Supplementary Material

Table S1. rDS examples in different geographic ambits, and at different thematic, spatial and temporal resolutions.

rDS	Ambit	DB model	Thematic resolution	Scale/ spatial resolution	Temporal resolution	Main methodology
Global Land Cover 2000 database	Global	HI	22 classes (global detail)	1000 m	2000	AC
GlobCover	Global	HI	22 classes (global detail)	300 m	2005–2006, 2009	AC
CORINE	Europe	HI	44 classes (max. level)	1:100000	1990, 2000, 2006, 2012, 2018	Ph
Land Cover Map for Great Britain	Country (Great Britain)	HI	21 classes	25 m	1990, 2000, 2007, 2015, 2017, 2018, 2019	AC
SIOSE	Country (Spain)	OO	41 s.c 44 p.c.c	1:25000	2005, 2009, 2011, 2014	Ph
Land Use and Vegetation Cover Map of Andalusia	Regional (Andalusia)	HI	144^{I}, 166^{II} Classes	$1:50000^{I}$, $1:25000^{II}$	1991^{I}, 1995^{I}, 1999^{I} and 1999^{II}, 2003^{II}, 2007^{II}	Ph
Land Cover Map of Catalonia	Regional (Catalonia)	HI	21^{III}, 61^{IV}, 241^{V} classes	$1:3000^{III}$, $1:1500^{IV}$, $1:1000^{V}$,	1993^{III}, $2000–2002^{IV}$, $2005–2007^{V}$, 2009^{V}	Ph

Database (DB) models are Hierarchical (HI) or Object-Oriented (OO). SIOSE thematic resolution "s.c" and "p.c.c" stands for "simple coverages" and "predefined compound coverages". The main methodology used is based on Automatic Classification (AC) or Photo interpretation (Ph). Superindices refer to the version of each thematic, scale or temporal resolution.

Table S2. Details of the imagery considered for each LCM.

Classification	200-030	200-031	Platform-Sensor
LCM-1987	30 April 1987	14 April 1987	L5-TM
	17 June 1987	17 June 1987	L5-TM
	4 August 1987	4 August 1987	L5-TM
	20 August 1987	20 August 1987	L5-TM
	2 September 1986	2 September 1986	L5-TM
LCM-2002	28 April 2001	28 April 2001	L7-ETM+
	30 May 2001	30 May 2001	L7-ETM+
	1 July 2001 & 5 July 2000	1 July 2001	L7-ETM+
	25 July 2001	25 July 2001	L5-TM
	17 September 2003	11 September 2001	L5-TM
LCM-2012	7 March 2014	7 March 2014	L8-OLI
	19 June 2011	19 June 2011	L5-TM
	5 July 2011	5 July 2011	L5-TM
	11 August 2013	11 August 2013	L8-OLI
	7 September 2011	7 September 2011	L5-TM
LCM-2017	15 March 2017	15 March 2017	L8-OLI
	19 April 2018	19 April 2018	L8-OLI
	19 June 2017	19 June 2017	L8-OLI
	5 July 2017	5 July 2017	L8-OLI
	3 August 2016	3 August 2016	L8-OLI
	22 August 2017	22 August 2017	L8-OLI
	7 September 2017	7 September 2017	L8-OLI
Classification	**200-032**	**200-033**	**Platform-Sensor**
LCM-2002	8 March 2000	8 March 2000	L7-ETM+
	12 April 2001	12 April 2001	L7-ETM+
	30 May 2001	30 May 2001	L7-ETM+
	28 June 2000	28 June 2000	L7-ETM+
	17 July 2001	17 July 2001	L7-ETM+
	15 August 2000	15 August 2000	L7-ETM+
	24 September 2000	24 September 2000	L5-TM

The pair of images corresponding to each WRS-2 scene (200-030 and 200-031) was mosaicked to obtain a unified classification ambit. The mosaic of images with the same path-row, but different dates, is indicated with the '&' symbol. L5-TM: Landsat 5 satellite and Thematic Mapper instrument; L7-ETM: Landsat 7 satellite and Enhanced Thematic Mapper Plus instrument; L8-OLI: Landsat 8 satellite and Operational Land Imager instrument. The same procedure was extended to the scenes 200-032 and 200-033.

Table S3. Examples of SQL queries for polygon extraction of forest categories.

Category	SQL statement
CNF	("CNFpl" >= 70 OR "CNF" >= 70 OR "SIOSE_CODE"='CNF') AND ("SIOSE_CODE" NOT LIKE '%FDP%' AND "SIOSE_CODE" NOT LIKE '%FDC%' AND "SIOSE_CODE" NOT LIKE '%ALG%' AND "SIOSE_CODE" NOT LIKE '%LAA%' AND "SIOSE_CODE" NOT LIKE '%LOL%' AND "SIOSE_CODE" NOT LIKE '%LFN%' AND "SIOSE_CODE" NOT LIKE '%CHL%' AND "SIOSE_CODE" NOT LIKE '%LFC%' AND "SIOSE_CODE" NOT LIKE '%LVI%' AND "SIOSE_CODE" NOT LIKE '%LOC%' AND "SIOSE_CODE" NOT LIKE '%CHA%')
FDC	("FDCpl" >= 70 OR "FDCfr" >= 70 OR "FDC" >= 70 OR "SIOSE_CODE"='FDC') AND ("CNF" <= 5 AND "CNFpl" <= 5 AND "FDP" <= 5) AND ("SIOSE_CODE" NOT LIKE '%ALG%' AND "SIOSE_CODE" NOT LIKE '%LAA%' AND "SIOSE_CODE" NOT LIKE '%LOL%' AND "SIOSE_CODE" NOT LIKE '%LFN%' AND "SIOSE_CODE" NOT LIKE '%CHL%' AND "SIOSE_CODE" NOT LIKE '%LFC%' AND "SIOSE_CODE" NOT LIKE '%LVI%' AND "SIOSE_CODE" NOT LIKE '%LOC%' AND "SIOSE_CODE" NOT LIKE '%CHA%')
FDP	("FDP" >= 65 OR "SIOSE_CODE"='FDP') AND ("CNF" < 10 AND "CNFpl" < 10 AND "FDC" < 10) AND ("SIOSE_CODE" NOT LIKE '%ALG%' AND "SIOSE_CODE" NOT LIKE '%LAA%' AND "SIOSE_CODE" NOT LIKE '%LOL%' AND "SIOSE_CODE" NOT LIKE '%LFN%' AND "SIOSE_CODE" NOT LIKE '%CHL%' AND "SIOSE_CODE" NOT LIKE '%LFC%' AND "SIOSE_CODE" NOT LIKE '%LVI%' AND "SIOSE_CODE" NOT LIKE '%LOC%' AND "SIOSE_CODE" NOT LIKE '%CHA%')

SQL statements were generated to extract candidate pixels from the SIOSE 2005 and 2011 datasets. Queries were formulated to identify preferentially pure and high cover fraction polygons. The examples show SQL statements applied to forest categories. The first line defines the minimum cover fraction of the category of interest, followed by a set of limiting or excluding predicates that restrict categories not compatible with the main one. Full category labels can be found in Tables S5-12 and in Section 3.3 of the manuscript.

Table S4. Parametrisation of rule statements defined for each category and geographical context.

Category	Rule 1	Rule 2	Rule 3	Rule 4	Rule 5
CoF	$NDVI_{max} \geq (MED_{max} - 1SDV_{max})$	0.40,0.90	--	0.15, 0.30	--
BDF	$NDVI_{max} \geq (MED_{max} - 1SDV_{max})$	0.50,0.90	--	0.10, 1.00	$(NDVI_{max\ Spring}) < (NDVI_{max\ Summer})$
BEF	$NDVI_{max} \geq (MED_{max} - 1SDV_{max})$	0.40,0.90	--	-0.15, 0.05	--
Shl	$NDVI_{max} \geq (MED_{max} - 1SDV_{max})$	0.15,0.65	--	-0.10,0.10	--
Grl[1]	$NDVI_{max} \geq (MED_{max} - 1SDV_{max})$	0.10,0.60	--	-0.10,0.60	$(NDVI_{max\ Spring}) > (NDVI_{max\ Summer})$
BrS	$NDVI_{max} \leq (MED_{max} + 1SDV_{max})$	-0.05,0.05	--	-0.10,0.05	--
WaB	--	-1.00,0.15	--	0.10,2.00	--
Urb	--	-0.15,0.15	--	0.05,0.15	--
IHC	--	0.05,0.90	1.00,4.50	0.20,1.00	--
DHC	--	0.05,0.90	0.30,4.50	-1.00,-0.05	$(NDVI_{max\ Spring}) > (NDVI_{max\ Summer})$
IWC[3]	--	0.15,0.90	0.75,4.50	0.15,1.00	$(NDVI_{max\ Spring}) < (NDVI_{max\ Summer})$
DWC[4]	--	0.10,0.60	1.00,4.50	0.10,0.10	--
RiC	--	-0.70,0.90	1.50,4.50	0.40,1.00	$(NDVI_{max\ Spring} < 0.05)$ AND $(NDVI_{max\ Summer} > 0.60)$

Rule 1 is the Maximum NDVI temporal response; **Rule 2** is the NDVI range along 'n' dates; **Rule 3** is the Photosynthetic activity for 'n' dates; **Rule 4** is the Contrast between the NDVImax values of the group of dates; **Rule 5** controls Phenological moments. Grl[1] refers to low altitude grasslands; IWC[3] refers to irrigated vineyard woody crops; DWC[4] denotes dry olive groves. Filtering rules are applied to the category candidate pixels derived from purer and high cover fraction SIOSE polygons. Full category labels can be found in Tables S5-12 and in Section 3.3 of the manuscript.

LCM-1987 imagery and SIOSE 2005 as rDS (scenes 200-030–200-031).

Table S5. Confusion matrix **without** the application of filtering rules. SIOSE 2005 rDS ground truth samples and LCM-1987 imagery.

	Ground truth samples															
Classified map	**CoF**	**BDF**	**BEF**	**Shl**	**Grl**	**BrS**	**Urb**	**WaB**	**IHC**	**DHC**	**IWC**	**DWC**	**RiC**	**Total**	**CE (%)**	**UA (%)**
(CoF) Coniferous forest	**65 624**	2 388	4 232	4 071	3 883	163	52	54	23	166	0	139	0	80 797	18.8	81.2
(BDF) Broadleaf deciduous forest	1 914	**39 012**	494	568	7 263	10	3	10	17	191	0	0	0	49 482	21.2	78.8
(BEF) Broadleaf evergreen forest	11 401	5 841	**72 633**	3 044	3 974	107	6	86	18	306	0	127	0	97 544	25.5	74.5
(Shl) Shrublands	2 619	565	2 046	**47 325**	4 650	394	33	29	29	820	35	1 140	0	59 685	20.7	79.3
(Grl) Grasslands	1 237	1 212	925	12 021	**79 822**	1 091	37	44	340	6 720	215	684	0	104 349	23.5	76.5
(BrS) Bare soils	22	6	4	656	1 350	**3 613**	32	3	26	314	0	25	0	6 051	40.3	59.7
(Urb) Urban areas and Infrastructures	1	0	0	35	21	30	**898**	3	12	41	7	13	0	1 061	15.3	84.7
(WaB) Water bodies	0	16	7	5	0	0	1	**1 660**	0	16	0	13	0	1 716	3.3	96.7
(IHC) Irrigated herbaceous crops	120	592	11	173	1 312	53	165	29	**31 467**	3 950	2 162	1 190	0	41 224	23.7	76.3
(DHC) Dry herbaceous crops	223	35	96	1 149	2 176	343	183	108	6 652	**162 202**	2 030	5 965	1 544	182 705	11.2	88.8
(IWC) Irrigated woody crops	127	282	15	349	612	71	117	19	3 547	4 958	**15 196**	3 900	1 544	30 738	50.6	49.4
(DWC) Dry woody crops	619	36	258	4 687	1 784	260	447	67	2 844	13 826	4 573	**74 867**	0	104 269	28.2	71.8
(RiC) Rice crops	33	11	0	173	178	61	69	9	959	406	187	215	**1 544**	3 845	59.8	40.2
NoData	1 129	2 047	276	345	1 238	381	0	0	0	19	0	0	0	5 436		
Total	85 070	52 044	80 997	74 600	108 265	6 575	2 043	2 122	45 934	193 935	24 405	88 278	4 632	768 901	OA = 77.5%	
OE (%)	22.9	25.0	10.3	36.6	26.3	45.1	56.0	21.8	31.5	16.4	37.7	15.2	66.7		OAw = 92.3%	
PA (%)	77.1	75.0	89.7	63.4	73.7	54.9	44.0	78.2	68.5	83.6	62.3	84.8	33.3		k = 0.7	

OE: omission error, CE: commission error, PA: producer's accuracy, UA: user's accuracy, k: kappa index of agreement, OA: overall accuracy, OAw: overall accuracy weighted by the ground truth area considering only classified pixels (unclassified pixels are not considered errors and are solved by spatial proximity).

LCM-1987 imagery and SIOSE 2005 as rDS (scenes 200-030–200-031).

Table S6. Confusion matrix **with** the application of filtering rules. SIOSE 2005 rDS ground truth samples and LCM-1987 imagery.

	Ground truth samples														
Classified map	**CoF**	**BDF**	**BEF**	**Shl**	**Grl**	**BrS**	**Urb**	**WaB**	**IHC**	**DHC**	**IWC**	**DWC**	**Total**	**CE (%)**	**UA (%)**
(CoF) Coniferous forest	**41 259**	559	933	994	1 419	0	0	0	3	12	5	0	45 183	8.7	91.3
(BDF) Broadleaf deciduous forest	739	**80 022**	485	81	891	0	0	0	99	0	2	0	82 321	2.8	97.2
(BEF) Broadleaf evergreen forest	5 295	1 355	**46 933**	1 568	671	0	0	0	1	43	20	0	55 886	16.0	84.0
(Shl) Shrublands	1 989	338	1 437	**116 342**	6 105	123	9	0	17	784	322	855	128 322	9.3	90.7
(Grl) Grasslands	302	469	24	2 805	**77 660**	83	19	0	34	5 104	30	900	87 428	11.2	88.8
(BrS) Bare soils	0	0	0	56	72	**13 486**	157	0	0	1 366	0	222	15 359	12.2	87.8
(Urb) Urban areas and Infrastructures	0	0	0	3	1	90	**2 047**	0	0	132	0	267	2 541	19.4	80.6
(WaB) Water bodies	0	0	0	0	0	0	0	**1 543**	0	0	0	0	1 543	0.0	100.0
(IHC) Irrigated herbaceous crops	1	154	1	4	137	0	0	0	**27 995**	238	1 387	0	29 916	6.4	93.6
(DHC) Dry herbaceous crops	0	0	0	57	1 076	422	43	0	40	**193 282**	15	1 093	196 029	1.4	98.6
(IWC) Irrigated woody crops	10	308	5	307	279	2	6	0	2 019	457	**22 638**	127	26 159	13.5	86.5
(DWC) Dry woody crops	0	0	0	747	850	668	3	0	0	5 904	27	**68 454**	76 653	10.7	89.3
NoData	0	0	0	0	0	0	0	0	0	0	0	0	0		
Total	49 595	83 205	49 818	122 964	89 161	14 874	2 284	1 543	30 207	207 321	24 447	71 920	747 340	OA = 92.6%	
OE (%)	16.8	3.8	5.8	5.4	12.9	9.3	10.4	0.0	7.3	6.8	7.4	4.8		OAw = 95.9%	
PA (%)	83.2	96.2	94.2	94.6	87.1	90.7	89.6	100.0	92.7	93.2	92.6	95.2		*k* = 0.9	

OE: omission error, CE: commission error, PA: producer's accuracy, UA: user's accuracy, *k*: kappa index of agreement, OA: overall accuracy, OAw: overall accuracy weighted by the ground truth area considering only classified pixels (unclassified pixels are not considered errors and are solved by spatial proximity).

LCM-2002 imagery and SIOSE 2005 as rDS (scenes 200-030–200-031).

Table S7. Confusion matrix **without** the application of filtering rules. SIOSE 2005 rDS ground truth samples and LCM-2002 imagery.

	Ground truth samples															
Classified map	**CoF**	**BDF**	**BEF**	**Shl**	**Grl**	**BrS**	**Urb**	**WaB**	**IHC**	**DHC**	**IWC**	**DWC**	**RiC**	**Total**	**CE (%)**	**UA (%)**
(CoF) Coniferous forest	**50 907**	823	1 058	1 612	295	34	31	25	11	55	15	29	1	54 895	7.3	92.7
(BDF) Broadleaf deciduous forest	1 044	**67 728**	1 403	1 884	1 077	91	0	11	163	173	59	0	0	73 634	8.0	92.0
(BEF) Broadleaf evergreen forest	5 640	1 644	**60 658**	7 398	785	109	5	26	41	197	5	27	0	76 534	20.7	79.3
(Shl) Shrublands	3 715	1 587	3 007	**115 688**	9 356	938	160	105	301	2 450	180	2 154	7	139 649	17.2	82.8
(Grl) Grasslands	504	678	429	13 544	**86 142**	1 135	39	18	824	8 148	224	1 252	11	112 948	23.7	76.3
(BrS) Bare soils	64	54	52	488	1 214	**3 545**	78	0	58	625	23	67	0	6 268	43.4	56.6
(Urb) Urban areas and Infrastructures	1	3	0	66	53	57	**2 802**	7	48	300	57	112	1	3 507	20.1	79.9
(WaB) Water bodies	1	10	0	5	9	2	0	**1 488**	1	22	0	4	0	1 543	3.5	96.5
(IHC) Irrigated herbaceous crops	17	184	3	424	868	155	145	13	**37 114**	5 524	1 526	825	304	47 100	21.2	78.8
(DHC) Dry herbaceous crops	55	51	43	1 647	1 853	636	293	82	6 709	**175 596**	984	2 764	17	190 729	7.9	92.1
(IWC) Irrigated woody crops	26	146	12	274	231	101	226	12	2 154	921	**9 841**	4 011	27	17 982	45.3	54.7
(DWC) Dry woody crops	99	11	22	1 614	545	124	368	26	967	2 748	3 098	**29 232**	12	38 866	24.8	75.2
(RiC) Rice crops	5	11	0	20	12	1	6	4	667	34	10	2	**1 494**	2 267	34.1	65.9
NoData	31	120	51	84	111	149	0	0	0	0	0	0	0	547		
Total	62 110	73 049	66 739	144 748	102 552	7 077	4 153	1 817	49 057	196 793	16 021	40 479	1 875	766 469	OA = 83.8%	
OE (%)	18.0	7.3	9.1	20.1	16.0	49.9	32.5	18.1	24.3	10.8	38.6	27.8	20.3		OAw = 88.6%	
PA (%)	82.0	92.7	90.9	79.9	84.0	50.1	67.5	81.9	75.7	89.2	61.4	72.2	79.7		*k* = 0.7	

OE: omission error, CE: commission error, PA: producer's accuracy, UA: user's accuracy, *k*: kappa index of agreement, OA: overall accuracy, OAw: overall accuracy weighted by the ground truth area considering only classified pixels (unclassified pixels are not considered errors and are solved by spatial proximity).

LCM-2002 imagery and SIOSE 2005 as rDS (scenes 200-030–200-031).

Table S8. Confusion matrix with the application of filtering rules. SIOSE 2005 rDS ground truth samples and LCM-2002 imagery.

	Ground truth samples														
Classified map	CoF	BDF	BEF	Shl	Grl	BrS	Urb	WaB	IHC	DHC	IWC	DWC	RiC	Total	CE (%)	UA (%)
(CoF) Coniferous forest	**46 959**	226	525	311	222	0	0	0	3	4	4	0	0	48 254	2.7	97.3
(BDF) Broadleaf deciduous forest	388	**83 499**	330	55	906	0	0	0	94	0	33	0	0	85 306	2.1	97.9
(BEF) Broadleaf evergreen forest	4 891	934	**52 718**	3 278	300	0	0	0	7	17	13	0	0	62 157	15.2	84.8
(Shl) Shrublands	1 634	311	1 889	**115 291**	6 468	97	39	0	15	410	337	1 178	0	127 670	9.7	90.3
(Grl) Grasslands	48	342	18	4 281	**84 012**	32	13	0	66	3 616	14	1 481	0	93 924	10.6	89.4
(BrS) Bare soils	0	0	0	16	33	**10 379**	494	0	0	1 711	0	60	0	12 692	18.2	81.8
(Urb) Urban areas and Infrastructures	0	0	0	4	1	79	**5 678**	0	0	220	1	133	0	6 117	7.2	92.8
(WaB) Water bodies	0	0	0	0	0	0	0	**1 578**	0	0	0	0	0	1 578	0.0	100.0
(IHC) Irrigated herbaceous crops	2	84	0	15	134	0	0	0	**27 676**	181	507	0	5	28 603	3.2	96.8
(DHC) Dry herbaceous crops	0	0	0	57	624	874	759	0	23	**189 497**	13	1 344	0	193 191	1.9	98.1
(IWC) Irrigated woody crops	16	277	18	232	296	0	18	0	1 640	183	**25 474**	90	0	28 244	9.8	90.2
(DWC) Dry woody crops	1	0	0	1 422	1 208	333	0	0	9	5 266	96	**68 756**	0	77 090	10.8	89.2
(RiC) Rice crops	0	0	0	0	0	0	0	0	201	0	0	0	**958**	1 159	17.3	82.7
NoData	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
Total	53 939	85 672	55 499	124 963	94 204	11 794	7 002	1 578	29 735	201 105	26 492	73 042	963	765 986	OA = 93.0%	
OE (%)	12.9	2.5	5.0	7.7	10.8	12.0	18.9	0.0	6.9	5.8	3.8	5.9	0.5		OAw = 95.9%	
PA (%)	87.1	97.5	95.0	92.3	89.2	88.0	81.1	100.0	93.1	94.2	96.2	94.1	99.5		*k* = 0.9	

OE: omission error, CE: commission error, PA: producer's accuracy, UA: user's accuracy, *k*: kappa index of agreement, OA: overall accuracy, OAw: overall accuracy weighted by the ground truth area considering only classified pixels (unclassified pixels are not considered errors and are solved by spatial proximity).

LCM-2017 imagery and SIOSE 2005 as rDS (scenes 200-030–200-031).

Table S9. Confusion matrix **without** the application of filtering rules. SIOSE 2005 rDS ground truth samples and LCM-2017 imagery.

	Ground truth samples															
Classified map	**CoF**	**BDF**	**BEF**	**Shl**	**Grl**	**BrS**	**Urb**	**WaB**	**IHC**	**DHC**	**IWC**	**DWC**	**RiC**	**Total**	**CE (%)**	**UA (%)**
(CoF) Coniferous forest	**75 220**	1 644	2 194	3 279	1 569	87	51	8	35	185	13	284	8	84 578	11.1	88.9
(BDF) Broadleaf deciduous forest	2 164	**46 233**	748	922	3 721	5	0	7	22	84	2	0	0	53 907	14.2	85.8
(BEF) Broadleaf evergreen forest	5 869	3 087	**60 513**	4 299	1 275	98	7	1	14	244	0	95	0	75 503	19.9	80.1
(Shl) Shrublands	2 531	836	2 444	**40 383**	5 566	316	38	5	44	565	36	1 129	8	53 900	25.1	74.9
(Grl) Grasslands	1 483	2 956	535	12 854	**88 801**	2 039	203	6	414	6 045	149	2 109	0	117 594	24.5	75.5
(BrS) Bare soils	26	11	5	585	920	**3 494**	149	1	138	541	76	71	0	6 018	41.9	58.1
(Urb) Urban areas and Infrastructures	5	0	0	41	43	114	**3 665**	8	112	206	22	103	0	4 320	15.2	84.8
(WaB) Water bodies	1	6	0	5	18	0	11	**2 351**	14	36	0	8	0	2 450	4.1	95.9
(IHC) Irrigated herbaceous crops	177	363	20	318	1 207	38	56	10	**37 276**	11 288	1 997	1 816	299	54 867	32.1	67.9
(DHC) Dry herbaceous crops	82	34	66	705	1 605	251	118	9	7 517	**160 165**	1 038	3 957	17	175 563	8.8	91.2
(IWC) Irrigated woody crops	216	691	34	343	1 373	33	94	9	3 692	2 252	**15 878**	6 381	91	31 087	48.9	51.1
(DWC) Dry woody crops	596	66	176	4 770	2 236	267	569	22	1 941	6 188	8 134	**63 415**	17	88 396	28.3	71.7
(RiC) Rice crops	11	40	1	9	62	0	2	14	1 450	472	51	79	**2 843**	5 034	43.5	56.5
NoData	3 196	2 653	375	508	2 094	420	67	34	0	94	0	16	0	9 457		
Total	91 578	58 619	67 113	69 021	110 491	7 162	5 031	2 483	52 669	188 367	27 395	79 463	3 284	762 674	OA = 78.7%	
OE (%)	17.9	21.1	9.8	41.5	19.6	51.2	27.1	5.3	29.2	15.0	42.0	20.2	13.4		OAw = 89.9%	
PA (%)	82.1	78.9	90.2	58.5	80.4	48.8	72.9	94.7	70.8	85.0	58.0	79.8	86.6		*k* = 0.7	

OE: omission error, CE: commission error, PA: producer's accuracy, UA: user's accuracy, *k*: kappa index of agreement, OA: overall accuracy, OAw: overall accuracy weighted by the ground truth area considering only classified pixels (unclassified pixels are not considered errors and are solved by spatial proximity).

LCM-2017 imagery and SIOSE 2005 as rDS (scenes 200-030–200-031).

Table S10. Confusion matrix **with** the application of filtering rules. SIOSE 2005 rDS ground truth samples and LCM-2017 imagery.

	Ground truth samples															
Classified map	**CoF**	**BDF**	**BEF**	**Shl**	**Grl**	**BrS**	**Urb**	**WaB**	**IHC**	**DHC**	**IWC**	**DWC**	**RiC**	**Total**	**CE (%)**	**UA (%)**
(CoF) Coniferous forest	**60 146**	365	642	793	250	0	0	0	33	17	82	0	0	62 328	3.5	96.5
(BDF) Broadleaf deciduous forest	981	**80 755**	174	21	1 372	0	0	0	125	0	49	0	0	83 476	3.3	96.7
(BEF) Broadleaf evergreen forest	4 329	311	**56 333**	3 482	481	0	0	0	6	75	27	0	0	65 044	13.4	86.6
(Shl) Shrublands	2 141	263	1 016	**140 197**	2 638	330	64	0	70	1 039	1 007	774	0	149 537	6.2	93.8
(Grl) Grasslands	360	976	78	3 304	**59 121**	10	22	0	129	2 273	309	657	0	67 239	12.1	87.9
(BrS) Bare soils	0	0	0	447	15	**13 443**	493	1	0	2 080	17	788	0	17 284	22.2	77.8
(Urb) Urban areas and Infrastructures	0	0	0	7	8	84	**6 790**	0	0	376	56	1 942	0	9 263	26.7	73.3
(WaB) Water bodies	0	0	0	0	0	0	0	**1 922**	0	0	0	0	0	1 922	0.0	100.0
(IHC) Irrigated herbaceous crops	9	177	0	104	246	0	0	0	**39 467**	555	1 570	0	11	42 139	6.3	93.7
(DHC) Dry herbaceous crops	0	0	1	178	636	159	45	0	160	**190 102**	214	1 285	0	192 780	1.4	98.6
(IWC) Irrigated woody crops	19	40	2	145	78	0	11	0	624	312	**20 168**	29	0	21 428	5.9	94.1
(DWC) Dry woody crops	1	0	0	431	246	315	3	0	2	3 417	202	**25 342**	0	29 959	15.4	84.6
(RiC) Rice crops	0	0	0	0	0	0	0	0	29	0	0	0	**138**	168	17.6	82.4
NoData	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
Total	67 984	82 886	58 246	149 110	65 091	14 341	7 428	1 922	40 646	200 245	23 702	30 816	149	742 566	OA = 93.5%	
OE (%)	11.5	2.6	3.3	6.0	9.2	6.3	8.6	0.0	2.9	5.1	14.9	17.8	7.1		OAw = 96.0%	
PA (%)	88.5	97.4	96.7	94.0	90.8	93.7	91.4	100.0	97.1	94.9	85.1	82.2	92.9		*k* = 0.9	

OE: omission error, CE: commission error, PA: producer's accuracy, UA: user's accuracy, *k*: kappa index of agreement, OA: overall accuracy, OAw: overall accuracy weighted by the ground truth area considering only classified pixels (unclassified pixels are not considered errors and are solved by spatial proximity).

LCM-2012 imagery and SIOSE 2011 as rDS (scenes 200-030–200-031).

Table S11. Confusion matrix **without** the application of filtering rules. SIOSE 2011 rDS ground truth samples and LCM-2012 imagery.

	Ground truth samples															
Classified map	**CoF**	**BDF**	**BEF**	**Shl**	**Grl**	**BrS**	**Urb**	**WaB**	**IHC**	**DHC**	**IWC**	**DWC**	**RiC**	**Total**	**CE (%)**	**UA (%)**
(CoF) Coniferous forest	**74 750**	551	1 020	1 818	501	32	43	7	30	149	11	37	0	78 949	5.3	94.7
(BDF) Broadleaf deciduous forest	558	**105 845**	2 338	2 110	2 406	39	13	14	70	365	76	41	0	113 874	7.1	92.9
(BEF) Broadleaf evergreen forest	5 515	2 052	**78 566**	5 252	1 285	101	7	0	11	352	7	47	0	93 195	15.7	84.3
(Shl) Shrublands	3 482	1 316	2 349	**140 989**	13 887	2 166	445	16	653	3 633	253	2 188	5	171 383	17.7	82.3
(Grl) Grasslands	394	1 284	473	15 741	**123 122**	1 995	172	58	1 059	9 369	173	1 081	0	154 920	20.5	79.5
(BrS) Bare soils	25	17	18	1 227	810	**6 763**	180	21	43	747	13	139	0	10 004	32.4	67.6
(Urb) Urban areas and Infrastructures	4	0	0	61	54	265	**7 358**	12	137	255	8	54	2	8 211	10.4	89.6
(WaB) Water bodies	0	11	0	13	51	0	0	**3 661**	0	14	0	0	2	3 753	2.5	97.5
(IHC) Irrigated herbaceous crops	46	244	33	699	1 564	302	299	7	**57 684**	10 258	2 784	1 165	650	75 735	23.8	76.2
(DHC) Dry herbaceous crops	128	76	70	1 934	2 303	1 046	286	5	8 254	**220 416**	281	1 775	26	236 601	6.8	93.2
(IWC) Irrigated woody crops	7	216	20	194	445	41	119	0	2 092	686	**12 349**	4 495	39	20 703	40.4	59.6
(DWC) Dry woody crops	67	3	7	720	531	126	233	5	645	1 746	2 933	**20 975**	2	27 995	25.1	74.9
(RiC) Rice crops	0	21	7	11	12	9	0	7	500	47	63	3	**3 145**	3 827	17.8	82.2
NoData	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
Total	84 977	111 636	84 903	170 772	146 972	12 884	9 156	3 811	71 179	248 036	18 952	32 001	3 872	999 150	OA = 85.6%	
OE (%)	12.0	5.2	7.5	17.4	16.2	47.5	19.6	3.9	19.0	11.1	34.8	34.5	18.8		OAw = 94.2%	
PA (%)	88.0	94.8	92.5	82.6	83.8	52.5	80.4	96.1	81.0	88.9	65.2	65.5	81.2		k = 0.8	

OE: omission error, CE: commission error, PA: producer's accuracy, UA: user's accuracy, k: kappa index of agreement, OA: overall accuracy, OAw: overall accuracy weighted by the ground truth area considering only classified pixels (unclassified pixels are not considered errors and are solved by spatial proximity).

LCM-2012 imagery and SIOSE 2011 as rDS (scenes 200-030–200-031).

Table S12. Confusion matrix **with** the application of filtering rules. SIOSE 2011 rDS ground truth samples and LCM-2012 imagery.

	Ground truth samples															
Classified map	**CoF**	**BDF**	**BEF**	**Shl**	**Grl**	**BrS**	**Urb**	**WaB**	**IHC**	**DHC**	**IWC**	**DWC**	**RiC**	**Total**	**CE (%)**	**UA (%)**
(CoF) Coniferous forest	**61 433**	244	520	412	142	0	0	0	11	1	2	0	0	62 765	2.1	97.9
(BDF) Broadleaf deciduous forest	100	**81 034**	39	83	836	0	0	0	50	1	24	0	0	82 168	1.4	98.6
(BEF) Broadleaf evergreen forest	4 720	503	**56 536**	3 014	505	0	0	0	5	36	9	0	0	65 327	13.5	86.5
(Shl) Shrublands	1 838	544	1 336	**142 670**	2 259	315	67	0	91	1 262	1 010	257	0	151 651	5.9	94.1
(Grl) Grasslands	130	723	19	2 132	**60 686**	41	8	0	42	2 360	63	299	0	66 505	8.8	91.2
(BrS) Bare soils	0	0	0	483	30	**12 399**	615	0	0	1 508	0	173	0	15 209	18.5	81.5
(Urb) Urban areas and Infrastructures	0	0	0	2	0	169	**6 540**	3	0	224	0	19	0	6 957	6.0	94.0
(WaB) Water bodies	0	0	0	0	0	0	0	**1 925**	0	0	0	0	0	1 925	0.0	100.0
(IHC) Irrigated herbaceous crops	1	112	0	76	114	0	0	0	**39 728**	155	1 577	0	7	41 772	4.9	95.1
(DHC) Dry herbaceous crops	0	0	0	160	446	907	215	1	128	**190 777**	53	627	0	193 313	1.3	98.7
(IWC) Irrigated woody crops	5	24	5	200	63	0	8	0	732	390	**20 892**	33	0	22 352	6.5	93.5
(DWC) Dry woody crops	0	0	0	412	242	562	0	0	2	4 247	156	**29 519**	0	35 141	16.0	84.0
(RiC) Rice crops	0	0	0	0	0	0	0	0	2	0	0	0	**142**	144	1.6	98.4
NoData	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
Total	68 228	83 183	58 455	149 645	65 324	14 392	7 455	1 929	40 792	200 963	23 787	30 927	149	745 229	OA = 94.2%	
OE (%)	10.0	2.6	3.3	4.7	7.1	13.9	12.3	0.2	2.6	5.1	12.2	4.6	5.0		OAw = 96.7%	
PA (%)	90.0	97.4	96.7	95.3	92.9	86.1	87.7	99.8	97.4	94.9	87.8	95.4	95.0		*k* = 0.9	

OE: omission error, CE: commission error, PA: producer's accuracy, UA: user's accuracy, *k*: kappa index of agreement, OA: overall accuracy, OAw: overall accuracy weighted by the ground truth area considering only classified pixels (unclassified pixels are not considered errors and are solved by spatial proximity).

LCM-2002 imagery and SIOSE 2005 as rDS (scenes 200-032–200-033).

Table S13. Confusion matrix **without** the application of filtering rules. SIOSE 2005 rDS ground truth samples and LCM-2002 imagery.

	Ground truth samples														
Classified map	**CoF**	**BDF**	**BEF**	**Shl**	**Grl**	**BrS**	**Urb**	**WaB**	**IHC**	**DHC**	**IWC**	**DWC**	**Total**	**CE (%)**	**UA (%)**
(CoF) Coniferous forest	**139 100**	1 129	14 789	2 731	4 159	593	17	382	71	442	15	575	164 002	15.2	84.8
(BDF) Broadleaf deciduous forest	568	**15 453**	3 486	373	876	17	0	2	34	68	10	11	20 897	26.1	73.9
(BEF) Broadleaf evergreen forest	14 228	2 411	**179 708**	7 410	12 771	273	8	2	40	317	58	2 818	220 046	18.3	81.7
(Shl) Shrublands	1 454	128	2 820	**21 941**	5 561	171	6	2	2	153	62	504	32 804	33.1	66.9
(Grl) Grasslands	2 461	420	8 327	9 404	**200 089**	2 142	123	16	215	13 651	181	3 690	240 720	16.9	83.1
(BrS) Bare soils	57	8	87	253	1 719	**6 163**	71	4	23	1 504	23	705	10 615	41.9	58.1
(Urb) Urban areas and Infrastructures	26	0	5	3	121	154	**1 703**	0	1	163	21	253	2 448	30.5	69.5
(WaB) Water bodies	0	0	0	0	121	0	0	**2 640**	2	59	0	0	2 821	6.4	93.6
(IHC) Irrigated herbaceous crops	7	51	14	21	363	17	14	0	**27 246**	6 410	94	183	34 420	20.8	79.2
(DHC) Dry herbaceous crops	312	13	160	168	6 619	1 455	102	6	3 934	**392 302**	764	3 473	409 306	4.2	95.8
(IWC) Irrigated woody crops	127	13	87	67	484	107	179	2	348	1 412	**12 498**	16 234	31 558	60.4	39.6
(DWC) Dry woody crops	1 438	233	2 583	767	3 456	994	955	2	1 123	16 958	7 175	**193 142**	228 827	15.6	84.4
NoData	1 044	10	192	80	140	55	0	0	0	0	0	13	1 534		
Total	160 823	19 867	212 256	43 217	236 479	12 142	3 177	3 058	33 040	433 439	20 901	221 601	1 400 000	OA = 85.1%	
OE (%)	13.5	22.2	15.3	49.2	15.4	49.2	46.4	13.7	17.5	9.5	40.2	12.8		OAw = 93.3%	
PA (%)	86.5	77.8	84.7	50.8	84.6	50.8	53.6	86.3	82.5	90.5	59.8	87.2		k = 0.7	

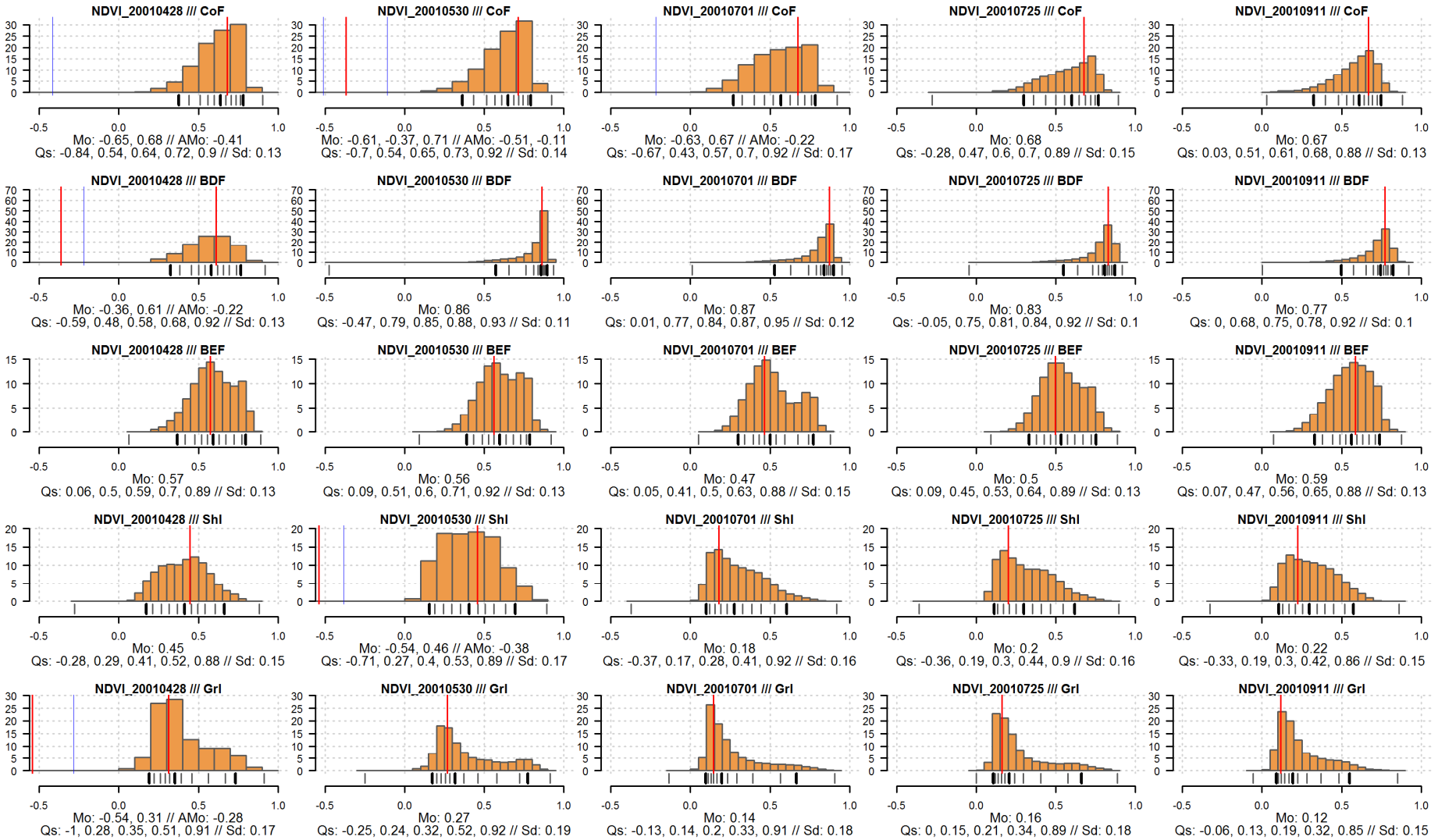
OE: omission error, CE: commission error, PA: producer's accuracy, UA: user's accuracy, *k*: kappa index of agreement, OA: overall accuracy, OAw: overall accuracy weighted by the ground truth area considering only classified pixels (unclassified pixels are not considered errors and are solved by spatial proximity).

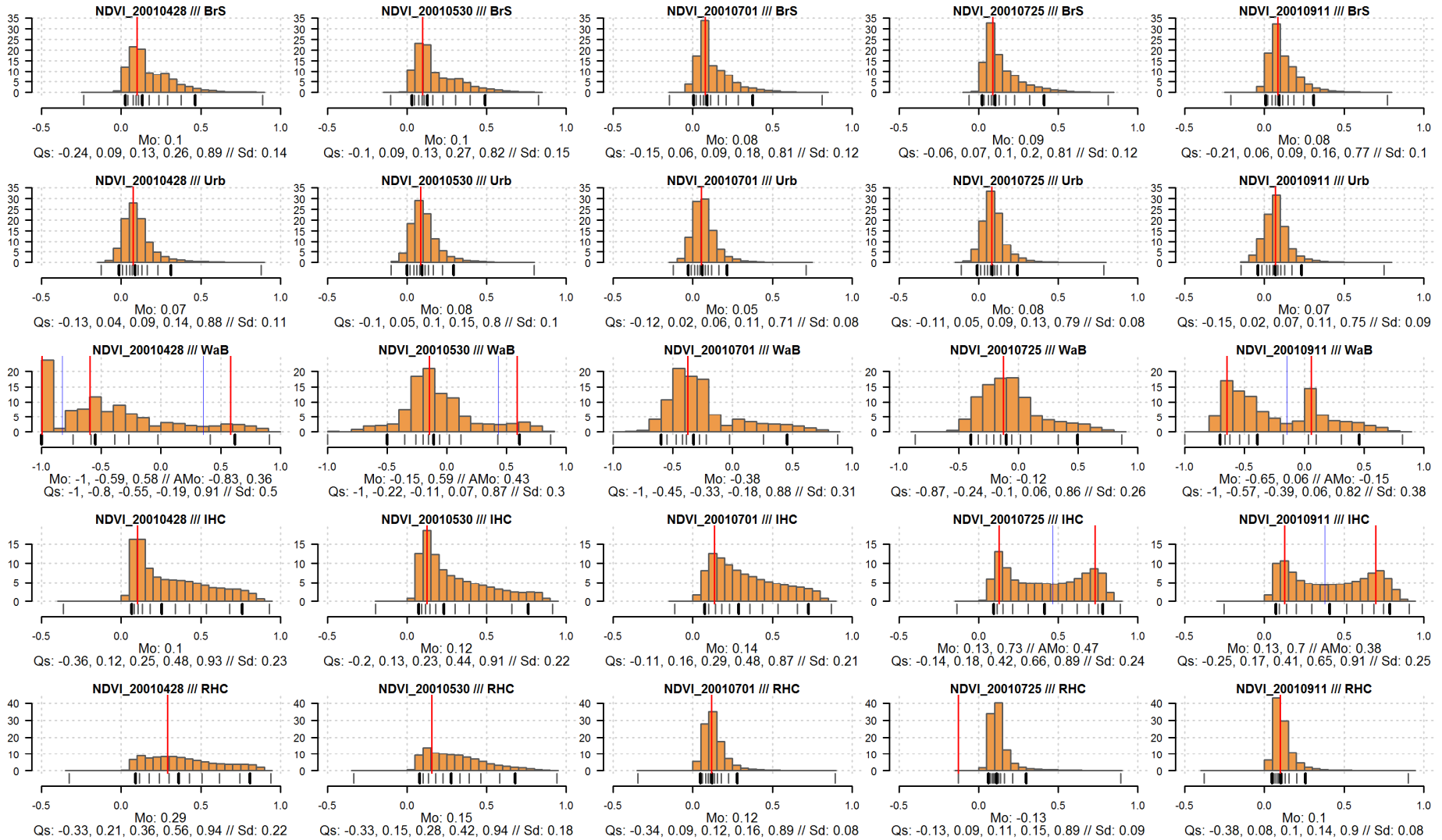
LCM-2002 imagery and SIOSE 2005 as rSD (scenes 200-032–200-033).

Table S14. Confusion matrix **with** the application of filtering rules. SIOSE 2005 rDS ground truth samples and LCM-2002 imagery.

	Ground truth samples														
Classified map	**CoF**	**BDF**	**BEF**	**Shl**	**Grl**	**BrS**	**Urb**	**WaB**	**IHC**	**DHC**	**IWC**	**DWC**	**Total**	**CE (%)**	**UA (%)**
(CoF) Coniferous forest	**121 586**	239	6 133	893	581	0	0	0	0	2	46	0	129 480	6.1	93.9
(BDF) Broadleaf deciduous forest	308	**16 620**	2 253	190	225	0	0	0	24	0	0	0	19 619	15.3	84.7
(BEF) Broadleaf evergreen forest	8 481	920	**177 990**	7 293	5 483	0	0	0	6	75	1 048	0	201 295	11.6	88.4
(Shl) Shrublands	757	30	1 622	**41 975**	5 342	159	4	0	0	33	433	58	50 414	16.7	83.3
(Grl) Grasslands	140	11	1 663	9 199	**217 645**	1 299	20	0	6	9 604	99	1 619	241 305	9.8	90.2
(BrS) Bare soils	0	0	0	190	2 615	**22 713**	115	0	0	1 917	0	810	28 361	19.9	80.1
(Urb) Urban areas and Infrastructures	0	0	0	0	0	169	**1 958**	0	0	71	0	86	2 283	14.2	85.8
(WaB) Water bodies	0	0	0	0	0	0	0	**3 680**	0	0	0	0	3 680	0.0	100.0
(IHC) Irrigated herbaceous crops	0	21	0	8	89	0	0	0	**23 975**	121	69	0	24 282	1.3	98.7
(DHC) Dry herbaceous crops	0	0	0	22	3 763	1 041	26	0	14	**422 871**	0	2 083	429 819	1.6	98.4
(IWC) Irrigated woody crops	78	9	918	491	380	0	18	0	123	292	**65 878**	10	68 195	3.4	96.6
(DWC) Dry woody crops	0	0	0	201	1 809	2 826	1 026	0	4	19 427	46	**175 928**	201 267	12.6	87.4
NoData	0	0	0	0	0	0	0	0	0	0	0	0	0		
Total	131 349	17 850	190 580	60 461	237 932	28 206	3 166	3 680	24 152	454 412	67 618	180 594	1 400 000	OA = 92.3%	
OE (%)	7.4	6.9	6.6	30.6	8.5	19.5	38.2	0.0	0.7	6.9	2.6	2.6		OAw = 96.4%	
PA (%)	92.6	93.1	93.4	69.4	91.5	80.5	61.8	100.0	99.3	93.1	97.4	97.4		k = 0.9	

OE: omission error, CE: commission error, PA: producer's accuracy, UA: user's accuracy, k: kappa index of agreement, OA: overall accuracy, OAw: overall accuracy weighted by the ground truth area considering only classified pixels (unclassified pixels are not considered errors and are solved by spatial proximity).


NDVI_20010428 /// CoF
Mo: -0.65, 0.68 // AMo: -0.41
Qs: -0.84, 0.54, 0.64, 0.72, 0.9 // Sd: 0.13
NDVI_20010530 /// CoF
Mo: -0.61, -0.37, 0.71 // AMo: -0.51, -0.11
Qs: -0.7, 0.54, 0.65, 0.73, 0.92 // Sd: 0.14
NDVI_20010701 /// CoF
Mo: -0.63, 0.67 // AMo: -0.22
Qs: -0.67, 0.43, 0.57, 0.7, 0.92 // Sd: 0.17
NDVI_20010725 /// CoF
Mo: 0.68
Qs: -0.28, 0.47, 0.6, 0.7, 0.89 // Sd: 0.15
NDVI_20010911 /// CoF
Mo: 0.67
Qs: 0.03, 0.51, 0.61, 0.68, 0.88 // Sd: 0.13
NDVI_20010428 /// BDF
Mo: -0.36, 0.61 // AMo: -0.22
Qs: -0.59, 0.48, 0.58, 0.68, 0.92 // Sd: 0.13
NDVI_20010530 /// BDF
Mo: 0.86
Qs: -0.47, 0.79, 0.85, 0.88, 0.93 // Sd: 0.11
NDVI_20010701 /// BDF
Mo: 0.87
Qs: 0.01, 0.77, 0.84, 0.87, 0.95 // Sd: 0.12
NDVI_20010725 /// BDF
Mo: 0.83
Qs: -0.05, 0.75, 0.81, 0.84, 0.92 // Sd: 0.1
NDVI_20010911 /// BDF
Mo: 0.77
Qs: 0, 0.68, 0.75, 0.78, 0.92 // Sd: 0.1
NDVI_20010428 /// BEF
Mo: 0.57
Qs: 0.06, 0.5, 0.59, 0.7, 0.89 // Sd: 0.13
NDVI_20010530 /// BEF
Mo: 0.56
Qs: 0.09, 0.51, 0.6, 0.71, 0.92 // Sd: 0.13
NDVI_20010701 /// BEF
Mo: 0.47
Qs: 0.05, 0.41, 0.5, 0.63, 0.88 // Sd: 0.15
NDVI_20010725 /// BEF
Mo: 0.5
Qs: 0.09, 0.45, 0.53, 0.64, 0.89 // Sd: 0.13
NDVI_20010911 /// BEF
Mo: 0.59
Qs: 0.07, 0.47, 0.56, 0.65, 0.88 // Sd: 0.13
NDVI_20010428 /// ShI
Mo: 0.45
Qs: -0.28, 0.29, 0.41, 0.52, 0.88 // Sd: 0.15
NDVI_20010530 /// ShI
Mo: -0.54, 0.46 // AMo: -0.38
Qs: -0.71, 0.27, 0.4, 0.53, 0.89 // Sd: 0.17
NDVI_20010701 /// ShI
Mo: 0.18
Qs: -0.37, 0.17, 0.28, 0.41, 0.92 // Sd: 0.16
NDVI_20010725 /// ShI
Mo: 0.2
Qs: -0.36, 0.19, 0.3, 0.44, 0.9 // Sd: 0.16
NDVI_20010911 /// ShI
Mo: 0.22
Qs: -0.33, 0.19, 0.3, 0.42, 0.86 // Sd: 0.15
NDVI_20010428 /// GrI
Mo: -0.54, 0.31 // AMo: -0.28
Qs: -1, 0.28, 0.35, 0.51, 0.91 // Sd: 0.17
NDVI_20010530 /// GrI
Mo: 0.27
Qs: -0.25, 0.24, 0.32, 0.52, 0.92 // Sd: 0.19
NDVI_20010701 /// GrI
Mo: 0.14
Qs: -0.13, 0.14, 0.2, 0.33, 0.91 // Sd: 0.18
NDVI_20010725 /// GrI
Mo: 0.16
Qs: 0, 0.15, 0.21, 0.34, 0.89 // Sd: 0.18
NDVI_20010911 /// GrI
Mo: 0.12
Qs: -0.06, 0.13, 0.19, 0.32, 0.85 // Sd: 0.15


NDVI_20010428 /// BrS
Mo: 0.1
Qs: -0.24, 0.09, 0.13, 0.26, 0.89 // Sd: 0.14
NDVI_20010530 /// BrS
Mo: 0.1
Qs: -0.1, 0.09, 0.13, 0.27, 0.82 // Sd: 0.15
NDVI_20010701 /// BrS
Mo: 0.08
Qs: -0.15, 0.06, 0.09, 0.18, 0.81 // Sd: 0.12
NDVI_20010725 /// BrS
Mo: 0.09
Qs: -0.06, 0.07, 0.1, 0.2, 0.81 // Sd: 0.12
NDVI_20010911 /// BrS
Mo: 0.08
Qs: -0.21, 0.06, 0.09, 0.16, 0.77 // Sd: 0.1
NDVI_20010428 /// Urb
Mo: 0.07
Qs: -0.13, 0.04, 0.09, 0.14, 0.88 // Sd: 0.11
NDVI_20010530 /// Urb
Mo: 0.08
Qs: -0.1, 0.05, 0.1, 0.15, 0.8 // Sd: 0.1
NDVI_20010701 /// Urb
Mo: 0.05
Qs: -0.12, 0.02, 0.06, 0.11, 0.71 // Sd: 0.08
NDVI_20010725 /// Urb
Mo: 0.08
Qs: -0.11, 0.05, 0.09, 0.13, 0.79 // Sd: 0.08
NDVI_20010911 /// Urb
Mo: 0.07
Qs: -0.15, 0.02, 0.07, 0.11, 0.75 // Sd: 0.09
NDVI_20010428 /// WaB
Mo: -1, -0.59, 0.58 // AMo: -0.83, 0.36
Qs: -1, -0.8, -0.55, -0.19, 0.91 // Sd: 0.5
NDVI_20010530 /// WaB
Mo: -0.15, 0.59 // AMo: 0.43
Qs: -1, -0.22, -0.11, 0.07, 0.87 // Sd: 0.3
NDVI_20010701 /// WaB
Mo: -0.38
Qs: -1, -0.45, -0.33, -0.18, 0.88 // Sd: 0.31
NDVI_20010725 /// WaB
Mo: -0.12
Qs: -0.87, -0.24, -0.1, 0.06, 0.86 // Sd: 0.26
NDVI_20010911 /// WaB
Mo: -0.65, 0.06 // AMo: -0.15
Qs: -1, -0.57, -0.39, 0.06, 0.82 // Sd: 0.38
NDVI_20010428 /// IHC
Mo: 0.1
Qs: -0.36, 0.12, 0.25, 0.48, 0.93 // Sd: 0.23
NDVI_20010530 /// IHC
Mo: 0.12
Qs: -0.2, 0.13, 0.23, 0.44, 0.91 // Sd: 0.22
NDVI_20010701 /// IHC
Mo: 0.14
Qs: -0.11, 0.16, 0.29, 0.48, 0.87 // Sd: 0.21
NDVI_20010725 /// IHC
Mo: 0.13, 0.73 // AMo: 0.47
Qs: -0.14, 0.18, 0.42, 0.66, 0.89 // Sd: 0.24
NDVI_20010911 /// IHC
Mo: 0.13, 0.7 // AMo: 0.38
Qs: -0.25, 0.17, 0.41, 0.65, 0.91 // Sd: 0.25
NDVI_20010428 /// RHC
Mo: 0.29
Qs: -0.33, 0.21, 0.36, 0.56, 0.94 // Sd: 0.22
NDVI_20010530 /// RHC
Mo: 0.15
Qs: -0.33, 0.15, 0.28, 0.42, 0.94 // Sd: 0.18
NDVI_20010701 /// RHC
Mo: 0.12
Qs: -0.34, 0.09, 0.12, 0.16, 0.89 // Sd: 0.08
NDVI_20010725 /// RHC
Mo: -0.13
Qs: -0.13, 0.09, 0.11, 0.15, 0.89 // Sd: 0.09
NDVI_20010911 /// RHC
Mo: 0.1
Qs: -0.38, 0.08, 0.1, 0.14, 0.9 // Sd: 0.08

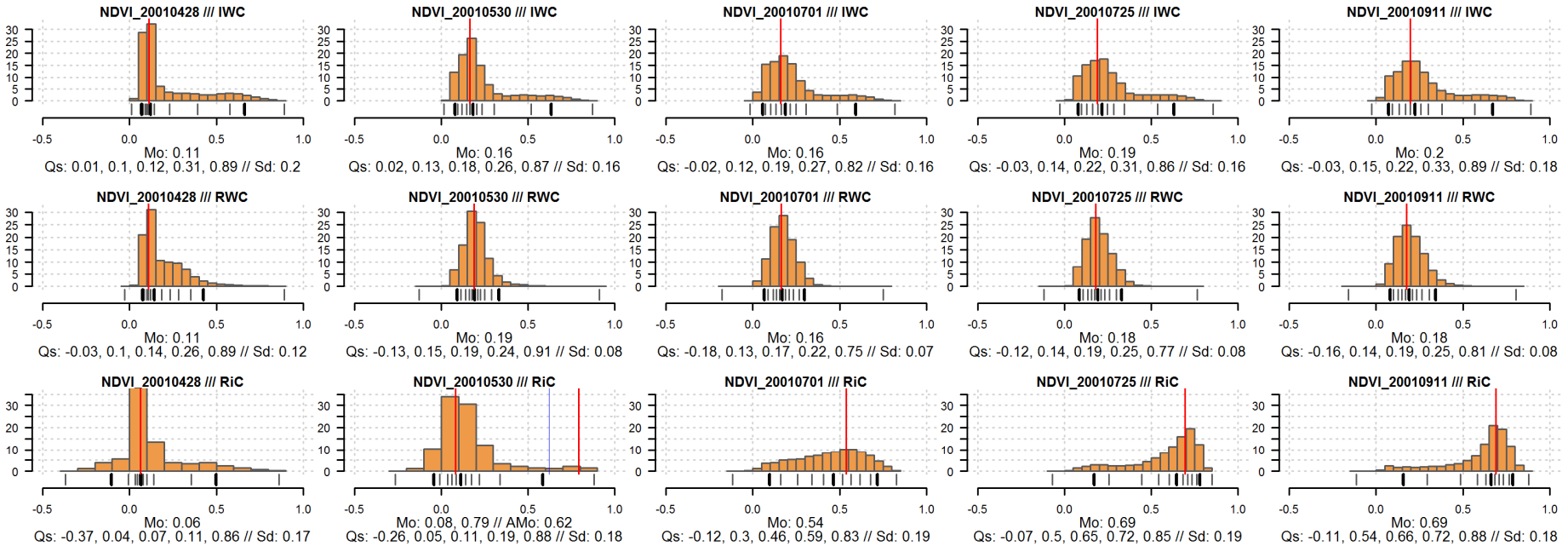


Figure S1. The temporal relative frequency distribution of the NDVI evaluated for each category. Percentage values are shown on the vertical axis, while the NDVI value range is shown on the horizontal axis. The red and blue vertical lines define *modes* (Mo) and *antimodes* (AMo), respectively [92]. The "Qs" values represent 0, 25, 50, 75 and 100% quantiles; "Sd" is the standard deviation.

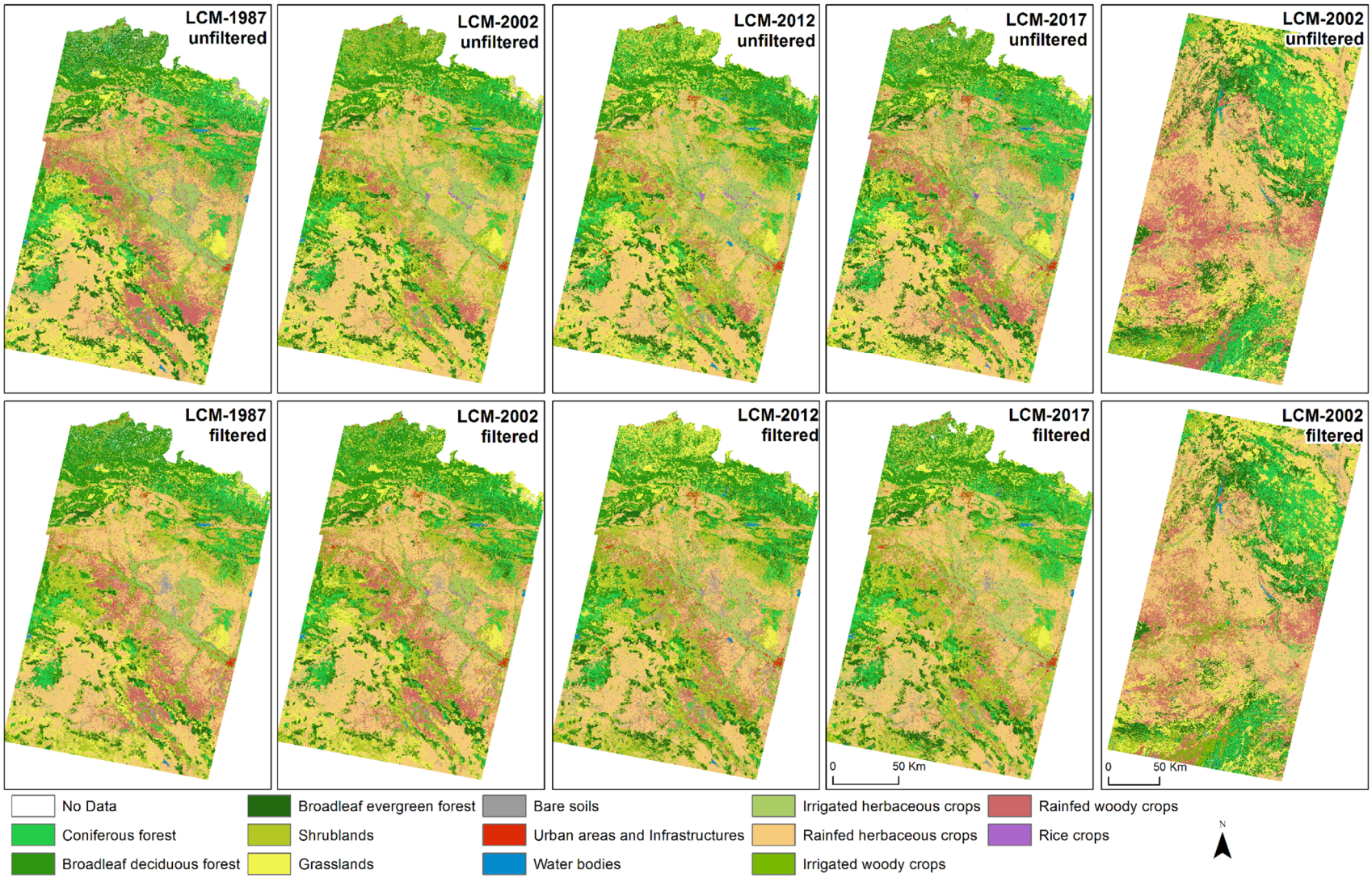


Figure S2. Classification results considering unfiltered and filtered GT samples from SIOSE 2005 (LCM-1987, LCM-2002 and 2017), and SIOSE 2011 (LCM-2012).