

**IL11. DOSDIM****1. MODEL DESCRIPTION AND EVALUATION OF MODEL PERFORMANCE: DOSDIM MODEL**

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2. GENERAL MODEL DESCRIPTION**2.1. Name of model, model developer, model user.**

DOSDIM (DOse DIstribution Model)

P. GOVAERTS, N. LEWYCKYJ, Th. ZEEVAERT - SCK•CEN, Mol (Belgium)

Users : T. Zeevaert

N. Lewyckyj

2.2. Important model characteristics.**2.2.1. Intended purpose of the model in radiation assessment**

DOSDIM was developed to assess the impact to man from routine and accidental atmospheric releases. It is a compartmental, deterministic, radiological model.

For an accidental release, dynamic transfers are used in opposition to a routine release for which equilibrium transfer factors are used. Parameter values were chosen to be conservative.

Transfers between compartments are described by first-order differential equations.

The following pathways are allowed for in DOSDIM :

- External irradiation from the passing cloud
- External irradiation from deposited materials
- Inhalation from the cloud and the resuspension
- Ingestion of contaminated food.

2.2.2. Intended accuracy of the model predictions

In the initial version of DOSDIM, a conservative bias was introduced for regulatory purposes. However, for the CB-scenario the degree of conservatism was reduced and more realistic i.e. unbiased predictions were aimed at. Finally for the S-scenario, a probability distribution functions were associated to the different parameters and an uncertainty analysis was provided.

2.2.3. Method used for deriving uncertainty estimates

In order to make stochastic calculations a Latin Hypercube Sampling code was applied to DOSDIM. For each parameter a statistic distribution (e.g. normal, log normal...) is defined and the number of runs is determined by the percentiles asked for. For the S-scenario, 500 runs were made.

2.2.4. Past experiences using this model

In this last version, DOSDIM was only used for VAMP-MPA scenarios (CB and S). A preliminary version was however used before in the framework of an exploitation licence for SCK•CEN and in a dose assessment study for routine releases from a concerning calculations of doses to population in case of a routine release from a Belgian manufactory of fuel elements.

2.2.5. Modifications made for this scenario

Comparatively with the version used for the CB-scenario, DOSDIM model was improved by :

- adding an uncertainty analysis using Latin Hypercube Sampling method
- modelling winter and summer grains separately
- dividing potatoes in early and late species
- modifying the model of the beef contamination in order to obtain more realistic results in the early phase
- modifying the model of the pig contamination in a dynamic way
- adding dynamic compartments for predatory and non-predatory freshwater fishes
- adding the contribution to the dose of seafishes using equilibrium transfer factors
- dividing human intake and whole-body concentrations in five different classes (man, woman, child 15 years, child 1 year, infant 3 months) according to ICRP 56 recommendations

- weighing all calculations for the different places in the S-region according to the foodstuff production

Unfortunately our predictions concerning the deposition were not in agreement with the data given in the "Description of S-scenario - 1991". We restarted the calculations from the observed deposition data. The vegetation growing period and the animal feeding practices were adapted according to the description of the scenario. We expressed also the translocation as a constant percentage of the deposited activity.

2.3. References describing detailed documentation of model

- Commission of the European Communities
"Seminar on the transfer of radioactive materials in the terrestrial environment subsequent to an accidental release to atmosphere"
11-15 April 1983, Dublin (Ireland), Volume II, p. 607-637.
- IAEA-CEC
"VAMP Multiple Pathways Assessment - Model description - Test scenario CB"
June 1993

2.4. Model structure (see flow chart)

On the flow chart, the interrupted lines represent transfers in the DOSDIM model which were not considered in the S-scenario and the continuous ones the effective structure of the version used for this exercise.

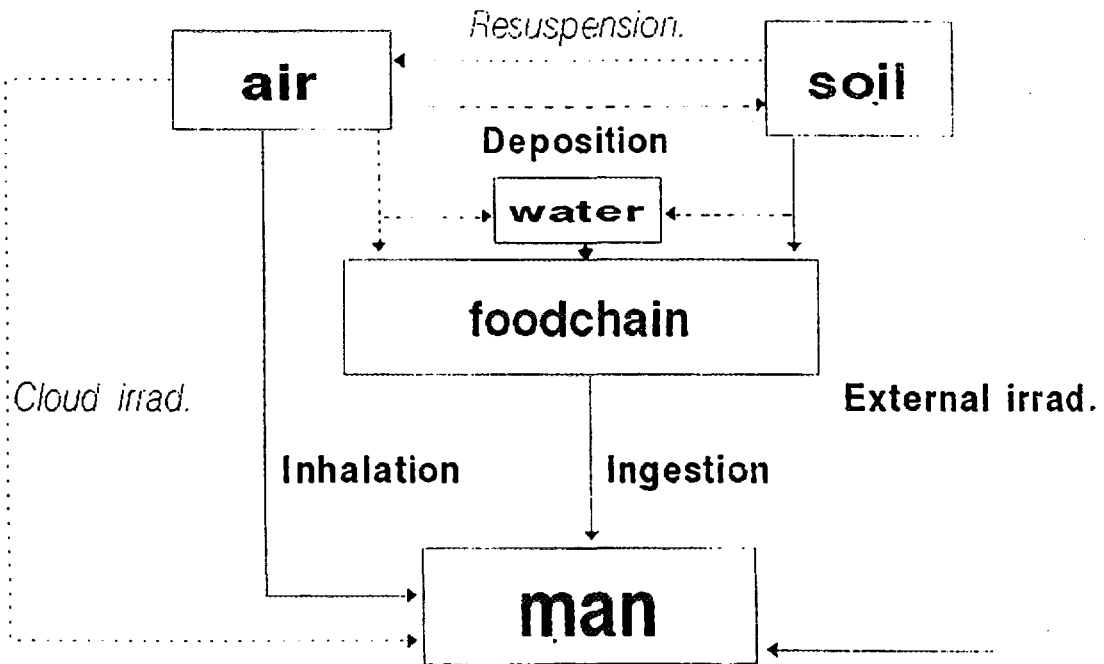
2.5. Description of procedure, equations and parameters used in different components of the model

In this description, only modifications or improvements with respect to the description and individual evaluation for CB-scenario are mentioned.

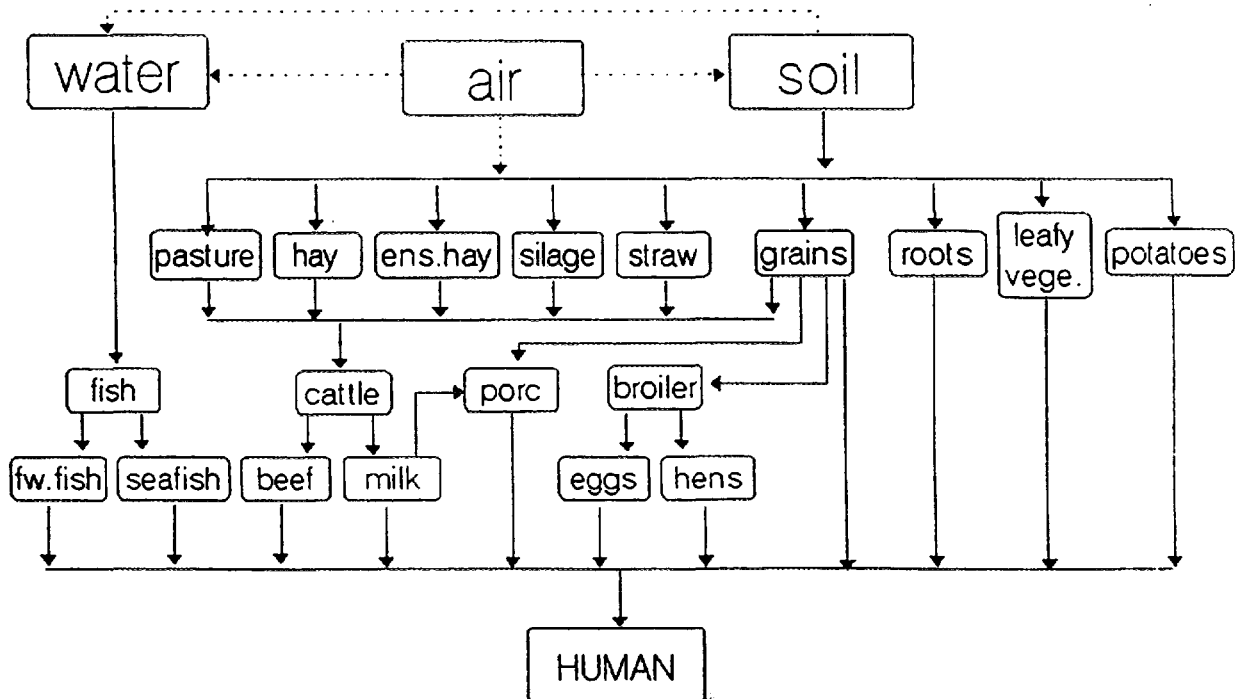
2.5.1. Total deposition

The calculated deposition does not agree with the observed one probably due to the uncertainties of data (small amount of sites for air concentration measurements) and

DOSDIM : pathways



DOSDIM : ingestion



to the size of the particles. We start our predictions from the observed deposition assuming an initial value of 19900 Bq/m^2 on 01.05.86.

2.5.2. Food items contributing to total diet

2.5.2.1. Vegetation

For this scenario we have taken into account the following vegetables or crops with their dry matter content expressed in percentage :

for humans :	root crops	12 %
	cereals	86 %
	rye	86 %
	leafy vegetables	10 %
	tubers	22 %
for animals :	pasture	20 %
	hay	83 %
	ensilaged hay	22 %
	grains	86 %
	straw	86 %
	ensilage	45 %

The plant contamination was calculated in the same way as for CB, exception made for the translocation which was expressed in percentage of the interception. To determine the Bv values we use a standard type of soil with a pH = 6 and with the following composition: sand 45 % ; clay 35 % ; loam 20 %.

The probability distribution functions are given between parenthesis. LN represents a log normal distribution, U a uniform distribution and GSD the geometrical standard deviation. The parameters used were :

The lixiviation parameter $\lambda_s = 4.29 \cdot 10^{-2}$ (LN ; GSD = 10) for grass
 $8.58 \cdot 10^{-2}$ (LN ; GSD = 10) for the other crops

	$(R/Y)_{fw}$	$(Bv)_{fw}$	Translocation (%)
pasture	0.38 LN ; GSD = 1.6	$1.66 \cdot 10^{-2}$ LN ; GSD = 4.6	-
hay	1.58 LN ; GSD = 1.6	$6.91 \cdot 10^{-2}$ LN ; GSD = 4.6	-
ensilaged hay	0.42 LN ; GSD = 1.6	$1.83 \cdot 10^{-2}$ LN ; GSD = 4.6	-
leafy vegetables	0.15 LN ; GSD = 1.6	$1.53 \cdot 10^{-2}$ LN ; GSD = 3.1	-
straw	0.25 U ; [0.1 ; 0.4]	$1.32 \cdot 10^{-1}$ LN ; GSD = 3.1	-
grains	0.625 U ; [0.25 ; 1.0]	$1.35 \cdot 10^{-2}$ LN ; GSD = 4.6	10 U [3 ; 17]
rye	0.625 U ; [0.25 ; 1.0]	$1.35 \cdot 10^{-2}$ LN ; GSD = 4.6	15 U [5 ; 25]
tubers	0.107 LN ; GSD = 2.8	$1.99 \cdot 10^{-2}$ LN ; GSD = 2.8	15 U [5 ; 25]
root crops	0.107 LN ; GSD = 2.8	$3.95 \cdot 10^{-3}$ LN ; GSD = 4.6	-
ensilage	0.15 LN ; GSD = 1.6	$6.89 \cdot 10^{-2}$ LN ; GSD = 3.1	-

where the fw index represents the fresh weight value.

The weathering decay is $\lambda_w = 4.62 \cdot 10^{-2}$ (LN ; GSD = 1.3) for the grass (pasture, hay and ensilaged hay) and $\lambda_w = 2.31 \cdot 10^{-2}$ (LN ; GSD = 1.6) for the rest of the crops. The food and feedstuffs were harvested and consumed according to the following tables :

	Feedstuffs or foodstuffs	Harvest or cut	Period of consumption
Humans	cereals	25.09	01.11 - 31.10
	early potatoes	01.07	01.08 - 30.09
	late potatoes	15.09	01.10 - 31.07
	rye	21.07	25.09 - 24.09
	root crops	15.09	01.08 - 31.07

	Feedstuffs or foodstuffs	Harvest or cut	Period of consumption
Animals	pasture	no cut	15.05 - 20.09
	hay	01.07	21.09 - 14.05
	ensilaged hay	15.06	20.09 - 15.05
		15.09	15.05 - 20.09
	grains	01.09	01.11 - 31.10
	straw	01.09	01.11 - 31.10

2.5.2.2. Milk

Cows were fed with uncontaminated feed until 25.05.86. The feeding regime was supposed to be as follows :

	Winter (kg dw/d)	Summer (kg dw/d)
Pasture	-	9.4
Hay	4.0	-
Grains	2.7	2.7
Ensilaged hay	4.6	2.3
Complete feed	2.2	-
Concentrates	1.1	-
Others	0.6	0.6
Total	15.2	15.0

The coefficients a_i for the milk model for Cs-137 (see CB-scenario) are respectively:

$$a_1 = 1.1 \cdot 10^{-3} \quad (\text{LN ; GSD} = 2.0)$$

$$a_2 = 1.9 \cdot 10^{-4} \quad (\text{LN ; GSD} = 2.0)$$

$$a_3 = 2.3 \cdot 10^{-5} \quad (\text{LN ; GSD} = 2.0)$$

$$\Rightarrow f_m = 4.0 \cdot 10^{-3}$$

2.5.2.3. Beef

The feeding regime was supposed to be as follows :

	Winter (kg dw/d)	Summer (kg dw/d)
Pasture	-	3.0
Hay	2.4	-
Grains	2.0	2.0
Ensilaged hay	1.2	0.6
Complete feed	0.5	-
Concentrates	0.4	-
Others	0.3	0.3
Total	6.8	6.1

The beef model was revised according to Coughtrey et al. (83) for a beef of 500 kg with 300 kg meat.

$$f_{f,\text{beef}}(t) = (b_1 e^{-\beta_1 t} + b_2 e^{-\beta_2 t}) \cdot b_3 \cdot e^{-\lambda t}$$

where

$$b_1 = 0.1 ; b_2 = 0.9$$

$$b_3 = 7.0 \cdot 10^{-4} \text{ (LN ; GSD = 2.2)} \Rightarrow f_f(\text{beef}) = 3 \cdot 10^{-2} \text{ d/kg}$$

$$\beta_1 = 6.93 \cdot 10^{-1} ; \beta_2 = 2.07 \cdot 10^{-2}$$

$f_{f,\text{beef}}(t)$ = time-dependent concentration in beef after a single intake at time $t = 0$

2.5.2.4. Pork

The model used for the calculation of the contamination of the pig meat is the same as for the beef meat. The parameter values for a pig of 100 kg with 25 kg meat are then

$$f_{f,\text{pork}}(t) = (c_1 e^{-\gamma_1 t} + c_2 e^{-\gamma_2 t}) \cdot c_3 \cdot e^{-\lambda t}$$

where $c1 = 0.1$; $c2 = 0.9$

$$c3 = 9.6 \cdot 10^{-3} \text{ (LN ; GSD = 2.2)}$$

$$\gamma1 = 3.3 \cdot 10^{-1} ; \gamma2 = 2.5 \cdot 10^{-2}$$

$f_{f,pork}(t)$ = time-dependent concentration in pork after a single intake
at time $t = 0$

2.5.2.5. Freshwater fish (non predatory)

If C_w represents the caesium concentration in water (see scenario description), the concentration in non predatory freshwater fish is then given by :

$$C_{ffs-np}(t) = [(\lambda_r + \lambda_p) \cdot C_w(i) \cdot C_F] - [(\lambda_r + \lambda_p) C_{ffs-np}(t-1)]$$

where : $C_F = 3000 \text{ l/kg}$ (LN ; GSD = 3.5)

$C_w(i)$ = concentration in the water on the i -th day

$$\lambda_p = 6.94 \cdot 10^{-3}$$

$C_{ffs-np}(t)$ = isotope concentration at time t for the freshwater fish-np

λ_r = physical decay of the isotope

2.5.2.6. Freshwater fish (predatory)

The model of the predatory freshwater fish is :

$$C_{ffs-p}(t) = [(\lambda_r + \lambda_p) \cdot Q_F \cdot C_{ffs-np}(t)] - [(\lambda_r + \lambda_p) C_{ffs-p}(t-1)]$$

where : $\lambda_p = 2.31 \cdot 10^{-3}$

$Q_F = 1.0 \text{ kg/y}$ (U ; [0.4 ; 1.6])

$C_{ffs-p}(t)$ = isotope concentration at time t for the freshwater fish-p

2.5.2.7. Marine fish

The seafish concentrations were taken from the description of S-scenario document.

2.5.3. Human intake

Human intakes were taken according the scenario description. The considered foodstuffs were : rye, cereals other than rye, leafy vegetables, root crops, potatoes, milk and milk products, beef meat, pork meat, freshwater fishes, seafishes, chicken and eggs. For children a mean value was calculated from consumption rates of boys and girls. Games, mushrooms and fruits were neglected.

2.5.4. Whole-body concentration

The whole-body concentrations were predicted for 5 age categories :

- men
- women
- children 15 years old
- children 1 year old
- infants 3 months

according to ICRP-56 recommendations.

We predicted only mean whole-body concentrations (no distribution) with 95 % confidence intervals for each age category.

2.5.5. Dose calculations

2.5.5.1. External doses

The external dose from the cloud was neglected. Concerning soil irradiation we used an average value of 2 different models :

a. $Dose = C_s \cdot SF \cdot D_{cfg} \cdot T$

where C_s = the concentration in the root zone of the soil

SF = the shielding factor = 0.29

D_{cfg} = the dose conversion factor for ground deposition
= $8.0 \cdot 10^{-14} \text{ Sv h}^{-1} / \text{Bq m}^{-3}$

$T = (1 - e^{-\lambda_s \cdot t}) / \lambda_s$ with $\lambda_s = 0.023$

b. Model from Gale

$$Dose = \left\{ \int_0^t [0.63 \exp(-1.13 t) + 0.37 \exp(-0.0075 t)] \exp(-\lambda_s t) dt \right\} \cdot D \cdot SF \cdot D_{cfg}$$

where D = total deposition

2.5.5.2. Ingestion doses

$$Dose = Q_{HB} \cdot D_{cfi}$$

where Q_{HB} = total human intake until the date of dose calculation

D_{cfi} = the dose conversion factor for ingestion

= $1.4 \cdot 10^{-8} \text{ Sv/Bq}$ for man and woman

= $1.3 \cdot 10^{-8} \text{ Sv/Bq}$ for children

2.5.5.3. Inhalation doses

The inhalation dose due to resuspension was neglected. Starting from the observed deposition data and a dry deposition velocity v_d of 10^{-3} m/s , a height of the plume

of 1000 m and an average rainfall rate of 1.5 mm/h, we estimated average air concentrations. Admitting an average inhalation rate of $0.3 \text{ m}^3/\text{h}$ and a dose conversion factor D_{cfc} of $8.6 \cdot 10^{-9} \text{ Sv h}^{-1}/\text{Bq m}^{-3}$ we obtained the average inhalation dose due to the cloud.

3. COMPARISON OF OBSERVED DATA AND MODEL PREDICTIONS

In our first version of predictions, a calculation code error and a misunderstanding of the results given by the LHS code lead to the fact that all the results were given with mistakes especially for wheat and freshwater fish.

3.1. Total deposition

As mentioned before, we started our modelling from the observed deposition data.

3.2. Food items contributing to total diet

3.2.1. Milk

DOSDIM overestimates the milk concentration in the early phase (05/86 - 08/86). This is probably due to strong feeding ban or to a lesser contamination of the grassland. From 09/86 until 07/87 the predictions are in good agreement with the observations. After that, DOSDIM underestimates the milk concentration by a factor of 5 to 10. This can be explained by giving continuously contaminated feed (which was stored from 86) or by high transfer factors from the different feedstuffs to the cow. Furthermore, DOSDIM does not have the same decrease from I/88 till IV/90 (half period of 2 years) due to the soil fixation. This aspect must be improved in the future.

3.2.2. Beef

We observed exactly the same behaviour for beef predictions as for the milk predictions due to the same kind of feeding regimes.

3.2.3. Pork

The predictions for pork are not in good agreement with the observations. Despite of the good dynamics from III/87 until IV/90, there is still one order of magnitude

underestimation. This is probably due to the bad predictions of the two major components of the pig feed : milk and grains.

3.2.4. Freshwater fish

The dynamics of the predictions for freshwater fish are in very good agreement with the observations. Unfortunately, in the first version of predictions, a calculation code error was made and we took a C_F value which did not take into account the dependence on the concentration of K in the water according to Vanderploeg et al., 1975 (1000 l/kg instead of 3000 l/kg).

3.2.5. Leafy vegetables

During the first months there is a large difference between our predictions and the observations regarding the dynamic behaviour. The observations seem to indicate that there was no direct deposition on the leafy vegetables (in opposition to our assumptions).

3.2.6. Wheat

The predictions seem to be in good agreement with the observed data exception made for the first year where we have assumed that there was no direct deposition. We observed also the same difference in dynamic behaviour as mentioned for milk (decrease with a half period of about 2 years).

3.2.7. Rye

For rye we overestimated the concentration by a factor of 4 for the first year (due to the assumption of direct deposition) and underestimations for the rest of the time (factor 2 to 4).

3.2.8. Pasture vegetation

For pasture we obtained a slight overestimation during the first year. The dynamics of our predictions do not reflect the fixation of caesium by the soil (see 3.2.1. milk).

3.3. Human intake

Large discrepancies (factor 10 to high) were obtained in June 86 and underestimations (factor 5) from IV/87 to the end. This is mainly due to the bad estimation of the concentration in milk and freshwater fish.

3.4. Whole-body

3.4.1. Mean whole-body concentration in man

The bad dynamics from a factor of 7 too high to a factor of 2 too low) of the predictions is mainly due to the bad predictions for milk and freshwater fish.

3.4.2. Distribution of whole-body concentrations (man)

not calculated

3.5. Dose calculations

3.5.1. External doses

3.5.1.1. External doses from cloud
neglected

3.5.1.2. External doses from ground exposure

External doses predicted are in good agreement with those estimated in the scenario. A small discrepancy appears for the predictions of 1990 (factor of 2).

3.5.2. Ingestion doses

An overestimation of a factor of 3 is observed in our predictions probably due to the milk concentration for the first month. For 1990 the DOSDIM predictions are much better due to the big influence of freshwater fish consumption.

3.5.3. Inhalation doses

3.5.3.1. Inhalation due to resuspension
neglected

3.5.3.2. Inhalation from the cloud

The DOSDIM predictions concerning cloud inhalation doses are a factor of 10 too high, probably due to the conversion from observed deposition data to air concentrations.

4. EXPLANATION OF MAJOR SOURCES OF MISPREDICTIONS

4.1. Recommendations of changes to the model

As observed in chapter 3, DOSDIM needs to take into account the soil fixation in a more realistic way. Furthermore, we may improve DOSDIM model by :

- revising our hypothesis concerning the milk contamination
- adding model for mushrooms, wild berries and game for semi-natural ecosystems
- calculating the deposition in function of the LAI
- calculating the deposition in function of the particle size
- adding a sensitivity analysis

4.2. Examples of how changes improve calculations

Replacing the predicted milk contamination by the observed values and fish by the corrected predictions, the human caesium intake calculated by DOSDIM is improved and the predictions are in closer agreement with the observations (see fig. 1 and fig. 2).

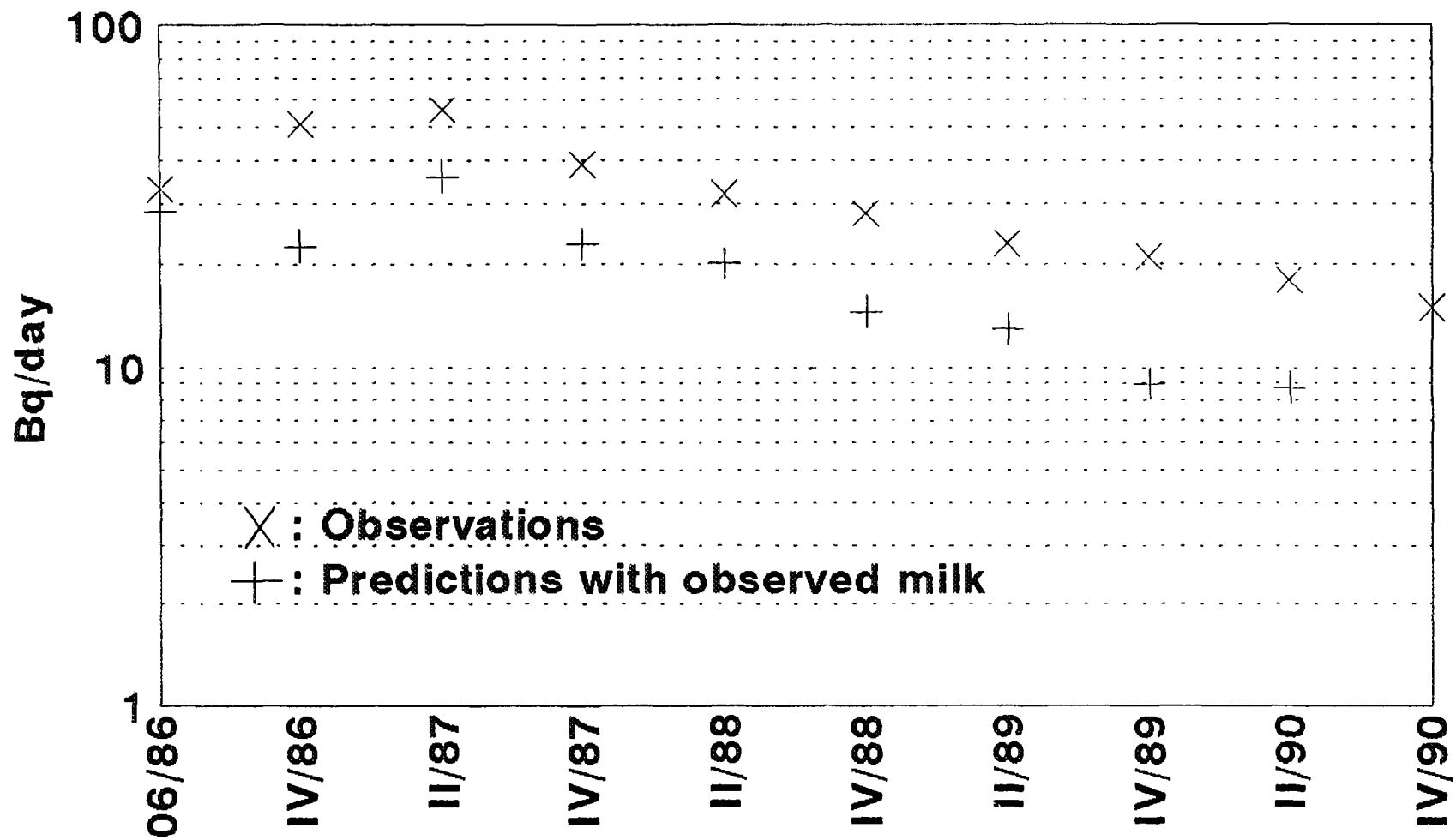


FIG. 1. Human Cs-137 intake (man).

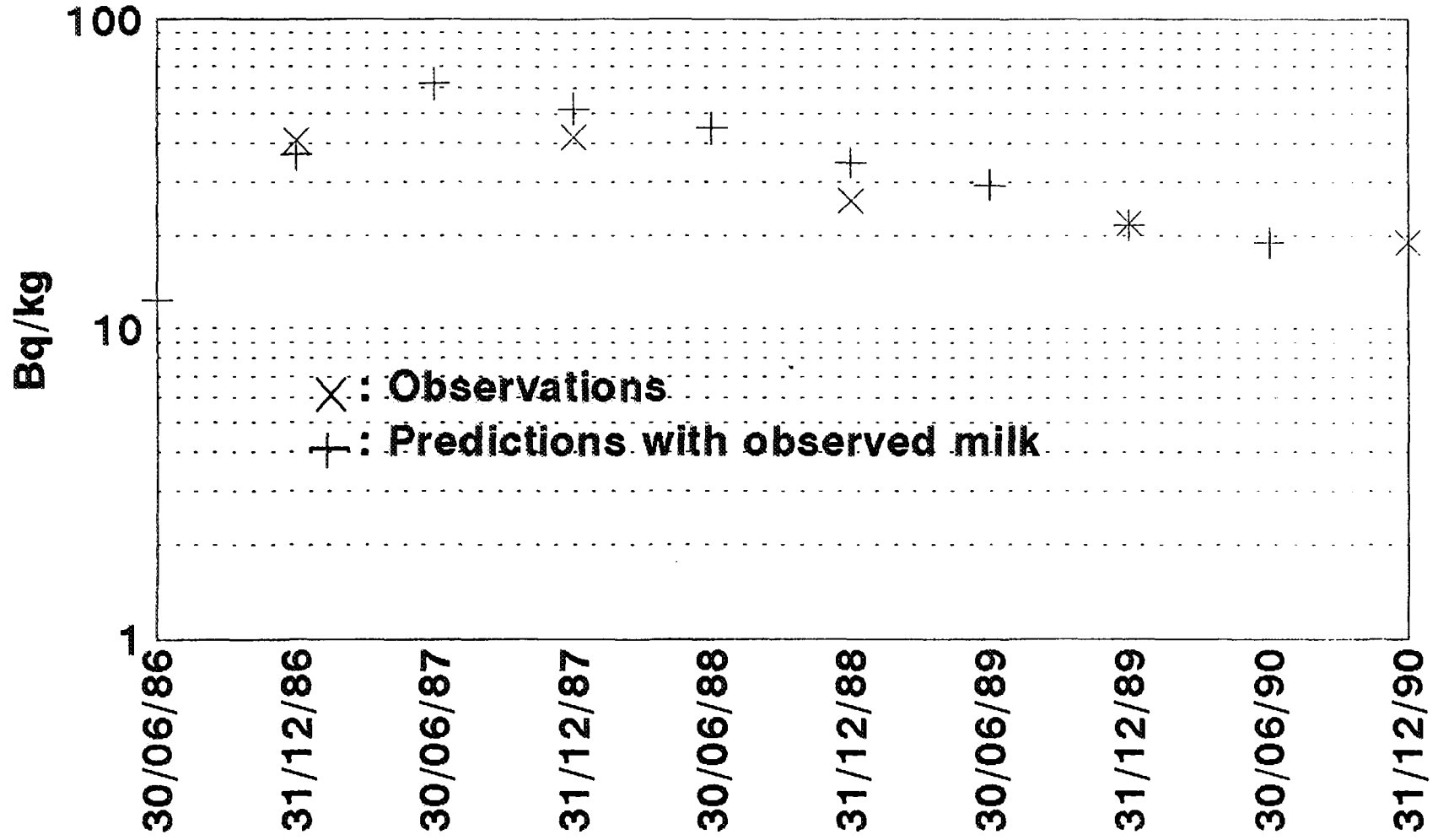


FIG. 2. Cs-137 concentration in whole body.

5. SUMMARY OF LESSONS LEARNED FROM THE SCENARIO

The S-scenario was a good opportunity to validate our sub-models concerning freshwater fish (non predatory and predatory).

Furthermore, DOSDIM model has been made more flexible in order to be able to be applied to various regions.

On the other hand, we have observed that good predictions may appear as a result of compensation errors.

Appendix III

**DOCUMENTATION OF MODEL PREDICTIONS
FOR SCENARIO S**

TABLE III.1. SUMMARY OF OBS. DATA AND MODEL PREDICTIONS FOR SCENARIO S

Name-> CODE->	OBS. DATA	Zeevaert/ DOSDIM	Peterson/ CHERPAC	Horyna/ SCHRAADLO	Suolanen/ DETRA	Kanyar/ TERNIRBU	Krajewski/ CLRP	Galeriu/ LINDOZ	Sazykina/ ECOMOD	Bergström/ ECOSAFE	Attwood/ FARMLAND	Yu/ RESRAD
III.2. Total deposition	(•)		(•)	(•)	(•)	(•)	(•)	(•)	(•)		•	(•)
III.3. Total inventory	(•)		•		(•)		(•)	(•)			•	(•)
III.4. Leafy vegetables	(•)	(•)	(•)		(•)	(•)	(•)	(•)	(•)	(•)	•	(•)
III.5. Wheat	(•)	(•)	(•)	(•)	(•)	(•)	(•)	(•)	(•)		•	(•)
III.6. Rye	(•)	(•)	(•)	(•)	(•)	(•)	(•)	(•)	(•)		•	(•)
III.7. Milk	(•)	(•)	(•)	(•)	(•)	(•)	(•)	(•)	(•)		•	(•)
III.8. Beef	(•)	(•)	(•)	(•)	(•)	(•)	(•)	(•)	(•)		•	(•)
III.9. Pork	(•)	(•)	(•)	(•)	(•)	(•)	(•)	(•)	(•)		•	(•)
III.10. Pasture veg.	(•)	(•)	(•)	(•)	(•)	(•)	(•)	(•)	(•)	(•)	•	(•)
III.11. Barley	(•)	(•)	(•)	(•)	(•)	(•)	(•)	(•)			•	(•)
III.12. Oats	(•)	(•)	(•)	(•)	(•)	(•)	(•)	(•)			•	(•)
III.13. Small game	(•)	(•)	(•)	(•)	(•)		(•)	(•)			•	(•)
III.14. Big game	(•)	(•)	(•)	(•)	(•)		(•)	(•)		(•)	•	(•)
III.15. Mushrooms	(•)	(•)	(•)	(•)	(•)		(•)	(•)		(•)	•	(•)
III.16. Berries	(•)	(•)	(•)	(•)	(•)		(•)	(•)		(•)	•	(•)
III.17. Fish	(•)	(•)	(•)	(•)	(•)	(•)	(•)	(•)	(•)		•	(•)
III.18. Daily intake, man	(•)	(•)	(•)	(•)	(•)	(•)	(•)	(•)	(•)		•	(•)
III.19. Daily intake, woman	(•)	(•)	(•)	(•)	(•)	(•)	(•)	(•)	(•)		•	(•)
III.20. Daily intake, child	(•)	(•)	(•)	(•)	(•)	(•)	(•)	(•)	(•)		•	(•)
III.21. Whole body, man	(•)	(•)	(•)	(•)	(•)	(•)	(•)	(•)	(•)		•	(•)
III.22. Whole body, woman	(•)	(•)	(•)	(•)	(•)	(•)	(•)	(•)	(•)		•	(•)
III.23. Whole body, child	(•)	(•)	(•)	(•)	(•)	(•)	(•)	(•)	(•)		•	(•)
III.24. WB distr., man	•		(•)	(•)	(•)	(•)	(•)	(•)	(•)		•	(•)
III.25. Ext. dose, cloud	(•)		(•)	(•)	(•)	(•)	(•)	(•)	(•)		•	(•)
Ext. dose, ground	(•)	(•)	(•)	(•)	(•)	(•)	(•)	(•)	(•)		•	(•)
III.26. Inh. dose, cloud	(•)	(•)	(•)	(•)	(•)	(•)	(•)	(•)	(•)		•	(•)
Inh. dose, resusp.	(•)		(•)	(•)	(•)	(•)	(•)	(•)	(•)		•	(•)
III.27. Ingestion dose	(•)	(•)	(•)	(•)	(•)	(•)	(•)	(•)	(•)		•	(•)
III.28. Total dose	(•)	(•)	(•)	(•)	(•)	(•)	(•)	(•)	(•)		•	(•)

• only arithmetic mean
 (•) both arithmetic mean and 95% confidence interval

TABLE 111.2 PREDICTIONS FOR SCENARIO S
 TOTAL [WET AND DRY] DEPOSITION OF CS-137 (Bq/m2)

observed			Zeevaert/DOSDIM		Peterson/CHERPAC			Kanyar/TERNIRBU			Krajewski/CLRP			Galeriu/LINDOZ		
mean	lower	upper	mean	lower upper	mean	lower	upper	mean	lower	upper	mean	lower	upper	mean	lower	upper
19900	13930	25870			20000	4000	57000	16000	11000	20000	20000	13800	26100	20300	12000	30000
Suolonen/DETRA			Attwood/FARMLAND		Bergstroem/ECOSAFE			Sazykina/ECOMOD			Yu/RESRAD			Horyna/SCHRAADLO		
mean	lower	upper	mean	lower upper	mean	lower	upper	mean	lower	upper	mean	lower	upper	mean	lower	upper
19000	6500	58000	9036					20000	14000	26000	20000	16000	24000	16800	3000	45000

TABLE III.3 PREDICTIONS FOR SCENARIO S
CS-137 TOTAL INVENTORY (Bq)

observed			Zeevaert/DOSDIM		Peterson/CHERPAC		Kanyar/TERNIRBU		Krajewski/CLRP			Galeriu/LINDOZ		
mean	lower	upper	mean	lower upper	mean	lower upper	mean	lower upper	mean	lower upper	mean	lower upper	mean	lower upper
3.5E+15	2.5E+15	4.6E+15			3.5E+15				2.9E+15	2.0E+15	3.8E+15	3.4E+15	2.0E+15	5.0E+15
Suolanen/DETRA			Attwood/FARMLAND		Bergstroem/ECOSAFE		Sazykina/ECOMOD		Yu/RESRAD			Horyna/SCHRAADLO		
mean	lower	upper	mean	lower upper	mean	lower upper	mean	lower upper	mean	lower upper	mean	lower upper	mean	lower upper
3.4E+15	3.1E+14	3.1E+16	1.6E+15						3.5E+15	2.8E+15	4.2E+15			

TABLE III.4 PREDICTIONS FOR SCENARIO S
CONCENTRATIONS IN LEAFY VEGETABLES (Bq/kg f.w.)

	observed			Zeevaert/DOSDIM			Peterson/CHERPAC			Kanyar/TERNIRBU			Krajewski/CLRP			Galeriu/LINDOZ		
	mean	lower	upper	mean	lower	upper	mean	lower	upper	mean	lower	upper	mean	lower	upper	mean	lower	upper
monthly avg.:																		
May 1986				25.20	7.900	57.50	18.00	1.400	44.00	1800.00	600.00	2900.00				8.00	4.00	24.00
Jun 1986		*	*	12.700	1.900	34.30	4.10	0.160	12.00	260.00	89.00	430.00	18.90	12.20	25.50	8.00	4.00	24.00
Jul 1986	3.30	1.40	8.90	7.000	0.420	22.70	5.80	0.430	27.00	120.00	51.00	220.00	24.50	17.10	31.90	12.00	6.00	36.00
Aug 1986				4.000	0.083	15.70	5.20	0.430	26.00	54.00	20.00	97.00	17.40	12.20	22.60	11.00	6.00	36.00
Sep 1986				2.400	0.018	11.20	5.20	0.420	26.00	41.00	5.70	120.00	17.10	11.90	22.20	10.00	5.00	30.00
year:																		
1987	2.50	1.40	6.70	0.039	0.0013	0.23	0.56	0.070	2.80	2.30	0.70	6.20	1.60	1.10	2.00	15.00	7.00	45.00
1988	1.20	0.60	4.40	0.015	0.0009	0.07	0.55	0.068	2.70	0.92	0.29	1.60	1.10	1.00	1.50	10.00	5.00	30.00
1989	2.70	1.00	3.70	0.014	0.0008	0.07	0.53	0.065	2.70	1.30	0.31	1.90	0.70	0.60	0.80	9.00	5.00	30.00
1990	0.50	0.20	1.60	0.014	0.0008	0.07	0.52	0.064	2.60	1.00	0.30	1.70	0.65	0.50	0.80	9.00	5.00	30.00

* observed values for 1986

	Suolanen/DETRA			Attwood/FARMLAND		Bergstroem/ECOSAFE			Sazykina/ECOMOD			Yu/RESRAD			Horyna/SCHRAADLO	
	mean	lower	upper	mean	lower upper	mean	lower	upper	mean	lower	upper	mean	lower	upper	mean	lower upper
monthly avg.:																
May 1986	226.00	79.00	650.00	594.00		31.30	19.50	43.20	4.80	2.40	7.20					
Jun 1986	125.00	44.00	360.00	146.00		13.90	8.02	19.80	2.90	1.60	4.20					
Jul 1986	61.00	21.00	175.00	47.00		6.70	3.65	9.75	2.10	1.30	2.60					
Aug 1986	31.00	11.00	89.00	10.20		3.59	1.91	5.26	1.60	1.10	2.10					
Sep 1986	15.00	5.30	43.00	4.48		2.19	1.19	3.19	1.30	1.00	1.60	9.90	7.20	11.90		
year:																
1987	0.20	0.07	0.60	0.32		0.92	0.52	1.33	1.40	1.00	1.90	9.50	7.00	11.50		
1988	0.19	0.07	0.57	0.29		0.89	0.50	1.28	0.80	0.50	1.30	9.30	6.80	11.20		
1989	0.18	0.06	0.54	0.27		0.86	0.49	1.24	0.50	0.30	0.60	9.10	6.60	11.00		
1990	0.17	0.06	0.51	0.27		0.83	0.47	1.20	0.20	0.16	0.32	8.90	6.50	10.70		

TABLE III.5 PREDICTIONS FOR SCENARIO S
CONCENTRATIONS IN WHEAT (Bq/kg f.w.)

	I	observed			I	Zeevaert/DOSDIM			Peterson/CHERPAC			Kanyar/TERNIRBU			Krajewski/CLRP			Galeriu/LINDOZ			I
		mean	lower	upper		mean	lower	upper	mean	lower	upper	mean	lower	upper	mean	lower	upper	mean	lower	upper	
harvest 1986	I	4.90	3.43	7.35	I	2.05	0.035	13.60	3.60	0.510	16.00	7.20	3.20	15.00	4.90	3.40	6.30	10.20	5.00	30.00	I
harvest 1987	I	0.53	0.37	0.74	I	2.00	0.034	13.30	0.54	0.051	2.20	0.70	0.23	1.30	0.40	0.30	0.50	0.80	0.40	2.40	I
harvest 1988	I	0.57	0.40	0.80	I	1.97	0.033	13.00	0.53	0.050	2.10	0.56	0.15	0.98	0.30	0.20	0.40	0.70	0.30	2.00	I
harvest 1989	I	0.40	0.32	0.60	I	1.91	0.032	12.70	0.51	0.049	2.10	0.57	0.24	0.88	0.20	0.16	0.30	0.70	0.30	2.00	I
harvest 1990	I	0.26	0.18	0.39	I	1.86	0.032	12.40	0.50	0.047	2.00	0.50	0.21	0.80	0.20	0.16	0.30	0.60	0.30	2.00	I

	I	Suolanen/DETRA			I	Attwood/FARMLAND			Bergstroem/ECOSAFE			Sazykina/ECOMOD			Yu/RESRAD			Horyna/SCHRAADLO			I
		mean	lower	upper		mean	lower	upper	mean	lower	upper	mean	lower	upper	mean	lower	upper	mean	lower	upper	
harvest 1986	I	2.40	0.80	6.90	I	0.37			25.70	17.80	33.60	6.90	4.30	9.50	2.00	1.40	2.60	13.00	3.00	31.00	I
harvest 1987	I	0.30	0.10	0.90	I	0.36			18.10	12.40	23.80	5.20	3.40	6.90	1.80	1.20	2.40	1.60	0.20	4.00	I
harvest 1988	I	0.29	0.09	0.87	I	0.35			13.20	8.74	17.60	4.30	2.60	6.00	1.80	1.20	2.40	1.60			I
harvest 1989	I	0.27	0.09	0.81	I	0.34			9.91	6.27	13.50	4.30	2.60	6.00	1.70	1.20	2.30	1.60			I
harvest 1990	I	0.26	0.08	0.78	I	0.33			7.63	4.57	10.70	2.60	1.70	3.40	1.70	1.10	2.20	1.50			I

TABLE III.6 PREDICTIONS FOR SCENARIO S
CONCENTRATIONS IN RYE (Bq/kg f.w.)

	I	observed			I	Zeevaert/DOSDIM			Peterson/CHERPAC			Kanyar/TERNIRBU			Krajewski/CLRP			Galeriu/LINDOZ			I
		mean	lower	upper		mean	lower	upper	mean	lower	upper	mean	lower	upper	mean	lower	upper	mean	lower	upper	
harvest 1986	I	28.00	14.00	44.80	I	214.00	9.640	752.00	19.00	2.100	75.00	32.00	15.00	65.00	34.00	23.80	44.20	60.50	30.00	200.00	I
harvest 1987	I	2.80	1.96	3.36	I	1.94	0.032	12.90	0.84	0.080	3.40	0.89	0.29	1.80	0.50	0.40	0.60	1.30	0.70	4.00	I
harvest 1988	I	3.50	2.45	4.55	I	1.89	0.032	12.60	0.82	0.077	3.30	0.72	0.24	1.60	0.30	0.20	0.40	1.20	0.60	4.00	I
harvest 1989	I	1.00	0.80	1.40	I	1.85	0.031	12.30	0.79	0.075	3.20	0.72	0.21	1.60	0.25	0.17	0.34	1.10	0.60	4.00	I
harvest 1990	I	1.00	0.70	1.40	I	1.80	0.030	12.00	0.77	0.073	3.10	0.65	0.23	1.30	0.21	0.16	0.27	1.00	0.50	3.00	I

	I	Suolanen/DETRA			I	Attwood/FARMLAND			Bergstroem/ECOSAFE			Sazykina/ECOMOD			Yu/RESRAD			Horyna/SCHRAADLO			I
		mean	lower	upper		mean	lower	upper	mean	lower	upper	mean	lower	upper	mean	lower	upper	mean	lower	upper	
harvest 1986	I	28.00	9.80	81.00	I	0.42			25.70	17.80	33.60	4.30	2.60	6.00	2.00	1.40	2.60	29.00	5.00	56.00	I
harvest 1987	I	0.40	0.10	1.20	I	0.41			18.10	12.40	23.80	3.40	1.70	5.20	1.80	1.20	2.40	1.70	0.20	4.50	I
harvest 1988	I	0.38	0.10	1.14	I	0.40			13.20	8.74	17.60	3.40	1.70	5.20	1.80	1.20	2.40	1.60			I
harvest 1989	I	0.36	0.09	1.08	I	0.39			9.91	6.27	13.50	2.60	1.70	3.40	1.70	1.20	2.30	1.60			I
harvest 1990	I	0.34	0.09	1.02	I	0.38			7.63	4.57	10.70	1.70	0.90	2.60	1.70	1.10	2.20	1.50			I

TABLE III.7 PREDICTIONS FOR SCENARIO S
CONCENTRATIONS IN MILK (Bq/L)

	observed			Zeevaert/DOSDIM			Peterson/CHERPAC			Kanyar/TERNIRBU			Krajewski/CLRP			Galeriu/LINDOZ		
	mean	lower	upper	mean	lower	upper	mean	lower	upper	mean	lower	upper	mean	lower	upper	mean	lower	upper
monthly avg.:																		
May 1986	1.90	1.52	2.28	60.30	9.78	216.00	8.70	3.20	67.00	1.70	0.56	3.40				2.80	1.40	8.40
Jun 1986	27.70	24.93	30.47	259.00	40.40	909.00	61.00	15.00	550.00	22.00	6.40	38.00	30.60	24.50	36.60	34.00	17.00	102.00
Jul 1986	26.40	24.02	28.78	102.00	9.71	410.00	19.00	2.60	230.00	18.00	8.90	29.00	10.30	7.60	13.10	20.00	10.00	60.00
Aug 1986	21.30	19.38	23.22	44.20	3.24	184.00	7.00	0.91	80.00	13.00	6.80	22.00	8.00	5.50	10.40	12.00	6.00	36.00
Sep 1986	20.30	18.47	22.13	22.00	1.60	94.40	4.30	0.64	37.00	10.00	3.90	21.00	7.40	5.40	9.40	34.00	17.00	102.00
quarterly avg.:																		
IV 1986	30.10	28.29	31.91	40.90	5.56	140.00	14.00	1.80	170.00	17.00	6.10	30.00	7.20	5.50	9.00	66.00	33.00	200.00
I 1987	32.70	31.07	34.99	62.00	5.65	237.00	15.00	1.80	180.00	16.00	5.30	30.00	7.00	5.40	8.70	71.00	35.00	210.00
II 1987	27.50	25.85	29.43	29.70	2.84	111.00	2.70	0.50	21.00	12.00	5.10	19.00	5.60	4.10	7.00	50.00	25.00	150.00
III 1987	14.40	13.68	15.26	3.80	0.36	16.70	1.90	0.36	10.00	7.60	2.30	12.00	5.80	4.00	7.60	16.00	8.00	48.00
IV 1987	13.80	13.11	14.77	1.91	0.23	7.85	1.80	0.35	10.00	5.30	2.10	9.70	3.25	2.60	3.90	4.00	2.00	12.00
I 1988	13.10	12.31	14.02	1.46	0.11	6.98	1.80	0.33	10.00	2.80	0.81	4.70	2.75	1.90	3.60	3.20	1.60	10.00
II 1988	12.10	11.37	12.95	1.43	0.13	6.87	1.30	0.24	6.90	2.10	0.71	3.30	2.75	1.90	3.60	2.40	1.20	7.20
III 1988	8.00	7.60	8.48	1.37	0.04	10.10	1.20	0.23	6.70	1.20	0.30	1.90	5.00	3.40	6.50	1.40	0.70	5.00
IV 1988	8.40	7.98	8.99	1.47	0.12	7.31	1.10	0.17	6.50	1.10	0.28	1.80	2.50	1.70	3.30	1.30	0.60	4.00
I 1989	8.20	7.71	8.77	1.36	0.08	6.77	1.10	0.17	6.50	0.96	0.20	1.90	2.30	1.60	3.00	1.20	0.60	4.00
II 1989	7.30	6.86	7.81	1.38	0.12	6.70	0.90	0.14	4.90	0.86	0.06	1.80	2.30	1.60	5.00	0.90	0.50	3.00
III 1989	4.90	4.66	5.24	1.34	0.04	9.86	0.80	0.14	4.70	0.49	0.09	0.91	4.30	3.00	5.70	0.70	0.40	3.00
IV 1989	4.70	4.42	5.03	1.43	0.12	7.14	0.80	0.12	4.70	0.43	0.14	0.73	2.20	1.50	2.80	0.30	0.20	3.00
I 1990	4.20	3.95	4.49	1.32	0.08	6.61	0.80	0.12	4.70	0.41	0.23	0.87	1.90	1.35	2.50	0.30	0.20	2.00
II 1990	3.80	3.61	4.07	1.35	0.11	6.54	0.70	0.11	3.80	0.34	0.18	0.64	2.00	1.40	2.60	0.30	0.20	2.00
III 1990	3.20	3.04	3.42	1.30	0.03	9.63	0.70	0.11	3.70	0.27	0.14	0.39	3.80	2.60	5.00	0.30	0.20	2.00
IV 1990	2.90	2.73	3.10				0.60	0.10	3.70	0.23	0.11	0.37	1.80	1.30	2.30	0.30	0.20	2.00

TABLE III.7 (cont.)
CONCENTRATIONS IN MILK (Bq/L)

	Suolanen/DETRA		Attwood/FARMLAND		Bergstrom/ECOSAFE		Sazykina/ECOMOD		Yu/RESRAD		Hotyns/SCHRAADLO																																																																																																																																																																																																																																																																																																												
	mean	lower upper	mean	lower upper	mean	lower upper	mean	lower upper	mean	lower upper	mean	lower upper																																																																																																																																																																																																																																																																																																											
monthly avg.:													May 1986	7.70	2.70 22.10	0.38		48.40	29.20 67.50	2.00	1.00 3.00			6.70	1.00 19.00	Jun 1986	40.00	14.00 115.00	1.44		43.40	24.20 62.50	48.00	30.00 66.00			40.00	10.00 110.00	Jul 1986	35.00	12.30 100.70	0.31		21.30	11.30 31.20	16.00	11.00 21.00			21.00	3.50 50.00	Aug 1986	25.00	8.80 71.90	0.18		11.70	6.27 17.20	10.00	6.00 14.00			9.00	1.40 25.00	Sep 1986	21.00	7.40 60.40	3.11		7.46	4.21 10.70	25.00	17.00 33.00			8.00	1.90 20.00	quarterly avg.:													IV 1986	35.00	12.30 100.70	145.00		43.20	25.10 61.20	28.00	22.00 54.00			39.00	5.00 100.00	I 1987	36.00	12.60 103.50	357.00		43.20	25.10 61.20	33.00	24.00 56.00			40.00	5.00 102.00	II 1987	29.00	10.20 83.40	254.00		3.62	2.11 5.14	19.00	12.00 26.00			20.00	7.00 90.00	III 1987	16.00	5.60 46.00	20.20		3.59	2.09 5.09	3.00	2.00 4.00			10.00	4.00 41.00	IV 1987	7.10	2.50 20.40	16.70		3.46	1.98 4.94	6.00	4.00 8.00			2.00	0.50 10.00	I 1988	6.00	2.10 17.30	34.00		3.43	1.96 4.90	6.00	4.00 8.00			2.00	0.50 5.00	II 1988	4.60	1.60 13.20	28.30		3.50	2.04 4.96	3.00	2.00 4.00			1.00	0.30 4.00	III 1988	2.10	0.70 6.00	3.78		3.47	2.02 4.91	1.00	0.60 1.40			1.00	0.20 3.00	IV 1988	3.30	1.20 9.50	7.78		3.34	1.92 4.77	2.00	1.40 2.60			1.00	0.20 2.80	I 1989	3.10	1.10 8.90	17.30		3.31	1.90 4.72	2.00	1.50 2.50			1.00	0.20 1.50	II 1989	2.70	0.90 7.80	16.30		3.38	1.97 4.78	1.00	0.60 1.40			0.70	0.20 2.00	III 1989	1.90	0.70 5.50	2.75		3.35	1.95 4.74	0.50	0.20 0.80			0.70	0.20 2.00	IV 1989	1.80	0.60 5.20	4.18		3.23	1.85 4.60	1.00	0.60 1.40			0.70	0.20 2.00	I 1990	1.60	0.60 4.60	10.40		3.20	1.84 4.56	1.00	0.60 1.40			2.80	0.60 5.40	II 1990	1.80	0.60 5.20	10.30		3.26	1.90 4.62	0.60	0.40 0.80			2.70	0.60 5.30	III 1990	1.90	0.70 5.50	1.88		3.23	1.89 4.58	0.20	0.10 0.30			0.70	0.20 2.00	IV 1990	1.60	0.60 4.60	3.18		3.12	1.79 4.44	0.40	0.20 0.60			0.70	0.20 2.00
May 1986	7.70	2.70 22.10	0.38		48.40	29.20 67.50	2.00	1.00 3.00			6.70	1.00 19.00																																																																																																																																																																																																																																																																																																											
Jun 1986	40.00	14.00 115.00	1.44		43.40	24.20 62.50	48.00	30.00 66.00			40.00	10.00 110.00																																																																																																																																																																																																																																																																																																											
Jul 1986	35.00	12.30 100.70	0.31		21.30	11.30 31.20	16.00	11.00 21.00			21.00	3.50 50.00																																																																																																																																																																																																																																																																																																											
Aug 1986	25.00	8.80 71.90	0.18		11.70	6.27 17.20	10.00	6.00 14.00			9.00	1.40 25.00																																																																																																																																																																																																																																																																																																											
Sep 1986	21.00	7.40 60.40	3.11		7.46	4.21 10.70	25.00	17.00 33.00			8.00	1.90 20.00																																																																																																																																																																																																																																																																																																											
quarterly avg.:													IV 1986	35.00	12.30 100.70	145.00		43.20	25.10 61.20	28.00	22.00 54.00			39.00	5.00 100.00	I 1987	36.00	12.60 103.50	357.00		43.20	25.10 61.20	33.00	24.00 56.00			40.00	5.00 102.00	II 1987	29.00	10.20 83.40	254.00		3.62	2.11 5.14	19.00	12.00 26.00			20.00	7.00 90.00	III 1987	16.00	5.60 46.00	20.20		3.59	2.09 5.09	3.00	2.00 4.00			10.00	4.00 41.00	IV 1987	7.10	2.50 20.40	16.70		3.46	1.98 4.94	6.00	4.00 8.00			2.00	0.50 10.00	I 1988	6.00	2.10 17.30	34.00		3.43	1.96 4.90	6.00	4.00 8.00			2.00	0.50 5.00	II 1988	4.60	1.60 13.20	28.30		3.50	2.04 4.96	3.00	2.00 4.00			1.00	0.30 4.00	III 1988	2.10	0.70 6.00	3.78		3.47	2.02 4.91	1.00	0.60 1.40			1.00	0.20 3.00	IV 1988	3.30	1.20 9.50	7.78		3.34	1.92 4.77	2.00	1.40 2.60			1.00	0.20 2.80	I 1989	3.10	1.10 8.90	17.30		3.31	1.90 4.72	2.00	1.50 2.50			1.00	0.20 1.50	II 1989	2.70	0.90 7.80	16.30		3.38	1.97 4.78	1.00	0.60 1.40			0.70	0.20 2.00	III 1989	1.90	0.70 5.50	2.75		3.35	1.95 4.74	0.50	0.20 0.80			0.70	0.20 2.00	IV 1989	1.80	0.60 5.20	4.18		3.23	1.85 4.60	1.00	0.60 1.40			0.70	0.20 2.00	I 1990	1.60	0.60 4.60	10.40		3.20	1.84 4.56	1.00	0.60 1.40			2.80	0.60 5.40	II 1990	1.80	0.60 5.20	10.30		3.26	1.90 4.62	0.60	0.40 0.80			2.70	0.60 5.30	III 1990	1.90	0.70 5.50	1.88		3.23	1.89 4.58	0.20	0.10 0.30			0.70	0.20 2.00	IV 1990	1.60	0.60 4.60	3.18		3.12	1.79 4.44	0.40	0.20 0.60			0.70	0.20 2.00																																																																														
IV 1986	35.00	12.30 100.70	145.00		43.20	25.10 61.20	28.00	22.00 54.00			39.00	5.00 100.00																																																																																																																																																																																																																																																																																																											
I 1987	36.00	12.60 103.50	357.00		43.20	25.10 61.20	33.00	24.00 56.00			40.00	5.00 102.00																																																																																																																																																																																																																																																																																																											
II 1987	29.00	10.20 83.40	254.00		3.62	2.11 5.14	19.00	12.00 26.00			20.00	7.00 90.00																																																																																																																																																																																																																																																																																																											
III 1987	16.00	5.60 46.00	20.20		3.59	2.09 5.09	3.00	2.00 4.00			10.00	4.00 41.00																																																																																																																																																																																																																																																																																																											
IV 1987	7.10	2.50 20.40	16.70		3.46	1.98 4.94	6.00	4.00 8.00			2.00	0.50 10.00																																																																																																																																																																																																																																																																																																											
I 1988	6.00	2.10 17.30	34.00		3.43	1.96 4.90	6.00	4.00 8.00			2.00	0.50 5.00																																																																																																																																																																																																																																																																																																											
II 1988	4.60	1.60 13.20	28.30		3.50	2.04 4.96	3.00	2.00 4.00			1.00	0.30 4.00																																																																																																																																																																																																																																																																																																											
III 1988	2.10	0.70 6.00	3.78		3.47	2.02 4.91	1.00	0.60 1.40			1.00	0.20 3.00																																																																																																																																																																																																																																																																																																											
IV 1988	3.30	1.20 9.50	7.78		3.34	1.92 4.77	2.00	1.40 2.60			1.00	0.20 2.80																																																																																																																																																																																																																																																																																																											
I 1989	3.10	1.10 8.90	17.30		3.31	1.90 4.72	2.00	1.50 2.50			1.00	0.20 1.50																																																																																																																																																																																																																																																																																																											
II 1989	2.70	0.90 7.80	16.30		3.38	1.97 4.78	1.00	0.60 1.40			0.70	0.20 2.00																																																																																																																																																																																																																																																																																																											
III 1989	1.90	0.70 5.50	2.75		3.35	1.95 4.74	0.50	0.20 0.80			0.70	0.20 2.00																																																																																																																																																																																																																																																																																																											
IV 1989	1.80	0.60 5.20	4.18		3.23	1.85 4.60	1.00	0.60 1.40			0.70	0.20 2.00																																																																																																																																																																																																																																																																																																											
I 1990	1.60	0.60 4.60	10.40		3.20	1.84 4.56	1.00	0.60 1.40			2.80	0.60 5.40																																																																																																																																																																																																																																																																																																											
II 1990	1.80	0.60 5.20	10.30		3.26	1.90 4.62	0.60	0.40 0.80			2.70	0.60 5.30																																																																																																																																																																																																																																																																																																											
III 1990	1.90	0.70 5.50	1.88		3.23	1.89 4.58	0.20	0.10 0.30			0.70	0.20 2.00																																																																																																																																																																																																																																																																																																											
IV 1990	1.60	0.60 4.60	3.18		3.12	1.79 4.44	0.40	0.20 0.60			0.70	0.20 2.00																																																																																																																																																																																																																																																																																																											

TABLE III.8 PREDICTIONS FOR SCENARIO S
CONCENTRATIONS IN BEEF (Bq/kg)

	observed			Zeevaert/DOSDIM			Peterson/CHERPAC			Kanyar/TERNIRBU			Krajewski/CLRP			Galeriu/LINDOZ		
	mean	lower	upper	mean	lower	upper	mean	lower	upper	mean	lower	upper	mean	lower	upper	mean	lower	upper
monthly avg.:																		
May 1986	9.20	6.16	12.51	20.00	1.94	79.90	0.71	0.11	1.90	2.10	0.52	7.10				0.70	0.30	2.00
Jun 1986	41.00	33.21	49.61	322.00	26.60	2222.00	0.25	0.04	0.65	5.50	0.80	10.00	167.00	135.00	200.00	37.00	18.00	110.00
Jul 1986	97.00	79.54	116.40	323.00	22.10	1420.00	56.00	6.90	420.00	78.00	25.00	140.00	155.00	120.00	190.00	44.00	22.00	180.00
Aug 1986	106.00	87.98	125.08	213.00	14.40	1005.00	110.00	14.00	850.00	60.00	26.00	120.00	125.00	94.00	155.00	37.00	18.00	110.00
Sep 1986	100.00	80.00	121.00	127.00	7.93	924.00	130.00	16.00	990.00	59.00	23.00	96.00	115.00	86.00	144.00	37.00	18.00	110.00
quarterly avg.:																		
IV 1986	126.00	104.58	147.42	122.00	10.50	618.00	67.00	7.10	510.00	61.00	28.00	91.00	116.00	88.00	144.00	110.00	55.00	330.00
I 1987	134.00	116.58	154.10	239.00	12.40	1289.00	40.00	2.80	350.00	56.00	26.00	89.00	115.00	87.00	143.00	160.00	80.00	480.00
II 1987	120.00	105.60	134.40	184.00	8.83	1003.00	39.00	2.60	340.00	52.00	28.00	86.00	102.00	77.00	128.00	140.00	70.00	420.00
III 1987	69.00	60.72	77.97	34.90	1.93	178.00	15.00	1.20	120.00	23.00	10.00	70.00	80.50	57.00	104.00	65.00	35.00	200.00
IV 1987	58.00	50.46	66.70	8.29	0.68	36.00	5.20	0.55	27.00	16.00	6.80	32.00	55.00	38.00	72.00	30.00	15.00	90.00
I 1988	57.00	48.45	66.12	4.86	0.28	24.80	4.70	0.49	23.00	12.00	4.50	20.00	48.00	33.00	63.00	9.00	4.00	27.00
II 1988	59.00	51.33	66.67	4.03	0.21	17.50	4.70	0.49	23.00	12.00	3.90	21.00	46.00	32.00	60.00	8.00	4.00	26.00
III 1988	39.00	34.32	43.68	3.13	0.11	19.10	3.60	0.35	17.00	5.70	1.10	12.00	60.00	41.00	79.00	4.10	2.00	12.00
IV 1988	33.00	29.04	37.29	3.51	0.18	17.80	3.00	0.25	15.00	4.00	1.00	7.00	45.00	31.00	59.00	3.30	1.60	10.00
I 1989	45.00	38.25	52.20	4.06	0.15	21.30	2.90	0.24	15.00	3.70	0.82	8.10	40.50	28.00	53.00	2.80	1.60	8.40
II 1989	34.00	28.90	39.10	3.82	0.19	16.90	2.90	0.23	15.00	3.20	0.81	10.00	39.00	27.00	51.00	2.20	1.10	7.00
III 1989	24.00	20.64	27.60	3.03	0.10	18.60	2.40	0.19	12.00	2.20	0.83	3.90	52.50	36.00	69.00	1.60	0.80	5.00
IV 1989	20.00	17.20	22.80	3.42	0.17	17.40	2.20	0.17	11.00	1.80	0.62	3.70	38.00	26.00	50.00	1.30	0.70	4.00
I 1990	21.00	17.85	24.36	3.95	0.15	20.80	2.10	0.17	11.00	1.70	0.86	3.20	34.00	23.60	44.00	1.10	0.50	4.00
II 1990	17.00	14.45	19.55	3.72	0.18	16.50	2.10	0.17	11.00	1.50	0.61	2.20	33.00	23.00	43.00	1.00	0.50	4.00
III 1990	13.00	10.92	15.08	2.96	0.09	18.20	1.80	0.15	9.00	1.20	0.57	2.00	45.00	31.00	60.00	0.70	0.40	3.00
IV 1990	12.00	9.96	14.04				1.70	0.14	8.40	1.00	0.48	1.70	34.00	25.00	43.00	0.60	0.30	3.00

TABLE III. 8 (cont.)
CONCENTRATIONS IN BEEF (Bq/kg)

monthly avg.:	Suolanen/DETRA			Attwood/FARMLAND			Bergstroem/ECOSAFE			Sazykina/ECONOD			Yu/RESRAD			Hor'yna/SCHRADLO		
	mean	lower	upper	mean	lower	upper	mean	lower	upper	mean	lower	upper	mean	lower	upper	mean	lower	upper
May 1986	4.60	1.60	13.00	1.25												9.00	2.00	25.00
Jun 1986	28.00	9.80	81.00	22.90						2.00	1.20	2.80				47.00	7.00	80.00
Jul 1986	141.00	49.00	406.00	15.80						142.00	104.00	200.00				46.00	8.00	79.00
Aug 1986	109.00	38.00	313.00	14.60						90.00	56.00	124.00				28.00	6.00	50.00
Sep 1986	76.00	27.00	219.00	18.80						70.00	44.00	96.00				25.00	4.00	40.00
quarterly avg.:																		
IV 1986	109.00	38.00	313.00	2220.00			43.00	18.70	67.30	110.00	70.00	150.00				50.00	10.00	110.00
I 1987	128.00	45.00	368.00	7530.00			36.50	15.30	57.60	125.00	90.00	160.00				60.00	11.00	120.00
II 1987	116.00	41.00	334.00	8380.00			27.80	12.70	42.90	50.00	30.00	70.00				25.00	5.00	85.00
III 1987	61.00	21.00	175.00	1800.00			21.20	10.90	31.60	20.00	14.00	26.00				15.00	4.00	65.00
IV 1987	33.00	12.00	95.00	502.00			17.60	9.62	25.50	18.00	13.00	23.00				7.00	2.00	26.00
I 1988	22.00	7.70	63.00	745.00			15.50	8.75	22.20	16.00	11.00	21.00				6.00	2.00	20.00
II 1988	18.00	6.30	52.00	869.00			14.30	8.16	20.40	14.00	10.00	18.00				6.00	2.00	20.00
III 1988	8.40	2.90	24.00	245.00			13.60	7.77	19.30	14.00	10.00	18.00				5.50	1.60	18.00
IV 1988	9.90	3.50	28.00	118.00			13.10	7.52	18.70	13.00	9.00	17.00				5.40	1.60	18.00
I 1989	10.00	3.50	29.00	385.00			12.80	7.35	18.30	12.00	8.00	16.00				5.40	1.60	18.00
II 1989	9.90	3.50	28.00	938.00			12.60	7.23	18.00	10.00	6.00	14.00				5.30	1.60	17.00
III 1989	6.80	2.40	20.00	147.00			12.40	7.13	17.70	10.00	6.00	14.00				5.30	1.60	17.00
IV 1989	6.50	2.30	19.00	230.00			12.30	7.05	17.50	8.00	4.00	12.00				5.30	1.50	17.00
I 1990	6.00	2.10	17.00	292.00			12.20	6.97	17.30	8.00	5.00	13.00						
II 1990	6.00	2.10	17.00	292.00			12.00	6.90	17.20	6.00	3.00	9.00						
III 1990	6.80	2.40	20.00	99.50			11.90	6.84	17.00	5.00	3.00	7.00						
IV 1990	6.00	2.10	17.00	71.30			11.80	6.78	16.90	5.00	3.00	7.00						

TABLE III.9 PREDICTIONS FOR SCENARIO S
CONCENTRATIONS IN PORK (Bq/kg)

	observed		Zeevaert/DOSDIM		Peterson/CHERPAC		Karyar/TERNIRBU		Krajenski/CLRP		Galeriu/LINDOZ																																																																																																																																																																																																																																																																																																												
	mean	lower upper	mean	lower upper	mean	lower upper	mean	lower upper	mean	lower upper	mean	lower upper																																																																																																																																																																																																																																																																																																											
monthly avg.:													May 1986	0.80	0.40 1.20	0.05 0.0027	0.24	0.66 0.1200	1.90	0.36 0.11	0.93			1.00	0.50 3.00	Jun 1986	3.40	1.36 7.82	1.16 0.0640	5.85	0.33 0.0320	1.10	0.57 0.30	1.10	5.60	4.60 6.60	4.80	2.40 14.00	Jul 1986	6.60	2.64 16.50	1.33 0.0680	6.37	0.16 0.0067	0.68	1.70 0.65	2.90	9.70	7.80 11.60	6.00	3.00 18.00	Aug 1986	6.20	4.34 8.68	0.94 0.0430	4.68	0.08 0.0016	0.43	4.20 2.20	7.60	6.90	5.20 8.60	4.80	2.40 14.00	Sep 1986	8.10	5.67 11.34	0.58 0.0270	2.97	0.04 0.0004	0.30	6.20 3.10	9.80	8.90	6.40 11.30	4.10	2.00 12.00	quarterly avg.:													IV 1986	9.10	5.46 15.47	0.55 0.0440	3.66	2.90 0.3800	16.00	4.80 2.30	8.90	12.60	8.90 16.30	20.00	10.00 60.00	I 1987	15.00	12.00 19.50	1.04 0.0620	6.25	3.70 0.4500	21.00	6.10 2.80	12.00	13.40	9.40 17.30	26.00	13.00 78.00	II 1987	13.00	11.70 15.60	0.97 0.0500	5.79	3.80 0.4500	22.00	6.90 2.80	12.00	13.60	9.60 17.60	26.00	13.00 78.00	III 1987	13.00	11.70 15.60	0.62 0.0210	3.99	3.80 0.4500	22.00	6.70 1.90	11.00	10.80	7.60 14.00	22.00	11.00 66.00	IV 1987	8.70	7.83 10.44	0.54 0.0100	3.69	2.70 0.3400	17.00	6.30 1.80	11.00	3.10	2.10 4.00	7.00	3.00 20.00	I 1988	6.50	5.20 7.80	0.52 0.0079	3.64	2.70 0.3200	16.00	5.40 2.20	9.70	2.10	1.40 2.70	2.20	1.10 5.00	II 1988	6.20	4.96 8.06	0.52 0.0073	3.63	2.70 0.3200	16.00	4.40 1.70	9.30	2.10	1.50 2.70	1.60	0.80 5.00	III 1988	6.10	4.27 8.54	0.52 0.0065	3.61	2.70 0.3200	16.00	4.20 1.70	9.10	3.40	2.30 4.40	1.30	0.60 4.00	IV 1988	5.70	4.56 7.41	0.51 0.0066	3.56	1.10 0.1000	6.80	3.90 1.50	8.70	1.70	1.10 2.20	1.20	0.60 4.00	I 1989	5.90	4.72 7.67	0.50 0.0070	3.55	0.58 0.0580	4.20	3.30 1.40	6.40	1.60	1.10 2.10	1.00	0.50 4.00	II 1989	6.00	4.20 7.80	0.50 0.0069	3.54	0.57 0.0540	4.10	2.80 1.20	4.90	1.70	1.20 2.20	1.00	0.50 4.00	III 1989	5.60	4.48 7.28	0.50 0.0063	3.53	0.57 0.0540	4.10	2.40 1.20	4.20	2.90	2.00 3.80	0.90	0.50 4.00	IV 1989	7.20	5.76 8.64	0.49 0.0064	3.48	0.56 0.0520	4.00	1.60 0.96	2.90	1.40	1.00 1.80	0.80	0.40 4.00	I 1990	6.70	6.03 8.04	0.49 0.0068	3.46	0.55 0.0520	3.90	1.00 0.52	2.00	1.35	0.90 1.80	0.70	0.30 3.00	II 1990	6.80	5.44 8.16	0.49 0.0067	3.46	0.55 0.0520	4.00	1.00 0.63	2.10	1.40	1.00 1.80	0.60	0.30 3.00	III 1990	6.50	3.90 10.40	0.49 0.0062	3.45	0.55 0.0520	4.00	0.83 0.44	2.00	2.50	1.70 3.30	0.60	0.30 3.00	IV 1990	6.50	5.20 8.45			0.54 0.0510	3.90	0.80 0.42	1.90	1.25	1.00 1.50	0.60	0.30 3.00
May 1986	0.80	0.40 1.20	0.05 0.0027	0.24	0.66 0.1200	1.90	0.36 0.11	0.93			1.00	0.50 3.00																																																																																																																																																																																																																																																																																																											
Jun 1986	3.40	1.36 7.82	1.16 0.0640	5.85	0.33 0.0320	1.10	0.57 0.30	1.10	5.60	4.60 6.60	4.80	2.40 14.00																																																																																																																																																																																																																																																																																																											
Jul 1986	6.60	2.64 16.50	1.33 0.0680	6.37	0.16 0.0067	0.68	1.70 0.65	2.90	9.70	7.80 11.60	6.00	3.00 18.00																																																																																																																																																																																																																																																																																																											
Aug 1986	6.20	4.34 8.68	0.94 0.0430	4.68	0.08 0.0016	0.43	4.20 2.20	7.60	6.90	5.20 8.60	4.80	2.40 14.00																																																																																																																																																																																																																																																																																																											
Sep 1986	8.10	5.67 11.34	0.58 0.0270	2.97	0.04 0.0004	0.30	6.20 3.10	9.80	8.90	6.40 11.30	4.10	2.00 12.00																																																																																																																																																																																																																																																																																																											
quarterly avg.:													IV 1986	9.10	5.46 15.47	0.55 0.0440	3.66	2.90 0.3800	16.00	4.80 2.30	8.90	12.60	8.90 16.30	20.00	10.00 60.00	I 1987	15.00	12.00 19.50	1.04 0.0620	6.25	3.70 0.4500	21.00	6.10 2.80	12.00	13.40	9.40 17.30	26.00	13.00 78.00	II 1987	13.00	11.70 15.60	0.97 0.0500	5.79	3.80 0.4500	22.00	6.90 2.80	12.00	13.60	9.60 17.60	26.00	13.00 78.00	III 1987	13.00	11.70 15.60	0.62 0.0210	3.99	3.80 0.4500	22.00	6.70 1.90	11.00	10.80	7.60 14.00	22.00	11.00 66.00	IV 1987	8.70	7.83 10.44	0.54 0.0100	3.69	2.70 0.3400	17.00	6.30 1.80	11.00	3.10	2.10 4.00	7.00	3.00 20.00	I 1988	6.50	5.20 7.80	0.52 0.0079	3.64	2.70 0.3200	16.00	5.40 2.20	9.70	2.10	1.40 2.70	2.20	1.10 5.00	II 1988	6.20	4.96 8.06	0.52 0.0073	3.63	2.70 0.3200	16.00	4.40 1.70	9.30	2.10	1.50 2.70	1.60	0.80 5.00	III 1988	6.10	4.27 8.54	0.52 0.0065	3.61	2.70 0.3200	16.00	4.20 1.70	9.10	3.40	2.30 4.40	1.30	0.60 4.00	IV 1988	5.70	4.56 7.41	0.51 0.0066	3.56	1.10 0.1000	6.80	3.90 1.50	8.70	1.70	1.10 2.20	1.20	0.60 4.00	I 1989	5.90	4.72 7.67	0.50 0.0070	3.55	0.58 0.0580	4.20	3.30 1.40	6.40	1.60	1.10 2.10	1.00	0.50 4.00	II 1989	6.00	4.20 7.80	0.50 0.0069	3.54	0.57 0.0540	4.10	2.80 1.20	4.90	1.70	1.20 2.20	1.00	0.50 4.00	III 1989	5.60	4.48 7.28	0.50 0.0063	3.53	0.57 0.0540	4.10	2.40 1.20	4.20	2.90	2.00 3.80	0.90	0.50 4.00	IV 1989	7.20	5.76 8.64	0.49 0.0064	3.48	0.56 0.0520	4.00	1.60 0.96	2.90	1.40	1.00 1.80	0.80	0.40 4.00	I 1990	6.70	6.03 8.04	0.49 0.0068	3.46	0.55 0.0520	3.90	1.00 0.52	2.00	1.35	0.90 1.80	0.70	0.30 3.00	II 1990	6.80	5.44 8.16	0.49 0.0067	3.46	0.55 0.0520	4.00	1.00 0.63	2.10	1.40	1.00 1.80	0.60	0.30 3.00	III 1990	6.50	3.90 10.40	0.49 0.0062	3.45	0.55 0.0520	4.00	0.83 0.44	2.00	2.50	1.70 3.30	0.60	0.30 3.00	IV 1990	6.50	5.20 8.45			0.54 0.0510	3.90	0.80 0.42	1.90	1.25	1.00 1.50	0.60	0.30 3.00																																																																														
IV 1986	9.10	5.46 15.47	0.55 0.0440	3.66	2.90 0.3800	16.00	4.80 2.30	8.90	12.60	8.90 16.30	20.00	10.00 60.00																																																																																																																																																																																																																																																																																																											
I 1987	15.00	12.00 19.50	1.04 0.0620	6.25	3.70 0.4500	21.00	6.10 2.80	12.00	13.40	9.40 17.30	26.00	13.00 78.00																																																																																																																																																																																																																																																																																																											
II 1987	13.00	11.70 15.60	0.97 0.0500	5.79	3.80 0.4500	22.00	6.90 2.80	12.00	13.60	9.60 17.60	26.00	13.00 78.00																																																																																																																																																																																																																																																																																																											
III 1987	13.00	11.70 15.60	0.62 0.0210	3.99	3.80 0.4500	22.00	6.70 1.90	11.00	10.80	7.60 14.00	22.00	11.00 66.00																																																																																																																																																																																																																																																																																																											
IV 1987	8.70	7.83 10.44	0.54 0.0100	3.69	2.70 0.3400	17.00	6.30 1.80	11.00	3.10	2.10 4.00	7.00	3.00 20.00																																																																																																																																																																																																																																																																																																											
I 1988	6.50	5.20 7.80	0.52 0.0079	3.64	2.70 0.3200	16.00	5.40 2.20	9.70	2.10	1.40 2.70	2.20	1.10 5.00																																																																																																																																																																																																																																																																																																											
II 1988	6.20	4.96 8.06	0.52 0.0073	3.63	2.70 0.3200	16.00	4.40 1.70	9.30	2.10	1.50 2.70	1.60	0.80 5.00																																																																																																																																																																																																																																																																																																											
III 1988	6.10	4.27 8.54	0.52 0.0065	3.61	2.70 0.3200	16.00	4.20 1.70	9.10	3.40	2.30 4.40	1.30	0.60 4.00																																																																																																																																																																																																																																																																																																											
IV 1988	5.70	4.56 7.41	0.51 0.0066	3.56	1.10 0.1000	6.80	3.90 1.50	8.70	1.70	1.10 2.20	1.20	0.60 4.00																																																																																																																																																																																																																																																																																																											
I 1989	5.90	4.72 7.67	0.50 0.0070	3.55	0.58 0.0580	4.20	3.30 1.40	6.40	1.60	1.10 2.10	1.00	0.50 4.00																																																																																																																																																																																																																																																																																																											
II 1989	6.00	4.20 7.80	0.50 0.0069	3.54	0.57 0.0540	4.10	2.80 1.20	4.90	1.70	1.20 2.20	1.00	0.50 4.00																																																																																																																																																																																																																																																																																																											
III 1989	5.60	4.48 7.28	0.50 0.0063	3.53	0.57 0.0540	4.10	2.40 1.20	4.20	2.90	2.00 3.80	0.90	0.50 4.00																																																																																																																																																																																																																																																																																																											
IV 1989	7.20	5.76 8.64	0.49 0.0064	3.48	0.56 0.0520	4.00	1.60 0.96	2.90	1.40	1.00 1.80	0.80	0.40 4.00																																																																																																																																																																																																																																																																																																											
I 1990	6.70	6.03 8.04	0.49 0.0068	3.46	0.55 0.0520	3.90	1.00 0.52	2.00	1.35	0.90 1.80	0.70	0.30 3.00																																																																																																																																																																																																																																																																																																											
II 1990	6.80	5.44 8.16	0.49 0.0067	3.46	0.55 0.0520	4.00	1.00 0.63	2.10	1.40	1.00 1.80	0.60	0.30 3.00																																																																																																																																																																																																																																																																																																											
III 1990	6.50	3.90 10.40	0.49 0.0062	3.45	0.55 0.0520	4.00	0.83 0.44	2.00	2.50	1.70 3.30	0.60	0.30 3.00																																																																																																																																																																																																																																																																																																											
IV 1990	6.50	5.20 8.45			0.54 0.0510	3.90	0.80 0.42	1.90	1.25	1.00 1.50	0.60	0.30 3.00																																																																																																																																																																																																																																																																																																											

TABLE III.9 (cont.)
CONCENTRATIONS IN PORK (Bq/kg)

	Suolalanen/DETRA		Attwood/FARMLAND		Bergstrom/ECOSAFE		Sazykina/ECOMOD		YU/RESRAD		Horyna/SCHRAADLO																																																																																																																																																																																																																																																																																																												
	mean	Lower upper	mean	Lower upper	mean	Lower upper	mean	Lower upper	mean	Lower upper	mean	Lower upper																																																																																																																																																																																																																																																																																																											
monthly avg.:													May 1986							1.00	0.60	1.40		7.00	2.00	Jun 1986	1.20	0.40	3.50				5.00	3.00	7.00		20.00	9.00	Jul 1986	2.30	0.80	6.60				6.00	3.00	9.00		22.00	40.00	Aug 1986	4.30	1.50	12.40				8.00	5.00	11.00		23.00		Sep 1986	6.50	2.30	18.70			8.20	3.3900	13.00	14.00		24.00		quarterly avg.:													IV 1986	11.00	3.90	31.60			7.54	3.0100	12.10	28.00	7.10	1.80	16.70	I 1987	14.00	4.90	40.30			6.94	2.6700	11.20	15.00	22.00	10.00	50.00	II 1987	8.50	3.00	24.40	0.024		6.41	2.3700	10.40	17.00	20.00	2.00		III 1987	4.40	1.50	12.70	0.024		5.92	2.1000	9.74	7.00	18.00	8.00	41.00	IV 1987	2.70	0.90	7.80	0.024		5.49	1.8700	9.12	4.50	18.00	8.00		I 1988	2.40	0.80	6.90	0.023		5.10	1.6600	8.54	4.50	18.00	8.00		II 1988	1.90	0.70	5.50	0.023		4.75	1.4800	8.02	3.00	16.00	14.00		III 1988	0.90	0.30	2.60	0.023		4.43	1.3200	7.54	1.00	14.00	6.00	32.00	IV 1988	1.40	0.50	4.00	0.023		4.14	1.1700	7.10	1.00	14.00	6.00		I 1989	1.20	0.40	3.50	0.023		3.87	1.0400	6.69	2.00	13.00	9.00	20.00	II 1989	1.00	0.40	2.90	0.023		3.63	0.9300	6.32	1.70	9.00	4.00	11.00	III 1989	0.70	0.20	2.00	0.023		3.40	0.8310	5.97	1.70	5.00	2.40		IV 1989	0.70	0.20	1.70	0.023		3.20	0.7410	5.65	1.40	4.80			I 1990	0.60	0.20	1.70	0.022		3.01	0.6620	5.36	1.40	5.00	2.40		II 1990	0.70	0.20	2.00	0.022		2.84	0.5920	5.08	0.80	5.00	2.40		III 1990	0.70	0.20	2.00	0.022		2.68	0.5290	4.83	0.50	4.80			IV 1990	0.60	0.20	1.70	0.022		2.53	0.4720	4.59	0.50	4.80		
May 1986							1.00	0.60	1.40		7.00	2.00	Jun 1986	1.20	0.40	3.50				5.00	3.00	7.00		20.00	9.00	Jul 1986	2.30	0.80	6.60				6.00	3.00	9.00		22.00	40.00	Aug 1986	4.30	1.50	12.40				8.00	5.00	11.00		23.00		Sep 1986	6.50	2.30	18.70			8.20	3.3900	13.00	14.00		24.00		quarterly avg.:													IV 1986	11.00	3.90	31.60			7.54	3.0100	12.10	28.00	7.10	1.80	16.70	I 1987	14.00	4.90	40.30			6.94	2.6700	11.20	15.00	22.00	10.00	50.00	II 1987	8.50	3.00	24.40	0.024		6.41	2.3700	10.40	17.00	20.00	2.00		III 1987	4.40	1.50	12.70	0.024		5.92	2.1000	9.74	7.00	18.00	8.00	41.00	IV 1987	2.70	0.90	7.80	0.024		5.49	1.8700	9.12	4.50	18.00	8.00		I 1988	2.40	0.80	6.90	0.023		5.10	1.6600	8.54	4.50	18.00	8.00		II 1988	1.90	0.70	5.50	0.023		4.75	1.4800	8.02	3.00	16.00	14.00		III 1988	0.90	0.30	2.60	0.023		4.43	1.3200	7.54	1.00	14.00	6.00	32.00	IV 1988	1.40	0.50	4.00	0.023		4.14	1.1700	7.10	1.00	14.00	6.00		I 1989	1.20	0.40	3.50	0.023		3.87	1.0400	6.69	2.00	13.00	9.00	20.00	II 1989	1.00	0.40	2.90	0.023		3.63	0.9300	6.32	1.70	9.00	4.00	11.00	III 1989	0.70	0.20	2.00	0.023		3.40	0.8310	5.97	1.70	5.00	2.40		IV 1989	0.70	0.20	1.70	0.023		3.20	0.7410	5.65	1.40	4.80			I 1990	0.60	0.20	1.70	0.022		3.01	0.6620	5.36	1.40	5.00	2.40		II 1990	0.70	0.20	2.00	0.022		2.84	0.5920	5.08	0.80	5.00	2.40		III 1990	0.70	0.20	2.00	0.022		2.68	0.5290	4.83	0.50	4.80			IV 1990	0.60	0.20	1.70	0.022		2.53	0.4720	4.59	0.50	4.80															
Jun 1986	1.20	0.40	3.50				5.00	3.00	7.00		20.00	9.00	Jul 1986	2.30	0.80	6.60				6.00	3.00	9.00		22.00	40.00	Aug 1986	4.30	1.50	12.40				8.00	5.00	11.00		23.00		Sep 1986	6.50	2.30	18.70			8.20	3.3900	13.00	14.00		24.00		quarterly avg.:													IV 1986	11.00	3.90	31.60			7.54	3.0100	12.10	28.00	7.10	1.80	16.70	I 1987	14.00	4.90	40.30			6.94	2.6700	11.20	15.00	22.00	10.00	50.00	II 1987	8.50	3.00	24.40	0.024		6.41	2.3700	10.40	17.00	20.00	2.00		III 1987	4.40	1.50	12.70	0.024		5.92	2.1000	9.74	7.00	18.00	8.00	41.00	IV 1987	2.70	0.90	7.80	0.024		5.49	1.8700	9.12	4.50	18.00	8.00		I 1988	2.40	0.80	6.90	0.023		5.10	1.6600	8.54	4.50	18.00	8.00		II 1988	1.90	0.70	5.50	0.023		4.75	1.4800	8.02	3.00	16.00	14.00		III 1988	0.90	0.30	2.60	0.023		4.43	1.3200	7.54	1.00	14.00	6.00	32.00	IV 1988	1.40	0.50	4.00	0.023		4.14	1.1700	7.10	1.00	14.00	6.00		I 1989	1.20	0.40	3.50	0.023		3.87	1.0400	6.69	2.00	13.00	9.00	20.00	II 1989	1.00	0.40	2.90	0.023		3.63	0.9300	6.32	1.70	9.00	4.00	11.00	III 1989	0.70	0.20	2.00	0.023		3.40	0.8310	5.97	1.70	5.00	2.40		IV 1989	0.70	0.20	1.70	0.023		3.20	0.7410	5.65	1.40	4.80			I 1990	0.60	0.20	1.70	0.022		3.01	0.6620	5.36	1.40	5.00	2.40		II 1990	0.70	0.20	2.00	0.022		2.84	0.5920	5.08	0.80	5.00	2.40		III 1990	0.70	0.20	2.00	0.022		2.68	0.5290	4.83	0.50	4.80			IV 1990	0.60	0.20	1.70	0.022		2.53	0.4720	4.59	0.50	4.80																												
Jul 1986	2.30	0.80	6.60				6.00	3.00	9.00		22.00	40.00	Aug 1986	4.30	1.50	12.40				8.00	5.00	11.00		23.00		Sep 1986	6.50	2.30	18.70			8.20	3.3900	13.00	14.00		24.00		quarterly avg.:													IV 1986	11.00	3.90	31.60			7.54	3.0100	12.10	28.00	7.10	1.80	16.70	I 1987	14.00	4.90	40.30			6.94	2.6700	11.20	15.00	22.00	10.00	50.00	II 1987	8.50	3.00	24.40	0.024		6.41	2.3700	10.40	17.00	20.00	2.00		III 1987	4.40	1.50	12.70	0.024		5.92	2.1000	9.74	7.00	18.00	8.00	41.00	IV 1987	2.70	0.90	7.80	0.024		5.49	1.8700	9.12	4.50	18.00	8.00		I 1988	2.40	0.80	6.90	0.023		5.10	1.6600	8.54	4.50	18.00	8.00		II 1988	1.90	0.70	5.50	0.023		4.75	1.4800	8.02	3.00	16.00	14.00		III 1988	0.90	0.30	2.60	0.023		4.43	1.3200	7.54	1.00	14.00	6.00	32.00	IV 1988	1.40	0.50	4.00	0.023		4.14	1.1700	7.10	1.00	14.00	6.00		I 1989	1.20	0.40	3.50	0.023		3.87	1.0400	6.69	2.00	13.00	9.00	20.00	II 1989	1.00	0.40	2.90	0.023		3.63	0.9300	6.32	1.70	9.00	4.00	11.00	III 1989	0.70	0.20	2.00	0.023		3.40	0.8310	5.97	1.70	5.00	2.40		IV 1989	0.70	0.20	1.70	0.023		3.20	0.7410	5.65	1.40	4.80			I 1990	0.60	0.20	1.70	0.022		3.01	0.6620	5.36	1.40	5.00	2.40		II 1990	0.70	0.20	2.00	0.022		2.84	0.5920	5.08	0.80	5.00	2.40		III 1990	0.70	0.20	2.00	0.022		2.68	0.5290	4.83	0.50	4.80			IV 1990	0.60	0.20	1.70	0.022		2.53	0.4720	4.59	0.50	4.80																																									
Aug 1986	4.30	1.50	12.40				8.00	5.00	11.00		23.00		Sep 1986	6.50	2.30	18.70			8.20	3.3900	13.00	14.00		24.00		quarterly avg.:													IV 1986	11.00	3.90	31.60			7.54	3.0100	12.10	28.00	7.10	1.80	16.70	I 1987	14.00	4.90	40.30			6.94	2.6700	11.20	15.00	22.00	10.00	50.00	II 1987	8.50	3.00	24.40	0.024		6.41	2.3700	10.40	17.00	20.00	2.00		III 1987	4.40	1.50	12.70	0.024		5.92	2.1000	9.74	7.00	18.00	8.00	41.00	IV 1987	2.70	0.90	7.80	0.024		5.49	1.8700	9.12	4.50	18.00	8.00		I 1988	2.40	0.80	6.90	0.023		5.10	1.6600	8.54	4.50	18.00	8.00		II 1988	1.90	0.70	5.50	0.023		4.75	1.4800	8.02	3.00	16.00	14.00		III 1988	0.90	0.30	2.60	0.023		4.43	1.3200	7.54	1.00	14.00	6.00	32.00	IV 1988	1.40	0.50	4.00	0.023		4.14	1.1700	7.10	1.00	14.00	6.00		I 1989	1.20	0.40	3.50	0.023		3.87	1.0400	6.69	2.00	13.00	9.00	20.00	II 1989	1.00	0.40	2.90	0.023		3.63	0.9300	6.32	1.70	9.00	4.00	11.00	III 1989	0.70	0.20	2.00	0.023		3.40	0.8310	5.97	1.70	5.00	2.40		IV 1989	0.70	0.20	1.70	0.023		3.20	0.7410	5.65	1.40	4.80			I 1990	0.60	0.20	1.70	0.022		3.01	0.6620	5.36	1.40	5.00	2.40		II 1990	0.70	0.20	2.00	0.022		2.84	0.5920	5.08	0.80	5.00	2.40		III 1990	0.70	0.20	2.00	0.022		2.68	0.5290	4.83	0.50	4.80			IV 1990	0.60	0.20	1.70	0.022		2.53	0.4720	4.59	0.50	4.80																																																						
Sep 1986	6.50	2.30	18.70			8.20	3.3900	13.00	14.00		24.00		quarterly avg.:													IV 1986	11.00	3.90	31.60			7.54	3.0100	12.10	28.00	7.10	1.80	16.70	I 1987	14.00	4.90	40.30			6.94	2.6700	11.20	15.00	22.00	10.00	50.00	II 1987	8.50	3.00	24.40	0.024		6.41	2.3700	10.40	17.00	20.00	2.00		III 1987	4.40	1.50	12.70	0.024		5.92	2.1000	9.74	7.00	18.00	8.00	41.00	IV 1987	2.70	0.90	7.80	0.024		5.49	1.8700	9.12	4.50	18.00	8.00		I 1988	2.40	0.80	6.90	0.023		5.10	1.6600	8.54	4.50	18.00	8.00		II 1988	1.90	0.70	5.50	0.023		4.75	1.4800	8.02	3.00	16.00	14.00		III 1988	0.90	0.30	2.60	0.023		4.43	1.3200	7.54	1.00	14.00	6.00	32.00	IV 1988	1.40	0.50	4.00	0.023		4.14	1.1700	7.10	1.00	14.00	6.00		I 1989	1.20	0.40	3.50	0.023		3.87	1.0400	6.69	2.00	13.00	9.00	20.00	II 1989	1.00	0.40	2.90	0.023		3.63	0.9300	6.32	1.70	9.00	4.00	11.00	III 1989	0.70	0.20	2.00	0.023		3.40	0.8310	5.97	1.70	5.00	2.40		IV 1989	0.70	0.20	1.70	0.023		3.20	0.7410	5.65	1.40	4.80			I 1990	0.60	0.20	1.70	0.022		3.01	0.6620	5.36	1.40	5.00	2.40		II 1990	0.70	0.20	2.00	0.022		2.84	0.5920	5.08	0.80	5.00	2.40		III 1990	0.70	0.20	2.00	0.022		2.68	0.5290	4.83	0.50	4.80			IV 1990	0.60	0.20	1.70	0.022		2.53	0.4720	4.59	0.50	4.80																																																																			
quarterly avg.:													IV 1986	11.00	3.90	31.60			7.54	3.0100	12.10	28.00	7.10	1.80	16.70	I 1987	14.00	4.90	40.30			6.94	2.6700	11.20	15.00	22.00	10.00	50.00	II 1987	8.50	3.00	24.40	0.024		6.41	2.3700	10.40	17.00	20.00	2.00		III 1987	4.40	1.50	12.70	0.024		5.92	2.1000	9.74	7.00	18.00	8.00	41.00	IV 1987	2.70	0.90	7.80	0.024		5.49	1.8700	9.12	4.50	18.00	8.00		I 1988	2.40	0.80	6.90	0.023		5.10	1.6600	8.54	4.50	18.00	8.00		II 1988	1.90	0.70	5.50	0.023		4.75	1.4800	8.02	3.00	16.00	14.00		III 1988	0.90	0.30	2.60	0.023		4.43	1.3200	7.54	1.00	14.00	6.00	32.00	IV 1988	1.40	0.50	4.00	0.023		4.14	1.1700	7.10	1.00	14.00	6.00		I 1989	1.20	0.40	3.50	0.023		3.87	1.0400	6.69	2.00	13.00	9.00	20.00	II 1989	1.00	0.40	2.90	0.023		3.63	0.9300	6.32	1.70	9.00	4.00	11.00	III 1989	0.70	0.20	2.00	0.023		3.40	0.8310	5.97	1.70	5.00	2.40		IV 1989	0.70	0.20	1.70	0.023		3.20	0.7410	5.65	1.40	4.80			I 1990	0.60	0.20	1.70	0.022		3.01	0.6620	5.36	1.40	5.00	2.40		II 1990	0.70	0.20	2.00	0.022		2.84	0.5920	5.08	0.80	5.00	2.40		III 1990	0.70	0.20	2.00	0.022		2.68	0.5290	4.83	0.50	4.80			IV 1990	0.60	0.20	1.70	0.022		2.53	0.4720	4.59	0.50	4.80																																																																																
IV 1986	11.00	3.90	31.60			7.54	3.0100	12.10	28.00	7.10	1.80	16.70	I 1987	14.00	4.90	40.30			6.94	2.6700	11.20	15.00	22.00	10.00	50.00	II 1987	8.50	3.00	24.40	0.024		6.41	2.3700	10.40	17.00	20.00	2.00		III 1987	4.40	1.50	12.70	0.024		5.92	2.1000	9.74	7.00	18.00	8.00	41.00	IV 1987	2.70	0.90	7.80	0.024		5.49	1.8700	9.12	4.50	18.00	8.00		I 1988	2.40	0.80	6.90	0.023		5.10	1.6600	8.54	4.50	18.00	8.00		II 1988	1.90	0.70	5.50	0.023		4.75	1.4800	8.02	3.00	16.00	14.00		III 1988	0.90	0.30	2.60	0.023		4.43	1.3200	7.54	1.00	14.00	6.00	32.00	IV 1988	1.40	0.50	4.00	0.023		4.14	1.1700	7.10	1.00	14.00	6.00		I 1989	1.20	0.40	3.50	0.023		3.87	1.0400	6.69	2.00	13.00	9.00	20.00	II 1989	1.00	0.40	2.90	0.023		3.63	0.9300	6.32	1.70	9.00	4.00	11.00	III 1989	0.70	0.20	2.00	0.023		3.40	0.8310	5.97	1.70	5.00	2.40		IV 1989	0.70	0.20	1.70	0.023		3.20	0.7410	5.65	1.40	4.80			I 1990	0.60	0.20	1.70	0.022		3.01	0.6620	5.36	1.40	5.00	2.40		II 1990	0.70	0.20	2.00	0.022		2.84	0.5920	5.08	0.80	5.00	2.40		III 1990	0.70	0.20	2.00	0.022		2.68	0.5290	4.83	0.50	4.80			IV 1990	0.60	0.20	1.70	0.022		2.53	0.4720	4.59	0.50	4.80																																																																																													
I 1987	14.00	4.90	40.30			6.94	2.6700	11.20	15.00	22.00	10.00	50.00	II 1987	8.50	3.00	24.40	0.024		6.41	2.3700	10.40	17.00	20.00	2.00		III 1987	4.40	1.50	12.70	0.024		5.92	2.1000	9.74	7.00	18.00	8.00	41.00	IV 1987	2.70	0.90	7.80	0.024		5.49	1.8700	9.12	4.50	18.00	8.00		I 1988	2.40	0.80	6.90	0.023		5.10	1.6600	8.54	4.50	18.00	8.00		II 1988	1.90	0.70	5.50	0.023		4.75	1.4800	8.02	3.00	16.00	14.00		III 1988	0.90	0.30	2.60	0.023		4.43	1.3200	7.54	1.00	14.00	6.00	32.00	IV 1988	1.40	0.50	4.00	0.023		4.14	1.1700	7.10	1.00	14.00	6.00		I 1989	1.20	0.40	3.50	0.023		3.87	1.0400	6.69	2.00	13.00	9.00	20.00	II 1989	1.00	0.40	2.90	0.023		3.63	0.9300	6.32	1.70	9.00	4.00	11.00	III 1989	0.70	0.20	2.00	0.023		3.40	0.8310	5.97	1.70	5.00	2.40		IV 1989	0.70	0.20	1.70	0.023		3.20	0.7410	5.65	1.40	4.80			I 1990	0.60	0.20	1.70	0.022		3.01	0.6620	5.36	1.40	5.00	2.40		II 1990	0.70	0.20	2.00	0.022		2.84	0.5920	5.08	0.80	5.00	2.40		III 1990	0.70	0.20	2.00	0.022		2.68	0.5290	4.83	0.50	4.80			IV 1990	0.60	0.20	1.70	0.022		2.53	0.4720	4.59	0.50	4.80																																																																																																										
II 1987	8.50	3.00	24.40	0.024		6.41	2.3700	10.40	17.00	20.00	2.00		III 1987	4.40	1.50	12.70	0.024		5.92	2.1000	9.74	7.00	18.00	8.00	41.00	IV 1987	2.70	0.90	7.80	0.024		5.49	1.8700	9.12	4.50	18.00	8.00		I 1988	2.40	0.80	6.90	0.023		5.10	1.6600	8.54	4.50	18.00	8.00		II 1988	1.90	0.70	5.50	0.023		4.75	1.4800	8.02	3.00	16.00	14.00		III 1988	0.90	0.30	2.60	0.023		4.43	1.3200	7.54	1.00	14.00	6.00	32.00	IV 1988	1.40	0.50	4.00	0.023		4.14	1.1700	7.10	1.00	14.00	6.00		I 1989	1.20	0.40	3.50	0.023		3.87	1.0400	6.69	2.00	13.00	9.00	20.00	II 1989	1.00	0.40	2.90	0.023		3.63	0.9300	6.32	1.70	9.00	4.00	11.00	III 1989	0.70	0.20	2.00	0.023		3.40	0.8310	5.97	1.70	5.00	2.40		IV 1989	0.70	0.20	1.70	0.023		3.20	0.7410	5.65	1.40	4.80			I 1990	0.60	0.20	1.70	0.022		3.01	0.6620	5.36	1.40	5.00	2.40		II 1990	0.70	0.20	2.00	0.022		2.84	0.5920	5.08	0.80	5.00	2.40		III 1990	0.70	0.20	2.00	0.022		2.68	0.5290	4.83	0.50	4.80			IV 1990	0.60	0.20	1.70	0.022		2.53	0.4720	4.59	0.50	4.80																																																																																																																							
III 1987	4.40	1.50	12.70	0.024		5.92	2.1000	9.74	7.00	18.00	8.00	41.00	IV 1987	2.70	0.90	7.80	0.024		5.49	1.8700	9.12	4.50	18.00	8.00		I 1988	2.40	0.80	6.90	0.023		5.10	1.6600	8.54	4.50	18.00	8.00		II 1988	1.90	0.70	5.50	0.023		4.75	1.4800	8.02	3.00	16.00	14.00		III 1988	0.90	0.30	2.60	0.023		4.43	1.3200	7.54	1.00	14.00	6.00	32.00	IV 1988	1.40	0.50	4.00	0.023		4.14	1.1700	7.10	1.00	14.00	6.00		I 1989	1.20	0.40	3.50	0.023		3.87	1.0400	6.69	2.00	13.00	9.00	20.00	II 1989	1.00	0.40	2.90	0.023		3.63	0.9300	6.32	1.70	9.00	4.00	11.00	III 1989	0.70	0.20	2.00	0.023		3.40	0.8310	5.97	1.70	5.00	2.40		IV 1989	0.70	0.20	1.70	0.023		3.20	0.7410	5.65	1.40	4.80			I 1990	0.60	0.20	1.70	0.022		3.01	0.6620	5.36	1.40	5.00	2.40		II 1990	0.70	0.20	2.00	0.022		2.84	0.5920	5.08	0.80	5.00	2.40		III 1990	0.70	0.20	2.00	0.022		2.68	0.5290	4.83	0.50	4.80			IV 1990	0.60	0.20	1.70	0.022		2.53	0.4720	4.59	0.50	4.80																																																																																																																																				
IV 1987	2.70	0.90	7.80	0.024		5.49	1.8700	9.12	4.50	18.00	8.00		I 1988	2.40	0.80	6.90	0.023		5.10	1.6600	8.54	4.50	18.00	8.00		II 1988	1.90	0.70	5.50	0.023		4.75	1.4800	8.02	3.00	16.00	14.00		III 1988	0.90	0.30	2.60	0.023		4.43	1.3200	7.54	1.00	14.00	6.00	32.00	IV 1988	1.40	0.50	4.00	0.023		4.14	1.1700	7.10	1.00	14.00	6.00		I 1989	1.20	0.40	3.50	0.023		3.87	1.0400	6.69	2.00	13.00	9.00	20.00	II 1989	1.00	0.40	2.90	0.023		3.63	0.9300	6.32	1.70	9.00	4.00	11.00	III 1989	0.70	0.20	2.00	0.023		3.40	0.8310	5.97	1.70	5.00	2.40		IV 1989	0.70	0.20	1.70	0.023		3.20	0.7410	5.65	1.40	4.80			I 1990	0.60	0.20	1.70	0.022		3.01	0.6620	5.36	1.40	5.00	2.40		II 1990	0.70	0.20	2.00	0.022		2.84	0.5920	5.08	0.80	5.00	2.40		III 1990	0.70	0.20	2.00	0.022		2.68	0.5290	4.83	0.50	4.80			IV 1990	0.60	0.20	1.70	0.022		2.53	0.4720	4.59	0.50	4.80																																																																																																																																																	
I 1988	2.40	0.80	6.90	0.023		5.10	1.6600	8.54	4.50	18.00	8.00		II 1988	1.90	0.70	5.50	0.023		4.75	1.4800	8.02	3.00	16.00	14.00		III 1988	0.90	0.30	2.60	0.023		4.43	1.3200	7.54	1.00	14.00	6.00	32.00	IV 1988	1.40	0.50	4.00	0.023		4.14	1.1700	7.10	1.00	14.00	6.00		I 1989	1.20	0.40	3.50	0.023		3.87	1.0400	6.69	2.00	13.00	9.00	20.00	II 1989	1.00	0.40	2.90	0.023		3.63	0.9300	6.32	1.70	9.00	4.00	11.00	III 1989	0.70	0.20	2.00	0.023		3.40	0.8310	5.97	1.70	5.00	2.40		IV 1989	0.70	0.20	1.70	0.023		3.20	0.7410	5.65	1.40	4.80			I 1990	0.60	0.20	1.70	0.022		3.01	0.6620	5.36	1.40	5.00	2.40		II 1990	0.70	0.20	2.00	0.022		2.84	0.5920	5.08	0.80	5.00	2.40		III 1990	0.70	0.20	2.00	0.022		2.68	0.5290	4.83	0.50	4.80			IV 1990	0.60	0.20	1.70	0.022		2.53	0.4720	4.59	0.50	4.80																																																																																																																																																														
II 1988	1.90	0.70	5.50	0.023		4.75	1.4800	8.02	3.00	16.00	14.00		III 1988	0.90	0.30	2.60	0.023		4.43	1.3200	7.54	1.00	14.00	6.00	32.00	IV 1988	1.40	0.50	4.00	0.023		4.14	1.1700	7.10	1.00	14.00	6.00		I 1989	1.20	0.40	3.50	0.023		3.87	1.0400	6.69	2.00	13.00	9.00	20.00	II 1989	1.00	0.40	2.90	0.023		3.63	0.9300	6.32	1.70	9.00	4.00	11.00	III 1989	0.70	0.20	2.00	0.023		3.40	0.8310	5.97	1.70	5.00	2.40		IV 1989	0.70	0.20	1.70	0.023		3.20	0.7410	5.65	1.40	4.80			I 1990	0.60	0.20	1.70	0.022		3.01	0.6620	5.36	1.40	5.00	2.40		II 1990	0.70	0.20	2.00	0.022		2.84	0.5920	5.08	0.80	5.00	2.40		III 1990	0.70	0.20	2.00	0.022		2.68	0.5290	4.83	0.50	4.80			IV 1990	0.60	0.20	1.70	0.022		2.53	0.4720	4.59	0.50	4.80																																																																																																																																																																											
III 1988	0.90	0.30	2.60	0.023		4.43	1.3200	7.54	1.00	14.00	6.00	32.00	IV 1988	1.40	0.50	4.00	0.023		4.14	1.1700	7.10	1.00	14.00	6.00		I 1989	1.20	0.40	3.50	0.023		3.87	1.0400	6.69	2.00	13.00	9.00	20.00	II 1989	1.00	0.40	2.90	0.023		3.63	0.9300	6.32	1.70	9.00	4.00	11.00	III 1989	0.70	0.20	2.00	0.023		3.40	0.8310	5.97	1.70	5.00	2.40		IV 1989	0.70	0.20	1.70	0.023		3.20	0.7410	5.65	1.40	4.80			I 1990	0.60	0.20	1.70	0.022		3.01	0.6620	5.36	1.40	5.00	2.40		II 1990	0.70	0.20	2.00	0.022		2.84	0.5920	5.08	0.80	5.00	2.40		III 1990	0.70	0.20	2.00	0.022		2.68	0.5290	4.83	0.50	4.80			IV 1990	0.60	0.20	1.70	0.022		2.53	0.4720	4.59	0.50	4.80																																																																																																																																																																																								
IV 1988	1.40	0.50	4.00	0.023		4.14	1.1700	7.10	1.00	14.00	6.00		I 1989	1.20	0.40	3.50	0.023		3.87	1.0400	6.69	2.00	13.00	9.00	20.00	II 1989	1.00	0.40	2.90	0.023		3.63	0.9300	6.32	1.70	9.00	4.00	11.00	III 1989	0.70	0.20	2.00	0.023		3.40	0.8310	5.97	1.70	5.00	2.40		IV 1989	0.70	0.20	1.70	0.023		3.20	0.7410	5.65	1.40	4.80			I 1990	0.60	0.20	1.70	0.022		3.01	0.6620	5.36	1.40	5.00	2.40		II 1990	0.70	0.20	2.00	0.022		2.84	0.5920	5.08	0.80	5.00	2.40		III 1990	0.70	0.20	2.00	0.022		2.68	0.5290	4.83	0.50	4.80			IV 1990	0.60	0.20	1.70	0.022		2.53	0.4720	4.59	0.50	4.80																																																																																																																																																																																																					
I 1989	1.20	0.40	3.50	0.023		3.87	1.0400	6.69	2.00	13.00	9.00	20.00	II 1989	1.00	0.40	2.90	0.023		3.63	0.9300	6.32	1.70	9.00	4.00	11.00	III 1989	0.70	0.20	2.00	0.023		3.40	0.8310	5.97	1.70	5.00	2.40		IV 1989	0.70	0.20	1.70	0.023		3.20	0.7410	5.65	1.40	4.80			I 1990	0.60	0.20	1.70	0.022		3.01	0.6620	5.36	1.40	5.00	2.40		II 1990	0.70	0.20	2.00	0.022		2.84	0.5920	5.08	0.80	5.00	2.40		III 1990	0.70	0.20	2.00	0.022		2.68	0.5290	4.83	0.50	4.80			IV 1990	0.60	0.20	1.70	0.022		2.53	0.4720	4.59	0.50	4.80																																																																																																																																																																																																																		
II 1989	1.00	0.40	2.90	0.023		3.63	0.9300	6.32	1.70	9.00	4.00	11.00	III 1989	0.70	0.20	2.00	0.023		3.40	0.8310	5.97	1.70	5.00	2.40		IV 1989	0.70	0.20	1.70	0.023		3.20	0.7410	5.65	1.40	4.80			I 1990	0.60	0.20	1.70	0.022		3.01	0.6620	5.36	1.40	5.00	2.40		II 1990	0.70	0.20	2.00	0.022		2.84	0.5920	5.08	0.80	5.00	2.40		III 1990	0.70	0.20	2.00	0.022		2.68	0.5290	4.83	0.50	4.80			IV 1990	0.60	0.20	1.70	0.022		2.53	0.4720	4.59	0.50	4.80																																																																																																																																																																																																																															
III 1989	0.70	0.20	2.00	0.023		3.40	0.8310	5.97	1.70	5.00	2.40		IV 1989	0.70	0.20	1.70	0.023		3.20	0.7410	5.65	1.40	4.80			I 1990	0.60	0.20	1.70	0.022		3.01	0.6620	5.36	1.40	5.00	2.40		II 1990	0.70	0.20	2.00	0.022		2.84	0.5920	5.08	0.80	5.00	2.40		III 1990	0.70	0.20	2.00	0.022		2.68	0.5290	4.83	0.50	4.80			IV 1990	0.60	0.20	1.70	0.022		2.53	0.4720	4.59	0.50	4.80																																																																																																																																																																																																																																												
IV 1989	0.70	0.20	1.70	0.023		3.20	0.7410	5.65	1.40	4.80			I 1990	0.60	0.20	1.70	0.022		3.01	0.6620	5.36	1.40	5.00	2.40		II 1990	0.70	0.20	2.00	0.022		2.84	0.5920	5.08	0.80	5.00	2.40		III 1990	0.70	0.20	2.00	0.022		2.68	0.5290	4.83	0.50	4.80			IV 1990	0.60	0.20	1.70	0.022		2.53	0.4720	4.59	0.50	4.80																																																																																																																																																																																																																																																									
I 1990	0.60	0.20	1.70	0.022		3.01	0.6620	5.36	1.40	5.00	2.40		II 1990	0.70	0.20	2.00	0.022		2.84	0.5920	5.08	0.80	5.00	2.40		III 1990	0.70	0.20	2.00	0.022		2.68	0.5290	4.83	0.50	4.80			IV 1990	0.60	0.20	1.70	0.022		2.53	0.4720	4.59	0.50	4.80																																																																																																																																																																																																																																																																						
II 1990	0.70	0.20	2.00	0.022		2.84	0.5920	5.08	0.80	5.00	2.40		III 1990	0.70	0.20	2.00	0.022		2.68	0.5290	4.83	0.50	4.80			IV 1990	0.60	0.20	1.70	0.022		2.53	0.4720	4.59	0.50	4.80																																																																																																																																																																																																																																																																																			
III 1990	0.70	0.20	2.00	0.022		2.68	0.5290	4.83	0.50	4.80			IV 1990	0.60	0.20	1.70	0.022		2.53	0.4720	4.59	0.50	4.80																																																																																																																																																																																																																																																																																																
IV 1990	0.60	0.20	1.70	0.022		2.53	0.4720	4.59	0.50	4.80																																																																																																																																																																																																																																																																																																													

TABLE III.11 PREDICTIONS FOR SCENARIO S
CONCENTRATIONS IN BARLEY (Bq/kg f.w.)

	I	observed			Zeevaert/DOSDIM			Peterson/CHERPAC			Kanyar/TERNIRBU			Krajewski/CLRP			Galeriu/LINDOZ			I
		mean	lower	upper	mean	lower	upper	mean	lower	upper	mean	lower	upper	mean	lower	upper	mean	lower	upper	
harvest 1986	I	3.70	2.22	7.03	2.05	0.035	13.60	7.30	0.530	47.00	6.70	3.00	13.00	9.70	6.81	12.64	10.90	5.00	30.00	I
harvest 1987	I	0.70	0.49	1.05	2.00	0.034	13.30	0.71	0.067	2.90	0.82	0.25	1.30	0.75	0.53	0.98	0.90	0.50	3.00	I
harvest 1988	I	0.70	0.56	0.91	1.97	0.033	13.00	0.69	0.065	2.80	0.60	0.17	1.00	0.59	0.41	0.76	0.80	0.40	2.50	I
harvest 1989	I	1.50	1.05	2.10	1.91	0.032	12.70	0.67	0.063	2.70	0.58	0.15	0.91	0.46	0.32	0.59	0.75	0.30	2.50	I
harvest 1990	I				1.86	0.032	12.40	0.65	0.061	2.60	0.52	0.16	0.87	0.36	0.25	0.46	0.70	0.30	2.50	I

	I	Suolanen/DETRA			Attwood/FARMLAND		Bergstroem/ECOSAFE		Sazykina/ECOMOD		Yu/RESRAD		Horyna/SCHRAADLO		I
		mean	lower	upper	mean	lower upper	mean	lower upper	mean	lower upper	mean	lower upper	mean	lower upper	
harvest 1986	I	3.00	1.10	8.60	0.456						6.40	5.10	9.10	I	
harvest 1987	I	0.40	0.10	1.20	0.442						6.20	4.90	8.80	I	
harvest 1988	I	0.38	0.10	1.14	0.429						6.00	4.80	8.60	I	
harvest 1989	I	0.36	0.09	1.08	0.417						5.90	4.70	8.40	I	
harvest 1990	I	0.34	0.08	1.02	0.404						5.70	4.60	8.20	I	

TABLE III.12 PREDICTIONS FOR SCENARIO S
CONCENTRATIONS IN OATS (Bq/kg f.w.)

	I	observed			Zeevaert/DOSDIM			Peterson/CHERPAC			Kanyar/TERNIRBU			Krajewski/CLRP			Galeriu/LINDOZ			I
		mean	lower	upper	mean	lower	upper	mean	lower	upper	mean	lower	upper	mean	lower	upper	mean	lower	upper	
harvest 1986	I	8.70	4.35	17.40	2.05	0.035	13.60	8.00	1.100	34.00	3.20	1.70	8.60							I
harvest 1987	I	1.70	1.19	2.38	2.00	0.034	13.30	0.77	0.073	3.10	0.96	0.28	2.10							I
harvest 1988	I	3.40	2.72	4.42	1.97	0.033	13.00	0.75	0.071	3.00	0.89	0.27	1.80							I
harvest 1989	I	5.40	4.32	7.02	1.91	0.032	12.70	0.73	0.069	2.90	0.70	0.30	1.90							I
harvest 1990	I				1.86	0.032	12.40	0.71	0.067	2.80	0.67	0.23	1.40							I

	I	Suolanen/DETRA			Attwood/FARMLAND		Bergstroem/ECOSAFE		Sazykina/ECOMOD		Yu/RESRAD		Horyna/SCHRAADLO		I
		mean	lower	upper	mean	lower upper	mean	lower upper	mean	lower upper	mean	lower upper	mean	lower upper	
harvest 1986	I	3.10	1.10	8.90	0.858						8.20	6.10	12.30	I	
harvest 1987	I	0.40	0.10	1.20	0.832						7.90	5.90	12.00	I	
harvest 1988	I	0.38	0.10	1.14	0.808						7.70	5.70	11.70	I	
harvest 1989	I	0.36	0.09	1.08	0.784						7.50	5.60	11.40	I	
harvest 1990	I	0.34	0.08	1.02	0.761						7.40	5.50	11.10	I	

TABLE III.13 PREDICTIONS FOR SCENARIO S
CONCENTRATIONS IN SMALL GAME (Bq/kg)

	observed			Zeevaert/DOSDIM		Peterson/CHERPAC		Kanyar/TERNIRBU		Krajewski/CLRP			Galeriu/LINDOZ	
	mean	lower	upper	mean	lower upper	mean	lower upper	mean	lower upper	mean	lower	upper	mean	lower upper
1986	220	145	356			380	80 1600			600	300	1200		
1987						330	81 1100			550	200	1100		
1988	250	173	415			410	57 2000			400	200	800		
1989	230	161	377			290	52 1700			350	150	700		
1990	220	150	343			200	60 390			300	150	600		

	Suolanen/DETRA			Attwood/FARMLAND		Bergstroem/ECOSAFE		Sazykina/ECOMOD		Yu/RESRAD		Horyna/SCHRAADLO	
	mean	lower	upper	duck	goose	mean	lower upper	mean	lower upper	mean	lower upper	mean	lower upper
1986	390	137	1122	23.20	24.80			200	120 280				
1987	371	130	1067	1.47	1.58			240	160 320				
1988	355	124	1021	1.24	1.33			640	440 840				
1989	344	120	989	0.96	1.03			400	250 550				
1990	334	117	961	0.74	0.80			480	300 660				

TABLE III.14 PREDICTIONS FOR SCENARIO S
CONCENTRATIONS IN BIG GAME (Bq/kg)

	observed			Zeevaert/DOSDIM		Peterson/CHERPAC		Kanyar/TERNIRBU		Krajewski/CLRP			Galeriu/LINDOZ	
	mean	lower	upper	mean	lower upper	mean	lower upper	mean	lower upper	mean	lower	upper	mean	lower upper
1986	250	230	310			210	76 810			300	150	600	400	200 1500
1987	210	200	270			220	68 710			250	120	500	400	200 1500
1988	270	250	330			220	61 700			200	100	400	350	200 1500
1989	250	240	310			220	57 700			200	100	400	300	150 1500
1990	220	210	290			190	54 700			150	100	300	270	150 1500

	Suolanen/DETRA			Attwood/FARMLAND		Bergstroem/ECOSAFE		Sazykina/ECOMOD		Yu/RESRAD		Horyna/SCHRAADLO	
	mean	lower	upper	mean	lower upper	mean	lower upper	mean	lower upper	mean	lower upper	mean	lower upper
1986	273	96	785	11.90		394	368 420	140	100 180				
1987	259	91	745	0.47		381	355 406	180	120 240				
1988	252	88	725	0.41		368	343 393	360	200 520				
1989	244	85	702	0.31		355	331 380	260	200 320				
1990	236	83	679	0.23		343	319 367	300	180 420				

TABLE III.15 PREDICTIONS FOR SCENARIO S
CONCENTRATIONS IN WILD, EDIBLE MUSHROOMS (Bq/kg f.w.)

	I	observed			I	Zeevaert/DOSDIM		Peterson/CHERPAC		Kanyar/TERNIRBU		Krajewski/CLRP			Galeriu/LINDOZ			I
		mean	lower	upper		mean	lower upper	mean	lower upper	mean	lower upper	mean	lower upper	mean	lower upper	mean	lower upper	
1986	I	330	230	550	I		340	26.0	1600			1100	200	5000	700	300	2000	I
1987	I	370	130	910	I		440	38.0	3200			1000	200	5000	800	300	2500	I
1988	I	460	270	840	I		530	1.8	2900			950	190	4750	980	400	3000	I
1989	I	670	360	1500	I		470	7.3	6500			900	180	4500	780	400	3000	I
1990	I	510	360	1000	I		380	4.0	4100			900	180	4500	600	300	2000	I

	I	Suolanen/DETRA			I	Attwood/FARMLAND		Bergstroem/ECOSAFE			Sazykina/ECOMOD			Yu/RESRAD			Horyna/SCHRAADLO			I
		mean	lower	upper		mean	lower upper	mean	lower upper	mean	lower upper	mean	lower upper	mean	lower upper	mean	lower upper			
1986	I	703	246	2022	I	1490		2050	1860	2240	1000	600	1400			170	10	1100	I	
1987	I	678	237	1950	I	1330		1980	1800	2160	900	500	1400			170	10	1100	I	
1988	I	659	231	1895	I	1260		1910	1740	2090	1200	800	1600			170	10	1100	I	
1989	I	641	224	1844	I	998		1850	1680	2020	900	600	1200			170	10	1000	I	
1990	I	624	218	1795	I	798		1790	1620	1950	700	400	1000			170	5	800	I	

TABLE III.16 PREDICTIONS FOR SCENARIO S
CONCENTRATIONS IN WILD BERRIES (Bq/kg f.w.)

	I	observed			I	Zeevaert/DOSDIM		Peterson/CHERPAC		Kanyar/TERNIRBU		Krajewski/CLRP			Galeriu/LINDOZ			I
		mean	lower	upper		mean	lower upper	mean	lower upper	mean	lower upper	mean	lower upper	mean	lower upper			
1986	I	110	80	160	I		99	23	240			45	15	135	200	100	600	I
1987	I	90	60	150	I		64	30	280			30	10	90	120	60	400	I
1988	I	150	100	250	I		110	36	380			15	5	45	80	40	300	I
1989	I	130	90	220	I		80	31	170			15	5	45	60	30	200	I
1990	I	120	80	220	I		69	18	140			15	5	45	40	20	150	I

	I	Suolanen/DETRA			I	Attwood/FARMLAND		Bergstroem/ECOSAFE			Sazykina/ECOMOD			Yu/RESRAD			Horyna/SCHRAADLO			I
		mean	lower	upper		mean	lower upper	mean	lower upper	mean	lower upper	mean	lower upper	mean	lower upper	mean	lower upper			
1986	I	140	49	403	I		138	113	163	180	120	240	1.6	1.0	2.5				I	
1987	I	136	48	391	I		134	110	158	150	110	190	1.5	0.9	2.3				I	
1988	I	132	46	380	I		129	106	152	210	150	270	1.4	0.8	2.3				I	
1989	I	129	45	371	I		125	102	147	170	130	210	1.4	0.8	2.2				I	
1990	I	125	44	360	I		121	99	142	200	140	260	1.3	0.8	2.1				I	

TABLE III.17 PREDICTIONS FOR SCENARIO S
CONCENTRATIONS IN FRESHWATER FISH (Bq/kg f.w.)

	observed			Zeevaert/DOSDIM			Peterson/CHERPAC			Kanyar/TERNIRBU			Krajewski/CLRP		Galeriu/LINDOZ			
	mean	lower	upper	mean	lower	upper	mean	lower	upper	mean	lower	upper	mean	lower	upper	mean	lower	upper
1986	940	752	1504	216	9.2	1243	1400	470	4200	1400	580	2800				557	200	3000
1987	1580	1422	2054	328	13.9	2004	1600	530	4800	1200	690	1800				870	300	4000
1988	1020	918	1326	280	12.2	1707	1200	400	3600	660	380	1000				810	300	4000
1989	760	684	988	210	9.2	1299	930	310	2800	330	230	450				677	250	3000
1990	630	567	1008	171	7.5	1058	690	230	2100	170	110	230				533	200	2500

	Suolanen/DETRA			Attwood/FARMLAND		Bergstroem/ECOSAFE			Sazykina/ECOMOD			Yu/RESRAD			Horyna/SCHRAADLO			
	mean	lower	upper	mean	lower	upper	mean	lower	upper	mean	lower	upper	mean	lower	upper	mean	lower	upper
1986	374	131	1076	1730			1030	866	1260	800	500	1100	1600	270	2500			
1987	1342	470	3860	795			1210	928	1490	720	360	1080	330	56	550			
1988	1156	405	3325	456			978	736	1220	450	250	650	190	32	320			
1989	708	248	2036	323			767	572	961	330	200	460	140	22	220			
1990	374	131	1076	305			608	451	764	240	150	330	130	21	210			

TABLE III.18 PREDICTIONS FOR SCENARIO S
HUMAN INTAKE, WOMAN (Bq/d)

	I	observed			I	Zeevaert/DOSDIM			Peterson/CHERPAC			Kanyar/TERNIRBU			Krajewski/CLRP			Galeriu/LINDOZ			I
		mean	lower	upper		mean	lower	upper	mean	lower	upper	mean	lower	upper	mean	lower	upper	mean	lower	upper	
June 1986	I	25.0	22.3	28.3	I	177.0	22.2	612.0	43.0	17.0	310.0	18.0	11.0	27.0	23.9	19.2	28.6	18.5	9.0	55.0	I
IV 1986	I	33.0	31.4	35.6	I	50.7	16.6	132.0	30.0	13.0	130.0	33.0	19.0	51.0	26.4	20.5	32.2	55.0	27.0	160.0	I
II 1987	I	37.0	35.2	41.1	I	44.0	11.0	118.0	25.0	11.0	60.0	28.0	12.0	37.0	25.1	19.5	30.8	36.8	18.0	110.0	I
IV 1987	I	21.0	19.5	23.9	I	36.9	3.8	26.9	19.0	8.0	38.0	16.0	11.0	21.0	5.1	3.5	6.7	22.6	11.0	67.0	I
II 1988	I	26.0	24.4	30.2	I	6.0	2.1	19.1	17.0	7.4	36.0	9.3	5.7	13.0	4.9	3.3	6.4	9.0	4.5	27.0	I
IV 1988	I	15.0	14.0	17.3	I	5.5	2.1	17.0	14.0	6.2	30.0	5.6	3.6	9.3	4.2	2.9	5.6	14.0	7.0	42.0	I
II 1989	I	18.0	16.9	21.1	I	5.1	2.0	15.2	13.0	5.3	26.0	4.2	2.3	7.0	4.1	2.8	5.5	7.0	3.5	21.0	I
IV 1989	I	12.0	10.8	15.1	I	4.9	2.0	14.3	11.0	4.3	22.0	2.7	1.9	5.1	4.4	3.8	4.9	12.0	6.0	36.0	I
II 1990	I	12.0	11.2	16.1	I	4.8	1.9	13.5	9.5	3.8	19.0	2.4	1.8	3.9	3.6	2.4	4.8	9.3	4.6	28.0	I
IV 1990	I	9.5	8.6	11.9	I				8.2	3.3	17.0	1.8	1.3	2.6	3.3	2.4	4.2	9.3	4.6	28.0	I

	I	Suolanen/DETRA			I	Attwood/FARMLAND			Bergstroem/ECOSAFE			Sazykina/ECOMOD			Yu/RESRAD			Horyna/SCHRAADLO			I
		mean	lower	upper		mean	lower	upper	mean	lower	upper	mean	lower	upper	mean	lower	upper	mean	lower	upper	
June 1986	I	26.0	9.1	75.0	I	95.9			31.8	18.7	44.9	53.0	40.0	66.0							I
IV 1986	I	29.0	10.0	83.0	I	237.0			23.4	19.3	24.7	40.0	28.0	52.0	27.0	15.0	40.0				I
II 1987	I	29.0	10.0	83.0	I	592.0			20.2	17.8	22.5	30.0	22.0	38.0							I
IV 1987	I	17.0	6.0	49.0	I	45.5			18.6	16.5	20.7	20.0	14.0	26.0	14.0	9.0	21.0				I
II 1988	I	15.0	5.3	43.0	I	72.7			17.2	15.3	19.2	17.0	12.0	22.0							I
IV 1988	I	13.0	4.6	37.0	I	23.5			16.2	14.4	18.0	16.0	11.0	21.0	12.0	8.0	19.0				I
II 1989	I	12.0	4.2	35.0	I	64.1			15.4	13.7	17.1	13.0	9.0	17.0							I
IV 1989	I	9.7	3.4	28.0	I	23.1			14.3	12.7	15.9	12.0	8.0	16.0	11.0	7.0	17.0				I
II 1990	I	7.8	2.7	22.0	I	27.9			13.7	12.1	15.2	10.0	7.5	12.5							I
IV 1990	I	6.6	2.3	19.0	I	12.1			13.0	11.6	14.5	10.0	7.5	12.5	11.0	7.0	17.0				I

TABLE I.II.19 PREDICTIONS FOR SCENARIO S
HUMAN INTAKE, MAN (Bq/d)

	observed		Zeevaert/DOSDIM		Peterson/CHERPAC		Kanyar/TERNIRBU		Krajewski/CLRP		Galeriu/LINDOZ	
	mean	lower upper	mean	lower upper	mean	lower upper	mean	lower upper	mean	lower upper	mean	lower upper
June 1986	35.0	31.2 39.2	262.0	32.6 914.0	65.0	21.0 430.0	19.0	10.0 29.0	35.1	28.2 42.0	24.7	12.0 75.0
IV 1986	47.0	44.7 50.8	72.7	23.1 190.0	39.0	16.0 200.0	33.0	22.0 50.0	28.3	21.8 34.8	74.0	37.0 230.0
II 1987	52.0	49.4 57.2	62.4	15.9 167.0	31.0	13.0 73.0	32.0	21.0 42.0	26.6	20.4 32.8	49.0	25.0 150.0
IV 1987	30.0	27.9 33.9	14.8	5.5 39.8	25.0	9.7 47.0	17.0	14.0 22.0	6.5	4.4 8.5	30.2	15.0 90.0
II 1988	39.0	36.7 45.6	8.8	3.1 28.4	22.0	8.4 42.0	9.9	7.3 14.0	6.1	4.1 8.0	12.0	6.0 36.0
IV 1988	22.0	20.5 25.3	8.2	3.0 25.1	19.0	7.2 35.0	6.8	5.1 9.3	5.4	3.7 7.0	18.7	9.0 58.0
II 1989	26.0	24.2 30.4	7.6	3.0 22.6	17.0	6.2 33.0	5.8	4.1 7.7	5.2	3.5 6.8	9.3	4.0 28.0
IV 1989	16.0	14.6 19.5	7.3	2.9 21.3	14.0	5.2 28.0	4.1	2.9 5.9	4.6	3.1 6.0	15.9	8.0 48.0
II 1990	17.0	15.8 23.0	7.0	2.9 20.1	13.0	4.8 23.0	3.4	2.6 5.4	4.5	3.0 5.9	12.4	6.0 36.0
IV 1990	13.0	11.8 16.0	7.0	2.9 20.1	11.0	4.1 20.0	2.7	1.5 3.6	4.1	3.0 5.2	12.3	6.0 36.0

	Suolanen/DETRA		Attwood/FARMLAND		Bergstrom/ECOSAFE		Sazykina/ECOMOD		Yu/RESRAD		Horyna/SCHRAADLO	
	mean	lower upper	mean	lower upper	mean	lower upper	mean	lower upper	mean	lower upper	mean	lower upper
June 1986	37.0	13.0 106.0	97.8		42.2	27.2 57.2	75.0	60.0 90.0				
IV 1986	41.0	14.0 118.0	333.0		29.9	25.5 34.3	59.0	46.0 72.0				
II 1987	43.0	15.0 124.0	812.0		26.5	23.2 29.8	42.0	30.0 54.0	39.0	22.0 58.0		
IV 1987	24.0	8.4 69.0	61.9		24.6	21.6 27.7	28.0	18.0 38.0	20.0	12.0 30.0		
II 1988	21.0	7.4 60.0	99.1		22.7	19.8 25.5	22.0	15.0 29.0	17.0	11.0 26.0		
IV 1988	18.0	6.3 52.0	31.7		21.2	18.6 23.9	20.0	13.0 27.0				
II 1989	16.0	5.6 46.0	85.7		20.1	17.6 22.6	16.0	10.0 22.0	16.0	10.0 24.0		
IV 1989	13.0	4.6 37.0	25.2		18.5	16.1 20.8	15.0	10.0 20.0				
II 1990	11.0	3.9 32.0	37.7		17.6	15.4 19.8	13.0	9.0 17.0				
IV 1990	9.0	3.2 26.0	15.9		16.7	14.6 18.8	13.0	9.0 17.0	15.0	10.0 24.0		

TABLE III.20 PREDICTIONS FOR SCENARIO S
HUMAN INTAKE, CHILD (Bq/d)

I	I	observed		Zeevaert/DOSDIM		Peterson/CHERPAC		Kanyar/TERNIRBU		Krajewski/CLRP		Galeriu/LINDOZ	
		I mean	I lower upper	I mean	I lower upper	I mean	I lower upper	I mean	I lower upper	I mean	I lower upper	I mean	I lower upper
June 1986	I	25.0	22.5 28.0	224.0	26.8 783.0	46.0	12.0 380.0	17.0	11.0 25.0	24.0	19.2 28.6	22.5	11.0 68.0
IV 1986	I	32.0	30.4 33.9	56.3	14.5 156.0	23.0	9.2 160.0	30.0	21.0 40.0	25.0	19.4 30.5	60.5	30.0 180.0
II 1987	I	33.0	31.4 35.3	47.1	8.8 137.0	15.0	7.1 47.0	25.0	17.0 35.0	23.7	18.3 29.1	40.8	21.0 120.0
IV 1987	I	18.0	17.1 19.6	7.1	2.1 15.8	10.0	4.5 22.0	13.0	9.6 17.0	5.0	3.4 6.6	20.7	10.0 61.0
II 1988	I	19.0	18.1 20.9	3.0	0.9 8.9	8.9	3.9 20.0	8.4	5.8 12.0	4.7	3.2 6.2	5.9	3.0 18.0
IV 1988	I	13.0	12.4 14.3	2.9	0.9 9.3	7.3	3.2 17.0	6.4	4.3 8.7	4.2	2.8 5.5	9.7	5.0 30.0
II 1989	I	12.0	11.4 13.1	2.8	0.8 7.9	6.4	2.8 14.0	4.7	3.5 6.1	4.1	2.8 5.4	4.2	2.0 13.0
IV 1989	I	9.8	9.1 11.7	2.7	0.8 8.8	5.4	2.3 12.0	3.3	2.4 4.4	3.6	2.4 4.8	7.9	4.0 24.0
II 1990	I	6.7	6.4 7.6	2.7	0.8 7.6	4.8	2.1 10.0	3.0	2.1 4.0	3.5	2.4 4.6	6.0	3.0 18.0
IV 1990	I	7.5	7.1 8.9	2.7	0.8 7.6	4.2	1.8 8.9	2.4	1.5 3.5	3.2	2.4 4.1	6.1	3.0 18.0

I	I	Suolanen/DETRA		Attwood/FARMLAND		Bergstrom/ECOSAFE		Sazykina/ECOMOD		Yu/RESRAD		Horyna/SCHRAADLO	
		I mean	I lower upper	I mean	I lower upper	I mean	I lower upper	I mean	I lower upper	I mean	I lower upper	I mean	I lower upper
June 1986	I	32.0	11.0 92.0	103.0		40.0	20.0 59.9						
IV 1986	I	31.0	11.0 89.0	291.0		18.2	13.7 22.6						
II 1987	I	28.0	9.8 81.0	702.0		14.0	11.9 16.1			33.0	17.0 49.0		
IV 1987	I	13.0	4.6 37.0	51.6		12.7	10.8 14.6			15.0	9.0 23.0		
II 1988	I	11.0	3.9 32.0	84.0		11.8	10.0 13.6			13.0	8.0 20.0		
IV 1988	I	8.8	3.1 25.0	25.6		11.1	9.4 12.8			12.0	8.0 18.0		
II 1989	I	8.2	2.9 24.0	72.5		10.6	9.0 12.2			12.0	8.0 18.0		
IV 1989	I	6.8	2.4 20.0	20.0		9.9	8.4 11.5			12.0	8.0 18.0		
II 1990	I	5.6	2.0 16.0	31.2		9.5	8.0 11.1			12.0	8.0 18.0		
IV 1990	I	5.1	1.8 15.0	12.3		9.1	7.6 10.6			12.0	8.0 18.0		

TABLE III.21 PREDICTIONS FOR SCENARIO S
 CONCENTRATIONS IN WHOLE BODY, WOMAN (Bq/kg)

	observed		Zeevaert/DOSDIM		Peterson/CHERPAC		Kanyar/TERNIRBU		Krajewski/CLRP		Galeriu/LINDOZ								
	mean	lower upper	mean	lower upper	mean	lower upper	mean	lower upper	mean	lower upper	mean	lower upper							
30-Jun-86	4.7	4.0	5.6	5.6	69.6	9.2	233.0	15.0	6.4	110.0	1.7	1.2	2.3	3.9	3.1	4.6	5.3	3.0	15.0
31-Dec-86	27.1	22.8	32.3	32.3	66.8	26.7	166.0	49.0	22.0	210.0	12.0	7.1	19.0	32.7	23.7	37.7	50.2	25.0	130.0
30-Jun-87	36.7	31.2	43.2	43.2	57.8	16.1	152.0	53.0	23.0	170.0	17.0	9.2	24.0	50.7	42.0	63.4	58.5	28.0	150.0
31-Dec-87	30.3	25.8	35.7	35.7	20.2	7.3	49.0	43.0	17.0	94.0	16.0	9.2	23.0	41.0	31.2	50.8	37.2	18.0	100.0
30-Jun-88	19.8	17.5	22.4	22.4	9.1	3.5	25.6	37.0	13.0	74.0	13.0	8.8	20.0	20.5	15.0	26.0	21.7	10.0	50.0
31-Dec-88	17.1	15.1	19.3	19.3	17.1	2.7	21.5	31.0	11.0	61.0	12.0	6.1	18.0	15.4	10.8	20.0	18.6	9.0	45.0
30-Jun-89	16.8	14.0	20.1	20.1	6.3	2.4	18.5	27.0	10.0	57.0	9.9	4.3	15.0	11.3	7.8	14.8	13.6	6.0	29.0
31-Dec-89	14.4	12.0	17.3	17.3	6.0	2.4	17.7	23.0	8.1	49.0	7.9	3.4	12.0	11.3	7.7	15.0	14.8	7.0	30.0
30-Jun-90	10.7	9.5	12.2	12.2	5.8	2.3	16.4	21.0	7.5	41.0	6.3	3.2	10.0	6.1	4.2	8.1	13.6	7.0	30.0
31-Dec-90	10.8	9.5	12.3	12.3	5.8	2.3	16.4	17.0	6.1	34.0	3.7	1.8	5.8	6.4	4.3	8.5	13.6	7.0	30.0

	Suolaneht/DETRA		Attwood/FARMLAND		Bergstroem/ECOSAFE		Sazykina/ECOMOD		Yu/RESRAD		Horvyna/SCHRADLO					
	mean	lower upper	mean	lower upper	mean	lower upper	mean	lower upper	mean	lower upper	mean	lower upper				
30-Jun-86	8.4	6.6	12.0	105.0	23.9	14.2	33.6	1.7	1.2	2.3	3.9	3.1	4.6	5.3	3.0	15.0
31-Dec-86	39.0	30.0	58.0	219.0	33.9	27.4	40.3	12.0	7.1	19.0	32.7	23.7	37.7	50.2	25.0	130.0
30-Jun-87	53.0	41.0	78.0	170.0	37.9	33.0	42.8	17.0	9.2	24.0	50.7	42.0	63.4	58.5	28.0	150.0
31-Dec-87	40.0	31.0	59.0	173.0	34.5	30.6	38.5	16.0	9.2	23.0	41.0	31.2	50.8	37.2	18.0	100.0
30-Jun-88	30.0	23.0	44.0	106.0	31.3	27.7	34.9	13.0	8.8	20.0	20.5	15.0	26.0	21.7	10.0	50.0
31-Dec-88	25.0	20.0	37.0	41.1	29.1	25.7	32.4	12.0	6.1	18.0	15.4	10.8	20.0	18.6	9.0	45.0
30-Jun-89	22.0	17.0	33.0	69.6	27.2	24.1	30.3	9.9	4.3	15.0	11.3	7.8	14.8	13.6	6.0	29.0
31-Dec-89	19.0	15.0	28.0	42.3	25.2	22.3	28.0	7.9	3.4	12.0	11.3	7.7	15.0	14.8	7.0	30.0
30-Jun-90	16.0	12.0	24.0	36.9	23.7	21.0	26.4	6.3	3.2	10.0	6.1	4.2	8.1	13.6	7.0	30.0
31-Dec-90	13.0	10.0	19.0	19.3	22.5	19.9	25.0	3.7	1.8	5.8	6.4	4.3	8.5	13.6	7.0	30.0

TABLE III.22 PREDICTIONS FOR SCENARIO S
CONCENTRATIONS IN WHOLE BODY, MAN (Bq/kg)

	observed			Zeevaert/DOSDIM			Peterson/CHERPAC			Kanyar/TERNIRBU			Krajewski/CLRP			Galeriu/LINDOZ		
	mean	lower	upper	mean	lower	upper	mean	lower	upper	mean	lower	upper	mean	lower	upper	mean	lower	upper
30-Jun-86	7.2	5.8	8.9	112.0	14.5	377.0	19.0	7.6	130.0	1.6	1.0	2.3	4.9	3.9	5.8	5.5	2.5	12.0
31-Dec-86	41.1	33.0	51.1	146.0	45.3	376.0	61.0	27.0	320.0	10.0	5.5	15.0	31.4	24.1	38.7	59.0	30.0	130.0
30-Jun-87	50.4	44.2	57.4	145.0	43.5	372.0	67.0	30.0	290.0	16.0	10.0	22.0	48.4	37.3	59.5	82.0	40.0	180.0
31-Dec-87	41.6	36.5	47.3	71.1	25.7	163.0	58.0	22.0	150.0	20.0	12.0	27.0	38.9	28.9	47.9	59.0	30.0	130.0
30-Jun-88	30.1	26.3	34.4	34.9	13.9	84.9	51.0	18.0	120.0	17.0	11.0	24.0	20.2	14.6	25.8	38.0	19.0	100.0
31-Dec-88	25.9	22.6	29.7	22.4	9.1	60.2	43.0	16.0	89.0	13.0	7.6	18.0	16.3	11.4	21.2	29.0	15.0	80.0
30-Jun-89	25.8	21.3	31.3	17.7	7.2	50.2	38.0	13.0	77.0	9.8	4.9	15.0	12.1	8.3	15.8	22.0	10.0	50.0
31-Dec-89	22.2	18.3	26.9	15.7	6.3	46.8	31.0	12.0	65.0	8.5	5.1	14.0	12.4	8.5	16.4	22.0	10.0	50.0
30-Jun-90	18.0	15.7	20.7	14.7	6.0	41.2	28.0	9.9	57.0	6.7	4.2	10.0	9.8	6.7	12.9	20.5	10.0	50.0
31-Dec-90	18.1	15.8	20.8				24.0	8.2	48.0	4.0	2.5	5.7	10.2	6.5	14.0	20.2	10.0	50.0

	Suolonen/DETRA			Attwood/FARMLAND		Bergstroem/ECOSAFE			Sazykina/ECOMOD		Yu/RESRAD		Horyna/SCHRAADLO		
	mean	lower	upper	mean	lower upper	mean	lower upper	mean	lower upper	mean	lower upper	mean	lower upper		
30-Jun-86	10.0	7.8	15.0	95.1		27.8	17.6	37.9				10.0	6.0	18.0	
31-Dec-86	47.0	37.0	70.0	319.0		51.9	41.9	61.9		49.0	27.0	73.0	23.0	15.0	42.0
30-Jun-87	75.0	59.0	111.0	1150.0		64.6	55.7	73.4		31.0	18.0	46.0	40.0	21.0	75.0
31-Dec-87	59.0	46.0	87.0	479.0		63.1	55.4	70.9		27.0	17.0	42.0	31.0	17.0	58.0
30-Jun-88	43.0	34.0	64.0	275.0		58.5	51.3	65.8		24.0	15.0	37.0	7.1	3.9	13.5
31-Dec-88	34.0	27.0	50.0	126.0		54.2	47.5	61.0		23.0	15.0	36.0	4.6	2.8	9.0
30-Jun-89	29.0	23.0	43.0	132.0		50.4	44.1	56.8		22.0	14.0	34.0	3.0	1.6	5.7
31-Dec-89	25.0	20.0	37.0	72.9		46.4	40.5	52.3		22.0	14.0	33.0	2.4	1.3	4.7
30-Jun-90	21.0	16.0	31.0	68.1		43.3	37.8	48.8		21.0	13.0	32.0			
31-Dec-90	17.0	13.0	25.0	41.9		40.7	35.5	45.9		21.0	13.0	32.0			

TABLE III.23 PREDICTIONS FOR SCENARIO S
CONCENTRATIONS IN WHOLE BODY, CHILD (Bq/kg)

I	observed		Zeevaert/DOSDIM		Peterson/CHERPAC		Kanyar/TERNIRBU		Krajewski/CLRP		Galeriu/LINDOZ							
	I mean	Lower upper	I mean	Lower upper	mean	Lower upper	mean	Lower upper	mean	Lower upper	mean	Lower upper						
I 30-Jun-86	7.0	5.4	9.1	156.0	15.2	390.0	26.0	9.4	210.0	1.6	1.1	2.3	5.2	4.2	6.1	5.8	3.0	15.0
I 31-Dec-86	40.2	31.1	52.1	128.0	36.9	320.0	44.0	18.0	300.0	9.2	5.6	13.0	24.6	19.0	30.2	45.3	23.0	120.0
I 30-Jun-87	34.1	26.1	44.5	117.0	28.9	327.0	34.0	14.0	170.0	13.0	7.2	17.0	31.7	24.6	30.8	46.0	23.0	120.0
I 31-Dec-87	28.1	21.5	36.7	44.6	12.9	104.0	21.0	9.4	52.0	13.0	7.2	16.0	16.6	12.2	20.7	23.0	11.0	55.0
I 30-Jun-88	18.8	14.9	23.6	16.1	5.5	38.8	18.0	8.0	43.0	10.0	5.3	14.0	6.9	4.8	9.0	10.5	5.0	25.0
I 31-Dec-88	16.2	12.9	20.3	8.6	3.3	21.5	15.0	6.7	34.0	7.1	4.0	10.0	6.9	4.6	9.0	9.0	5.0	25.0
I 30-Jun-89	12.6	10.1	15.8	6.6	2.3	19.0	13.0	5.8	30.0	5.0	3.3	6.9	5.3	3.6	7.0	5.6	3.0	15.0
I 31-Dec-89	10.8	8.7	13.5	5.9	1.9	17.3	11.0	4.7	24.0	4.1	2.4	6.6	5.9	4.0	7.8	7.0	3.0	19.0
I 30-Jun-90	9.2	6.8	12.4	5.7	1.8	17.6	9.8	4.3	22.0	3.4	1.9	5.7	4.6	3.1	6.0	6.1	3.0	20.0
I 31-Dec-90	9.3	6.9	12.5	5.7	1.8	17.6	8.4	3.6	18.0	2.6	1.5	4.4	5.6	4.3	6.8	6.2	3.0	20.0

I	Suolanen/DETRA		Attwood/FARMLAND		Bergstroem/ECOSAFE		Sazykina/ECOMOD		Yu/RESRAD		Horyna/SCHRAADLO	
	I mean	Lower upper	I mean	Lower upper	mean	Lower upper	mean	Lower upper	mean	Lower upper	mean	Lower upper
I 30-Jun-86	25.0	20.0	37.0	105.0	55.4	27.8	82.9	85.0	44.0	125.0	85.0	44.0
I 31-Dec-86	51.0	40.0	75.0	227.0	46.4	34.2	58.5	48.0	28.0	72.0	48.0	28.0
I 30-Jun-87	64.0	50.0	95.0	607.0	43.8	36.5	51.1	40.0	25.0	61.0	40.0	25.0
I 31-Dec-87	38.0	30.0	56.0	57.4	37.4	32.2	42.7	31.0	19.0	47.0	31.0	19.0
I 30-Jun-88	24.0	19.0	36.0	71.2	33.8	28.9	38.6	29.0	18.0	44.0	29.0	18.0
I 31-Dec-88	19.0	15.0	28.0	21.7	31.3	26.7	35.8	25.0	16.0	38.0	25.0	16.0
I 30-Jun-89	18.0	14.0	27.0	59.7	29.3	23.1	31.4	23.0	15.0	35.0	23.0	15.0
I 31-Dec-89	15.0	12.0	22.0	19.0	27.2	21.8	29.7	21.0	14.0	32.0	21.0	14.0
I 30-Jun-90	12.0	9.4	18.0	26.3	25.7	21.8	29.7	20.0	13.0	31.0	20.0	13.0
I 31-Dec-90	11.0	8.6	16.0	10.4	24.4	20.6	28.2	20.0	13.0	31.0	20.0	13.0

TABLE 111.24 PREDICTIONS FOR SCENARIO S
DISTRIBUTION OF WHOLE BODY CONTENT - MAN (Bq/kg)

fractile (%) *	observed			Zeevaert/DOSDIM		Peterson/CHERPAC		Kanyar/TERNIRBU		Krajewski/CLRP		Galeriu/LINDOZ	
	mean	lower	upper	mean	lower upper	mean	lower upper	mean	lower upper	mean	lower upper	mean	lower upper
31-Dec-87													
97.5	11.9					21.0	10.0 42.0	10.0	4.8	11.0			
68	31.8					28.0	14.0 56.0	16.0	9.7	21.0			
50	35.9					53.0	24.0 99.0	20.0	13.0	25.0			
32	43.8					110.0	50.0 190.0	22.0	15.0	29.0			
2.5	90.3					170.0	64.0 270.0	47.0	30.0	65.0			
31-Dec-90													
97.5	3.8					7.8	3.7 12.0	1.2	0.5	1.8			
68	10.2					11.0	4.9 16.0	1.8	1.2	2.5			
50	12.7					23.0	9.9 32.0	2.3	1.6	3.1			
32	16.8					52.0	21.0 68.0	3.2	2.2	4.1			
2.5	101.0					78.0	30.0 100.0	6.2	4.0	8.5			

fractile (%) *	Suolanen/DETRA			Attwood/FARMLAND		Bergstroem/ECOSAFE		Sazykina/ECOMOD		Yu/RESRAD		Horyna/SCHRAADLO	
	mean	lower	upper	mean	lower upper	mean	lower upper	mean	lower upper	mean	lower upper	mean	lower upper
31-Dec-87													
97.5	8.0	5.0	15.0							19.0			
68	40.0	30.0	62.0							25.0			
50	48.0	38.0	80.0							27.0			
32	55.0	44.0	85.0							28.0			
2.5	165.0	140.0	195.0							39.0			
31-Dec-90													
97.5	1.3	1.0	2.0							13.0			
68	10.8	8.0	17.0							19.0			
50	13.8	10.0	21.0							21.0			
32	16.0	11.0	23.0							23.0			
2.5	38.8	34.0	54.0							32.0			

* fractile of a CCDF or (1-p), where p is a fractile of CDF.
CCDF = Complementary Cumulative Distribution Function
CDF = Cumulative Distribution Function

TABLE III.25 PREDICTIONS FOR SCENARIO S
EXTERNAL DOSE

	estimated			Zeevaert/DOSDIM			Peterson/CHERPAC			Kanyar/TERNIRBU			Krajewski/CLRP			Galeriu/LINDOZ		
	mean	lower	upper	mean	lower	upper	mean	lower	upper	mean	lower	upper	mean	lower	upper	mean	lower	upper
cloud exposure (nSv)	5.0	1.0	25.0				13.0	6.7	19.0	2.2	1.4	3.1	6.2	2.7	9.7			
ground exposure (mSv)																		
27-Apr-86 - 30-Apr-87	0.060	0.040	0.090	0.040	0.005	0.075	0.043	0.020	0.082	0.031	0.018	0.038	0.044	0.031	0.057	0.063	0.030	0.200
27-Apr-86 - 31-Dec-90	0.190	0.110	0.280	0.090	0.014	0.160	0.082	0.038	0.150	0.095	0.052	0.150	0.116	0.081	0.150	0.160	0.080	0.500
27-Apr-86 - lifetime	0.670	0.350	1.100				0.086			0.330	0.160	0.510	0.176	0.124	0.232	0.640	0.320	2.000
	Suolanen/DETRA			Attwood/FARMLAND		Bergstroem/ECOSAFE		Sazykina/ECOMOD		Yu/RESRAD		Horyna/SCHRAADLO						
	mean	lower	upper	mean	lower upper	mean	lower upper	mean	lower upper	mean	lower upper	mean	lower upper					
cloud exposure (nSv)	0.53	0.18	1.50	24.0				13.0	7.0	19.0			36.0					
ground exposure (mSv)																		
27-Apr-86 - 30-Apr-87	0.050	0.020	0.160	0.224				0.076	0.056	0.096	0.063	0.049	0.075					
27-Apr-86 - 31-Dec-90	0.160	0.050	0.460	0.742				0.240	0.180	0.300	0.300	0.230	0.360	0.200				
27-Apr-86 - lifetime	0.700	0.250	2.000	2.500				1.300	0.900	1.700	1.870	1.450	2.220					

TABLE III.26 PREDICTIONS FOR SCENARIO S
 INHALATION DOSE (nSv)

	estimated			Zeevaert/DOSDIM			Peterson/CHERPAC			Kanyar/TERNIRBU			Krajewski/CLRP		Galeriu/LINDOZ			
	mean	lower	upper	mean	lower	upper	mean	lower	upper	mean	lower	upper	mean	lower	upper	mean	lower	upper
inhalation from cloud	200	40	1000	15000	3500	50000	220	120	440	230	150	320	1100			570	250	1500
inhalation of resuspension																		
27-Apr-86 - 30-Apr-87	50	10	250							3.4	2.0	4.2				150	100	300
27-Apr-86 - 31-Dec-90	58	12	290							5.2	2.7	8.1				200		
27-Apr-86 - lifetime	63	13	315							10.0	5.1	18.0				250		
inhalation from cloud	120	11	1100	2070						1400	1000	1800				2700	500	6000
inhalation of resuspension																		
27-Apr-86 - 30-Apr-87	1.2	0.4	3.5	13						25	15	35	27	21	32			
27-Apr-86 - 31-Dec-90	5.0	1.7	15.0	15						30	17	42	28	22	33	5		
27-Apr-86 - lifetime	33.0	11.0	96.0	19						45	30	60	36	28	43			

TABLE III.27 PREDICTIONS FOR SCENARIO S
INGESTION DOSE (mSv)

	estimated values	Zeevaert/DOSDIM	Peterson/CHERPAC	Kanyar/TERNIRBU	Krajewski/CLRP	Galeriu/LINDOZ

27-Apr-86 - 30-Apr-87						

total:	0.100	0.479	0.190	0.160	0.133	0.240
lower conf. interval	0.080	0.199	0.082	0.062	0.102	
upper conf. interval	0.120	1.466	0.960	0.230	0.165	

food type 1:	0.052 milk	0.283 milk	0.068 fish	0.078 fish		0.158 milk
food type 2:	0.016 fish	0.051 fish	0.044 milk	0.059 milk		0.028 fish
food type 3:	0.012 beef	0.050 beef	0.032 fruit	0.011 beef		0.016 meat

27-Apr-86 - 31-Dec-90						

total:	0.310	0.596	0.540	0.260	0.276	0.584
lower conf. interval	0.230	0.228	0.230	0.110	0.204	
upper conf. interval	0.390	1.731	1.400	0.410	0.348	

food type 1:	0.112 milk	0.302 milk	0.250 fish	0.120 fish		0.234 milk
food type 2:	0.096 fish	0.119 fish	0.092 fruit	0.092 milk		0.175 fish
food type 3:	0.030 beef	0.052 beef	0.070 milk	0.020 beef		0.051 mush.

27-Apr-86 - lifetime						

total:	0.700		0.880	0.330	0.311	
lower conf. interval	0.560			0.110	0.230	
upper conf. interval	2.720			0.560	0.400	

food type 1:	0.273 fish		0.340 fish	0.170 fish		
food type 2:	0.126 milk		0.180 fruit	0.100 milk		
food type 3:	0.066 mushr.		0.097 milk	0.022 beef		

TABLE III.27 (cont.)
 INGESTION DOSE (mSv)

	Suolanen/DETRA	Attwood/FARMLAND	Bergstroem/ECOSAFE	Sazykina/ECOMOD	Yu/RESRAD	Horyna/SCHRAADLO

27-Apr-86 - 30-Apr-87						
total:	0.180	1.930		0.230	0.160	
lower conf. interval	0.060			0.170	0.060	
upper conf. interval	0.520			0.300	0.220	
food type 1:	0.110 milk			0.100 milk	0.120 fish	
food type 2:	0.030 fish			0.070 fish	0.015 milk	
food type 3:	0.030 beef			0.030 beef	0.013 beef	

27-Apr-86 - 31-Dec-90						
total:	0.530	3.480		0.500	0.340	
lower conf. interval	0.190			0.380	0.210	
upper conf. interval	1.520			0.650	0.500	
food type 1:	0.230 fish			0.190 fish	0.170 fish	
food type 2:	0.180 milk			0.140 milk	0.065 milk	
food type 3:	0.050 beef			0.045 beef	0.054 beef	

27-Apr-86 - lifetime						
total:	0.610	3.980		1.080	1.450	
lower conf. interval	0.210			0.810	0.870	
upper conf. interval	1.750			1.350	2.110	
food type 1:	0.260 fish			0.300 fish	0.450 fish	
food type 2:	0.190 milk			0.180 milk	0.400 milk	
food type 3:	0.050 beef			0.070 beef	0.320 beef	

TABLE III.28 PREDICTIONS FOR SCENARIO S
TOTAL DOSE, MAN (mSv)

	estimated values	Zeevaert/DOSDIM	Peterson/CHERPAC	Kanyar/TERNIRBU	Krajewski/CLRP	Galeriu/LINDOZ
27-Apr-86 - 30-Apr-87						
total:	0.160	0.535	0.230	0.190	0.178	
lower conf. interval	0.140	0.208	0.111	0.081	0.133	
upper conf. interval	0.180	1.600	0.999	0.260	0.223	
pathway 1:	0.100 ing	0.479 ing	0.190 ing	0.160 ing	0.133 ing	
pathway 2:	0.060 ext	0.040 ext	0.043 ext	0.031 ext	0.044 ext	
pathway 3:	0.00026 inh	0.016 inh	0.00022 inh	0.00023 inh	0.001 inh	
27-Apr-86 - 31-Dec-90						
total:	0.500	0.702	0.620	0.360	0.393	
lower conf. interval	0.450	0.245	0.243	0.160	0.282	
upper conf. interval	0.580	1.940	2.190	0.570	0.494	
pathway 1:	0.310 ing	0.596 ing	0.540 ing	0.260 ing	0.276 ing	
pathway 2:	0.190 ext	0.090 ext	0.082 ext	0.095 ext	0.116 ext	
pathway 3:	0.00026 inh	0.016 inh	0.00022 inh	0.00023 inh	0.001 inh	
27-Apr-86 - lifetime						
total:	1.370		0.970	0.660	0.490	
lower conf. interval	1.100			0.310	0.352	
upper conf. interval	3.500			1.000	0.627	
pathway 1:	0.700 ing		0.880 ing	0.330 ing	0.311 ing	
pathway 2:	0.670 ext		0.086 ext	0.330 ext	0.178 ext	
pathway 3:	0.00027 inh		0.00022 inh	0.00024 inh	0.001 inh	

TABLE III.28 (cont.)
TOTAL DOSE, MAN (mSv)

	Suolenen/DETRA	Attwood/FARMLAND	Bergstroem/ECOSAFE	Sazykina/ECOMOD	Yu/RESRAD	Horyna/SCHRAADLO
----- ----- ----- ----- ----- ----- -----						
27-Apr-86 - 30-Apr-87						
total:	0.230	2.037		0.320	0.220	
lower conf. interval				0.230	0.120	
upper conf. interval				0.400	0.300	
pathway 1:	0.050 ext			0.230 ing	0.160 ing	
pathway 2:	0.180 ing			0.076 ext	0.063 ext	
pathway 3:	0.00012 inh			0.0014 inh	0.00003 inh	
----- ----- ----- ----- ----- ----- -----						
27-Apr-86 - 31-Dec-90						
total:	0.690	3.808		0.730	0.640	
lower conf. interval				0.560	0.480	
upper conf. interval				0.930	0.850	
pathway 1:	0.160 ext			0.500 ing	0.340 ing	
pathway 2:	0.530 ing			0.240 ext	0.300 ext	
pathway 3:	0.00012 inh			0.0014 inh	0.00003 inh	
----- ----- ----- ----- ----- ----- -----						
27-Apr-86 - lifetime						
total:	1.300	5.083		2.380	3.310	
lower conf. interval	0.600			1.700	2.660	
upper conf. interval	3.700			3.100	4.290	
pathway 1:	0.700 ext			1.300 ext	1.870 ext	
pathway 2:	0.610 ing			1.080 ing	1.450 ing	
pathway 3:	0.00012 inh			0.0014 inh	0.00004 inh	
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