

a) Initial classification scheme

		predicted															
		bgr	cru	cas	dry	gra	hea	wdm	meq	hmo	sno	wat	gru	wdw	mgr	wet	observation accuracy (%)
observed	bgr	112	3	0	0	0	0	0	0	0	0	14	11	0	0	0	80.0
	cru	0	283	5	0	121	0	0	0	3	0	7	21	60	0	0	56.6
	cas	0	12	1469	0	0	240	0	0	49	0	17	29	164	0	0	74.2
	dry	0	0	0	971	3	39	0	0	2	0	0	0	0	0	0	95.7
	gra	0	51	0	2	1022	0	0	0	0	0	0	0	0	0	0	95.1
	hea	0	6	4	44	1	502	0	0	0	0	0	0	0	0	0	90.1
	wdm	0	6	0	0	3	0	429	0	0	0	0	29	0	0	0	91.9
	meq	0	0	0	0	0	0	0	377	0	0	0	0	0	32	15	88.9
	hmo	0	0	14	6	0	31	0	0	170	0	0	16	30	14	0	60.5
	sno	0	0	0	0	0	0	0	0	0	113	0	0	0	0	0	100
	wat	1	0	12	0	18	0	5	0	0	0	1078	35	0	0	9	93.1
	gru	0	29	0	0	0	3	11	0	0	0	0	1132	0	44	32	90.5
	wdw	0	465	112	0	0	0	0	0	82	0	3	3	1089	0	0	62.1
	mgr	0	0	0	0	0	1	0	43	0	0	0	18	0	622	60	83.6
	wet	0	0	0	0	0	0	0	0	0	0	0	58	0	21	1094	93.3
prediction accuracy (%)		99.1	33.1	90.9	94.9	87.5	61.5	96.4	89.8	55.6	100	96.3	83.7	81.1	84.9	90.4	

b) Simplified classification scheme

		predicted							observation accuracy (%)
		cru	sno	wat	veg	bgg	gru	wdc	
observed	cru	272	0	2	11	112	33	59	55.6
	sno	0	132	0	0	0	0	0	100
	wat	7	0	933	86	35	27	71	80.5
	veg	1	0	2	5984	18	21	115	97.4
	bgg	65	0	5	4	1133	11	0	93
	gru	16	0	2	94	2	1138	0	90.9
	wdc	445	0	8	230	0	8	941	57.7
prediction accuracy (%)		33.7	100	98	93.4	87.2	91.9	79.3	

c) Optimized classification scheme

		predicted												observation accuracy (%)
		bgr	cas	dry	gra	meq	sno	wat	gru	wdc	hea	mgr	wet	
observed	bgr	131	0	0	0	0	0	5	0	4	0	0	0	93.6
	cas	0	1443	0	0	0	0	24	39	216	279	0	0	72.1
	dry	0	0	1015	8	0	0	0	0	0	32	0	0	96.2
	gra	0	0	4	1024	0	0	0	0	49	1	0	0	95.0
	meq	0	0	0	0	383	0	0	0	0	0	22	17	90.8
	sno	0	0	0	0	0	116	0	0	0	0	0	0	100
	wat	7	4	0	14	0	0	913	6	130	0	0	8	84.4
	gru	0	0	0	0	1	0	4	1144	28	0	45	32	91.2
	wdc	0	108	0	118	0	0	16	16	1936	29	0	0	87.1
	hea	0	16	62	0	0	0	7	50	698	6	0	0	83.2
	mgr	0	0	0	0	50	0	0	16	2	2	623	50	83.8
	wet	3	0	0	0	1	0	0	50	0	0	22	1096	93.5
prediction accuracy (%)		92.9	91.9	93.9	88.0	88.0	100	94.9	89.5	80.2	67.1	86.8	91.1	