

Appendix D – Example Output from PRZM/EXAMS

Figure D-1. PRZM/EXAMS simulation for surface applications with California Strawberry Crop Scenario.

stored as CAST_GR.out

Chemical: MITC

PRZM environment: CASTrawberr modified Wedday, 26 March 2008 at 10:39:14

EXAMS environment: pond298.ex modified Tuesday, 26 August 2008 at 06:14:08

Metfile: w23234.dvf modified Tuesday, 26 August 2008 at 06:15:38

Water segment concentrations (ppb)

Year	Peak	96 hr	21 Day	60 Day	90 Day	Yearly
1961	0	0	0	0	0	0
1962	2.169	1.62	0.6282	0.2199	0.1466	0.0362
1963	0.1335	0.09306	0.03228	0.01178	0.007862	0.001939
1964	0.191	0.1409	0.05266	0.01843	0.01229	0.003083
1965	0.06034	0.04764	0.01684	0.005894	0.003929	0.001444
1966	0.03463	0.02569	0.01007	0.003737	0.002492	0.000615
1967	0.09444	0.07284	0.02369	0.008291	0.005527	0.001503
1968	1.345	0.9045	0.3114	0.109	0.07267	0.01809
1969	0.2354	0.1808	0.06375	0.02231	0.01488	0.004533
1970	0.699	0.5426	0.2259	0.07905	0.0527	0.01333
1971	0.05079	0.03808	0.0124	0.004448	0.002969	0.001435
1972	0.207	0.1511	0.05258	0.0184	0.01227	0.003217
1973	0.1615	0.1137	0.05233	0.01832	0.01221	0.003435
1974	0.05187	0.04096	0.01531	0.005482	0.003657	0.001063
1975	0.006766	0.004709	0.001647	0.000763	0.00051	0.000126
1976	0.03737	0.0164	0.003124	0.001093	0.000729	0.00018
1977	0.478	0.323	0.1269	0.04441	0.0296	0.007858
1978	0.03463	0.02686	0.01266	0.004561	0.003042	0.000812
1979	0.1552	0.1138	0.0362	0.01267	0.008446	0.002291
1980	0.0369	0.02588	0.01087	0.003966	0.002646	0.000651
1981	0.2734	0.1853	0.06116	0.0214	0.01427	0.003581
1982	0.4717	0.354	0.1134	0.0397	0.02646	0.007214
1983	0.1428	0.1041	0.02845	0.009956	0.006638	0.002586
1984	0.1027	0.07164	0.02434	0.00852	0.00568	0.001815
1985	0.003795	0.002754	0.001091	0.000443	0.000297	8.93E-05
1986	0.123	0.08823	0.03652	0.01278	0.008522	0.002232
1987	0.03558	0.02465	0.009346	0.003433	0.002291	0.000735
1988	0.1567	0.1266	0.05013	0.01755	0.0117	0.003053
1989	0.03025	0.02131	0.007875	0.002871	0.001917	0.000473
1990	1.147	0.8213	0.2917	0.1021	0.06806	0.01685

Sorted results
Prob.

	Peak	96 hr	21 Day	60 Day	90 Day	Yearly
0.032258065	2.169	1.62	0.6282	0.2199	0.1466	0.0362
0.064516129	1.345	0.9045	0.3114	0.109	0.07267	0.01809
0.096774194	1.147	0.8213	0.2917	0.1021	0.06806	0.01685
0.129032258	0.699	0.5426	0.2259	0.07905	0.0527	0.01333
0.161290323	0.478	0.354	0.1269	0.04441	0.0296	0.007858
0.193548387	0.4717	0.323	0.1134	0.0397	0.02646	0.007214
0.225806452	0.2734	0.1853	0.06375	0.02231	0.01488	0.004533
0.258064516	0.2354	0.1808	0.06116	0.0214	0.01427	0.003581
0.290322581	0.207	0.1511	0.05266	0.01843	0.01229	0.003435
0.322580645	0.191	0.1409	0.05258	0.0184	0.01227	0.003217
0.35483871	0.1615	0.1266	0.05233	0.01832	0.01221	0.003083
0.387096774	0.1567	0.1138	0.05013	0.01755	0.0117	0.003053
0.419354839	0.1552	0.1137	0.03652	0.01278	0.008522	0.002586
0.451612903	0.1428	0.1041	0.0362	0.01267	0.008446	0.002291
0.483870968	0.1335	0.09306	0.03228	0.01178	0.007862	0.002232
0.516129032	0.123	0.08823	0.02845	0.009956	0.006638	0.001939
0.548387097	0.1027	0.07284	0.02434	0.00852	0.00568	0.001815
0.580645161	0.09444	0.07164	0.02369	0.008291	0.005527	0.001503
0.612903226	0.06034	0.04764	0.01684	0.005894	0.003929	0.001444
0.64516129	0.05187	0.04096	0.01531	0.005482	0.003657	0.001435
0.677419355	0.05079	0.03808	0.01266	0.004561	0.003042	0.001063
0.709677419	0.03737	0.02686	0.0124	0.004448	0.002969	0.000812
0.741935484	0.0369	0.02588	0.01087	0.003966	0.002646	0.000735
0.774193548	0.03558	0.02569	0.01007	0.003737	0.002492	0.000651
0.806451613	0.03463	0.02465	0.009346	0.003433	0.002291	0.000615
0.838709677	0.03463	0.02131	0.007875	0.002871	0.001917	0.000473
0.870967742	0.03025	0.0164	0.003124	0.001093	0.000729	0.00018
0.903225806	0.006766	0.004709	0.001647	0.000763	0.00051	0.000126
0.935483871	0.003795	0.002754	0.001091	0.000443	0.000297	8.93E-05
0.967741935	0	0	0	0	0	0
0.1	1.1022	0.79343	0.28512	0.099795	0.066524	0.016498
Average of						0.004681

Inputs generated by pe5.pl - Novemeber 2006

Data used for this run:

Output File: CAST_GR

Metfile: w23234.dvf

PRZM scenario: CASTrawberry-noplasticRLF_V2.txt

EXAMS environment file: pond298.exv

Chemical Name: MITC

Description	Variable Name	Value	Units	Comments
Molecular weight	mwt	73.12	g/mol	
Henry's Law Const.	henry	1.79E-04	atm-m ³ /mol	
Vapor Pressure	vapr	19	torr	
Solubility	sol	7600	mg/L	
Kd	Kd	0.26	mg/L	
Koc	Koc		mg/L	
Photolysis half-life	kdp	51.6	days	Half-life
Aerobic Aquatic Metabolism	kbacw	19.2	days	Halfife
Anaerobic Aquatic Metabolism	kbacs	0	days	Halfife
Aerobic Soil Metabolism	asm	9.61	days	Halfife
Hydrolysis:	pH 7	20.4	days	Half-life
Method:	CAM	4	integer	See PRZM manual
Incorporation Depth:	DEPI	25	cm	
Application Rate:	TAPP	1	kg/ha	
Application Efficiency:	APPEFF	1	fraction	
Spray Drift	DRFT	0	fraction of application rate applied to pond	
Application Date	Date	15-12	dd/mm or dd/mmm or dd-mm or dd-mmm	
Record 17:	FILTRA			
	IPSCND	3		
	UPTKF			
Record 18:	PLVKRT			
	PLDKRT			
	FEXTRC			
Flag for Index Res. Run	IR	EPA Pond		
Flag for runoff calc.	RUNOFF	none	none, monthly or total(average of entire run)	

Figure D-2. PRZM/EXAMS simulation for soil incorporated applications with California Nursery Crop Scenario.

stored as CANU_GR.out

Chemical: MITC

PRZM environment: CANurseryS1 modified Tuesday, 27 May 2008 at 11:16:22

EXAMS environment: pond298.ex modified Tuesday, 26 August 2008 at 06:14:08

Metfile: w23188.dvf modified Tuesday, 26 August 2008 at 06:15:38

Water segment concentrations (ppb)

Year	Peak	96 hr	21 Day	60 Day	90 Day	Yearly
1961	1.55E-09	1.01E-09	3.17E-10	1.23E-10	8.51E-11	2.30E-11
1962	0.1231	0.08634	0.02879	0.01022	0.006813	0.00168
1963	0.000536	0.000358	0.000117	4.13E-05	2.75E-05	6.79E-06
1964	2.55E-05	1.68E-05	5.29E-06	1.87E-06	1.25E-06	3.07E-07
1965	0.001802	0.001222	0.000404	0.000148	9.88E-05	2.44E-05
1966	1.29E-08	8.45E-09	2.64E-09	9.33E-10	6.22E-10	1.73E-10
1967	5.17E-05	3.47E-05	1.35E-05	5.68E-06	3.79E-06	9.34E-07
1968	0.01271	0.008466	0.002719	0.000961	0.000641	0.000158
1969	0.04837	0.03509	0.01355	0.004816	0.003211	0.000792
1970	0.01884	0.01264	0.004017	0.001418	0.000945	0.000233
1971	0.1323	0.08967	0.02958	0.01048	0.006986	0.001723
1972	8.35E-07	5.55E-07	1.77E-07	8.73E-08	5.88E-08	1.49E-08
1973	0.00206	0.001318	0.000403	0.000142	9.46E-05	2.33E-05
1974	0.001387	0.000931	0.00032	0.000113	7.56E-05	1.87E-05
1975	0.01627	0.01089	0.003619	0.001288	0.000859	0.000212
1976	0.000104	6.72E-05	2.07E-05	1.13E-05	7.65E-06	1.88E-06
1977	4.50E-05	2.96E-05	9.30E-06	3.28E-06	2.19E-06	5.40E-07
1978	0.003818	0.002499	0.000973	0.000368	0.000245	6.05E-05
1979	0.000557	0.000371	0.000133	5.17E-05	3.45E-05	8.50E-06
1980	0.1529	0.1135	0.04654	0.01682	0.01122	0.002758
1981	0.008899	0.005964	0.003142	0.001118	0.000746	0.000184
1982	0.009613	0.006436	0.002672	0.000943	0.000629	0.000155
1983	0.004781	0.003598	0.001418	0.00051	0.00034	8.38E-05
1984	1.82E-06	1.15E-06	3.43E-07	1.21E-07	8.06E-08	1.98E-08
1985	1.78E-07	1.14E-07	3.47E-08	1.22E-08	8.16E-09	2.04E-09
1986	0.9441	0.6369	0.2085	0.07394	0.0493	0.01216
1987	0.02914	0.01976	0.006363	0.00226	0.001507	0.000372
1988	0.000309	0.000232	8.04E-05	2.89E-05	1.92E-05	4.73E-06
1989	0.000159	0.000104	3.26E-05	1.15E-05	7.65E-06	1.89E-06
1990	0.0156	0.01066	0.003561	0.001261	0.000841	0.000207

Sorted results

Prob.	Peak	96 hr	21 Day	60 Day	90 Day	Yearly
0.032258065	0.9441	0.6369	0.2085	0.07394	0.0493	0.01216
0.064516129	0.1529	0.1135	0.04654	0.01682	0.01122	0.002758
0.096774194	0.1323	0.08967	0.02958	0.01048	0.006986	0.001723
0.129032258	0.1231	0.08634	0.02879	0.01022	0.006813	0.00168
0.161290323	0.04837	0.03509	0.01355	0.004816	0.003211	0.000792
0.193548387	0.02914	0.01976	0.006363	0.00226	0.001507	0.000372
0.225806452	0.01884	0.01264	0.004017	0.001418	0.000945	0.000233
0.258064516	0.01627	0.01089	0.003619	0.001288	0.000859	0.000212
0.290322581	0.0156	0.01066	0.003561	0.001261	0.000841	0.000207
0.322580645	0.01271	0.008466	0.003142	0.001118	0.000746	0.000184
0.35483871	0.009613	0.006436	0.002719	0.000961	0.000641	0.000158
0.387096774	0.008899	0.005964	0.002672	0.000943	0.000629	0.000155
0.419354839	0.004781	0.003598	0.001418	0.00051	0.00034	8.38E-05
0.451612903	0.003818	0.002499	0.000973	0.000368	0.000245	6.05E-05
0.483870968	0.00206	0.001318	0.000404	0.000148	9.88E-05	2.44E-05
0.516129032	0.001802	0.001222	0.000403	0.000142	9.46E-05	2.33E-05
0.548387097	0.001387	0.000931	0.00032	0.000113	7.56E-05	1.87E-05
0.580645161	0.000557	0.000371	0.000133	5.17E-05	3.45E-05	8.50E-06
0.612903226	0.000536	0.000358	0.000117	4.13E-05	2.75E-05	6.79E-06
0.64516129	0.000309	0.000232	8.04E-05	2.89E-05	1.92E-05	4.73E-06
0.677419355	0.000159	0.000104	3.26E-05	1.15E-05	7.65E-06	1.89E-06
0.709677419	0.000104	6.72E-05	2.07E-05	1.13E-05	7.65E-06	1.88E-06
0.741935484	5.17E-05	3.47E-05	1.35E-05	5.68E-06	3.79E-06	9.34E-07
0.774193548	4.50E-05	2.96E-05	9.30E-06	3.28E-06	2.19E-06	5.40E-07
0.806451613	2.55E-05	1.68E-05	5.29E-06	1.87E-06	1.25E-06	3.07E-07
0.838709677	1.82E-06	1.15E-06	3.43E-07	1.21E-07	8.06E-08	1.98E-08
0.870967742	8.35E-07	5.55E-07	1.77E-07	8.73E-08	5.88E-08	1.49E-08
0.903225806	1.78E-07	1.14E-07	3.47E-08	1.22E-08	8.16E-09	2.04E-09
0.935483871	1.29E-08	8.45E-09	2.64E-09	9.33E-10	6.22E-10	1.73E-10
0.967741935	1.55E-09	1.01E-09	3.17E-10	1.23E-10	8.51E-11	2.30E-11
0.1	0.13138	0.089337	0.029501	0.010454	0.006969	0.001719
					Average of	0.000696

Inputs generated by pe5.pl - Novemeber 2006

Data used for this run:

Output File: CANU_GR

Metfile: w23188.dvf

PRZM scenario: CAnurserySTD_V2.txt

EXAMS environment file: pond298.exv

Chemical Name: MITC

Description	Variable Name	Value	Units	Comments
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Molecular weight	mwt	73.12	g/mol	
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Henry's Law Const.	henry	1.79E-04	atm-m ³ /mol	
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Vapor Pressure	vapr	19	torr	
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Solubility	sol	7600	mg/L	
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Kd	Kd	0.26	mg/L	
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Koc	Koc		mg/L	
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Photolysis half-life	kdp	51.6	days	Half-life
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Aerobic Aquatic Metabolism	kbacw	19.2	days	Halfife
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Anaerobic Aquatic Metabolism	kbacs	0	days	Halfife
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Aerobic Soil Metabolism	asm	9.61	days	Halfife
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Hydrolysis:	pH 7	20.4	days	Half-life
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Method:	CAM	4	integer	See PRZM manual
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Incorporation Depth:	DEPI	25	cm	
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Application Rate:	TAPP	1	kg/ha	
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Application Efficiency:	APPEFF	1	fraction	
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Spray Drift	DRFT	0	fraction of application rate applied to pond	
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Application Date	Date	15-02	dd/mm or dd/mm or dd-mm or dd-mmm	
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Record 17: FILTRA

IPSCND	3	
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UPTKF

Record 18: PLVKRT

PLDKRT

FEXTRC

Flag for Index Res. Run IR EPA Pond

Flag for runoff calc. RUNOFF none none, monthly or total(average of entire run)