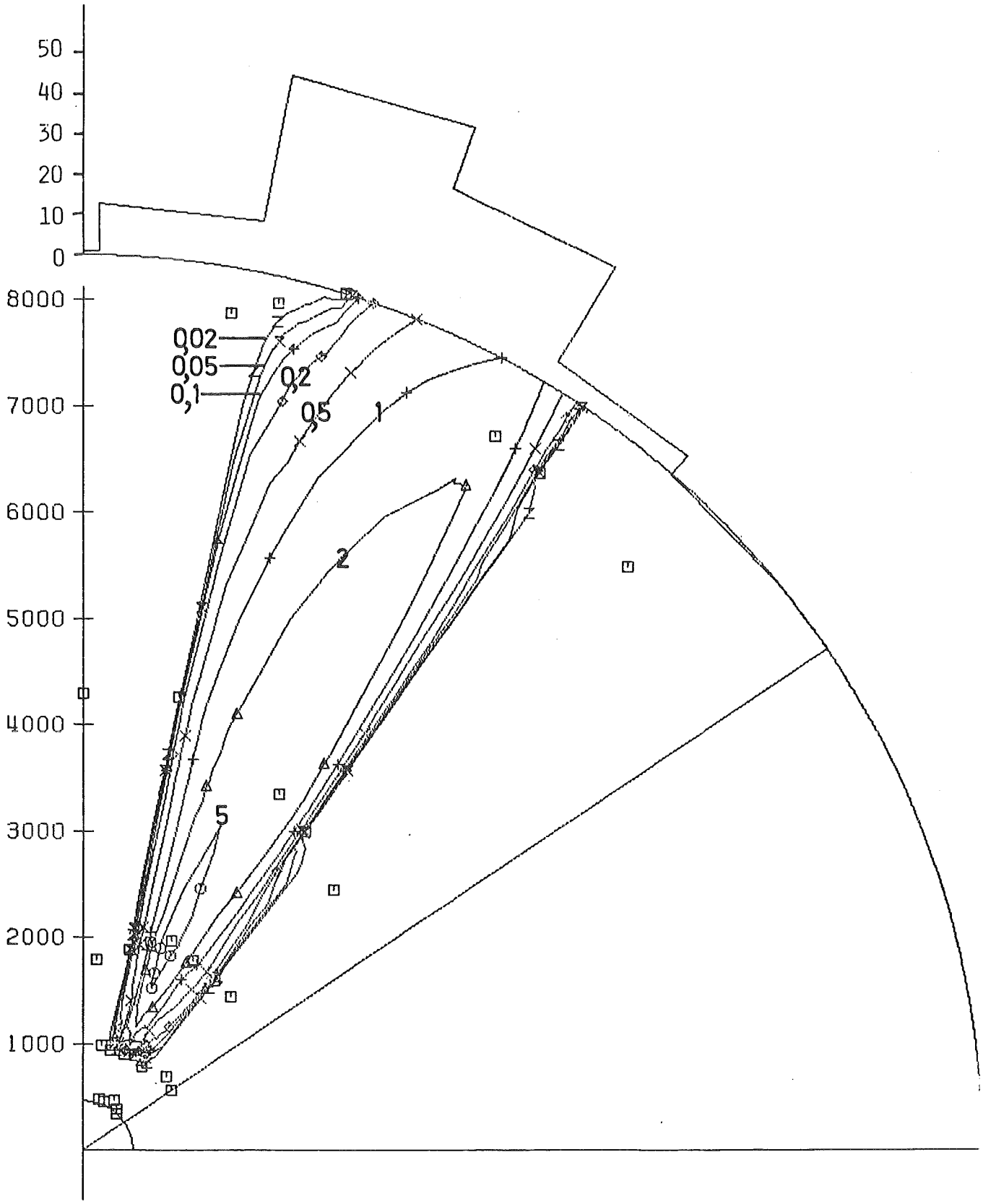

FIG. 20E: CONCENTRATION DISTRIBUTION IN 1/10**6 G/M**3

EXPERIMENT 72/1 CF2BR2 H=195 M

FOR DETAILED INFORMATION SEE FIGURE 1A

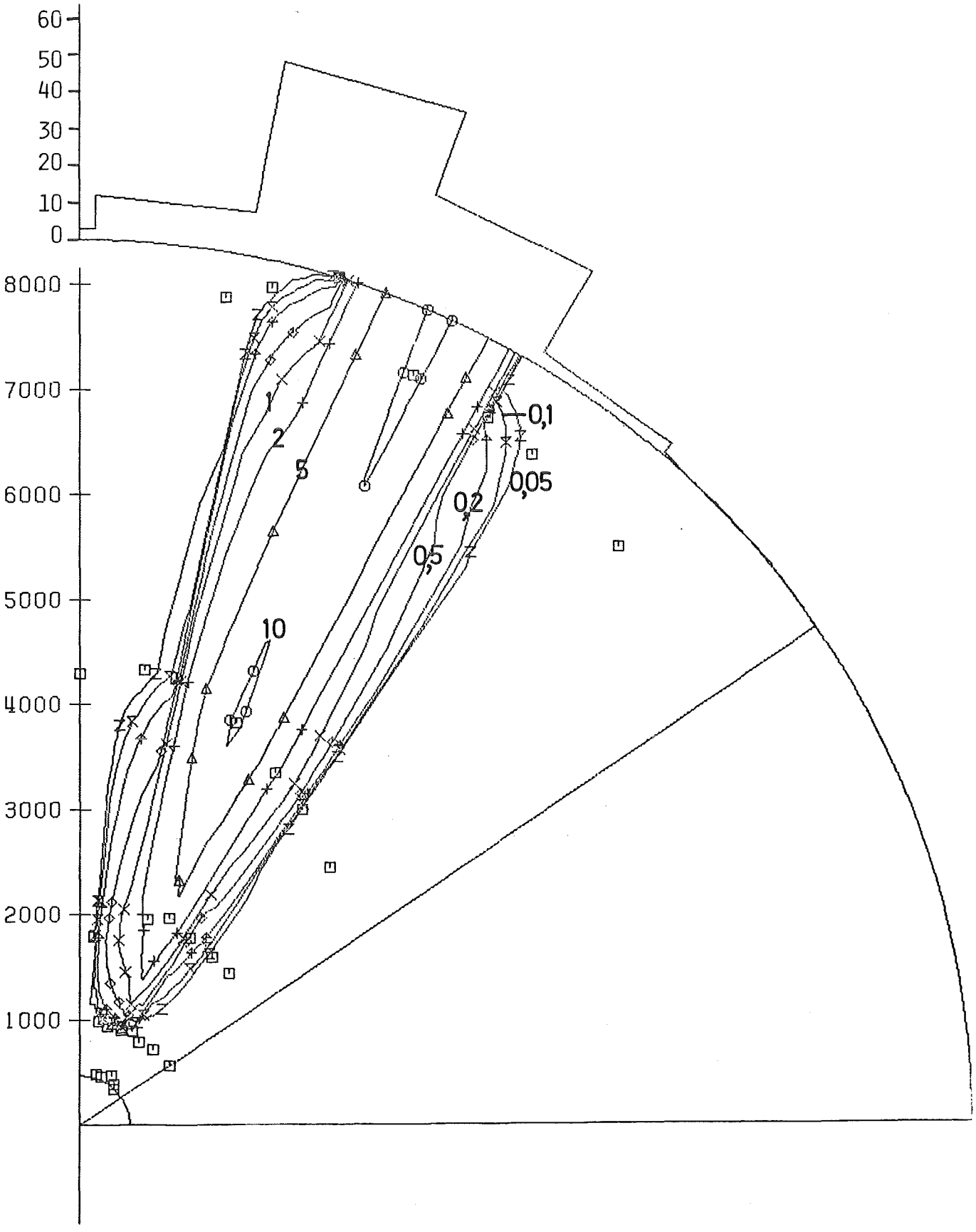

FIG. 20F: CONCENTRATION DISTRIBUTION IN 1/10**6 G/M**3
EXPERIMENT 72/2 CF2BR2 H=195 M
FOR DETAILED INFORMATION SEE FIGURE 1A

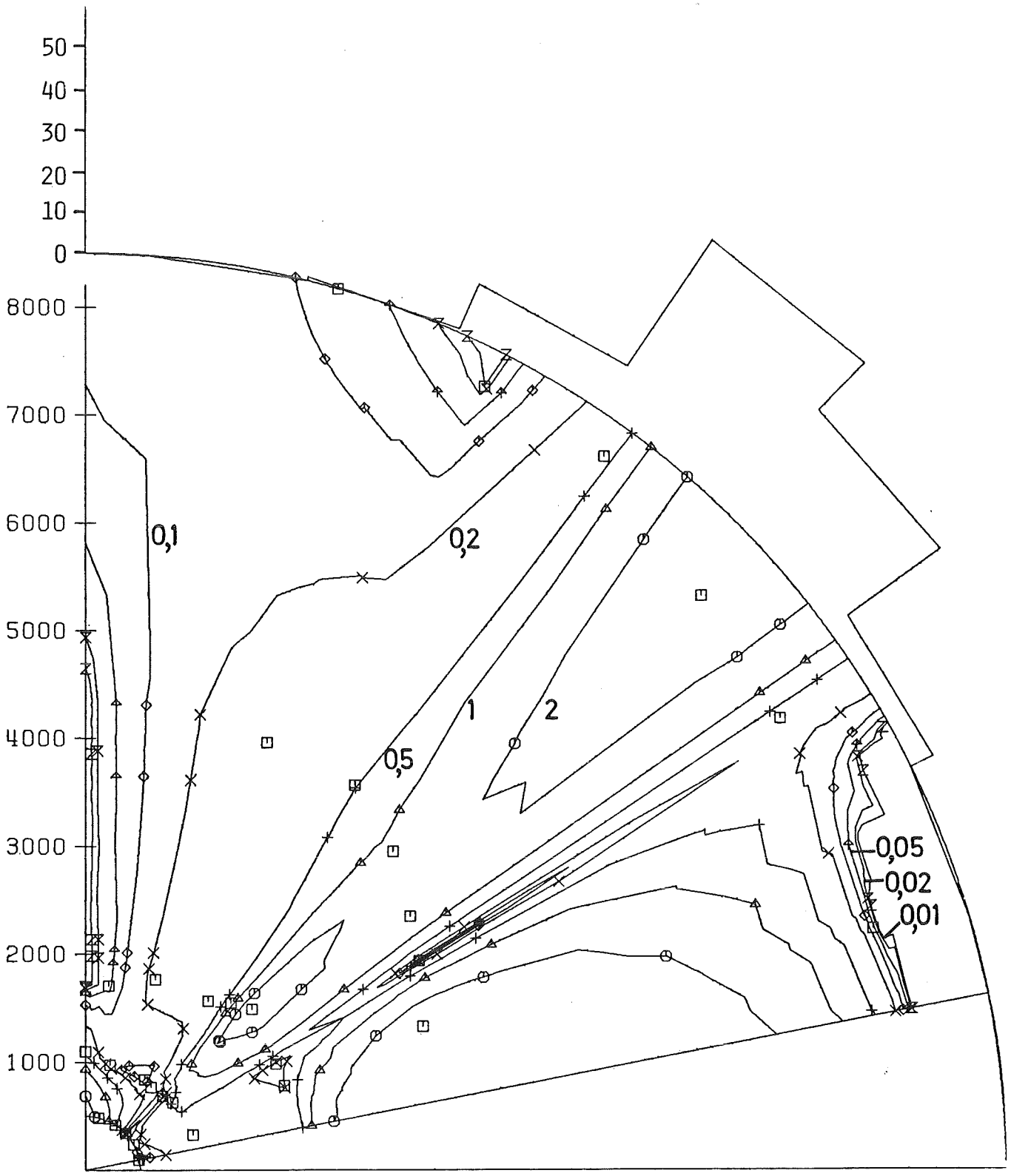

FIG. 20G: CONCENTRATION DISTRIBUTION IN 1/10**6 G/M**3
EXPERIMENT 72/1 SF6 H=195 M
FOR DETAILED INFORMATION SEE FIGURE 1A

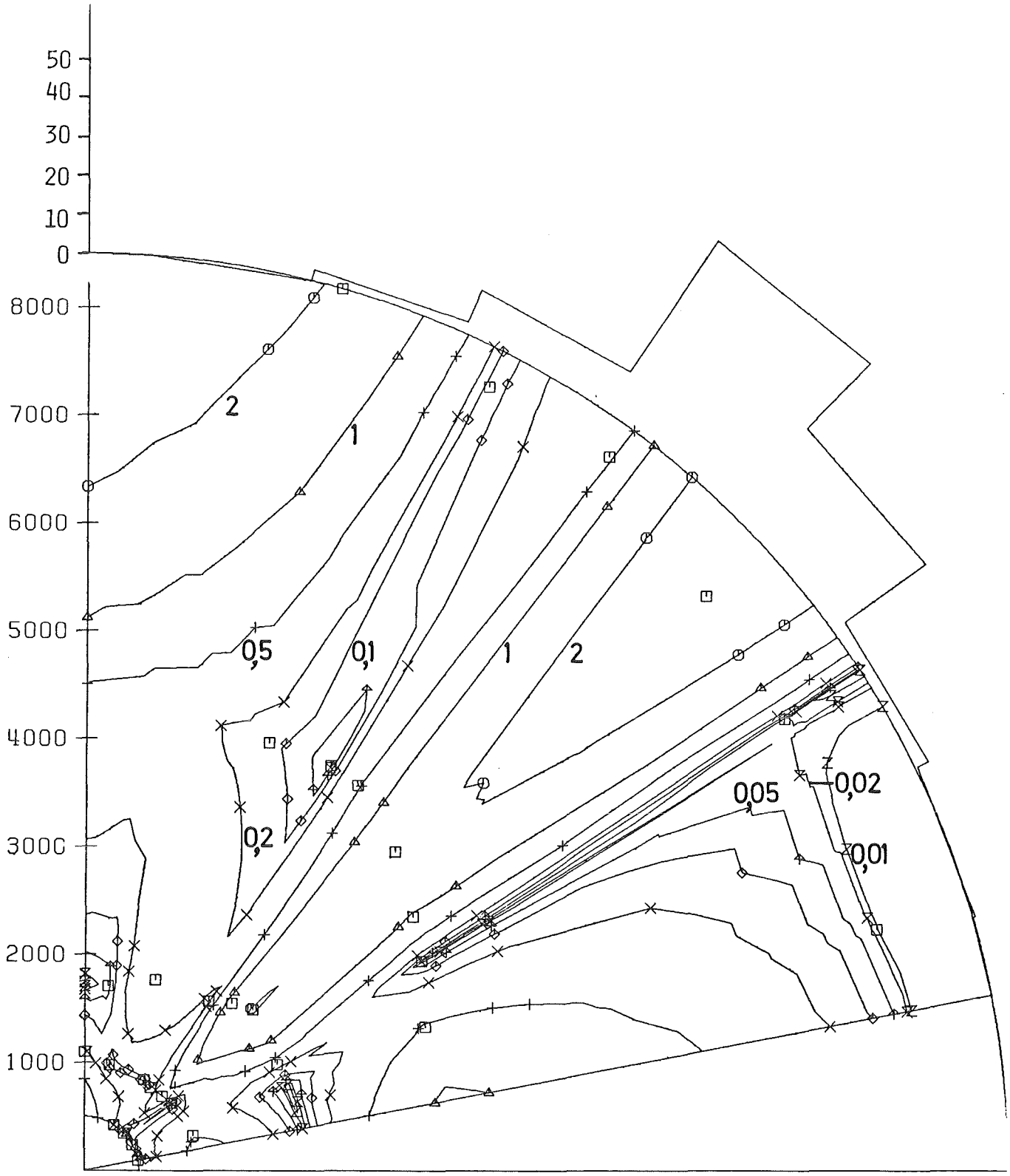

FIG. 20H: CONCENTRATION DISTRIBUTION IN 1/10**6 G/M**3
EXPERIMENT 72/2 SF6 H=195 M
FOR DETAILED INFORMATION SEE FIGURE 1A

TAB. 21A: METEOROLOGICAL DATA OF EXPERIMENT NO. 73

		HEIGHT	1.SAMPLING PERIOD			2.SAMPLING PERIOD		
		(M)	13.10	13.20	13.30	13.40	13.50	14.00
WIND DIRECTION (DEGREE)		40	217	214	214	220	215	222
		60	214	211	211	217	212	222
		100	211	209	209	215	217	218
		160	218	216	213	219	223	222
		200	226	223	220	225	228	227
WIND SPEED (M/S)		40	5.0	4.4	4.3	5.1	5.1	4.6
		60	5.7	5.0	5.2	5.9	5.6	5.2
		100	6.5	5.6	6.0	6.6	6.0	5.8
		160	6.8	5.6	6.4	6.6	6.5	6.1
		200	7.0	6.1	6.8	6.7	7.0	6.7
STANDARD DEVIATION OF WIND DIR. VECTOR VANE (DEGREE)	VER.	40	12.7	12.8	13.4	13.0	12.8	13.7
	HOR.		16.7	16.0	17.3	17.7	15.9	17.9
	VER.	100	7.8	8.7	8.0	7.7	7.3	8.2
	HOR.		9.6	10.5	10.3	10.5	9.6	10.5
	VER.	160	5.8	6.3	6.2	6.0	5.5	6.5
	HOR.		5.6	6.4	6.5	6.7	5.8	6.8
STAND. DEVIATION OF HOR. WIND DIRECTION WIND VANE (DEGREE)		100	7.1	12.0	11.7	7.1	10.1	9.6
TEMPERATURE GRADIENT (K/100M)		30/100	-1.5	-1.5	-1.6	-1.5	-1.4	-1.4
NET RADIATION (MW/CM**2)			34.2	33.7	33.0	32.9	32.5	27.3
DIFFUSION CATEGORY BASED ON ...	VER. FLUCTUATION		C			C		
	HOR. FLUCTUATION		D			D		
	TEMP. GRADIENT		B			C		
	SYNOP. OBSERV.		C			C		

TAB. 21B: EXPERIMENT 73 4. 8.80 13.00 - 14.00

TRACER AND EMISSION RATE: CFCL3 14.80 G/S

POSITION		R (M)	ALPHA (DEGREE)	TRACER CONCENTRATION IN NG/M**3 SAMPL. PERIOD 1	SAMPL. PERIOD 2
I	A	170.	341.	106	94
	B	110.	10.	≤ 384	351
	C	150.	16.	317	352
	D	160.	26.	619	822
	E	170.	35.	597	4544
	F	150.	45.	774	2088
	G	155.	58.	592	447
	H	145.	74.	804	1661
	I	120.	84.	1496	1807
	K	170.	101.	685	914
	L	145.	103.	9	592
II	A	335.	7.	325	247
	B	325.	15.	-	457
	C	360.	20.	≤ 390	114
	D	350.	28.	≤ 386	591
	E	310.	36.	1518	1346
	F	280.	46.	5055	833
	G	300.	54.	326	29
	H	300.	63.	2457	2897
	I	350.	65.	1734	-
	K	310.	73.	1525	1104
	L	285.	83.	1314	-
	M	320.	91.	43	666
	N	255.	96.	816	1165
III	A	615.	4.	-	1035
	B	600.	17.	976	535
	C	600.	28.	1873	409
	D	625.	38.	-	19600
	E	600.	47.	857	2031
	F	600.	55.	635	147
	G	605.	63.	700	314
	H	575.	67.	263	521
	I	590.	74.	465	821
	K	600.	80.	1382	818
	L	575.	86.	-	-
	M	555.	92.	1932	1471
	N	560.	101.	1101	1311

TAB. 21B: EXPERIMENT 73 4. 8.80 13.00 - 14.00

TRACER AND EMISSION RATE: CFCL3 14.80 G/S

POSITION		R (M)	ALPHA (DEGREE)	TRACER CONCENTRATION IN NG/M**3 SAMPL. PERIOD 1	SAMPL. PERIOD 2
IV	A	1285.	4.	517	725
	B	1160.	10.	895	-
	C	1135.	24.	10420	12598
	D	1185.	30.	11135	12326
	E	1225.	42.	24292	11323
	F	1495.	47.	7363	-
	G	1350.	56.	1546	822
	H	1180.	63.	1807	1378
	I	1430.	73.	1403	842
	K	1350.	85.	673	176
	L	1350.	91.	$\leq$ 395	$\leq$ 402
V	A	2500.	2.	1827	1096
	B	2400.	7.	718	185
	C	2650.	15.	734	856
	D	2800.	28.	809	2061
	E	2470.	35.	8505	9839
	F	2450.	44.	1702	3982
	G	2580.	53.	1111	1268
	H	2800.	65.	$\leq$ 386	1030
	I	2340.	72.	-	$\leq$ 385
	K	2310.	83.	399	231
	L	2750.	90.	$\leq$ 385	-
	M	2560.	100.	$\leq$ 389	696

TAB. 21C: EXPERIMENT 73 4.8.80 13.00 - 14.00

TRACER AND EMISSION RATE: CF2BR2 22.40 G/S

POSITION		R (M)	ALPHA (DEGREE)	TRACER CONCENTRATION IN NG/M**3 SAMPL. PERIOD 1	SAMPL. PERIOD 2
I	A	170.	341.	≤ 38	≤ 46
	B	110.	10.	≤ 33	≤ 39
	C	150.	16.	≤ 41	≤ 39
	D	160.	26.	≤ 42	≤ 40
	E	170.	35.	≤ 41	≤ 46
	F	150.	45.	≤ 41	≤ 46
	G	155.	58.	≤ 37	≤ 38
	H	145.	74.	≤ 41	≤ 45
	I	120.	84.	≤ 45	≤ 38
	K	170.	101.	≤ 43	≤ 46
	L	145.	103.	≤ 36	≤ 37
II	A	335.	7.	≤ 41	≤ 45
	B	325.	15.	-	≤ 41
	C	360.	20.	≤ 43	≤ 43
	D	350.	28.	≤ 39	≤ 44
	E	310.	36.	≤ 45	≤ 40
	F	280.	46.	≤ 38	≤ 44
	G	300.	54.	≤ 47	≤ 39
	H	300.	63.	≤ 42	≤ 42
	I	350.	65.	≤ 46	-
	K	310.	73.	≤ 39	≤ 39
	L	285.	83.	≤ 40	-
	M	320.	91.	≤ 44	≤ 44
	N	255.	96.	≤ 48	≤ 37
III	A	615.	4.	-	≤ 36
	B	600.	17.	≤ 45	≤ 58
	C	600.	28.	≤ 55	≤ 43
	D	625.	38.	-	292
	E	600.	47.	≤ 33	≤ 35
	F	600.	55.	≤ 31	≤ 32
	G	605.	63.	≤ 47	≤ 28
	H	575.	67.	≤ 48	≤ 30
	I	590.	74.	≤ 41	≤ 41
	K	600.	80.	≤ 39	≤ 42
	L	575.	86.	≤ 39	≤ 47
	M	555.	92.	≤ 44	≤ 36
	N	560.	101.	≤ 43	≤ 43

TAB. 21C: EXPERIMENT 73 4.8.80 13.00 - 14.00

TRACER AND EMISSION RATE: CF2BR2 22.40 G/S

POSITION		R (M)	ALPHA (DEGREE)	TRACER CONCENTRATION IN NG/M**3 SAMPL. PERIOD 1	SAMPL. PERIOD 2
IV	A	1285.	4.	≤ 35	≤ 35
	B	1160.	10.	≤ 31	-
	C	1135.	24.	1575	2049
	D	1185.	30.	6538	9438
	E	1225.	42.	22647	9892
	F	1495.	47.	14450	-
	G	1350.	56.	≤ 35	≤ 31
	H	1180.	63.	≤ 40	≤ 27
	I	1430.	73.	≤ 31	≤ 33
	K	1350.	85.	≤ 32	≤ 32
	L	1350.	91.	≤ 37	≤ 31
V	A	2500.	2.	≤ 40	≤ 38
	B	2400.	7.	≤ 31	≤ 30
	C	2650.	15.	≤ 40	≤ 38
	D	2800.	28.	526	2126
	E	2470.	35.	9836	16312
	F	2450.	44.	5438	10099
	G	2580.	53.	589	638
	H	2800.	65.	≤ 40	≤ 38
	I	2340.	72.	-	≤ 42
	K	2310.	83.	≤ 35	≤ 43
	L	2750.	90.	≤ 42	-
	M	2560.	100.	≤ 43	≤ 43

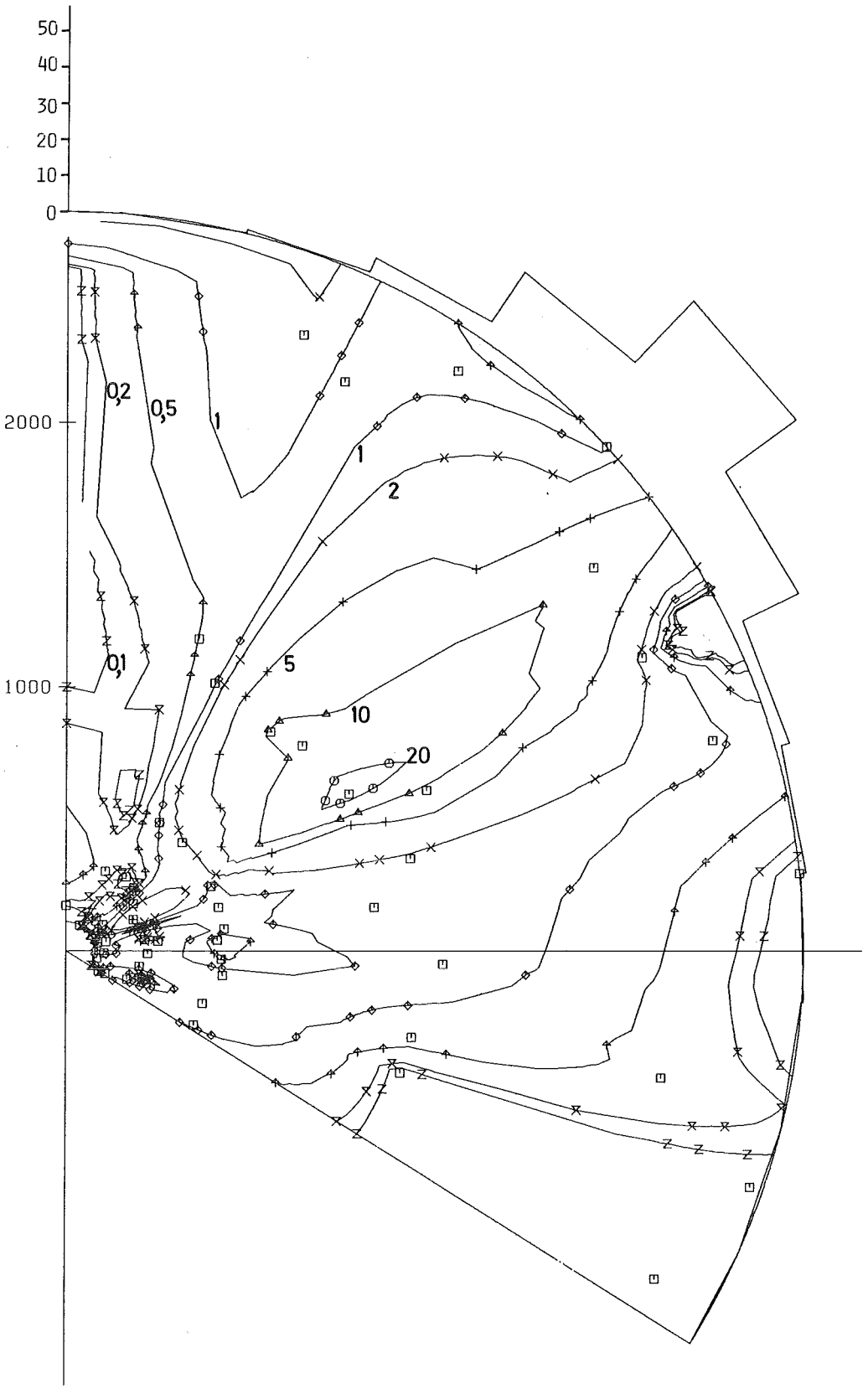

FIG. 21A: CONCENTRATION DISTRIBUTION IN 1/10××6 G/M××3
EXPERIMENT 73/1 CFCL3 H = 160 M
FOR DETAILED INFORMATION SEE FIGURE 1A

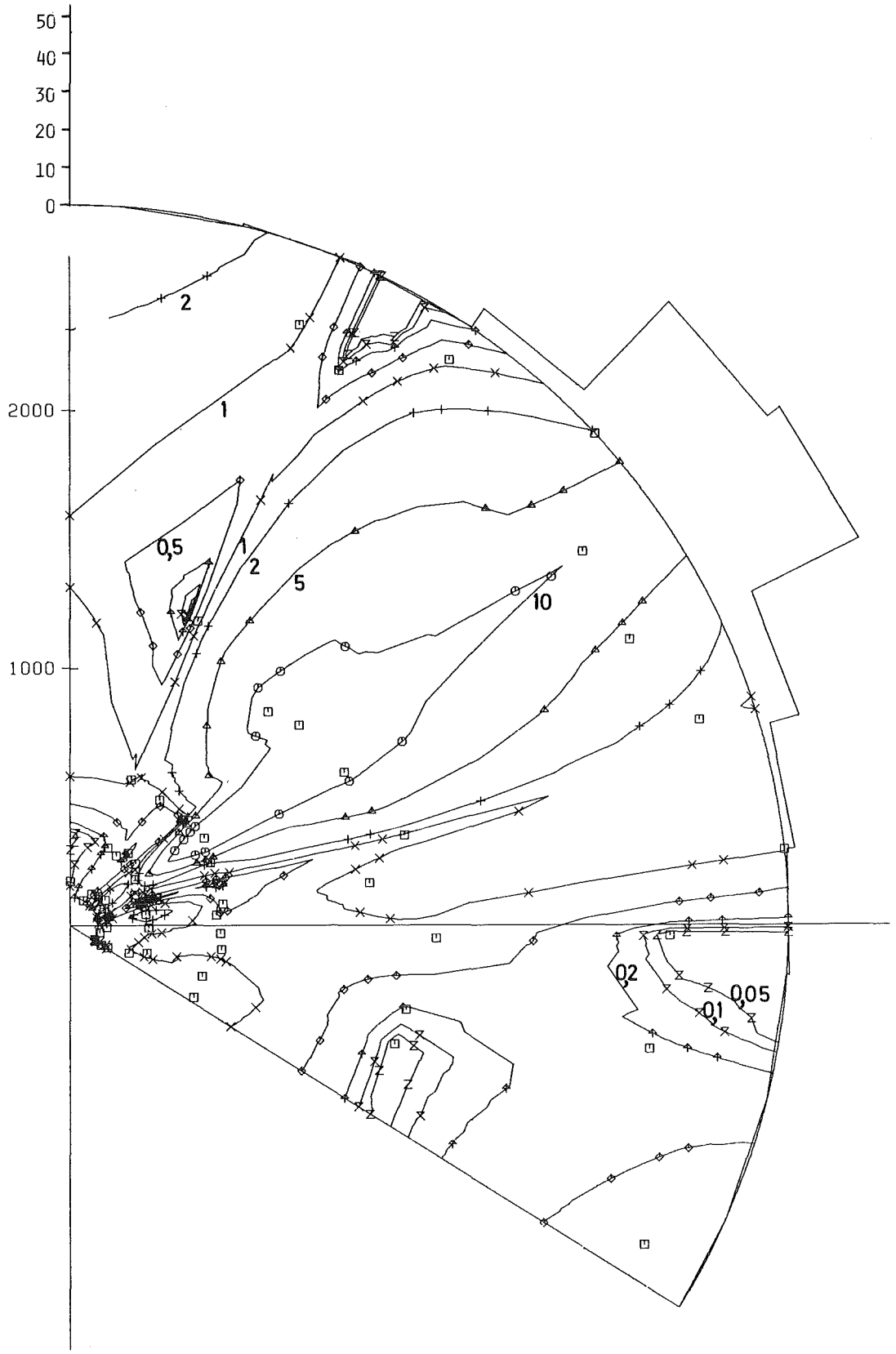

FIG. 21B: CONCENTRATION DISTRIBUTION IN 1/10××6 G/M××3
EXPERIMENT 73/2 CFCL3 H = 160 M
FOR DETAILED INFORMATION SEE FIGURE 1A

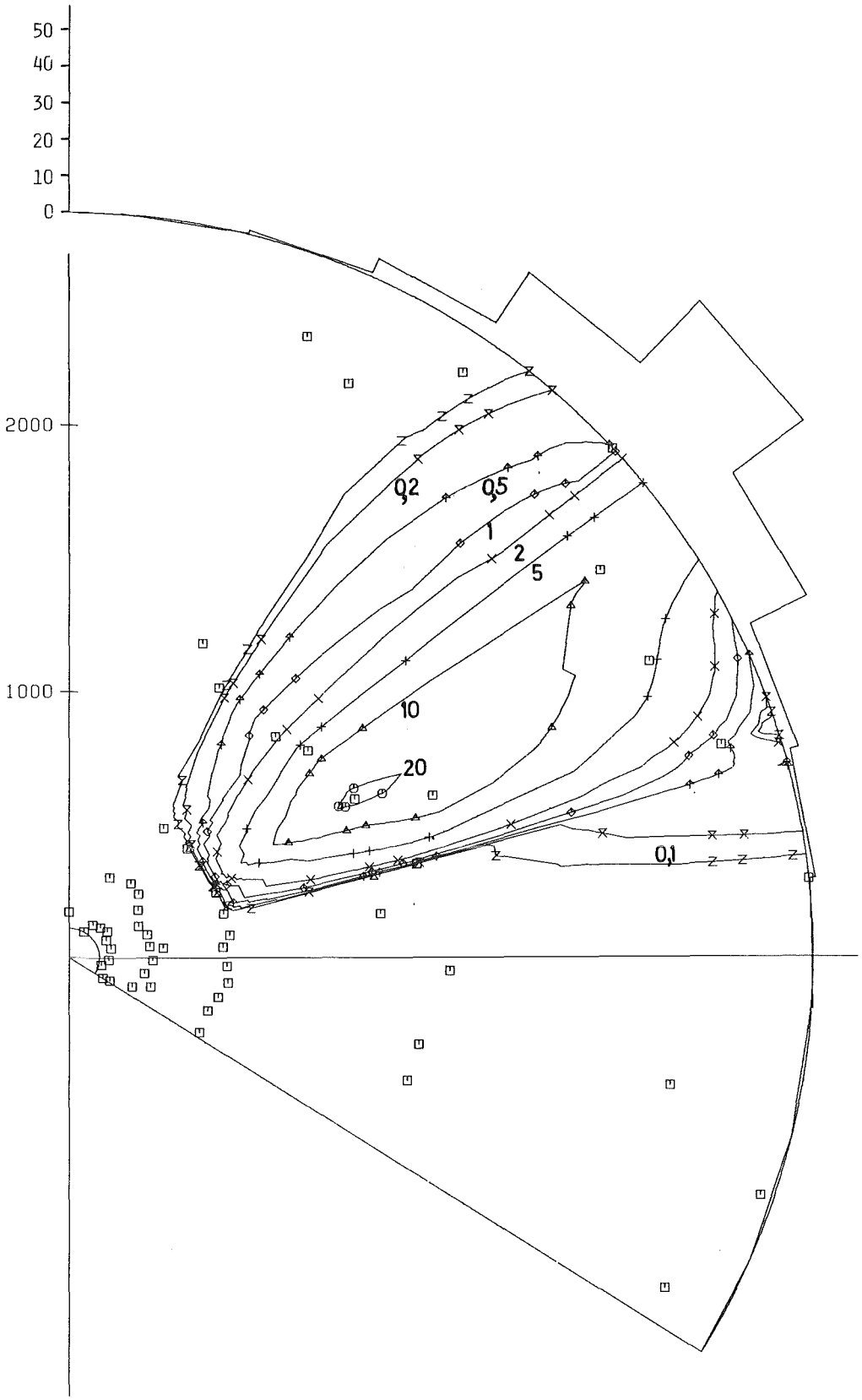

FIG. 21C: CONCENTRATION DISTRIBUTION IN 1/10××6 G/M××3
EXPERIMENT 73/1 CF2BR2 H = 195 M
FOR DETAILED INFORMATION SEE FIGURE 1A

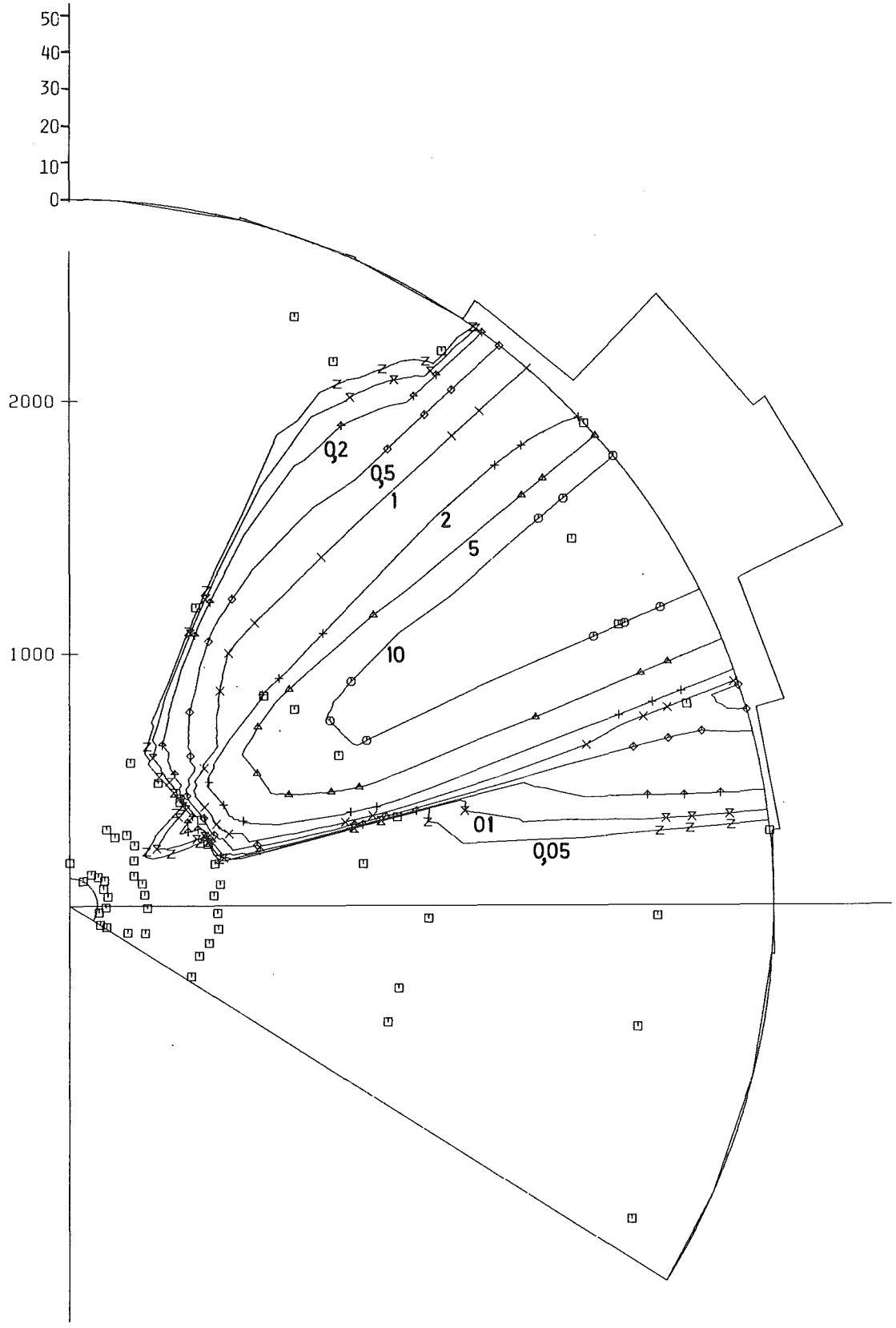

FIG. 21D: CONCENTRATION DISTRIBUTION IN 1/10××6 G/M××3
EXPERIMENT 73/2 CF2BR2 H = 195 M
FOR DETAILED INFORMATION SEE FIGURE 1A