Supplementary Materials

Urban water consumption at multiple spatial and temporal scales. A review of existing datasets.

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Supplementary Table S1. Metadata of the reviewed electricity datasets at the end use scale.

ELECTRICITY DATASETS AT THE END USE SCALE						
AUTHORS	**YEAR**	**CITY**	**DATASET SIZE**	**TIME SERIES LENGTH**	**TIME SAMPLING RESOLUTION**	**ACCESS POLICY**
Hart, G.W. [1]	1992	United States	1 home in 1984, 3 homes in 1985, ten homes in 1987-88.	12 days	from 10 s to5-10 min	Not available
Ghisi, E. et al. [2]	2007	Brazil	17.643 houses	/	day (Kwh/day)	Restricted
Richardson, I. et al. [3]	2010	United Kingdom	22 houses	2 years (2008 and 2009)	1 m	Open : Link here
Kolter, J. Z., and Johnson, M. J. [4]	2011	United Kingdom	6 houses	119 days (April - June 2011)	1 s	Open: Link here
Anderson, K., et al.[5]	2012	United States	1 house	1 week	8 s	Open: Link here

Zimmermann, J.-P., et al. [6]	2012	England	251 houses	26 houses for 1 year 225 houses for 1 month	10min	Open : Link here
Reinhardt, A., et al. [7]	2012	Germany 2012 and Australia 2013	517 features	1 day (different days of the year 2012 for Germany and 2013 for Australia)	1 s and 8 s	Open: Link here
Barker S, et al. [8]	2012	United States	(i) a highresolution data set from 3 homes and (ii) a lower resolution data set from 400 homes	3 months	1 s	Open: Link here
Edwards, R.E., et al. [9]	2012	Australia	3 homes	2 year (1 January-31 December 2010)	15 min	Open: Link here
Makonin, S., et al. [10]	2013	Canada	1 house	1 year	1m	Open: Link here
Batra, N., et al.[11]	2013	India	3 home	73 days (summer 2013)	1 s	Open: Link here
Maasoumy, M., et al. [12]	2013	United States	Cory Hall on the UC Berkeley campus	1 year (1 January 2012-1 January 2013)	20 s	Open: Link here

Gisler, C., et al.[13]	2013	Switzerland	100 home	2 hour	10 s	Open: Link here
Beckel, C., et al.[14]	2014	Swisse	6 house	8 months	1 s	Open: Link here
Gao, J., et al.[15]	2014	United States	56 houses	summer 2013	1 s	Open: Link here
Batra N., et al.[16]	2014	India	Academic Campus in Dehli	1 year	30 s	Open: Link here
Pereira, L., et al[17]	2014	Portugal	50 houses	3 year	1 min	Open: Link here
Ali A. B. et al.[18]	2014	Australia	1 house	6 months	1 h	Restricted
Kelly, J., and Knottenbelt, W. [19]	2015	United Kingdom	5 houses	different version from 2 until 4 years of data (2012-2016)	1 s and 6 s	Open: Link here
Akshay Uttama Nambi, S.N., et al. [20]	2015	Netherland	1 house	6 months	1 s	Open: Link here

Makonin, S., et al.[21]	2016	Canada	1 house	2 years	1m	Open: Link here
Parson, O., et al. [22]	2016	United States	722 houses	4 years	1 min	Free for academic use :Link here
Picon, T., et al.[23]	2016	France	1 houses	1 month (June 2016)	6 s	Open: Link here
Kahl, M., et al. [24]	2016	4 regions in Germany, 1 in Austria, and 2 in Indonesia	110 different appliances which can be grouped into 47 different types (classes) in 6 different regions.	/	5 s	Open: Link here
Shiraki, H. et al.[25]	2016	Japan	12 houses	1 year (2018)	1 h	Open: Link here
Johnson, G., et al.[26]	2017	Canada	23 houses	1 year	1 m	Resticted
Kriechbaumer, T., and Jacobsen, H.A.[27]	2018	Germany	1 house	213 days + 50 day (2 phase recordings 2016-2017)	5 s	Open: Link here

Makonin, S., et al.[28]	2018	Canada	2 houses	2 days for House 1 and 59 days for House 2 (2016)	1 s	Open: Link here
Shin, C., et al. [29]	2019	South Korea	22 houses	The measurement periods differed for each house, from 29 days to 122 days (2016-2017)	1 s	Open: Link here
Dua, D. and Graff, C. [51]	2019	France	1 house	47 months (2006 - 2010)	1 m	Open: Link here

Supplementary Table S2. Metadata of the reviewed electricity datasets at the household scale.

ELECTRICITY DATASETS AT THE HOUSEHOLD SCALE						
AUTHORS	**YEAR**	**CITY**	**DATASET SIZE**	**TIME SERIES LENGTH**	**TIME SAMPLING RESOLUTION**	**ACCESS POLICY**
Hirst, E., et al. [30]	1982	Colombia	4081 households	1 year (April 1978-March 1979)		Not available
Stuart, G., et al. [31]	2007	United Kingdom	37 school	2 years (April 2002– August 2004)	30 min	Restricted
Firth, S., et al. [32]	2008	United Kingdom	72 households	2 years	5 min	Restricted
Taherian, S., et al. [33]	2010	Unired Kingdom	12 houses	6 months (1 May - 30 September 2009)	6 sec	Restricted
Richardson, I., et al.[34]	2010	United Kingdom	22 house	1 year (2008)	1 min	Restricted

Ndiaye, D., Gabriel, K. [35]	2011	Canada	221 houses	17 months (February 2007-July 2008)	1 hour	Restricted
Georges Hebrail, Alice Berard [52]	2012	France	1 house	47 months (December 2006 - November 2010)	1 min	Open: Link here
Commission for Energy Regulation (CER) [53]	2012	Ireland	500 houses	17 months (July 2009-Dicember 2010)	30 min	Open: Link here
Umapathi, S., et al.[36]	2013	Australia	20 houses	1 year	1 m	Restricted
Fernandes, F., et al.[37]	2013	Portugal	1 house	1 year	1 min	Open: Link here
Department of Energy & Climate Change (DECC) UK [54]	2013	Unired Kingdom	250 houses	1 year (2010-2011)	10 min	Open: Link here
London Assemblly [55]	2013	United kingdom	5.567 houses	27 months (November 2011 - February 2014)	30 min	Open: Link here

Hino, H., et al.[38]	2013	Japan	500 houses	2 year (January 2006 - January 2008)	1 day	Restricted
Rogers, D.F., Polak, G.G. et al.[39]	2013	/	93 houses	/	1 hour	Restricted
Palmer, J., et al. [40]	2014	United Kingdom	250 houses	1 year (2010-2011)	2 m	Request access Link here
Kwac, J., et al. [41]	2014	California	There are 218 090 smart meters corresponding to 520 different zip codes.	42 months (April 2008 - October 2011)	1 h	Resticted
Rhodes, J.D., et al. [42]	2014	United States	103 houses	1 year (November 2012 - October 2013)	1 min	Restricted

Beckel, C., et al.[43]	2014	Ireland	4232 houses	75 weeks (between July 2009 -December 2010)	30 min	Restricted
Monacchi, A., et al.[44]	2015	Italy and Austria	8 houses	1 year	1 s	Open: Link here
Granell, R., et al.[45]	2015	Bulgaria and England	197 houses	/	7-8 s	Restricted
Motlagh, O., et al.[46]	2015	Australia	300 houses	91 days (season 2010-2011)	1 day	Restricted
Jonathan Ortiz, Nick Gottschlich [56]	2016	France	1 house	6 months (January -June 2007)	1 min	Open: Link here

Marszal-Pomianowska, A., et al. [47]	2016	Denmark	1) 35 houses 2) 100 homes 3) 1 home	1) From 2 to 12 months in 2012 2) 1 month measurements between 1999 and 2000 3)12 months continuous data for 2010	1) 5 min and 1 h 2) 10 min 3) 1h	Restricted
Zhou, D., et al. [48]	2016	Unites States	500 houses	2 years (between 2012 - 2014)	1 h	Restricted
Dudek, G., et al. [49]	2018	Poland	1000 houses	1 year.	15 min	Restricted
Garroussi, Zineb [57]	2019		40 houses	/	1 h	Open: Link here
Gercek, C., et al.[50]	2019	Netherland	217 houses	1 year (2013)	15 min	Restricted

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