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Mapping the contamination of Ivankiv district territory with radionuclides

FINAL REPORT

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Abstract

The radioactivity of the Ivankiv District has been measured coarsely in the past by gamma measurements (air gamma spectrometry, 1995 – 1997) and the radionuclides terrestrial contamination density in the settlements has been also determined in the course of the yard-by-yard survey in the early 90ies; the data from these measurements have been used to create a map of the District reflecting the distribution of radioactive contamination of the soil. Gamma measurements (air gamma spectrometry of ^{137}Cs) performed in 1995-1997 were done in a sketchy manner and need to be reviewed/updated. New measurements of the gamma-radiation equivalent dose rates (EDE) and the radionuclides activities in soil must be carried out for the more precise mapping of the radioactive contamination of the territory that will provide the higher spatial resolution and accuracy and will account for the radioactive decay of the radionuclides which are the most important now in the radiological concern, such as ^{90}Sr (half-life 28.8 years) and ^{137}Cs (half-life 30.2 years).

Gamma measurements of the soil can be done in-situ in a grid size that will be able to be used for the cartographic maps to be created at the required scale.

The surface area of the Ivankiv District covers an area of 3.616 km^2.

Representative large-scale gamma dose rate survey and soil sampling on regular grids of step width about 1 km and 3 km, respectively, were carried out for the first time in territory of Ivankiv district (Ukraine), which is adjacent with the 30km zone of the Chernobyl NPP. Integrated maps of terrestrial ^{90}Sr contamination density for the study territory (scale 1 : 200,000, 1 : 50,000) has been created from the analyzed soil samples.

Content

List of principal abbreviation and conventional signs

ChNPP – Chernobyl NPP

PED - power of ambient equivalent dose rate of photon ionizing irradiation;

SSTU – State standard of Ukraine;

WGS 84 (World Geodetic System 1984) — three - dimensional system of coordinates for positioning on the Earth.

1. Field works

According to requirements specification, methodology for the field works implementation has been elaborated. It was concerned to creation of the reference points net in the Ivankov region area, optimization of motor routes, measuring of geographical coordinates on the land, measurements of ambient equivalent dose of photon ionizing irradiation power (PED), and carrying out of soil sampling with aim to detect ^{137}Cs and ^{90}Sr content.

Both Ukrainian SSTU (SOU 74.14-37-424:2006 and SOU 74.14-37-425:2006) [1, 2], and as well as International standards (IS0 18589-2, IS0 18589-3, IS0 18589-5) were taken into account at the planning and realization of the field works.

We used the same methodology of sampling to create maps of radioactive contamination of the 30-km Chernobyl NPP exclusion zone [3, 4].

1.1 *Creation of the reference points net*

The Map of General Staff of the USSR (1:100000) tied up to geographical coordinates in WGS 84 system has been used as a topographic base for the electronic working map where the reference points net was plotted on (Fig. 1.1). To specify the current state of geographic objects the space digitized photos have been used (Fig. 1.2). MapInfo and OziExplorer Geoinformation products have been used for bringing the maps to conformity with geographic coordinates and creation of the reference points net.

The reference point net includes the territory of Ivankov region and 3-km zone near the border. Knots of the reference points net are used as coordinates for the points of PED measurements on land, and soil sampling. According to administrative arrangement of Ukraine, up-to-date area of the Ivankov region, without area of the alienation zone of ChNNP, amounts to 1.75 thousands $km^{2,}$ and 83 settlements are located there.

The reference point net consists of three sub-levels. The first level is represented by the grid with pitch 3000x3000 m (according to requirements specification – net B). The second level is represented by the grid with pitch 1000x1000 m (according to requirements specification – net A). The third level is represented by the grid with pitch 333x333 m.

PED measurements inside the area of settlements are carried out in knots of the grid 333x333 m; outside the settlements the same procedure in knots of the grid 1000x1000 m is done. Soil sampling inside the settlements is carried out in knots of the grid 1000x1000 m, and outside the settlements it is done in knots of the grid 3000x3000 m. The working map with the plotted reference points is given in Fig. 1.1.

To make it easy, the working map has been divided into 36 pages to be used for GPS navigation in field. Change of the map's page on-screen of tablet or notebook during navigation is realized automatically by loading of the respective graphic file.

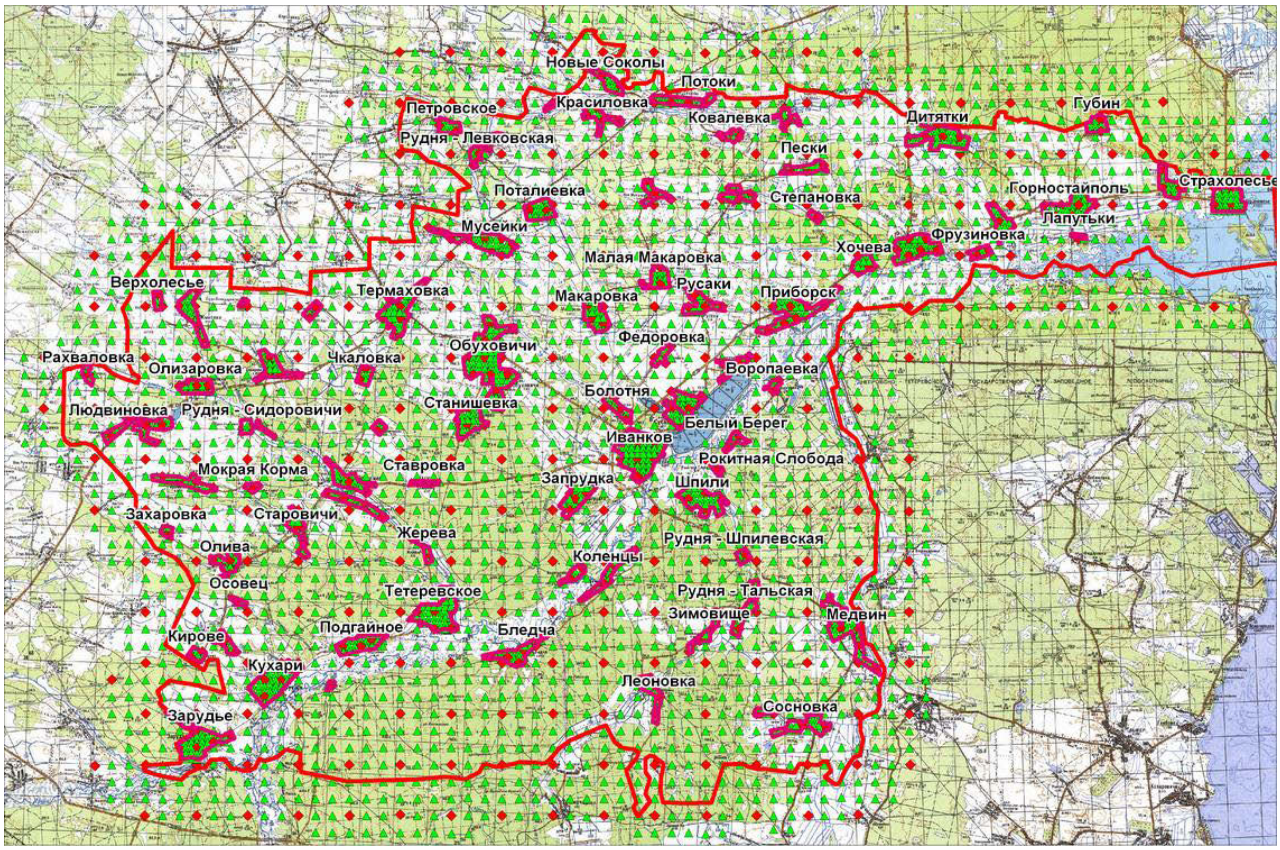

Fig. 1.1. The working map of Ivankov region with coordinates of points for PED measurements (green points) and soil sampling (red points).

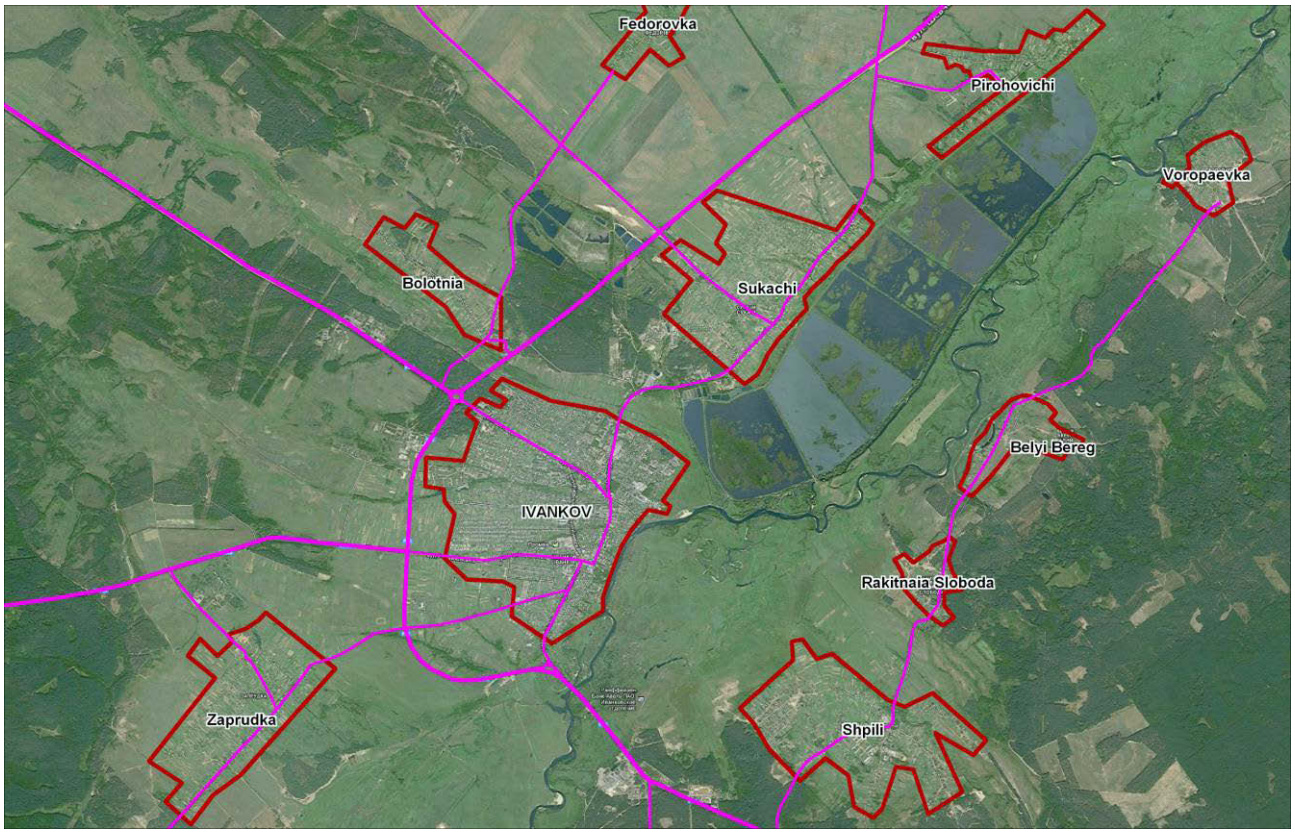

Fig. 1.2. Fragment of the Ivankov region map made after digitizing of the space photo.

1.2 *Working up of routes*

Analysis of the various cartographic information concerning Ivankov region (Google Earth, Google Maps, Yandex Maps, Maps of General Staff of the USSR 1:100000, et al.) has been accomplished during working up of itineraries to the reference points. Special attention was paid to cartographic data permitting schedule motor routes to points located distantly from the main roads (cuttings in forest, field roads, crossings et al.). As a result, the hybrid map with coordinates of the reference points was composed in OziExplorer medium and loaded to notebook with external GPS receiver. The system was placed in a car and used for navigation in field. This approach permitted to schedule the motor route taking into account distance and state of ways up to the reference points. Fragment of the hybrid map is given in Fig. 1.3.

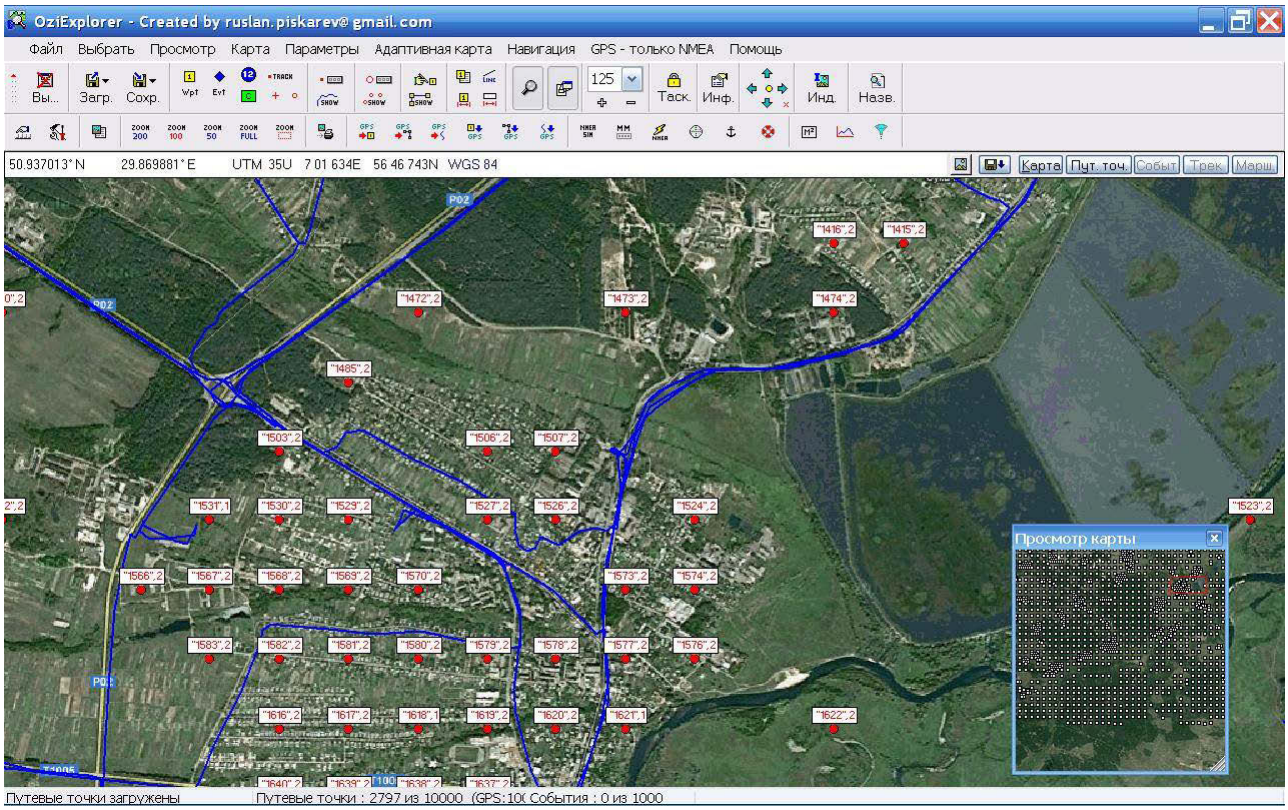

Fig. 1.3. Fragment of the hybrid map with the reference points used in GPS-navigation in field..

1.3 *Navigation in locality*

External GPS receiver GlobalSat attached to the notebook through Bluetooth has been used as the basic station for navigation in locality. Bringing the maps with the reference points to conformity with geographic coordinates was carried out in control points where coordinates were precisely estimated (intersection of primary roads). If it was impossible to arrive at the reference point nearer then the specified limit of radius, the point was reached on foot. In those cases portable GPS receivers Garmin GPSmap 60CSx containing previously loaded map of the region and reference points have been used to fix coordinates of sampling and PED measurements point. Coordinates were estimated in WGS 84 system.

As the error of coordinates estimation can be increased according to the actual in USA schedule of admission (SA), then, before beginning of the field works, testing of their detection accuracy has been carried out in points with well known coordinates.

1.4 *Measurements of ambient equivalent dose of photon ionizing irradiation power (PED)*

Measurements of ambient equivalent dose of photon ionizing irradiation power were carried out according to requirements specification at two values of heights (1 m and 10 cm over ground surface) in the points with geographic coordinates corresponding to coordinates of the reference points. PED was measured with use of radiometers-dosimeters for gamma-beta-irradiation RKS-01 (РКС-01) Stora-TU («Сторa-ТУ») (Fig. 1.4). This apparatus is certified in Ukraine. Detectors of ionising irradiation in radiometer are represented by four gas-discharge Geiger-Muller counters SBM-20-1 (СБМ-20-1). Measurements range for power of ambient equivalent for dose of gamma-and x-rays irradiation (^{137}Cs) amounts (0,1÷999,9) ± 15 % mcSv/hr. Time to obtain statistically reliable value of PED is not overrun 20 s.

Fig. 1.4. Outward of radiometer-dosimeter RKS-01 “Stora-TU”

Measurements of zero background for dosimeters in use have been performed before beginning of the main measurements. Measurements were carried out over surface of the water body where contribution of gamma-irradiation from natural and technogenic radionuclides is negligible because of water shielding , therefore the dosimeter’s readings are determined practically in full by sum of it’s own background and response to cosmic radiation (Fig. 1.5).

Fig. 1.5. Measurements of zero background for dosimeters on ice over the water body.

As far as possible, the plain areas were selected to measure PED in the reference points; distance up to the nearest buildings, constructions etc. was not less then 30 m.

All measurements were carried out in absence of the snow mantle.

Data of PED measurements can be distorted by such factors, as increase of irradiation due to washing out of radon decay products from atmosphere to ground surface with rain, alteration of soil density owing to water absorption. To reduce their effect, PED measurements have been carried out not earlier then 3 hours after rain.

To decrease shielding effect of human body to dosimeter, measurements were carried out on the outstretched aside arm; while other persons were located at a distance more then 5 m.

In each point and at each height not less then 5 measurements of PED were carried out; average meaning for value under measuring was calculated. Results of measurements were inserted into the field record book.

1.5 *Soil sampling*

According to requirements specification, samples of soil have been collected inside the settlements by the 1000x1000 m grid, and outside them - by the 3000x3000 m grid. Soil sampling was carried out in plots with geographical coordinates corresponding to knots of the reference net for soil sampling. The most horizontal (flat) places with even and smooth

vegetation, without any apparent breaking of the sod (surface layer of soil), and where PED values varied not more then 30%, have been selected. Distance from the sampling point up to the nearest trees and buildings was taken into account; and it had had not been less then their two heights.

In case of soil sampling in forestland, brushwood etc. where the distances up to the nearest trees, bushes et al. were less their two heights, selection of samples was carried out at the equal distances from trees and bushes . The special binding records were done in the field record book (section .Notes).

Sampling points were chosen at the distances not less then 20 m from roads and places, where accumulation or wash-off of radioactive contamination was probable. To form a composite sample of soil it is recommended to use 5 point samples (the "envelope sampling" ). 4-5 are minimum number of soil samples necessary to assess the relative error of median density of soil contamination $\delta_{\gamma=0.95}$ = 20 % (SOU 74.14-37-425:2006) with relative error of measuring ^{137}Cs activity $\boldsymbol{\delta_{meas}}$ **=10-20%** [2].

In each sampling area the composite (mixed) sample (mass is not less then 2 kg) has been prepared. With this aim 5 single-point samples were picked-up by an envelope procedure with pitch 2-5 m, to the depth not less 20 cm. Diameter of the sampler was 37 mm (Fig. 1.6). According to fulfilled studies, this approach assures comprehension and representativity of soil sampling, both on fuel, and condensed traces of Chernobyl release regardless of landscape conditions (forest, fallow, arable land, flood-land, dry-land), and contamination gradient [5].

Mixed (combined) soil sample has been prepared directly with picking-up of the single-point samples into common plastic packet. Protocol for each sample has been prepared where date, geographic coordinates of sampling, PED value, name of work executor, notes and brief description of landscape (wood, meadow, flood land etc.) et al. are given.

Fig. 1.6.. Sampler 37 mm (0,001 m^2)

In Fig. 1.7 the photo of soil sampling procedure is represented

Fig. 1.7. Procedure of soil sampling.

1.6 *Scope of the fulfilled works*

Taking into consideration weather conditions, 15 field campaigns of 5 days duration each one have been accomplished. During these campaigns PED values were measured in 3449 reference points, soil samples were collected in 549 points. That is conformed to requirements specification on fulfillment of field works completely.

Results of the field works are imaged and represented in Fig. 1.8, where green spots mark the reference points with measured PED , and red spots – points, where soil samples were collected and PED is measured. Protocols of the field works where geographic coordinates of sampling points, PED values and Notes are given as Excel files in Supplement.

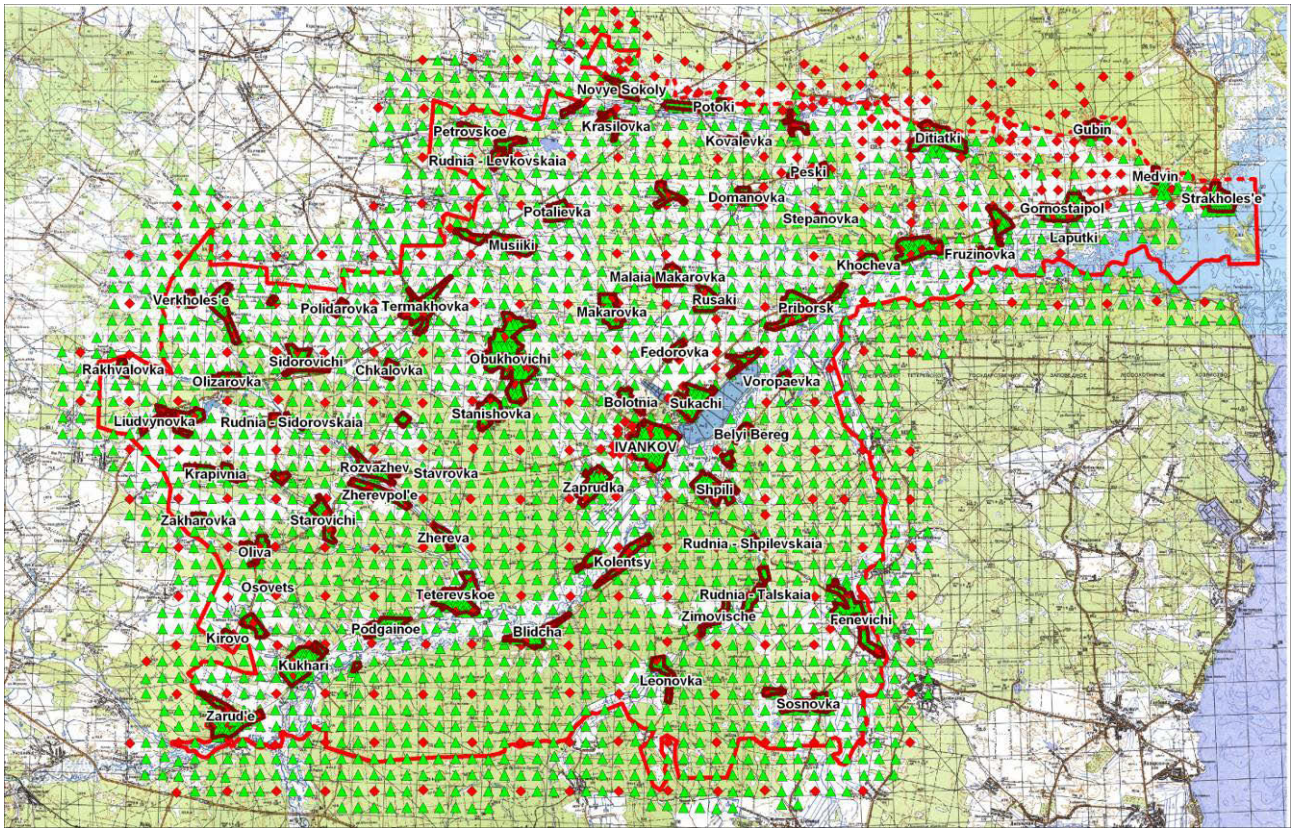

Fig. 1.8. The working map , where location of reference points with measured PED values (green), and points, where soil samples have been collected and PED measurements accomplished (red), are shown.

1.7 *Areas with anomalous radioactive contamination*

As a result of scheduled PED measurements accomplished in the area of Ivankov region, the local plots with PED values exceeding the blank meanings to few orders of magnitude have been revealed. Visual examination of these plots pointed to the fact, that, in due time, military sub-units on chemical defense participated in actions on Chernobyl catastrophe consequences elimination, were located there. Remains of various subjects, as saved sign-stops (Fig. 1.9), rests of ways with hard surface, ruined house footings, construction waste point to this assumption.

Fig. 1.9. Sign-stop for dislocation of brigade on chemical defense of population, MD USSR, participated in elimination of Chernobyl catastrophe consequences.

We have found two such plots. Both of them were located in the depth of forests, at a distance about 100 m from auto roads. Superficially conducted gamma-survey of these plots pointed to their extremely heterogeneous contamination (from blank meanings of PED to ones, exceeding 50 mcSv/hr in localities) (Fig. 1.10). Coordinates of these plots were fixated by respective record in the field record book.

Fig. 1.10. Detection of the local source of radioactive contamination with high meaning of PED

Photos of one of such sources represented by a small fragment of ferroconcrete are given in Fig. 1.11. High beta flow from the fragment might indicate its fuel character of contamination.

Fig. 1.11. Fragment of ferroconcrete construction with PED and density of beta flow exceeding the blank meanings up to three order of magnitude.

Indeed, occurrence of sites with high radioactive contamination outside the exclusion zone represents a serious threat for local residents, that is consequently required an immediate intervention.

The general approach to the problem solving has to be found, first of all, on analysis of archive documents concerning with dislocation places of military sub-units recruited in the works on elimination of Chernobyl catastrophe consequences, their detail radiation survey, and making-up of appropriate measures on de-activation.

2. Measurement of radionuclides activity concentration in collected soil samples

2.1 *Methods of measurements*

2.1.1 Sample treatment

The soil samples were dried in an electrical oven at 105°C to a constant weight. Then they were carefully mixed and sieved through a 1 mm sieve, 100-150 g aliquots were collected for further ^{90}Sr radiochemical analysis and 1l Marinelli beakers were filled for gamma-spectrometric measurements. All samples after gamma-spectrometric measurements are stored in laboratory.

2.1.2 Measurement of gamma-emitters activity concentration in soil samples

The gamma spectrometry measurements were performed using HPGe-detectors, of 30% relative efficiency and 1.90 keV FWHM for 1333 keV (GEM-30185,EG&G ORTEC, USA) and GammaVision32 software. The efficiency calibration was carried for the geometry 1L Marinelli beaker using the spiked soil sample (^{241}Am, ^{243}Am, ^{152}Eu, ^{154}Eu, ^{137}Cs, ^{40}K).

2.1.3 Radiochemical method applied for ^{90}Sr activity concentration determination

Principles for the measurement of the activity of ^{90}Sr in soil samples that used in this work are based on the standard ISO 18589-5 Measurement of radioactivity in the environment — Soil — Part 5: Measurement of strontium 90.

^{90}Sr activity is estimated through the measurement of its daughter product, yttrium. All the measurements are based on a chemical separation step followed by beta counting of the element using a beta-spectrometer (SEB-70, AKP (Ukraine)).

The radiochemical separation yield is calculated using carriers such as stable Sr and Y. Atomic absorption spectroscopy (Varian) is used to measure the carrier. Stable strontium is added as a carrier in considerable quantity that exceeds its original concentration in the test sample to avoid the overestimation of the radiochemical separation yield.

Procedures

Strontium desorption

Strontium is desorbed from the soil test portion by nitric acid treatment and remains in solution in the leachate fraction. The carrier is added at the start of this step of the procedure and left to

stay for one day to obtain equilibrium before starting the strontium desorption. This procedure includes the following steps:

- Weigh between 100 g and 150 g of the test sample and ash the aliquot in a muffle furnace at 550º C for 12 h.
- Gradually add 5 ml of 8 M HNO_3 per gram of sample.
- Add the carrier and stir to homogenize.
- Digest on a hot plate while mixing for 1 h.
- Wait up to one day.
- Transfer the sample to a funnel and filter it through a paper filter with repeated washing with water. Retain the supernatant.

Chemical separation by precipitation

The precipitation technique is suited to separate all mineral elements, including strontium, in soils samples with high mineral salt contents. It consists in the separation of rare earth elements including yttrium and strontium from alkaline by oxalate precipitation at pH 4. Cesium, soluble complexes of iron, aluminum, magnesium and uranium remain in solution. Yttrium and other interfering elements are eliminated by precipitating the hydroxides followed by the oxalates precipitation. The final product is a strontium carbonate precipitate. This procedure includes the following steps:

Separation of alkaline metals

- Transfer the filtrate to a 1000 ml glass beaker and add 40 to 50 g of oxalic acid, adjust the pH to 4 with concentrated ammonia.
- Wait up to one day.
- Slowly filter out the precipitated oxalates using a funnel with a paper filter
- After drying anneal the oxalates in a muffle furnace at 600º C for 2 h to convert them into carbonates.
- Transfer the carbonates to a 250 ml glass beaker and dissolve them by adding 20 to 40 g of 1M nitric acid. Digest on a hot plate while mixing for 2 h with intermittent additions of H_2O_2. Filter the solution through a 0.45 μm filter using a Buchner funnel. Retain the supernatant.

Separation of barium, radium and lead

- Adjust the pH to 4 to 6 with concentrated ammonia.
- Add 4 ml of barium acetate and heat.
- Add 1 ml of 1 M sodium chromate and stir.
- Leave it to cool; filter using a filter pump and a Buchner funnel.
- Wash the filter with demineralized water. Throw away the filter with the precipitate. Retain the supernatant.

Separation of fission products and yttrium

- Transfer the filtrate to a 250 ml glass beaker and add 1 ml of the Fe^{3+} carrier solution ((20 mg/ml).

- Adjust the pH to 9 using concentrated ammonia.
- Heat for 10 min, avoid boiling.
- Leave it to cool and filter through a 0.45 μm filter using a Buchner funnel.
- Wash the filter with 10 ml of demineralized water. Throw away the filter with the precipitate.
- Record the date and time of the precipitation as t = 0 for the time from the separation of the yttrium present in the test portion.

Strontium purification

-Adjust the pH to 8 using ammonia, add 20 ml of the saturated sodium carbonate solution. Stir for 30 min.
- Filter the $SrCO_3$ obtained using the filter pump and a Buchner funnel. Rinse the beaker and the precipitate with the 0.1 M sodium carbonate solution and then with demineralized water.
- Throw away the filtrate, leaving the precipitate to dry for at least 10 min, with the vacuum pump from the filter system running.
- Turn off the vacuum pump and slowly pour 100 ml of concentrated HNO_3 through the precipitate.
- Turn on the vacuum pump and leave the precipitate to dry.

Yttrium extraction

- Dissolve the $SrCO_3$ precipitate in a maximum volume of 35 ml of 2.5 M nitric acid. Put the solution in a pre-weighed flask and record the mass.
- Add 1 ml of the yttrium carrier (20 mg/ml in 0.1 mol/l HNO_3).
- Store for two weeks in order to reach an equilibrium of ^{90}Y of more than 95 %.
- Pour the solution at equilibrium into a centrifuge tube. Adjust the pH to 8 using ammonia. Heat in the water bath to 90 °C. Cold centrifuge to separate the precipitate.
- Collect in a beaker the supernatant, which contains the Sr tracer that allows the determination of the extraction yield of the strontium (used for determination of Sr concentration by AAS).
- Record the date and time of the separation of the strontium.
- Dissolve the yttrium precipitate in five drops of concentrated HCl and 30 ml of demineralized water.
- Add, whilst stirring, 5 ml of the saturated oxalic acid solution and adjust the pH to 2 to 2,5 using ammonia. Heat in the water bath to 90 °C, then leave to cool for 15 min.
- Filter the yttrium oxalate precipitate through the pre-weighed cellulose filter. Rinse the centrifuge tube with demineralized water.

Preparation of the source for measurement by beta-spectrometry

- Put the filter with the yttrium oxalate precipitate directly into a pre-weighed test dish. This is the source that is measured.
- Leave the source to dry in an oven until a constant mass is obtained, then leave it to cool in a desiccator.
- After weighing, put the source in the desiccator until it is measured.

Determination of the chemical yields

The chemical yield of the yttrium is calculated from the ratio of the mass of the collected oxalate precipitate to the mass of the equivalent yttrium oxalate added as a carrier in the middle of the procedure.

The chemical yield of the strontium is calculated from the ratio of the mass of the element in supernatant after Y precipitation to the mass of the t strontium added as a carrier at the start of the procedure.

2.2 *Experimental data*

Our laboratory has got 547 soil samples that had been collected within planed sampling net since the beginning of the project. All the samples were prepared for analysis – dried, sieved, weighted and registered. Rests of samples after measurement are kept in the laboratory storage and are available for quality assurance measurements or other analysis.

Activity concentrations of gamma-emitted radionuclides were measured in all soil samples using gamma-spectrometers with HPGe detectors. Average time of measurements was about 1 hour. But for samples with low content of natural radionuclides the value was increased to decrease uncertainties of measurements.

Activity concentration of ^{137}Cs in the soil samples varied in the wide range from 6 to 390 Bq kg^{-1}. Radioactive contamination of study area consists of a superposition of global fallout and radioactive fallout from the accident at the Chernobyl nuclear power plant. Global fallout of ^{137}Cs for this region at the moment is about 1 kBq m^{-2} (or 4 Bq kg^{-1}).

^{40}K, ^{238}U and ^{232}Th are long-lived radionuclides that have existed in the earth's crust throughout its history. The concentration of the primordial radionuclides in soil is determined by the radioactivity of the source rock and by the nature of the processes which involved in the formation of the soil. The soil cover of Ivankiv district mainly consists of soddy-podzolic, podzolic and boggy soils. Content of the natural radionuclides in these soils is low. For example, the mean values of activity concentrations of the natural radionuclides in podzolic soil are following: ^{40}K – 150 Bq kg^{-1}, ^{238}U – 9 - Bq kg^{-1} and ^{232}Th – 12 Bq kg^{-1} [6]. Thus, content of the natural radionuclides in the soil samples was anticipatory low. Mean values of activity concentration of the radionuclides in the soil samples were following: ^{40}K – 140 Bq kg^{-1}, ^{238}U – 12 - Bq kg^{-1} and ^{232}Th – 10 Bq kg^{-1} . One can see that the obtained values are very close to those mentioned above.

^{90}Sr contamination of the study area also consists of two components: fallout from global weapons testing and Chornobyl radioactive fallout. Global fallout of ^{90}Sr for this region at the

moment is about 0.6 kBq m^{-2} (or about 2 Bq kg^{-1}). Activity concentration of ^{90}Sr in the soil samples varied in the range from 1 to 190 Bq kg^{-1}. Strontium content in about 7% of the samples was close to the level of contamination due to global radioactive fallout.

All data on measured radionuclides activity concentrations are presented in Annex 1.

2.3 *Quality control of measurements*

Quality assurance programs of our laboratory are based on ISO/IEC 17025 standard. Laboratory of nuclear-physics methods of analysis and radiochemistry on a regular basis takes part in international and national proficiency tests. All analysis are carried out according to documented procedures.

Quality of gamma-spectrometric measurements are controlled by periodic monitoring of the system performance, creation and maintenance of QC X-charts for activity/efficiency, background and FWHM, and use of control samples made of reference materials. The QC performance monitoring procedures are performed routinely using MAESTRO 32 software QA option.

Also we have measured the reference sample of soil (IAEA-375). Obtained results are in the confidence interval material of recommended by the IAEA (Table 2.1).

Homogeneity of samples was checked by gamma-spectrometric measurements of three test portions, which were prepared from the same sample. Standard deviations between ^{137}Cs activity concentrations in the soil sub-samples for all samples that had been collected during the 1st campaign (65 samples) did not exceed 15 % (the value was typically lower than a measurement uncertainty).

Table 2.1 -Results of measurements of radionuclides activity concentration in soil, Bq/kg (reference date 31.12.1991).

IAEA-375				UIAR			
^{90}Sr	95% confidence interval	^{137}Cs	95% confidence interval	^{90}Sr	2σ	^{137}Cs	2σ
108	101-114	31.0	29.0-34.0	110.0	9.0	5320.0	300.0

3. Discussion of the results of measurements

3.1 *Relationship between the dose rate and the density of contamination*

The cosmic radiation dose rate on the territory of Ivankiv district and own background of used dosimeters were estimated before the beginning of experimental works. The experiment is described in details above (1.4). The data, that had been obtained in the experiment (Table 3.2) showed that the "zero background" (sum of device background and cosmic dose rate) for devices used in the work (Stora TU) can be estimated by the value of 0.08 μSv $hour^{-1}$ (STD-0.008 μSv $hour^{-1}$). Own background of these devices that had been measured in the laboratory using a 10 cm lead shielding was 0.05 μSv $hour^{-1}$ (STD-0.01 μSv $hour^{-1}$). Thus equivalent dose of cosmic radiation for study area can be estimated as 0.03 μSv $hour^{-1}$.

The dose rate in air 1 m above ground from the natural radionuclides present in the atmosphere and in the soil at sampling areas can be estimated using data on their activity concentrations in the soil samples and calculated conversation factors (Table 3.1).

Table 3.1 - Absorbed dose rate in air 1m above ground for a representative soil containing unit activity concentrations of ^{40}K, ^{238}U and ^{232}Th [6]

Radionuclides including their daughters	Absorbed dose rate per unit activity concentration in soil, · 10^{-10}Gy $hour^{-1}$ per Bq kg^{-1}
^{40}K	0.43
^{238}U	4.27
^{232}Th	6.62

At each measuring point of grid A, the total gamma radiation dose rates at a 1 m distance above the soil and at a 0.1 m distance above the soil were measured. Data on measured total dose rates at sampling points are presented in Annex 2. The total dose rate of gamma radiation at sampling points consists of four main sources: device background; cosmic radiation, natural radionuclides and ^{137}Cs. The aim of our gamma radiation survey was to allocate the contribution of the last component and use it for ^{137}Cs terrestrial density of contamination.

Analysis of dose rate data showed that in general there is a tendency of dose rates increasing with increasing of density of contamination with ^{137}Cs (Fig. 3.1,Fig. 3.2). But correlation of these values was very low. This was most likely due to high intrinsic background of the used instrument, its low sensitivity and the different landscape of many of the sampling sites assessed. The best relationship between dose rate and ^{137}Cs density of contamination was observed for forest sites where the main part of the radionuclide is located in litter and upper layers of mineral soil. Also, the relationship is better for measurements at 1 m above the ground. In this case the measured gamma field characterizes the larger area of the contaminated soil surface than for measurements at 0.1m above the ground.

Contribution of natural radionuclides to total measured dose was estimated using data on their activity concentrations in soil samples and conversation factors (Table 3.1) in assumption that these radionuclides are uniformly distributed in the ground. The estimated values ranged from 0.008 to 0.07 $\mu Sv\ hr^{-1}$ with a mean of 0.022 $\mu Sv\ hr^{-1}$ (STD- 0.007 $\mu Sv\ hr^{-1}$). The instrumental and cosmic background and contribution from natural radionuclides were subtracted from values of measured dose rates. No consistent relationship between obtained values and ^{137}Cs terrestrial density of contamination was observed (Fig. 3.3). Furthermore, a part of obtained values fall into negative region. Main reason of such result is big total uncertainty of these values. Mainly, used dosimeters worked at the dose rates close to their background. Measurements in this region have large uncertainties. Also, each step of estimations is characterized by an uncertainty and a final value uncertainty accumulates them.

Taking into account obtained data on gamma dose rate at sampling points and their analysis we can state that it is impossible to determine contribution of ^{137}Cs into total measured dose rate and reconstruct ^{137}Cs terrestrial density of contamination. Thus, the dose rate values were not used for mapping.

Table 3.2 – Data on measurements of zero background for dosimeters on ice over the water body

	Dose rate, μSv hour^{-1}						
#	TerraP No1	TerraP No2	Terra	Stora ТУ No1	Stora ТУ No2	Stora	SRP-88
1	0.07	0.07	0.07	0.1	0.09	0.07	0.05
2	0.07	0.08	0.07	0.1	0.09	0.07	0.04
3	0.07	0.08	0.07	0.08	0.08	0.07	0.04
4	0.07	0.09	0.07	0.08	0.08	0.07	0.04
5	0.07	0.08	0.08	0.08	0.07	0.08	0.05
6	0.06	0.08	0.07	0.08	0.08	0.07	0.04
7	0.07	0.08	0.07	0.07	0.07	0.07	0.05
8	0.06	0.07	0.07	0.07	0.07	0.09	0.06
9	0.07	0.07	0.07	0.07	0.07	0.09	0.05
10	0.07	0.07	0.07	0.08	0.07	0.09	0.06
11	0.06	0.07	0.07	0.07	0.08	0.09	0.04
12	0.06	0.07	0.07	0.07	0.07	0.08	0.05
13	0.06	0.08	0.07	0.08	0.09	0.08	0.05
14	0.06	0.07	0.07	0.07	0.1	0.08	0.06
15	0.06	0.07	0.05	0.08	0.07	0.07	0.05
16	0.06	0.07	0.06	0.1	0.08	0.07	0.05
17	0.06	0.07	0.06	0.09	0.08	0.07	0.05
18	0.06	0.07	0.05	0.09	0.08	0.07	0.06
19	0.06	0.08	0.05	0.08	0.08	0.07	0.05
20	0.07	0.07	0.06	0.08	0.09	0.08	0.05
21	0.07	0.07	0.06	0.07	0.09	0.08	0.05
22	0.07	0.07	0.06	0.08	0.08	0.08	0.06
23	0.06	0.07	0.06	0.08	0.08	0.08	0.04
24	0.07	0.07	0.06	0.08	0.08	0.08	0.06
25	0.07	0.07	0.06	0.08	0.07	0.08	0.05
26	0.07	0.07	0.06	0.08	0.08	0.08	0.06
27	0.07	0.07	0.06	0.08	0.08	0.08	0.05
28	0.06	0.06	0.05	0.09	0.08	0.07	0.05
29	0.06	0.06	0.05	0.08	0.09	0.07	0.04
30	0.06	0.06	0.05	0.08	0.1	0.07	0.04
31	0.06	0.06	0.06	0.08	0.09	0.06	0.04
32	0.06	0.06	0.06	0.09	0.1	0.06	0.06
33	0.06	0.06	0.06	0.08	0.11	0.06	0.05
34	0.07	0.08	0.07	0.08	0.09	0.09	0.05
35	0.06	0.08	0.07	0.07	0.08	0.09	0.05
36	0.06	0.08	0.07	0.08	0.08	0.09	0.05
37	0.06	0.08	0.08	0.07	0.07	0.09	0.06
38	0.06	0.08	0.07	0.07	0.08	0.08	0.05
39	0.07	0.08	0.06	0.09	0.08	0.07	0.06
40	0.07	0.07	0.07	0.09	0.09	0.08	0.05
41	0.07	0.07	0.06	0.08	0.08	0.08	0.04
42	0.06	0.07	0.05	0.08	0.09	0.07	0.05
43	0.06	0.07	0.06	0.09	0.09	0.07	0.06
44	0.05	0.07	0.06	0.08	0.09	0.07	0.05
45	0.06	0.07	0.06	0.07	0.08	0.06	0.06
46	0.06	0.07	0.06	0.08	0.07	0.06	0.05
Mean	**0.064**	**0.072**	**0.063**	**0.080**	**0.082**	**0.076**	**0.050**
Median	**0.060**	**0.070**	**0.060**	**0.080**	**0.080**	**0.075**	**0.050**
STD	**0.005**	**0.007**	**0.008**	**0.008**	**0.009**	**0.009**	**0.007**

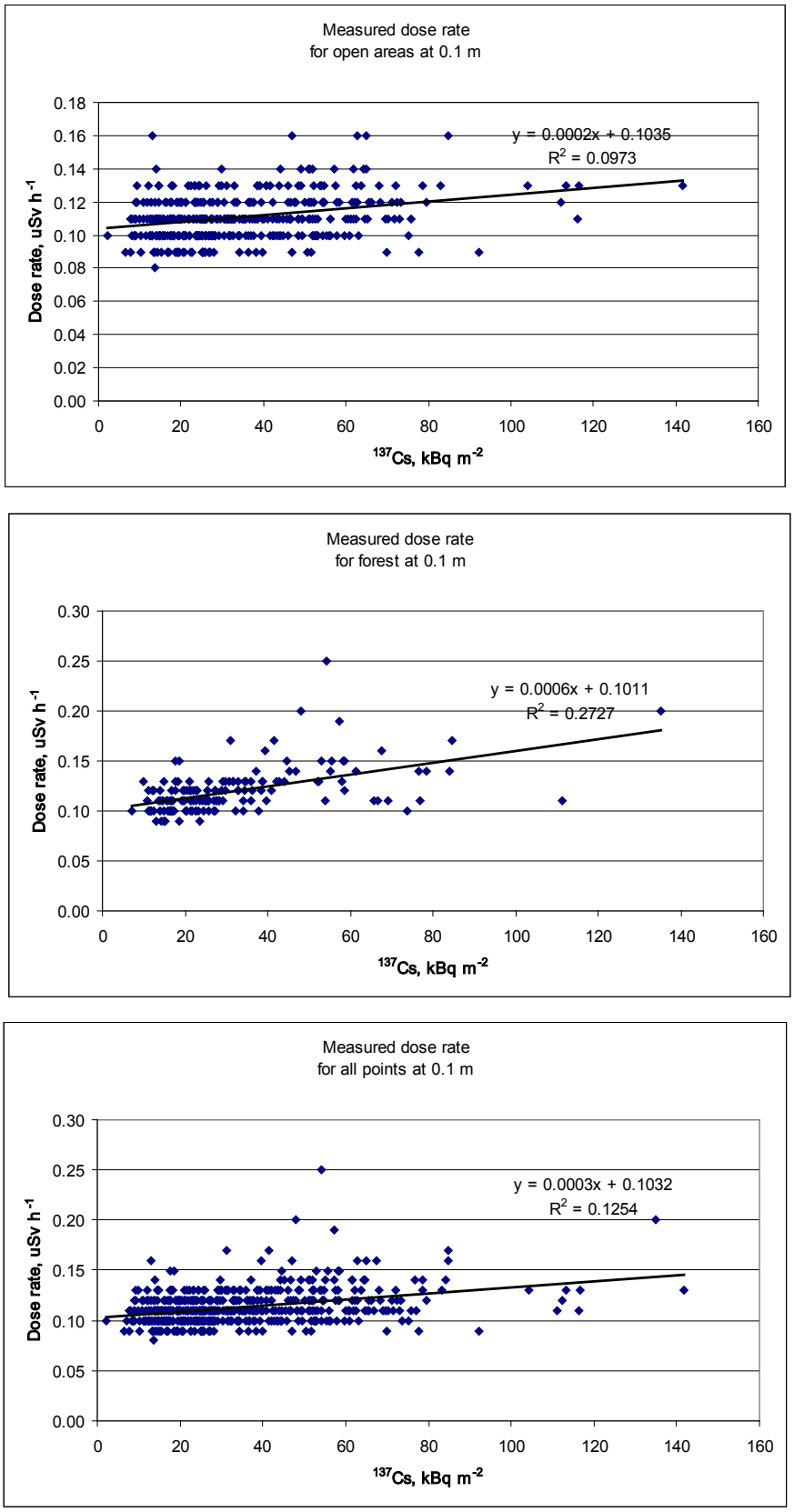

Fig. 3.1 –Relationship between total dose rates measured at 0.1 m at the ground and ^{137}Cs terrestrial densities of contamination

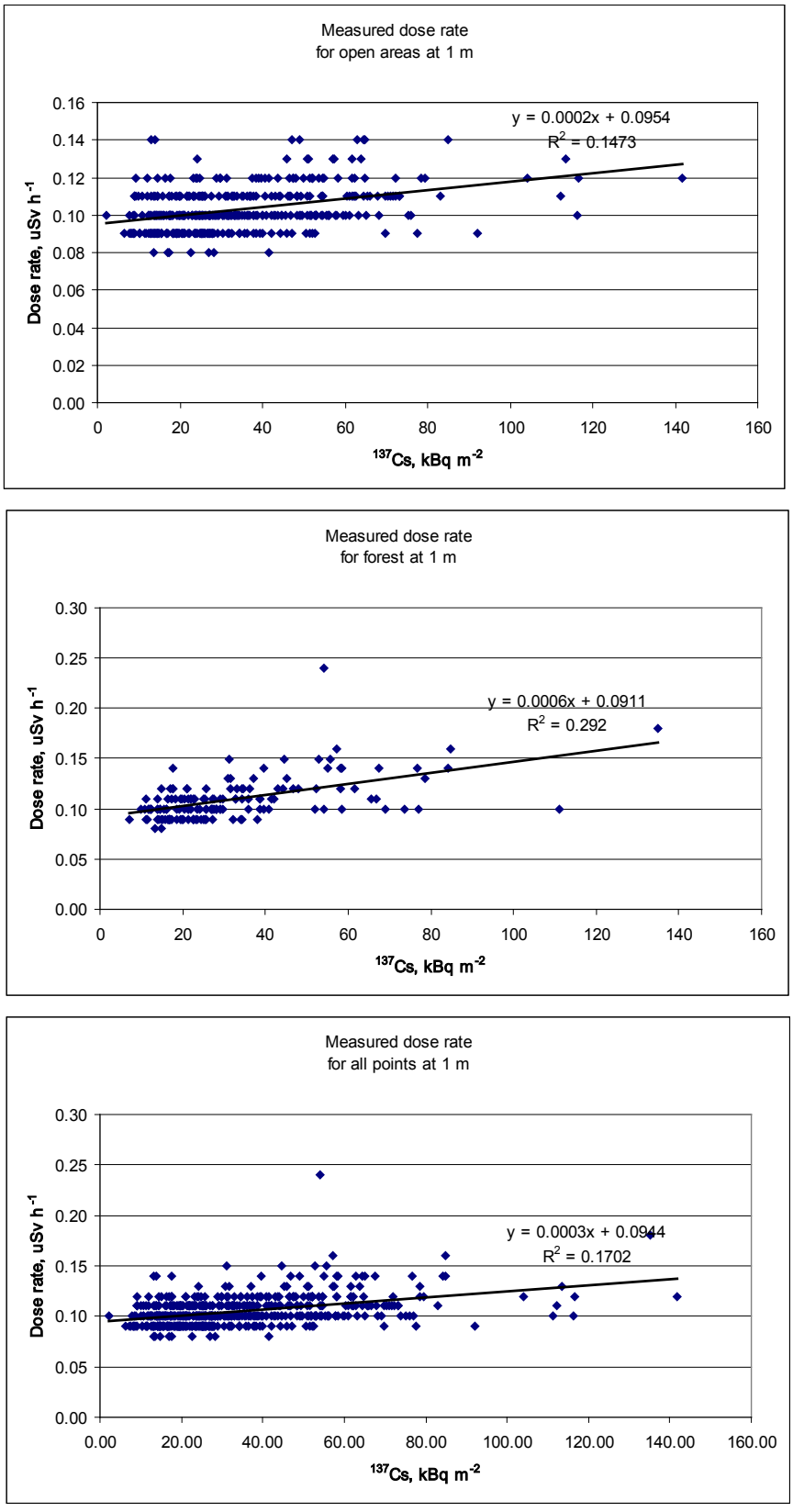

Fig. 3.2 –Relationship between total dose rates measured above 1m at the ground and ^{137}Cs terrestrial densities of contamination

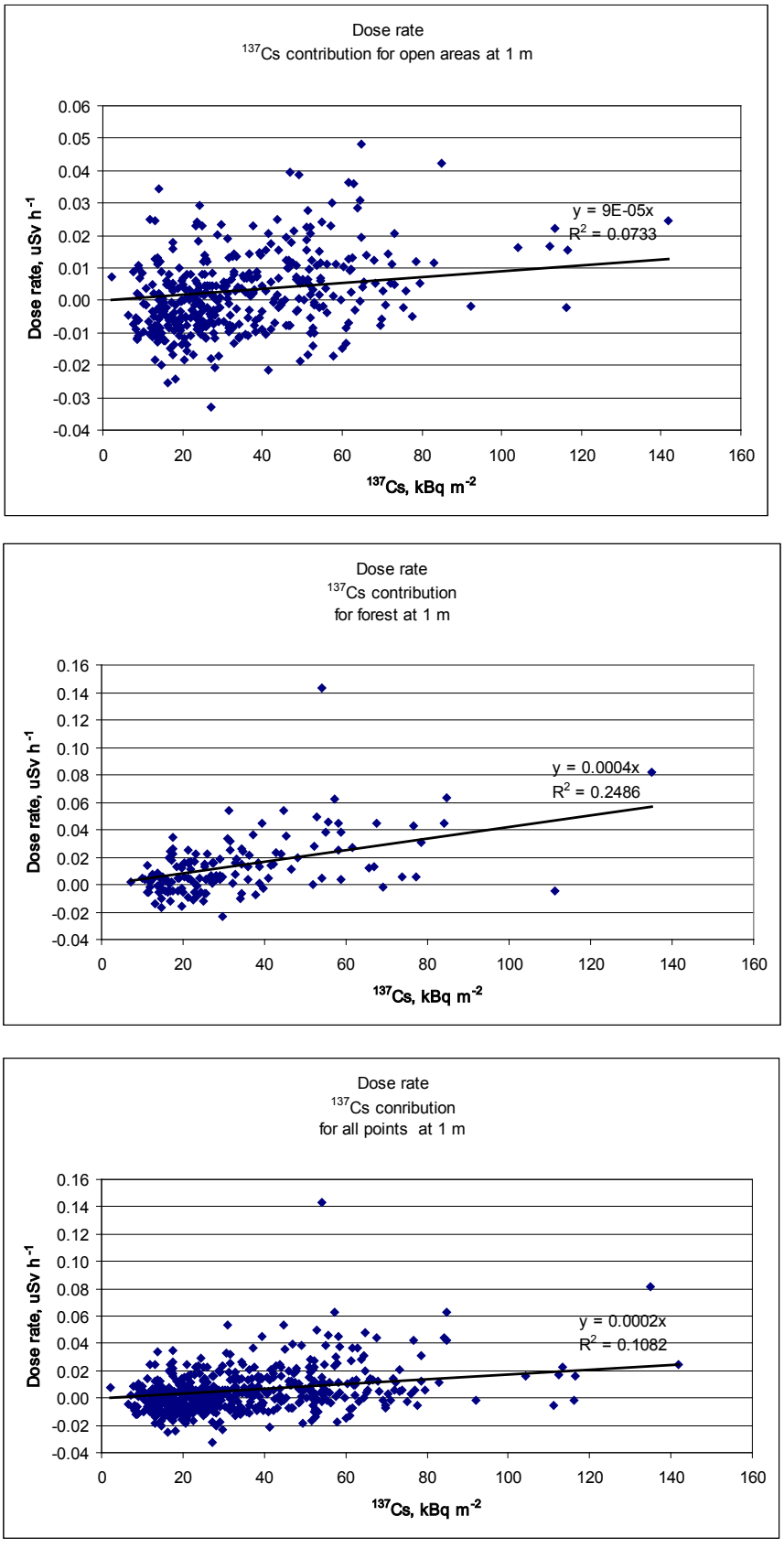

Fig. 3.3 –Relationship between calculated dose rates from ^{137}Cs above 1m at the ground and ^{137}Cs terrestrial densities of contamination

3.2 *The ratio between the measured density of ^{137}Cs contamination of settlements and passport (official) data*

The values of the mean densities of contamination with ^{137}Cs of settlements Ivankov district correspond to the official data of dose certification of Ukraine in 1990-1991 (Fig. 3.4, Table 3.1, Fig. 3.5) [7]. The measured density of ^{137}Cs contamination was lower than the official values for 70% of villages.

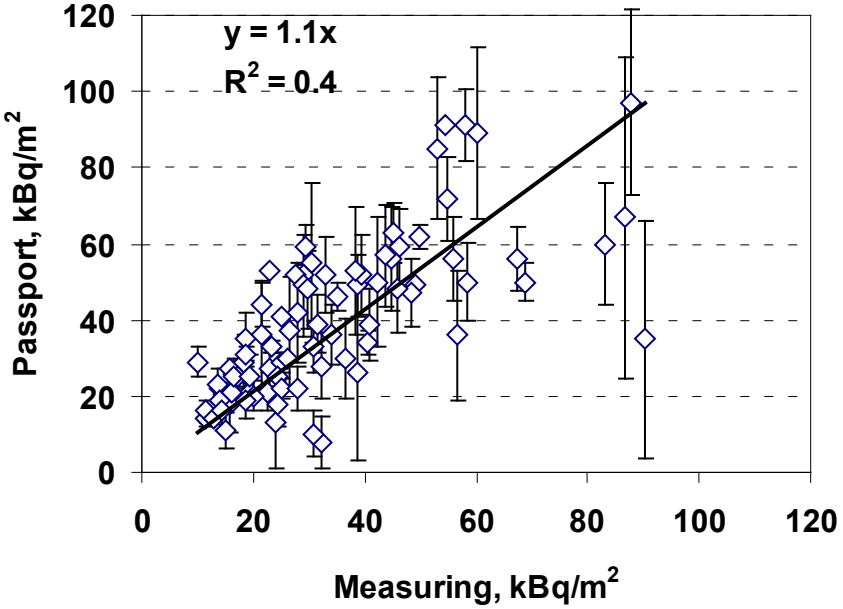

Fig. 3.4. The ratio between the measured density of ^{137}Cs contamination of settlements and passport (official) data

Table 3.1. Characteristics density of soil contamination with ^{137}Cs and ^{90}Sr for settlements of Ivankov region: number of measurements (**N**), the arithmetic mean (**AM**), standard deviation (**SD**), minimum (**Min**), maximum (**Max**), geometric mean (**GM**), the geometric standard deviation (**GSD**)

No	Settlement	N	^{137}Cs						^{90}Sr						Passport , ^{137}Cs [7][1]	^{137}Cs
			AM, kBq/m^2	SD, kBq/m^2	Min, kBq/m^2	Max, kBq/m^2	GM, kBq/m^2	GSD	AM, kBq/m^2	SD, kBq/m^2	Min, kBq/m^2	Max, kBq/m^2	GM, kBq/m^2	GSD	AM', kBq/m^2	AM/AM'
1.	Belyi Bereg	2	68.8	5.1	65.2	72.4	68.7	1.08	11.4	9.8	4.5	18.4	9.1	2.70	50	1.4±0.2
2.	Blidcha	5	38.7	22.8	21.9	77.0	34.5	1.67	4.9	3.6	1.7	10.8	4.0	2.03	26	1.5±0.9
3.	Bolotnia	3	30.5	21.0	9.0	51.0	24.4	2.45	4.5	2.0	2.5	6.5	4.2	1.62	55	0.6±0.4
4.	Buda-Polidarovskaia	1	22.5				22.5		1.5				1.5		21	1.1±0.2
5.	Varovsk	2	19.3	0.1	19.2	19.3	19.3	1.01	2.4	1.9	1.0	3.7	2.0	2.45	21	0.9±0.2
6.	Verkholes'e	2	13.8	1.4	12.8	14.8	13.8	1.11	1.1	0.9	0.5	1.8	1.0	2.35	22	0.6±0.2
7.	Voropaevka	2	67.3	8.3	61.5	73.2	67.1	1.13	19.4	14.3	9.3	29.5	16.6	2.26	56	1.2±0.2
8.	Gornostaipol	5	57.9	9.4	46.8	69.7	57.3	1.18	21.2	4.6	13.8	24.3	20.7	1.28	91	0.6±0.1
9.	Gubin	3	53.0	18.6	33.0	69.8	50.6	1.47	16.5	9.4	7.7	26.4	14.6	1.85	85	0.6±0.2
10.	Ditiatki	5	60.3	22.4	26.1	84.2	56.1	1.58	24.0	12.9	10.1	35.8	20.7	1.91	89	0.7±0.3
11.	Domanovka	1	83.1				83.1		43.3				43.3		60	1.4±0.3
12.	Dymarka	2	11.5	1.7	10.3	12.6	11.4	1.16	2.7	0.5	2.3	3.0	2.7	1.19	14	0.8±0.2
13.	Zhereva	2	22.9	4.7	19.5	26.2	22.6	1.23	1.1	0.5	0.8	1.5	1.1	1.50	27	0.8±0.2
14.	Zherevpol'e	4	15.1	4.7	8.2	18.5	14.4	1.46	1.4	0.7	0.9	2.4	1.3	1.53	11	1.4±0.4
15.	Zhmievka	5	24.1	12.1	14.3	40.7	21.9	1.63	1.9	1.1	0.7	3.7	1.6	1.87	13	1.9±0.9
16.	Zaprudka	5	18.5	7.0	8.6	25.6	17.3	1.56	3.8	1.4	2.5	5.7	3.6	1.44	35	0.5±0.2
17.	Zarud'e	6	25.1	2.7	21.1	28.2	24.9	1.12	2.2	0.4	1.7	3.0	2.2	1.19	29	0.9±0.2
18.	Zakharovka	1	20.2				20.2		2.5				2.5		20	1.0±0.2
19.	Zimovische	3	56.6	16.9	44.7	76.0	55.1	1.33	7.5	3.5	4.3	11.3	7.0	1.63	36	1.6±0.5
20.	Zorin	2	49.8	3.2	47.5	52.1	49.7	1.07	19.6	3.7	17.0	22.2	19.4	1.21	62	0.8±0.2
21.	Ivankov	7	42.3	17.2	16.1	62.8	38.5	1.65	7.7	3.6	3.5	14.9	7.1	1.55	50	0.8±0.3
22.	Karpilovka	3	87.7	24.4	64.9	113.4	85.5	1.32	48.4	26.1	28.9	78.1	44.2	1.67	97	0.9±0.3
23.	Kirovo	1	29.4				29.4		1.7				1.7		59	0.5±0.1
24.	Kovalevka	2	49.1	0.1	49.0	49.1	49.1	1.00	22.1	1.6	21.0	23.3	22.1	1.07	49	1.0±0.2

[1] Recalculated for 2014

No	Settlement	N	^{137}Cs						^{90}Sr						Passport , ^{137}Cs [7][1]	^{137}Cs
			AM, kBq/m^2	SD, kBq/m^2	Min, kBq/m^2	Max, kBq/m^2	GM, kBq/m^2	GSD	AM, kBq/m^2	SD, kBq/m^2	Min, kBq/m^2	Max, kBq/m^2	GM, kBq/m^2	GSD	AM', kBq/m^2	AM/AM'
25.	Kolentsovskoe	2	21.5	14.2	11.5	31.5	19.0	2.04	4.1	2.5	2.4	5.9	3.7	1.90	36	0.6±0.4
26.	Kolentsy	4	34.2	7.8	27.9	44.2	33.5	1.25	5.9	3.6	2.2	10.4	5.0	1.94	36	1.0±0.2
27.	Krapivnia	4	29.1	2.3	26.1	31.6	29.0	1.08	10.5	3.9	8.1	16.3	10.1	1.39	52	0.6±0.2
28.	Krasilovka	4	21.6	5.8	15.4	27.7	21.0	1.32	1.7	0.8	1.2	3.0	1.6	1.51	44	0.5±0.1
29.	Kukhari	3	24.2	2.5	22.0	26.8	24.1	1.11	2.0	0.2	1.8	2.1	2.0	1.11	25	1.0±0.2
30.	Laputki	1	45.2				45.2		4.7				4.7		63	0.7±0.2
31.	Leonovka	3	40.4	3.0	37.9	43.8	40.3	1.08	9.6	1.8	7.5	10.8	9.5	1.22	34	1.2±0.2
32.	Liudvinovka	2	18.2	7.2	13.1	23.3	17.5	1.50	1.5	1.1	0.7	2.2	1.3	2.21	29	0.6±0.2
33.	Makarovka	4	30.8	6.7	24.8	37.9	30.3	1.24	8.0	1.6	6.2	9.6	7.9	1.23	33	0.9±0.2
34.	Malaia Makarovka	3	31.5	7.6	23.5	38.6	30.9	1.29	8.2	2.0	6.6	10.4	8.0	1.26	39	0.8±0.2
35.	Medvin	1	48.5				48.5		20.8				20.8		47	1.0±0.2
36.	Mokraia Korma	1	15.6				15.6		8.0				8.0		27	0.6±0.0
37.	Musiiki	5	17.2	2.7	14.6	21.6	17.0	1.16	2.4	0.6	1.6	3.0	2.4	1.30	25	0.7±0.2
38.	Novye Makalevichi	3	32.4	8.5	27.3	42.2	31.7	1.28	12.4	4.6	9.4	17.7	11.9	1.41	28	1.2±0.3
39.	Novye Sokoly	2	35.1	3.7	32.5	37.7	35.0	1.11	8.9	0.4	8.6	9.2	8.9	1.05	46	0.8±0.2
40.	Obukhovichi	10	27.9	13.1	14.8	59.7	25.8	1.49	5.2	2.3	2.8	9.9	4.8	1.54	42	0.7±0.3
41.	Oliva	3	13.5	4.4	8.8	17.5	13.0	1.43	1.0	0.5	0.7	1.5	0.9	1.52	23	0.6±0.2
42.	Olizarovka	3	15.8	7.5	9.0	23.7	14.6	1.63	1.1	0.5	0.7	1.6	1.0	1.52	18	0.9±0.4
43.	Oranoe	6	86.8	42.2	28.4	141.7	76.3	1.82	23.2	13.0	2.3	35.1	17.2	2.88	67	1.3±0.6
44.	Osovets	1	22.8				22.8		1.9				1.9		53	0.4±0.1
45.	Peski	2	54.6	0.0	54.6	54.7	54.6	1.00	28.1	5.2	24.4	31.7	27.8	1.20	91	0.6±0.2
46.	Petrovskoe	3	11.5	2.9	8.2	13.8	11.2	1.32	1.9	0.6	1.2	2.4	1.8	1.45	16	0.7±0.2
47.	Pirogovichi	3	58.5	10.4	51.0	70.3	57.9	1.19	9.5	9.0	2.6	19.6	6.8	2.77	50	1.2±0.2
48.	Podgainoe	3	25.1	2.6	23.1	28.1	25.0	1.11	5.6	5.2	2.3	11.7	4.3	2.40	22	1.1±0.2
49.	Polidarovka	2	12.9	1.4	12.0	13.9	12.9	1.11	2.0	0.6	1.6	2.4	2.0	1.35	14	0.9±0.2
50.	Potalievka	2	16.2	1.8	14.9	17.4	16.1	1.12	4.5	1.9	3.1	5.8	4.2	1.54	21	0.8±0.2
51.	Potoki	1	27.5				27.5		6.2				6.2		52	0.5±0.1
52.	Priborsk	8	46.2	10.4	30.4	65.5	45.2	1.26	16.6	6.2	8.0	26.3	15.4	1.52	59	0.8±0.2

No	Settlement	N	^{137}Cs						^{90}Sr						Passport , ^{137}Cs [7][1]	^{137}Cs
			AM, kBq/m^2	SD, kBq/m^2	Min, kBq/m^2	Max, kBq/m^2	GM, kBq/m^2	GSD	AM, kBq/m^2	SD, kBq/m^2	Min, kBq/m^2	Max, kBq/m^2	GM, kBq/m^2	GSD	AM', kBq/m^2	AM/AM'
53.	Rakitnaia Sloboda	1	26.1				26.1		0.7				0.7		30	0.9±0.2
54.	Rakhvalovka	3	18.8	4.7	14.0	23.3	18.4	1.29	7.7	8.1	2.0	16.9	5.2	2.96	19	1.0±0.2
55.	Rozvazhev	1	38.6				38.6		13.9				13.9		49	0.8±0.2
56.	Rudnia-Levkovskaia	2	13.8	0.3	13.6	14.0	13.8	1.02	2.6	0.2	2.5	2.7	2.6	1.07	19	0.7±0.2
57.	Rudnia-Sidorovskaia	3	18.5	1.8	17.3	20.5	18.4	1.10	1.7	0.2	1.5	1.8	1.6	1.09	31	0.6±0.2
58.	Rudnia-Talskaia	3	39.5	10.4	27.7	46.7	38.5	1.33	9.7	4.3	6.3	14.6	9.1	1.53	52	0.8±0.2
59.	Rudnia-Shpilevskaia	1	55.9				55.9		15.8				15.8		56	1.0±0.2
60.	Rusaki	4	40.7	9.4	33.5	54.5	39.9	1.24	14.6	7.8	6.5	23.1	12.9	1.81	39	1.0±0.2
61.	Sidorovichi	4	16.4	5.1	10.8	22.1	15.8	1.38	1.8	0.2	1.6	2.1	1.8	1.12	25	0.7±0.2
62.	Sloboda-Kukharskaia	3	23.4	1.5	21.7	24.7	23.4	1.07	1.7	0.3	1.3	1.9	1.6	1.22	33	0.7±0.2
63.	Sosnovka	4	36.5	10.4	28.4	51.8	35.6	1.30	7.7	3.0	4.5	10.4	7.3	1.51	30	1.2±0.3
64.	Stavrovka	2	19.2	6.1	14.9	23.5	18.7	1.38	2.3	0.4	2.1	2.6	2.3	1.18	25	0.8±0.2
65.	Stanishovka	4	32.8	9.9	19.6	41.0	31.5	1.41	3.8	0.9	2.6	4.4	3.7	1.29	52	0.6±0.2
66.	Starovichi	2	32.2	6.8	27.4	37.0	31.8	1.24	2.5	0.8	1.9	3.0	2.4	1.39	8	4.0±0.9
67.	Starye Sokoly	3	29.1	13.3	13.8	37.3	26.5	1.76	18.4	13.5	4.9	31.8	14.2	2.63	49	0.6±0.3
68.	Stepanovka	1	54.8				54.8		12.3				12.3		72	0.8±0.2
69.	Strakholes'e	3	44.6	13.6	28.9	53.0	43.0	1.41	18.9	6.3	11.7	23.2	18.1	1.46	56	0.8±0.2
70.	Sukachi	3	38.5	16.6	26.7	57.5	36.3	1.50	7.6	3.9	3.6	11.4	6.8	1.80	53	0.7±0.3
71.	Termakhovka	5	14.5	5.0	9.2	21.1	13.8	1.42	1.8	0.7	1.0	2.9	1.6	1.51	16	0.9±0.3
72.	Teterevskoe	5	24.5	6.0	20.2	34.3	23.9	1.25	4.8	3.4	2.9	10.9	4.1	1.72	18	1.4±0.3
73.	Fedorovka	1	10.0				10.0		4.0				4.0		29	0.3±0.1
74.	Fenevichi	7	29.8	10.2	24.9	52.7	28.7	1.31	8.3	2.9	3.8	11.6	7.8	1.49	48	0.6±0.2
75.	Fruzinovka	2	43.6	13.4	34.1	53.0	42.5	1.37	25.1	10.0	18.0	32.1	24.1	1.50	57	0.8±0.2
76.	Khocheva	2	90.3	31.1	68.3	112.3	87.6	1.42	28.5	10.9	20.9	36.2	27.5	1.48	35	2.6±0.9
77.	Chkalovka	2	25.2	0.4	24.9	25.4	25.2	1.02	2.2	0.2	2.1	2.4	2.2	1.09	41	0.6±0.2
78.	Shevchenkovo	1	27.8				27.8		2.5				2.5		22	1.3±0.3

No	Settlement	N	^{137}Cs						^{90}Sr						Passport , ^{137}Cs [7][1]	^{137}Cs
			AM, kBq/m^2	SD, kBq/m^2	Min, kBq/m^2	Max, kBq/m^2	GM, kBq/m^2	GSD	AM, kBq/m^2	SD, kBq/m^2	Min, kBq/m^2	Max, kBq/m^2	GM, kBq/m^2	GSD	AM', kBq/m^2	AM/AM'
79.	Shevchenkovo	2	26.6	14.5	16.4	36.9	24.6	1.77	5.4	1.1	4.6	6.2	5.4	1.23	37	0.7±0.4
80.	Shpili	4	46.0	11.2	30.4	56.1	44.8	1.3	12.1	4.0	7.7	16.9	11.6	1.4	48	1.0±0.2
81.	Yakhnovka	1	30.8				30.8		3.4				3.4		10	3.1±0.6

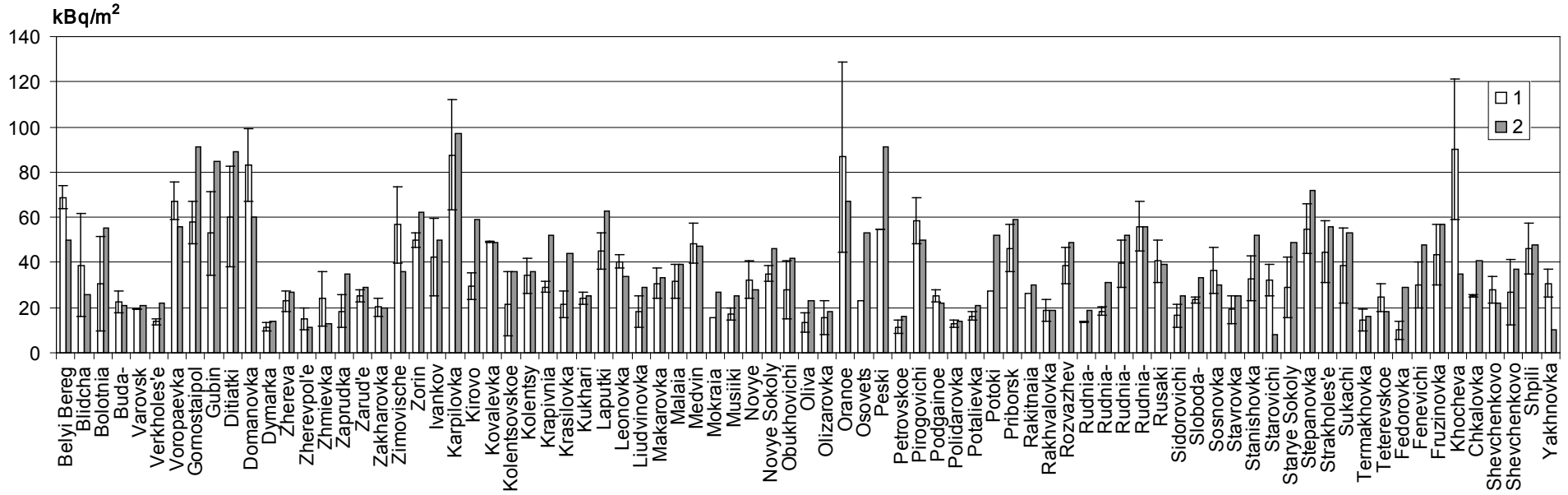

Fig. 3.5. The ratio between the measured density of ^{137}Cs contamination of settlements (1) and passport (official) data (2)

4. Maps of ^{137}Cs and ^{90}Sr density of contamination in Ivankov region.

Just as in the work [3, 4], contamination of the Ivankov region area with radionuclides ^{137}Cs and ^{90}Sr has been considered to coordinates of the area $f_{Cs}(x, y)$ and $f_{Sr}(x, y)$, as continuous nonnegative functions. Coordinates (x, y) in this case represent longitude and latitude in projection WGS 84. B

Map making for ^{137}Cs and ^{90}Sr contamination of the area under study (making of isolines and iso-areas of contamination) has been done by results of the previously conducted sampling, and based on the methodology successfully used for radionuclides contamination mapping of the near ChNPP zone [3, 4]. The methodology has been improved according to results mounted in the field of computer cartography recently.

4.1 *Map making for ^{137}Cs and ^{90}Sr contamination in Ivankov region*

The main point of technology applied for contamination mapping consists in the following:

By the data of ^{137}Cs and ^{90}Sr density of soil contamination in the sampling points , and by "kriging"-method [3, 4, 5] with «SURFER» package use, meanings of $f_{Cs}(x, y)$ and $f_{Sr}(x, y)$ functions in knots of any regular grid (x_i, y_j) are estimated.

Obtained values of $f_{Cs}(x_i, y_j)$ and $f_{Sr}(x_i, y_j)$ functions ("grids") are imported into cartographic package "MAPINFO", where the final making, integration and processing of maps on contamination is completed.

When f_{Cs} and f_{Sr} functions meanings in (x_i, y_j) knots of the regular grid were calculating (creation of "grids"), peculiarities of the observed values for density of contamination in a point, and f_{Cs} and f_{Sr} functions have been taken into account. Observed values for density of contamination in a point have log-normal distribution of probabilities [5], and functions f_{Cs} and f_{Sr} are purely positive.

To avoid obtaining of negative values during calculation of theses functions in areas with minor meanings of density of contamination , "kriging" has been used for logarithms calculating for f_{Cs} , and f_{Sr} ($g_{Cs}(x_i, y_j)=\ln(f_{Cs}(x_i, y_j))$ and $g_{Sr}(x_i, y_j)=\ln(f_{Sr}(x_i, y_j))$) functions.

After "grids" making their respective conversions were accomplished - $f_{Cs} = exp(g_{Cs})$ and $f_{Cs} = exp(g_{Cs})$. 4.1

"Grid" pitch of 0.25 km was chosen for the regular grid.

To apply “kriging” method for interpolation, it is necessary to recognise the type and variogram parameters for recoverable character (logarithm of ^{137}Cs and ^{90}Sr density of soil contamination, in our case).Variogram points to the average distinction between values of soil contamination density depending on a distance in the given direction.

As it is shown in the work [5], on the “southern trace” inside the exclusion zone of ChNPP anisotropy for variograms of ^{137}Cs and ^{90}Sr soil contamination was not found; they have linear character, and are approximated by the model of kind

$$\gamma(h) = A \cdot h + B, \qquad 4.2$$

where h– distance between points (lag).

Territory of Ivankov region is located on the prolongation of the “southern trace”, therefore, respective variograms have to possess close meanings. Geostatistic analysis of the observed meanings for ^{137}Cs and ^{90}Sr density of soil contamination, obtained as a result of previous sampling, confirms this consideration.

Variograms for density of soil contamination with ^{137}Cs and ^{90}Sr in Ivankov region obtained as a result of this analyis are given in Fig. 4.1.

Obtained variograms have been used for calculating of meanings for functions $g_{Cs}(x_i, y_j)=\ln(f_{Cs}(x_i, y_j))$ и $g_{Sr}(x_i, y_j)=\ln(f_{Sr}(x_i, y_j))$. (at making of “ grids”).

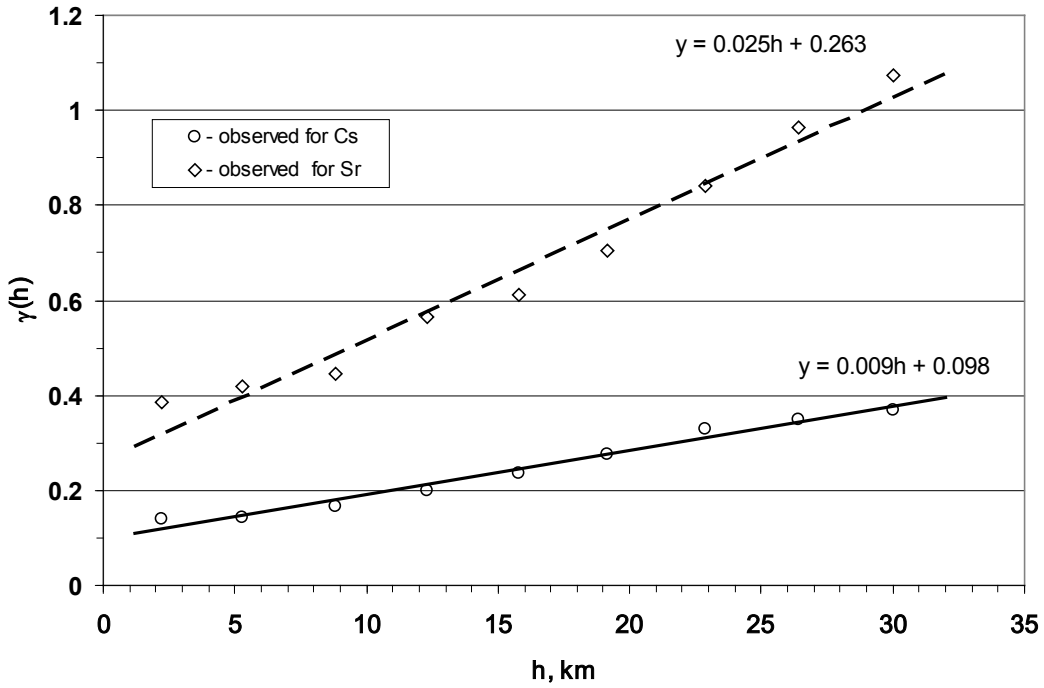

Fig. 4.1. Variograms for density of ^{137}Cs and ^{90}Sr soil contamination in Ivankov region

4.2 *Maps of ^{137}Cs and ^{90}Sr density of contamination*

After importing the repaired "grids" into cartographic package «MAPINFO» thematic maps were made by standard method of reverse distances (degree 2), pitch0.2 km, and search radius 2 km.

This radius ensures finding in a search area, at least, single measured value of contamination density in a sampling point, except calculated meanings for density of ^{137}Cs and ^{90}Sr soil contamination in knots of the regular grid.

According to requirements specification, maps-schemes have been made in two scales: 1: 200 000 and 1: 500 000. Isolines and iso-areas levels for density of ^{137}Cs and ^{90}Sr soil contamination were chosen according to ones accepted in normative documents of Ukraine and used in Atlas of radioactive contamination of Ukraine. [8]. Results of the work – maps-scheme for density of ^{137}Cs and ^{90}Sr soil contamination in Ivankov region are given below (Fig. 4.2-Fig. 4.9.

5. Conclusion

Representative large-scale gamma dose rate survey and soil sampling on regular grids of step width about 1 km and 3 km, respectively, were carried out for the first time in territory of Ivankiv district (Ukraine), which is adjacent to the 30km zone of the Chernobyl NPP. The integrated maps of ^{90}Sr contamination density of soil on the territory under study (scale 1: 200,000, 1: 50,000) have been created by the data of soil samples analysis.

Density of area contamination with ^{137}Cs inside settlements of Ivankiv region doesn't exceed 100 kBq/m^2 (Fig. 3.4, Fig. 3.5, Table 3.1), that ensures against exceeding of medium annual external effective irradiation dose for population over 12 mSv/y. According to the data of dosimetric passportization of settlements in Ukraine (recalculation of measurements carried out in 1991), density of ^{137}Cs contamination inside s. Karpilovka only, in 2011, overrun 100 kBq/m^2 slightly , and amounted to 104 kBq/m^2 [7]; that is well fitted with data obtained in 2014 - kBq/m^2 by us.

Exceeding ^{137}Cs content in agricultural products isn't observing during last years, as well. By the data of dosimetric passportization of settlements in Ukraine in 2011 and 2012, ^{137}Cs maximum specific activity in cow milk of private farms mounted to 23 Bq/l (s. Shpili); that is corresponded to 23 mSv/y of maximum effective internal irradiation dose for population [7].

Thus, mid - annual effective irradiation doses for population due to ^{137}Cs contamination of territory today will not exceed 1 mSv in all settlements of Ivankiv region. According to the article 1 of Law of Ukraine "About legal regime of territories…" [9] , "Territories undergone to radioactive contamination in consequence of Chernobyl disaster, in borders of Ukraine, are considered as such ones, if the lasting contamination of environment with radioactive substances exceeding pre-accidental level has settled down there; and, taking into account natural-climate, and complete ecological characteristics of specific territories, it ought to create irradiation dose for population over ***1,0 mSv*** *(0,1 rem)per year. Consequently, that demands application of countermeasures pursuing to radiation protection of population, and other specialized interventions directed to restraint additional irradiation of population due to Chernobyl catastrophe, and support of normal economic activity".* Thus, nowadays levels of additional irradiation for population due to ^{137}Cs contamination of territory can't be considered as a subject of anxiety. Overrun of ^{137}Cs content in agricultural products obtained in Ivankiv region also hasn't been observed; excepting for wild growing mushrooms and berries.

. Study of ^{90}Sr contamination of the territory shown, that at the density of radionuclide contamination over 5 kBq/m^2 [10], observed in the eastern part of Ivankov region territory (Fig. 4.6- Fig. 4.9), radiostrontium content in grain may exceed hygienic norms for food grain.(20 Bq/kg)[2] [11]. It is proved out by the data of radiological monitoring in 2009-2013 yy. [10, 12].

It is necessary to underline, that at the density of ^{90}Sr contamination of territory over 5 kBq/m^2 specific activity of radiostrontium in fuel wood and brushwood has to overrun hygienic norm – 60 Bq/kg[3] [13]. As a result, it seems impossible to store up a fuel wood at a half of Ivankiv region territory (eastern part) (Fig. 4.6- Fig. 4.9).

Obtained results allow to conclude, that nowadays principal limitations for maintaining of economic activity in Ivankiv region of Kiev Oblast, after ChNPP accident, are determined by ^{90}Sr radioactive contamination (probable exceeding of permissible content in food grain and fuel wood), and partially, ^{137}Cs (probable exceeding of permissible content in wild growing mushrooms, berries, and game).

Existence of local spots with high level of radioactive contamination of area and separate objects, found during fulfilment of works, should be noted; mainly there were places of military sub-units dislocation, participated in works on accidental consequences elimination in the nearest zone of ChNPP in 1986-1987 yy. Territory contamination can be connected with de-activation of

[2] http://search.ligazakon.ua/l_doc2.nsf/link1/RE12719.html
[3] http://zakon3.rada.gov.ua/laws/show/z1384-05

(technical) equipment after its return from the near accidental zone. To discover such anomalous spots, carry out of their mapping and elaborate of strategy for treatment, some special works ought to be conducted, as: elaboration of methods for measuring of volume distribution of radionuclides, detail volume mapping etc.

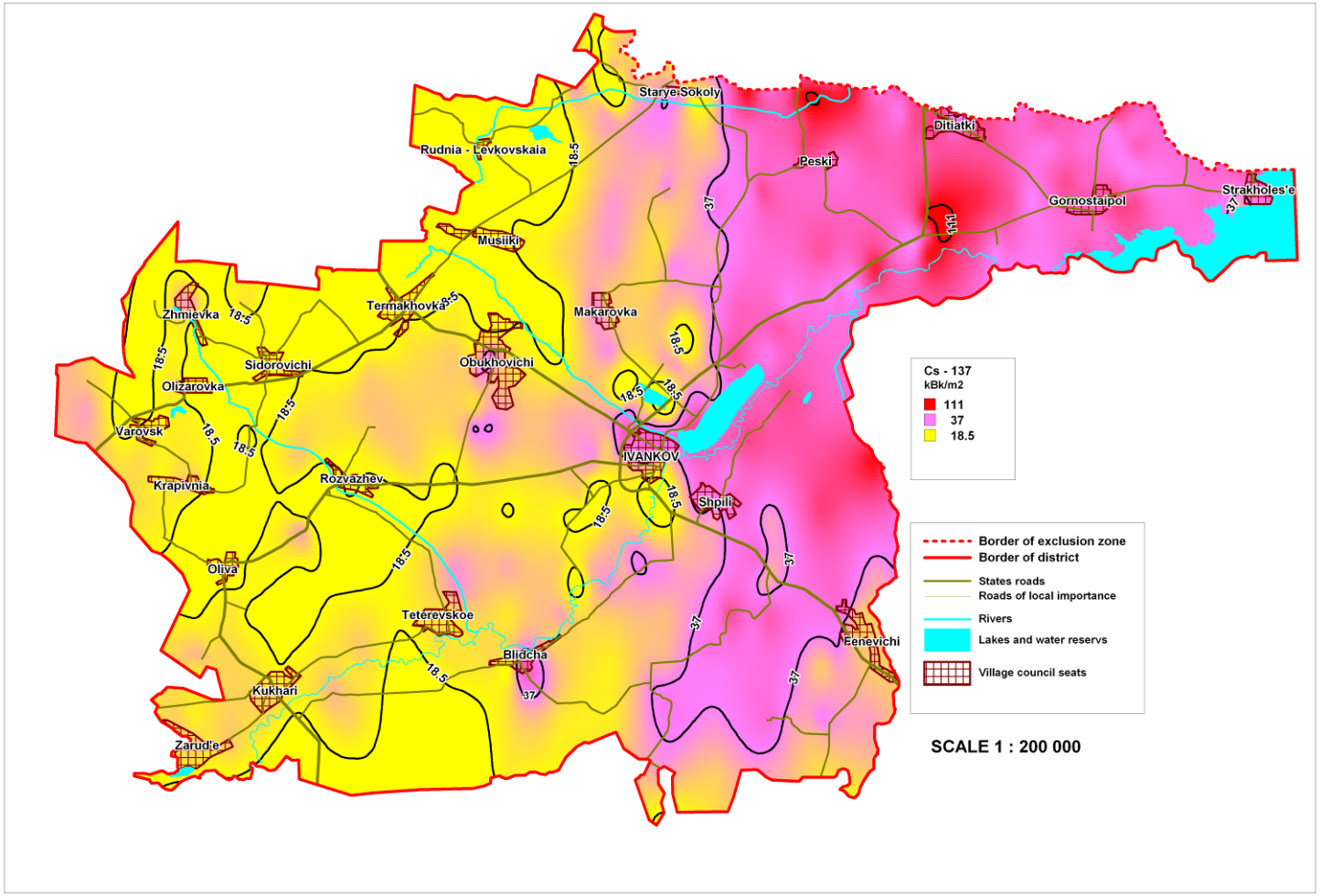

Fig. 4.1. Cartogram for density of soil contamination with ^{137}Cs in Ivankov region, 2014. Scale 1: 200 000. (with halftones)

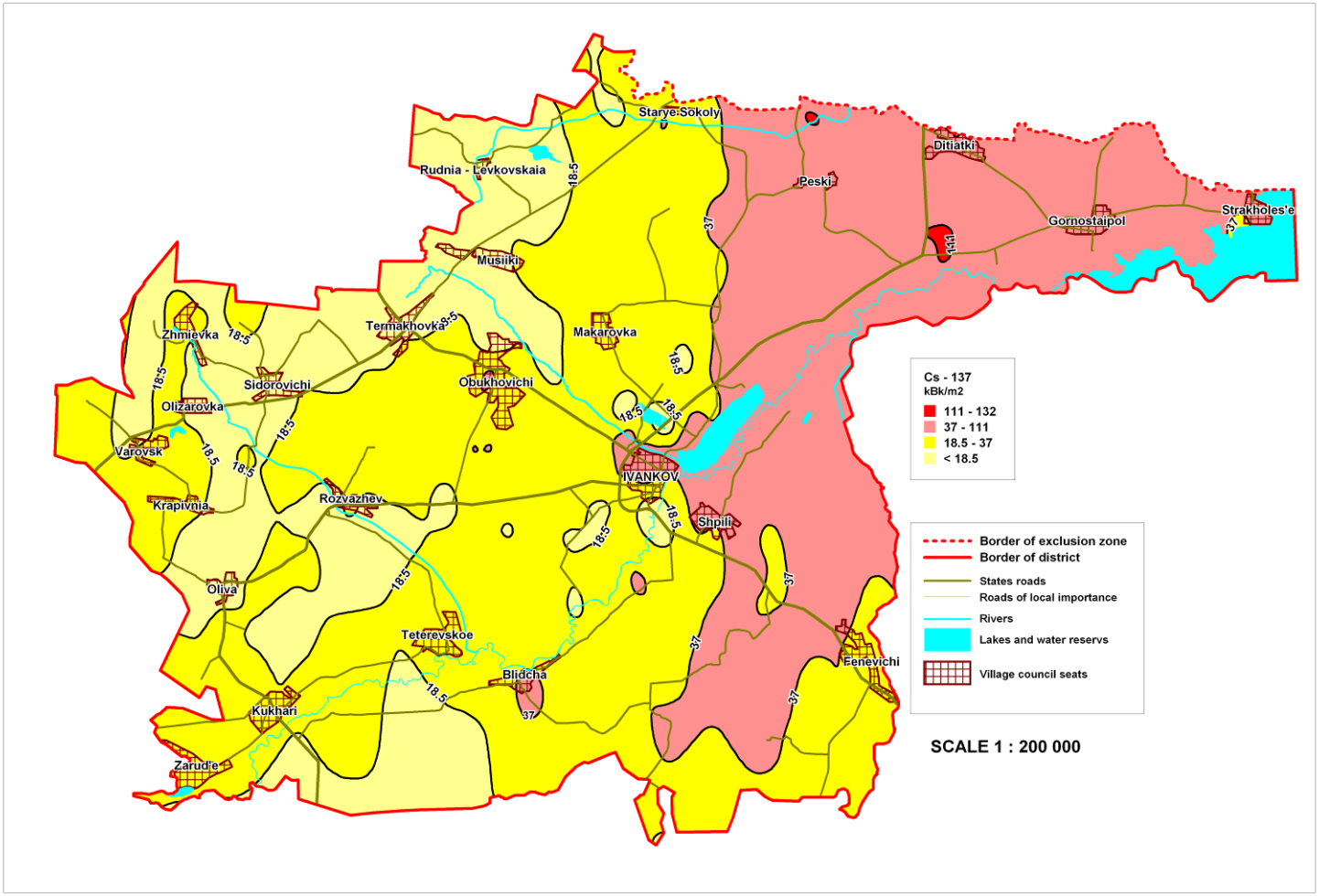

Fig. 4.2. Cartogram for density of soil contamination with ^{137}Cs in Ivankov region, 2014. Scale 1: 200 000. (without halftones)

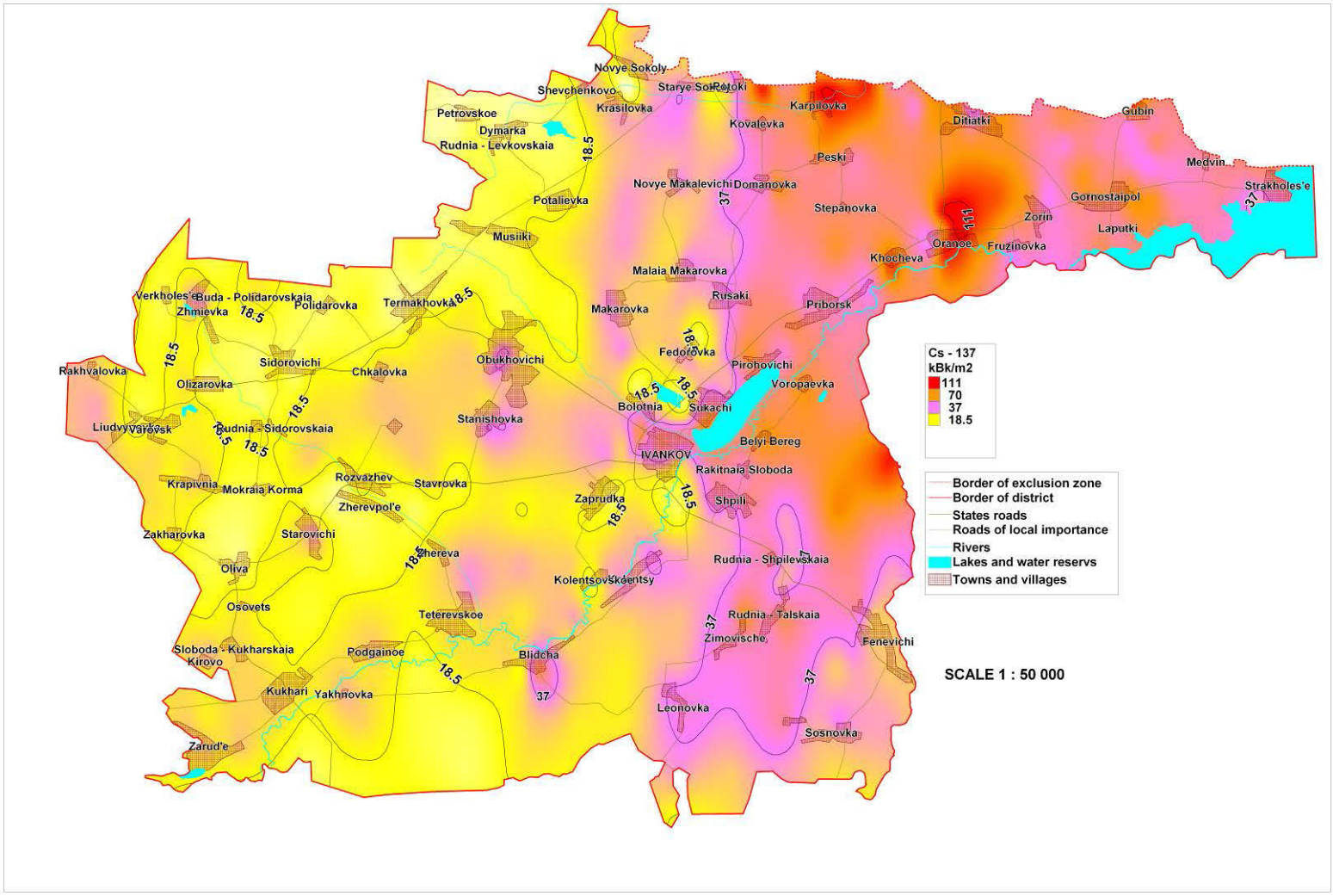

Fig. 4.3. Cartogram for density of soil contamination with ^{137}Cs in Ivankov region, 2014. Scale 1: 50 000. (with halftones)

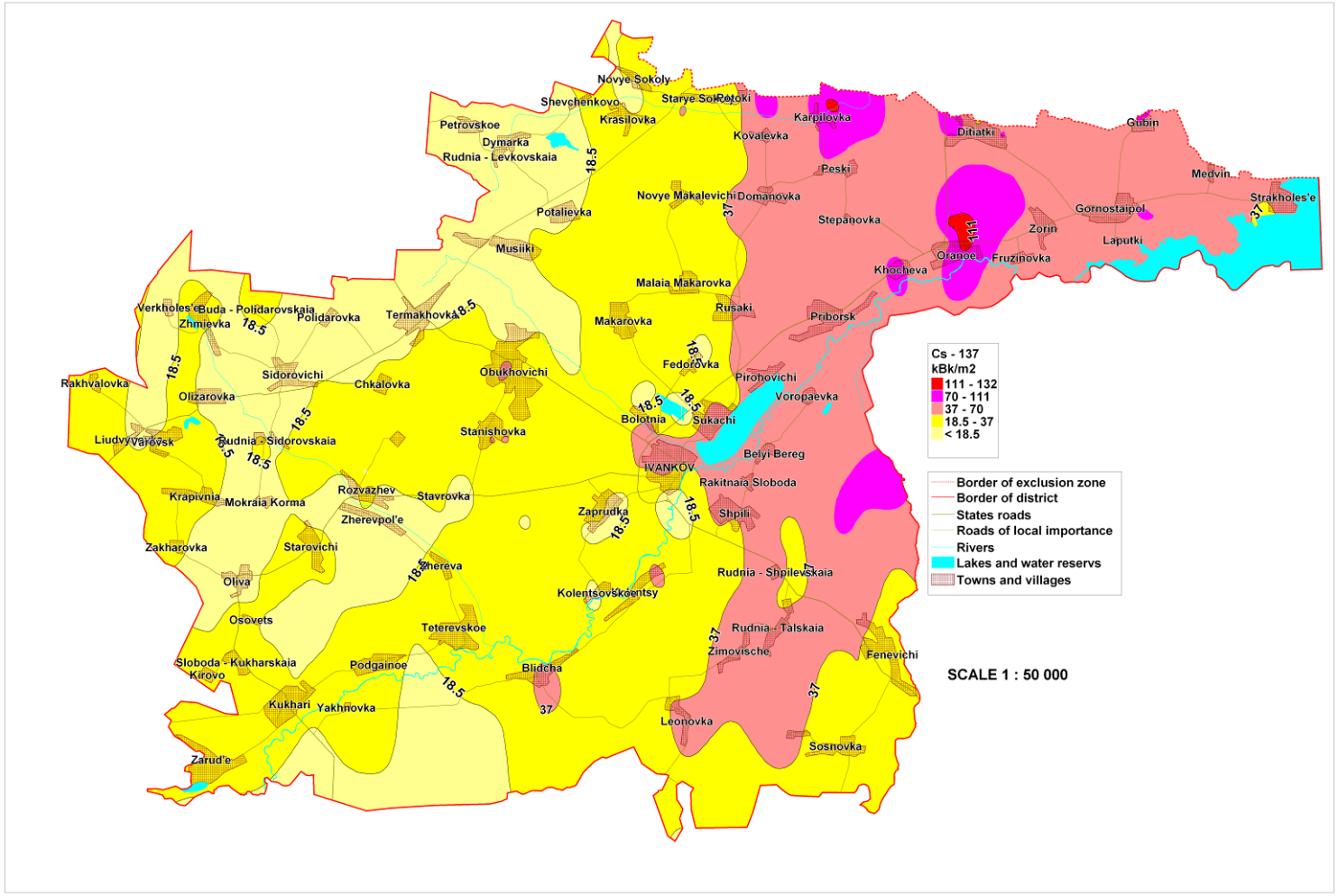

Fig. 4.4. Cartogram for density of soil contamination with ^{137}Cs in Ivankov region, 2014. Scale 1: 50 000. (without halftones)

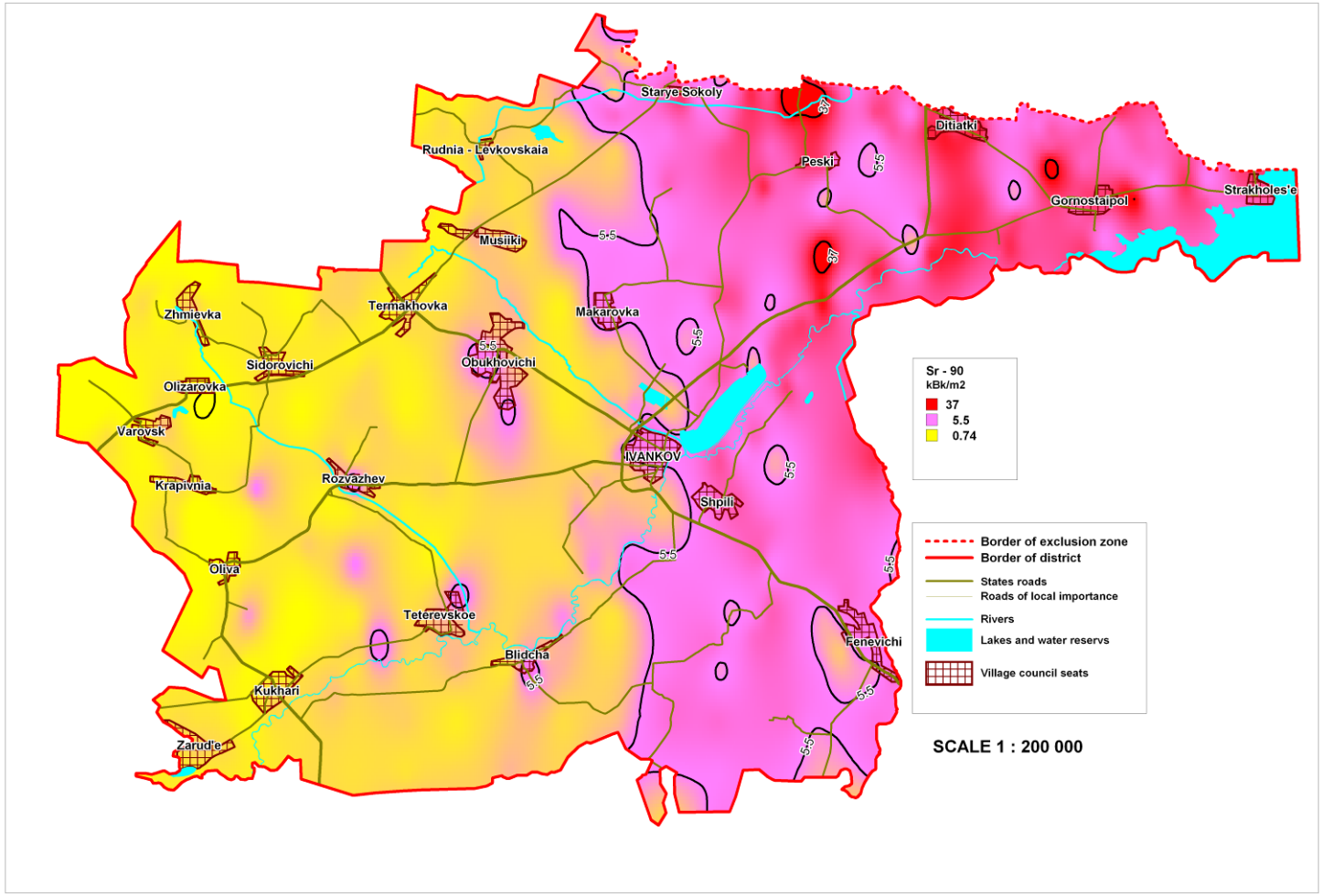

Fig. 4.5. Cartogram for density of soil contamination with ^{90}Sr in Ivankov region, 2014. Scale 1: 200 000. (with halftones)

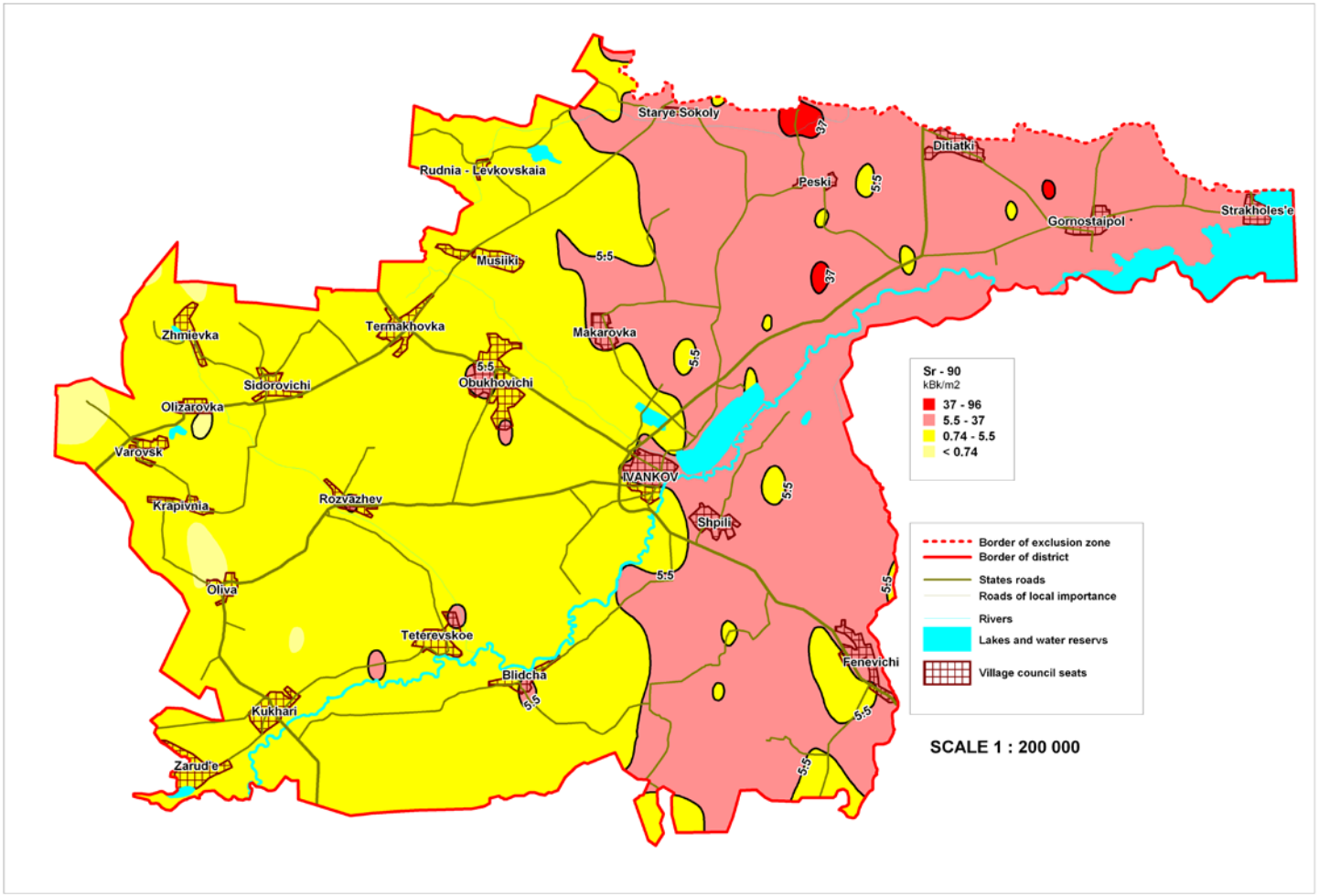

Fig. 4.6. – Cartogram for density of soil contamination with ^{90}Sr in Ivankov region, 2014. Scale 1: 200 000. (without halftones)

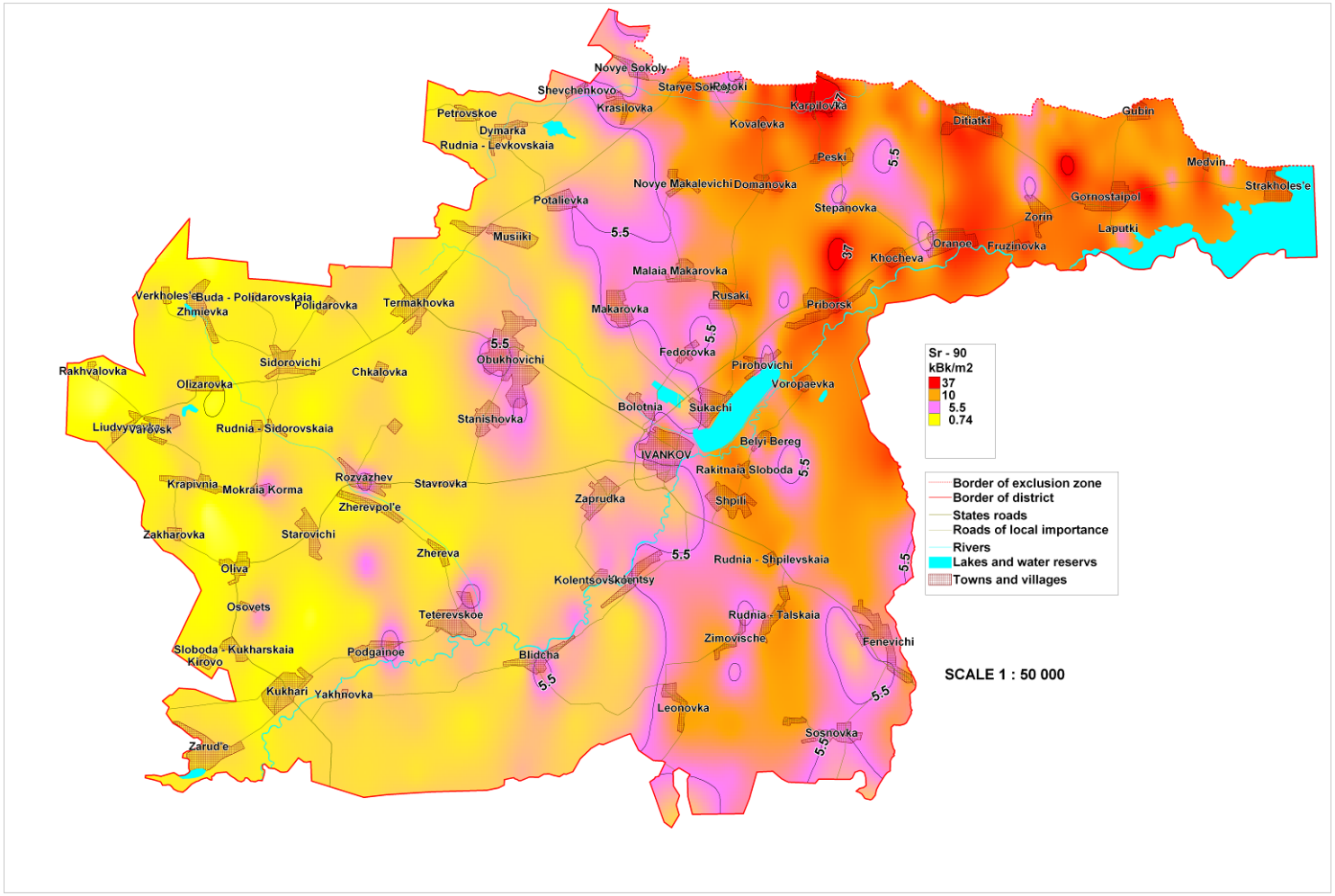

Fig. 4.7. Cartogram for density of soil contamination with ^{90}Sr in Ivankov region, 2014 . Scale 1: 50 000. (with halftones)

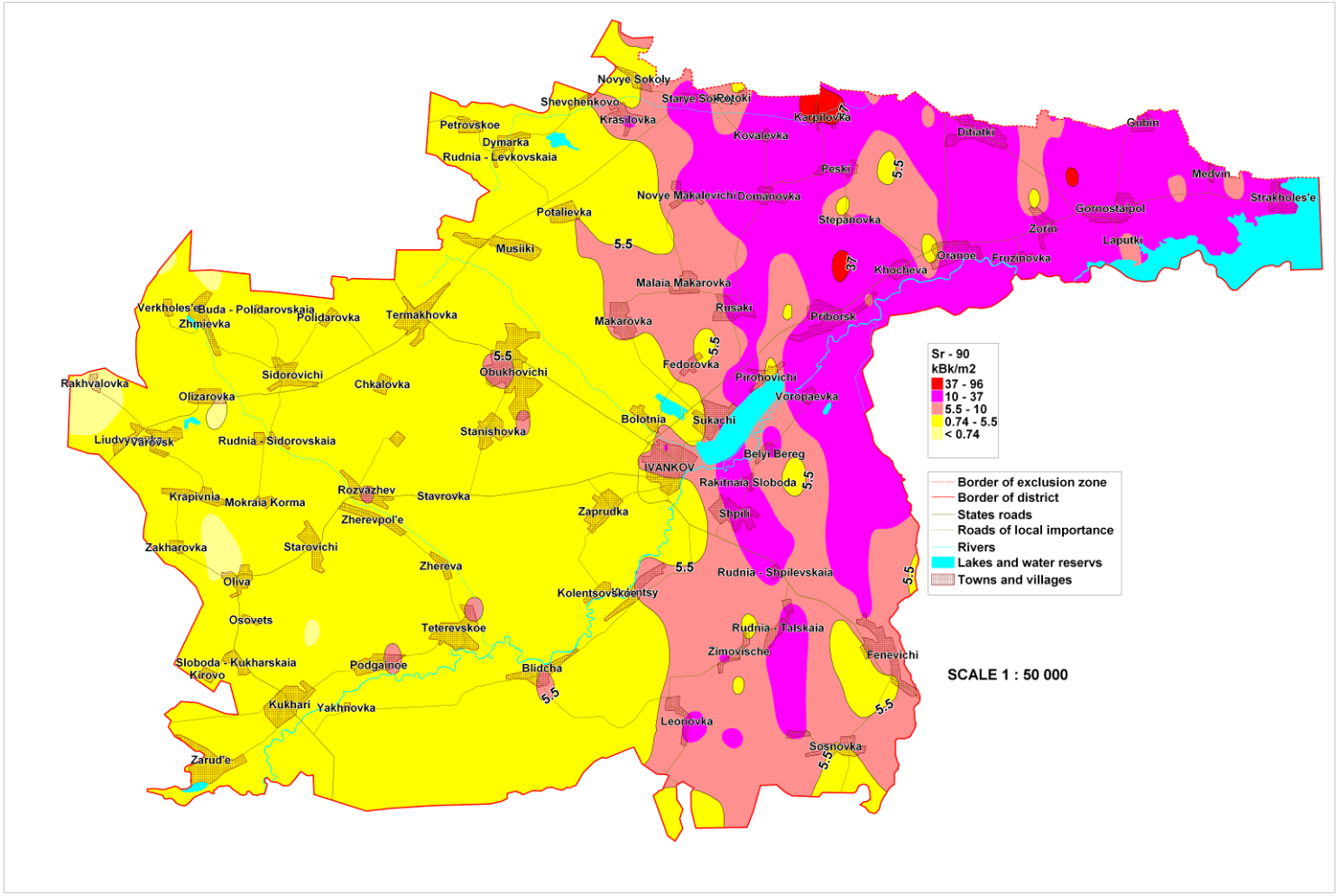

Fig. 4.8. Cartogram for density of soil contamination with ^{90}Sr in Ivankov region, 2014. Scale 1: 50 000. (without halftones)

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Annex 1 Experimental data on radionuclides content in collected soil samples

#	Point number	Full weight, kg	Sample weight, kg	^{137}Cs, Bq/kg	2σ, %	^{90}Sr, Bq/kg	2σ, %	Total recovery, part	2σ, %	^{90}Sr, Bq/kg (incl. rec.)	2σ, %	^{40}K, Bq/kg	2σ, %	^{226}Ra, Bq/kg	2σ, %	^{232}Th, Bq/kg	2σ, %	^{137}Cs, kBq/m^2	2σ, kBq/m^2	^{90}Sr, kBq/m^2	2σ, kBq/m^2	Ratio Cs/Sr
1	262	1.561	1.198	190	6	62.4	6	0.87	4	71.7	7.2	280	11	18	25	15	16	58.3	3.5	22.0	1.6	2.6
2	451	1.542	1.043	230	6	73.6	6	0.92	4	80.0	7.2	390	10	25	21	23	14	69.7	4.2	24.3	1.7	2.9
3	600	1.61	0.941	150	6	52.6	7	0.98	4	53.7	8.1	280	12	17	24	14	20	47.5	2.8	17.0	1.4	2.8
4	268	1.621	1.227	140	7	40.1	8	0.91	4	44.1	8.9	140	14	13	30	7	25	44.6	3.1	14.0	1.3	3.2
5	608	1.397	1.228	190	6	40.1	6	0.89	4	45.1	7.2	110	13	11	29	11	17	52.2	3.1	12.4	0.9	4.2
6	271	1.463	1.266	150	6	27.2	8	0.53	4	50.9	8.9	180	12	25	16	11	21	43.1	2.6	14.6	1.3	2.9
7	127	1.662	1.21	80	7	28.7	8	0.93	4	30.9	8.9	100	17	10	25	6	30	26.1	1.8	10.1	0.9	2.6
8	155	1.639	1.233	160	6	28.2	7	0.84	4	33.6	8.1	230	12	18	23	13	18	51.6	3.1	10.8	0.9	4.8
9	119	1.42	1.23	250	6	79.5	7	0.84	4	94.6	8.1	80	15	9	30	5	30	69.8	4.2	26.4	2.1	2.6
10	723	1.023	0.902	310	6	83.3	7	0.64	4	130.2	8.1	225	14	33	20	26	16	62.3	3.7	26.2	2.1	2.4
11	452	1.746	1.055	180	6	55.7	7	0.97	4	57.4	8.1	365	11	25	18	20	16	61.8	3.7	19.7	1.6	3.1
12	881	1.442	1.125	155	6	70	8	0.91	4	76.9	8.9	240	8	14	8	14	6	43.9	2.6	21.8	2.0	2.0
13	115	1.502	1.31	285	6	22.5	9	0.64	4	35.2	9.8	110	15	7	40	5	40	84.2	5.0	10.4	1.0	8.1
14	162	1.561	1.367	170	6	32.6	9	0.91	4	35.8	9.8	180	12	11	24	9	19	52.2	3.1	11.0	1.1	4.7
15	2456	1.566	1.194	82	6	11.7	15	0.96	4	12.2	15.5	140	10	10	19	8	14	25.2	1.5	3.8	0.6	6.7
16	386	1.442	1.264	162	6	51.6	9	0.99	4	52.1	9.8	110	15	10	30	6	27	45.9	2.8	14.8	1.5	3.1
17	671	1.717	1.338	84	7	6	20	0.88	4	6.8	20.4	90	15	8	30	6	25	28.4	2.0	2.3	0.5	12.4
18	564	1.471	1.001	180	9	62.3	7	0.81	4	76.9	8.1	400	9	26	18	25	11	52.1	4.7	22.2	1.8	2.3
19	2297	1.456	1.242	90	6	14.6	9	0.42	4	34.8	9.8	120	13	10	22	7	19	25.8	1.5	9.9	1.0	2.6
20	166	1.822	1.056	210	6	92.6	6	0.93	4	100.0	7.2	210	11	13	25	13	17	75.2	4.5	35.8	2.6	2.1
21	296	1.452	1.09	186	6	54.7	8	0.90	4	60.8	8.9	290	10	20	20	16	14	53.1	3.2	17.3	1.6	3.1
22	272	1.396	1.206	170	6	28.3	10	0.66	4	42.7	10.8	260	9	19	17	17	11	46.7	2.8	11.7	1.3	4.0
23	444	1.163	0.999	320	6	122.7	8	0.63	4	194.8	8.9	100	18	20	22	7	30	73.2	4.4	44.5	4.0	1.6
24	2866	1.892	1.138	53	7	9.6	15	0.98	4	9.8	15.5	250	9	16	13	14	11	19.7	1.4	3.7	0.6	5.4
25	158	1.501	1.131	164	7	45.8	7	0.90	4	50.9	8.1	190	13	15	24	9	29	48.4	3.4	15.0	1.2	3.2
26	288	1.523	1.152	162	7	63.1	6	0.91	4	69.5	7.2	190	12	15	22	11	18	48.5	3.4	20.8	1.5	2.3
27	2333	0.971	0.833	142	7	34.2	8	0.84	4	40.7	8.9	250	13	25	20	19	16	27.1	1.9	7.8	0.7	3.5
28	265	1.539	1.337	200	6	50.5	6	0.96	4	52.6	7.2	160	11	12	24	9	20	60.5	3.6	15.9	1.1	3.8
29	1331	1.708	1.294	93	6	6.9	12	0.30	4	23.3	12.6	145	12	10	25	14	50	31.2	1.9	7.8	1.0	4.0
30	169	1.533	1.145	180	6	78.5	6	0.82	4	95.6	7.2	210	11	13	26	10	22	54.2	3.3	28.8	2.1	1.9
31	831	1.406	1.066	110	6	22.9	9	0.80	4	28.8	9.8	20	10	14	20	10	6	30.4	1.8	8.0	0.8	3.8
32	1205	1.6	1.224	100	7	16.9	9	0.26	4	65.0	9.8	290	10	19	19	19	13	31.5	2.2	20.4	2.0	1.5
33	1508	1.189	1.018	270	6	27.5	9	0.99	4	27.8	9.8	190	10	16	21	18	13	63.1	3.8	6.5	0.6	9.7

#	Point number	Full weight, kg	Sample weight, kg	^{137}Cs, Bq/kg	2σ, %	^{90}Sr, Bq/kg	2σ, %	Total recovery, part	2σ, %	^{90}Sr, Bq/kg (incl. rec.)	2σ, %	^{40}K, Bq/kg	2σ, %	^{226}Ra, Bq/kg	2σ, %	^{232}Th, Bq/kg	2σ, %	^{137}Cs, kBq/m^2	2σ, kBq/m^2	^{90}Sr, kBq/m^2	2σ, kBq/m^2	Ratio Cs/Sr
34	2460	1.523	1.317	90	8	17.5	10	0.46	4	38.0	10.8	90	16	10	26	6	23	26.9	2.2	11.4	1.2	2.4
35	605	1.848	1.34	390	6	68.2	8	0.89	4	76.6	8.9	75	19	6	60	6	42	141.7	8.5	27.8	2.5	5.1
36	382	1.327	0.969	230	6	84	8	0.89	4	94.4	8.9	340	10	24	17	22	13	60.0	3.6	24.6	2.2	2.4
37	116	1.475	1.131	160	6	27.6	8	0.59	4	46.5	8.9	215	7	12	14	11	9	46.4	2.8	13.5	1.2	3.4
38	664	1.794	1.404	220	6	50.3	8	0.53	4	95.6	8.9	80	15	8	30	5	27	77.6	4.7	33.7	3.0	2.3
39	274	1.597	1.213	220	6	49.2	7	0.94	4	52.1	8.1	170	13	14	25	9	23	69.1	4.1	16.4	1.3	4.2
40	2300	1.314	1.004	100	7	24	8	0.99	4	24.2	8.9	150	15	13	29	10	22	25.8	1.8	6.2	0.6	4.1
41	740	1.842	1.207	310	6	93.5	6	0.94	4	100.0	7.2	90	11	7	35	6	22	112.3	6.7	36.2	2.6	3.1
42	161	1.411	1.105	220	6	64.7	9	0.97	4	66.5	9.8	350	10	21	25	20	14	61.0	3.7	18.4	1.8	3.3
43	269	1.507	1.309	124	6	32.1	8	0.75	4	43.0	8.9	210	11	14	22	12	15	36.7	2.2	12.7	1.1	2.9
44	389	1.196	1.033	53	8	17.6	10	0.97	4	18.1	10.8	150	13	14	20	20	17	12.5	1.0	4.3	0.5	2.9
45	455	1.697	1.321	200	6	7.9	15	0.92	4	8.6	15.5	120	13	9	30	7	21	66.7	4.0	2.9	0.4	23.2
46	175	1.506	0.998	240	6	82.7	7	0.76	4	109.1	8.1	270	12	22	24	18	16	71.1	4.3	32.3	2.6	2.2
47	159	1.488	1.112	180	6	39.7	8	0.75	4	53.3	8.9	300	10	17	24	15	15	52.7	3.2	15.6	1.4	3.4
48	153	1.505	1.138	190	6	45.7	7	0.88	4	51.9	8.1	180	14	15	28	12	23	56.2	3.4	15.4	1.2	3.7
49	563	1.401	0.993	210	6	77.7	7	0.87	4	88.9	8.1	370	11	25	19	22	15	57.8	3.5	24.5	2.0	2.4
50	457	1.675	1.259	280	6	64.3	6	0.90	4	71.4	7.2	90	8	7	21	7	13	92.2	5.5	23.5	1.7	3.9
51	717	1.735	1.12	100	7	50.9	7	0.96	4	52.9	8.1	300	10	22	19	17	15	34.1	2.4	18.0	1.5	1.9
52	716	1.519	1.167	220	6	52.9	7	0.71	4	74.1	8.1	170	7	11	14	12	37	65.7	3.9	22.1	1.8	3.0
53	1364	1.511	1.307	26	6	5.7	13	0.87	4	6.5	13.6	80	9	6	16	6	10	7.7	0.5	1.9	0.3	4.0
54	661	1.419	1.233	190	6	66	7	0.57	4	115.2	8.1	215	7	14	7	13	6	53.0	3.2	32.1	2.6	1.6
55	884	1.408	1.206	170	6	55.3	6	0.98	4	56.5	7.2	100	16	10	31	5	38	47.1	2.8	15.6	1.1	3.0
56	1321	1.466	1.094	95	7	13	9	0.74	4	17.6	9.8	240	11	14	22	16	14	27.4	1.9	5.1	0.5	5.4
57	1475	1.975	1.338	190	6	12.9	13	0.92	4	14.1	13.6	60	20	5	40	12	50	73.8	4.4	5.5	0.7	13.5
58	121	1.607	1.204	160	6	51.2	7	0.96	4	53.3	8.1	80	6	6	12	5	8	50.5	3.0	16.8	1.4	3.0
59	151	1.397	1.203	120	6	25.7	9	0.92	4	28.1	9.8	130	15	15	30	7	25	33.0	2.0	7.7	0.8	4.3
60	156	1.448	1.097	150	6	52.5	8	0.99	4	53.3	8.9	220	6	13	7	12	6	42.7	2.6	15.2	1.4	2.8
61	515	1.399	1.216	170	6	46.7	8	0.93	4	50.0	8.9	215	12	20	22	15	18	46.8	2.8	13.8	1.2	3.4
62	595	1.769	1.339	130	6	12.5	12	0.93	4	13.5	12.6	60	17	7	36	4	32	45.2	2.7	4.7	0.6	9.7
63	512	1.212	0.967	210	6	74.4	8	0.74	4	100.9	8.9	300	11	24	24	19	17	50.0	3.0	24.1	2.2	2.1
64	448	1.727	1.042	180	7	34.8	9	0.49	4	70.9	9.8	400	10	26	19	25	13	61.1	4.3	24.1	2.4	2.5
65	383	1.465	1.122	150	6	44.4	10	0.97	4	45.8	10.8	245	12	17	25	18	15	43.2	2.6	13.2	1.4	3.3
66	1363	1.697	1.298	80	9	8.2	15	0.76	4	10.8	15.5	80	16	6	30	5	25	26.7	2.4	3.6	0.6	7.4
67	1614	1.868	1.271	90	7	14.6	11	0.94	4	15.5	11.7	140	10	8	20	8	14	33.1	2.3	5.7	0.7	5.8
68	172	1.427	1.09	220	6	118.8	7	0.95	4	124.7	8.1	127	7	8	11	7	8	61.7	3.7	35.0	2.8	1.8
69	1171	1.414	1.195	253	9	57.9	9	0.82	4	70.6	9.8	260	9	18	20	17	12	70.3	6.3	19.6	1.9	3.6
70	2038	1.693	1.206	159	6	13.2	13	0.39	4	33.8	13.6	53	25	11	36	<3		52.9	3.2	11.3	1.5	4.7
71	2179	2.044	1.405	105	7	8	15	0.85	4	9.4	15.5	70	19	6	30	5	30	42.2	3.0	3.8	0.6	11.2
72	7000	1.482	1.056	170	7	42.3	10	0.45	4	94.4	10.8	380	11	27	20	24	15	49.5	3.5	27.5	3.0	1.8

#	Point number	Full weight, kg	Sample weight, kg	^{137}Cs, Bq/kg	2σ, %	^{90}Sr, Bq/kg	2σ, %	Total recovery, part	2σ, %	^{90}Sr, Bq/kg (incl. rec.)	2σ, %	^{40}K, Bq/kg	2σ, %	^{226}Ra, Bq/kg	2σ, %	^{232}Th, Bq/kg	2σ, %	^{137}Cs, kBq/m^2	2σ, kBq/m^2	^{90}Sr, kBq/m^2	2σ, kBq/m^2	Ratio Cs/Sr
73	463	1.683	1.387	158	6	16.5	12	0.86	4	19.2	12.6	77	12	6	26	4	24	52.3	3.1	6.3	0.8	8.2
74	667	1.766	1.267	300	7	63.6	8	0.79	4	80.5	8.9	180	13	16	29	12	22	104.2	7.3	27.9	2.5	3.7
75	113	1.661	1.335	191	6	9.4	12	0.68	4	13.7	12.6	156	13	12	35	9	23	62.4	3.7	4.5	0.6	13.9
76	384	1.988	1.438	102	7	11.3	12	0.92	4	12.3	12.6	90	11	7	26	5	19	39.9	2.8	4.8	0.6	8.3
77	1525	1.138	0.979	210	6	39.2	8	0.94	4	41.7	8.9	117	19	11	35	9	27	47.0	2.8	9.3	0.8	5.0
78	176	1.424	1.12	230	7	52	8	0.92	4	56.4	8.9	300	12	17	26	16	17	64.4	4.5	15.8	1.4	4.1
79	521	1.787	1.351	156	7	32.8	8	0.94	4	35.0	8.9	76	15	9	10	5	23	54.8	3.8	12.3	1.1	4.5
80	255	1.716	1.228	233	7	70.4	8	0.88	4	79.8	8.9	249	11	19	23	15	16	78.6	5.5	26.9	2.4	2.9
81	1168	1.441	1.195	180	7	6.7	16	0.74	4	9.1	16.5	211	12	20	24	14	18	51.0	3.6	2.6	0.4	19.9
82	712	1.561	1.167	380	6	108.1	8	0.95	4	114.3	8.9	190	13	16	28	12	21	116.6	7.0	35.1	3.1	3.3
83	178	1.69	1.257	172	7	23.2	11	0.86	4	27.1	11.7	290	9	16	19	15	21	57.1	4.0	9.0	1.1	6.3
84	106	1.438	1.188	300	6	110.8	8	0.82	4	135.1	8.9	150	11	10	35	9	19	84.8	5.1	38.2	3.4	2.2
85	1203	1.531	1.319	180	6	18.5	12	0.88	4	20.9	12.6	80	14	8	37	5	28	54.2	3.3	6.3	0.8	8.6
86	311	1.462	1.24	190	7	95	8	0.86	4	110.5	4.1	230	11	14	25	15	15	54.6	3.8	31.7	1.3	1.7
87	445	1.263	1.021	320	6	116	8	0.95	4	122.1	8.9	310	11	25	25	19	19	79.5	4.8	30.3	2.7	2.6
88	185	1.562	1.109	160	7	62.1	8	0.82	4	75.7	8.9	258	10	9	42	12	26	49.1	3.4	23.3	2.1	2.1
89	1162	1.4	1.003	140	7	60.5	8	0.93	4	65.1	8.9	110	18	15	29	8	24	38.5	2.7	17.9	1.6	2.2
90	285	1.623	1.286	140	6	18.1	12	0.84	4	21.5	12.6	116	14	8	32	7	26	44.7	2.7	6.9	0.9	6.5
91	188	1.859	1.207	134	7	52.9	9	0.92	4	57.5	9.8	166	14	15	27	10	19	49.0	3.4	21.0	2.1	2.3
92	2176	1.813	1.275	70	7	18.2	12	0.88	4	20.6	12.6	90	17	9	28	5	30	24.9	1.7	7.3	0.9	3.4
93	111	1.689	1.2	187	9	62.1	8	0.87	4	71.1	8.9	150	13	13	24	10	20	62.1	5.6	23.6	2.1	2.6
94	469	1.45	1.158	220	7	37.5	10	0.82	4	45.7	10.8	140	10	10	10	10	7	62.7	4.4	13.0	1.4	4.8
95	394	1.536	1.164	172	7	58.9	9	0.82	4	71.8	9.8	195	13	17	23	12	20	51.9	3.6	21.7	2.1	2.4
96	316	1.746	1.3	144	7	36.7	9	0.88	4	41.7	9.8	220	11	16	24	11	16	49.4	3.5	14.3	1.4	3.5
97	131	1.72	1.331	192	6	72.7	8	0.85	4	85.5	8.9	90	9	6	23	5	18	64.9	3.9	28.9	2.6	2.2
98	2035	2.013	1.497	75	7	10	18	0.88	4	11.4	18.4	54	20	5	37	4	30	29.7	2.1	4.5	0.8	6.6
99	2867	1.744	1.183	75	7	7.9	20	0.90	4	8.8	20.4	69	19	8	35	5	28	25.7	1.8	3.0	0.6	8.5
100	2153	1.876	1.354	143	6	29	10	0.92	4	31.4	10.8	65	20	8	30	6	29	52.7	3.2	11.6	1.2	4.6
101	282	2.01	1.27	156	6	49	9	0.94	4	52.1	9.8	246	10	19	18	14	15	61.6	3.7	20.6	2.0	3.0
102	39	1.45	0.997	390	7	161.5	8	0.98	4	164.8	8.9	150	14	19	33	12	24	111.2	7.8	47.0	4.2	2.4
103	259	1.499	1.221	219	6	6	9	0.40	4	15.0	9.8	300	11	19	26	20	17	64.5	3.9	4.4	0.4	14.6
104	1528	1.545	1.32	190	6	22.4	10	0.97	4	23.1	10.8	129	14	11	34	9	25	57.7	3.5	7.0	0.8	8.2
105	177	1.44	1.24	190	6	61.2	8	0.86	4	71.2	8.9	290	8	20	17	16	12	53.8	3.2	20.1	1.8	2.7
106	422	1.623	1.288	130	7	24.5	10	0.52	4	47.1	10.8	190	11	13	21	13	14	41.5	2.9	15.0	1.6	2.8
107	454	1.695	1.44	103	7	34.4	8	0.96	4	35.8	8.9	80	18	8	33	6	25	34.3	2.4	11.9	1.1	2.9
108	406	1.838	1.364	230	5	91.1	8	0.76	4	119.9	8.9	150	11	11	29	9	20	83.1	4.2	43.3	3.9	1.9
109	887	1.671	1.579	112	7	18.8	10	0.70	4	26.9	10.8	100	14	8	35	5	33	36.8	2.6	8.8	1.0	4.2
110	438	1.632	1.5	90	7	33.6	11	0.92	4	36.5	11.7	170	9	13	15	11	11	28.9	2.0	11.7	1.4	2.5
111	314	1.448	1.159	192	6	83.3	8	0.97	4	85.7	8.9	290	11	24	20	21	14	54.7	3.3	24.4	2.2	2.2

#	Point number	Full weight, kg	Sample weight, kg	^{137}Cs, Bq/kg	2σ, %	^{90}Sr, Bq/kg	2σ, %	Total recovery, part	2σ, %	^{90}Sr, Bq/kg (incl. rec.)	2σ, %	^{40}K, Bq/kg	2σ, %	^{226}Ra, Bq/kg	2σ, %	^{232}Th, Bq/kg	2σ, %	^{137}Cs, kBq/m^2	2σ, kBq/m^2	^{90}Sr, kBq/m^2	2σ, kBq/m^2	Ratio Cs/Sr
112	893	1.422	1.344	137	6	59.4	9	0.72	4	82.5	9.8	148	14	11	31	9	22	38.3	2.3	23.1	2.3	1.7
113	1615	1.885	1.071	110	7	13.6	10	0.79	4	17.2	10.8	240	7	17	17	24	7	40.8	2.9	6.4	0.7	6.4
114	466	1.603	1.464	163	9	6.5	22	0.89	4	7.3	22.4	80	13	7	30	5	20	51.4	4.6	2.3	0.5	22.3
115	896	1.55	1.211	110	7	19.1	12	0.90	4	21.2	12.6	200	13	13	24	10	20	33.5	2.3	6.5	0.8	5.2
116	1836	1.689	1.23	36	8	6.2	12	0.83	4	7.5	12.6	108	12	8	25	10	13	12.0	1.0	2.5	0.3	4.8
117	844	1.424	1.294	130	7	29.5	8	0.85	4	34.7	8.9	180	14	11	27	8	26	36.4	2.5	9.7	0.9	3.7
118	440	1.508	1.145	172	6	57.1	8	0.91	4	62.7	8.9	140	6	9	9	83	7	51.0	3.1	18.6	1.7	2.7
119	419	1.469	1.019	138	7	38.3	10	0.68	4	56.3	10.8	270	11	19	21	20	13	39.9	2.8	16.3	1.8	2.5
120	379	1.667	1.203	220	7	64	9	0.79	4	81.0	9.8	360	9	23	19	22	13	72.1	5.0	26.5	2.6	2.7
121	362	1.612	1.22	166	6	46.6	10	0.94	4	49.7	10.8	130	15	18	19	7	27	52.6	3.2	15.8	1.7	3.3
122	890	1.631	1.156	170	6	53.7	8	0.89	4	60.3	8.9	180	6	12	9	11	7	54.5	3.3	19.3	1.7	2.8
123	69	1.748	1.14	330	6	159.9	8	0.92	4	173.8	8.9	220	12	20	30	12	21	113.4	6.8	59.7	5.3	1.9
124	253	1.488	1.209	190	7	34.7	9	0.91	4	38.1	9.8	226	12	14	23	13	17	55.6	3.9	11.2	1.1	5.0
125	380	1.671	1.083	156	6	55.2	9	0.93	4	59.4	9.8	360	5	21	7	22	6	51.2	3.1	19.5	1.9	2.6
126	1022	1.525	1.457	132	7	17.2	10	0.86	4	19.9	10.8	270	11	15	24	16	14	39.6	2.8	6.0	0.6	6.6
127	2185	1.829	1.243	130	7	16.8	12	0.96	4	17.6	12.6	120	18	11	30	8	27	46.7	3.3	6.3	0.8	7.4
128	2286	1.748	1.437	130	6	15.1	10	0.74	4	20.4	10.8	170	11	14	25	10	17	44.7	2.7	7.0	0.8	6.4
129	2187	2.972	1.523	130	6	6.7	22	0.92	4	7.3	22.4	120	14	9	28	9	21	76.0	4.6	4.3	1.0	17.9
130	2104	2.471	1.615	57	7	15.3	13	0.91	4	16.7	13.6	60	18	7	23	5	27	27.7	1.9	8.1	1.1	3.4
131	2182	2.479	1.267	133	6	27.5	9	0.88	4	31.2	9.8	150	13	13	24	10	17	64.8	3.9	15.2	1.5	4.3
132	2398	2.54	1.228	82	7	16.7	12	0.85	4	19.6	12.6	60	19	7	30	5	27	40.9	2.9	9.8	1.2	4.2
133	2444	1.648	1.208	90	6	19.6	11	0.91	4	21.6	11.7	80	7	7	10	6	8	29.2	1.7	7.0	0.8	4.2
134	2856	1.157	0.997	120	7	27.8	9	0.85	4	32.7	9.8	40	9	5	13	4	9	27.3	1.9	7.4	0.7	3.7
135	2487	1.787	1.46	108	6	18.4	9	0.86	4	21.4	9.8	90	16	9	30	6	26	37.9	2.3	7.5	0.7	5.0
136	2145	2.044	1.53	110	6	30.1	9	0.83	4	36.3	9.8	76	15	7	33	6	24	44.2	2.7	14.6	1.4	3.0
137	2330	1.927	1.222	130	6	26.2	9	0.88	4	29.8	9.8	190	6	13	8	12	6	49.2	3.0	11.3	1.1	4.4
138	2289	1.788	1.337	120	6	24.9	9	0.69	4	36.1	9.8	151	10	12	19	11	12	42.2	2.5	12.7	1.2	3.3
139	2855	1.915	1.458	38	9	6.9	20	0.88	4	7.9	20.4	40	22	3	40	3	34	14.3	1.3	3.0	0.6	4.8
140	2606	1.655	1.479	121	6	26.3	10	0.79	4	33.3	10.8	76	17	7	34	5	28	39.4	2.4	10.8	1.2	3.6
141	2854	1.925	1.466	51	8	5.5	14	0.89	4	6.2	14.6	67	18	8	25	5	26	19.3	1.5	2.3	0.3	8.3
142	2570	1.649	1.152	135	6	28.7	9	0.89	4	32.4	9.8	96	16	11	28	8	26	43.8	2.6	10.5	1.0	4.2
143	2188	1.924	1.48	110	6	14.5	12	0.81	4	17.8	12.6	170	11	11	23	10	15	41.6	2.5	6.7	0.9	6.2
144	2860	1.675	1.417	70	9	20.7	12	0.88	4	23.5	12.6	43	7	4	11	4	9	23.0	2.1	7.7	1.0	3.0
145	2353	2.118	1.289	73	7	6.3	22	0.89	4	7.1	22.4	140	14	7	21	8	21	30.4	2.1	2.9	0.7	10.3
146	2396	2.499	1.386	86	7	10.4	16	0.91	4	11.4	16.5	74	18	5	40	5	26	42.2	3.0	5.6	0.9	7.5
147	2859	2.128	1.273	82	7	11.6	14	0.89	4	13.0	14.6	58	21	9	32	4	33	34.3	2.4	5.5	0.8	6.3
148	2406	2.097	1.268	65	7	5.5	24	0.87	4	6.3	24.3	44	25	6	31	4	29	26.8	1.9	2.6	0.6	10.3
149	2609	1.813	1.361	58	8	7.1	15	0.87	4	8.2	15.5	80	19	8	30	7	21	20.7	1.7	2.9	0.5	7.1
150	2618	2.028	1.487	33	8	2.8	40	0.89	4	3.1	40.2	60	17	6	27	4	26	13.2	1.1	1.3	0.5	10.5

#	Point number	Full weight, kg	Sample weight, kg	^{137}Cs, Bq/kg	2σ, %	^{90}Sr, Bq/kg	2σ, %	Total recovery, part	2σ, %	^{90}Sr, Bq/kg (incl. rec.)	2σ, %	^{40}K, Bq/kg	2σ, %	^{226}Ra, Bq/kg	2σ, %	^{232}Th, Bq/kg	2σ, %	^{137}Cs, kBq/m^2	2σ, kBq/m^2	^{90}Sr, kBq/m^2	2σ, kBq/m^2	Ratio Cs/Sr
151	2409	2.162	1.492	60	6	3.5	20	0.87	4	4.0	20.4	50	7	5	10	4	8	25.5	1.5	1.7	0.3	14.9
152	2309	2.147	1.583	52	8	8.1	12	0.91	4	8.9	12.6	50	20	7	29	4	27	21.9	1.8	3.8	0.5	5.8
153	2612	2.048	1.481	53	7	3.9	15	0.84	4	4.6	15.5	48	20	5	30	3	30	21.3	1.5	1.9	0.3	11.4
154	2857	2.002	1.397	70	9	12.1	11	0.89	4	13.6	11.7	48	20	5	30	3	31	27.5	2.5	5.4	0.6	5.1
155	2430	2.225	1.523	52	6	7.2	12	0.85	4	8.5	12.6	60	7	5	10	5	7	22.7	1.4	3.7	0.5	6.1
156	2621	2.195	1.502	35	7	1.8	50	0.92	4	4.5	19.4	50	18	6	31	4	27	15.1	1.1	1.9	0.4	7.9
157	2524	2.092	1.488	75	7	6.8	22	0.82	4	8.3	22.4	70	18	6	33	5	24	30.8	2.2	3.4	0.8	9.0
158	2441	2.116	1.451	49	8	5.2	27	0.93	4	5.6	27.3	50	21	5	28	4	30	20.4	1.6	2.3	0.6	8.8
159	2438	2.145	1.47	67	7	8.1	20	0.88	4	9.2	20.4	57	20	8	31	5	30	28.3	2.0	3.9	0.8	7.3
160	2624	1.93	1.377	67	7	4.9	30	0.93	4	5.3	30.3	44	23	7	32	5	26	25.4	1.8	2.0	0.6	12.7
161	2513	1.926	1.388	58	7	4.1	19	0.88	4	4.7	19.4	190	11	14	21	13	13	22.0	1.5	1.8	0.3	12.4
162	2750	1.794	1.26	73	7	7.8	12	0.93	4	8.4	12.6	80	17	10	27	5	24	25.7	1.8	3.0	0.4	8.7
163	2544	2.038	1.313	67	7	4.7	30	0.89	4	5.3	30.3	80	17	7	32	6	24	26.8	1.9	2.1	0.6	12.7
164	2433	1.979	1.397	36	8	3.2	30	0.81	4	4.0	30.3	50	21	5	38	4	29	14.0	1.1	1.5	0.5	9.1
165	2435	1.704	1.317	230	6	26.8	9	0.83	4	32.3	9.8	60	19	6	54	4	37	77.0	4.6	10.8	1.1	7.1
166	2638	1.685	1.35	82	7	5.3	15	0.78	4	6.8	15.5	100	15	9	29	6	23	27.2	1.9	2.3	0.3	12.1
167	2709	1.884	1.278	57	8	5.3	12	0.90	4	5.9	12.6	220	11	17	18	14	14	21.1	1.7	2.2	0.3	9.7
168	2630	1.986	1.626	60	7	1.8	40	0.91	4	2.0	40.2	<19		8	25	6	24	23.4	1.6	0.8	0.3	30.3
169	2695	1.748	1.354	82	7	5.7	27	0.94	4	6.1	27.3	134	13	14	22	9	17	28.2	2.0	2.1	0.6	13.5
170	2858	2.161	1.581	34	8	3.6	35	0.90		4.0	35.0	50	20	6	29	3	29	14.4	1.2	1.7	0.6	8.5
171	2627	2.097	1.564	40	7	2	25	0.46	4	4.3	25.3	50	13	4	24	4	17	16.5	1.2	1.8	0.5	9.2
172	2753	1.535	1.374	75	7	4.8	28	0.85	4	5.6	28.3	70	20	8	30	7	24	22.6	1.6	1.7	0.5	13.3
173	2653	1.444	1.187	90	7	2.5	38	0.32	4	7.8	38.2	100	7	7	10	7	7	25.5	1.8	2.2	0.8	11.5
174	2510	1.926	1.38	63	7	5.3	15	0.94	4	5.6	15.5	170	12	12	23	11	16	23.9	1.7	2.1	0.3	11.2
175	2763	1.491	1.059	70	7	2.9	22	0.85	4	3.4	22.4	210	11	22	19	26	11	20.5	1.4	1.0	0.2	20.4
176	2633	1.68	1.277	60	8	5.1	18	0.99	4	5.2	18.4	220	12	14	21	17	13	19.8	1.6	1.7	0.3	11.6
177	1793	1.954	1.469	146	5	43	7	0.98	5	43.9	8.6	53	7	5.5	13	5.3	8	56.1	2.8	16.9	1.4	3.3
178	1647	2.09	1.494	94	6	31.1	8	0.92	4	33.8	8.9	60	11	6	25	5	16	38.6	2.3	13.9	1.2	2.8
179	1782	1.904	1.448	123	5	35.4	8	0.96	4	37.0	8.9	545	7	6	12	4.5	9	46.0	2.3	13.8	1.2	3.3
180	1799	1.674	1.376	156	5	20.1	12	0.86	4	23.5	12.6	53	14	6	29	5	22	51.3	2.6	7.7	1.0	6.6
181	250	1.912	1.52	77	6	39.2	10	0.79	4	49.7	10.8	53	16	7	31	5	22	28.9	1.7	18.7	2.0	1.5
182	1985	1.778	1.444	160	6	43.3	8	0.96	4	45.2	8.9	70	17	9	30	6	30	55.9	3.4	15.8	1.4	3.5
183	192	2.005	1.47	91	6	15.3	11	0.89	4	17.1	11.7	67	18	9	30	5	28	35.9	2.2	6.8	0.8	5.3
184	418	1.852	1.335	75	7	23.4	9	0.91	4	25.7	9.8	119	14	11	23	7	22	27.3	1.9	9.4	0.9	2.9
185	7	1.88	1.502	42	8	5.9	6	0.77	4	7.7	7.2	127	13	9	26	7	18	15.5	1.2	2.8	0.2	5.5
186	1354	1.593	1.326	173	6	<3		0.81	4	<3.8		57	21	8	42	4	47	54.2	3.3	<1.2		
187	1326	1.92	1.425	194	5	70.3	10	0.90	4	78.1	10.8	53	7	6	12	5	9	73.2	3.7	29.5	3.2	2.5
188	137	1.443	1.386	29	9	7.3	15	0.85	4	8.6	15.5	98	16	12	21	7	20	8.2	0.7	2.4	0.4	3.4
189	1368	1.192	1.067	140	6	19.9	10	0.93	4	21.4	10.8	135	13	15	20	15	15	32.8	2.0	5.0	0.5	6.6

#	Point number	Full weight, kg	Sample weight, kg	^{137}Cs, Bq/kg	2σ, %	^{90}Sr, Bq/kg	2σ, %	Total recovery, part	2σ, %	^{90}Sr, Bq/kg (incl. rec.)	2σ, %	^{40}K, Bq/kg	2σ, %	^{226}Ra, Bq/kg	2σ, %	^{232}Th, Bq/kg	2σ, %	^{137}Cs, kBq/m^2	2σ, kBq/m^2	^{90}Sr, kBq/m^2	2σ, kBq/m^2	Ratio Cs/Sr
190	1357	2.041	1.478	145	6	16.1	10	0.86	4	18.7	10.8	56	17	8	31	5	23	58.2	3.5	7.5	0.8	7.7
191	2818	1.94	1.552	19	6	2.8	40	0.88	4	3.2	40.2	48	7	4	10	3.3	8	7.2	0.4	1.2	0.5	6.0
192	51	1.771	1.252	104	7	35.6	9	0.99	4	36.0	9.8	233	11	13	24	14	15	36.2	2.5	12.5	1.2	2.9
193	62	1.736	1.303	108	6	17.3	10	0.95	4	18.2	10.8	178	11	14	23	11	17	36.9	2.2	6.2	0.7	5.9
194	61	1.638	1.341	51	6	14	14	0.97	4	14.4	14.6	110	10	85	18	6.6	12	16.4	1.0	4.6	0.7	3.5
195	1311	1.537	1.104	96	7	15	14	0.98	4	15.3	14.6	380	10	25	17	26	12	29.0	2.0	4.6	0.7	6.3
196	45	1.415	1.225	99	7	18.3	9	0.82	4	22.3	9.8	154	13	14	24	9	19	27.5	1.9	6.2	0.6	4.4
197	1221	1.904	1.384	65	7	12.4	14	0.95	4	13.1	14.6	158	12	13	20	11	16	24.3	1.7	4.9	0.7	5.0
198	1153	2.344	1.4	77	6	16.9	10	0.95	4	17.9	10.8	212	10	15	19	14	13	35.5	2.1	8.2	0.9	4.3
199	1360	1.721	1.357	170	6	29.5	11	0.88	4	33.6	11.7	180	10	12	16	15	11	57.5	3.5	11.4	1.3	5.1
200	1378	1.776	1.404	56	5	7.3	15	0.99	4	7.4	15.5	214	6	13	7	15	6	19.6	1.0	2.6	0.4	7.6
201	636	1.809	1.282	41	9	6.6	18	0.99	4	6.7	18.4	340	10	22	18	23	12	14.6	1.3	2.4	0.4	6.2
202	189	2.015	1.618	90	6	24.7	8	0.94	4	26.3	8.9	92	16	10	26	6	25	35.7	2.1	10.4	0.9	3.4
203	1147	2.019	1.589	42	7	3.5	30	0.98	4	3.6	30.3	80	12	5	23	5	18	16.7	1.2	1.4	0.4	11.8
204	475	1.808	1.53	76	6	16.7	12	0.96	4	17.4	12.6	118	12	12	19	6	22	27.0	1.6	6.2	0.8	4.4
205	279	2.165	1.577	33	8	5.8	25	0.90	4	6.4	25.3	96	14	8	24	6	18	14.0	1.1	2.7	0.7	5.1
206	48	1.853	1.404	38	8	13	14	0.98	4	13.3	14.6	125	13	9	25	9	17	13.8	1.1	4.9	0.7	2.9
207	1137	1.709	1.288	81	7	10.8	16	0.96	4	11.3	16.5	272	10	18	20	17	14	27.2	1.9	3.8	0.6	7.2
208	1575	1.853	1.494	179	6	11	15	0.89	4	12.4	15.5	52	20	8	39	5	33	65.2	3.9	4.5	0.7	14.5
209	21	1.721	1.415	96	6	25	9	0.92	4	27.2	9.8	118	15	10	24	6	26	32.5	1.9	9.2	0.9	3.5
210	964	1.906	1.49	123	6	39.3	10	0.86	4	45.5	10.8	95	16	10	30	11	44	46.1	2.8	17.0	1.8	2.7
211	1075	1.636	1.281	62	6	7.8	20	0.84	4	9.3	20.4	289	8	21	14	20	9	19.9	1.2	3.0	0.6	6.7
212	639	1.765	1.294	40	9	10.8	12	0.88	4	12.3	12.6	244	11	19	17	17	13	13.9	1.2	4.3	0.5	3.2
213	651	1.775	1.199	62	7	3.9	22	0.84	4	4.7	22.4	284	10	20	14	20	11	21.6	1.5	1.6	0.4	13.3
214	1366	2.197	1.604	118	6	14	12	0.93	4	15.0	12.6	88	12	8	27	7	17	51.0	3.1	6.5	0.8	7.9
215	1271	2.171	1.692	144	6	19	11	0.87	4	21.9	11.7	45	16	6	28	4	31	61.5	3.7	9.3	1.1	6.6
216	92	1.719	1.345	88	5	45.9	8	0.95	4	48.3	8.9	182	6	9.5	8	11	6	29.7	1.5	16.3	1.5	1.8
217	685	1.843	1.525	44	5	6.3	24	0.90	4	7.0	24.3	139	6	8	8	7	6	15.9	0.8	2.5	0.6	6.3
218	804	1.912	1.51	35	9	3	40	0.87	4	3.4	40.2	148	13	11	24	11	16	13.2	1.2	1.3	0.5	10.2
219	202	1.888	1.434	34	8	8	20	0.99	4	8.1	20.4	145	12	10	21	9	15	12.6	1.0	3.0	0.6	4.2
220	12	1.76	1.412	109	6	22.4	10	0.90	4	24.9	10.8	124	13	10	22	7	20	37.7	2.3	8.6	0.9	4.4
221	1218	1.79	1.38	68	6	8.3	19	0.90	4	9.2	19.4	200	7	13	13	13	9	23.9	1.4	3.2	0.6	7.4
222	76	1.77	1.325	75	7	20.3	12	0.83	4	24.5	12.6	263	10	15	20	15	14	26.1	1.8	8.5	1.1	3.1
223	1172	2.107	1.27	91	7	16.5	10	0.99	4	16.7	10.8	273	11	17	20	21	12	37.7	2.6	6.9	0.7	5.5
224	1138	1.781	1.359	55	7	19.3	10	0.89	4	21.7	10.8	184	11	21	16	14	13	19.3	1.3	7.6	0.8	2.5
225	694	1.665	1.21	68	8	16.7	10	0.96	4	17.4	10.8	302	10	17	18	21	12	22.3	1.8	5.7	0.6	3.9
226	236	1.981	1.38	35	8	6	30	0.94	4	6.4	30.3	147	12	11	22	10	15	13.6	1.1	2.5	0.8	5.5
227	901	1.91	1.323	73	7	14.8	11	0.99	4	14.9	11.7	145	13	10	26	12	50	27.4	1.9	5.6	0.7	4.9
228	141	1.188	0.895	59	8	8.3	25	0.92	5	9.0	25.5	99	18	13	26	8.5	22	13.8	1.1	2.1	0.5	6.5

#	Point number	Full weight, kg	Sample weight, kg	^{137}Cs, Bq/kg	2σ, %	^{90}Sr, Bq/kg	2σ, %	Total recovery, part	2σ, %	^{90}Sr, Bq/kg (incl. rec.)	2σ, %	^{40}K, Bq/kg	2σ, %	^{226}Ra, Bq/kg	2σ, %	^{232}Th, Bq/kg	2σ, %	^{137}Cs, kBq/m^2	2σ, kBq/m^2	^{90}Sr, kBq/m^2	2σ, kBq/m^2	Ratio Cs/Sr
229	904	1.907	1.322	101	6.5	23.7	9	0.98	4	24.2	9.8	119	14	10	28	8	19	37.9	2.5	9.1	0.9	4.2
230	633	1.913	1.382	46	7.5	7.4	20	0.92	4	8.0	20.4	164	12	13	22	11	15	17.3	1.3	3.0	0.6	5.7
231	642	1.532	1/192	56	7	6.5	24	0.94	4	6.9	24.3	176	12	14	19	11	15	16.9	1.2	2.1	0.5	8.1
232	68	1.435	1.116	102	6	19.2	14	0.67	4	28.7	14.6	135	14	13	25	8	22	28.8	1.7	8.1	1.2	3.6
233	1144	1.77	1.336	66	7	6.2	14	0.74	4	8.4	14.6	215	11	15	19	13	14	23.0	1.6	2.9	0.4	7.9
234	54	1.596	1.249	119	6	36.5	9	0.61	4	59.4	9.8	207	11	15	24	12	17	37.3	2.2	18.7	1.8	2.0
235	785	1.774	1.381	93	7	15.5	10	0.72	4	21.5	10.8	266	10	19.5	19	14	14	32.4	2.3	7.5	0.8	4.3
236	1106	1.81	1.289	28	9	7.9	10	0.70	4	11.3	10.8	195	11	13	21	12	14	10.0	0.9	4.0	0.4	2.5
237	729	1.963	1.349	100	6	15.6	11	0.58	4	26.9	11.7	351	9	21	17	21	11	38.6	2.3	10.4	1.2	3.7
238	1157	1.939	1.472	137	6	22.8	9	0.94	4	24.2	9.8	264	10	18	24	18	13	52.2	3.1	9.2	0.9	5.7
239	580	1.953	1.508	28	9	2.3	50	0.93	4	2.5	50.2	106	14	9	22	6	18	10.8	1.0	0.9	0.5	11.3
240	1336	1.58	1.173	29	9	7.4	19	0.92	4	8.0	19.4	127	15	11	19	7	21	9.0	0.8	2.5	0.5	3.6
241	787	1.659	1.283	72	7	18.1	10	0.89	4	20.3	10.8	77	17	8	28	4.5	28	23.5	1.6	6.6	0.7	3.5
242	732	1.879	1.395	185	6	51.4	7	0.91	4	56.5	8.1	82	14	8	32	7	22	68.3	4.1	20.9	1.7	3.3
243	706	2.024	1.604	180	6	42.7	8	0.96	4	44.5	8.9	95	13	9	29	6	21	71.6	4.3	17.7	1.6	4.0
244	211	2.012	1.528	26	5	4.8	17	0.81	4	5.9	17.5	108	6	6	7	6	6	10.3	0.5	2.3	0.4	4.4
245	688	1.532	1.142	81	5	18.3	10	0.98	4	18.6	10.8	164	6	9	8	12	6	24.4	1.2	5.6	0.6	4.4
246	1417	1.955	1.417	82	7	10.8	10	0.94	4	11.5	10.8	193	11	25	13	10	18	31.5	2.2	4.4	0.5	7.1
247	879	1.852	1.279	133	6	32.7	9	0.77	4	42.2	9.8	123	14	12	26	11	16	48.4	2.9	15.4	1.5	3.1
248	682	1.758	1.421	34	8	3.3	18	0.83	4	4.0	18.4	165	11	13	15	12	13	11.8	0.9	1.4	0.3	8.6
249	898	1.863	1.47	87	6.5	17.3	11	0.83	4	20.9	11.7	113	13	11	22	8	17	31.9	2.1	7.7	0.9	4.2
250	238	2.04	1.502	33	8	5.1	30	0.97	4	5.3	30.3	129	13	10	22	8	16	13.2	1.1	2.1	0.6	6.3
251	1371	1.942	1.605	78	6.5	3.1	40	0.91	4	3.4	40.2	75	15	66	30	49	23	29.8	1.9	1.3	0.5	22.9
252	95	1.892	1.336	85	6.5	23.5	9	0.96	4	24.6	9.8	131	13	11	22	9	18	31.6	2.1	9.2	0.9	3.5
253	1015	1.992	1.51	65	7	17.5	10	0.97	4	18.0	10.8	161	11	21	13	9	15	25.5	1.8	7.1	0.8	3.6
254	1028	1.823	1.346	144	6	66.9	6	0.91	4	73.5	7.2	207	8	12	18	12	12	51.6	3.1	26.3	1.9	2.0
255	1034	1.973	1.507	169	6	46.5	7	0.92	4	50.5	8.1	237	8	16	14	14	10	65.5	3.9	19.6	1.6	3.3
256	340	1.502	1.224	94	7	27.6	10	0.80	4	34.5	10.8	133	13	12	21	8	22	27.8	1.9	10.2	1.1	2.7
257	1223	1.63	1.232	120	6	12.5	11	0.69	4	18.1	11.7	263	10	16	22	14	14	38.5	2.3	5.8	0.7	6.6
258	676	1.782	1.33	44	5	2.3	25	0.27	4	8.5	25.3	234	5	13	6	15	6	15.4	0.8	3.0	0.8	5.2
259	1141	1.32	1.088	230	5	37	8	0.97	4	38.1	8.9	206	6	13	8	16	6	59.7	3.0	9.9	0.9	6.0
260	1505	1.433	1.059	223	6	49.4	10	0.94	4	52.8	10.8	148	13	18	23	22	12	62.8	3.8	14.9	1.6	4.2
261	57	1.836	1.361	6	16	2.8	26	0.92	4	3.0	6.5	3.2	11	12	16	14	12	2.2	0.3	1.1	0.1	2.0
262	413	1.82	1.424	118	6	48.4	7	0.98	4	49.4	8.1	78	12	6	25	6	18	42.2	2.5	17.7	1.4	2.4
263	1833	1.218	0.999	127	6	38.5	8	0.91	4	42.4	8.9	72	15	10	20	10	14	30.4	1.8	10.2	0.9	3.0
264	864	2.083	1.458	60.5	7	14.9	11	0.98	4	15.2	11.7	195	11.5	15	17	12	15	24.8	1.7	6.2	0.7	4.0
265	1510	1.704	1.37	216	6	50.9	7	0.93	4	54.8	8.1	78	16	13	25	7	21	72.4	4.3	18.4	1.5	3.9
266	969	1.466	1.165	122	6	20.9	11	0.63	4	33.2	11.7	205	10	14	23	13	15	35.2	2.1	9.6	1.1	3.7
267	1624	1.26	0.974	210	6	27.1	8	0.32	4	84.7	8.9	96	16	13	29	16	14	52.0	3.1	21.0	1.9	2.5

#	Point number	Full weight, kg	Sample weight, kg	^{137}Cs, Bq/kg	2σ, %	^{90}Sr, Bq/kg	2σ, %	Total recovery, part	2σ, %	^{90}Sr, Bq/kg (incl. rec.)	2σ, %	^{40}K, Bq/kg	2σ, %	^{226}Ra, Bq/kg	2σ, %	^{232}Th, Bq/kg	2σ, %	^{137}Cs, kBq/m^2	2σ, kBq/m^2	^{90}Sr, kBq/m^2	2σ, kBq/m^2	Ratio Cs/Sr
268	1374	1.602	1.192	95	7	20.9	10	0.94	4	22.2	10.8	372	9	24	16	25	12	29.9	2.1	7.0	0.8	4.3
269	487	1.939	1.462	45	6	4.3	30	0.93	4	4.6	30.3	65	7	4	11	4	8	17.2	1.0	1.8	0.5	9.7
270	2824	2.049	1.517	31	6	2.3	40	0.94	4	2.4	40.2	120	6	8	8	8	6	12.5	0.7	1.0	0.4	12.7
271	912	2.176	1.498	49	7	4.8	30	0.92	4	5.2	30.3	167	11	11	22	9.5	16	21.0	1.5	2.2	0.7	9.4
272	241	2.031	1.616	34	6	3.5	40	0.89	4	3.9	40.2	100	9	7	16	6	12	13.6	0.8	1.6	0.6	8.6
273	1150	2.086	1.658	94	6	5.3	30	0.95	4	5.6	30.3	69	15	7	28	4	25	38.5	2.3	2.3	0.7	16.8
274	691	1.806	1.425	97	6	13.3	10	0.75	4	17.7	10.8	68	18	5	43	5	30	34.4	2.1	6.3	0.7	5.5
275	2869	1.774	1.275	74	7	17.7	11	0.72	4	24.6	11.7	100	14	11	21	6	23	25.8	1.8	8.6	1.0	3.0
276	244	1.973	1.506	73	7	4.7	30	0.89	4	5.3	30.3	111	13	8	25	7	18	28.3	2.0	2.0	0.6	13.8
277	392	1.859	1.499	145	6	53.4	9	0.84	4	63.6	9.8	182	11	12	21	10	18	53.0	3.2	23.2	2.3	2.3
278	482	2.047	1.497	44	6	11.4	10	0.89	4	12.8	10.8	142	8	8	16	9	9	17.7	1.1	5.2	0.6	3.4
279	494	1.926	1.456	46	8	9.6	14	0.63	4	15.2	14.6	121	14	9	23	7	19	17.4	1.4	5.8	0.8	3.0
280	703	1.821	1.458	190	6	47.9	9	0.90	4	53.2	9.8	98	14	11	24	6	26	68.0	4.1	19.1	1.9	3.6
281	291	2.004	1.599	86	6	21.5	11	0.89	4	24.2	11.7	99	14	8.5	27	5	27	33.9	2.0	9.5	1.1	3.6
282	558	1.893	1.433	363	5.5	59	8	0.83	4	71.1	8.9	123	14	11	40	7	31	135.1	7.4	26.5	2.4	5.1
283	290	1.738	1.378	128	6	33.5	8	0.91	4	36.8	8.9	100	16	6	38	6	28	43.7	2.6	12.6	1.1	3.5
284	292	1.24	1.619	154	6	41.6	9	0.97	4	42.9	9.8	131	11	10	23	7	20	37.5	2.3	10.5	1.0	3.6
285	294	1.98	1.515	147	6	26.8	11	0.94	4	28.5	11.7	131	11	11	25	7	19	57.2	3.4	11.1	1.3	5.2
286	460	1.924	1.461	224	6	25.1	11	0.93	4	27.0	11.7	83	17	9	34	4.5	36	84.7	5.1	10.2	1.2	8.3
287	1531	2.014	1.407	64	7	13.6	11	0.76	4	17.9	11.7	132	14	10	29	9	17	25.3	1.8	7.1	0.8	3.6
288	491	1.684	1.183	45	8	8.7	12	0.92	4	9.5	12.6	149	14	13	22	12	16	14.9	1.2	3.1	0.4	4.8
289	2787	1.78	1.407	65	6	10.5	15	0.92	4	11.4	15.5	96	9	8	16	5.5	11	22.7	1.4	4.0	0.6	5.7
290	1988	2.499	1.657	90	5	12.6	14	0.92	4	13.7	14.6	80	10	7	18	4.5	14	44.2	2.2	6.7	1.0	6.6
291	1989	2.152	1.575	62	7	1.8	40	0.92	4	2.0	40.2	80	14	9	27	5	20	26.2	1.8	0.8	0.3	31.7
292	2203	2.058	1.432	50	7	6.7	18	0.92	4	7.3	18.4	70	14	9	25	6	18	20.2	1.4	2.9	0.5	6.9
293	1803	1.572	1.239	80	7	5.3	22	0.65	4	8.2	22.4	160	11	14	17	10	15	24.7	1.7	2.5	0.6	9.8
294	1807	1.776	1.303	53	8	3	30	0.93	4	3.2	30.3	120	16	8	25	7	16	18.5	1.5	1.1	0.3	16.4
295	1769	1.884	1.157	69	8	8.7	17	0.90	4	9.7	17.5	230	8	12	10	13	9	25.6	2.0	3.6	0.6	7.1
296	1753	1.663	1.34	25	8	2.4	30	0.89	4	2.7	30.3	91	13	9	25	5	19	8.2	0.7	0.9	0.3	9.3
297	1843	1.797	1.351	52	7	5.1	18	0.78	4	6.5	18.4	84	15	11	25	6	20	18.4	1.3	2.3	0.4	8.0
298	1933	1.657	1.271	60	6	3.6	22	0.80	4	4.5	22.4	84	12	7	25	5	17	19.5	1.2	1.5	0.3	13.3
299	1723	1.41	1.063	64	8	8.9	13	0.52	4	17.1	13.6	240	10	22	21	19	12	17.7	1.4	4.7	0.6	3.7
300	1772	1.363	1.007	32	8	8.8	14	0.92	4	9.6	14.6	130	10	18	17	10	13	8.6	0.7	2.6	0.4	3.3
301	2209	2.284	1.612	50	7	4.3	19	0.79	4	5.4	19.4	80	13	6	38	4	21	22.5	1.6	2.4	0.5	9.2
302	2774	2.098	1.456	30	8	4.2	19	0.75	4	5.6	19.4	60	20	8	24	4	23	12.4	1.0	2.3	0.4	5.4
303	2771	2.078	1.177	40	7	3.7	28	0.93	4	4.0	28.3	70	13	10	18	5	18	16.3	1.1	1.6	0.5	10.1
304	2020	2.077	1.396	66	6	4.3	19	0.98	4	4.4	19.4	83	11	8.5	22.5	6	17	26.9	1.6	1.8	0.3	15.0
305	2210	2.025	1.293	47	7	4.5	19	0.97	4	4.6	19.4	67	17	7	34	4	30	18.7	1.3	1.8	0.4	10.1
306	1811	2.048	1.391	42	8	3.1	30	0.96	4	3.2	30.3	80	16	7	24	6	20	16.9	1.4	1.3	0.4	13.0

#	Point number	Full weight, kg	Sample weight, kg	^{137}Cs, Bq/kg	2σ, %	^{90}Sr, Bq/kg	2σ, %	Total recovery, part	2σ, %	^{90}Sr, Bq/kg (incl. rec.)	2σ, %	^{40}K, Bq/kg	2σ, %	^{226}Ra, Bq/kg	2σ, %	^{232}Th, Bq/kg	2σ, %	^{137}Cs, kBq/m^2	2σ, kBq/m^2	^{90}Sr, kBq/m^2	2σ, kBq/m^2	Ratio Cs/Sr
307	2768	2.006	1.401	42	7	4.4	19	0.95	4	4.6	19.4	51	17	6	28	4	20	16.6	1.2	1.8	0.4	9.1
308	2075	1.715	1.294	34	9	6.7	17	0.95	4	7.1	17.5	52	21	8	30	4.5	23	11.5	1.0	2.4	0.4	4.8
309	1599	2.131	1.502	41	9	2.3	32	0.758	4	3.0	32.2	46	15	6	22	4	19	17.2	1.5	1.3	0.4	13.5
310	2191	2.104	1.433	66	7	10.3	12	0.60	4	17.2	12.6	160	8	11	9	10	8	27.3	1.9	7.1	0.9	3.8
311	1711	1.769	1.231	67	7	10.2	13	0.99	4	10.3	13.6	80	15	11	25	6	20	23.3	1.6	3.6	0.5	6.5
312	1757	1.695	1.241	42	8	5.2	13	0.86	4	6.0	13.6	60	16	13	20	11	12	14.0	1.1	2.0	0.3	6.9
313	2194	2.19	1.304	58.5	7	3.3	30	0.94	4	3.5	30.3	45	23.5	7	38	5	30	25.2	1.8	1.5	0.5	16.7
314	2371	1.894	1.243	65	7	7.7	16	0.97	4	7.9	16.5	129	14	15	22	8	19	24.2	1.7	3.0	0.5	8.2
315	2102	1.748	1.309	106	6	11.6	13	0.97	4	12.0	13.6	100	15	22	25	7	22	36.4	2.2	4.1	0.6	8.9
316	1605	1.503	1.106	66.5	7	4.6	20	0.97	4	4.7	20.4	107	16	22	23	8	20	19.6	1.4	1.4	0.3	14.0
317	2127	1.694	1.041	103	7	31.3	9	0.96	4	32.6	9.8	116	12	17	23	13	13	34.3	2.4	10.9	1.1	3.2
318	1857	1.812	1.353	38	7	2.8	20	0.77	4	3.6	20.4	80	13	6	24	5	17	13.5	0.9	1.3	0.3	10.5
319	2266	1.749	1.214	76	7	8.3	11	0.88	4	9.4	11.7	108	13	18	19	7	17	26.1	1.8	3.2	0.4	8.1
320	2421	2.272	1.545	46.5	21	2.3	24	0.57	4	4.0	24.3	70	14	9	22	5	19	20.8	4.4	1.8	0.4	11.5
321	2269	1.577	1.231	68	5	9.6	13	0.94	4	10.2	13.6	88	8	7	17	6	18	21.1	1.1	3.2	0.4	6.7
322	2017	2.042	1.542	80	8	4.8	20	0.98	4	4.9	20.4	60	10	4	15	3.4	10	32.1	2.6	2.0	0.4	16.3
323	2850	1.804	1.285	47	7	5.6	20	0.95	4	5.9	20.4	60	10	4	12	3	8	16.7	1.2	2.1	0.4	8.0
324	2427	1.397	0.883	51	6	5.7	20	0.83	4	6.9	20.4	88	9	12	12	13	8	14.0	0.8	1.9	0.4	7.4
325	2368	1.982	1.495	72	6	5.8	20	0.98	4	5.9	20.4	70	14	8.5	27	5	22	28.1	1.7	2.3	0.5	12.2
326	2014	1.979	1.327	88	6	6.5	17	0.92	4	7.1	17.5	84	14	10	25	8	16	34.2	2.1	2.7	0.5	12.5
327	2010	1.938	1.436	52	6.5	3.8	26	0.93	4	4.1	26.3	71	12	7	22	5	17	19.8	1.3	1.6	0.4	12.7
328	1873	2.029	1.426	42	7	5.9	20	0.99	4	6.0	20.4	131	11	9	23	8	14	16.8	1.2	2.4	0.5	7.0
329	1663	1.777	1.348	46	7	8.6	14	0.85	4	10.1	14.6	223	8	14	14	13	11	16.1	1.1	3.5	0.5	4.5
330	2648	2.038	1.342	71	7	11.1	11	0.98	4	11.3	11.7	188	12	15	21	12	15	28.4	2.0	4.5	0.5	6.3
331	1839	2.027	1.21	62	7	8.1	15	0.81	4	10.0	15.5	85	18	14	27	9	19	24.7	1.7	4.0	0.6	6.2
332	2206	1.684	1.164	62	7	8.8	14	0.78	4	11.3	14.6	96	14	15	25	6	21	20.5	1.4	3.7	0.5	5.5
333	1379	2.134	1.325	60	5	4.6	19	0.75	4	6.1	19.4	180	6	9.5	12	10	6	25.2	1.3	2.6	0.5	9.8
334	2324	1.779	1.218	66	5	27.7	10	0.83	4	33.4	10.8	233	5	14	9	13	6	23.1	1.2	11.7	1.3	2.0
335	1463	1.881	1.225	107	6	10.3	13	0.86	4	12.0	13.6	222	11	13.5	21	15	15	39.6	2.4	4.4	0.6	8.9
336	1460	1.722	1.187	121	6.5	11.1	13	0.88	4	12.6	13.6	286	10	21	22	16	13	41.0	2.7	4.3	0.6	9.6
337	2023	2.305	1.583	70	6.5	7.5	16	0.99	4	7.6	16.5	53	17.5	11	32	4.5	24	31.7	2.1	3.4	0.6	9.2
338	1611	2.142	1.519	69	7	4.9	19	0.92	4	5.3	19.4	50	19	9	29	4.5	23	29.1	2.0	2.2	0.4	13.0
339	1490	1.702	1.33	83	6.5	7.2	15	0.95	4	7.6	15.5	106	13	11	26	7	19	27.8	1.8	2.5	0.4	11.0
340	2200	1.849	1.439	56	7	5.4	20	0.91	4	5.9	20.4	55	17	7	30	5	20	20.4	1.4	2.2	0.4	9.4
341	1718	1.576	1.249	48	8	8.2	13	0.98	4	8.4	13.6	131	14	12	20	9	19	14.9	1.2	2.6	0.4	5.7
342	1715	1.815	1.442	66	7	4.1	22	0.71	4	5.8	22.4	120	14	13	28	8	20	23.5	1.6	2.1	0.5	11.4
343	1641	1.548	1.141	63	7	11.3	10	0.84	4	13.5	10.8	65	19	12	24	8	18	19.2	1.3	4.1	0.4	4.7
344	2777	2.056	1.489	54	7	8.8	13	0.95	4	9.3	13.6	55	18	10	27	5	20	21.8	1.5	3.7	0.5	5.8
345	1502	1.647	1.226	96	7	12.1	13	0.98	4	12.3	13.6	224	11	17	20	14	15	31.1	2.2	4.0	0.5	7.8

#	Point number	Full weight, kg	Sample weight, kg	^{137}Cs, Bq/kg	2σ, %	^{90}Sr, Bq/kg	2σ, %	Total recovery, part	2σ, %	^{90}Sr, Bq/kg (incl. rec.)	2σ, %	^{40}K, Bq/kg	2σ, %	^{226}Ra, Bq/kg	2σ, %	^{232}Th, Bq/kg	2σ, %	^{137}Cs, kBq/m^2	2σ, kBq/m^2	^{90}Sr, kBq/m^2	2σ, kBq/m^2	Ratio Cs/Sr
346	2135	1.572	1.201	91	7	7.2	14	0.99	4	7.3	14.6	84	17	16	27	6	25	28.1	2.0	2.2	0.3	12.5
347	2046	1.907	1.451	84	7	13.7	12	0.87	4	15.7	12.6	78	17	16	32	5	29	31.5	2.2	5.9	0.7	5.3
348	2424	1.776	1.288	57	8	3.6	23	0.84	4	4.3	23.3	102	16	19	20	13	14	19.9	1.6	1.5	0.3	13.3
349	2028	1.824	1.393	101	6	4.2	15	0.23	4	18.3	15.5	71	17	13	23	5	30	36.2	2.2	6.5	1.0	5.5
350	2851	2.09	1.599	52	7	11.2	13	0.86	4	13.0	13.6	56	17	9	19	5	21	21.4	1.5	5.4	0.7	4.0
351	2044	1.476	1.263	96	5	25.9	9	0.72	4	36.0	9.8	118	6	8	9	9	6	27.9	1.4	10.4	1.0	2.7
352	1842	1.396	1.067	58	5.5	10.3	12	0.50	4	20.6	12.6	200	6	21	7	35	6	15.9	0.9	5.7	0.7	2.8
353	938	2.254	1.619	34	8	3.9	30	0.71	4	5.5	30.3	129	12	17	16	9	15	15.1	1.2	2.4	0.7	6.2
354	792	2.002	1.48	46	8	1.5	40	0.88	4	1.7	40.2	150	12	15	19	9	17	18.1	1.4	0.7	0.3	27.0
355	1867	1.968	1.539	37	8	1	60	0.96	4	1.0	60.1	110	14	12	23	6	21	14.3	1.1	0.4	0.2	35.5
356	2838	1.939	1.391	77	7	4.1	24	0.95	4	4.3	24.3	235	10	22	20	13	14	29.4	2.1	1.6	0.4	17.8
357	1969	2.051	1.513	68	6	7.4	18	0.98	4	7.6	18.4	89.5	13.5	9	32	6	20	27.4	1.6	3.0	0.6	9.0
358	1394	1.828	1.38	55	7	1.5	40	0.95	4	1.6	40.2	112	13	12	26	7	16	19.8	1.4	0.6	0.2	34.8
359	1276	2.247	1.566	33	8	1.5	40	0.97	4	1.5	40.2	171	11	14	22	9	15	14.6	1.2	0.7	0.3	21.3
360	1996	1.92	1.448	38	8	1.9	30	0.96	4	2.0	30.3	124	13	11	22	7.5	16	14.3	1.1	0.7	0.2	19.2
361	1928	1.902	1.395	54	7	5.5	18	0.81	4	6.8	18.4	195	11	15	22	13	13	20.2	1.4	2.5	0.5	8.0
362	1396	2.32	1.634	35	8	1.9	36	0.83	4	2.3	36.2	77	15	10	25	5	19	16.0	1.3	1.0	0.4	15.3
363	2007	2.062	1.53	37	7	13.5	11	0.76	4	17.8	11.7	661	5	6	28	4	21	15.0	1.0	7.2	0.8	2.1
364	2839	1.877	1.406	58	7	1.7	40	0.83	4	2.0	40.2	106	12	14	22	7	17	21.4	1.5	0.8	0.3	28.3
365	2004	2.115	1.668	42	7.5	2.7	28	0.80	4	3.4	28.3	61	16	8	29	3	30	17.5	1.3	1.4	0.4	12.4
366	1281	1.915	1.42	63	7	3.4	24	0.81	4	4.2	24.3	74	17	11	20	5	23	23.7	1.7	1.6	0.4	15.0
367	1278	1.899	1.236	24	10	2.5	32	0.93	4	2.7	32.2	163	12	12	23	10	16	9.0	0.9	1.0	0.3	8.9
368	1705	2.196	1.51	58	7	6.5	17	0.95	4	6.8	17.5	113	13	9	20	8	15	25.0	1.8	3.0	0.5	8.5
369	2096	1.982	1.499	45	7	3.3	24	0.86	4	3.8	24.3	57	18	12	25	5	24	17.5	1.2	1.5	0.4	11.7
370	2416	2.156	1.503	57	7	1.42	40	0.87	4	1.6	40.2	141	12	12	18	8	16	24.2	1.7	0.7	0.3	34.9
371	2316	1.647	1.261	67	7	3.8	22	0.94	4	4.0	22.4	207	12	19	23	11	17	21.7	1.5	1.3	0.3	16.6
372	2413	2.109	1.447	71	7	3.8	22	0.95	4	4.0	22.4	164	12	15	30	10	16	29.4	2.1	1.7	0.4	17.8
373	2414	2.129	1.459	46	7	3	26	0.95	4	3.2	26.3	117	13	11	27	7	19	19.3	1.3	1.3	0.3	14.6
374	1995	1.982	1.451	36	8	1.7	40	0.92	4	1.8	40.2	93	14	9	22	5	22	14.0	1.1	0.7	0.3	19.5
375	851	1.676	1.245	45	8	5	18	0.94	4	5.3	18.4	260	10	22	21	13	15	14.8	1.2	1.8	0.3	8.5
376	2835	1.72	1.231	70	7	1.8	35	0.95	4	1.9	35.2	118	15	20	17	9	19	23.7	1.7	0.6	0.2	36.9
377	2318	2.091	1.463	60	7	4.2	18	0.91	4	4.6	18.4	156	12	15	23	8	17	24.7	1.7	1.9	0.3	13.0
378	2388	2.057	1.527	59	7	4.2	20	0.96	4	4.4	20.4	196	11	18	26	12	13	23.9	1.7	1.8	0.4	13.5
379	2160	1.936	1.513	60	7	4.7	17	0.95	4	4.9	17.5	136	13	13	24	9	17	22.8	1.6	1.9	0.3	12.1
380	2847	2.008	1.525	30	9	2.1	30	0.95	4	2.2	30.3	45	22	10	23	4	26	11.8	1.1	0.9	0.3	13.6
381	1120	1.933	1.365	50	9	2.2	30	0.97	4	2.3	30.3	228	11	18	17	15	13	19.0	1.7	0.9	0.3	22.0
382	2975	1.556	1.205	69	7	2.1	30	0.93	4	2.3	30.3	217	11	16	21	11	17	21.1	1.5	0.7	0.2	30.6
383	1252	1.9	1.433	70	7	1.7	40	0.93	4	1.8	40.2	118	13	10.5	28	7	17	26.1	1.8	0.7	0.3	38.3
384	2001	1.681	1.213	60	8	4	24	0.94	4	4.3	24.3	126	14	13.5	29	10	18	19.8	1.6	1.4	0.3	14.1

#	Point number	Full weight, kg	Sample weight, kg	^{137}Cs, Bq/kg	2σ, %	^{90}Sr, Bq/kg	2σ, %	Total recovery, part	2σ, %	^{90}Sr, Bq/kg (incl. rec.)	2σ, %	^{40}K, Bq/kg	2σ, %	^{226}Ra, Bq/kg	2σ, %	^{232}Th, Bq/kg	2σ, %	^{137}Cs, kBq/m^2	2σ, kBq/m^2	^{90}Sr, kBq/m^2	2σ, kBq/m^2	Ratio Cs/Sr
385	1399	1.937	1.476	86	7	1.1	60	0.93	4	1.2	60.1	162	14	15	26	10	19	32.7	2.3	0.5	0.3	72.7
386	2842	1.836	1.334	65	7	2.7	30	0.88	4	3.1	30.3	122	13	15	20	8	19	23.5	1.6	1.1	0.3	21.2
387	1890	1.826	1.376	103	6	5	20	0.94	4	5.3	20.4	116	13	12	28	6	20	37.0	2.2	1.9	0.4	19.4
388	2761	2.105	1.516	51	7	2.4	35	0.81	4	3.0	35.2	55	18	8	24	4	26	21.1	1.5	1.2	0.4	17.2
389	2843	2.035	1.537	48	7	2.2	43	0.74	4	3.0	43.2	64	17	8	29	5	23	19.2	1.3	1.2	0.5	16.1
390	2845	2.311	1.619	37	8	1.8	48	0.89	4	2.0	48.2	54	19	7	37	3	31	16.8	1.3	0.9	0.4	18.3
391	1005	1.673	1.334	45	8	7.6	18	0.89	4	8.5	18.4	127	14	15	25	8	17	14.8	1.2	2.8	0.5	5.3
392	2844	1.854	1.486	46	7	1.7	50	0.80	4	2.1	50.2	83	15	13	24	5	24	16.8	1.2	0.8	0.4	21.6
393	1123	2.121	1.588	27	8	3	28	0.81	4	3.7	28.3	95	13	9	26	6.5	16	11.3	0.9	1.5	0.4	7.3
394	1239	1.713	1.297	32	5	4.8	22	0.93	4	5.2	22.4	165	6	10	7	11	6	10.8	0.5	1.7	0.4	6.2
395	2834	1.954	1.287	102	5	3.4	26	0.96	4	3.5	26.3	297	6	15	8	17	6	39.2	2.0	1.4	0.4	28.8
396	1236	1.828	1.372	53	8	4.2	20	0.94	4	4.5	20.4	115	14	15	23	7	22	19.0	1.5	1.6	0.3	11.9
397	1038	1.877	1.413	53	8	9.1	13	0.94	4	9.7	13.6	135	13	11	28	11	15	19.6	1.6	3.6	0.5	5.5
398	1093	1.474	1.198	50	8	4.8	20	0.95	4	5.1	20.4	125	15	15	27	8	21	14.5	1.2	1.5	0.3	9.9
399	1860	1.838	1.225	36	9	3.9	21	0.98	4	4.0	21.4	259	11	19	22	15	13	13.0	1.2	1.4	0.3	9.0
400	936	1.808	1.335	36	7	1.4	40	0.95	4	1.5	40.2	155	11	14	8	8.5	15	12.8	0.9	0.5	0.2	24.4
401	1125	1.769	1.218	40	7	4	18	0.78	4	5.1	18.4	140	11	14	23	7	16	13.9	1.0	1.8	0.3	7.8
402	1708	1.436	1.001	98	6	4.1	15	0.78	4	5.3	15.5	171	11	12	35	9	17	27.7	1.7	1.5	0.2	18.6
403	1499	2.012	1.302	59	7	2.7	20	0.48	4	5.6	20.4	278	8	18	16	15	10	23.3	1.6	2.2	0.5	10.5
404	935	1.826	1.143	92	7	4.6	20	0.76	4	6.1	20.4	289	10	25	19	17	14	33.0	2.3	2.2	0.4	15.2
405	2825	1.909	1.272	24	10	15.6	11	0.84	4	18.6	11.7	143	13	14	23	8	17	9.0	0.9	7.0	0.8	1.3
406	909	0.793	0.514	94	7	15.7	11	0.635	4	24.7	11.7	81	20	12	21	10	19	14.7	1.0	3.9	0.5	3.8
407	3454	1.8	1.224	26	9	3.5	20	0.73	4	4.8	20.4	295	8	26	13	20	9	9.2	0.8	1.7	0.3	5.4
408	1999	1.351	1.023	33	9	2.6	22	0.99	4	2.6	22.4	106	16	16	21	7	21	8.8	0.8	0.7	0.2	12.6
409	2219	1.862	1.381	48	8	14.6	9	0.86	4	17.0	9.8	192	11	19	21	9	15	17.6	1.4	6.2	0.6	2.8
410	916	1.89	1.234	29	10	4.1	16	0.9	4	4.6	16.5	277	10	23	20	15	14	10.8	1.1	1.7	0.3	6.4
411	1242	1.558	1.194	72	7	6.7	16	0.98	4	6.8	16.5	177	13	27	21	12	16	22.1	1.5	2.1	0.3	10.5
412	2826	1.67	1.223	40	9	5.2	15	0.63	4	8.3	15.5	317	9	27	19	19	12	13.1	1.2	2.7	0.4	4.8
413	932	1.41	1.08	147	6	4.7	16	0.35	4	13.4	16.5	272	10	17	20	19	12	40.7	2.4	3.7	0.6	10.9
414	2386	1.898	1.255	85	6	4.1	15	0.87	4	4.7	15.5	271	7	20	11	18	8	31.7	1.9	1.8	0.3	18.0
415	985	1.686	1.262	43	6	3.2	22	0.69	4	4.6	22.4	247	7	14	13	15	8	14.3	0.9	1.5	0.3	9.3
416	1698	1.648	1.146	56	7	2.9	24	0.81	4	3.6	24.3	239	9	18	18	18	11	18.1	1.3	1.2	0.3	15.6
417	2765	1.154	0.84	79	7	6	15	0.99	4	6.1	15.5	266	10	42	13	31	9	17.9	1.3	1.4	0.2	13.0
418	1128	1.885	1.242	42	8	1.7	40	0.4	4	4.3	40.2	218	11	16	20	18	12	15.6	1.2	1.6	0.6	9.9
419	2846	1.948	1.356	26	9	7.1	16	0.97	4	7.3	16.5	48	21	6	33	4	24	10.0	0.9	2.8	0.5	3.6
420	1737	1.908	1.328	41	9	3.5	23	0.95	4	3.7	23.3	159	16	13	26	11	20	15.4	1.4	1.4	0.3	11.1
421	1864	1.645	1.288	45	8	3.1	26	0.9	4	3.4	26.3	132	12	14	20	12	16	14.6	1.2	1.1	0.3	13.1
422	925	1.984	1.363	33	10	2	27	0.93	4	2.2	27.3	221	13	15	23	13	18	12.9	1.3	0.8	0.2	15.3
423	1443	1.934	1.48	54	9	3.5	20	0.86	4	4.1	20.4	139	17	13	32	9	25	20.5	1.8	1.5	0.3	13.3

#	Point number	Full weight, kg	Sample weight, kg	^{137}Cs, Bq/kg	2σ, %	^{90}Sr, Bq/kg	2σ, %	Total recovery, part	2σ, %	^{90}Sr, Bq/kg (incl. rec.)	2σ, %	^{40}K, Bq/kg	2σ, %	^{226}Ra, Bq/kg	2σ, %	^{232}Th, Bq/kg	2σ, %	^{137}Cs, kBq/m^2	2σ, kBq/m^2	^{90}Sr, kBq/m^2	2σ, kBq/m^2	Ratio Cs/Sr
424	1261	1.823	1.43	71	6	4	16	0.61	4	6.6	16.5	170	8	8	9	9	6	25.4	1.5	2.4	0.4	10.8
425	2829	1.986	1.491	32	7	1.1	50	0.92	4	1.2	50.2	262	7	14	15	15	8	12.5	0.9	0.5	0.2	26.8
426	1444	1.895	1.404	47	7	4	20	0.94	4	4.3	20.4	115	11	7	25	8	14	17.5	1.2	1.6	0.3	11.0
427	2817	1.927	1.452	58	7	10.2	11	0.88	4	11.6	11.7	54	18	5	41	3	33	22.0	1.5	4.4	0.5	5.0
428	928	1.636	1.187	70	7	4.3	15	0.94	4	4.6	15.5	154	14	13	27	11	17	22.5	1.6	1.5	0.2	15.3
429	1388	1.833	1.446	61	7	1.8	25	0.923	4	2.0	25.3	112	15	11	27	9	19	22.0	1.5	0.7	0.2	31.3
430	977	1.67	1.261	28	12	2.8	25	0.95	4	2.9	25.3	246	14	18	20	14	18	9.2	1.1	1.0	0.2	9.5
431	2222	1.806	1.318	50	7	1.8	25	0.93	4	1.9	25.3	230	9	15	21	15	11	17.8	1.2	0.7	0.2	25.8
432	2827	1.548	1.247	53	10	3.3	19	0.87	4	3.8	19.4	221	15	18	22	14	18	16.1	1.6	1.2	0.2	14.0
433	1189	1.643	1.296	77	17	5.8	13	0.9	4	6.4	13.6	186	11	14	21	13	13	24.9	4.2	2.1	0.3	11.9
434	1391	1.899	1.438	30	10	2.8	26	0.88	4	3.2	26.3	64	20	7	39	4	38	11.2	1.1	1.2	0.3	9.4
435	924	1.813	1.215	39	9	6.7	13	0.99	4	6.8	13.6	273	11	14	25	16	13	13.9	1.3	2.4	0.3	5.8
436	1385	1.364	0.995	93	7	8.5	11	0.933	4	9.1	11.7	98	18	16	20	11	18	24.9	1.7	2.4	0.3	10.2
437	1735	1.763	1.242	45	10	22.9	10	0.99	4	23.1	10.8	159	18	12	32	11	20	15.6	1.6	8.0	0.9	1.9
438	2820	1.843	1.498	40	9	4.7	18	0.89	4	5.3	18.4	90	18	13	25	6	23	14.5	1.3	1.9	0.4	7.6
439	2828	1.82	1.27	59	9	4.5	19	0.95	4	4.7	19.4	218	15	18	24	13	20	21.1	1.9	1.7	0.3	12.5
440	1049	1.677	1.131	64	5	5.7	18	0.96	4	5.9	18.4	259	6	15	6	15	6	21.1	1.1	2.0	0.4	10.8
441	1491	2.05	1.325	43	8	4.2	19	0.93	4	4.5	19.4	71	18	8	27	5	22	17.3	1.4	1.8	0.4	9.5
442	2819	1.945	1.334	27	11	3.1	26	0.91	4	3.4	26.3	110	18	11	30	9	22	10.3	1.1	1.3	0.3	7.9
443	1592	1.92	1.41	46	9	1.6	30	0.48	4	3.3	30.3	270	10	16	25	17	13	17.4	1.6	1.3	0.4	13.8
444	1131	1.671	1.204	44	11	3	19	0.91	4	3.3	19.4	265	14	16	35	16	18	14.5	1.6	1.1	0.2	13.3
445	974	1.971	1.109	47	11	7	18	0.94	4	7.4	18.4	287	14	24	26	18	18	18.2	2.0	2.9	0.5	6.3
446	2822	2.038	1.106	34	13	4.3	15	0.96	4	4.5	15.5	156	18	26	20	22	14	13.6	1.8	1.8	0.3	7.6
447	978	1.326	0.998	46	10	6	16	0.99	4	6.1	16.5	345	12	28	18	21	11	12.0	1.2	1.6	0.3	7.6
448	2335	2.101	1.603	94	7	5.4	15	0.95	4	5.7	15.5	99	17	11	32	6	27	38.8	2.7	2.3	0.4	16.5
449	2880	1.796	1.388	156	6	13.3	10	0.92	4	14.5	10.8	52	25	13	37	6	30	55.1	3.3	5.1	0.5	10.8
450	1198	2.045	1.591	16	10	6.1	12	0.97	4	6.3	12.6	51	18	7	22	4	21	6.4	0.6	2.5	0.3	2.5
451	1826	2.219	1.685	180	6	26.7	8	0.934	4	28.6	8.9	42	30	7	50	4	52	78.5	4.7	12.5	1.1	6.3
452	1824	1.754	1.244	170	7	26	9	0.91	4	28.6	9.8	68	25	13	30	7	42	58.6	4.1	9.9	1.0	6.0
453	2879	2.281	1.624	88	7	12.8	11	0.94	4	13.6	11.7	54	22	5	52	3	44	39.5	2.8	6.1	0.7	6.5
454	2784	1.788	1.353	90	7	19.6	10	0.95	4	20.6	10.8	84	17	11	24	6	28	31.6	2.2	7.3	0.8	4.4
455	2450	1.626	1.223	146	7	32.5	9	0.9	4	36.1	9.8	199	16	21	31	13	25	46.7	3.3	11.5	1.1	4.0
456	2447	2.099	1.554	94	7	8.7	13	0.92	4	9.5	13.6	57	22	8	42	5	35	38.8	2.7	3.9	0.5	9.9
457	2871	2.292	1.718	80	7	11.1	11	0.93	4	11.9	11.7	38	24	7	36	3	40	36.0	2.5	5.4	0.6	6.7
458	1630	1.91	1.464	180	6	33.3	9	0.9	4	37.0	9.8	50	18	9	33	4	35	67.6	4.1	13.9	1.4	4.9
459	2875	2.036	1.594	120	7	22.5	10	0.89	4	25.3	10.8	70	20	13	25	6	30	48.0	3.4	10.1	1.1	4.7
460	2877	1.609	1.247	144	7	45	9	0.92	4	48.9	9.8	65	24	10	42	6	40	45.5	3.2	15.5	1.5	2.9
461	2872	2.162	1.393	101	7	17.2	11	0.89	4	19.3	11.7	59	20	8	37	3	43	42.9	3.0	8.2	1.0	5.2
462	2870	1.825	1.295	145	6	4	16	0.89	4	4.5	16.5	99	16	14	28	7	26	52.0	3.1	1.6	0.3	32.3

#	Point number	Full weight, kg	Sample weight, kg	^{137}Cs, Bq/kg	2σ, %	^{90}Sr, Bq/kg	2σ, %	Total recovery, part	2σ, %	^{90}Sr, Bq/kg (incl. rec.)	2σ, %	^{40}K, Bq/kg	2σ, %	^{226}Ra, Bq/kg	2σ, %	^{232}Th, Bq/kg	2σ, %	^{137}Cs, kBq/m^2	2σ, kBq/m^2	^{90}Sr, kBq/m^2	2σ, kBq/m^2	Ratio Cs/Sr
463	2873	2.009	1.402	105	6	38.2	8	0.89	4	42.9	8.9	46	18	10	32	3	36	41.5	2.5	17.0	1.5	2.4
464	2041	2.431	1.408	69	8	11.9	11	0.86	4	13.8	11.7	40	30	10	31	4	44	33.0	2.6	6.6	0.8	5.0
465	2876	1.866	1.456	84	7	27.9	10	0.99	4	28.2	10.8	43	23	8	27	4	32	30.8	2.2	10.3	1.1	3.0
466	877	1.91	1.206	145	6	41.9	9	0.984	4	42.6	9.8	64	19	11	30	4	37	54.4	3.3	16.0	1.6	3.4
467	1633	1.581	1.127	374	6	80.2	8	0.87	4	92.2	8.9	71	23	14	42	8	38	116.2	7.0	28.7	2.6	4.1
468	3208	2.04	1.246	110	6	32.1	9	0.99	4	32.4	9.8	46	23	9	35	4	36	44.1	2.6	13.0	1.3	3.4
469	2874	1.775	1.214	168	7	35.4	9	0.92	4	38.5	9.8	53	18	9	27	3	28	58.6	4.1	13.4	1.3	4.4
470	2453	1.553	1.188	80	6	15.8	10	0.85	4	18.6	10.8	252	9	17	15	16	12	24.4	1.5	5.7	0.6	4.3
471	1618	1.841	1.09	134	6	18.9	9	0.99	4	19.1	9.8	202	10	15	19	17	12	48.5	2.9	6.9	0.7	7.0
472	1621	1.789	1.135	66	7	17	10	0.99	4	17.2	10.8	198	11	16	20	15	13	23.2	1.6	6.0	0.7	3.8
473	2861	1.89	1.575	100	9	16	9	0.99	4	16.2	9.8	30	20	6	22	5	19	37.2	3.3	6.0	0.6	6.2
474	2600	1.936	1.479	136	9	25.5	10	0.96	4	26.6	10.8	100	13	8	21	7	15	51.8	4.7	10.1	1.1	5.1
475	2595	1.58	1.288	129	9	21.1	10	0.99	4	21.3	10.8	50	19	8	24	4	26	40.1	3.6	6.6	0.7	6.1
476	1852	2.05	1.34	29	11	2.9	22	0.95	4	3.1	22.4	35	22	8	24	4	20	11.7	1.3	1.2	0.3	9.5
477	2644	2.051	1.32	80	9	13.8	11	0.96	4	14.4	11.7	45	16	7	30	5	23	32.3	2.9	5.8	0.7	5.6
478	2863	2.018	1.423	39	10	2.5	22	0.95	4	2.6	22.4	40	18	6	22	4	19	15.5	1.5	1.0	0.2	14.8
479	1627	1.996	1.381	148	9	7.8	13	0.94	4	8.3	13.6	50	17	8	19	4	20	58.1	5.2	3.3	0.4	17.8
480	1382	1.295	1.001	100	9	3.6	23	0.95	4	3.8	23.3	80	14	9	21	5	19	25.5	2.3	1.0	0.2	26.4
481	2197	1.557	1.184	114	9	19.8	10	0.96	4	20.6	10.8	38	22	8	23	4	21	34.9	3.1	6.3	0.7	5.5
482	1595	1.682	1.382	85	8	5.2	16	0.98	4	5.3	16.5	43	18	6	22	4	19	28.1	2.2	1.8	0.3	16.0
483	1602	1.867	1.477	74	9	5.8	14	0.98	4	5.9	14.6	60	16	7	21	5	24	27.2	2.4	2.2	0.3	12.5
484	2781	1.796	1.329	73	9	15	10	0.944	4	15.9	10.8	30	25	6	24	4	20	25.8	2.3	5.6	0.6	4.6
485	2597	1.804	1.363	95	8	27.9	10	0.95	4	29.4	10.8	120	14	8	23	7	18	33.7	2.7	10.4	1.1	3.2
486	1829	2.297	1.676	72	9	17	9	0.93	4	18.3	9.8	35	23	8	27	8	15	32.5	2.9	8.3	0.8	3.9
487	2865	1.704	1.349	72	9	13.8	13	0.98	4	14.1	13.6	40	19	9	20	5	23	24.1	2.2	4.7	0.6	5.1
488	2591	0.919	0.672	183	9	49.9	8	0.99	4	50.4	8.9	50	18	11	20	9	17	33.1	3.0	9.1	0.8	3.6
489	2031	1.636	1.304	102	9	21.6	9	0.97	4	22.3	9.8	40	20	6	22	5	20	32.8	3.0	7.2	0.7	4.6
490	2603	1.536	1.13	115	9	37.1	9	0.96	4	38.6	9.8	50	19	8	25	6	21	34.7	3.1	11.7	1.1	3.0
491	1849	1.845	1.467	54	9	4.3	16	0.99	4	4.3	16.5	36	21	8	25	7	22	19.6	1.8	1.6	0.3	12.4
492	2868	2.077	1.447	84	9	11.1	10	0.93	4	11.9	10.8	30	24	6	23	4	21	34.3	3.1	4.9	0.5	7.0
493	1846	1.866	1.332	46	9	5.2	13	0.92	4	5.7	13.6	40	23	6	23	4	20	16.9	1.5	2.1	0.3	8.1
494	1918	1.617	1.199	98	8	38.3	9	0.97	4	39.5	9.8	20	30	4	28	3	26	31.2	2.5	12.6	1.2	2.5
495	2864	1.937	1.342	71	10	16.9	10	0.94	4	18.0	10.8	70	17	7	24	4	21	27.0	2.7	6.8	0.7	3.9
496	2862	2.073	1.49	45	10	5.2	13	0.91	4	5.7	13.6	45	24	8	23	5	22	18.3	1.8	2.3	0.3	7.9
497	1608	1.24	0.977	106	10	17.4	11	0.99	4	17.6	11.7	150	13	8	25	6	23	25.8	2.6	4.3	0.5	6.0
498	2895	1.93	1.392	39	10	5.3	16	0.96	4	5.5	16.5	45	19	10	20	8	21	14.8	1.5	2.1	0.3	7.1
499	2848	1.903	1.427	32	12	5	19	0.95	4	5.3	19.4	42	30	11	21	7	21	12.0	1.4	2.0	0.4	6.1
500	1586	1.909	1.402	67	10	2	30	0.91	4	2.2	30.3	190	13	13	19	11	17	25.1	2.5	0.8	0.2	30.5
501	233	1.929	1.348	39	12	4.1	18	0.92	4	4.5	18.4	30	32	8	24	6	24	14.8	1.8	1.7	0.3	8.8

#	Point number	Full weight, kg	Sample weight, kg	^{137}Cs, Bq/kg	2σ, %	^{90}Sr, Bq/kg	2σ, %	Total recovery, part	2σ, %	^{90}Sr, Bq/kg (incl. rec.)	2σ, %	^{40}K, Bq/kg	2σ, %	^{226}Ra, Bq/kg	2σ, %	^{232}Th, Bq/kg	2σ, %	^{137}Cs, kBq/m^2	2σ, kBq/m^2	^{90}Sr, kBq/m^2	2σ, kBq/m^2	Ratio Cs/Sr
502	2853	1.599	1.22	44	11	6	18	0.99	4	6.1	18.4	30	34	9	23	5	26	13.8	1.5	1.9	0.4	7.3
503	2837	1.852	1.373	69	9	2	30	0.99	4	2.0	30.3	140	14	9	21	9	18	25.1	2.3	0.7	0.2	34.2
504	2213	1.777	1.331	65	10	2.4	28	0.84	4	2.9	28.3	60	17	8	24	4	25	22.7	2.3	1.0	0.3	22.8
505	2841	2.065	1.379	42	10	2	40	0.96	4	2.1	40.2	55	17	8	23	4	25	17.1	1.7	0.8	0.3	20.2
506	2852	1.962	1.371	52	9	6.2	19	0.84	4	7.4	19.4	50	18	8	24	9	18	20.1	1.8	2.8	0.6	7.0
507	1436	1.876	1.32	52	11	9.9	12	0.99	4	10.0	12.6	170	13	11	21	10	18	19.2	2.1	3.7	0.5	5.2
508	2849	1.934	1.398	49	10	6.7	16	0.9	4	7.4	16.5	50	21	7	28	6	24	18.6	1.9	2.8	0.5	6.6
509	2216	1.947	1.454	41	11	1.3	45	0.91	4	1.4	45.2	50	19	7	27	6	22	15.7	1.7	0.5	0.2	28.7
510	1427	1.152	1.378	58	9	3.1	27	0.97	4	3.2	27.3	45	22	9	24	7	20	13.1	1.2	0.7	0.2	18.1
511	2418	1.714	1.406	54	10	1.7	35	0.97	4	1.8	35.2	140	13	8	25	8	21	18.2	1.8	0.6	0.2	30.8
512	2840	2.113	1.308	42	12	2.6	35	0.96	4	2.7	35.2	90	16	9	25	8	21	17.4	2.1	1.1	0.4	15.5
513	1433	1.668	1.317	59	11	3.1	23	0.98	4	3.2	23.3	180	13	9	26	8	20	19.3	2.1	1.0	0.2	18.7
514	2811	1.958	1.17	20	13	4.9	22	0.87	4	5.6	22.4	40	24	8	26	7	21	7.7	1.0	2.2	0.5	3.6
515	2836	1.8	1.404	89	9	2.3	30	0.94	4	2.4	30.3	100	11	9	28	6	22	31.5	2.8	0.9	0.3	36.4
516	2832	1.759	1.385	51	11	1	45	0.96	4	1.0	45.2	100	13	6	30	5	25	17.6	1.9	0.4	0.2	49.0
517	2896	1.912	1.428	62	9	3.9	17	0.96	4	4.1	17.5	40	26	8	25	6	23	23.3	2.1	1.5	0.3	15.3
518	135	1.589	1.235	40	12	3.7	20	0.96	4	3.9	20.4	64	18	7	27	6	23	12.5	1.5	1.2	0.2	10.4
519	1134	2.046	1.38	53	10	2.8	27	0.9	4	3.1	27.3	90	15	7	28	6	23	21.3	2.1	1.3	0.3	17.0
520	2821	2.027	1.529	29	12	1.6	40	0.99	4	1.6	40.2	50	21	7	28	5	24	11.6	1.4	0.6	0.3	17.9
521	2802	2.065	1.492	64	9	5.9	14	0.99	4	6.0	14.6	40	26	8	24	7	19	26.0	2.3	2.4	0.4	10.7
522	2831	2.273	1.399	80	10	3.3	22	0.98	4	3.4	22.4	200	12	10	22	11	18	35.7	3.6	1.5	0.3	23.8
523	679	2.037	1.246	44	11	5.1	17	0.92	4	5.5	17.5	240	12	10	21	8	16	17.6	1.9	2.2	0.4	7.9
524	2833	1.742	1.112	193	9	2.9	28	0.96	4	3.0	28.3	70	17	9	23	7	19	66.1	5.9	1.0	0.3	63.9
525	921	2.048	1.262	45	12	5.4	23	0.93	4	5.8	23.3	260	12	15	21	14	17	18.1	2.2	2.3	0.5	7.8
526	1870	1.977	1.119	60	12	3.2	27	0.93	4	3.4	27.3	260	12	18	19	22	15	23.3	2.8	1.3	0.4	17.4
527	4	1.639	1.109	79.5	10	14.2	11	0.81	4	17.5	11.7	110	16	7	29	10	19	25.6	2.6	5.6	0.7	4.5
528	2830	1.25	0.95	36	17	6.5	19	0.38	4	17.1	19.4	250	13	15	19	15	17	8.8	1.5	4.2	0.8	2.1
529	2823	1.371	1.034	32	13	5.6	21	0.79	4	7.1	21.4	90	16	11	21	10	19	8.6	1.1	1.9	0.4	4.5
530	1589	1.269	0.926	83	9	5.8	16	0.98	4	5.9	16.5	220	12	16	20	16	16	20.7	1.9	1.5	0.2	14.0
531	697	1.635	1.223	97	9	24.7	8	0.98	4	25.2	8.9	140	15	13	20	14	15	31.2	2.8	8.1	0.7	3.8
532	6000	2.12	1.608	115	9	5.4	19	0.99	4	5.5	19.4	40	21	12	21	12	18	47.9	4.3	2.3	0.4	21.1
533	6001	1.33	1.513	293	9	7.2	18	0.88	4	8.2	18.4	80	17	10	20	10	19	76.6	6.9	2.1	0.4	35.8
534	6002	1.478	1.205	100	9	8.7	14	0.96	4	9.1	14.6	60	17	10	19	8	21	29.1	2.6	2.6	0.4	11.0
535	6003	1.343	1.296	90	10	10.1	12	0.99	4	10.2	12.6	85	16	13	23	7	22	23.8	2.4	2.7	0.3	8.8
536	6004	1.417	1.312	88	10	10.8	13	0.96	4	11.3	13.6	86	16	11	20	8	22	24.5	2.5	3.1	0.4	7.8
537	6005	1.36	1.289	142	9	3.1	22	0.44	4	7.0	22.4	45	24	8	22	9	20	38.0	3.4	1.9	0.4	20.2
538	6006	1.022	0.94	120	10	12.9	12	0.99	4	13.0	12.6	200	11	13	21	10	19	24.1	2.4	2.6	0.3	9.2
539	6007	1.314	1.208	92	9	9.6	11	0.73	4	13.2	11.7	120	13	8	28	8	23	23.8	2.1	3.4	0.4	7.0
540	6008	1.49	1.309	86	9	7.6	15	0.94	4	8.1	15.5	160	12	9	27	7	22	25.2	2.3	2.4	0.4	10.6

#	Point number	Full weight, kg	Sample weight, kg	^{137}Cs, Bq/kg	2σ, %	^{90}Sr, Bq/kg	2σ, %	Total recovery, part	2σ, %	^{90}Sr, Bq/kg (incl. rec.)	2σ, %	^{40}K, Bq/kg	2σ, %	^{226}Ra, Bq/kg	2σ, %	^{232}Th, Bq/kg	2σ, %	^{137}Cs, kBq/m^2	2σ, kBq/m^2	^{90}Sr, kBq/m^2	2σ, kBq/m^2	Ratio Cs/Sr
541	906	1.556	1.285	53	10	3	30	0.93	4	3.2	30.3	40	22	11	15	8	17	16.2	1.6	1.0	0.3	16.4
542	479	1.775	1.46	98	9	10.3	12	0.96	4	10.7	12.6	35	24	13	16	12	17	34.2	3.1	3.7	0.5	9.1
543	888	2.29	1.511	120	8	8.7	12	0.99	4	8.8	12.6	120	12	8	29	5	22	54.0	4.3	4.0	0.5	13.7
544	1566	1.475	1.368	220	9	22.4	11	0.66	4	33.9	11.7	40	25	14	17	9	18	63.8	5.7	9.8	1.2	6.5
545	472	2.192	1.257	110	10	32	9	0.99	4	32.3	9.8	220	11	12	21	9	19	47.4	4.7	13.9	1.4	3.4
546	7002	1.482	1.191	190	7	36	11	0.99	4	36.4	11.7	180	11	14	23	11	16	55.4	3.9	10.6	1.2	5.2
547	7001	1.482	1.233	110	7	45	11	0.99	4	45.5	11.7	210	12	16	24	12	18	32.0	2.2	13.2	1.6	2.4

Annex 2 Dose rate at sampling points and their location

Points No	longitude	latitude	1-soil sapling; 2-dose rate measurement	Dose rate, μSv hour^{-1}		Sampling site description
				at 0.1m	at 1m	
1	29.852414	51.160815	2	0.1	0.09	forest
2	29.838133	51.151827	2	0.09	0.09	old field
3	29.852412	51.151827	2	0.1	0.09	old field
4	29.86728	51.151183	1	0.11	0.09	forest
5	29.880973	51.151822	2	0.11	0.1	forest
6	29.852414	51.142829	2	0.11	0.1	forest
7	29.855660	51.143060	1	0.11	0.1	forest
8	29.861932	51.142835	2	0.11	0.1	field
9	29.866694	51.142829	2	0.11	0.11	field
10	29.880973	51.142829	2	0.12	0.1	old field
11	29.861932	51.139837	2	0.1	0.1	field
12	29.866460	51.139670	1	0.1	0.1	field
13	29.87145	51.139837	2	0.11	0.09	field
14	29.86669	51.136839	2	0.1	0.09	field
15	29.87145	51.136839	2	0.1	0.09	old field
16	29.87621	51.136839	2	0.11	0.1	old field
17	29.852412	51.133842	2	0.11	0.11	forest
18	29.866694	51.133835	2	0.11	0.1	field
19	29.87145	51.133842	2	0.1	0.09	old field
20	29.876210	51.133842	2	0.1	0.1	field
21	29.880570	51.133835	1	0.1	0.09	field
22	29.895709	51.133503	2	0.12	0.11	old field
23	29.909355	51.132683	2	0.12	0.12	old field
24	29.952255	51.132917	2	0.12	0.1	old field
25	30.022914	51.133035	2	0.13	0.11	old field
26	29.88097	51.130844	2	0.11	0.1	field
27	29.87621	51.130844	2	0.1	0.1	field
28	29.909870	51.127790	2	0.13	0.12	village
29	29.914288	51.127846	2	0.12	0.1	field
30	29.919047	51.127846	2	0.11	0.1	field
31	29.923806	51.127846	2	0.12	0.12	field
32	29.928473	51.127553	2	0.12	0.11	field
33	29.933325	51.127846	2	0.13	0.11	old field
34	29.957124	51.127846	2	0.12	0.12	field
35	30.095153	51.124848	2	0.12	0.11	field
36	30.080768	51.124069	2	0.12	0.12	old field
37	30.066375	51.123952	2	0.12	0.11	old field
38	30.053664	51.124069	2	0.13	0.12	meadow
39	30.037053	51.125783	1	0.11	0.1	forest
40	30.022447	51.124538	2	0.14	0.13	old field
41	30.00949	51.124842	2	0.15	0.13	forest
42	29.99521	51.124842	2	0.14	0.13	forest
43	29.98093	51.124842	2	0.15	0.13	forest
44	29.965994	51.125124	2	0.13	0.13	old field
45	29.952220	51.124930	1	0.12	0.11	field
46	29.947582	51.124069	2	0.12	0.12	field

47	29.942845	51.124848	2	0.11	0.11	village
48	29.936980	51.124470	1	0.11	0.11	field
49	29.932534	51.1253	2	0.12	0.1	field
50	29.927861	51.1253	2	0.12	0.1	field
51	29.923590	51.125600	1	0.12	0.11	field
52	29.918982	51.125417	2	0.11	0.11	field
53	29.914683	51.12571	2	0.12	0.1	field
54	29.909690	51.126060	1	0.11	0.11	field
55	29.895249	51.124848	2	0.12	0.1	old field
56	29.880973	51.124842	2	0.11	0.11	meadow
57	29.865120	51.125010	1	0.1	0.1	field
58	29.852414	51.124842	2	0.11	0.1	old field
59	29.838134	51.124842	2	0.12	0.11	field
60	29.828614	51.124848	2	0.12	0.11	field
61	29.824320	51.124580	1	0.12	0.12	field
62	29.833360	51.127670	1	0.12	0.11	old field
63	29.809575	51.124842	2	0.11	0.1	old field
64	29.709618	51.124842	2	0.1	0.09	forest
65	29.819094	51.121852	2	0.13	0.13	village
66	29.852412	51.121852	2	0.1	0.1	field
67	29.857172	51.121852	2	0.1	0.1	field
68	29.861630	51.121980	1	0.11	0.1	field
69	30.019000	51.121852	1	0.13	0.13	old field
70	30.023759	51.118854	2	0.15	0.13	meadow
71	30.019000	51.118854	2	0.17	0.13	field
72	30.014890	51.119090	2	0.17	0.13	field
73	29.86669	51.118854	2	0.12	0.1	old field
74	29.861932	51.118854	2	0.11	0.11	field
75	29.857172	51.118854	2	0.12	0.11	field
76	29.852840	51.118820	1	0.13	0.11	field
77	29.695343	51.115856	2	0.1	0.09	forest
78	29.709618	51.115849	2	0.11	0.1	forest
79	29.723898	51.115849	2	0.11	0.1	forest
80	29.728661	51.115856	2	0.11	0.1	field
81	29.733421	51.115856	2	0.1	0.09	field
82	29.738181	51.115856	2	0.11	0.11	forest
83	29.752457	51.115849	2	0.1	0.1	meadow
84	29.765125	51.115913	2	0.11	0.1	forest
85	29.781016	51.115849	2	0.09	0.09	meadow
86	29.795296	51.115849	2	0.1	0.09	meadow
87	29.809426	51.116323	2	0.11	0.1	old field
88	29.823854	51.115856	2	0.11	0.11	forest
89	29.837746	51.11474	2	0.12	0.11	forest
90	29.852414	51.115849	2	0.13	0.11	field
91	29.862701	51.116264	2	0.13	0.12	field
92	29.866600	51.115650	1	0.14	0.12	field
93	29.872234	51.115854	2	0.12	0.1	field
94	29.876210	51.115856	2	0.1	0.09	field
95	29.880940	51.115450	1	0.1	0.09	field
96	29.895253	51.115849	2	0.12	0.12	old field
97	29.909532	51.115849	2	0.12	0.1	forest
98	29.923639	51.116323	2	0.11	0.11	forest

99	29.939621	51.116264	2	0.11	0.11	forest
100	29.951585	51.115678	2	0.12	0.1	field
101	29.966651	51.115849	2	0.13	0.12	meadow
102	29.980922	51.115856	2	0.14	0.12	field
103	29.995139	51.116323	2	0.14	0.12	meadow
104	30.00949	51.115849	2	0.14	0.13	meadow
105	30.018999	51.115856	2	0.14	0.14	old field
106	30.022030	51.116417	1	0.16	0.14	old field
107	30.028519	51.115856	2	0.11	0.11	field
108	30.038037	51.115856	2	0.13	0.12	old field
109	30.052328	51.115849	2	0.12	0.12	old field
110	30.066600	51.115856	2	0.11	0.11	field
111	30.080875	51.115856	1	0.12	0.11	field
112	30.095167	51.115849	2	0.11	0.1	field
113	30.109432	51.115856	1	0.11	0.11	field
114	30.123726	51.115849	2	0.16	0.14	forest
115	30.138470	51.115860	1	0.14	0.14	forest
116	30.209404	51.115849	1	0.11	0.11	field
117	30.223663	51.115856	2	0.09	0.09	field
118	30.279780	51.115350	2	0.09	0.09	field
119	30.284860	51.116540	1	0.09	0.09	field
120	30.295460	51.115830	2	0.11	0.1	forest
121	30.307740	51.116420	1	0.09	0.09	field
122	30.290890	51.113340	2	0.09	0.09	field
123	30.285310	51.113330	2	0.09	0.08	field
124	30.280760	51.113010	2	0.09	0.08	field
125	30.276560	51.112740	2	0.09	0.08	field
126	30.152380	51.112570	2	0.11	0.1	forest
127	30.147420	51.113990	1	0.11	0.11	farm
128	30.143610	51.112140	2	0.12	0.11	field
129	30.137991	51.112858	2	0.14	0.13	forest
130	30.132950	51.112410	2	0.11	0.11	old field
131	30.018510	51.112880	1	0.16	0.14	old field
132	29.88097	51.112858	2	0.11	0.11	old field
133	29.86669	51.112858	2	0.11	0.1	field
134	29.742941	51.112858	2	0.1	0.1	field
135	29.738181	51.112858	1	0.1	0.1	field
136	29.733421	51.112858	2	0.09	0.09	field
137	29.728710	51.112550	1	0.1	0.09	field
138	29.728661	51.109862	2	0.11	0.11	field
139	29.733421	51.109862	2	0.11	0.1	field
140	29.738181	51.109862	2	0.1	0.1	old field
141	29.742910	51.109950	1	0.11	0.1	forest
142	29.861932	51.109862	2	0.11	0.1	field
143	29.976440	51.109950	2	0.15	0.13	field
144	29.979770	51.110370	2	0.13	0.13	old field
145	30.019320	51.109880	2	0.14	0.13	forest
146	30.142310	51.109190	2	0.12	0.12	village
147	30.147090	51.110280	2	0.12	0.11	village
148	30.152720	51.109530	2	0.13	0.1	field
149	30.156150	51.110060	2	0.1	0.1	field
150	30.162520	51.109800	2	0.11	0.09	field

151	30.275070	51.109710	1	0.11	0.11	field
152	30.281320	51.109740	2	0.11	0.1	field
153	30.285350	51.109770	1	0.1	0.1	field
154	30.290750	51.110070	2	0.09	0.09	field
155	30.308730	51.106720	1	0.09	0.09	field
156	30.296060	51.107000	1	0.1	0.1	field
157	30.281270	51.106940	2	0.1	0.1	field
158	30.266400	51.106430	1	0.11	0.11	field
159	30.251090	51.106830	1	0.11	0.1	field
160	30.238080	51.106880	2	0.12	0.1	field
161	30.224620	51.106690	1	0.1	0.1	field
162	30.210220	51.106900	1	0.1	0.09	field
163	30.195106	51.106864	2	0.12	0.12	forest
164	30.180827	51.106864	2	0.12	0.11	field
165	30.171920	51.107030	2	0.1	0.1	forest
166	30.166530	51.107350	1	0.1	0.1	field
167	30.161788	51.106864	2	0.12	0.1	field
168	30.157330	51.107230	2	0.11	0.1	field
169	30.152575	51.107300	1	0.1	0.1	field
170	30.147510	51.106864	2	0.12	0.12	village
171	30.14275	51.106864	2	0.12	0.11	field
172	30.138860	51.106510	1	0.14	0.13	field
173	30.133231	51.106864	2	0.12	0.11	village
174	30.129276	51.106901	2	0.12	0.12	old field
175	30.122640	51.106570	1	0.12	0.11	field
176	30.109789	51.106865	1	0.14	0.14	field
177	30.095488	51.107079	1	0.13	0.12	field
178	30.080875	51.106864	1	0.14	0.13	field
179	30.066596	51.106864	2	0.13	0.13	field
180	30.052328	51.106856	2	0.13	0.12	field
181	30.038037	51.106864	2	0.13	0.12	field
182	30.023470	51.107260	2	0.21	0.2	forest
183	30.009490	51.106856	2	0.14	0.11	forest
184	29.994590	51.107650	2	0.13	0.13	field
185	29.980870	51.107120	1	0.14	0.14	village
186	29.976163	51.106864	2	0.1	0.1	meadow
187	29.971403	51.106864	2	0.14	0.12	garden
188	29.966430	51.107350	1	0.13	0.1	field
189	29.955287	51.107076	1	0.11	0.1	field
190	29.938092	51.106856	2	0.12	0.1	forest
191	29.923812	51.106856	2	0.11	0.11	forest
192	29.909550	51.105740	1	0.11	0.1	forest
193	29.895221	51.106650	2	0.12	0.11	forest
194	29.880973	51.106856	2	0.12	0.11	old field
195	29.865504	51.107182	2	0.11	0.11	old field
196	29.852412	51.106864	2	0.11	0.1	field
197	29.838134	51.106856	2	0.11	0.11	old field
198	29.823855	51.106856	2	0.11	0.11	old field
199	29.794472	51.107005	2	0.12	0.1	forest
200	29.785777	51.106864	2	0.1	0.1	forest
201	29.781016	51.106856	2	0.09	0.09	old field
202	29.776480	51.106890	1	0.11	0.1	old field

203	29.771498	51.106864	2	0.1	0.1	field
204	29.76659	51.106847	2	0.1	0.09	old field
205	29.761979	51.106864	2	0.11	0.09	old field
206	29.752422	51.107109	2	0.1	0.1	old field
207	29.737864	51.106974	2	0.11	0.09	forest
208	29.723898	51.106856	2	0.11	0.1	field
209	29.709618	51.106856	2	0.1	0.09	forest
210	29.695343	51.106864	2	0.1	0.1	meadow
211	29.761880	51.104230	1	0.09	0.09	old field
212	29.767766	51.1041	2	0.1	0.1	field
213	29.771498	51.103866	2	0.11	0.09	field
214	30.122360	51.103920	2	0.1	0.1	field
215	30.129640	51.103770	2	0.13	0.12	field
216	30.133530	51.104310	2	0.12	0.11	field
217	30.142750	51.103866	2	0.11	0.1	field
218	30.147430	51.104440	2	0.11	0.1	field
219	30.150660	51.103960	2	0.1	0.1	field
220	30.157028	51.103870	2	0.14	0.13	field
221	30.161788	51.103866	2	0.11	0.1	field
222	30.166548	51.103866	2	0.14	0.14	village
223	30.170540	51.103850	2	0.1	0.1	forest
224	30.171080	51.100890	2	0.14	0.14	forest
225	30.166548	51.101280	2	0.11	0.1	field
226	30.148560	51.100449	2	0.12	0.12	old field
227	30.142750	51.100868	2	0.12	0.11	old field
228	29.771498	51.100868	2	0.11	0.1	field
229	29.766738	51.100868	2	0.1	0.09	village
230	29.761979	51.100868	2	0.11	0.1	field
231	29.757219	51.100868	2	0.1	0.1	village
232	29.723902	51.097872	2	0.11	0.1	old field
233	29.738101	51.097862	1	0.1	0.09	forest
234	29.752457	51.097862	2	0.11	0.1	field
235	29.757219	51.097872	2	0.1	0.09	field
236	29.761950	51.098080	1	0.11	0.11	field
237	29.766736	51.097862	2	0.11	0.1	field
238	29.779019	51.098832	1	0.09	0.09	field
239	29.795296	51.097862	2	0.1	0.1	field
240	29.809575	51.097862	2	0.11	0.09	old field
241	29.825965	51.098953	1	0.08	0.08	field
242	29.838133	51.097872	2	0.12	0.1	old field
243	29.852414	51.097862	2	0.11	0.1	forest
244	29.866694	51.097862	1	0.11	0.1	forest
245	29.880973	51.097862	2	0.1	0.1	old field
246	29.895090	51.097776	2	0.1	0.09	forest
247	29.909487	51.097862	2	0.11	0.1	forest
248	29.92448	51.096986	2	0.11	0.11	forest
249	29.93635	51.097689	2	0.12	0.11	forest
250	29.953820	51.097130	1	0.12	0.1	forest
251	29.966644	51.097872	2	0.12	0.12	forest
252	29.98093	51.097862	2	0.13	0.11	forest
253	29.994260	51.098270	1	0.15	0.15	forest
254	30.00948	51.097872	2	0.14	0.13	forest

255	30.023769	51.097862	1	0.13	0.12	field
256	30.038037	51.097872	2	0.13	0.12	field
257	30.052590	51.098230	2	0.15	0.14	forest
258	30.066596	51.097872	2	0.14	0.12	forest
259	30.078880	51.098320	1	0.11	0.11	field
260	30.095153	51.097872	2	0.14	0.12	old field
261	30.108450	51.097600	2	0.22	0.19	forest
262	30.123010	51.098230	1	0.12	0.12	old field
263	30.138006	51.097862	2	0.12	0.11	old field
264	30.152290	51.097862	2	0.14	0.11	old field
265	30.167270	51.097770	1	0.11	0.11	old field
266	30.180200	51.097190	2	0.16	0.14	forest
267	30.195124	51.097862	2	0.09	0.09	forest
268	30.209790	51.097870	1	0.1	0.1	field
269	30.224310	51.097770	1	0.11	0.1	field
270	30.235063	51.097423	2	0.12	0.11	forest
271	30.252370	51.098000	1	0.11	0.11	field
272	30.266560	51.097880	1	0.12	0.12	field
273	30.280802	51.097862	2	0.11	0.1	field
274	30.296910	51.098300	1	0.11	0.1	forest (self-seeding)
275	30.309520	51.097250	2	0.14	0.13	forest
276	30.323126	51.096486	2	0.17	0.15	forest
277	29.761979	51.094873	2	0.11	0.11	forest
278	29.757219	51.094873	2	0.11	0.11	field
279	29.757750	51.091980	1	0.1	0.09	old field
280	30.018999	51.091875	2	0.13	0.11	field
281	30.024850	51.091160	2	0.12	0.1	field
282	30.037110	51.092380	1	0.12	0.12	field
283	30.042797	51.091875	2	0.12	0.12	old field
284	30.047460	51.092480	2	0.12	0.12	village
285	30.053450	51.091230	1	0.15	0.15	forest
286	30.337630	51.092410	2	0.09	0.09	old field
287	30.366350	51.088458	2	0.09	0.09	forest
288	30.337780	51.089260	1	0.1	0.1	old field
289	30.323641	51.088869	2	0.12	0.12	field
290	30.307230	51.088710	1	0.13	0.12	field
291	30.294300	51.088750	1	0.1	0.1	field
292	30.281730	51.089020	1	0.12	0.12	field
293	30.2665	51.088877	2	0.14	0.12	forest
294	30.250950	51.089040	1	0.19	0.16	forest
295	30.237689	51.088406	2	0.1	0.1	forest
296	30.223640	51.088820	1	0.11	0.1	field
297	30.209570	51.088780	2	0.11	0.1	field
298	30.195400	51.089120	2	0.18	0.18	forest
299	30.179180	51.088580	2	0.12	0.11	forest
300	30.166660	51.087570	2	0.09	0.09	forest
301	30.152493	51.089420	2	0.1	0.1	old field
302	30.137587	51.089673	2	0.1	0.1	old field
303	30.123529	51.089622	2	0.11	0.11	old field
304	30.109713	51.089491	2	0.1	0.1	old field
305	30.095167	51.088869	2	0.12	0.12	field
306	30.080875	51.088877	2	0.12	0.11	meadow

307	30.066608	51.088869	2	0.13	0.12	forest
308	30.052328	51.088869	2	0.14	0.12	old field
309	30.047330	51.089110	2	0.13	0.13	village
310	30.042899	51.08931	2	0.12	0.12	field
311	30.037500	51.089490	1	0.12	0.11	field
312	30.033520	51.089320	2	0.12	0.12	field
313	30.028670	51.089360	2	0.12	0.11	field
314	30.023220	51.088380	1	0.13	0.12	field
315	30.018999	51.088877	2	0.13	0.12	village
316	30.009772	51.089414	1	0.11	0.11	field
317	29.995210	51.088869	2	0.1	0.1	forest
318	29.98093	51.088869	2	0.14	0.13	forest
319	29.966644	51.088877	2	0.12	0.11	forest
320	29.952371	51.088869	2	0.12	0.11	forest
321	29.938092	51.088869	2	0.12	0.1	forest
322	29.923812	51.088869	2	0.11	0.1	forest
323	29.909532	51.088869	2	0.11	0.11	forest
324	29.895253	51.088869	2	0.12	0.1	forest
325	29.880973	51.088869	2	0.1	0.09	forest
326	29.866694	51.088869	2	0.11	0.09	forest
327	29.852414	51.088869	2	0.11	0.11	forest
328	29.838134	51.088869	2	0.12	0.12	forest
329	29.823855	51.088869	2	0.11	0.11	field
330	29.809575	51.088869	2	0.1	0.1	old field
331	29.795033	51.089661	2	0.11	0.1	old field
332	29.781016	51.088869	2	0.1	0.09	forest
333	29.766635	51.087985	2	0.1	0.1	forest
334	29.752457	51.088869	2	0.11	0.1	forest
335	30.337120	51.086020	2	0.1	0.1	yard
336	30.357160	51.082700	2	0.11	0.1	old field
337	30.347040	51.082860	2	0.1	0.1	old field
338	30.342740	51.083090	2	0.11	0.1	old field
339	30.338170	51.082750	2	0.1	0.1	old field
340	29.904670	51.083290	1	0.11	0.1	field
341	29.752459	51.079885	2	0.1	0.1	meadow
342	29.766738	51.079885	2	0.1	0.09	forest
343	29.781016	51.079876	2	0.11	0.1	forest
344	29.795296	51.079876	2	0.1	0.09	old field
345	29.809575	51.079876	2	0.11	0.11	garden
346	29.823854	51.079885	2	0.1	0.09	forest
347	29.838134	51.079876	2	0.1	0.1	old field
348	29.852414	51.079876	2	0.12	0.11	forest
349	29.866694	51.079876	2	0.11	0.11	forest
350	29.880973	51.079876	2	0.12	0.1	old field
351	29.895253	51.079876	2	0.11	0.11	old field
352	29.901488	51.079876	2	0.12	0.1	field
353	29.904768	51.079885	2	0.11	0.11	field
354	29.909532	51.079876	2	0.12	0.1	field
355	29.923812	51.079876	2	0.1	0.1	meadow
356	29.938092	51.079876	2	0.11	0.11	old field
357	29.952371	51.079876	2	0.11	0.1	old field
358	29.966651	51.079876	2	0.1	0.1	old field

359	29.971403	51.079885	2	0.1	0.1	field
360	29.976163	51.079885	2	0.1	0.1	old field
361	29.980960	51.080320	2	0.13	0.12	field
362	29.994110	51.081516	1	0.1	0.09	field
363	30.00949	51.079876	2	0.11	0.11	old field
364	30.023759	51.079885	2	0.13	0.11	meadow
365	30.039010	51.080040	2	0.14	0.14	forest
366	30.052328	51.079876	2	0.12	0.12	forest
367	30.066608	51.079876	2	0.12	0.11	forest
368	30.080565	51.079172	2	0.13	0.13	old field
369	30.095167	51.079876	2	0.13	0.13	forest
370	30.109447	51.079876	2	0.14	0.13	forest
371	30.123760	51.080270	2	0.15	0.14	forest
372	30.137830	51.079200	2	0.12	0.11	forest (self-seeding)
373	30.152269	51.079885	2	0.12	0.1	old field
374	30.167100	51.079340	2	0.12	0.12	forest (self-seeding)
375	30.181013	51.079922	2	0.1	0.09	old field
376	30.195124	51.079876	2	0.14	0.12	forest
377	30.209410	51.079350	2	0.12	0.12	forest
378	30.223090	51.079400	2	0.09	0.09	field
379	30.237963	51.079876	1	0.13	0.12	field
380	30.252243	51.079876	1	0.14	0.13	field
381	30.266522	51.079876	2	0.14	0.12	field
382	30.280690	51.079450	1	0.11	0.1	field
383	30.295230	51.079850	1	0.1	0.1	field
384	30.309361	51.079876	1	0.09	0.09	field
385	30.323020	51.079820	2	0.11	0.1	forest
386	30.336560	51.079030	1	0.1	0.09	old field
387	30.343000	51.080220	2	0.09	0.09	old field
388	30.348110	51.080240	2	0.1	0.09	old field
389	30.352100	51.080200	1	0.1	0.09	old field
390	30.356600	51.080040	2	0.1	0.1	old field
391	30.366479	51.079876	2	0.11	0.1	old field
392	30.380730	51.079910	1	0.1	0.1	old field
393	30.390251	51.079885	2	0.11	0.11	field
394	30.394630	51.079560	1	0.11	0.1	field
395	30.402734	51.076737	2	0.12	0.1	old field
396	30.39977	51.076887	2	0.12	0.11	old field
397	30.39501	51.076887	2	0.11	0.11	old field
398	30.390251	51.076887	2	0.11	0.1	village
399	30.385560	51.077150	2	0.13	0.12	field
400	30.383230	51.077500	2	0.1	0.1	old field
401	30.347414	51.076887	2	0.14	0.13	old field
402	30.342655	51.076887	2	0.14	0.12	old field
403	30.270780	51.076810	2	0.14	0.14	old field
404	30.265990	51.077200	2	0.15	0.15	field
405	30.261860	51.077560	2	0.13	0.13	field
406	29.990380	51.076920	1	0.13	0.11	field
407	29.985681	51.076887	2	0.12	0.11	meadow
408	29.980922	51.076887	2	0.13	0.12	field
409	29.976310	51.077280	2	0.14	0.13	meadow
410	29.972105	51.076136	2	0.09	0.09	old field

411	29.919047	51.076887	2	0.12	0.11	field
412	29.914288	51.076887	2	0.11	0.11	field
413	29.909310	51.077180	1	0.12	0.11	field
414	29.905881	51.077297	2	0.12	0.1	field
415	29.819094	51.073889	2	0.1	0.1	village
416	29.904768	51.073889	2	0.1	0.1	field
417	29.908779	51.074016	2	0.11	0.1	field
418	29.924300	51.074010	1	0.11	0.1	meadow
419	29.966350	51.073780	1	0.11	0.1	old field
420	29.971480	51.074270	2	0.11	0.11	field
421	29.976163	51.073889	2	0.13	0.13	village
422	29.980190	51.073520	1	0.1	0.08	field
423	29.985681	51.073889	2	0.11	0.09	meadow
424	29.990220	51.074280	2	0.1	0.1	old field
425	30.261820	51.074170	2	0.12	0.1	village
426	30.266500	51.073889	2	0.13	0.12	field
427	30.271260	51.073889	2	0.12	0.12	field
428	30.380960	51.073889	2	0.12	0.11	old field
429	30.385491	51.073889	2	0.12	0.1	field
430	30.390251	51.073889	2	0.13	0.11	old field
431	30.39501	51.073889	2	0.13	0.12	field
432	30.39977	51.073889	2	0.12	0.11	field
433	30.40453	51.070892	2	0.12	0.12	old field
434	30.39977	51.070892	2	0.13	0.12	old field
435	30.395039	51.070883	2	0.12	0.1	old field
436	30.390251	51.070892	2	0.12	0.11	old field
437	30.385491	51.070892	2	0.12	0.12	old field
438	30.380797	51.070883	1	0.12	0.12	old field
439	30.366479	51.070883	2	0.11	0.1	old field
440	30.351150	51.071490	1	0.12	0.11	meadow
441	30.337951	51.070883	2	0.12	0.11	meadow
442	30.323641	51.070883	2	0.12	0.1	field
443	30.309337	51.070892	2	0.13	0.11	field
444	30.295360	51.071600	1	0.11	0.11	old field
445	30.281540	51.071120	1	0.12	0.12	old field
446	30.275359	51.070818	2	0.11	0.11	field
447	30.271260	51.070892	2	0.11	0.1	village
448	30.265500	51.070610	1	0.11	0.11	field
449	30.261741	51.070892	2	0.11	0.1	village
450	30.256998	51.071208	2	0.11	0.11	field
451	30.252180	51.070760	1	0.11	0.11	field
452	30.237790	51.071170	1	0.11	0.11	field
453	30.223840	51.070890	2	0.09	0.09	forest
454	30.209384	51.070892	1	0.1	0.1	field
455	30.195190	51.070920	1	0.11	0.11	forest
456	30.180568	51.070805	2	0.09	0.09	old field
457	30.168600	51.070840	1	0.09	0.09	old field
458	30.151807	51.070751	2	0.11	0.1	old field
459	30.138440	51.070950	2	0.11	0.11	forest
460	30.123820	51.071260	1	0.17	0.16	forest
461	30.109469	51.070361	2	0.1	0.09	forest
462	30.095167	51.070883	2	0.13	0.12	old field

463	30.082260	51.069580	1	0.13	0.12	forest
464	30.066608	51.070883	2	0.15	0.15	forest
465	30.052328	51.070883	2	0.12	0.1	field
466	30.039138	51.070470	1	0.11	0.1	old field
467	30.022898	51.0705	2	0.12	0.12	meadow
468	30.00949	51.070883	2	0.13	0.11	forest
469	29.993450	51.071070	1	0.12	0.11	field
470	29.980922	51.070892	2	0.11	0.1	old field
471	29.966526	51.071444	2	0.11	0.11	field
472	29.953709	51.071267	1	0.12	0.12	old field
473	29.938092	51.070883	2	0.13	0.12	forest
474	29.923812	51.070883	2	0.12	0.1	old field
475	29.908790	51.071540	1	0.12	0.1	meadow
476	29.900008	51.070892	2	0.11	0.1	meadow
477	29.893942	51.069437	2	0.11	0.11	forest
478	29.880973	51.070883	2	0.09	0.09	forest
479	29.866127	51.069372	1	0.1	0.09	forest
480	29.852412	51.070892	2	0.1	0.1	forest
481	29.838134	51.070883	2	0.1	0.09	old field
482	29.824620	51.069970	1	0.1	0.1	meadow
483	29.819094	51.070892	2	0.09	0.09	бог
484	29.809575	51.070883	2	0.1	0.1	field
485	29.804846	51.07009	2	0.11	0.11	field
486	29.795760	51.070930	2	0.13	0.12	field
487	29.781590	51.071510	1	0.1	0.09	forest
488	29.765170	51.071010	2	0.12	0.11	old field
489	29.752459	51.070892	2	0.11	0.1	forest
490	29.814334	51.070892	2	0.1	0.1	old field
491	29.804816	51.067894	1	0.11	0.1	meadow
492	29.809575	51.067894	2	0.11	0.11	field
493	29.814334	51.067894	2	0.12	0.1	old field
494	29.819094	51.067894	1	0.1	0.1	garden
495	29.823854	51.067894	2	0.11	0.1	field
496	30.238440	51.068070	2	0.12	0.11	field
497	30.242496	51.067688	2	0.11	0.11	field
498	30.247424	51.068435	2	0.11	0.1	field
499	30.252211	51.068080	2	0.11	0.1	field
500	30.256982	51.067894	2	0.12	0.11	field
501	30.261741	51.067894	2	0.11	0.11	village
502	30.266489	51.067961	2	0.11	0.11	field
503	30.271642	51.067830	2	0.12	0.11	field
504	30.381798	51.067948	2	0.11	0.11	old field
505	30.386471	51.067948	2	0.12	0.11	old field
506	30.390251	51.067894	2	0.11	0.1	old field
507	30.394883	51.068241	2	0.11	0.11	field
508	30.39965	51.068182	2	0.12	0.1	old field
509	30.404417	51.0683	2	0.12	0.1	old field
510	30.270750	51.065150	2	0.13	0.13	bog
511	30.266653	51.065107	2	0.12	0.12	garden
512	30.262330	51.065360	1	0.12	0.12	field
513	30.256930	51.064490	2	0.11	0.11	field
514	30.252070	51.064370	2	0.1	0.09	field

515	30.246610	51.064770	1	0.11	0.1	old field
516	30.243280	51.064770	2	0.1	0.1	field
517	30.195106	51.067894	2	0.11	0.1	field
518	30.198910	51.067630	2	0.11	0.1	garden
519	30.199470	51.064890	2	0.11	0.1	village
520	30.196242	51.064985	2	0.11	0.11	field
521	30.047557	51.064896	1	0.12	0.12	old field
522	30.042930	51.065070	2	0.13	0.12	field
523	29.823854	51.064896	2	0.1	0.09	field
524	29.819094	51.064896	2	0.1	0.1	village
525	29.814334	51.064896	2	0.1	0.1	garden
526	29.809575	51.064896	2	0.11	0.1	meadow
527	29.804816	51.064896	2	0.11	0.11	field
528	29.709618	51.061889	2	0.12	0.1	old field
529	29.725446	51.062048	2	0.11	0.1	forest
530	29.738177	51.061889	2	0.11	0.11	forest
531	29.752457	51.061889	2	0.11	0.11	old field
532	29.766736	51.061889	2	0.11	0.11	old field
533	29.781094	51.062524	2	0.1	0.1	field
534	29.796270	51.061260	2	0.1	0.09	field
535	29.809575	51.061889	2	0.11	0.1	field
536	29.823855	51.061889	2	0.12	0.1	field
537	29.838133	51.061899	2	0.11	0.11	field
538	29.852412	51.061899	2	0.11	0.1	forest
539	29.86669	51.061899	2	0.12	0.12	old field
540	29.88097	51.061899	2	0.12	0.11	old field
541	29.895520	51.061970	2	0.11	0.11	forest
542	29.909532	51.061889	2	0.12	0.1	forest
543	29.923806	51.061899	2	0.11	0.11	old field
544	29.938085	51.061899	2	0.12	0.1	old field
545	29.952371	51.061889	2	0.12	0.12	old field
546	29.966181	51.063212	2	0.11	0.11	old field
547	29.980922	51.061899	2	0.12	0.11	old field
548	29.99521	51.061889	2	0.12	0.12	old field
549	30.00948	51.061899	2	0.13	0.12	forest
550	30.023759	51.061899	2	0.14	0.12	forest
551	30.038049	51.061889	2	0.14	0.13	forest
552	30.047557	51.061899	2	0.13	0.11	forest
553	30.052000	51.062510	2	0.11	0.1	old field
554	30.067580	51.062520	2	0.17	0.14	forest
555	30.080370	51.062390	2	0.17	0.13	forest
556	30.095220	51.062090	2	0.1	0.09	old field
557	30.109447	51.061889	2	0.14	0.12	forest
558	30.123726	51.061889	1	0.2	0.18	forest
559	30.138006	51.061889	2	0.12	0.12	old field
560	30.152286	51.061889	2	0.13	0.13	old field
561	30.166548	51.061899	2	0.13	0.11	forest
562	30.180845	51.061889	2	0.11	0.1	old field
563	30.195435	51.061004	1	0.1	0.1	field
564	30.199676	51.061738	1	0.12	0.12	old field
565	30.204660	51.062370	2	0.13	0.12	village
566	30.209310	51.061910	2	0.09	0.09	farm

567	30.223663	51.061899	2	0.12	0.12	old field
568	30.237963	51.061889	2	0.13	0.12	old field
569	30.252243	51.061889	2	0.11	0.11	old field
570	30.2665	51.061899	2	0.12	0.11	old field
571	30.280802	51.061889	2	0.12	0.11	old field
572	30.295081	51.061889	2	0.12	0.1	old field
573	30.309361	51.061889	2	0.12	0.12	old field
574	30.323616	51.061899	2	0.12	0.11	old field
575	30.33792	51.061889	2	0.11	0.11	forest
576	30.3522	51.061889	2	0.12	0.11	forest
577	30.208450	51.058390	2	0.09	0.09	meadow
578	30.203392	51.058824	2	0.11	0.1	field
579	30.198908	51.058876	2	0.11	0.11	field
580	29.719450	51.058620	1	0.11	0.1	forest
581	29.728661	51.055904	2	0.1	0.1	old field
582	29.733290	51.056040	2	0.1	0.1	field
583	29.757191	51.055368	2	0.11	0.1	field
584	29.762009	51.054895	2	0.12	0.1	field
585	29.766639	51.054895	2	0.12	0.11	field
586	30.198787	51.056141	2	0.12	0.12	garden
587	30.261563	51.055634	2	0.11	0.1	old field
588	30.3522	51.052896	2	0.11	0.1	forest
589	30.33792	51.052896	2	0.11	0.11	forest
590	30.325935	51.053254	2	0.11	0.1	forest
591	30.309634	51.054622	2	0.12	0.11	meadow
592	30.292749	51.052621	2	0.1	0.1	forest
593	30.282851	51.052570	2	0.12	0.12	forest
594	30.271330	51.052700	2	0.1	0.1	forest
595	30.267920	51.052700	1	0.14	0.13	forest
596	30.252243	51.052896	2	0.12	0.11	old field
597	30.237963	51.052896	2	0.12	0.12	old field
598	30.223683	51.052896	2	0.13	0.12	old field
599	30.209384	51.052906	2	0.11	0.11	old field
600	30.200610	51.052720	1	0.12	0.12	field
601	30.195820	51.052910	2	0.09	0.09	field
602	30.180820	51.053500	2	0.11	0.1	forest
603	30.166070	51.053220	2	0.13	0.12	forest
604	30.152286	51.052896	2	0.14	0.12	forest
605	30.138880	51.052890	1	0.13	0.12	old field
606	30.133588	51.052722	2	0.11	0.11	old field
607	30.128539	51.052672	2	0.12	0.11	old field
608	30.124380	51.053030	1	0.12	0.12	village
609	30.119280	51.052810	2	0.12	0.12	old field
610	30.109447	51.052896	2	0.11	0.11	old field
611	30.095167	51.052896	2	0.14	0.13	forest
612	30.080875	51.052906	2	0.15	0.14	forest
613	30.066608	51.052896	2	0.14	0.14	forest
614	30.052328	51.052896	2	0.13	0.13	forest
615	30.038049	51.052896	2	0.13	0.12	forest
616	30.023769	51.052896	2	0.12	0.12	forest
617	30.00948	51.052906	2	0.12	0.11	forest
618	29.99521	51.052896	2	0.12	0.12	forest

619	29.98093	51.052896	2	0.11	0.11	forest
620	29.966651	51.052896	2	0.12	0.11	forest
621	29.953909	51.053265	2	0.12	0.12	meadow
622	29.938085	51.052906	2	0.13	0.11	field
623	29.923812	51.052896	2	0.12	0.12	field
624	29.909532	51.052896	2	0.12	0.11	forest
625	29.895253	51.052896	2	0.13	0.12	forest
626	29.880973	51.052896	2	0.12	0.11	old field
627	29.866694	51.052896	2	0.13	0.12	forest
628	29.852414	51.052896	2	0.12	0.12	forest
629	29.838134	51.052896	2	0.12	0.11	field
630	29.823854	51.052906	2	0.12	0.12	old field
631	29.809575	51.052906	2	0.11	0.1	forest
632	29.79366	51.0527	2	0.11	0.11	old field
633	29.780410	51.051950	1	0.12	0.1	old field
634	29.776258	51.052906	2	0.11	0.11	village
635	29.771498	51.052906	2	0.12	0.1	field
636	29.767160	51.053070	1	0.13	0.11	field
637	29.761979	51.052906	2	0.12	0.12	field
638	29.757219	51.052906	2	0.13	0.12	old field
639	29.751950	51.053120	1	0.11	0.1	old field
640	29.748405	51.053354	2	0.11	0.1	old field
641	29.742263	51.053058	2	0.11	0.11	field
642	29.738110	51.052970	1	0.11	0.09	forest
643	29.723898	51.052896	2	0.11	0.11	old field
644	29.709618	51.052896	2	0.11	0.1	old field
645	29.761979	51.049909	2	0.11	0.11	field
646	29.766734	51.05037	2	0.1	0.1	field
647	29.771498	51.049909	2	0.1	0.1	field
648	29.776258	51.049909	2	0.11	0.1	old field
649	29.781017	51.049909	2	0.13	0.12	field
650	29.785777	51.049909	2	0.12	0.12	village
651	29.790710	51.049880	1	0.13	0.11	village
652	30.114192	51.049909	2	0.11	0.1	shrubbery
653	30.118924	51.050417	2	0.12	0.11	field
654	30.124160	51.049370	2	0.12	0.12	field
655	30.128471	51.049909	2	0.12	0.11	old field
656	30.133231	51.049910	2	0.11	0.11	old field
657	30.137991	51.049909	2	0.12	0.1	field
658	30.142394	51.049754	2	0.11	0.11	field
659	30.147565	51.050187	2	0.1	0.09	field
660	30.199111	51.049329	2	0.12	0.11	field
661	30.191340	51.045610	1	0.1	0.1	field
662	30.185901	51.047885	2	0.09	0.09	field
663	30.180827	51.046912	2	0.09	0.09	field
664	30.147910	51.047140	1	0.09	0.09	село
665	30.142750	51.046912	2	0.09	0.09	yard
666	30.137991	51.046912	2	0.1	0.09	field
667	30.133231	51.046912	1	0.13	0.12	field
668	30.127100	51.047050	2	0.12	0.11	old field
669	30.123711	51.046912	2	0.11	0.11	field
670	30.118952	51.046910	2	0.1	0.1	village

671	30.114100	51.047040	1	0.1	0.1	field
672	29.789830	51.047240	2	0.11	0.11	meadow
673	29.785777	51.046912	2	0.12	0.1	field
674	29.781017	51.046912	2	0.11	0.1	village
675	29.776258	51.046912	2	0.1	0.1	village
676	29.770860	51.046760	1	0.11	0.1	village
677	29.495439	51.043914	2	0.12	0.11	forest
678	29.681059	51.043903	2	0.12	0.11	old field
679	29.694039	51.043838	1	0.13	0.12	meadow
680	29.709618	51.043903	2	0.12	0.11	old field
681	29.72639	51.044307	2	0.12	0.1	old field
682	29.737610	51.044000	1	0.11	0.09	field
683	29.752457	51.043903	2	0.11	0.1	field
684	29.766738	51.043914	2	0.11	0.11	field
685	29.780180	51.044203	1	0.1	0.1	field
686	29.795297	51.043914	2	0.11	0.1	field
687	29.809575	51.043914	2	0.1	0.09	field
688	29.823360	51.043250	1	0.1	0.09	forest
689	29.838133	51.043914	2	0.11	0.1	field
690	29.852412	51.043914	2	0.13	0.11	forest
691	29.865510	51.044690	1	0.13	0.12	forest
692	29.88097	51.043914	2	0.12	0.12	field
693	29.895253	51.043903	2	0.13	0.11	field
694	29.908430	51.043980	1	0.13	0.11	field
695	29.923812	51.043903	2	0.12	0.12	field
696	29.938092	51.043903	2	0.13	0.12	field
697	29.952572	51.044055	1	0.13	0.12	field
698	29.966651	51.043903	2	0.12	0.12	old field
699	29.98093	51.043903	2	0.14	0.12	old field
700	29.99521	51.043903	2	0.13	0.11	old field
701	30.00949	51.043903	2	0.12	0.12	meadow
702	30.023769	51.043903	2	0.12	0.11	old field
703	30.038070	51.043210	1	0.13	0.11	old field
704	30.052317	51.043914	2	0.13	0.12	old field
705	30.066596	51.043914	2	0.12	0.11	old field
706	30.079690	51.044090	1	0.11	0.11	old field
707	30.085635	51.043914	2	0.11	0.11	meadow
708	30.08992	51.043454	2	0.12	0.1	meadow
709	30.096400	51.043970	2	0.12	0.11	meadow
710	30.109447	51.043903	2	0.13	0.12	forest
711	30.118952	51.043914	2	0.14	0.12	park
712	30.123726	51.043903	1	0.13	0.12	park
713	30.128471	51.043914	2	0.12	0.1	meadow
714	30.136277	51.045153	2	0.11	0.11	meadow
715	30.150756	51.044643	2	0.1	0.09	meadow
716	30.165520	51.043560	1	0.11	0.11	forest
717	30.180840	51.043250	1	0.1	0.1	old field
718	30.185260	51.042850	2	0.1	0.1	old field
719	30.195106	51.043914	2	0.1	0.1	meadow
720	30.211235	51.044093	2	0.11	0.1	meadow
721	30.223683	51.043903	2	0.13	0.11	meadow
722	30.235536	51.044567	2	0.12	0.12	meadow

723	30.254171	51.044871	1	0.13	0.12	meadow
724	30.118952	51.040916	2	0.12	0.11	old field
725	30.114192	51.040916	2	0.11	0.11	old field
726	30.090607	51.041411	2	0.12	0.11	meadow
727	30.085635	51.040916	2	0.11	0.1	field
728	30.081150	51.040850	2	0.1	0.09	field
729	29.914250	51.037900	1	0.13	0.12	old field
730	30.080875	51.037919	2	0.11	0.1	forest
731	30.084587	51.037830	2	0.1	0.1	forest
732	30.090930	51.037700	1	0.12	0.1	field
733	30.095153	51.037919	2	0.13	0.11	old field
734	30.166631	51.033922	2	0.11	0.1	meadow
735	30.152196	51.033483	2	0.11	0.1	meadow
736	30.136576	51.034845	2	0.12	0.11	meadow
737	30.12287	51.035918	2	0.13	0.12	meadow
738	30.109454	51.035895	2	0.12	0.12	meadow
739	30.095658	51.036262	2	0.11	0.11	meadow
740	30.082280	51.035200	1	0.12	0.11	village
741	30.067400	51.033700	2	0.11	0.11	old field
742	30.052317	51.034922	2	0.14	0.14	forest
743	30.03733	51.034688	2	0.13	0.13	old field
744	30.023769	51.03491	2	0.13	0.12	forest
745	30.00949	51.03491	2	0.12	0.12	old field
746	29.99521	51.03491	2	0.13	0.11	old field
747	29.980922	51.034922	2	0.14	0.14	old field
748	29.966651	51.03491	2	0.13	0.12	field
749	29.952965	51.034054	2	0.14	0.13	field
750	29.938085	51.034922	2	0.14	0.12	field
751	29.923806	51.034922	2	0.13	0.12	field
752	29.918192	51.034881	2	0.12	0.11	field
753	29.914288	51.034922	2	0.11	0.1	field
754	29.909532	51.034910	2	0.1	0.1	field
755	29.895249	51.034922	2	0.11	0.11	field
756	29.88097	51.034922	2	0.14	0.13	forest
757	29.866690	51.034922	2	0.15	0.14	forest
758	29.852412	51.034922	2	0.12	0.11	field
759	29.838133	51.034922	2	0.1	0.1	forest
760	29.823855	51.03491	2	0.12	0.1	old field
761	29.809575	51.034922	2	0.11	0.11	field
762	29.795297	51.034922	2	0.11	0.1	field
763	29.781016	51.03491	2	0.11	0.11	old field
764	29.766828	51.035851	2	0.12	0.11	forest
765	29.752459	51.034922	2	0.12	0.1	forest
766	29.738177	51.03491	2	0.11	0.11	old field
767	29.724749	51.034934	2	0.11	0.1	forest
768	29.709623	51.034922	2	0.12	0.11	meadow
769	29.695338	51.03491	2	0.12	0.1	old field
770	29.681059	51.03491	2	0.12	0.12	old field
771	29.665923	51.035266	2	0.13	0.12	old field
772	29.652507	51.034922	2	0.13	0.11	old field
773	29.638228	51.034922	2	0.12	0.11	old field
774	29.626616	51.034538	2	0.11	0.11	meadow

775	29.552542	51.03491	2	0.11	0.1	field
776	29.538276	51.034922	2	0.1	0.1	old field
777	29.523996	51.034922	2	0.11	0.1	field
778	29.509704	51.03491	2	0.11	0.11	field
779	29.495424	51.03491	2	0.12	0.11	forest
780	29.481144	51.03491	2	0.12	0.11	forest
781	29.909528	51.031924	2	0.11	0.11	field
782	29.914288	51.031924	2	0.11	0.1	old field
783	29.919047	51.031924	2	0.13	0.11	field
784	29.919047	51.028926	2	0.12	0.12	field
785	29.914250	51.028650	1	0.11	0.1	field
786	29.909528	51.028926	2	0.12	0.11	village
787	29.900690	51.027730	1	0.1	0.09	meadow
788	29.714382	51.028926	2	0.1	0.1	field
789	29.48116	51.025929	2	0.12	0.1	forest
790	29.495424	51.025916	2	0.11	0.11	old field
791	29.509704	51.025916	2	0.12	0.11	old field
792	29.52588	51.02546	1	0.11	0.1	field
793	29.537341	51.025796	2	0.11	0.1	old field
794	29.552542	51.025916	2	0.1	0.1	field
795	29.566822	51.025916	2	0.11	0.11	old field
796	29.581112	51.025929	2	0.12	0.11	field
797	29.593551	51.025619	2	0.11	0.11	field
798	29.62395	51.025929	2	0.12	0.1	field
799	29.63822	51.025916	2	0.11	0.11	meadow
800	29.6525	51.025916	2	0.12	0.1	field
801	29.666779	51.025916	2	0.12	0.11	field
802	29.681059	51.025916	2	0.12	0.12	forest
803	29.695343	51.025929	2	0.11	0.11	field
804	29.709800	51.025720	1	0.1	0.09	field
805	29.706266	51.025738	2	0.1	0.1	field
806	29.723898	51.025916	2	0.11	0.1	field
807	29.736878	51.025619	2	0.12	0.1	old field
808	29.752457	51.025916	2	0.12	0.11	field
809	29.767772	51.025797	2	0.13	0.11	meadow
810	29.77911	51.025857	2	0.12	0.11	forest
811	29.795296	51.025916	2	0.11	0.11	forest
812	29.809575	51.025929	2	0.11	0.1	old field
813	29.823043	51.025857	2	0.1	0.1	old field
814	29.839839	51.027202	2	0.11	0.11	forest
815	29.852049	51.025262	2	0.11	0.11	field
816	29.866694	51.025916	2	0.1	0.1	forest
817	29.880973	51.025916	2	0.11	0.11	forest
818	29.895253	51.025916	2	0.12	0.12	old field
819	29.909528	51.025929	2	0.12	0.11	old field
820	29.923812	51.025916	2	0.13	0.12	meadow
821	29.938085	51.025929	2	0.13	0.12	field
822	29.942845	51.025929	2	0.13	0.13	field
823	29.952371	51.025916	2	0.14	0.12	field
824	29.966644	51.025929	2	0.12	0.12	old field
825	29.980922	51.025929	2	0.12	0.11	old field
826	29.99521	51.025916	2	0.13	0.11	forest

827	30.00948	51.025929	2	0.14	0.12	old field
828	30.023769	51.025916	2	0.12	0.12	old field
829	30.036953	51.025761	2	0.13	0.11	old field
830	30.052311	51.025750	2	0.11	0.1	field
831	30.061140	51.025750	1	0.12	0.1	field
832	30.065076	51.025644	2	0.11	0.11	meadow
833	30.080156	51.024824	2	0.12	0.12	meadow
834	30.095167	51.025916	2	0.12	0.12	meadow
835	30.109447	51.025916	2	0.11	0.11	meadow
836	30.12374	51.026889	2	0.12	0.11	meadow
837	30.137761	51.02439	2	0.12	0.12	meadow
838	30.152335	51.024873	2	0.13	0.12	meadow
839	30.166352	51.025093	2	0.13	0.11	meadow
840	30.062329	51.023016	2	0.11	0.1	meadow
841	30.057880	51.022750	2	0.11	0.1	old field
842	30.019096	51.022309	2	0.13	0.12	old field
843	29.947605	51.022932	2	0.12	0.11	field
844	29.942570	51.022560	1	0.1	0.09	field
845	29.704863	51.022932	2	0.11	0.1	field
846	29.700103	51.022932	2	0.1	0.1	old field
847	29.685175	51.022715	2	0.11	0.11	field
848	29.524769	51.023521	2	0.11	0.1	old field
849	29.520011	51.023521	2	0.11	0.11	old field
850	29.514478	51.022932	2	0.1	0.1	field
851	29.49086	51.02296	1	0.1	0.09	old field
852	29.490679	51.019934	2	0.11	0.1	village
853	29.495439	51.019934	2	0.09	0.09	field
854	29.514478	51.019934	2	0.1	0.1	field
855	29.519238	51.019934	2	0.1	0.09	field
856	29.562074	51.019934	2	0.11	0.11	old field
857	29.566834	51.019934	2	0.11	0.1	old field
858	29.685825	51.019934	2	0.12	0.11	old field
859	29.695343	51.019934	2	0.12	0.12	field
860	29.700103	51.019934	2	0.11	0.11	field
861	29.704863	51.019934	2	0.12	0.1	field
862	29.852412	51.019934	2	0.1	0.1	field
863	29.857172	51.019934	2	0.11	0.11	village
864	29.862180	51.020150	1	0.11	0.1	field
865	29.947480	51.020030	2	0.12	0.11	field
866	29.942845	51.019934	2	0.11	0.11	field
867	29.952760	51.020090	2	0.13	0.12	village
868	30.01424	51.019934	2	0.12	0.12	old field
869	30.018999	51.019934	2	0.12	0.11	field
870	30.023759	51.019934	2	0.13	0.11	field
871	30.028519	51.019934	2	0.12	0.12	old field
872	30.052670	51.019510	2	0.1	0.1	field
873	30.056431	51.019572	2	0.09	0.09	field
874	30.123711	51.016936	2	0.13	0.13	forest
875	30.109432	51.016936	2	0.14	0.12	forest
876	30.095167	51.016923	2	0.12	0.11	meadow
877	30.082277	51.018467	1	0.12	0.1	meadow
878	30.064353	51.017645	2	0.12	0.11	meadow

879	30.050930	51.016690	1	0.11	0.11	meadow
880	30.046750	51.017120	2	0.12	0.11	field
881	30.037700	51.016830	1	0.11	0.11	field
882	30.033279	51.016936	2	0.1	0.09	field
883	30.028519	51.016936	2	0.1	0.1	field
884	30.024910	51.016890	1	0.09	0.09	field
885	30.019000	51.016936	2	0.12	0.11	village
886	30.014460	51.017290	2	0.1	0.09	field
887	30.010910	51.017330	1	0.12	0.11	old field
888	29.995365	51.015104	1	0.11	0.1	forest
889	29.98093	51.016923	2	0.11	0.11	old field
890	29.966930	51.017330	1	0.12	0.11	meadow
891	29.961884	51.016936	2	0.11	0.1	field
892	29.957124	51.016936	2	0.1	0.1	field
893	29.952333	51.016923	1	0.09	0.09	field
894	29.947605	51.016936	2	0.1	0.09	field
895	29.942845	51.016936	2	0.12	0.1	old field
896	29.938092	51.016923	1	0.12	0.1	field
897	29.923812	51.016923	2	0.13	0.13	old field
898	29.909200	51.016510	1	0.11	0.09	meadow
899	29.896551	51.016779	2	0.12	0.1	forest
900	29.880973	51.016923	2	0.11	0.11	forest
901	29.866750	51.017130	1	0.11	0.1	meadow
902	29.861932	51.016936	2	0.11	0.11	field
903	29.857172	51.016936	2	0.1	0.1	field
904	29.852520	51.016940	1	0.11	0.09	field
905	29.838134	51.016923	2	0.11	0.11	old field
906	29.82278	51.01673	1	0.1	0.1	forest
907	29.809575	51.016923	2	0.11	0.1	forest
908	29.795297	51.016936	2	0.11	0.11	forest
909	29.7806	51.01672	1	0.1	0.09	old field
910	29.766736	51.016923	2	0.11	0.11	field
911	29.75464	51.017346	2	0.11	0.1	field
912	29.740941	51.017546	1	0.1	0.1	meadow
913	29.723898	51.016923	2	0.11	0.1	field
914	29.709618	51.016923	2	0.11	0.1	field
915	29.700103	51.016936	2	0.11	0.11	village
916	29.69527	51.01699	1	0.12	0.11	village
917	29.690585	51.016936	2	0.11	0.1	field
918	29.685825	51.016936	2	0.11	0.11	field
919	29.681065	51.016936	2	0.12	0.11	field
920	29.666786	51.016936	2	0.11	0.11	field
921	29.652507	51.016936	1	0.11	0.1	field
922	29.63822	51.016923	2	0.12	0.11	field
923	29.628709	51.016936	2	0.13	0.12	old field
924	29.62395	51.016936	1	0.14	0.14	village
925	29.610322	51.017298	1	0.12	0.1	old field
926	29.595381	51.016923	2	0.12	0.11	old field
927	29.581102	51.016923	2	0.11	0.1	old field
928	29.566834	51.016936	1	0.1	0.09	forest
929	29.562074	51.016936	2	0.1	0.1	village
930	29.552555	51.016936	2	0.11	0.1	old field

931	29.538263	51.016923	2	0.11	0.11	forest
932	29.52235	51.01683	1	0.13	0.11	old field
933	29.519238	51.016936	2	0.11	0.1	field
934	29.514478	51.016936	2	0.11	0.11	village
935	29.5101	51.01756	1	0.11	0.1	field
936	29.494968	51.016936	1	0.1	0.09	old field
937	29.49104	51.01702	2	0.1	0.09	field
938	29.481023	51.016923	1	0.11	0.1	old field
939	29.466865	51.016923	2	1.12	0.11	old field
940	29.514478	51.013938	2	0.11	0.11	field
941	29.519238	51.013938	2	0.1	0.1	field
942	29.523611	51.014408	2	0.11	0.1	village
943	29.61919	51.013938	2	0.11	0.09	field
944	29.62337	51.01434	2	0.11	0.11	field
945	29.681065	51.013938	2	0.12	0.11	old field
946	29.685825	51.013938	2	0.12	0.1	field
947	29.690585	51.013938	2	0.11	0.11	village
948	29.695343	51.013938	2	0.11	0.1	old field
949	29.700560	51.014530	2	0.11	0.09	meadow
950	29.852412	51.013938	2	0.09	0.09	village
951	29.858363	51.013906	2	0.1	0.1	field
952	29.861932	51.013938	2	0.11	0.1	old field
953	29.866167	51.013658	2	0.1	0.09	field
954	29.933325	51.013938	2	0.15	0.14	village
955	29.938085	51.013938	2	0.15	0.13	village
956	29.942845	51.013938	2	0.12	0.11	old field
957	29.948080	51.014070	2	0.12	0.1	field
958	30.023759	51.013938	2	0.12	0.11	field
959	30.028519	51.013938	2	0.12	0.12	field
960	30.033279	51.013938	2	0.11	0.11	field
961	30.038037	51.013938	2	0.12	0.1	field
962	30.042797	51.013938	2	0.12	0.1	meadow
963	30.033279	51.010941	2	0.11	0.1	field
964	30.028190	51.011600	1	0.12	0.11	village
965	30.023759	51.010941	2	0.12	0.11	meadow
966	30.018999	51.010941	2	0.12	0.11	old field
967	29.86669	51.010941	2	0.1	0.1	field
968	29.862756	51.011303	2	0.1	0.1	field
969	29.857680	51.011140	1	0.11	0.11	field
970	29.851520	51.010990	2	0.09	0.09	field
971	29.77162	51.0105	2	0.11	0.11	old field
972	29.766738	51.010941	2	0.09	0.09	field
973	29.700103	51.010941	2	0.1	0.1	field
974	29.695343	51.010941	1	0.11	0.09	field
975	29.690585	51.010941	2	0.1	0.09	field
976	29.685825	51.010941	2	0.1	0.1	field
977	29.681065	51.010941	1	0.12	0.11	old field
978	29.61909	51.011283	1	0.13	0.11	field
979	29.523996	51.010941	2	0.11	0.1	field
980	29.519238	51.010941	2	0.12	0.11	field
981	29.467638	51.008519	2	0.11	0.11	meadow
982	29.481917	51.008519	2	0.12	0.1	field

983	29.495424	51.00793	2	0.11	0.1	old field
984	29.509718	51.007943	2	0.12	0.1	old field
985	29.52415	51.00804	1	0.11	0.1	meadow
986	29.539049	51.008532	2	0.12	0.1	forest
987	29.553315	51.008519	2	0.11	0.1	old field
988	29.566834	51.007943	2	0.11	0.11	old field
989	29.581102	51.00793	2	0.12	0.11	forest
990	29.595381	51.00793	2	0.12	0.11	forest
991	29.609661	51.00793	2	0.11	0.1	old field
992	29.62394	51.00793	2	0.1	0.1	old field
993	29.63822	51.00793	2	0.12	0.11	field
994	29.6525	51.00793	2	0.12	0.12	field
995	29.666779	51.00793	2	0.12	0.11	field
996	29.681065	51.007943	2	0.11	0.1	field
997	29.690585	51.007943	2	0.12	0.11	field
998	29.695338	51.00793	2	0.11	0.11	village
999	29.700103	51.007943	2	0.11	0.1	field
1000	29.709618	51.00793	2	0.11	0.11	old field
1001	29.722611	51.007465	2	0.12	0.1	field
1002	29.738177	51.00793	2	0.12	0.11	field
1003	29.752457	51.007930	2	0.13	0.13	field
1004	29.767877	51.007364	2	0.12	0.1	old field
1005	29.77188	51.008	1	0.1	0.09	field
1006	29.776258	51.007943	2	0.09	0.09	forest
1007	29.781017	51.007643	2	0.1	0.09	forest
1008	29.795361	51.008657	2	0.12	0.1	meadow
1009	29.809575	51.00793	2	0.1	0.1	old field
1010	29.824177	51.009015	2	0.11	0.1	old field
1011	29.838066	51.008716	2	0.1	0.1	old field
1012	29.852412	51.007943	2	0.1	0.1	meadow
1013	29.857172	51.007943	2	0.11	0.11	village
1014	29.861932	51.007943	2	0.12	0.1	field
1015	29.866670	51.007900	1	0.11	0.11	field
1016	29.87145	51.007943	2	0.11	0.11	old field
1017	29.880973	51.00793	2	0.12	0.11	old field
1018	29.895249	51.007943	2	0.12	0.12	old field
1019	29.909532	51.00793	2	0.12	0.11	old field
1020	29.923812	51.00793	2	0.13	0.12	old field
1021	29.938085	51.007943	2	0.13	0.12	old field
1022	29.952490	51.008320	1	0.12	0.12	field
1023	29.966651	51.00793	2	0.11	0.11	field
1024	29.98093	51.00793	2	0.12	0.1	field
1025	29.994679	51.00722	2	0.12	0.11	old field
1026	30.00949	51.00793	2	0.12	0.12	old field
1027	30.01424	51.007943	2	0.12	0.11	old field
1028	30.019280	51.007200	1	0.12	0.11	garden
1029	30.023550	51.007950	2	0.13	0.12	village
1030	30.037393	51.008797	2	0.12	0.11	meadow
1031	30.051307	51.008301	2	0.12	0.12	meadow
1032	30.066608	51.00793	2	0.12	0.1	meadow
1033	30.00948	51.004945	2	0.11	0.11	village
1034	30.003380	51.004670	1	0.12	0.11	field

1035	29.999961	51.004945	2	0.13	0.11	field
1036	29.86669	51.004945	2	0.11	0.1	field
1037	29.861932	51.004945	2	0.1	0.1	field
1038	29.79124	51.0051	1	0.1	0.09	field
1039	29.785777	51.004945	2	0.09	0.09	field
1040	29.781017	51.004945	2	0.1	0.09	forest
1041	29.776258	51.004945	2	0.09	0.09	forest
1042	29.771498	51.004945	2	0.1	0.1	village
1043	29.695343	51.004945	2	0.1	0.09	field
1044	29.690585	51.004945	2	0.11	0.1	field
1045	29.52823	51.00512	2	0.1	0.09	field
1046	29.523996	51.004945	2	0.11	0.11	forest
1047	29.528756	51.001948	2	0.1	0.1	field
1048	29.690585	51.001948	2	0.12	0.1	field
1049	29.695343	51.001948	1	0.12	0.09	field
1050	29.761979	51.001948	2	0.11	0.1	field
1051	29.76751	51.00217	2	0.12	0.11	field
1052	29.771123	51.0021	2	0.12	0.12	field
1053	29.77548	51.00212	2	0.11	0.11	old field
1054	30.052328	50.998937	2	0.12	0.11	meadow
1055	30.038037	50.998951	2	0.12	0.11	meadow
1056	30.021785	50.998821	2	0.12	0.12	meadow
1057	30.00949	50.998937	2	0.12	0.11	meadow
1058	29.99521	50.998937	2	0.11	0.11	field
1059	29.979913	50.999293	2	0.12	0.11	forest
1060	29.966651	50.998937	2	0.13	0.11	old field
1061	29.952371	50.998937	2	0.12	0.12	old field
1062	29.938092	50.998937	2	0.13	0.12	forest
1063	29.923812	50.998937	2	0.12	0.11	field
1064	29.909532	50.998937	2	0.12	0.11	old field
1065	29.895253	50.998937	2	0.11	0.11	field
1066	29.880973	50.998937	2	0.11	0.11	field
1067	29.866694	50.998937	2	0.11	0.1	field
1068	29.852414	50.998937	2	0.11	0.11	old field
1069	29.8409	50.999076	2	0.12	0.11	forest
1070	29.823855	50.998937	2	0.12	0.1	old field
1071	29.809575	50.998937	2	0.11	0.1	meadow
1072	29.795296	50.998937	2	0.13	0.1	forest
1073	29.781016	50.998937	2	0.11	0.11	old field
1074	29.771498	50.998951	2	0.12	0.1	old field
1075	29.766820	50.998420	1	0.12	0.11	field
1076	29.761979	50.998951	2	0.11	0.1	field
1077	29.752457	50.998937	2	0.11	0.11	old field
1078	29.738177	50.998937	2	0.11	0.1	old field
1079	29.723898	50.998937	2	0.11	0.11	old field
1080	29.709618	50.998937	2	0.11	0.1	field
1081	29.695338	50.998937	2	0.11	0.11	forest
1082	29.681059	50.998937	2	0.12	0.1	field
1083	29.666779	50.998937	2	0.12	0.11	old field
1084	29.6525	50.998937	2	0.11	0.11	old field
1085	29.63822	50.998937	2	0.12	0.11	old field
1086	29.62394	50.998937	2	0.12	0.11	forest

1087	29.609661	50.998937	2	0.12	0.11	old field
1088	29.595381	50.998937	2	0.11	0.1	field
1089	29.581102	50.998937	2	0.1	0.1	field
1090	29.566822	50.998937	2	0.1	0.1	old field
1091	29.552542	50.998937	2	0.1	0.09	field
1092	29.53774	50.998937	2	0.09	0.09	field
1093	29.52905	50.99902	1	0.11	0.1	field
1094	29.523983	50.998937	2	0.11	0.11	forest
1095	29.509704	50.998937	2	0.11	0.11	old field
1096	29.495424	50.998937	2	0.11	0.1	old field
1097	29.48116	50.998951	2	0.12	0.1	old field
1098	29.467799	50.998897	2	0.12	0.11	meadow
1099	29.53423	50.99654	2	0.1	0.1	forest
1100	29.75746	50.99592	2	0.11	0.11	garden
1101	29.761979	50.995953	2	0.11	0.1	field
1102	29.766738	50.996040	2	0.12	0.11	field
1103	29.771498	50.995953	2	0.11	0.11	village
1104	29.776258	50.995953	2	0.12	0.1	old field
1105	29.920263	50.995624	2	0.11	0.11	field
1106	29.923840	50.995810	1	0.11	0.11	field
1107	29.919440	50.993180	2	0.11	0.1	village
1108	29.914288	50.992955	2	0.12	0.11	field
1109	29.78132	50.99257	2	0.11	0.1	garden
1110	29.776258	50.992955	2	0.1	0.1	field
1111	29.770520	50.992630	2	0.12	0.11	village
1112	29.766738	50.992955	2	0.12	0.1	garden
1113	29.761979	50.992955	2	0.12	0.11	garden
1114	29.757219	50.992955	2	0.11	0.11	field
1115	29.581112	50.992955	2	0.11	0.1	village
1116	29.467704	50.99003	2	0.12	0.11	meadow
1117	29.481023	50.989943	2	0.12	0.1	old field
1118	29.495424	50.989943	2	0.11	0.1	field
1119	29.509704	50.989943	2	0.12	0.11	field
1120	29.52395	50.98989	1	0.12	0.11	field
1121	29.538263	50.989943	2	0.11	0.1	forest
1122	29.552542	50.989943	2	0.11	0.11	forest
1123	29.56701	50.99044	1	0.12	0.11	forest
1124	29.581112	50.989958	2	0.1	0.1	field
1125	29.58575	50.99004	1	0.11	0.1	old field
1126	29.590632	50.989958	2	0.12	0.11	forest
1127	29.595381	50.989943	2	0.1	0.1	forest
1128	29.60909	50.98957	1	0.11	0.1	old field
1129	29.62395	50.989958	2	0.11	0.11	old field
1130	29.63822	50.989943	2	0.12	0.11	forest
1131	29.6525	50.989943	1	0.13	0.12	field
1132	29.666779	50.989943	2	0.12	0.12	old field
1133	29.681059	50.989943	2	0.1	0.09	field
1134	29.695338	50.989943	1	0.11	0.1	forest
1135	29.710391	50.990532	2	0.12	0.1	forest
1136	29.724671	50.990532	2	0.11	0.1	old field
1137	29.738120	50.989560	1	0.1	0.09	field
1138	29.752700	50.989910	1	0.11	0.1	village

1139	29.757219	50.989958	2	0.1	0.1	village
1140	29.761979	50.989958	2	0.11	0.1	field
1141	29.767031	50.990190	1	0.1	0.1	field
1142	29.771498	50.989958	2	0.12	0.1	old field
1143	29.776258	50.989958	2	0.11	0.11	field
1144	29.781610	50.990560	1	0.11	0.1	old field
1145	29.795297	50.989958	2	0.11	0.09	field
1146	29.809575	50.989943	2	0.11	0.1	field
1147	29.822860	50.988690	1	0.1	0.1	field
1148	29.838444	50.98884	2	0.11	0.11	forest
1149	29.852414	50.989943	2	0.12	0.1	forest
1150	29.865266	50.991258	1	0.12	0.11	forest
1151	29.880973	50.989943	2	0.11	0.11	old field
1152	29.895253	50.989943	2	0.11	0.11	old field
1153	29.909930	50.989520	1	0.11	0.11	field
1154	29.914288	50.989958	2	0.12	0.11	field
1155	29.923812	50.989943	2	0.12	0.11	meadow
1156	29.938092	50.989943	2	0.13	0.11	field
1157	29.953230	50.990090	1	0.13	0.12	field
1158	29.966651	50.989943	2	0.13	0.12	old field
1159	29.98093	50.989943	2	0.12	0.12	field
1160	29.985681	50.989960	2	0.12	0.11	field
1161	29.990441	50.989958	2	0.12	0.1	old field
1162	29.994560	50.990250	1	0.13	0.11	field
1163	30.00728	50.99122	2	0.12	0.11	meadow
1164	30.026081	50.98997	2	0.11	0.11	meadow
1165	30.038026	50.989943	2	0.12	0.11	meadow
1166	30.051307	50.990149	2	0.12	0.11	meadow
1167	29.984698	50.986853	2	0.11	0.11	old field
1168	29.981260	50.987540	1	0.14	0.13	field
1169	29.976163	50.986961	2	0.12	0.12	field
1170	29.971150	50.986410	2	0.12	0.1	field
1171	29.966644	50.986961	1	0.11	0.11	field
1172	29.919850	50.986000	1	0.12	0.11	field
1173	29.909528	50.986961	2	0.12	0.12	village
1174	29.776258	50.986961	2	0.12	0.11	village
1175	29.771498	50.986961	2	0.12	0.1	old field
1176	29.766738	50.986961	2	0.11	0.11	old field
1177	29.761979	50.986961	2	0.12	0.1	old field
1178	29.757219	50.986961	2	0.11	0.1	field
1179	29.753342	50.986884	2	0.12	0.1	field
1180	29.590632	50.986961	2	0.11	0.11	field
1181	29.585872	50.986961	2	0.1	0.09	field
1182	29.581112	50.986961	2	0.11	0.1	field
1183	29.42903	50.983963	2	0.1	0.1	field
1184	29.433564	50.98416	2	0.09	0.1	old field
1185	29.585872	50.98386	2	0.09	0.09	field
1186	29.590632	50.983963	2	0.1	0.09	field
1187	29.595391	50.983963	2	0.1	0.1	field
1188	29.662026	50.983963	2	0.15	0.15	old field
1189	29.666786	50.983963	1	0.11	0.11	village
1190	29.672319	50.984552	2	0.11	0.1	old field

1191	29.752459	50.983963	2	0.11	0.11	field
1192	29.756300	50.984140	2	0.11	0.1	field
1193	29.761979	50.983963	2	0.12	0.1	field
1194	29.766738	50.983963	2	0.11	0.1	field
1195	29.771498	50.983963	2	0.11	0.11	field
1196	29.776258	50.983963	2	0.12	0.11	old field
1197	29.976163	50.984020	2	0.13	0.12	garden
1198	30.052317	50.980965	1	0.09	0.09	meadow
1199	30.038049	50.98095	2	0.1	0.1	old field
1200	30.023759	50.980965	2	0.12	0.1	meadow
1201	30.011059	50.980269	2	0.12	0.11	meadow
1202	29.995186	50.981817	2	0.13	0.11	meadow
1203	29.971090	50.980920	1	0.13	0.11	field
1204	29.966644	50.980965	2	0.13	0.11	old field
1205	29.952048	50.980922	1	0.11	0.11	field
1206	29.938085	50.980965	2	0.11	0.1	old field
1207	29.923806	50.980965	2	0.1	0.1	field
1208	29.909528	50.980965	2	0.11	0.11	field
1209	29.895253	50.98095	2	0.12	0.11	field
1210	29.880973	50.980950	2	0.11	0.11	forest
1211	29.865654	50.980805	2	0.11	0.11	forest
1212	29.852412	50.980965	2	0.12	0.11	forest
1213	29.838134	50.98095	2	0.12	0.1	old field
1214	29.823854	50.980965	2	0.11	0.11	old field
1215	29.808550	50.981190	2	0.12	0.11	field
1216	29.795500	50.980860	2	0.11	0.1	field
1217	29.790537	50.980965	2	0.12	0.1	field
1218	29.786190	50.980360	1	0.1	0.1	field
1219	29.781017	50.980965	2	0.11	0.1	old field
1220	29.776258	50.980965	2	0.11	0.11	old field
1221	29.771400	50.980550	1	0.13	0.13	old field
1222	29.766738	50.980965	2	0.13	0.12	field
1223	29.757150	50.981080	1	0.11	0.1	field
1224	29.752457	50.98095	2	0.11	0.1	old field
1225	29.738177	50.98095	2	0.12	0.1	field
1226	29.723902	50.980965	2	0.11	0.11	field
1227	29.709623	50.980965	2	0.12	0.11	old field
1228	29.695338	50.98095	2	0.11	0.11	forest
1229	29.681065	50.980965	2	0.12	0.1	forest
1230	29.671546	50.980965	2	0.12	0.11	forest
1231	29.666786	50.980965	2	0.1	0.1	village
1232	29.662026	50.980965	2	0.1	0.09	village
1233	29.652507	50.980965	2	0.11	0.1	old field
1234	29.63822	50.98095	2	0.11	0.1	field
1235	29.62395	50.980965	2	0.11	0.11	old field
1236	29.60994	50.98098	1	0.09	0.09	field
1237	29.604911	50.980965	2	0.1	0.09	field
1238	29.600151	50.980965	2	0.1	0.1	field
1239	29.595394	50.980348	1	0.11	0.1	field
1240	29.590632	50.980965	2	0.1	0.1	field
1241	29.585872	50.980965	2	0.1	0.09	field
1242	29.58118	50.9809	1	0.1	0.1	field

1243	29.566834	50.980965	2	0.12	0.1	forest
1244	29.552555	50.980965	2	0.11	0.11	forest
1245	29.538276	50.980965	2	0.11	0.11	forest
1246	29.523996	50.980965	2	0.13	0.11	forest
1247	29.509718	50.980965	2	0.12	0.11	field
1248	29.495424	50.98095	2	0.12	0.12	field
1249	29.48116	50.980965	2	0.12	0.11	old field
1250	29.451265	50.980924	2	0.12	0.12	forest
1251	29.438306	50.98095	2	0.11	0.1	field
1252	29.43281	50.98112	1	0.1	0.09	old field
1253	29.428804	50.980965	2	0.09	0.09	field
1254	29.424044	50.980965	2	0.1	0.1	field
1255	29.43362	50.97809	2	0.1	0.1	garden
1256	29.519196	50.977412	2	0.1	0.1	field
1257	29.524014	50.977531	2	0.1	0.09	field
1258	29.52893	50.97811	2	0.09	0.09	field
1259	29.53326	50.9781	2	0.09	0.09	field
1260	29.575789	50.978246	2	0.1	0.1	field
1261	29.662026	50.977968	1	0.12	0.11	field
1262	29.666786	50.977968	2	0.12	0.1	field
1263	29.766738	50.977968	2	0.11	0.09	field
1264	29.771498	50.977968	2	0.12	0.11	old field
1265	29.776258	50.977968	2	0.11	0.09	field
1266	29.781017	50.977968	2	0.1	0.1	field
1267	29.785777	50.977968	2	0.1	0.09	field
1268	29.790537	50.977968	2	0.11	0.1	field
1269	29.965897	50.97771	2	0.12	0.12	old field
1270	30.009480	50.977968	2	0.13	0.12	village
1271	30.014940	50.978350	1	0.14	0.12	forest
1272	30.00948	50.974971	2	0.12	0.12	field
1273	29.786080	50.974810	2	0.11	0.1	village
1274	29.781017	50.974971	2	0.11	0.11	field
1275	29.776258	50.974971	2	0.12	0.1	field
1276	29.5334	50.97511	1	0.12	0.11	field
1277	29.528756	50.974971	2	0.11	0.11	field
1278	29.52447	50.97487	1	0.12	0.11	village
1279	29.520011	50.97556	2	0.11	0.11	village
1280	29.514478	50.974971	2	0.1	0.1	village
1281	29.51049	50.9752	1	0.1	0.09	village
1282	29.426039	50.971938	2	0.12	0.1	old field
1283	29.438323	50.971973	2	0.11	0.11	old field
1284	29.45201	50.97175	2	0.12	0.11	forest
1285	29.466865	50.971957	2	0.11	0.11	field
1286	29.481144	50.971957	2	0.12	0.11	forest
1287	29.495424	50.971957	2	0.11	0.11	forest
1288	29.509718	50.971973	2	0.11	0.1	field
1289	29.51458	50.97218	2	0.1	0.1	field
1290	29.519238	50.971973	2	0.11	0.09	field
1291	29.523996	50.971973	2	0.1	0.09	field
1292	29.52857	50.9721	2	0.1	0.1	old field
1293	29.533273	50.972414	2	0.1	0.1	field
1294	29.538276	50.971973	2	0.11	0.1	old field

1295	29.552542	50.971957	2	0.09	0.09	meadow
1296	29.566822	50.971957	2	0.1	0.09	forest
1297	29.581112	50.971973	2	0.11	0.11	forest
1298	29.595381	50.971957	2	0.11	0.11	forest
1299	29.60967	50.971973	2	0.12	0.11	forest
1300	29.62395	50.971973	2	0.11	0.11	forest
1301	29.638228	50.971973	2	0.12	0.11	forest
1302	29.652507	50.971973	2	0.12	0.11	forest
1303	29.666779	50.971957	2	0.11	0.11	forest
1304	29.681065	50.971973	2	0.11	0.1	forest
1305	29.695343	50.971973	2	0.11	0.11	forest
1306	29.709623	50.971973	2	0.11	0.1	meadow
1307	29.723902	50.971973	2	0.11	0.11	meadow
1308	29.738181	50.971973	2	0.11	0.1	field
1309	29.752459	50.971973	2	0.1	0.1	field
1310	29.765124	50.972	2	0.11	0.1	field
1311	29.776730	50.972230	1	0.12	0.1	field
1312	29.781017	50.971973	2	0.12	0.11	old field
1313	29.795297	50.971973	2	0.11	0.11	field
1314	29.809575	50.971973	2	0.12	0.1	field
1315	29.823855	50.971957	2	0.1	0.1	forest
1316	29.838134	50.971957	2	0.11	0.1	field
1317	29.851501	50.971936	2	0.12	0.11	meadow
1318	29.86669	50.971973	2	0.11	0.11	old field
1319	29.880973	50.971957	2	0.11	0.1	field
1320	29.909532	50.971957	2	0.12	0.12	old field
1321	29.923590	50.971240	1	0.11	0.1	field
1322	29.928566	50.971973	2	0.12	0.11	field
1323	29.938085	50.971973	2	0.11	0.11	field
1324	29.951846	50.972159	2	0.1	0.09	forest
1325	29.996931	50.971936	2	0.12	0.11	meadow
1326	30.008410	50.972610	1	0.12	0.11	field
1327	30.013960	50.972100	2	0.13	0.11	village
1328	30.023759	50.971973	2	0.14	0.12	old field
1329	30.038037	50.971973	2	0.23	0.22	forest
1330	30.051118	50.971818	2	0.13	0.12	meadow
1331	29.948000	50.968720	1	0.11	0.1	village
1332	29.942561	50.968247	2	0.11	0.09	village
1333	29.938085	50.968975	2	0.11	0.1	village
1334	29.933325	50.968975	2	0.1	0.09	village
1335	29.929145	50.96914	2	0.11	0.11	field
1336	29.875840	50.969170	1	0.11	0.11	village
1337	29.871450	50.968975	2	0.11	0.1	forest
1338	29.781017	50.968975	2	0.12	0.11	field
1339	29.776258	50.968975	2	0.1	0.1	village
1340	29.771498	50.968975	2	0.11	0.1	old field
1341	29.771498	50.965978	2	0.12	0.11	old field
1342	29.776258	50.965978	2	0.12	0.1	field
1343	29.781017	50.965978	2	0.11	0.11	field
1344	29.87145	50.965978	2	0.11	0.1	village
1345	29.87621	50.965978	2	0.11	0.11	field
1346	29.919160	50.966240	2	0.1	0.09	field

1347	29.922909	50.965688	2	0.1	0.1	field
1348	29.928566	50.965978	2	0.11	0.11	old field
1349	29.933325	50.965978	2	0.11	0.09	field
1350	29.938085	50.965978	2	0.1	0.1	village
1351	29.942845	50.965978	2	0.11	0.1	field
1352	29.944950	50.966160	2	0.11	0.1	yard
1353	30.052317	50.962981	2	0.22	0.2	forest
1354	30.039000	50.962530	1	0.25	0.24	forest
1355	30.024180	50.963000	2	0.2	0.18	forest
1356	30.009480	50.962981	2	0.12	0.12	forest
1357	29.996578	50.962413	1	0.15	0.14	forest
1358	29.982337	50.962177	2	0.12	0.1	meadow
1359	29.941250	50.963270	2	0.11	0.11	village
1360	29.936710	50.962800	1	0.13	0.13	field
1361	29.933325	50.962981	2	0.12	0.12	old field
1362	29.928011	50.962594	2	0.12	0.11	field
1363	29.922810	50.962730	1	0.1	0.09	field
1364	29.910550	50.964570	1	0.11	0.1	dam
1365	29.895249	50.962981	2	0.13	0.12	forest
1366	29.880770	50.963090	1	0.11	0.1	field
1367	29.87621	50.962981	2	0.11	0.1	field
1368	29.866540	50.962380	1	0.13	0.11	field
1369	29.851810	50.963390	2	0.12	0.11	forest
1370	29.838133	50.962981	2	0.13	0.11	forest
1371	29.823590	50.962570	1	0.13	0.11	forest
1372	29.809575	50.962981	2	0.12	0.1	old field
1373	29.795297	50.962981	2	0.13	0.11	forest
1374	29.781600	50.962940	1	0.13	0.12	field
1375	29.776043	50.962305	2	0.11	0.1	forest
1376	29.766465	50.962914	2	0.11	0.11	forest
1377	29.757219	50.962981	2	0.11	0.1	field
1378	29.753330	50.963360	1	0.11	0.1	field
1379	29.73859	50.96312	1	0.09	0.09	field
1380	29.723898	50.962964	2	0.11	0.11	forest
1381	29.708696	50.962569	2	0.11	0.1	forest
1382	29.695044	50.961887	1	0.12	0.11	forest
1383	29.681065	50.962981	2	0.12	0.12	forest
1384	29.667737	50.962313	2	0.12	0.11	forest
1385	29.651804	50.962583	1	0.11	0.09	forest
1386	29.63822	50.962964	2	0.1	0.1	forest
1387	29.62394	50.962964	2	0.1	0.09	forest
1388	29.609604	50.962043	1	0.11	0.11	forest
1389	29.595391	50.962981	2	0.12	0.11	forest
1390	29.581112	50.962981	2	0.11	0.11	forest
1391	29.568409	50.963843	1	0.1	0.09	forest
1392	29.552555	50.962981	2	0.11	0.1	forest
1393	29.538276	50.962981	2	0.12	0.1	forest
1394	29.52422	50.962981	1	0.12	0.11	forest
1395	29.495424	50.962964	2	0.1	0.1	forest
1396	29.48104	50.96309	1	0.11	0.1	forest
1397	29.466881	50.962981	2	0.12	0.11	forest
1398	29.452585	50.962964	2	0.12	0.12	old field

1399	29.43806	50.96295	1	0.12	0.11	forest
1400	29.424044	50.962981	2	0.12	0.12	forest
1401	29.46316	50.959923	2	0.11	0.11	field
1402	29.466854	50.959083	2	0.12	0.1	field
1403	29.74787	50.96012	2	0.11	0.11	field
1404	29.752459	50.959983	2	0.11	0.1	field
1405	29.757219	50.959983	2	0.1	0.1	village
1406	29.761979	50.959983	2	0.11	0.1	old field
1407	29.88097	50.959983	2	0.11	0.11	field
1408	29.885729	50.959983	2	0.12	0.1	field
1409	29.919047	50.959983	2	0.1	0.1	old field
1410	29.923806	50.959983	2	0.11	0.1	field
1411	29.928566	50.959983	2	0.12	0.1	field
1412	29.932970	50.959950	2	0.1	0.09	field
1413	29.937789	50.959974	2	0.11	0.1	village
1414	29.932910	50.956840	2	0.11	0.1	yard
1415	29.928566	50.956985	2	0.12	0.11	field
1416	29.923806	50.956985	2	0.13	0.11	old field
1417	29.885910	50.956750	1	0.11	0.1	field
1418	29.761979	50.956985	2	0.1	0.1	old field
1419	29.75722	50.95706	2	0.11	0.1	garden
1420	29.752459	50.956985	2	0.1	0.1	field
1421	29.7477	50.956985	2	0.1	0.09	field
1422	29.742941	50.956985	2	0.11	0.1	field
1423	29.498977	50.956761	2	0.11	0.11	field
1424	29.495439	50.956985	2	0.11	0.11	village
1425	29.48112	50.956523	2	0.11	0.1	field
1426	29.4764	50.956985	2	0.11	0.11	village
1427	29.466881	50.956985	1	0.11	0.11	old field
1428	29.424026	50.95397	2	0.13	0.11	forest
1429	29.438306	50.95397	2	0.13	0.12	old field
1430	29.452585	50.95397	2	0.12	0.11	meadow
1431	29.462121	50.953985	2	0.11	0.11	field
1432	29.466881	50.953985	2	0.12	0.11	field
1433	29.481144	50.95397	1	0.1	0.09	meadow
1434	29.48592	50.953985	2	0.1	0.1	field
1435	29.490679	50.953985	2	0.11	0.1	village
1436	29.495439	50.953985	1	0.12	0.11	field
1437	29.500199	50.953985	2	0.11	0.11	field
1438	29.509704	50.95397	2	0.1	0.09	field
1439	29.523983	50.95397	2	0.1	0.1	meadow
1440	29.539036	50.954559	2	0.1	0.1	old field
1441	29.552542	50.95397	2	0.1	0.09	old field
1442	29.562074	50.953985	2	0.1	0.1	old field
1443	29.566834	50.953985	1	0.09	0.09	old field
1444	29.576353	50.953985	1	0.11	0.11	village
1445	29.581102	50.95397	2	0.12	0.11	forest
1446	29.595391	50.953985	2	0.12	0.1	field
1447	29.610967	50.954	2	0.12	0.11	forest
1448	29.62395	50.953985	2	0.12	0.12	forest
1449	29.638228	50.953985	2	0.11	0.11	field
1450	29.652507	50.953985	2	0.12	0.1	forest

1451	29.666779	50.95397	2	0.1	0.09	forest
1452	29.67716	50.95364	2	0.1	0.1	field
1453	29.681	50.95401	2	0.1	0.09	field
1454	29.695343	50.953985	2	0.13	0.12	forest
1455	29.708851	50.953899	2	0.13	0.11	forest
1456	29.723902	50.953985	2	0.12	0.1	forest
1457	29.738177	50.95397	2	0.11	0.11	field
1458	29.742941	50.953985	2	0.1	0.1	field
1459	29.7477	50.953985	2	0.1	0.09	field
1460	29.75214	50.95394	1	0.11	0.1	old field
1461	29.757219	50.953985	2	0.11	0.11	old field
1462	29.761979	50.953985	2	0.11	0.11	field
1463	29.7667	50.95425	1	0.11	0.1	forest
1464	29.781017	50.953985	2	0.1	0.1	field
1465	29.795297	50.953985	2	0.11	0.1	forest
1466	29.809575	50.953985	2	0.11	0.11	forest
1467	29.823854	50.953985	2	0.12	0.1	old field
1468	29.838134	50.95397	2	0.12	0.11	forest
1469	29.852412	50.953985	2	0.11	0.11	old field
1470	29.86669	50.953985	2	0.12	0.12	old field
1471	29.881070	50.954100	2	0.14	0.14	forest
1472	29.895249	50.953985	2	0.14	0.12	old field
1473	29.909528	50.953985	2	0.13	0.11	old field
1474	29.92442	50.954023	2	0.12	0.11	old field
1475	29.927568	50.953443	1	0.1	0.1	forest
1476	29.932012	50.954182	2	0.1	0.1	field
1477	29.965239	50.953322	2	0.09	0.09	meadow
1478	29.979825	50.954057	2	0.1	0.1	meadow
1479	29.99521	50.95397	2	0.15	0.13	forest
1480	30.00949	50.95397	2	0.18	0.16	forest
1481	30.023759	50.953985	2	0.23	0.22	forest
1482	30.038049	50.95397	2	0.22	0.21	forest
1483	30.052317	50.953985	2	0.2	0.19	forest
1484	30.067967	50.954	2	0.15	0.13	meadow
1485	29.890489	50.950989	2	0.13	0.12	old field
1486	29.752459	50.950989	2	0.1	0.1	field
1487	29.7477	50.950989	2	0.11	0.1	old field
1488	29.742941	50.950989	2	0.11	0.11	field
1489	29.681065	50.950989	2	0.1	0.1	field
1490	29.67626	50.95103	1	0.1	0.09	field
1491	29.581112	50.950989	1	0.11	0.1	field
1492	29.566834	50.950989	2	0.1	0.1	field
1493	29.562074	50.950989	2	0.1	0.09	field
1494	29.48116	50.950989	2	0.11	0.1	field
1495	29.4764	50.950989	2	0.11	0.11	field
1496	29.457362	50.950989	2	0.12	0.11	field
1497	29.45244	50.95101	2	0.11	0.11	field
1498	29.447843	50.947991	2	0.12	0.11	field
1499	29.45218	50.94813	1	0.13	0.11	field
1500	29.48116	50.947991	2	0.12	0.11	meadow
1501	29.590632	50.947991	2	0.12	0.1	field
1502	29.7477	50.947991	1	0.11	0.11	field

1503	29.885729	50.947991	2	0.13	0.11	old field
1504	29.890489	50.947991	2	0.13	0.13	field
1505	29.894940	50.947810	1	0.16	0.14	field
1506	29.900008	50.947991	2	0.14	0.12	field
1507	29.904768	50.947991	2	0.12	0.11	village
1508	29.909690	50.948060	1	0.1	0.1	field
1509	29.976163	50.947991	2	0.11	0.1	field
1510	29.981310	50.947850	1	0.12	0.11	old field
1511	30.080875	50.944993	2	0.14	0.12	meadow
1512	30.065145	50.944693	2	0.16	0.15	forest
1513	30.052317	50.944993	2	0.17	0.16	forest
1514	30.038037	50.944993	2	0.16	0.16	forest
1515	30.023759	50.944993	2	0.15	0.15	forest
1516	30.00948	50.944993	2	0.14	0.12	forest
1517	29.99521	50.944977	2	0.11	0.09	forest
1518	29.985681	50.944993	2	0.11	0.1	field
1519	29.98093	50.944977	2	0.1	0.09	field
1520	29.976163	50.944993	2	0.1	0.1	old field
1521	29.971403	50.944993	2	0.1	0.09	field
1522	29.966644	50.944993	2	0.09	0.09	meadow
1523	29.954323	50.944945	2	0.1	0.1	meadow
1524	29.914288	50.944993	2	0.12	0.11	village
1525	29.909140	50.945080	1	0.16	0.14	village
1526	29.904768	50.944993	2	0.13	0.13	village
1527	29.900008	50.944993	2	0.13	0.12	village
1528	29.894270	50.944230	1	0.12	0.1	field
1529	29.890489	50.944993	2	0.11	0.11	village
1530	29.885729	50.944993	2	0.12	0.12	field
1531	29.880600	50.944870	1	0.11	0.1	village
1532	29.866705	50.944639	2	0.1	0.09	field
1533	29.852412	50.944993	2	0.11	0.1	old field
1534	29.839258	50.94496	2	0.11	0.11	old field
1535	29.823854	50.944993	2	0.11	0.1	old field
1536	29.809575	50.944993	2	0.1	0.1	old field
1537	29.795296	50.944977	2	0.11	0.1	forest
1538	29.781017	50.944993	2	0.13	0.11	forest
1539	29.766738	50.944993	2	0.12	0.11	forest
1540	29.752457	50.944977	2	0.12	0.1	forest
1541	29.738181	50.944993	2	0.11	0.1	forest
1542	29.721931	50.945059	2	0.12	0.1	forest
1543	29.709618	50.944977	2	0.11	0.1	forest
1544	29.694561	50.945363	2	0.09	0.09	meadow
1545	29.681065	50.944993	2	0.1	0.09	meadow
1546	29.666779	50.944977	2	0.1	0.1	meadow
1547	29.652507	50.944993	2	0.12	0.11	forest
1548	29.63822	50.944977	2	0.11	0.1	meadow
1549	29.62395	50.944993	2	0.11	0.1	forest
1550	29.60967	50.944993	2	0.1	0.1	meadow
1551	29.595391	50.944993	2	0.1	0.1	meadow
1552	29.583336	50.945035	2	0.1	0.09	old field
1553	29.566834	50.944993	2	0.11	0.11	old field
1554	29.552555	50.944993	2	0.11	0.1	old field

1555	29.538276	50.944993	2	0.11	0.1	old field
1556	29.523996	50.944993	2	0.12	0.11	forest
1557	29.509704	50.944977	2	0.11	0.11	field
1558	29.495439	50.944993	2	0.1	0.09	field
1559	29.490679	50.944993	2	0.11	0.1	field
1560	29.48592	50.944993	2	0.1	0.1	field
1561	29.481144	50.944977	2	0.11	0.09	field
1562	29.466881	50.944993	2	0.11	0.11	field
1563	29.452603	50.944993	2	0.12	0.12	old field
1564	29.438306	50.944977	2	0.12	0.11	meadow
1565	29.424044	50.944993	2	0.13	0.12	forest
1566	29.876318	50.943449	1	0.13	0.13	village
1567	29.88096	50.942906	2	0.11	0.11	field
1568	29.885729	50.941995	2	0.13	0.12	old field
1569	29.890489	50.941995	2	0.12	0.12	village
1570	29.895249	50.941995	2	0.12	0.1	village
1571	29.900340	50.942120	2	0.13	0.1	village
1572	29.904768	50.941995	2	0.12	0.12	village
1573	29.909528	50.941995	2	0.13	0.11	village
1574	29.914288	50.941995	2	0.12	0.12	village
1575	29.971810	50.942240	1	0.11	0.1	old field
1576	29.914288	50.938999	2	0.11	0.11	village
1577	29.909528	50.938999	2	0.12	0.12	village
1578	29.904768	50.938999	2	0.11	0.11	village
1579	29.900008	50.938999	2	0.13	0.11	village
1580	29.895249	50.938999	2	0.12	0.11	field
1581	29.890489	50.938999	2	0.12	0.12	village
1582	29.885729	50.938999	2	0.13	0.11	village
1583	29.88097	50.938999	2	0.12	0.11	old field
1584	29.452585	50.935984	2	0.12	0.11	meadow
1585	29.466881	50.936001	2	0.11	0.11	meadow
1586	29.481144	50.935984	1	0.1	0.1	field
1587	29.495424	50.935984	2	0.1	0.09	field
1588	29.509704	50.935984	2	0.1	0.09	field
1589	29.523983	50.935984	1	0.11	0.1	meadow
1590	29.538263	50.935984	2	0.1	0.09	meadow
1591	29.552555	50.936001	2	0.11	0.1	field
1592	29.566834	50.936001	1	0.11	0.11	field
1593	29.581102	50.935984	2	0.11	0.1	meadow
1594	29.595381	50.935984	2	0.1	0.09	meadow
1595	29.609661	50.935984	1	0.11	0.1	forest
1596	29.62394	50.935984	2	0.12	0.11	forest
1597	29.633469	50.936001	2	0.11	0.11	old field
1598	29.63822	50.935984	2	0.11	0.11	forest
1599	29.65263	50.93602	1	0.11	0.11	forest
1600	29.666876	50.936149	2	0.13	0.12	forest
1601	29.680514	50.935675	2	0.1	0.09	old field
1602	29.695122	50.936559	1	0.12	0.11	forest
1603	29.709623	50.936001	2	0.13	0.12	forest
1604	29.723898	50.935984	2	0.12	0.1	forest
1605	29.73937	50.93682	1	0.11	0.09	forest
1606	29.752457	50.935984	2	0.12	0.11	forest

1607	29.766738	50.936001	2	0.12	0.12	forest
1608	29.780267	50.935877	1	0.13	0.12	forest
1609	29.795296	50.935984	2	0.11	0.1	forest
1610	29.809575	50.936001	2	0.11	0.11	forest
1611	29.82374	50.93575	1	0.11	0.1	forest
1612	29.838134	50.935984	2	0.1	0.1	field
1613	29.852414	50.935984	2	0.11	0.1	forest
1614	29.866694	50.935984	1	0.12	0.11	field
1615	29.881480	50.936310	1	0.13	0.12	field
1616	29.885729	50.936001	2	0.12	0.11	field
1617	29.890489	50.936001	2	0.11	0.11	field
1618	29.895249	50.936001	1	0.13	0.11	field
1619	29.900008	50.936001	2	0.12	0.11	field
1620	29.904768	50.936001	2	0.12	0.1	field
1621	29.90966	50.93622	1	0.12	0.11	field
1622	29.923812	50.935984	2	0.11	0.11	meadow
1623	29.938092	50.935984	2	0.11	0.1	meadow
1624	29.953120	50.936090	1	0.14	0.12	meadow
1625	29.965972	50.937427	2	0.1	0.09	forest
1626	29.98093	50.935984	2	0.12	0.11	forest
1627	29.997449	50.936169	1	0.13	0.12	forest
1628	30.00949	50.935984	2	0.14	0.12	forest
1629	30.023769	50.935984	2	0.15	0.14	forest
1630	30.03905	50.93582	1	0.16	0.14	forest
1631	30.052317	50.936001	2	0.15	0.14	forest
1632	30.066608	50.935984	2	0.14	0.14	forest
1633	30.080888	50.935984	1	0.11	0.1	meadow
1634	29.963421	50.932952	2	0.13	0.12	forest
1635	29.957590	50.932770	2	0.14	0.13	meadow
1636	29.904663	50.932624	2	0.1	0.1	village
1637	29.900008	50.933003	2	0.09	0.09	village
1638	29.895249	50.933003	2	0.09	0.09	village
1639	29.890489	50.933003	2	0.12	0.11	парк
1640	29.885729	50.933003	2	0.12	0.1	village
1641	29.63793	50.93321	1	0.11	0.09	field
1642	29.638228	50.930005	2	0.1	0.09	field
1643	29.642988	50.930005	2	0.1	0.1	village
1644	29.895249	50.930005	2	0.11	0.1	field
1645	29.900008	50.930005	2	0.12	0.11	village
1646	29.904768	50.930005	2	0.1	0.1	village
1647	29.961570	50.930130	1	0.11	0.1	old field
1648	29.966644	50.930005	2	0.18	0.13	forest
1649	30.080875	50.927008	2	0.14	0.12	forest
1650	30.066608	50.92699	2	0.14	0.13	forest
1651	30.052328	50.92699	2	0.15	0.13	forest
1652	30.040169	50.927222	2	0.15	0.14	forest
1653	30.023769	50.92699	2	0.14	0.14	forest
1654	30.00948	50.927008	2	0.14	0.12	forest
1655	29.995201	50.927008	2	0.13	0.12	forest
1656	29.98093	50.92699	2	0.12	0.11	forest
1657	29.967218	50.926938	2	0.13	0.12	forest
1658	29.952371	50.92699	2	0.1	0.09	meadow

1659	29.938092	50.92699	2	0.09	0.09	meadow
1660	29.923806	50.927008	2	0.1	0.1	meadow
1661	29.909532	50.92699	2	0.1	0.09	meadow
1662	29.900008	50.927008	2	0.11	0.1	field
1663	29.89579	50.92674	1	0.12	0.1	field
1664	29.890489	50.927008	2	0.11	0.1	field
1665	29.88097	50.927008	2	0.11	0.1	field
1666	29.86669	50.927008	2	0.12	0.11	field
1667	29.852412	50.927008	2	0.11	0.11	field
1668	29.838134	50.92699	2	0.11	0.1	old field
1669	29.82284	50.927401	2	0.12	0.11	forest
1670	29.809575	50.927008	2	0.12	0.1	forest
1671	29.794264	50.926844	2	0.12	0.11	forest
1672	29.781016	50.92699	2	0.13	0.12	forest
1673	29.766738	50.927008	2	0.12	0.11	forest
1674	29.752459	50.927008	2	0.11	0.11	forest
1675	29.738177	50.92699	2	0.12	0.11	forest
1676	29.722722	50.927257	2	0.1	0.1	field
1677	29.709623	50.927008	2	0.11	0.09	field
1678	29.695338	50.92699	2	0.1	0.09	bog
1679	29.68129	50.92695	2	0.09	0.09	forest
1680	29.666779	50.92699	2	0.12	0.11	forest
1681	29.65778	50.926965	2	0.12	0.1	field
1682	29.652507	50.927008	2	0.12	0.11	village
1683	29.64706	50.92717	2	0.12	0.11	village
1684	29.642988	50.927008	2	0.11	0.11	field
1685	29.63822	50.92699	2	0.1	0.09	field
1686	29.624631	50.927109	2	0.1	0.1	forest
1687	29.60967	50.927008	2	0.11	0.1	forest
1688	29.595381	50.92699	2	0.09	0.09	meadow
1689	29.581102	50.92699	2	0.09	0.09	bog
1690	29.566822	50.92699	2	0.1	0.09	old field
1691	29.552542	50.92699	2	0.11	0.1	forest
1692	29.538276	50.927008	2	0.09	0.09	old field
1693	29.523983	50.92699	2	0.1	0.1	village
1694	29.519238	50.927008	2	0.11	0.1	village
1695	29.508803	50.92629	2	0.1	0.1	village
1696	29.504959	50.927008	2	0.1	0.09	meadow
1697	29.500199	50.927008	2	0.09	0.09	meadow
1698	29.49577	50.92687	1	0.1	0.1	meadow
1699	29.490679	50.927008	2	0.1	0.09	meadow
1700	29.48116	50.927008	2	0.1	0.09	field
1701	29.466881	50.927008	2	0.1	0.08	field
1702	29.495439	50.924011	2	0.09	0.09	old field
1703	29.50042	50.924011	2	0.1	0.09	field
1704	29.504959	50.924011	2	0.1	0.1	field
1705	29.51027	50.92461	1	0.09	0.09	old field
1706	29.514478	50.924011	2	0.1	0.09	field
1707	29.519238	50.924011	2	0.09	0.09	meadow
1708	29.523996	50.92474	1	0.1	0.09	meadow
1709	29.642988	50.924011	2	0.11	0.1	field
1710	29.64714	50.92416	2	0.12	0.11	village

1711	29.65255	50.92395	1	0.13	0.12	field
1712	29.657267	50.924011	2	0.12	0.11	village
1713	29.662026	50.924011	2	0.1	0.1	field
1714	29.704863	50.924011	2	0.1	0.09	field
1715	29.70967	50.9239	1	0.11	0.1	field
1716	29.714382	50.924011	2	0.1	0.1	field
1717	29.719142	50.924011	2	0.11	0.11	field
1718	29.723902	50.924011	1	0.1	0.1	old field
1719	29.728661	50.924011	2	0.09	0.09	field
1720	29.838022	50.923567	2	0.11	0.09	old field
1721	29.842368	50.924155	2	0.1	0.09	field
1722	29.8495	50.92371	2	0.1	0.09	field
1723	29.85221	50.92377	1	0.12	0.1	field
1724	29.947605	50.921013	2	0.11	0.11	field
1725	29.942845	50.921013	2	0.12	0.1	field
1726	29.938085	50.921013	2	0.11	0.1	field
1727	29.857172	50.921013	2	0.1	0.1	field
1728	29.85211	50.92139	2	0.11	0.1	field
1729	29.847653	50.921013	2	0.1	0.1	field
1730	29.842893	50.921013	2	0.1	0.09	field
1731	29.662026	50.921013	2	0.1	0.09	field
1732	29.657263	50.921345	2	0.11	0.1	field
1733	29.65271	50.921607	2	0.11	0.11	field
1734	29.576353	50.921013	2	0.1	0.1	field
1735	29.571594	50.921013	1	0.1	0.09	field
1736	29.566834	50.921013	2	0.09	0.09	field
1737	29.538276	50.921013	1	0.09	0.09	field
1738	29.533516	50.921013	2	0.09	0.09	field
1739	29.528756	50.921013	2	0.1	0.09	field
1740	29.523996	50.921013	2	0.11	0.1	field
1741	29.519238	50.921013	2	0.11	0.11	village
1742	29.481144	50.917997	2	0.1	0.08	field
1743	29.495439	50.918015	2	0.1	0.09	forest
1744	29.509718	50.918015	2	0.11	0.1	field
1745	29.523996	50.918015	2	0.11	0.1	meadow
1746	29.538276	50.918015	2	0.11	0.11	field
1747	29.552555	50.918015	2	0.12	0.11	forest
1748	29.566834	50.918015	2	0.12	0.11	old field
1749	29.581112	50.918015	2	0.12	0.1	forest
1750	29.595391	50.918015	2	0.1	0.1	forest
1751	29.609661	50.917997	2	0.11	0.1	old field
1752	29.62394	50.917997	2	0.12	0.1	field
1753	29.63337	50.91805	1	0.11	0.09	field
1754	29.638228	50.918015	2	0.11	0.11	field
1755	29.642988	50.918015	2	0.11	0.1	field
1756	29.6525	50.917997	2	0.11	0.09	old field
1757	29.66702	50.91794	1	0.1	0.1	field
1758	29.681065	50.918015	2	0.1	0.1	forest
1759	29.695343	50.918015	2	0.11	0.1	old field
1760	29.709623	50.918015	2	0.12	0.11	forest
1761	29.723902	50.918015	2	0.1	0.09	forest
1762	29.737695	50.917952	2	0.11	0.11	forest

1763	29.7525	50.91796	2	0.11	0.11	forest
1764	29.766738	50.918015	2	0.11	0.1	forest
1765	29.781017	50.918015	2	0.11	0.1	forest
1766	29.796066	50.91833	2	0.1	0.1	forest
1767	29.809575	50.917997	2	0.11	0.1	forest
1768	29.823854	50.918015	2	0.1	0.09	field
1769	29.83874	50.91771	1	0.11	0.09	field
1770	29.842893	50.918015	2	0.1	0.1	field
1771	29.847653	50.918015	2	0.1	0.1	field
1772	29.8523	50.91783	1	0.1	0.09	field
1773	29.865998	50.918367	2	0.11	0.1	old field
1774	29.881040	50.918310	2	0.1	0.09	field
1775	29.895253	50.917997	2	0.11	0.11	meadow
1776	29.909528	50.918015	2	0.12	0.1	meadow
1777	29.923812	50.917997	2	0.11	0.1	meadow
1778	29.933325	50.917716	2	0.12	0.1	field
1779	29.938085	50.918015	2	0.12	0.11	field
1780	29.942845	50.918015	2	0.14	0.13	village
1781	29.946078	50.918490	1	0.13	0.13	field
1782	29.952364	50.918015	2	0.13	0.12	field
1783	29.961884	50.918015	2	0.12	0.11	field
1784	29.966644	50.918015	2	0.11	0.11	field
1785	29.980922	50.918015	2	0.13	0.13	forest
1786	29.99521	50.917997	2	0.13	0.12	forest
1787	30.00948	50.918015	2	0.13	0.13	forest
1788	30.023759	50.918015	2	0.14	0.12	forest
1789	30.038037	50.918015	2	0.15	0.13	forest
1790	30.052317	50.918015	2	0.16	0.14	forest
1791	30.066608	50.917997	2	0.15	0.12	forest
1792	30.080875	50.918015	2	0.14	0.12	forest
1793	29.967110	50.914960	1	0.11	0.1	field
1794	29.961884	50.915018	2	0.1	0.1	meadow
1795	29.957124	50.915018	2	0.13	0.12	garden
1796	29.952491	50.914544	2	0.11	0.1	field
1797	29.947605	50.915018	2	0.1	0.09	village
1798	29.943060	50.914610	2	0.11	0.11	village
1799	29.938950	50.915520	1	0.12	0.12	field
1800	29.933325	50.915018	2	0.11	0.1	forest
1801	29.851334	50.914992	2	0.11	0.09	field
1802	29.847653	50.915018	2	0.1	0.09	field
1803	29.84282	50.915	1	0.11	0.1	field
1804	29.838133	50.915018	2	0.11	0.1	field
1805	29.657267	50.915018	2	0.1	0.1	forest
1806	29.652507	50.915018	2	0.12	0.1	village
1807	29.64777	50.91491	1	0.09	0.09	field
1808	29.642988	50.915018	2	0.09	0.09	field
1809	29.657267	50.912021	2	0.1	0.09	field
1810	29.662026	50.912021	2	0.09	0.09	field
1811	29.6682	50.91179	1	0.09	0.09	field
1812	29.833373	50.912021	2	0.12	0.1	garden
1813	29.838133	50.912021	2	0.11	0.1	field
1814	29.842893	50.912021	2	0.11	0.1	field

1815	29.84842	50.91176	2	0.12	0.11	bushes
1816	29.938085	50.912021	2	0.12	0.11	field
1817	29.942845	50.912021	2	0.15	0.14	village
1818	29.947605	50.912021	2	0.11	0.1	village
1819	29.952364	50.912021	2	0.12	0.11	village
1820	29.957124	50.912021	2	0.12	0.11	village
1821	29.961919	50.911703	2	0.11	0.11	field
1822	30.095153	50.909023	2	0.14	0.13	meadow
1823	30.080888	50.909004	2	0.14	0.14	forest
1824	30.064622	50.908769	1	0.15	0.14	forest
1825	30.052328	50.909004	2	0.14	0.14	forest
1826	30.037079	50.908879	1	0.14	0.13	forest
1827	30.023769	50.909004	2	0.13	0.13	forest
1828	30.00949	50.909004	2	0.12	0.11	forest
1829	29.99518	50.909004	1	0.11	0.11	field
1830	29.980922	50.909023	2	0.11	0.1	field
1831	29.966651	50.909004	2	0.1	0.1	field
1832	29.962957	50.909081	2	0.11	0.1	field
1833	29.950215	50.908862	1	0.11	0.1	field
1834	29.938085	50.909023	2	0.14	0.13	forest
1835	29.9224	50.909312	2	0.1	0.1	forest
1836	29.909460	50.910150	1	0.12	0.12	village
1837	29.895253	50.909004	2	0.1	0.09	meadow
1838	29.88097	50.909023	2	0.1	0.1	meadow
1839	29.86494	50.910072	1	0.1	0.09	meadow
1840	29.852412	50.909023	2	0.1	0.09	field
1841	29.842893	50.909023	2	0.1	0.1	field
1842	29.838133	50.909023	1	0.11	0.11	field
1843	29.823855	50.909004	1	0.13	0.11	forest
1844	29.809575	50.909023	2	0.12	0.11	forest
1845	29.795296	50.909004	2	0.13	0.12	forest
1846	29.780774	50.9085	1	0.12	0.12	forest
1847	29.766738	50.909023	2	0.09	0.09	forest
1848	29.752457	50.909004	2	0.1	0.09	forest
1849	29.736924	50.908987	1	0.12	0.11	forest
1850	29.723898	50.909004	2	0.11	0.1	forest
1851	29.709623	50.909023	2	0.1	0.09	forest
1852	29.695276	50.908891	1	0.1	0.1	forest
1853	29.681059	50.909004	2	0.09	0.09	field
1854	29.676306	50.909023	2	0.1	0.09	field
1855	29.67199	50.9092	2	0.09	0.09	village
1856	29.666786	50.909023	2	0.09	0.09	field
1857	29.6514	50.90976	1	0.09	0.09	old field
1858	29.63822	50.909004	2	0.1	0.09	field
1859	29.62395	50.909023	2	0.1	0.1	field
1860	29.610752	50.909185	1	0.1	0.09	field
1861	29.604911	50.909023	2	0.09	0.09	old field
1862	29.595381	50.909004	2	0.11	0.1	forest
1863	29.581102	50.909004	2	0.12	0.11	forest
1864	29.566716	50.909004	1	0.1	0.09	old field
1865	29.552542	50.909004	2	0.09	0.09	old field
1866	29.538263	50.909004	2	0.09	0.09	field

1867	29.52413	50.90913	1	0.09	0.09	field
1868	29.509718	50.909023	2	0.09	0.09	field
1869	29.495424	50.909004	2	0.12	0.1	old field
1870	29.48116	50.909023	1	0.12	0.11	old field
1871	29.60967	50.906025	2	0.09	0.09	garden
1872	29.676306	50.906025	2	0.1	0.09	field
1873	29.6809	50.90598	1	0.11	0.09	field
1874	29.833373	50.906025	2	0.12	0.11	field
1875	29.838133	50.906025	2	0.1	0.09	field
1876	29.951886	50.90624	2	0.11	0.09	village
1877	29.60967	50.903028	2	0.1	0.1	field
1878	29.604911	50.903028	2	0.12	0.11	field
1879	29.600151	50.903028	2	0.12	0.12	field
1880	29.48116	50.900031	2	0.11	0.11	forest
1881	29.496143	50.899568	2	0.12	0.1	field
1882	29.509718	50.900031	2	0.11	0.11	field
1883	29.524773	50.900119	2	0.11	0.1	field
1884	29.539414	50.900028	2	0.12	0.12	field
1885	29.552542	50.900011	2	0.11	0.1	field
1886	29.566822	50.900011	2	0.11	0.11	field
1887	29.581112	50.900031	2	0.12	0.1	forest
1888	29.595381	50.900011	2	0.1	0.1	field
1889	29.604911	50.900031	2	0.12	0.12	village
1890	29.61066	50.9006	1	0.1	0.1	village
1891	29.61443	50.900031	2	0.11	0.1	field
1892	29.62394	50.900011	2	0.11	0.11	field
1893	29.63822	50.900011	2	0.12	0.1	field
1894	29.6525	50.900011	2	0.12	0.11	forest
1895	29.666786	50.900031	2	0.11	0.1	old field
1896	29.681065	50.900031	2	0.09	0.09	meadow
1897	29.695343	50.900031	2	0.1	0.09	meadow
1898	29.709623	50.900031	2	0.1	0.1	field
1899	29.723902	50.900031	2	0.1	0.09	forest
1900	29.738177	50.900011	2	0.11	0.1	forest
1901	29.752457	50.900011	2	0.1	0.09	forest
1902	29.766738	50.900031	2	0.1	0.1	forest
1903	29.781016	50.900011	2	0.12	0.11	forest
1904	29.795296	50.900011	2	0.11	0.11	forest
1905	29.809575	50.900011	2	0.12	0.1	forest
1906	29.823854	50.900031	2	0.11	0.11	forest
1907	29.838134	50.900011	2	0.1	0.09	field
1908	29.852412	50.900031	2	0.11	0.09	field
1909	29.866694	50.900011	2	0.1	0.09	meadow
1910	29.880973	50.900011	2	0.09	0.09	meadow
1911	29.895249	50.900031	2	0.1	0.09	meadow
1912	29.910453	50.899832	2	0.12	0.12	forest
1913	29.922947	50.900124	2	0.13	0.12	forest
1914	29.938085	50.900031	2	0.13	0.12	forest
1915	29.951070	50.900011	2	0.12	0.11	forest
1916	29.966644	50.900031	2	0.13	0.11	forest
1917	29.98093	50.900011	2	0.14	0.12	forest
1918	29.995201	50.900031	1	0.17	0.15	forest

1919	30.00948	50.900031	2	0.14	0.13	forest
1920	30.023759	50.900031	2	0.14	0.13	forest
1921	30.038037	50.900031	2	0.14	0.12	forest
1922	30.052317	50.900031	2	0.12	0.11	forest
1923	30.066608	50.900011	2	0.13	0.11	forest
1924	30.080875	50.900031	2	0.14	0.13	forest
1925	30.0938	50.90025	2	0.14	0.12	forest
1926	29.61443	50.897033	2	0.12	0.12	old field
1927	29.60967	50.897033	2	0.13	0.12	field
1928	29.502	50.897033	1	0.12	0.11	field
1929	29.495439	50.897033	2	0.1	0.1	field
1930	29.50039	50.900031	2	0.09	0.09	old field
1931	29.500972	50.894624	2	0.11	0.1	old field
1932	29.61443	50.894035	2	0.12	0.11	village
1933	29.7048	50.8945	1	0.09	0.09	old field
1934	30.095167	50.891017	2	0.13	0.11	forest
1935	30.080875	50.891037	2	0.13	0.12	forest
1936	30.066608	50.891017	2	0.14	0.12	forest
1937	30.052328	50.891017	2	0.12	0.12	forest
1938	30.037594	50.890745	2	0.12	0.11	forest
1939	30.023769	50.891017	2	0.13	0.12	forest
1940	30.00948	50.891037	2	0.12	0.11	forest
1941	29.995201	50.891037	2	0.1	0.09	forest
1942	29.980930	50.891017	2	0.12	0.11	forest
1943	29.966644	50.891037	2	0.11	0.1	forest
1944	29.952364	50.891037	2	0.13	0.11	forest
1945	29.938092	50.891017	2	0.12	0.11	forest
1946	29.923812	50.891017	2	0.11	0.1	field
1947	29.90845	50.890952	2	0.11	0.11	field
1948	29.894026	50.891118	2	0.1	0.09	meadow
1949	29.880973	50.891017	2	0.1	0.1	meadow
1950	29.864841	50.891554	2	0.1	0.09	meadow
1951	29.852414	50.891017	2	0.1	0.1	field
1952	29.838133	50.891037	2	0.11	0.09	forest
1953	29.823855	50.891017	2	0.1	0.1	forest
1954	29.809575	50.891037	2	0.11	0.11	forest
1955	29.795499	50.891976	2	0.11	0.1	forest
1956	29.781017	50.891037	2	0.1	0.09	forest
1957	29.766738	50.891037	2	0.09	0.09	forest
1958	29.752457	50.891017	2	0.1	0.09	forest
1959	29.738177	50.891017	2	0.11	0.1	forest
1960	29.723902	50.891037	2	0.1	0.09	meadow
1961	29.71416	50.89088	2	0.12	0.1	old field
1962	29.709623	50.891037	2	0.1	0.1	field
1963	29.695338	50.891017	2	0.12	0.11	forest
1964	29.681059	50.891017	2	0.12	0.1	forest
1965	29.666786	50.891037	2	0.11	0.1	field
1966	29.652507	50.891037	2	0.12	0.1	forest
1967	29.63822	50.891017	2	0.11	0.11	forest
1968	29.62394	50.891017	2	0.12	0.1	forest
1969	29.61509	50.89129	1	0.11	0.1	old field
1970	29.60884	50.891155	2	0.11	0.1	field

1971	29.596255	50.890872	2	0.09	0.09	forest
1972	29.581112	50.891037	2	0.1	0.09	forest
1973	29.566247	50.890165	2	0.11	0.1	forest
1974	29.552542	50.891017	2	0.11	0.11	field
1975	29.537548	50.890782	2	0.1	0.09	forest
1976	29.523983	50.891017	2	0.1	0.1	old field
1977	29.509718	50.891037	2	0.1	0.1	forest
1978	29.495439	50.891037	2	0.11	0.1	forest
1979	29.552555	50.88804	2	0.1	0.1	field
1980	29.557315	50.88804	2	0.11	0.1	forest
1981	29.61443	50.88804	2	0.1	0.09	field
1982	29.719142	50.88804	2	0.09	0.09	field
1983	29.890489	50.88804	2	0.1	0.1	field
1984	29.985320	50.888260	2	0.13	0.12	old field
1985	29.986943	50.885522	1	0.1	0.1	field
1986	29.980922	50.885042	2	0.11	0.1	field
1987	29.890489	50.885042	2	0.09	0.09	field
1988	29.885729	50.885042	1	0.1	0.09	field
1989	29.71897	50.88525	1	0.11	0.1	field
1990	29.61443	50.885042	2	0.09	0.09	old field
1991	29.557315	50.885042	2	0.11	0.09	old field
1992	29.552555	50.885042	2	0.1	0.09	village
1993	29.54293	50.88462	2	0.1	0.1	village
1994	29.509718	50.882044	2	0.12	0.1	forest
1995	29.5246	50.88231	1	0.1	0.09	forest
1996	29.53874	50.88234	1	0.11	0.1	field
1997	29.543035	50.882044	2	0.11	0.09	village
1998	29.547795	50.882044	2	0.1	0.1	field
1999	29.55243	50.88215	1	0.1	0.09	field
2000	29.55745	50.88249	2	0.1	0.09	garden
2001	29.56604	50.88246	1	0.11	0.1	old field
2002	29.581102	50.882024	2	0.1	0.09	meadow
2003	29.595381	50.882024	2	0.1	0.1	forest
2004	29.609562	50.882024	1	0.1	0.09	forest
2005	29.62395	50.882044	2	0.09	0.09	meadow
2006	29.638228	50.882044	2	0.09	0.09	field
2007	29.653384	50.881535	1	0.13	0.12	forest
2008	29.666779	50.882024	2	0.12	0.11	forest
2009	29.681065	50.882044	2	0.12	0.11	forest
2010	29.69548	50.88203	1	0.11	0.09	forest
2011	29.709623	50.882044	2	0.11	0.1	forest
2012	29.719142	50.882044	2	0.11	0.1	field
2013	29.723898	50.882024	2	0.1	0.1	field
2014	29.73746	50.88208	1	0.11	0.09	forest
2015	29.752457	50.882024	2	0.1	0.1	forest
2016	29.766736	50.882024	2	0.11	0.1	forest
2017	29.781016	50.882024	1	0.1	0.09	forest
2018	29.795296	50.882024	2	0.1	0.1	forest
2019	29.809575	50.882024	2	0.1	0.09	forest
2020	29.823794	50.882024	1	0.11	0.1	forest
2021	29.838134	50.882024	2	0.12	0.1	forest
2022	29.852414	50.882024	2	0.1	0.1	field

2023	29.866694	50.882024	1	0.11	0.11	meadow
2024	29.87621	50.882044	2	0.11	0.1	meadow
2025	29.880973	50.882024	2	0.12	0.11	village
2026	29.885729	50.882044	2	0.11	0.11	forest
2027	29.895253	50.882024	2	0.12	0.11	forest
2028	29.909528	50.882044	1	0.12	0.12	forest
2029	29.923812	50.882024	2	0.12	0.11	forest
2030	29.938092	50.882024	2	0.12	0.12	forest
2031	29.952371	50.882024	1	0.12	0.11	forest
2032	29.966651	50.882024	2	0.13	0.12	forest
2033	29.980922	50.882044	2	0.11	0.1	forest
2034	29.985681	50.882044	2	0.1	0.1	field
2035	29.995201	50.882044	1	0.12	0.1	forest
2036	30.010113	50.882141	2	0.13	0.11	forest
2037	30.023769	50.882024	2	0.11	0.11	forest
2038	30.038210	50.881810	1	0.15	0.15	forest
2039	30.052328	50.882024	2	0.13	0.13	forest
2040	30.066604	50.88266	2	0.14	0.12	forest
2041	30.080888	50.882024	1	0.13	0.12	forest
2042	30.095167	50.882024	2	0.12	0.12	meadow
2043	29.88097	50.879047	2	0.11	0.1	field
2044	29.87621	50.879047	1	0.1	0.09	old field
2045	29.87145	50.879047	2	0.1	0.1	meadow
2046	29.847653	50.879047	1	0.11	0.1	field
2047	29.557315	50.879047	2	0.11	0.11	field
2048	29.552542	50.879326	2	0.11	0.11	field
2049	29.547795	50.879047	2	0.11	0.1	field
2050	29.547795	50.87605	2	0.1	0.09	field
2051	29.552555	50.87605	2	0.1	0.1	forest
2052	29.838133	50.87605	2	0.1	0.09	forest
2053	29.842893	50.87605	2	0.11	0.1	old field
2054	29.847653	50.87605	2	0.1	0.09	field
2055	29.87145	50.87605	2	0.1	0.09	field
2056	30.080875	50.873052	2	0.11	0.1	old field
2057	30.06645	50.87229	2	0.14	0.13	forest
2058	30.052317	50.873052	2	0.13	0.12	forest
2059	30.038049	50.873031	2	0.12	0.09	forest
2060	30.02388	50.87243	2	0.14	0.13	forest
2061	30.009080	50.872890	2	0.13	0.13	forest
2062	29.994101	50.873153	2	0.13	0.12	forest
2063	29.980922	50.873052	2	0.12	0.12	forest
2064	29.966644	50.873052	2	0.12	0.11	forest
2065	29.953222	50.872767	2	0.12	0.11	forest
2066	29.938092	50.873031	2	0.11	0.11	field
2067	29.923812	50.873031	2	0.11	0.1	forest
2068	29.909528	50.873052	2	0.12	0.1	forest
2069	29.895253	50.873031	2	0.12	0.11	forest
2070	29.879837	50.873904	2	0.12	0.11	old field
2071	29.87145	50.873052	2	0.1	0.1	field
2072	29.866694	50.873031	2	0.11	0.1	meadow
2073	29.852412	50.873052	2	0.1	0.09	meadow
2074	29.842893	50.873052	2	0.1	0.1	meadow

2075	29.838133	50.873052	1	0.1	0.09	village
2076	29.823854	50.873052	2	0.11	0.11	forest
2077	29.809575	50.873052	2	0.1	0.1	forest
2078	29.795297	50.873052	2	0.12	0.1	forest
2079	29.781017	50.873052	2	0.11	0.1	forest
2080	29.766738	50.873052	2	0.12	0.1	forest
2081	29.752459	50.873052	2	0.12	0.11	forest
2082	29.739478	50.873251	2	0.11	0.11	meadow
2083	29.723902	50.873052	2	0.12	0.11	forest
2084	29.709623	50.873052	2	0.12	0.12	forest
2085	29.695343	50.873052	2	0.12	0.11	forest
2086	29.681059	50.873031	2	0.12	0.12	forest
2087	29.666786	50.873052	2	0.12	0.12	forest
2088	29.652507	50.873052	2	0.12	0.12	forest
2089	29.638902	50.873739	2	0.13	0.11	forest
2090	29.623218	50.874156	2	0.11	0.11	forest
2091	29.610899	50.873171	2	0.12	0.11	forest
2092	29.595391	50.873052	2	0.11	0.11	forest
2093	29.581112	50.873052	2	0.12	0.11	forest
2094	29.566834	50.873052	2	0.12	0.12	forest
2095	29.552542	50.873031	2	0.12	0.11	forest
2096	29.54792	50.87312	1	0.13	0.12	forest
2097	29.543035	50.873052	2	0.11	0.11	forest
2098	29.538276	50.873052	2	0.12	0.12	forest
2099	29.523996	50.873052	2	0.12	0.1	forest
2100	29.828614	50.870054	2	0.13	0.12	forest
2101	29.833373	50.870054	2	0.09	0.09	meadow
2102	29.86669	50.870054	1	0.09	0.1	field
2103	29.87145	50.870054	2	0.11	0.1	forest
2104	29.991480	50.870190	1	0.11	0.1	forest
2105	29.994300	50.870200	2	0.1	0.09	field
2106	29.994940	50.867140	2	0.11	0.1	field
2107	29.861932	50.867057	2	0.1	0.09	village
2108	29.857172	50.867057	2	0.09	0.09	meadow
2109	29.738181	50.867057	2	0.11	0.1	old field
2110	29.73368	50.86708	2	0.13	0.09	old field
2111	29.523983	50.864038	2	0.1	0.09	old field
2112	29.538276	50.86406	2	0.11	0.1	old field
2113	29.552036	50.864232	2	0.1	0.1	forest
2114	29.566822	50.864038	2	0.12	0.1	forest
2115	29.581102	50.864038	2	0.13	0.11	forest
2116	29.595381	50.864038	2	0.12	0.11	forest
2117	29.60967	50.86406	2	0.11	0.11	forest
2118	29.621801	50.863919	2	0.11	0.11	forest
2119	29.63822	50.864038	2	0.12	0.1	forest
2120	29.6525	50.864038	2	0.11	0.11	forest
2121	29.666786	50.86406	2	0.12	0.11	forest
2122	29.681065	50.86406	2	0.11	0.1	forest
2123	29.695338	50.864038	2	0.11	0.11	forest
2124	29.709623	50.86406	2	0.12	0.11	forest
2125	29.723898	50.864038	2	0.11	0.1	field
2126	29.733421	50.86406	2	0.1	0.09	field

2127	29.73887	50.86394	1	0.09	0.09	field
2128	29.75323	50.864627	2	0.12	0.11	forest
2129	29.767509	50.864627	2	0.12	0.12	forest
2130	29.781789	50.864627	2	0.11	0.11	forest
2131	29.795297	50.86406	2	0.12	0.11	forest
2132	29.809575	50.864038	2	0.12	0.1	forest
2133	29.823854	50.86406	2	0.12	0.1	meadow
2134	29.839605	50.863952	2	0.11	0.11	meadow
2135	29.852412	50.86406	1	0.1	0.09	field
2136	29.865875	50.864274	2	0.13	0.12	forest
2137	29.880973	50.864038	2	0.12	0.11	forest
2138	29.895249	50.86406	2	0.13	0.12	forest
2139	29.909528	50.86406	2	0.11	0.11	forest
2140	29.923812	50.864038	2	0.11	0.11	field
2141	29.938092	50.864038	2	0.12	0.11	field
2142	29.952530	50.863410	2	0.11	0.11	forest
2143	29.966651	50.864038	2	0.11	0.1	forest
2144	29.980930	50.864038	2	0.12	0.11	forest
2145	29.995201	50.864220	1	0.14	0.11	field
2146	30.00949	50.864038	2	0.12	0.11	meadow
2147	30.023769	50.864038	2	0.13	0.12	forest
2148	30.038049	50.864038	2	0.1	0.09	forest
2149	30.052317	50.86406	2	0.11	0.09	field
2150	30.057076	50.864060	2	0.11	0.11	meadow
2151	30.066608	50.864038	2	0.1	0.1	meadow
2152	30.066596	50.861062	2	0.1	0.1	field
2153	30.056350	50.861630	1	0.1	0.1	field
2154	29.995201	50.861062	2	0.12	0.11	forest
2155	29.990441	50.861062	2	0.12	0.1	meadow
2156	29.847653	50.861062	2	0.1	0.09	meadow
2157	29.738181	50.861062	2	0.1	0.1	field
2158	29.733421	50.861062	2	0.1	0.09	field
2159	29.562074	50.861062	2	0.09	0.09	field
2160	29.55719	50.86114	1	0.11	0.1	old field
2161	29.562	50.85912	2	0.09	0.09	old field
2162	29.714382	50.858064	2	0.1	0.09	old field
2163	29.719142	50.858064	2	0.1	0.1	old field
2164	29.723902	50.858064	2	0.1	0.1	old field
2165	29.728661	50.858064	2	0.09	0.09	old field
2166	29.733421	50.858064	2	0.1	0.09	village
2167	29.738181	50.858064	2	0.09	0.09	field
2168	29.742941	50.858064	2	0.09	0.09	old field
2169	29.985681	50.858064	2	0.11	0.1	forest
2170	29.990620	50.858490	2	0.12	0.1	field
2171	29.996040	50.857550	2	0.12	0.1	field
2172	30.051970	50.858200	2	0.13	0.12	forest
2173	30.057076	50.858064	2	0.11	0.11	village
2174	30.061836	50.858064	2	0.11	0.1	field
2175	30.071355	50.855067	2	0.15	0.14	field
2176	30.066608	50.855044	1	0.12	0.12	field
2177	30.060759	50.854765	2	0.11	0.1	forest
2178	30.052328	50.855044	2	0.12	0.1	forest

2179	30.038660	50.854850	1	0.13	0.11	forest
2180	30.023769	50.855044	2	0.12	0.12	forest
2181	30.00948	50.855067	2	0.12	0.1	forest
2182	29.995150	50.854920	1	0.14	0.12	
2183	29.990441	50.855067	2	0.12	0.11	field
2184	29.985681	50.855067	2	0.12	0.1	field
2185	29.980960	50.855380	1	0.11	0.11	field
2186	29.966644	50.855067	2	0.1	0.1	field
2187	29.961510	50.855190	1	0.11	0.1	field
2188	29.951400	50.855130	1	0.13	0.12	field
2189	29.938092	50.855044	2	0.13	0.11	field
2190	29.923806	50.855067	2	0.13	0.12	forest
2191	29.909532	50.855044	1	0.12	0.1	forest
2192	29.895253	50.855044	2	0.11	0.11	field
2193	29.880955	50.856416	2	0.12	0.1	old field
2194	29.86669	50.855067	1	0.11	0.11	forest
2195	29.851838	50.854922	2	0.12	0.12	forest
2196	29.838134	50.855044	2	0.12	0.11	forest
2197	29.824691	50.85502	1	0.11	0.1	meadow
2198	29.809503	50.855775	2	0.12	0.11	meadow
2199	29.795514	50.855472	2	0.11	0.11	meadow
2200	29.78149	50.8553	1	0.1	0.1	forest
2201	29.766736	50.855044	2	0.11	0.09	old field
2202	29.752457	50.855044	2	0.1	0.09	forest
2203	29.73814	50.85599	1	0.11	0.1	old field
2204	29.733421	50.855067	2	0.1	0.09	old field
2205	29.728661	50.855067	2	0.1	0.09	old field
2206	29.72476	50.85507	1	0.1	0.1	old field
2207	29.719142	50.855067	2	0.1	0.09	old field
2208	29.714382	50.855067	2	0.09	0.09	old field
2209	29.70952	50.85513	1	0.09	0.09	old field
2210	29.69525	50.85502	1	0.09	0.09	forest
2211	29.681059	50.855044	2	0.1	0.09	forest
2212	29.666779	50.855044	2	0.1	0.1	forest
2213	29.652408	50.855044	1	0.11	0.09	forest
2214	29.63822	50.855044	2	0.1	0.09	forest
2215	29.62395	50.855067	2	0.09	0.09	forest
2216	29.60967	50.855067	1	0.1	0.09	forest
2217	29.595381	50.855044	2	0.1	0.09	forest
2218	29.581102	50.855044	2	0.11	0.1	field
2219	29.566641	50.855485	1	0.15	0.14	forest
2220	29.552542	50.855044	2	0.13	0.11	old field
2221	29.538276	50.855067	2	0.1	0.1	old field
2222	29.524199	50.854414	1	0.11	0.1	old field
2223	29.70487	50.8519	2	0.09	0.09	old field
2224	29.709623	50.85207	2	0.09	0.09	field
2225	29.71397	50.85216	2	0.1	0.1	old field
2226	29.719142	50.85207	2	0.1	0.09	old field
2227	29.723902	50.85207	2	0.11	0.1	old field
2228	29.728661	50.85207	2	0.1	0.09	field
2229	29.733421	50.85207	2	0.09	0.09	garden
2230	29.738181	50.85207	2	0.1	0.1	field

2231	29.961884	50.85207	2	0.1	0.09	field
2232	29.980922	50.85207	2	0.1	0.09	village
2233	29.985138	50.851804	2	0.1	0.1	field
2234	30.066596	50.852070	2	0.1	0.1	forest
2235	30.071120	50.852040	2	0.1	0.1	village
2236	30.080875	50.849072	2	0.12	0.11	field
2237	30.076380	50.848900	2	0.09	0.09	village
2238	30.070670	50.848320	2	0.11	0.1	village
2239	30.066160	50.847750	2	0.11	0.11	village
2240	30.061836	50.849072	2	0.09	0.09	farm
2241	30.057076	50.849072	2	0.09	0.09	field
2242	29.981030	50.849720	2	0.1	0.09	field
2243	29.976163	50.849072	2	0.1	0.1	field
2244	29.961884	50.849072	2	0.11	0.1	field
2245	29.73844	50.84908	2	0.11	0.09	old field
2246	29.733421	50.849072	2	0.1	0.1	field
2247	29.728661	50.849072	2	0.1	0.1	village
2248	29.723902	50.849072	2	0.11	0.1	field
2249	29.71912	50.84893	2	0.1	0.09	field
2250	29.714382	50.849072	2	0.1	0.1	field
2251	29.509718	50.846074	2	0.1	0.1	old field
2252	29.523996	50.846074	2	0.1	0.09	old field
2253	29.538263	50.846051	2	0.12	0.11	field
2254	29.552542	50.846051	2	0.1	0.09	old field
2255	29.567595	50.84664	2	0.13	0.13	forest
2256	29.581885	50.846663	2	0.12	0.11	forest
2257	29.596154	50.84664	2	0.11	0.11	forest
2258	29.60967	50.846074	2	0.1	0.1	forest
2259	29.62394	50.846051	2	0.11	0.1	forest
2260	29.638228	50.846074	2	0.09	0.08	field
2261	29.6525	50.846051	2	0.1	0.09	field
2262	29.666786	50.846074	2	0.11	0.1	forest
2263	29.681059	50.846051	2	0.1	0.1	forest
2264	29.695343	50.846074	2	0.1	0.09	old field
2265	29.70912	50.84633	2	0.11	0.1	old field
2266	29.72407	50.84633	1	0.11	0.1	garden
2267	29.72953	50.8463	2	0.1	0.1	village
2268	29.733421	50.846074	2	0.1	0.09	meadow
2269	29.7384	50.8461	1	0.12	0.1	village
2270	29.743449	50.845827	2	0.1	0.09	meadow
2271	29.752459	50.846074	2	0.1	0.1	meadow
2272	29.765821	50.844956	2	0.11	0.1	meadow
2273	29.781047	50.847411	2	0.1	0.1	meadow
2274	29.794816	50.847825	2	0.1	0.09	meadow
2275	29.809371	50.847743	2	0.1	0.1	meadow
2276	29.823855	50.846051	2	0.09	0.08	meadow
2277	29.836311	50.846033	2	0.1	0.1	forest
2278	29.852412	50.846074	2	0.12	0.11	forest
2279	29.86669	50.846074	2	0.13	0.12	forest
2280	29.88097	50.846074	2	0.12	0.11	forest
2281	29.895253	50.846051	2	0.14	0.12	forest
2282	29.909532	50.846051	2	0.1	0.1	field

2283	29.923495	50.845037	2	0.11	0.1	field
2284	29.938085	50.846074	2	0.11	0.1	old field
2285	29.952364	50.846390	2	0.11	0.11	field
2286	29.956500	50.846000	1	0.11	0.1	field
2287	29.966651	50.846051	2	0.1	0.1	field
2288	29.975151	50.846095	2	0.1	0.09	field
2289	29.980770	50.845580	1	0.1	0.09	field
2290	29.996051	50.846335	2	0.13	0.11	old field
2291	30.00949	50.846051	2	0.13	0.1	forest
2292	30.023759	50.846074	2	0.12	0.12	forest
2293	30.038037	50.846074	2	0.12	0.1	field
2294	30.052328	50.846051	2	0.11	0.09	old field
2295	30.057076	50.846074	2	0.09	0.09	field
2296	30.062850	50.845680	2	0.09	0.08	field
2297	30.065970	50.845520	1	0.09	0.09	field
2298	30.071681	50.846926	2	0.09	0.09	field
2299	30.077580	50.846540	2	0.09	0.09	village
2300	30.080790	50.846130	1	0.09	0.09	field
2301	30.080875	50.843077	2	0.09	0.09	field
2302	30.077750	50.843170	2	0.09	0.09	meadow
2303	30.066596	50.843077	2	0.11	0.09	old field
2304	30.062120	50.842860	2	0.13	0.13	meadow
2305	30.05641	50.842974	2	0.09	0.09	field
2306	29.980922	50.843077	2	0.1	0.09	field
2307	29.976490	50.844330	2	0.09	0.09	field
2308	29.952530	50.843720	2	0.1	0.1	field
2309	29.819600	50.843610	1	0.1	0.09	meadow
2310	29.67557	50.843093	2	0.11	0.11	field
2311	29.671546	50.843077	2	0.1	0.09	field
2312	29.666786	50.843077	2	0.1	0.09	field
2313	29.54805	50.84265	2	0.09	0.09	old field
2314	29.543035	50.843077	2	0.11	0.1	field
2315	29.538276	50.843077	2	0.12	0.12	field
2316	29.53695	50.84024	1	0.11	0.11	field
2317	29.543035	50.84008	2	0.11	0.1	field
2318	29.54701	50.8405	1	0.11	0.1	field
2319	29.552555	50.84008	2	0.11	0.1	old field
2320	29.652507	50.84008	2	0.1	0.09	old field
2321	29.657267	50.84008	2	0.09	0.09	field
2322	29.66146	50.83992	2	0.09	0.09	village
2323	29.666786	50.84008	2	0.1	0.1	field
2324	29.67177	50.84052	1	0.11	0.1	old field
2325	29.676306	50.84008	2	0.1	0.09	field
2326	29.681065	50.84008	2	0.1	0.1	field
2327	29.809640	50.839600	2	0.09	0.09	field
2328	29.814334	50.840080	2	0.11	0.1	forest
2329	29.943000	50.840160	2	0.12	0.12	field
2330	29.947980	50.840040	1	0.11	0.1	field
2331	29.952720	50.840603	2	0.13	0.11	field
2332	30.080225	50.839860	2	0.09	0.09	forest
2333	30.079780	50.837390	1	0.09	0.08	field
2334	30.065141	50.836733	2	0.12	0.12	meadow

2335	30.052328	50.837058	1	0.13	0.1	forest
2336	30.038049	50.837058	2	0.12	0.11	field
2337	30.025067	50.837085	2	0.12	0.1	field
2338	30.00948	50.837082	2	0.14	0.11	forest
2339	29.995201	50.837082	2	0.14	0.12	forest
2340	29.98093	50.837058	2	0.12	0.12	forest
2341	29.966651	50.837058	2	0.11	0.11	field
2342	29.952364	50.837082	2	0.11	0.09	meadow
2343	29.942845	50.837082	2	0.11	0.1	field
2344	29.936536	50.836338	2	0.12	0.1	forest
2345	29.923752	50.836734	2	0.12	0.1	field
2346	29.909528	50.837082	2	0.13	0.12	forest
2347	29.895249	50.837082	2	0.12	0.11	forest
2348	29.880973	50.837058	2	0.11	0.11	forest
2349	29.86669	50.837082	2	0.1	0.1	forest
2350	29.852412	50.837082	2	0.13	0.12	forest
2351	29.838133	50.837082	2	0.12	0.12	forest
2352	29.823854	50.837082	2	0.13	0.11	forest
2353	29.809610	50.837170	1	0.1	0.09	field
2354	29.804560	50.837420	2	0.12	0.12	field
2355	29.800056	50.837082	2	0.09	0.08	village
2356	29.794617	50.837053	2	0.1	0.09	meadow
2357	29.781016	50.837058	2	0.11	0.09	meadow
2358	29.769077	50.837374	2	0.1	0.1	meadow
2359	29.751984	50.83596	2	0.1	0.1	meadow
2360	29.73957	50.83596	2	0.1	0.09	meadow
2361	29.721866	50.837759	2	0.09	0.09	meadow
2362	29.707417	50.837374	2	0.11	0.09	meadow
2363	29.695338	50.837058	2	0.1	0.1	meadow
2364	29.68198	50.837052	2	0.11	0.09	meadow
2365	29.676306	50.837082	2	0.1	0.1	meadow
2366	29.67208	50.83732	2	0.1	0.09	meadow
2367	29.666779	50.837058	2	0.1	0.09	old field
2368	29.66121	50.83714	1	0.09	0.09	field
2369	29.657267	50.837082	2	0.09	0.09	old field
2370	29.652507	50.837082	2	0.1	0.09	forest
2371	29.64882	50.83716	1	0.1	0.1	old field
2372	29.642988	50.837082	2	0.11	0.09	field
2373	29.637414	50.837082	2	0.11	0.11	field
2374	29.62395	50.837082	2	0.11	0.1	field
2375	29.609661	50.837058	2	0.1	0.1	field
2376	29.595391	50.837082	2	0.11	0.09	field
2377	29.581102	50.837058	2	0.1	0.1	field
2378	29.566822	50.837058	2	0.1	0.09	meadow
2379	29.552035	50.837374	2	0.1	0.09	village
2380	29.548931	50.837309	2	0.1	0.1	field
2381	29.538263	50.837058	2	0.12	0.1	field
2382	29.523983	50.837058	2	0.1	0.09	old field
2383	29.508803	50.837049	2	0.1	0.1	field
2384	29.519238	50.834084	2	0.1	0.1	field
2385	29.523996	50.834084	2	0.09	0.09	field
2386	29.52908	50.83403	1	0.1	0.1	old field

2387	29.552555	50.834084	2	0.1	0.1	field
2388	29.55745	50.83419	1	0.1	0.1	field
2389	29.647747	50.834084	2	0.11	0.1	field
2390	29.652507	50.834084	2	0.12	0.1	field
2391	29.657267	50.834084	2	0.11	0.09	old field
2392	29.781017	50.834084	2	0.11	0.1	field
2393	29.785090	50.834270	2	0.1	0.08	field
2394	29.789820	50.834270	2	0.1	0.09	field
2395	29.794780	50.834340	2	0.11	0.1	field
2396	29.798940	50.834070	1	0.11	0.1	field
2397	29.804816	50.834084	2	0.1	0.09	old field
2398	29.937748	50.833328	1	0.12	0.1	forest
2399	30.080920	50.833680	2	0.09	0.09	field
2400	30.082340	50.833560	2	0.09	0.09	field
2401	30.084467	50.830930	2	0.1	0.1	field
2402	30.082550	50.831980	2	0.09	0.09	village
2403	29.799860	50.831250	2	0.12	0.11	forest
2404	29.795297	50.831086	2	0.1	0.09	field
2405	29.790380	50.831330	2	0.1	0.1	village
2406	29.784740	50.830240	1	0.09	0.09	village
2407	29.780840	50.830950	2	0.11	0.11	forest
2408	29.776260	50.831090	2	0.11	0.1	field
2409	29.771498	50.831086	1	0.09	0.09	field
2410	29.766738	50.831086	2	0.1	0.1	field
2411	29.528756	50.831086	2	0.1	0.09	field
2412	29.523996	50.831086	2	0.11	0.11	field
2413	29.519772	50.83147	1	0.11	0.1	field
2414	29.523211	50.82844	1	0.09	0.09	old field
2415	29.552542	50.828065	2	0.11	0.09	meadow
2416	29.56786	50.82792	1	0.1	0.09	field
2417	29.581112	50.828089	2	0.1	0.1	field
2418	29.595381	50.828065	1	0.1	0.09	old field
2419	29.600151	50.828089	2	0.1	0.09	field
2420	29.604911	50.828089	2	0.1	0.1	forest
2421	29.6095	50.82841	1	0.09	0.09	old field
2422	29.62395	50.828089	2	0.09	0.09	meadow
2423	29.63822	50.828065	2	0.1	0.09	meadow
2424	29.65034	50.8291	1	0.11	0.09	meadow
2425	29.666779	50.828065	2	0.11	0.1	meadow
2426	29.681059	50.828065	2	0.11	0.09	meadow
2427	29.697905	50.828443	1	0.1	0.09	meadow
2428	29.710254	50.826066	2	0.12	0.1	meadow
2429	29.723902	50.828089	2	0.11	0.11	meadow
2430	29.738100	50.828420	1	0.1	0.09	forest
2431	29.752459	50.828089	2	0.1	0.09	forest
2432	29.766470	50.828420	2	0.1	0.1	forest
2433	29.781190	50.827900	1	0.11	0.1	forest
2434	29.790340	50.828490	2	0.1	0.09	old field
2435	29.795297	50.828089	1	0.11	0.1	forest
2436	29.800056	50.828089	2	0.1	0.09	meadow
2437	29.809690	50.828410	2	0.08	0.08	old field
2438	29.823070	50.827730	1	0.11	0.1	forest

2439	29.839952	50.828402	2	0.1	0.1	forest
2440	29.852333	50.828862	2	0.11	0.11	forest
2441	29.866694	50.828065	1	0.12	0.11	forest
2442	29.880973	50.828065	2	0.11	0.1	forest
2443	29.895253	50.828065	2	0.11	0.11	forest
2444	29.909330	50.829730	1	0.13	0.11	forest
2445	29.923806	50.828089	2	0.13	0.12	forest
2446	29.938092	50.828065	2	0.12	0.11	forest
2447	29.952364	50.828089	1	0.13	0.11	forest
2448	29.966651	50.828065	2	0.13	0.13	forest
2449	29.98093	50.828065	2	0.13	0.12	forest
2450	29.99521	50.828065	1	0.14	0.12	forest
2451	30.00949	50.828065	2	0.15	0.12	forest
2452	30.023769	50.828065	2	0.12	0.12	forest
2453	30.038037	50.828089	1	0.13	0.11	field
2454	30.052317	50.828089	2	0.12	0.11	field
2455	30.066608	50.828065	2	0.12	0.1	forest
2456	30.081477	50.827524	1	0.1	0.09	old field
2457	30.085840	50.828111	2	0.1	0.1	meadow
2458	30.089182	50.827579	2	0.1	0.1	field
2459	30.095167	50.828065	2	0.1	0.09	meadow
2460	30.094680	50.825100	1	0.1	0.1	forest
2461	29.60904	50.82557	2	0.11	0.1	field
2462	29.604911	50.825091	2	0.11	0.09	field
2463	29.595492	50.824501	2	0.1	0.09	field
2464	29.590218	50.825091	2	0.1	0.1	old field
2465	29.585872	50.825091	2	0.11	0.1	field
2466	29.581112	50.822093	2	0.11	0.09	field
2467	29.585872	50.822093	2	0.1	0.09	old field
2468	29.590632	50.822093	2	0.1	0.1	field
2469	29.595391	50.822093	2	0.11	0.09	field
2470	29.600151	50.822093	2	0.1	0.1	field
2471	29.604911	50.822093	2	0.11	0.09	field
2472	30.095153	50.819096	2	0.11	0.1	forest
2473	30.080875	50.819096	2	0.11	0.11	old field
2474	30.066596	50.819096	2	0.12	0.1	forest
2475	30.051044	50.819108	2	0.13	0.11	forest
2476	30.038037	50.819096	2	0.13	0.12	forest
2477	30.023759	50.819096	2	0.14	0.12	forest
2478	30.00948	50.819096	2	0.14	0.12	forest
2479	29.99521	50.819071	2	0.13	0.1	forest
2480	29.98093	50.819071	2	0.12	0.11	forest
2481	29.966644	50.819096	2	0.13	0.11	forest
2482	29.952371	50.819071	2	0.12	0.11	forest
2483	29.938085	50.819096	2	0.12	0.12	forest
2484	29.923806	50.819096	2	0.13	0.11	forest
2485	29.909532	50.819071	2	0.1	0.1	field
2486	29.904768	50.819096	2	0.11	0.09	old field
2487	29.899860	50.819480	1	0.11	0.1	field
2488	29.895253	50.819071	2	0.1	0.09	field
2489	29.881112	50.818581	2	0.11	0.1	field
2490	29.86669	50.819096	2	0.12	0.1	forest

2491	29.852412	50.819096	2	0.11	0.11	forest
2492	29.837039	50.818589	2	0.1	0.1	forest
2493	29.823854	50.819096	2	0.11	0.1	forest
2494	29.809575	50.819096	2	0.1	0.1	forest
2495	29.795296	50.819071	2	0.11	0.11	forest
2496	29.781017	50.819096	2	0.11	0.09	forest
2497	29.766736	50.819071	2	0.1	0.1	forest
2498	29.752459	50.819096	2	0.12	0.1	forest
2499	29.737290	50.819401	2	0.1	0.09	forest
2500	29.723902	50.819096	2	0.13	0.12	forest
2501	29.709623	50.819096	2	0.13	0.12	forest
2502	29.695343	50.819096	2	0.1	0.1	forest
2503	29.681065	50.819096	2	0.11	0.1	forest
2504	29.666779	50.819071	2	0.12	0.11	forest
2505	29.6525	50.819071	2	0.12	0.11	forest
2506	29.638220	50.819071	2	0.19	0.09	meadow
2507	29.621102	50.819008	2	0.11	0.1	meadow
2508	29.60967	50.819096	2	0.11	0.1	meadow
2509	29.60038	50.8195	2	0.12	0.1	village
2510	29.595080	50.819230	1	0.11	0.1	field
2511	29.590632	50.819096	2	0.11	0.08	field
2512	29.585872	50.819096	2	0.1	0.09	old field
2513	29.581690	50.818240	1	0.11	0.11	field
2514	29.576240	50.819440	2	0.11	0.1	field
2515	29.566834	50.819096	2	0.1	0.1	field
2516	29.552555	50.819096	2	0.1	0.1	meadow
2517	29.570960	50.816790	2	0.09	0.09	forest
2518	29.576353	50.816099	2	0.11	0.09	old field
2519	29.581112	50.816099	2	0.1	0.09	field
2520	29.585872	50.816099	2	0.13	0.12	field
2521	29.590400	50.816210	2	0.1	0.1	village
2522	29.595391	50.816099	2	0.11	0.1	village
2523	29.633469	50.816099	2	0.1	0.09	meadow
2524	29.638228	50.816099	1	0.11	0.1	field
2525	29.895249	50.816099	2	0.09	0.09	field
2526	29.900008	50.816099	2	0.1	0.1	field
2527	29.904300	50.816099	2	0.11	0.09	field
2528	29.909490	50.813190	2	0.09	0.08	field
2529	29.904768	50.813101	2	0.1	0.09	field
2530	29.633469	50.813101	2	0.1	0.09	forest
2531	29.596320	50.813173	2	0.12	0.11	meadow
2532	29.590632	50.813101	2	0.11	0.09	field
2533	29.58649	50.813392	2	0.1	0.1	field
2534	29.581112	50.813101	2	0.1	0.1	field
2535	29.576353	50.813101	2	0.11	0.09	old field
2536	29.571594	50.813101	2	0.1	0.09	old field
2537	29.495831	50.8093	2	0.1	0.1	old field
2538	29.509900	50.810150	2	0.1	0.09	field
2539	29.523996	50.810102	2	0.1	0.1	field
2540	29.538263	50.810078	2	0.1	0.09	forest
2541	29.552650	50.810830	2	0.1	0.1	forest
2542	29.566822	50.810078	2	0.11	0.09	meadow

2543	29.577075	50.810386	2	0.09	0.09	field
2544	29.581102	50.810078	1	0.1	0.1	village
2545	29.586387	50.810451	2	0.1	0.09	field
2546	29.590632	50.810102	2	0.11	0.09	old field
2547	29.595391	50.810820	2	0.11	0.1	meadow
2548	29.609661	50.810078	2	0.1	0.09	meadow
2549	29.623410	50.810910	2	0.11	0.11	forest
2550	29.638228	50.810102	2	0.1	0.1	forest
2551	29.652507	50.810102	2	0.1	0.09	forest
2552	29.666779	50.810078	2	0.12	0.12	forest
2553	29.681065	50.810102	2	0.11	0.09	forest
2554	29.695343	50.810102	2	0.09	0.09	forest
2555	29.709623	50.810102	2	0.11	0.09	forest
2556	29.723902	50.810102	2	0.1	0.09	forest
2557	29.737200	50.810078	2	0.1	0.09	forest
2558	29.752459	50.810102	2	0.12	0.1	forest
2559	29.766736	50.810078	2	0.11	0.1	old field
2560	29.781017	50.810102	2	0.11	0.11	forest
2561	29.795296	50.810078	2	0.12	0.1	forest
2562	29.812035	50.810157	2	0.12	0.1	forest
2563	29.823855	50.810078	2	0.11	0.09	forest
2564	29.838134	50.810078	2	0.12	0.1	forest
2565	29.851704	50.809958	2	0.12	0.11	forest
2566	29.867135	50.809958	2	0.12	0.11	forest
2567	29.88097	50.810102	2	0.11	0.1	field
2568	29.895249	50.810102	2	0.1	0.1	old field
2569	29.909528	50.810102	2	0.1	0.09	field
2570	29.914230	50.810330	1	0.1	0.1	field
2571	29.922667	50.810004	2	0.1	0.09	forest
2572	29.938085	50.810102	2	0.1	0.1	forest
2573	29.952371	50.810078	2	0.12	0.1	forest
2574	29.966651	50.810078	2	0.12	0.11	forest
2575	29.980922	50.810102	2	0.11	0.11	forest
2576	29.995201	50.810102	2	0.12	0.11	forest
2577	30.00949	50.810078	2	0.13	0.11	forest
2578	30.023769	50.810078	2	0.12	0.12	forest
2579	30.038049	50.810078	2	0.12	0.11	forest
2580	30.052317	50.810102	2	0.11	0.11	forest
2581	30.066596	50.810102	2	0.13	0.13	forest
2582	30.080875	50.810102	2	0.12	0.11	forest
2583	30.095167	50.810078	2	0.1	0.09	meadow
2584	29.915990	50.806550	2	0.1	0.09	forest
2585	29.910700	50.807610	2	0.11	0.09	field
2586	29.581112	50.807105	2	0.08	0.08	forest
2587	29.909528	50.804108	2	0.1	0.09	field
2588	29.995201	50.804108	2	0.11	0.1	field
2589	29.999961	50.804108	2	0.12	0.11	forest
2590	30.00948	50.804108	2	0.14	0.12	field
2591	30.08088	50.800511	1	0.11	0.1	meadow
2592	30.066608	50.801085	2	0.12	0.11	meadow
2593	30.052328	50.801085	2	0.1	0.09	old field
2594	30.047557	50.80111	2	0.11	0.1	field

2595	30.038037	50.80111	1	0.11	0.1	old field
2596	30.023769	50.801085	2	0.12	0.11	forest
2597	30.008669	50.801379	1	0.12	0.11	old field
2598	30.00472	50.80111	2	0.11	0.11	field
2599	29.999961	50.80111	2	0.11	0.1	meadow
2600	29.995708	50.801488	1	0.1	0.1	field
2601	29.980922	50.80111	2	0.12	0.12	forest
2602	29.966644	50.80111	2	0.13	0.11	forest
2603	29.951162	50.800727	1	0.13	0.12	forest
2604	29.937138	50.80105	2	0.11	0.1	forest
2605	29.923812	50.801085	2	0.11	0.1	forest
2606	29.910870	50.801160	1	0.1	0.09	field
2607	29.89532	50.802024	2	0.11	0.09	meadow
2608	29.880997	50.80187	2	0.1	0.1	meadow
2609	29.866910	50.801085	1	0.1	0.1	old field
2610	29.85209	50.802031	2	0.11	0.11	forest
2611	29.838133	50.80111	2	0.12	0.1	forest
2612	29.823910	50.801620	1	0.11	0.11	forest
2613	29.811549	50.801418	2	0.12	0.1	forest
2614	29.795297	50.80111	2	0.11	0.1	forest
2615	29.780948	50.801085	2	0.12	0.1	forest
2616	29.766736	50.801085	2	0.11	0.09	forest
2617	29.752459	50.80111	2	0.09	0.09	forest
2618	29.737545	50.801080	1	0.09	0.08	forest
2619	29.724618	50.800875	2	0.09	0.08	forest
2620	29.709429	50.800620	2	0.1	0.09	forest
2621	29.695775	50.800773	1	0.09	0.09	forest
2622	29.681717	50.800926	2	0.1	0.1	forest
2623	29.666779	50.801085	2	0.11	0.11	forest
2624	29.652148	50.800875	1	0.11	0.09	forest
2625	29.638228	50.80111	2	0.11	0.1	forest
2626	29.62395	50.80111	2	0.12	0.1	forest
2627	29.609670	50.801110	1	0.11	0.11	forest
2628	29.595391	50.80111	2	0.1	0.09	meadow
2629	29.580593	50.800845	2	0.11	0.09	meadow
2630	29.566716	50.801085	1	0.09	0.09	forest
2631	29.552542	50.801085	2	0.1	0.1	meadow
2632	29.538276	50.80111	2	0.1	0.1	field
2633	29.523360	50.801150	1	0.12	0.11	field
2634	29.509	50.80062	2	0.11	0.1	field
2635	29.50467	50.80022	2	0.1	0.1	field
2636	29.500410	50.801020	2	0.11	0.1	field
2637	29.504800	50.798090	2	0.09	0.09	forest
2638	29.509600	50.798140	1	0.09	0.09	old field
2639	29.909528	50.798112	2	0.11	0.1	old field
2640	30.038037	50.798112	2	0.1	0.09	field
2641	30.042797	50.798112	2	0.11	0.1	field
2642	30.047066	50.798112	2	0.11	0.11	meadow
2643	30.057076	50.795115	2	0.1	0.1	old field
2644	30.052317	50.795115	1	0.11	0.1	old field
2645	30.047557	50.795115	2	0.1	0.09	field
2646	30.042797	50.795115	2	0.1	0.1	field

2647	30.038037	50.795414	2	0.1	0.09	field
2648	30.033279	50.795115	1	0.11	0.1	village
2649	30.028519	50.795115	2	0.1	0.1	field
2650	30.023759	50.795115	2	0.11	0.1	field
2651	29.518680	50.795830	2	0.1	0.1	field
2652	29.514720	50.795300	2	0.1	0.09	field
2653	29.523620	50.792790	1	0.12	0.1	village
2654	29.528756	50.792118	2	0.11	0.1	field
2655	29.538263	50.792092	2	0.1	0.1	field
2656	29.552531	50.792457	2	0.11	0.1	forest
2657	29.5659	50.792284	2	0.1	0.1	forest
2658	29.581102	50.792092	2	0.09	0.09	meadow
2659	29.595381	50.792092	2	0.1	0.1	meadow
2660	29.609661	50.792092	2	0.1	0.09	field
2661	29.62394	50.792092	2	0.11	0.1	forest
2662	29.63822	50.792092	2	0.1	0.09	forest
2663	29.6525	50.792092	2	0.11	0.09	forest
2664	29.666786	50.792118	2	0.12	0.1	forest
2665	29.681065	50.792118	2	0.11	0.1	forest
2666	29.695338	50.792092	2	0.1	0.1	forest
2667	29.709623	50.792118	2	0.1	0.1	forest
2668	29.723898	50.792092	2	0.11	0.1	forest
2669	29.738177	50.792092	2	0.1	0.1	forest
2670	29.752457	50.792092	2	0.11	0.11	forest
2671	29.766736	50.792092	2	0.12	0.1	forest
2672	29.781016	50.792092	2	0.11	0.11	forest
2673	29.795296	50.792092	2	0.12	0.1	forest
2674	29.812035	50.791758	2	0.11	0.1	forest
2675	29.823854	50.792118	2	0.12	0.11	forest
2676	29.838133	50.792118	2	0.11	0.1	meadow
2677	29.854761	50.792525	2	0.1	0.1	meadow
2678	29.880012	50.792831	2	0.11	0.1	forest
2679	29.895253	50.792092	2	0.12	0.1	forest
2680	29.908824	50.792814	2	0.12	0.12	forest
2681	29.923812	50.792092	2	0.12	0.11	forest
2682	29.938092	50.792092	2	0.11	0.11	forest
2683	29.952371	50.792092	2	0.12	0.11	forest
2684	29.966651	50.792092	2	0.12	0.11	forest
2685	29.98093	50.792092	2	0.11	0.11	forest
2686	29.99521	50.792092	2	0.11	0.1	meadow
2687	30.00949	50.792092	2	0.11	0.1	meadow
2688	30.01424	50.792118	2	0.11	0.11	field
2689	30.018999	50.792118	2	0.12	0.1	forest
2690	30.023759	50.792118	2	0.1	0.1	field
2691	30.028107	50.792143	2	0.12	0.1	village
2692	30.038037	50.792118	2	0.1	0.09	field
2693	30.04755	50.791722	2	0.1	0.1	village
2694	30.052317	50.792118	2	0.1	0.09	field
2695	29.551870	50.788910	1	0.1	0.08	old field
2696	29.546980	50.789560	2	0.11	0.1	old field
2697	29.543035	50.789120	2	0.11	0.1	old field
2698	29.538190	50.789590	2	0.12	0.11	old field

2699	29.533540	50.789230	2	0.09	0.09	field
2700	29.528756	50.78912	2	0.1	0.09	field
2701	29.523650	50.788790	2	0.12	0.11	field
2702	29.519238	50.78912	2	0.11	0.09	old field
2703	29.509718	50.786122	2	0.11	0.1	forest
2704	29.513509	50.785007	2	0.1	0.09	field
2705	29.519210	50.786250	2	0.1	0.09	field
2706	29.524200	50.786160	2	0.1	0.1	village
2707	29.528756	50.786122	2	0.1	0.09	village
2708	29.534100	50.785910	2	0.08	0.08	village
2709	29.537980	50.786510	1	0.1	0.09	field
2710	29.543035	50.786122	2	0.11	0.1	forest
2711	29.547795	50.786122	2	0.11	0.1	field
2712	30.080888	50.783098	2	0.1	0.1	meadow
2713	30.066596	50.783125	2	0.11	0.1	meadow
2714	30.052328	50.783098	2	0.12	0.11	field
2715	30.040083	50.783149	2	0.13	0.12	field
2716	30.023759	50.783125	2	0.12	0.12	field
2717	30.010516	50.782884	2	0.11	0.11	forest
2718	29.995201	50.783125	2	0.12	0.1	old field
2719	29.98093	50.783098	2	0.12	0.1	forest
2720	29.966651	50.783098	2	0.13	0.11	forest
2721	29.951697	50.782893	2	0.13	0.12	forest
2722	29.938085	50.783125	2	0.12	0.12	forest
2723	29.923812	50.783098	2	0.11	0.09	forest
2724	29.909532	50.783098	2	0.12	0.1	forest
2725	29.895860	50.783510	2	0.11	0.11	forest
2726	29.880970	50.783125	2	0.1	0.1	forest
2727	29.823855	50.783098	2	0.1	0.1	forest
2728	29.809575	50.783125	2	0.1	0.09	forest
2729	29.795297	50.783125	2	0.11	0.09	forest
2730	29.781016	50.783098	2	0.1	0.1	forest
2731	29.766738	50.783125	2	0.11	0.1	forest
2732	29.752459	50.783125	2	0.1	0.1	forest
2733	29.738181	50.783125	2	0.12	0.1	forest
2734	29.723902	50.783125	2	0.1	0.09	forest
2735	29.709623	50.783125	2	0.1	0.09	forest
2736	29.695338	50.783098	2	0.11	0.1	forest
2737	29.681059	50.783098	2	0.12	0.1	forest
2738	29.666779	50.783098	2	0.1	0.1	forest
2739	29.6525	50.783098	2	0.11	0.1	forest
2740	29.638228	50.783125	2	0.1	0.09	forest
2741	29.62395	50.783125	2	0.11	0.11	forest
2742	29.60967	50.783125	2	0.1	0.09	meadow
2743	29.595391	50.783125	2	0.09	0.09	meadow
2744	29.581102	50.783098	2	0.1	0.09	meadow
2745	29.566834	50.783125	2	0.11	0.1	forest
2746	29.552555	50.783125	2	0.12	0.11	forest
2747	29.539440	50.784100	2	0.11	0.11	forest
2748	29.533516	50.783125	2	0.11	0.09	field
2749	29.529686	50.78307	2	0.1	0.1	forest
2750	29.524330	50.782920	1	0.11	0.11	field

2751	29.519238	50.783125	2	0.1	0.09	old field
2752	29.514478	50.783125	2	0.09	0.08	field
2753	29.510320	50.782710	1	0.09	0.08	meadow
2754	29.514478	50.780127	2	0.09	0.09	field
2755	29.519238	50.780127	2	0.09	0.09	village
2756	29.523445	50.780363	2	0.1	0.09	field
2757	29.529828	50.779751	2	0.1	0.1	forest
2758	29.524050	50.777500	2	0.1	0.09	meadow
2759	29.519238	50.77713	2	0.1	0.1	meadow
2760	29.514478	50.77713	2	0.1	0.09	meadow
2761	29.481023	50.774105	1	0.12	0.12	forest
2762	29.495424	50.774105	2	0.11	0.11	forest
2763	29.524760	50.775410	1	0.1	0.09	meadow
2764	29.552542	50.774105	2	0.12	0.11	meadow
2765	29.565394	50.772658	1	0.13	0.11	meadow
2766	29.62394	50.774105	2	0.11	0.1	forest
2767	29.63822	50.774105	2	0.1	0.1	forest
2768	29.652408	50.774105	1	0.1	0.09	forest
2769	29.666786	50.774132	2	0.1	0.1	forest
2770	29.681065	50.774132	2	0.12	0.1	forest
2771	29.695343	50.774132	1	0.1	0.09	forest
2772	29.709623	50.774132	2	0.1	0.09	forest
2773	29.723898	50.774105	2	0.11	0.1	forest
2774	29.738181	50.774132	1	0.12	0.1	forest
2775	29.752459	50.774132	2	0.1	0.1	forest
2776	29.766736	50.774105	2	0.1	0.09	forest
2777	29.780948	50.774105	1	0.1	0.1	forest
2778	29.895253	50.774105	2	0.1	0.09	field
2779	29.923806	50.774132	2	0.09	0.09	forest
2780	29.938085	50.774132	2	0.1	0.09	forest
2781	29.952371	50.774105	1	0.1	0.1	forest
2782	29.966644	50.774132	2	0.1	0.09	forest
2783	29.98093	50.774105	2	0.11	0.1	forest
2784	29.99521	50.774105	1	0.13	0.13	forest
2785	30.00949	50.774105	2	0.12	0.1	forest
2786	30.023769	50.774105	2	0.1	0.09	field
2787	30.038037	50.774132	1	0.12	0.11	forest
2788	30.067866	50.774001	2	0.12	0.1	meadow
2789	29.952364	50.765139	2	0.1	0.09	forest
2790	29.939021	50.764886	2	0.11	0.1	old field
2791	29.923806	50.765139	2	0.11	0.1	forest
2792	29.895249	50.765139	2	0.1	0.09	forest
2793	29.652507	50.765139	2	0.1	0.1	forest
2794	29.952371	50.756119	2	0.11	0.11	forest
2795	29.938092	50.756119	2	0.11	0.1	forest
2796	29.923806	50.756146	2	0.12	0.12	old field
2797	29.895253	50.756119	2	0.11	0.1	forest
2798	29.895249	50.747154	2	0.12	0.1	forest
2799	29.838134	51.160815	2	0.12	0.1	old field
2800	29.823854	51.161419	2	0.11	0.11	meadow
2801	29.808623	51.160819	2	0.12	0.1	field
2802	29.823855	51.151822	1	0.1	0.09	old field

2803	29.809575	51.151827	2	0.12	0.11	meadow
2804	29.795296	51.151822	2	0.11	0.11	meadow
2805	29.838134	51.142829	2	0.12	0.1	forest
2806	29.823855	51.142829	2	0.11	0.09	forest
2807	29.810527	51.142835	2	0.11	0.1	meadow
2808	29.838133	51.133842	2	0.11	0.1	forest
2809	29.823854	51.134441	2	0.1	0.09	forest
2810	29.795296	51.124842	2	0.1	0.1	field
2811	29.781093	51.123834	1	0.09	0.09	meadow
2812	29.796249	51.133842	2	0.1	0.09	meadow
2813	29.794344	51.142835	2	0.1	0.09	meadow
2814	29.781017	51.133842	2	0.11	0.1	old field
2815	29.809575	51.133835	2	0.09	0.09	meadow
2816	29.781017	51.143435	2	0.11	0.11	forest
2817	29.778549	51.152105	1	0.12	0.11	forest
2818	29.739360	51.125110	1	0.1	0.09	forest
2819	29.739076	51.152375	1	0.1	0.09	field
2820	29.695338	51.151822	1	0.11	0.1	forest
2821	29.696735	51.12492	1	0.1	0.09	forest
2822	29.656334	51.125291	1	0.12	0.1	old field
2823	29.695255	51.097862	1	0.1	0.1	meadow
2824	29.735813	51.070635	1	0.1	0.1	forest
2825	29.694579	51.072272	1	0.1	0.09	old field
2826	29.65191	51.0435	1	0.16	0.14	old field
2827	29.607021	51.043935	1	0.1	0.1	old field
2828	29.566834	51.043315	1	0.1	0.1	field
2829	29.523869	51.043903	1	0.11	0.1	field
2830	29.523869	51.070883	1	0.11	0.1	old field
2831	29.480208	51.070892	1	0.1	0.09	field
2832	29.48116	51.043914	1	0.12	0.12	forest
2833	29.438176	51.043903	1	0.12	0.11	old field
2834	29.438323	51.016936	1	0.13	0.12	old field
2835	29.438219	50.988598	1	0.12	0.11	meadow
2836	29.39533	50.989943	1	0.13	0.12	forest
2837	29.395487	50.962981	1	0.09	0.09	old field
2838	29.438323	50.93645	1	0.13	0.11	field
2839	29.4383	50.90868	1	0.1	0.09	forest
2840	29.481023	50.882024	1	0.1	0.08	field
2841	29.481023	50.855044	1	0.09	0.08	old field
2842	29.478841	50.827867	1	0.11	0.1	forest
2843	29.479558	50.800762	1	0.11	0.1	forest
2844	29.438323	50.773533	1	0.09	0.09	field
2845	29.47899	50.7463	1	0.1	0.09	forest
2846	29.523869	50.747125	1	0.13	0.1	forest
2847	29.566822	50.747125	1	0.1	0.1	forest
2848	29.609562	50.774105	1	0.12	0.1	forest
2849	29.60967	50.747154	1	0.15	0.1	forest
2850	29.652507	50.747154	1	0.1	0.09	forest
2851	29.695343	50.747753	1	0.12	0.1	forest
2852	29.738101	50.747125	1	0.1	0.09	forest
2853	29.780948	50.747125	1	0.12	0.11	forest
2854	29.823854	50.774132	1	0.09	0.09	field

2855	29.823854	50.747154	1	0.09	0.09	forest
2856	29.866330	50.774650	1	0.1	0.09	forest
2857	29.866690	50.747154	1	0.11	0.11	forest
2858	29.909794	50.747503	1	0.11	0.1	forest
2859	29.909532	50.774105	1	0.11	0.09	old field
2860	29.953580	50.747140	1	0.12	0.11	forest
2861	29.994827	50.747665	1	0.14	0.13	forest
2862	30.03899	50.747154	1	0.1	0.09	meadow
2863	30.080938	50.747296	1	0.1	0.09	field
2864	30.079923	50.774132	1	0.1	0.09	meadow
2865	30.121927	50.774162	1	0.11	0.1	forest
2866	30.123328	50.801309	1	0.11	0.1	field
2867	30.122386	50.829576	1	0.11	0.1	forest
2868	30.123768	50.85554	1	0.12	0.11	forest
2869	30.080178	50.854993	1	0.1	0.1	meadow
2870	30.123719	50.882024	1	0.13	0.1	forest
2871	30.122395	50.908554	1	0.13	0.11	forest
2872	30.122566	50.935336	1	0.13	0.12	forest
2873	30.078535	50.963576	1	0.17	0.11	forest
2874	30.081797	50.990691	1	0.12	0.1	forest
2875	30.166168	51.01667	1	0.2	0.12	forest
2876	30.211893	51.017658	1	0.13	0.13	forest
2877	30.252025	51.016184	1	0.11	0.1	field
2878	30.295081	51.016923	1	0	0	inaccessible
2879	30.338781	51.018467	1	0.16	0.14	forest
2880	30.380573	51.017858	1	0.14	0.14	forest
2895	29.864102	51.178653	1	0.09	0.08	forest
2896	29.823794	51.178802	1	0.1	0.09	forest
2897	29.466881	51.043914	2	0.12	0.11	forest
2898	29.452585	51.043903	2	0.1	0.1	forest
2899	29.466865	51.03491	2	0.11	0.1	field
2900	29.452603	51.034922	2	0.11	0.11	old field
2901	29.438323	51.035521	2	0.11	0.11	field
2902	29.466865	51.025916	2	0.11	0.1	old field
2903	29.452603	51.025329	2	0.11	0.1	old field
2904	29.437371	51.025929	2	0.12	0.12	old field
2905	29.452585	51.016923	2	0.11	0.11	field
2906	29.424996	51.016936	2	0.12	0.11	old field
2907	29.453555	51.007943	2	0.11	0.11	field
2908	29.438306	51.00793	2	0.12	0.11	forest
2909	29.423092	51.007943	2	0.13	0.11	forest
2910	29.424026	50.998937	2	0.12	0.1	field
2911	29.438323	50.998951	2	0.12	0.11	forest
2912	29.452603	50.998951	2	0.12	0.1	forest
2913	29.452585	50.989943	2	0.12	0.11	field
2914	29.423092	50.989958	2	0.1	0.09	meadow
2915	29.409765	50.989358	2	0.1	0.1	village
2916	29.409765	50.998351	2	0.11	0.11	field
2917	29.409746	50.98095	2	0.12	0.11	field
2918	29.408813	50.971973	2	0.1	0.1	field
2919	29.409765	50.962981	2	0.12	0.11	forest
2920	29.379044	50.990267	2	0.13	0.12	forest

2921	29.395467	50.98095	2	0.13	0.12	meadow
2922	29.395487	50.971973	2	0.12	0.1	forest
2923	29.379868	50.980798	2	0.13	0.12	forest
2924	29.380142	50.971501	2	0.13	0.11	forest
2925	29.379607	50.963029	2	0.12	0.12	field
2926	29.395487	50.953985	2	0.1	0.09	meadow
2927	29.380113	50.953992	2	0.12	0.11	forest
2928	29.409765	50.944993	2	0.13	0.13	forest
2929	29.395487	50.944993	2	0.12	0.11	forest
2930	29.379777	50.944955	2	0.1	0.1	meadow
2931	29.409746	50.935984	2	0.11	0.1	meadow
2932	29.424044	50.936001	2	0.12	0.11	forest
2933	29.452603	50.927008	2	0.1	0.1	field
2934	29.438323	50.927008	2	0.11	0.1	field
2935	29.424026	50.92699	2	0.12	0.11	meadow
2936	29.466881	50.918015	2	0.12	0.11	village
2937	29.452603	50.917416	2	0.12	0.11	field
2938	29.438323	50.918015	2	0.11	0.11	field
2939	29.452585	50.909004	2	0.12	0.1	village
2940	29.466881	50.909023	2	0.12	0.1	forest
2941	29.438323	50.900031	2	0.12	0.1	forest
2942	29.45278	50.90012	2	0.12	0.1	forest
2943	29.46646	50.89999	2	0.1	0.09	forest
2944	29.48116	50.891037	2	0.11	0.11	old field
2945	29.466865	50.891017	2	0.12	0.11	forest
2946	29.452585	50.891017	2	0.1	0.09	forest
2947	29.452585	50.882024	2	0.09	0.09	field
2948	29.466881	50.882044	2	0.1	0.09	forest
2949	29.494487	50.882044	2	0.09	0.09	field
2950	29.509704	50.873031	2	0.1	0.09	forest
2951	29.496391	50.873052	2	0.1	0.09	forest
2952	29.481144	50.873031	2	0.09	0.08	field
2953	29.481144	50.864038	2	0.09	0.09	field
2954	29.494487	50.86406	2	0.1	0.09	forest
2955	29.509704	50.864038	2	0.1	0	meadow
2956	29.509704	50.855044	2	0.1	0.09	old field
2957	29.495424	50.855044	2	0.09	0.09	old field
2958	29.495424	50.846051	2	0.1	0.09	old field
2959	29.481144	50.846051	2	0.1	0.1	old field
2960	29.466881	50.846074	2	0.11	0.1	field
2961	29.495424	50.837058	2	0.12	0.1	field
2962	29.48116	50.837082	2	0.11	0.1	field
2963	29.466881	50.837082	2	0.1	0.1	field
2964	29.509718	50.828089	2	0.11	0.11	forest
2965	29.523996	50.819096	2	0.12	0.1	forest
2966	29.538276	50.819096	2	0.1	0.09	forest
2967	29.509718	50.819096	2	0.13	0.12	forest
2968	29.495439	50.819096	2	0.12	0.11	forest
2969	29.495439	50.828089	2	0.1	0.09	forest
2970	29.481144	50.819071	2	0.11	0.1	forest
2971	29.466865	50.819071	2	0.09	0.09	forest
2972	29.466881	50.810102	2	0.11	0.09	forest

2973	29.481144	50.810078	2	0.1	0.09	forest
2974	29.45243	50.809407	2	0.09	0.09	forest
2975	29.452915	50.818897	1	0.13	0.12	forest
2976	29.466881	50.80111	2	0.1	0.09	forest
2977	29.452603	50.80111	2	0.09	0.09	forest
2978	29.495439	50.792118	2	0.11	0.11	forest
2979	29.509718	50.792118	2	0.12	0.1	forest
2980	29.481144	50.792092	2	0.12	0.11	forest
2981	29.468427	50.791649	2	0.1	0.1	forest
2982	29.466865	50.783098	2	0.12	0.1	forest
2983	29.481144	50.783098	2	0.11	0.11	forest
2984	29.495439	50.783125	2	0.11	0.11	forest
2985	29.466865	50.774105	2	0.1	0.1	meadow
2986	29.452585	50.774105	2	0.1	0.09	field
2987	29.481	50.763654	2	0.1	0.1	meadow
2988	29.4813	50.75541	2	0.12	0.1	forest
2989	29.466881	50.756146	2	0.13	0.11	forest
2990	29.468936	50.766222	2	0.1	0.1	meadow
2991	29.452585	50.765112	2	0.11	0.1	meadow
2992	29.451651	50.756146	2	0.1	0.1	meadow
2993	29.495424	50.765112	2	0.1	0.09	meadow
2994	29.510563	50.765134	2	0.1	0.09	forest
2995	29.523983	50.765112	2	0.1	0.1	forest
2996	29.52214	50.75485	2	0.09	0.09	forest
2997	29.509704	50.756119	2	0.12	0.1	forest
2998	29.495424	50.756119	2	0.11	0.1	forest
2999	29.495424	50.747125	2	0.1	0.1	forest
3000	29.509718	50.747154	2	0.12	0.11	forest
3001	29.538263	50.747125	2	0.13	0.12	forest
3002	29.539228	50.756146	2	0.09	0.09	forest
3003	29.538263	50.765112	2	0.11	0.1	forest
3004	29.537117	50.774472	2	0.12	0.1	meadow
3005	29.552555	50.765139	2	0.09	0.09	forest
3006	29.552555	50.756146	2	0.11	0.1	forest
3007	29.552542	50.747125	2	0.1	0.09	forest
3008	29.566822	50.756119	2	0.1	0.09	forest
3009	29.566822	50.765112	2	0.1	0.09	meadow
3010	29.581102	50.774105	2	0.09	0.09	meadow
3011	29.581112	50.765139	2	0.09	0.09	meadow
3012	29.581112	50.756146	2	0.1	0.09	meadow
3013	29.581102	50.747125	2	0.1	0.09	meadow
3014	29.595381	50.747125	2	0.09	0.09	meadow
3015	29.595391	50.756146	2	0.1	0.1	meadow
3016	29.595381	50.765112	2	0.1	0.09	forest
3017	29.594439	50.774132	2	0.1	0.1	forest
3018	29.609661	50.765112	2	0.11	0.1	forest
3019	29.60967	50.756146	2	0.1	0.1	forest
3020	29.62395	50.765139	2	0.11	0.1	forest
3021	29.62394	50.756119	2	0.12	0.11	forest
3022	29.62394	50.747125	2	0.1	0.1	forest
3023	29.63822	50.747125	2	0.11	0.1	forest
3024	29.63822	50.756119	2	0.11	0.1	forest

3025	29.63822	50.765112	2	0.1	0.09	forest
3026	29.6525	50.756119	2	0.11	0.1	forest
3027	29.62394	50.738132	2	0.1	0.09	forest
3028	29.63822	50.738132	2	0.1	0.1	forest
3029	29.6525	50.738132	2	0.12	0.11	forest
3030	29.666779	50.738132	2	0.12	0.1	forest
3031	29.681059	50.738132	2	0.12	0.1	forest
3032	29.695338	50.738132	2	0.11	0.1	forest
3033	29.709618	50.738132	2	0.14	0.13	forest
3034	29.666779	50.765112	2	0.12	0.11	forest
3035	29.666786	50.756146	2	0.11	0.11	forest
3036	29.666779	50.747125	2	0.12	0.11	forest
3037	29.681059	50.747125	2	0.09	0.09	forest
3038	29.681059	50.756119	2	0.1	0.1	forest
3039	29.681065	50.765139	2	0.11	0.09	forest
3040	29.695338	50.765112	2	0.11	0.1	forest
3041	29.695338	50.756119	2	0.1	0.09	forest
3042	29.709618	50.747125	2	0.09	0.09	forest
3043	29.709623	50.756146	2	0.09	0.09	forest
3044	29.70867	50.765139	2	0.1	0.09	forest
3045	29.738177	50.765112	2	0.11	0.1	forest
3046	29.738181	50.756146	2	0.09	0.09	forest
3047	29.723898	50.765112	2	0.11	0.09	forest
3048	29.723902	50.756146	2	0.11	0.09	forest
3049	29.723898	50.747125	2	0.11	0.1	field
3050	29.723898	50.738132	2	0.13	0.12	forest
3051	29.738398	50.737528	2	0.11	0.1	forest
3052	29.752877	50.737635	2	0.11	0.1	forest
3053	29.752459	50.747154	2	0.12	0.1	forest
3054	29.752459	50.756745	2	0.1	0.09	forest
3055	29.752459	50.764539	2	0.11	0.1	forest
3056	29.766736	50.765112	2	0.11	0.1	forest
3057	29.766736	50.756119	2	0.12	0.1	forest
3058	29.766736	50.747125	2	0.11	0.11	forest
3059	29.781016	50.756119	2	0.11	0.11	forest
3060	29.781016	50.765112	2	0.1	0.09	old field
3061	29.795297	50.774132	2	0.1	0.1	forest
3062	29.795296	50.765112	2	0.11	0.1	forest
3063	29.795296	50.756119	2	0.12	0.1	forest
3064	29.795296	50.747125	2	0.11	0.11	forest
3065	29.809575	50.747154	2	0.1	0.1	forest
3066	29.809575	50.756146	2	0.11	0.09	forest
3067	29.810546	50.766518	2	0.1	0.1	meadow
3068	29.809575	50.774132	2	0.1	0.09	forest
3069	29.823855	50.765112	2	0.11	0.09	forest
3070	29.824900	50.756860	2	0.11	0.1	bog
3071	29.838133	50.783125	2	0.09	0.09	meadow
3072	29.838134	50.774105	2	0.1	0.09	bog
3073	29.838939	50.764953	2	0.12	0.11	forest
3074	29.852412	50.783125	2	0.12	0.1	forest
3075	29.86669	50.791518	2	0.11	0.11	forest
3076	29.867643	50.783125	2	0.11	0.1	forest

3077	29.852412	50.774132	2	0.1	0.1	meadow
3078	29.852414	50.765112	2	0.11	0.1	forest
3079	29.852412	50.756146	2	0.11	0.11	forest
3080	29.838253	50.756955	2	0.1	0.1	forest
3081	29.838133	50.747154	2	0.1	0.09	forest
3082	29.852576	50.747449	2	0.11	0.11	forest
3083	29.881500	50.774840	2	0.11	0.1	forest
3084	29.88097	50.765139	2	0.12	0.1	forest
3085	29.86669	50.765139	2	0.12	0.11	forest
3086	29.86669	50.756146	2	0.12	0.1	forest
3087	29.880973	50.756119	2	0.11	0.11	forest
3088	29.880973	50.747125	2	0.12	0.1	forest
3089	29.895058	50.73917	2	0.12	0.1	forest
3090	29.909381	50.73917	2	0.11	0.11	forest
3091	29.909528	50.756146	2	0.12	0.12	forest
3092	29.909528	50.765139	2	0.12	0.11	forest
3093	29.924417	50.746788	2	0.13	0.12	forest
3094	29.923812	50.738132	2	0.11	0.1	field
3095	29.939606	50.747298	2	0.12	0.11	forest
3096	29.938092	50.738132	2	0.1	0.1	field
3097	29.952377	50.737316	2	0.09	0.09	field
3098	29.966651	50.765112	2	0.11	0.1	forest
3099	29.966644	50.756146	2	0.1	0.09	forest
3100	29.966651	50.747125	2	0.12	0.11	forest
3101	29.966651	50.738132	2	0.1	0.09	forest
3102	29.980259	50.76502	2	0.12	0.11	forest
3103	29.982487	50.756237	2	0.12	0.11	forest
3104	29.98093	50.747125	2	0.14	0.13	forest
3105	29.99521	50.765112	2	0.14	0.13	forest
3106	29.993649	50.756007	2	0.11	0.1	forest
3107	30.00949	50.765112	2	0.13	0.11	forest
3108	30.009785	50.755627	2	0.12	0.12	forest
3109	30.00949	50.747125	2	0.13	0.12	forest
3110	30.00949	50.739931	2	0.11	0.11	field
3111	30.023769	50.765112	2	0.12	0.11	forest
3112	30.023759	50.756146	2	0.11	0.1	forest
3113	30.02429	50.747536	2	0.1	0.09	field
3114	30.023769	50.739931	2	0.12	0.11	field
3115	30.036306	50.765346	2	0.1	0.1	village
3116	30.038049	50.756119	2	0.12	0.12	field
3117	30.052317	50.774132	2	0.12	0.11	forest
3118	30.052317	50.765139	2	0.1	0.09	field
3119	30.052317	50.756146	2	0.13	0.12	field
3120	30.052328	50.747125	2	0.1	0.09	meadow
3121	30.066608	50.765112	2	0.1	0.09	meadow
3122	30.066596	50.756196	2	0.11	0.11	meadow
3123	30.066608	50.747125	2	0.09	0.09	field
3124	30.081827	50.756146	2	0.1	0.1	field
3125	30.080888	50.765112	2	0.1	0.09	meadow
3126	30.095167	50.756119	2	0.11	0.11	forest
3127	30.095167	50.765112	2	0.1	0.1	old field
3128	30.093545	50.774065	2	0.16	0.14	forest

3129	30.095153	50.783125	2	0.12	0.11	forest
3130	30.107975	50.756225	2	0.12	0.11	forest
3131	30.109602	50.765074	2	0.1	0.09	forest
3132	30.109432	50.774132	2	0.1	0.09	forest
3133	30.111161	50.783149	2	0.13	0.11	forest
3134	30.123726	50.783098	2	0.11	0.1	forest
3135	30.095167	50.792092	2	0.12	0.11	forest
3136	30.108295	50.792763	2	0.13	0.13	forest
3137	30.123726	50.792092	2	0.11	0.1	forest
3138	30.096567	50.80128	2	0.11	0.1	meadow
3139	30.110233	50.801346	2	0.12	0.11	forest
3140	30.108656	50.80991	2	0.11	0.11	forest
3141	30.123980	50.810650	2	0.1	0.09	forest
3142	30.123711	50.819096	2	0.12	0.1	forest
3143	30.109280	50.818900	2	0.09	0.09	forest
3144	30.110895	50.827762	2	0.12	0.11	forest
3145	30.095153	50.837082	2	0.1	0.09	meadow
3146	30.109210	50.837470	2	0.1	0.09	forest
3147	30.123899	50.836932	2	0.09	0.09	field
3148	30.138006	50.801085	2	0.19	0.09	field
3149	30.138006	50.810078	2	0.1	0.1	field
3150	30.139162	50.819015	2	0.11	0.11	forest
3151	30.138006	50.828065	2	0.11	0.09	forest
3152	30.138006	50.837058	2	0.1	0.09	forest
3153	30.096252	50.846227	2	0.12	0.11	forest
3154	30.107064	50.845693	2	0.12	0.11	forest
3155	30.122007	50.845563	2	0.11	0.09	old field
3156	30.095167	50.855044	2	0.11	0.11	forest
3157	30.109447	50.855044	2	0.12	0.12	forest
3158	30.080875	50.864060	2	0.1	0.1	meadow
3159	30.095167	50.864038	2	0.11	0.1	forest
3160	30.109447	50.864038	2	0.12	0.11	forest
3161	30.123711	50.86406	2	0.13	0.11	forest
3162	30.095411	50.872916	2	0.12	0.1	meadow
3163	30.109432	50.872453	2	0.13	0.12	village
3164	30.123726	50.873031	2	0.11	0.11	forest
3165	30.138006	50.873031	2	0.13	0.12	forest
3166	30.109432	50.882044	2	0.12	0.11	meadow
3167	30.138006	50.882024	2	0.13	0.11	forest
3168	30.109432	50.891037	2	0.12	0.1	meadow
3169	30.124663	50.891037	2	0.12	0.12	field
3170	30.138006	50.891017	2	0.12	0.1	field
3171	30.10848	50.900031	2	0.12	0.1	meadow
3172	30.123711	50.900031	2	0.14	0.13	forest
3173	30.137145	50.899871	2	0.13	0.13	forest
3174	30.108656	50.908905	2	0.15	0.14	forest
3175	30.138006	50.909004	2	0.14	0.12	forest
3176	30.096147	50.917868	2	0.15	0.12	meadow
3177	30.109432	50.917416	2	0.14	0.13	forest
3178	30.124663	50.918015	2	0.15	0.11	forest
3179	30.138006	50.917997	2	0.14	0.12	forest
3180	30.095167	50.935984	2	0.12	0.11	meadow

3181	30.110384	50.936001	2	0.15	0.15	forest
3182	30.0938	50.945552	2	0.13	0.12	field
3183	30.109432	50.945593	2	0.15	0.13	forest
3184	30.123043	50.94489	2	0.14	0.14	forest
3185	30.066608	50.962964	2	0.14	0.12	meadow
3186	30.095153	50.962981	2	0.13	0.13	forest
3187	30.109432	50.962981	2	0.16	0.14	forest
3188	30.066608	50.971957	2	0.13	0.12	meadow
3189	30.079638	50.971558	2	0.13	0.11	forest
3190	30.095153	50.971973	2	0.14	0.13	forest
3191	30.109432	50.971973	2	0.14	0.12	forest
3192	30.066596	50.980965	2	0.11	0.09	meadow
3193	30.080888	50.98095	2	0.12	0.12	forest
3194	30.095167	50.98095	2	0.13	0.11	forest
3195	30.109447	50.98095	2	0.13	0.1	forest
3196	30.066347	50.989286	2	0.11	0.1	meadow
3197	30.095153	50.990557	2	0.12	0.11	forest
3198	30.066596	50.998951	2	0.12	0.1	meadow
3199	30.080888	50.998937	2	0.11	0.11	old field
3200	30.096042	50.998734	2	0.1	0.1	forest
3201	30.109432	50.998351	2	0.11	0.1	forest
3202	30.08164	51.007961	2	0.11	0.11	meadow
3203	30.095167	51.00793	2	0.11	0.1	forest
3204	30.109447	51.00793	2	0.13	0.13	forest
3205	30.123726	51.00793	2	0.14	0.1	forest
3206	30.123726	50.998937	2	0.12	0.11	forest
3207	30.109432	50.989958	2	0.12	0.12	forest
3208	30.123711	50.989958	1	0.13	0.12	forest
3209	30.137991	51.016936	2	0.15	0.11	forest
3210	30.153221	51.016936	2	0.15	0.12	forest
3211	30.137038	51.007943	2	0.13	0.13	forest
3212	30.137991	50.99955	2	0.11	0.1	forest
3213	30.137415	50.988746	2	0.13	0.11	forest
3214	30.151663	50.989394	2	0.1	0.09	forest
3215	30.152286	50.998937	2	0.1	0.1	forest
3216	30.152006	51.007544	2	0.14	0.12	forest
3217	30.166548	51.007943	2	0.15	0.12	forest
3218	30.166548	50.99955	2	0.12	0.1	forest
3219	30.180827	51.007943	2	0.14	0.13	forest
3220	30.180674	51.016724	2	0.17	0.12	forest
3221	30.181821	51.025163	2	0.11	0.11	meadow
3222	30.180845	51.03491	2	0	0	inaccessible
3223	30.195124	51.03491	2	0	0	inaccessible
3224	30.195106	51.025929	2	0.1	0.1	meadow
3225	30.195242	51.016847	2	0.12	0.1	forest
3226	30.195124	51.00793	2	0.12	0.11	forest
3227	30.209384	51.007943	2	0.13	0.13	forest
3228	30.209384	51.025329	2	0.13	0.12	village
3229	30.209404	51.03491	2	0	0	inaccessible
3230	30.223683	51.025916	2	0.14	0.12	forest
3231	30.223663	51.016936	2	0.13	0.12	forest
3232	30.223683	51.00793	2	0.12	0.11	forest

3233	30.237005	51.035224	2	0.11	0.11	forest
3234	30.237963	51.025916	2	0.12	0.11	forest
3235	30.238438	51.016562	2	0.12	0.11	forest
3236	30.237943	51.007344	2	0.11	0.11	meadow
3237	30.252243	51.03491	2	0	0	inaccessible
3238	30.252222	51.025929	2	0.12	0.11	forest
3239	30.252222	51.007943	2	0.12	0.12	forest
3240	30.267911	51.035093	2	0	0	inaccessible
3241	30.265548	51.025929	2	0.15	0.14	forest
3242	30.266333	51.01694	2	0.12	0.12	forest
3243	30.2665	51.007943	2	0.13	0.12	forest
3244	30.280779	51.007943	2	0.13	0.12	forest
3245	30.295081	51.00793	2	0.14	0.12	forest
3246	30.280779	51.016936	2	0.15	0.13	forest
3247	30.280802	51.025916	2	0.17	0.14	forest
3248	30.277903	51.032808	2	0.12	0.11	meadow
3249	30.29601	51.034922	2	0	0	inaccessible
3250	30.295081	51.025916	2	0.14	0.13	forest
3251	30.309361	51.03491	2	0.13	0.12	village
3252	30.309337	51.025329	2	0.12	0.12	forest
3253	30.322992	51.025217	2	0.12	0.12	forest
3254	30.322411	51.03457	2	0.12	0.11	meadow
3255	30.337895	51.025929	2	0.14	0.14	forest
3256	30.323641	51.016923	2	0.14	0.13	forest
3257	30.309337	51.016936	2	0.13	0.13	forest
3258	30.354283	51.025667	2	0.13	0.12	meadow
3259	30.3522	51.016923	2	0.13	0.13	forest
3260	30.351222	51.007943	2	0.14	0.13	forest
3261	30.366479	51.016923	2	0.13	0.13	forest
3262	30.366479	51.00793	2	0.14	0.14	forest
3263	30.380759	51.00793	2	0.15	0.14	forest
3264	30.395039	51.00793	2	0.14	0.14	forest
3265	30.394478	51.016832	2	0.14	0.13	forest
3266	30.407536	51.008119	2	0.15	0.14	forest
3381	29.921989	51.132663	2	0.12	0.12	forest
3391	29.880973	51.160815	2	0.11	0.1	old field
3392	29.880973	51.169808	2	0.11	0.09	forest
3393	29.87813	51.178676	2	0.1	0.1	forest
3394	29.866694	51.160815	2	0.12	0.1	old field
3395	29.866694	51.169808	2	0.1	0.1	forest
3396	29.852414	51.169808	2	0.1	0.09	forest
3397	29.852414	51.178802	2	0.1	0.1	forest
3398	29.838134	51.169808	2	0.11	0.1	old field
3399	29.838134	51.178802	2	0.11	0.09	forest
3400	29.852414	51.185996	2	0.11	0.1	forest
3401	29.866694	51.185996	2	0.1	0.1	forest
3402	29.823855	51.169808	2	0.11	0.11	forest
3403	29.766738	51.124848	2	0.1	0.1	old field
3404	29.766738	51.133842	2	0.11	0.11	old field
3405	29.766736	51.142829	2	0.12	0.11	forest
3406	29.766738	51.151827	2	0.12	0.1	forest
3407	29.752457	51.124842	2	0.11	0.1	forest

3408	29.752459	51.133842	2	0.12	0.1	forest
3409	29.753411	51.142835	2	0.11	0.11	old field
3410	29.752459	51.151827	2	0.11	0.1	forest
3411	29.738181	51.133842	2	0.11	0.09	forest
3412	29.738181	51.142835	2	0.1	0.1	forest
3413	29.723902	51.124848	2	0.12	0.1	meadow
3414	29.723902	51.133842	2	0.11	0.1	forest
3415	29.723902	51.142235	2	0.11	0.11	old field
3416	29.723902	51.151827	2	0.11	0.1	meadow
3417	29.709618	51.133835	2	0.1	0.1	forest
3418	29.709623	51.142835	2	0.11	0.1	forest
3419	29.70867	51.151827	2	0.11	0.09	forest
3420	29.695343	51.133842	2	0.11	0.11	meadow
3421	29.695343	51.142835	2	0.1	0.1	forest
3422	29.681059	51.124842	2	0.1	0.1	forest
3423	29.666779	51.124842	2	0.11	0.09	forest
3424	29.681065	51.133842	2	0.11	0.11	old field
3425	29.666786	51.133842	2	0.12	0.11	forest
3426	29.681065	51.142835	2	0.1	0.09	forest
3427	29.666779	51.142829	2	0.11	0.1	forest
3428	29.681059	51.115849	2	0.11	0.11	field
3429	29.666786	51.115257	2	0.11	0.09	old field
3430	29.652507	51.115257	2	0.11	0.11	field
3431	29.652507	51.106864	2	0.11	0.1	forest
3432	29.665834	51.106864	2	0.11	0.11	village
3433	29.681065	51.106264	2	0.1	0.1	meadow
3434	29.681059	51.097862	2	0.12	0.11	forest
3435	29.666779	51.097862	2	0.12	0.1	field
3436	29.738177	51.088869	2	0.11	0.1	field
3437	29.723902	51.088877	2	0.12	0.1	forest
3438	29.709623	51.097272	2	0.11	0.1	field
3439	29.709623	51.088877	2	0.11	0.11	field
3440	29.695338	51.088869	2	0.1	0.1	field
3441	29.682017	51.088877	2	0.11	0.1	field
3442	29.666786	51.070292	2	0.11	0.1	field
3443	29.682017	51.070892	2	0.1	0.1	field
3444	29.709623	51.079885	2	0.1	0.1	field
3445	29.72295	51.079885	2	0.11	0.11	field
3446	29.738177	51.079876	2	0.11	0.1	forest
3447	29.723898	51.070883	2	0.12	0.1	forest
3448	29.709618	51.070883	2	0.11	0.1	field
3449	29.68216	51.080437	2	0.11	0.11	forest
3450	29.695343	51.061899	2	0.12	0.1	field
3451	29.681065	51.0613	2	0.11	0.1	field
3452	29.6658	51.061899	2	0.11	0.11	old field
3453	29.652507	51.0613	2	0.12	0.11	old field
3454	29.65233	51.07074	1	0.13	0.12	village
3455	29.695343	51.052906	2	0.12	0.1	field
3456	29.681059	51.052896	2	0.1	0.1	field
3457	29.667738	51.052906	2	0.11	0.11	field
3458	29.652507	51.052307	2	0.13	0.12	field
3459	29.63822	51.052896	2	0.12	0.12	field

3460	29.622045	51.052906	2	0.12	0.11	field
3461	29.638228	51.061899	2	0.12	0.11	field
3462	29.62395	51.043914	2	0.13	0.12	field
3463	29.63822	51.043903	2	0.14	0.12	field
3464	29.667594	51.04426	2	0.11	0.11	field
3465	29.60967	51.034322	2	0.11	0.11	field
3466	29.643798	51.025953	2	0.12	0.11	field
3467	29.595391	51.034322	2	0.12	0.1	old field
3468	29.581112	51.034922	2	0.11	0.11	field
3469	29.566822	51.03491	2	0.12	0.11	field
3470	29.581112	51.043914	2	0.12	0.11	field
3471	29.595381	51.043903	2	0.13	0.12	field
3472	29.609661	51.052896	2	0.12	0.1	meadow
3473	29.595391	51.052906	2	0.11	0.11	field
3474	29.581112	51.052906	2	0.11	0.11	field
3475	29.566822	51.052896	2	0.12	0.1	field
3476	29.552542	51.052896	2	0.12	0.11	field
3477	29.552542	51.043903	2	0.11	0.1	field
3478	29.538263	51.043903	2	0.12	0.1	field
3479	29.509704	51.043903	2	0.11	0.11	forest
3480	29.509718	51.052906	2	0.11	0.11	forest
3481	29.509704	51.061889	2	0.1	0.1	forest
3482	29.509704	51.070883	2	0.11	0.09	meadow
3483	29.523983	51.061889	2	0.11	0.1	по
3484	29.552555	51.070892	2	0.11	0.11	forest
3485	29.538263	51.061889	2	0.11	0.1	meadow
3486	29.552542	51.061889	2	0.12	0.1	forest
3487	29.566834	51.062498	2	0.12	0.11	field
3488	29.537323	51.070892	2	0.1	0.1	field
3489	29.509704	51.079876	2	0.11	0.1	forest
3490	29.495424	51.079876	2	0.1	0.09	forest
3491	29.481144	51.079876	2	0.1	0.1	forest
3492	29.495424	51.070883	2	0.11	0.1	field
3493	29.538263	51.052896	2	0.1	0.1	field
3494	29.523983	51.052896	2	0.12	0.1	field
3495	29.495424	51.061889	2	0.11	0.11	forest
3496	29.480208	51.061899	2	0.11	0.1	old field
3497	29.465929	51.061899	2	0.12	0.11	old field
3498	29.495424	51.052896	2	0.12	0.1	field
3499	29.48116	51.053506	2	0.11	0.11	field
3500	29.466881	51.052906	2	0.11	0.09	forest
3501	29.452585	51.052896	2	0.12	0.11	old field
3502	29.452585	51.061889	2	0.11	0.1	forest
3503	29.424044	51.034922	2	0.14	0.12	old field
3504	29.424044	51.025929	2	0.13	0.11	old field
3505	30.095167	50.92699	2	0.14	0.11	meadow
3506	30.109432	50.927008	2	0.15	0.13	forest
3507	30.123726	50.92699	2	0.2	0.16	forest
3508	30.138006	50.92699	2	0.17	0.14	forest
3510	30.095167	50.95397	2	0.15	0.13	forest
3511	30.109447	50.95397	2	0.16	0.14	forest
3512	30.066519	50.791707	2	0.12	0.1	meadow

3513	30.080475	50.791533	2	0.11	0.1	meadow
3514	29.538006	50.828374	2	0.12	0.1	forest
6000	29.872403	50.951421	1	0.12	0.12	old field
6001	29.87865	50.94914	1	0.14	0.14	forest
6002	29.86594	50.94783	1	0.1	0.09	old field
6003	29.866018	50.944693	1	0.1	0.09	field
6004	29.86207	50.938095	1	0.1	0.1	old field
6005	29.85117	50.93631	1	0.1	0.09	forest
6006	29.862585	50.933984	1	0.12	0.12	old field
6007	29.86825	50.93393	1	0.12	0.12	old field
6008	29.878773	50.932329	1	0.11	0.11	field
7000	30.285100	51.0759	1	0.1	0.1	field
7000	30.285121	51.075759	2	0.11	0,11	field
7001	51.021745	30.048110	1	0.1	0.1	field
7002	51.022164	30.049180	1	0.1	0.1	field