

TABLES OF INPUT DATA

Tables 1-9 are also available as an Excel file (FP-input_data.xls).

Table 1. Distribution of radionuclide deposition by elevation in the floodplain area.

Level m	Area		Volume		⁹⁰ Sr		¹³⁷ Cs		
	km ²	%	10 ³ km ³	%	Ci	%	Ci	%	
Channel ^a	0 ^b	4.3	12.5	9.4	4.9	-	0.0	-	0.0
0	1	6.3	18.3	16.0	8.3	519	8.6	441	7.2
0	2	9.2	26.7	25.3	13.1	1293	21.4	1089	17.8
0	2.5	11.4	33.1	31.4	16.2	1792	29.7	1556	25.5
0	3	14.3	41.5	38.8	20.0	2511	41.6	2282	37.4
0	3.5	18.7	54.3	48.1	24.8	3580	59.3	3358	55.0
0	4	24.5	71.1	59.9	30.9	4793	79.4	4682	76.7
0	6	32.6	94.7	122.9	63.4	5736	95.0	5854	95.9
0	8	34.3	99.7	193.8	100.0	6035	99.9	6103	100.0
0	10	34.5	100.0	-	0.0	6039	100.0	6106	100.0

^a Including the river's main channel and other internal surface depressions below "0" level.

^b "0" level corresponds to 104 m BS (Baltic System), the normal level of the river for the Output cross section (Yanov Bridge) under winter hydrological conditions (flow < 400 m³ s⁻¹).

Table 5. Typical hydrochemical composition of Pripyat River and internal lakes for winter conditions.

Chemical species	Units	Pripyat River	Internal lakes
NO ₂ ⁻	mg L ⁻¹	N/O ^a	N/O
NO ₃ ⁻	mg L ⁻¹	N/O	N/O
HCO ₃ ⁻	mg L ⁻¹	192.76	109.80
Cl ⁻	mg L ⁻¹	21.30	10.65
SO ₄ ⁻	mg L ⁻¹	28.25	27.33
Ca ²⁺	mg L ⁻¹	48.09	28.06
Mg ²⁺	mg L ⁻¹	6.81	5.84
(Na + K) ⁺	mg L ⁻¹	31.27	17.24
NH ₄ ⁺	mg L ⁻¹	0.45	0.60
Mineralisation	mg L ⁻¹	336.71	199.53
Hardness	mg-eq L ⁻¹	2.96	1.88
pH	-	7.49	7.4
eH	mV	438	427
O ₂	mg L ⁻¹	17.55	12.95
O ₂	%	181	128
Cu	µg L ⁻¹	11	9
Zn	µg L ⁻¹	7	14
Permanganate oxidation	mg O ₂ L ⁻¹	17.4	12.3

^a N/O = not observed.

Table 7. Activity concentrations of ^{90}Sr and ^{137}Cs in selected internal lakes.

Date	^{137}Cs particulate pCi L ⁻¹	^{137}Cs dissolved pCi L ⁻¹	^{90}Sr dissolved pCi L ⁻¹
25 January 1991	88.8	-	3490
10 February 1991	79.1	-	2830
25 February 1991	432	494	5010

Table 8. Values for the Manning n -roughness coefficient.

Type of channel and description	% of cover (averaged)	Minimum	Normal	Maximum
Area of the floodplain covered by				
a) sandy soils and poor grass	20	0.025	0.03	0.035
b) sandy soils and reach grass and vegetation	30	0.03	0.035	0.05
c) sandy soils covered by willow bushes	50	0.06	0.12	0.18
Main stream channel			0.025-0.035	

Table 9. Typical physico-chemical composition of the alluvial acid soddy soil in the floodplain area.

Parameter	Units	Value
Horizon		A _D
Depth	cm	0-7
pH		5.0
SEC	meq/100 g	6.7
Humus	%	2.1
Macro-cations in exchangeable complex	meq/100 g	
Ca ²⁺		3.1
Mg ²⁺		0.25
K ⁺		0.09
Na ⁺		0.03
Sr ²⁺		0.003