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A high-resolution dataset of water fluxes and states for Germany accounting for parametric uncertainty

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Table S1. Time and location invariant *global* parameters of mHM v4.3 which are purpose to an automated calibration.

Category	Number	Paraeter Name	Unit	Minimum	Maximum
Interception	1	canopyInterceptionFactor	[1]	0.1	0.3
Snow	2	snowTreshholdTemperature	[°C]	-2	2
	3	degreeDayFactor_forest	[mm d^{-1} $°C^{-1}$]	0.0001	4
	4	degreeDayFactor_impervious	[mm d^{-1} $°C^{-1}$]	0.5	4
	5	degreeDayFactor_pervious	[mm d^{-1} $°C^{-1}$]	0.5	6
	6	increaseDegreeDayFactorByPrecip	[d^{-1} mm^{-1}]	0.1	7
	7	maxDegreeDayFactor_forest	[mm d^{-1} $°C^{-1}$]	3	8
	8	maxDegreeDayFactor_impervious	[mm d^{-1} $°C^{-1}$]	3	8
	9	maxDegreeDayFactor_pervious	[mm d^{-1} $°C^{-1}$]	3	8
Soil moisture - storage	10	orgMatterContent_forest	[%]	4	7
	11	orgMatterContent_impervious	[%]	0	0.1
	12	orgMatterContent_pervious	[%]	1.5	3
	13	PTF_lower66_5_constant	[-]	0.7	0.8
	14	PTF_lower66_5_clay	[-]	0.0005	0.0015
	15	PTF_lower66_5_Db	[-]	-0.27	-0.25
	16	PTF_higher66_5_constant	[-]	0.8	0.9
	17	PTF_higher66_5_clay	[-]	-0.0015	-0.0005
	18	PTF_higher66_5_Db	[-]	-0.35	-0.3
Soil moisture - evapotranspiration	19	infiltrationShapeFactor	[-]	0.5	4
	20	Permanent Wilting Point	[-]	0.001	0.5
	21	Field Capacity	[-]	0.5	0.98
	22	rootFractionCoefficient_forest	[-]	0.96	0.98
	23	rootFractionCoefficient_impervious	[-]	0.91	0.95
	24	rootFractionCoefficient_pervious	[-]	0.94	0.965
Evapotranspiration	25	minCorrectionFactorPET	[-]	0.8	1
	26	maxCorrectionFactorPET	[-]	1	1.2
	27	aspectTresholdPET	[°]	175	195
Direct runoff	28	imperviousStorageCapacity	[mm]	0	1
Interflow	29	interflowStorageCapacityFactor	[mm]	1	40
	30	fastInterflowRecession_slope	[d]	1	10
	31	slowInterflowRecession_constant	[d]	1	30
	32	slowInterflowRecession_slope	[d]	0	30
	33	slowInterflowRecession_Ks	[d]	0	30
	34	slowInterflowExponent	[-]	0	1
Percolation	35	PTF_Ks_constant	[-]	50	60
	36	PTF_Ks_sand	[-]	-0.1	-0.05
	37	PTF_Ks_clay	[-]	0.16	0.17

continued on next page

Category	Number	Paraeter Name	Unit	Minimum	Maximum
	38	rechargeCoefficient	[d]	1	100
Percolation	39	gain_loss_GWreservoir_karstic	[-]	0	1
	40	rechargeFactor_karstic	[-]	0.75	1.5
	41	muskingumTravelTime_constant	[-]	0.31	0.35
	42	muskingumTravelTime_riverLength	[-]	0.073	0.079
Routing	43	muskingumTravelTime_riverSlope	[-]	1.95	2.1
	44	muskingumTravelTime_impervious	[-]	0.09	0.11
	45	muskingumAttenuation_riverSlope	[-]	0.05	0.5
	46	baseflow_parameter_geounit_1	[d]	10	400
	47	baseflow_parameter_geounit_2	[d]	10	400
	48	baseflow_parameter_geounit_3	[d]	10	400
	49	baseflow_parameter_geounit_4	[d]	10	400
	50	baseflow_parameter_geounit_5	[d]	10	400
	51	baseflow_parameter_geounit_6	[d]	10	400
	52	baseflow_parameter_geounit_7	[d]	10	400
	53	baseflow_parameter_geounit_8	[d]	10	400
	54	baseflow_parameter_geounit_9	[d]	10	400
	55	baseflow_parameter_geounit_10	[d]	10	400
	56	baseflow_parameter_geounit_11	[d]	10	400
Geology	57	baseflow_parameter_geounit_12	[d]	10	400
	58	baseflow_parameter_geounit_13	[d]	10	400
	59	baseflow_parameter_geounit_14	[d]	10	400
	60	baseflow_parameter_geounit_15	[d]	10	400
	61	baseflow_parameter_geounit_16	[d]	10	400
	62	baseflow_parameter_geounit_17	[d]	10	400
	63	baseflow_parameter_geounit_18	[d]	10	400
	64	baseflow_parameter_geounit_19	[d]	10	400
	65	baseflow_parameter_geounit_20	[d]	10	400
	66	baseflow_parameter_geounit_21	[d]	10	400
	67	baseflow_parameter_geounit_22	[d]	10	400
	68	baseflow_parameter_geounit_23	[d]	10	400

Table S2. List of effective parameters of mHM v4.3 with the corresponding physiographic characteristics and the upscaling operators (Arithmetic mean (A), Harmonic mean (H), Geometric mean (G) and Majority statistic (M)) for the MPR approach is shown. Soil properties include the fractions of sand and clay contents, bulk destiny and rootzone depth, whereas landcover is mainly distinguished in three major classes: forest, sealed and mixed cover. These effective parameters are estimated based on transfer functions connecting physiographic characteristics and *global* parameters which are shown in Table S1.

Parameter	Description	Physiographic Characteristic	Upscaling Operator
β_1	Thickness of waterfilm on the canopy surface (-).	Landcover	A
β_2	Threshold temperature for phase transition snow and rain (°C).	–	–
β_3	Degree day factor during rainless days (mm d^{-1} °C).	Land cover	A
β_4	Rate of increase of the degree-day factor per unit of precipitation (mm d^{-1} °C).	–	–
β_5	Max. degree-day factor reached during rainy days (mm d^{-1} °C).	Land cover	A
β_6	Porosity of soil layers (-).	Soil texture, land cover	H
β_7	Field capacity of soil layers (-).	Soil texture, land cover	H
β_8	Permanent wilting point of soil layers (-).	Soil texture, land cover	H
β_9	Parameter that determines the relative contribution of rain or snowmelt to runoff (-).	Soil texture, land cover	H
β_{10}	Max. ponding retention in impervious areas (mm).	Land cover	A
β_{11}	Fraction of roots in soil layers (-).	Land cover	A
β_{12}	Max. water holding capacity of the unsat. zone (mm).	Soil texture, land cover	H
β_{13}	Fast recession constant (d).	Slope	A
β_{14}	Slow recession constant (d).	Soil texture	A
β_{15}	Exponent that quantifies the degree of nonlinearity of the cell response (-).	Soil texture	A
β_{16}	Effective percolation rate (d).	Soil texture	A
β_{17}	Baseflow recession rate (d).	Geology	M
β_{18}	Fraction of the groundwater recharge that might be gained or lost either as deep percolation or as intercatchment groundwater flow in nonconservative basins (-).	Geology	M
β_{19}	Muskingum travel time parameter (h).	Length, slope and land cover of river reach	–
β_{20}	Muskingum attenuation parameter (-).	Slope of river reach	–
β_{21}	Aspect correction factor of the PET (-).	Aspect	A

Table S3: Climatic, hydrologic and land surface characteristics of the 222 supplementary catchments

Station	Alti-	Longi-	Lati-	Basin	Elevation		Land cover			Posrosity		Slope		Aspect		Period		Qobs	Precip	PET	Qsim	ET	Gauge	River
ID	tude	tude	tude	Area	mean	stddev	forest	sealed	mixed	mean	stddev	mean	stddev	mean	stddev	start	end	[mm a^{-1}]	[mm a^{-1}]	[mm a^{-1}]	[mm a^{-1}]	[mm a^{-1}]	name	name
6335115	85.00	7.91	49.91	4013.0	349.2	112.8	37.6	6.2	56.2	427.3	83.5	10.7	8.0	175.8	104.6	1955	2009	239.8	749.9	763.5	230.0	519.5	GROLSHEIM	NAHE
6335125	173.00	8.03	48.39	954.0	592.1	195.2	69.7	3.6	26.8	346.1	56.2	24.6	14.1	183.3	104.2	1955	2008	773.6	1437.9	762.8	857.0	583.0	SCHWAIBACH	KINZIG
6335290	154.00	9.29	49.26	1929.0	405.6	94.4	36.9	5.7	57.4	310.4	73.6	9.3	8.3	182.0	104.3	1955	2009	366.7	915.6	783.4	356.3	560.8	STEIN	KOCHER
6335350	135.00	8.36	50.55	3571.0	322.2	102.9	44.1	8.0	47.8	497.2	104.1	9.8	7.4	177.9	102.6	1955	2009	306.7	819.3	746.0	292.7	526.5	LEUN-(NEU)	LAHN
6335601	160.00	9.16	49.07	7916.0	489.7	159.3	37.0	12.7	50.4	347.3	109.6	10.3	10.0	174.1	107.4	1955	2009	353.2	911.8	774.1	358.1	561.0	LAUFFEN	NECKAR
6335602	245.76	9.42	48.71	3995.0	549.9	144.2	35.5	11.1	53.4	329.0	103.1	10.3	10.4	174.4	108.3	1955	2009	393.5	917.4	768.4	365.0	562.8	PLOCHINGEN	NECKAR
6335800	230.00	10.87	49.95	4251.0	427.9	125.9	41.4	4.9	53.7	445.2	169.1	9.9	8.4	180.6	101.6	1955	2009	332.9	831.2	738.7	308.6	524.3	KEMMERN	MAIN
6337500	94.98	9.94	51.86	2916.0	276.7	126.3	35.7	6.1	58.2	409.8	126.5	9.5	8.5	177.8	105.2	1976	1987	354.5	828.5	686.9	327.9	492.0	GREENE	LEINE
6337501	23.01	9.70	52.68	7209.0	95.8	88.4	31.4	8.8	59.9	600.7	131.2	1.9	3.9	185.6	108.3	1955	2009	179.5	688.6	721.5	195.5	494.0	MARKLENDORF	ALLER
6337502	31.80	10.06	52.62	4374.0	113.6	107.4	31.2	7.3	61.5	588.5	132.7	2.5	4.8	184.3	105.9	1955	2009	195.1	681.6	720.8	190.1	492.4	CELLE	ALLER
6337504	245.87	8.90	51.16	1202.0	477.0	110.5	55.9	3.8	40.3	497.8	131.6	14.0	9.2	169.8	99.9	1955	2009	504.4	985.9	676.1	485.3	500.9	SCHMITTLOTHEIM	EDER
6337506	151.03	9.50	51.19	2975.0	368.7	101.0	42.6	4.8	52.5	469.8	106.4	10.6	6.8	181.7	106.9	1955	2009	282.7	792.2	727.5	278.3	514.6	GREBENAU	FULDA
6337507	140.89	9.47	51.23	6366.0	371.2	113.6	42.7	4.8	52.5	484.3	106.2	10.4	7.6	177.7	105.3	1955	2009	294.8	798.2	712.6	292.2	506.6	GUNTERSHAUSEN	FULDA
6337508	179.54	9.72	51.00	2523.0	375.7	102.2	41.0	5.1	53.9	469.6	105.7	10.1	6.5	180.6	107.1	1955	2009	286.4	797.8	725.6	286.1	512.5	ROTENBURG	FULDA
6337509	43.81	9.68	52.39	5304.0	230.5	130.8	32.8	7.9	59.3	406.8	125.0	8.3	8.3	176.1	108.8	1955	2009	311.1	811.1	707.1	314.9	498.2	HERRENHAUSEN	LEINE
6337510	21.00	9.60	52.68	6443.0	203.1	134.7	30.3	8.7	61.0	437.8	142.6	7.2	8.0	177.0	110.7	1955	2009	309.9	793.9	707.8	299.2	496.5	SCHWARMSTEDT	LEINE
6337511	143.52	9.98	51.27	5166.0	402.4	132.6	42.1	5.7	52.2	402.8	160.9	11.7	8.9	179.4	105.4	1955	2009	288.9	793.0	704.3	298.0	502.2	ALLENDORF	WERRA
6337512	168.02	10.20	51.13	4302.0	417.0	134.6	42.4	6.1	51.6	410.2	166.9	11.5	8.9	180.7	105.4	1955	2009	297.4	798.3	696.1	308.4	498.1	HELDRA	WERRA
6337513	117.40	9.71	51.41	5487.0	396.8	133.4	42.8	5.6	51.6	401.8	159.9	11.9	9.0	179.3	105.5	1955	2009	293.1	793.6	706.6	296.8	503.7	LETZTER-HELLER	WERRA
6338110	12.42	7.25	52.60	4981.0	69.9	34.8	11.5	9.2	79.4	607.8	104.5	1.2	2.4	193.8	104.6	1965	2009	315.7	804.0	724.7	291.0	511.7	DALUM	EMS
6338120	32.71	7.60	52.09	2842.0	83.2	35.7	11.4	10.7	77.9	602.3	108.2	1.3	2.5	196.5	103.2	1955	2008	316.7	802.3	724.4	292.2	511.9	GREVEN	EMS
6338130	24.19	7.43	52.29	3740.0	76.5	34.7	10.7	9.9	79.4	607.4	107.0	1.2	2.5	193.5	103.5	1955	2007	321.0	796.9	721.9	287.4	509.8	RHEINE-UNTER-SCHLEUSE-UP	EMS
6338800	5.00	9.32	54.51	481.0	29.3	12.9	5.1	4.0	90.9	606.6	92.2	1.0	1.0	188.8	96.0	1955	2004	396.9	841.0	610.9	395.3	446.0	TREIA	TREENE
6340200	-999.00	11.69	51.23	6218.0	282.9	123.4	23.8	6.8	69.5	471.1	125.4	6.4	6.9	168.2	106.1	1955	2008	158.7	629.2	721.2	157.2	480.3	LAUCHA	UNSTRUT
6340302	190.19	11.34	50.72	2678.0	534.7	103.8	44.6	5.1	50.3	419.9	94.0	11.4	10.1	178.6	108.0	1955	2008	321.5	802.8	704.4	298.4	505.7	RUDOLSTADT	SAALE
6342520	84.00	11.19	48.89	1400.0	477.3	49.9	30.9	3.8	65.3	373.7	176.7	5.3	5.8	167.1	103.2	1955	2008	233.9	744.1	775.2	203.6	541.2	EICHSTAETT	ALTMUEHL
6340600	-999.00	12.58	51.59	6171.0	385.5	201.3	25.7	10.2	64.1	462.1	91.1	6.9	6.1	183.0	111.4	1965	1999	341.4	787.4	689.7	317.3	468.5	BAD-DUEBEN	VEREINIGTE-MULDE
6338100	6.71	7.24	52.74	8369.0	60.5	36.2	12.7	7.8	79.5	605.4	107.1	1.3	2.4	191.5	106.5	1965	1999	310.5	793.6	708.6	305.0	486.3	VERSEN	EMS
9304028	-99.00	10.74	53.39	157.0	34.8	10.8	25.4	3.2	71.4	611.8	45.2	1.1	1.3	198.3	93.7	1976	1995	238.3	694.2	685.1	214.3	478.4	Schwartow	Boize
9304030	-99.00	11.02	53.32	735.0	38.4	14.1	29.6	3.6	66.8	612.8	53.2	0.8	0.9	197.1	95.4	1955	1995	200.6	636.4	683.4	160.4	478.5	Garlitz	Sude
9304031	-99.00	12.01	53.15	575.0	78.2	19.4	13.6	3.3	83.2	618.0	82.4	1.2	1.0	199.6	97.8	1978	1996	190.5	593.8	689.4	135.3	462.1	Wolfshagen	Stepenitz
9304032	-99.00	11.14	53.84	242.0	55.1	12.9	9.8	3.6	86.6	525.1	27.6	1.8	1.4	181.9	105.7	1966	1995	176.3	636.5	651.8	189.9	448.8	Questin	Stepenitz
9304033	-99.00	10.94	53.85	123.0	40.1	14.5	7.6	2.1	90.3	630.2	30.0	1.8	1.4	187.6	106.2	1965	1995	217.2	666.7	661.2	212.5	454.4	Schoenberg	Maurine
9304034	-99.00	11.12	53.86	441.0	50.8	15.2	9.4	3.7	87.0	543.0	47.5	1.9	1.5	181.8	106.4	1955	1995	221.9	636.0	653.1	187.0	450.8	Boerzow	Stepenitz
9304037	-99.00	13.85	50.95	198.0	505.7	173.7	31.5	5.1	63.4	410.3	60.0	12.2	8.3	156.7	115.7	1955	1995	442.9	828.2	652.3	358.6	470.4	DOHNA	MUEGLITZ
9304038	472.00	12.31	50.02	233.0	571.9	58.6	49.2	3.7	47.2	386.0	61.4	6.2	3.6	181.4	103.5	1967	1995	247.0	746.3	693.8	251.3	498.9	WALDSASSEN	WONDREB
9304039	492.31	12.11	50.03	122.0	617.6	76.0	43.7	5.7	50.6	367.6	36.5	8.3	5.6	170.0	104.3	1966	1995	463.0	918.4	667.4	430.4	489.1	LORENZREUTH	ROESLAU
9304042	-99.00	14.00	51.02	227.0	313.8	52.3	17.4	9.4	73.1	467.1	67.6	5.9	4.2	182.5	107.9	1955	1995	308.1	785.4	725.6	272.4	514.0	ELBERSDORF	WESENITZ
9304045	-99.00	13.08	50.63	206.0	663.6	102.1	38.5	9.4	52.1	390.2	47.0	9.6	5.7	171.9	109.8	1955	2006	445.0	946.3	626.5	476.8	471.2	STRECKENWALDE	PRESSNITZ
9304047	-99.00	12.78	51.01	2107.0	466.5	177.2	32.0	16.2	51.9	437.6	79.1	8.5	6.5	182.9	113.1	1955	1995	423.5	838.2	689.1	341.9	496.3	WECHSELBURG	ZWICKAUER-MULDE
9304050	-99.00	13.27	51.06	585.2	476.6	124.2	19.7	8.4	71.9	450.4	59.5	7.4	5.2	176.8	115.0	1955	1995	374.6	842.0	675.2	355.5	486.9	NOSSEN-1	FREIBERGER-MULDE
9304051	-99.00	13.38	50.88	244.4	576.7	91.9	26.2	5.2	68.7	437.3	59.1	9.8	5.7	176.1	113.0	1955	1995	462.2	900.8	657.2	416.5	484.7	BERTHELSDORF	FREIBERGER–MULDE
9304060	-99.00	12.26	50.33	171.0	561.4	56.9	53.2	5.5	41.3	486.2	75.2	10.6	5.4	183.4	103.2	1955	2005	348.7	801.7	702.9	285.3	516.9	ADORF	WEISSE-ELSTER
9304063	-99.00	10.80	51.50	303.6	389.2	125.3	64.8	7.2	28.0	392.9	110.9	13.3	10.9	173.1	91.6	1955	2005	361.8	897.5	667.4	408.4	491.0	NORDHAUSEN	ZORGE
9304064	-99.00	10.81	51.48	200.6	254.0	67.3	15.5	4.9	79.7	483.1	111.0	5.9	5.3	156.5	100.1	1958	1997	244.8	711.9	692.1	233.6	480.3	SUNDHAUSEN	HELME
9304065	-99.00	10.58	51.46	104.2	344.1	74.5	32.9	7.2	60.0	341.5	134.5	9.2	8.0	150.5	104.6	1955	2005	259.1	742.0	700.2	253.0	492.0	BLEICHERODE	BODE
9304066	-99.00	10.97	51.36	523.9	318.9	74.7	32.6	7.5	59.9	400.4	129.8	8.6	7.6	164.0	107.9	1962	2005	205.2	666.8	707.1	186.6	483.8	HACHELBICH	WIPPER
9304067	-99.00	10.66	51.46	317.8	336.6	70.7	27.4	7.9	64.7	382.1	136.7	8.2	7.4	169.5	107.6	1955	2005	232.5	710.5	700.7	225.5	488.2	WIPPERDORF	WIPPER
9304069	-99.00	10.95	50.84	174.7	544.7	146.0	65.5	5.9	28.6	288.7	60.0	15.5	10.7	169.5	114.9	1955	2005	409.8	870.5	662.6	399.3	474.5	ARNSTADT	GERA
9304070	-99.00	10.71	51.11	716.1	294.1	83.5	17.5	6.6	75.9	435.4	109.7	4.5	2.9	155.6	100.2	1955	2005	187.3	646.1	716.1	190.5	488.1	NAGELSTEDT	UNSTRUT
9304079	15.94	11.16	52.97	1325.0	42.1	19.7	20.8	2.9	76.3	645.0	73.0	1.4	1.3	176.8	110.8	1967	1996	157.5	571.5	725.1	103.6	471.9	LUCHOW	JEETZEL
9304084	-99.00	11.58	51.07	894.3	392.8	142.3	31.6	7.5	60.9	381.5	120.9	8.0	7.1	177.6	116.0	1955	2005	220.1	687.4	725.0	207.8	491.9	NIEDERTREBRA	ILM
9304085	-99.00	11.39	50.94	627.0	450.1	128.7	43.6	4.6	51.8	327.7	82.0	9.4	7.8	174.5	115.4	1955	2005	220.7	729.4	713.4	244.6	496.2	MELLINGEN	ILM
9304086	-99.00	11.02	50.70	174.2	626.6	114.2	72.3	8.7	19.0	375.7	74.6	15.0	10.2	170.8	113.7	1955	2005	501.5	961.1	659.3	476.8	484.2	GRAFINAU-ANGESTEDT	ILM
9304088	-99.00	11.55	50.77	254.8	345.0	79.4	29.0	8.0	63.0	458.7	134.4	8.0	5.8	205.0	119.9	1955	2005	166.3	627.8	731.8	134.2	494.4	FREIENORLA	ORLA
9304089	-99.00	11.27	50.69	361.3	613.3	114.2	72.3	3.6	24.1	399.2	75.1	18.8	12.2	179.8	110.4	1955	1994	459.7	955.8	671.1	457.1	498.3	BLANKENBURG-WEIDMANSCHEIL	SCHWARZA
9304090	-99.00	11.05	50.56	122.6	675.9	82.2	85.2	3.3	11.6	386.7	49.0	16.9	10.4	175.8	110.7	1955	1988	690.0	1076.3	659.8	577.9	497.5	KATZHUTTE	SCHWARZA
9304091	-99.00	11.43	50.62	362.7	554.1	100.1	63.1	2.5	34.5	439.6	74.4	18.2	12.2	179.4	109.0	1955	2005	334.4	854.8	692.4	351.3	506.6	KAULSDORF-EICHICHT	LOQUITZ
9304098	-99.00	13.15	51.08	286.0	372.9	72.5	13.3	7.4	79.3	488.0	60.8	5.5	3.6	187.9	115.7	1955	2005	318.9	798.4	701.5	302.5	496.8	NIEDERSTRIEGIS1	STRIEGIS
9304102	-99.00	13.77	51.20	300.0	243.5	44.2	30.8	11.8	57.5	510.9	99.8	3.2	2.6	196.2	104.3	1955	1995	246.2	730.1	732.5	220.9	510.1	GROSSDITTMANNSDORF	GROSSE-ROEDER
9304105	-99.00	13.48	51.56	637.0	111.2	12.6	46.2	5.7	48.1	648.2	74.9	0.8	0.9	188.6	102.5	1956	1995	103.3	584.1	749.4	91.7	492.7	Schadewitz	Kleine-Elster
9304130	2.73	9.32	54.52	481.0	29.4	12.9	5.1	3.9	91.0	606.6	92.2	1.0	1.0	188.8	96.0	1955	1980	351.5	817.7	609.4	373.4	443.8	TREIA	TREENE
9304134	-999.00	10.81	51.47	200.6	254.2	67.2	15.5	4.9	79.7	483.1	111.0	5.9	5.3	156.5	100.1	1958	2005	248.9	726.2	695.9	243.5	483.7	SUNDHAUSEN	HELME
9304136	-999.00	10.99	50.93	842.8	438.7	152.9	38.1	6.9	55.1	375.8	121.7	9.1	9.3	172.3	114.9	1955	2005	214.7	748.3	684.2	283.1	476.9	ERFURT-MOEBISBURG	GERA
9305022	435.27	13.36	48.83	113.0	655.5	103.9	45.1	3.1	51.8	327.9	9.8	12.6	6.6	160.2	100.6	1955	2006	566.3	1124.7	727.5	580.1	546.9	EBERHARDSREUTH	MITTERNACHER-OHE
9305024	327.97	13.46	48.69	762.0	699.0	190.7	50.2	2.6	47.2	332.1	22.5	13.5	7.8	181.7	94.1	1955	2006	677.4	1139.6	715.3	596.4	545.4	KALTENECK	ILZ
9305031	448.56	13.00	49.04	109.0	659.0	134.2	48.9	2.7	48.4	328.1	8.4	13.7	7.2	173.4	110.9	1955	2004	606.2	1175.4	730.4	634.6	541.8	TEISNACH	TEISNACH
9305036	-99.00	13.24	49.01	120.0	836.0	187.6	79.3	2.5	18.2	345.0	25.1	15.8	8.8	201.0	99.7	1955	2006	720.4	1272.4	683.7	747.7	526.9	ROEHRNBACH	OSTERBACH
9305038	334.13	12.13	49.13	2658.0	576.8	181.7	52.7	3.2	44.1	360.9	92.2	12.2	8.5	177.1	104.5	1960	1995	477.1	971.2	720.1	436.7	530.7	REGENSTAUF	REGEN
9305043	338.46	11.94	49.12	5426.0	488.4	84.8	43.1	4.3	52.6	440.9	211.2	7.1	5.4	175.1	102.4	1960	1995	310.9	789.3	736.1	262.8	523.3	HEITZENHOFEN	NAAB
9305044	372.16	12.16	49.54	2004.0	507.4	87.2	43.5	4.4	52.1	545.0	214.3	6.2	5.0	175.4	101.9	1960	1995	301.6	796.7	712.7	280.7	512.2	UNTERKOEBLITZ	NAAB
9305045	383.59	11.45	49.11	152.3	448.1	45.7	33.1	5.3	61.7	331.0	118.6	6.2	7.1	173.5	100.4	1955	1995	236.1	779.5	763.6	234.0	544.9	BERCHING	SULZ
9305055	498.27	9.83	48.24	405.5	590.1	47.1	22.1	7.0	71.0	511.7	34.5	4.4	4.3	179.4	111.9	1983	1995	368.3	904.7	770.5	342.9	562.3	NIEDERKIRCH	RISS
9305056	587.95	9.29	48.11	452.4	762.9	58.9	46.4	4.9	48.7	249.1	39.0	8.9	7.5	169.7	99.5	1981	1995	342.5	935.2	750.2	381.1	561.2	LAUCHERTAL	LAUCHERT
9305064	403.09	10.69	48.79	1578.0	472.2	41.8	22.6	4.3	73.2	382.8	135.0	4.9	4.6	165.8	102.4	1960	1995	233.4	752.1	767.0	210.3	540.5	HARBURG	WOERNITZ

continued on next page

Station	Alti-	Longi-	Lati-	Basin	Elevation		Land cover			Posrosity		Slope		Aspect		Period		Qobs	Precip	PET	Qsim	ET	Gauge	River
ID	tude	tude	tude	Area	mean	stddev	forest	sealed	mixed	mean	stddev	mean	stddev	mean	stddev	start	end	[mm a^{-1}]	[mm a^{-1}]	[mm a^{-1}]	[mm a^{-1}]	[mm a^{-1}]	name	name
9305065	436.40	10.38	48.49	951.0	592.9	92.9	23.6	5.9	70.5	497.1	45.0	4.2	4.1	184.7	122.0	1955	2006	409.8	978.3	766.6	424.2	555.6	OFFINGEN	MINDEL
9305066	441.11	10.27	48.46	707.0	614.8	102.9	24.5	5.2	70.3	498.1	43.3	4.7	4.7	177.8	118.2	1960	1995	432.1	998.2	756.5	443.4	552.5	GUENZBURG	GUENZ
9305077	490.99	9.90	48.27	264.0	625.0	64.0	34.6	3.1	62.3	498.0	24.5	4.3	3.4	172.9	115.9	1955	2006	391.2	967.4	765.9	408.6	560.3	ACHSTETTEN	BAIERZER-ROT
9305094	556.31	11.14	47.84	601.0	884.0	302.9	44.2	3.8	52.1	525.7	135.0	18.3	22.8	168.3	110.6	1955	2006	778.0	1397.3	704.3	853.7	545.8	WEILHEIM	AMMER
9305105	581.91	9.15	48.09	155.0	813.4	77.2	45.3	11.8	42.9	224.4	35.5	12.1	10.4	168.9	97.6	1955	1995	345.2	917.9	742.2	368.2	563.2	UNTERSCHMEIEN	SCHMIECHA
9305107	642.10	8.95	48.04	134.0	859.4	72.1	55.9	6.5	37.7	223.3	40.1	16.7	13.6	168.0	98.8	1955	1996	430.7	937.5	716.4	399.4	548.0	FRIDINGEN	BAERA
9305111	496.62	12.55	47.99	378.0	841.1	257.0	59.8	4.8	35.4	471.5	121.2	25.4	25.4	185.5	111.8	1955	2006	1113.1	1754.9	720.5	1198.7	558.7	STEIN-BEI-ALTENMARKT	TRAUN
9305116	435.02	12.15	48.03	244.0	525.0	40.0	26.9	2.7	70.4	551.2	55.6	3.8	3.6	165.9	97.5	1955	2006	485.1	1073.4	767.4	493.0	581.9	ANGER	ATTEL
9305128	605.27	12.65	47.82	183.0	997.4	241.7	74.4	1.7	24.0	403.9	120.3	39.6	25.3	186.4	109.0	1955	2006	1506.4	1970.8	705.8	1420.6	553.0	SIEGSDORF	WEISSE-TRAUN
9305131	-99.00	10.04	47.87	308.1	731.4	106.9	32.4	3.0	64.6	569.9	47.7	7.5	8.4	188.0	111.1	1955	2006	565.3	1277.2	762.2	705.9	572.3	LAUBEN	AITRACH
9305133	-99.00	8.47	48.06	108.5	844.9	68.4	53.1	12.1	34.8	379.3	57.1	9.3	6.1	152.2	97.8	1959	1989	617.8	1247.5	732.4	695.2	555.4	VILLINGEN	BRIGACH
9305134	736.50	8.35	47.99	158.0	965.9	73.3	69.5	3.0	27.4	327.3	19.1	18.7	9.6	167.1	104.1	1955	2006	960.3	1467.8	709.5	918.3	550.5	HAMMEREISENBACH	BREG
9305138	660.85	8.68	47.93	766.0	814.8	109.2	46.5	6.7	46.8	320.4	76.1	10.0	8.8	159.8	99.6	1955	1987	525.7	1078.4	738.0	532.0	556.1	KIRCHENHAUSEN	DONAU
9305142	739.70	10.58	47.75	109.0	827.4	37.7	14.8	1.4	83.7	549.0	36.7	5.4	5.4	172.4	111.3	1955	2006	786.0	1401.1	725.2	849.4	553.0	LEUTERSCHACH	LOBACH
9305145	697.28	10.65	47.83	450.0	879.2	155.7	25.7	3.1	71.1	541.9	70.3	8.8	11.5	166.0	111.5	1955	2006	873.4	1472.7	723.6	921.1	553.2	BIESSENHOFEN	WERTACH
9315010	327.23	6.48	50.58	344.6	518.6	60.8	44.8	5.6	49.6	366.6	115.3	10.4	7.6	177.2	110.0	1955	1993	467.8	913.7	663.0	426.1	486.6	GEMUEND	URFT
9315014	124.13	6.29	50.82	232.2	293.7	100.9	42.4	18.1	39.6	464.8	83.0	6.1	4.5	202.3	118.2	1966	1987	416.7	929.5	681.2	436.9	495.3	ESCHWEILER-KLAERANLAGE	INDE
9315015	371.39	6.55	50.55	131.1	514.2	44.4	38.8	6.5	54.8	297.6	103.0	7.2	5.1	180.4	111.4	1975	1985	371.3	858.3	665.0	388.5	479.5	KALL-SPORTPLATZ	URFT
9316003	59.67	10.95	52.45	514.0	123.1	31.8	25.8	4.4	69.8	587.9	112.6	2.5	2.1	167.9	115.0	1967	1997	117.3	565.6	726.7	102.3	467.9	GRAFHORST	ALLER
9316008	54.90	10.61	52.57	340.0	80.2	15.8	35.0	3.1	61.9	686.6	67.7	1.1	1.1	183.8	99.7	1967	1996	195.5	657.4	723.8	163.0	498.6	NEUDORF-PLATENDORF	ISE
9316009	45.17	10.32	52.57	205.0	66.2	17.2	33.0	2.0	65.1	663.5	51.2	0.7	0.6	204.5	83.8	1961	2005	175.2	692.6	724.5	178.2	514.8	NEUHAUS	SCHWARZWASSER
9316014	286.50	7.99	48.12	303.0	703.8	227.7	70.8	1.2	28.0	317.2	3.9	27.0	15.5	186.0	104.4	1955	1997	882.3	1531.8	720.1	976.2	555.6	GUTACH	ELZ
9316018	132.19	8.30	48.82	468.8	648.8	226.5	75.2	4.2	20.6	406.0	82.4	24.6	13.1	180.5	107.4	1955	2006	1045.2	1611.4	709.3	1066.9	545.9	ROTENFELS	MURG
9316023	276.92	8.22	48.32	127.0	648.1	152.8	80.7	1.1	18.3	354.6	82.7	28.8	12.9	178.1	96.8	1968	1992	1135.4	1692.3	736.1	1124.0	571.2	OBERWOLFACH	WOLF
9316025	176.00	8.03	48.39	957.0	592.1	195.2	69.7	3.6	26.8	346.1	56.2	24.6	14.1	183.3	104.2	1955	2006	776.0	1438.7	761.1	859.3	581.8	SCHWAIBACH	KINZIG
9316037	423.60	7.86	47.71	209.0	904.7	206.7	68.9	1.3	29.7	317.3	1.4	31.6	14.1	188.2	98.9	1955	1997	1160.2	1770.4	675.4	1242.1	528.6	ZELL	WIESE
9316051	-99.00	8.45	47.85	258.2	929.3	120.0	62.2	3.0	34.9	310.1	40.3	15.9	10.7	161.5	102.5	1955	1987	697.2	1325.3	713.9	782.0	548.7	EBNET	DREISAM
9316052	345.47	8.33	47.63	617.0	782.0	178.3	45.9	3.2	50.9	321.3	132.7	13.8	10.4	167.2	99.2	1955	2006	450.7	1132.4	749.1	582.2	559.3	OBERLAUCHRINGEN	WUTACH
9316074	408.49	8.73	48.54	147.4	588.4	57.5	38.7	6.0	55.3	349.4	64.4	9.5	7.2	166.3	104.0	1983	1995	372.0	1065.0	771.1	526.4	565.7	ISELHAUSEN	WALDACH
9316089	-99.00	9.86	47.68	164.1	753.1	115.8	25.9	1.1	73.1	573.3	44.6	11.5	9.1	202.6	108.7	1955	1995	1070.2	1718.9	745.2	1149.7	567.6	EPPLINGS	OBERE-ARGEN
9316094	-99.00	9.25	47.73	271.5	569.4	105.4	29.5	3.2	67.3	548.5	9.2	7.7	6.7	180.1	96.1	1955	2006	370.6	943.7	762.9	372.7	572.0	UHLDINGEN	SEEFELDER-AACH
9316095	401.89	9.54	47.68	790.0	578.5	73.0	26.8	6.5	66.8	553.9	19.5	4.6	4.5	190.8	97.8	1955	2006	456.0	1035.3	772.4	456.1	581.0	GERBERTSHAUS	SCHUSSEN
9316096	515.96	9.67	47.93	246.0	595.5	32.4	26.0	5.2	68.9	549.5	16.2	3.5	3.5	179.2	100.0	1955	1983	317.8	920.1	753.8	358.4	564.3	MAGENHAUS	SCHUSSEN
9316097	421.07	9.60	47.63	652.0	706.5	142.0	27.1	2.8	70.1	574.8	42.3	9.7	8.9	199.3	103.2	1955	2006	959.3	1545.5	760.2	964.2	582.5	GIESSEN	ARGEN
9316109	-99.00	8.22	48.31	126.2	641.0	155.9	80.5	1.3	18.2	350.0	78.8	28.8	12.9	177.0	96.7	1955	1995	1059.1	1680.3	742.7	1102.1	578.9	OBERWOLFACH	WOLF
9316111	-99.00	8.36	48.62	230.7	751.8	126.0	76.9	2.8	20.3	395.9	69.4	24.6	13.1	170.8	104.7	1955	1984	1265.6	1684.7	680.5	1155.4	530.6	FORBACH	MURG
9316135	-99.00	7.43	50.42	368.6	353.3	144.1	31.1	10.7	58.2	506.8	50.4	11.4	9.4	163.9	102.3	1955	2006	196.9	698.1	745.8	185.5	514.1	NETTEGUT	NETTE
9316136	-99.00	6.60	50.13	471.8	513.4	67.4	45.9	3.4	50.8	395.2	114.7	10.5	6.9	176.0	103.3	1969	1995	450.0	965.3	668.0	479.3	488.4	DENSBORN	KYLL
9316138	117.03	7.38	50.37	242.0	419.0	122.2	39.5	6.2	54.3	503.0	52.0	13.5	9.9	169.6	103.3	1973	1995	242.4	744.4	729.2	234.6	510.2	WERNERSECK	NETTE
9316142	170.94	6.81	49.95	187.0	386.3	90.5	58.8	3.0	38.3	393.5	101.7	9.2	7.2	178.3	93.7	1973	1995	331.6	856.4	734.4	338.1	515.2	DREIS	SALM
9316146	206.68	6.46	49.88	266.0	412.7	90.9	27.6	3.7	68.7	291.0	94.7	9.3	6.5	191.7	95.5	1957	2006	336.0	900.4	719.9	392.6	508.5	ALSDORF-OBERECKEN	NIMS
9316150	212.37	6.91	49.41	207.2	325.2	48.3	18.0	13.4	68.6	409.6	33.7	10.2	5.2	189.0	102.2	1959	1997	439.8	951.9	744.8	428.6	525.2	LEBACH	THEEL
9316152	188.25	6.78	49.37	715.8	382.2	109.0	39.2	8.8	52.0	424.0	45.9	10.0	6.2	188.0	95.0	1960	1997	458.4	1023.3	736.1	487.0	535.4	NALBACH	PRIMS
9316154	216.35	6.90	49.79	126.0	481.0	92.7	52.2	1.6	46.2	463.9	35.8	13.2	8.7	200.3	110.2	1973	1995	434.7	982.9	718.3	468.2	511.6	DHRONTALSPERRE	KLEINE-DHRON
9316155	155.95	6.94	49.83	170.0	482.6	101.6	57.2	2.9	39.9	449.4	26.8	13.4	9.7	213.3	104.4	1956	2006	345.7	868.2	728.4	344.7	523.4	PAPIERMUHLE	DHRON
9316162	125.22	7.83	49.78	318.0	304.6	58.9	31.3	4.4	64.3	426.6	86.9	12.3	7.9	178.1	106.9	1956	2006	170.3	670.6	760.2	163.6	507.2	ALTENBAMBERG	ALSENZ
9316163	205.38	7.82	49.61	171.0	316.6	46.9	38.0	6.5	55.6	457.6	86.5	11.1	7.9	174.0	104.0	1973	1995	186.3	727.3	750.0	207.0	514.7	IMSWEILER	ALSENZ
9316166	182.66	7.48	49.60	588.0	319.7	76.8	34.4	9.4	56.2	458.1	96.8	11.0	8.5	175.3	103.9	1965	1995	320.3	862.7	769.4	324.8	534.9	ESCHENAU	GLAN
9316170	133.73	7.72	49.78	2832.0	374.1	103.9	40.1	6.3	53.6	440.8	70.9	11.0	8.1	176.2	103.5	1970	1995	284.4	805.2	752.8	284.8	520.1	BOOS	NAHE
9316172	164.46	8.10	49.65	113.0	294.2	85.1	29.1	4.8	66.1	378.5	126.2	9.4	7.9	163.6	108.2	1973	1995	151.4	659.3	746.4	159.8	495.5	ALBISHEIM	PFRIMM
9316177	120.87	8.20	49.14	101.0	221.7	79.3	34.7	5.9	59.3	507.4	56.2	10.6	11.8	152.5	95.9	1960	2006	190.5	778.7	792.8	231.5	546.5	HERXHEIM	KLINBACH
9316184	135.19	10.11	51.69	894.0	314.6	162.5	40.5	5.7	53.8	490.9	89.3	11.7	10.7	186.5	102.5	1955	1996	405.9	880.3	679.6	387.5	494.0	BERKA	RHUME
9316185	133.47	10.13	51.70	211.0	337.8	158.1	51.8	7.5	40.8	471.2	88.1	14.1	10.0	208.1	95.5	1955	1996	600.1	1019.0	656.3	528.4	492.8	BERKA	SOSE
9316186	128.41	10.09	51.71	1119.0	317.0	161.7	42.4	6.0	51.6	483.6	88.2	12.0	10.6	190.6	101.6	1963	1996	435.2	897.2	679.1	403.1	494.2	ELVESHAUSEN	RHUME
9316188	142.02	9.92	51.55	634.0	295.6	80.3	25.5	7.9	66.6	359.6	131.5	7.8	6.4	174.4	108.6	1959	1996	258.8	717.1	723.7	227.2	493.3	GOTTINGEN	LEINE
9316189	100.46	9.94	51.86	2920.0	276.8	126.4	35.7	6.1	58.2	409.8	126.5	9.5	8.5	178.0	105.2	1955	1996	348.9	819.4	698.2	325.3	496.4	GREENE	LEINE
9316190	129.08	10.13	51.94	135.0	270.0	110.8	44.1	7.5	48.5	424.9	88.9	10.7	8.8	206.0	106.4	1962	1996	352.8	902.8	678.2	408.0	496.7	GR.RHUDEN	NETTE
9316191	184.10	10.26	51.65	127.0	484.3	180.6	80.1	3.5	16.4	479.3	87.2	20.2	13.8	201.2	86.5	1955	2005	614.7	1217.3	642.1	718.4	500.4	HATTORF	SIEBER
9316195	82.89	9.70	52.11	137.0	197.5	78.1	34.3	6.5	59.2	336.6	115.3	8.7	7.8	157.7	103.7	1962	2005	311.7	837.3	711.3	327.3	511.2	MEHLE	SAALE
9316197	130.27	9.77	51.81	148.0	328.4	98.1	66.5	1.7	31.8	434.4	134.3	8.9	6.4	153.4	108.7	1962	2005	450.0	951.6	693.8	449.9	503.1	OLDENDORF	IILME
9316199	184.17	9.93	51.41	319.0	340.3	71.0	28.1	5.7	66.2	375.2	125.5	9.2	7.2	179.6	108.5	1964	1996	267.6	727.0	716.8	230.8	498.6	RECKERSHAUSEN	LEINE
9316200	155.57	10.22	51.57	185.0	255.7	69.2	20.8	7.2	71.9	494.3	100.9	8.8	6.9	183.0	112.9	1962	2005	205.6	698.0	707.6	210.5	489.1	ROLLSHAUSEN	HAHLE
9316204	-99.00	9.97	51.38	275.0	351.2	66.9	28.3	6.0	65.7	374.1	127.9	9.4	7.4	181.1	108.7	1960	1996	309.1	728.9	712.4	233.7	497.0	Arenshausen	Leine
9316208	336.32	10.01	50.66	182.0	591.6	121.1	34.2	2.9	62.9	395.4	113.1	13.5	6.8	192.4	111.9	1956	2006	484.9	948.8	652.1	475.6	475.1	GUENTHERS	ULSTER
9316210	235.69	9.64	50.60	561.0	426.6	130.8	36.0	8.3	55.7	475.4	103.8	10.1	6.7	190.8	109.0	1955	1995	376.6	871.3	692.9	378.4	494.5	KAEMMERZELL	FULDA
9316212	212.35	9.74	50.81	421.8	379.1	86.4	33.7	4.1	62.2	433.0	122.5	9.0	6.1	188.7	106.9	1959	1983	251.1	739.9	698.8	250.0	494.1	HERMANNSPIEGEL	HAUNE
9316214	283.78	8.79	51.10	139.0	494.9	118.7	53.0	4.9	42.1	477.3	118.3	15.5	10.2	162.1	100.2	1956	1993	553.9	991.1	637.7	514.1	475.0	SCHREUFA	NUHNE
9316215	221.03	9.29	50.86	250.0	341.7	66.7	37.9	4.3	57.8	481.2	74.0	6.6	3.8	191.8	109.8	1960	2006	235.1	736.4	720.8	232.9	502.3	ROELLSHAUSEN	SCHWALM
9316216	167.59	9.33	51.07	986.1	318.1	81.1	37.2	4.6	58.2	498.3	70.3	7.3	5.3	179.9	106.5	1958	2006	218.9	709.4	713.9	213.4	497.8	UTTERSHAUSEN	SCHWALM
9316220	223.92	8.92	51.50	363.0	470.0	124.5	44.7	4.7	50.6	377.7	119.7	15.0	10.2	173.4	109.0	1975	1993	447.3	936.1	658.2	455.5	479.3	WESTHEIM	DIEMEL
9316222	118.80	9.60	51.63	282.0	281.6	80.7	46.2	4.4	49.5	466.9	141.5	10.3	6.3	181.7	101.3	1967	1996	385.9	851.5	711.1	342.2	513.0	VERNAWAHISHAUSEN	SCHWULME
9316227	-99.00	10.63	50.49	271.0	481.2	97.6	44.3	4.3	51.4	378.5	181.9	9.6	7.9	186.8	94.2	1955	1992	344.1	848.8	698.9	356.7	511.4	GRIMMELHAUSEN	WERRA
9316228	-99.00	10.41	50.58	1170.0	502.1	127.1	54.4	6.0	39.6	389.6	200.7	13.7	10.0	187.5	98.7	1955	2005	398.8	882.2	679.3	397.3	498.8	MEININGEN	WERRA
9316229	-99.00	10.72	50.50	256.0	590.8	122.7	70.8	4.8	24.5	510.3	222.1	17.8	10.9	190.4	95.7	1955	1988	567.2	981.4	667.5	475.1	506.1	RAPPELDORF	SCHLEUSE
9316231	-99.00	10.47	50.54	321.0	541.8	135.7	61.1	9.7	29.2	440.3	240.5	16.3	10.0	190.9	98.0	1955	2005	457.8	940.0	655.8	454.5	493.3	ELLINGSHAUSEN	HASEL
9316235	-99.00	10.08	50.82	214.0	482.8	108.1	36.7	3.3	60.0	334.9	135.3	11.9	7.6	167.9	106.8	1955	2005	344.7	813.2	692.4	330.0	492.4	DORNDORF-2	FELDA
9316236	-99.00	9.98	50.82	399.0	476.5	146.8	31.4	2.6	66.0	347.2	124.1	11.7	7.1	188.6	111.0	1955	1998	395.6	850.3	678.9	367.4	483.2	UNTERBREIZBACH-RAESA	ULSTER
9316238	-99.00	10.34	50.97	305.2	408.6	116.2	44.3	9.3	46.4	367.3	69.4	11.1	10.1	167.3	117.9	1955	2005	288.8	812.8	663.5	344.3	475.1	EISENACH-PETERSBERG	HORSEL
9316246	33.19	8.41	52.65	764.0	55.5	29.3	11.5	4.6	83.9	588.4	129.8	1.7	3.2	166.8	109.5	1965	1996	262.4	742.8	708.5	250.3	492.2	HOOPEN	HUNTE

continued on next page

Station	Alti-	Longi-	Lati-	Basin	Elevation		Land cover			Posrosity		Slope		Aspect		Period		Qobs	Precip	PET	Qsim	ET	Gauge	River
ID	tude	tude	tude	Area	mean	stddev	forest	sealed	mixed	mean	stddev	mean	stddev	mean	stddev	start	end	[mm a^{-1}]	[mm a^{-1}]	[mm a^{-1}]	[mm a^{-1}]	[mm a^{-1}]	name	name
9316249	66.36	9.09	52.15	102.0	218.8	62.0	19.0	4.8	76.2	514.1	102.6	8.8	5.6	181.5	115.9	1961	1996	445.3	889.2	706.5	385.3	504.6	UCHTDORF	EXTER
9316260	31.60	7.95	52.56	945.0	85.9	38.3	18.9	10.3	70.8	494.9	133.3	3.3	3.8	176.5	111.7	1962	2005	301.6	815.8	710.3	318.8	499.1	BERSENBRUCK	HASE
9316261	12.11	7.35	52.70	2968.0	51.2	35.1	13.6	5.9	80.5	584.1	122.1	1.6	2.6	188.1	109.4	1957	1997	296.7	775.8	702.8	285.2	492.1	BOKELOH	HASE
9316264	55.82	8.00	52.31	323.0	108.0	33.0	18.7	12.5	68.9	436.4	79.1	4.4	3.7	176.1	109.2	1955	2005	379.3	823.8	707.5	334.4	492.1	EVERSBURG	HASE
9316265	18.20	7.60	52.68	2218.0	58.3	37.4	13.4	7.1	79.5	572.2	132.4	1.9	2.9	183.0	110.1	1960	1997	297.5	781.4	701.6	285.8	492.5	HERZLAKE	HASE
9316266	24.70	7.38	52.41	371.0	62.1	32.9	10.5	10.1	79.4	578.7	118.6	1.9	3.1	191.7	119.1	1957	2005	262.3	789.1	712.9	297.3	493.0	ESSELTE	SPELLER-AA-H
9316268	25.81	7.42	52.43	476.0	47.3	16.8	8.4	2.2	89.5	606.4	83.5	0.8	1.0	205.5	96.0	1961	1997	372.0	774.5	705.2	274.1	500.7	PLANTLUNNE	GROSSE-AA
9316270	23.15	8.01	52.71	515.0	39.7	16.1	8.4	6.3	85.3	650.7	77.6	0.8	1.0	202.9	104.6	1963	1997	261.7	733.7	702.2	244.1	490.5	UPTIOH	LAGER-HASE
9316271	54.05	7.95	52.32	229.0	106.5	39.6	21.0	11.8	67.2	418.6	126.3	5.0	4.9	166.7	114.2	1958	2005	345.9	847.6	708.1	351.8	498.7	WERSEN	DUTE
9316273	9.97	7.24	52.73	8469.0	60.7	36.2	12.7	7.9	79.4	605.4	107.1	1.3	2.4	191.6	106.5	1955	1992	301.6	770.7	704.8	275.5	496.5	VERSEN-WEHRDURCHSTICH	EMS
9316284	15.44	6.97	52.56	708.0	54.6	28.2	8.8	6.5	84.7	605.2	48.2	1.1	1.5	171.4	114.1	1955	1997	310.2	788.9	708.2	299.7	490.7	NEUENHAUS-WEHR	VECHTE
9316288	105.05	8.73	51.75	101.8	257.2	88.1	43.2	8.6	48.2	461.3	195.3	8.8	7.8	231.4	87.9	1975	1993	520.5	1023.3	699.2	509.2	513.9	NEUHAUS-1	LIPPE
9316293	220.79	8.53	51.55	143.0	382.0	65.0	41.1	2.9	55.9	392.3	116.0	8.8	6.3	186.1	118.1	1974	1993	409.0	941.4	671.7	449.1	485.9	WEINE	ALME
9316298	43.54	7.26	51.79	236.4	67.9	14.7	20.9	6.4	72.6	667.4	63.8	1.3	1.6	175.8	92.9	1958	1993	317.4	827.2	724.9	302.9	521.8	SYTHEN-1	HALTERNER-MUEHLENBACH
9316310	283.53	8.10	51.11	186.0	541.0	109.3	71.7	3.8	24.5	556.3	21.7	22.7	11.7	200.6	103.1	1955	1993	695.1	1203.2	654.1	700.5	501.3	KICKENBACH	LENNE
9316315	140.74	7.52	51.33	194.0	361.9	67.9	50.7	11.6	37.7	533.4	44.6	14.5	8.4	186.8	107.0	1971	1993	739.5	1243.6	661.9	737.9	501.6	HAGEN-ANBROCK	VOLME
9316316	123.05	7.42	51.35	154.0	305.1	75.7	30.2	16.7	53.1	464.4	46.5	10.3	6.7	184.3	108.5	1971	1993	665.9	1170.1	692.5	654.0	512.3	HAGEN-HASPE	ENNEPE
9316325	71.75	7.32	50.79	215.0	238.0	52.5	30.5	7.5	62.1	473.5	31.4	9.5	5.0	190.9	103.0	1971	1993	678.1	1064.6	724.8	533.0	530.6	BROEL	BROEL
9316330	161.18	7.16	51.26	338.0	316.3	58.1	27.5	17.2	55.3	471.4	61.4	9.0	5.4	194.5	100.8	1955	1985	721.5	1285.2	689.9	766.9	519.3	WUPPERTAL-ELBERFELD	WUPPER
9316337	86.62	7.45	50.51	697.0	289.1	64.5	41.4	6.0	52.6	463.7	33.2	9.2	7.3	183.2	102.7	1956	1995	385.3	936.3	728.1	403.3	532.9	FRIEDRICHSTHAL	WIED
9316342	268.94	8.53	50.91	304.2	470.0	83.3	60.7	6.9	32.5	510.2	126.6	17.0	10.0	174.7	101.9	1955	2006	566.5	1056.9	726.4	520.3	537.7	BIEDENKOPF	LAHN
9316343	166.38	8.72	50.69	1667.0	334.9	100.6	44.2	5.6	50.2	512.9	100.8	10.0	7.9	178.3	102.9	1956	1995	290.1	819.2	731.0	303.0	516.7	MARBURG	LAHN
9316345	292.82	8.47	50.92	113.4	443.0	65.6	45.6	9.3	45.1	503.9	82.9	13.5	8.3	175.9	106.2	1966	1991	468.3	986.7	739.3	455.0	536.8	BREIDENSTEIN	PERF
9316350	155.11	8.46	50.58	692.2	383.7	105.1	53.0	8.9	38.1	470.2	121.1	12.7	7.6	170.8	100.0	1963	1995	430.1	937.8	746.5	402.1	537.7	ASSLAR	DILL
9316352	183.19	8.06	50.24	143.7	388.4	66.4	55.9	6.9	37.3	463.4	55.2	11.6	7.0	187.8	110.6	1961	2006	257.7	755.3	730.8	245.2	513.0	MICHELBACH	AAR
9316354	172.84	7.80	50.28	145.0	338.7	66.7	36.3	2.4	61.3	469.2	13.7	8.5	4.8	179.4	109.9	1973	1995	214.7	742.0	740.3	226.5	512.7	SCHULEMUHLE	MUHLBACH
9316355	-99.00	9.83	48.63	137.6	673.2	100.0	43.8	5.5	50.7	235.8	38.6	18.3	15.2	172.5	107.1	1955	2006	557.7	1059.1	710.9	552.4	537.1	GEISLINGEN-(BRUECKE)	FILS
9316359	358.43	9.75	48.69	356.0	625.7	112.1	37.4	7.3	55.3	252.3	45.6	15.4	14.4	178.4	104.8	1955	1995	529.5	1031.6	702.4	521.8	532.6	SUESSEN	FILS
9316378	408.49	8.73	48.54	144.5	588.4	57.5	38.7	6.0	55.3	349.4	64.4	9.5	7.2	166.3	104.0	1955	1981	302.4	960.4	742.1	426.2	551.3	ISELHAUSEN	WALDACH
9316380	-99.00	8.57	48.14	218.2	712.0	46.4	33.7	5.9	60.4	388.3	67.4	5.9	4.8	145.9	100.5	1955	2006	705.2	1045.2	756.0	512.0	562.1	HOEFEN	ENZ
9316383	334.86	9.74	48.99	125.9	457.5	45.3	54.4	4.0	41.7	293.5	33.7	10.0	7.8	171.0	106.0	1955	2006	455.8	1016.7	771.2	451.3	565.9	MITTELROT	FICHTENBERGER-ROT
9316389	-99.00	10.10	49.03	329.2	496.3	37.2	36.7	4.8	58.4	319.8	76.1	6.0	4.8	177.7	104.8	1955	1995	267.4	848.3	771.4	295.8	555.5	JAGSTZELL	JAGST
9316405	104.74	8.95	50.13	921.0	296.8	112.2	45.6	6.8	47.6	440.3	109.0	9.9	7.4	193.1	101.4	1957	2006	340.1	908.9	747.5	376.0	534.4	HANAU	KINZIG
9316407	117.16	8.80	50.28	1072.0	228.6	97.1	31.7	7.9	60.4	474.2	82.5	6.1	5.0	182.1	99.4	1958	1995	184.6	727.1	730.9	219.1	507.6	ILBENSTADT	NIDDA
9316408	127.45	8.78	50.33	183.0	295.5	86.3	42.4	10.7	46.9	510.6	55.8	7.9	5.3	158.7	103.5	1962	2006	195.1	720.3	721.4	223.4	499.2	FRIEDBERG	USA
9316410	113.30	8.88	50.23	392.6	268.9	123.5	37.4	5.7	56.9	448.7	76.8	8.2	5.7	203.9	93.7	1956	2006	295.9	842.5	734.8	317.1	525.6	WINDECKEN	NIDDER
9316412	186.27	8.40	50.14	108.0	374.4	90.1	64.1	8.9	27.0	417.7	59.5	12.9	6.9	181.3	98.0	1956	1995	259.2	800.5	683.4	299.6	500.8	EPPSTEIN	SCHWARZBACH
9316418	196.17	9.62	50.20	457.0	446.9	123.6	65.6	2.9	31.5	506.5	96.7	14.4	7.3	188.9	102.2	1955	2006	400.1	959.6	728.6	427.7	535.2	MITTELSINN	SINN
9316419	174.54	9.54	50.03	220.0	387.7	76.7	75.7	2.6	21.7	557.2	31.4	14.9	7.3	175.6	101.3	1955	2006	453.9	1035.4	774.3	467.7	568.5	PARTENSTEIN	LOHR
9316420	144.57	9.22	49.83	142.0	348.0	85.2	72.7	3.5	23.8	545.7	52.8	15.6	8.6	193.7	101.5	1955	2006	272.6	890.1	768.8	332.4	559.1	RUECK	ELSAVA
9316421	267.20	11.15	50.17	2424.0	480.8	124.0	43.6	5.1	51.4	436.4	165.4	11.3	9.2	183.2	101.7	1960	1989	397.6	886.9	709.8	371.3	514.1	SCHWUERBITZ	MAIN
9316426	332.60	11.57	49.95	333.0	486.4	110.1	36.4	7.5	56.0	513.1	206.1	9.1	7.3	178.1	105.3	1955	2006	300.5	856.6	725.0	344.7	513.7	BAYREUTH	ROTER-MAIN
9316433	288.39	11.21	50.23	255.0	493.0	164.3	50.4	6.0	43.6	483.1	135.2	13.1	12.3	180.5	92.6	1955	1982	449.2	900.1	676.5	397.7	504.7	HORB	STEINACH
9316434	282.13	10.96	50.26	365.0	452.4	132.7	43.7	8.4	47.9	397.2	169.6	11.5	10.4	182.5	92.8	1955	1983	435.8	853.7	699.5	361.2	507.7	COBURG-GUETERBAHNHOF	ITZ
9316436	242.11	10.85	50.01	383.0	344.9	47.9	49.5	1.9	48.6	530.9	154.5	7.8	5.1	166.7	104.0	1955	2006	197.9	700.9	781.3	165.5	535.4	LEUCHERHOF	BAUNACH
9316438	290.22	10.99	49.44	1845.0	416.9	55.6	38.9	9.0	52.1	490.1	166.1	4.9	5.0	177.2	109.7	1960	1995	194.6	729.3	777.4	188.5	538.2	NEUMUEHLE	REDNITZ
9316439	373.99	11.38	49.37	209.0	488.0	60.8	33.7	9.2	57.1	301.3	120.4	7.9	7.2	189.3	100.3	1955	1995	316.9	882.5	766.2	331.9	550.2	RASCH	SCHWARZACH
9316441	272.99	11.02	49.61	185.0	378.5	69.1	25.7	9.9	64.4	373.1	179.4	6.4	5.8	195.8	106.8	1955	1982	244.2	787.7	781.5	246.4	540.9	ERLANGEN	SCHWABACH
9316445	256.92	10.89	49.80	269.0	341.8	46.8	35.2	2.5	62.4	583.1	192.6	7.0	5.0	164.3	106.5	1955	1982	183.5	713.2	780.1	176.4	536.6	HERRNSDORF	REICHE-EBRACH
9316447	199.68	9.78	49.50	1013.0	380.8	60.9	18.3	2.8	78.9	383.9	101.0	6.1	6.1	188.5	111.1	1955	1995	201.1	708.2	774.3	186.9	522.3	BAD-MERGENTHEIM	TAUBER
9316452	-99.00	8.68	49.55	176.1	295.9	95.3	37.2	9.5	53.3	356.8	56.0	15.1	8.6	189.3	102.0	1956	2006	587.7	994.8	750.8	448.3	547.0	WEINHEIM	WESCHNITZ
9316457	159.45	8.83	49.81	151.0	287.7	84.8	34.7	4.7	60.6	411.3	93.3	12.8	7.3	180.1	108.6	1961	2006	357.1	951.9	734.8	430.4	523.2	GROSS-BIEBERAU	GERSPRENZ
9316458	119.84	8.99	49.97	461.0	214.1	82.0	34.7	9.4	55.9	474.2	91.8	7.0	7.2	173.2	113.2	1956	2006	214.5	813.1	762.3	290.6	523.8	HARRESHAUSEN	GERSPRENZ
9316460	197.72	9.22	49.69	396.0	389.5	83.1	61.4	4.4	34.2	483.7	88.2	13.5	11.7	167.8	103.0	1960	1995	269.6	877.3	758.1	338.9	539.0	WEILBACH	MUD
9316464	549.47	8.64	48.17	454.0	701.7	58.3	34.0	10.7	55.3	364.9	96.1	7.2	6.5	162.0	105.5	1955	1995	347.3	942.0	739.2	405.7	549.2	ROTTWEIL	NECKAR
9316466	385.15	8.71	48.45	1119.0	653.0	85.9	34.9	9.2	55.9	337.8	90.9	8.9	8.9	163.9	105.4	1955	1995	404.3	1002.5	741.6	467.6	551.0	HORB	NECKAR
9316471	428.10	8.58	48.38	202.0	645.5	60.1	36.9	7.3	55.8	352.0	60.0	9.6	8.3	160.1	99.1	1955	2006	634.8	1267.3	729.5	759.2	553.2	HOPFAU	GLATT
9316479	218.15	9.32	48.85	569.0	398.5	100.0	38.4	14.2	47.5	314.9	63.0	12.4	9.2	184.4	107.8	1955	1995	383.4	952.0	776.2	386.5	569.4	NEUSTADT	REMS
9316480	257.30	9.47	48.99	180.0	424.8	67.5	62.6	3.9	33.6	281.0	27.5	15.6	9.2	181.9	103.7	1955	1995	407.4	1033.3	773.0	459.4	573.6	OPPENWEILER	MURR
9316483	244.55	8.73	48.90	1476.0	568.2	125.8	52.8	9.1	38.1	409.1	102.0	11.7	11.3	168.5	103.9	1955	1987	374.3	1009.5	746.4	461.5	554.6	PFORZHEIM	ENZ
9316487	293.76	8.70	48.84	705.0	585.3	91.7	51.8	6.6	41.7	411.6	78.4	11.5	10.7	164.6	100.3	1955	1992	370.8	1013.6	750.3	464.5	560.6	UNTERREICHENBACH	NAGOLD
9316494	183.99	9.46	49.24	152.0	340.9	85.2	33.0	8.2	58.8	344.0	65.7	9.1	8.3	192.3	108.4	1955	1995	337.0	897.7	775.7	345.9	551.2	OHRNBERG	OHRN
9316509	570.35	8.62	48.14	220.0	708.9	47.3	34.7	5.5	59.8	385.5	67.6	6.0	5.1	145.2	100.1	1963	1981	400.6	1045.7	739.4	508.4	553.3	BUEHLINGEN	ESCHACH
9316522	11.90	9.21	53.08	955.0	44.8	18.7	18.8	4.9	76.3	606.5	57.6	0.9	0.9	208.9	109.7	1961	2005	336.9	774.7	701.7	280.4	494.3	HELLWEGE-SCHL.-V	WUMME
9316523	26.89	9.53	53.20	239.0	53.2	19.9	21.1	3.1	75.8	637.2	49.1	0.9	1.2	223.9	104.6	1969	1996	305.7	744.2	695.7	263.6	482.8	LAUENBRUCK-B-75	WUMME
9316524	7.21	9.17	53.34	604.0	32.0	8.5	11.0	4.4	84.6	599.0	56.2	1.0	0.8	191.8	102.4	1961	2005	316.7	777.1	694.4	281.9	495.4	ROCKSTEDT	OSTE
9316529	-999.00	10.75	50.51	114.0	591.1	123.0	74.1	6.5	19.4	513.6	241.4	17.0	10.2	186.3	91.9	1963	2005	569.8	1010.8	653.6	510.5	498.0	SCHLEUSINGEN	NAHE-(THUERINGEN)
9316534	-999.00	9.97	51.38	275.0	351.4	66.8	28.3	6.0	65.7	374.1	127.9	9.4	7.4	181.1	108.7	1960	2005	305.8	738.1	718.5	239.5	502.0	ARENSHAUSEN	LEINE