

Table S1 Time series for dairy cattle sub-category populations, 1994-2018 (thousand head)

Year	Commercial dairy production system						Smallholder dairy production system					
	Cows, >3 years	Males, 3–10 years	Calves, < 6 months	Calves, 6–12 months	Growing males, 1–3 years	Growing females, 1–3 years	Cows, >3 years	Males, 3–10 years	Calves, < 6 months	Calves, 6–12 months	Growing males, 1–3 years	Growing females, 1–3 years
1994	24.7	0.9	2.5	7.0	1.1	12.3	109.2	7.8	14.9	14.9	1.7	37.6
1995	24.7	0.9	2.5	7.0	1.1	12.3	117.4	8.4	16.0	16.0	1.8	40.4
1996	24.7	0.9	2.5	7.0	1.1	12.3	122.2	8.7	16.7	16.7	1.9	42.0
1997	37.9	1.4	3.8	10.8	1.7	18.9	130.3	9.3	17.8	17.8	2.0	44.8
1998	51.0	1.9	5.2	14.5	2.3	25.4	129.5	9.3	17.6	17.6	2.0	44.5
1999	64.2	2.4	6.5	18.2	2.9	32.0	122.5	8.8	16.7	16.7	1.9	42.1
2000	77.3	2.9	7.8	22.0	3.4	38.5	130.7	9.4	17.8	17.8	2.0	45.0
2001	90.4	3.3	9.1	25.7	4.0	45.1	155.5	11.1	21.2	21.2	2.4	53.5
2002	103.6	3.8	10.5	29.5	4.6	51.6	132.9	9.5	18.1	18.1	2.0	45.7
2003	116.7	4.3	11.8	33.2	5.2	58.2	140.6	10.1	19.2	19.2	2.2	48.4
2004	129.9	4.8	13.1	36.9	5.8	64.7	118.6	8.5	16.2	16.2	1.8	40.8
2005	143.0	5.3	14.4	40.7	6.4	71.3	165.3	11.8	22.5	22.5	2.5	56.9
2006	156.2	5.8	15.8	44.4	7.0	77.8	161.0	11.5	21.9	21.9	2.5	55.4
2007	169.3	6.2	17.1	48.1	7.5	84.4	189.3	13.5	25.8	25.8	2.9	65.2
2008	182.5	6.7	18.4	51.9	8.1	90.9	194.2	13.9	26.5	26.5	3.0	66.8
2009	195.6	7.2	19.8	55.6	8.7	97.5	181.0	13.0	24.7	24.7	2.8	62.3
2010	208.7	7.7	21.1	59.4	9.3	104.0	230.1	16.5	31.4	31.4	3.5	79.2
2011	221.9	8.2	22.4	63.1	9.9	110.6	319.9	22.9	43.6	43.6	4.9	110.1
2012	235.0	8.7	23.7	66.8	10.5	117.1	329.9	23.6	45.0	45.0	5.1	113.5
2013	248.2	9.2	25.1	70.6	11.1	123.7	416.6	29.8	56.8	56.8	6.4	143.3
2014	261.3	9.6	26.4	74.3	11.6	130.2	442.6	31.7	60.3	60.3	6.8	152.3
2015	274.5	10.1	27.7	78.1	12.2	136.8	477.9	34.2	65.1	65.1	7.3	164.4
2016	287.6	10.6	29.1	81.8	12.8	143.3	624.7	44.7	85.1	85.1	9.6	215.0
2017	300.8	11.1	30.4	85.5	13.4	149.9	601.0	43.0	81.9	81.9	9.2	206.8
2018	313.9	11.6	31.7	89.3	14.0	156.4	745.5	53.3	101.6	101.6	11.4	256.6

Table S2 Time series for other cattle sub-category populations, 1994–2018 (head)

Year	Pastoral and aAgro-pastoral system							Mixed crop–livestock system						
	Cows, >3 years	Males for draught, 3–10 years	Other males, >3–10 years	Calves, < 6 months	Calves 6–12 months	Males, 1–<3 years	Females 1–<3 years	Cows, >3 years	Males for draught, 3–10 years	Other males, >3–10 years	Calves, < 6 months	Calves, 6–12 months	Males, 1–<3 years	Females, 1–<3 years
1994	1596.5	569.4	263.2	430.8	450.1	342.6	458.3	9410.8	7172.8	781.6	1966.7	1920.7	2067.6	2482.6
1995	1717.5	612.8	283.4	463.6	484.3	368.8	493.3	10148.0	7734.4	842.8	2120.7	2071.2	2229.5	2677.2
1996	2261.4	672.0	340.8	687.4	709.0	440.8	707.6	10104.1	7788.2	819.1	2471.1	2468.4	2254.9	2677.1
1997	2359.1	699.8	358.0	720.9	743.7	462.1	743.1	10803.6	8327.1	875.8	2641.9	2639.2	2410.9	2862.4
1998	2433.5	709.6	371.8	740.8	761.0	477.1	764.3	10718.8	8261.9	868.9	2621.4	2618.5	2392.0	2840.0
1999	2413.1	706.8	363.6	726.9	746.3	468.4	747.9	10101.4	7786.4	818.9	2470.4	2467.8	2254.3	2676.3
2000	2457.2	716.6	375.3	747.8	768.1	481.6	771.4	10806.6	8329.7	876.0	2642.9	2640.0	2411.6	2863.2
2001	2911.9	848.4	446.1	888.3	912.5	572.0	917.0	12952.7	9983.0	1050.0	3167.6	3164.2	2890.3	3431.9
2002	2489.0	725.7	380.5	758.0	778.6	488.1	782.1	10980.0	8463.4	890.1	2685.3	2682.4	2450.4	2909.1
2003	1867.2	481.5	204.9	608.3	499.9	287.6	493.7	12581.7	8855.7	1016.1	3299.4	2878.5	2682.5	3229.6
2004	1892.2	476.1	203.6	609.0	454.8	275.8	424.8	13199.1	9199.6	1170.4	3144.5	2555.8	2705.1	3289.8
2005	1935.6	485.7	240.7	619.2	464.7	293.6	438.2	13630.7	9834.8	1265.2	3356.1	2816.9	2575.1	3135.6
2006	2445.0	555.4	332.9	707.9	557.1	336.4	560.4	14293.3	10145.7	1423.0	3673.8	3180.5	2714.7	3256.4
2007	2378.5	528.9	335.3	779.5	591.7	358.4	539.2	15775.0	10990.4	1515.7	4006.5	3658.7	3151.0	3770.8
2008	2499.0	567.6	306.4	726.0	646.0	342.0	626.7	16409.3	11850.7	1475.0	3788.1	3614.3	3290.4	4016.2
2009	2609.2	565.4	339.5	706.7	640.4	353.2	631.7	16710.5	12257.0	1901.7	4496.5	3367.7	3250.8	4048.2
2010	3234.1	639.4	501.9	899.8	767.2	399.2	759.1	17351.2	12824.2	1726.3	4295.9	4091.7	3297.8	4029.7
2011	3035.5	622.6	436.7	867.6	728.1	416.8	749.7	17201.3	12293.4	1439.1	4213.2	3881.2	3411.4	3959.8
2012	3827.8	754.5	618.9	1112.6	795.1	475.2	895.2	17271.5	12599.2	1510.0	4499.6	3539.1	3607.2	4186.9
2013	4188.4	785.7	480.3	1176.7	930.3	502.4	866.8	17337.4	12914.5	1572.7	4437.4	3701.6	3721.3	4214.7
2014	4487.8	886.6	521.9	1217.3	1006.7	587.9	1067.9	17623.1	13412.7	1350.9	4445.5	4049.6	3782.9	4404.5
2015	4718.9	801.3	732.0	1154.4	977.6	528.4	902.1	17781.1	13661.1	1356.1	4330.5	4493.6	3840.3	4470.8
2016	4323.8	761.4	770.0	1132.3	1013.0	486.1	797.5	18214.1	14021.6	1328.4	4873.1	4279.6	4032.0	4780.1
2017	4282.4	792.8	751.6	1160.2	1033.1	506.3	826.0	18191.9	14739.2	1189.7	4607.6	4639.6	4184.8	4858.0
2018	5008.6	714.2	811.9	1557.8	988.8	563.2	774.5	18441.6	14084.9	1317.6	4850.8	4796.2	4280.1	5085.1

Table S3 Average live weight and growth rate of cattle sub-categories in various production systems

Production system	Sub-category	Live weight, kg	Growth rate, g/day
Mixed crop livestock system	Adult multipurpose cows >3 years	285.8	0
	Adult males used for draught (3–10 years)	342.8	0
	Adult males used for breeding & other purpose (>3–10 years)	342.8	0
	Calves < 6 months (male & female)	53.8	0.362
	Calves 6 m–1 year (male & female)	105.5	0.213
	Growing males 1–3 years	226.9	0.202
	Growing females 1–3 years	181.4	0.149
Pastoral and agropastoral system	Adult multipurpose cows >3 years	295.0	0
	Adult males used for draught (3–10 years)	339.8	0
	Adult males used for breeding & other purpose (>3–10 years)	339.8	0
	Calves < 6 months (male & female)	58.8	0.402
	Calves 6 m–1 year (male & female)	117.0	0.298
	Growing males 1–3 years	225.1	0.186
Commercial intensive system	Growing females 1–3 years	190.2	0.144
	Adult crossbred and pure exotic dairy cows (3–10 years)	428.6	0
	Adult crossbred and pure exotic males 3–10 years	418.5	0
	Pure exotic calves (<6 months) male & female	60.0	0.340
	Crossbred and pure exotic calves (6 m–< 1 yr) male & female	117.6	0.300
	Crossbred and pure exotic growing males (1–< 3 years)	261.0	0.254
	Crossbred and pure exotic growing females (1 –< 3 years)	261.0	0.263
Smallholder intensive system	Adult crossbred and pure exotic dairy cows (3–10 & above years)	428.6	0
	Adult crossbred and pure exotic males 3–10 * above years	418.5	0
	Crossbred & pure exotic calves (<6 months) male & female	60.0	0.340
	Crossbred & pure exotic calves (6 m–< 1 yr) male & female	117.6	0.300
	Crossbred & pure exotic growing males (1–< 3 years)	261.0	0.254
	Crossbred & pure exotic growing females (1 –< 3 years)	261.0	0.263

Table S4 Time series for proportion of cows giving birth for other cattle in mixed crop-livestock production system (1000s head)

Year	Calves born (< 6 month)	Calf mortality (< 6 months)	Total calves (< 6 months)	Cows in milk	Cows giving birth, %
1994					32.6
1995					33.0
1996					33.7
1997	315.1	671.2	382.2	108.9	35.1
1998					37.9
1999					40.7
2000					43.5
2001	3239.0				46.3
2002	3730.3	794.5	4524.8	8712.5	49.1
2003	3573.6	761.2	4334.8	8048.1	51.9
2004	3798.0	809.0	4607.0	8194.2	53.9
2005	4159.6	886.0	5045.6	9113.5	56.2
2006	4562.5	971.8	5534.3	9923.1	55.4
2007	4302.9	916.5	5219.4	9919.4	55.8
2008	5010.4	1067.2	6077.6	9627.7	52.6
2009	4918.3	1047.6	5965.8	10676.8	63.1
2010	4787.6	1019.8	5807.3	10577.8	55.9
2011	5229.5	1113.9	6343.4	10711.5	54.9
2012	5173.7	1102.0	6275.7	10731.7	59.2
2013	5215.4	1110.9	6326.3	11382.0	58.5
2014	5053.2	1076.3	6129.5	11326.5	55.6
2015	5628.5	1198.9	6827.4	11833.2	54.1
2016	5381.9	1146.4	6528.3	12392.7	57.7
2017	5780.3	1231.2	7011.5	12405.0	52.7
2018	3730.3	794.5	4524.8	8712.5	56.5

Table S5 Average kilograms of milk produced daily for milking cows, 1994–2018

Year	Mixed crop-livestock	Pastoral/agro pastoral	Commercial and small holder
1994	0.56	0.62	4.54
1995	0.57	0.62	4.61
1996	0.58	0.64	4.68
1997	0.60	0.66	4.76
1998	0.65	0.71	4.84
1999	0.70	0.77	4.92
2000	0.75	0.82	5.00
2001	0.80	0.88	5.08
2002	0.84	0.93	5.17
2003	0.90	0.97	5.25
2004	0.91	0.99	5.34
2005	0.97	1.11	5.43
2006	0.96	1.04	5.52
2007	0.95	1.08	5.61
2008	0.90	0.98	5.70
2009	1.15	1.19	5.80
2010	0.98	1.08	5.90
2011	0.98	1.02	6.00
2012	1.01	1.12	6.10
2013	1.01	1.08	6.15
2014	0.95	1.04	6.21
2015	0.93	0.99	6.27
2016	0.98	1.05	6.33
2017	0.90	0.97	6.38
2018	0.96	1.06	6.44

Table S6 Margin of error around the mean and probability density functions used in Ethiopia cattle enteric fermentation emission inventory

Parameter	System	Margin of error	PDF, justification	References
Live weight	Mixed crop-livestock	± 14.72%–36.91%	Normal, SE small compared with mean	Calculated from data in Wilkes <i>et al.</i> (2020)
	Pastoral agro/pastoral	± 14.75%–21.25%	Normal, SE small compared with mean	Calculated from data in Wilkes <i>et al.</i> (2020)
	Commercial dairy	± 0.88%–14.56%	Normal, SE small compared with mean	Calculated from data in Wilkes <i>et al.</i> (2020)
	Smallholder dairy	± 1.76%–29.12%	Normal, SE small compared with mean	Calculated from data in Wilkes <i>et al.</i> (2020)
Proportion of cows giving birth	Mixed crop-livestock	± 3.75%	Beta, proportion cannot have negative values	CSA (2019)
	Pastoral agro/pastoral	± 18.04%	Beta, proportion cannot have negative values	CSA (2019)
	Commercial dairy	± 50%	Beta, proportion cannot have negative values	Expert judgement
	Smallholder dairy	±6.25%	Beta, proportion cannot have negative values	CSA (2019)
Milk yield		±29.26%	Normal, s.e. small compared with mean	Migose <i>et al.</i> (2020)
Milk fat content (%)		±10%	Normal, s.e. small compared with mean	Expert judgement
Digestible energy, % dairy cattle			Triangular distribution minimum: 50% most likely: inventory value; maximum 65%	IPCC (2006, 2019)
Digestible energy, % other cattle			Triangular distribution minimum: 45% most likely: inventory value maximum 60%	IPCC (2006, 2019)
CH ₄ conversion factor, %		±20%	Normal, SE. small compared with mean	IPCC (2019)
C _{maintainence}		±15%	Beta, proportion cannot have negative values	Monni <i>et al</i> (2007)
C _{activity}		±15%	Beta, proportion cannot have negative values	Monni <i>et al</i> (2007)
C _{pregnancy}		±15%	Beta, proportion cannot have negative values	Monni <i>et al</i> (2007)
C _{growth}		±15%	Beta, proportion cannot have negative values	Monni <i>et al</i> (2007)

C-values reflect the parameters used to calculate net energy required for the subscripted physiological function

Table S7 Emission factors for dairy cattle sub-categories, 1994–2018 (kg CH₄ /head/year)

Year	Commercial dairy production system							Smallholder dairy production system						
	Cows >3 years	Males (3–10 years)	Calves < 6 months	Calves 6–12 months	Males 1–3 years	Females 1–3 years	Implied emission factor	Cows >3 years	Breeding males, 3–10 years	Calves < 6 months	Calves 6–12 months	Males 1–3 years	Females 1–3 years	Implied emission factor
1994	69.5	47.1	3.5	11.2	40.6	38.6	48.8	69.5	49.7	3.5	11.2	42.5	40.2	52.6
1995	69.8	47.1	3.5	11.2	40.6	38.6	48.9	69.8	49.7	3.5	11.2	42.5	40.2	52.8
1996	70.2	47.1	3.5	11.2	40.6	38.6	49.1	70.2	49.6	3.5	11.2	42.5	40.2	52.9
1997	70.5	47.1	3.5	11.2	40.6	38.6	49.3	70.5	49.6	3.5	11.2	42.4	40.2	53.1
1998	70.8	47.1	3.5	11.2	40.6	38.6	49.4	70.8	49.6	3.5	11.2	42.4	40.2	53.3
1999	71.1	47.1	3.5	11.2	40.6	38.6	49.6	71.1	49.6	3.5	11.2	42.4	40.1	53.5
2000	71.5	47.1	3.5	11.2	40.6	38.6	49.8	71.5	49.5	3.5	11.2	42.4	40.1	53.7
2001	71.8	47.1	3.5	11.2	40.6	38.6	49.9	71.8	49.5	3.5	11.2	42.4	40.1	53.9
2002	72.2	47.1	3.5	11.2	40.6	38.6	50.1	72.2	49.5	3.5	11.2	42.4	40.1	54.1
2003	72.6	47.1	3.5	11.2	40.7	38.6	50.3	72.6	49.5	3.5	11.2	42.3	40.1	54.3
2004	72.9	47.1	3.5	11.2	40.6	38.6	50.5	72.9	49.4	3.5	11.2	42.3	40.1	54.5
2005	73.3	47.1	3.5	11.2	40.7	38.6	50.7	73.3	49.4	3.5	11.2	42.3	40.1	54.8
2006	73.7	47.1	3.5	11.2	40.7	38.6	50.9	73.7	49.4	3.5	11.2	42.3	40.0	55.0
2007	74.0	47.0	3.5	11.2	40.6	38.6	51.1	74.0	49.3	3.5	11.2	42.2	40.0	55.2
2008	74.4	47.1	3.5	11.2	40.6	38.6	51.3	74.4	49.3	3.5	11.2	42.2	40.0	55.4
2009	74.8	47.1	3.5	11.2	40.6	38.6	51.5	74.8	49.3	3.5	11.2	42.2	40.0	55.6
2010	75.3	47.1	3.5	11.2	40.7	38.6	51.7	75.3	49.3	3.5	11.2	42.2	40.0	55.9
2011	75.7	47.1	3.5	11.2	40.7	38.6	51.9	75.7	49.3	3.5	11.2	42.2	40.0	56.2
2012	76.1	47.1	3.5	11.2	40.7	38.6	52.1	76.1	49.2	3.5	11.2	42.2	40.0	56.4
2013	76.3	47.1	3.5	11.2	40.6	38.6	52.2	76.3	49.2	3.5	11.2	42.2	39.9	56.5
2014	76.6	47.1	3.5	11.2	40.6	38.6	52.4	76.6	49.2	3.5	11.2	42.1	39.9	56.6
2015	76.8	47.1	3.5	11.2	40.6	38.6	52.5	76.8	49.2	3.5	11.2	42.1	39.9	56.8
2016	77.1	47.1	3.5	11.2	40.6	38.6	52.6	77.1	49.1	3.5	11.2	42.1	39.9	56.9
2017	77.3	47.1	3.5	11.2	40.7	38.6	52.7	77.3	49.1	3.5	11.2	42.1	39.9	57.1
2018	77.6	47.1	3.5	11.2	40.7	38.6	52.9	77.6	49.1	3.5	11.2	42.1	39.9	57.2
Mean	73.7	47.1	3.5	11.2	40.6	38.6	50.9	73.7	49.4	3.5	11.2	42.3	40.0	55.0
SD	2.60	0.01	0.00	0.01	0.01	0.01	1.32	2.60	0.19	0.00	0.01	0.13	0.11	1.49

Table S8 Emission factors for other cattle sub-categories in the pastoral and agro pastoral system, 1994–2018 (kg methane/head/year)

Year	Cows, >3 years	Draught males, 3–10 years	Other males, >3–10 years	Calves, < 6 months	Calves, 6–12 months	Males, 1–3 years	Females, 1–3 years	Implied emission factor
1994	60.5	64.3	68.6	6.0	18.3	57.6	45.9	49.3
1995	60.5	64.3	68.6	6.0	18.3	57.6	45.9	49.3
1996	60.7	64.2	68.5	6.0	18.4	57.6	45.9	47.9
1997	60.9	64.1	68.5	6.0	18.4	57.6	45.9	47.9
1998	61.5	64.1	68.5	6.0	18.4	57.5	45.8	48.2
1999	62.1	64.0	68.5	6.0	18.4	57.5	45.8	48.5
2000	62.6	63.9	68.4	6.0	18.4	57.5	45.8	48.6
2001	63.2	63.9	68.4	6.0	18.4	57.5	45.8	48.8
2002	63.8	63.8	68.4	6.0	18.4	57.5	45.8	49.0
2003	64.3	63.7	68.4	6.0	18.3	57.4	45.8	48.8
2004	64.6	63.7	68.3	6.0	18.3	57.4	45.8	49.3
2005	65.4	63.6	68.3	6.0	18.3	57.4	45.7	49.8
2006	65.0	63.5	68.3	6.0	18.3	57.4	45.7	50.3
2007	65.2	63.5	68.3	6.0	18.3	57.4	45.7	49.4
2008	64.3	63.4	68.2	6.0	18.3	57.3	45.7	49.4
2009	66.6	63.3	68.2	6.0	18.3	57.3	45.7	50.9
2010	65.2	63.3	68.2	6.0	18.3	57.3	45.7	50.3
2011	64.7	63.2	68.1	6.0	18.3	57.3	45.7	49.9
2012	65.7	63.1	68.1	6.0	18.3	57.3	45.6	50.8
2013	65.4	63.1	68.1	6.0	18.3	57.3	45.6	50.2
2014	64.8	63.0	68.1	6.0	18.3	57.2	45.6	50.2
2015	64.4	62.9	68.0	6.0	18.3	57.2	45.6	51.0
2016	65.1	62.9	68.0	6.0	18.3	57.2	45.6	50.8
2017	64.1	62.8	68.0	6.0	18.3	57.2	45.6	50.0
2018	65.0	62.7	68.0	6.0	18.3	57.2	45.5	49.9
Mean	63.8	63.5	68.3	6.0	18.3	57.4	45.7	49.5
SD	1.81	0.49	0.19	0.01	0.01	0.14	0.11	0.92

Table S9 Emission factors for other cattle sub-categories in the mixed crop-livestock system, 1994–2018 (kg methane/head/year)

Year	Cows >3 years	Draught males, 3–10 years	Other males, >3–10 years	Calves, < 6 months	Calves, 6–12 months	Males, 1–3 years	Females, 1–3 years	Smallholder fattening male	Commercial feedlot male	Implied emission factor
1994	53.6	59.1	62.3	5.2	14.6	54.2	41.7	49.5	55.7	47.7
1995	53.7	59.0	62.2	5.2	14.6	54.2	41.7	49.5	55.6	47.7
1996	53.8	58.9	62.2	5.2	14.6	54.2	41.6	49.5	55.6	46.8
1997	54.1	58.9	62.2	5.2	14.6	54.2	41.6	49.5	55.6	46.8
1998	54.6	58.8	62.2	5.2	14.6	54.2	41.6	49.5	55.6	47.0
1999	55.1	58.7	62.1	5.2	14.6	54.1	41.6	49.4	55.6	47.2
2000	55.7	58.6	62.1	5.2	14.6	54.1	41.6	49.4	55.5	47.3
2001	56.2	58.6	62.1	5.2	14.6	54.1	41.6	49.4	55.5	47.5
2002	56.7	58.5	62.1	5.2	14.6	54.1	41.6	49.4	55.5	47.6
2003	56.9	58.0	61.6	5.1	14.5	53.6	41.2	49.1	55.5	47.1
2004	57.4	58.2	61.8	5.1	14.5	53.9	41.4	49.2	55.5	48.2
2005	58.2	58.4	62.0	5.2	14.6	54.1	41.6	49.4	55.5	48.5
2006	57.7	58.0	61.7	5.1	14.5	53.8	41.3	49.2	55.4	47.8
2007	57.7	57.9	61.7	5.1	14.5	53.8	41.3	49.2	55.4	47.6
2008	57.2	58.0	61.8	5.2	14.6	53.9	41.4	49.3	55.4	48.0
2009	59.8	58.1	62.0	5.2	14.6	54.0	41.5	49.3	55.4	48.8
2010	58.2	58.2	62.1	5.2	14.7	54.2	41.6	49.4	55.4	48.2
2011	58.1	58.1	62.1	5.2	14.7	54.2	41.6	49.4	55.3	48.1
2012	58.7	58.0	62.0	5.2	14.7	54.1	41.6	49.3	55.3	48.4
2013	58.4	57.8	61.8	5.2	14.6	53.9	41.4	49.2	55.3	48.2
2014	57.9	57.8	61.9	5.2	14.6	54.0	41.5	49.2	55.3	47.9
2015	57.6	57.8	61.9	5.2	14.6	54.0	41.5	49.2	55.3	47.7
2016	58.2	57.6	61.8	5.2	14.6	53.9	41.4	49.2	55.3	47.6
2017	56.9	57.3	61.5	5.1	14.6	53.6	41.2	49.0	55.2	47.1
2018	57.9	57.5	61.7	5.2	14.6	53.9	41.4	49.1	55.2	47.2
Mean	56.8	58.2	62.0	5.2	14.6	54.0	41.5	49.3	55.4	47.7
SD	1.74	0.49	0.22	0.02	0.05	0.18	0.14	0.14	0.13	0.54