

Table S2. Coefficients of variation.

Element/ direction	Pine #1			Pine #2			Pine #3			Pine #4			Pine #5			Pine #6		
	SD*	Mean	CV**	SD	Mean	CV	SD	Mean	CV	SD	Mean	CV	SD	Mean	CV	SD	Mean	CV
Al_eas	4.7	60.5	8%	4.9	56.1	9%	4.3	53.4	8%	5.8	55.7	11%	7.3	51.1	14%	5.2	55.7	9%
Al_wes	4.9	57.7	9%	4.2	55.5	7%	4.7	50.7	9%	4.5	59.0	8%	6.1	53.1	11%	4.7	53.5	9%
Al_nor	5.7	57.4	10%	5.0	54.5	9%	4.3	49.4	9%	6.4	56.8	11%	5.5	53.1	10%	4.8	54.4	9%
Al_sou	5.5	59.5	9%	3.9	58.0	7%	5.5	50.0	11%	5.7	53.8	11%	6.6	51.7	13%	6.2	54.1	11%
Ca_eas	57.7	394.2	15%	73.2	356.5	21%	50.8	354.6	14%	91.3	441.1	21%	105.3	336.6	31%	61.4	357.2	17%
Ca_wes	74.1	330.2	22%	60.3	315.6	19%	58.8	347.7	17%	47.7	412.5	12%	52.8	302.0	17%	72.4	408.8	18%
Ca_nor	70.0	420.7	17%	63.9	324.8	20%	42.7	303.0	14%	86.4	390.7	22%	66.6	341.9	19%	96.0	447.5	21%
Ca_sou	82.3	409.7	20%	75.9	349.9	22%	56.3	336.3	17%	73.1	406.4	18%	96.8	386.0	25%	55.0	298.1	18%
Cl_eas	3.3	6.8	50%	4.3	6.0	72%	2.5	4.1	61%	2.7	3.6	75%	3.5	2.2	156%	3.1	3.4	92%
Cl_wes	2.7	5.6	48%	2.6	4.4	59%	3.3	4.1	80%	3.1	4.5	69%	2.9	2.8	102%	1.9	2.1	92%
Cl_nor	3.3	5.1	65%	4.1	6.0	69%	1.5	2.0	77%	5.0	4.4	112%	2.1	1.9	108%	1.1	1.4	82%
Cl_sou	15.4	9.4	163%	4.8	5.8	83%	2.0	2.7	74%	3.4	4.6	75%	2.4	2.2	109%	2.3	3.0	76%
Cu_eas	25.5	200.0	13%	28.4	226.8	13%	21.4	241.3	9%	26.1	216.8	12%	34.7	207.1	17%	27.0	146.7	18%
Cu_wes	21.7	169.7	13%	25.1	179.0	14%	23.7	242.3	10%	24.4	173.1	14%	32.1	150.9	21%	26.4	247.1	11%
Cu_nor	25.3	245.0	10%	23.4	165.6	14%	16.8	193.8	9%	25.4	145.5	17%	25.0	138.1	18%	22.6	228.3	10%
Cu_sou	24.4	200.4	12%	29.2	210.7	14%	24.4	219.2	11%	24.8	249.1	10%	27.2	230.6	12%	24.7	176.0	14%
Fe_eas	23.0	52.4	44%	20.6	53.4	39%	14.7	64.3	23%	14.1	59.3	24%	37.2	64.0	58%	66.0	60.8	109%
Fe_wes	11.0	45.5	24%	13.1	39.6	33%	10.5	66.2	16%	30.9	42.5	73%	14.8	49.1	30%	10.9	61.2	18%
Fe_nor	9.5	61.4	16%	16.4	47.4	35%	21.5	72.5	30%	20.3	47.9	42%	27.9	45.8	61%	12.5	57.7	22%
Fe_sou	18.6	44.9	41%	15.7	48.7	32%	16.9	67.5	25%	14.8	61.6	24%	18.1	57.1	32%	10.0	41.3	24%
K_eas	38.5	101.4	38%	22.8	77.1	30%	35.6	85.6	42%	24.9	73.6	34%	37.0	83.4	44%	34.8	97.1	36%
K_wes	26.0	76.0	34%	26.2	68.4	38%	26.0	72.8	36%	11.9	48.1	25%	35.7	62.8	57%	36.2	96.3	38%
K_nor	32.5	97.3	33%	24.1	70.9	34%	21.8	53.5	41%	28.6	60.0	48%	19.4	66.9	29%	13.6	88.3	15%
K_sou	27.1	82.5	33%	33.1	77.9	43%	23.0	71.1	32%	30.0	60.8	49%	23.0	96.4	24%	21.5	69.8	31%
Mn_eas	8.3	79.0	11%	9.8	83.3	12%	18.9	89.2	21%	14.8	90.7	16%	13.1	107.7	12%	10.8	94.5	11%
Mn_wes	9.3	80.7	12%	15.9	119.2	13%	22.1	92.9	24%	11.1	80.4	14%	14.0	77.2	18%	13.1	72.9	18%
Mn_nor	11.8	75.4	16%	11.3	91.5	12%	13.0	104.1	13%	11.5	84.1	14%	13.4	84.3	16%	12.1	86.7	14%
Mn_sou	11.1	75.0	15%	13.1	93.5	14%	12.6	100.0	13%	12.6	85.0	15%	15.2	112.5	13%	10.1	83.6	12%
P_eas	3.9	18.8	21%	3.2	12.2	26%	3.1	12.0	25%	4.3	11.8	36%	4.2	6.7	63%	3.5	12.1	29%
P_wes	4.1	14.2	29%	3.8	12.3	31%	3.4	9.9	35%	4.7	16.8	28%	4.4	9.7	46%	3.8	10.7	35%
P_nor	4.0	14.8	27%	3.4	11.8	29%	2.8	8.4	33%	4.7	13.6	35%	3.6	8.1	45%	3.5	9.5	37%
P_sou	3.3	16.1	21%	4.3	16.4	26%	3.6	8.6	42%	4.3	12.5	34%	3.9	8.4	46%	3.0	11.5	26%
S_eas	3.1	10.3	30%	2.4	6.2	39%	2.4	5.7	42%	3.3	5.7	58%	2.1	2.1	100%	2.6	4.8	53%
S_wes	2.8	7.2	39%	3.1	6.5	47%	2.4	4.4	53%	3.6	7.8	47%	2.8	4.1	67%	2.4	4.0	60%
S_nor	2.9	7.6	38%	2.7	5.3	52%	1.7	3.4	50%	3.6	6.4	56%	2.5	3.2	78%	1.9	3.6	54%
S_sou	5.5	10.9	50%	3.6	8.4	43%	2.4	4.3	55%	3.1	6.7	46%	2.7	3.0	88%	2.7	5.0	54%
Si_eas	4.2	30.8	13%	6.1	23.9	26%	3.5	20.0	18%	5.1	20.8	25%	5.5	13.1	42%	4.8	22.8	21%
Si_wes	4.3	26.2	17%	4.8	22.9	21%	3.8	16.0	24%	4.7	27.3	17%	5.6	19.0	29%	3.8	20.3	19%
Si_nor	5.8	23.4	25%	4.6	22.0	21%	3.6	14.8	25%	6.6	24.3	27%	5.0	17.5	29%	4.0	17.6	22%
Si_sou	9.5	30.3	31%	5.5	27.1	20%	4.5	15.2	29%	5.3	19.3	28%	4.8	17.6	27%	5.7	23.0	25%
Sr_eas	40.4	83.2	49%	41.3	152.5	27%	37.9	222.9	17%	50.9	212.5	24%	67.6	263.4	26%	39.5	104.0	38%
Sr_wes	43.0	122.2	35%	36.5	138.5	26%	45.4	311.0	15%	33.9	98.2	35%	48.3	155.0	31%	41.4	225.7	18%
Sr_nor	45.9	253.2	18%	40.1	139.3	29%	47.2	288.4	16%	57.3	149.6	38%	49.6	170.8	29%	39.4	187.8	21%
Sr_sou	34.3	102.6	33%	49.5	96.9	51%	54.7	279.9	20%	46.5	225.6	21%	72.7	220.3	33%	34.2	131.3	26%
Ti_eas	4.8	18.8	25%	7.1	20.1	35%	4.6	16.9	27%	8.0	16.6	48%	19.1	18.2	105%	5.4	14.8	37%
Ti_wes	5.5	17.2	32%	5.7	15.8	36%	4.3	15.8	27%	7.2	16.0	45%	5.9	14.0	42%	6.0	15.6	38%
Ti_nor	5.3	17.8	30%	5.6	17.9	31%	4.2	16.0	26%	8.0	15.7	51%	5.9	13.5	44%	5.1	14.7	35%
Ti_sou	16.2	20.5	79%	5.9	17.1	35%	4.6	15.8	29%	6.2	16.1	39%	7.2	14.7	49%	5.9	14.1	42%
Zn_eas	56.9	234.2	24%	40.6	235.2	17%	29.9	153.1	20%	52.7	145.8	36%	39.1	111.7	35%	33.0	185.5	18%
Zn_wes	27.7	214.1	13%	44.1	193.8	23%	27.9	155.6	18%	27.5	175.9	16%	35.4	155.7	23%	33.0	173.3	19%
Zn_nor	47.0	166.6	28%	49.5	200.6	25%	24.1	102.9	23%	34.9	173.4	20%	34.1	176.2	19%	35.2	183.9	19%
Zn_sou	46.7	215.8	22%	53.2	229.6	23%	49.9	129.1	39%	29.5	158.4	19%	41.6	161.0	26%	24.4	193.5	13%

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