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AfU Kanton Solothurn
AWA Kanton Bern

Aare Monitoring Chemie 2012-2022

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1 Messstellenübersicht



Bezeichnung	Messstelle	Kanton	Abflussmessung	Gewässer	Parameter	DOC Zielwert [mg/L C]	Weitere Bezeichnungen
NAWA83	Thun Schadau Seeauslauf	BE	NAWA83	Aare	Nährstoffe (ohne BSB5), Schwermetalle, Hydrometrie	2	NAWA 83 / THUN, LHG 2030
LHG2135	Bern, Schönaue	BE	LHG2135	Aare	Hydrometrie, Schwermetalle	2	LHG 2135
AC52	Eymatt, Stägmatt-Steg	BE	Nicht vorhanden	Aare	Nährstoffe (ohne BSB5), Schwermetalle	2	AC52
NAWA81	Hagneck	BE	NAWA81	Aare	Nährstoffe (ohne BSB5), Schwermetalle, Hydrometrie	2	NAWA 81 / AC15, LHG 2085
NAWA82	Auslauf Bielersee	BE	NAWA82	Aare	Nährstoffe (ohne BSB5), Schwermetalle, DICH, Hydrometrie	2	NAWA 82 / BIEL
NAWA6	Murgenthal	BE	NAWA6	Aare	Nährstoffe (ohne BSB5), Schwermetalle, DICH, Hydrometrie	2	NAWA 6 /AE06 / LGH 2063
WQ_CT01	Aarau	AG	LHG2016	Aare	Nährstoffe, Schwermetalle, DICH	2	WQ_CT01
LHG2016	Brugg	AG	LHG2016	Aare	Hydrometrie, Abflussproportionale Mischproben	2	LHG 2016 / WQ_2016

Bezeichnung	Messstelle	Kanton	Abflussmessung	Gewässer	Parameter	DOC Zielwert [mg/L C]	Weitere Bezeichnungen
NAWA31	Leuggern (Felsenau)	AG	FG_2205	Aare	Nährstoffe, Schwermetalle, DICH	2	NAWA 31 / WQ_CT02
FG_2205	Stilli	AG	FG_2205	Aare	Hydrometrie	2	
NAWA58	Schlupf	BE	Nicht vorhanden	Chise	Nährstoffe, Schwermetalle, Biologie, Hydrometrie	4	NAWA 58 / KI52
NAWA59	Belpmatten	BE	Nicht vorhanden	Gürbe	Nährstoffe, Schwermetalle, Biologie	4	NAWA 59 / GU03, GUR009
NAWA106	Marfeldingen	BE	Nicht vorhanden	Saane	Nährstoffe, Schwermetalle, Biologie	4	NAWA 106 / SA51 / SAA009
NAWA94	Mündung Bielersee	BE	Nicht vorhanden	Schüss	Nährstoffe, Schwermetalle, Biologie	4	NAWA 94 / SC01, SUZ011
LHG1993	Derendingen	SO	LHG1993	Emme	Nährstoffe, Schwermetalle, Biologie, Hydrometrie	3	1993
LHG1284	Luterbach	SO	LHG1284	Emmenkanal	Nährstoffe, Schwermetalle, Biologie, Hydrometrie	3	1284
LHG1292	Deitingen	SO	LHG1292	Russbach	Nährstoffe, Schwermetalle, Biologie, Hydrometrie	3	1292 / SO_85



Bezeichnung	Messstelle	Kanton	Abflussmessung	Gewässer	Parameter	DOC Zielwert [mg/L C]	Weitere Bezeichnungen
NAWA63	Mangen M	BE	Nicht vorhanden	Langete	Nährstoffe, Schwermetalle, Biologie	4	NAWA 63 / LA08, LAN009
FG_0340	Vordemwald	AG	FG_0340	Pfaffnern	Hydrometrie	2	FG_0340
WQ_CT06	Rothrist	AG	FG_0340	Pfaffnern	Nährstoffe, Schwermetalle, Biologie	3	WQ_CT06, WQ_SP01
FG_2450	Zofingen	AG	FG_2450	Wigger	Nährstoffe, Schwermetalle, Biologie, Hydrometrie	3	WQ_CT07, WQ_SP02, FG_2450
LHG1288	Olten	SO	LHG1288	Dünnern	Nährstoffe, Schwermetalle, Biologie, MV, Hydrometrie	4	1288 / DUENNERN 3, LHG 2434, CH_089_SO
FG_0333	Suhr	AG	FG_0333	Suhre	Nährstoffe, Schwermetalle, Biologie, Hydrometrie	3	WQ_CT08, WQ_SP04, FG_0333
FG_0348	Suhr	AG	FG_0348	Wyna	Nährstoffe, Schwermetalle, Biologie, Hydrometrie	3	WQ_CT09, WQ_SP06, FG_0348
FG_0346	Lenzburg	AG	FG_0346	Aabach	Hydrometrie	2	FG_0346
WQ_CT10	Niederlenz	AG	FG_0346	Aabach	Nährstoffe, Schwermetalle, Biologie	3	WQ_CT10, WQ_SP07
FG_0332	Othmarsingen	AG	FG_0332	Bünz	Hydrometrie	2	FG_0332

Bezeichnung	Messstelle	Kanton	Abflussmessung	Gewässer	Parameter	DOC Zielwert [mg/L C]	Weitere Bezeichnungen
WQ_CT11	Möriken	AG	FG_0332	Bünz	Nährstoffe, Schwermetalle, Biologie, MV,	3	WQ_CT11, WQ_SP09
LHG2018	Mellingen	AG	LHG2018	Reuss	Hydrometrie	2	LHG 2018 / FG_2018
WQ_CT04	Gebenstorf	AG	LHG2018	Reuss	Nährstoffe, Schwermetalle	2	WQ_CT04
LHG2243	Baden	AG	LHG2243	Limmat	Hydrometrie	2	LHG 2243 / FG_2243
WQ_CT05	Turgi	AG	LHG2243	Limmat	Nährstoffe, Schwermetalle	2	WQ_CT05
FG_0358	Döttingen	AG	FG_0358	Surb	Nährstoffe, Schwermetalle, Biologie, Hydrometrie	3	WQ_C12, FG_0358, WQ_SP14

2 Übersicht Einzugsgebiete

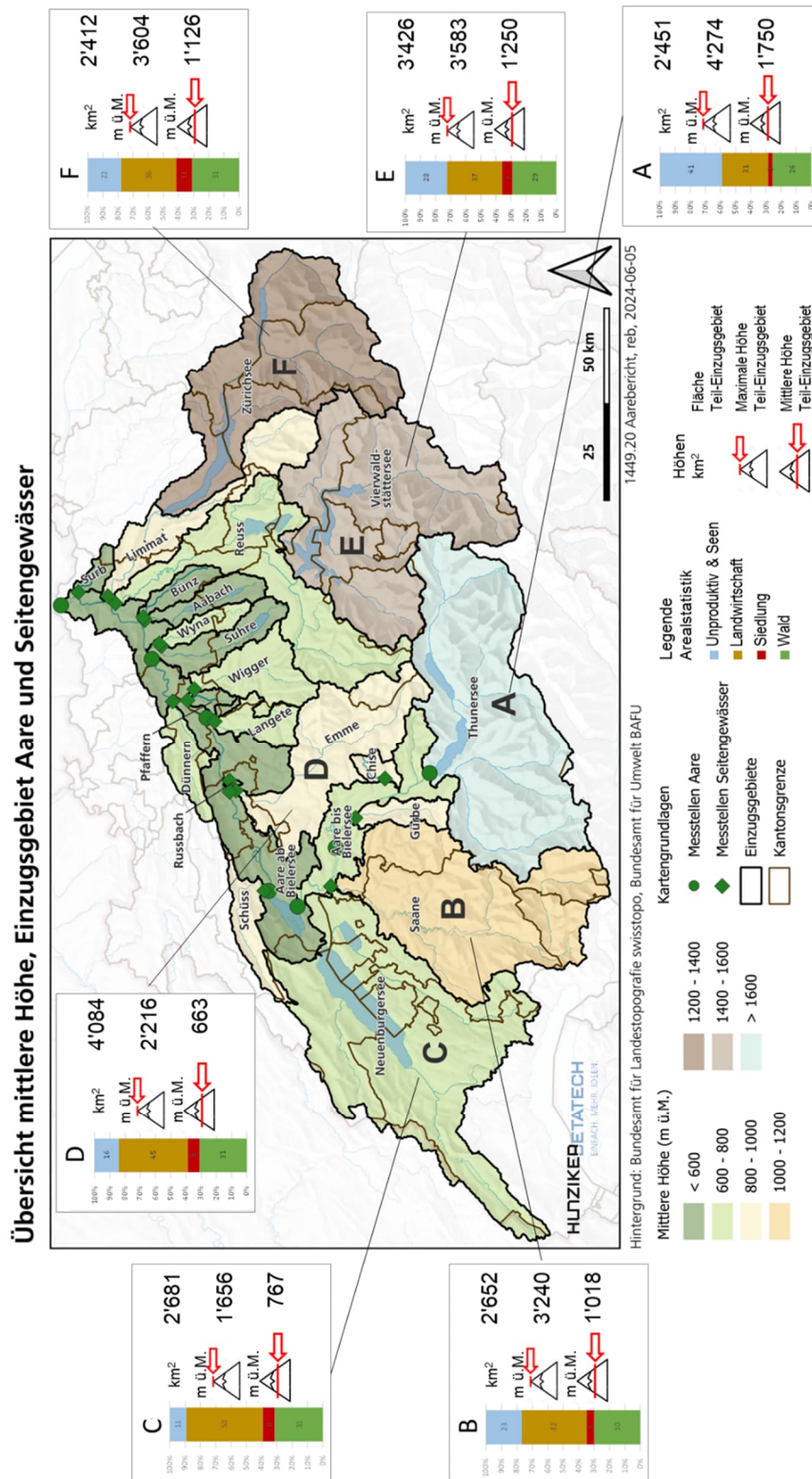


Abbildung 1: Gliederung des Gesamteinzugsgebiets der Aare in sechs Einzugsgebiete. Die Teileinzugsgebiete sind entsprechend der mittleren Höhe eingefärbt. Die Balkendiagramme zeigen pro Einzugsgebiet die Verteilung der Bodenbedeckung gemäss Arealstatistik sowie die maximale und mittlere Höhe.

3 Abweichende Bewertungen



Messstellen Bezeichnung	Datum	Parameter	Bewertung HBT	Bewertung Kantone	Messstelle	Kanton	Abflussmessstelle Bezeichnung	Abfluss- messstelle
NAWA58	01.01.2022	Cu	4	3	Schlupf	BE		
NAWA31	01.01.2018	DOC	3	2	Leuggern (Felsenau)	AG	Stilli	FG_2205
WQ_CT01	01.01.2015	NH4	2	1	Aarau	AG	Brugg	LHG2016
NAWA31	01.01.2022	NH4	2	1	Leuggern (Felsenau)	AG	Stilli	FG_2205
FG_2450	01.01.2022	NH4	2	1	Zofingen	AG	Zofingen	FG_2450
WQ_CT01	01.01.2022	NH4	2	1	Aarau	AG	Brugg	LHG2016
NAWA59	01.01.2013	NO2	1	2	Belpmatten	BE		
NAWA59	01.01.2016	NO2	4	5	Belpmatten	BE		
FG_0333	01.01.2018	NO2	2	1	Suhr	AG	Suhr	FG_0333
NAWA58	01.01.2021	NO2	1	2	Schlupf	BE		
NAWA106	01.01.2021	NO2	4	5	Marfeldingen	BE		
NAWA94	01.01.2022	NO2	1	2	Mündung Bielersee	BE		
NAWA59	01.01.2022	NO2	1	2	Belpmatten	BE		
WQ_CT10	01.01.2012	P_tot	1	2	Niederlenz	AG	Lenzburg	FG_0346
FG_0358	01.01.2012	P_tot	4	3	Döttingen	AG	Döttingen	FG_0358
FG_2450	01.01.2015	P_tot	4	3	Zofingen	AG	Zofingen	FG_2450
WQ_CT05	01.01.2015	P_tot	1	2	Turgi	AG	Baden	LHG2243
WQ_CT06	01.01.2016	P_tot	4	3	Rothrist	AG	Vordemwald	FG_0340
NAWA31	01.01.2016	P_tot	1	2	Leuggern (Felsenau)	AG	Stilli	FG_2205
WQ_CT01	01.01.2016	P_tot	1	2	Aarau	AG	Brugg	LHG2016
FG_0333	01.01.2017	P_tot	4	3	Suhr	AG	Suhr	FG_0333
NAWA31	01.01.2017	P_tot	1	2	Leuggern (Felsenau)	AG	Stilli	FG_2205
WQ_CT05	01.01.2017	P_tot	1	2	Turgi	AG	Baden	LHG2243
FG_0358	01.01.2018	P_tot	4	3	Döttingen	AG	Döttingen	FG_0358
NAWA31	01.01.2018	P_tot	1	2	Leuggern (Felsenau)	AG	Stilli	FG_2205
WQ_CT05	01.01.2018	P_tot	1	2	Turgi	AG	Baden	LHG2243
WQ_CT11	01.01.2021	P_tot	4	3	Möriken	AG	Othmarsingen	FG_0332
WQ_CT06	01.01.2021	P_tot	4	3	Rothrist	AG	Vordemwald	FG_0340
FG_0358	01.01.2021	P_tot	4	3	Döttingen	AG	Döttingen	FG_0358
FG_2450	01.01.2021	P_tot	4	3	Zofingen	AG	Zofingen	FG_2450

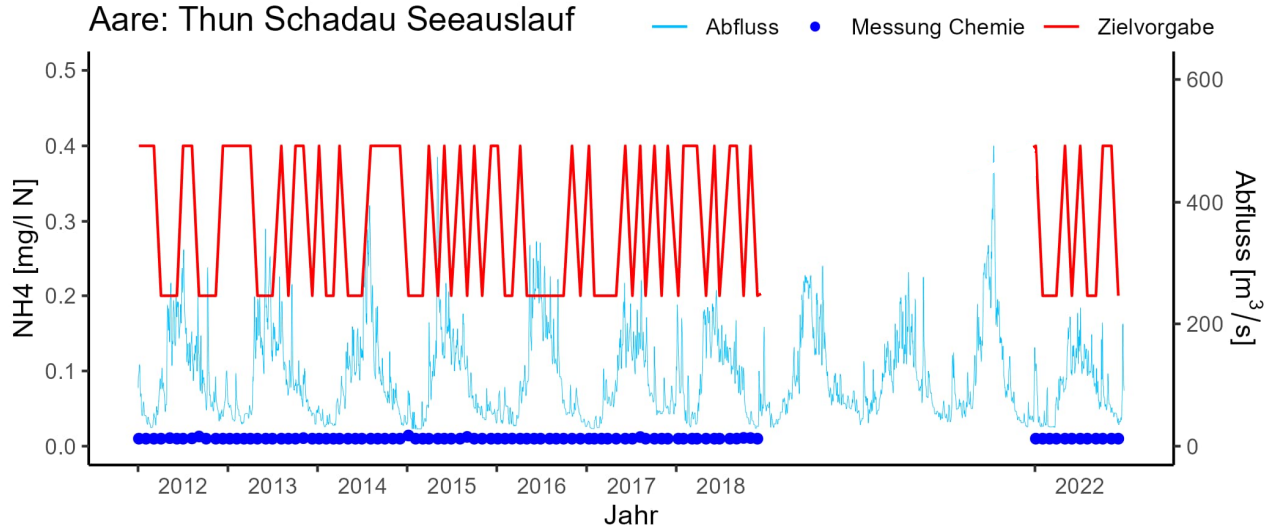
Messstellen Bezeichnung	Datum	Parameter	Bewertung HBT	Bewertung Kantone	Messstelle	Kanton	Abflussmessstelle Bezeichnung	Abflusss- messstelle
NAWA31	01.01.2022	P_tot	1	2	Leuggern (Felsenau)	AG	Stilli	FG_2205
WQ_CT01	01.01.2022	P_tot	1	2	Aarau	AG	Brugg	LHG2016
AC52	01.01.2022	Zn	2	1	Eymatt, Stägmatt-Steg	BE		
NAWA59	01.01.2022	Zn	3	2	Belpmatten	BE		



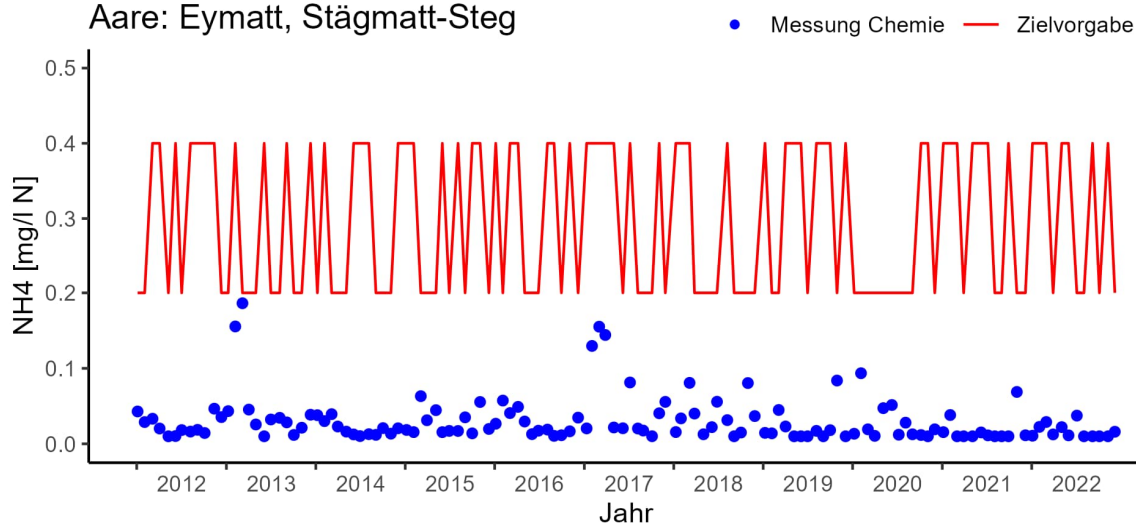
4 Ganglinien

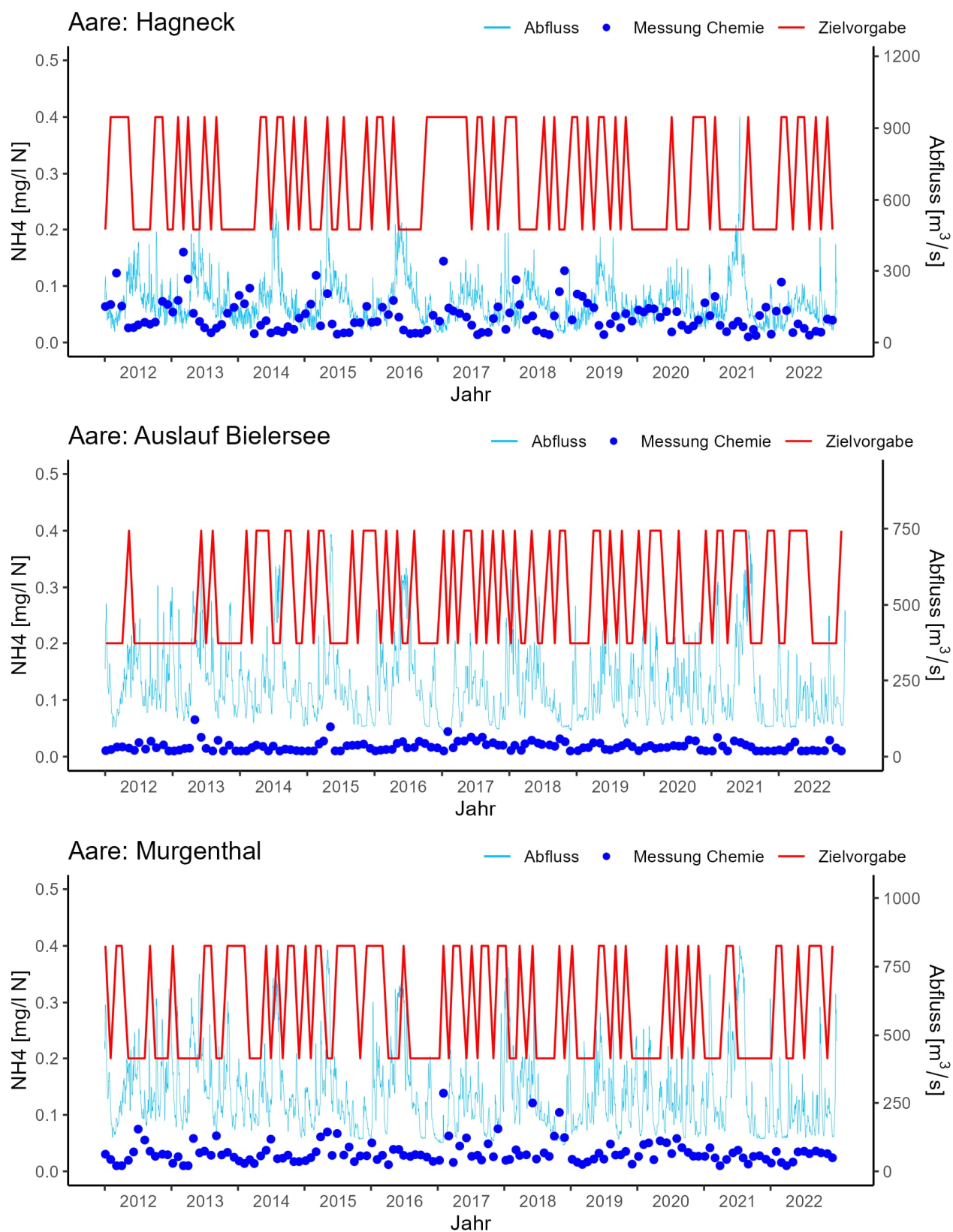
4.1 Ammonium

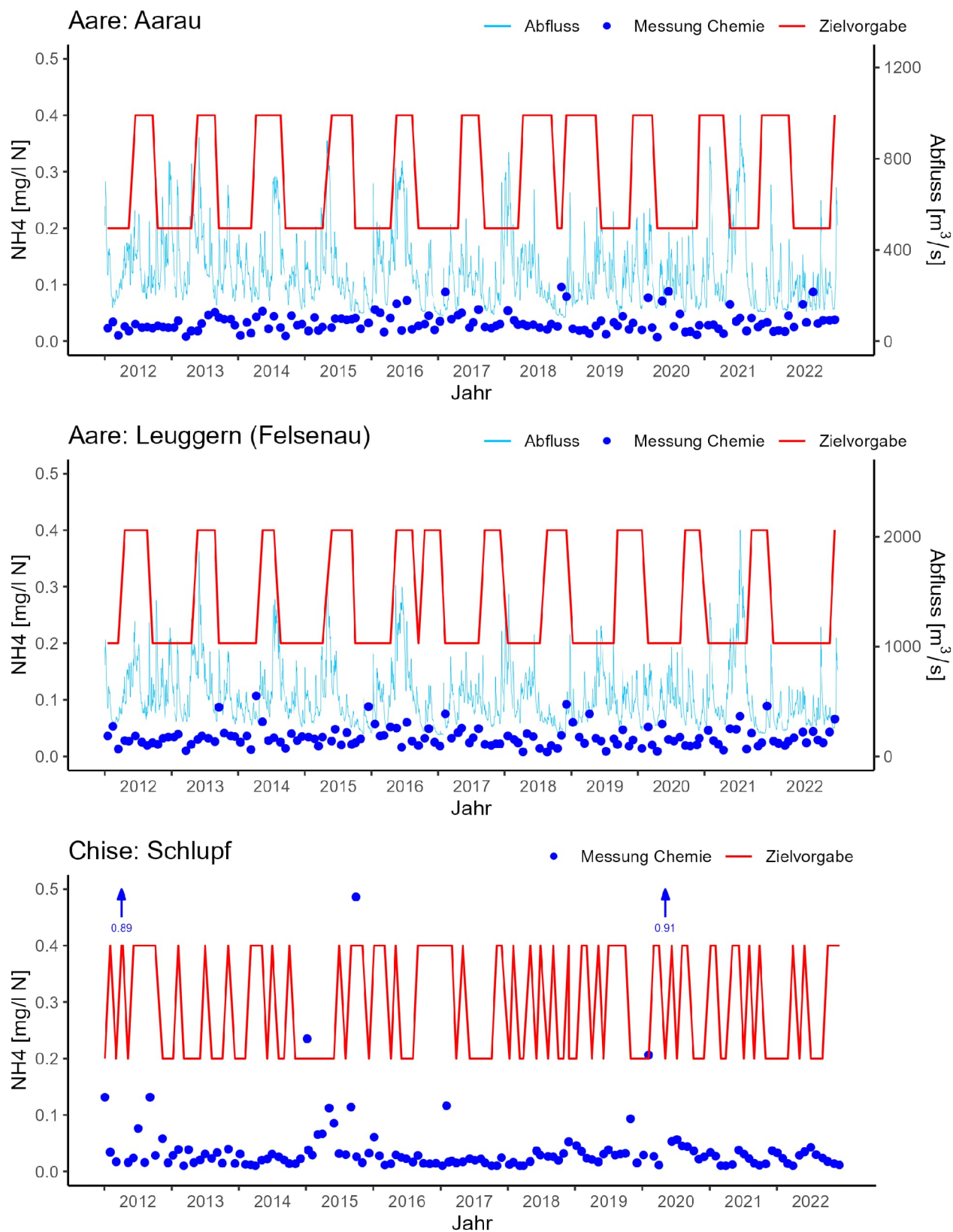
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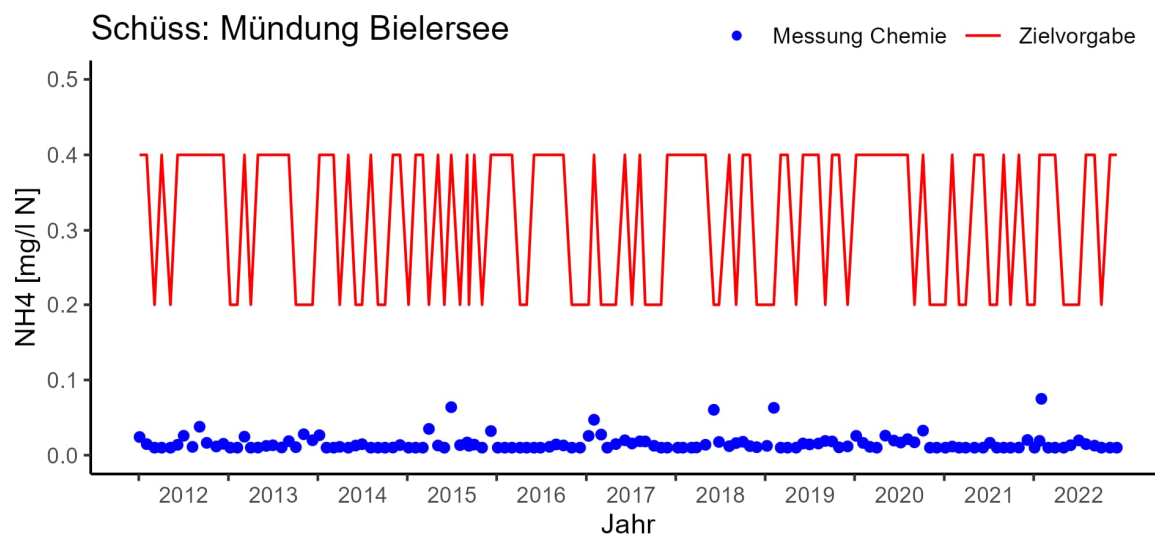
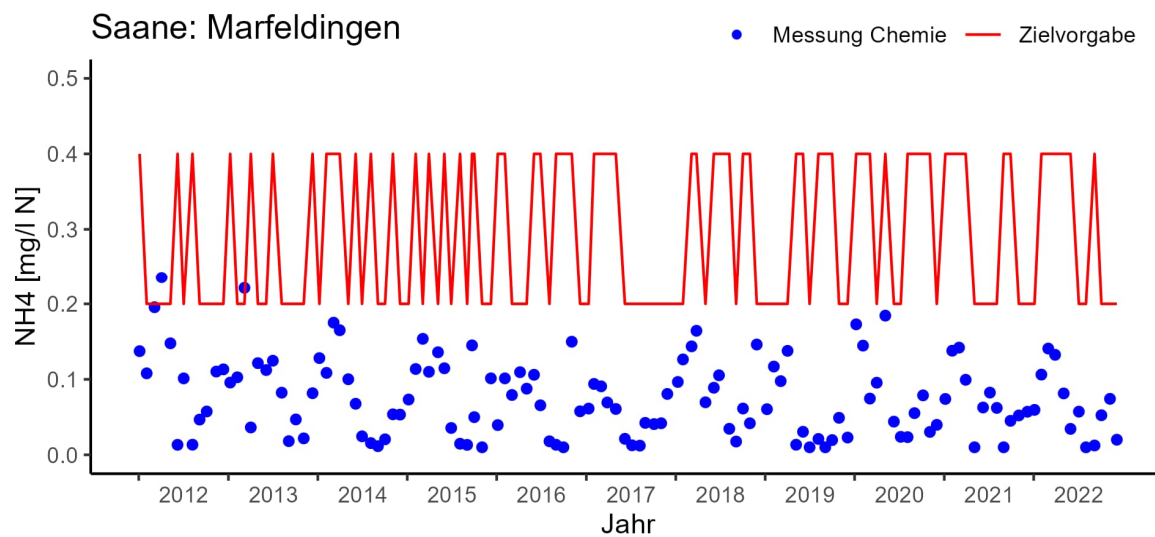
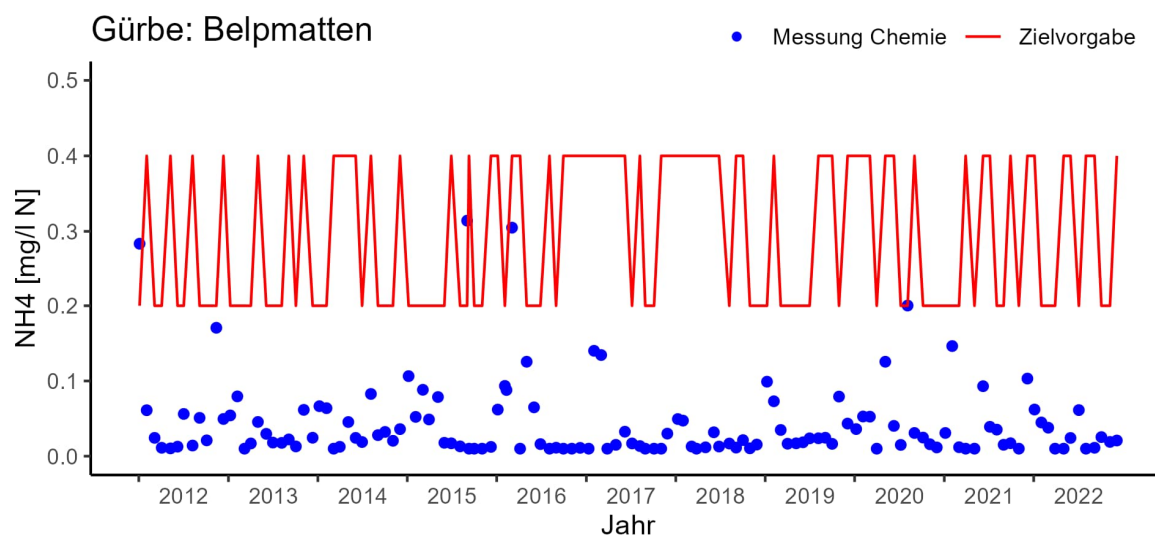


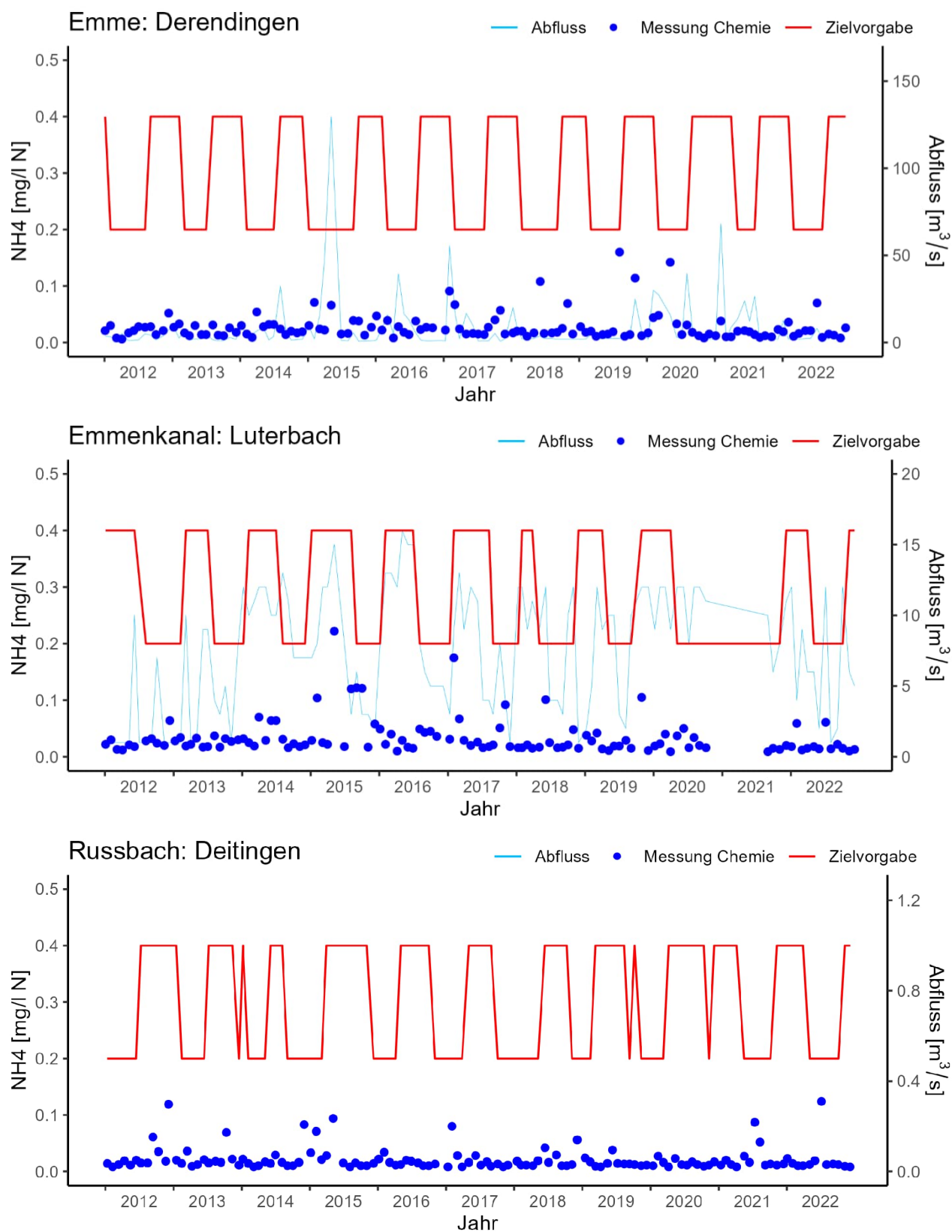
Aare: Eymatt, Stägmatt-Steg

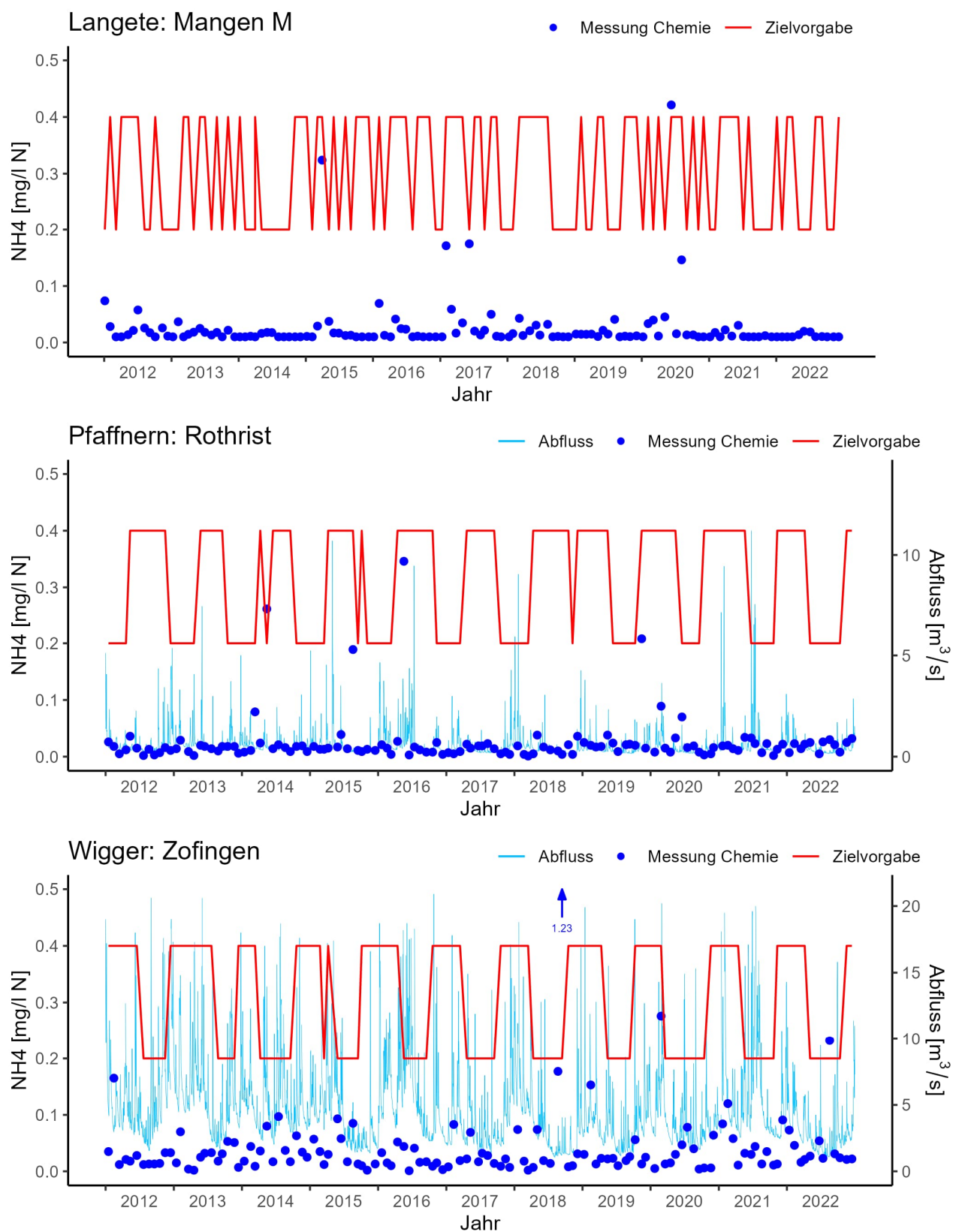


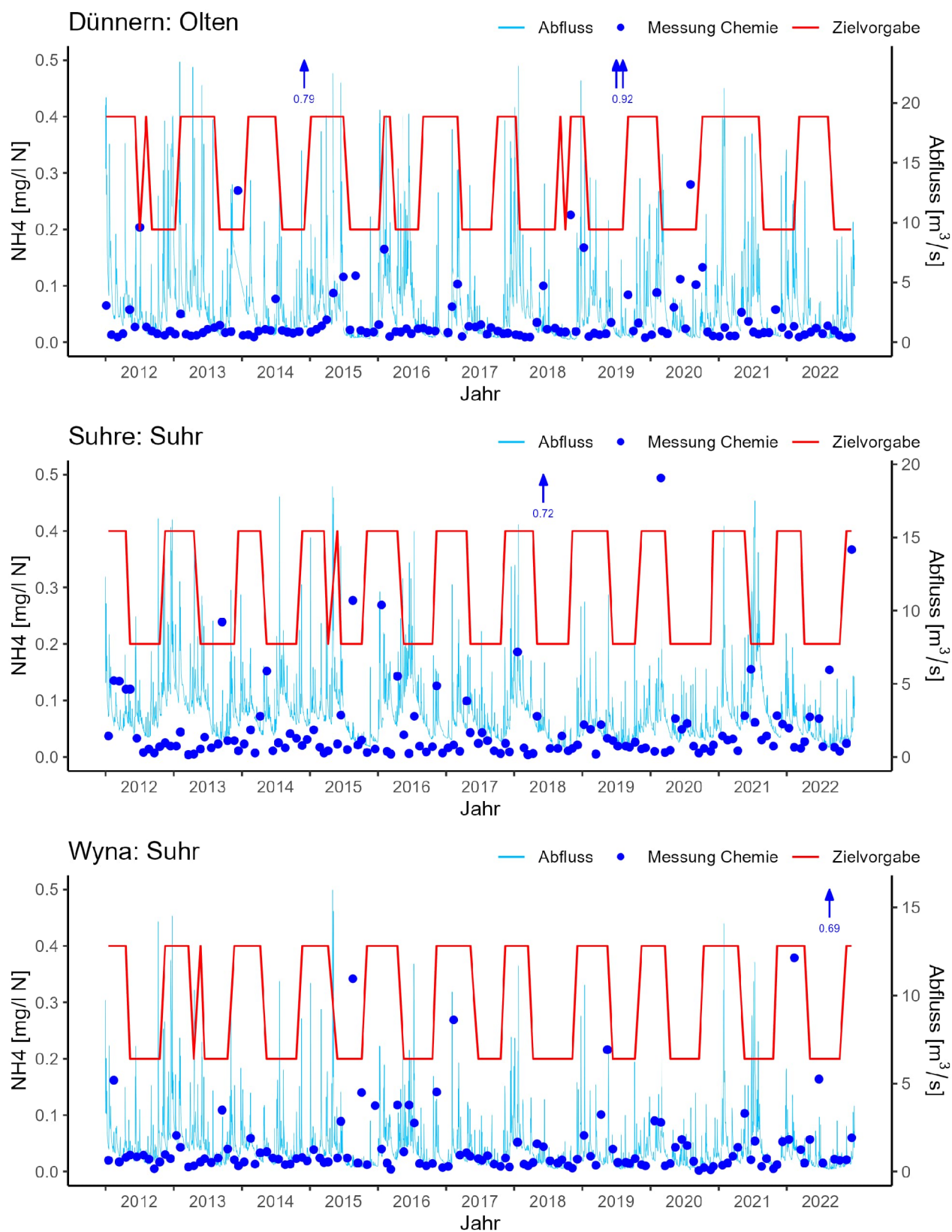


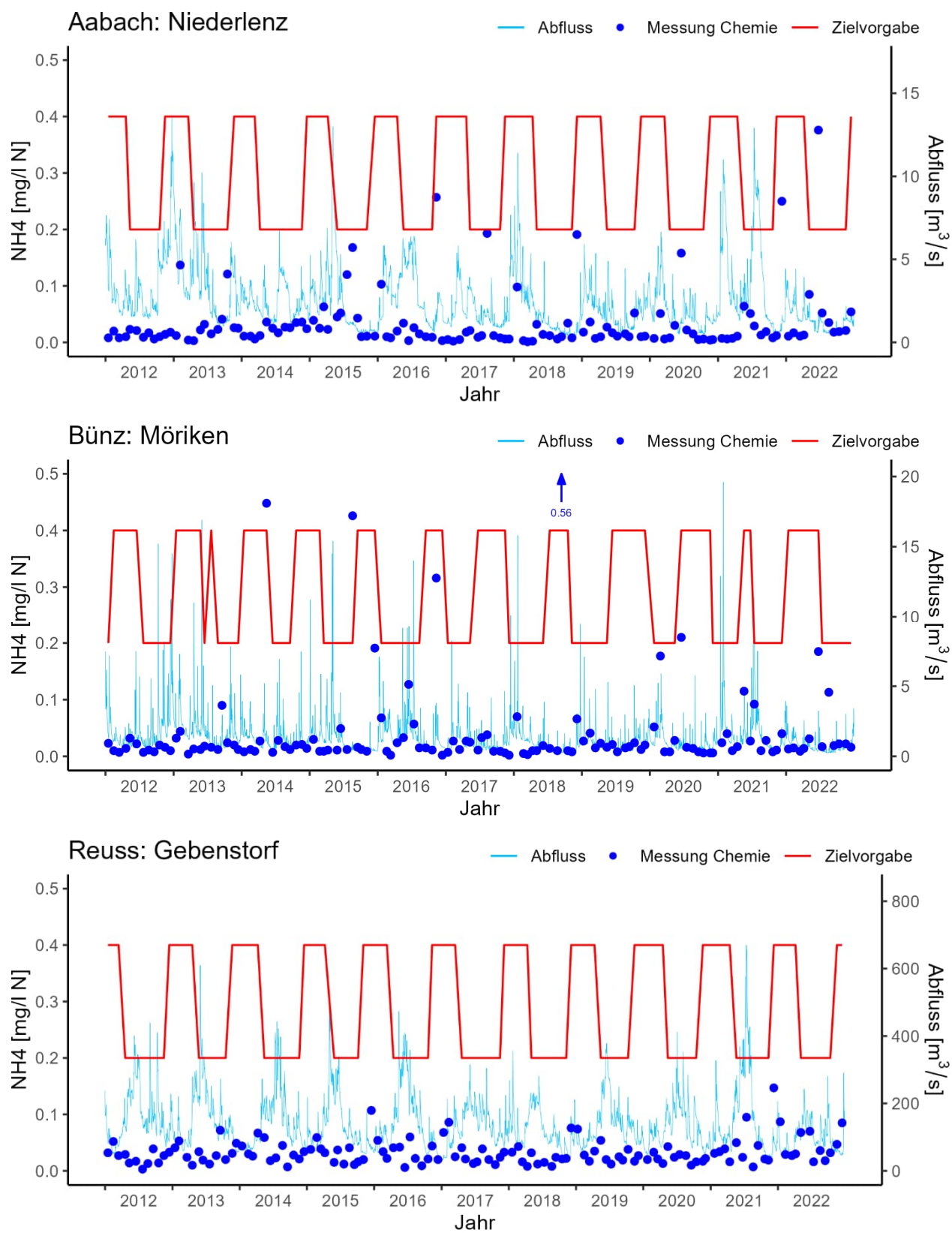


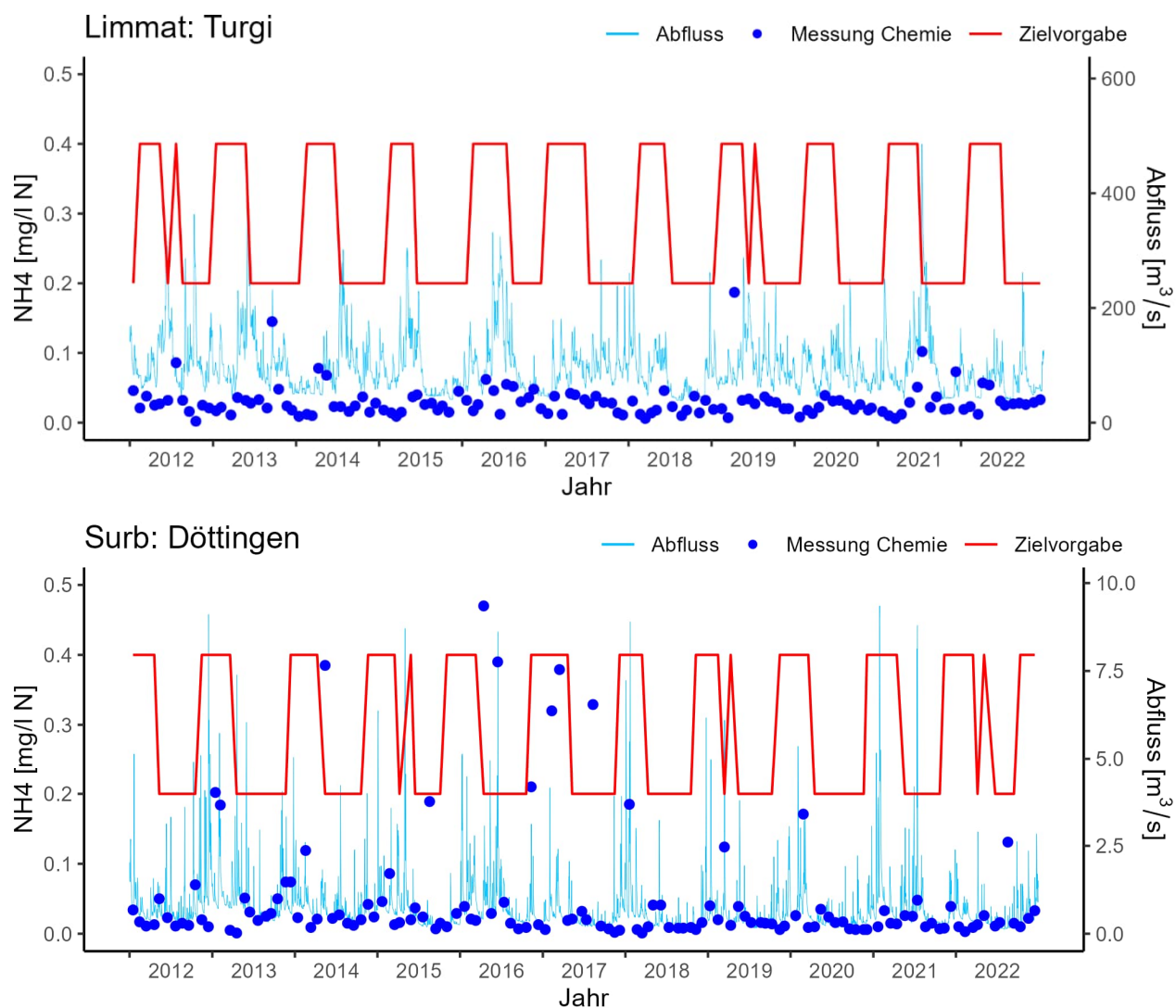






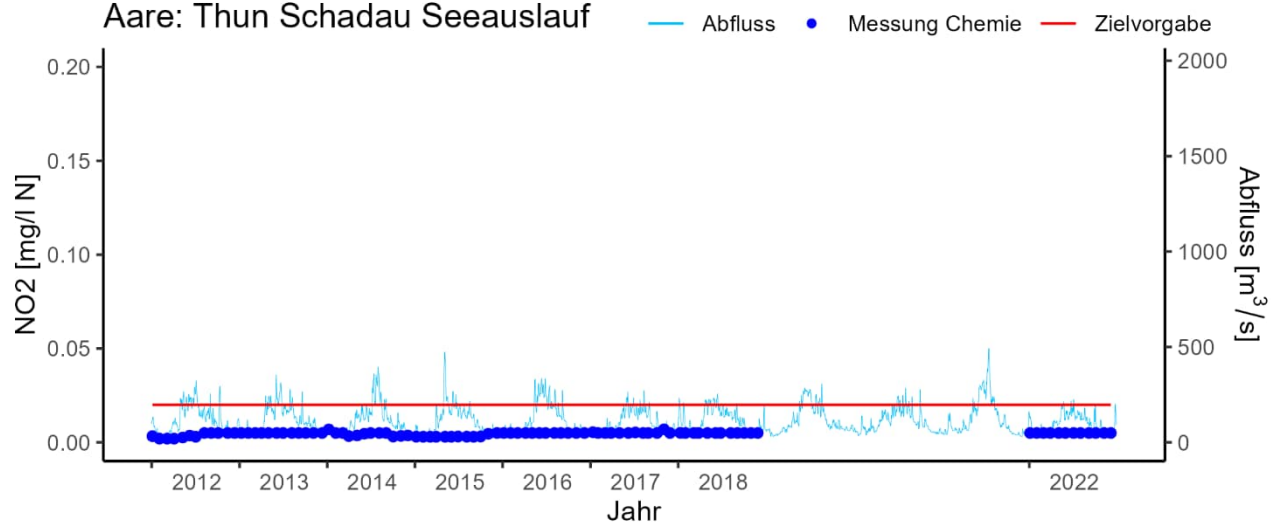




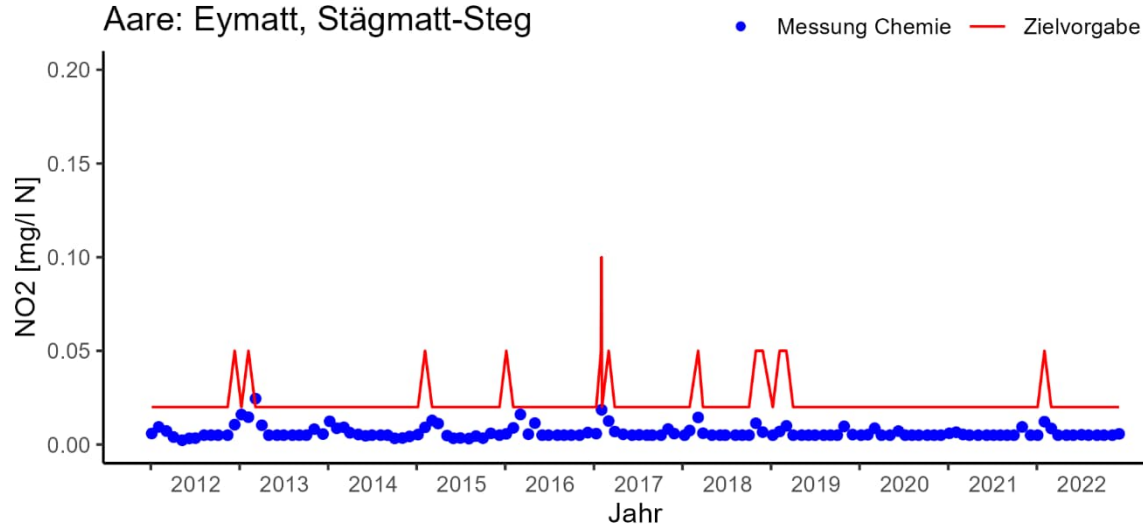


4.2 Nitrit

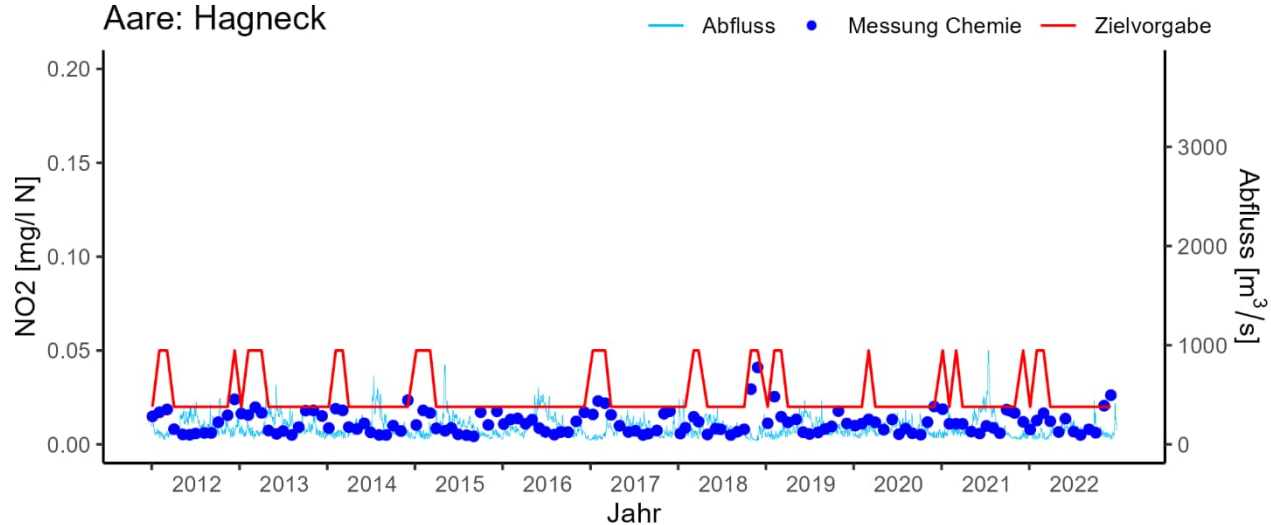
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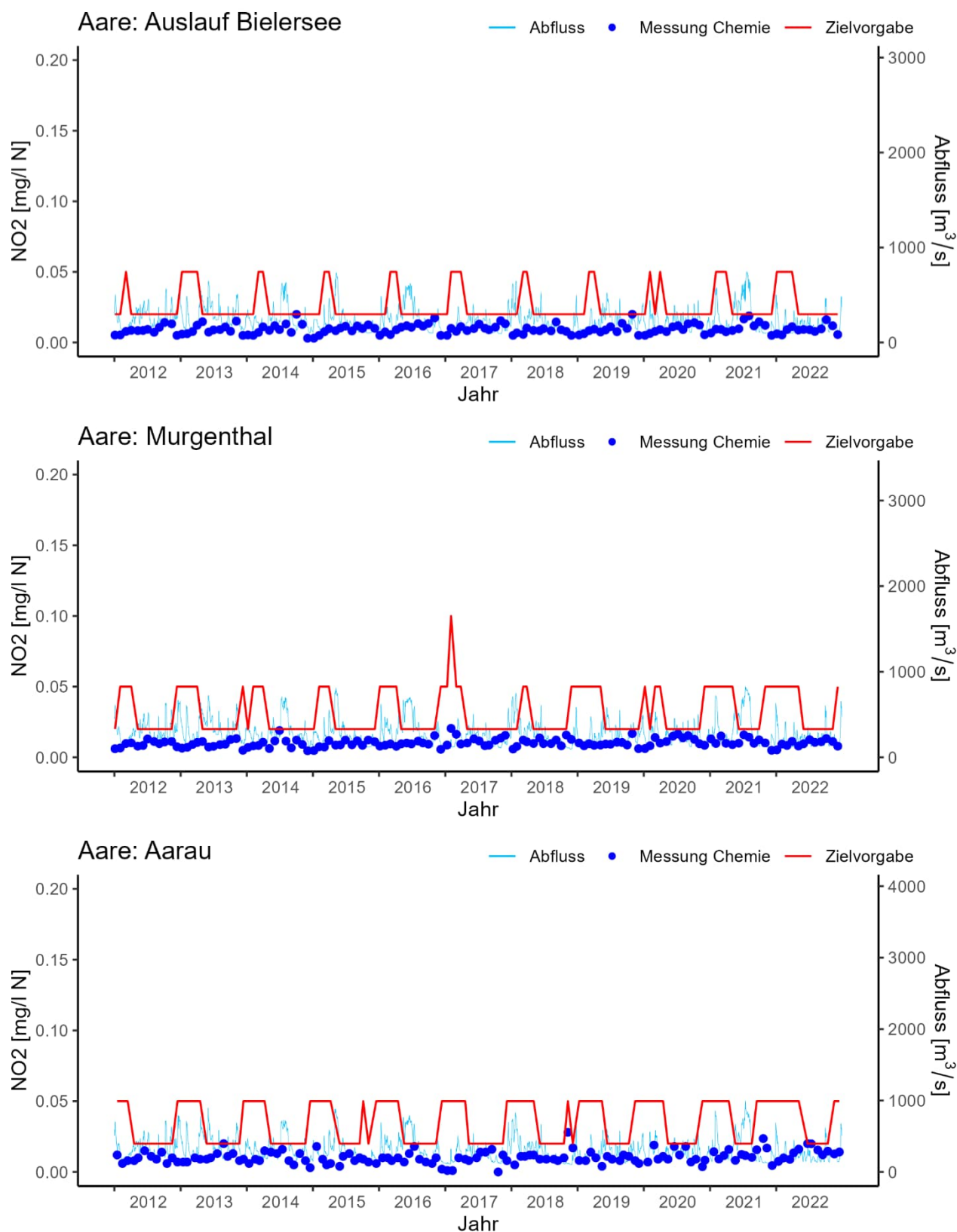


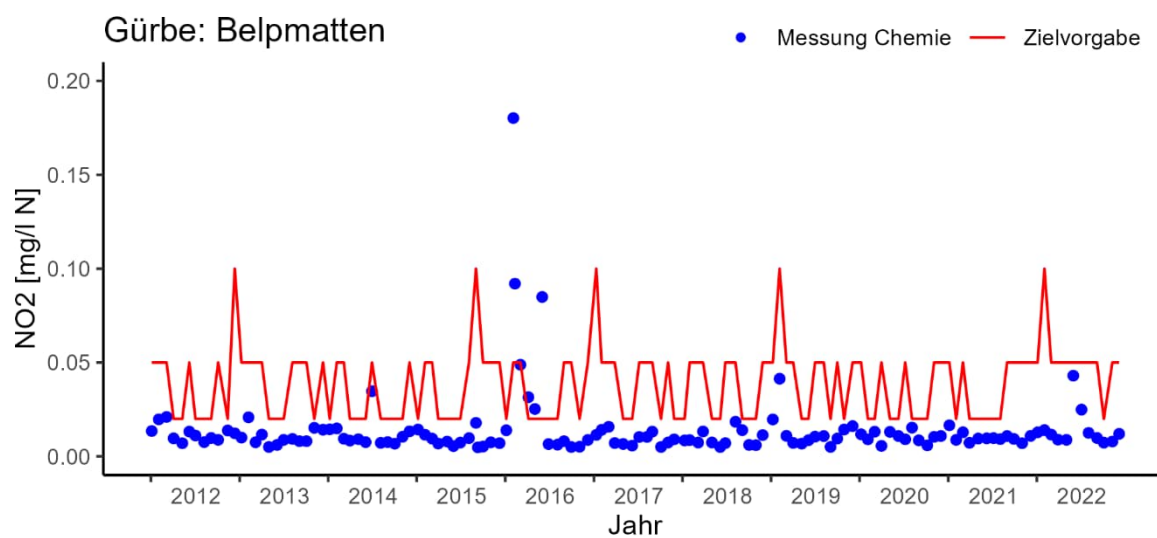
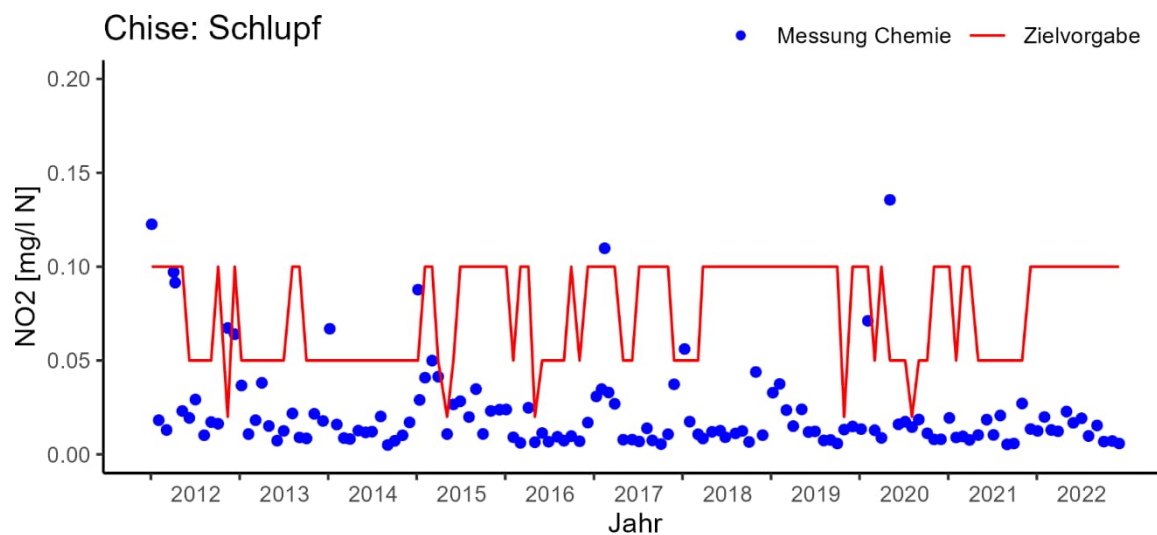
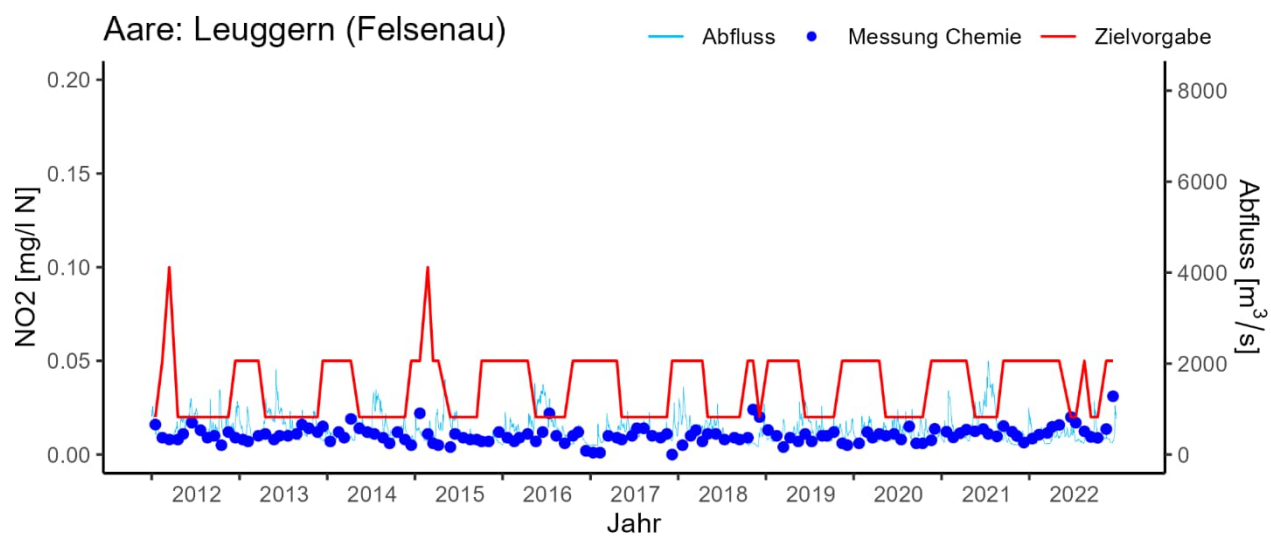
Aare: Eymatt, Stägmatt-Steg



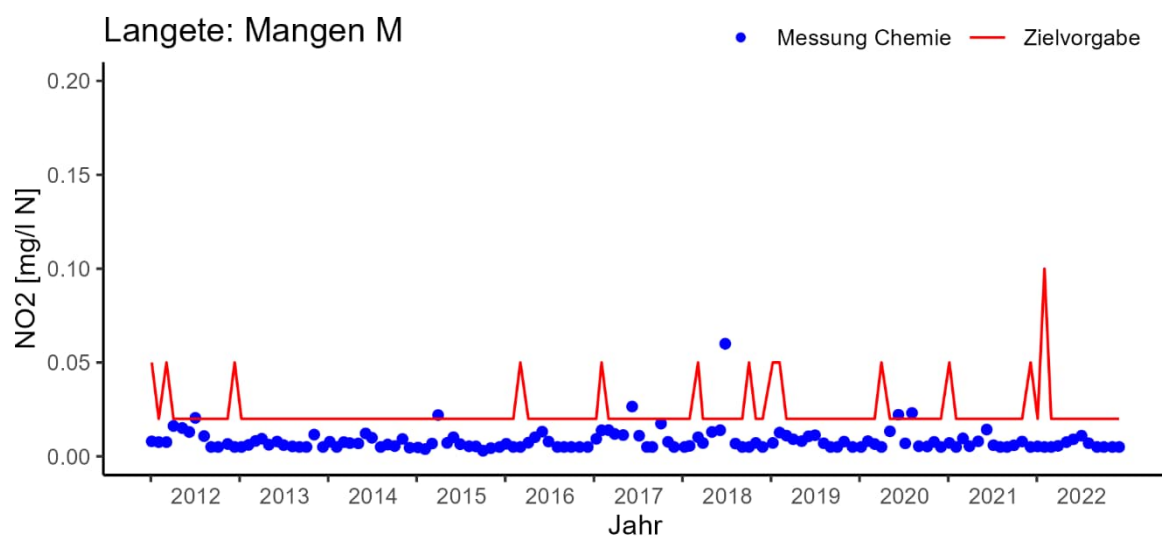
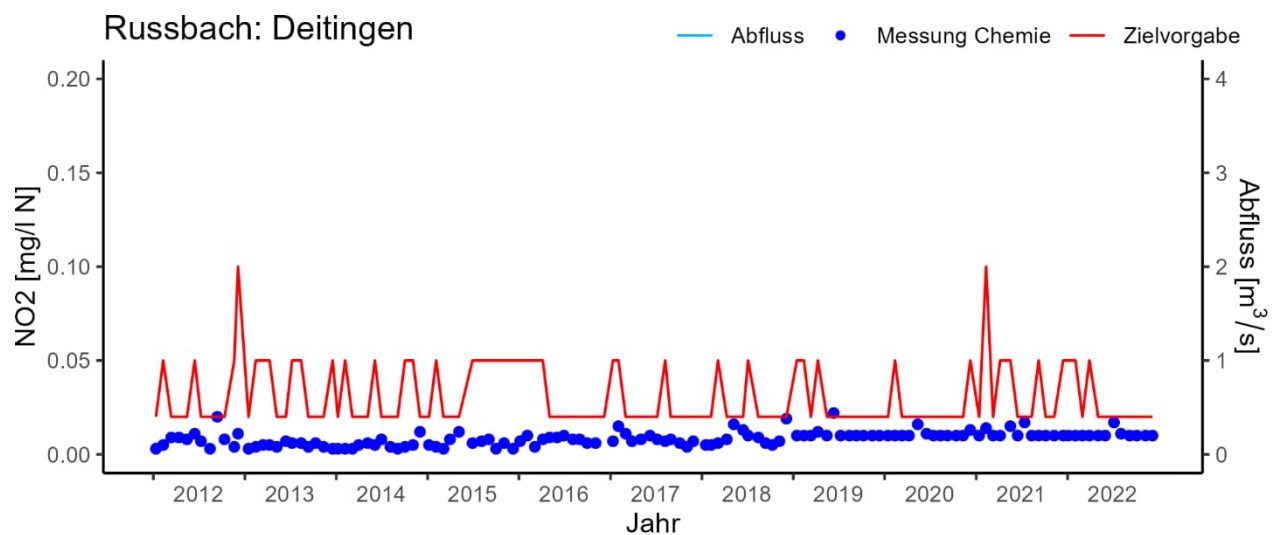
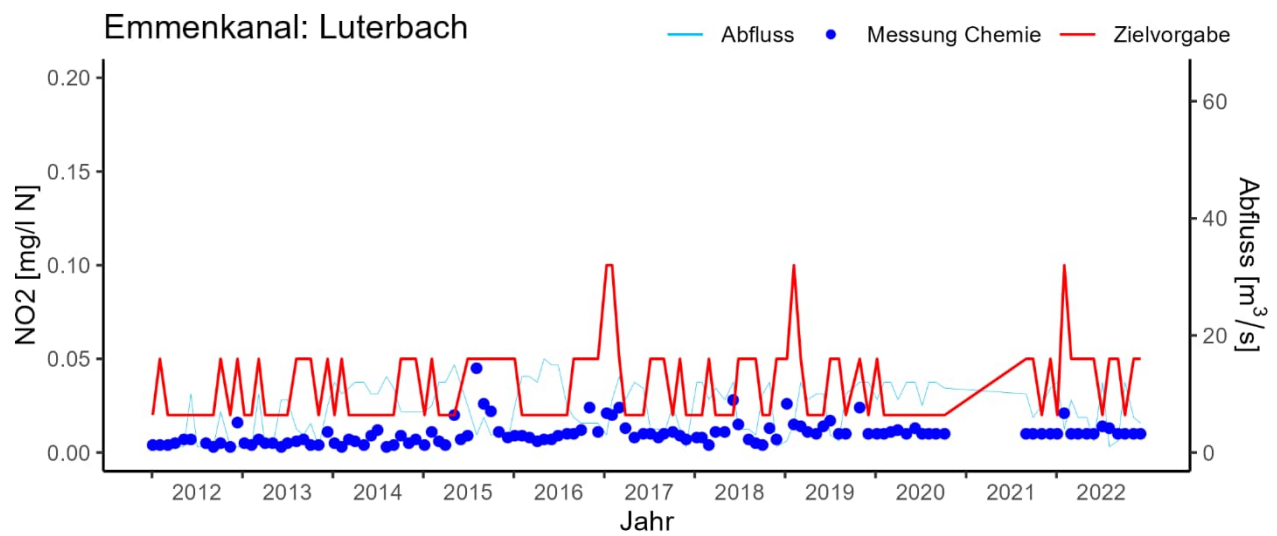
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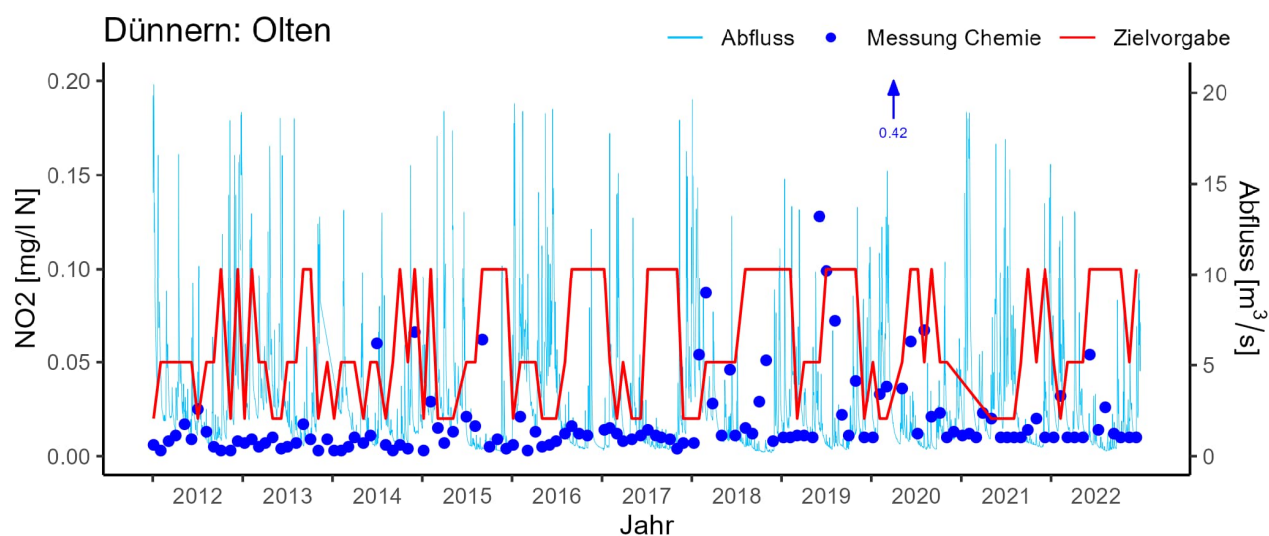
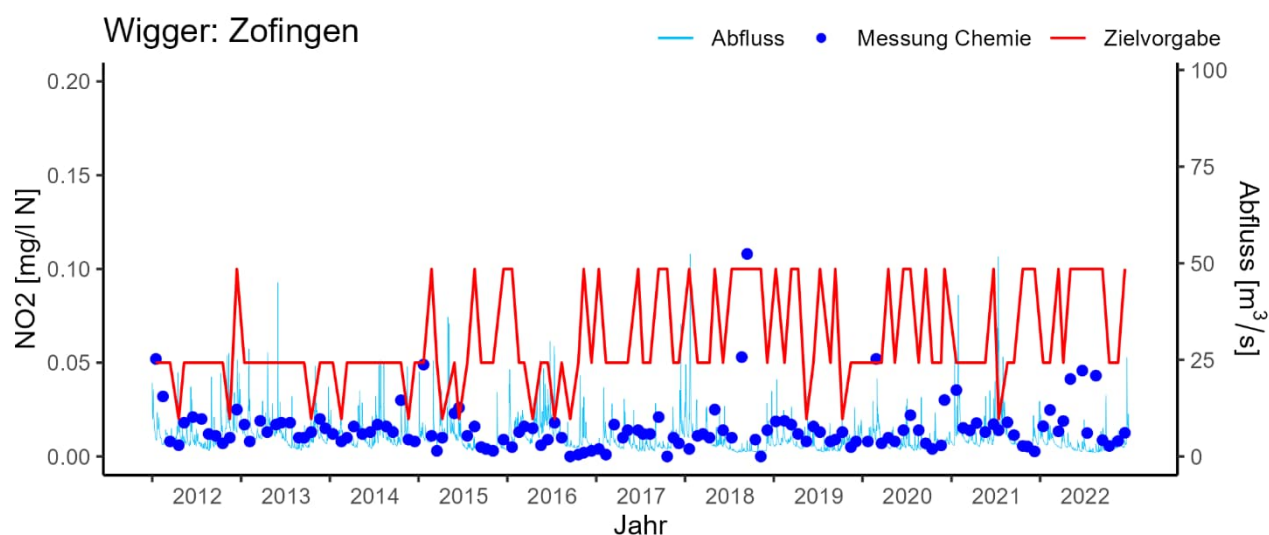
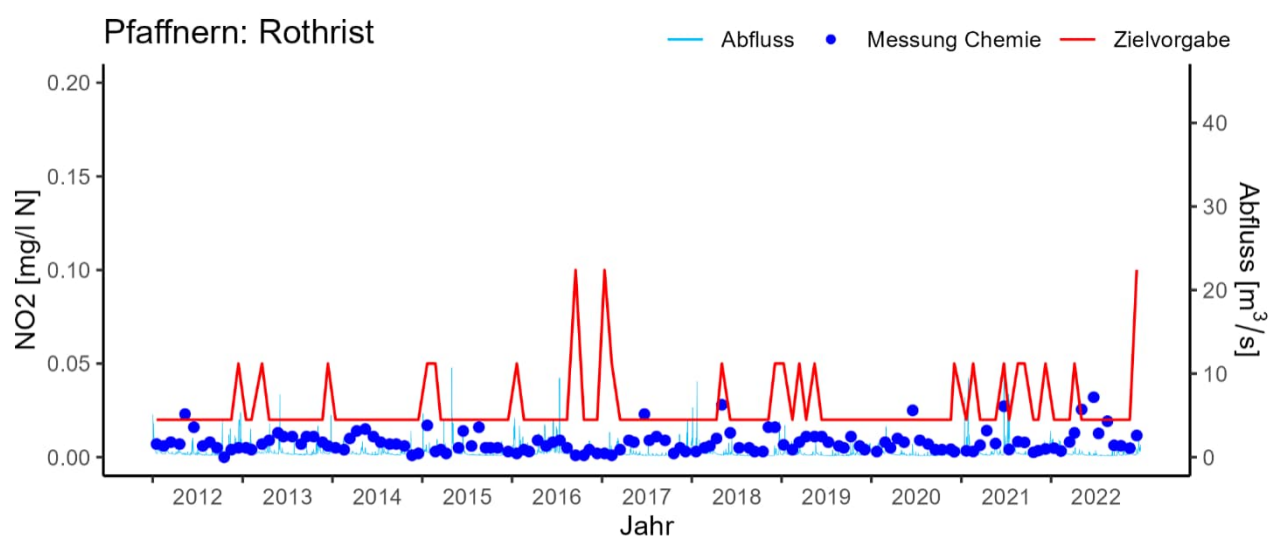


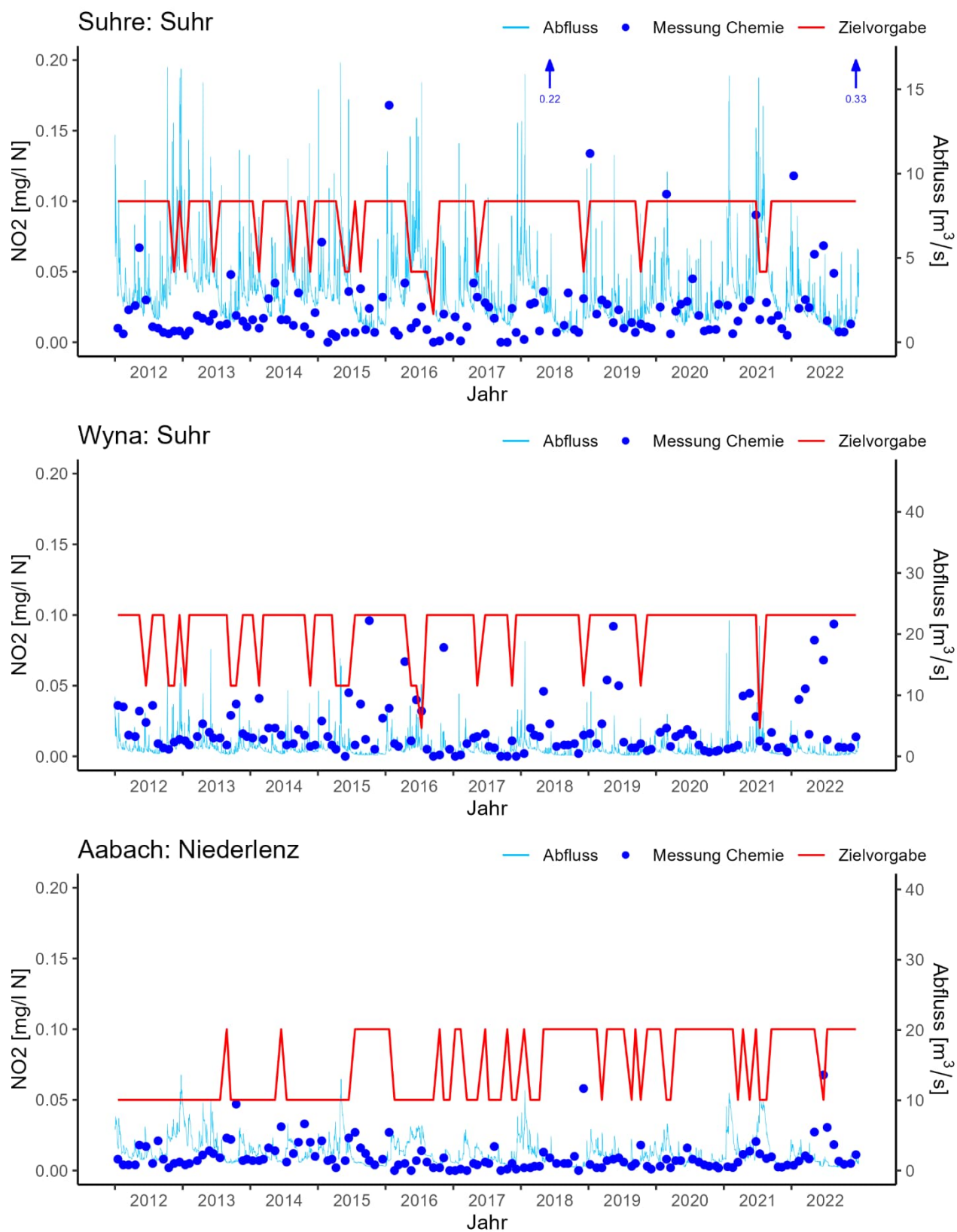


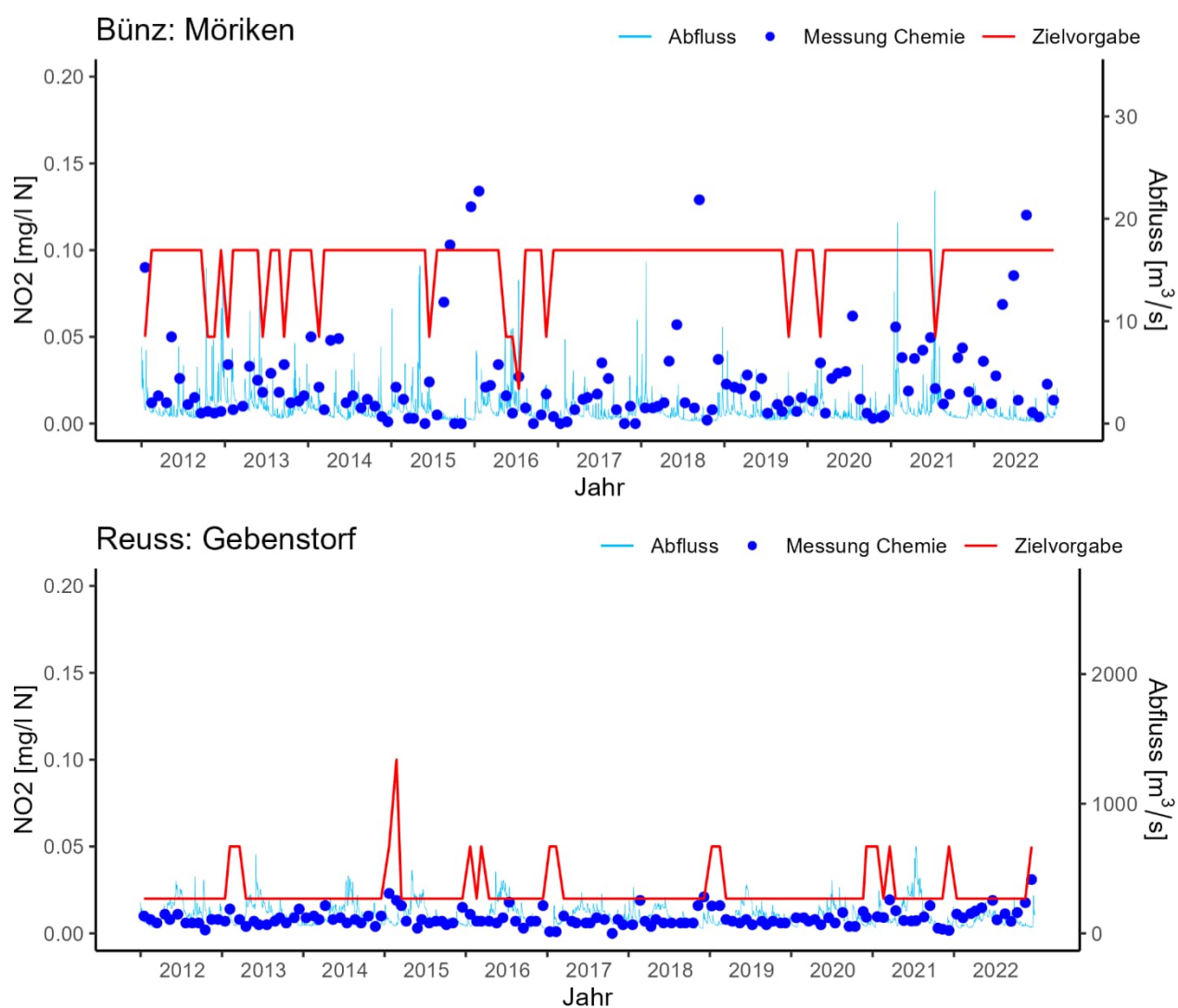


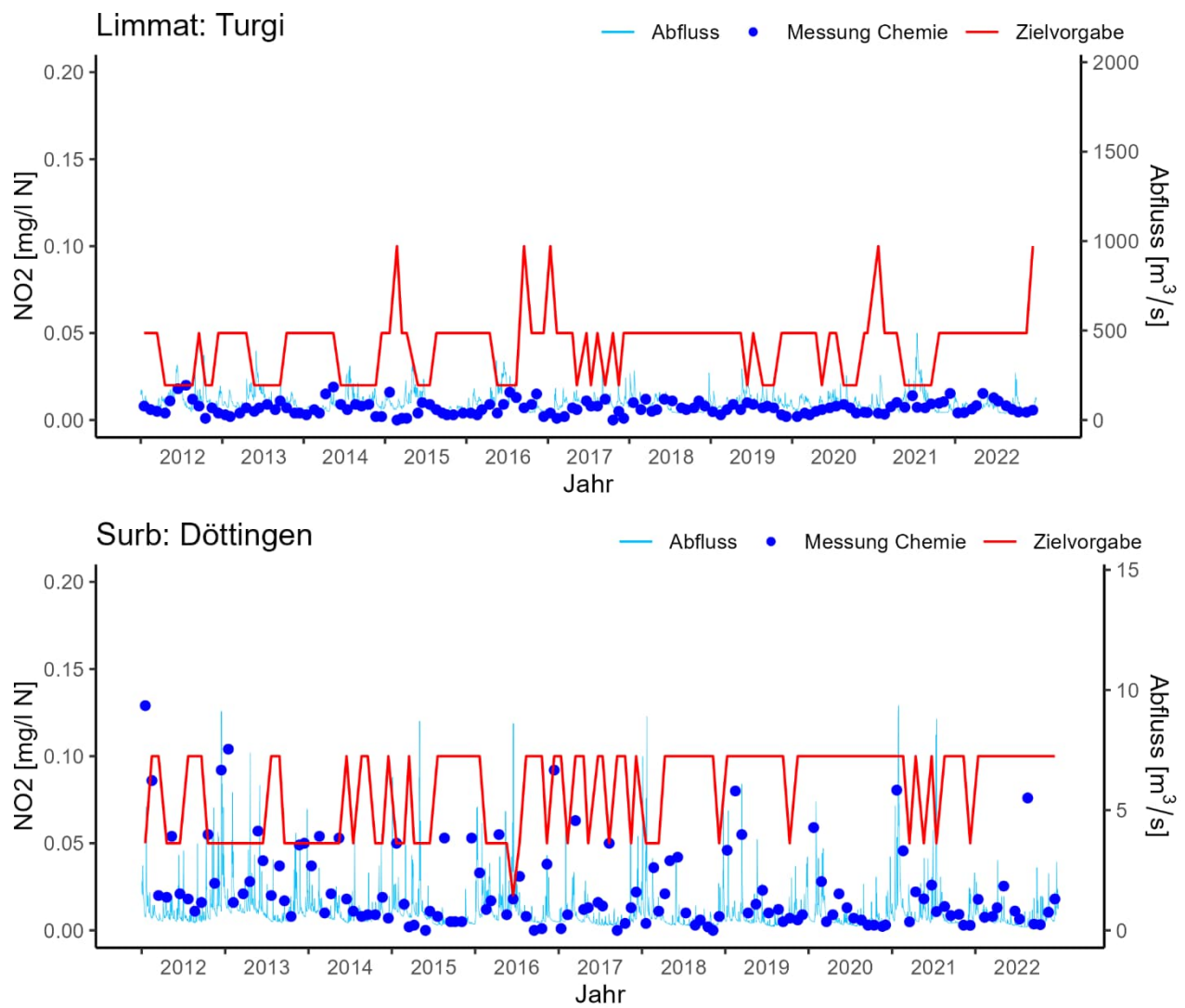






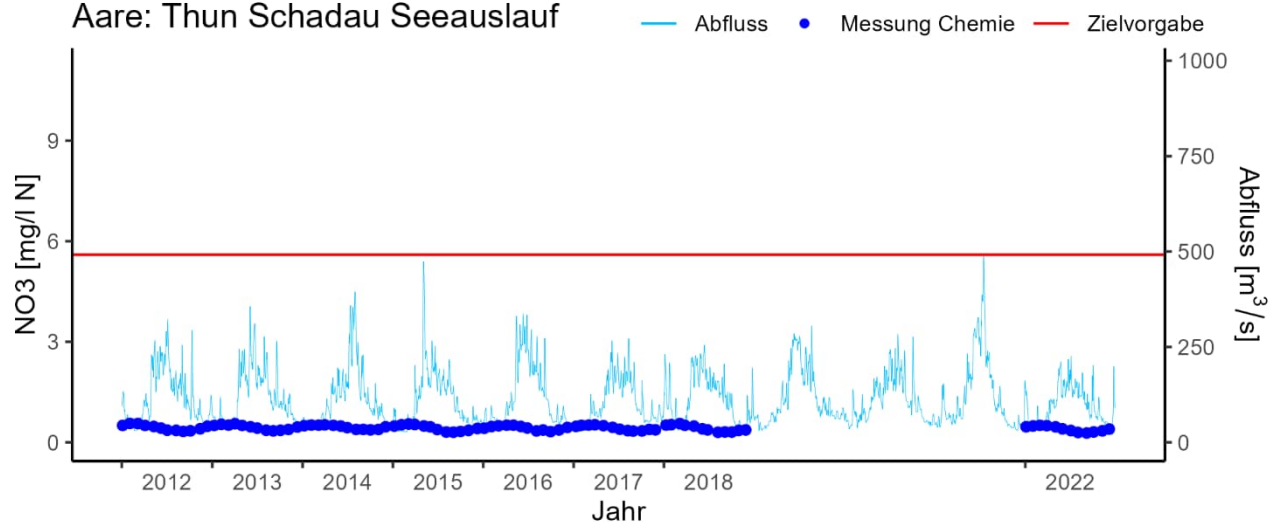




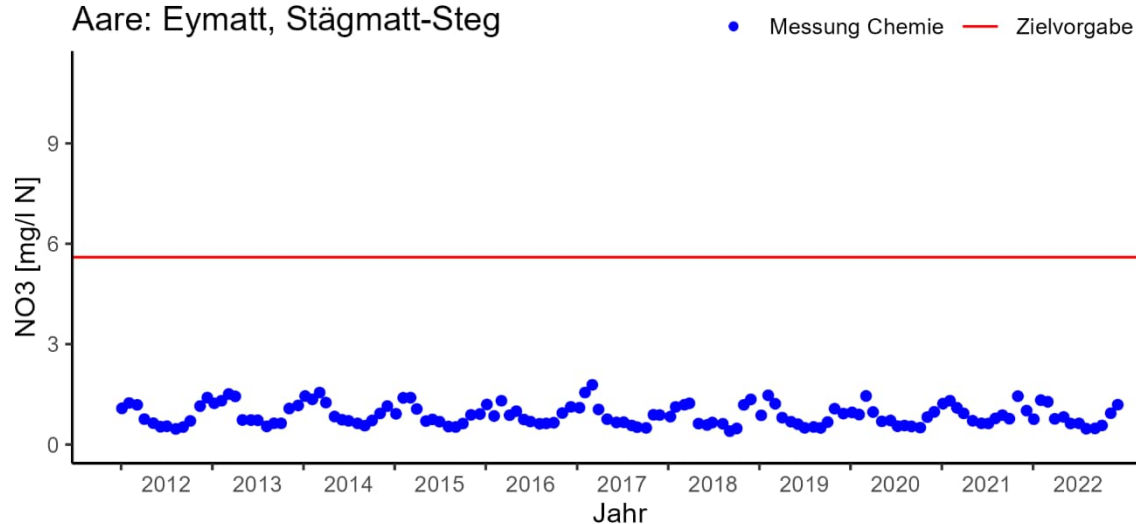


4.3 Nitrat

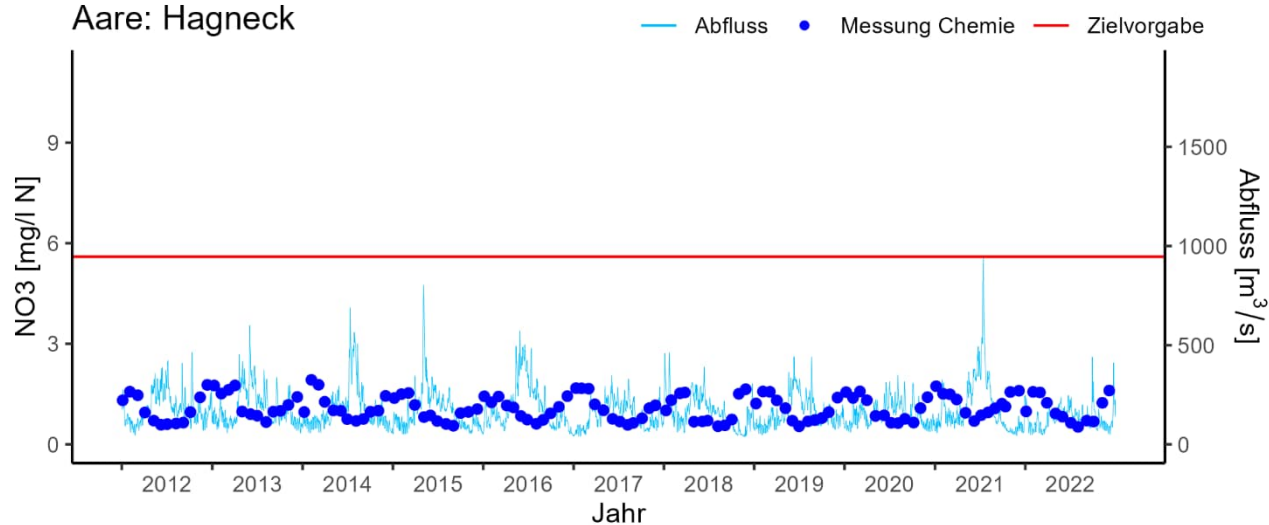
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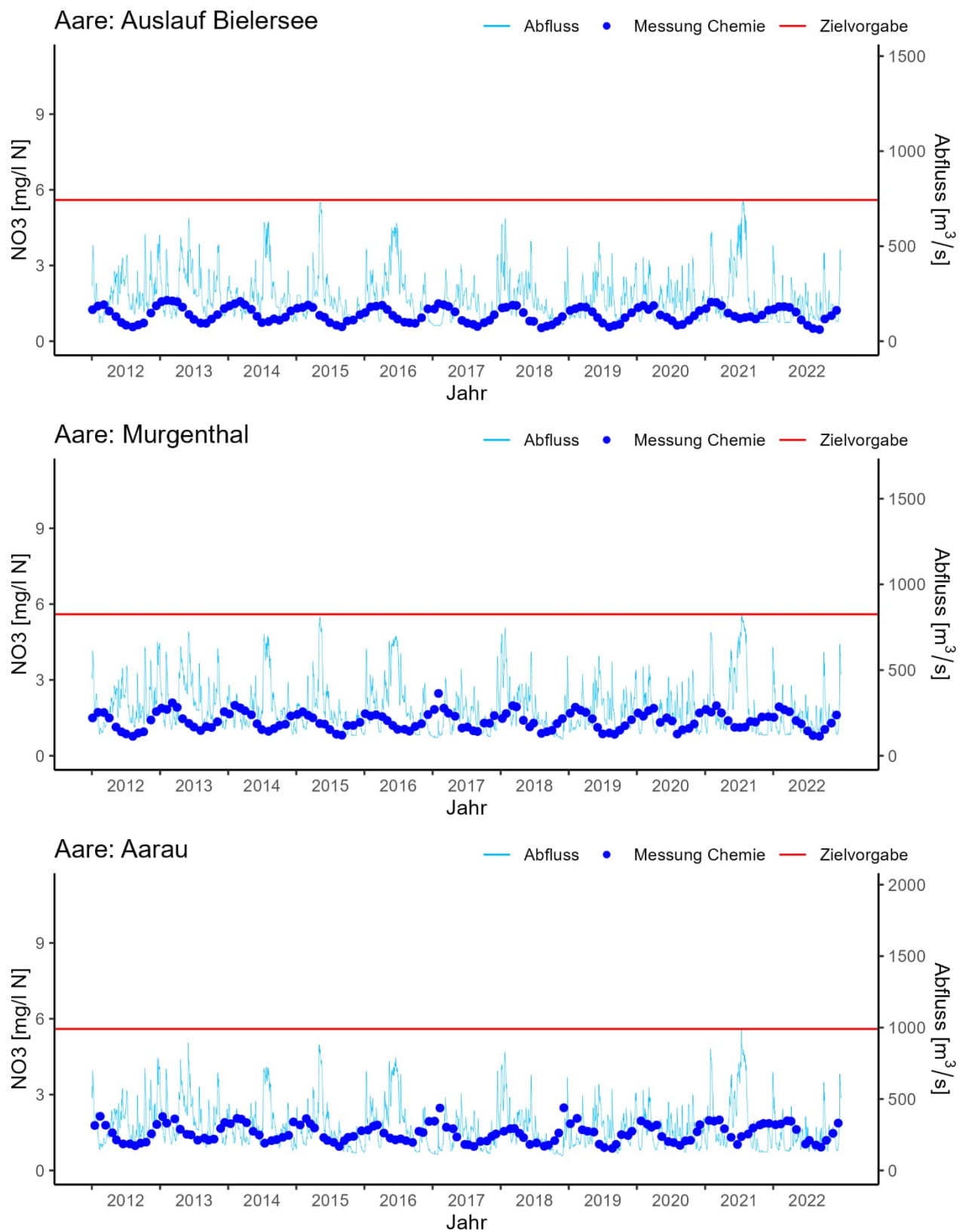


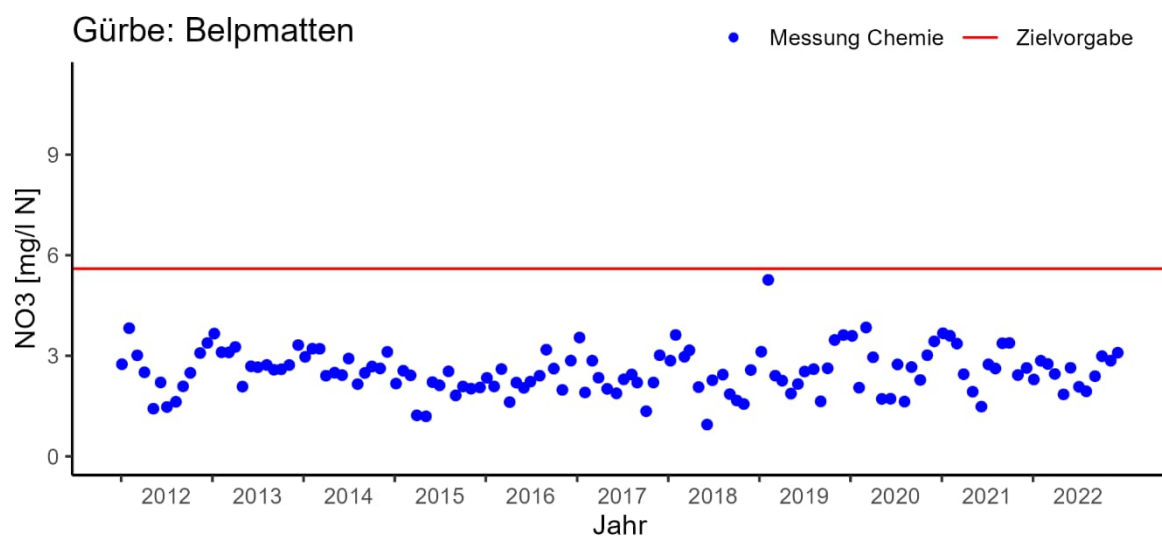
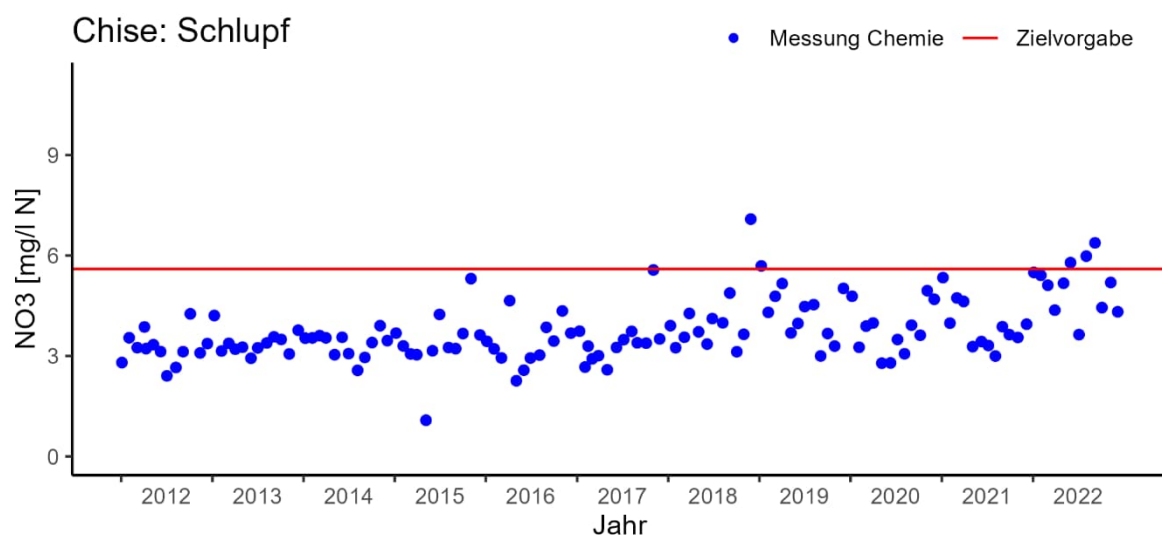
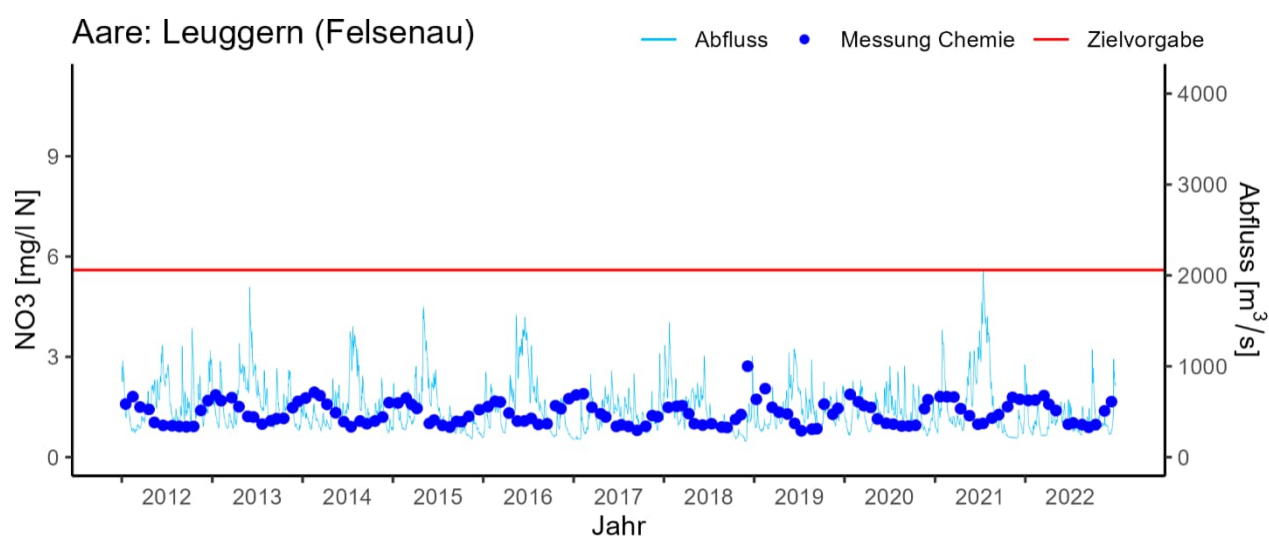
Aare: Eymatt, Stägmatt-Steg

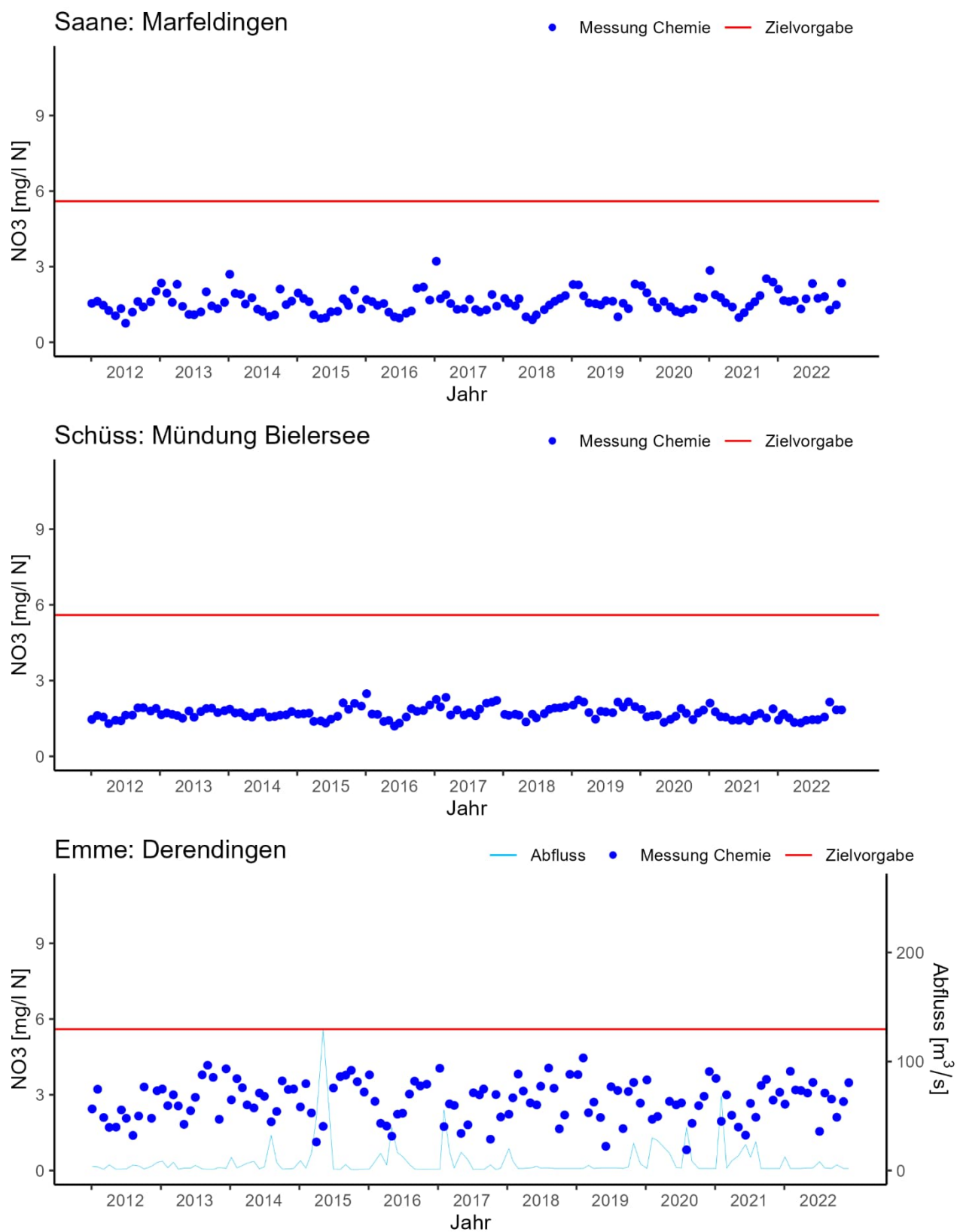


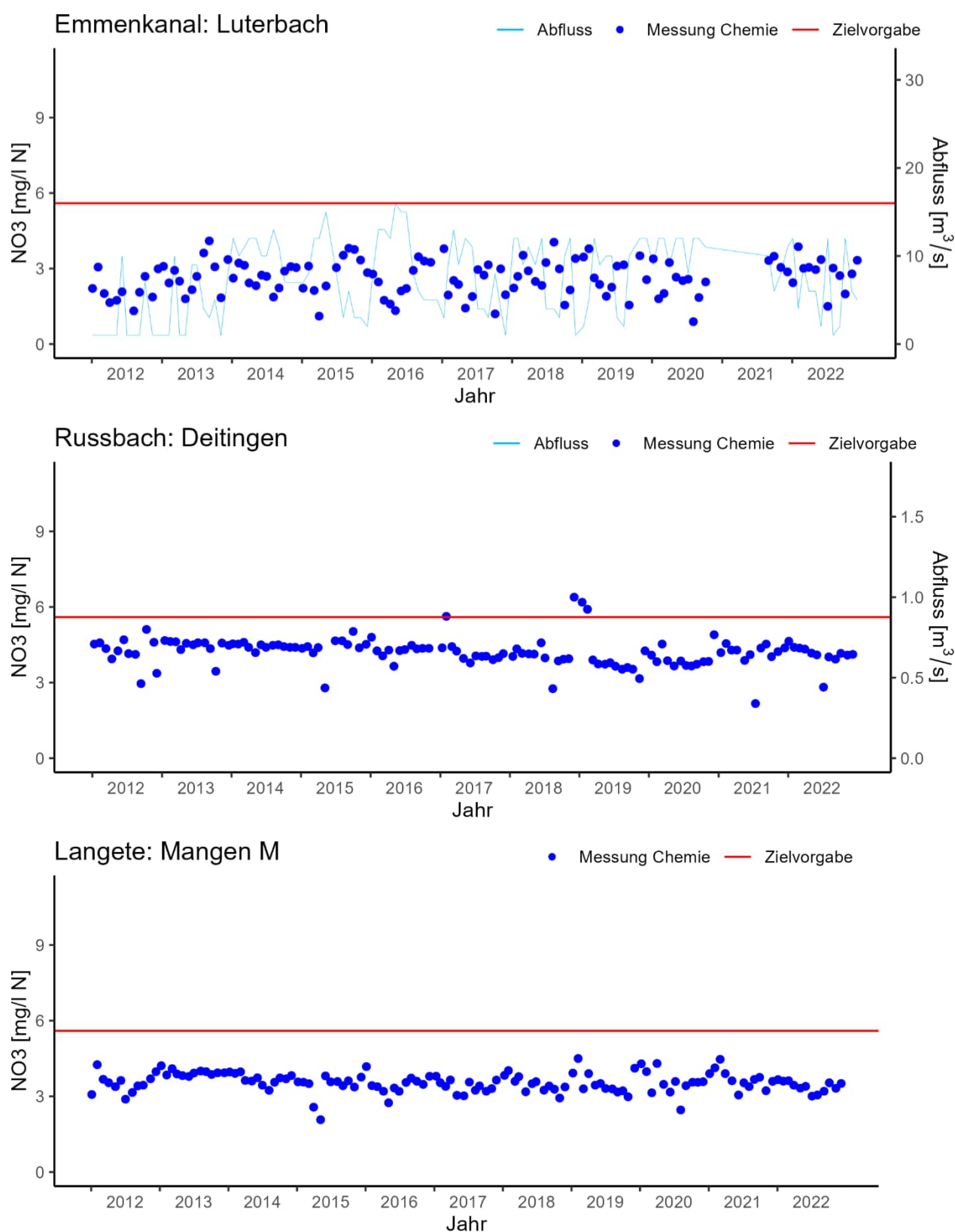
Aare: Hagneck

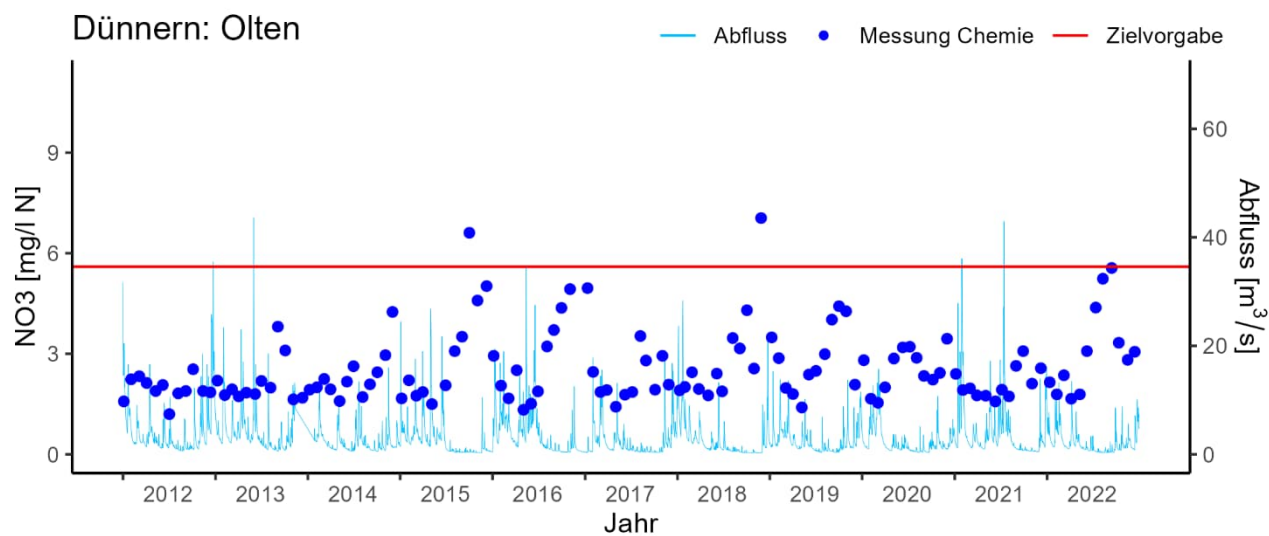
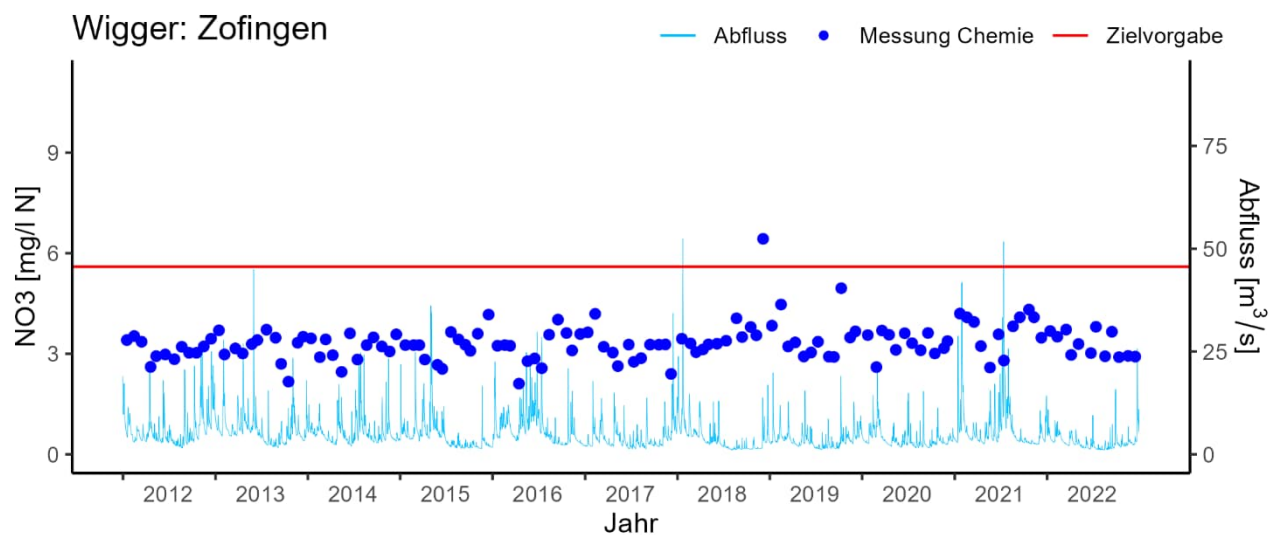
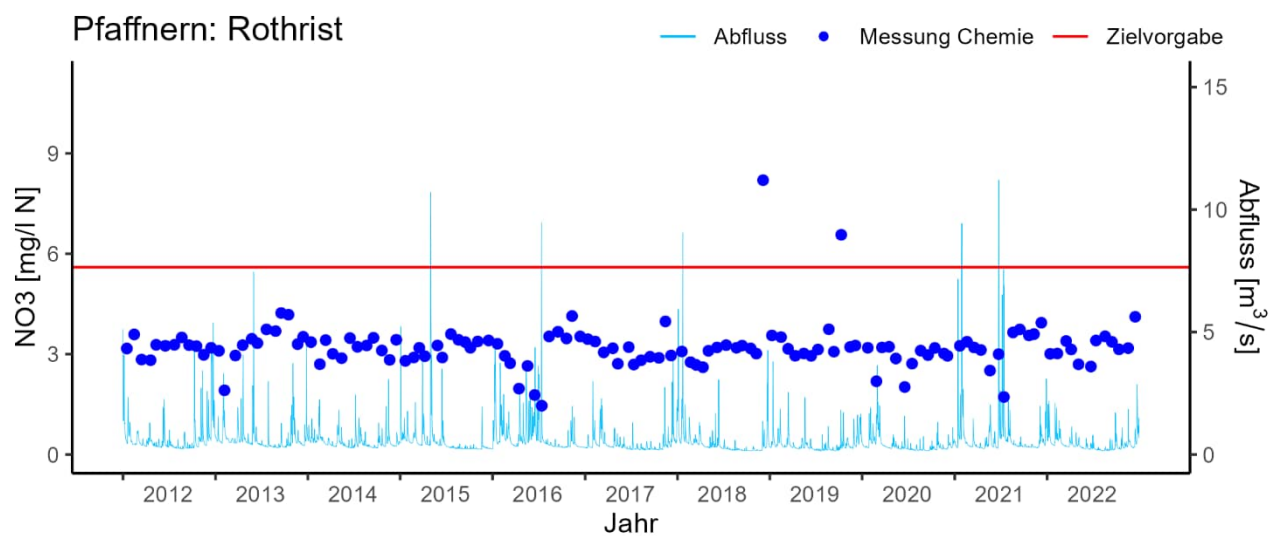


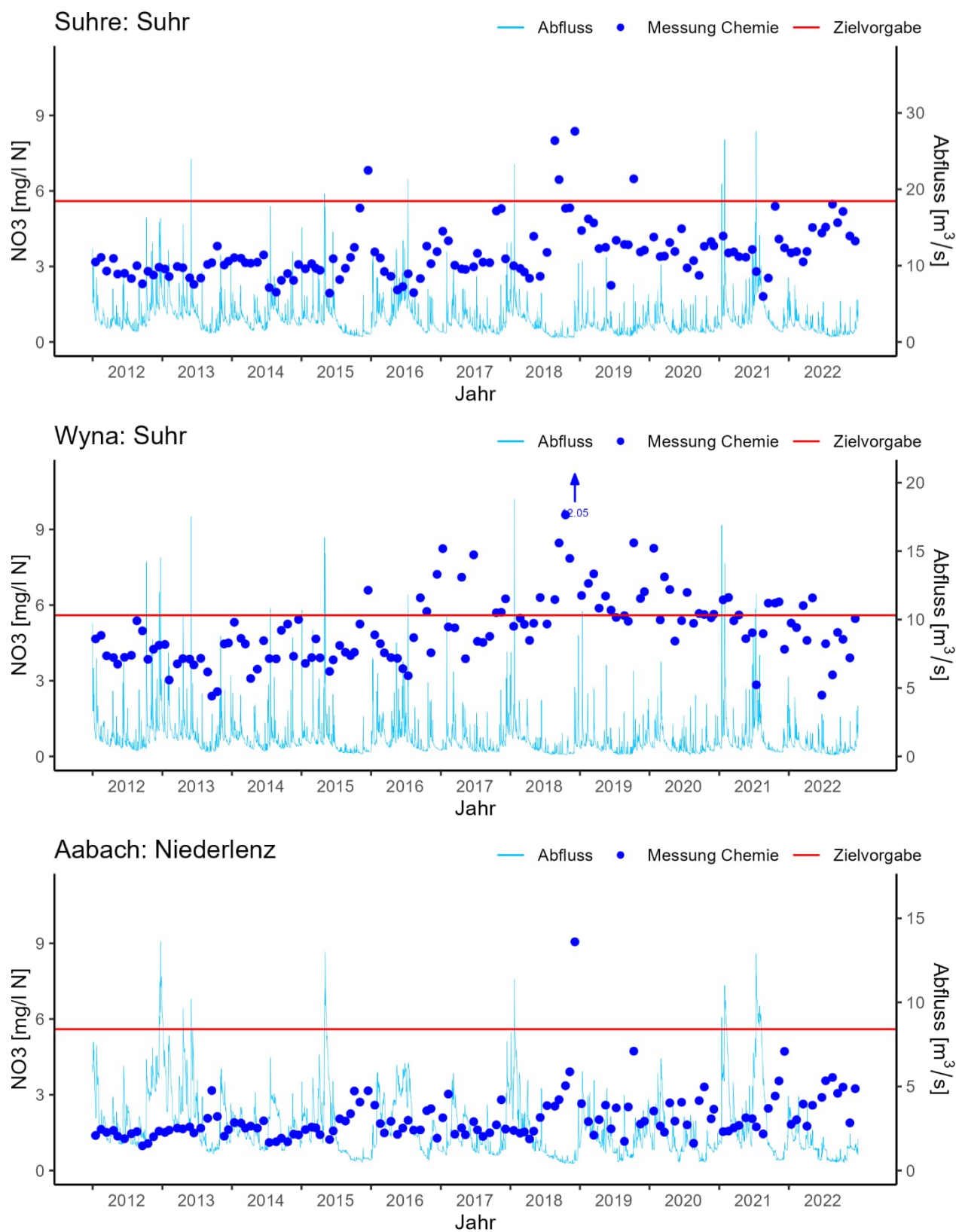


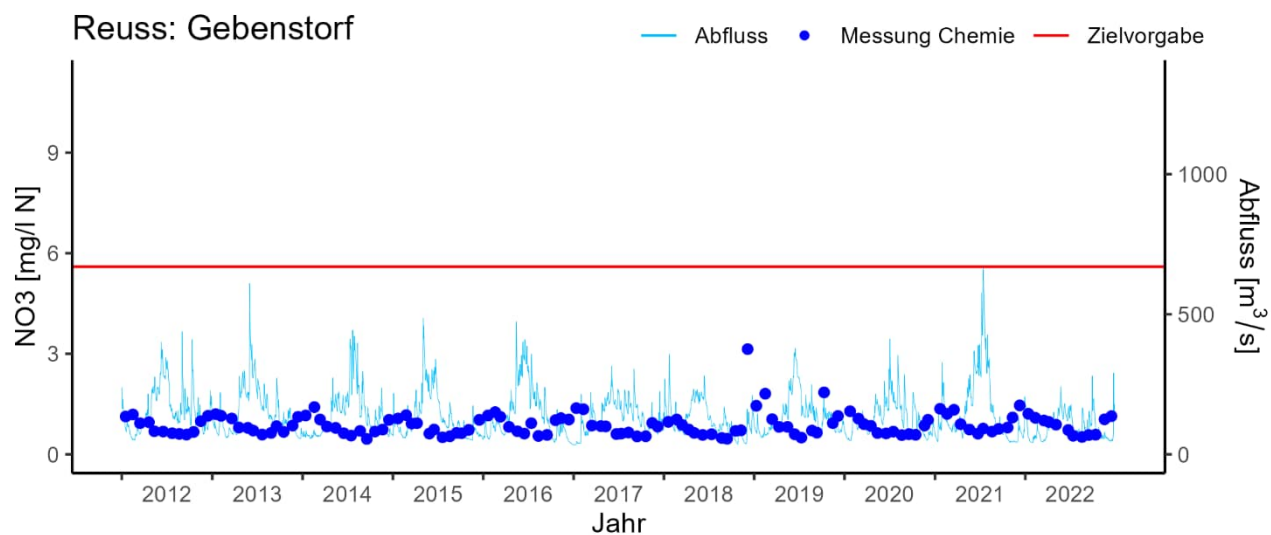
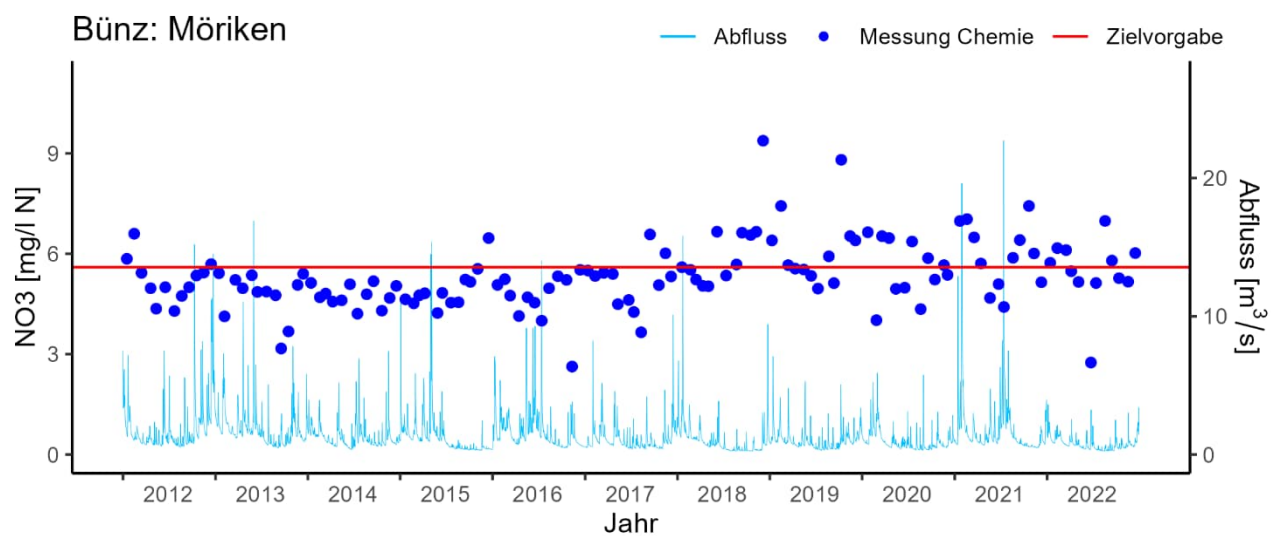


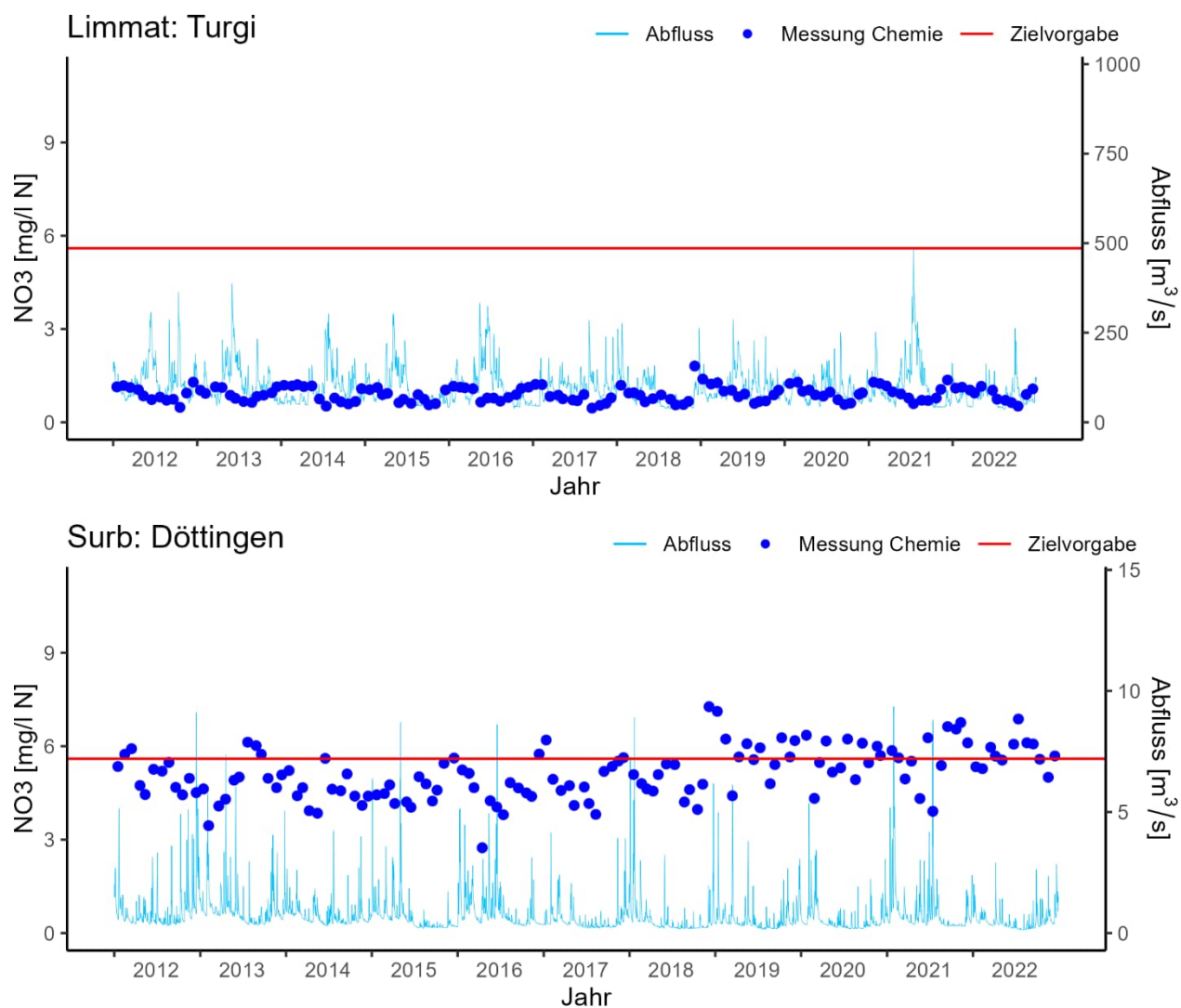






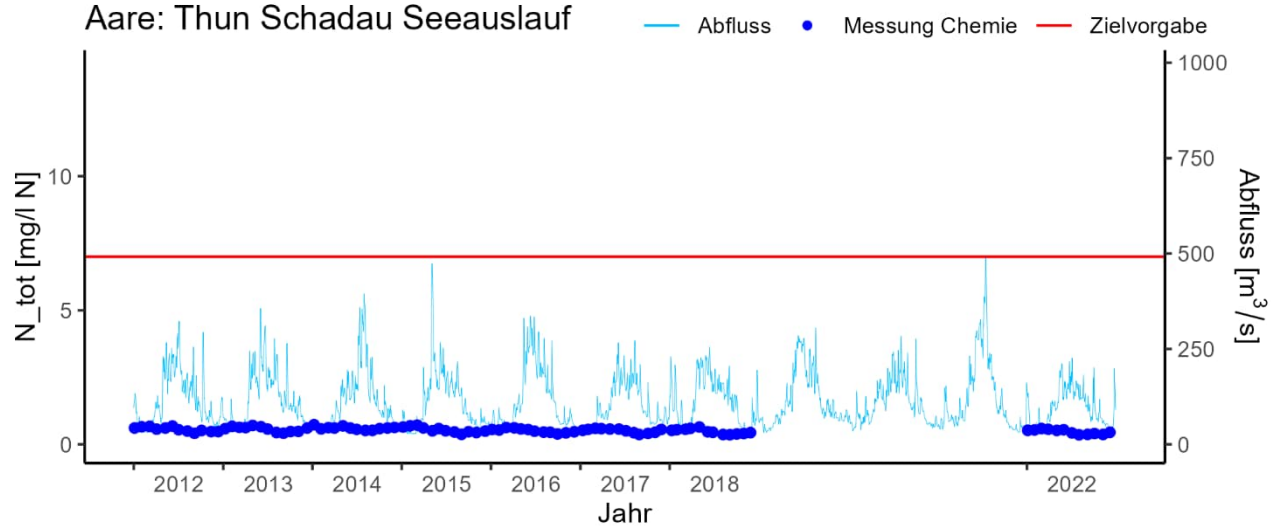




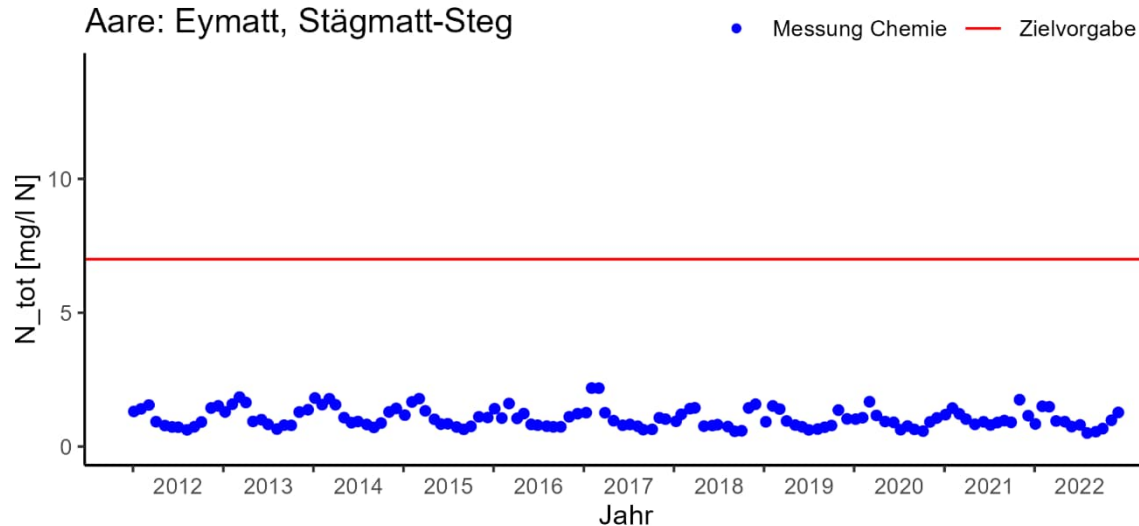


4.4 Gesamtstickstoff

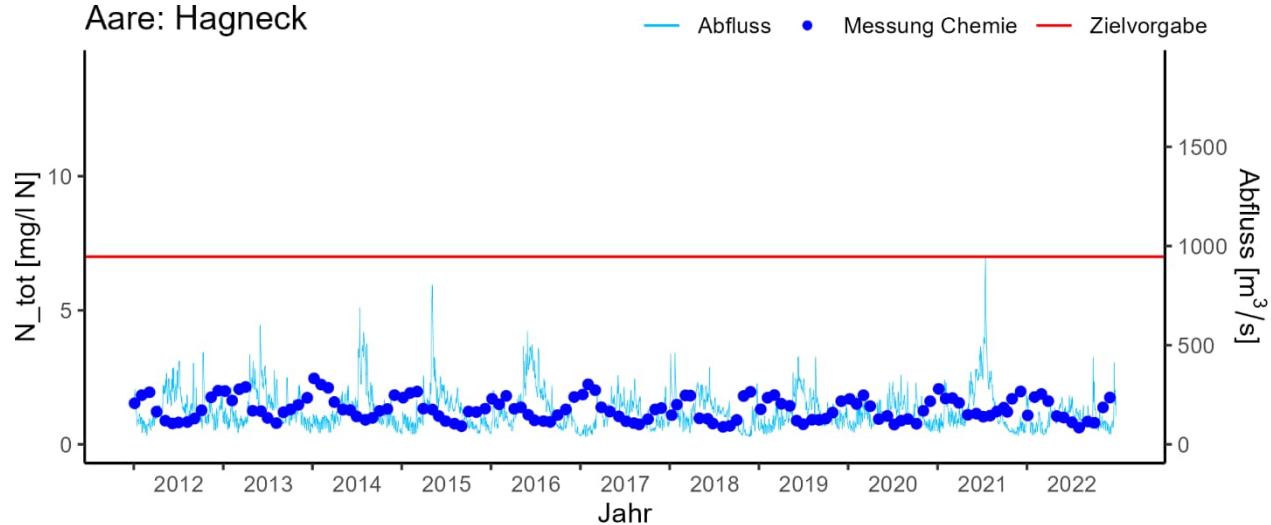
Aare: Thun Schadau Seeauslauf

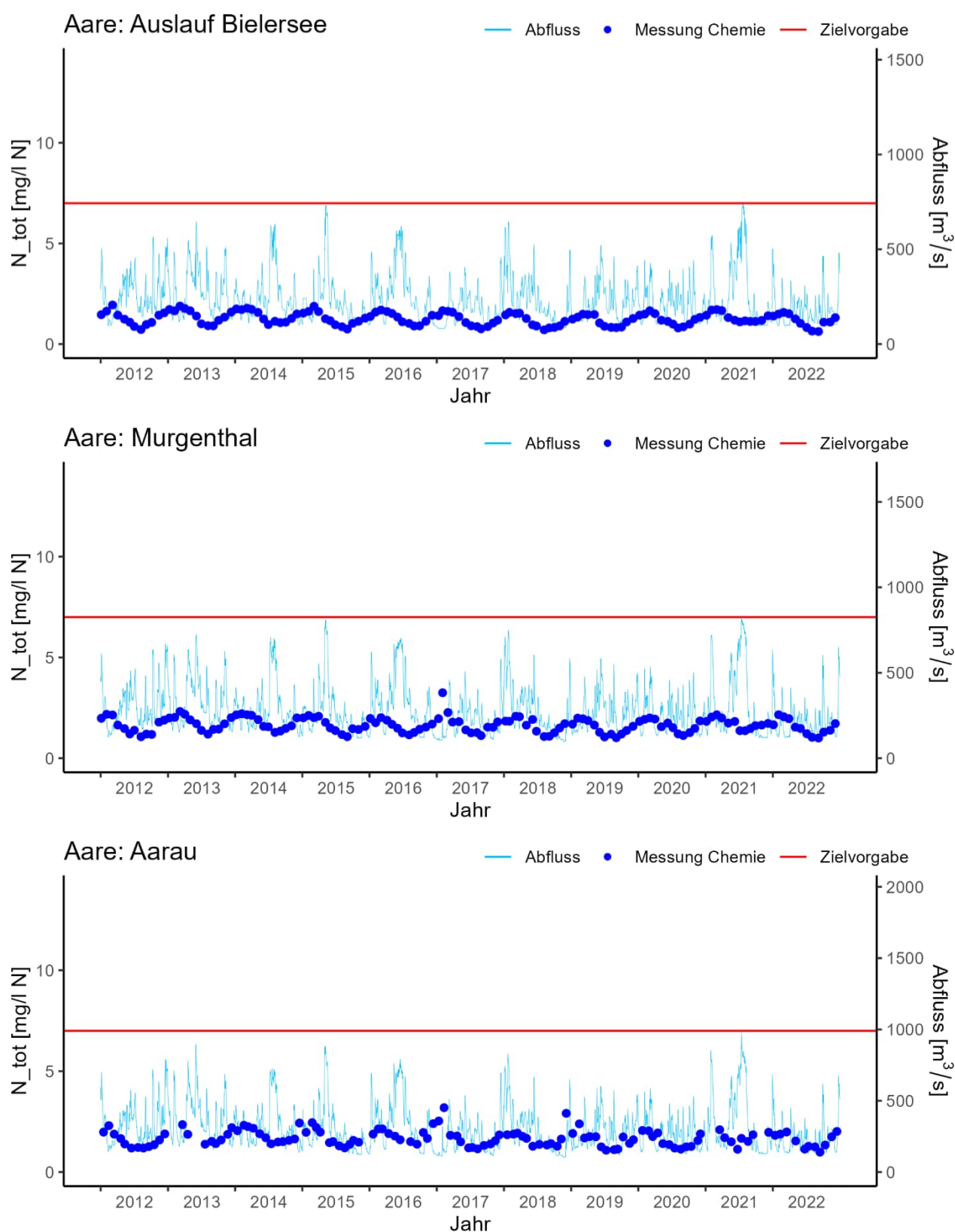


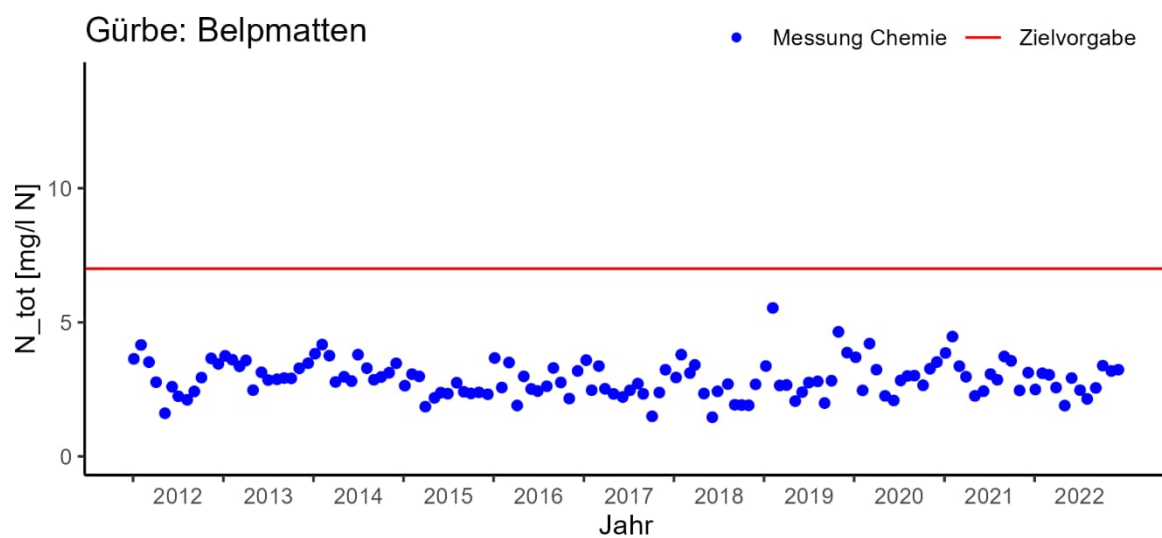
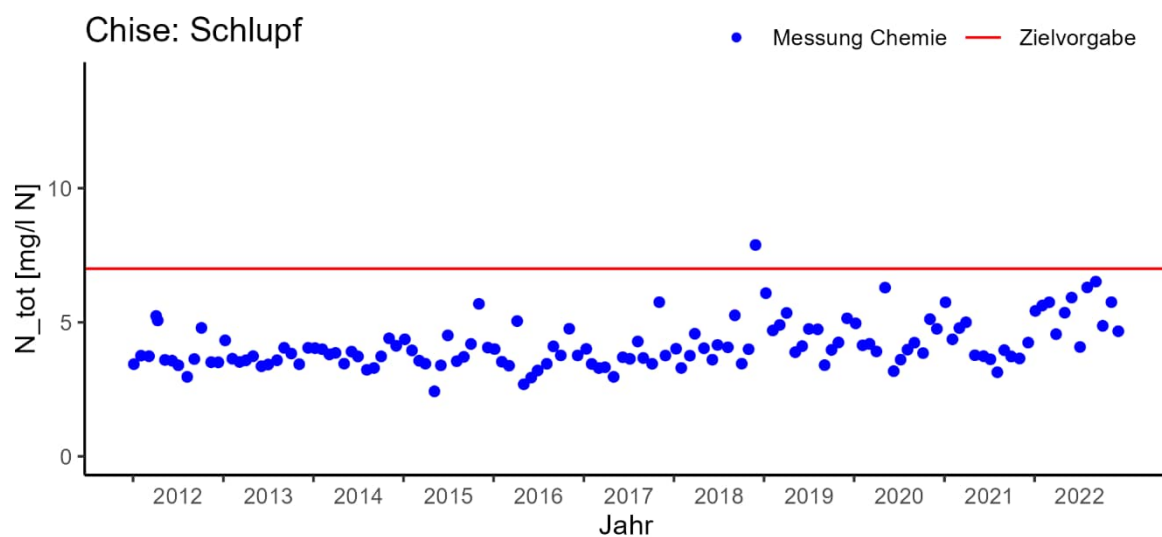
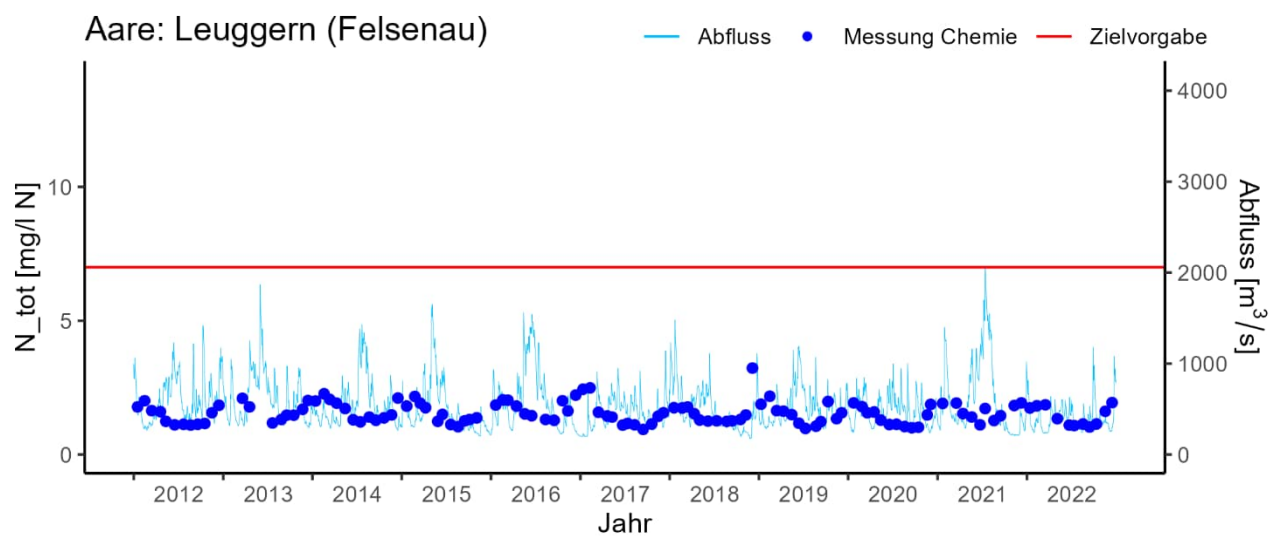
Aare: Eymatt, Stägmatt-Steg

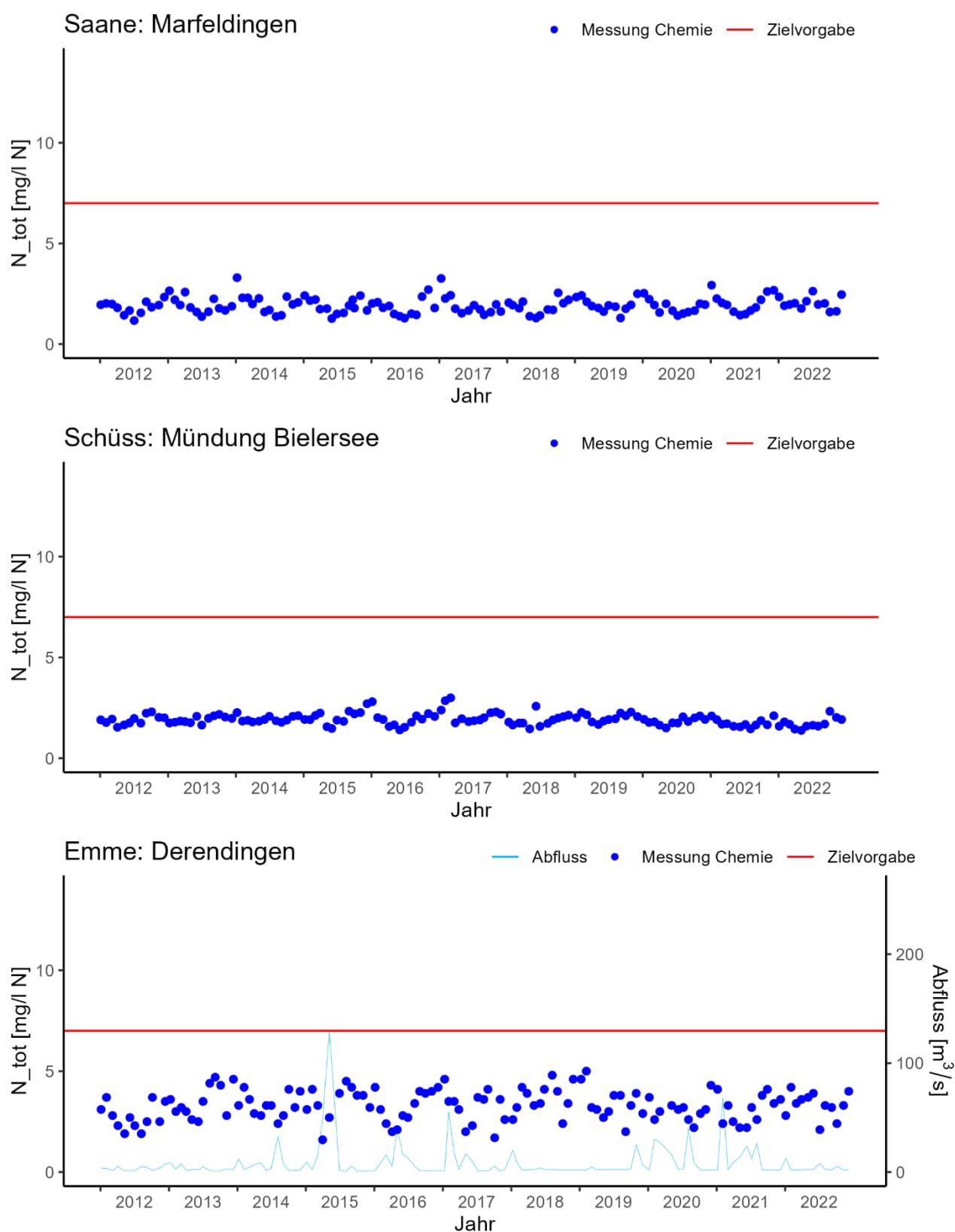


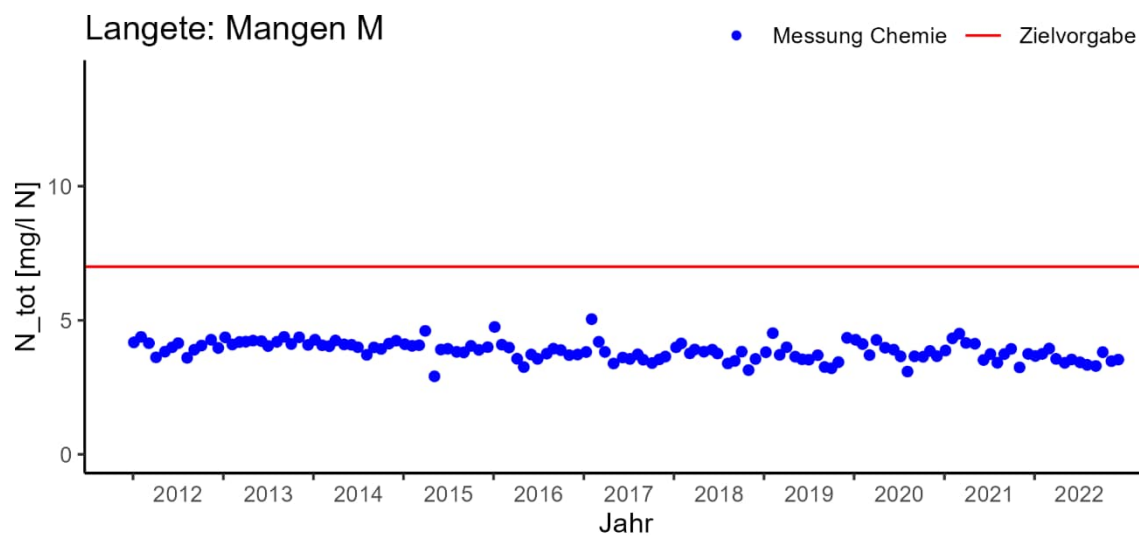
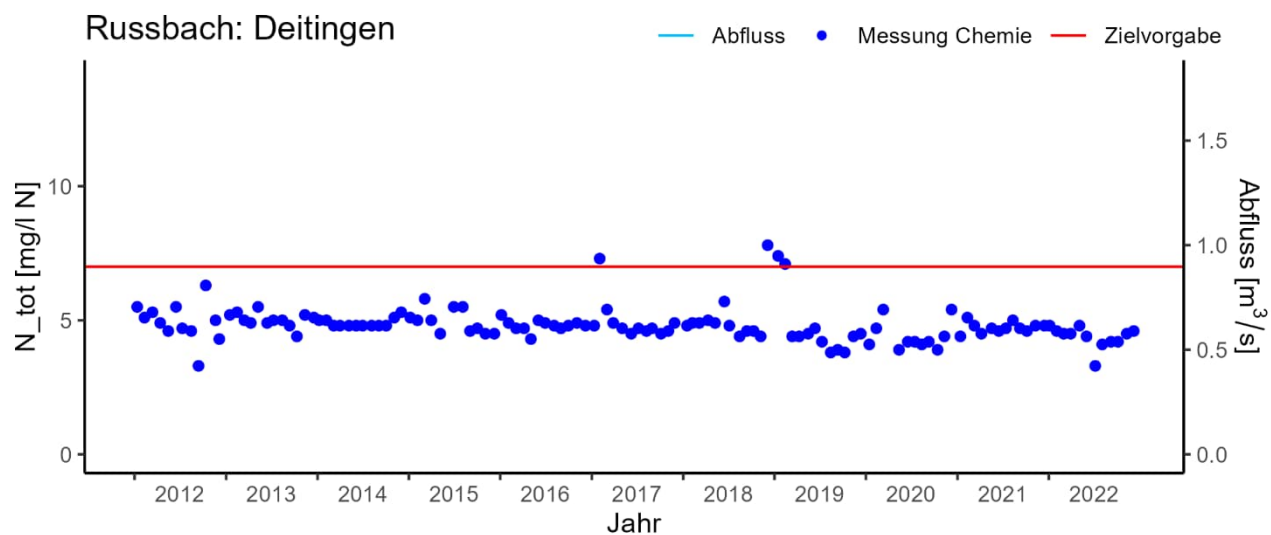
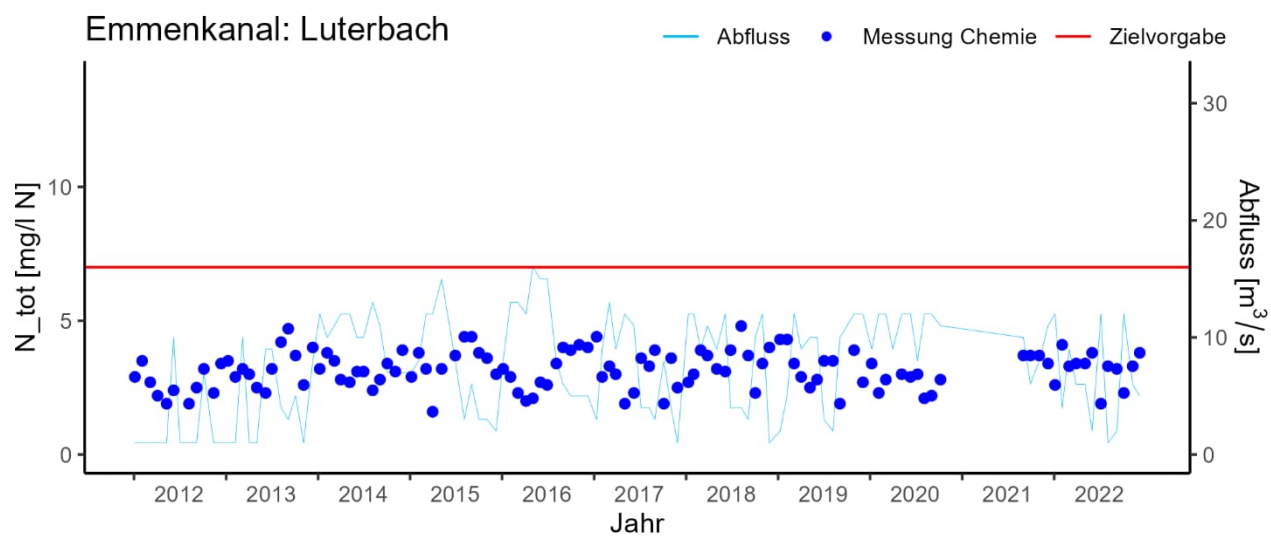
Aare: Hagneck



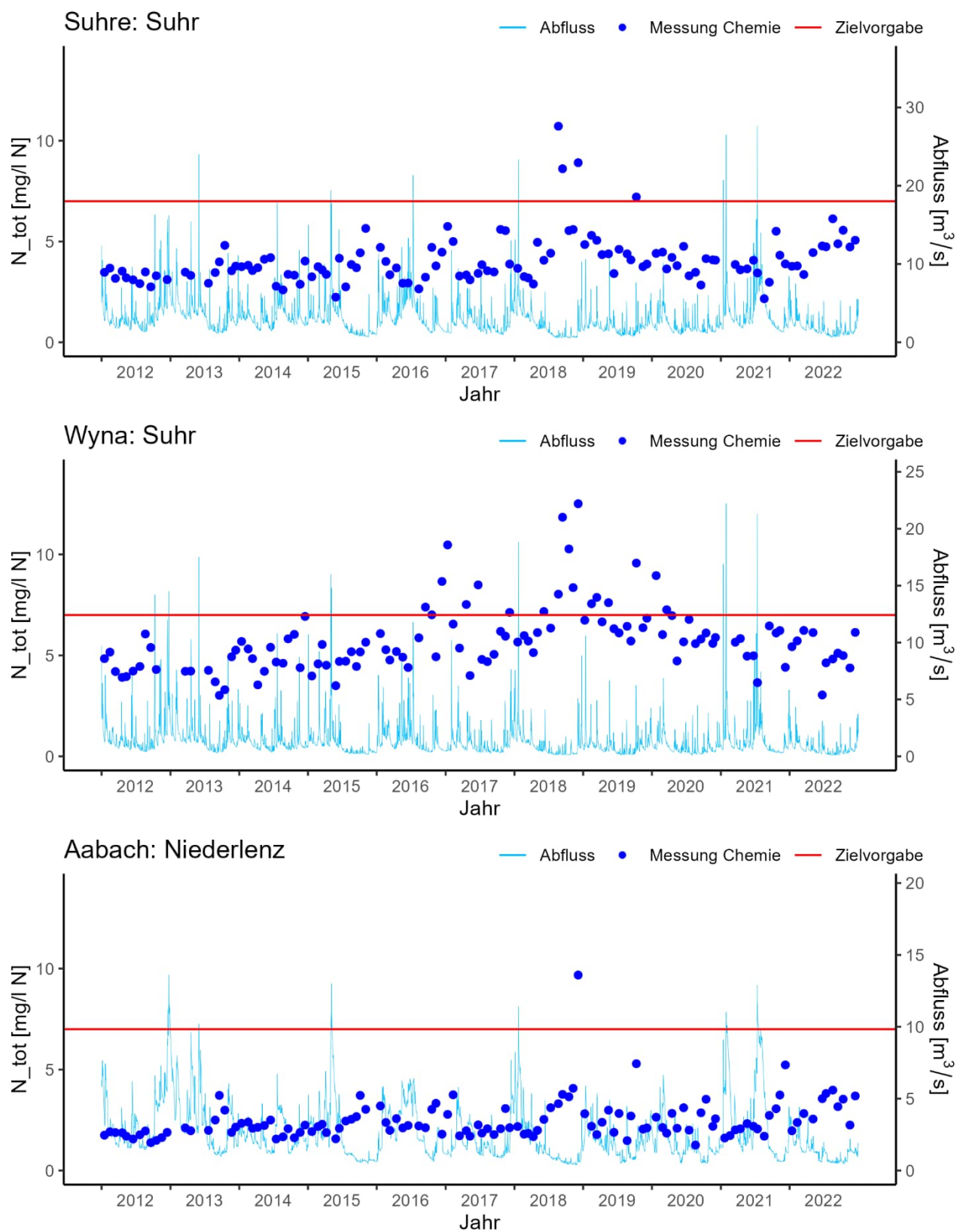




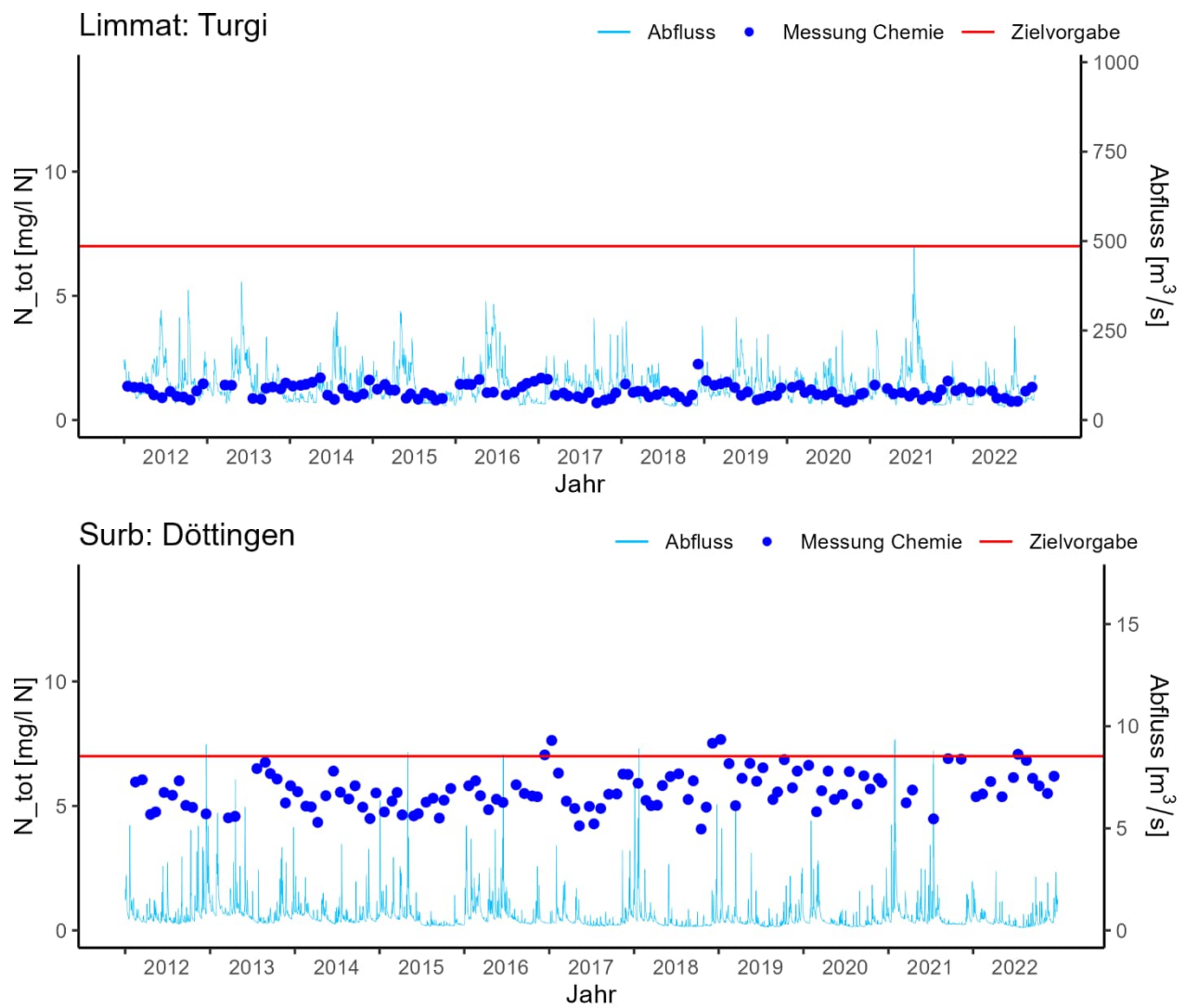






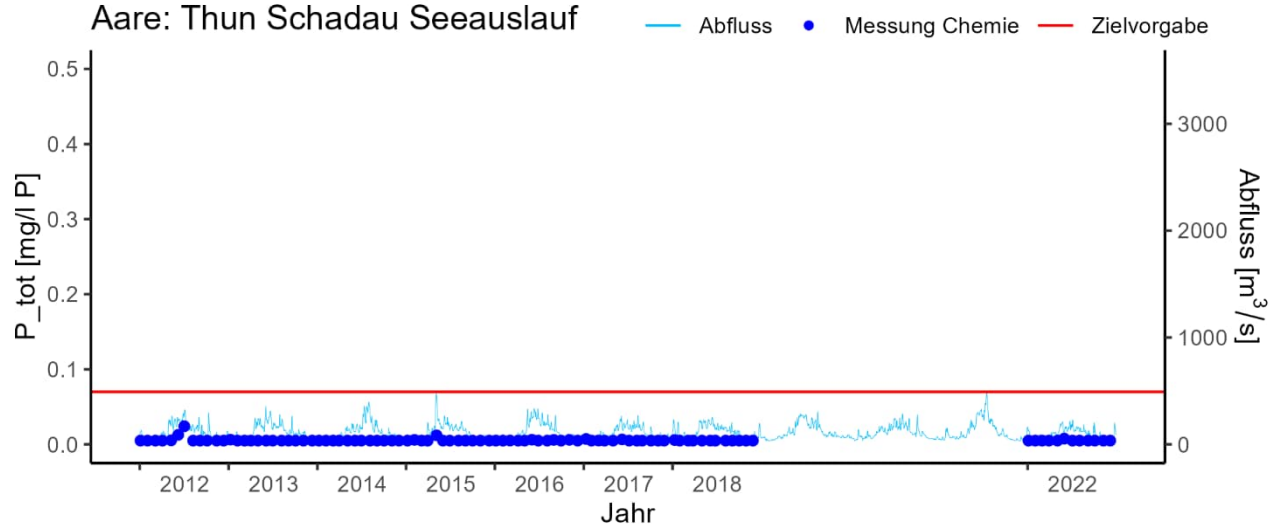




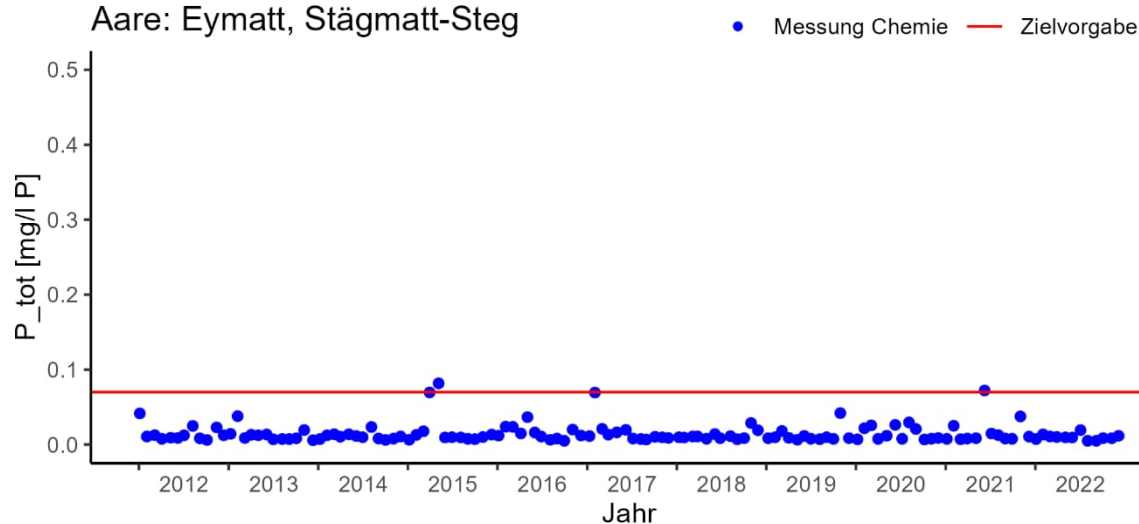


4.5 Gesamtphosphor

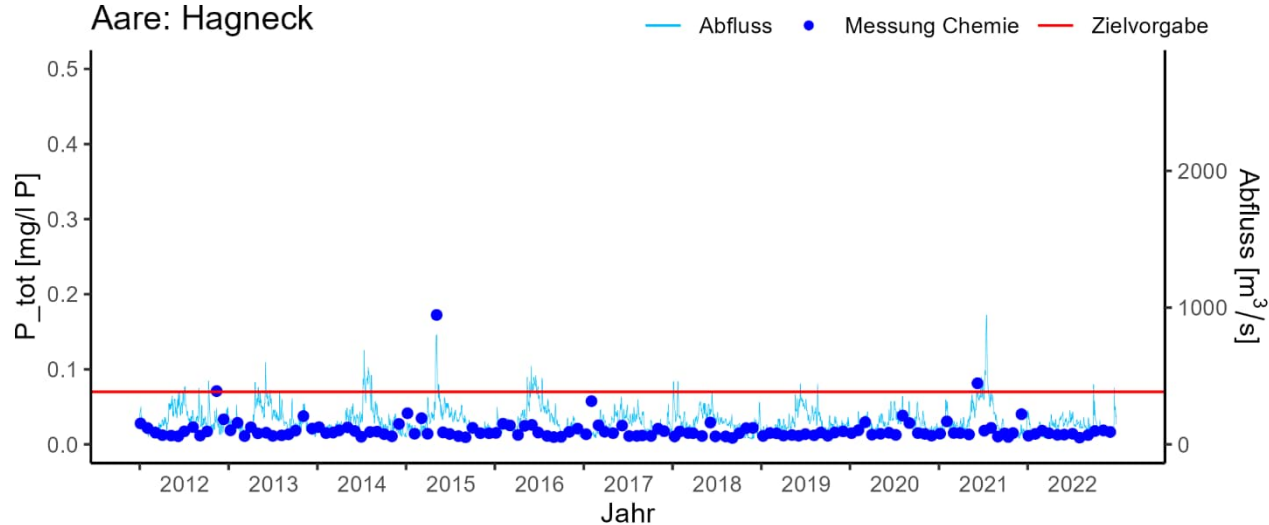
Aare: Thun Schadau Seeauslauf

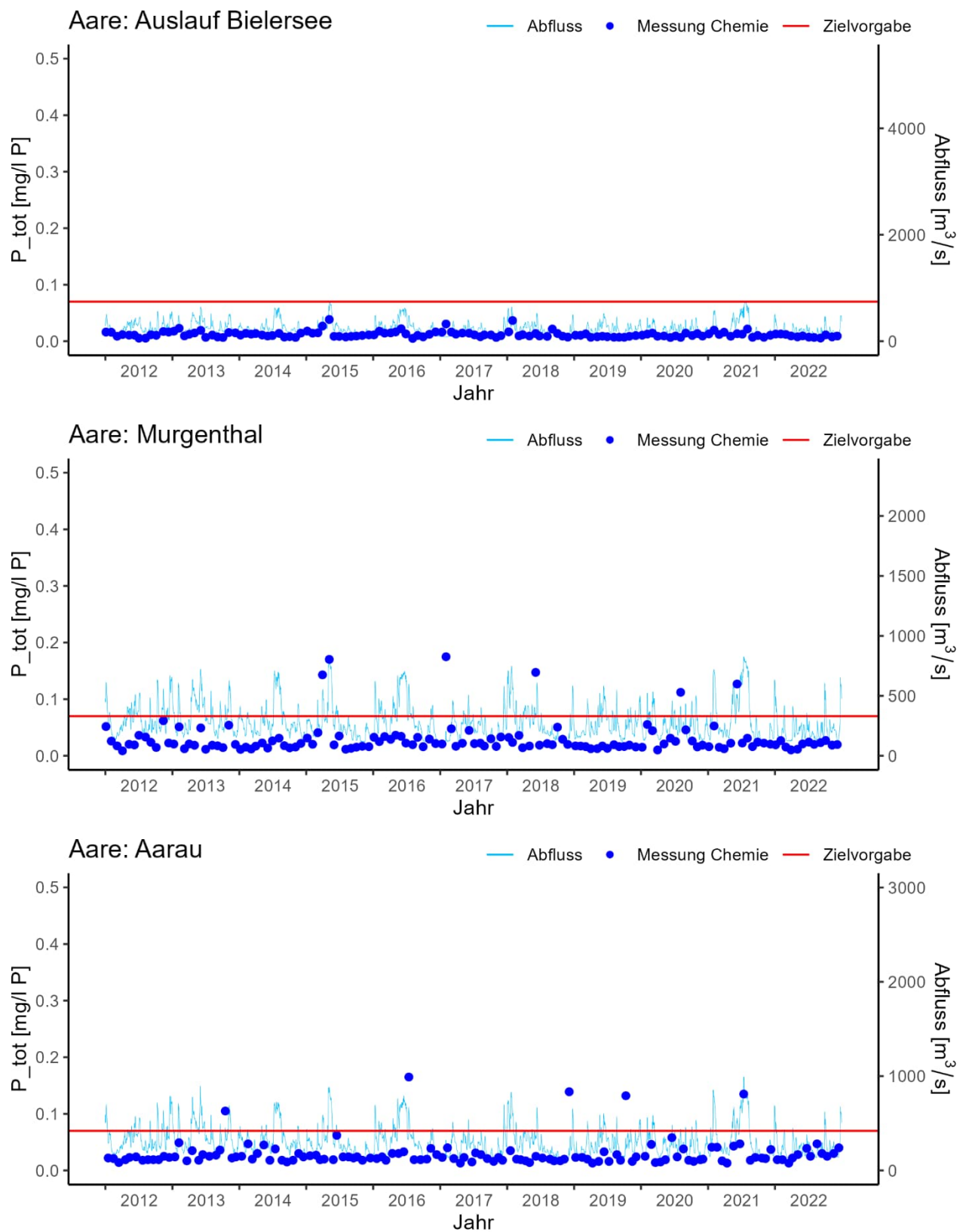


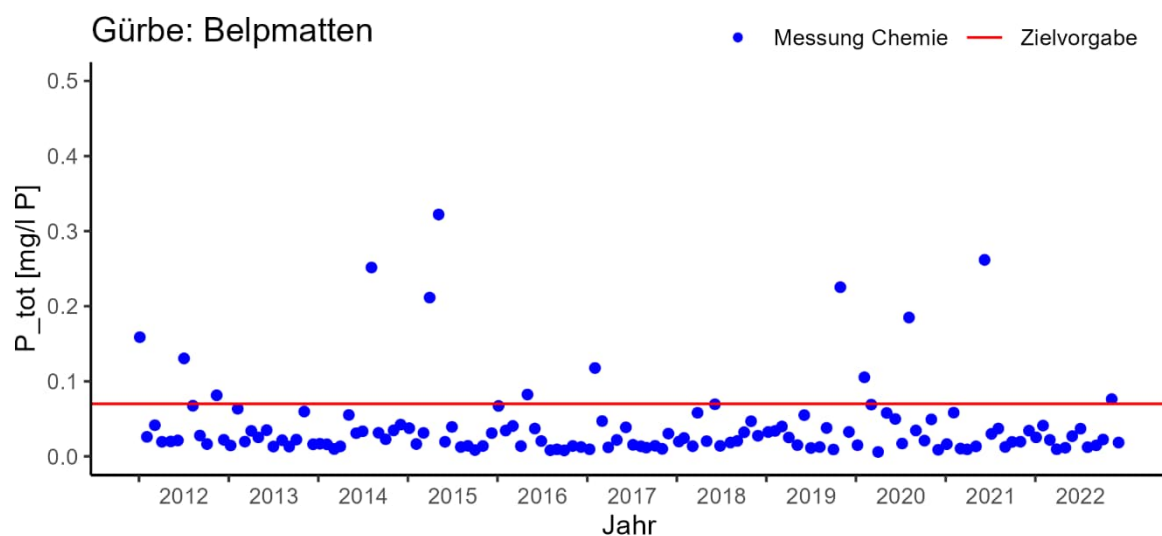
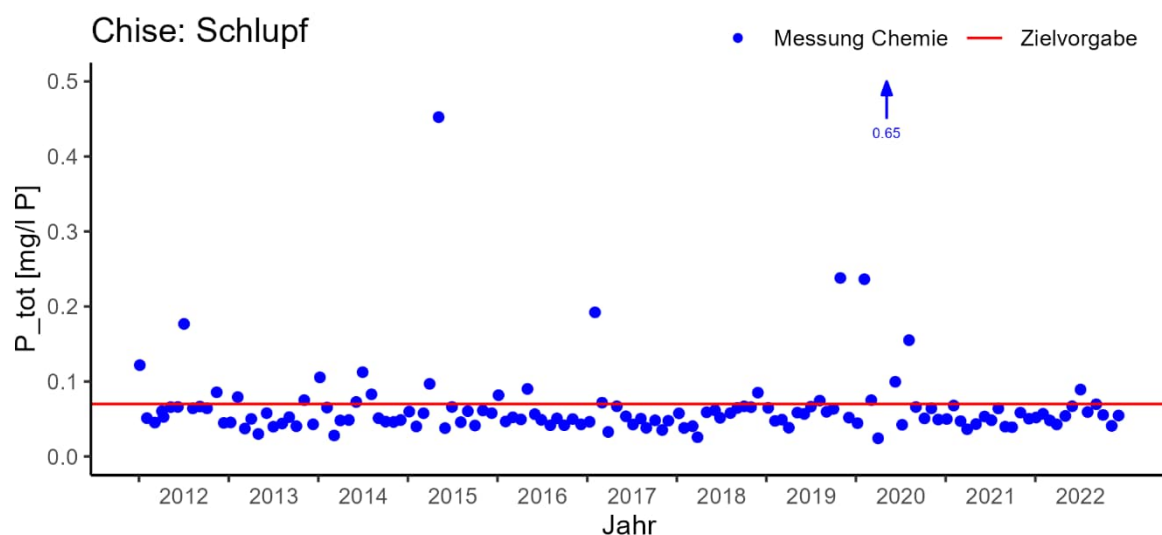
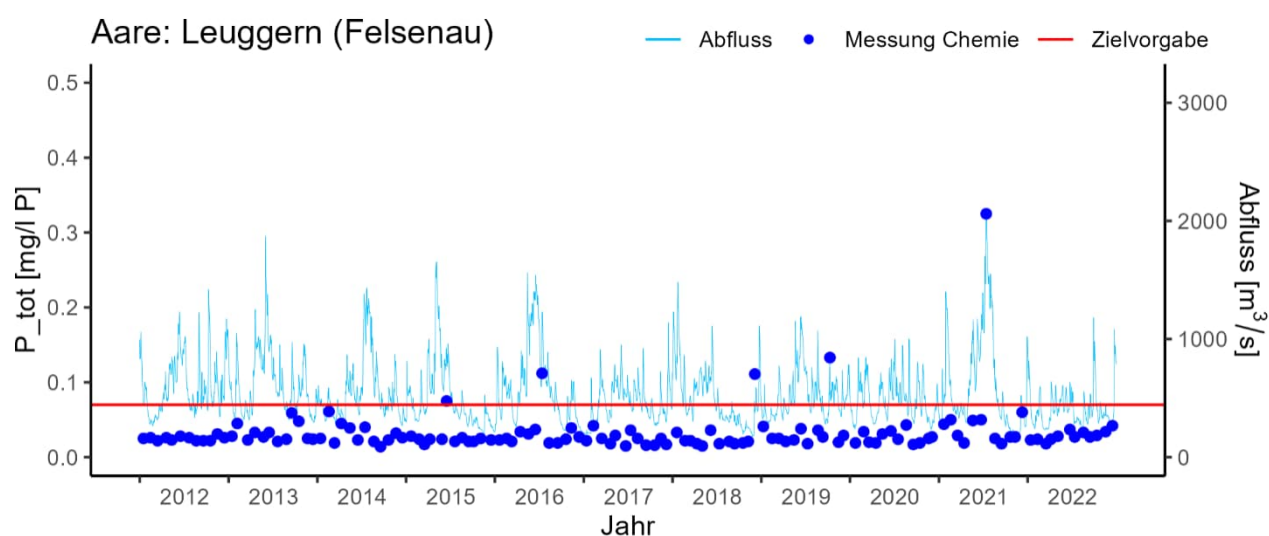
Aare: Eymatt, Stägmatt-Steg

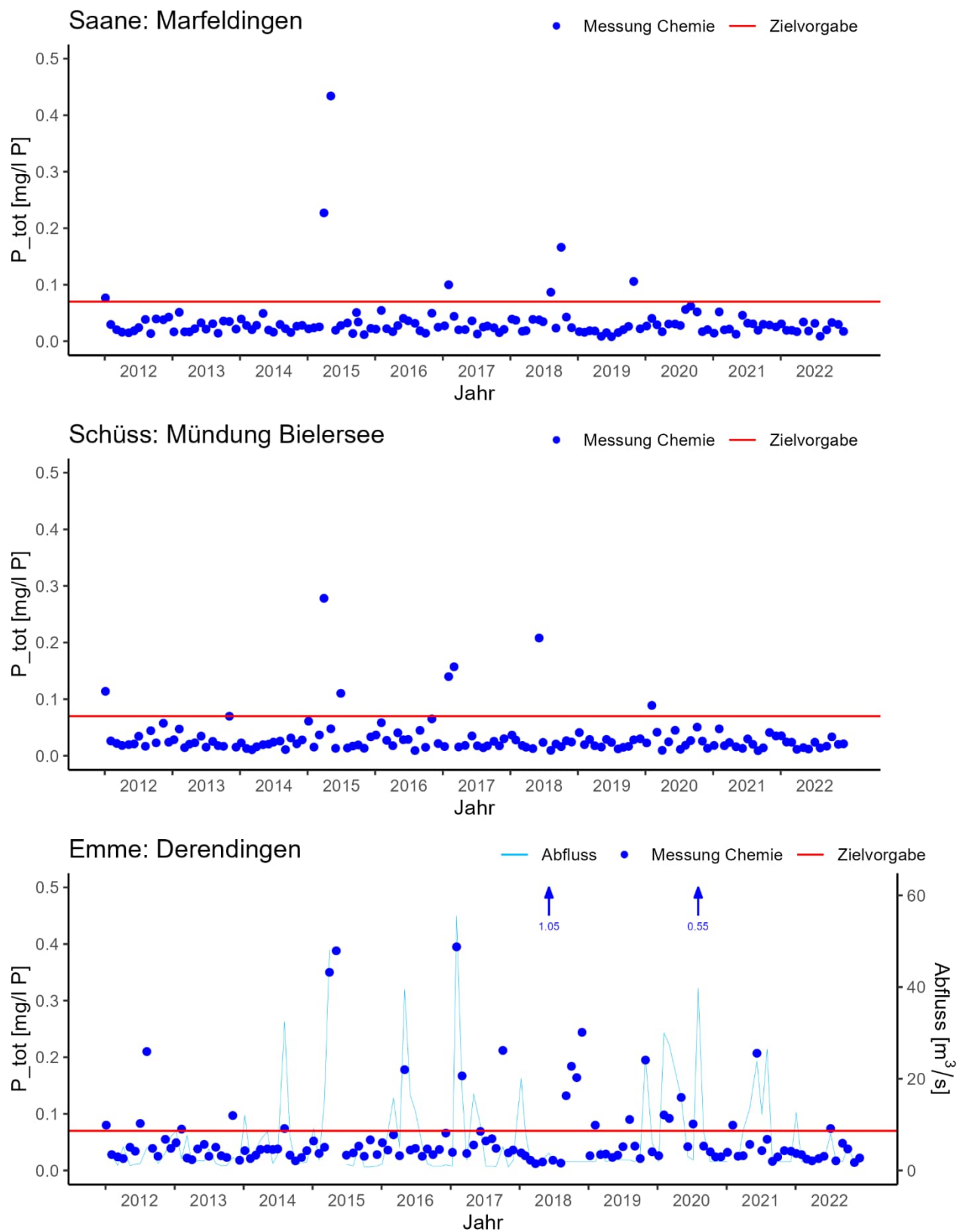


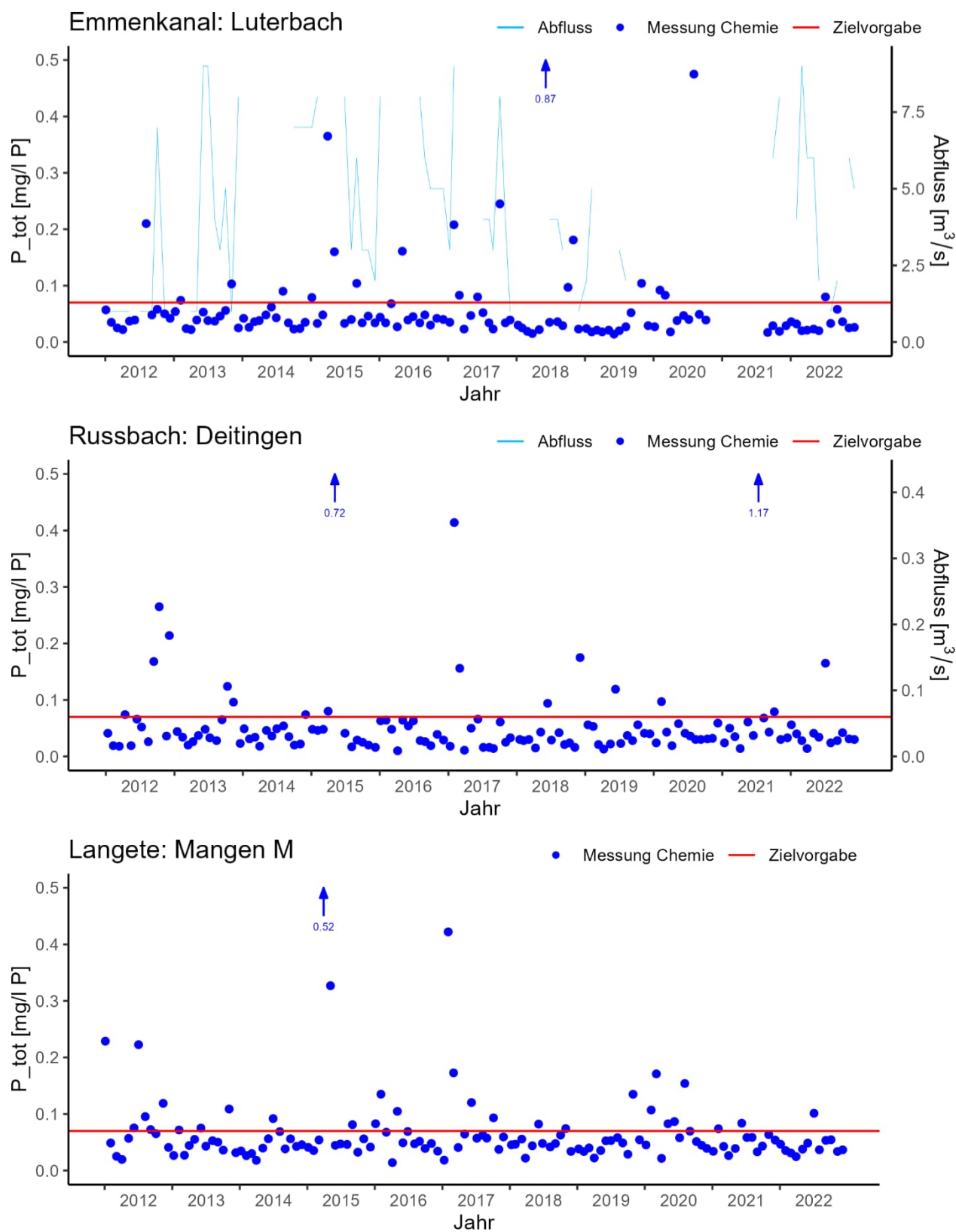
Aare: Hagneck

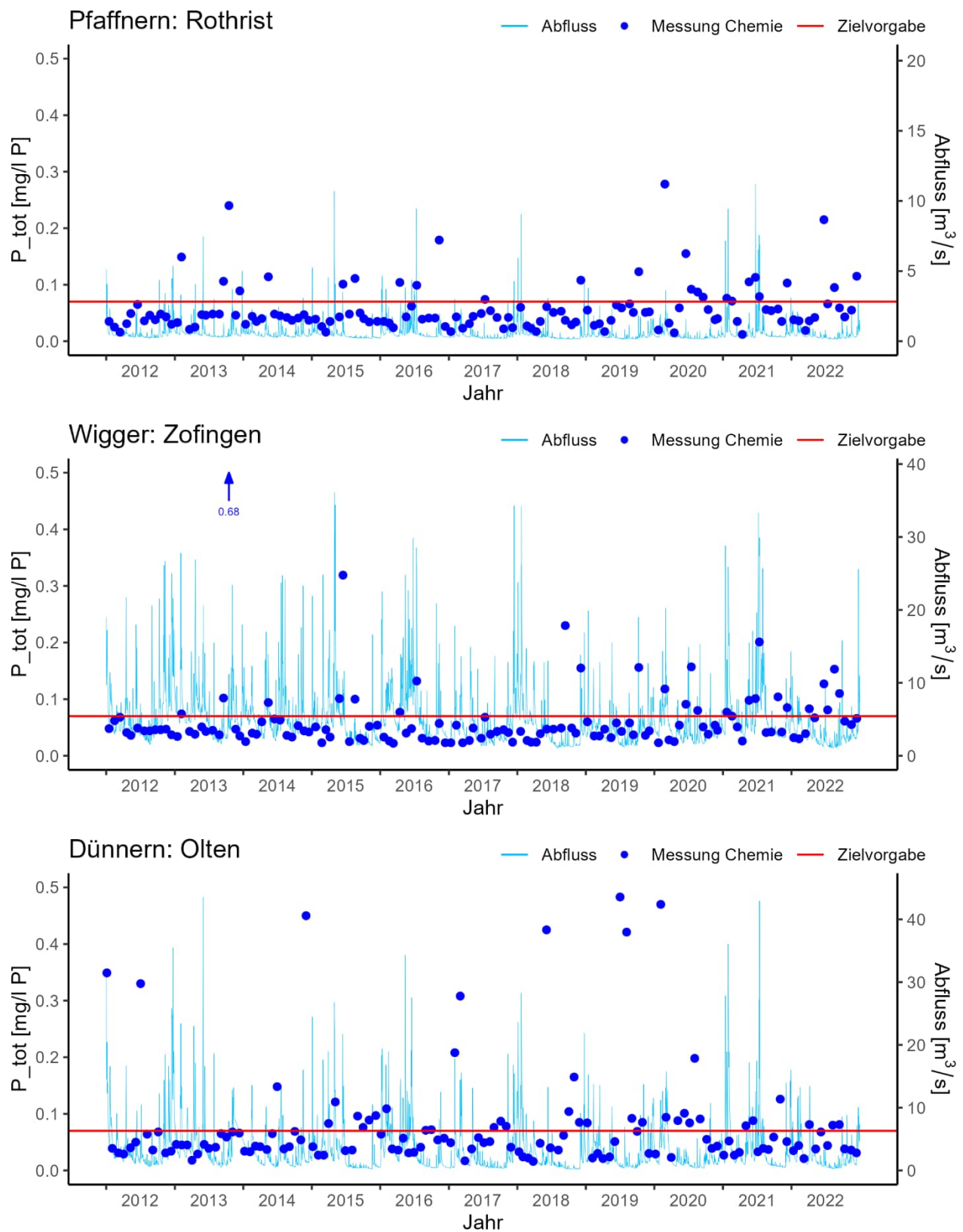


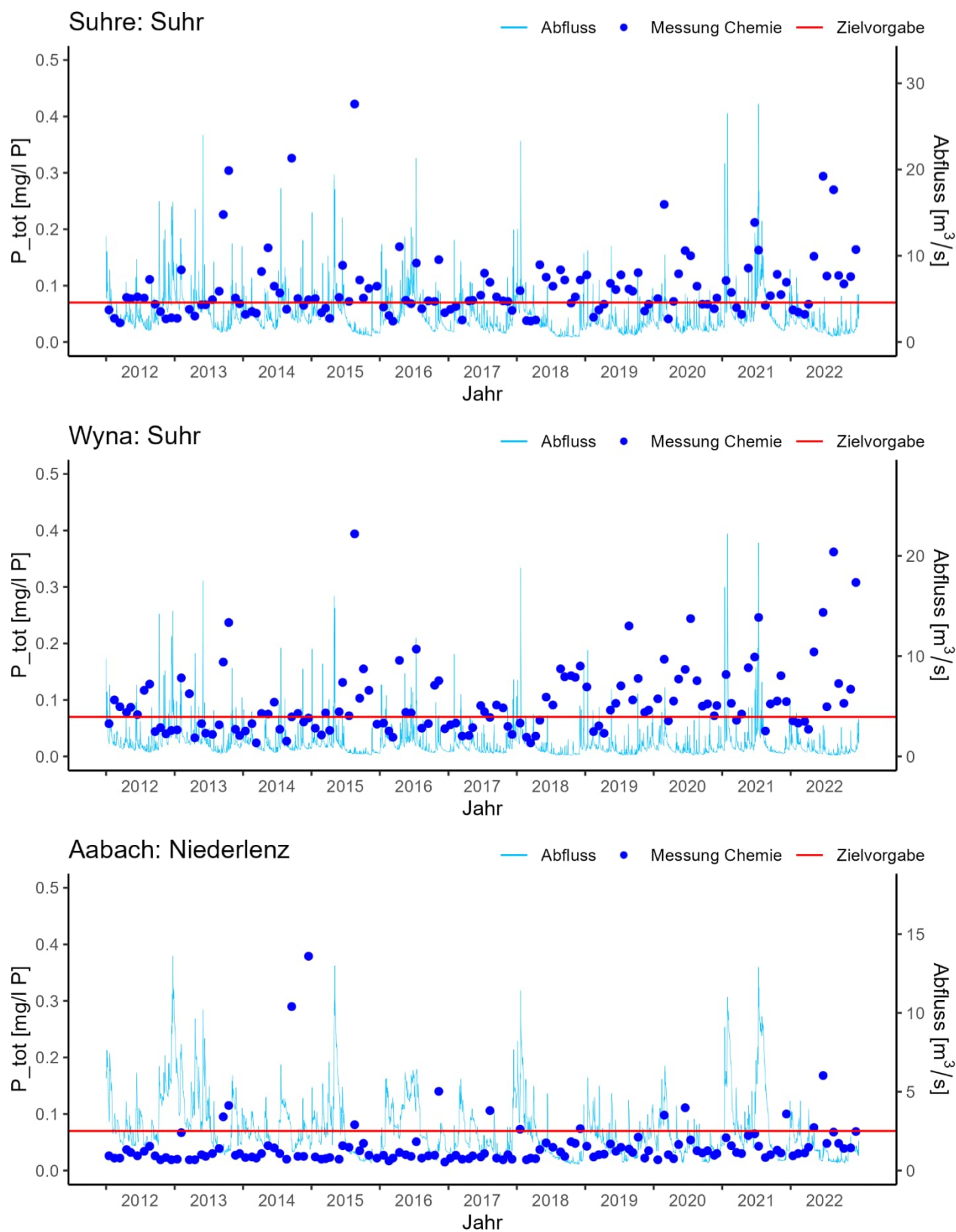


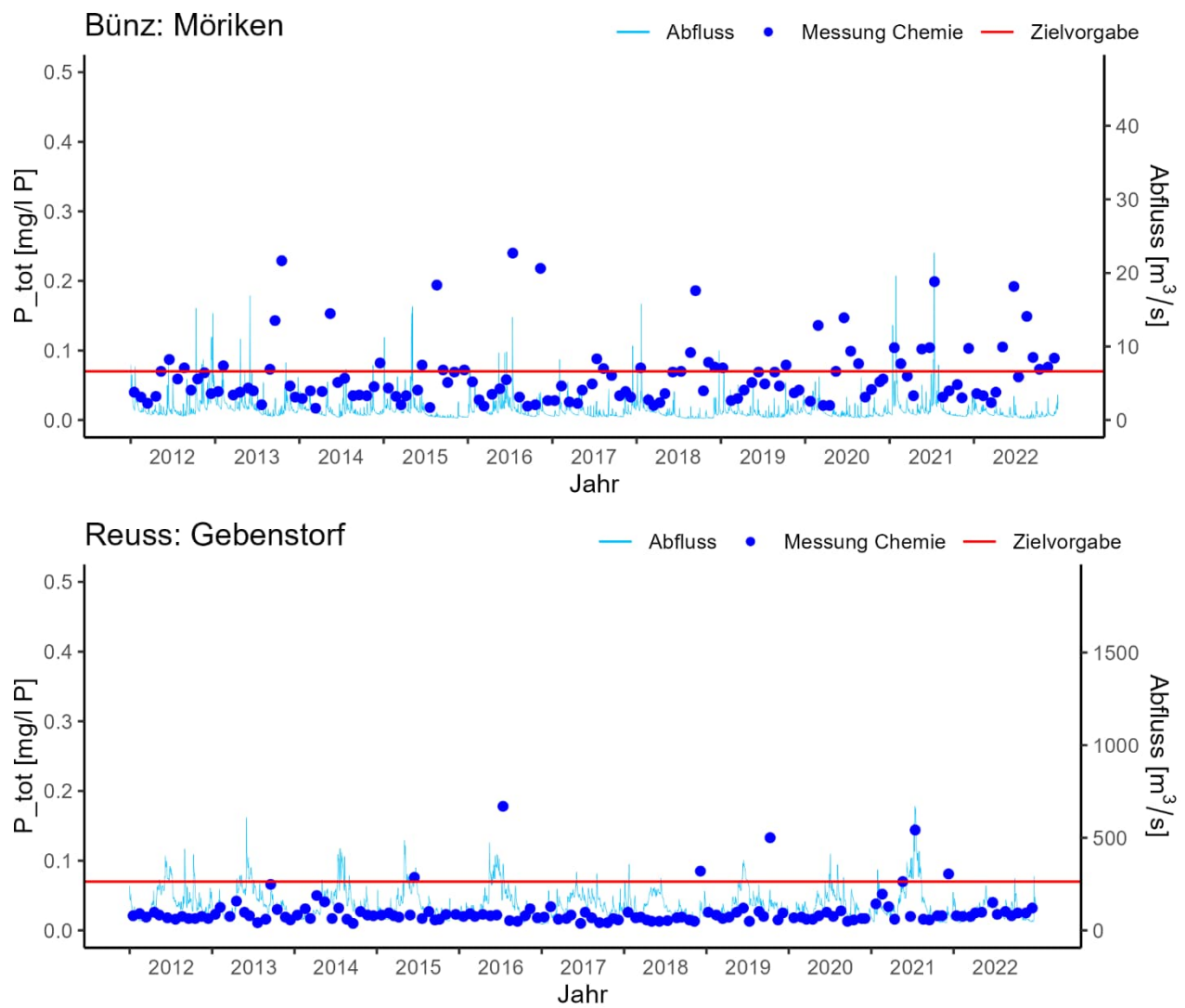


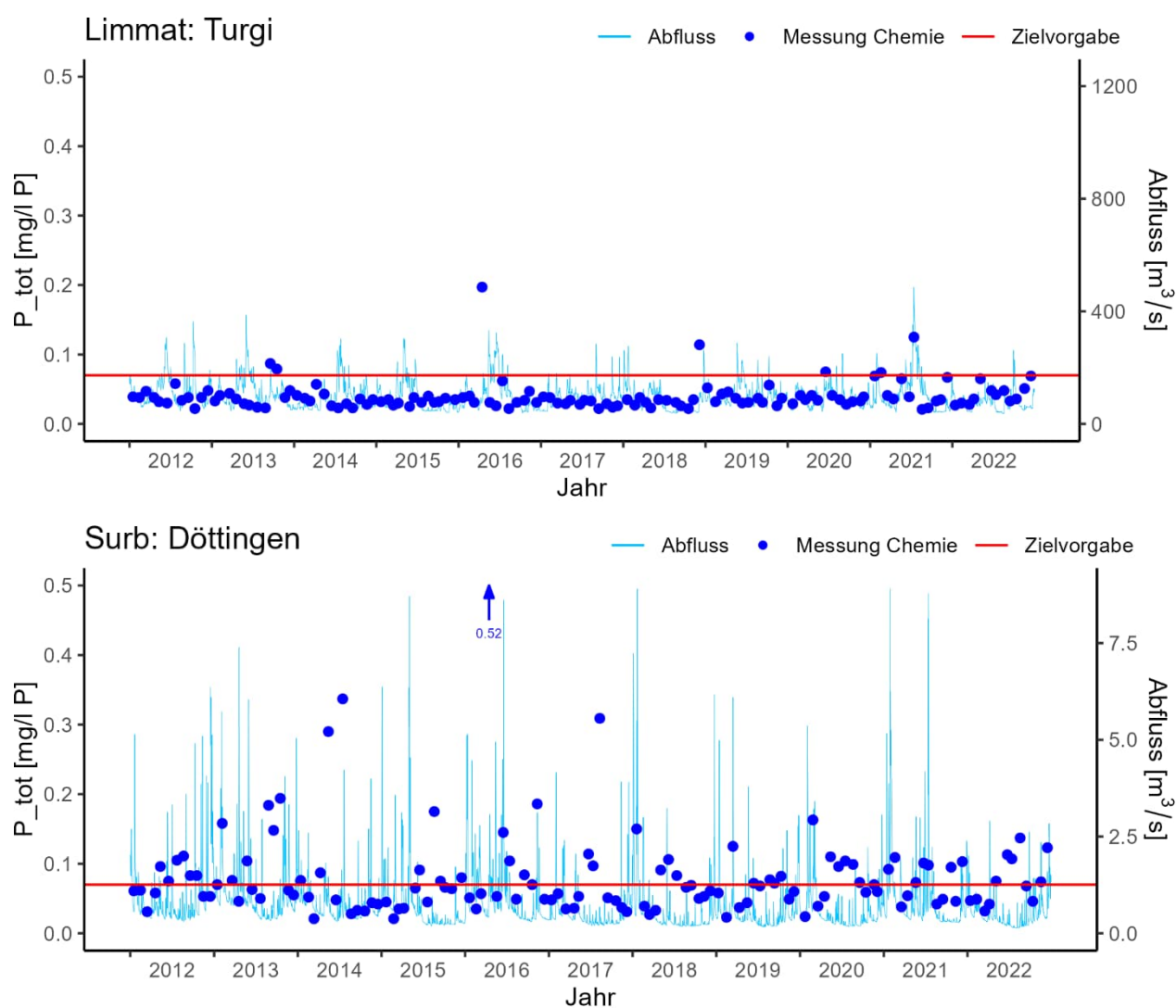






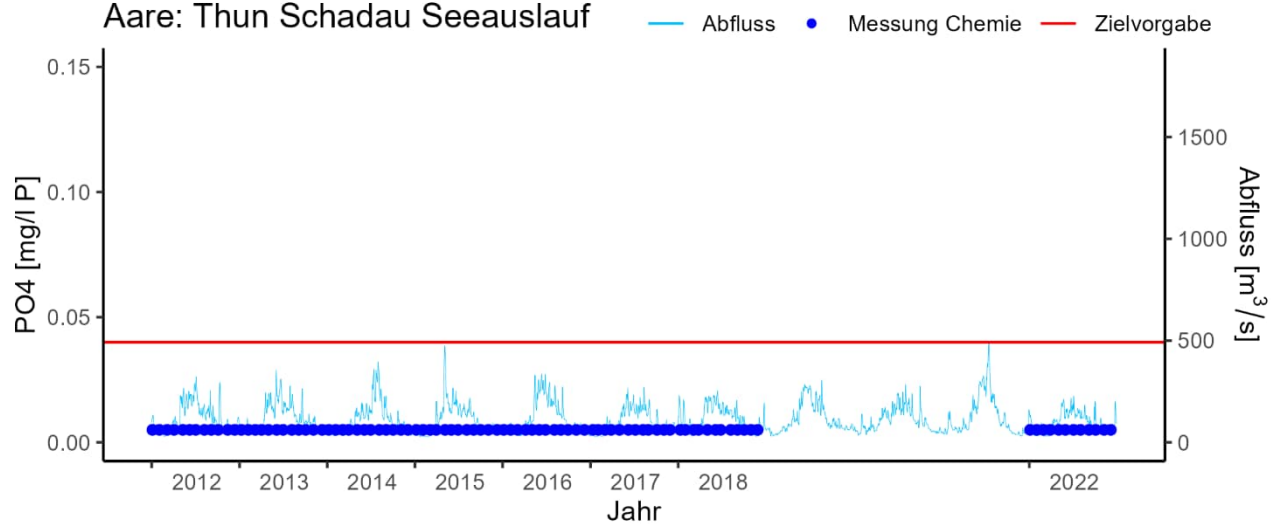




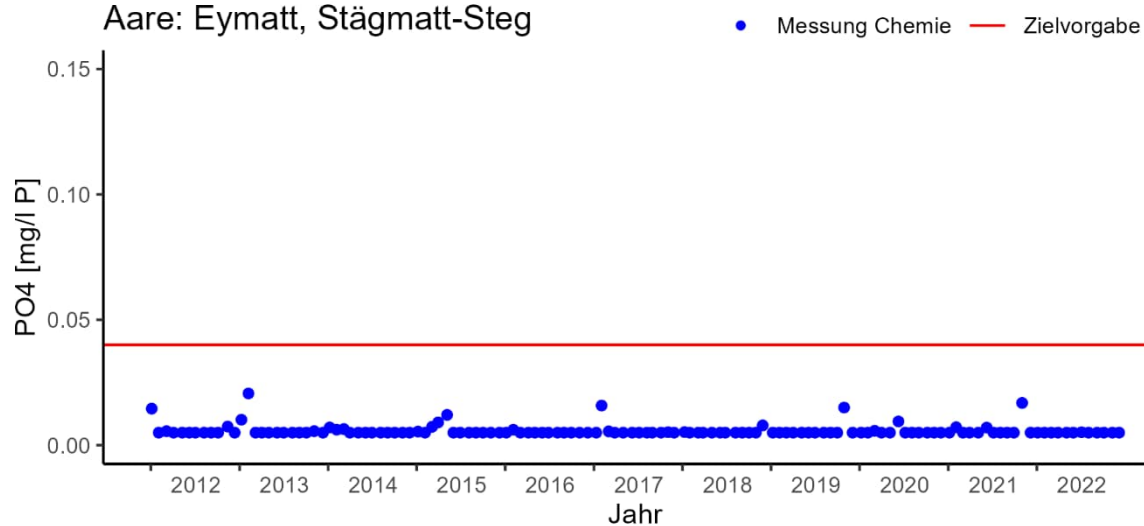


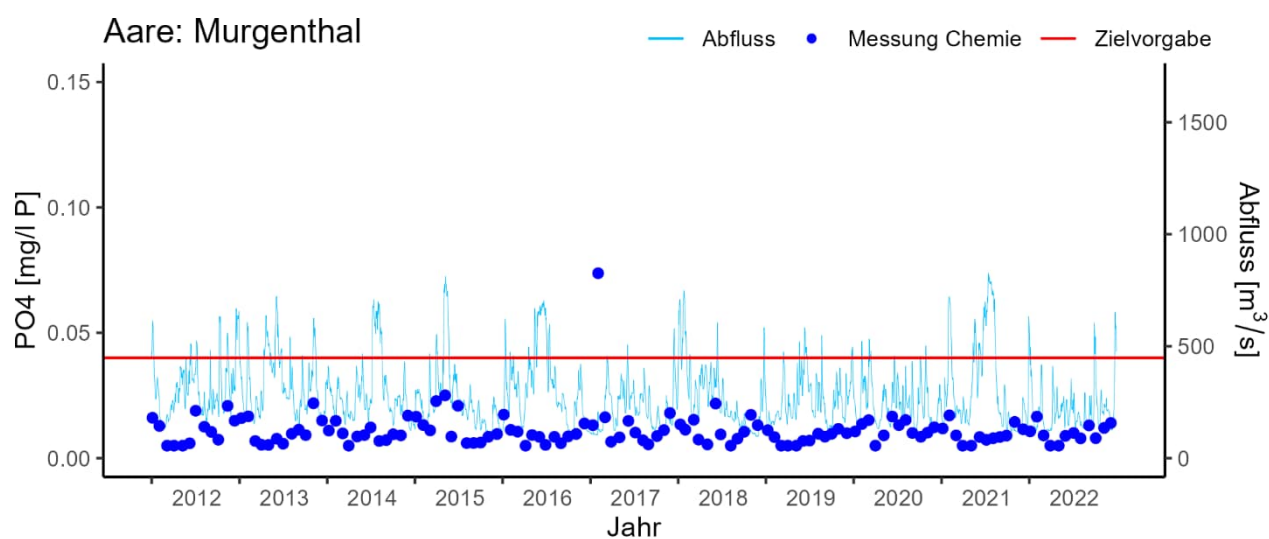
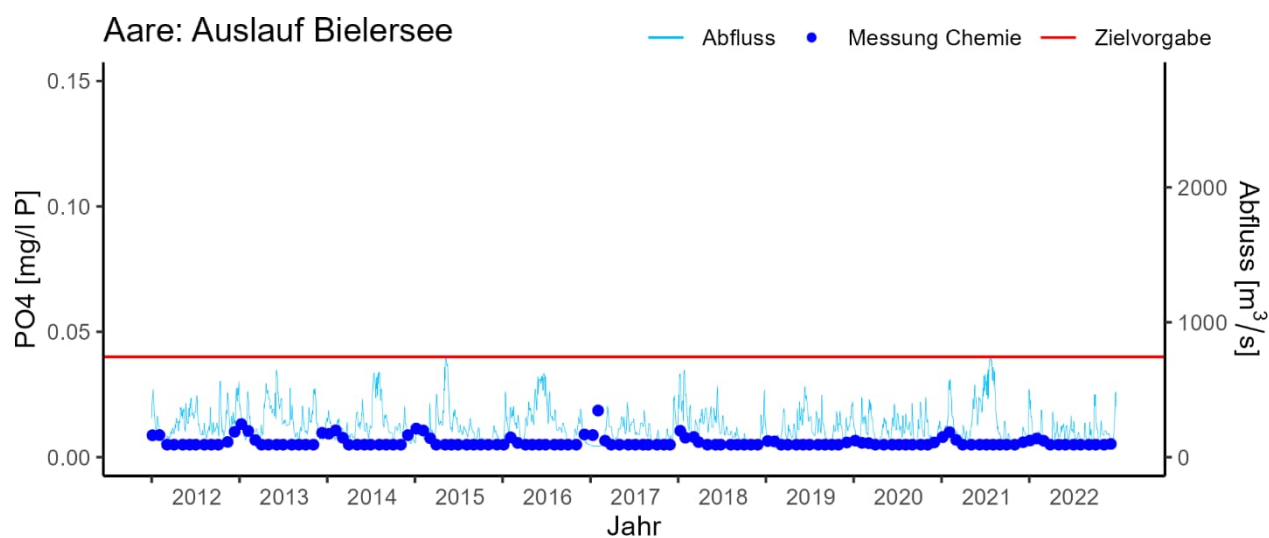
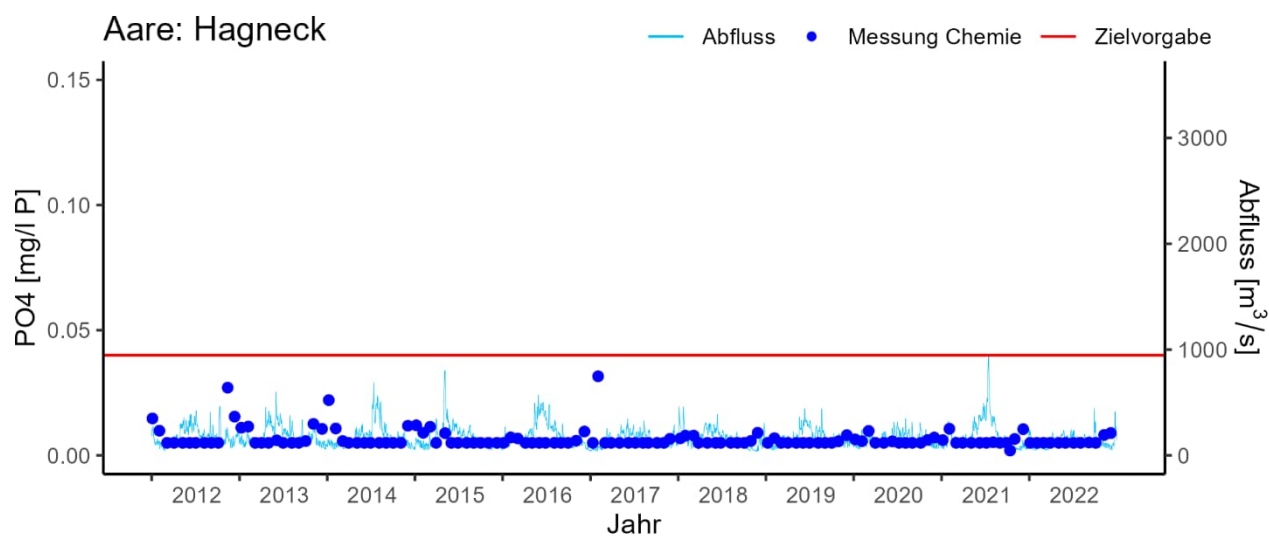
4.6 Ortho-Phosphat

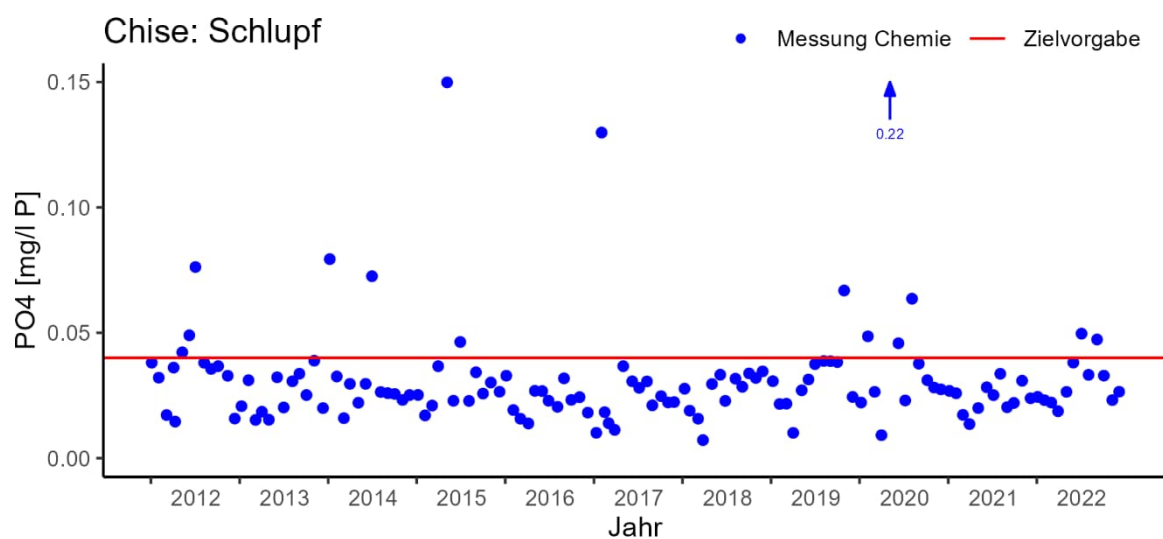
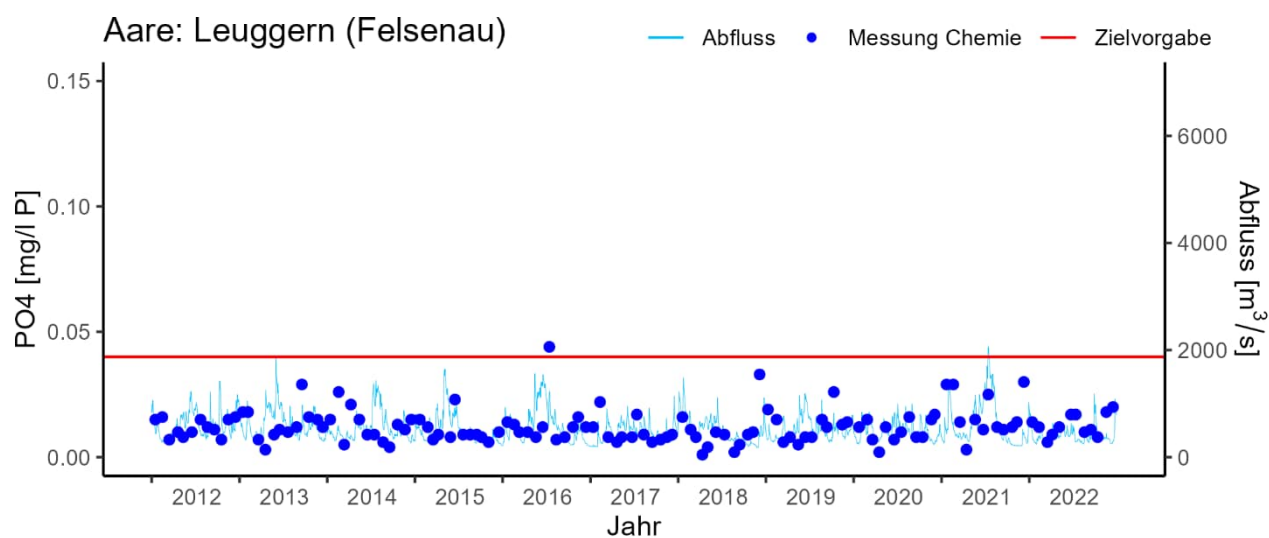
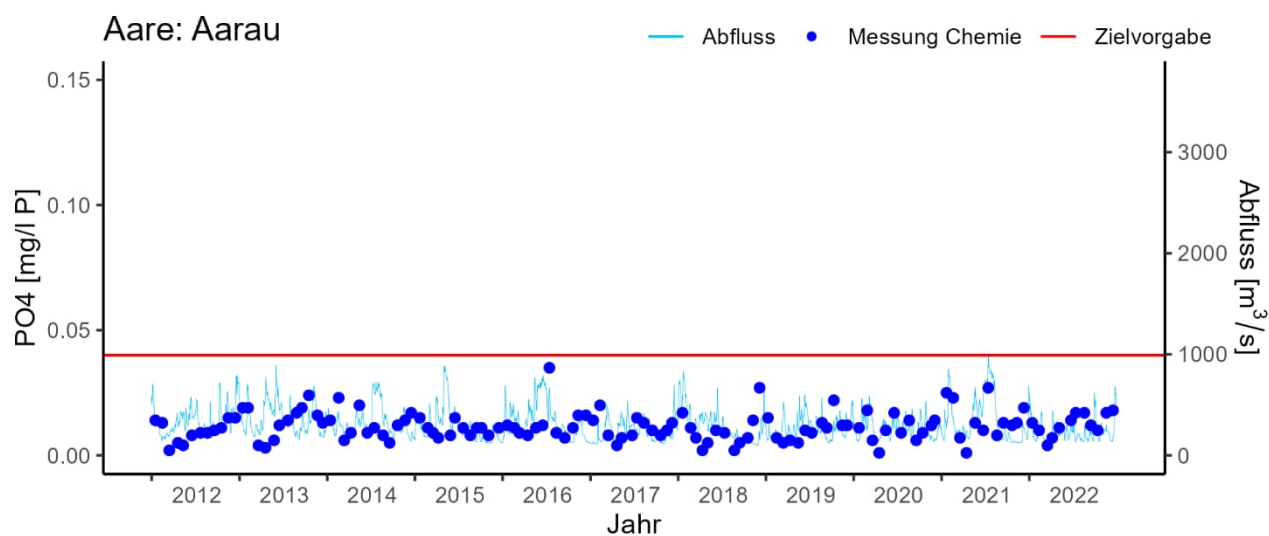
Aare: Thun Schadau Seeauslauf

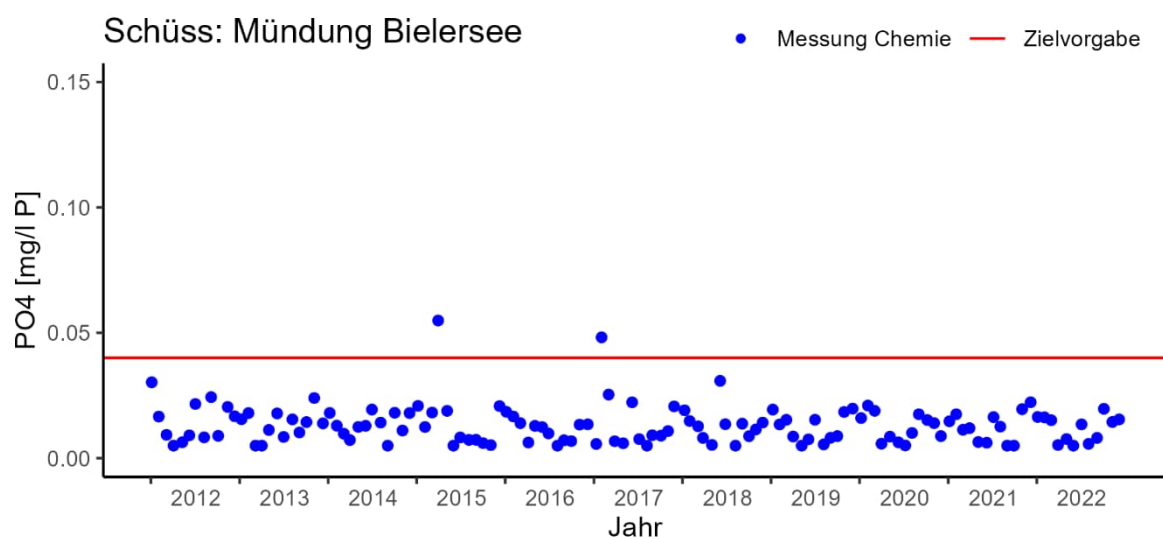
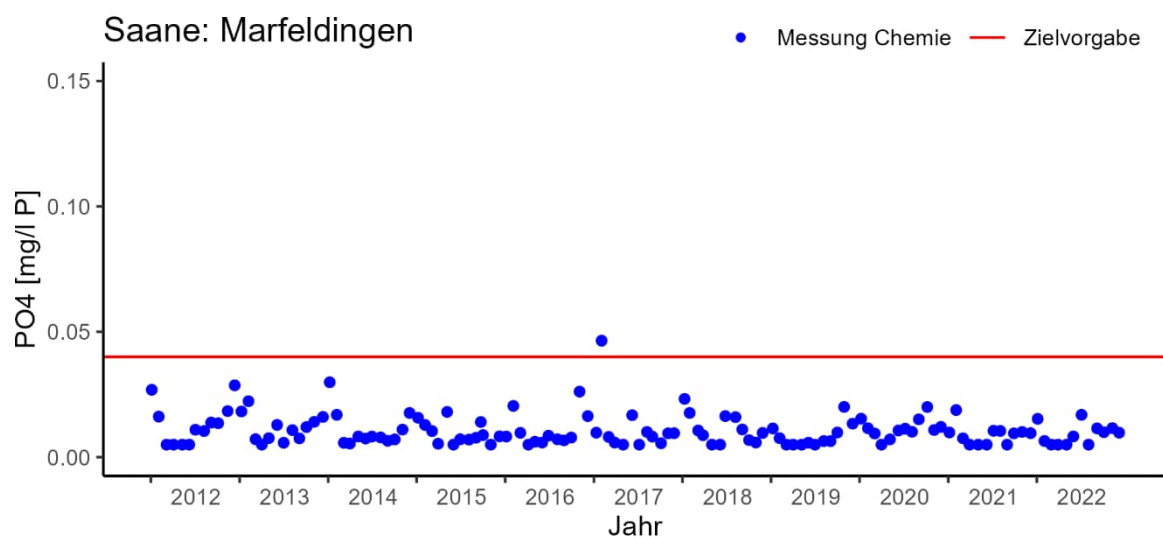
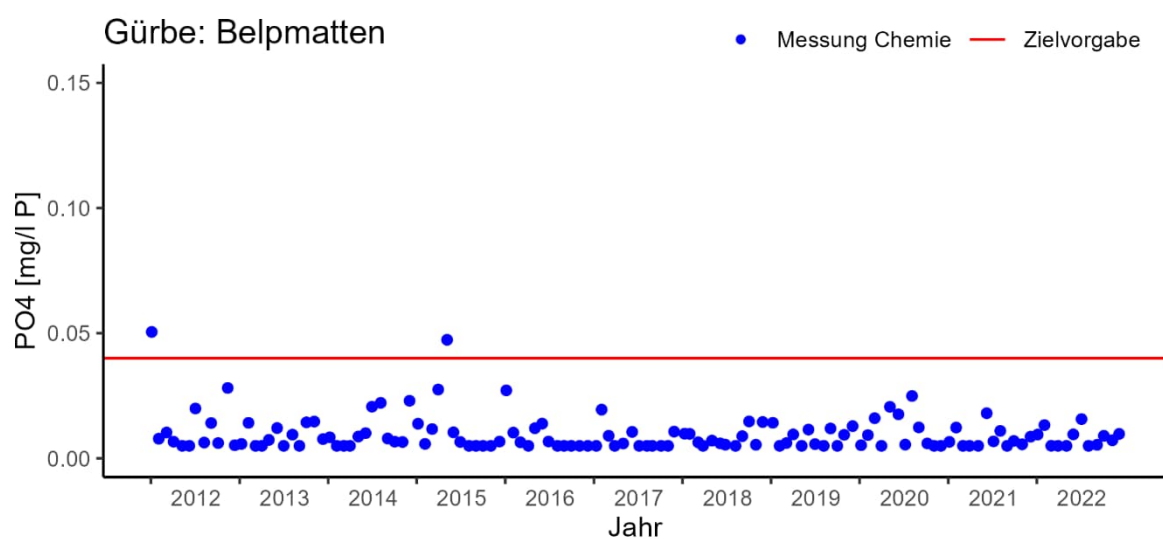


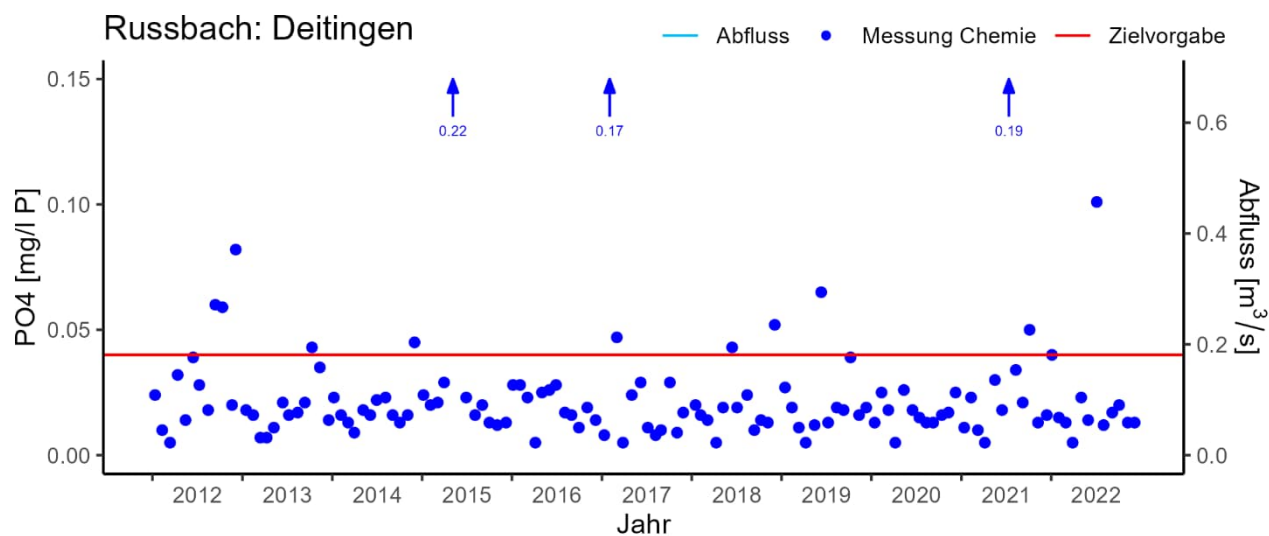
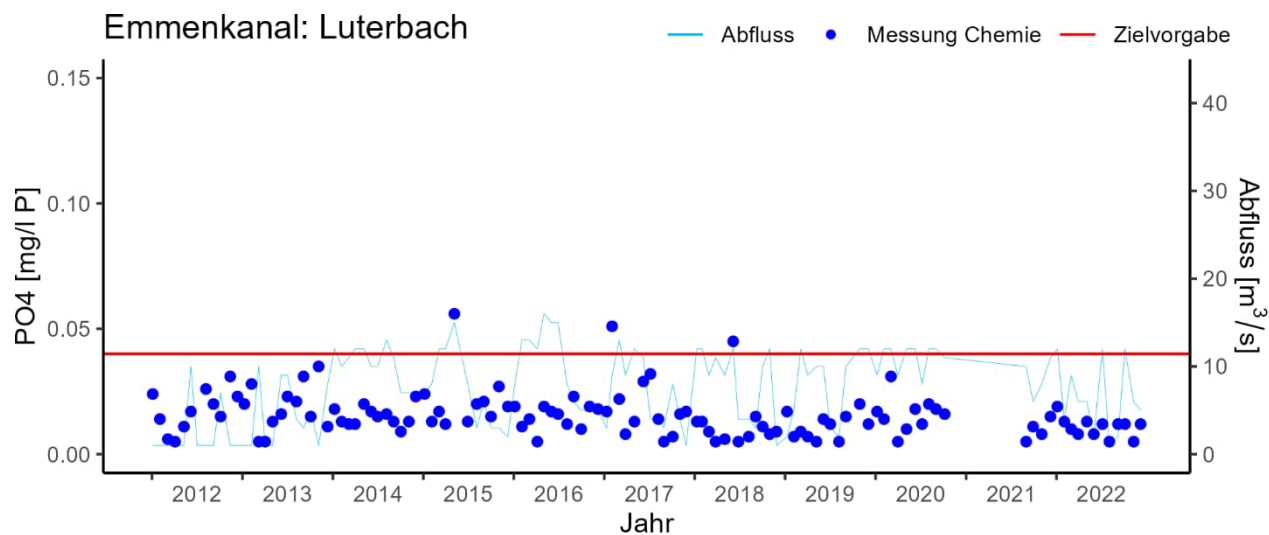
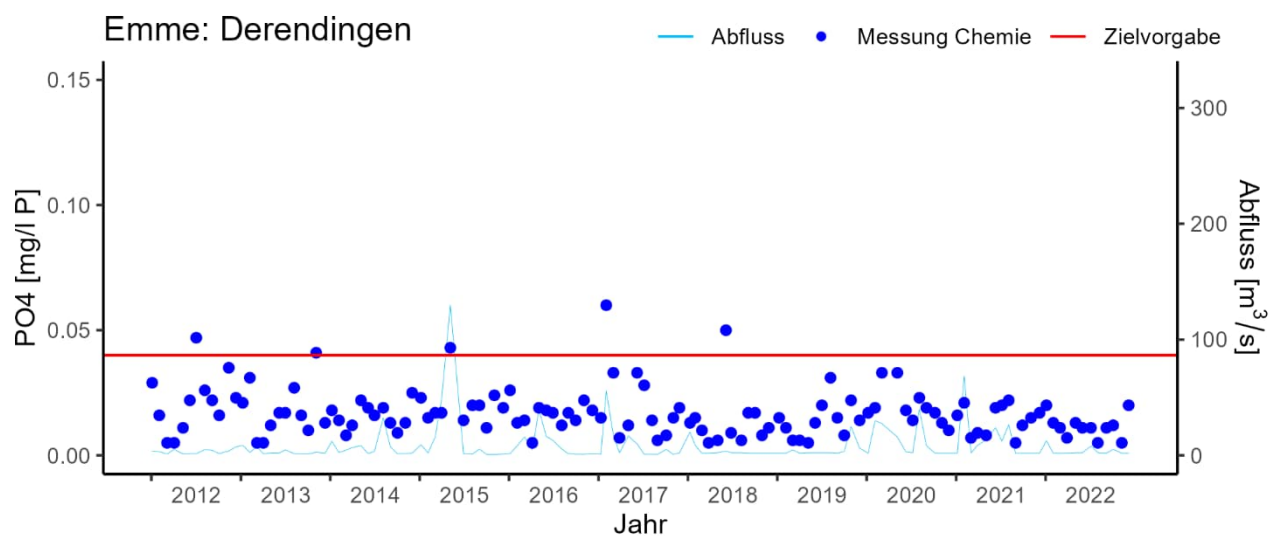
Aare: Eymatt, Stägmatt-Steg

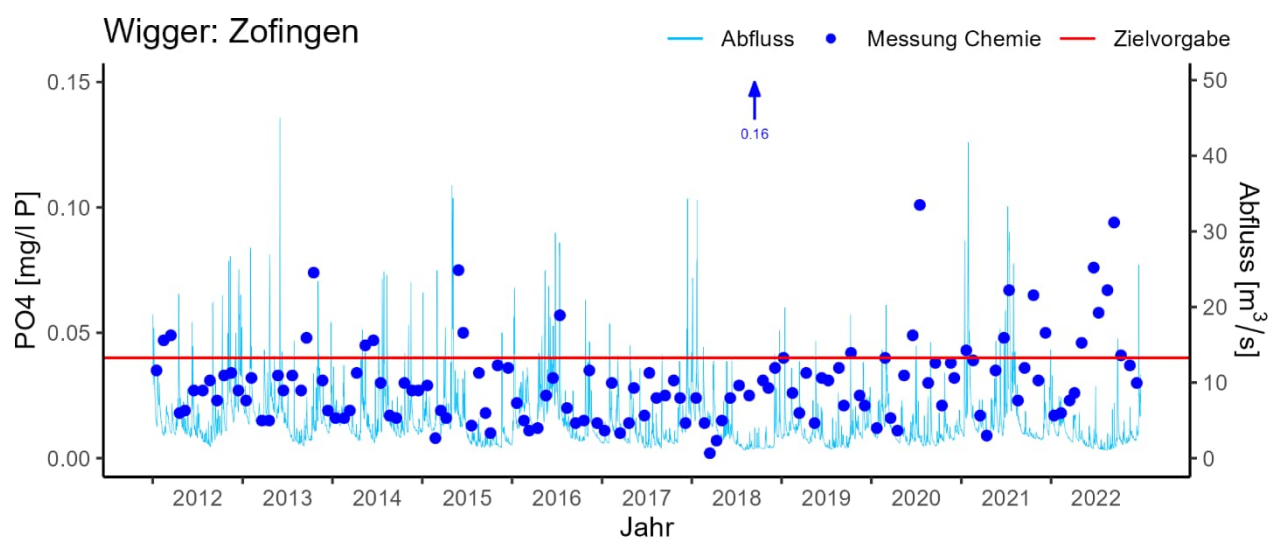
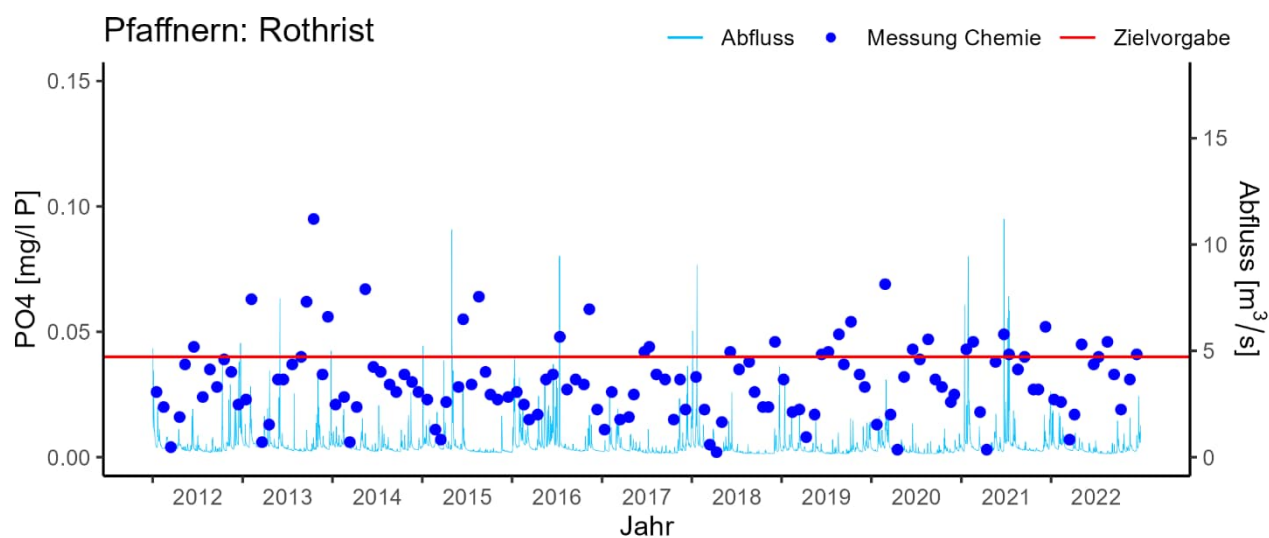
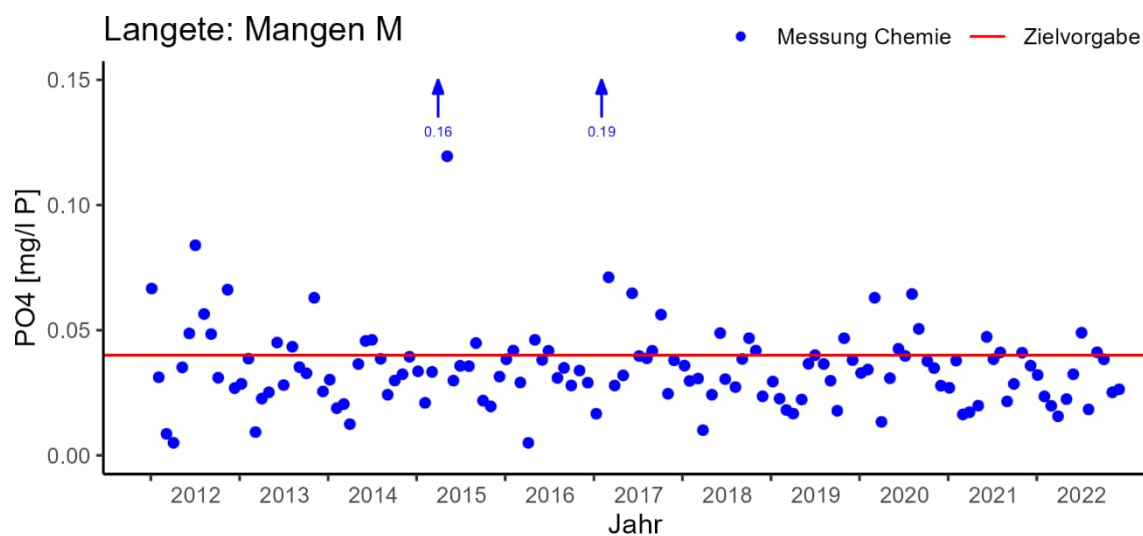


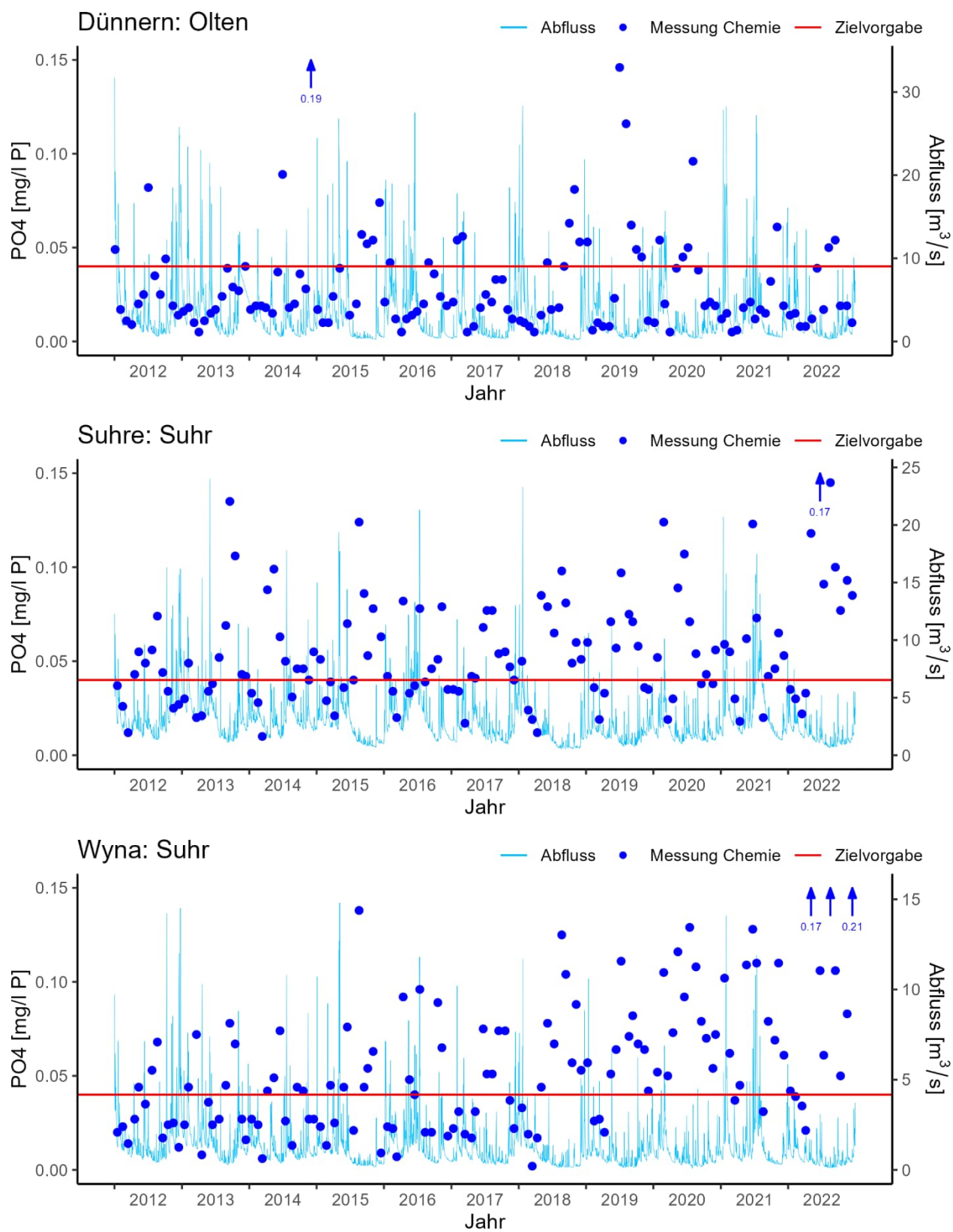


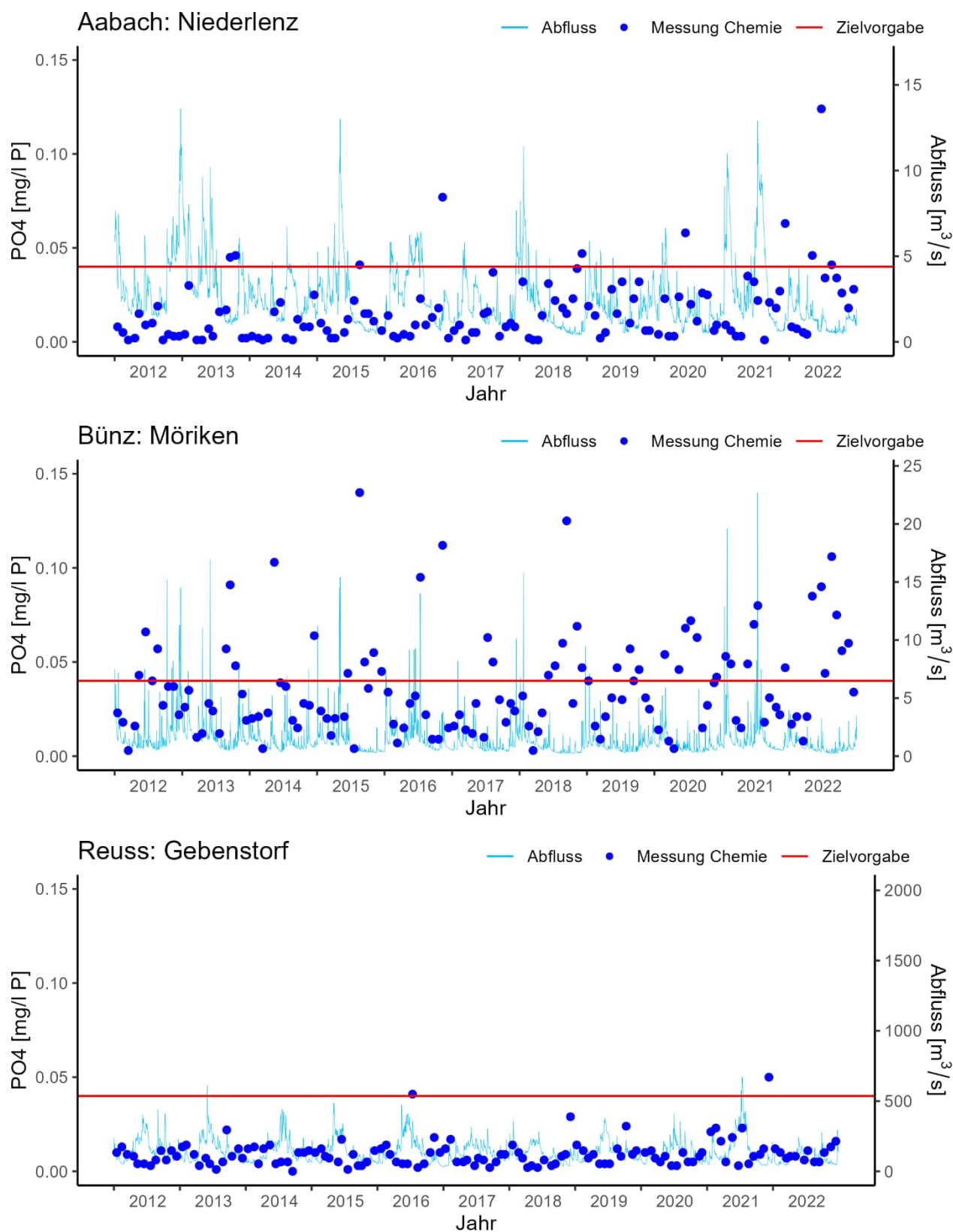


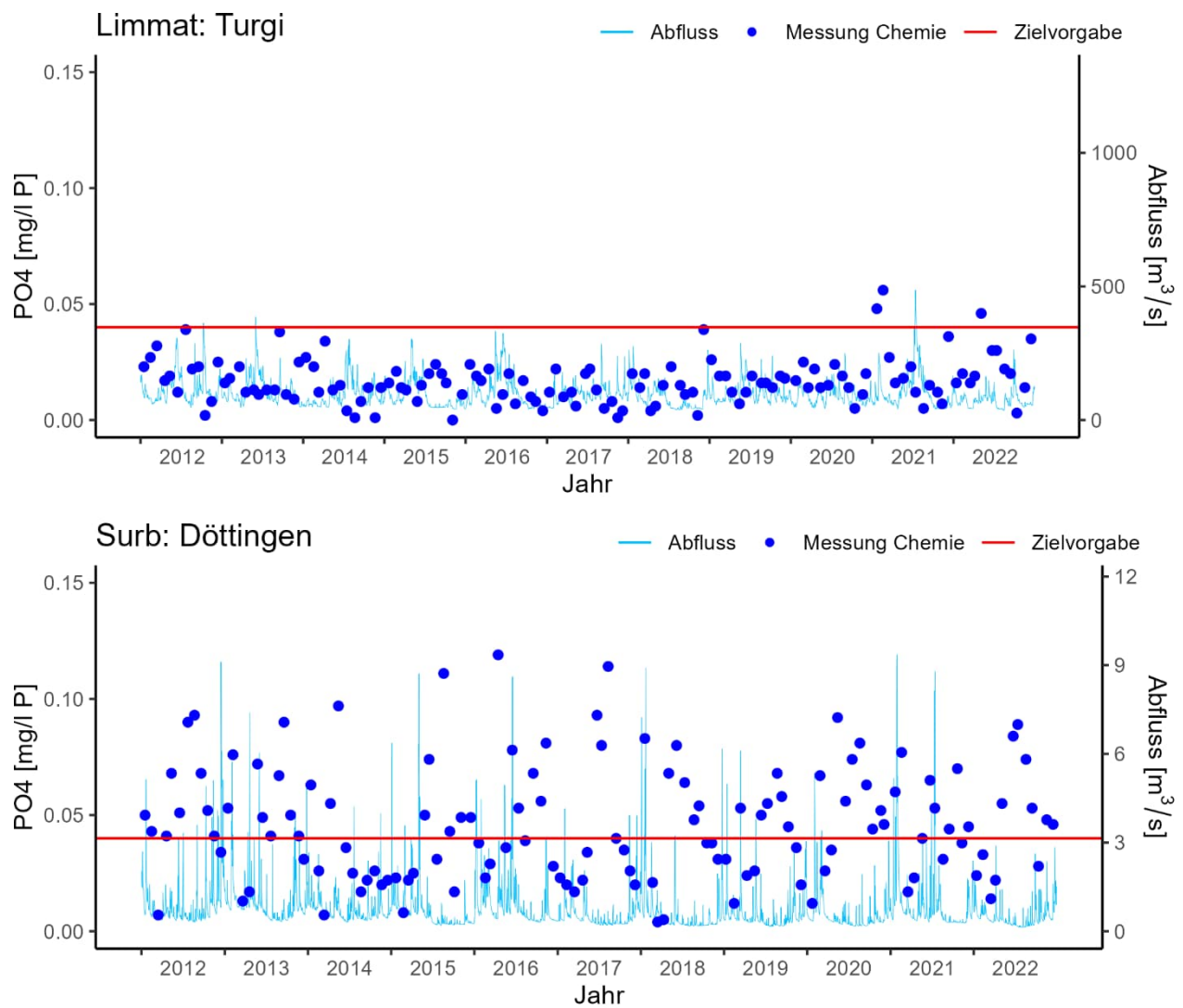






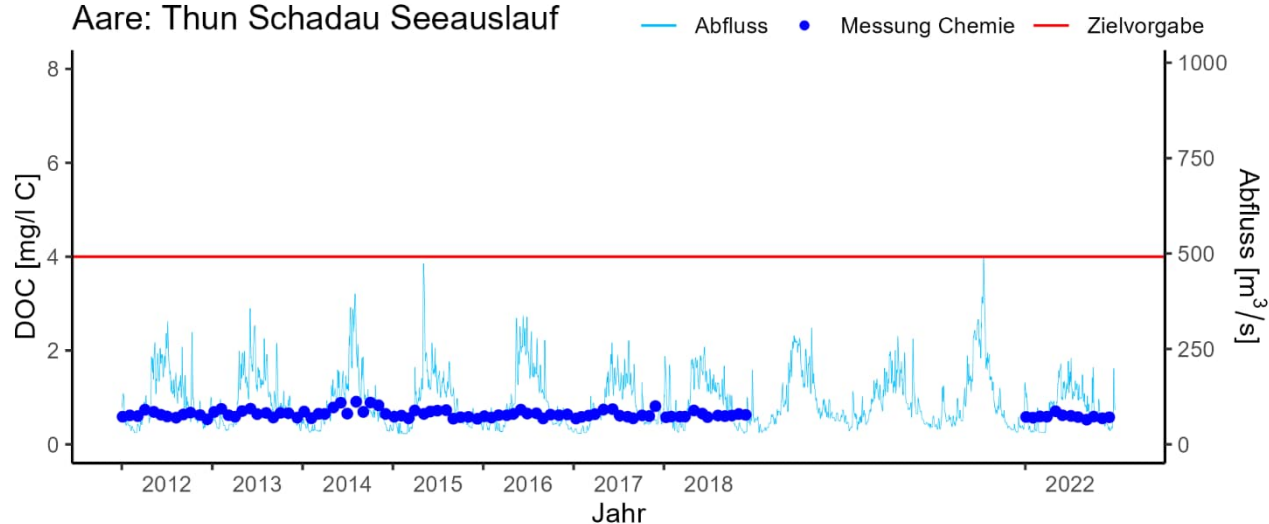




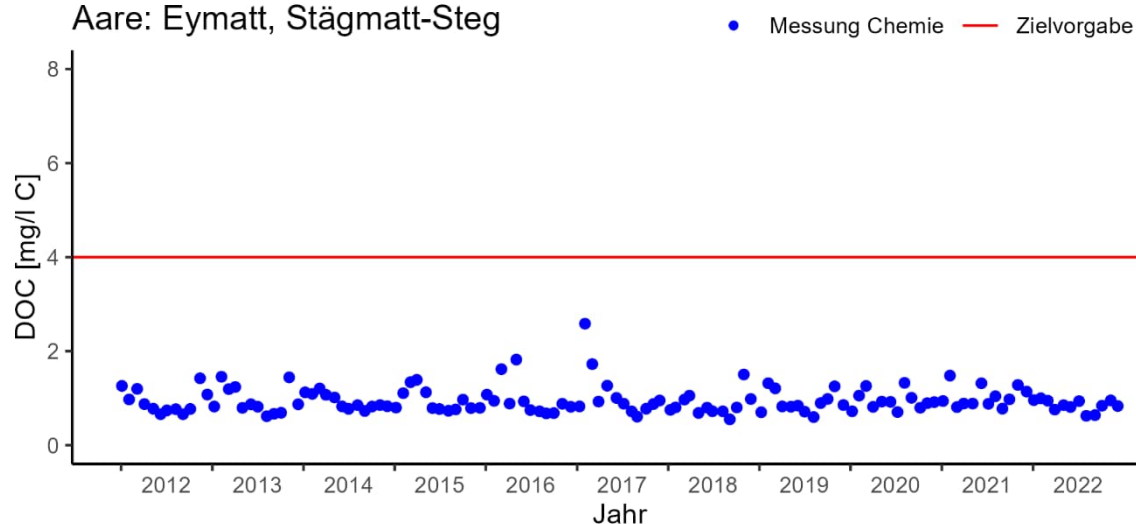


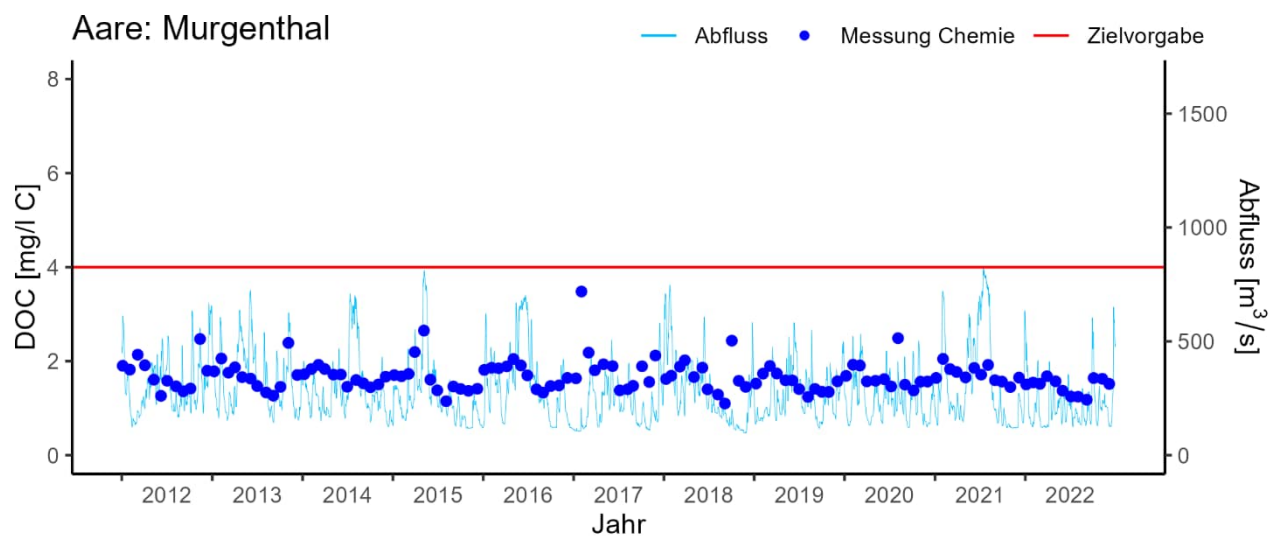
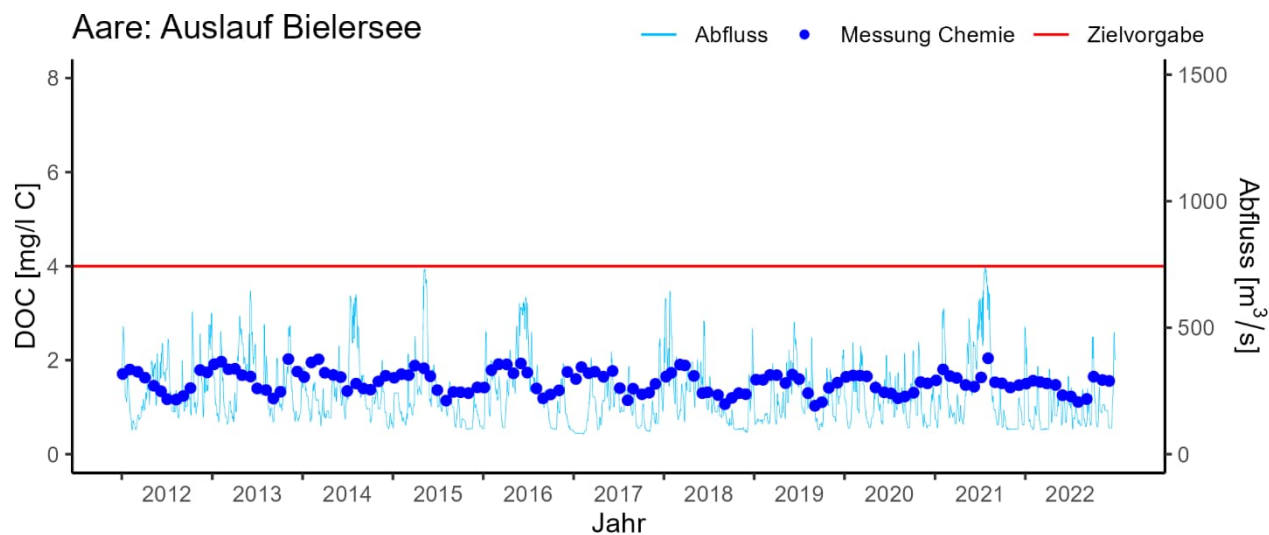
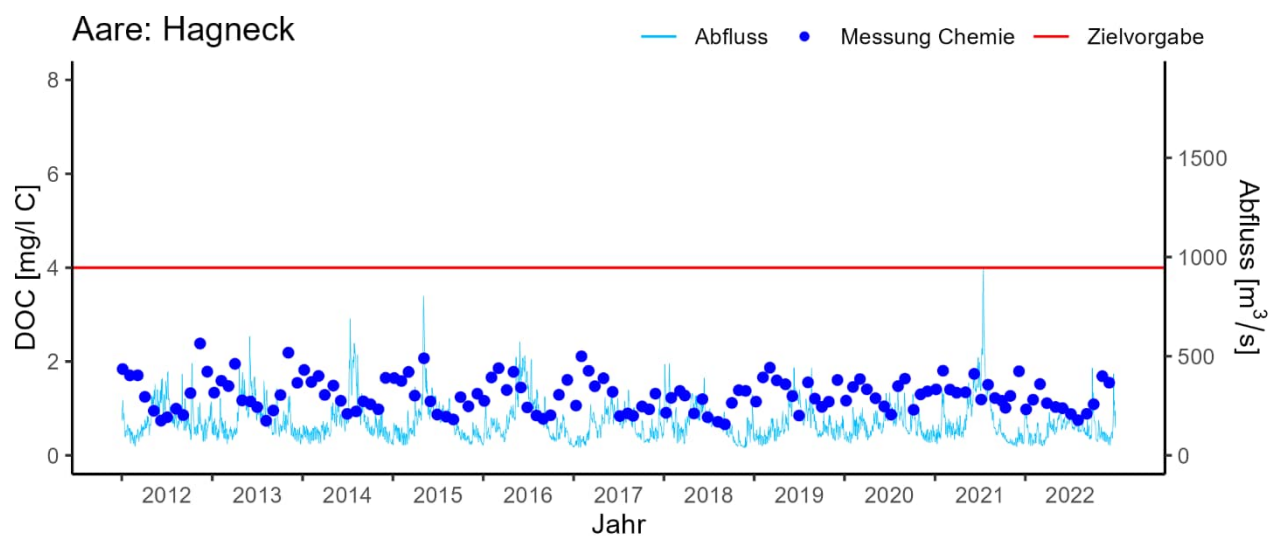
4.7 Gelöster Organischer Kohlenstoff (DOC)

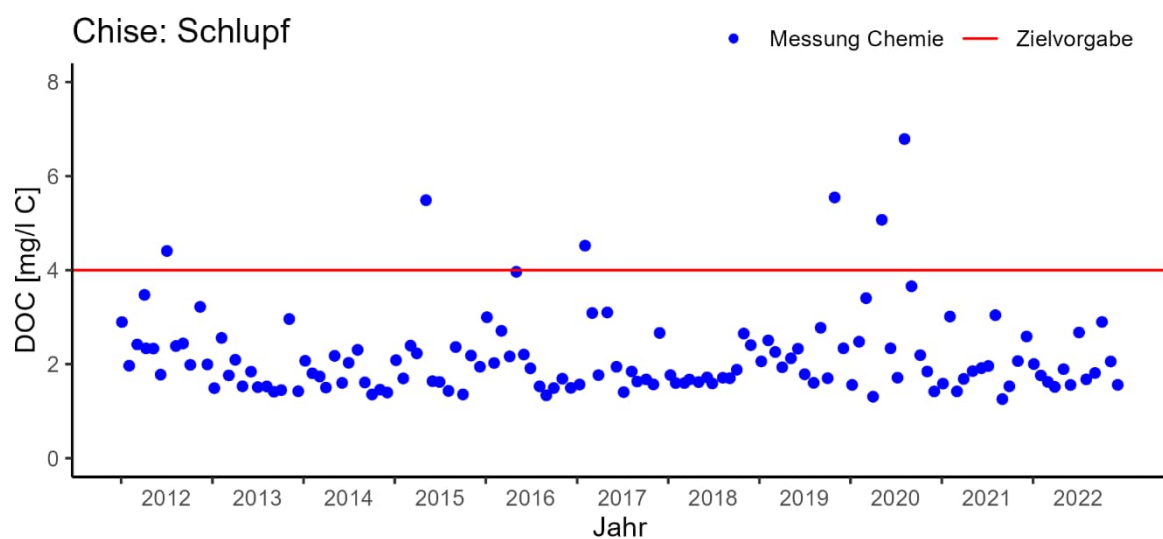
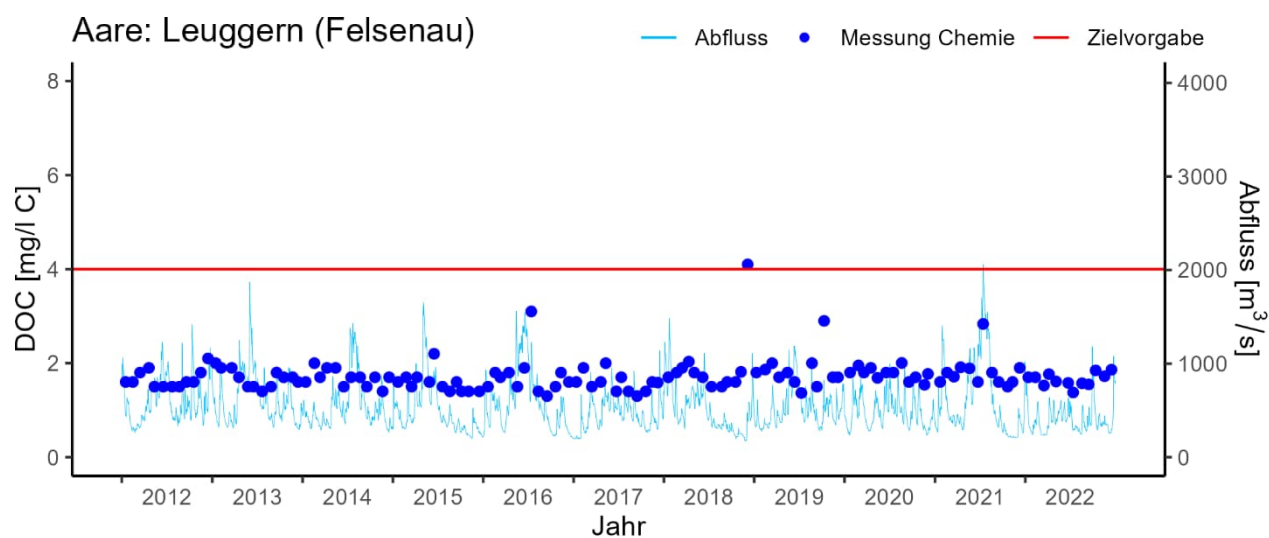
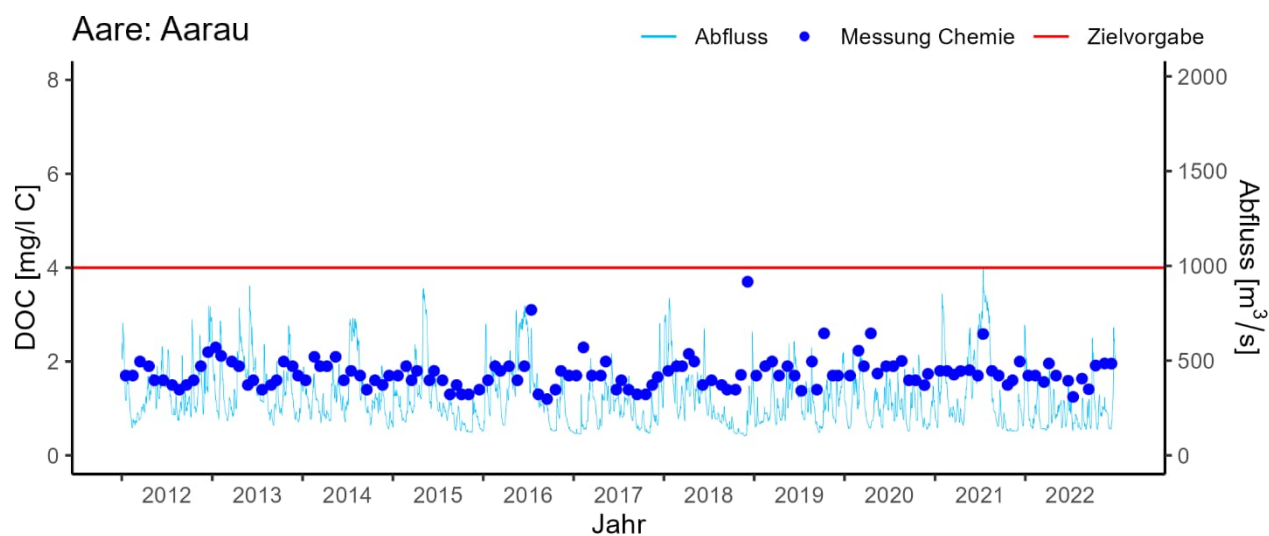
Aare: Thun Schadau Seeauslauf

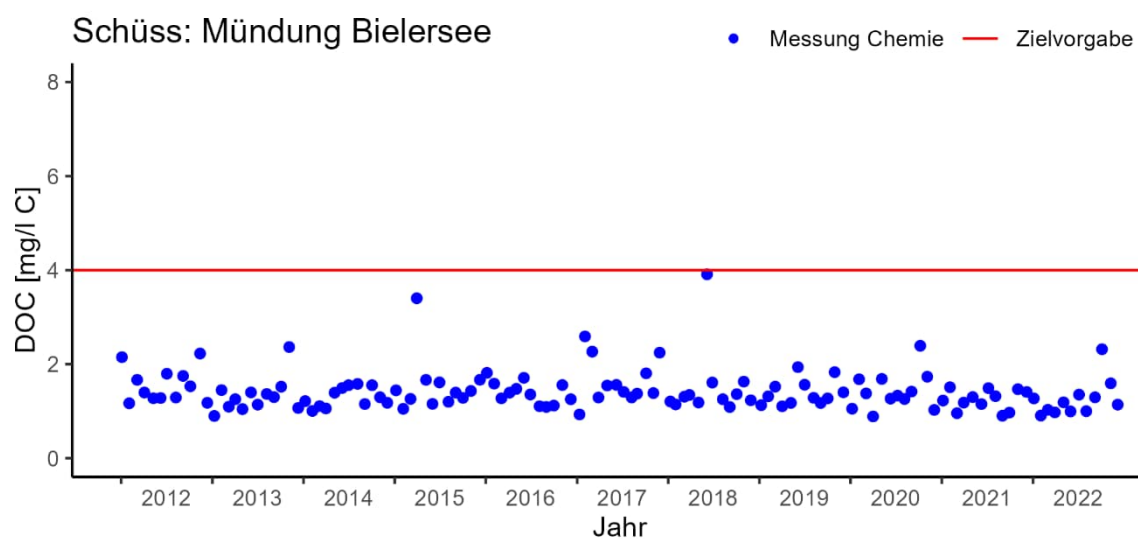
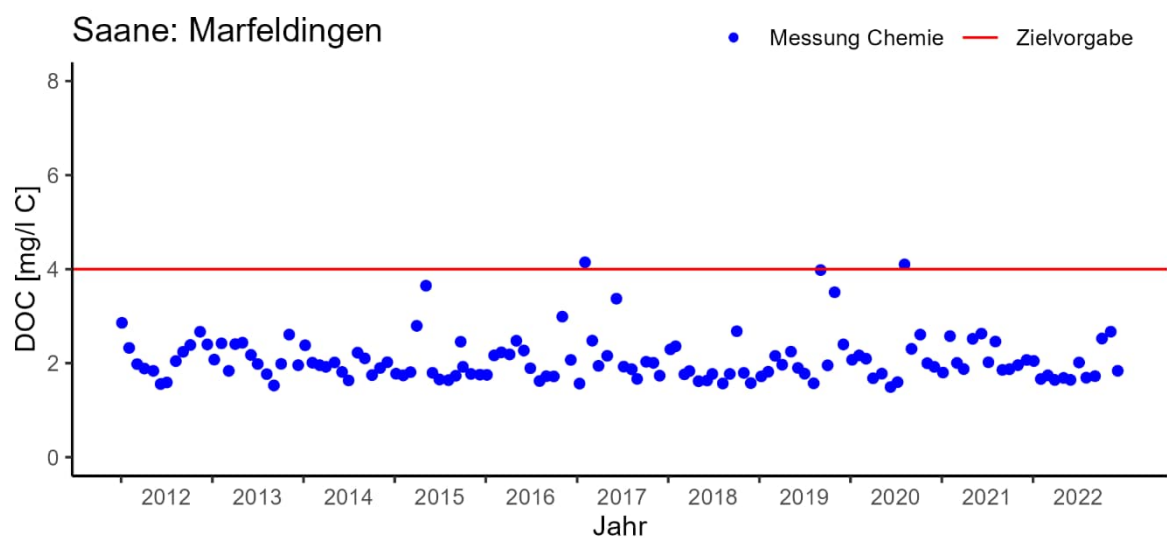
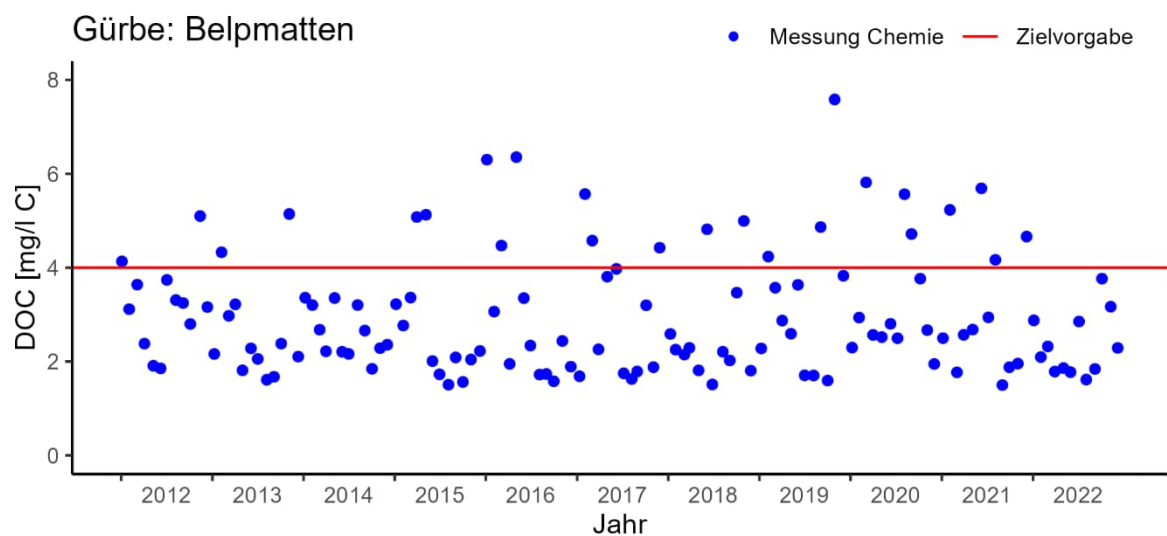


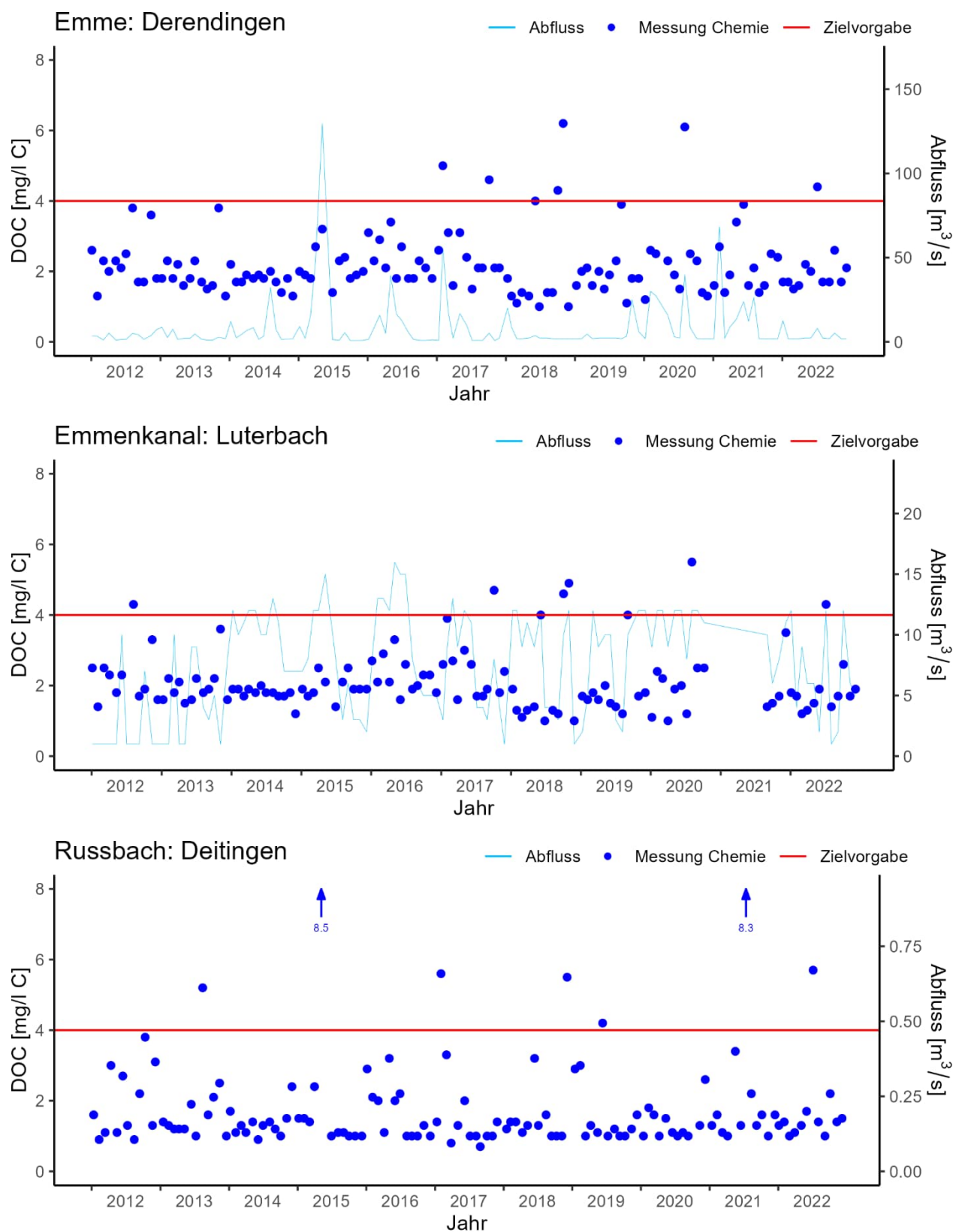
Aare: Eymatt, Stägmatt-Steg

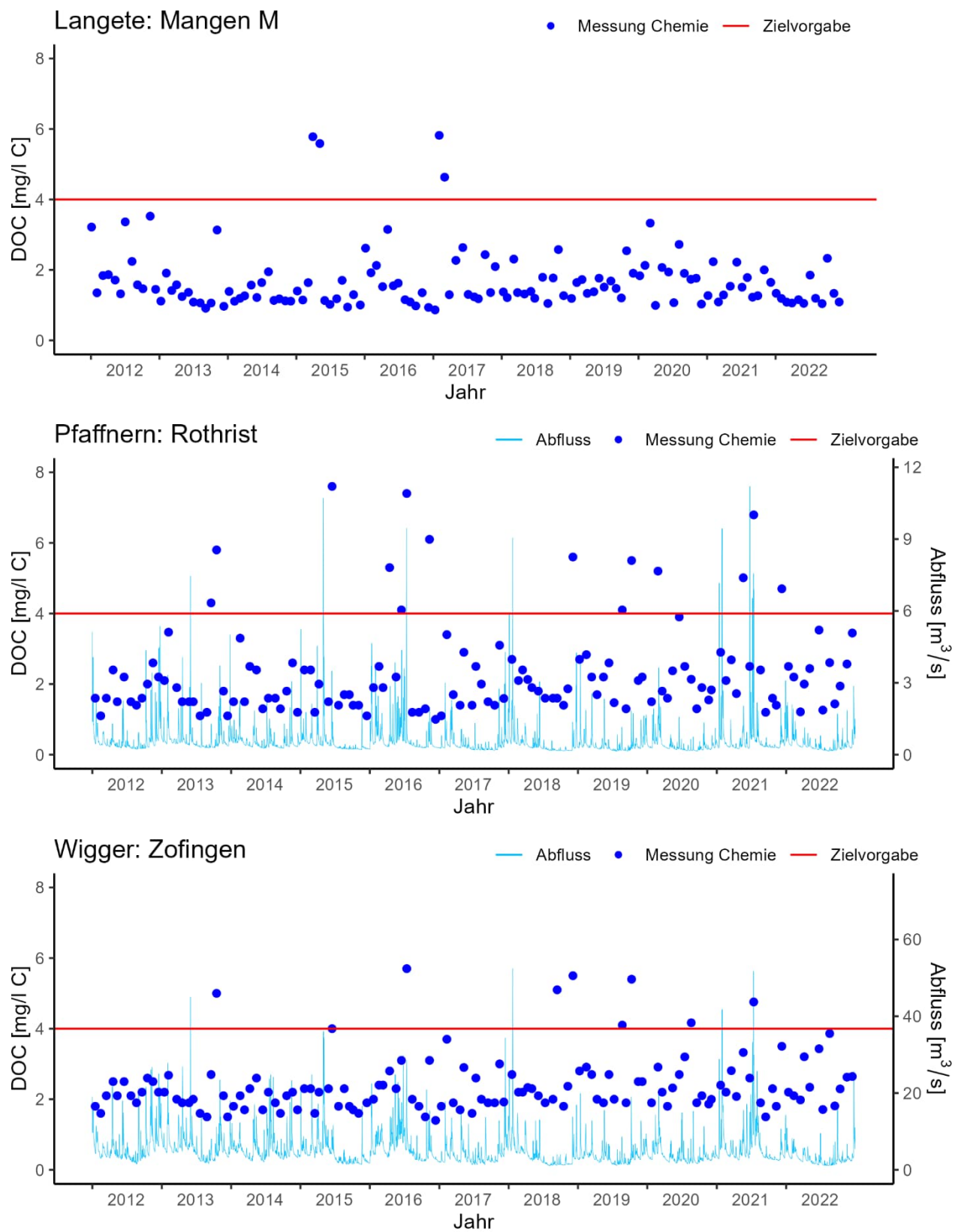


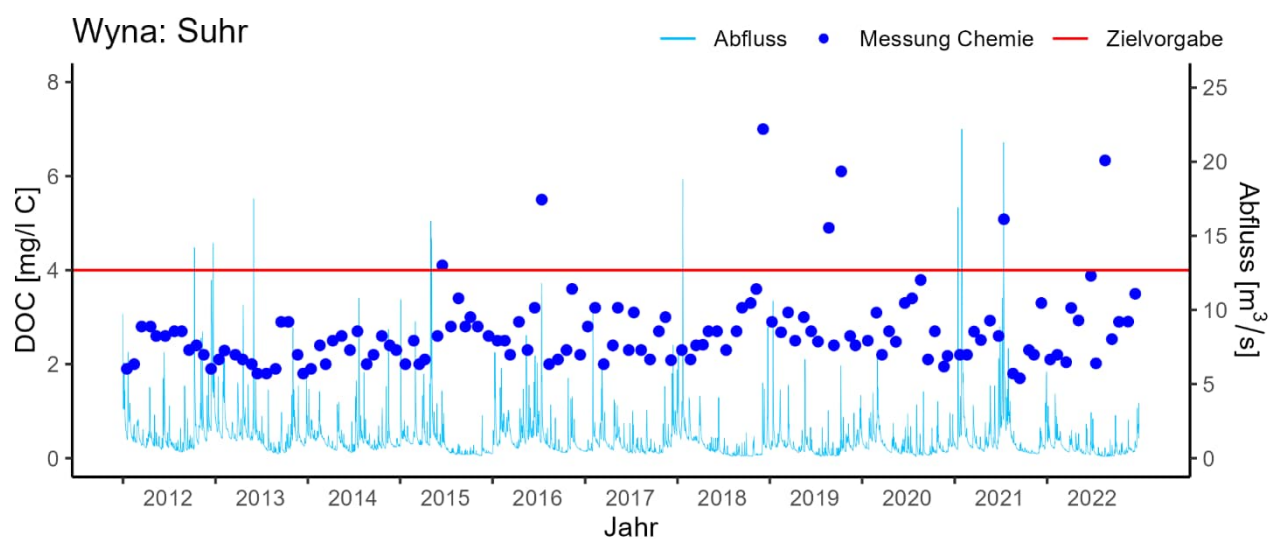
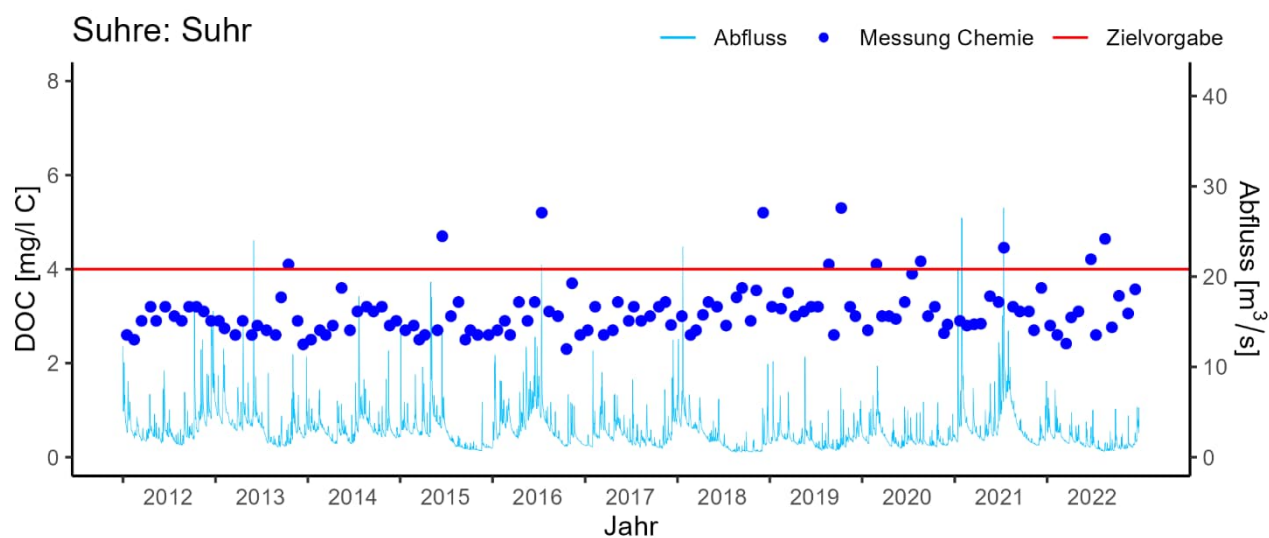
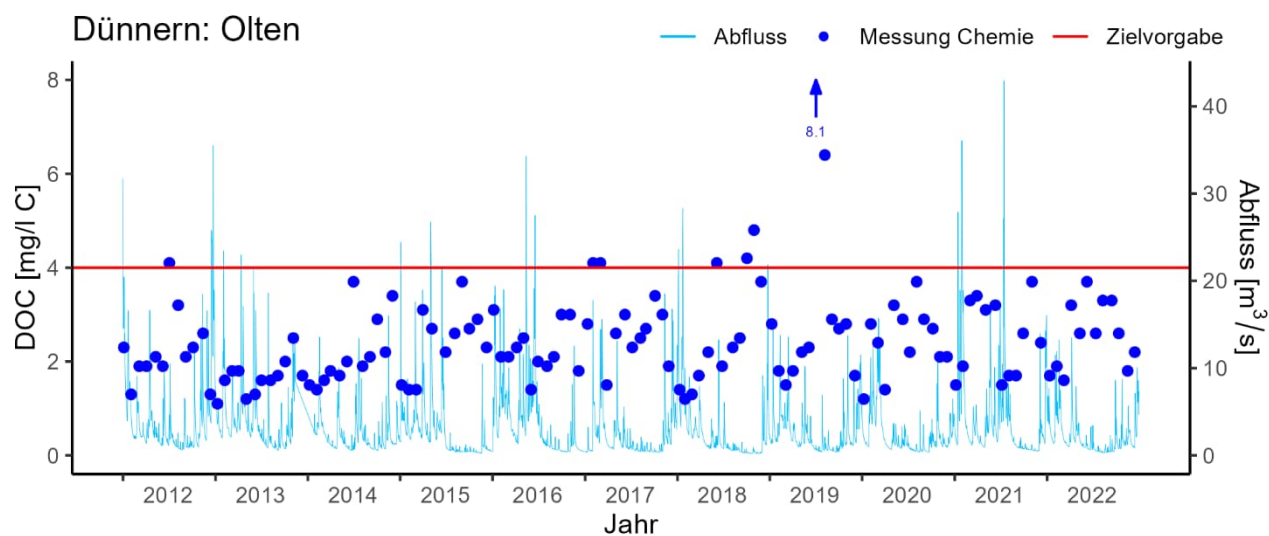


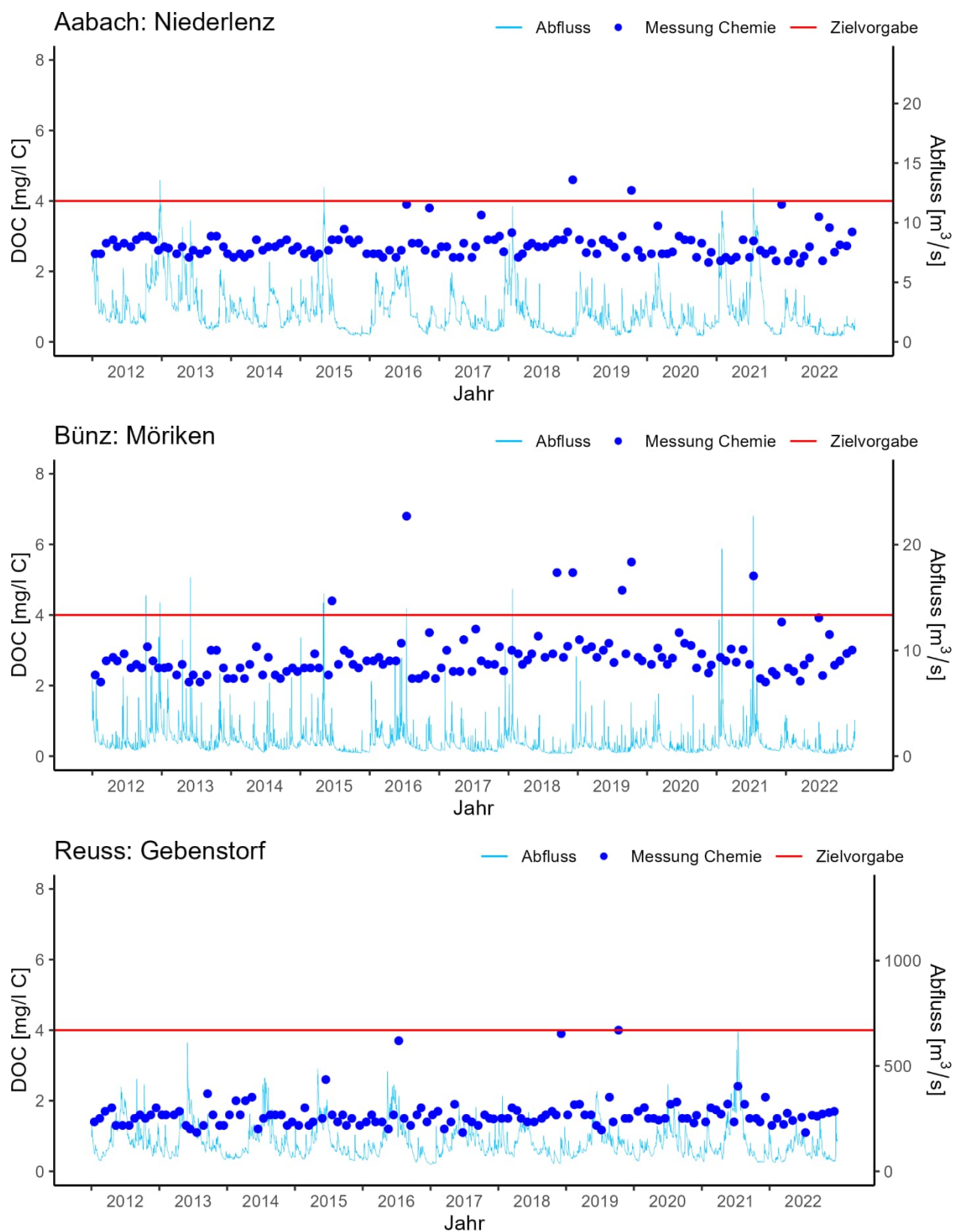


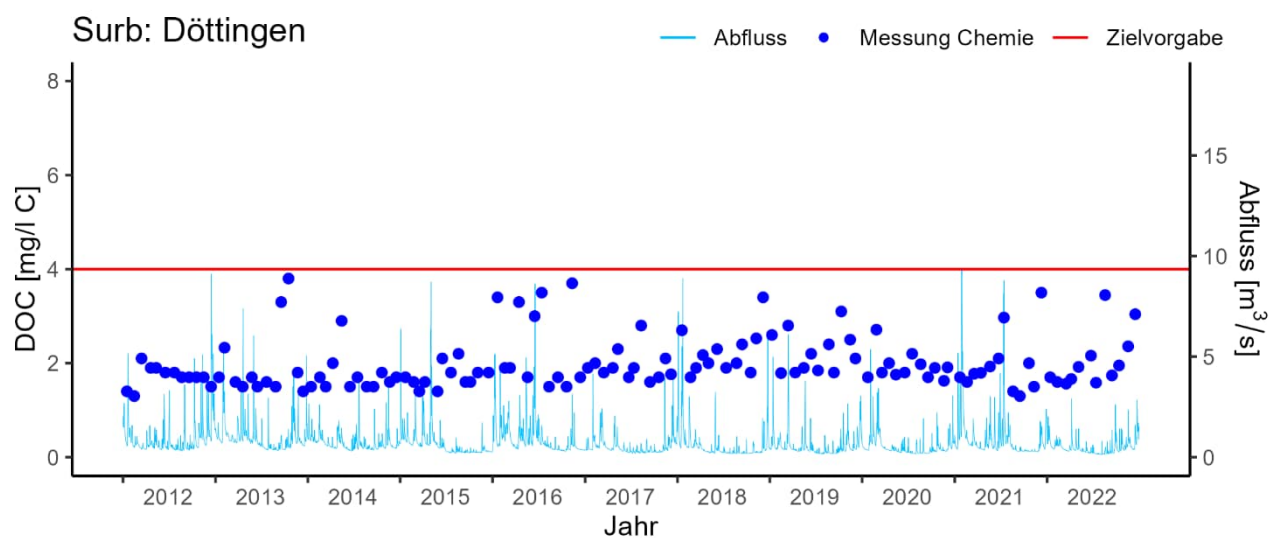
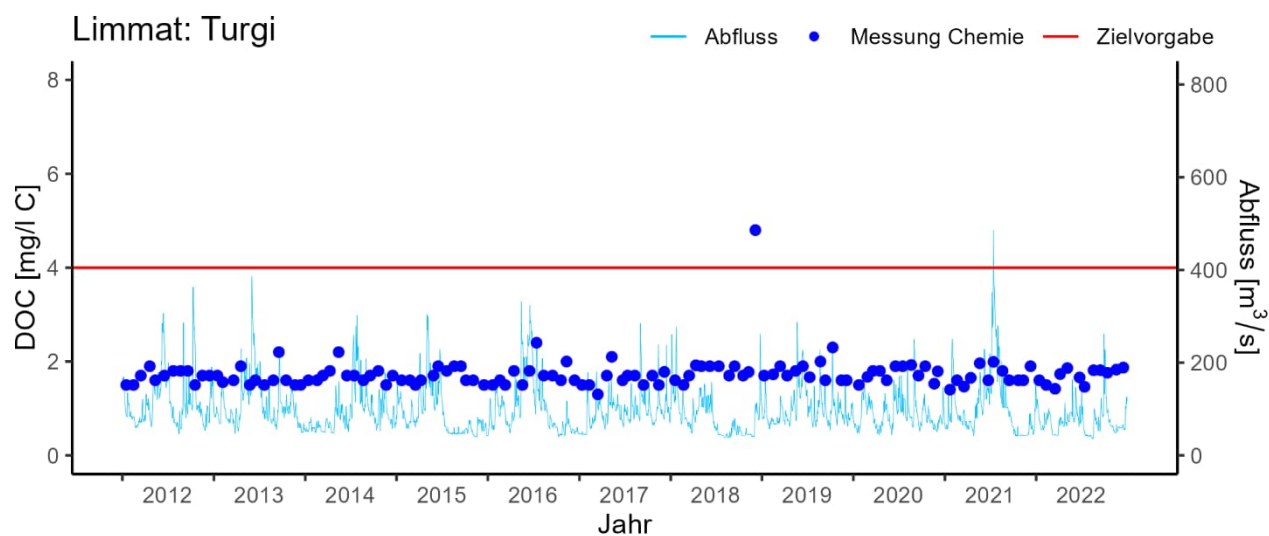






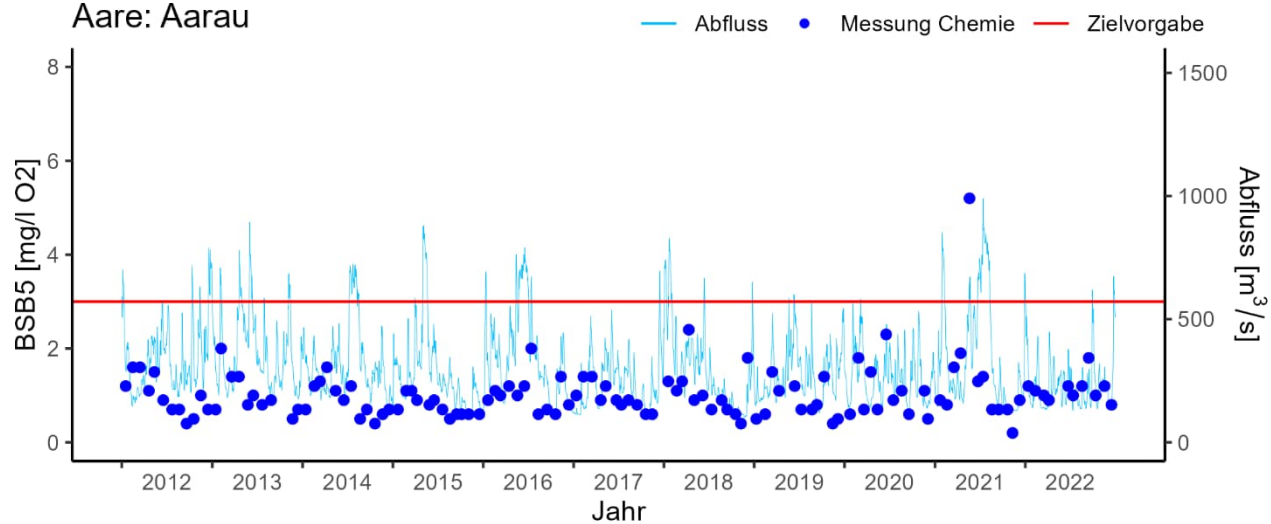




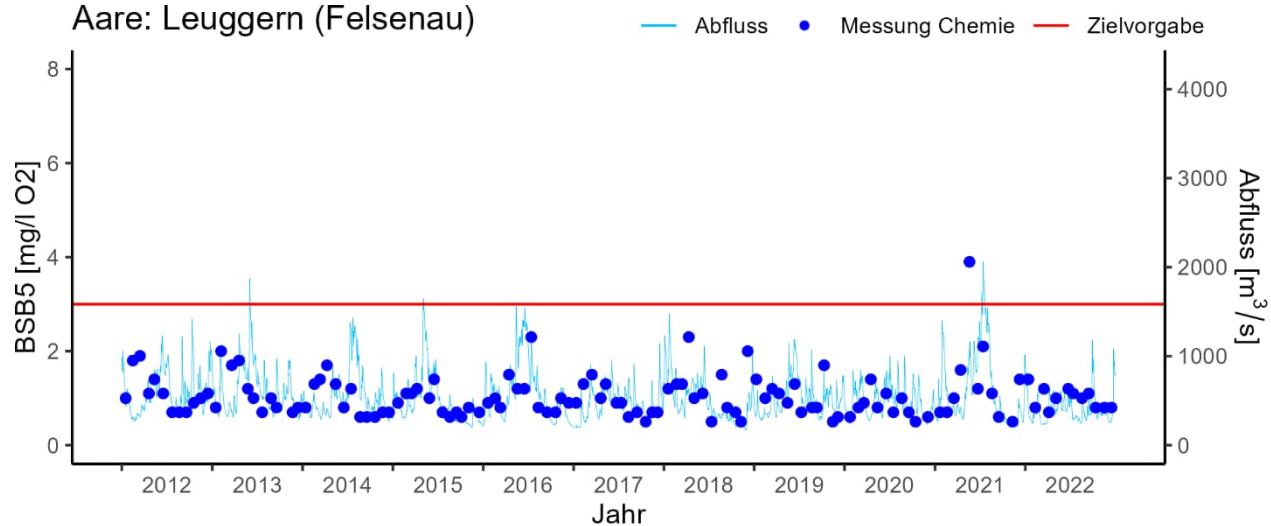


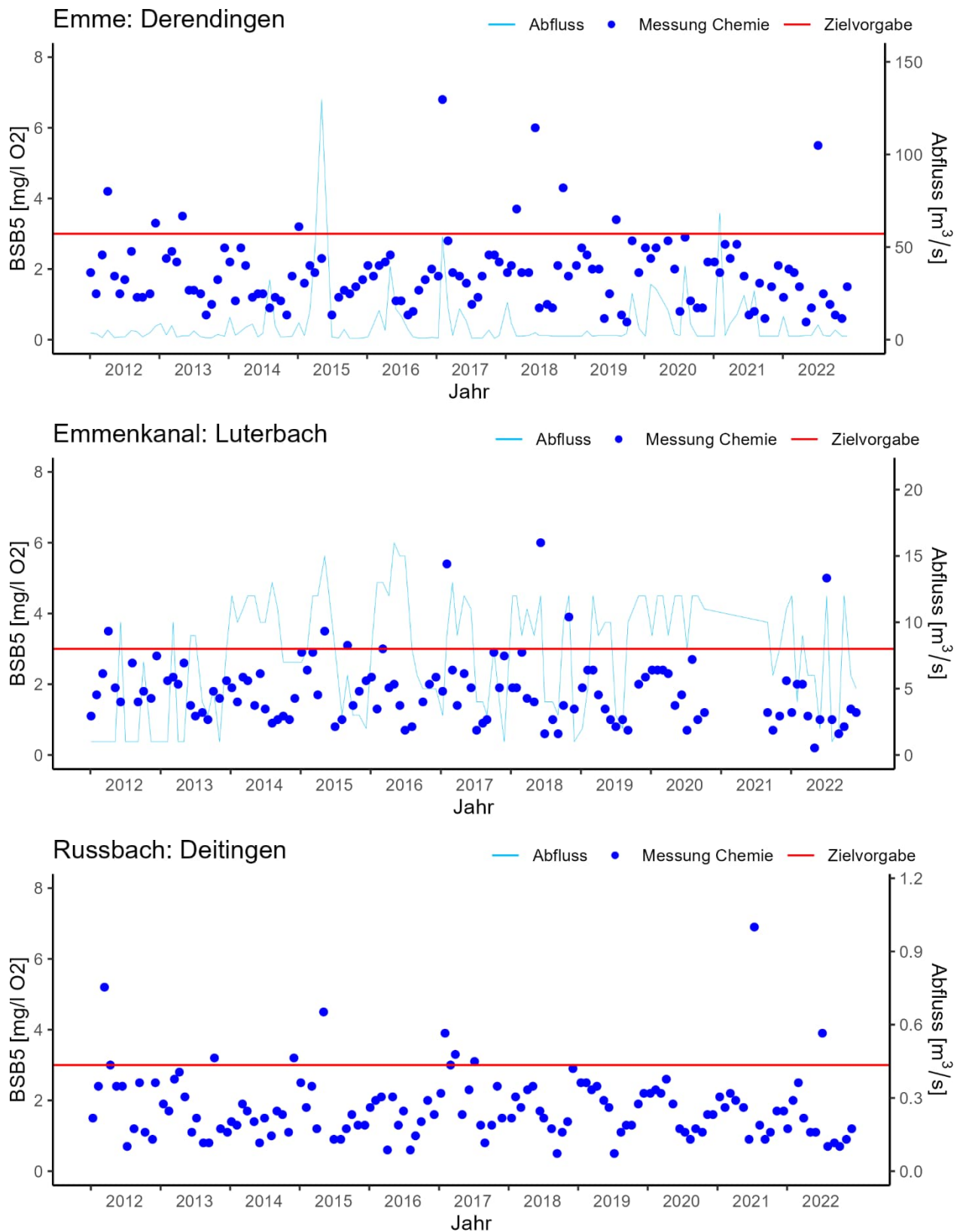
4.8 Biochemischer Sauerstoffbedarf (BSB5)

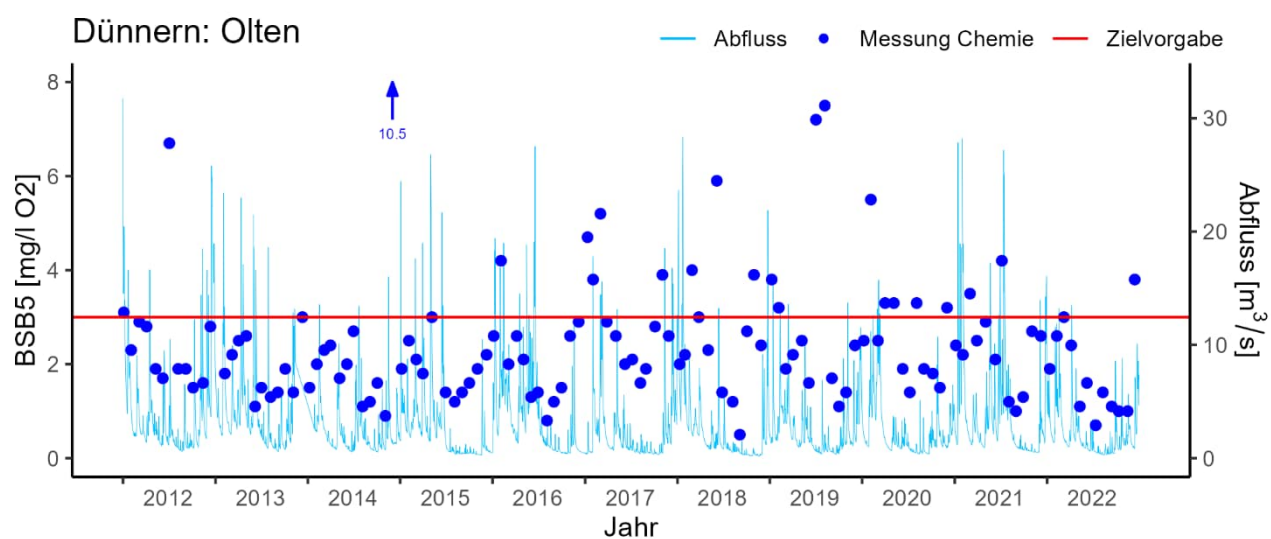
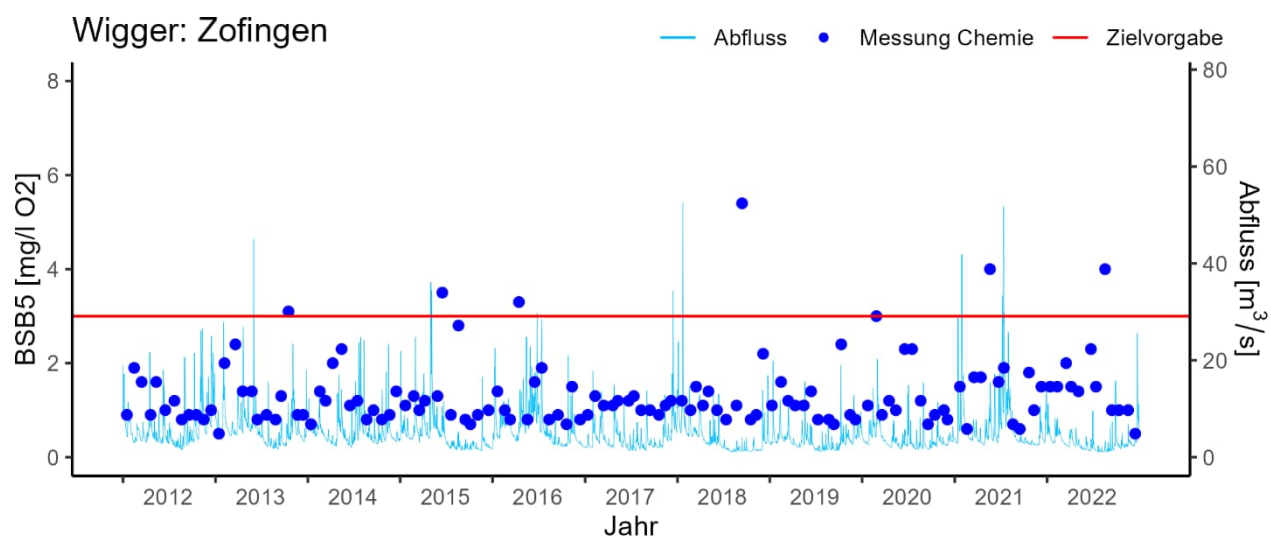
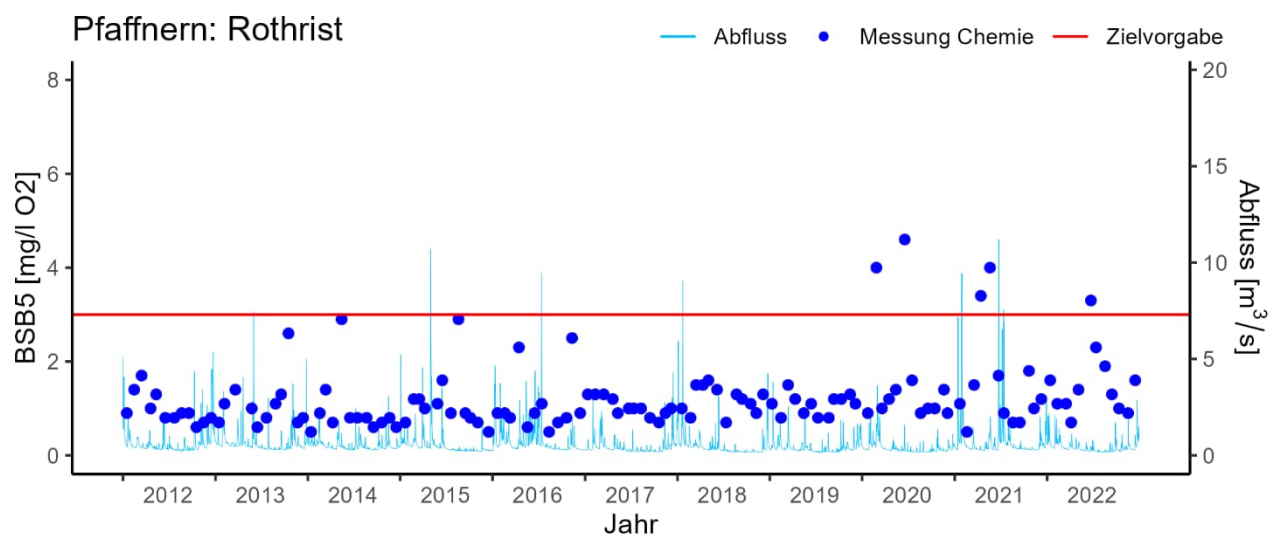
Aare: Aarau

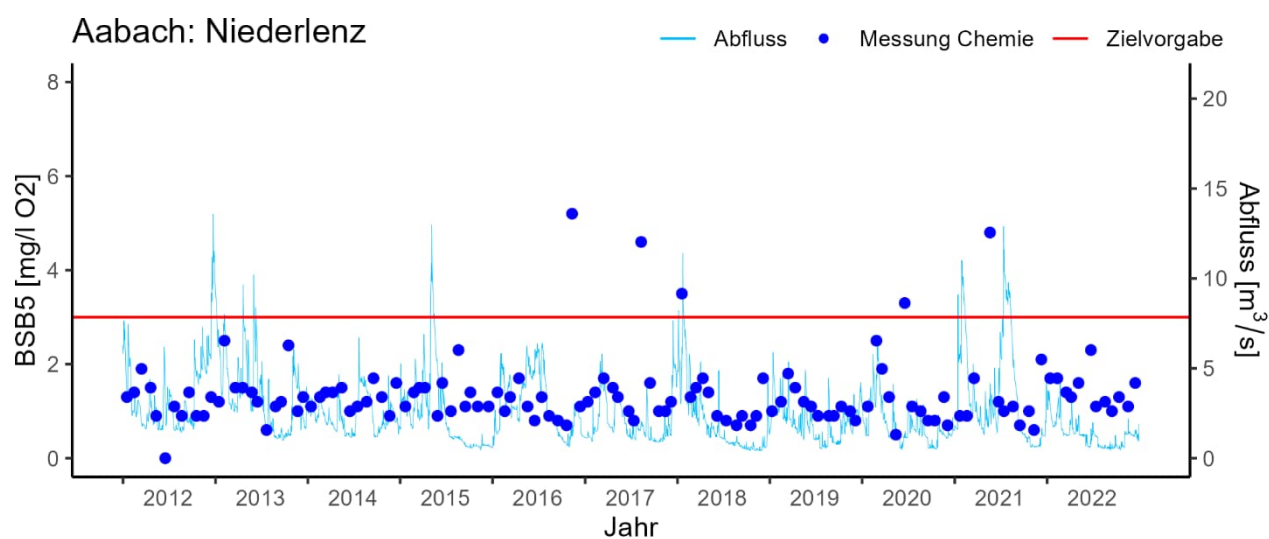
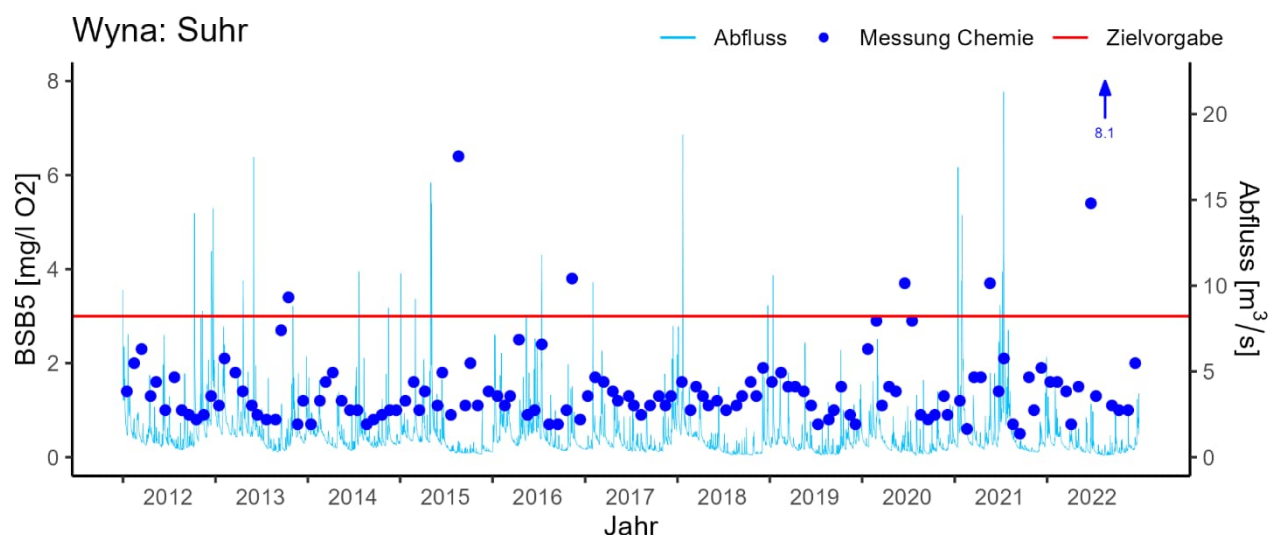
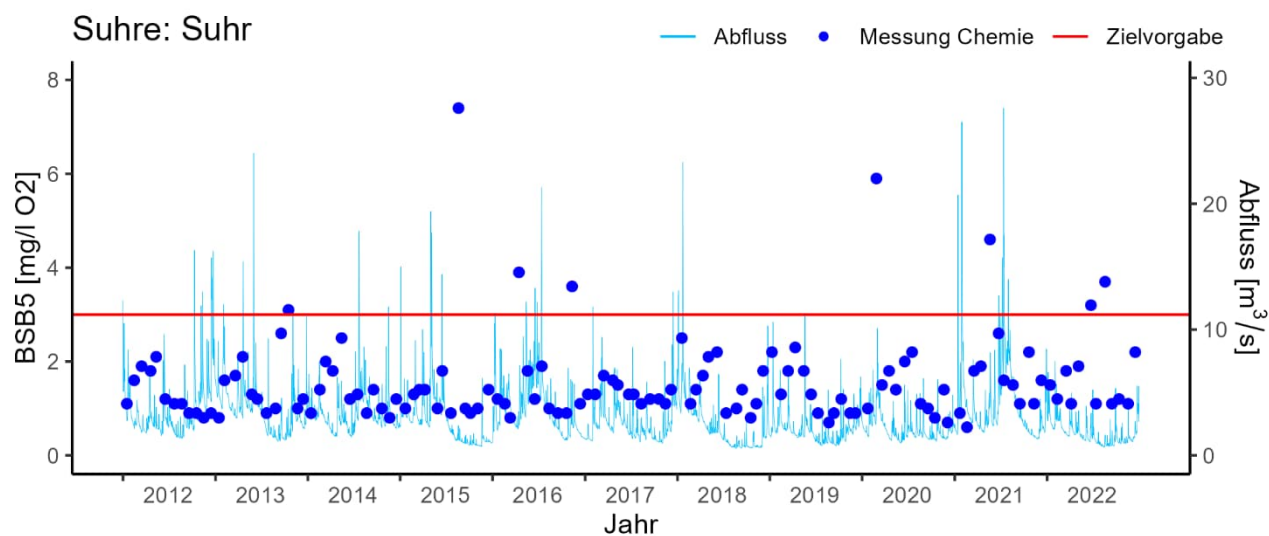


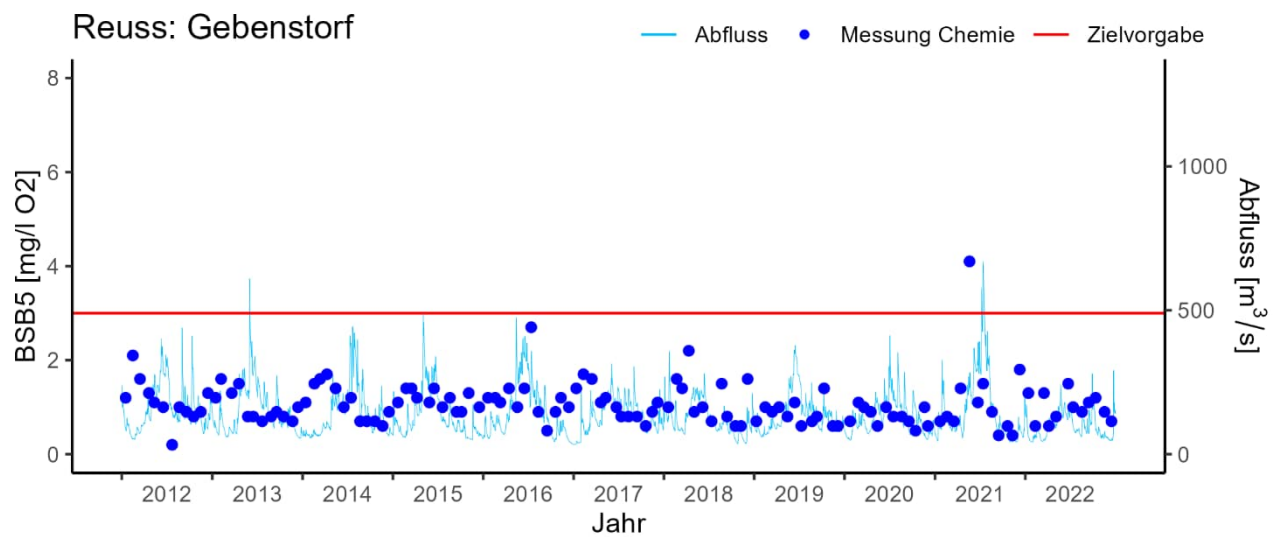
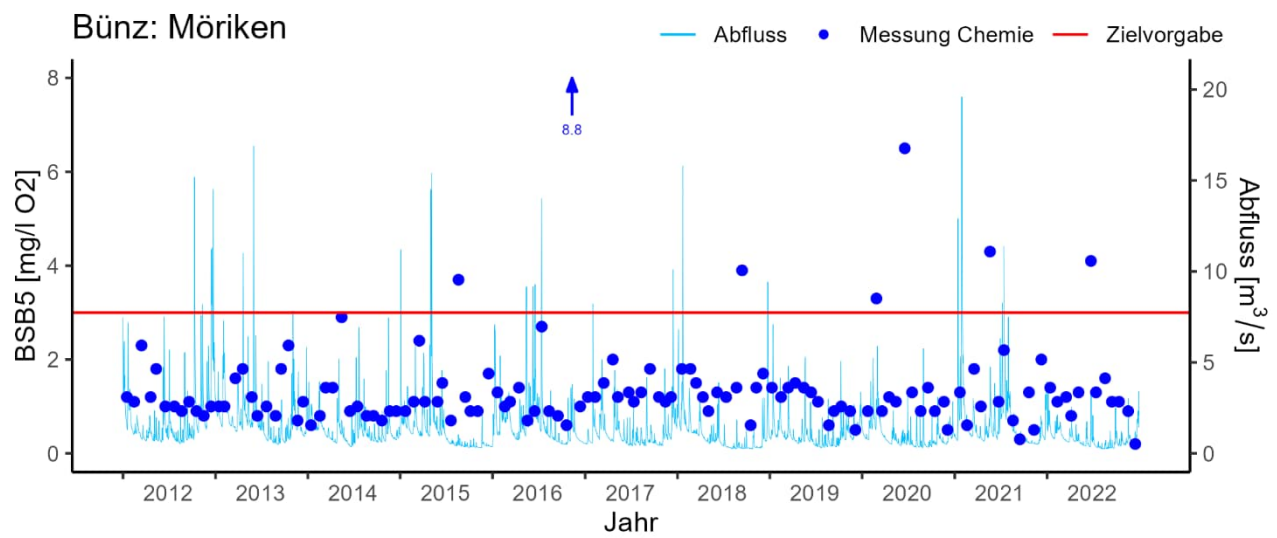
Aare: Leuggern (Felsenau)

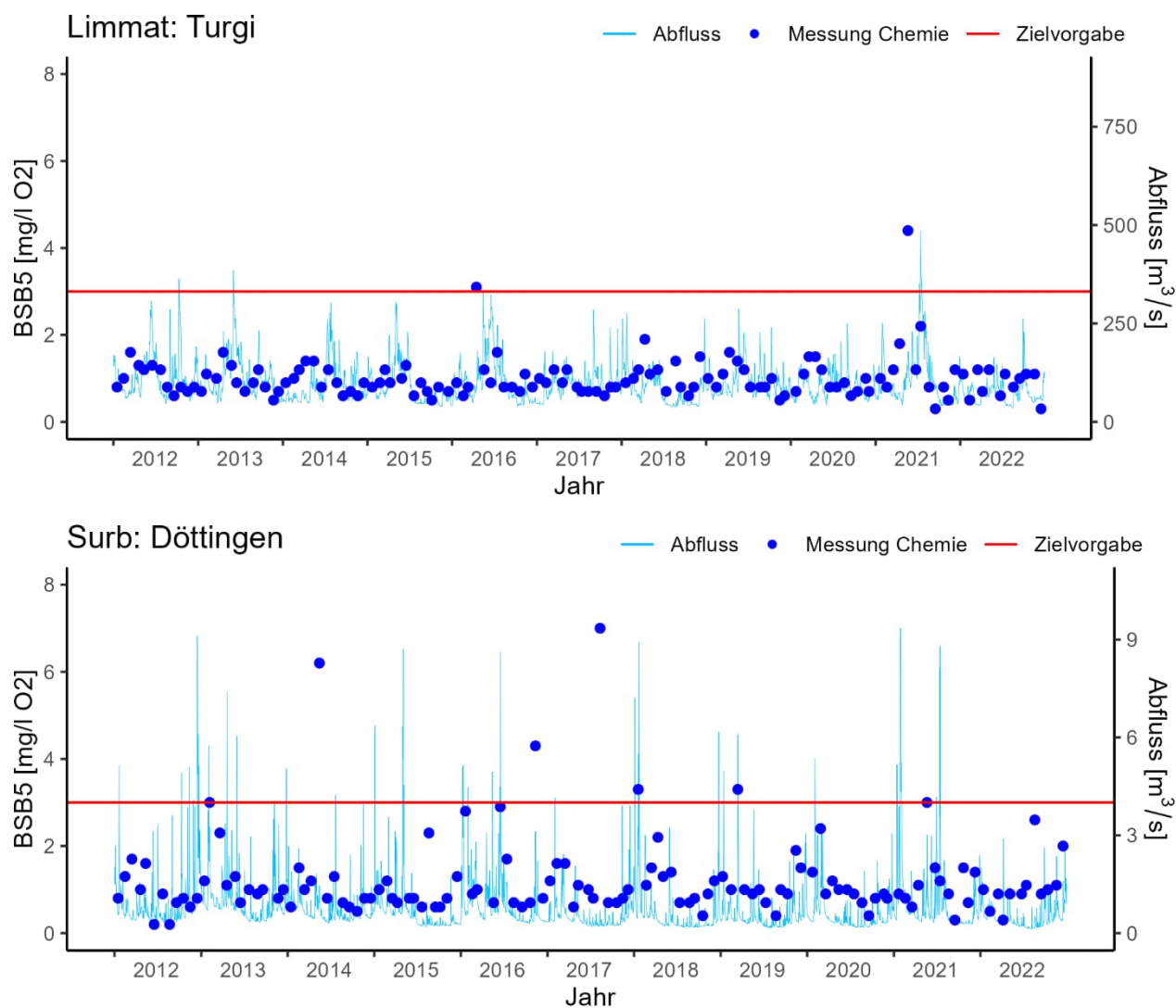






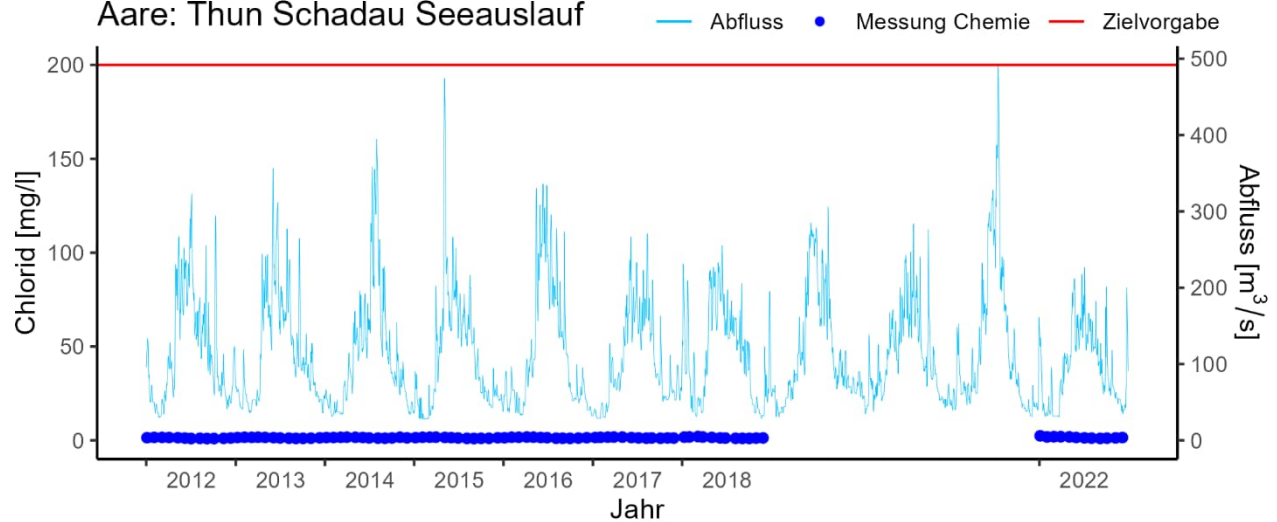




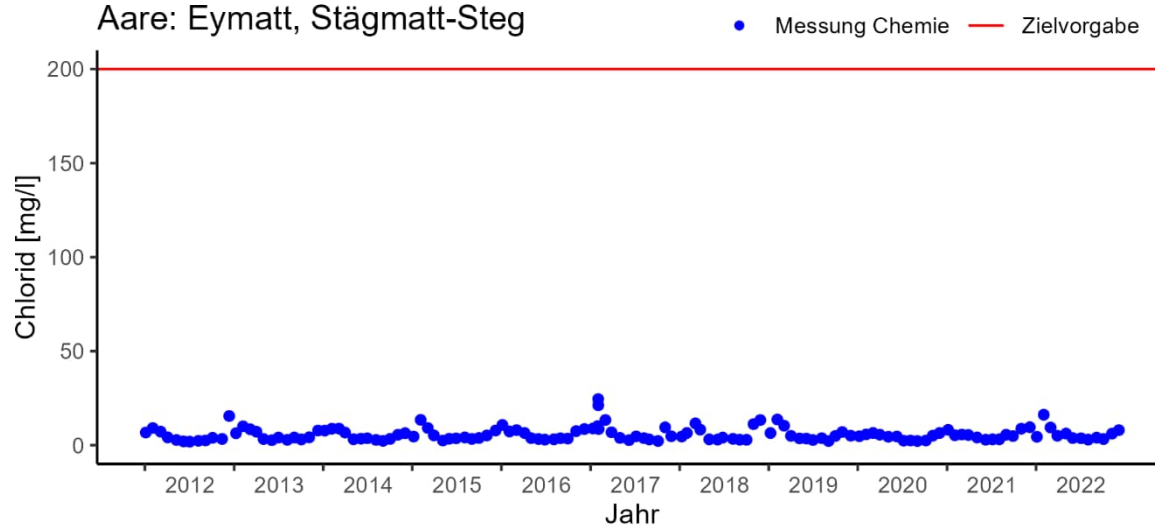


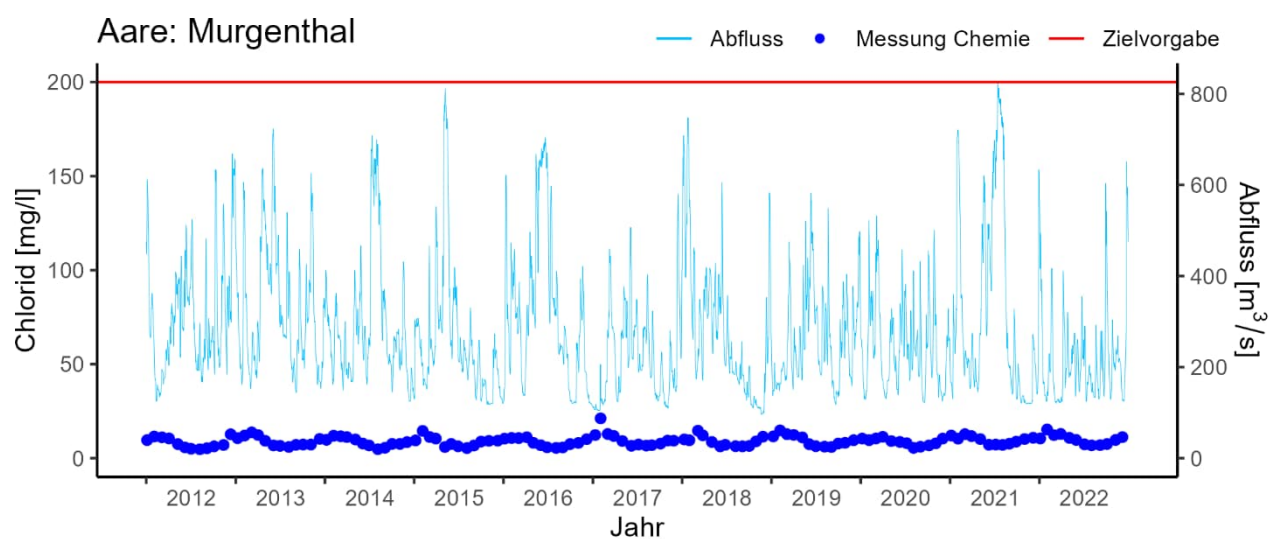
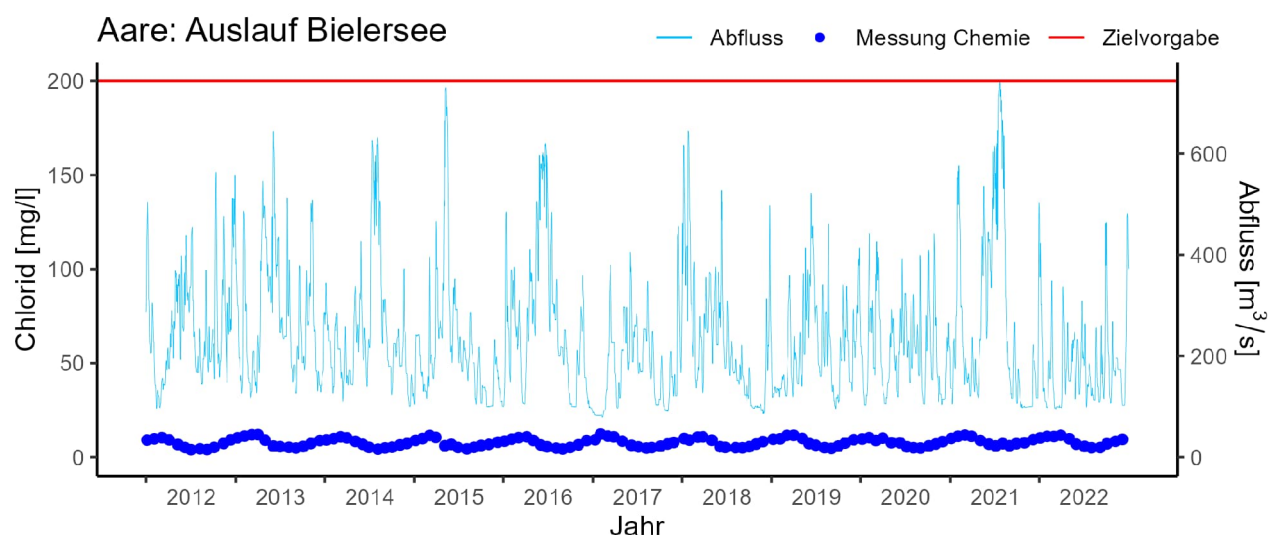
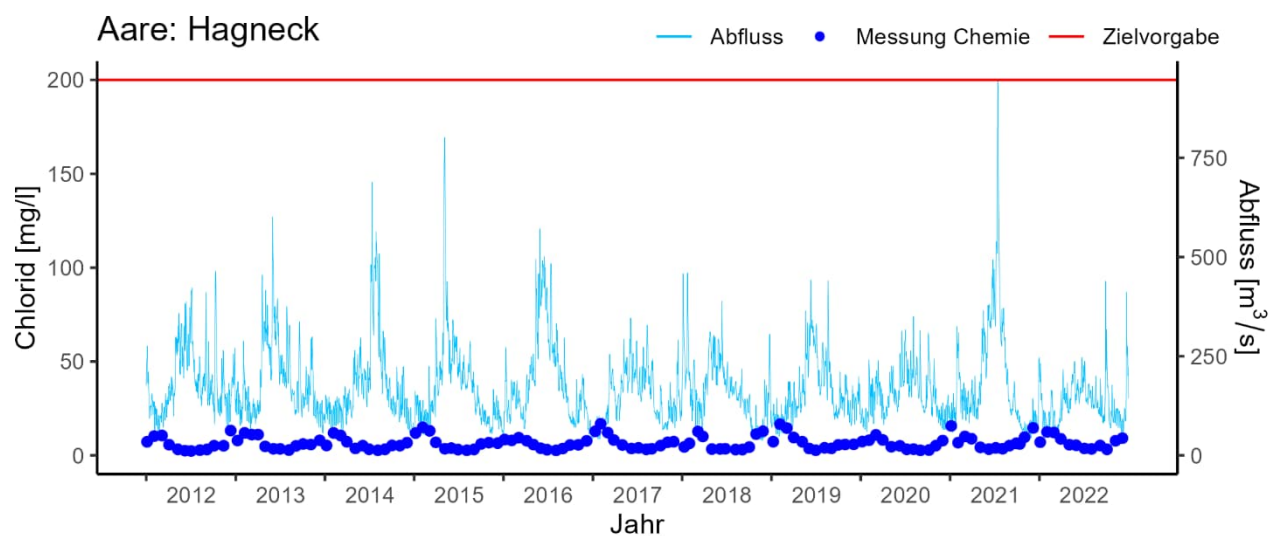
4.9 Chlorid

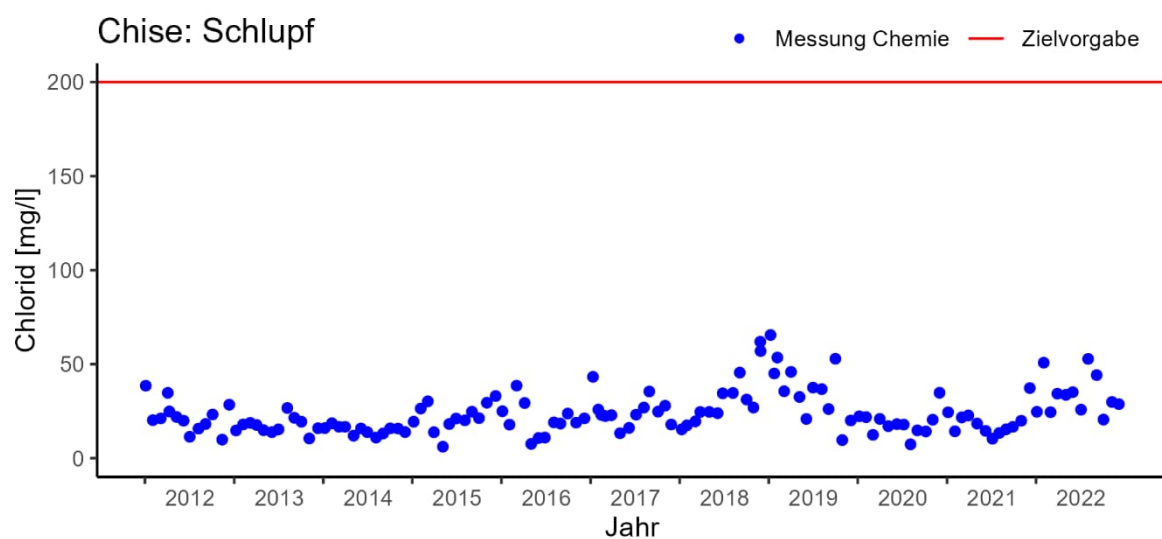
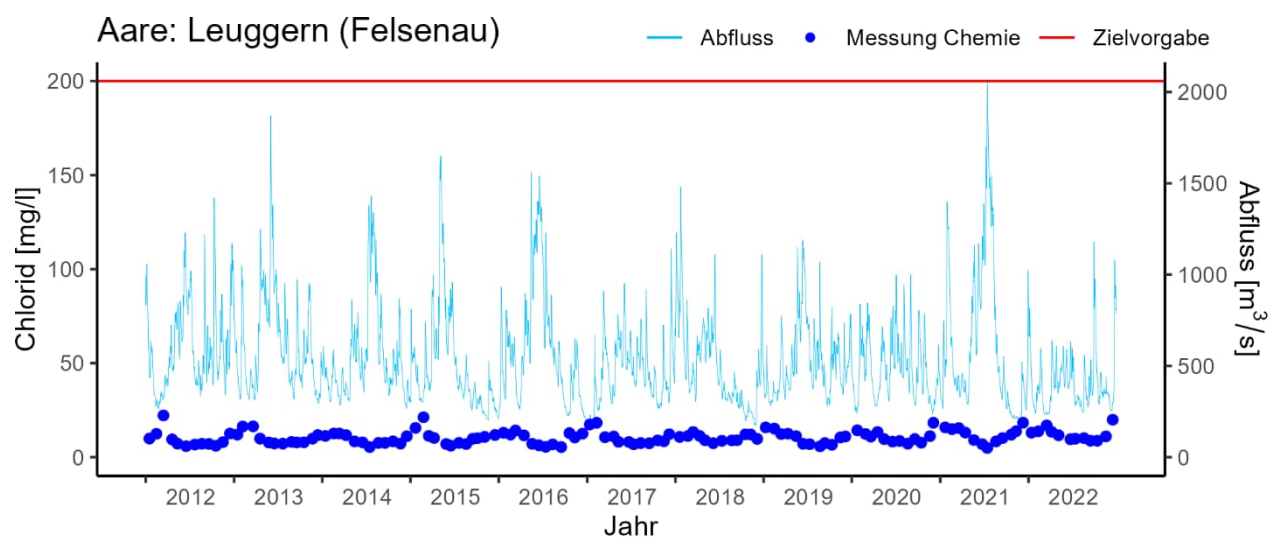
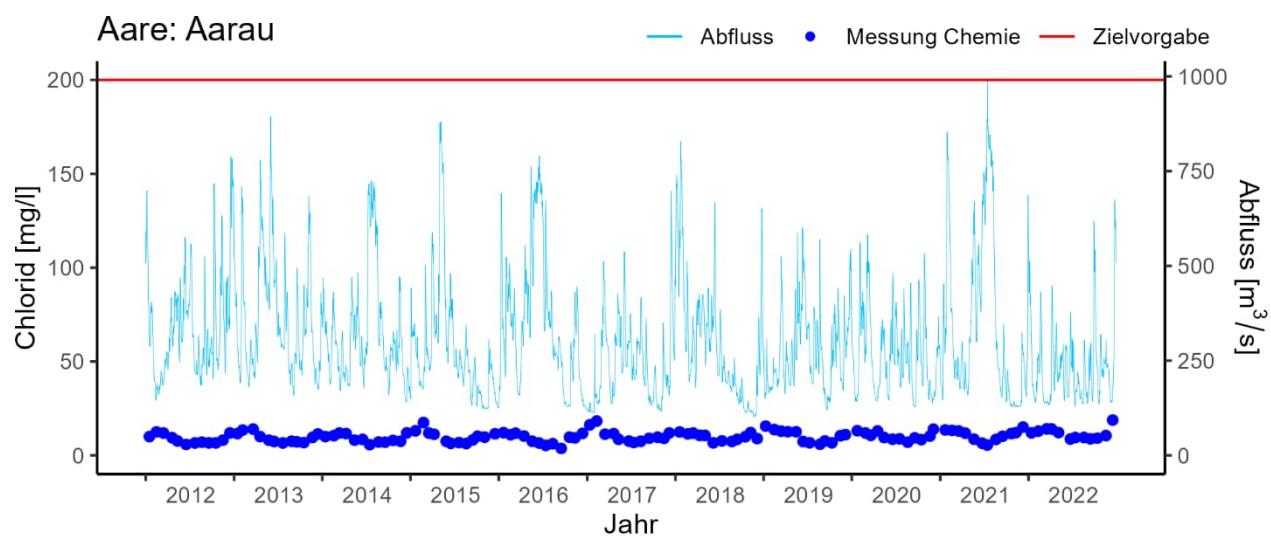
Aare: Thun Schadau Seeauslauf

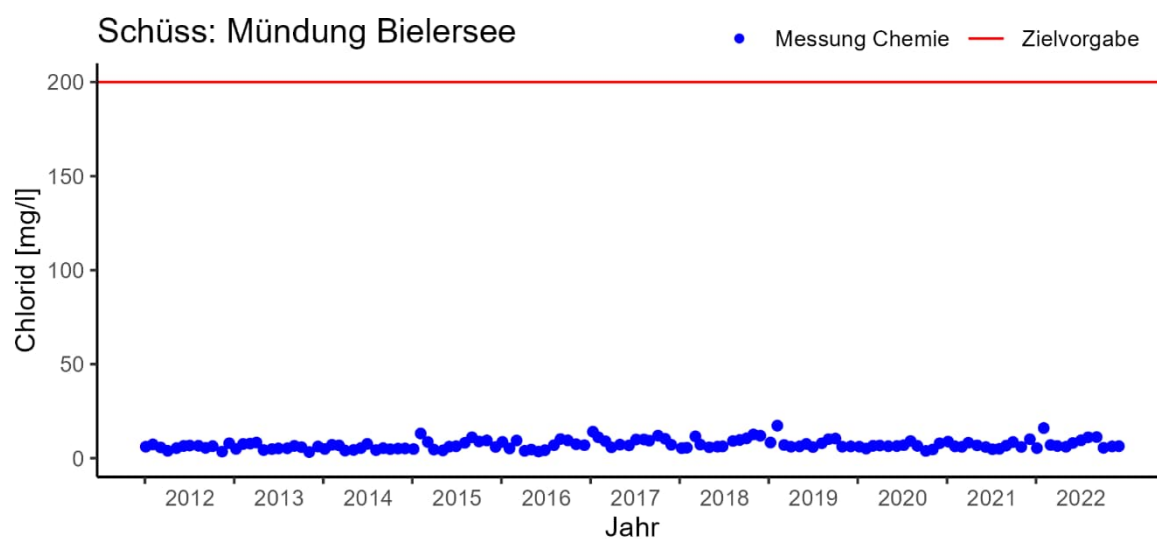
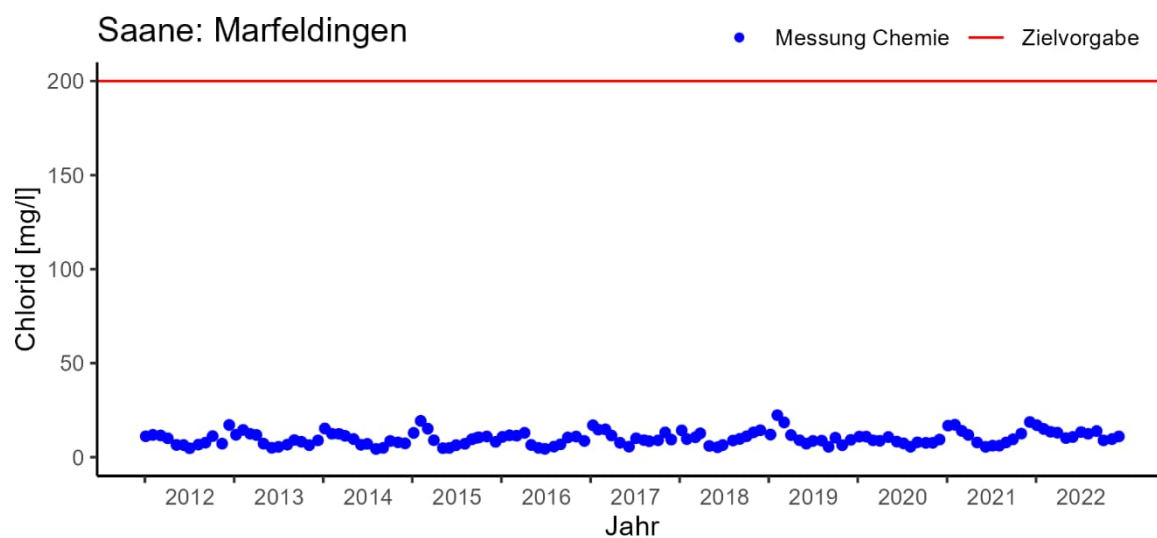
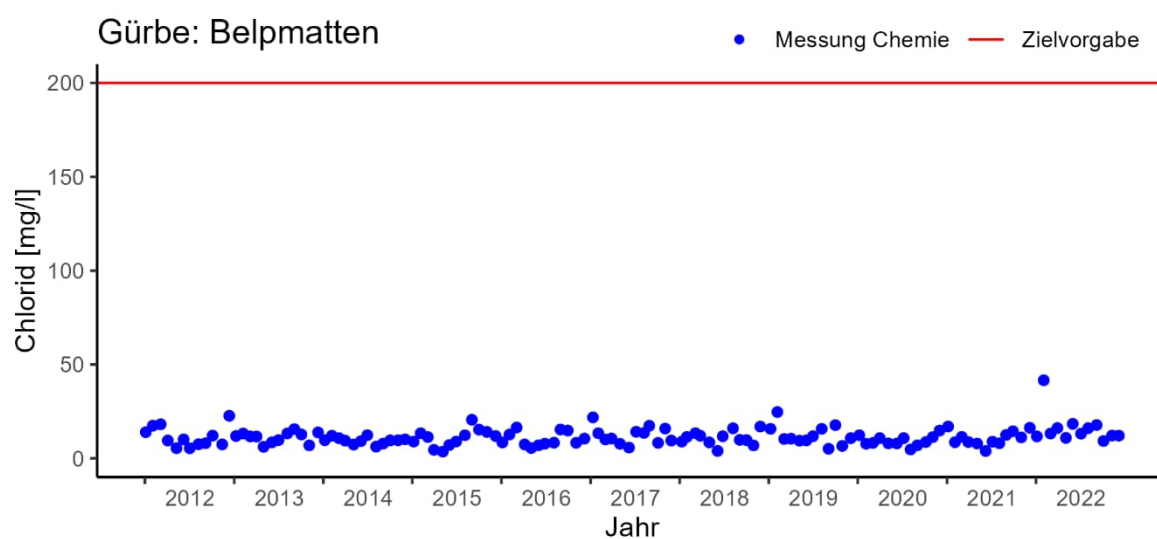


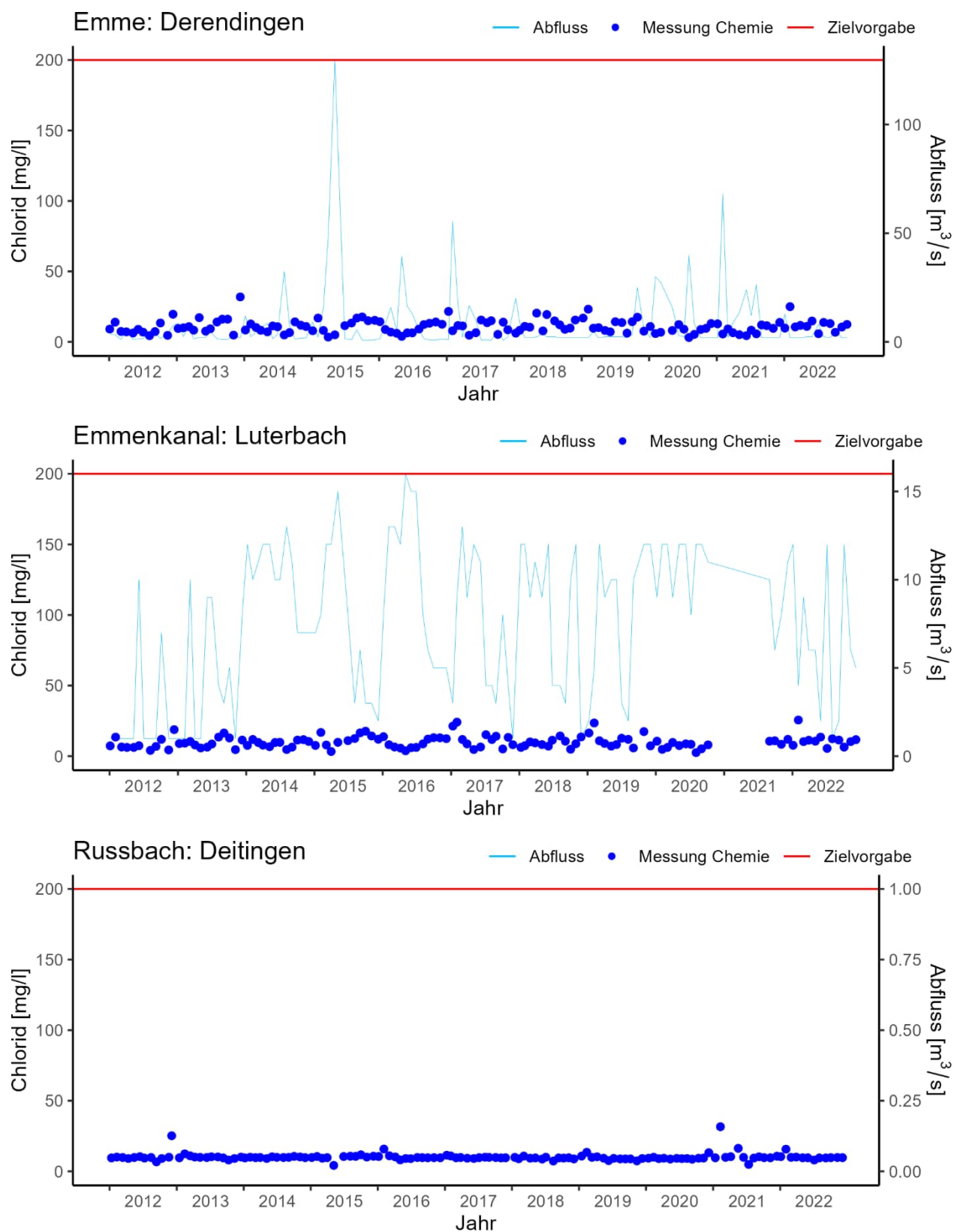
Aare: Eymatt, Stägmatt-Steg

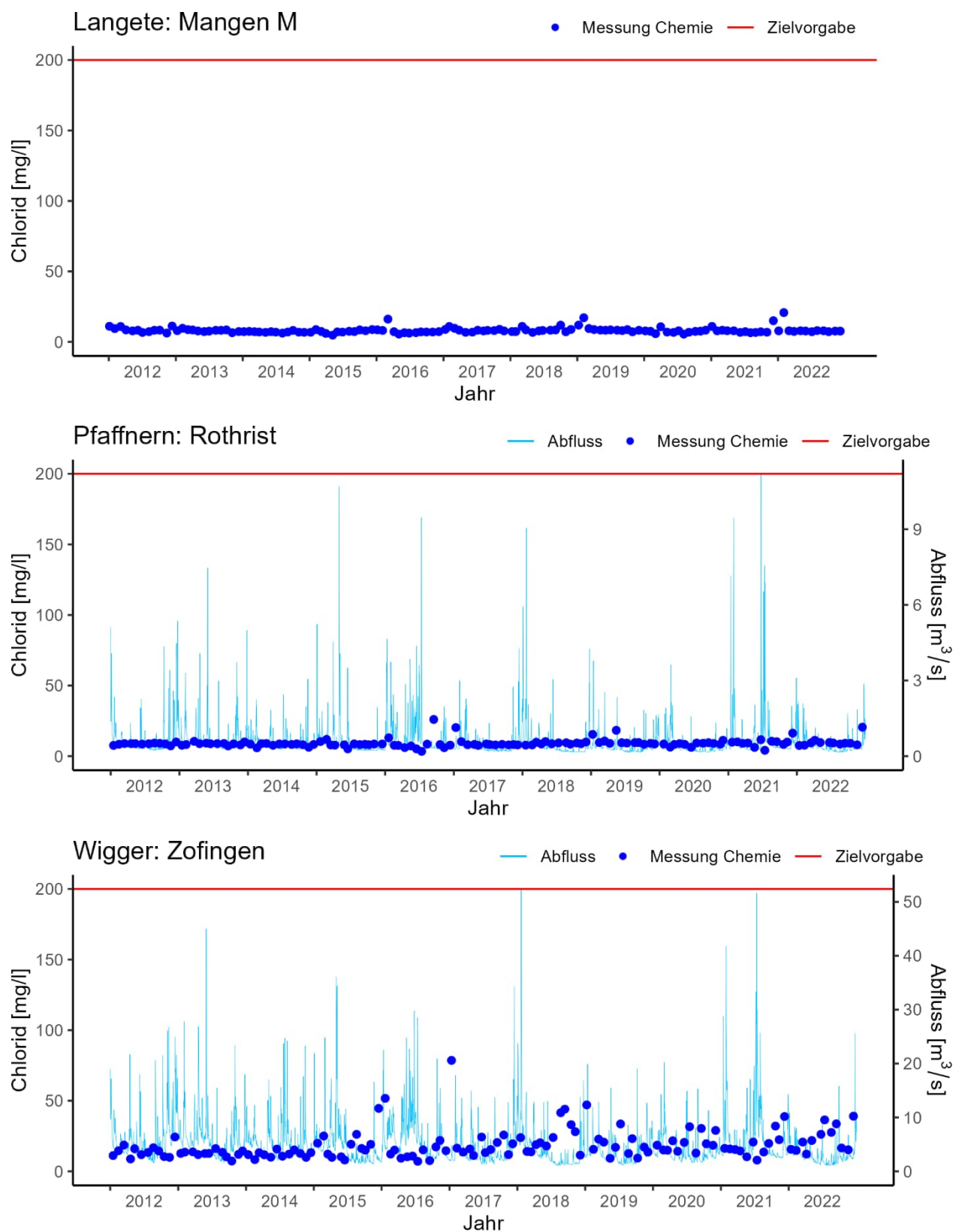


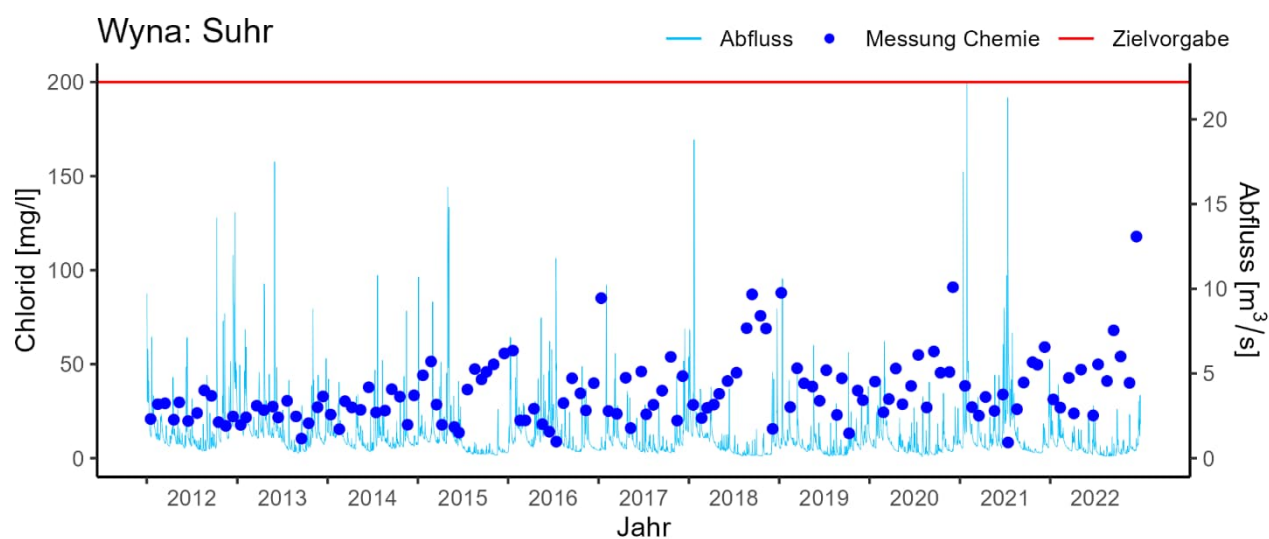
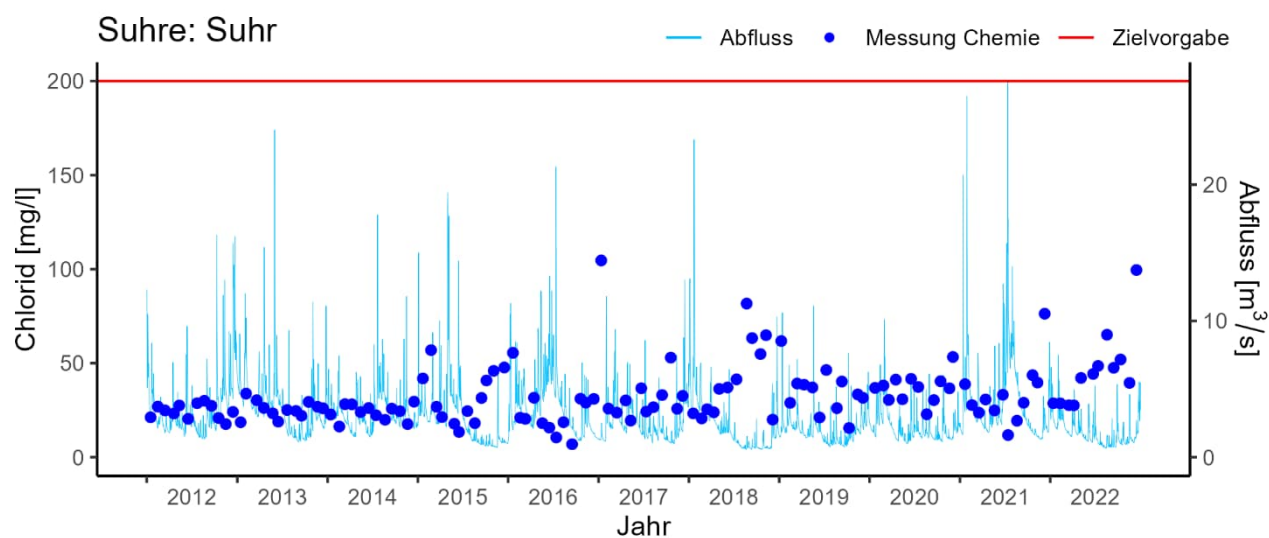
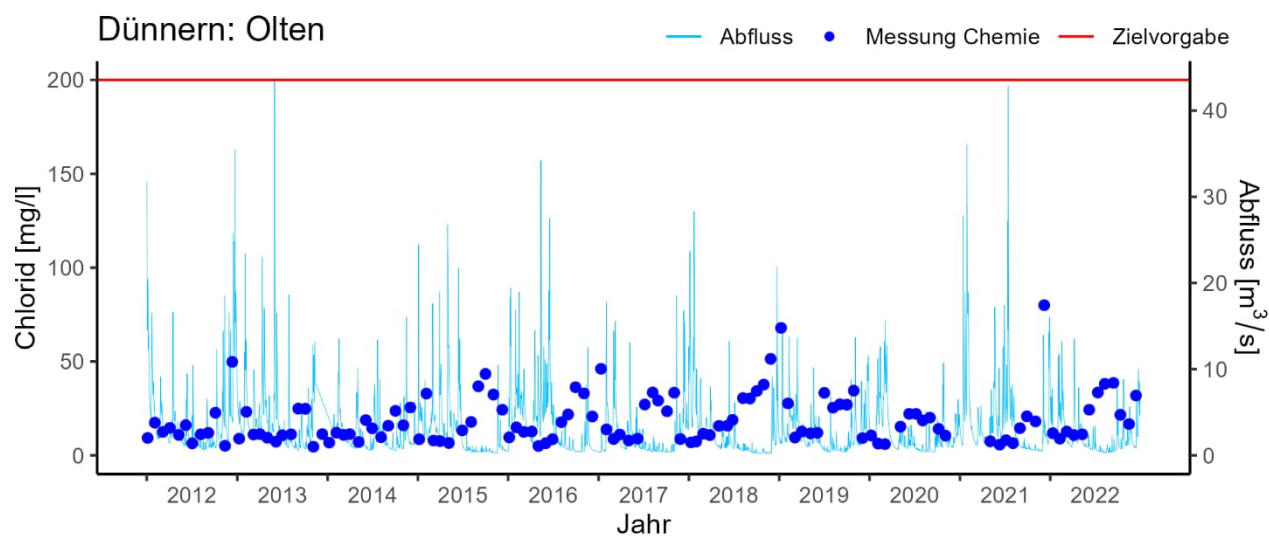


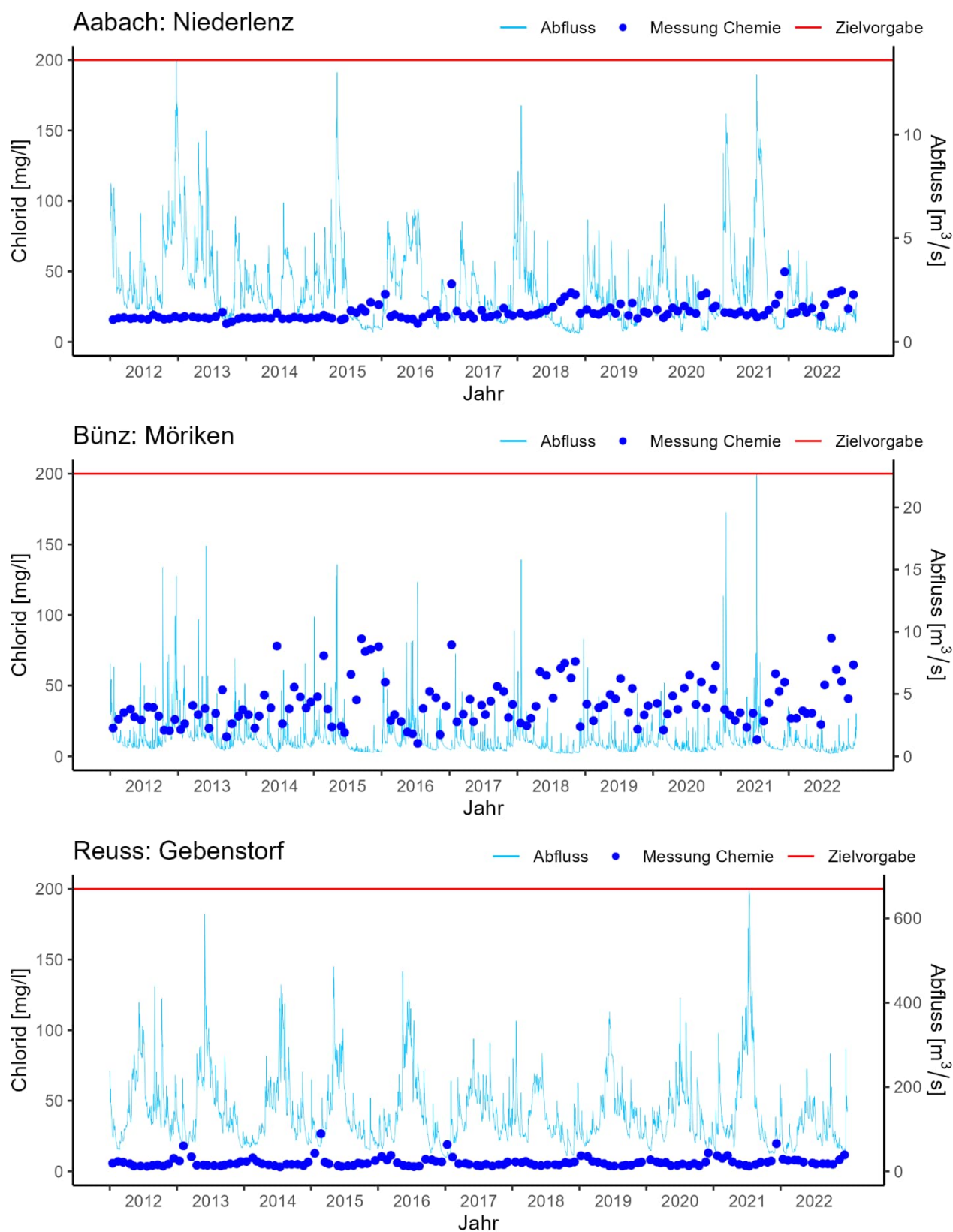


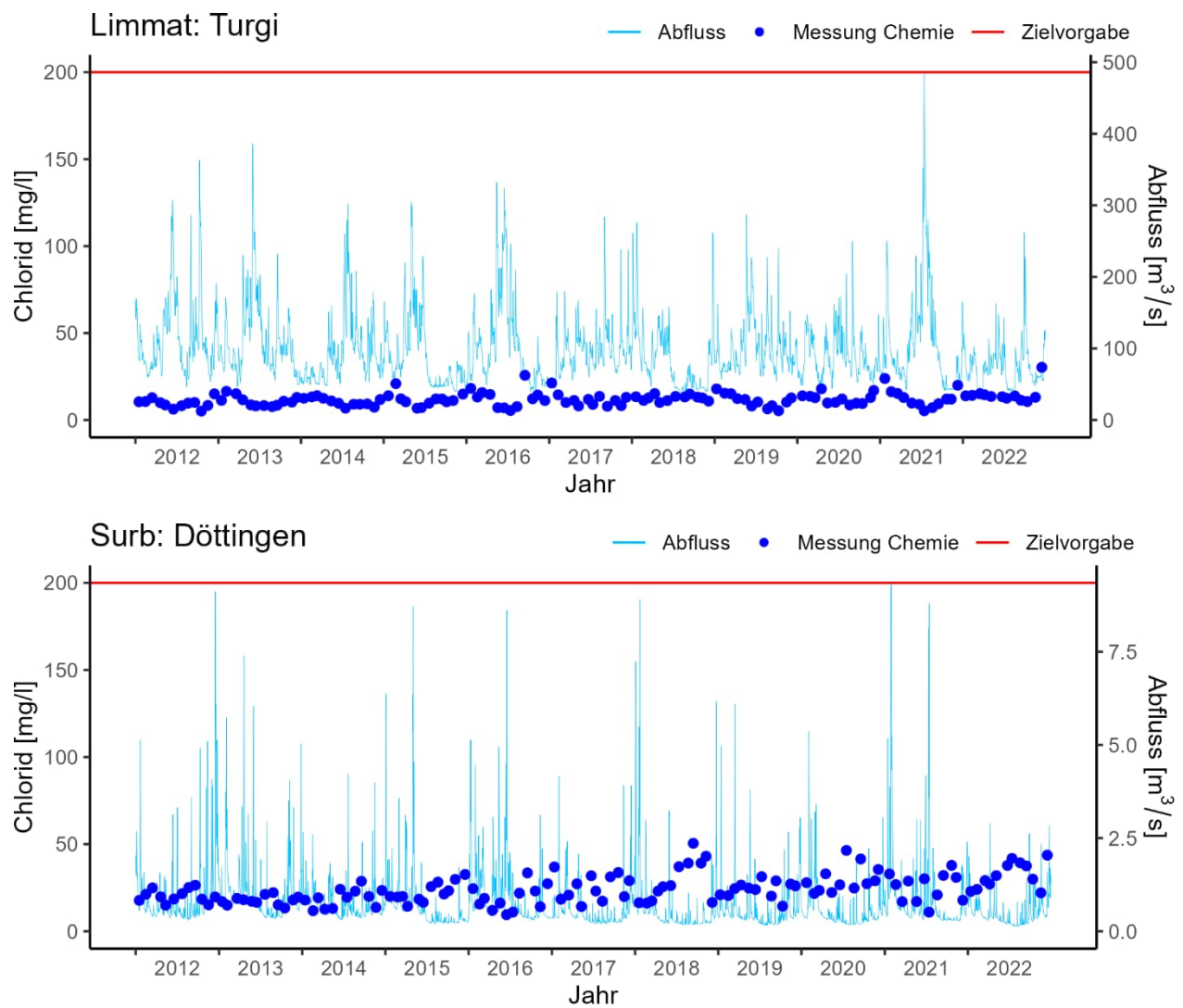








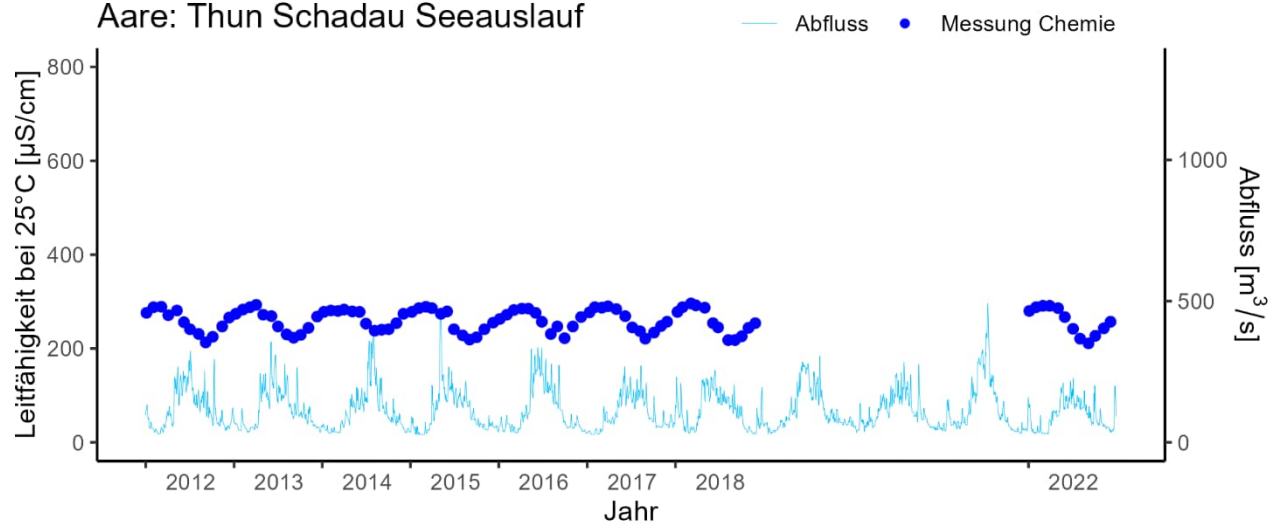




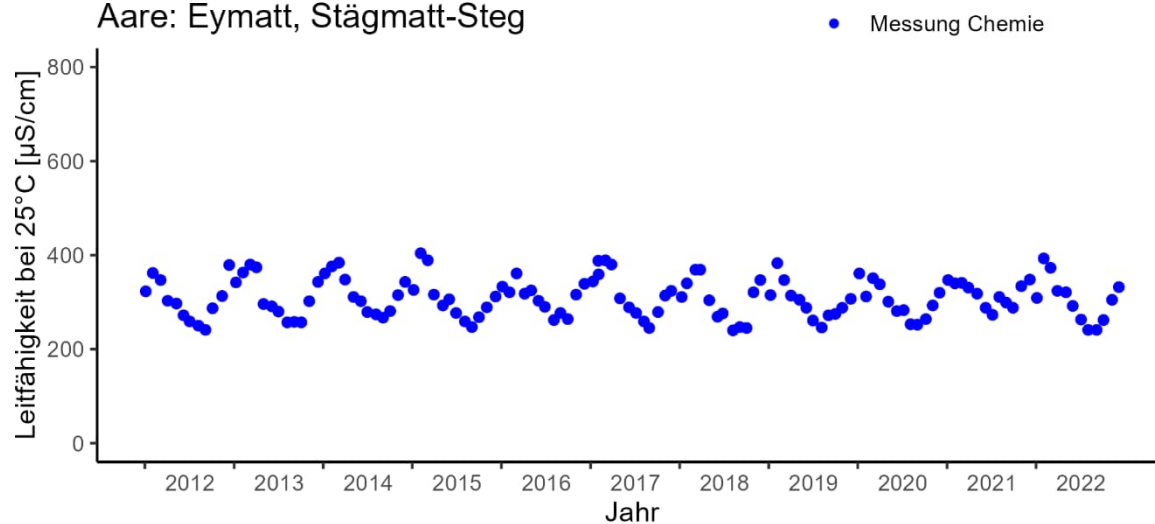


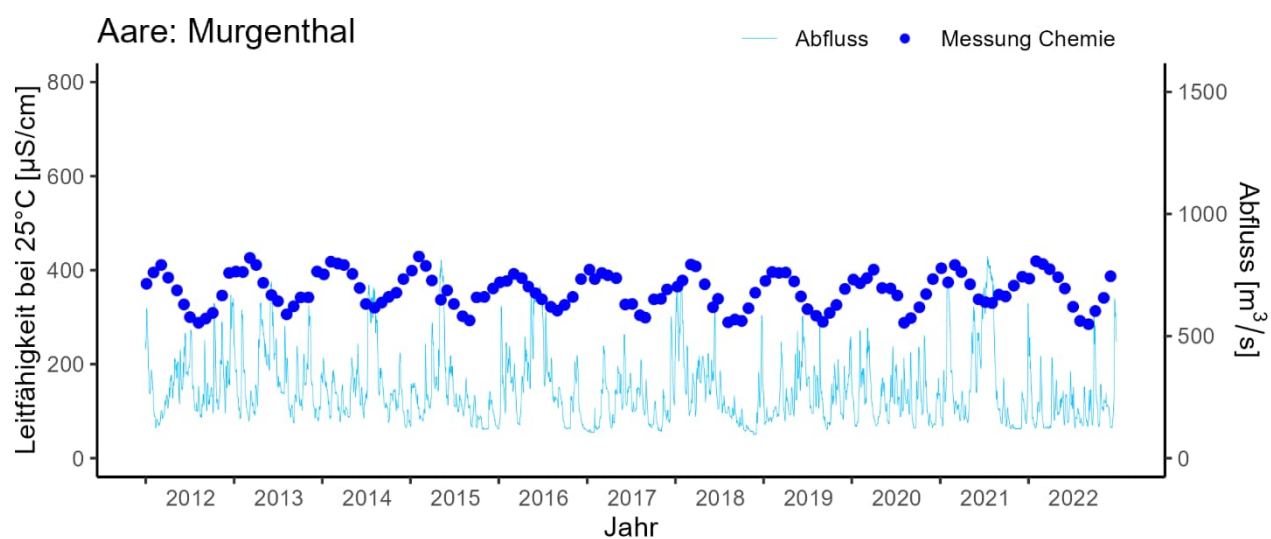
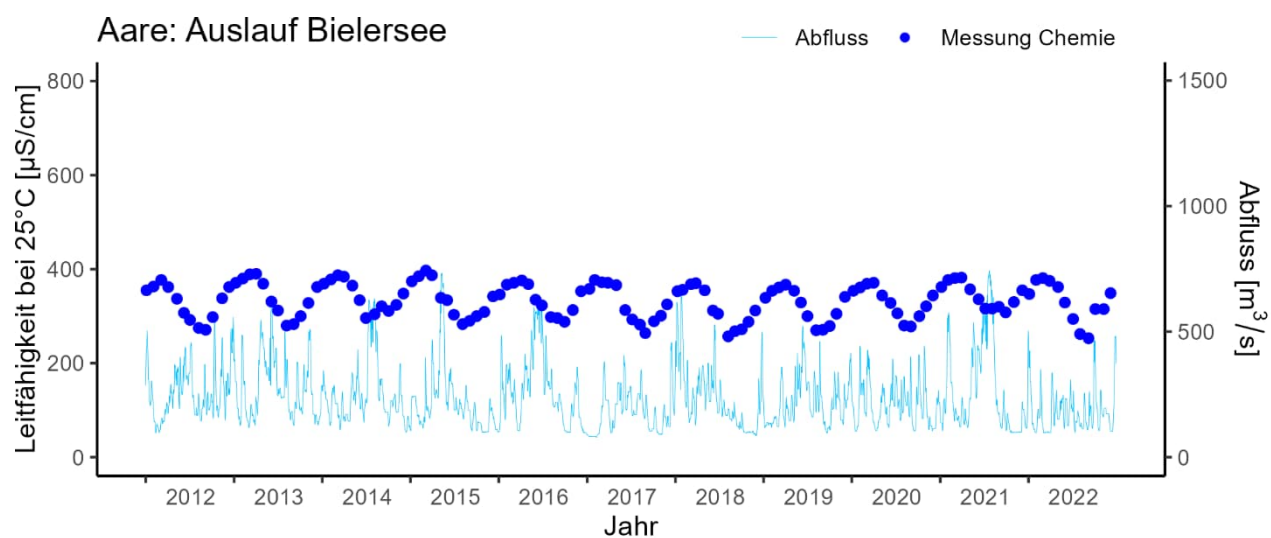
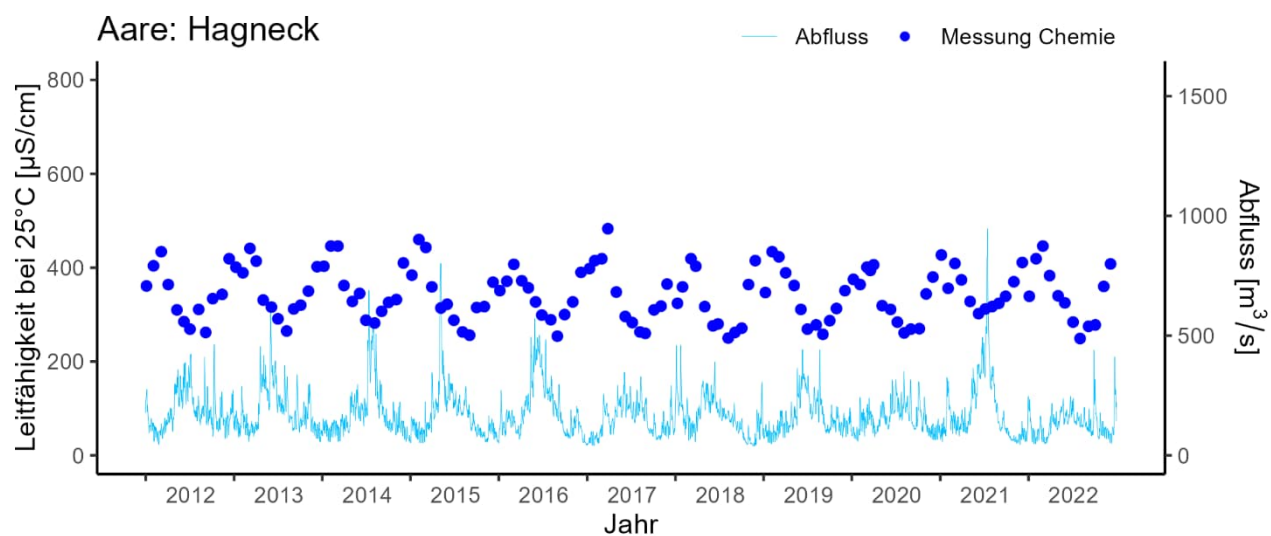
4.10 Leitfähigkeit

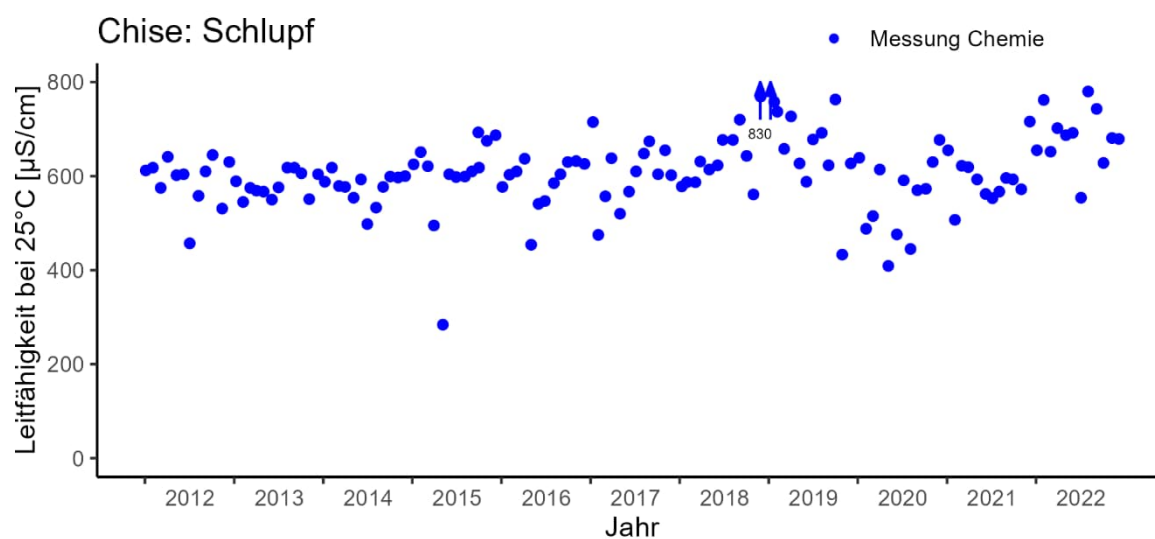
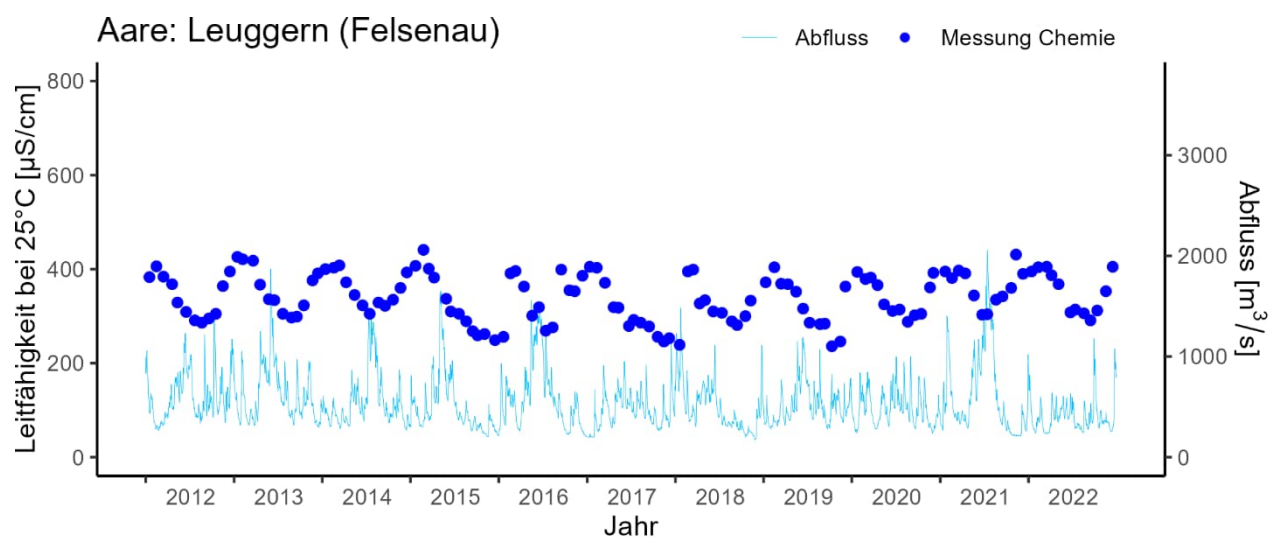
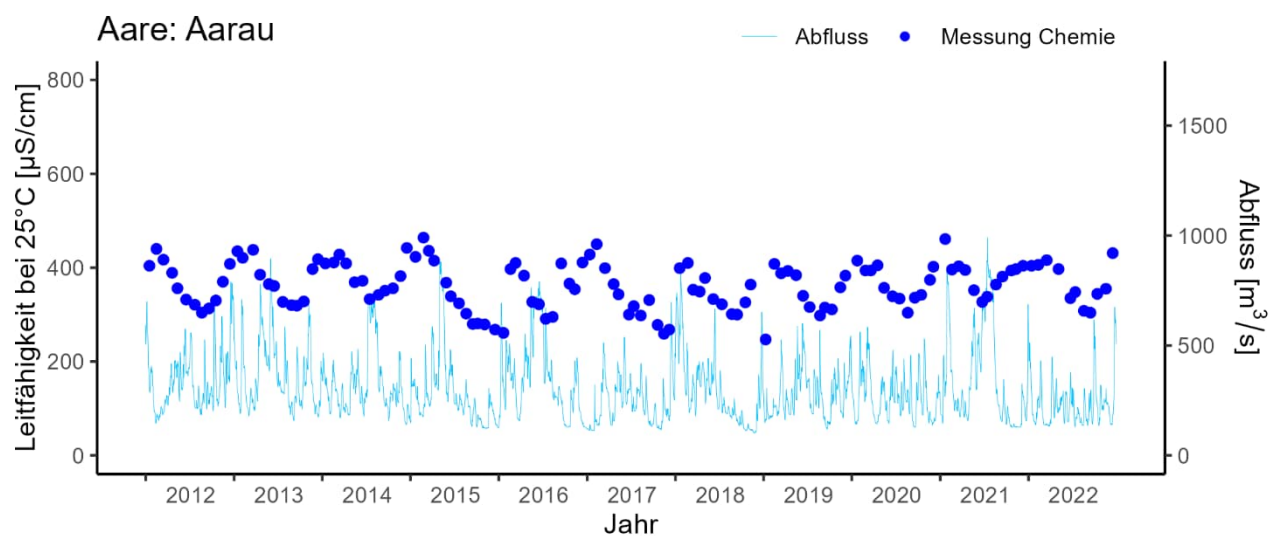
Aare: Thun Schadau Seeauslauf

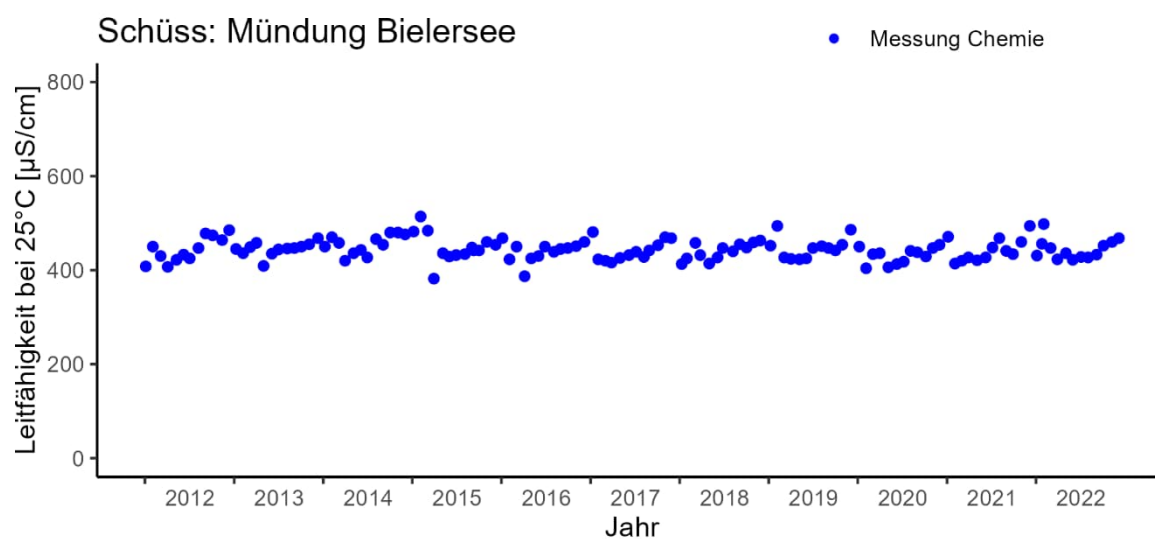
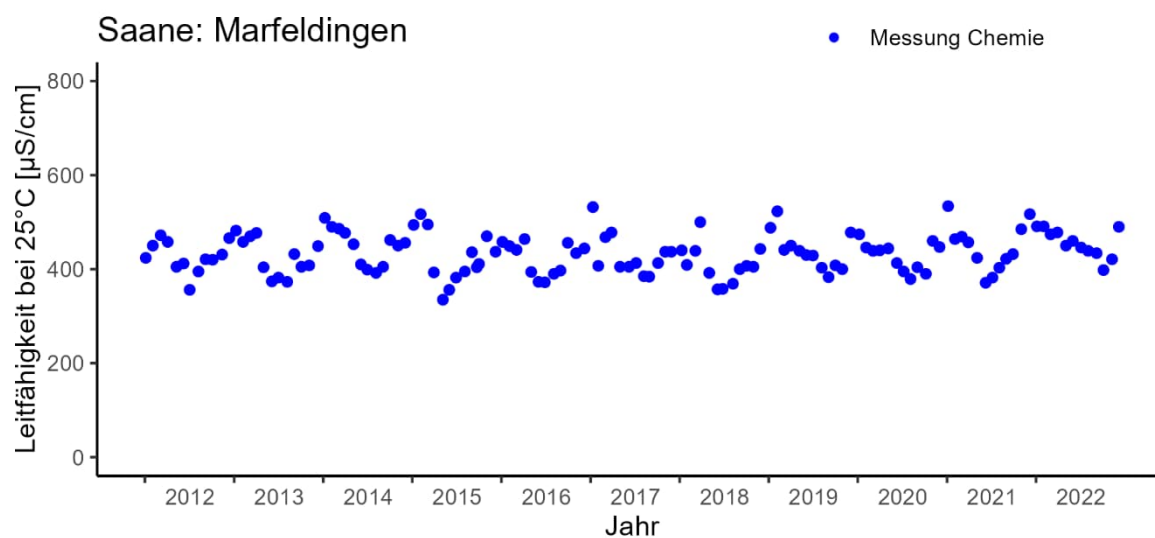
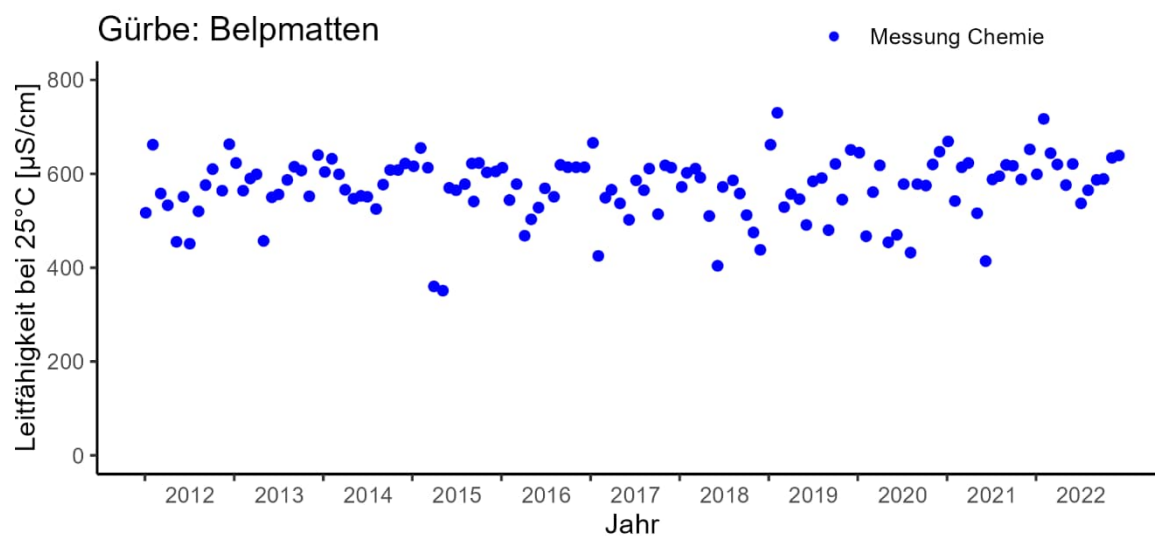


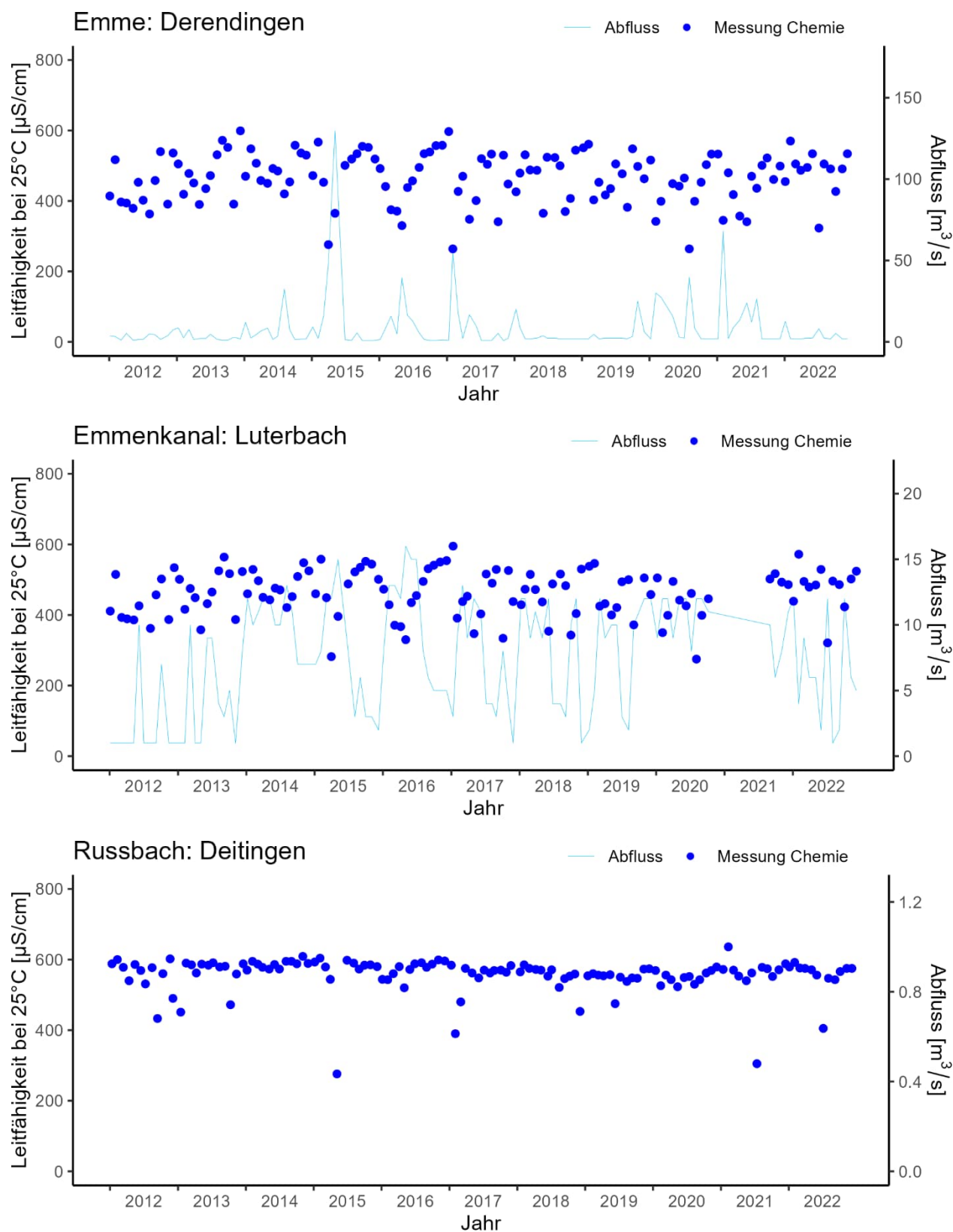
Aare: Eymatt, Stägmatt-Steg

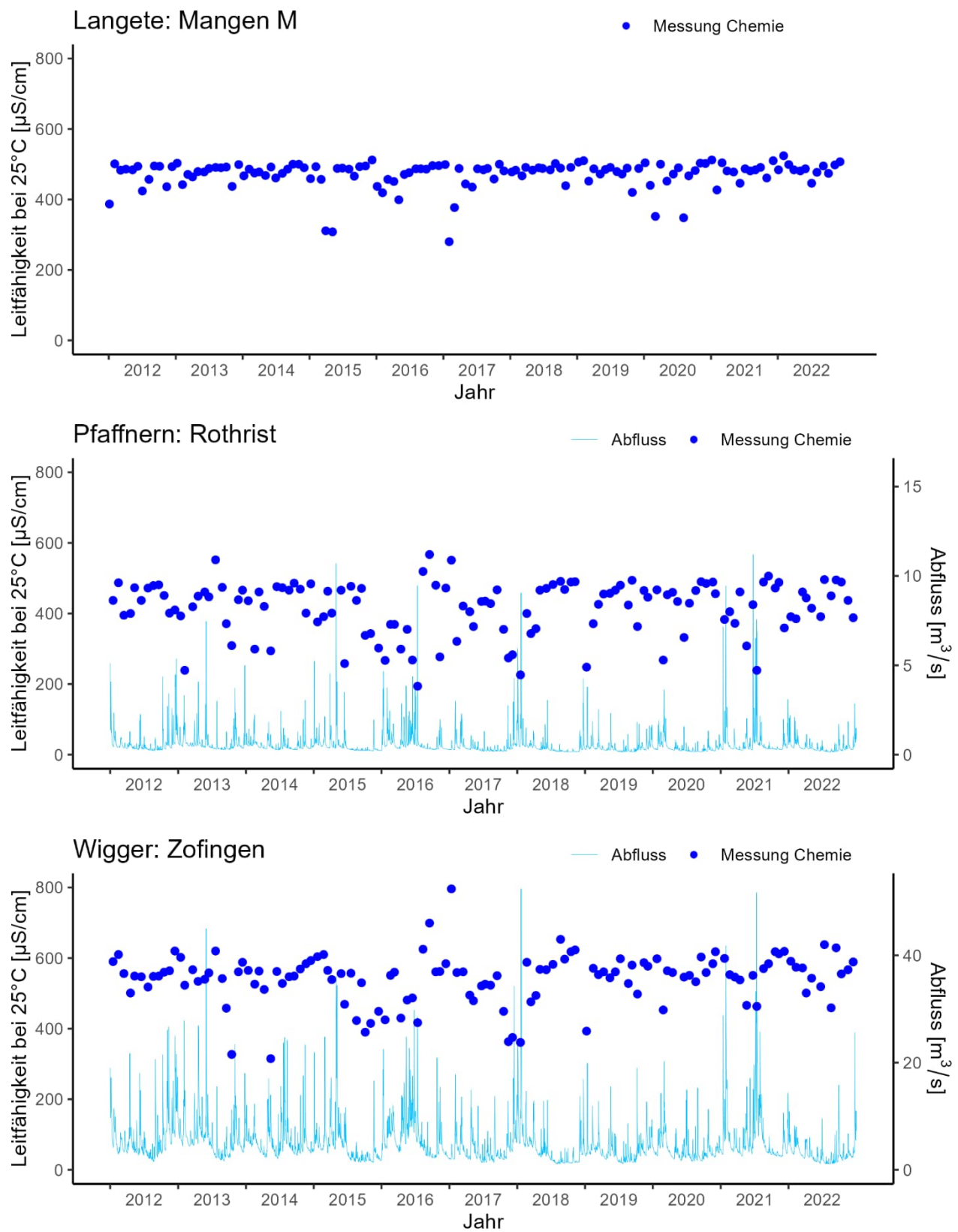


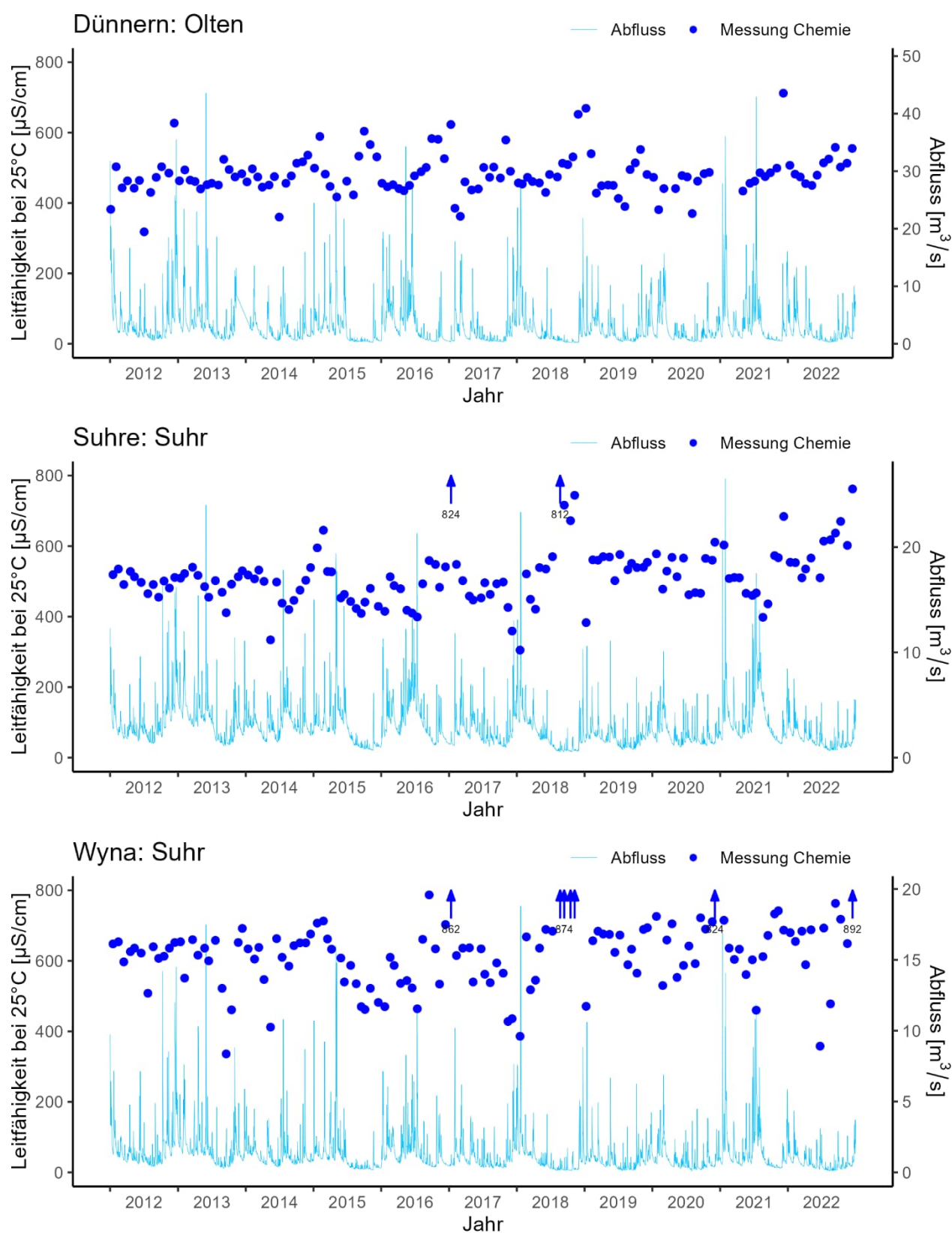


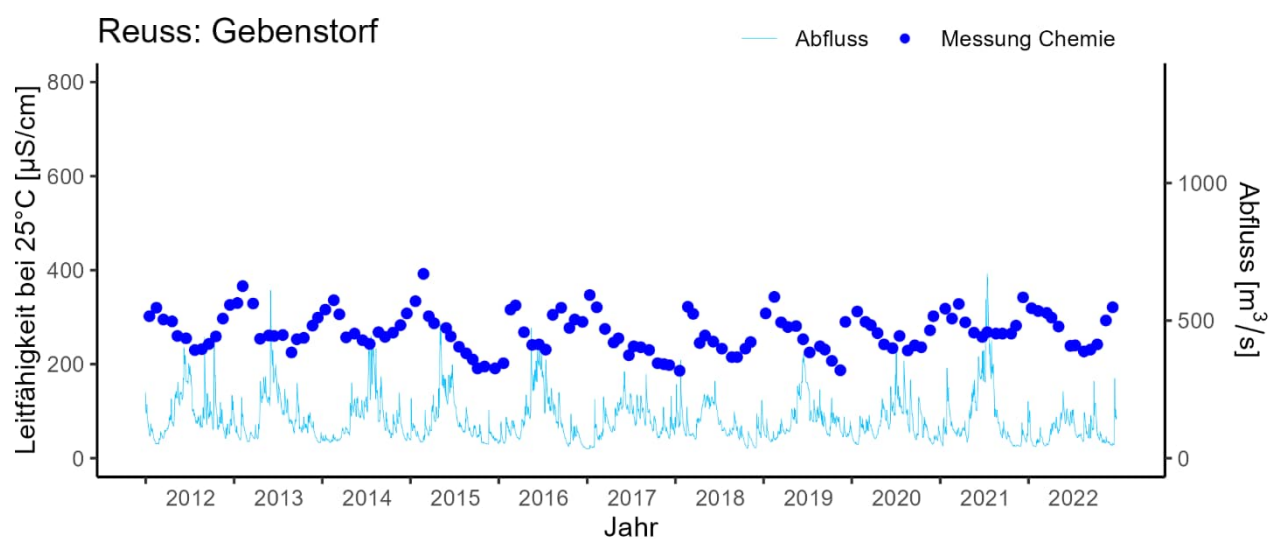
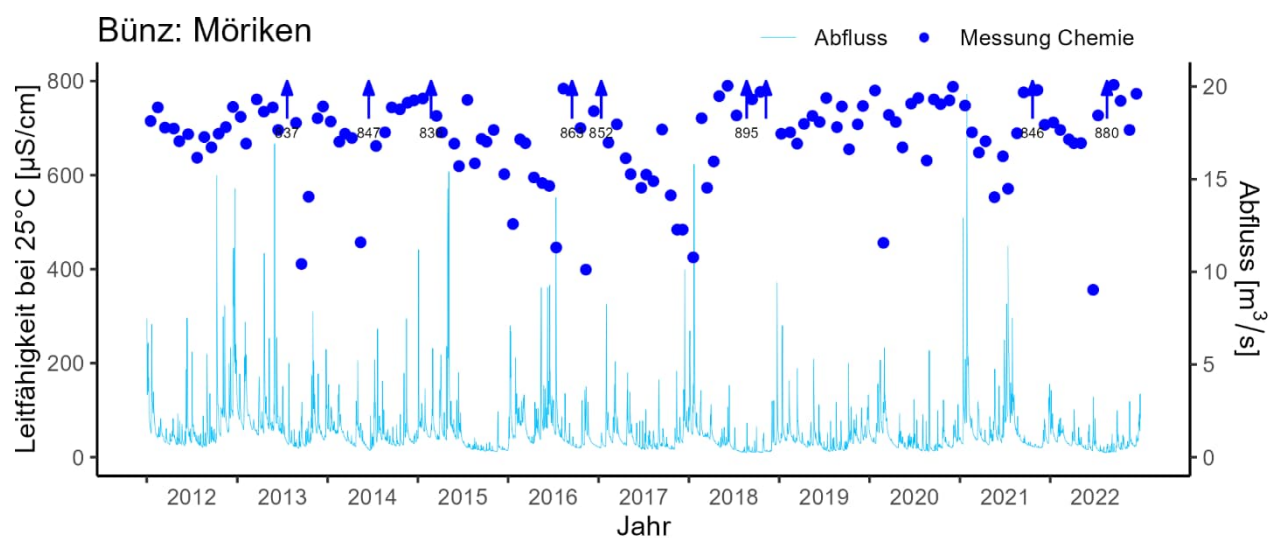
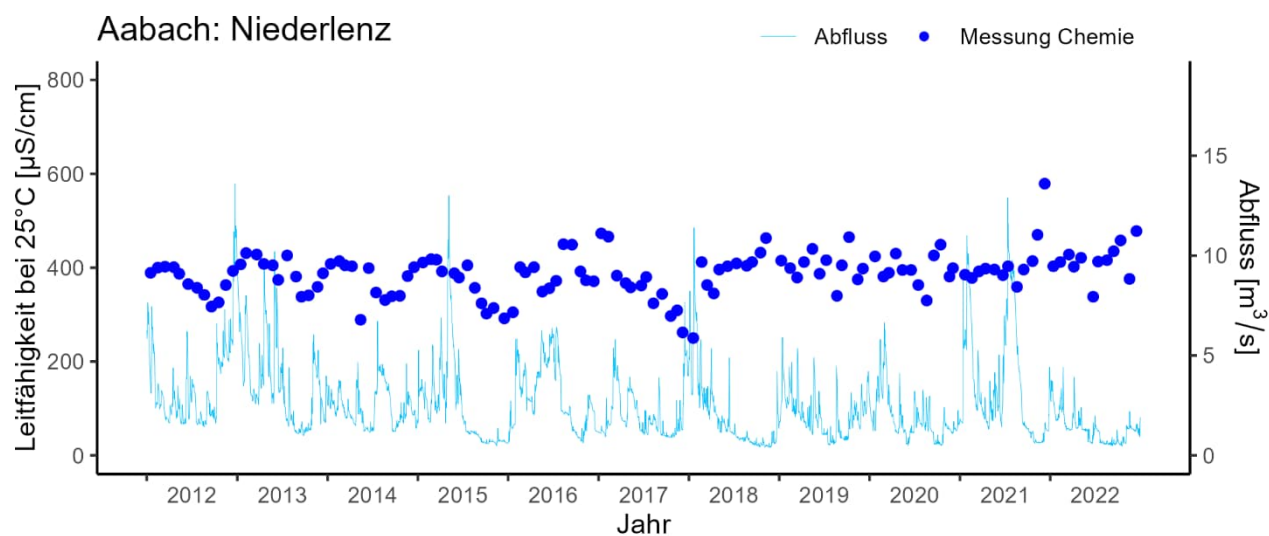


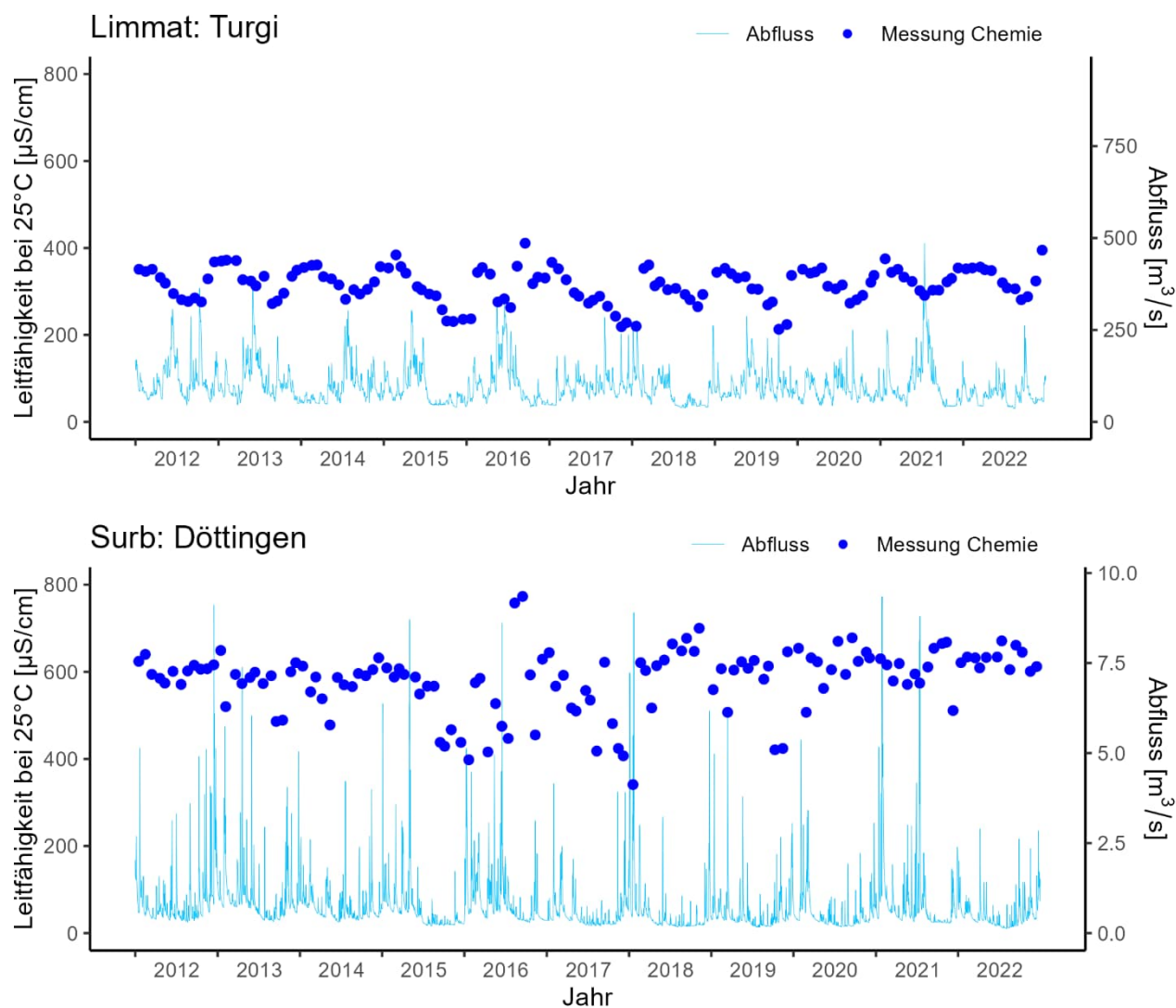






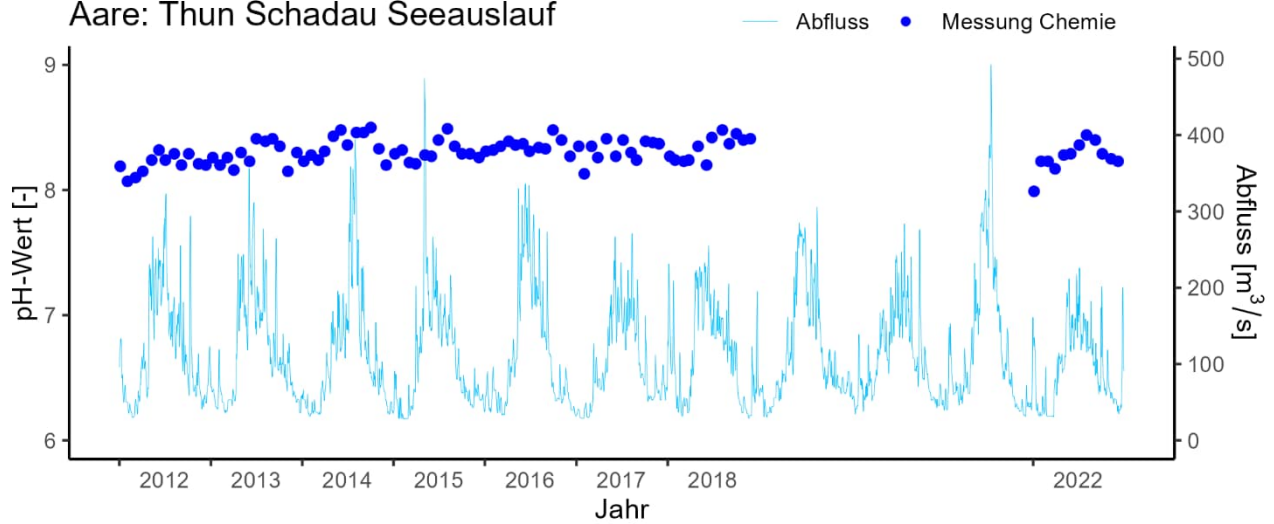




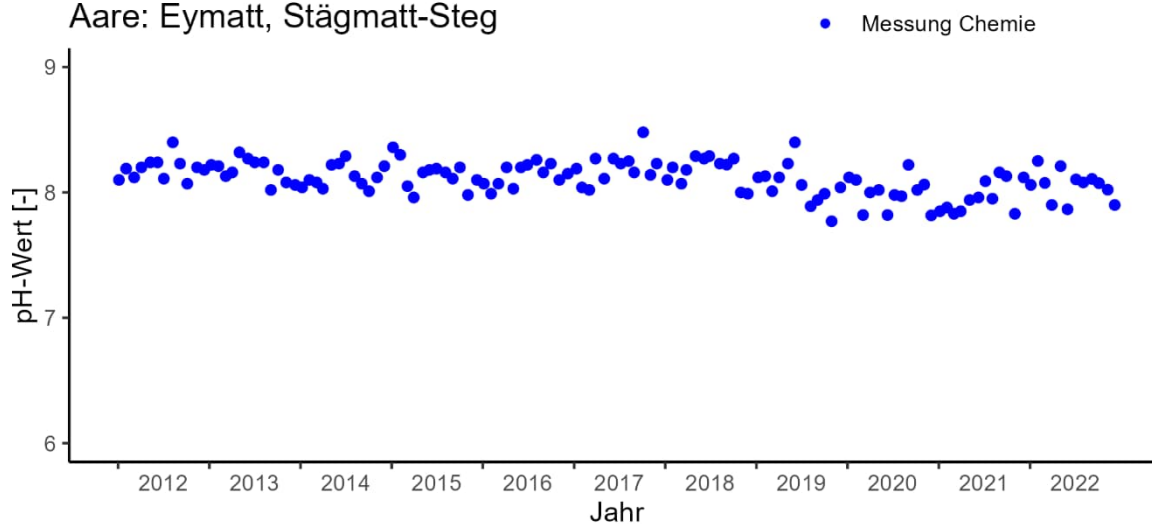


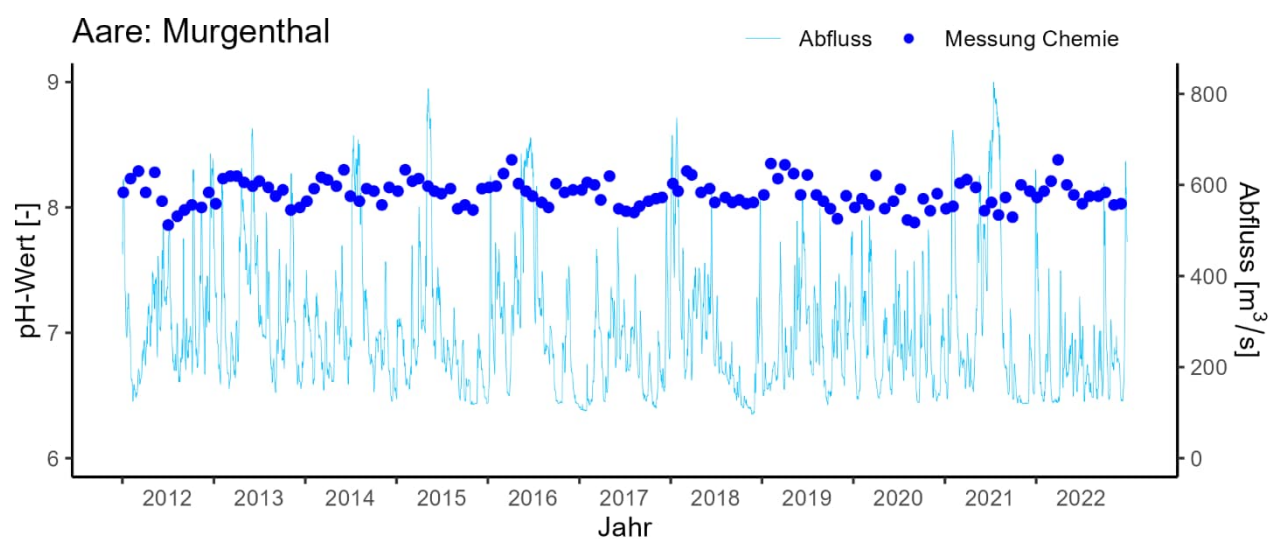
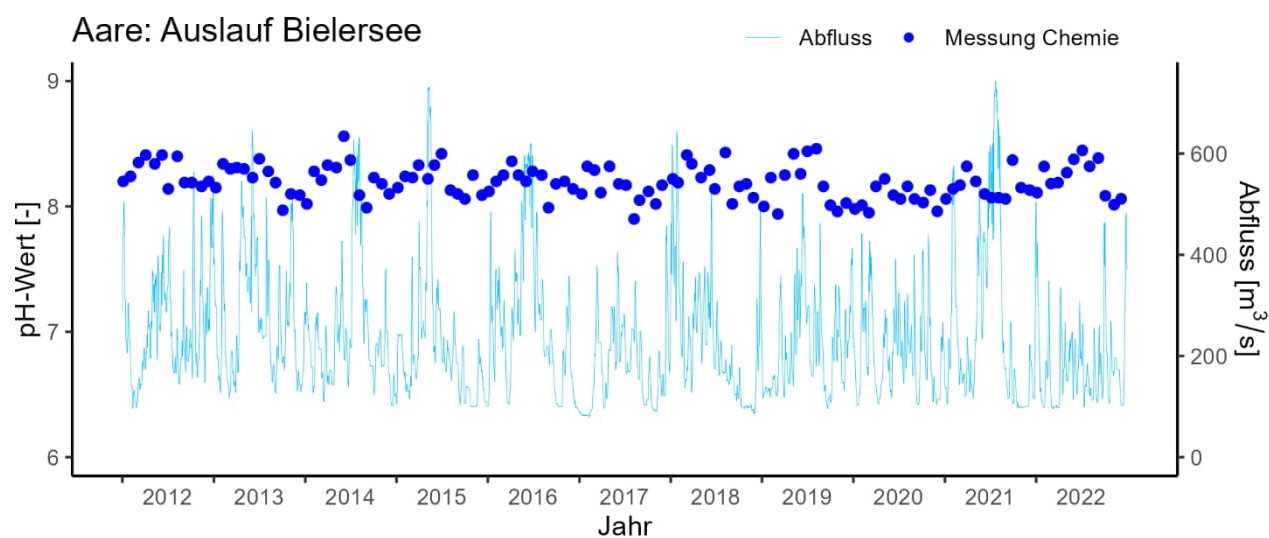
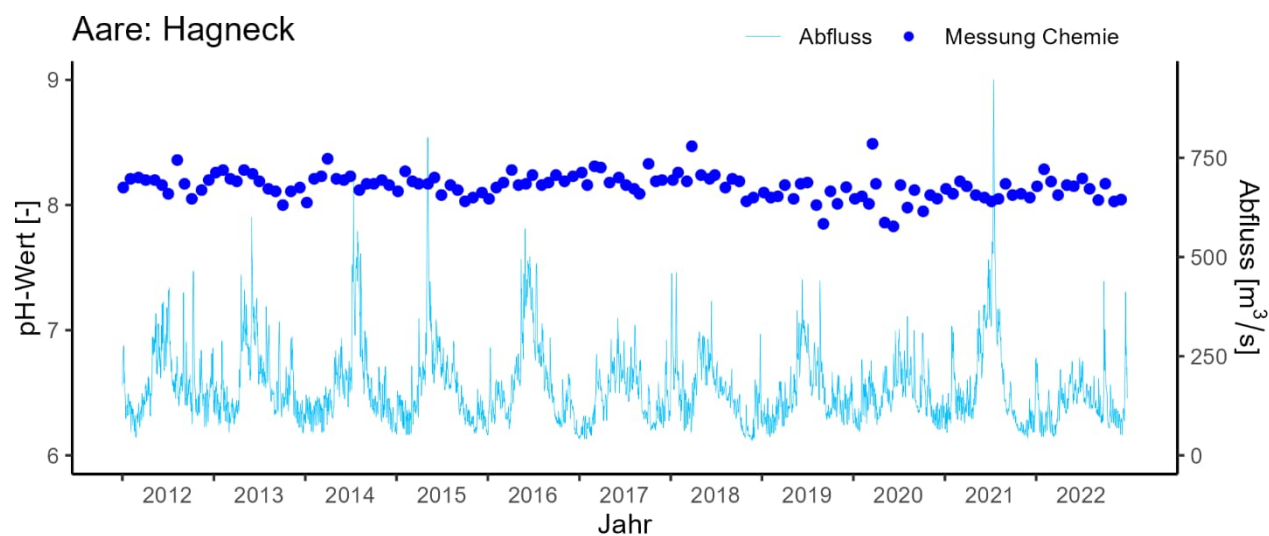
4.11 pH-Wert

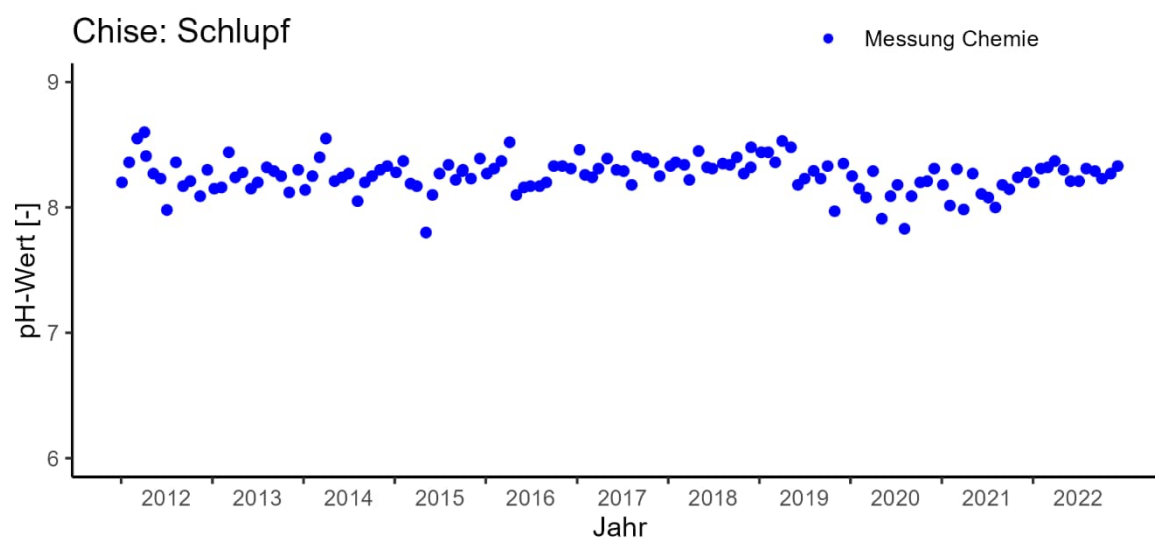
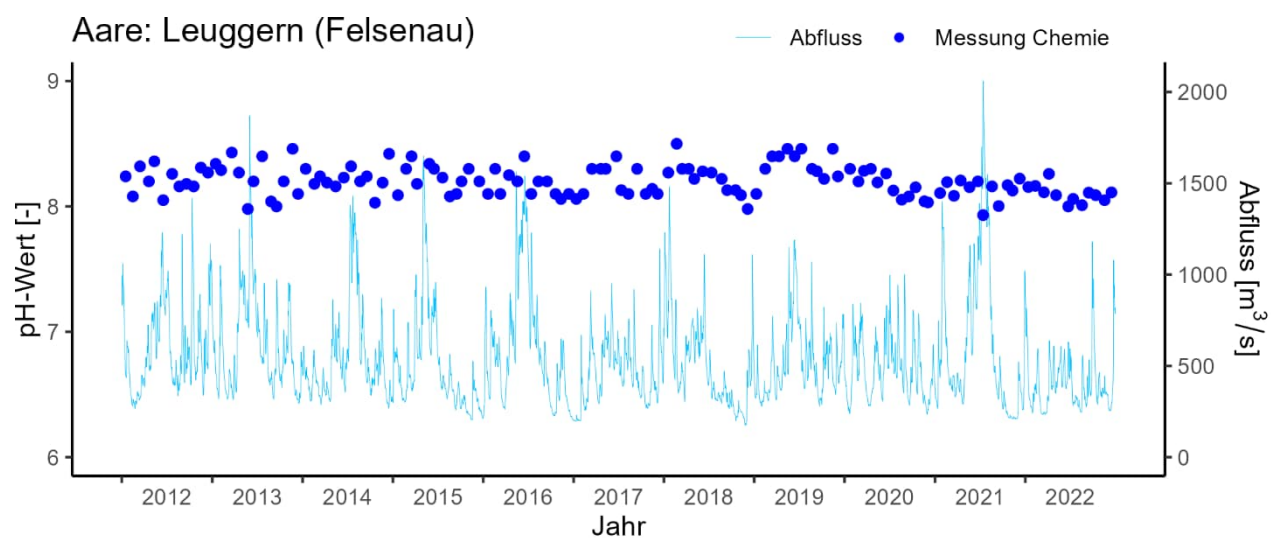
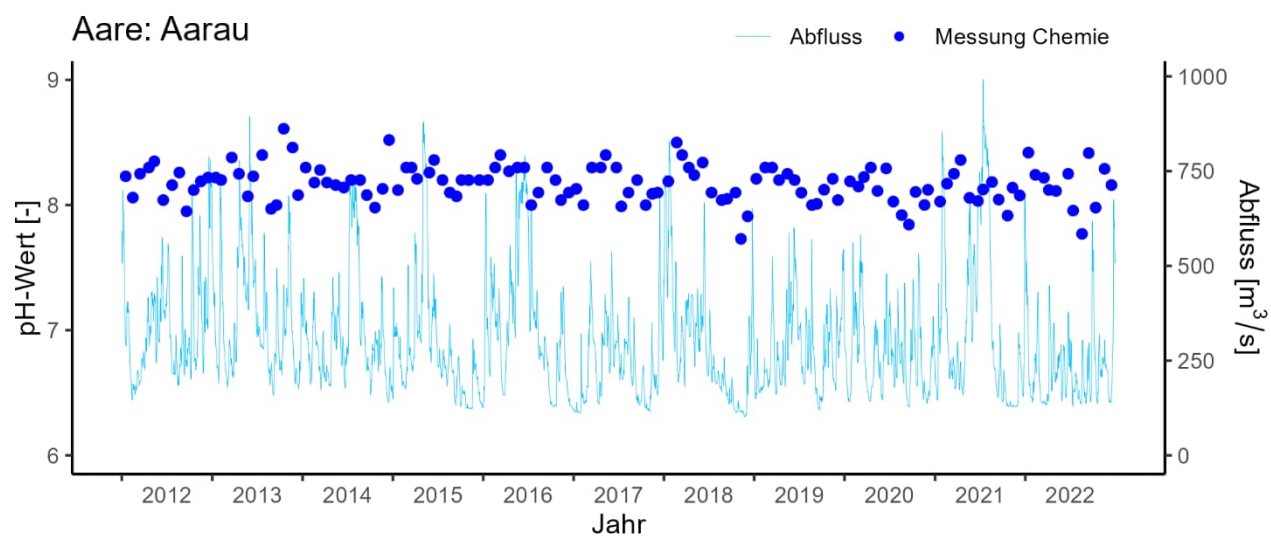
Aare: Thun Schadau Seeauslauf

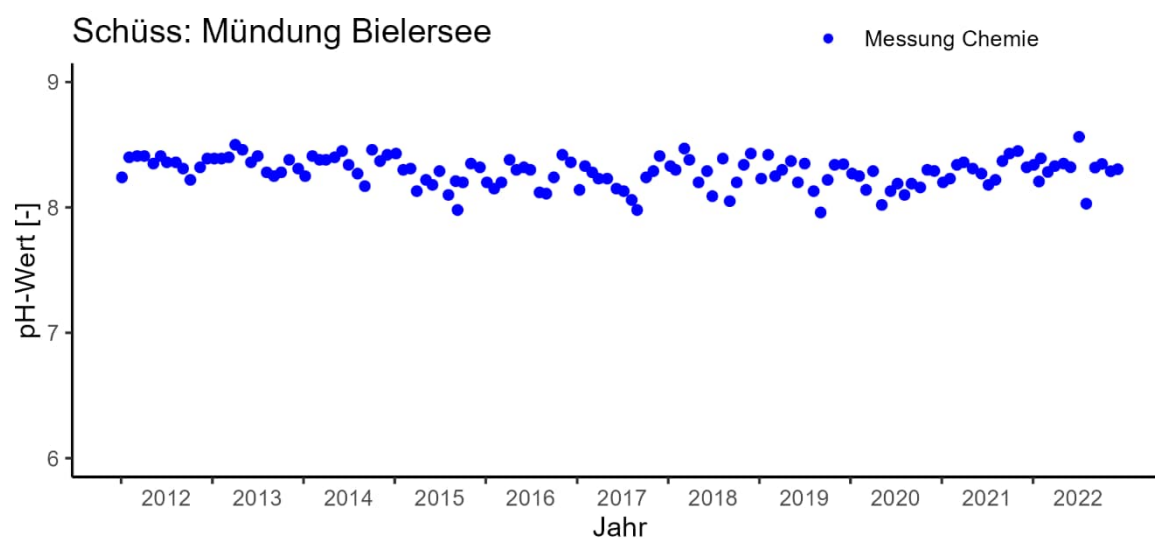
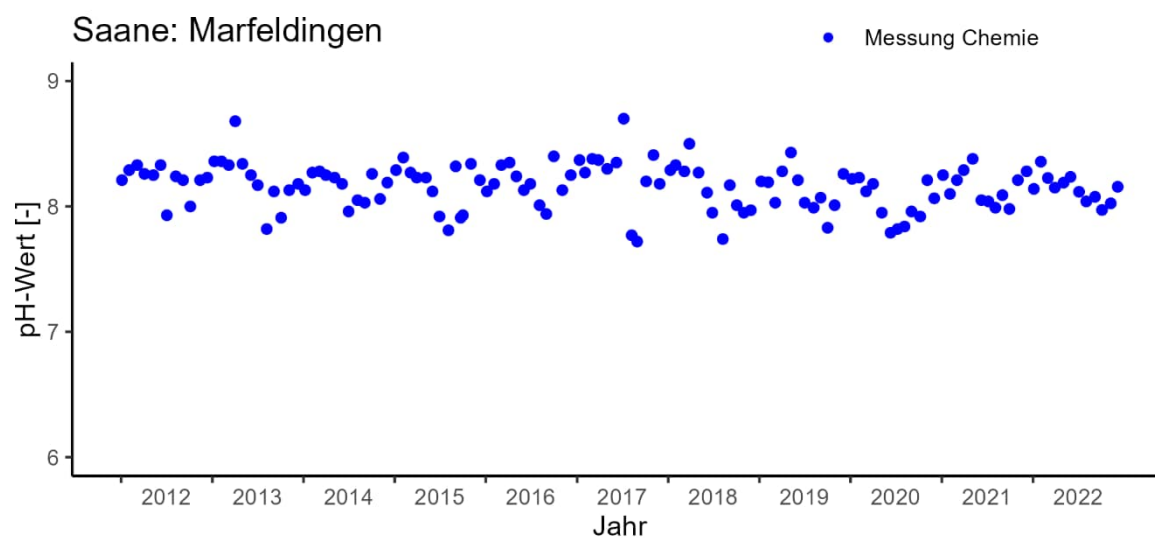
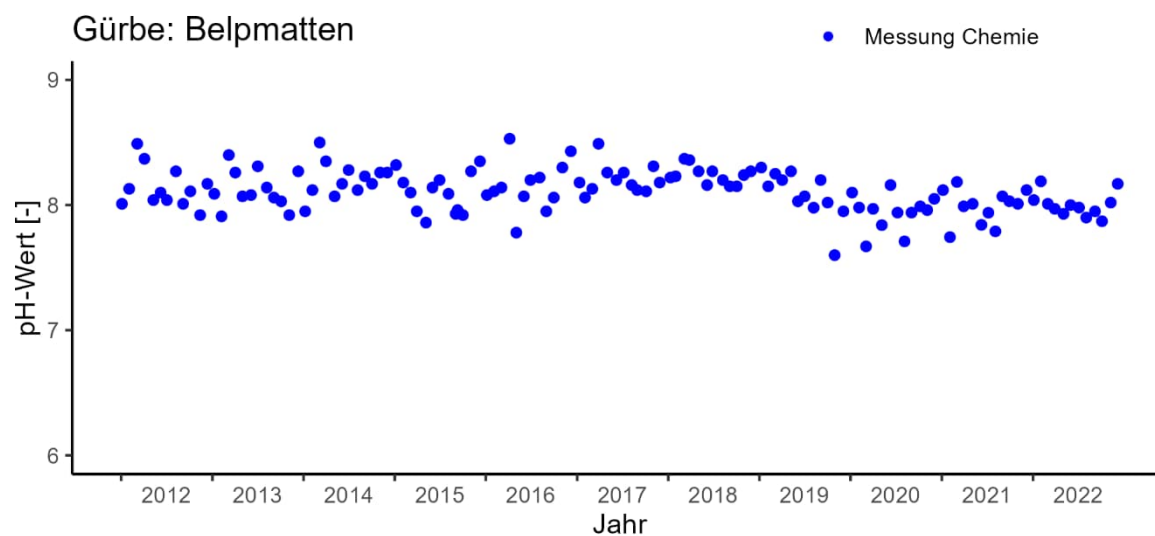


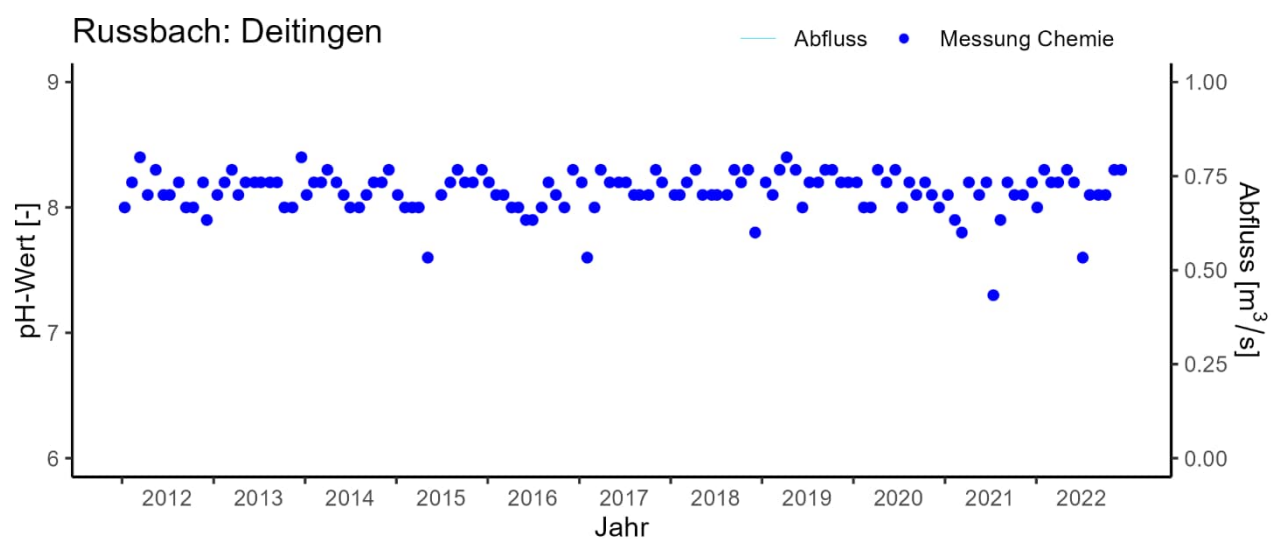
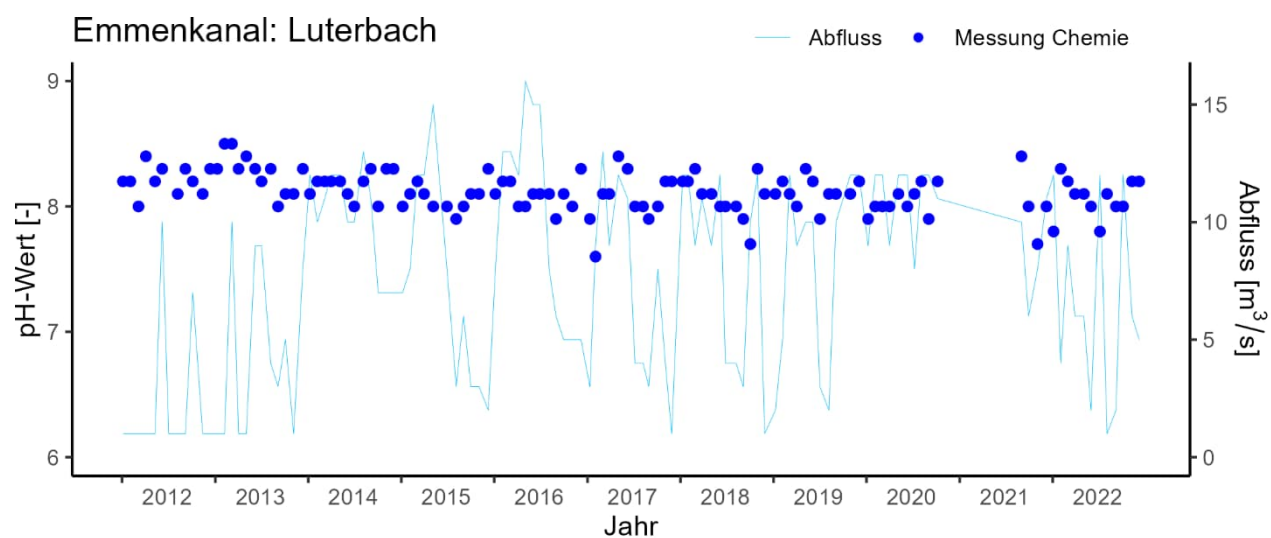
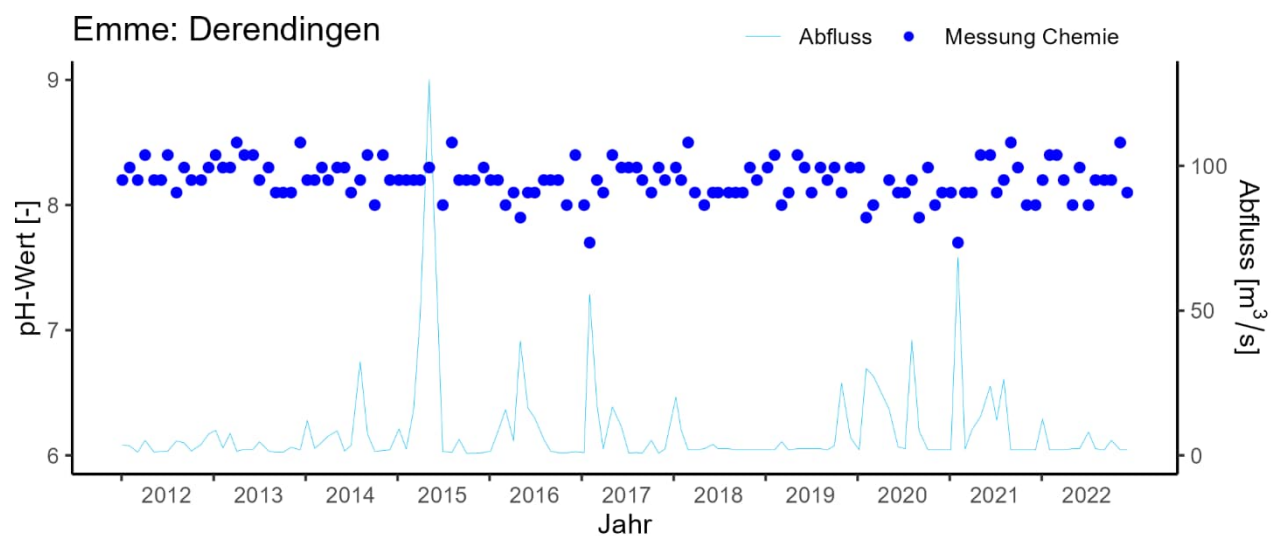
Aare: Eymatt, Stägmatt-Steg

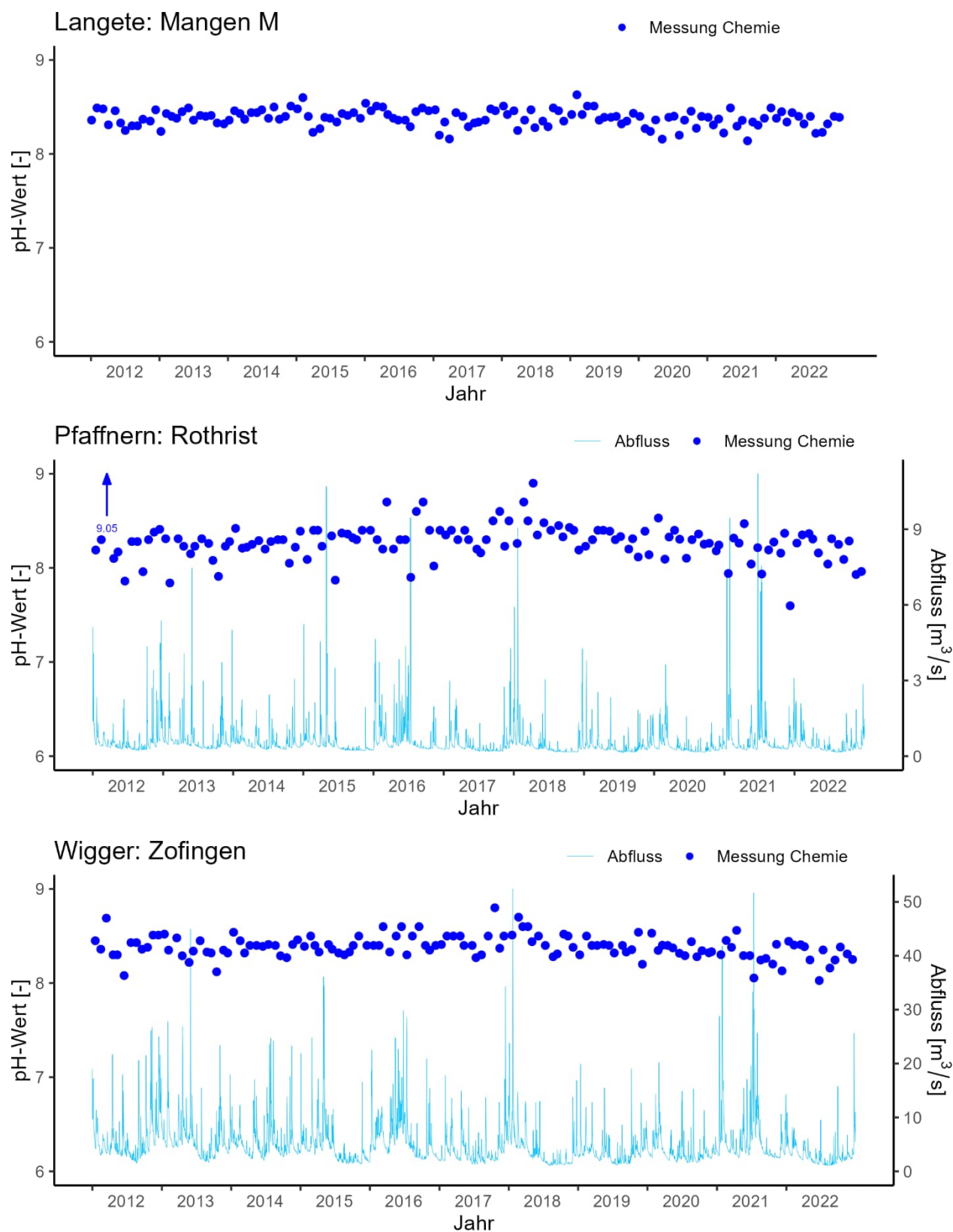


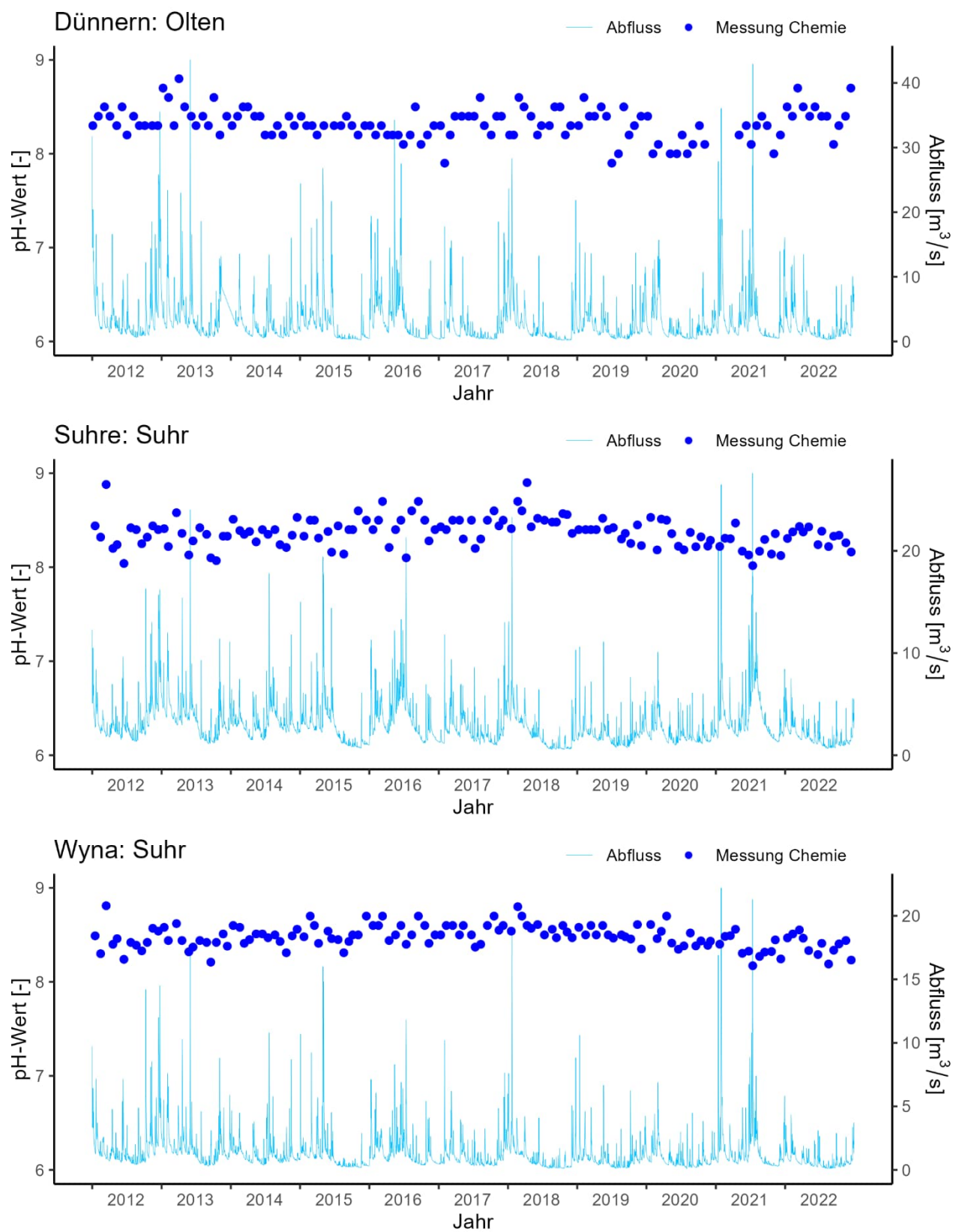


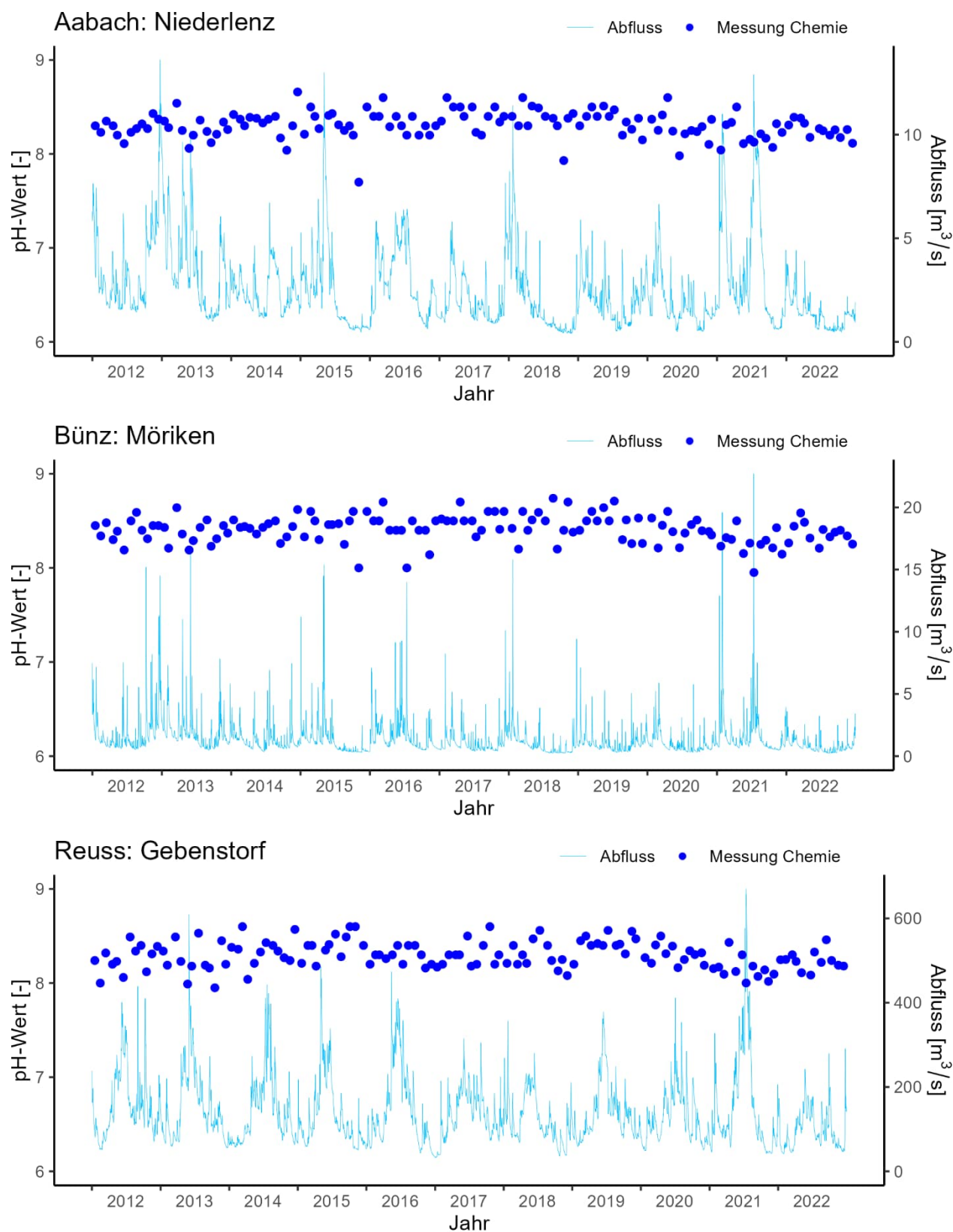


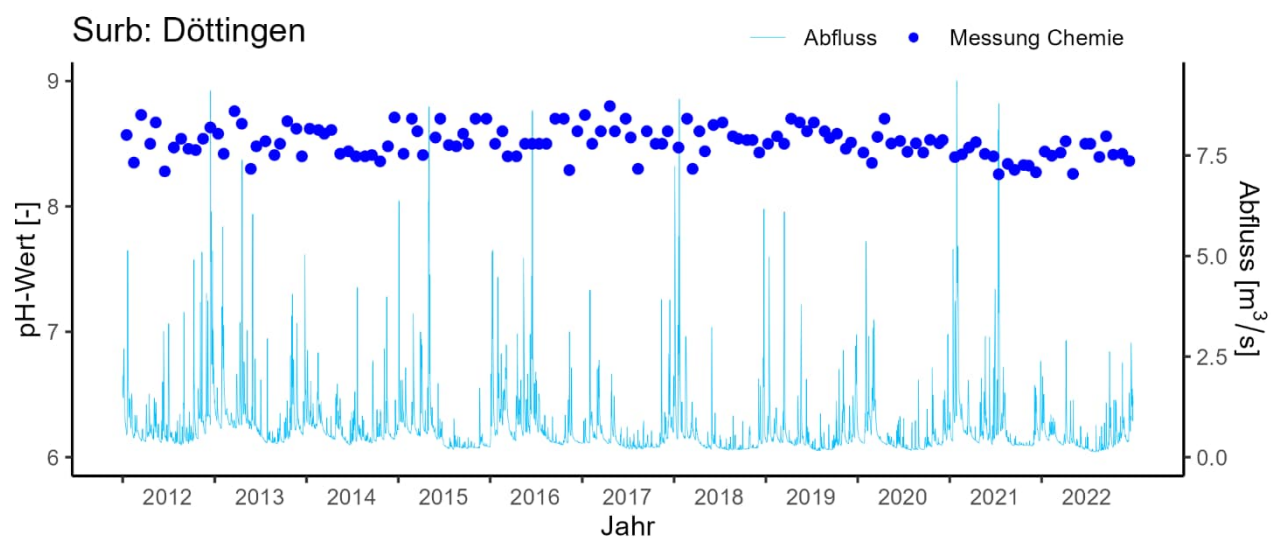
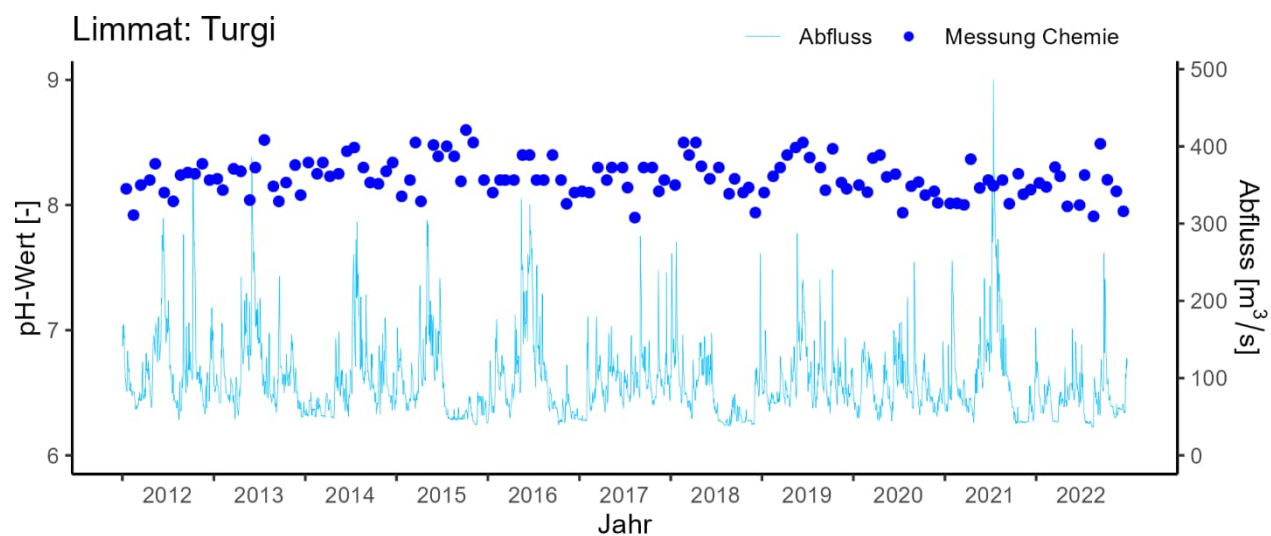








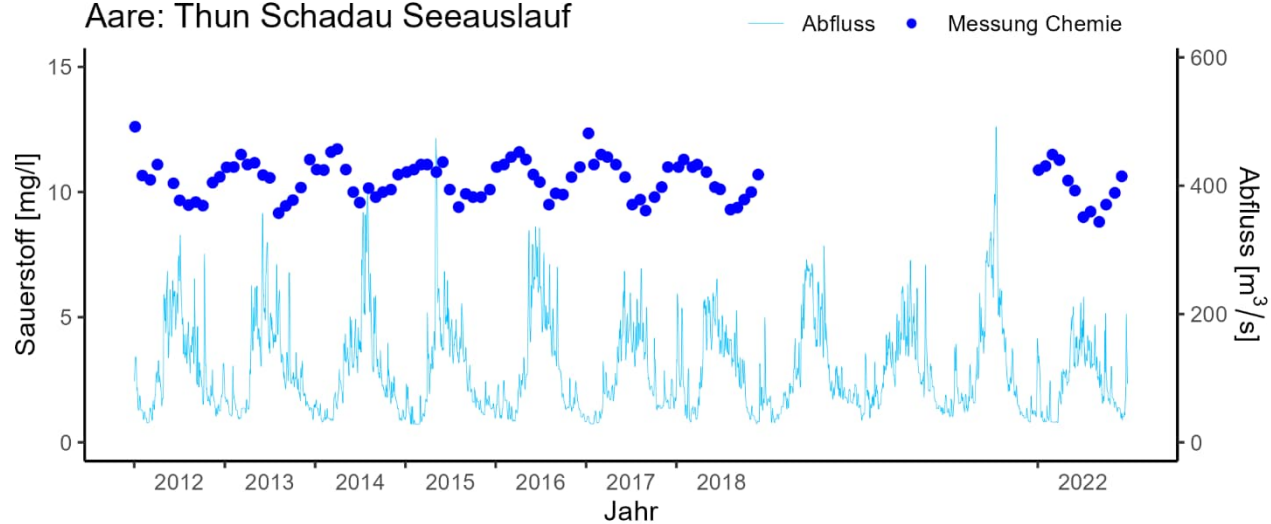




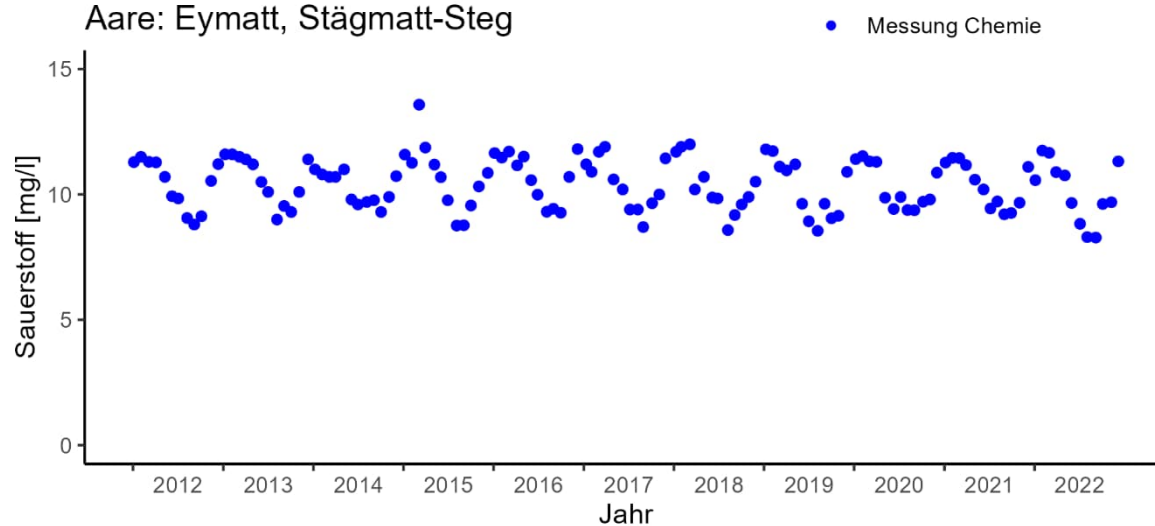


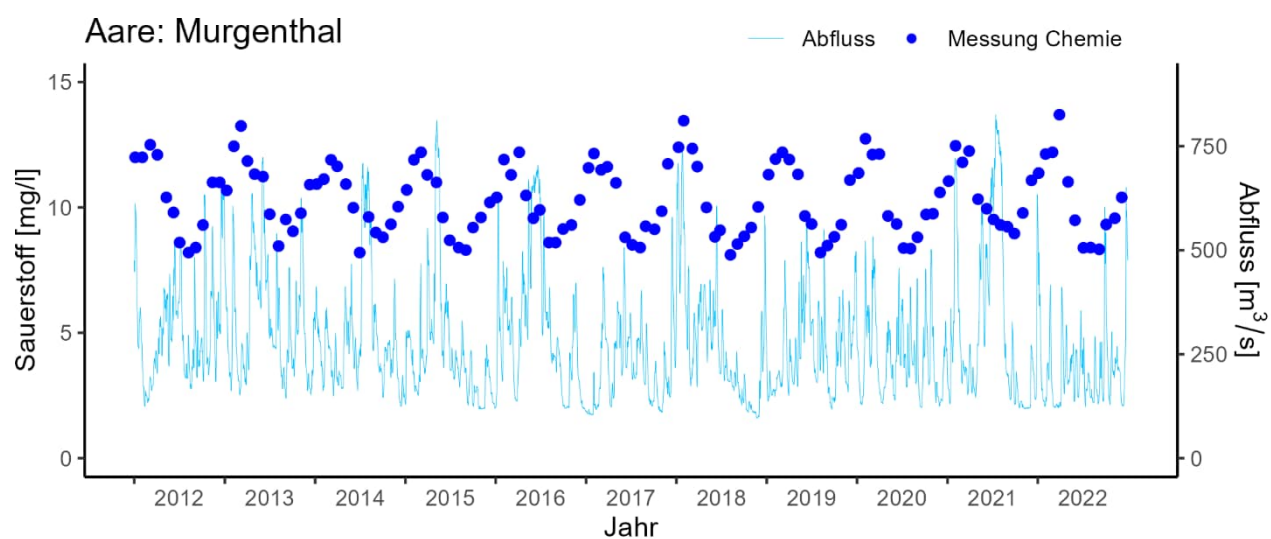
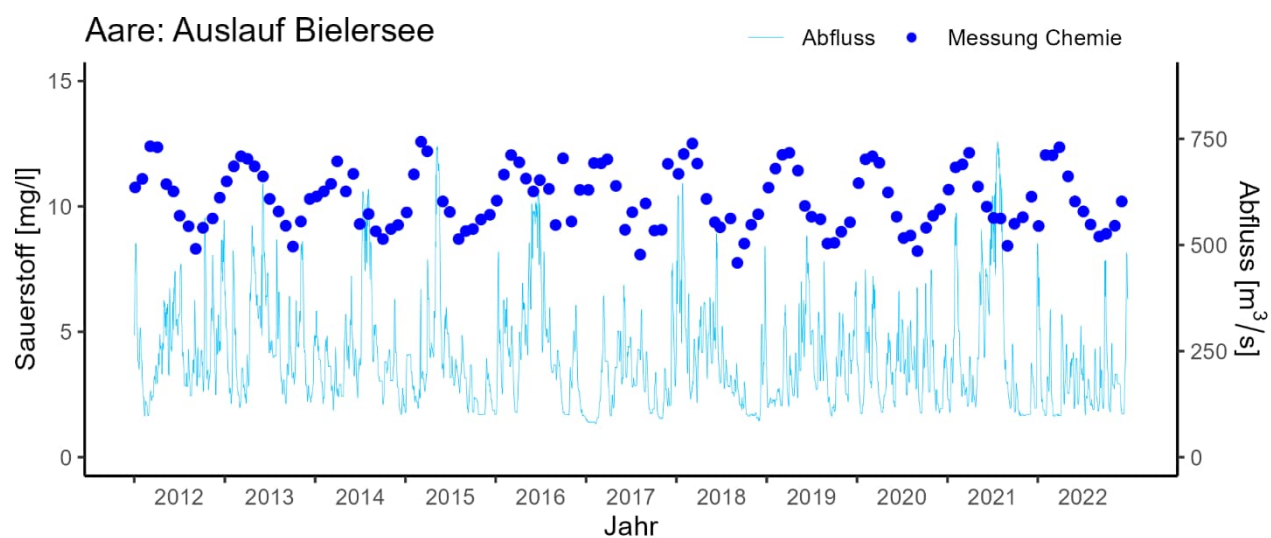
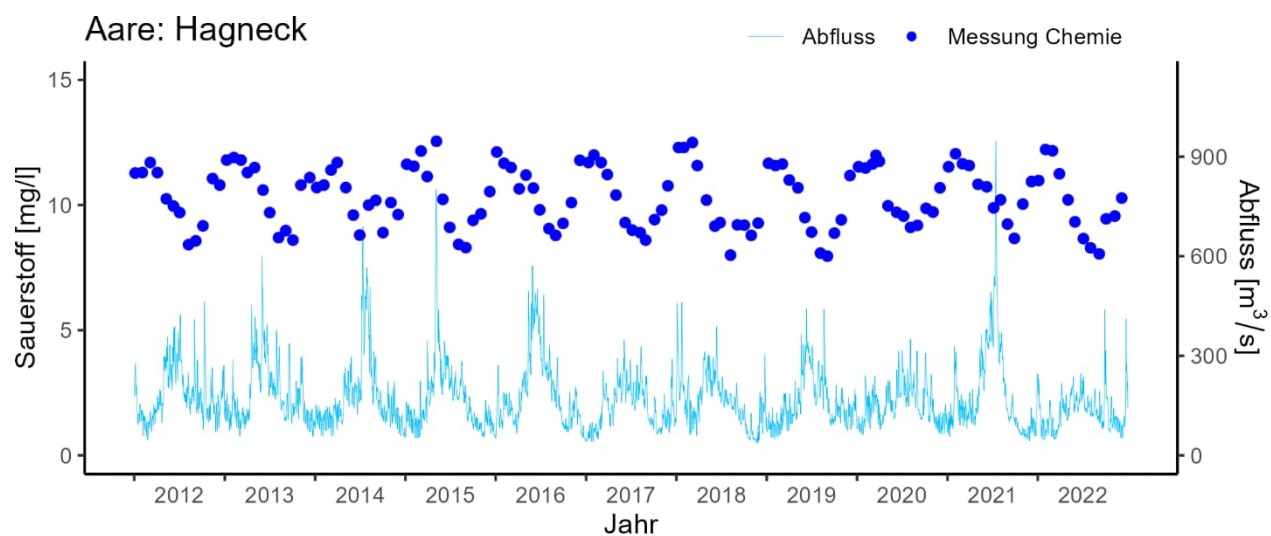
4.12 Gelöster Sauerstoff

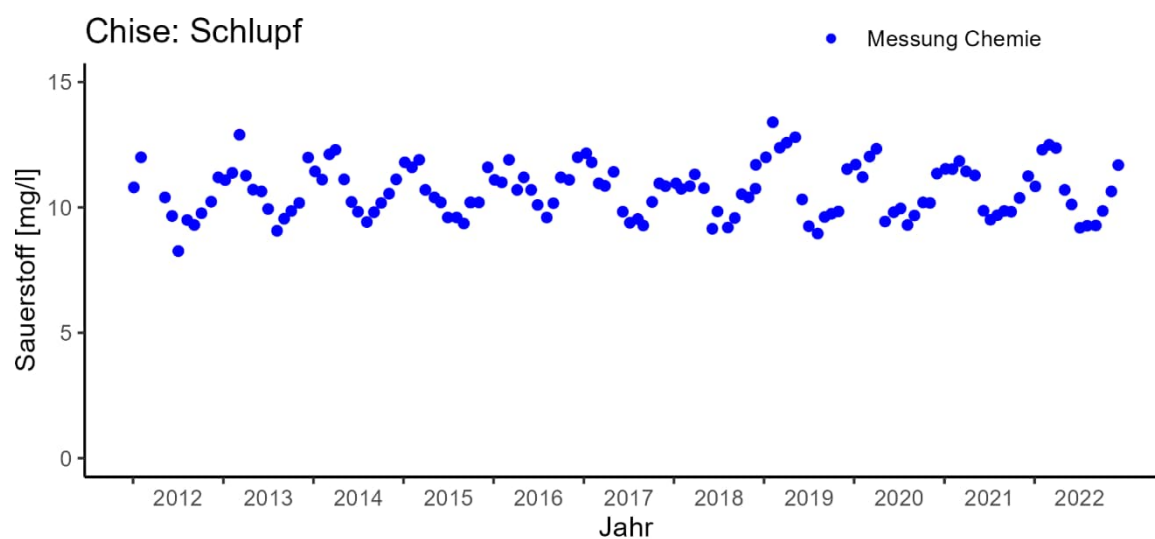
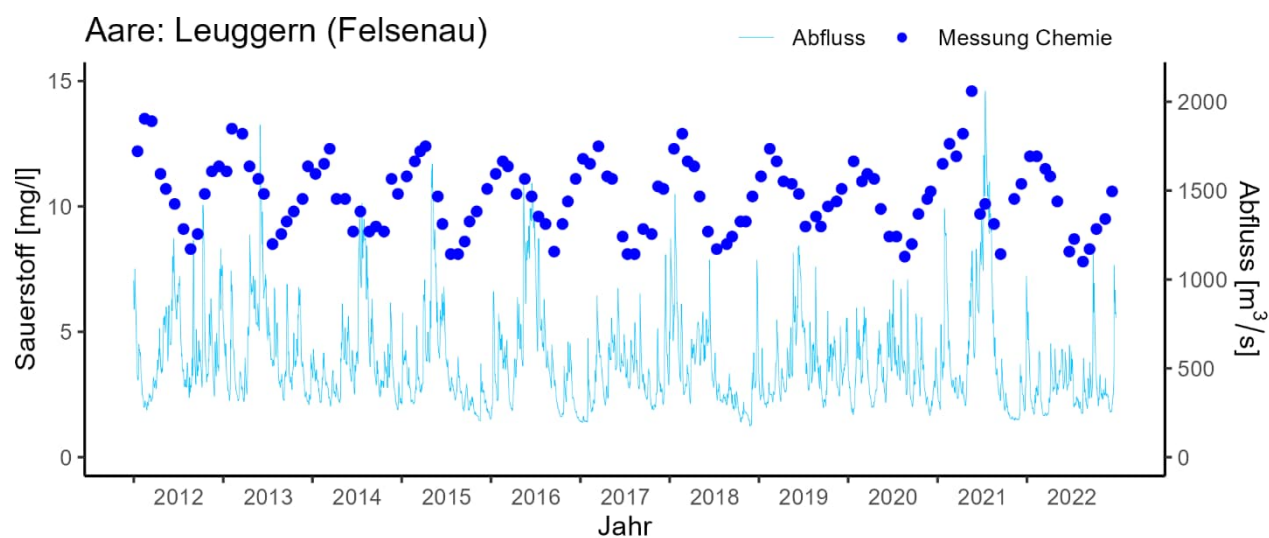
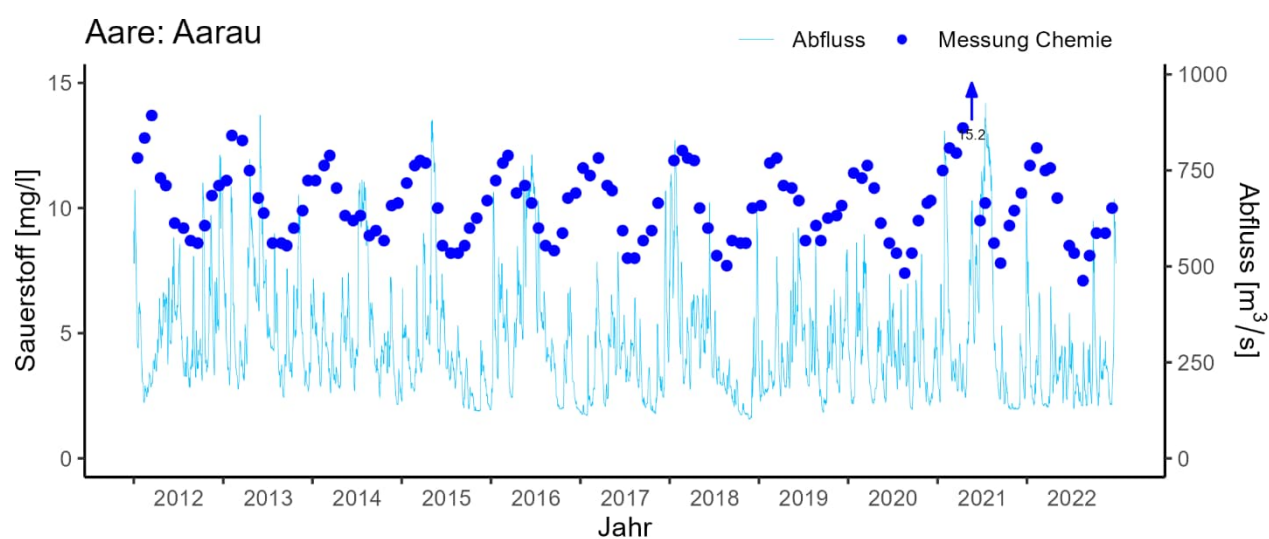
Aare: Thun Schadau Seeauslauf

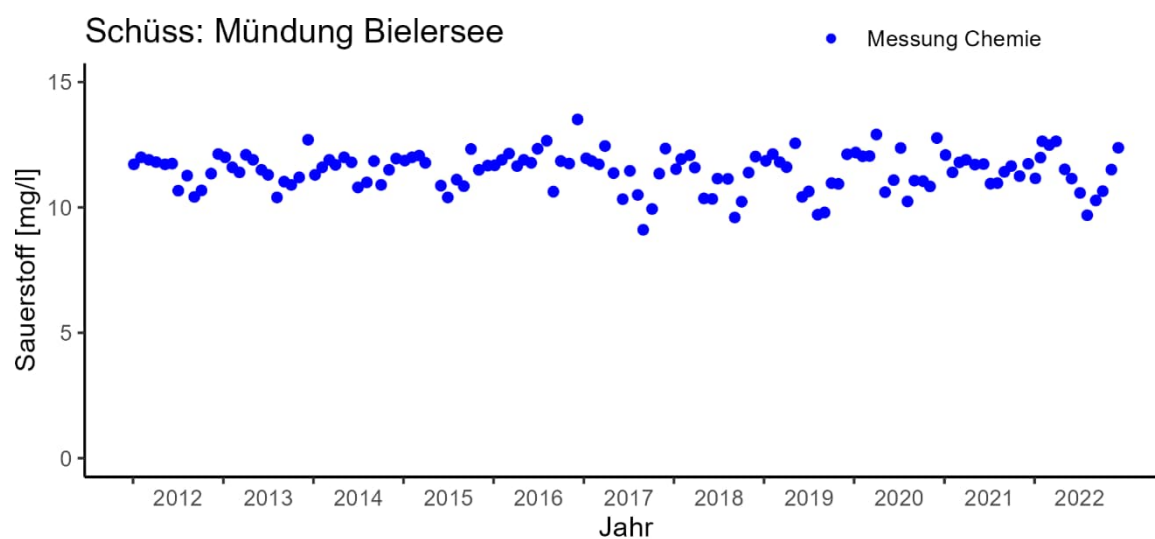
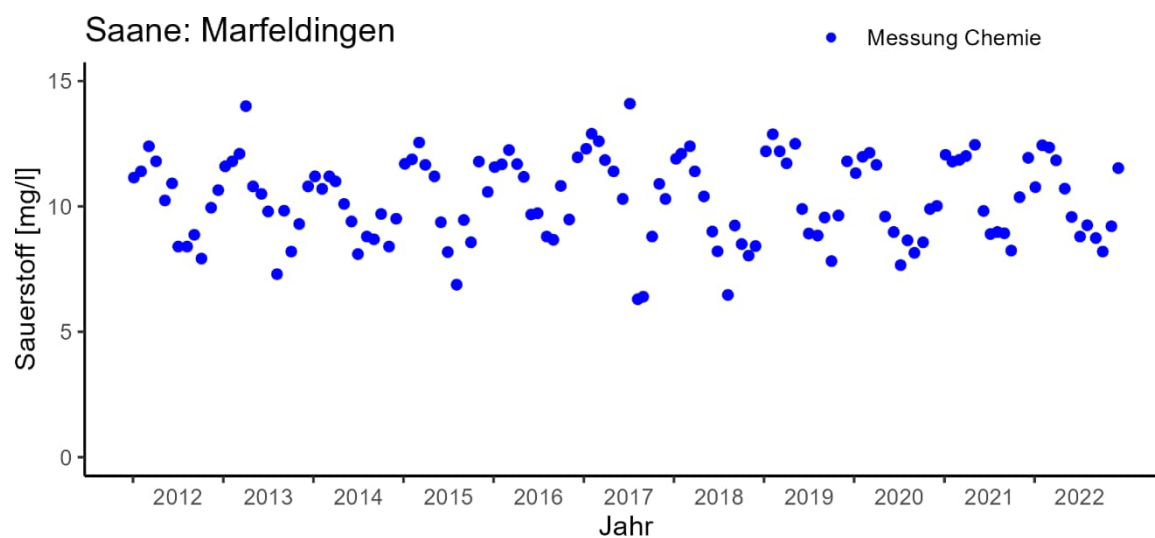
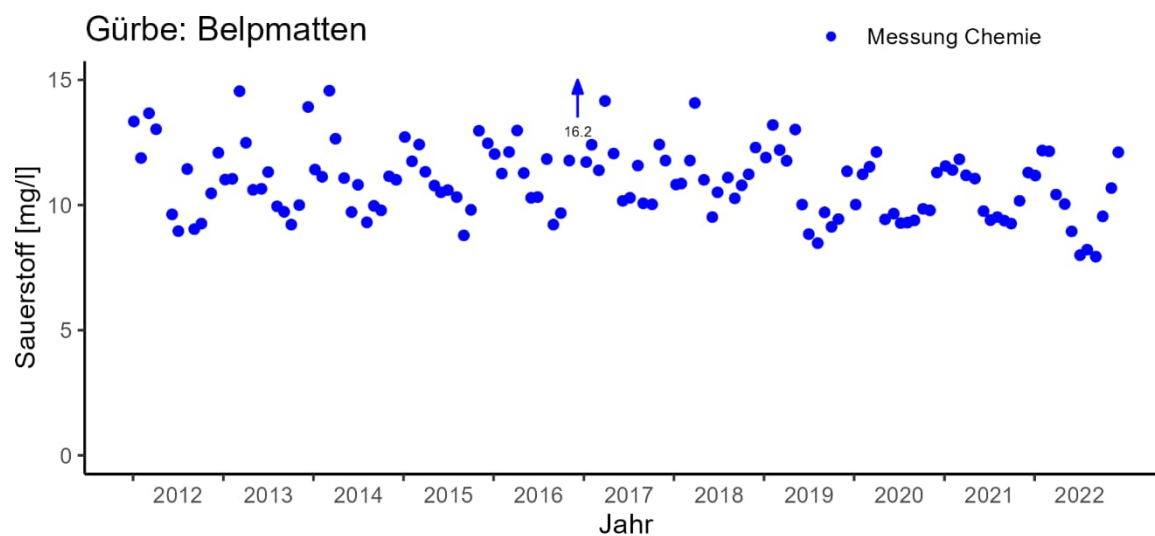


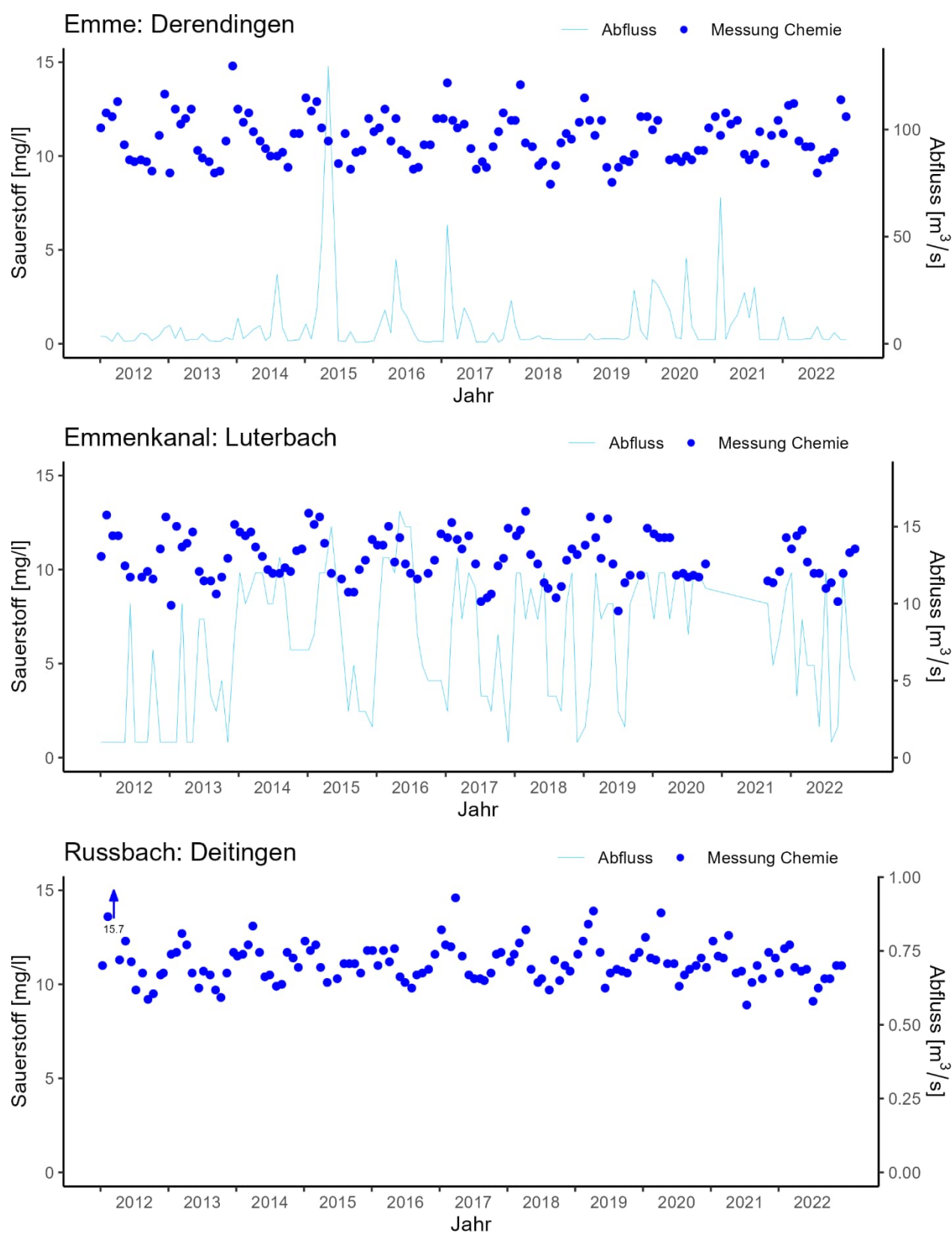
Aare: Eymatt, Stägmatt-Steg

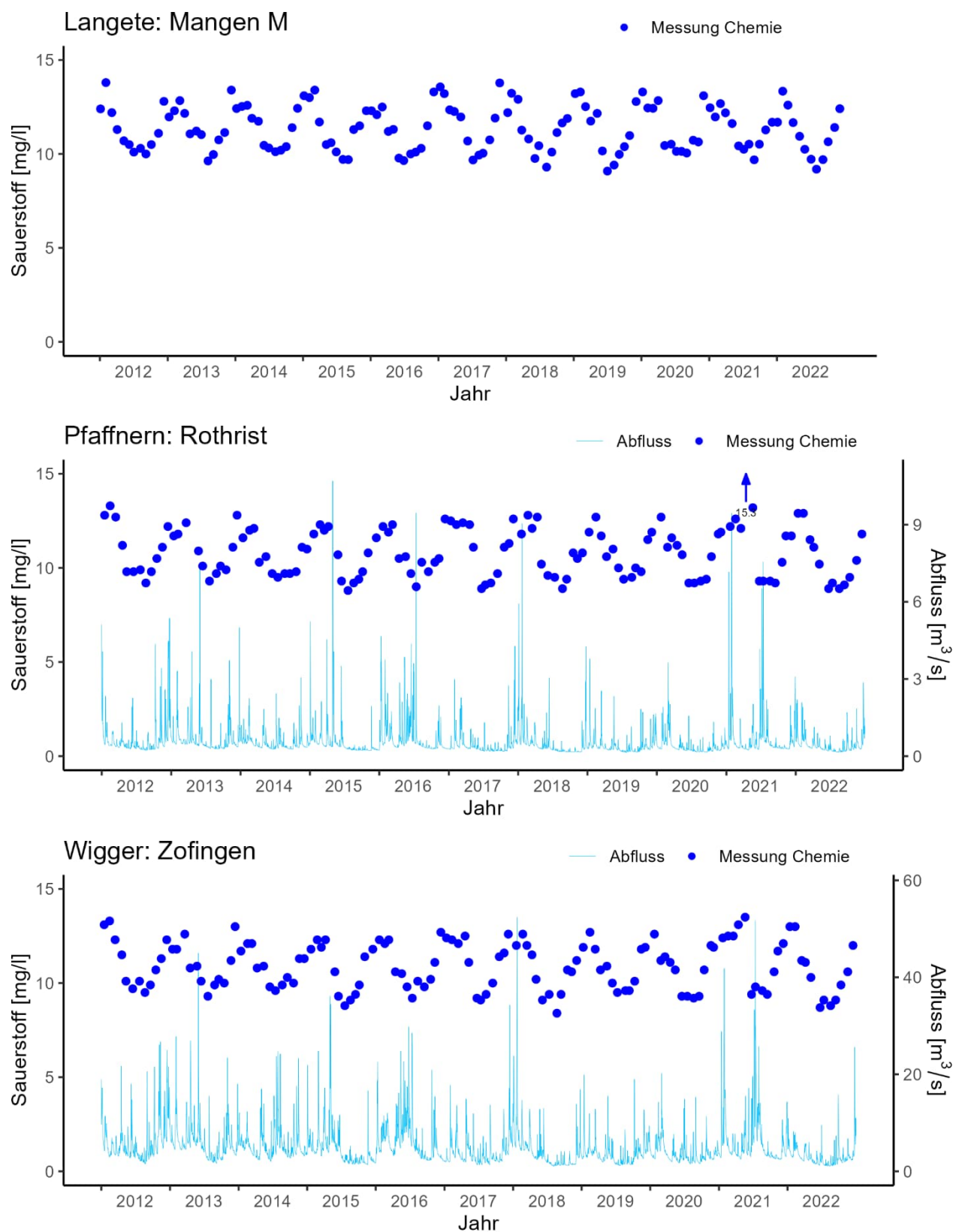


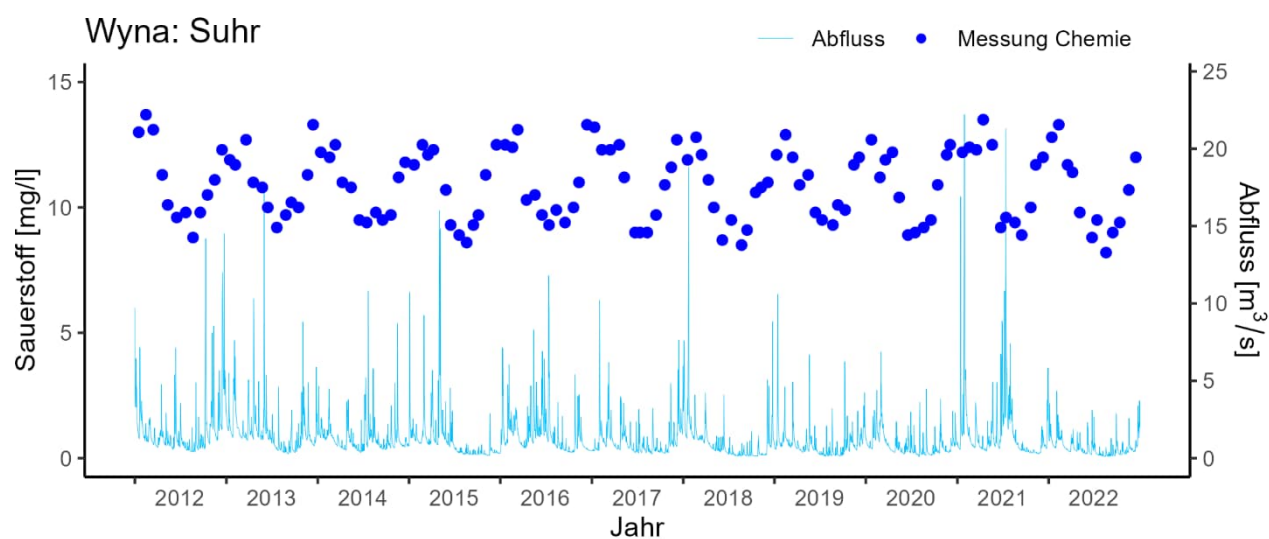
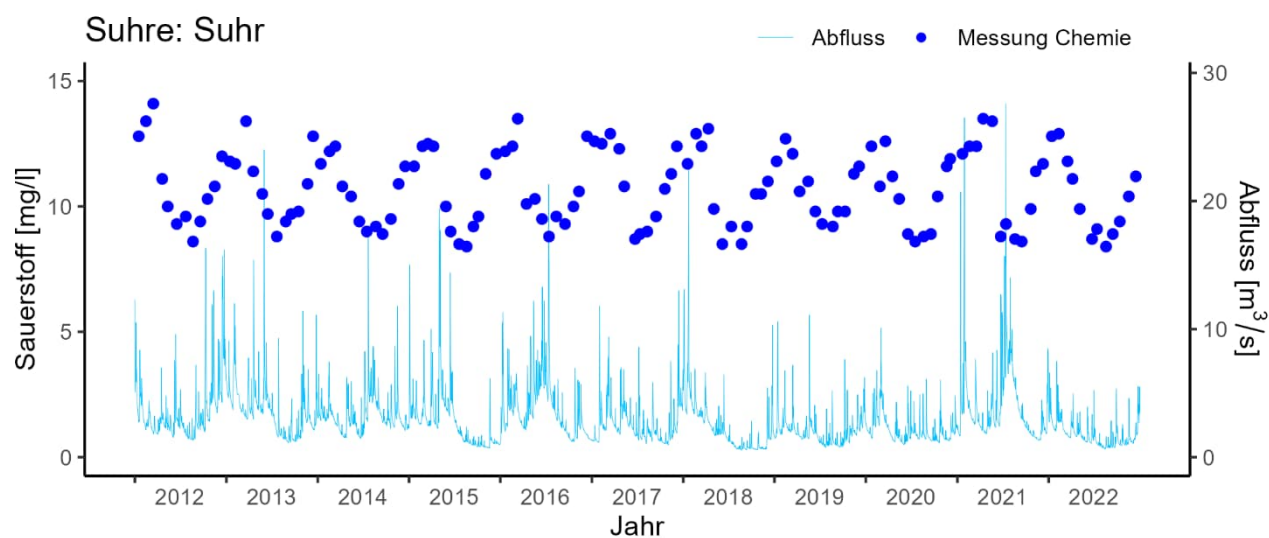
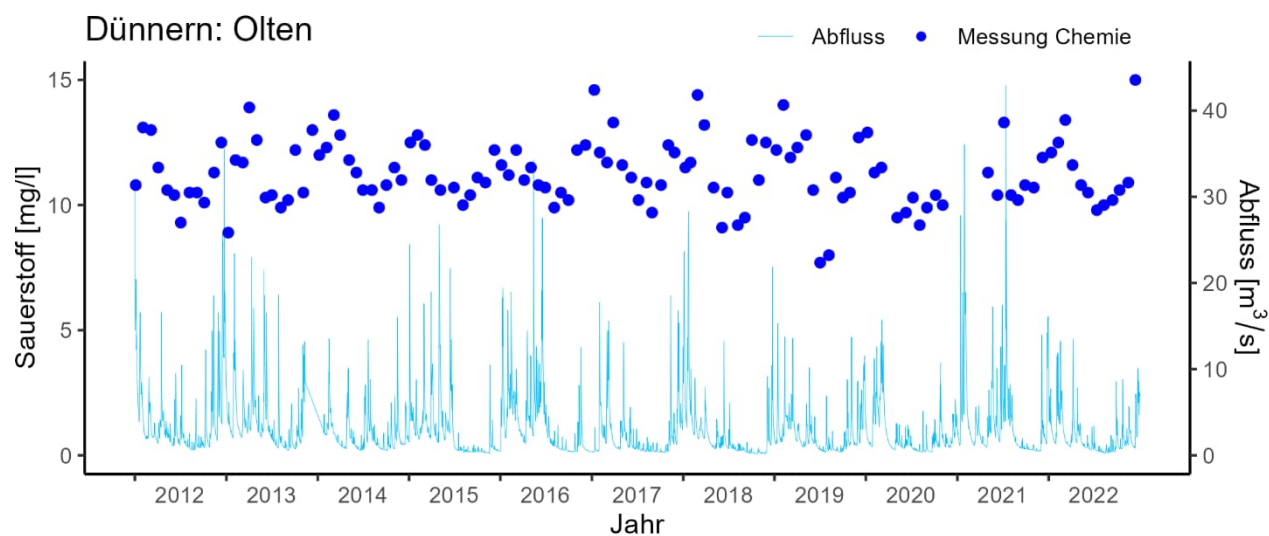


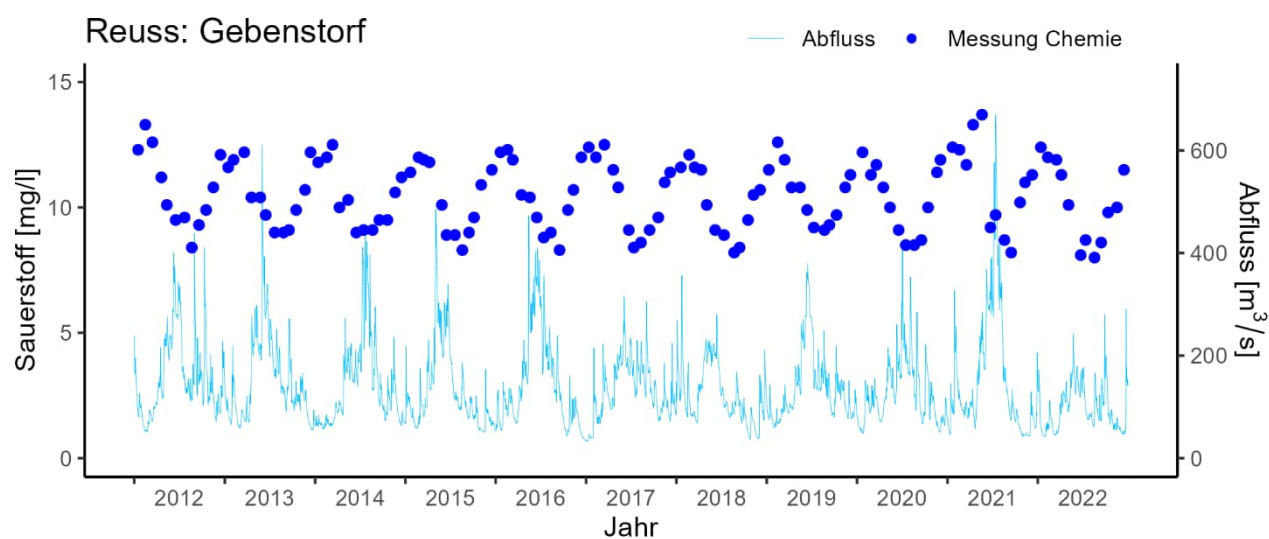
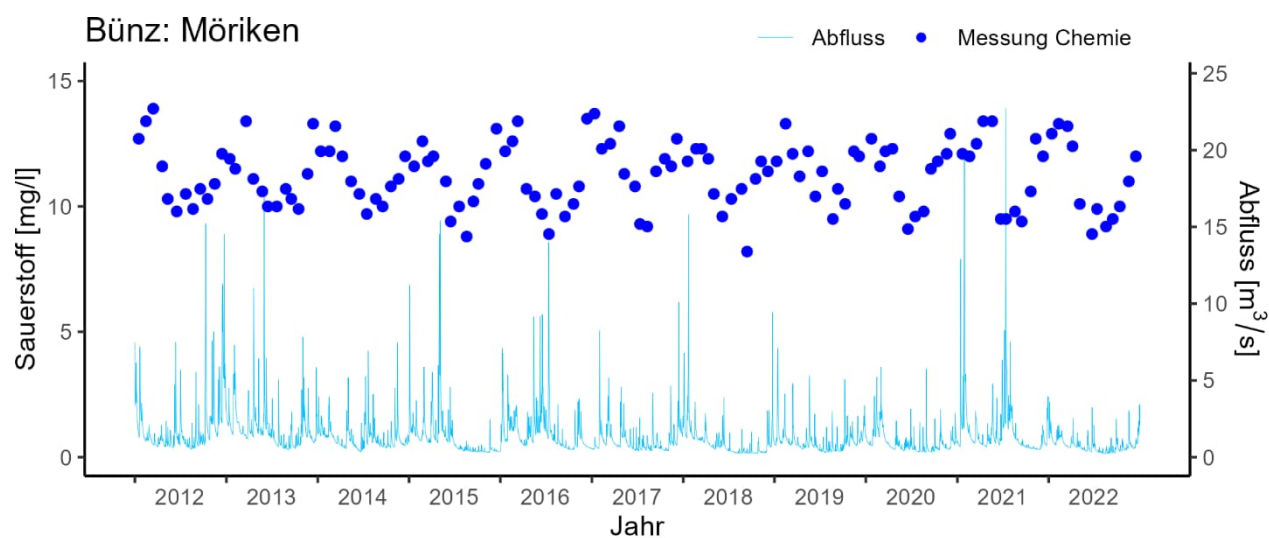
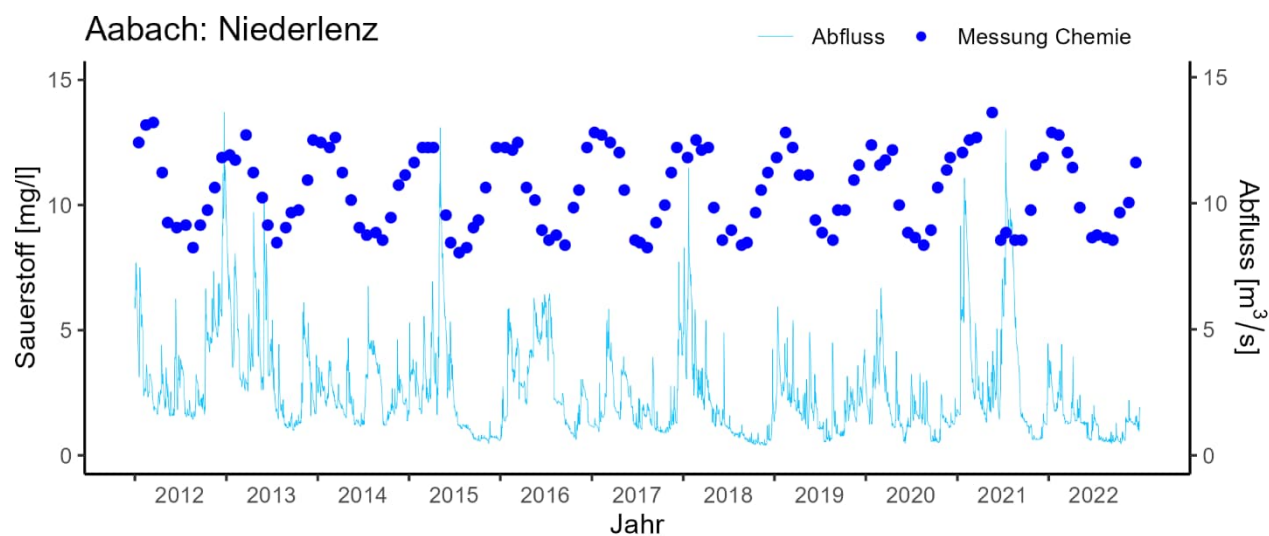


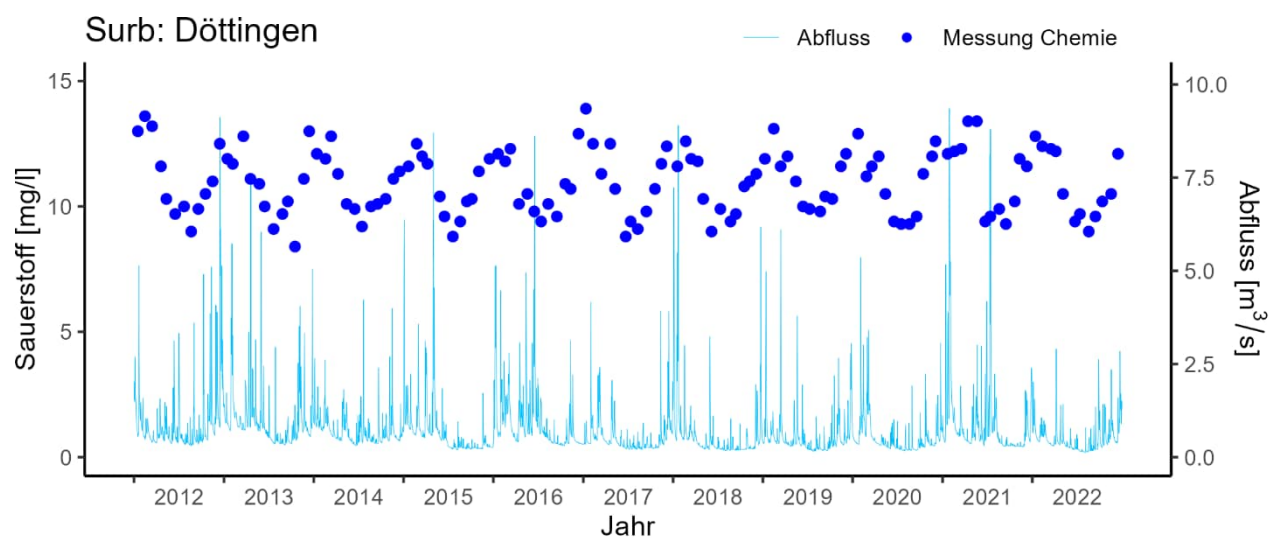
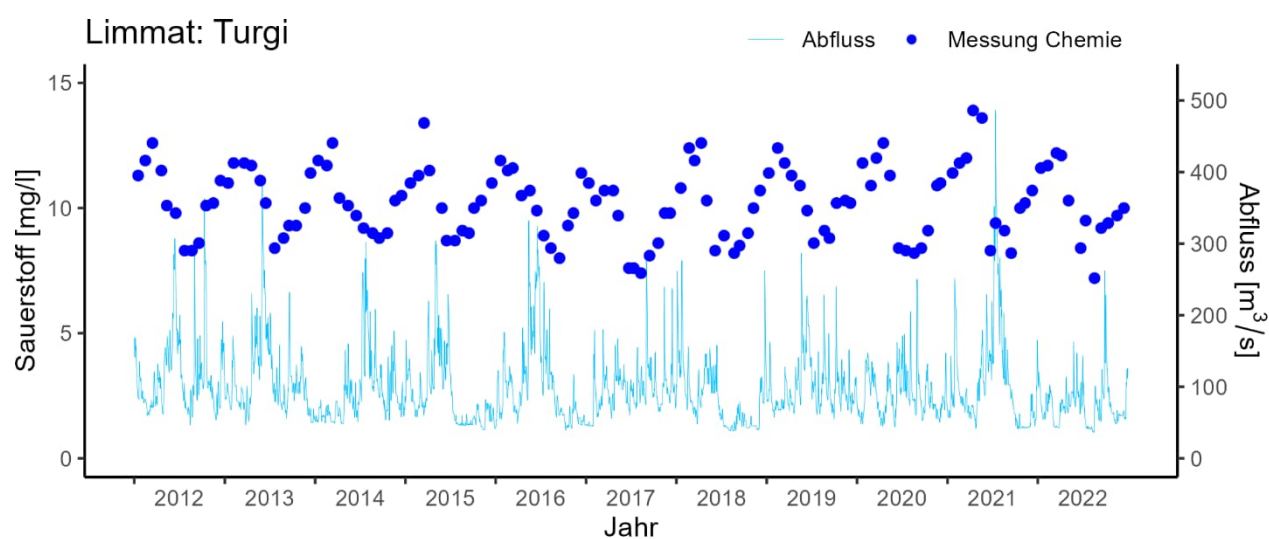




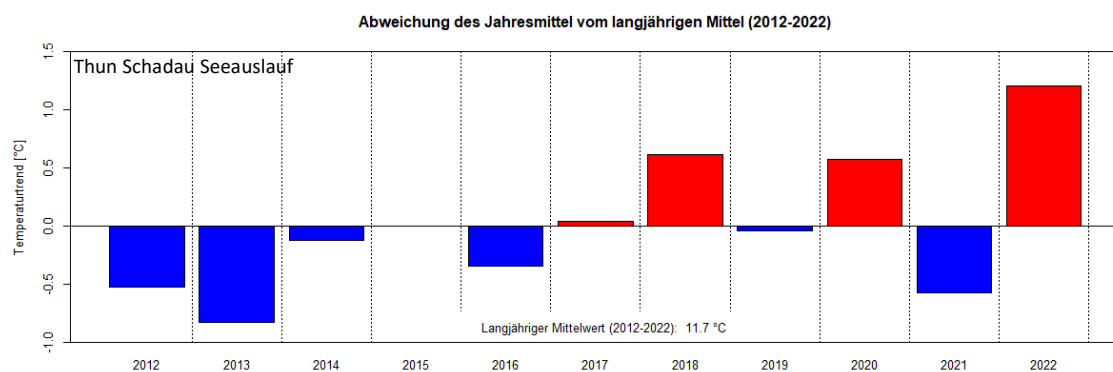
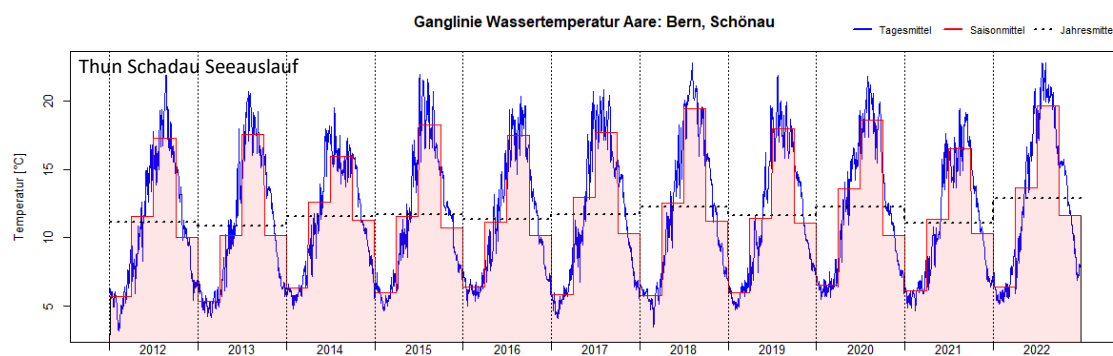
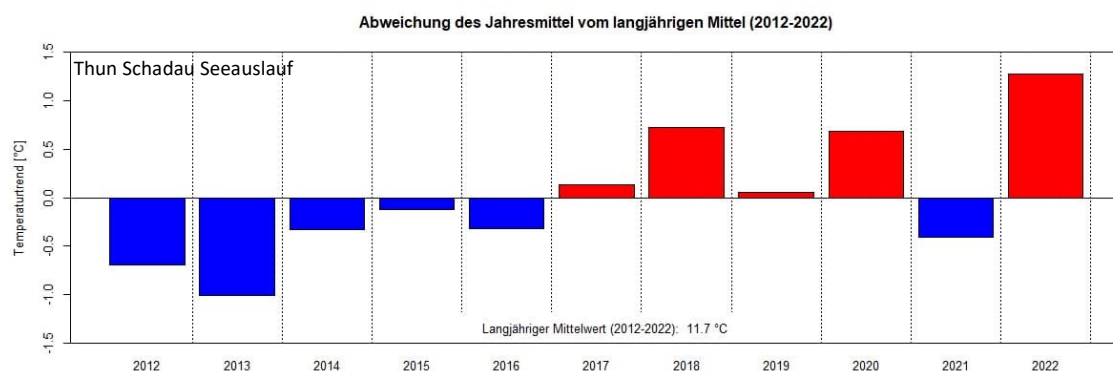
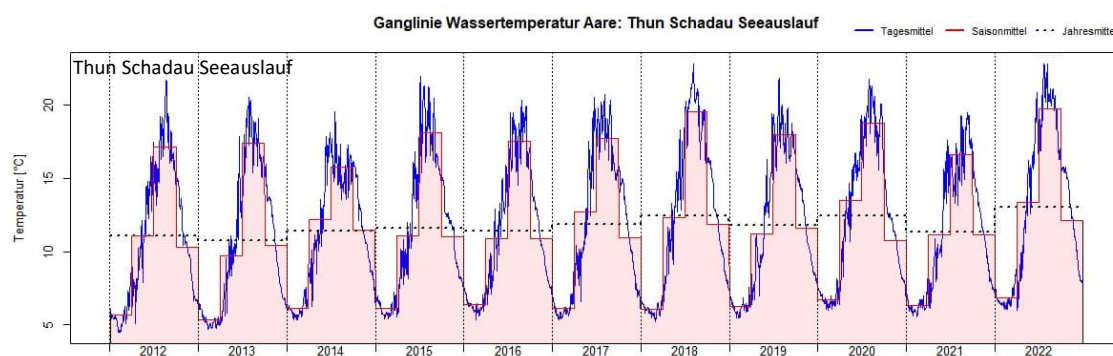


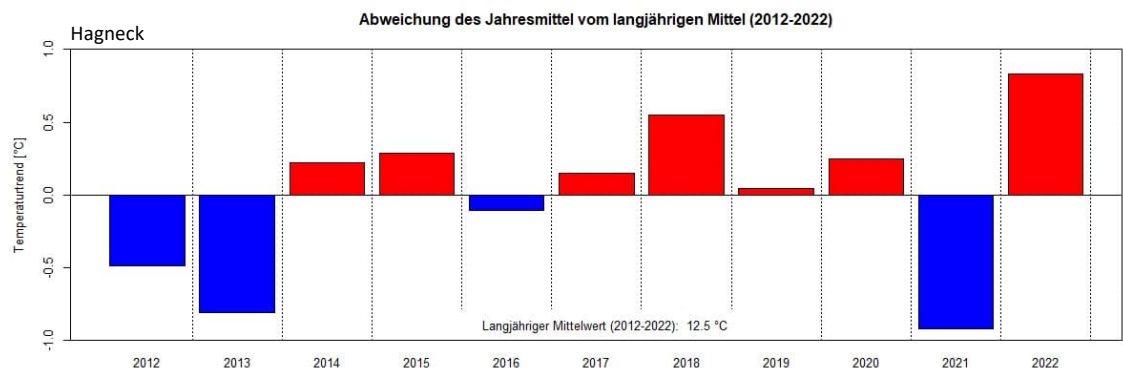
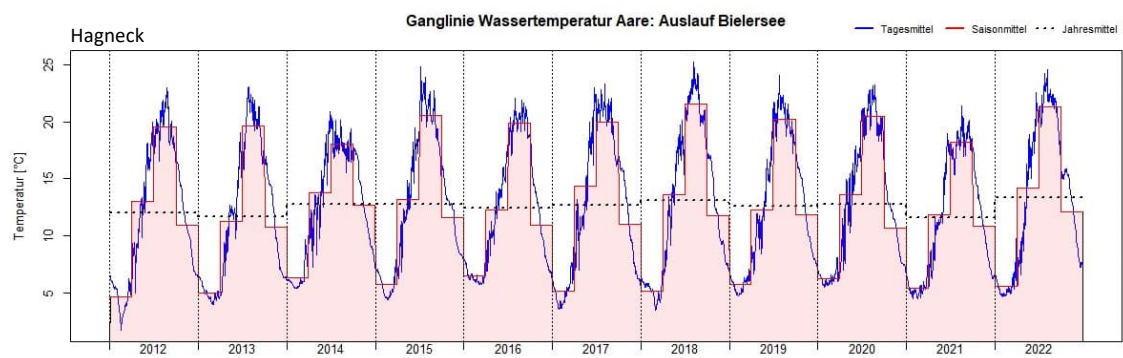
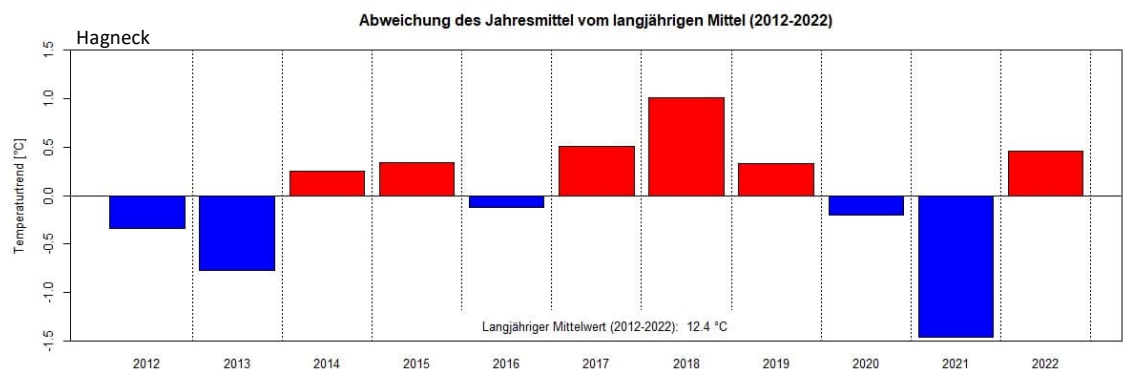
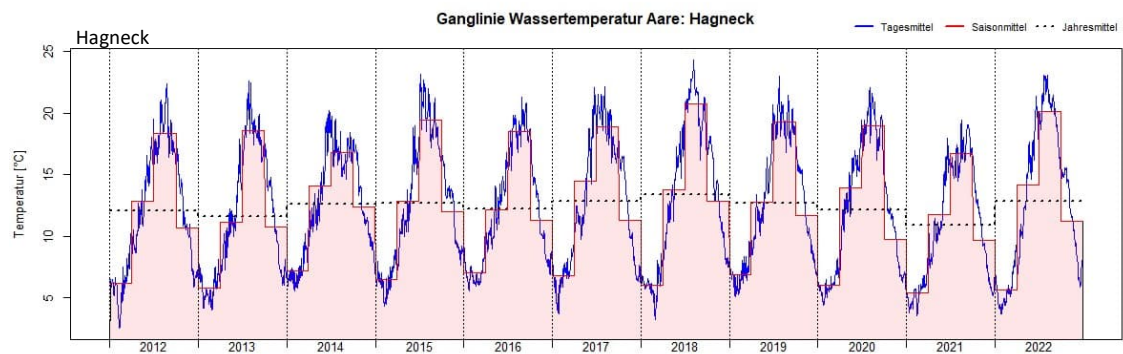


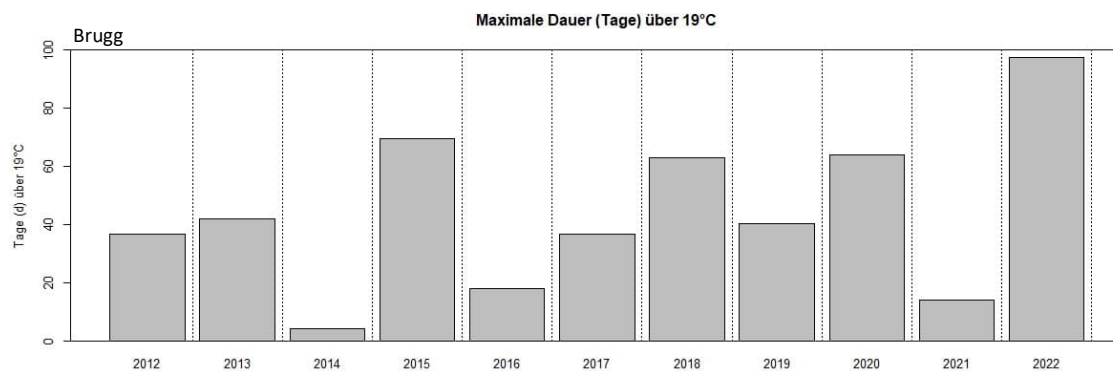
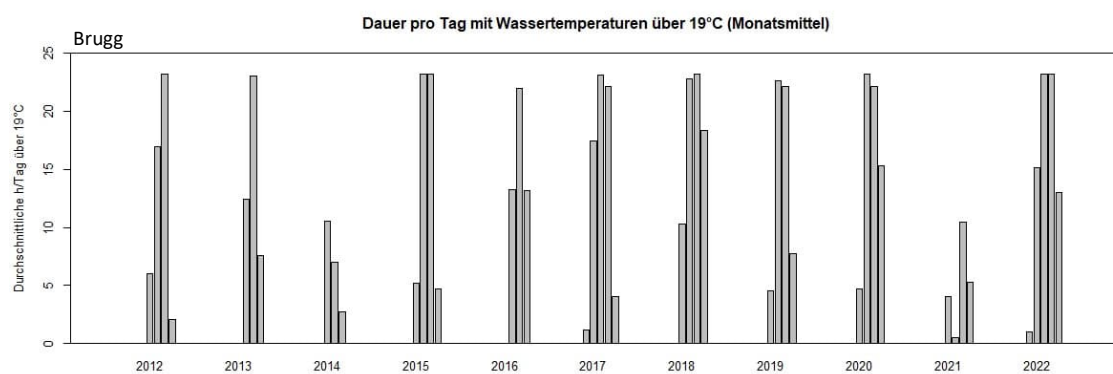
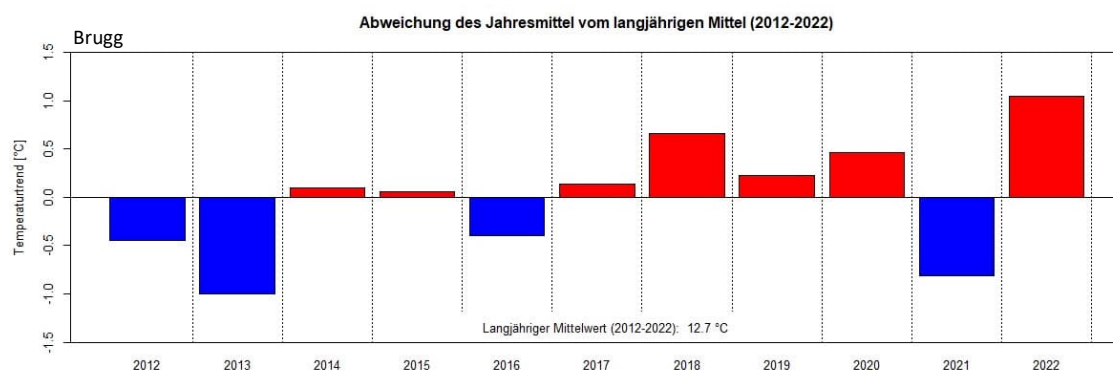
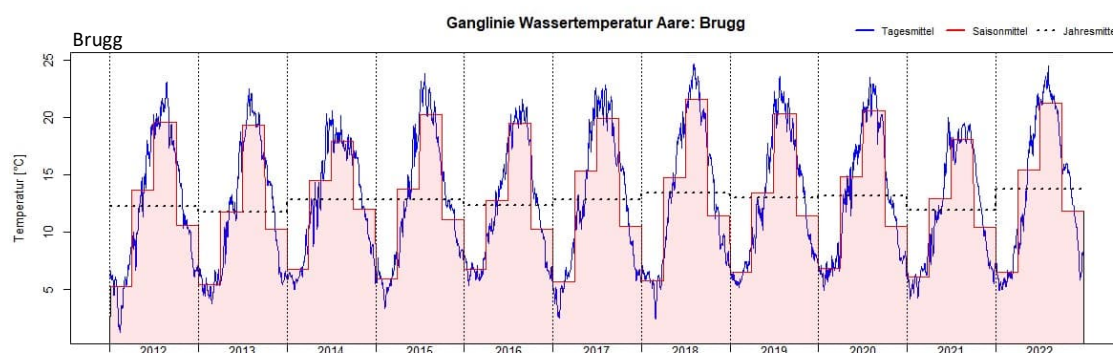


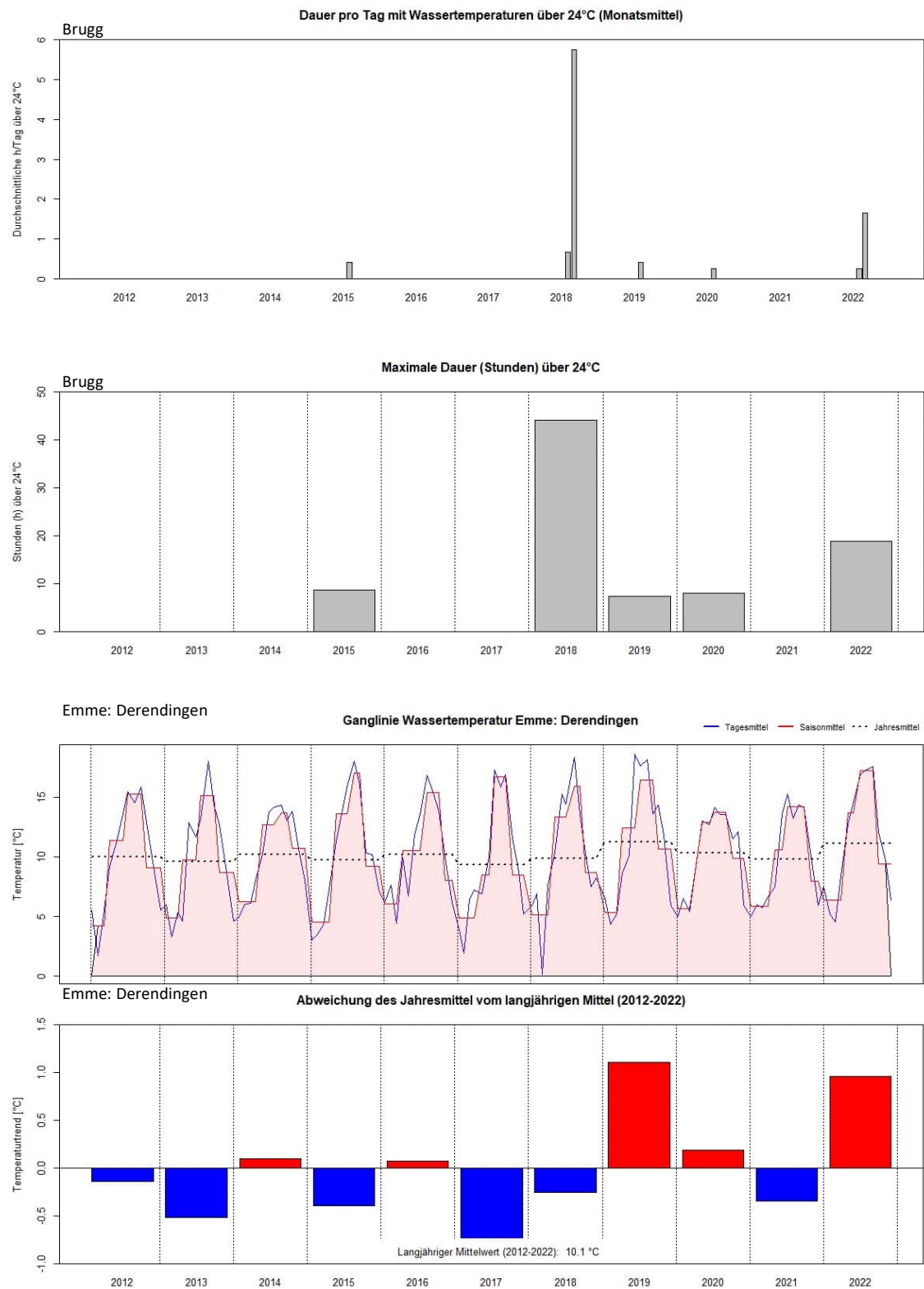


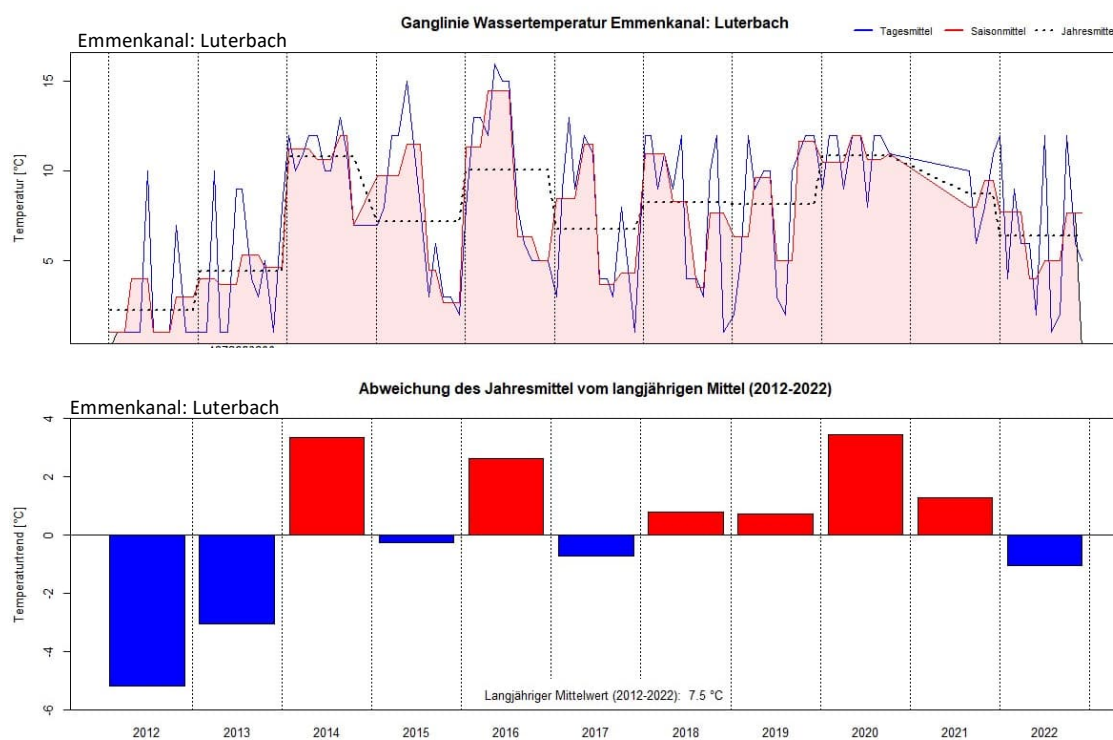
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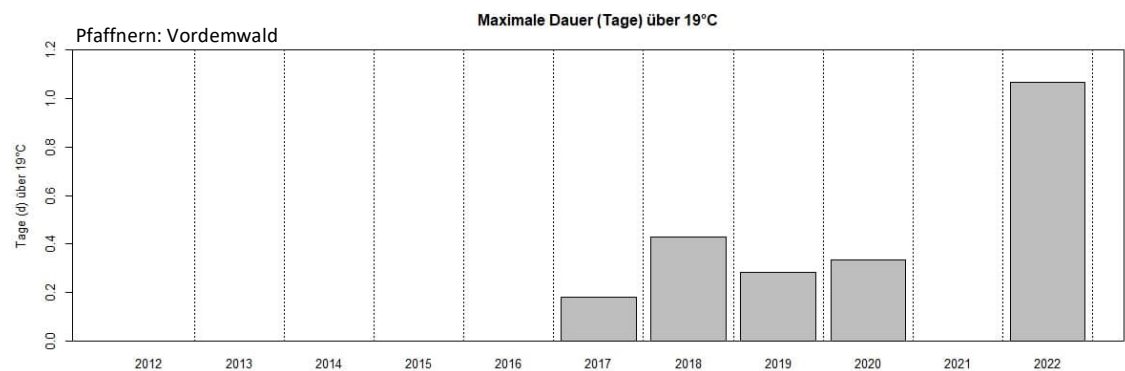
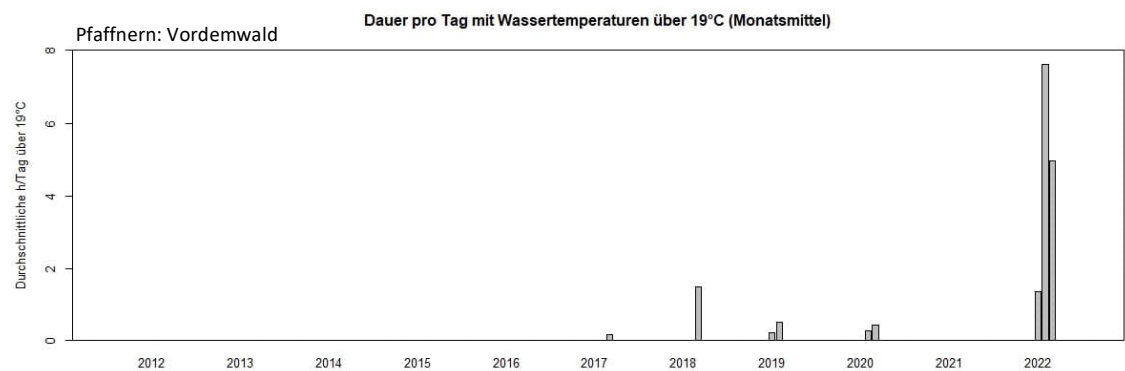
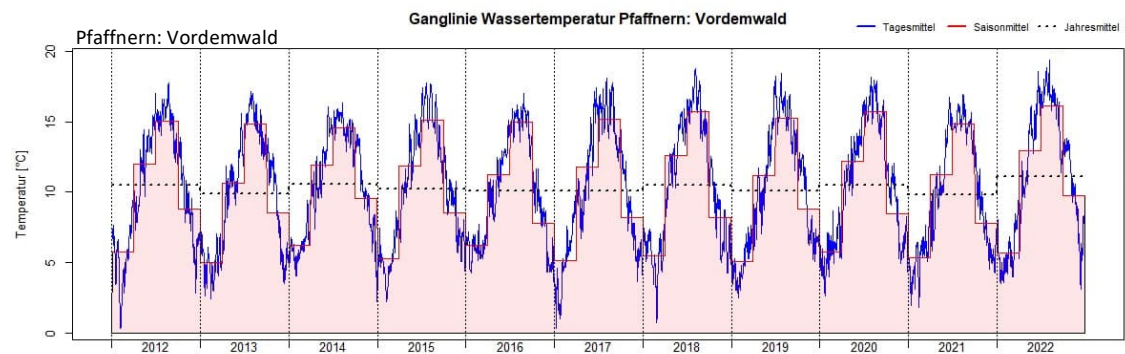


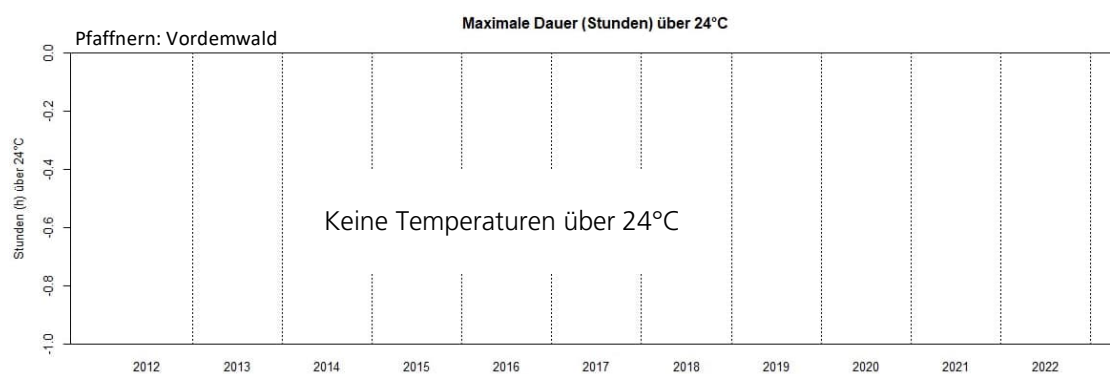
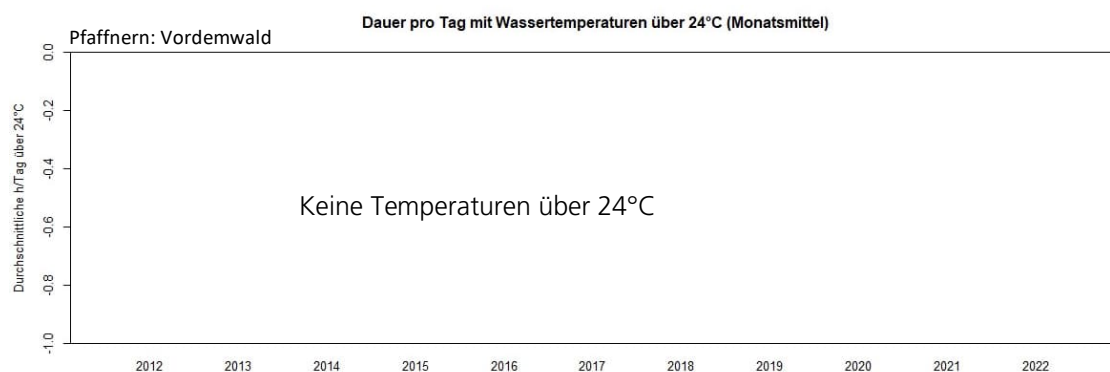


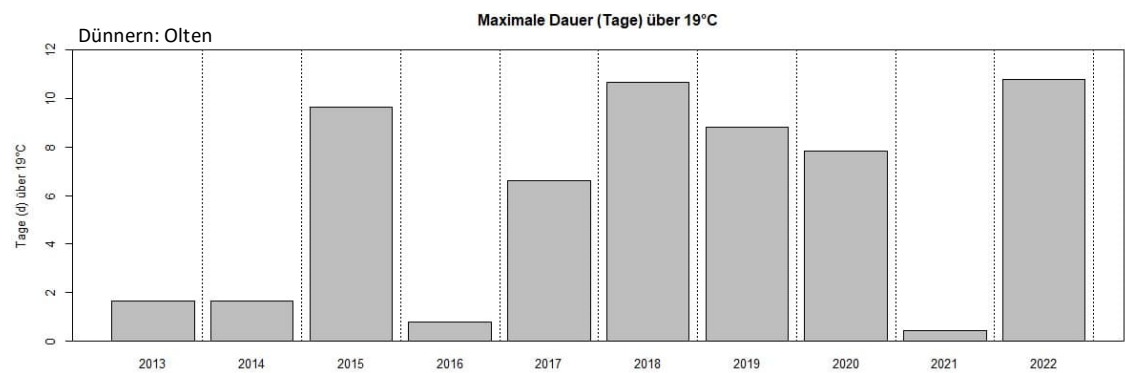
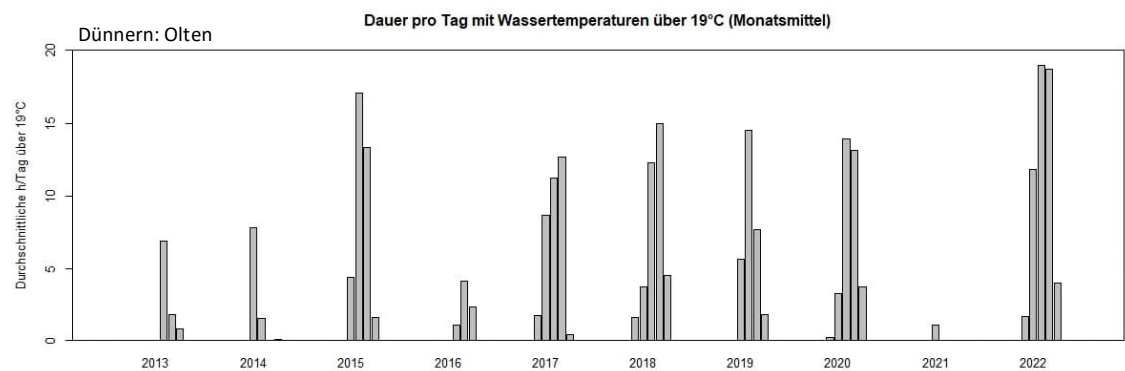
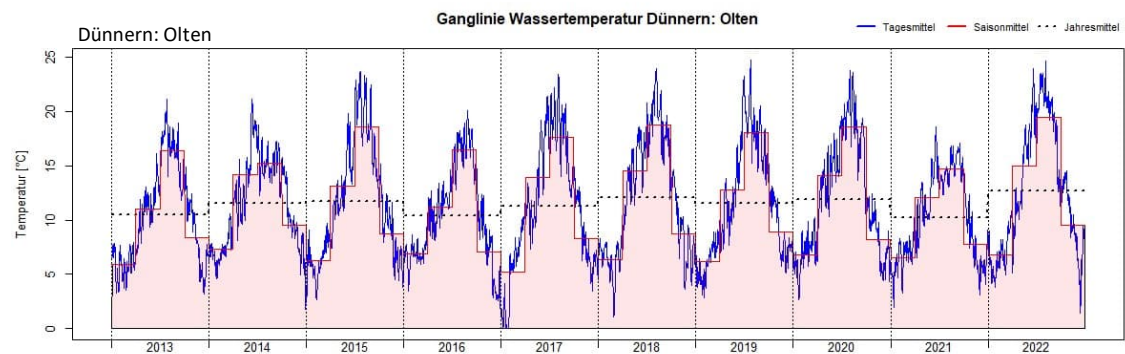


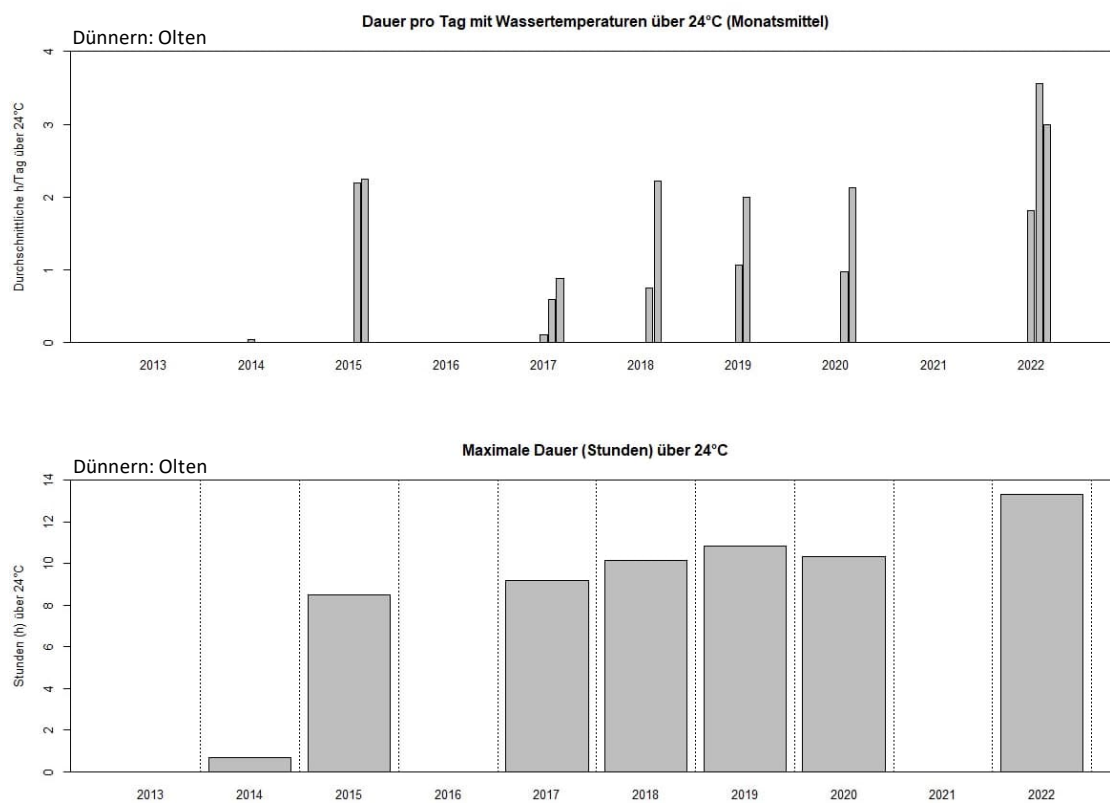


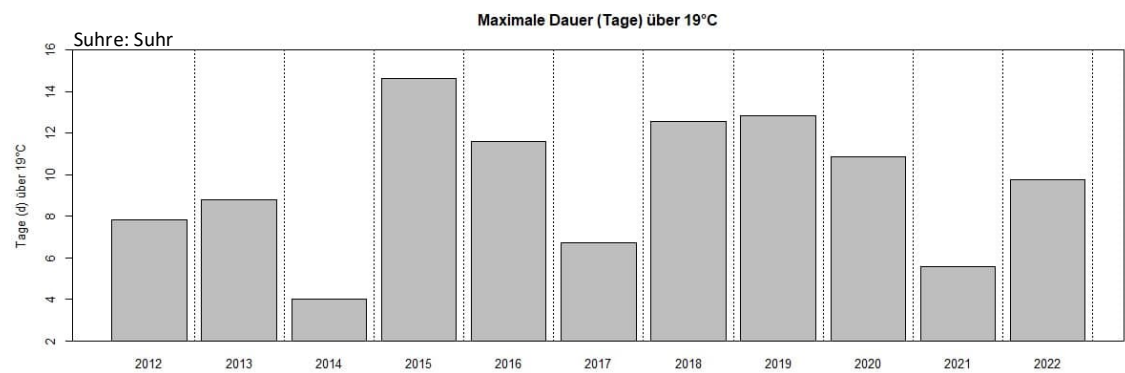
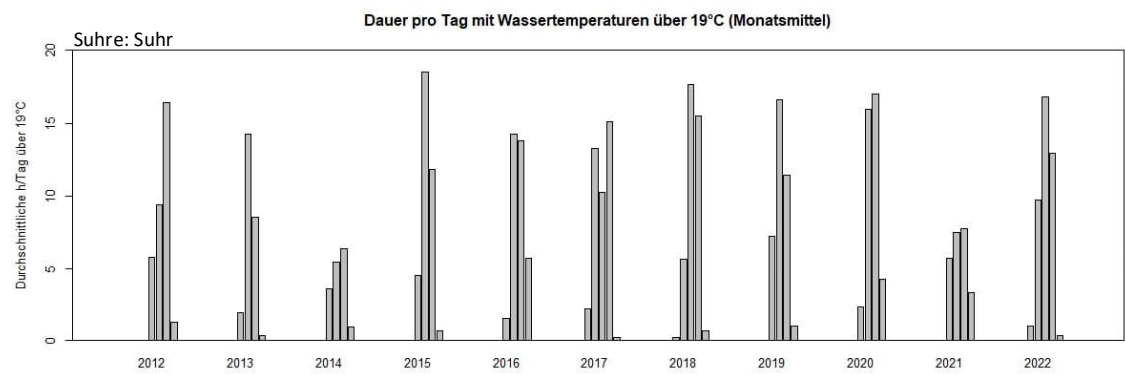
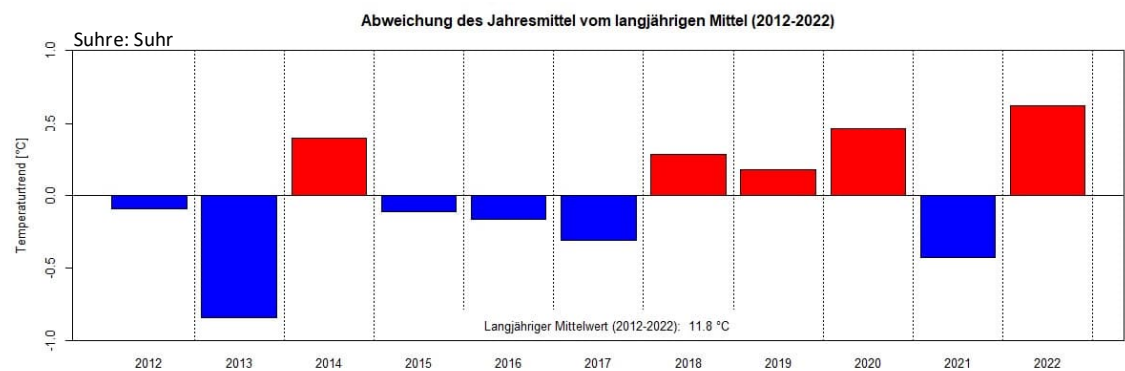
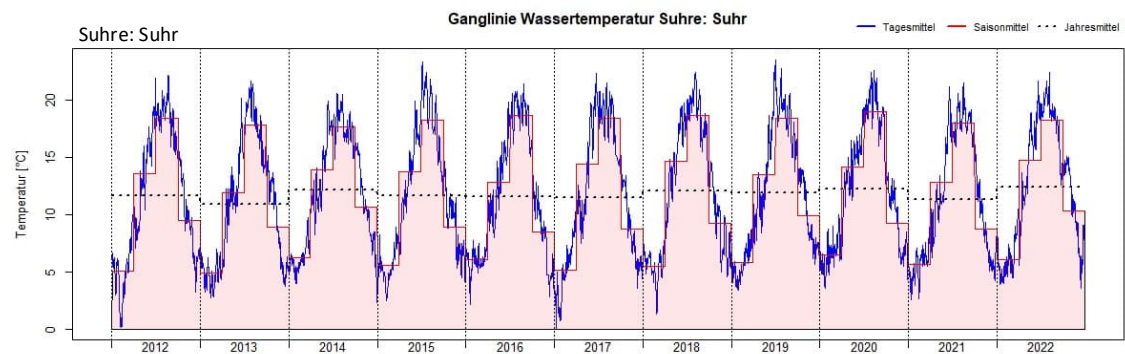


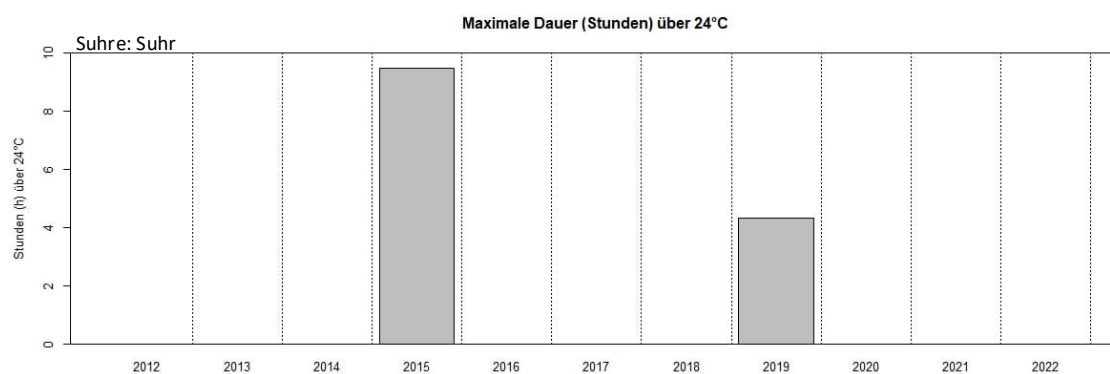
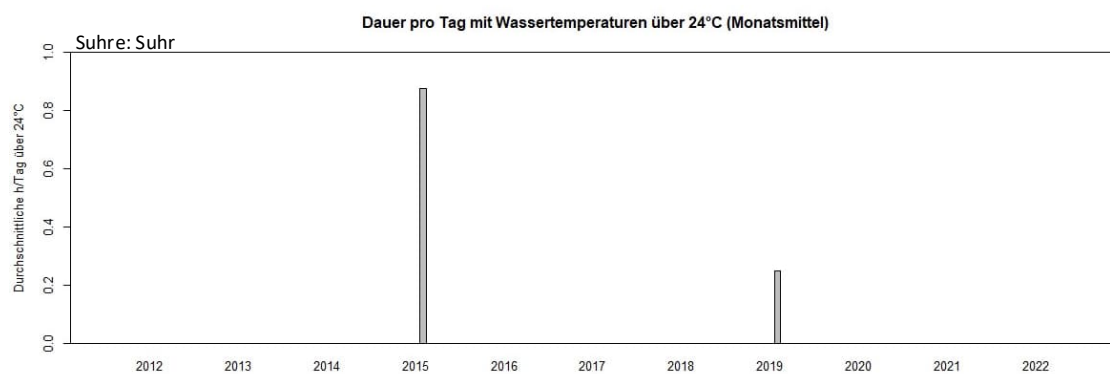


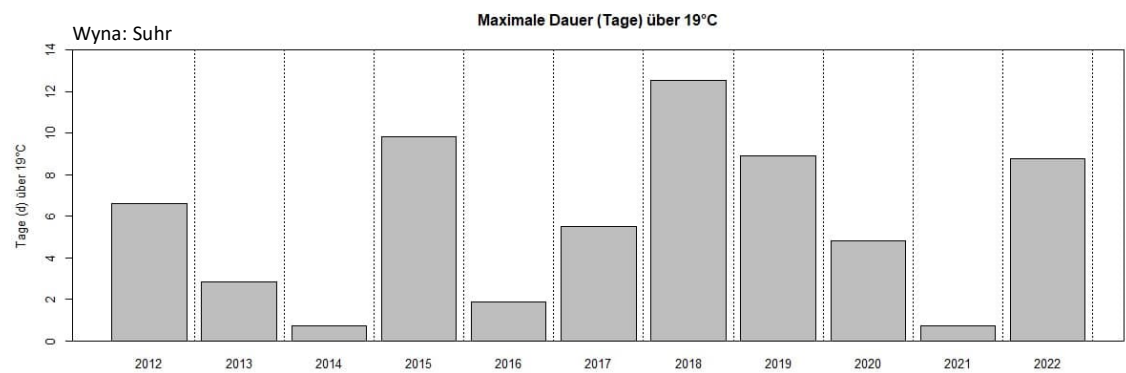
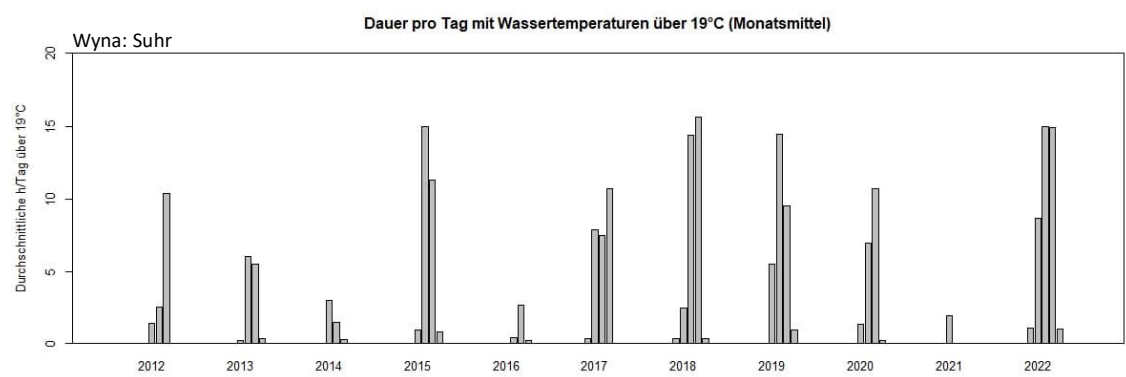
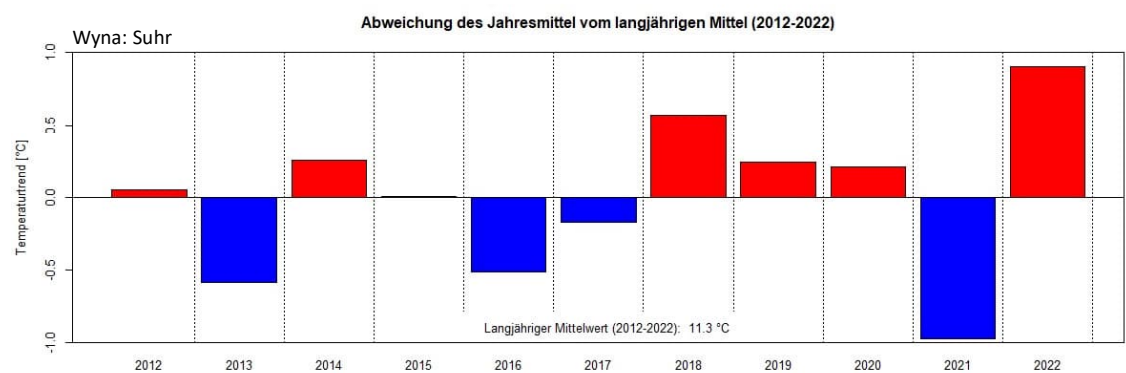
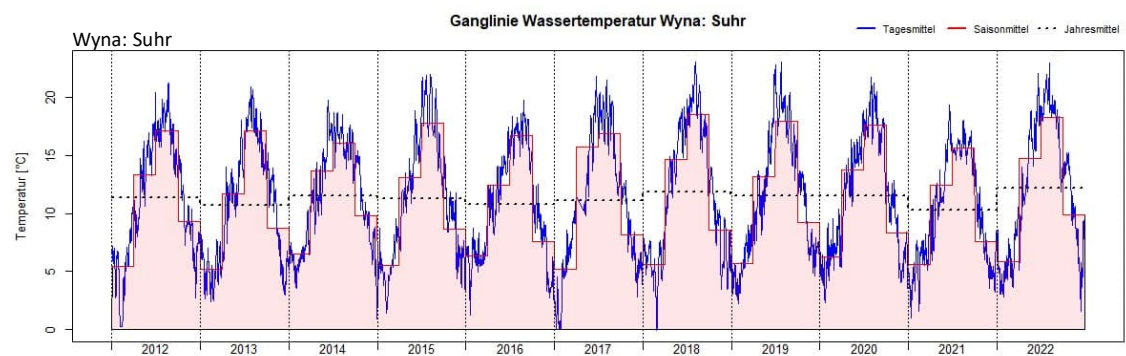


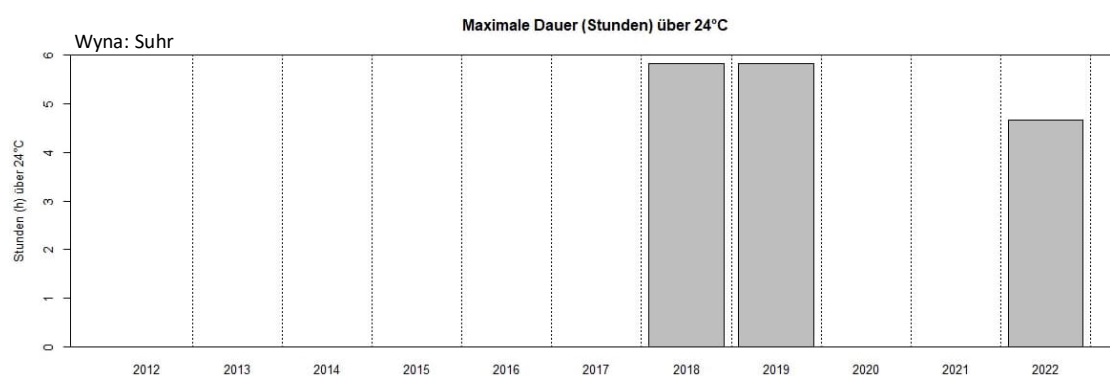
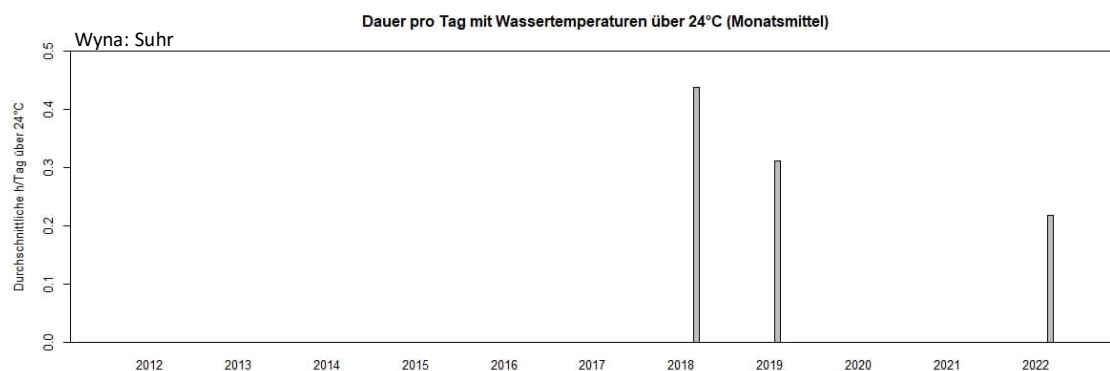


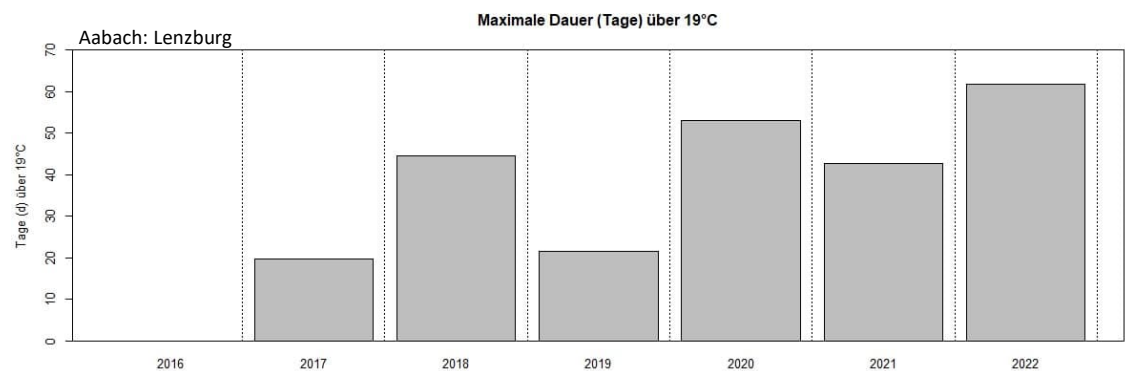
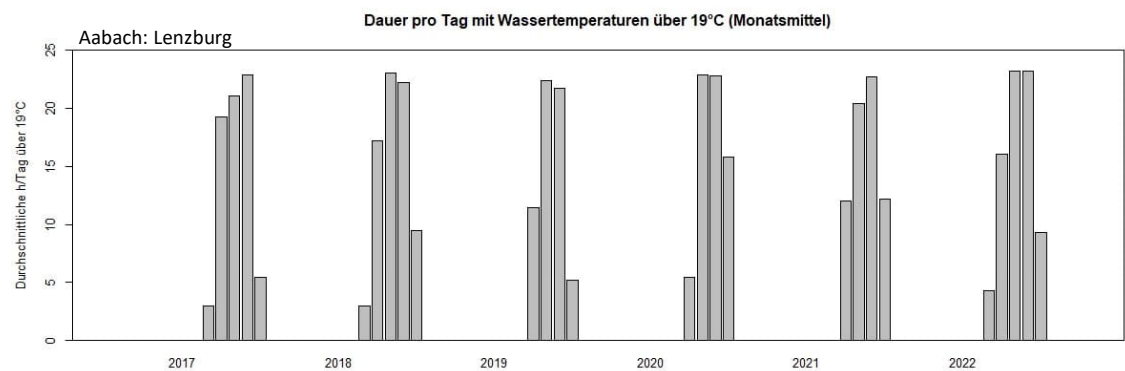
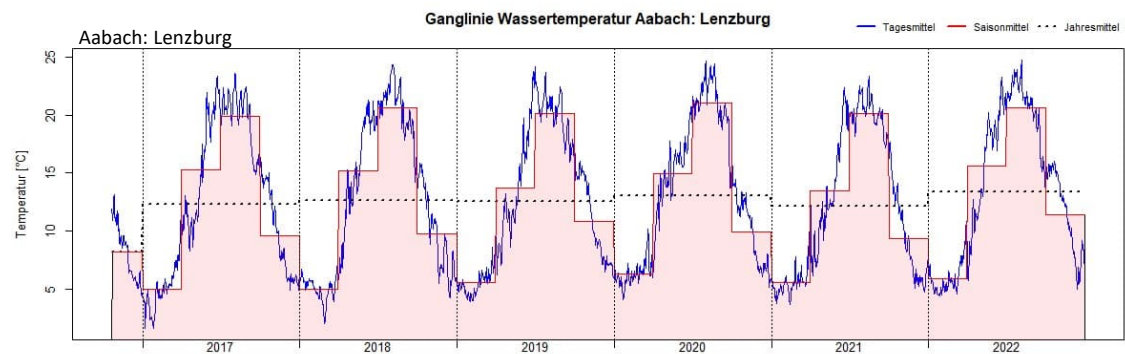


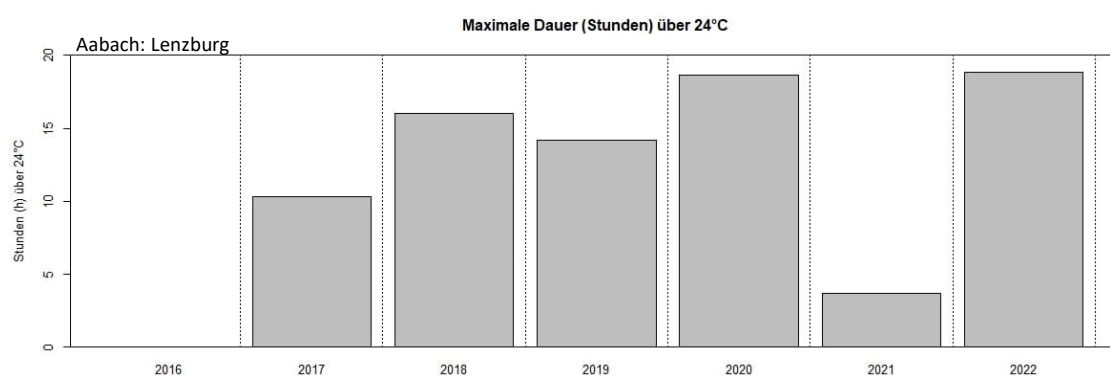
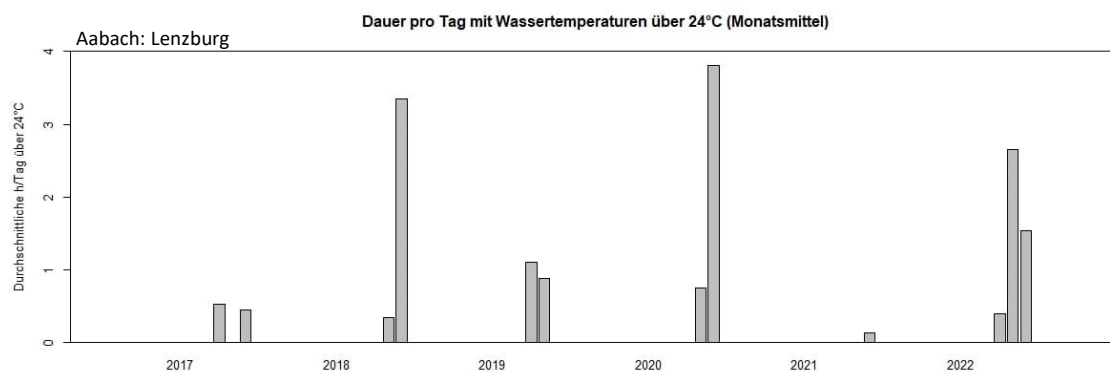


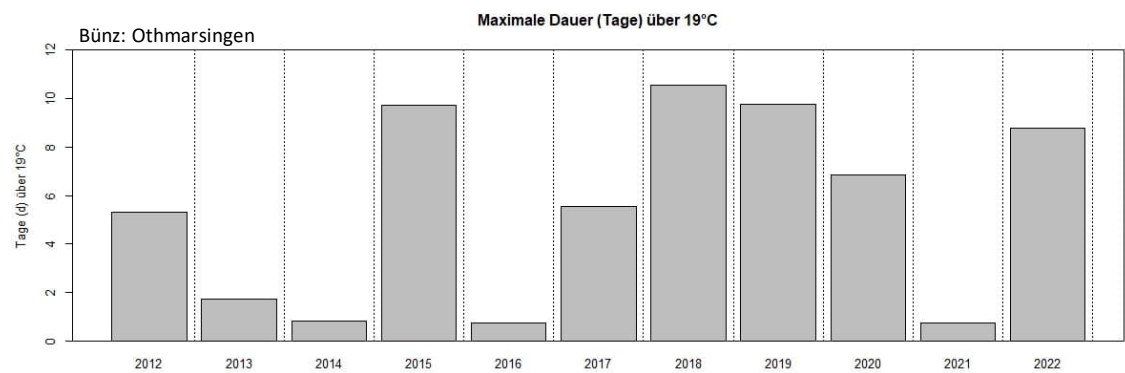
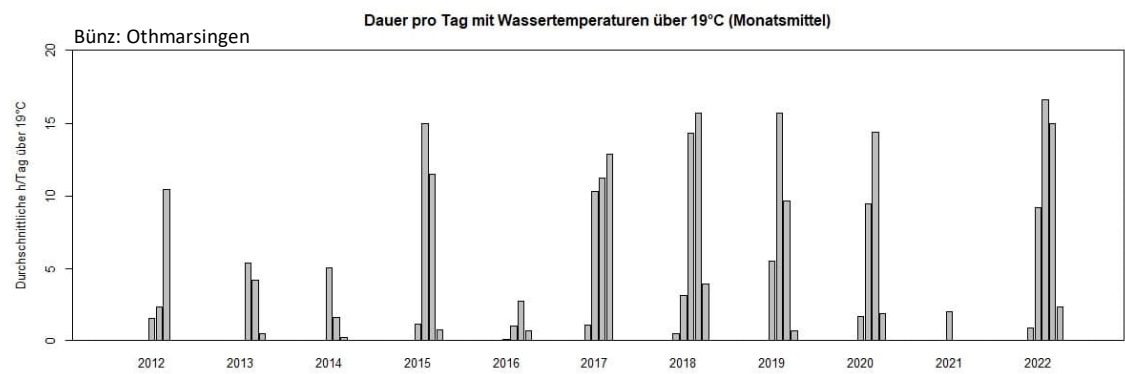
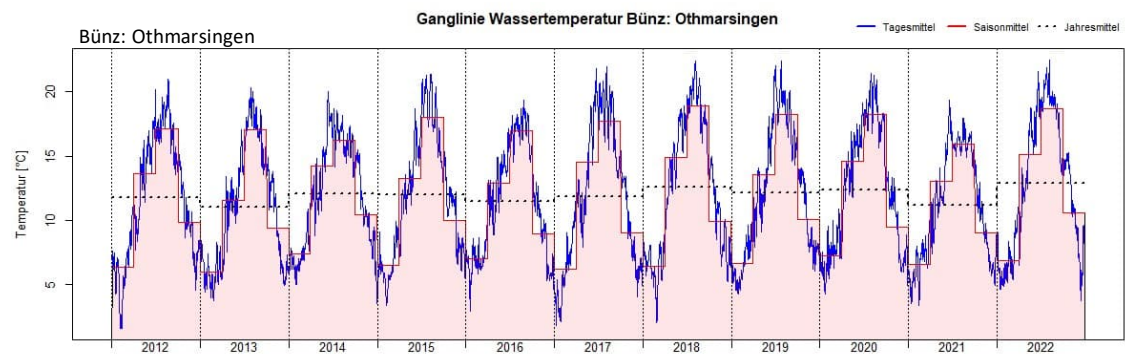


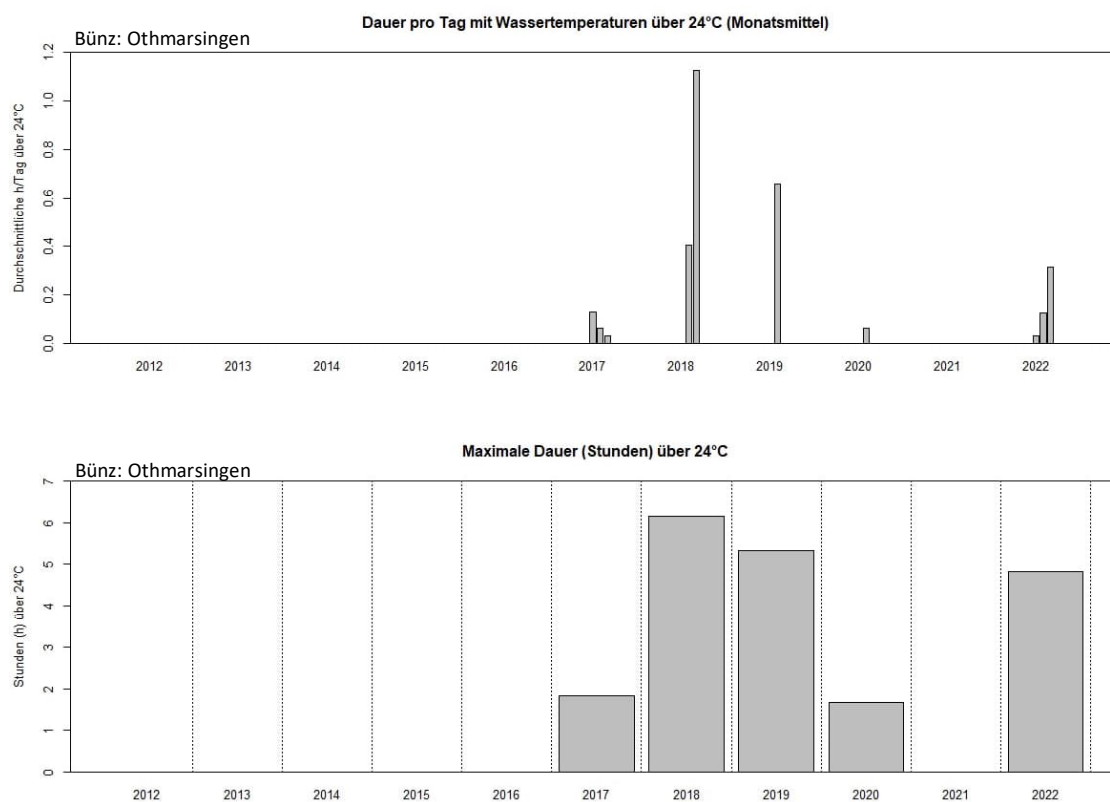


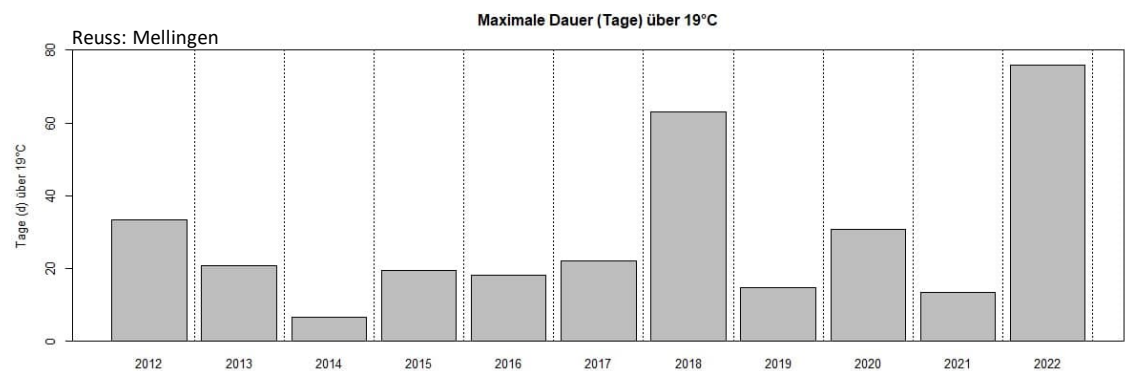
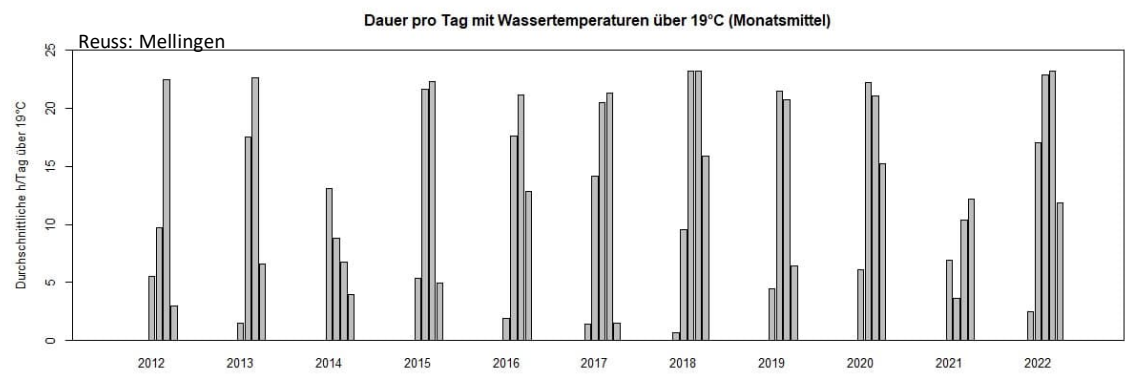
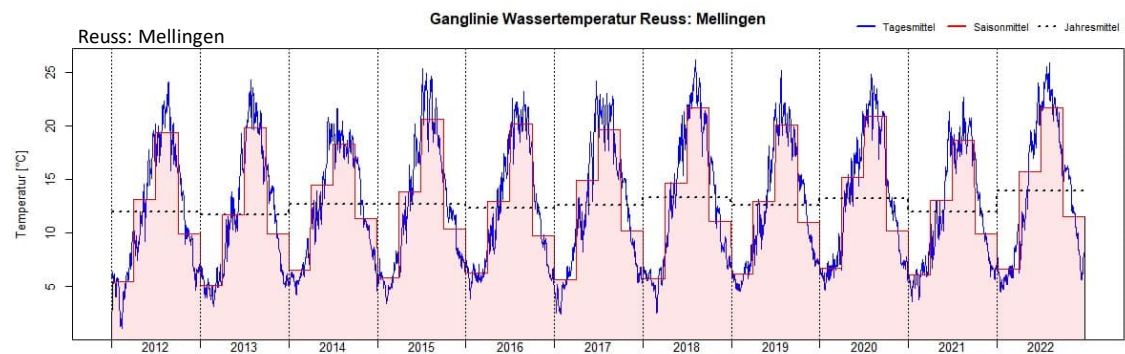


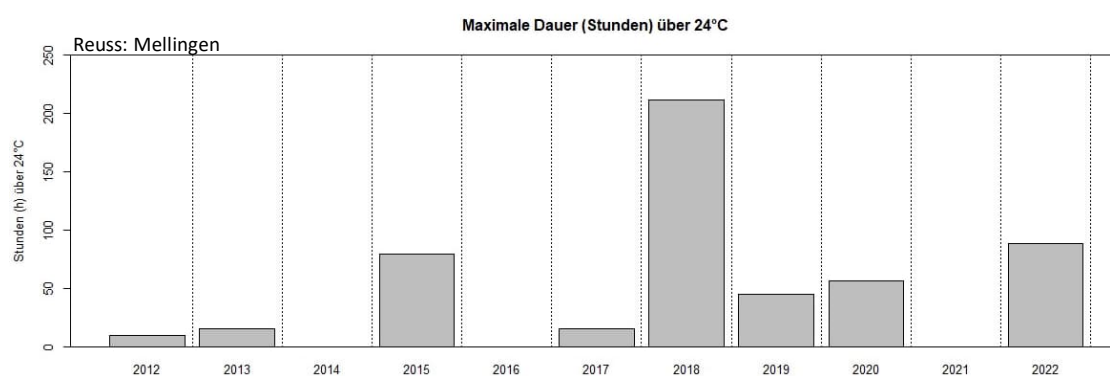
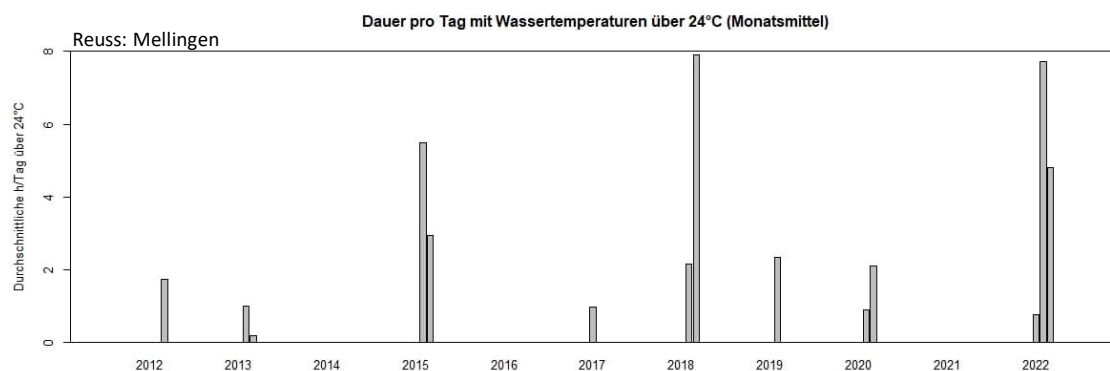


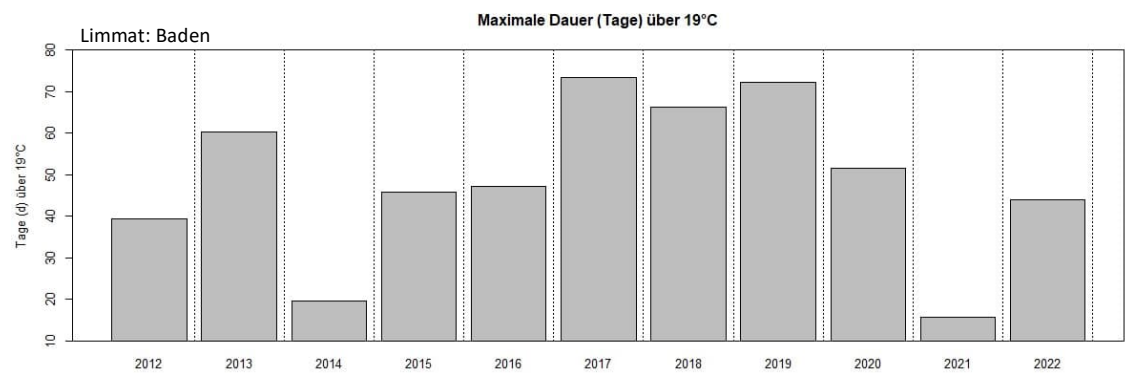
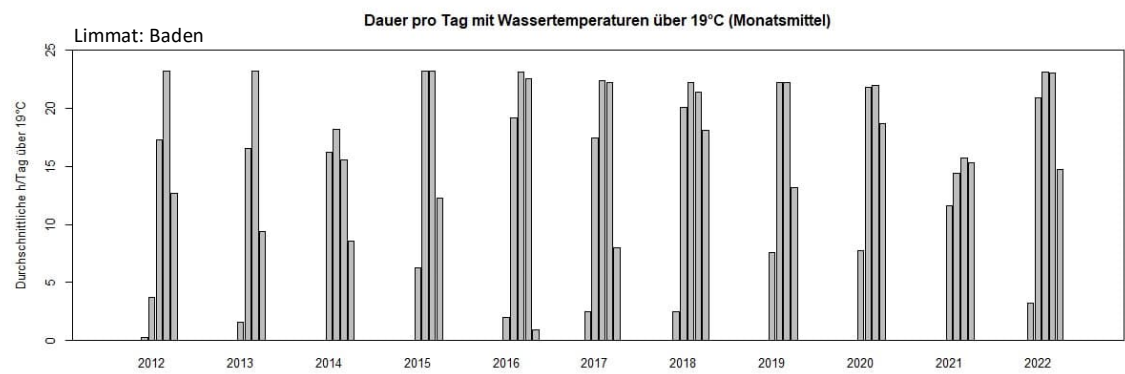
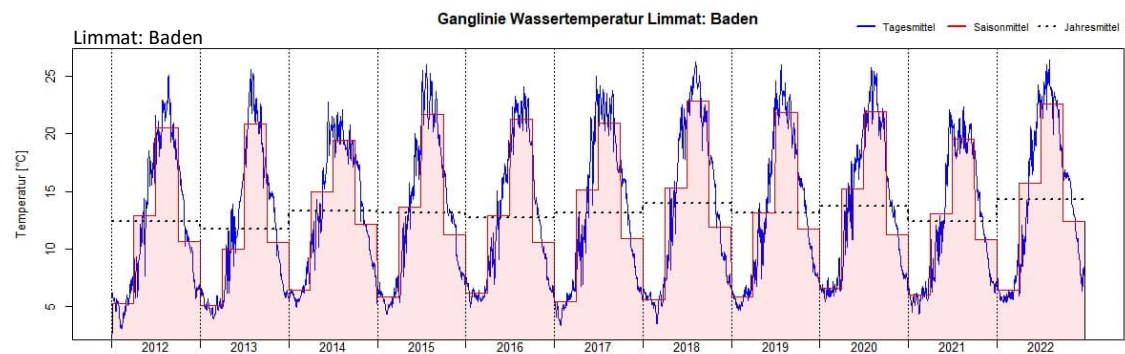


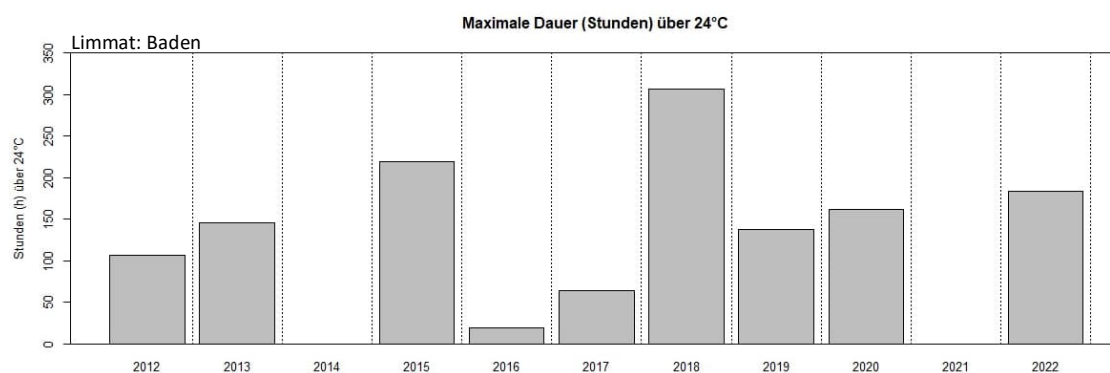
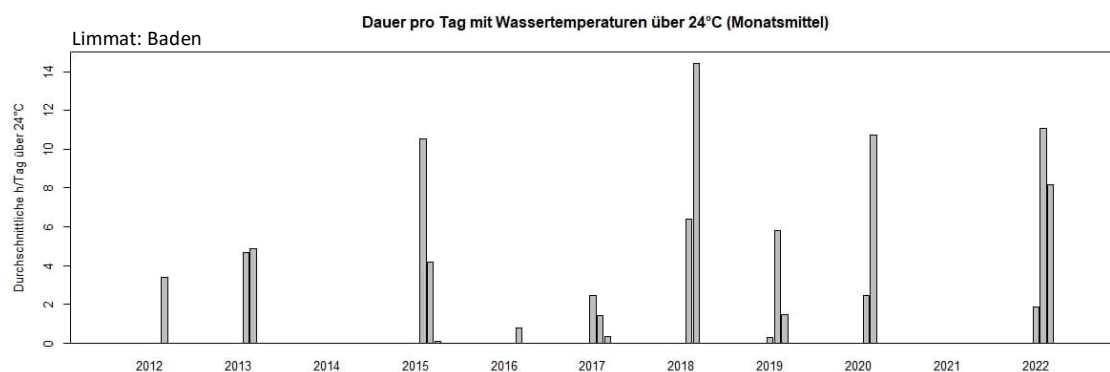


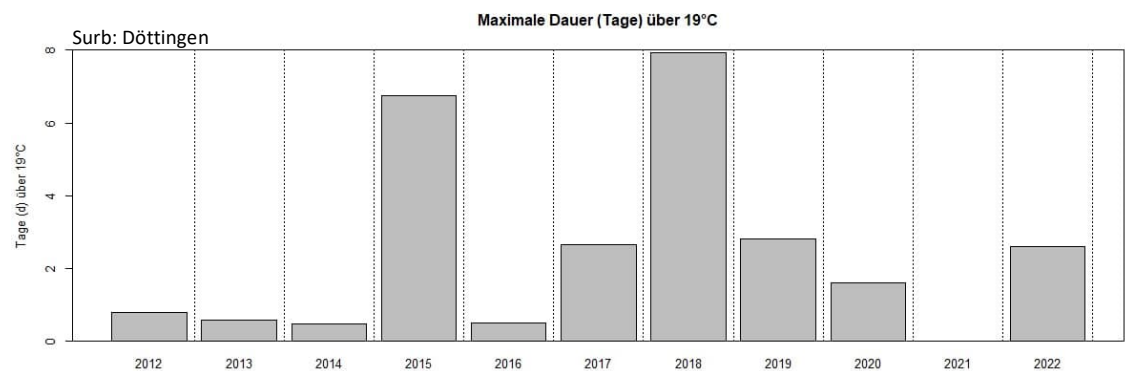
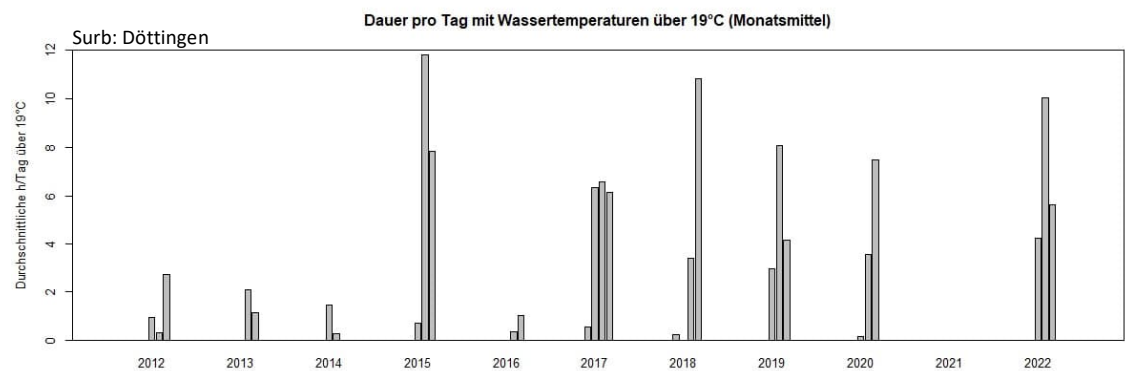
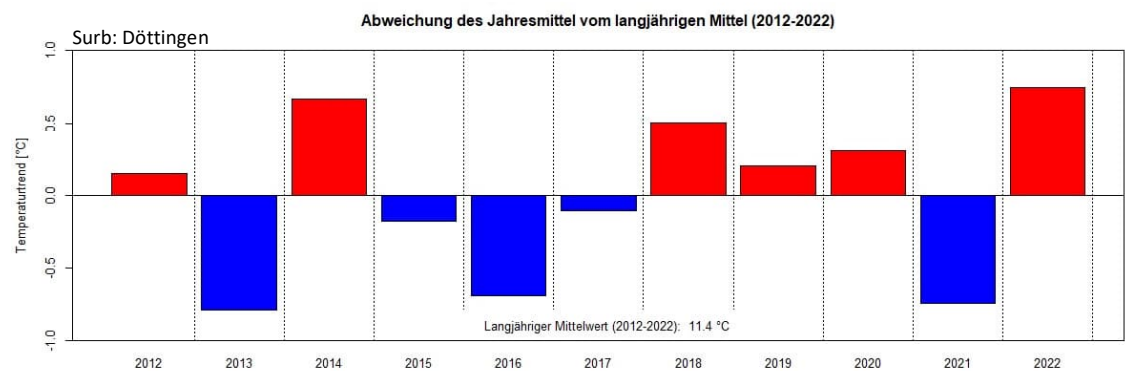
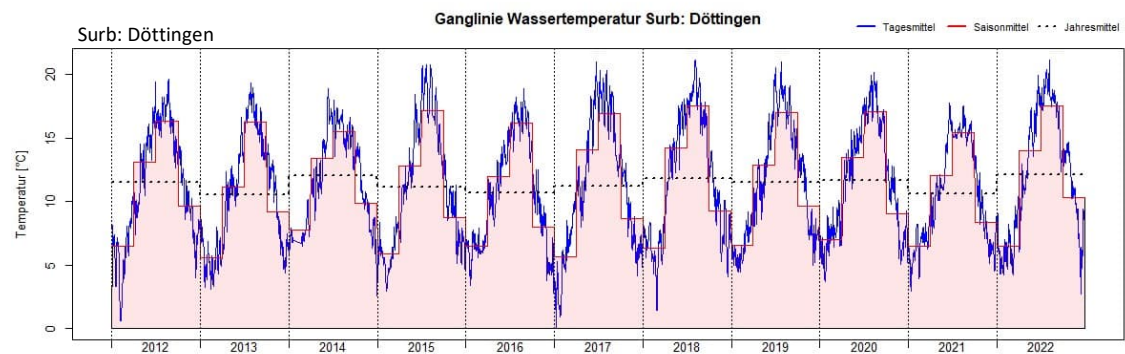


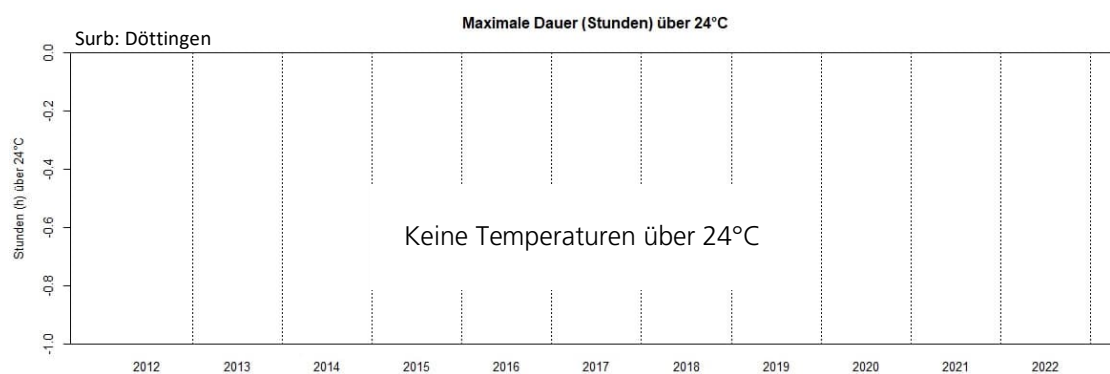
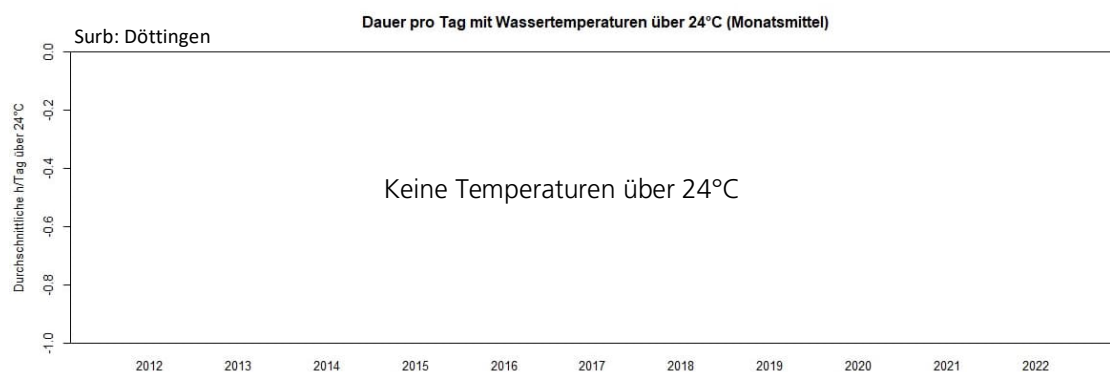






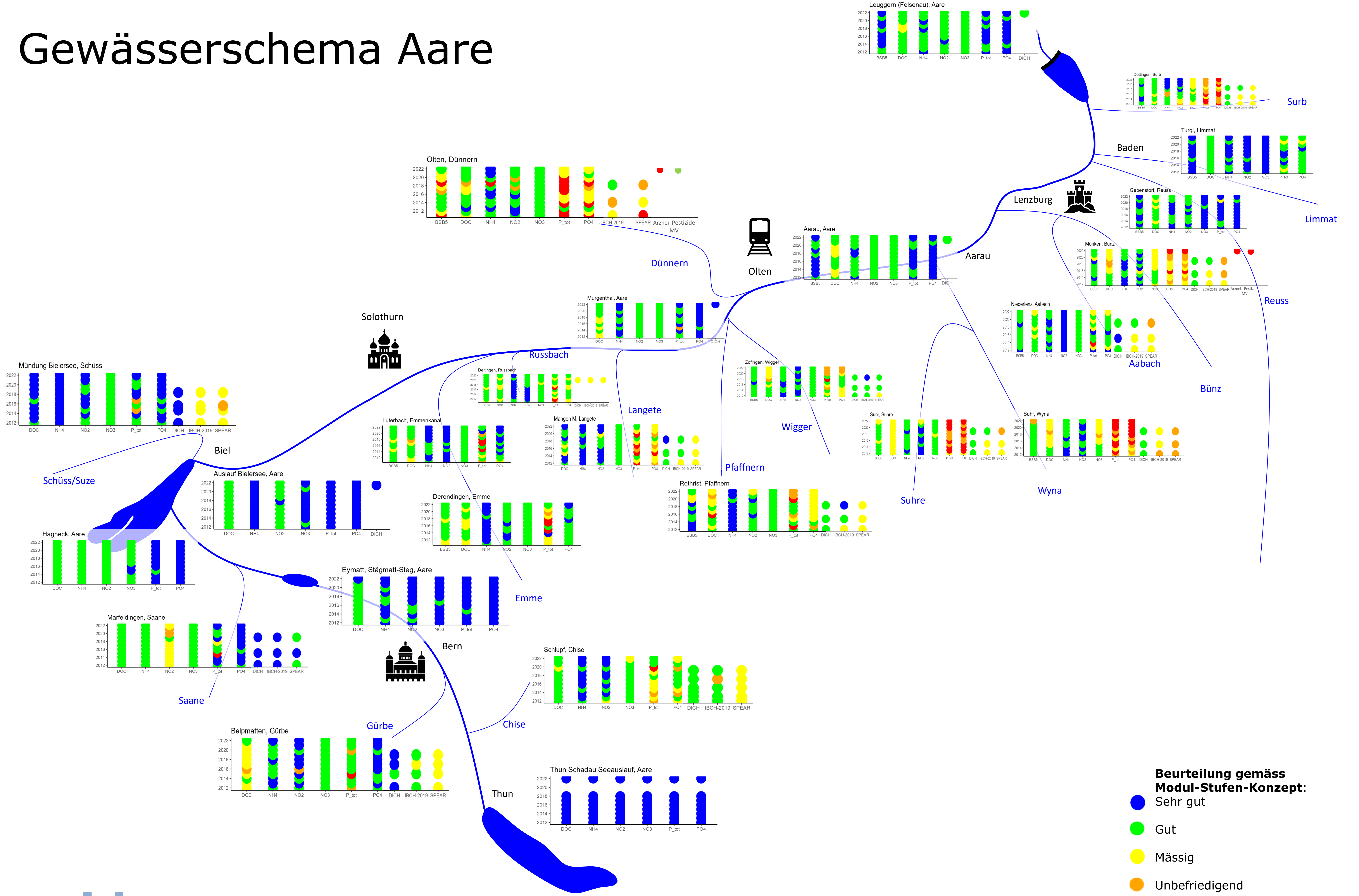






5 Gewässerschema

Gewässerschema Aare



Beurteilung gemäss Modul-Stufen-Konzept:

- Sehr gut
- Gut
- Mässig
- Unbefriedigend
- Schlecht

6 Auswertung Mikroverunreinigungen



Risikobeurteilung Einzelstoffe gemäss ökotoxikologischen Kriterien

Substanz		Woche								Höchstwert [RQ]	Einhaltung GSchV
		04.08.2020	27.04.2021	17.08.2021	31.08.2021	28.09.2021	15.03.2022	07.06.2022	21.06.2022		
Humanarzneimittel	2,4-D									0.1	0.03
	Atenolol									0.0	0.00
	Bezafibrat									0.0	0.00
	Carbamazepin									0.1	0.14
	Clarithromycin									0.5	0.06
	Diclofenac									5.4	0.27
	Metoprolol									0.0	0.12
	Naproxen									0.1	0.10
	Sulfamethoxazol									0.3	0.15
	Trimethoprim									0.0	0.02
	Mefenaminsäure									0.0	0.04
	Azithromycin									1.7	0.03
	Aclonifen									0.0	0.00
	Atrazin									0.0	0.00
Pestizid: Herbizid	Bentazon									0.0	0.00
	Chloridazon									0.0	0.00
	Chlortoluron									0.1	0.04
	Diffenican									0.0	0.00
	Dimethachlor									0.0	0.00
	Dimethenamid									0.0	0.00
	Diuron									0.4	0.03
	Ethofumesat									0.0	0.00
	Flufenacet									0.0	0.00
	Foramsulfuron									0.0	0.00
	Glyphosat									0.0	0.10
	Isoproturon									0.0	0.00
	Linuron									0.0	0.00
	MCPA									0.1	0.06
	Mecoprop									0.2	0.12
	Mesosulfuron-methyl									0.0	0.00
	Metamitron									0.0	0.00
	Metazachlor									0.0	0.00
	Metolachlor									0.0	0.00
	Metribuzin									0.0	0.00
	Napropamid									0.0	0.00
	Nicosulfuron									0.0	0.00
	Pendimethalin									0.0	0.00
	Pethoxamid									0.0	0.00
	Propyzamid									0.0	0.00
	Prosulfocarb									0.0	0.00
	Sotalol									0.0	0.03
	Terbutryn									0.0	0.00
Pestizid: Fungizid	Azoxystrobin									0.0	0.00
	Boscalid									0.0	0.00
	Carbendazim									0.0	0.00
	Cyprodinil									0.0	0.00
	Epoxiconazol									0.0	0.00
	Iprovalicarb									0.0	0.00
	Metalaxyl									0.0	0.00
	Propamocarb									0.0	0.05
	Pyrimethanil									0.0	0.00
	Spiroxamin									0.0	0.00
	Tebuconazol									0.0	0.00
	Terbutylazin									0.0	0.00
Pestizid: Insektizid	Clothianidin									0.0	0.00
	Cyproconazol									0.0	0.00
	Dimethoat									0.0	0.00
	Imidacloprid									0.0	0.00
	Methiocarb									0.0	0.00
	Methomyl									0.0	0.00
	Methoxyfenozid									0.0	0.00
	Pirimicarb									0.0	0.00
	Thiacloprid									0.0	0.00
	Thiamethoxam									0.0	0.00
	Metalddehyd									0.0	0.00
	Diethyltoluamid (DEET)									0.0	0.08
weitere	Sulfamethazin									0.0	0.03
	Benzotriazol									0.0	0.71
	4-Methyl-1H-benzotriazol									0.0	0.00
	5-Methyl-1H-benzotriazol									0.0	0.00
	Summe Methyl-1H-benzotriazole									0.0	0.00
	Chloridazon-desphenyl									0.0	0.00
	Kupfer (Cu)									7.5	15.00
Acesulfam K										0.0	0.00
Höchstwert pro Messung [RQ]		4.1	5.0	2.4	1.4	5.4	4.0	2.6	7.5	3.0	
		7.5									
		#NV									



Mischungstoxizität Wirkstoffgruppen gemäss ökotoxikologischen Kriterien

Wirkstoffgruppe \ Woche	04.08.2020	27.04.2021	17.08.2021	31.08.2021	28.09.2021	15.03.2022	07.06.2022	21.06.2022	02.08.2022	Höchstwert [RQ]
Arzneimittel & weitere ²										10.1
Biozide										0.0
Fungizide										0.0
Herbizide										0.6
Insektizide										0.0

Mischungstoxizität taxonomische Gruppen gemäss ökotoxikologischen Kriterien

taxon. Gruppe \ Woche	04.08.2020	27.04.2021	17.08.2021	31.08.2021	28.09.2021	15.03.2022	07.06.2022	21.06.2022	02.08.2022	Höchstwert [RQ]
Invertebraten										1.7
Pflanzen										0.0
Vertebraten										1.9

1 Pestizid: Repellent

2 Beinhaltet Arzneimittelmetaboliten, Tierarzneimittel, Lebensmittelchemikalien und Industriechemikalien

Wirkungsbasierte Beurteilung der Wasserqualität für Mikroverunreinigungen aus diffusen Quellen angelehnt an das „Modul Nährstoffe“ des Modulstufenkonzeptes des BAFU. MEC = Gemessener Einzelwert pro Probe, CQK = chronisches Qualitätskriterium (CQK), RQ = Risikoquotient.

Beurteilung	Bedingung & Beschreibung (RQ = MEC / QK)	Einhaltung Qualitätskriterium (CQK)
RQ < 0.1	Umweltkonzentration (MEC) ist mehr als 10 mal kleiner als das Qualitätskriterium (CQK)	ja
0.1 ≤ RQ < 1	Umweltkonzentration (MEC) ist weniger als 1 und bis zu 10 mal kleiner als das Qualitätskriterium (CQK)	
1 ≤ RQ < 2	Umweltkonzentration (MEC) ist kleiner als das doppelte Qualitätskriterium (CQK)	nein
2 ≤ RQ < 10	Umweltkonzentration (MEC) ist kleiner als das zehnfache Qualitätskriterium (CQK)	
10 ≤ RQ	Umweltkonzentration (MEC) ist gleich wie oder grösser als das zehnfache Qualitätskriterium (CQK)	
-	Keine Daten verfügbar	-

Quelle: Wittmer, I., M. Junghans, H. Singer und C. Stamm (2014), „Mikroverunreinigungen – Beurteilungskonzept für organische Spurenstoffe aus diffusen Einträgen“. Studie im Auftrag des BAFU. Eawag, Dübendorf

Beurteilung der Wasserqualität bezüglich der Einhaltung der Gewässerschutzverordnung (GSchV). Für zeitproportionale Zweiwochenmischproben gilt: MEC = Gemessener Einzelwert pro Probe; Grenzwerte gemäss GSchV.

Beurteilung	Bedingung & Beschreibung	Einhaltung Gewässerschutz
MEC < GSchV	Umweltkonzentration (MEC) ist kleiner als die Anforderung gemäss GSchV	ja
MEC ≥ GSchV	Umweltkonzentration (MEC) ist gleich wie oder grösser als die Anforderung gemäss GSchV	nein
-	keine Daten oder keine numerischen Anforderungen verfügbar	-



Einhaltung Gewässerschutzverordnung (GSchV)

Woche		04.08.2020	27.04.2021	17.08.2021	31.08.2021	28.09.2021	15.03.2022	07.06.2022	21.06.2022	02.08.2022	Höchstwert [µg/l]
Substanz											
Humanarzneimittel	2,4-D										0.03
	Atenolol										0.00
	Bezafibrat										0.00
	Carbamazepin										0.14
	Clarithromycin										0.06
	Diclofenac										0.27
	Metoprolol										0.12
	Naproxen										0.10
	Sulfamethoxazol										0.15
	Trimethoprim										0.02
	Mefenaminsäure										0.04
	Azithromycin										0.03
	Aclonifen										0.00
	Atrazin										0.00
Pestizid: Herbizid	Bentazon										0.00
	Chloridazon										0.00
	Chlortoluron										0.04
	Diffenican										0.00
	Dimethachlor										0.00
	Dimethenamid										0.00
	Diuron										0.03
	Ethofumesat										0.00
	Flufenacet										0.00
	Foramsulfuron										0.00
	Glyphosat										0.10
	Isoproturon										0.00
	Linuron										0.00
	MCPA										0.06
	Mecoprop										0.12
	Mesosulfuron-methyl										0.00
	Metamitron										0.00
	Metazachlor										0.00
	Metolachlor										0.00
	Metribuzin										0.00
	Napropamid										0.00
	Nicosulfuron										0.00
	Pendimethalin										0.00
	Pethoxamid										0.00
	Propyzamid										0.00
	Prosulfocarb										0.00
	Sotalol										0.03
	Terbutryn										0.00
Pestizid: Fungizid	Azoxystrobin										0.00
	Boscalid										0.00
	Carbendazim										0.00
	Cyprodinil										0.00
	Epoxiconazol										0.00
	Iprovalicarb										0.00
	Metaxyl										0.00
	Propamocarb										0.05
	Pyrimethanil										0.00
	Spiroxamin										0.00
Pestizid: Insektizid	Tebuconazol										0.00
	Terbutylazin										0.00
	Clothianidin										0.00
	Cyproconazol										0.00
	Dimethoat										0.00
	Imidacloprid										0.00
	Methiocarb										0.00
	Methomyl										0.00
	Methoxyfenozid										0.00
	Pirimicarb										0.00
Tierarzneimittel	Thiacloprid										0.00
	Thiamethoxam										0.00
	Metaldehyd										0.00
	Diethyltoluamid (DEET)										0.08
	Sulfamethazin										0.03
	Benzotriazol										0.71
	4-Methyl-1H-benzotriazol										0.00
	5-Methyl-1H-benzotriazol										0.00
	Summe Methyl-1H-benzotriazole										0.00
	Chloridazon-desphenyl										0.00
Kupfer (Cu)											15.00
Acesulfam K											0.00
Bewertung pro Messung		4.1	5.0	2.4	1.4	5.4	4.0	2.6	7.5	3.0	#NV

Beurteilung der Wasserqualität bezüglich der Einhaltung der Gewässerschutzverordnung (GSchV). Für zeitproportionale Zweiwochenmischproben gilt: MEC = Gemessener Einzelwert pro Probe; Grenzwerte gemäss GSchV, Anhang 2, Ziff 11. Dieses

Beurteilung	Bedingung & Beschreibung	Einhaltung Gewässerschutzverordnung
MEC < GSchV	Umweltkonzentration (MEC) ist kleiner als die Anforderung gemäss GSchV	ja
MEC ≥ GSchV	Umweltkonzentration (MEC) ist gleich wie oder grösser als die Anforderung gemäss GSchV	nein
-	keine Daten oder keine numerischen Anforderungen verfügbar	-

Mischungstoxizität Wirkstoffgruppen gemäss ökotoxikologischen Kriterien

Wirkstoffgruppe \ Woche	1-2	3-4	5-6	7-8	9-10	11-12	13-14	15-16	17-18	19-20	21-22	23-24	25-26	27-28	29-30	31-32	33-34	35-36	37-38	39-40	41-42	43-44	45-46	47-48	49-50	51-52	Jahreshöchstwert [RQ]
Arzneimittel & weitere ⁴																											11.2
Biozide																											0.0
Fungizide																											0.1
Herbizide																											9.0
Insektizide																											167.4

Mischungstoxizität taxonomische Gruppen gemäss ökotoxikologischen Kriterien

taxon. Gruppe \ Woche	1-2	3-4	5-6	7-8	9-10	11-12	13-14	15-16	17-18	19-20	21-22	23-24	25-26	27-28	29-30	31-32	33-34	35-36	37-38	39-40	41-42	43-44	45-46	47-48	49-50	51-52	Jahreshöchstwert [RQ]
Invertebraten																											169.8
Pflanzen																											9.4
Vertebraten																											149.4

1 Carbamazepin-10,11 - Dihydro-10,11-Dihydroxy

2 R = Repellent

3 M = Metabolit

4 Beinhaltet Arzneimittelmetaboliten, Industriechemikalien und Repellents

Wirkungsbasierte Beurteilung der Wasserqualität für Mikroverunreinigungen aus diffusen Quellen angelehnt an das „Modul Nährstoffe“ des Modulstufenkonzeptes des BAFU. MEC = Gemessener Einzelwert pro Probe, CQK = chronisches Qualitätskriterium (CQK), RQ = Risikoquotient.

Beurteilung	Bedingung & Beschreibung (RQ = MEC / QK)	Einhaltung Qualitätskriterium (CQK)
RQ < 0.1	Umweltkonzentration (MEC) ist mehr als 10 mal kleiner als das Qualitätskriterium (CQK)	ja
0.1 ≤ RQ < 1	Umweltkonzentration (MEC) ist weniger als 1 und bis zu 10 mal kleiner als das Qualitätskriterium (CQK)	
1 ≤ RQ < 2	Umweltkonzentration (MEC) ist kleiner als das doppelte Qualitätskriterium (CQK)	nein
2 ≤ RQ < 10	Umweltkonzentration (MEC) ist kleiner als das zehnfache Qualitätskriterium (CQK)	
10 ≤ RQ	Umweltkonzentration (MEC) ist gleich wie oder grösser als das zehnfache Qualitätskriterium (CQK)	
-	Keine Daten verfügbar	-

Quelle: Wittmer, I., M. Junghans, H. Singer und C. Stamm (2014), „Mikroverunreinigungen – Beurteilungskonzept für organische Spurenstoffe aus diffusen Einträgen“. Studie im Auftrag des BAFU. Eawag, Dübendorf

Einhaltung Gewässerschutzverordnung (GSchV)

Substanz		Woche														Jahreshöchstwert [ng/l]														
		1-2	3-4	5-6	7-8	9-10	11-12	13-14	15-16	17-18	19-20	21-22	23-24	25-26	27-28		29-30	31-32	33-34	35-36	37-38	39-40	41-42	43-44	45-46	47-48	49-50	51-52		
A	2,4-D																												61	
	Atrazin																												6	
	Azithromycin																												69	
	Azoxystrobin																												5	
	Bentazon																												91	
	Bifenthrin																												0	
	Boscalid																												6	
	Carbendazim																												7	
	Chloridazon																												0	
	Chloridazon-desphenyl																												180	
A	Chlorotoluron																												0	
	Chlorpyrifos																												0.18	
	Chlorpyrifos-methyl																												0.08	
	Clarithromycin																												34	
	Clothianidin																												0	
	Cypermethrin																												0.243	
	Cyproconazol																												0	
	Cyprodinil																												5	
	R	DEET																												110
		Deltamethrin																												0.25
Diazinon																													10	
Dicamba																													70	
A		Diclofenac																												300
		Diffufenican																												0
		Dimethachlor																												3
		Dimethenamid																												280
		Dimethoat																												3
		Diuron																												15
	Epoxiconazol																												5	
	Ethofumesat																												23	
	Fenoxycarb																												0	
	Fenpropimorph																												0	
A	Fipronil																												1	
	Flufenacet																												11	
	Foramsulfuron																												0	
	Imidacloprid																												7	
	Iprovalicarb																												0	
	Isoproturon																												3	
	lambda-Cyhalothrin																												0.32	
	Linuron																												7	
	MCPA																												120	
	Mecoprop																												380	
A	Mesotrion																												37	
	Metalaxyl																												7	
	Metamitron																												130	
	Metazachlor																												150	
	Methiocarb																												0	
	Methomyl																												0	
	Methoxyfenozid																												0	
	Metolachlor																												75	
	Metribuzin																												11	
	Napropamid																												570	
A	Nicosulfuron																												30	
	Permethrin																												0.65	
	Pirimicarb																												72	
	Propamocarb																													

A = Arzneimittel
B = Biozid
R = Repellent

Beurteilung der Wasserqualität bezüglich der Einhaltung der Gewässerschutzverordnung (GSchV). Für zeitproportionale Zweiwochenmischproben gilt: MEC = Gemessener Einzelwert pro Probe; Grenzwerte gemäss GSchV, Anhang 2, Ziff 11. Dieses Gewässer dient nicht der Trinkwassernutzung.

Beurteilung	Bedingung & Beschreibung	Einhaltung Gewässerschutzverordnung
MEC < GSchV	Umweltkonzentration (MEC) ist kleiner als die Anforderung gemäss GSchV	ja
MEC ≥ GSchV	Umweltkonzentration (MEC) ist gleich wie oder grösser als die Anforderung gemäss GSchV	nein
-	keine Daten verfügbar	-



Bern, 28. November 2024
wal/sle/reb/whs/lue

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