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Tables

bib_ref	source	n	date_min	date_max	min_doc	max_doc	min_a350	max_a350
Arctic Great Rivers Observatory (*Arctic-GRO data*)	Continuous	168	2009-05-14	2014-08-29	175.00	1958.33	2.30	43.76
Aiken et al. (2005)	Discrete	894	1995-03-01	1998-06-01	233.33	44600.00	5.12	1844.45
Anderson et al. (2007)	Continuous	38	2002-06-01	2003-06-01	335.00	7333.33	1.51	30.91
Asmala et al. (2014)	Continuous	140	2010-08-03	2011-10-19	222.00	2304.00	2.12	81.33
Bouillon et al. (2014)	Discrete	30	2011-03-20	2012-11-24	63.33	591.67	5.30	35.00
Braun et al. (2015)	Discrete	134	2009-07-09	2010-09-28	140.00	905.83	0.07	31.24
Breton et al. (2009)	Discrete	48			108.33	2166.67	2.31	109.91
Brezonik et al. (2015)	Discrete	35	2013-07-31	2013-09-18	221.67	2475.00	1.11	102.96
Del Castillo et al. (1999)	Discrete	17	1995-09-01	1996-10-01	72.90	276.10	0.09	3.86
Conan et al. (2007)	Continuous	248	2002-08-04	2002-08-26	125.40	236.05	0.63	1.34
Del Castillo et al. (2000)	Discrete	13			89.10	305.00	0.22	1.55
Engel et al. (2015)	Discrete	247	2012-10-02	2012-10-19	78.60	184.60	0.03	0.74
finish_rivers	Discrete	2823	1991-03-20	2013-01-23	94.00	3995.00	1.31	52.83
Forsström et al. (2015)	Discrete	19			125.00	1350.00	0.37	39.03
Galgani et al. (2016)	Discrete	42	2012-12-08	2012-12-23	60.83	124.17	0.02	0.81
Gonçalves-Araujo et al. (2015)	Discrete	38	2013-09-01	2013-09-06	117.00	732.00	1.12	15.12
Gonnelli et al. (2016)	Discrete	13			60.40	68.90	0.09	0.23
Griffin et al. (2011)	Discrete	18	2008-07-14	2009-07-25	178.33	793.33	3.38	14.75
Guéguen et al. (2011)	Discrete	8	2007-07-27	2007-07-27	190.00	1224.00	1.61	19.57
Helms et al. (2008)	Discrete	33	2004-05-01	2005-05-01	162.00	1279.00	0.23	41.49
Hernes et al. (2008)	Discrete	29	2006-01-10	2006-12-05	172.50	593.33	2.58	26.25
kattegat	Continuous	497	2006-08-21	2007-09-19	66.00	498.00	0.32	3.37
Kellerman et al. (2015)	Discrete	113	2010-09-26	2010-11-25	200.00	3325.00	0.34	46.85
Lambert et al. (2015)	Discrete	573	2010-05-02	2014-11-17	108.33	5650.00	1.00	249.40
Loken et al. (2016)	Discrete	208	2012-04-23	2013-09-18	164.25	3130.58	0.78	108.26
Hanson et al. (2004)	Continuous	102			343.33	2678.33	4.97	101.62
Buffam et al. (2011)	Discrete	45	2008-05-29	2008-08-10	655.83	10233.33	16.36	419.61
Greenfield et al. (2005)	Discrete	29	1998-05-13	1999-08-15	221.67	1024.17	0.58	22.34
NTL LTER Lead PI et al. (2012)	Discrete	134	2001-04-30	2013-11-08	19.17	2573.75	0.02	82.70
Markager et al. (2011)	Continuous	551	2001-08-28	2002-09-24	65.98	1678.25	0.75	44.26
Massicotte et al. (2011)	Continuous	59	2006-08-09	2006-08-15	152.03	620.58	1.17	21.00
Moran (2007)	Discrete	55	2004-07-08	2006-05-23	75.00	3166.67	0.05	103.43
Nelson et al. (2002, 2007) and Nelson et al. (2010)	Continuous	2333			35.00	91.90	0.01	0.52
Norman et al. (2011)	Continuous	58	2006-09-08	2006-10-13	131.97	947.22	0.23	3.74
Oestreich et al. (2016)	Discrete	29			60.67	581.80	0.71	12.84
Osburn et al. (2007)	Continuous	187	2000-06-21	2007-05-10	40.50	425.20	0.06	8.13
Osburn et al. (2009)	Discrete	27			70.00	576.00	0.28	9.72
Osburn et al. (2016)	Discrete	130			59.00	1433.00	0.10	33.32
The Polaris project	Discrete	116	2011-06-06	2012-07-21	152.50	2005.83	1.60	82.50
Retamal et al. (2007)	Discrete	22	2002-07-22	2004-06-17	73.33	475.00	0.11	10.60
Sickman et al. (2010)	Discrete	72	2003-04-21	2004-03-23	117.09	7035.60	1.05	223.59
Stedmon et al. (2007)	Continuous	15			271.96	664.88	3.01	22.44
Stedmon et al. (2011)	Continuous	78	2004-03-19	2005-10-10	216.67	1258.33	1.91	39.33
Stedmon et al. (2015)	Continuous	189	2012-09-03	2012-09-11	47.70	91.08	0.08	0.50
Tehrani et al. (2013)	Discrete	39	2007-07-01	2009-09-01	117.17	487.50	0.42	6.93
Wagner et al. (2015)	Discrete	60	2010-07-01	2011-06-01	275.00	1700.00	1.54	56.82
Werdell et al. (2003)	Discrete	899	2009-08-17	2011-07-20	40.63	970.70	0.04	17.74
Zhang et al. (2005)	Discrete	16			729.17	1682.50	2.64	8.55
	Discrete	20			1116.67	6683.33	1.81	79.30

Table 1: Summary of data used in this study. *Discrete* means that the absorption data was reported at discrete wavelengths whereas *Continuous* means that complete absorption spectra were available.

Wavelength (nm)	Intercept	Slope	R^2	n
253	-1.33	0.28	0.9883	30
254	-1.31	0.28	0.9884	5027
280	-1.02	0.38	0.9921	104
300	-0.56	0.49	0.9957	239
320	-0.27	0.64	0.9981	134
325	-0.20	0.69	0.9987	336
330	-0.15	0.74	0.9992	27
340	-0.08	0.86	0.9997	29
355	0.02	1.08	0.9999	1183
365	0.11	1.27	0.9991	45
375	0.14	1.50	0.9979	239
380	0.17	1.63	0.9969	899
400	0.28	2.24	0.9905	308
412	0.36	2.68	0.9846	1013
420	0.44	3.01	0.9791	59
440	0.63	3.94	0.9620	219
443	0.64	4.09	0.9580	946

Table 2: Coefficients of the linear regressions between absorption coefficents at 350 nm and other wavelengths. Each regression includes a total of 2321 observations. All regression have p-value < 0.00001. n represents the number of observations that were reported at this wavelength.

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