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Supplement of

Decadal-scale soil redistribution along hillslopes in the Mojave Desert

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Supplementary material – Rock fragments, ¹³⁷Cs activities and inventories per soil samples, and ¹³⁷Cs inventory per soil profile

Site	Soil pit	Depth (cm)	>2mm (%)	<2mm (%)	Avg. rock frag. in profile (%)	Cs-137 activity (mBq/g)	Uncertainty (mBq/g)	Cs-137 inventory (Bq/m ²)	Cs-137 inventory per profile (Bq/m ²)
BRH S. aspect	1	0-3	19%	81%	26%	4.35	0.51	163.1	163.1
		3-6	45%	55%		0	-	0.0	
		6-9	7%	93%		0	-	0.0	
	2	0-3	33%	67%	38%	0	-	0.0	0
		3-6	40%	60%		0	-	0.0	
		6-9	47%	53%		0	-	0.0	
	3	0-3	33%	67%	31%	2.52	0.61	94.5	149.8
		3-6	41%	59%		1.47	1.42	55.2	
		6-9	20%	80%		0	-	0.0	
	4	0-3	40%	60%	23%	3.70	0.59	138.7	138.7
		3-6	7%	93%		0	-	0.0	
		6-9	14%	86%		0	-	0.0	
	5	0-3	20%	80%	10%	0	-	0.0	0
		3-6	6%	94%		0	-	0.0	
		6-9	4%	96%		0	-	0.0	
	6	0-3	26%	74%	23%	5.44	0.94	203.9	203.9
		3-6	17%	83%		0	-	0.0	
		6-9	26%	74%		0	-	0.0	
	7	0-3	20%	80%	21%	4.00	1.12	150.1	150.1
		3-6	13%	87%		0	-	0.0	
		6-9	31%	69%		0	-	0.0	
	8	0-3	4%	96%	7%	0	-	0.0	0
		3-6	8%	92%		0	-	0.0	
		6-9	11%	89%		0	-	0.0	
BRH N. aspect	9	0-3	1%	99%	1%	0	-	0.0	0
		3-6	0%	100%		0	-	0.0	
		6-9	0%	100%		0	-	0.0	
	10	0-3	31%	69%	22%	2.40	0.96	90.1	90.1
		3-6	8%	92%		0	-	0.0	
		6-9	13%	87%		0	-	0.0	
	11	0-3	43%	57%	39%	6.03	0.61	226.0	226.0
		3-6	29%	71%		0	-	0.0	
		6-9	40%	60%		0	-	0.0	
	12	0-3	10%	64%	17%	3.21	1.01	120.4	120.4
		3-6	26%	109%		0	-	0.0	
		6-9	17%	83%		0	-	0.0	
	13	0-3	16%	84%	11%	4.03	0.34	151.1	210.5
		3-6	10%	90%		1.59	0.91	59.4	
		6-9	0%	100%		0	-	0.0	
14	0-3	6%	94%	17%	0	-	0.0	0	
	3-6	16%	84%		0	-	0.0		
	6-9	56%	44%		0	-	0.0		
15	0-3	26%	74%	21%	3.46	1.05	129.7	304.7	
	3-6	19%	81%		4.67	0.56	175.0		

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		6-9	19%	81%		0	-	0.0	
	16	0-3	27%	73%	21%	8.49	0.85	318.5	508.2
		3-6	16%	84%		5.06	1.09	189.7	
		6-9	17%	83%		0	-	0.0	
GM2	1	0-3	48%	52%	42%	3.46	0.44	129.9	198.0
		3-6	32%	68%		1.82	1.03	68.1	
		6-9	45%	55%		0	-	0.0	
	2	0-3	45%	55%	51%	16.04	1.76	601.4	881.2
		3-6	38%	62%		5.73	0.43	214.9	
		6-9	69%	31%		1.73	0.66	65.0	
	3	0-3	43%	57%	41%	8.60	0.88	322.5	490.0
		3-6	42%	58%		1.86	1.41	69.7	
		6-9	37%	63%		2.60	1.14	97.7	
	4	0-3	54%	46%	55%	4.94	0.53	185.4	478.7
		3-6	55%	45%		7.82	1.26	293.3	
		6-9	56%	44%		0.00	-	0.0	
	5	0-3	54%	46%	46%	6.44	1.20	241.7	506.5
		3-6	57%	43%		3.82	0.43	143.2	
		6-9	34%	66%		3.24	0.39	121.6	
	6	0-3	43%	57%	40%	8.82	1.53	330.8	424.5
		3-6	40%	60%		0.00	-	0.0	
		6-9	38%	62%		2.50	n/a	93.8	
7	0-3	42%	58%	47%	12.26	1.31	459.7	781.2	
	3-6	49%	51%		2.22	0.40	83.3		
	6-9	49%	51%		6.35	1.01	238.2		
8	0-3	54%	46%	50%	12.55	0.82	470.7	809.3	
	3-6	53%	47%		6.41	1.64	240.3		
	6-9	44%	56%		2.62	0.92	98.3		
EPR3	1	0-3	39%	61%	38%	0.00	-	0.0	0
		3-6	27%	73%		0.00	-	0.0	
		6-9	50%	50%		0.00	-	0.0	
	2	0-3	21%	79%	18%	1.02	0.33	38.2	38.2
		3-6	16%	84%		0.00	-	0.0	
		6-9	11%	89%		0.00	-	0.0	
	3	0-3	32%	68%	23%	4.01	0.89	150.3	150.3
		3-6	18%	82%		0.00	-	0.0	
		6-9	14%	86%		0.00	-	0.0	
	4	0-3	23%	77%	19%	5.03	1.10	188.6	188.6
		3-6	8%	92%		0.00	-	0.0	
		6-9	26%	74%		0.00	-	0.0	
	5	0-3	26%	74%	34%	0.00	-	0.0	85.1
		3-6	50%	50%		0.00	-	0.0	
		6-9	11%	89%		2.27	0.67	85.1	
	6	0-3	32%	68%	45%	7.56	1.03	283.5	283.5
		3-6	41%	59%		0.00	-	0.0	
		6-9	57%	43%		0.00	-	0.0	

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7	0-3	31%	69%	22%	0.00	-	0.0	0	
	3-6	3%	97%		0.00	-	0.0		
	6-9	27%	73%		0.00	-	0.0		
8	0-3	34%	66%	30%	1.42	0.92	53.3	239.9	
	3-6	22%	78%		5.0	1.6	186.7		
	6-9	31%	69%		0.00	-	0.0		
9	0-3	24%	76%	27%	0	-	0.0	61.3	
	3-6	28%	72%		1.6	0.8	61.3		
	6-9	31%	69%		0	-	0.0		
10	0-3	37%	63%	30%	11.91	0.73	446.7	451.3	
	3-6	29%	71%		0.12	0.23	4.7		
	6-9	21%	79%		0	-	0.0		
11	0-3	24%	76%	16%	4.65	0.38	174.4	174.4	
	3-6	11%	89%		0.00	-	0.0		
	6-9	12%	88%		0.00	-	0.0		
12	0-3	36%	64%	40%	7.02	0.40	263.3	263.3	
	3-6	46%	54%		0.00	-	0.0		
	6-9	37%	63%		0.00	-	0.0		
13	0-3	48%	52%	31%	9.50	1.15	356.4	416.8	
	3-6	29%	71%		1.61	0.36	60.4		
	6-9	2%	98%		0.00	-	0.0		
14	0-3	20%	80%	24%	4.89	0.41	183.3	287.4	
	3-6	29%	71%		2.78	0.82	104.1		
	6-9	23%	77%		0	-	0.0		
EPR2	1	0-3	38%	62%	41%	8.2	0.3	308.4	711.9
		3-6	64%	36%		9.3	1.6	348.9	
		6-9	19%	81%		1.5	1.2	54.6	
2	0-3	33%	67%	24%	14.8	0.7	554.9	786.7	
	3-6	25%	75%		6.2	0.5	231.8		
	6-9	7%	93%		0.0	-	0.0		
3	0-3	12%	88%	15%	2.3	0.3	86.7	86.7	
	3-6	10%	90%		0.0	-	0.0		
	6-9	30%	70%		0.0	-	0.0		
4	0-3	15%	85%	10%	5.0	0.6	186.5	386.4	
	3-6	4%	96%		5.3	0.4	199.9		
	6-9	6%	94%		0.0	-	0.0		
5	0-3	40%	60%	33%	4.2	0.8	156.3	156.3	
	3-6	31%	69%		0.0	-	0.0		
	6-9	20%	80%		0.0	-	0.0		
6	0-3	38%	62%	35%	4.9	1.0	182.3	182.3	
	3-6	14%	86%		0.0	-	0.0		
	6-9	49%	51%		0.0	-	0.0		
7	0-3	40%	60%	26%	7.1	0.7	266.9	450.9	
	3-6	17%	83%		4.9	0.8	184.1		
	6-9	11%	89%		0.0	-	0.0		
8	0-3	31%	69%	27%	6.0	0.6	225.9	225.9	

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3-6	21%	79%	0.0	-	0.0
6-9	27%	73%	0.0	-	0.0