

Soil-IMP calibration problem

No

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SOIL/IMP ^{241}Am RATIOS FOR ALL
ENEWETAK ATOLL ISLANDS EXCEPT JANET (ENJEBI)

UNCORRECTED FOR
BRUSH ATTENUATION

STEM	LEAF
.4	
.5	0
.6	248
.7	089
.8	00888
.9	0356
1.0	034468999
1.1	01445567789
1.2	222345789
1.3	001347899
1.4	014457
1.5	11278
1.6	1136
1.7	0157
1.8	7
1.9	34
2.0	57
2.1	9
2.2	6
2.3	3
2.4	7
2.5	6
2.6	2
2.7	
2.8	2
2.9	6

CORRECTED FOR
BRUSH ATTENUATION

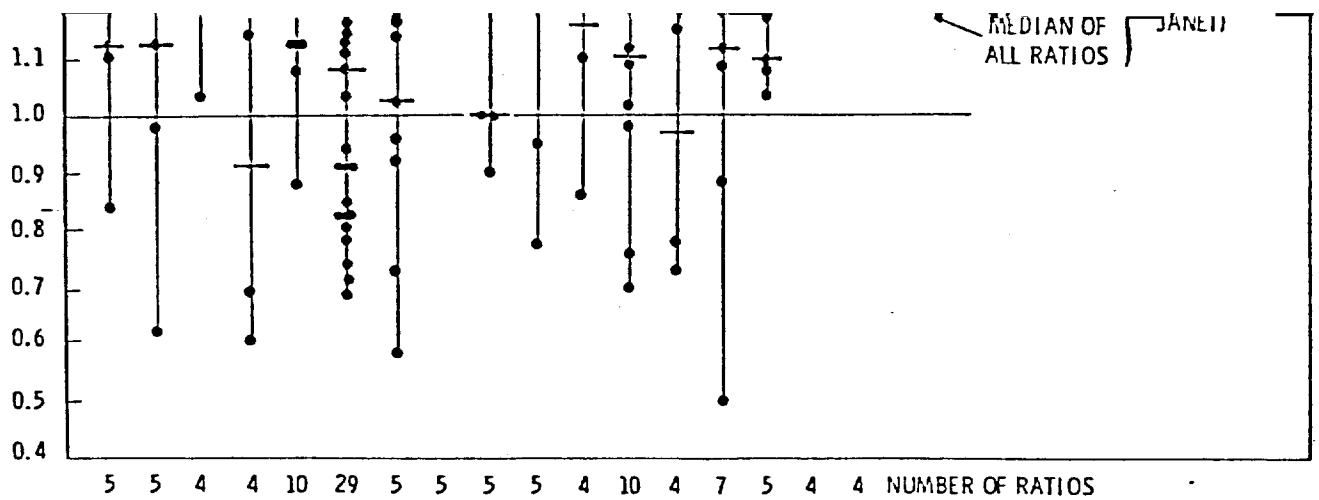
STEM	LEAF
.4	
.5	09
.6	129
.7	03688
.8	4688
.9	05689
1.0	00334488999
1.1	002223334566789
1.2	22236689
1.3	006689
1.4	1257
1.5	0004589
1.6	118
1.7	001
1.8	
1.9	
2.0	0578
2.1	9
2.2	
2.3	
2.4	07
2.5	8
2.6	9
2.7	
2.8	2
2.9	

(Example of how to read:
the row 1.6|118 above
represents three ratios
whose last digits are
1, 1 and 8; i.e., the
three ratios are 1.61,
1.61, and 1.68.)

SUMMARY

	UNCORRECTED*	CORRECTED*
n	86	86
MEDIAN RATIO	1.28	1.18
MEAN RATIO	1.40	1.30

*EXCLUDES JANET



++ IMP values below detection limits.

** No brush present when IMP readings taken.

* Average of A and B soil composites.

FIGURE 1. Soil*/IMP ²⁴¹Am ratios on Enewetak Atoll Islands after correction for brush attenuation.

Use IIR data and correction
for ground attenuation
⇒ SOIL IIR value in [change]

Soil Imp DATA

LOCATION	A comp ^{soil} IIR	B comp ^{soil} IIR	Imp VALUE #	Is. note
NE 14-2	11.3 0.87	18.2 1.40	13.0 2	Enjeki 1.1
NE 14-10	2.1 1.11	2.62 1.38	1.9 1	
SE 2-8	10.9 0.82	14.1 1.06	13.3 "	0.9
SW 4-14	1.37 0.91	1.14 0.76	1.5 "	0.8
SE 4-22	1.12 1.02	2.1 1.91	1.1 3	1.4
SE 6-1	23.1 1.38	21.3 1.28	16.7 (4.6)?	1.3
SE 6-8	8.78 0.80	8.91 0.81	11.0 3	.8
SE 6-14	12.5 0.84	12.4 0.84	14.8 "	.8
SE 12-14	3.28 0.64	3.99 0.78	5.1 "	.7
SE 14-6	2.93 0.64	3.46 0.75	4.6 "	.6
NW 2-14	12.8 0.87	19.9 1.35	14.7 "	1.1
NW 6-8	4.24 1.78	1.7 0.71	2.4 2	1.2
NW 2-8	1.28 1.60	1.2 1.50	.8 2	1.5
NE 6-16	12.7 0.85	14.8 0.99	14.9 2	.9
NE 6-24	4.06 0.33	13.6 1.11	12.2 "	.9
NE 10-8	22.0 1.33	18.6 1.12	16.6 "	1.2
NE 10-22	17.2 1.87	16.2 1.76	9.2 "	1.2
NW 21-7	1.51 1.68	1.36 1.51	.9 "	1.5
NW 21-7	3.03 1.12	2.51 0.93	2.7 "	1.0
WB 22-0	.89 0.42	2.63 1.25	2.1 "	.8
SW 14-2	3.2 2.67	4.33 5.90	4.8 "	.7
NW 11-8	6.25 1.18	6.64 1.25	5.3 "	1.2
EB 10-0	24.5 1.42	12.9 0.75	17.2 "	1.0
EB 3-0	4.37 1.12	4.52 1.16	3.9 "	1.1
WB 6-0	5.25 1.35	3.73 0.96	3.9 "	1.1
NE 14-18	2.19 0.78	2.95 1.05	2.8 "	0.9
DE 12-24	16.1 1.20	8.51 0.64	13.4 "	0.9

State... IIR... 1/1/19

Location	A comp $\frac{SO_4}{TMC}$	B comp $\frac{SO_4}{TMC}$	Imp VALUE	i #	Island
SE 12-30	2.54 0.71	2.81 0.78	3.6	3	Enjochi 0.74
SW 10-6	1.17 1.67	1.01 1.44	7	2	" 1.56
9-S-2	10.9 1.40	11.7 1.50	7.8	3	Lujor
11-S-5	3.29 1.73	1.66 0.87	1.9	"	"
5-N-1	9.98 0.58	20.1 1.18	17.3	"	"
5-S-3	47.4 1.32	65.7 1.82	35.9	"	"
1-S-1	21.5 1.62	10.0 0.75	13.3	"	"
S-B-0	18.3 1.27	21.8 1.51	14.4	"	"
1-N-1	23.0 0.65	33.5 0.95	35.2	"	"
3-S-1	28.2 2.09	6.34 0.47	13.5	"	"
6-S-1	18.7 1.26	15.3 1.03	14.8	"	"
8-S-4	3.99 1.25	3.85 1.20 SD = 0.429 $\mu = 1.22$	3.2	"	"
3-B-0	2.39 1.14	2.83 1.35	2.1	1	IRENE
7-S-3	1.57 0.87	4.55 2.53	1.8	1	"
8-N-1	4.46 1.44	4.1 1.32	3.1	1	"
10-S-4	1.92 1.37	1.69 1.21	1.4	3	"
13-N-2	3.35 0.61	6.31 1.15	5.5	1	"
1-BL-0	1.20 1.20	1.30 1.30	1.0	1	"
5-N-1	3.07 1.62	2.93 1.54	1.9	1	"
6-N-1	3.64 1.10	3.72 1.13	3.3	1	"
10-N-2	2.78 2.78	3.15 3.15	1.0	1	"
8-S-1	4.10 1.32	9.49 3.06 $\mu = 1.56$	3.1	1	"

10

10

1.926 26-N-12 84.3 68.2 2.12	100.4 3.13	32.1 7.507 1 (G)	Acmon	
1.570 28-S-2 35.15 2.10 0.50	5.33 1.27	4.2 0.6232 3	"	
1.049 14-S-10 11.19 16.45 1.70	5.93 0.61	9.7 .9565 1(G)	"	
1.050 14-N-10 .830 .28 0.70	1.38 3.45	.4 -.3979 1(G)	"	
1.0 2-N-2 .10 .11 0.55	.09 0.45	.2 -.699 1(G)	"	
12-S-4	<LLD	NO DATA	"	
14-S-8	<LLD	0	"	
1.842 12-N-1 1.745 .76 0.60	2.53 1.58	1.6 1.6, 204 1(G)	"	
1.356 20-S-1 0.14 .53 1.77	.35 1.17	.3 -.523 3	"	
	$\mu = 1.4$	7	"	
2 BL C	20.38 (CHEM) 2.91	2.22 (CHEM) 0.32	7.0 1(B)	Lucy
0 E 4	4.27 2.14	2.82 1.41	2.0	"
6 W 2	18.36 1.62	19.20 1.70	11.3	"
6 E 2	47.74 3.10	24.07 1.56	15.4	"
3 8 W 6	7.86 1.23	14.25 1.79	8.0	"
	$\mu = 1.78$			

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 good results on 177P

4	1-S-1	4.84	1.31✓	7.20	1.55	3.7	3	Clare
	4-S-3	15.43	1.77	8.96	1.03✓	8.7	"	"
	8-S-5	13.61	1.33✓	14.37	1.41✓	10.2	"	"
	10-S-6	6.14	.43✓	24.91	1.75✓	14.2	"	"
				$\mu = 1.37$				
	4-N-2	21.19	1.08✓	18.01	0.92✓	19.6	1(G)	Kate
	0-BL-0	2.65	0.62✓	2.67	0.62✓	4.3	1(G)	"
	4-S-2	9.01	1.23	8.44	1.16✓	7.3	"	"
	8-S-2	13.81	0.82✓	23.30	1.38✓	16.9	"	"
5	8-S-8	4.76	0.78✓	10.14	1.66	6.1	"	"
				$\mu = 1.03$				
	2 BL 0	2.87	1.25	3.16	1.37	2.2	3	Daisy
	10 BL 0	4.54	0.34	14.16	1.07	13.2	"	"
	3 E 8	1.33	0.35	3.53	0.92	3.3	"	"
4	2 E 0	12.70	1.19	14.58	1.36	10.7	"	"
				$\mu = 0.98$				

24-N-13	18.45	10.90	5.9	domon-adde samples 19/10 any soil removal
26-N-9	3.05	2.59	1.5	
26-N-11	21.03	18.55	19.5	
25-N-14	47.42	18.85	26.3 (near ps. removal)	domon-adde after crush <u>removal only</u> 10/10
26-N-11	37.92	43.31	35.0	
26-N-11	37.92	43.31	35.0	
26.5-N-13	48.29	39.23	31.4	

ПОМОН = ПИКРАПУД / ПИКРА

(all samples taken 22 MAR 78)

LOCATION / DEPTH	²³⁸ Pu	^{239,240} Pu	²⁴¹ Am	GAMMA	CHEM
11-N-5 (A) 0	5.02 ± 7.2%	31.76 ± 5.3%	4.17 ± 11%	4.34 ± 12%	
(B) 0	5.50 ± 6.7%	34.24 ± 5.0%	3.84 ± 7.6%		
(A) 10	1.48 ± 10%	11.94 ± 5.7%	1.45 ± 12%		
(B) 10			2.14 ± 28%		
(A) 20	0.77 ± 13%	6.87 ± 5.9%	1.11 ± 41%		
(B) 20	2.69 ± 7.5%	17.10 ± 4.9%	2.24 ± 9.7%		
Faint					
13N5 (A) 0	5.11 ± 6.6%	28.96 ± 5.0%	3.73 ± 21%	3.53 ± 12%	
(B) 0	9.19 ± 14%	52.96 ± 12%	6.43 ± 5.4%		
(A) 10			3.72 ± 7.6%		
(B) 10			3.05 ± 21%		
(A) 20	3.97 ± 6.7%	23.96 ± 4.8%	3.38 ± 19%		
(B) 20	4.22 ± 7.4%	26.00 ± 5.3%	3.18 ± 3.2%		
17N7 (A) 0			1.04 ± 35%	1.30 ± 18%	
(B) 0	0.22 ± 24%	3.48 ± 7.5%	0.81 ± 15%		
(A) 10			0.7 ± 18%		
(B) 10			0.92 ± 38%		
(A) 20	0.22 ± 22%	3.09 ± 7.2%	0.37 ± 96%		
(B) 20	0.21 ± 26%	2.98 ± 8.3%	<MDA		

5 loc... (1" next to boundary) }
 11AP... }
 ... on 6-2 (removed... will...)

REPOSITORY PNNL
COLLECTION Marshall Islands
BOX No. 5686
FOLDER Miscellaneous Information

DOCUMENT DOES NOT CONTAIN ECI

Reviewed by R. Schutte Date 5/1/97