My neat title here

Tables

bib_ref	source	n	date_min	date_max	min_doc	max_doc	min_a350	max_a350
agro	Continuous	168	2009-05-14	2014-08-29	175.00	1958.33	2.30	43.76
Aiken et al. (2005)	Discrete	894			233.33	44600.00	5.15	1844.29
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
Breton et al. (2009)	Discrete	48			108.33	2166.67	2.28	109.99
Brezonik et al. (2015)	Discrete	35	2013-07-31	2013-09-18	221.67	2475.00	1.14	102.98
Del Castillo et al. (1999)	Discrete	17	1995-09-01	1996-10-01	72.90	276.10	0.06	3.84
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	0.23	1.56
Engel et al. (2015)	Discrete	247	2012-10-02	2012-10-19	78.60	184.60	0.04	0.74
finish_rivers	Discrete	2823	1991-03-20	2013-01-23	94.00	3995.00	1.34	52.85
Forsström et al. (2015)	Discrete	19			125.00	1350.00	0.34	39.04
Galgani et al. (2016)	Discrete	37	2012-12-08	2012-12-23	60.83	124.17	0.02	0.79
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	3.43	14.78
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	0.20	41.50
Hernes et al. (2008)	Discrete	29	2006-01-10	2006-12-05	172.50	593.33	2.58	26.25
Kellerman et al. (2015)	Discrete	113	2010-09-26	2010-11-25	200.00	3325.00	0.37	46.87
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	0.81	108.28
lter2004	Continuous	102			343.33	2678.33	4.97	101.62
lter2008	Discrete	45	2008-05-29	2008-08-10	655.83	10233.33	16.36	419.53
lter5653	Discrete	29	1998-05-13	1999-08-15	221.67	1024.17	0.57	22.35
lter5689	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	57	2004-07-08	2006-05-23	75.00	3166.67	0.02	103.45
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	0.70	12.83
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	0.27	9.71
Osburn et al. (2011)	Discrete	20			1116.67	6683.33	1.81	79.30
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	0.09	10.58
Sickman et al. (2010)	Discrete	72	2003-04-21	2004-03-23	117.09	7035.60	1.08	223.60
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	0.50	6.99
Wagner et al. (2015)	Discrete	60	2010-07-01	2011-06-01	275.00	1700.00	1.57	56.84
Werdell et al. (2003)	Discrete	899	2009-08-17	2011-07-20	40.63	970.70	0.05	17.74
Zhang et al. (2005)	Discrete	16			729.17	1682.50	2.64	8.56

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.

-	<u>_</u>							
	Wavelength (nm)	Intercept	Slope	R^2	n			
	253.00	-1.33	0.28	0.99	30			
	254.00	-1.31	0.28	0.99	4764			
	280.00	-1.02	0.38	0.99	104			
	300.00	-0.56	0.49	1.00	239			
	320.00	-0.27	0.64	1.00	134			
	325.00	-0.20	0.69	1.00	336			
	330.00	-0.15	0.74	1.00	27			
	340.00	-0.08	0.86	1.00	29			
	355.00	0.02	1.08	1.00	1183			
	365.00	0.11	1.27	1.00	45			
	375.00	0.14	1.50	1.00	254			
	380.00	0.17	1.63	1.00	899			
	400.00	0.28	2.24	0.99	308			
	412.00	0.36	2.68	0.98	1013			
	420.00	0.44	3.01	0.98	59			
	440.00	0.63	3.94	0.96	219			
	443.00	0.64	4.09	0.96	950			

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.

References

- Aiken, G. et al. (2005). Everglades Water chemistry DOC and other parameters.
- Anderson, N. J. et al. (2007). "The effect of evapoconcentration on dissolved organic carbon concentration and quality in lakes of SW Greenland." English. In: *Freshwater Biology* 52.2, pp. 280–289.
- Asmala, E. et al. (2014). "Processing of humic-rich riverine dissolved organic matter by estuarine bacteria: effects of predegradation and inorganic nutrients." In: *Aquatic Sciences* 76.3, pp. 451–463.
- Bouillon, S. et al. (2014). "Contrasting biogeochemical characteristics of the Oubangui River and tributaries (Congo River basin)." In: *Scientific Reports* 4, p. 5402.
- Breton, J. et al. (2009). "Limnological properties of permafrost thaw ponds in northeastern Canada." In: *Canadian Journal of Fisheries and Aquatic Sciences* 66.10, pp. 1635–1648.
- Brezonik, P. L. et al. (2015). "Factors affecting the measurement of CDOM by remote sensing of optically complex inland waters." In: *Remote Sensing of Environment* 157.March 2016, pp. 199–215.
- Conan, P. et al. (2007). "Partitioning of organic production in marine plankton communities: The effects of inorganic nutrient ratios and community composition on new dissolved organic matter." In: *Limnology and Oceanography* 52.2, pp. 753–765.
- Del Castillo, C. E. et al. (1999). "Analysis of the optical properties of the Orinoco River plume by absorption and fluorescence spectroscopy." In: *Marine Chemistry* 66, pp. 35–51.
- Del Castillo, C. E. et al. (2000). "On the dispersal of riverine colored dissolved organic matter over the West Florida Shelf." In: *Limnology and Oceanography* 45.6, pp. 1425–1432.
- Engel, A. et al. (2015). "Mesocosm experiment Cape Verde 2012: chromophoric and fluorescent dissolved organic matter, polysaccharidic and proteinaceous gel particles production." In: xxx.
- Forsström, L. et al. (2015). "Dissolved organic matter concentration, optical parameters and attenuation of solar radiation in high-latitude lakes across three vegetation zones." In: *Écoscience* 6860.March 2016.
- Galgani, L. et al. (2016). "Changes in optical characteristics of surface microlayers hint to photochemically and microbially mediated DOM turnover in the upwelling region off the coast of Peru." In: *Biogeosciences* 13.8, pp. 2453–2473.
- Gonçalves-Araujo, R. et al. (2015). "From Fresh to Marine Waters: Characterization and Fate of Dissolved Organic Matter in the Lena River Delta Region, Siberia." In: *Frontiers in Marine Science* 2.December, p. 108.
- Gonnelli, M et al. (2016). "Dissolved organic matter dynamics in surface waters affected by oil spill pollution: results from the Serious Game exercise." In: *Deep Sea Research Part II: Topical Studies in Oceanography*.
- Griffin, C. G. et al. (2011). "Spatial and interannual variability of dissolved organic matter in the Kolyma River, East Siberia, observed using satellite imagery." In: *Journal of Geophysical Research* 116.G3, G03018.
- Guéguen, C. et al. (2011). "Characterisation of colored dissolved organic matter in Hudson Bay and Hudson Strait using parallel factor analysis." In: *Journal of Marine Systems* 88.3, pp. 423–433.
- Helms, J. R. et al. (2008). "Absorption spectral slopes and slope ratios as indicators of molecular weight, source, and photobleaching of chromophoric dissolved organic matter." In: Limnology and Oceanography 53.3, pp. 955–969.
- Hernes, P. J. et al. (2008). "The role of hydrologic regimes on dissolved organic carbon composition in an agricultural watershed." In: *Geochimica et Cosmochimica Acta* 72.21, pp. 5266–5277.
- Kellerman, A. M. et al. (2015). "Absence of a priming effect on dissolved organic carbon degradation in lake water." In: Kuzyakov2015, pp. 159–168.
- Lambert, T. et al. (2015). "Landscape Control on the Spatial and Temporal Variability of Chromophoric Dissolved Organic Matter and Dissolved Organic Carbon in Large African Rivers." In: *Ecosystems* 18.7, pp. 1224–1239.
- Loken, L. et al. (2016). Saint Louis River Estuary Water Chemistry, Wisconsin, Minnesota, USA 2012 2013. U.S. LTER Network.
- Markager, S. et al. (2011). "Seasonal dynamics and conservative mixing of dissolved organic matter in the temperate eutrophic estuary Horsens Fjord." English. In: *Estuarine, Coastal and Shelf Science* 92.3, pp. 376–388.
- Massicotte, P. et al. (2011). "Spatial connectivity in a large river system: resolving the sources and fate of dissolved organic matter." In: *Ecological Applications* 21.7, pp. 2600–2617.
- Moran, E. (2007). Water quality in the Tanana River basin, Alaska, water years 2004–2006: U.S. Geological Survey Open-File Report 2007–1390. Tech. rep., p. 6.
- Nelson, N. B. et al. (2002). "Chromophoric DOM in the Open Ocean." In: *Biogeochemistry of Marine Dissolved Organic Matter*. Ed. by D. A. H. A. Carlson. San Diego: Elsevier, pp. 547–578.
- Nelson, N. B. et al. (2007). "Hydrography of chromophoric dissolved organic matter in the North Atlantic." In: *Deep Sea Research Part I: Oceanographic Research Papers* 54.5, pp. 710–731.
- Nelson, N. B. et al. (2010). "Tracing global biogeochemical cycles and meridional overturning circulation using chromophoric dissolved organic matter." In: *Geophysical Research Letters* 37.3, n/a–n/a.
- Norman, L. et al. (2011). "The characteristics of dissolved organic matter (DOM) and chromophoric dissolved organic matter (CDOM) in Antarctic sea ice." In: *Deep Sea Research Part II: Topical Studies in Oceanography* 58.9-10, pp. 1075–1091.

- Oestreich, W. K. et al. (2016). "Colored dissolved organic matter in shallow estuaries: relationships between carbon sources and light attenuation." English. In: *Biogeosciences* 13.2, pp. 583–595.
- Osburn, C. et al. (2007). *Geospatial Synthesis of Chromophoric (color-absorbing) Dissolved Organic Matter (CDOM) Distribution in the Gulf of Mexico.*
- Osburn, C. L. et al. (2009). "Photoreactivity of chromophoric dissolved organic matter transported by the Mackenzie River to the Beaufort Sea." In: *Marine Chemistry* 115.1-2, pp. 10–20.
- Osburn, C. L. et al. (2011). "Linking the chemical and optical properties of dissolved organic matter in the Baltic–North Sea transition zone to differentiate three allochthonous inputs." In: *Marine Chemistry* 126.1-4, pp. 281–294.
- Osburn, C. L. et al. (2016). "Optical Proxies for Terrestrial Dissolved Organic Matter in Estuaries and Coastal Waters." In: Frontiers in Marine Science 2. January.
- Retamal, L. et al. (2007). "Comparison of the optical properties of dissolved organic matter in two river-influenced coastal regions of the Canadian Arctic." In: *Estuarine, Coastal and Shelf Science* 72.1-2, pp. 261–272.
- Sickman, J. O. et al. (2010). "Identifying sources of dissolved organic carbon in agriculturally dominated rivers using radiocarbon age dating: Sacramento–San Joaquin River Basin, California." In: *Biogeochemistry* 99.1-3, pp. 79–96.
- Stedmon, C. et al. (2011). "The supply and characteristics of colored dissolved organic matter (CDOM) in the Arctic Ocean: Pan Arctic trends and differences." In: *Marine Chemistry* 124.1-4, pp. 108–118.
- Stedmon, C. A. et al. (2007). "Characteristics of Dissolved Organic Matter in Baltic Coastal Sea Ice: Allochthonous or Autochthonous Origins?" English. In: *Environmental Science & Technology* 41.21, pp. 7273–7279.
- Stedmon, C. A. et al. (2015). "An approach to estimate the freshwater contribution from glacial melt and precipitation in East Greenland shelf waters using colored dissolved organic matter (CDOM)." In: *Journal of Geophysical Research: Oceans* 120.2, pp. 1107–1117.
- Tehrani, N. et al. (2013). "Chromophoric Dissolved Organic Matter and Dissolved Organic Carbon from Sea-Viewing Wide Field-of-View Sensor (SeaWiFS), Moderate Resolution Imaging Spectroradiometer (MODIS) and MERIS Sensors: Case Study for the Northern Gulf of Mexico." In: *Remote Sensing* 5.3, pp. 1439–1464.
- The Polaris project.
- Wagner, S. et al. (2015). "Associations Between the Molecular and Optical Properties of Dissolved Organic Matter in the Florida Everglades, a Model Coastal Wetland System." In: *Frontiers in Chemistry* 3.November, pp. 1–14.
- Werdell, P. J. et al. (2003). "Unique data repository facilitates ocean color satellite validation." In: *Eos, Transactions American Geophysical Union* 84.38, p. 377.
- Zhang, Y. L. et al. (2005). "A Preliminary Study of Chromophoric Dissolved Organic Matter (CDOM) in Lake Taihu, a Shallow Subtropical Lake in China." In: *Acta hydrochimica et hydrobiologica* 33.4, pp. 315–323.