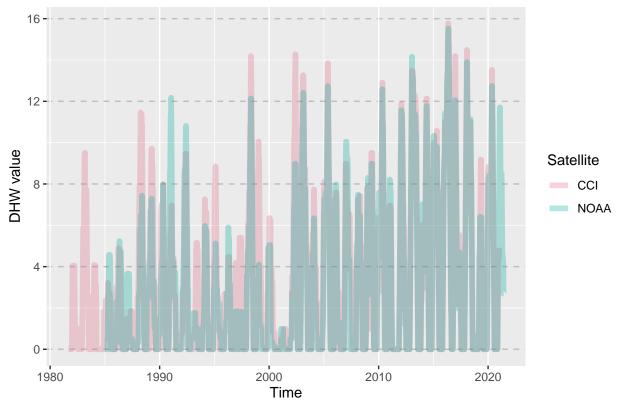
#### Degree Heating Week Analysis

Vanessa

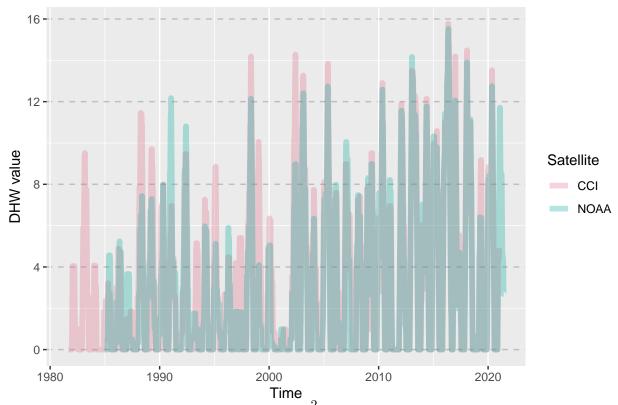
2021-09-14

#### Degree Heating Week Time Series Plots for CCI and NOAA data:

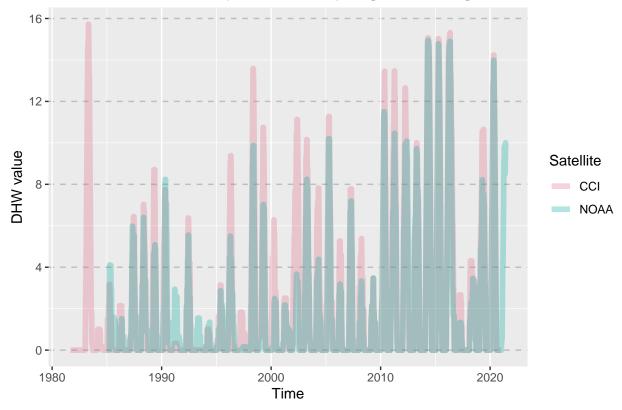
#### Time Series of BRS05 (-14.11, 123.54) Degree Heating Week values



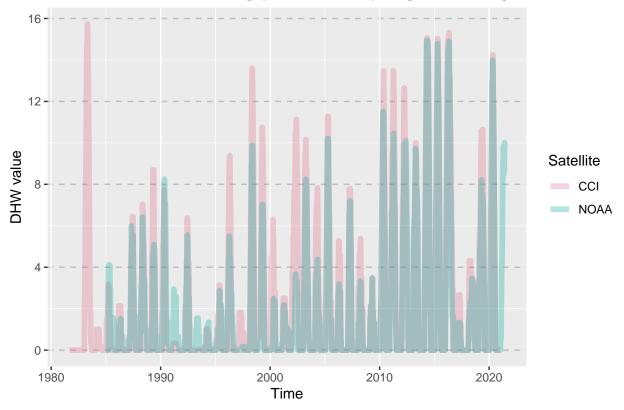
Time Series of BRS07 (-14.12, 123.55) Degree Heating Week values



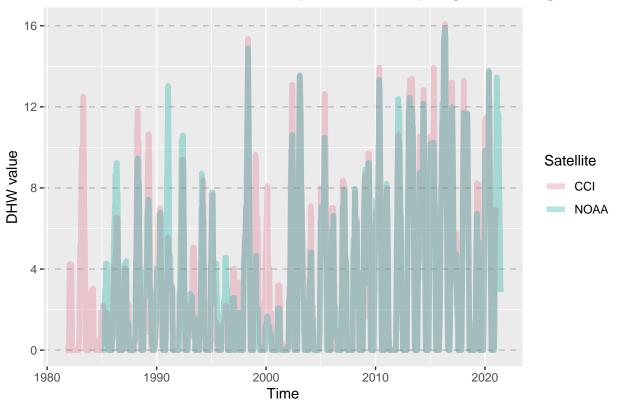




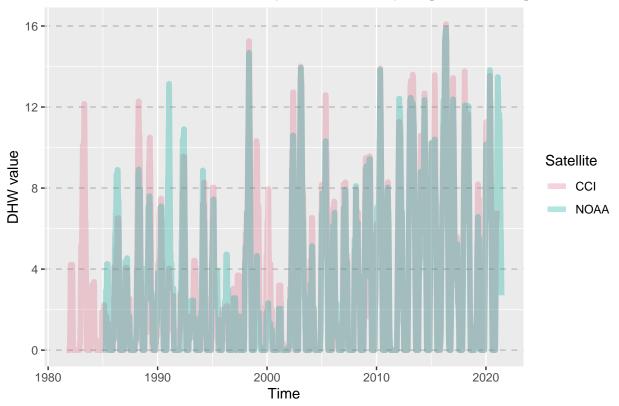


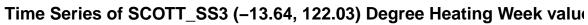


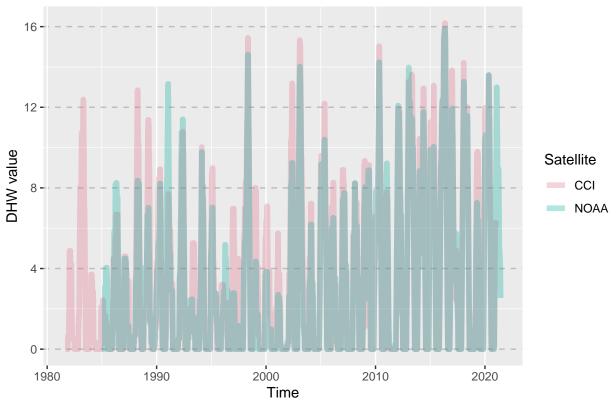




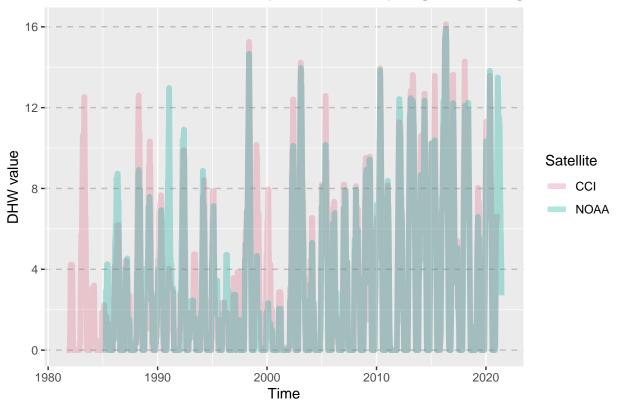


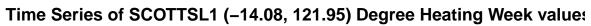


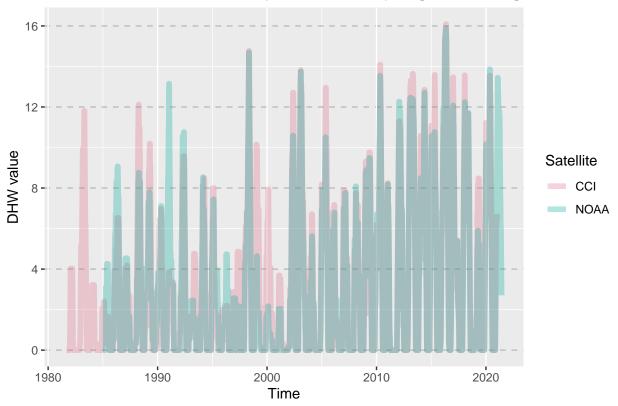


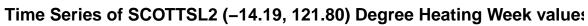


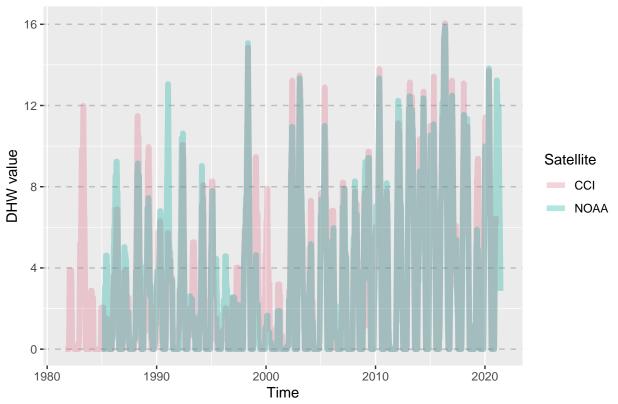


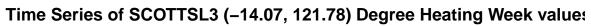


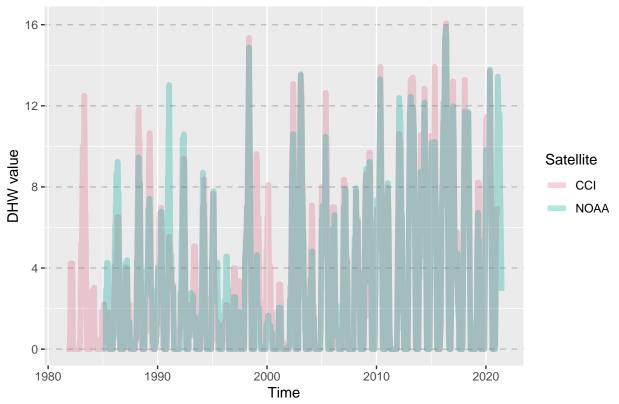




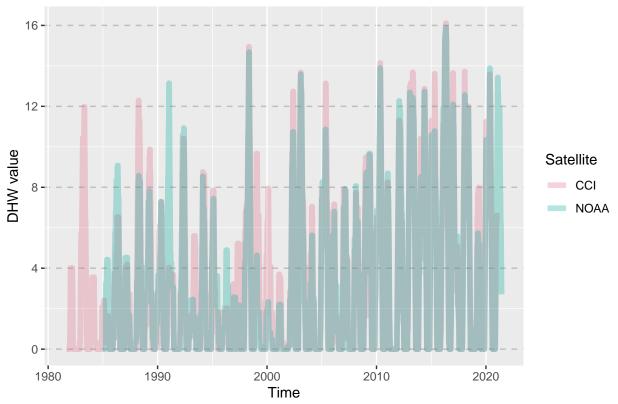




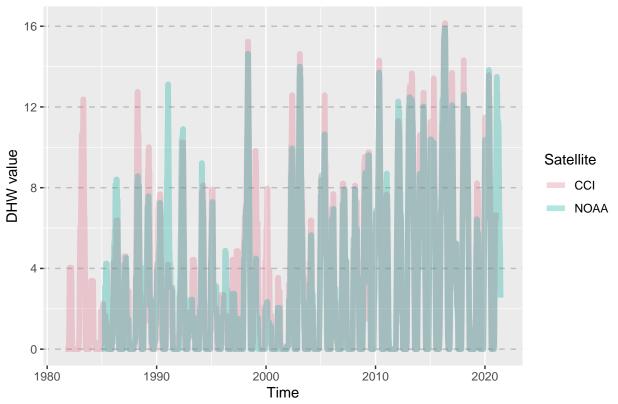




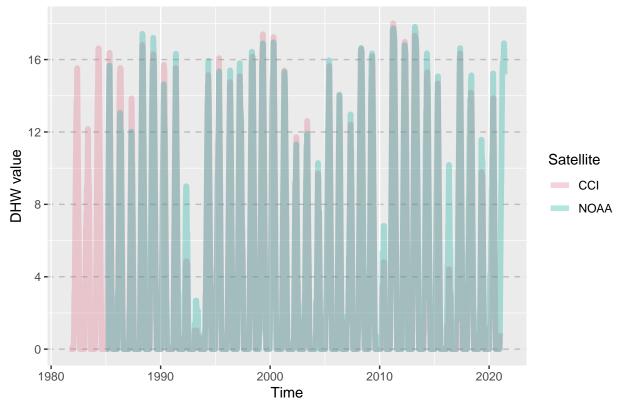


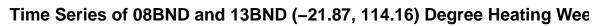


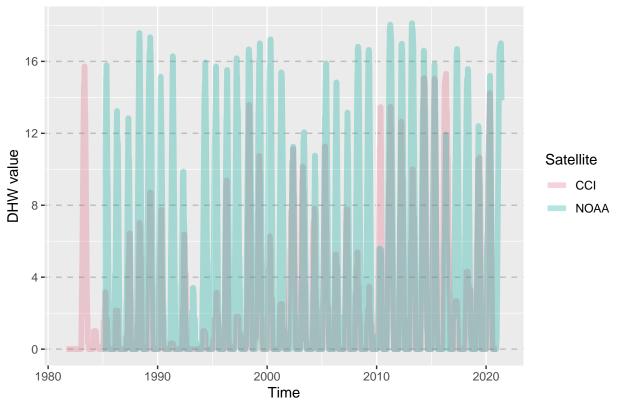


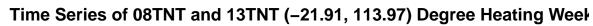


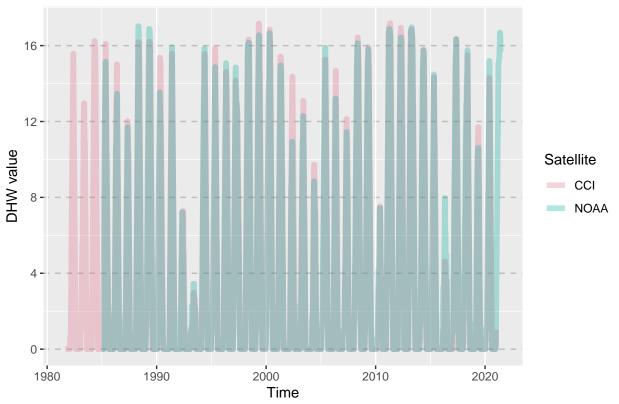




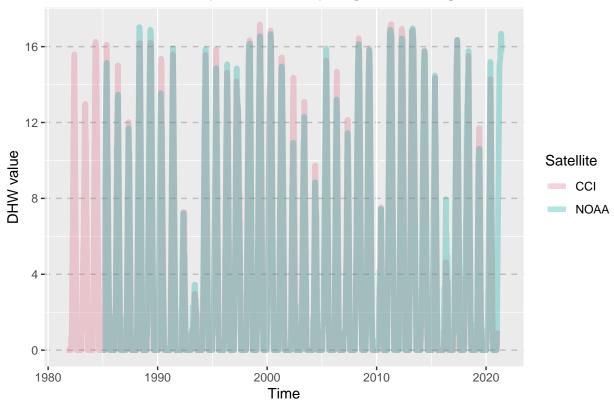




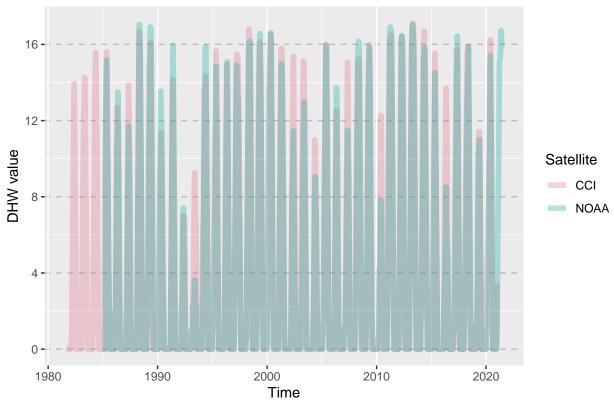




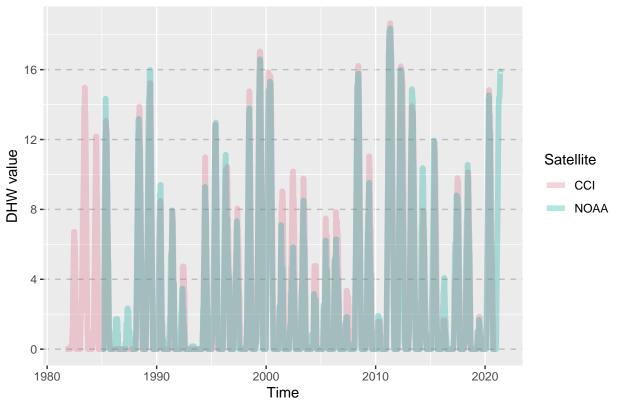




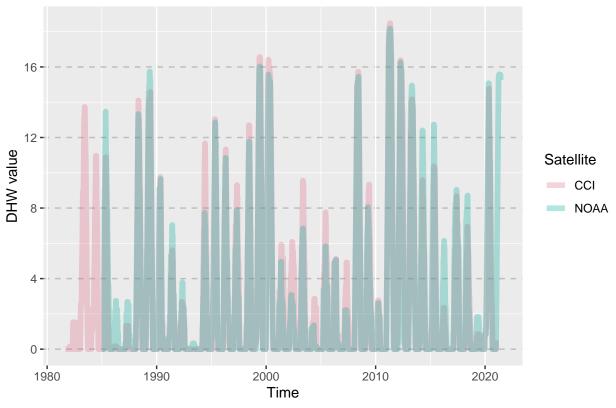


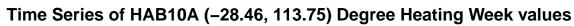


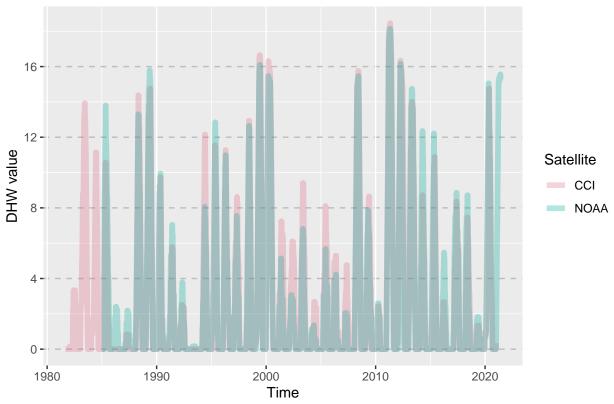




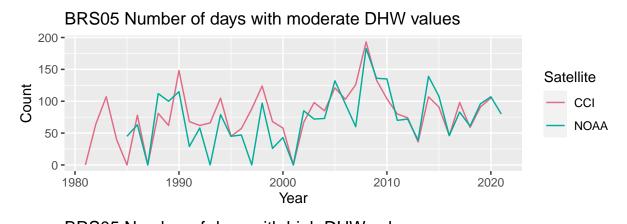








# $BRS05\ Yearly\ Sum$ of Moderate and High DHW Values in CCI and NOAA data



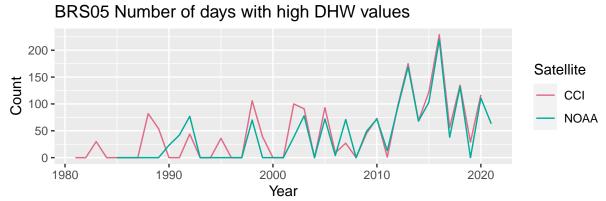


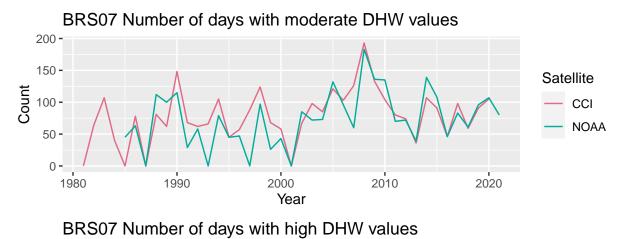
Table 1: Number of Days with moderate Degree Heating Week values

Year	CCI_DHW4	Year	NOAA_DHW4
2008	193	2008	183
1990	148	2014	139
2009	133	2009	136
2007	126	2010	135
1998	124	2005	132
2005	121	1990	115
1983	107	1988	112
2014	107	2015	108
1994	105	2020	107
2020	105	1989	100
2010	104	1998	97
2006	103	2006	96
2003	98	2019	96
2017	98	2002	85
2015	91	2017	83
2019	91	2021	80
1997	88	1994	79
2004	85	2004	73
1988	81	2003	72
2011	80	2012	72
1986	78	2011	70
2012	74	1986	63
1991	68	2018	61
1999	68	2007	60
2002	67	1992	58
1993	66	1996	47
1982	64	2016	46
1989	62	1985	45
1992	62	1995	45
2018	59	2000	43
2000	58	2013	39
1996	57	1991	29
2016	46	1999	26
1995	45	1987	0
1984	40	1993	0
2013	36	1997	0
1981	0	2001	0
1985	0	1981	NA
1987	0	1982	NA
2001	0	1983	NA
2021	NA	1984	NA
	-		I

Table 2: Number of Days with high Degree Heating Week values

Year 2016 2013 2018 2015 2020 1998 2002 2012 2005	CCI_DHW8  229  175  135  122  117	Year 2016 2013 2018 2020	NOAA_DHW8 220 169 132
2013 2018 2015 2020 1998 2002 2012	175 135 122 117	2013 2018	169 132
2018 2015 2020 1998 2002 2012	135 122 117	2018	132
2015 2020 1998 2002 2012	122 117		
2020 1998 2002 2012	117	2020	
1998 2002 2012			111
2002 2012	100	2015	103
2012	106	2012	93
	100	2003	78
2005	96	1992	77
	93	2005	72
2003	91	2010	72
1988	82	2007	71
2010	73	1998	70
2014	69	2014	68
2017	56	2021	63
1989	54	2009	49
2009	45	1991	42
1992	44	2002	38
1999	39	2017	38
1995	36	1990	23
1983	30	2011	13
2019	29	2006	4
2007	27	1985	0
2006	9	1986	0
2011	1	1987	0
1981	0	1988	0
1982	0	1989	0
1984	0	1993	0
1985	0	1994	0
1986	0	1995	0
1987	0	1996	0
1990	0	1997	0
1991	0	1999	0
1993	0	2000	0
1994	0	2001	0
1996	0	2004	0
1997	0	2008	0
2000	0	2019	0
2001	0	1981	NA
2004	0	1982	NA
2008	0	1983	NA
2021	NA	1984	NA

# BRS07 Yearly Sum of Moderate and High DHW Values in CCI and NOAA data



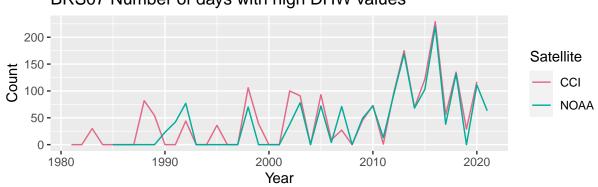


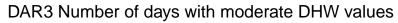
Table 3: Number of Days with moderate Degree Heating Week values

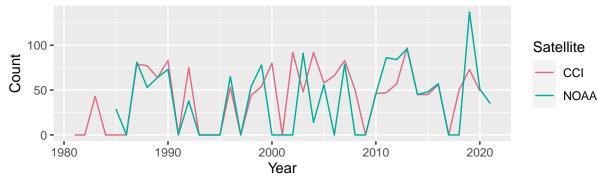
Year	CCI DHW4	Year	NOAA DHW4
2008	193	2008	183
1990	148	2014	139
2009	133	2009	136
2007	126	2010	135
1998	124	2005	132
2005	121	1990	115
1983	107	1988	112
2014	107	2015	108
1994	105	2020	107
2020	105	1989	100
2010	104	1998	97
2006	103	2006	96
2003	98	2019	96
2017	98	2002	85
2015	91	2017	83
2019	91	2021	80
1997	88	1994	79
2004	85	2004	73
1988	81	2003	72
2011	80	2012	72
1986	78	2011	70
2012	74	1986	63
1991	68	2018	61
1999	68	2007	60
2002	67	1992	58
1993	66	1996	47
1982	64	2016	46
1989	62	1985	45
1992	62	1995	45
2018	59	2000	43
2000	58	2013	39
1996	57	1991	29
2016	46	1999	26
1995	45	1987	0
1984	40	1993	0
2013	36	1997	0
1981	0	2001	0
1985	0	1981	NA
1987	0	1982	NA
2001	0	1983	NA
2021	NA	1984	NA

Table 4: Number of Days with high Degree Heating Week values

Year	CCI DHW8	Year	NOAA DHW8
2016	229	2016	220
2013	175	2013	169
2018	135	2018	132
2015	122	2020	111
2020	117	2015	103
1998	106	2012	93
2002	100	2003	78
2012	96	1992	77
2005	93	2005	72
2003	91	2010	72
1988	82	2007	71
2010	73	1998	70
2014	69	2014	68
2017	56	2021	63
1989	54	2009	49
2009	45	1991	42
1992	44	2002	38
1999	39	2017	38
1995	36	1990	23
1983	30	2011	13
2019	29	2006	4
2007	27	1985	0
2006	9	1986	0
2011	1	1987	0
1981	0	1988	0
1982	0	1989	0
1984	0	1993	0
1985	0	1994	0
1986	0	1995	0
1987	0	1996	0
1990	0	1997	0
1991	0	1999	0
1993	0	2000	0
1994	0	2001	0
1996	0	2004	0
1997	0	2008	0
2000	0	2019	0
2001	0	1981	NA
2004	0	1982	NA
2008	0	1983	NA
2021	NA	1984	NA

# DAR3 Yearly Sum of Moderate and High DHW Values in CCI and NOAA data





#### DAR3 Number of days with high DHW values

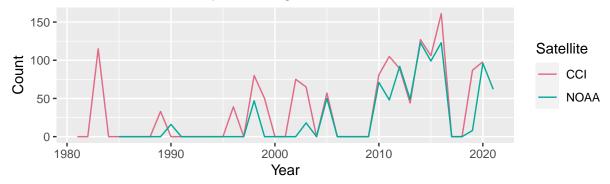


Table 5: Number of Days with moderate Degree Heating Week values

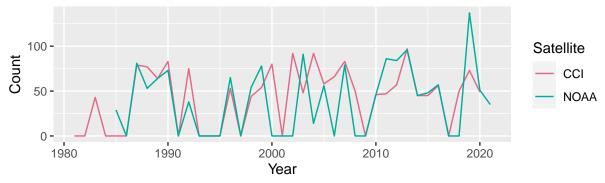
Year	CCI DHW4	Year	NOAA DHW4
2013	97	2019	137
2002	92	2013	96
2004	92	2003	91
1990	83	2011	86
2007	83	2012	84
2000	80	1987	81
1987	79	2007	79
1988	77	1999	78
1992	75	1990	73
2019	73	1996	65
2006	66	1989	64
1989	64	2016	57
2005	58	2005	56
2012	57	1998	54
2016	56	1988	53
1999	54	2020	51
1996	53	2015	48
2008	50	2010	46
2018	50	2014	45
2020	49	1992	38
2003	48	2021	35
2011	47	1985	29
2010	46	2004	14
2014	45	1986	0
2015	45	1991	0
1998	44	1993	0
1983	43	1994	0
1981	0	1995	0
1982	0	1997	0
1984	0	2000	0
1985	0	2001	0
1986	0	2002	0
1991	0	2006	0
1993	0	2008	0
1994	0	2009	0
1995	0	2017	0
1997	0	2018	0
2001	0	1981	NA
2009	0	1982	NA
2017	0	1983	NA
2021	NA	1984	NA

Table 6: Number of Days with high Degree Heating Week values

Year 2016 2014 1983 2015 2011	CCI_DHW8 161 127	Year 2014 2016	NOAA_DHW8 123
2014 1983 2015 2011	127		
1983 2015 2011		2016	
2015 2011	115	2010	123
2011	115	2015	99
	106	2020	96
2020	105	2012	92
2020	98	2010	71
2012	89	2021	62
2019	87	2005	50
2010	81	2013	49
1998	80	2011	48
2002	75	1998	47
2003	65	2003	18
2005	57	1990	16
1999	50	2019	8
2013	44	1985	0
1996	39	1986	0
1989	33	1987	0
1981	0	1988	0
1982	0	1989	0
1984	0	1991	0
1985	0	1992	0
1986	0	1993	0
1987	0	1994	0
1988	0	1995	0
1990	0	1996	0
1991	0	1997	0
1992	0	1999	0
1993	0	2000	0
1994	0	2001	0
1995	0	2002	0
1997	0	2004	0
2000	0	2006	0
2001	0	2007	0
2004	0	2008	0
2006	0	2009	0
2007	0	2017	0
2008	0	2018	0
2009	0	1981	NA
2017	0	1982	NA
2018	0	1983	NA
2021	NA	1984	NA

# DAR Long Yearly Sum of Moderate and High DHW Values in CCI and NOAA data

DARL Number of days with moderate DHW values



DARL Number of days with high DHW values

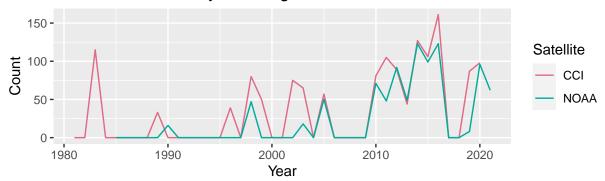


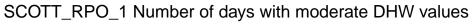
Table 7: Number of Days with moderate Degree Heating Week values

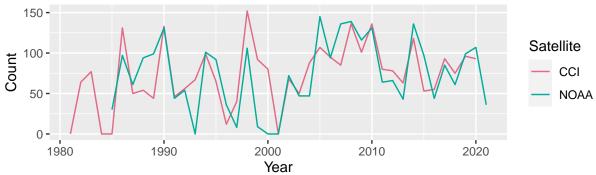
2002         92         2013         92         2003         92         2003         92         2003         92         2003         92         2003         92         2003         92         2003         92         2003         92         2011         93         93         2011         93         93         2012         93         93         2012         93         93         93         94	337 96 91 986 988 884 884 79 78 78 73 55 56 54
2002         92         2013           2004         92         2003           1990         83         2011           2007         83         2012           2000         80         1987           1987         79         2007           1988         77         1999           1992         75         1990           2019         73         1996           2006         66         1989           1989         64         2016           2012         57         1998           2016         56         1988           1999         54         2020           1996         53         2015	96 91 886 884 881 79 78 78 73 55 56
2004         92         2003         92         1990         83         2011         83         2012         83         2012         83         2012         80         1987         1987         1987         79         2007         70         1988         77         1999         79         79         2007         70         1999         70         70         1999         70         70         1999         70         70         70         1999         70         70         1999         70 <td>91 886 84 881 79 78 78 655 656</td>	91 886 84 881 79 78 78 655 656
1990         83         2011         3           2007         83         2012         3           2000         80         1987         3           1987         79         2007         7           1988         77         1999         7           1992         75         1990         7           2019         73         1996         6           2006         66         1989         6           1989         64         2016         3           2005         58         2005         3           2012         57         1998         3           2016         56         1988         3           1999         54         2020         3           1996         53         2015         3	86 84 81 79 78 73 65 64 67
2007         83         2012         3           2000         80         1987         3           1987         79         2007         7           1988         77         1999         7           1992         75         1990         7           2019         73         1996         6           2006         66         1989         6           1989         64         2016         3           2005         58         2005         3           2012         57         1998         3           2016         56         1988         3           1999         54         2020         3           1996         53         2015         3	84 81 79 78 73 65 64 57
2000         80         1987         3           1987         79         2007         3           1988         77         1999         3           1992         75         1990         3           2019         73         1996         4           2006         66         1989         4           2005         58         2005         4           2012         57         1998         4           2016         56         1988         4           1999         54         2020         4           1996         53         2015         4	81 79 78 73 65 64 67 66
1988     77     1999       1992     75     1990       2019     73     1996       2006     66     1989       1989     64     2016       2005     58     2005       2012     57     1998       2016     56     1988       1999     54     2020       1996     53     2015	78 73 65 64 67 66
1992     75     1990       2019     73     1996       2006     66     1989       1989     64     2016       2005     58     2005       2012     57     1998       2016     56     1988       1999     54     2020       1996     53     2015	73 65 64 67 66
2019     73     1996       2006     66     1989       1989     64     2016       2005     58     2005       2012     57     1998       2016     56     1988       1999     54     2020       1996     53     2015	55 54 57 56
2006     66     1989       1989     64     2016       2005     58     2005       2012     57     1998       2016     56     1988       1999     54     2020       1996     53     2015	54 57 56
1989     64     2016       2005     58     2005       2012     57     1998       2016     56     1988       1999     54     2020       1996     53     2015	57 56
2005         58         2005           2012         57         1998           2016         56         1988           1999         54         2020           1996         53         2015	56
2012     57     1998       2016     56     1988       1999     54     2020       1996     53     2015	
2016     56     1988       1999     54     2020       1996     53     2015	54
1999     54     2020       1996     53     2015	74
1996 53 2015	53
	51
2000	18
2008 50 2010	46
	45
	38
	35
2011 47 1985	29
2010 46 2004	14
2014 45 1986	0
2015 45 1991	0
1998 44 1993	0
1983 43 1994	0
1981 0 1995	0
1982 0 1997	0
1984 0 2000	0
1985 0 2001	0
1986 0 2002	0
1991 0 2006	0
1993 0 2008	0
1994 0 2009	0
1995 0 2017	0
1997 0 2018	0
	Α
	Α
2017 0 1983 N	Α
2021 NA 1984 N	

Table 8: Number of Days with high Degree Heating Week values

Year	CCI_DHW8	Year	NOAA_DHW8
2016	161	2014	123
2014	127	2016	123
1983	115	2015	99
2015	106	2020	96
2011	105	2012	92
2020	98	2010	71
2012	89	2021	62
2019	87	2005	50
2010	81	2013	49
1998	80	2011	48
2002	75	1998	47
2003	65	2003	18
2005	57	1990	16
1999	50	2019	8
2013	44	1985	0
1996	39	1986	0
1989	33	1987	0
1981	0	1988	0
1982	0	1989	0
1984	0	1991	0
1985	0	1992	0
1986	0	1993	0
1987	0	1994	0
1988	0	1995	0
1990	0	1996	0
1991	0	1997	0
1992	0	1999	0
1993	0	2000	0
1994	0	2001	0
1995	0	2002	0
1997	0	2004	0
2000	0	2006	0
2001	0	2007	0
2004	0	2008	0
2006	0	2009	0
2007	0	2017	0
2008	0	2018	0
2009	0	1981	NA
2017	0	1982	NA
2018	0	1983	NA
2021	NA	1984	NA

# SCOTT\_RPO\_1 Yearly Sum of Moderate and High DHW Values in CCI and NOAA data





#### SCOTT\_RPO\_1 Number of days with high DHW values

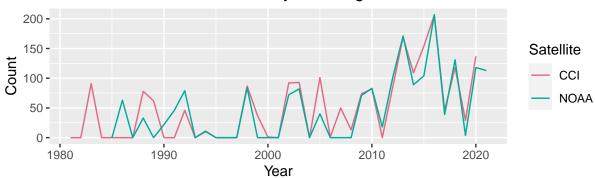


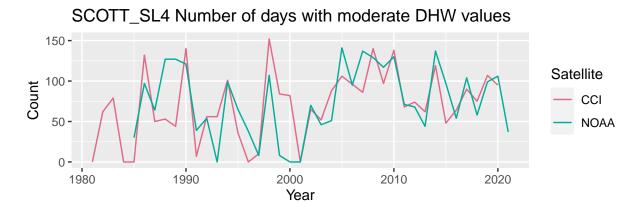
Table 9: Number of Days with moderate Degree Heating Week values

Year	CCI_DHW4	Year	NOAA_DHW4
1998	152	2005	145
2008	136	2008	139
2010	136	2007	136
1990	133	2014	136
1986	131	1990	131
2014	118	2010	131
2005	107	2009	116
2009	101	2020	107
1994	99	1998	106
2019	96	1994	101
2006	95	1989	99
2017	93	2019	99
2020	93	1986	97
1999	92	2015	97
2004	88	1988	94
2007	85	2006	94
2000	80	1995	92
2011	80	2017	85
2012	78	2002	72
1983	77	2012	66
2018	75	2011	64
2002	68	1987	61
1993	67	2018	61
1995	65	1992	54
1982	64	2003	47
2013	63	2004	47
1992	56	1991	44
2016	55	2016	44
1988	54	2013	43
2015	53	1996	36
1987	50	2021	36
2003	50	1985	30
1991	46	1999	9
1989	44	1997	8
1997	40	1993	0
1996	12	2000	0
1981	0	2001	0
1984	0	1981	NA
1985	0	1982	NA
2001	0	1983	NA
2021	NA	1984	NA
			1

Table 10: Number of Days with high Degree Heating Week values

2016         206         2016         20           2013         169         2013         1           2015         154         2018         1           2020         137         2020         1           2018         118         2021         1           2014         109         2015         10           2005         101         2012         10           2003         93         2014         3           2002         92         1998         3           2002         92         1998         3           1983         91         2010         3           2012         85         1992         3           2010         82         2002         3           1988         78         2003         3           2010         82         2002         3           1988         78         2009         4           1989         62         1991         3           2007         50         2005         3           1992         46         2017         3           2017         46         1988         3				
2013         169         2013         1           2015         154         2018         1           2020         137         2020         1           2018         118         2021         1           2014         109         2015         10           2005         101         2012         10           2003         93         2014         20           2002         92         1998         3           1983         91         2010         3           1998         87         2003         3           2012         85         1992         3           2010         82         2002         3           1988         78         2009         3           2009         74         1986         4           1989         62         1991         3           2007         50         2005         3           1992         46         2017         3           2017         46         1988         3           1999         37         1990         3           2019         29         2011         201	Year	CCI_DHW8	Year	NOAA_DHW8
2015         154         2018         1.           2020         137         2020         1           2018         118         2021         1           2014         109         2015         10           2005         101         2012         10           2003         93         2014         3           2002         92         1998         3           1983         91         2010         3           1998         87         2003         3           2012         85         1992         3           2010         82         2002         3           1988         78         2009         3           2010         82         2002         3           2012         85         1992         3           2009         74         1986         9           1989         62         1991         3           2007         50         2005         3           1992         46         2017         3           2017         46         1988         3           1999         37         1990         3 </td <td>2016</td> <td>206</td> <td>2016</td> <td>207</td>	2016	206	2016	207
2020         137         2020         1           2018         118         2021         1           2014         109         2015         10           2005         101         2012         10           2003         93         2014         20           2002         92         1998         3           1983         91         2010         3           1998         87         2003         3           2012         85         1992         3           2010         82         2002         3           1988         78         2009         3           2010         82         2002         3           1988         78         2009         3           2009         74         1986         6           1989         62         1991         6         1991           2007         50         2005         1         208         1           1992         46         2017         2017         2019         2011         2008         1         1988           1999         37         1990         2019         2019         20	2013	169	2013	171
2018         118         2021         1           2005         101         2012         10           2003         93         2014         202           2002         92         1998         3           1983         91         2010         3           1998         87         2003         3           2012         85         1992         3           2010         82         2002         3           1988         78         2009         3           2009         74         1986         4           1989         62         1991         3           2007         50         2005         3           1992         46         2017         3           2017         46         1988         3           1999         37         1990         3           2019         29         2011         2019         2019           2008         13         1994         1994         1994         1994         1994         1994         1995         1998         1998         1998         1998         1998         1998         1998         1998		154	2018	131
2014         109         2015         10           2003         93         2014         202           2002         92         1998         2010           1983         91         2010         2010           1998         87         2003         202           2012         85         1992         202           2010         82         2002         202           1988         78         2009         202           2009         74         1986         6           1989         62         1991         2005           1992         46         2017         2019           2017         46         1988         30           1999         37         1990         30           2019         29         2011         2019         2011           2008         13         1994         10         2019         2019           2000         1         1985         2006         1         1987         1980         1993         1984         0         1993         1995         1985         0         1996         1997         1987         0         1999	2020	137	2020	118
2005         101         2012         10           2003         93         2014         2002         92         1998           1983         91         2010         2010         2010         2010         2012         2010         2012         2010         2012         2010         2012         2010         2012         2010	2018	118	2021	113
2003         93         2014           2002         92         1998           1983         91         2010           1998         87         2003           2012         85         1992           2010         82         2002           1988         78         2009           2009         74         1986           1989         62         1991           2007         50         2005           1992         46         2017           2017         46         1988           1999         37         1990           2019         29         2011           2008         13         1994           1994         10         2019           2006         1         1985           2006         1         1987           1981         0         1993           1984         0         1995           1985         0         1996           1986         0         1997           1987         0         1999           1990         0         2000           1991         0 <t< td=""><td>2014</td><td>109</td><td>2015</td><td>104</td></t<>	2014	109	2015	104
2002         92         1998           1983         91         2010           1998         87         2003           2012         85         1992           2010         82         2002           1988         78         2009           2009         74         1986           1989         62         1991           2007         50         2005           1992         46         2017           2017         46         1988           1999         37         1990           2019         29         2011           2008         13         1994           1994         10         2019           2006         1         1985           2006         1         1987           1981         0         1993           1984         0         1995           1985         0         1996           1986         0         1997           1987         0         1999           1990         0         2000           1991         0         2004           1995         0 <td< td=""><td>2005</td><td>101</td><td></td><td>101</td></td<>	2005	101		101
1983         91         2010           1998         87         2003           2012         85         1992           2010         82         2002           1988         78         2009           2009         74         1986           1989         62         1991           2007         50         2005           1992         46         2017           2017         46         1988           1999         37         1990           2019         29         2011           2008         13         1994           1994         10         2019           2000         1         1985           2006         1         1987           1981         0         1993           1984         0         1995           1985         0         1996           1986         0         1997           1990         0         2000           1991         0         2001           1993         0         2004           1995         0         2006           1996         0	2003	93	2014	89
1998         87         2003           2012         85         1992           2010         82         2002           1988         78         2009           2009         74         1986           1989         62         1991           2007         50         2005           1992         46         2017           2017         46         1988           1999         37         1990           2019         29         2011           2008         13         1994           1994         10         2019           2000         1         1985           2006         1         1987           1981         0         1989           1982         0         1993           1984         0         1995           1985         0         1996           1986         0         1997           1987         0         1999           1990         0         2000           1991         0         2004           1995         0         2006           1996         0         2	2002	92	1998	84
2012         85         1992           2010         82         2002           1988         78         2009           2009         74         1986           1989         62         1991           2007         50         2005           1992         46         2017           2017         46         1988           1999         37         1990           2019         29         2011           2008         13         1994           1994         10         2019           2000         1         1985           2006         1         1987           1981         0         1993           1982         0         1993           1984         0         1995           1986         0         1997           1987         0         1999           1990         0         2000           1991         0         2004           1995         0         2006           1996         0         2006           1996         0         2007	1983	91	2010	83
2010         82         2002           1988         78         2009           2009         74         1986           1989         62         1991           2007         50         2005           1992         46         2017           2017         46         1988           1999         37         1990           2019         29         2011           2008         13         1994           1994         10         2019           2000         1         1985           2006         1         1987           1981         0         1989           1982         0         1993           1984         0         1995           1986         0         1997           1987         0         1999           1990         0         2000           1991         0         2001           1993         0         2004           1995         0         2006           1996         0         2007	1998	87	2003	82
1988         78         2009           2009         74         1986           1989         62         1991           2007         50         2005           1992         46         2017           2017         46         1988           1999         37         1990           2019         29         2011           2008         13         1994           1994         10         2019           2000         1         1985           2006         1         1987           1981         0         1989           1982         0         1993           1984         0         1995           1986         0         1997           1987         0         1999           1990         0         2000           1991         0         2001           1993         0         2004           1995         0         2006           1996         0         2007	2012	85	1992	79
2009         74         1986           1989         62         1991           2007         50         2005           1992         46         2017           2017         46         1988           1999         37         1990           2019         29         2011           2008         13         1994           1994         10         2019           2000         1         1985           2006         1         1987           1981         0         1989           1982         0         1993           1984         0         1995           1985         0         1996           1987         0         1999           1990         0         2000           1991         0         2001           1993         0         2004           1995         0         2006           1996         0         2007	2010	82	2002	72
1989         62         1991           2007         50         2005           1992         46         2017           2017         46         1988           1999         37         1990           2019         29         2011           2008         13         1994           1994         10         2019           2000         1         1985           2006         1         1987           1981         0         1993           1982         0         1993           1984         0         1995           1986         0         1997           1987         0         1999           1990         0         2000           1991         0         2001           1993         0         2004           1995         0         2006           1996         0         2007	1988	78	2009	71
2007         50         2005           1992         46         2017           2017         46         1988           1999         37         1990           2019         29         2011           2008         13         1994           1994         10         2019           2000         1         1985           2006         1         1987           1981         0         1989           1982         0         1993           1984         0         1995           1986         0         1997           1987         0         1999           1990         0         2000           1991         0         2004           1995         0         2006           1996         0         2007	2009	74		63
1992       46       2017         2017       46       1988         1999       37       1990         2019       29       2011         2008       13       1994         1994       10       2019         2000       1       1985         2006       1       1987         1981       0       1989         1982       0       1993         1984       0       1995         1986       0       1997         1987       0       1999         1990       0       2000         1991       0       2004         1995       0       2006         1996       0       2007	1989	62		46
2017     46     1988       1999     37     1990       2019     29     2011       2008     13     1994       1994     10     2019       2000     1     1985       2006     1     1987       1981     0     1989       1982     0     1993       1984     0     1995       1985     0     1996       1986     0     1997       1987     0     1999       1990     0     2000       1991     0     2001       1995     0     2006       1996     0     2006       1996     0     2007		50		40
1999     37     1990       2019     29     2011       2008     13     1994       1994     10     2019       2000     1     1985       2006     1     1987       1981     0     1989       1982     0     1993       1984     0     1995       1986     0     1997       1987     0     1999       1990     0     2000       1991     0     2001       1995     0     2006       1996     0     2007		46		39
2019         29         2011           2008         13         1994           1994         10         2019           2000         1         1985           2006         1         1987           1981         0         1989           1982         0         1993           1984         0         1995           1985         0         1996           1986         0         1997           1990         0         2000           1991         0         2001           1993         0         2004           1995         0         2006           1996         0         2007				33
2008     13     1994       1994     10     2019       2000     1     1985       2006     1     1987       1981     0     1989       1982     0     1993       1984     0     1995       1985     0     1996       1986     0     1997       1987     0     1999       1990     0     2000       1991     0     2004       1995     0     2006       1996     0     2007				22
1994         10         2019           2000         1         1985           2006         1         1987           1981         0         1989           1982         0         1993           1984         0         1995           1985         0         1996           1986         0         1997           1987         0         1999           1990         0         2000           1991         0         2004           1995         0         2006           1996         0         2007				18
2000     1     1985       2006     1     1987       1981     0     1989       1982     0     1993       1984     0     1995       1985     0     1996       1986     0     1997       1987     0     1999       1990     0     2000       1991     0     2004       1995     0     2006       1996     0     2007				11
2006     1     1987       1981     0     1989       1982     0     1993       1984     0     1995       1985     0     1996       1986     0     1997       1987     0     1999       1990     0     2000       1991     0     2001       1993     0     2004       1995     0     2006       1996     0     2007		10		4
1981     0     1989       1982     0     1993       1984     0     1995       1985     0     1996       1986     0     1997       1987     0     1999       1990     0     2000       1991     0     2001       1993     0     2004       1995     0     2006       1996     0     2007				0
1982     0     1993       1984     0     1995       1985     0     1996       1986     0     1997       1987     0     1999       1990     0     2000       1991     0     2001       1993     0     2004       1995     0     2006       1996     0     2007				0
1984     0     1995       1985     0     1996       1986     0     1997       1987     0     1999       1990     0     2000       1991     0     2001       1993     0     2004       1995     0     2006       1996     0     2007		0		0
1985         0         1996           1986         0         1997           1987         0         1999           1990         0         2000           1991         0         2001           1993         0         2004           1995         0         2006           1996         0         2007		0		0
1986     0     1997       1987     0     1999       1990     0     2000       1991     0     2001       1993     0     2004       1995     0     2006       1996     0     2007				0
1987         0         1999           1990         0         2000           1991         0         2001           1993         0         2004           1995         0         2006           1996         0         2007		0		0
1990     0     2000       1991     0     2001       1993     0     2004       1995     0     2006       1996     0     2007				0
1991     0     2001       1993     0     2004       1995     0     2006       1996     0     2007		0		0
1993     0     2004       1995     0     2006       1996     0     2007				0
1995 0 2006 1996 0 2007				0
1996 0 2007				0
				0
1997   0 2008				0
	1997	0	2008	0
				NA
				NA
		<u> </u>		NA
2021 NA 1984 N	2021	NA	1984	NA

# SCOTT\_SL4 Yearly Sum of Moderate and High DHW Values in CCI and NOAA data



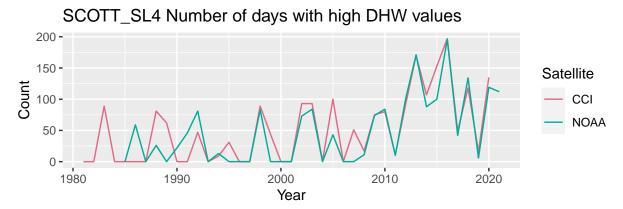


Table 11: Number of Days with moderate Degree Heating Week values

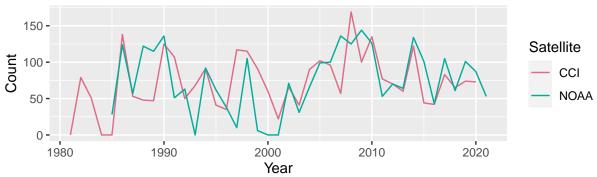
Year 1998 1990	CCI_DHW4 152	Year	NOAA_DHW4
1990	159		
	102	2005	141
	140	2007	137
2008	140	2014	137
2010	138	2010	130
1986	132	2008	129
2014	119	1988	127
2019	107	1989	127
2005	106	1990	121
1994	101	2009	117
2009	97	1998	107
2006	96	2020	106
2020	95	2017	104
2017	90	1994	99
2004	88	2019	99
2007	86	1986	97
1999	84	2015	97
2000	82	2006	95
1983	79	2011	71
2018	75	2002	70
2012	74	2012	68
2011	68	1995	65
2002	65	1987	64
2016	64	2018	58
1982	62	1992	54
2013	62	2016	54
1992	56	2004	51
1993	56	2003	46
1988	53	2013	44
2003	52	1991	39
1987	50	1996	38
2015	48	2021	37
1989	44	1985	30
1995	36	1997	8
1997	10	1999	8
1991	7	1993	0
1981	0	2000	0
1984	0	2001	0
1985	0	1981	NA
1996	0	1982	NA
2001	0	1983	NA
2021	NA	1984	NA

Table 12: Number of Days with high Degree Heating Week values

Year 2016 2013 2015 2020 2018	CCI_DHW8 197 170	Year 2016	NOAA_DHW8
2013 2015 2020		2016	196
2015 2020	170		100
2020		2013	171
	153	2018	134
2018	135	2020	119
2010	118	2021	112
2014	107	2012	101
2005	100	2015	100
2002	93	2014	88
2003	93	2003	84
2012	92	2010	84
1983	89	1998	83
1998	89	1992	81
1988	81	2009	74
2010	80	2002	73
2009	75	1986	59
1989	62	1991	46
2007	51	2005	43
2017	49	2017	42
1992	47	1988	26
1999	44	1990	22
1995	31	1994	13
2008	17	2008	11
2019	16	2011	10
2011	11	2019	6
1994	9	1985	0
2004	1	1987	0
1981	0	1989	0
1982	0	1993	0
1984	0	1995	0
1985	0	1996	0
1986	0	1997	0
1987	0	1999	0
1990	0	2000	0
1991	0	2001	0
1993	0	2004	0
1996	0	2006	0
1997	0	2007	0
2000	0	1981	NA
2001	0	1982	NA
2006	0	1983	NA
2021	NA	1984	NA

# SCOTT\_SS3 Yearly Sum of Moderate and High DHW Values in CCI and NOAA data





#### SCOTT\_SS3 Number of days with high DHW values

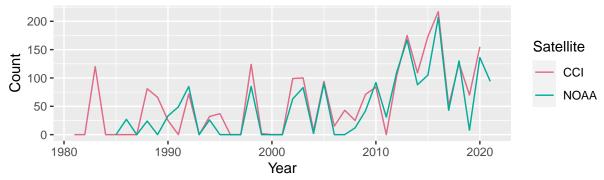


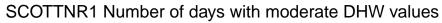
Table 13: Number of Days with moderate Degree Heating Week values  $\,$ 

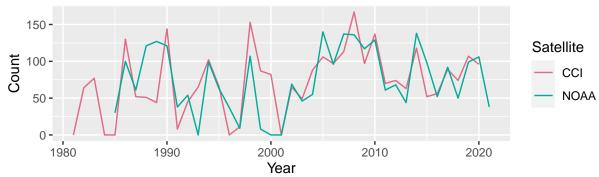
Year	CCI_DHW4	Year	NOAA_DHW4
2008	169	2009	144
1986	138	1990	136
2010	135	2007	136
1990	125	2014	134
2014	122	2010	126
1997	117	2008	125
1998	115	1986	124
1991	107	1988	122
2005	102	1989	115
2009	100	1998	105
2006	96	2017	105
1994	91	2015	101
1999	91	2019	101
2004	90	2006	100
2017	83	2005	99
1982	79	1994	92
2011	77	2020	87
2019	74	2002	71
2020	73	2012	70
2012	70	2004	66
1993	68	2013	64
2002	66	1992	63
2018	65	1995	62
2000	60	2018	61
2013	60	1987	57
2007	57	2011	53
1987	53	2021	53
1983	51	1991	51
1992	50	2016	43
1988	48	1996	38
1989	47	2003	31
2015	44	1985	28
2016	42	1997	10
1995	41	1999	6
2003	41	1993	0
1996	35	2000	0
2001	22	2001	0
1981	0	1981	NA
1984	0	1982	NA
1985	0	1983	NA
2021	NA	1984	NA
			1

Table 14: Number of Days with high Degree Heating Week values

Year	CCI DHW8	Year	NOAA DHW8
2016	217	2016	207
2013	175	2013	167
2015	173	2020	136
2020	155	2018	130
2018	126	2012	110
1998	124	2015	105
1983	120	2021	94
2014	109	2010	92
2012	104	2005	90
2003	100	2014	88
2002	99	1992	85
2005	94	1998	85
2010	84	2003	83
1988	81	2002	63
1992	72	1991	49
2009	71	2017	43
2019	70	2009	42
1989	66	1990	33
2017	51	2011	31
2007	43	1986	27
1995	37	1994	26
1994	32	1988	24
1990	25	2008	12
2008	25	2019	8
2006	15	2004	2
2004	7	1985	0
1999	2	1987	0
1981	0	1989	0
1982	0	1993	0
1984	0	1995	0
1985	0	1996	0
1986	0	1997	0
1987	0	1999	0
1991	0	2000	0
1993	0	2001	0
1996	0	2006	0
1997	0	2007	0
2000	0	1981	NA
2001	0	1982	NA
2011	0	1983	NA
2021	NA	1984	NA

# SCOTTNR1 Yearly Sum of Moderate and High DHW Values in CCI and NOAA data





#### SCOTTNR1 Number of days with high DHW values

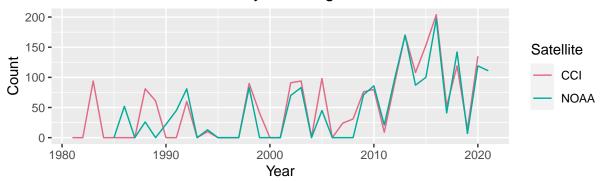


Table 15: Number of Days with moderate Degree Heating Week values

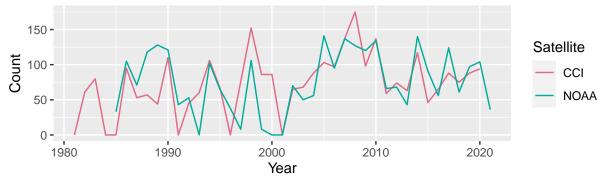
Year	CCI DHW4	Year	NOAA DHW4
2008	167	2005	140
1998	153	2014	138
1990	144	2007	137
2010	137	2008	136
1986	130	2010	129
2014	118	1989	127
2007	113	1988	121
2019	107	1990	121
2005	106	2009	117
1994	102	1998	107
2006	97	2020	106
2009	97	1986	100
2020	96	1994	99
2017	89	2019	99
2004	88	2015	98
1999	87	2006	96
2000	82	2017	92
1983	77	2002	69
2012	74	2012	68
2018	74	1995	63
2011	70	1987	61
1995	66	2011	61
1993	65	2004	55
2002	65	1992	54
1982	64	2016	52
2013	63	2018	50
2016	56	2003	46
1987	52	2013	44
2015	52	1991	38
1988	51	2021	38
2003	49	1996	37
1992	45	1985	30
1989	44	1997	9
1997	11	1999	8
1991	8	1993	0
1981	0	2000	0
1984	0	2001	0
1985	0	1981	NA
1996	0	1982	NA
2001	0	1983	NA
2021	NA	1984	NA

Table 16: Number of Days with high Degree Heating Week values

Year 2016 2013 2015 2020	CCI_DHW8 204	Year 2016	NOAA_DHW8
2013 2015		2016	107
2015	170		131
	170	2013	170
2020	153	2018	142
2020	135	2020	119
2018	119	2021	111
2014	108	2015	100
2005	98	2012	98
1983	94	2014	87
2003	94	2010	86
2002	91	1998	83
2012	91	2003	83
1998	90	1992	81
1988	81	2009	71
2010	80	2002	70
2009	76	1986	52
1989	61	1991	45
1992	60	2005	45
2017	52	2017	41
1999	41	1988	26
2008	31	1990	22
2007	24	2011	21
2019	14	1994	13
1994	10	2019	7
2011	9	1985	0
2004	1	1987	0
1981	0	1989	0
1982	0	1993	0
1984	0	1995	0
1985	0	1996	0
1986	0	1997	0
1987	0	1999	0
1990	0	2000	0
1991	0	2001	0
1993	0	2004	0
1995	0	2006	0
1996	0	2007	0
1997	0	2008	0
2000	0	1981	NA
2001	0	1982	NA
2006	0	1983	NA
2021	NA	1984	NA

# SCOTTSL1 Yearly Sum of Moderate and High DHW Values in CCI and NOAA data

SCOTTSL1 Number of days with moderate DHW values



SCOTTSL1 Number of days with high DHW values

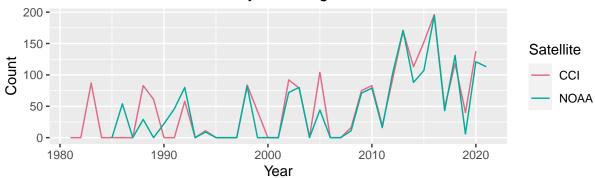


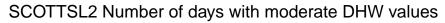
Table 17: Number of Days with moderate Degree Heating Week values

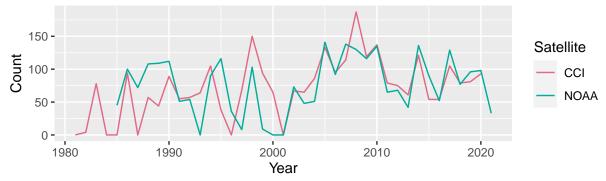
Year	CCI DHW4	Year	NOAA DHW4
2008	175	2005	141
1998	152	2014	140
2007	137	2007	137
2010	137	2010	134
2014	117	1989	128
1990	110	2008	127
1994	106	2017	124
2005	103	1990	121
2009	98	2009	120
2006	97	1988	118
1986	95	1998	106
2020	94	1986	105
2004	88	2020	104
2017	88	1994	102
2019	88	2019	97
1999	86	2006	95
2000	86	2015	91
1983	80	1987	71
1997	76	2002	70
2018	75	2012	68
2012	74	2011	66
2003	68	1995	65
1995	67	2018	61
2002	65	2004	56
2016	65	2016	56
2013	63	1992	53
1982	61	2003	50
1993	60	1991	43
2011	59	2013	43
1988	57	1996	38
1987	53	2021	36
2015	46	1985	33
1992	45	1997	8
1989	44	1999	8
1981	0	1993	0
1984	0	2000	0
1985	0	2001	0
1991	0	1981	NA
1996	0	1982	NA
2001	0	1983	NA
2021	NA	1984	NA

Table 18: Number of Days with high Degree Heating Week values

2013         170         2018           2015         152         2018           2020         138         2020           2018         118         2021           2014         113         2015           2005         104         2012           2012         94         2014           2002         92         1998           1983         87         1992           1998         84         2003           1988         83         2010           2010         83         2002           2003         79         2009           2009         75         1986           1989         61         1991           1992         58         2005           2017         48         2017           1999         42         1988           2019         40         1990           2011         19         2011           2008         16         2008           1994         11         1994           2004         1         2019           1981         0         1985           1982         0 <th>W8 195 171 131 121 113 107 103 88 82 80 80 79</th>	W8 195 171 131 121 113 107 103 88 82 80 80 79
2013         170         2013           2015         152         2018           2020         138         2020           2018         118         2021           2014         113         2015           2005         104         2012           2012         94         2014           2002         92         1998           1983         87         1992           1998         84         2003           1988         83         2010           2010         83         2002           2003         79         2009           2009         75         1986           1989         61         1991           1992         58         2005           2017         48         2017           1999         42         1988           2019         40         1990           2011         19         2011           2008         16         2008           1994         11         1994           2004         1         2019           1981         0         1985           1982         0 <td>171 131 121 113 107 103 88 82 80 80</td>	171 131 121 113 107 103 88 82 80 80
2015         152         2018           2020         138         2020           2018         118         2021           2014         113         2015           2005         104         2012           2012         94         2014           2002         92         1998           1983         87         1992           1998         84         2003           1988         83         2010           2010         83         2002           2003         79         2009           2009         75         1986           1989         61         1991           1992         58         2005           2017         48         2017           1999         42         1988           2019         40         1990           2011         19         2011           2008         16         2008           1994         11         1994           2004         1         2019           1981         0         1985           1982         0         1987           1984         0	131 121 113 107 103 88 82 80 80
2020         138         2020           2018         118         2021           2014         113         2015           2005         104         2012           2012         94         2014           2002         92         1998           1983         87         1992           1998         84         2003           1988         83         2010           2010         83         2002           2003         79         2009           2009         75         1986           1989         61         1991           1992         58         2005           2017         48         2017           1999         42         1988           2019         40         1990           2011         19         2011           2008         16         2008           1994         11         1994           2004         1         2019           1981         0         1985           1982         0         1987           1984         0         1989           1985         0	121 113 107 103 88 82 80 80
2018         118         2021           2014         113         2015           2005         104         2012           2012         94         2014           2002         92         1998           1983         87         1992           1998         84         2003           1988         83         2010           2010         83         2002           2003         79         2009           2009         75         1986           1989         61         1991           1992         58         2005           2017         48         2017           1999         42         1988           2019         40         1990           2011         19         2011           2008         16         2008           1994         11         1994           2004         1         2019           1981         0         1985           1982         0         1987           1984         0         1989           1985         0         1993           1986         0	113 107 103 88 82 80 80
2014         113         2015           2005         104         2012           2012         94         2014           2002         92         1998           1983         87         1992           1998         84         2003           1988         83         2010           2010         83         2002           2003         79         2009           2009         75         1986           1989         61         1991           1992         58         2005           2017         48         2017           1999         42         1988           2019         40         1990           2011         19         2011           2008         16         2008           1994         11         1994           2004         1         2019           1981         0         1985           1982         0         1987           1984         0         1989           1985         0         1993           1986         0         1995	107 103 88 82 80 80
2005         104         2012           2012         94         2014           2002         92         1998           1983         87         1992           1998         84         2003           1988         83         2010           2010         83         2002           2003         79         2009           2009         75         1986           1989         61         1991           1992         58         2005           2017         48         2017           1999         42         1988           2019         40         1990           2011         19         2011           2008         16         2008           1994         11         1994           2004         1         2019           1981         0         1985           1982         0         1987           1984         0         1989           1985         0         1993           1986         0         1995	88 82 80 80
2012         94         2014           2002         92         1998           1983         87         1992           1998         84         2003           1988         83         2010           2010         83         2002           2003         79         2009           2009         75         1986           1989         61         1991           1992         58         2005           2017         48         2017           1999         42         1988           2019         40         1990           2011         19         2011           2008         16         2008           1994         11         1994           2004         1         2019           1981         0         1985           1982         0         1987           1984         0         1989           1985         0         1993           1986         0         1995	88 82 80 80
2002         92         1998           1983         87         1992           1998         84         2003           1988         83         2010           2010         83         2002           2003         79         2009           2009         75         1986           1989         61         1991           1992         58         2005           2017         48         2017           1999         42         1988           2019         40         1990           2011         19         2011           2008         16         2008           1994         11         1994           2004         1         2019           1981         0         1985           1982         0         1987           1984         0         1989           1985         0         1993           1986         0         1995	82 80 80
1983         87         1992           1998         84         2003           1988         83         2010           2010         83         2002           2003         79         2009           2009         75         1986           1989         61         1991           1992         58         2005           2017         48         2017           1999         42         1988           2019         40         1990           2011         19         2011           2008         16         2008           1994         11         1994           2004         1         2019           1981         0         1985           1982         0         1987           1984         0         1989           1985         0         1993           1986         0         1995	80 80
1998         84         2003           1988         83         2010           2010         83         2002           2003         79         2009           2009         75         1986           1989         61         1991           1992         58         2005           2017         48         2017           1999         42         1988           2019         40         1990           2011         19         2011           2008         16         2008           1994         11         1994           2004         1         2019           1981         0         1985           1982         0         1987           1984         0         1989           1985         0         1993           1986         0         1995	80
1988     83     2010       2010     83     2002       2003     79     2009       2009     75     1986       1989     61     1991       1992     58     2005       2017     48     2017       1999     42     1988       2019     40     1990       2011     19     2011       2008     16     2008       1994     11     1994       2004     1     2019       1981     0     1985       1982     0     1987       1984     0     1989       1985     0     1993       1986     0     1995	
2010         83         2002           2003         79         2009           2009         75         1986           1989         61         1991           1992         58         2005           2017         48         2017           1999         42         1988           2019         40         1990           2011         19         2011           2008         16         2008           1994         11         1994           2004         1         2019           1981         0         1985           1982         0         1987           1984         0         1989           1985         0         1993           1986         0         1995	79
2003         79         2009           2009         75         1986           1989         61         1991           1992         58         2005           2017         48         2017           1999         42         1988           2019         40         1990           2011         19         2011           2008         16         2008           1994         11         1994           2004         1         2019           1981         0         1985           1982         0         1987           1984         0         1989           1985         0         1993           1986         0         1995	
2009         75         1986           1989         61         1991           1992         58         2005           2017         48         2017           1999         42         1988           2019         40         1990           2011         19         2011           2008         16         2008           1994         11         1994           2004         1         2019           1981         0         1985           1982         0         1987           1984         0         1989           1985         0         1993           1986         0         1995	72
1989     61     1991       1992     58     2005       2017     48     2017       1999     42     1988       2019     40     1990       2011     19     2011       2008     16     2008       1994     11     1994       2004     1     2019       1981     0     1985       1982     0     1987       1984     0     1989       1985     0     1993       1986     0     1995	71
1992     58     2005       2017     48     2017       1999     42     1988       2019     40     1990       2011     19     2011       2008     16     2008       1994     11     1994       2004     1     2019       1981     0     1985       1982     0     1987       1984     0     1989       1985     0     1993       1986     0     1995	54
2017     48     2017       1999     42     1988       2019     40     1990       2011     19     2011       2008     16     2008       1994     11     1994       2004     1     2019       1981     0     1985       1982     0     1987       1984     0     1989       1985     0     1993       1986     0     1995	46
1999     42     1988       2019     40     1990       2011     19     2011       2008     16     2008       1994     11     1994       2004     1     2019       1981     0     1985       1982     0     1987       1984     0     1989       1985     0     1993       1986     0     1995	44
2019     40     1990       2011     19     2011       2008     16     2008       1994     11     1994       2004     1     2019       1981     0     1985       1982     0     1987       1984     0     1989       1985     0     1993       1986     0     1995	43
2011     19     2011       2008     16     2008       1994     11     1994       2004     1     2019       1981     0     1985       1982     0     1987       1984     0     1989       1985     0     1993       1986     0     1995	29
2008     16     2008       1994     11     1994       2004     1     2019       1981     0     1985       1982     0     1987       1984     0     1989       1985     0     1993       1986     0     1995	22
1994     11     1994       2004     1     2019       1981     0     1985       1982     0     1987       1984     0     1989       1985     0     1993       1986     0     1995	16
2004     1     2019       1981     0     1985       1982     0     1987       1984     0     1989       1985     0     1993       1986     0     1995	11
1981     0     1985       1982     0     1987       1984     0     1989       1985     0     1993       1986     0     1995	9
1982     0     1987       1984     0     1989       1985     0     1993       1986     0     1995	6
1984     0     1989       1985     0     1993       1986     0     1995	0
1985     0     1993       1986     0     1995	0
1986 0 1995	0
	0
	0
1987 0 1996	0
1990 0 1997	0
1991 0 1999	0
1993 0 2000	0
1995 0 2001	0
1996 0 2004	0
1997 0 2006	0
2000 0 2007	0
	NA
	A T A
	NA
2021 NA 1984	NA NA NA

# SCOTTSL2 Yearly Sum of Moderate and High DHW Values in CCI and NOAA data





#### SCOTTSL2 Number of days with high DHW values

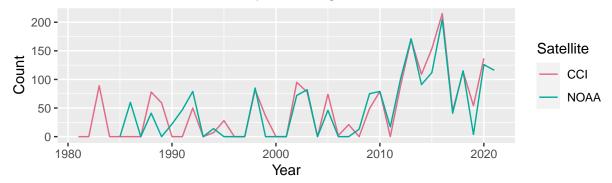


Table 19: Number of Days with moderate Degree Heating Week values  $\,$ 

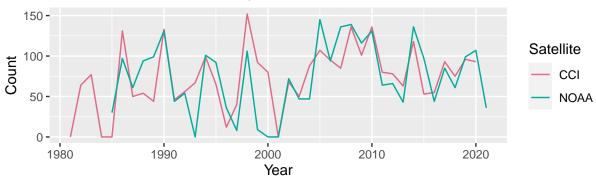
Year	CCI DHW4	Year	NOAA DIIWA
	001		NOAA_DHW4
2008	187	2005	141
1998	150	2007	138
2010	137	2014	136
2005	133	2010	135
2014	121	2008	130
2009	119	2017	129
2007	114	1995	116
1994	105	2009	116
2017	105	1990	112
2006	95	1989	109
1986	94	1988	108
1999	94	1998	103
2020	93	1986	100
1990	89	2020	98
2004	86	2019	96
2019	81	2006	92
2011	79	1994	90
2018	79	2015	90
1983	78	2018	77
2012	75	2002	73
1997	68	1987	72
2002	67	2012	68
2000	65	2011	65
2003	65	1992	54
1993	64	2016	52
2013	61	1991	51
1988	57	2004	51
1992	57	2003	48
1991	55	1985	45
2015	54	2013	42
2016	54	1996	36
1989	44	2021	33
1995	38	1999	9
1982	4	1997	8
1981	0	_1993	0
1984	0	2000	0
1985	0	2001	0
1987	0	1981	NA
1996	0	1982	NA
2001	0	1983	NA
2021	NA	1984	NA

Table 20: Number of Days with high Degree Heating Week values

Year         CCI_DHW8         Year         NOAA_DHW8           2016         215         2016         205           2013         170         2013         171           2015         154         2020         126           2020         137         2021         116           2018         114         2018         115           2014         109         2015         112           2002         95         2012         102           2012         90         2014         91           1983         89         1998         85           1998         82         2003         82           2010         79         1992         79           1988         78         2010         79           1988         78         2010         79           2003         78         2009         75           2005         74         2002         72           1989         59         1986         60           2019         54         1991         47           1992         50         2005         46           2009         49 <t< th=""><th></th><th></th><th></th><th></th></t<>				
2013         170         2013         171           2015         154         2020         126           2020         137         2021         116           2018         114         2018         115           2014         109         2015         112           2002         95         2012         102           2012         90         2014         91           1983         89         1998         85           1998         82         2003         82           2010         79         1992         79           1988         78         2010         79           1988         78         2010         79           2003         78         2009         75           2005         74         2002         72           1989         59         1986         60           2019         54         1991         47           1992         50         2005         46           2009         49         1988         41           2017         45         2017         41           1999         36         1990	Year	CCI_DHW8	Year	NOAA_DHW8
2015         154         2020         126           2020         137         2021         116           2018         114         2018         115           2014         109         2015         112           2002         95         2012         102           2012         90         2014         91           1983         89         1998         85           1998         82         2003         82           2010         79         1992         79           1988         78         2010         79           1988         78         2010         79           2003         78         2009         75           2005         74         2002         72           1989         59         1986         60           2019         54         1991         47           1992         50         2005         46           2009         49         1988         41           2017         45         2017         41           1999         36         1990         22           1995         28         2011	2016	215	2016	205
2020         137         2021         116           2018         114         2018         115           2014         109         2015         112           2002         95         2012         102           2012         90         2014         91           1983         89         1998         85           1998         82         2003         82           2010         79         1992         79           1988         78         2010         79           1988         78         2010         79           2003         78         2009         75           2005         74         2002         72           1989         59         1986         60           2019         54         1991         47           1992         50         2005         46           2009         49         1988         41           2017         45         2017         41           1999         36         1990         22           1995         28         2011         17           2007         21         1994	2013	170	2013	171
2018         114         2018         115           2014         109         2015         112           2002         95         2012         102           2012         90         2014         91           1983         89         1998         85           1998         82         2003         82           2010         79         1992         79           1988         78         2010         79           2003         78         2009         75           2005         74         2002         72           1989         59         1986         60           2019         54         1991         47           1992         50         2005         46           2009         49         1988         41           2017         45         2017         41           1999         36         1990         22           1995         28         2011         17           2007         21         1994         14           1994         7         2008         13           2006         2         2019 <td< td=""><td></td><td>154</td><td></td><td>126</td></td<>		154		126
2014         109         2015         112           2002         95         2012         102           2012         90         2014         91           1983         89         1998         85           1998         82         2003         82           2010         79         1992         79           1988         78         2010         79           2003         78         2009         75           2005         74         2002         72           1989         59         1986         60           2019         54         1991         47           1992         50         2005         46           2009         49         1988         41           2017         45         2017         41           1999         36         1990         22           1995         28         2011         17           2007         21         1994         14           1994         7         2008         13           2006         2         2019         4           1981         0         1985         0 </td <td>2020</td> <td>137</td> <td>2021</td> <td>116</td>	2020	137	2021	116
2002         95         2012         102           2012         90         2014         91           1983         89         1998         85           1998         82         2003         82           2010         79         1992         79           1988         78         2010         79           2003         78         2009         75           2005         74         2002         72           1989         59         1986         60           2019         54         1991         47           1992         50         2005         46           2009         49         1988         41           2017         45         2017         41           1999         36         1990         22           1995         28         2011         17           2007         21         1994         14           1994         7         2008         13           2006         2         2019         4           1981         0         1985         0           1984         0         1989         0	2018	114	2018	115
2012         90         2014         91           1983         89         1998         85           1998         82         2003         82           2010         79         1992         79           1988         78         2010         79           2003         78         2009         75           2005         74         2002         72           1989         59         1986         60           2019         54         1991         47           1992         50         2005         46           2009         49         1988         41           2017         45         2017         41           1999         36         1990         22           1995         28         2011         17           2007         21         1994         14           1994         7         2008         13           2006         2         2019         4           1981         0         1985         0           1982         0         1987         0           1985         0         1993         0				112
1988         89         1998         82           2010         79         1992         79           1988         78         2010         79           2003         78         2009         75           2005         74         2002         72           1989         59         1986         60           2019         54         1991         47           1992         50         2005         46           2009         49         1988         41           2017         45         2017         41           1999         36         1990         22           1995         28         2011         17           2007         21         1994         14           1994         7         2008         13           2006         2         2019         4           1981         0         1985         0           1982         0         1987         0           1984         0         1989         0           1985         0         1995         0           1987         0         1996         0 <td>2002</td> <td>95</td> <td>2012</td> <td>102</td>	2002	95	2012	102
1998         82         2003         82           2010         79         1992         79           1988         78         2010         79           2003         78         2009         75           2005         74         2002         72           1989         59         1986         60           2019         54         1991         47           1992         50         2005         46           2009         49         1988         41           2017         45         2017         41           1999         36         1990         22           1995         28         2011         17           2007         21         1994         14           1994         7         2008         13           2006         2         2019         4           1981         0         1985         0           1982         0         1987         0           1984         0         1989         0           1985         0         1995         0           1987         0         1996         0 <td></td> <td></td> <td></td> <td></td>				
2010         79         1992         79           1988         78         2010         79           2003         78         2009         75           2005         74         2002         72           1989         59         1986         60           2019         54         1991         47           1992         50         2005         46           2009         49         1988         41           2017         45         2017         41           1999         36         1990         22           1995         28         2011         17           2007         21         1994         14           1994         7         2008         13           2006         2         2019         4           1981         0         1985         0           1982         0         1987         0           1984         0         1989         0           1985         0         1993         0           1987         0         1996         0           1990         0         1997         0	1983	89	1998	85
1988         78         2010         79           2003         78         2009         75           2005         74         2002         72           1989         59         1986         60           2019         54         1991         47           1992         50         2005         46           2009         49         1988         41           2017         45         2017         41           1999         36         1990         22           1995         28         2011         17           2007         21         1994         14           1994         7         2008         13           2006         2         2019         4           1981         0         1985         0           1982         0         1987         0           1984         0         1989         0           1985         0         1993         0           1986         0         1995         0           1990         0         1997         0           1993         0         2000         0		82		82
2003         78         2009         75           2005         74         2002         72           1989         59         1986         60           2019         54         1991         47           1992         50         2005         46           2009         49         1988         41           2017         45         2017         41           1999         36         1990         22           1995         28         2011         17           2007         21         1994         14           1994         7         2008         13           2006         2         2019         4           1981         0         1985         0           1982         0         1987         0           1984         0         1989         0           1985         0         1993         0           1986         0         1995         0           1990         0         1997         0           1993         0         2000         0           1996         0         2001         0	2010	79	1992	79
2005         74         2002         72           1989         59         1986         60           2019         54         1991         47           1992         50         2005         46           2009         49         1988         41           2017         45         2017         41           1999         36         1990         22           1995         28         2011         17           2007         21         1994         14           1994         7         2008         13           2006         2         2019         4           1981         0         1985         0           1982         0         1987         0           1984         0         1989         0           1985         0         1993         0           1986         0         1995         0           1990         0         1997         0           1993         0         2000         0           1993         0         2000         0           1996         0         2001         0      <	1988	78	2010	79
1989         59         1986         60           2019         54         1991         47           1992         50         2005         46           2009         49         1988         41           2017         45         2017         41           1999         36         1990         22           1995         28         2011         17           2007         21         1994         14           1994         7         2008         13           2006         2         2019         4           1981         0         1985         0           1982         0         1987         0           1984         0         1989         0           1985         0         1993         0           1986         0         1995         0           1990         0         1997         0           1991         0         1999         0           1993         0         2000         0           1996         0         2001         0           1997         0         2004         0 <tr< td=""><td>2003</td><td>78</td><td>2009</td><td></td></tr<>	2003	78	2009	
2019         54         1991         47           1992         50         2005         46           2009         49         1988         41           2017         45         2017         41           1999         36         1990         22           1995         28         2011         17           2007         21         1994         14           1994         7         2008         13           2006         2         2019         4           1981         0         1985         0           1982         0         1987         0           1984         0         1989         0           1985         0         1993         0           1986         0         1995         0           1990         0         1997         0           1991         0         1999         0           1993         0         2000         0           1996         0         2001         0           1997         0         2004         0           2000         0         2006         0	2005	74	2002	72
1992         50         2005         46           2009         49         1988         41           2017         45         2017         41           1999         36         1990         22           1995         28         2011         17           2007         21         1994         14           1994         7         2008         13           2006         2         2019         4           1981         0         1985         0           1982         0         1987         0           1984         0         1989         0           1985         0         1993         0           1986         0         1995         0           1990         0         1997         0           1991         0         1999         0           1993         0         2000         0           1996         0         2001         0           1997         0         2004         0           2000         0         2004         0           2001         0         2004         0				60
2009         49         1988         41           2017         45         2017         41           1999         36         1990         22           1995         28         2011         17           2007         21         1994         14           1994         7         2008         13           2006         2         2019         4           1981         0         1985         0           1982         0         1987         0           1984         0         1989         0           1985         0         1993         0           1986         0         1995         0           1990         0         1997         0           1991         0         1999         0           1993         0         2000         0           1996         0         2001         0           1997         0         2004         0           2000         0         2004         0           2001         0         2007         0           2004         0         1981         NA				
2017         45         2017         41           1999         36         1990         22           1995         28         2011         17           2007         21         1994         14           1994         7         2008         13           2006         2         2019         4           1981         0         1985         0           1982         0         1987         0           1984         0         1989         0           1985         0         1993         0           1986         0         1995         0           1990         0         1997         0           1991         0         1997         0           1993         0         2000         0           1996         0         2001         0           1997         0         2004         0           2000         0         2004         0           2001         0         2007         0           2004         0         1981         NA           2008         0         1982         NA				
1999         36         1990         22           1995         28         2011         17           2007         21         1994         14           1994         7         2008         13           2006         2         2019         4           1981         0         1985         0           1982         0         1987         0           1984         0         1989         0           1985         0         1993         0           1986         0         1995         0           1990         0         1997         0           1991         0         1999         0           1993         0         2000         0           1996         0         2001         0           1997         0         2004         0           2000         0         2004         0           2001         0         2006         0           2004         0         1981         NA           2008         0         1982         NA           2011         0         1983         NA				
1995         28         2011         17           2007         21         1994         14           1994         7         2008         13           2006         2         2019         4           1981         0         1985         0           1982         0         1987         0           1984         0         1989         0           1985         0         1993         0           1986         0         1995         0           1990         0         1997         0           1991         0         1999         0           1993         0         2000         0           1996         0         2001         0           1997         0         2004         0           2000         0         2004         0           2001         0         2006         0           2004         0         1981         NA           2008         0         1982         NA           2011         0         1983         NA				
2007         21         1994         14           1994         7         2008         13           2006         2         2019         4           1981         0         1985         0           1982         0         1987         0           1984         0         1989         0           1985         0         1993         0           1986         0         1995         0           1990         0         1997         0           1991         0         1999         0           1993         0         2000         0           1996         0         2001         0           1997         0         2004         0           2000         0         2006         0           2001         0         2007         0           2004         0         1981         NA           2008         0         1982         NA           2011         0         1983         NA				
1994         7         2008         13           2006         2         2019         4           1981         0         1985         0           1982         0         1987         0           1984         0         1989         0           1985         0         1993         0           1986         0         1995         0           1990         0         1997         0           1991         0         1999         0           1993         0         2000         0           1996         0         2001         0           1997         0         2004         0           2000         0         2006         0           2001         0         2007         0           2004         0         1981         NA           2008         0         1982         NA           2011         0         1983         NA				
2006         2         2019         4           1981         0         1985         0           1982         0         1987         0           1984         0         1989         0           1985         0         1993         0           1986         0         1995         0           1987         0         1996         0           1990         0         1997         0           1991         0         1999         0           1993         0         2000         0           1996         0         2001         0           1997         0         2004         0           2000         0         2006         0           2001         0         2007         0           2004         0         1981         NA           2008         0         1982         NA           2011         0         1983         NA				
1981         0         1985         0           1982         0         1987         0           1984         0         1989         0           1985         0         1993         0           1986         0         1995         0           1987         0         1996         0           1990         0         1997         0           1991         0         1999         0           1993         0         2000         0           1996         0         2001         0           1997         0         2004         0           2000         0         2006         0           2001         0         2007         0           2004         0         1981         NA           2008         0         1982         NA           2011         0         1983         NA				13
1982         0         1987         0           1984         0         1989         0           1985         0         1993         0           1986         0         1995         0           1987         0         1996         0           1990         0         1997         0           1991         0         1999         0           1993         0         2000         0           1996         0         2001         0           1997         0         2004         0           2000         0         2006         0           2001         0         2007         0           2004         0         1981         NA           2008         0         1982         NA           2011         0         1983         NA				
1984         0         1989         0           1985         0         1993         0           1986         0         1995         0           1987         0         1996         0           1990         0         1997         0           1991         0         1999         0           1993         0         2000         0           1996         0         2001         0           2000         0         2004         0           2000         0         2006         0           2001         0         2007         0           2004         0         1981         NA           2008         0         1982         NA           2011         0         1983         NA				0
1985         0         1993         0           1986         0         1995         0           1987         0         1996         0           1990         0         1997         0           1991         0         1999         0           1993         0         2000         0           1996         0         2001         0           1997         0         2004         0           2000         0         2006         0           2001         0         2007         0           2004         0         1981         NA           2008         0         1982         NA           2011         0         1983         NA				_
1986         0         1995         0           1987         0         1996         0           1990         0         1997         0           1991         0         1999         0           1993         0         2000         0           1996         0         2001         0           1997         0         2004         0           2000         0         2006         0           2001         0         2007         0           2004         0         1981         NA           2008         0         1982         NA           2011         0         1983         NA				
1987         0         1996         0           1990         0         1997         0           1991         0         1999         0           1993         0         2000         0           1996         0         2001         0           1997         0         2004         0           2000         0         2006         0           2001         0         2007         0           2004         0         1981         NA           2008         0         1982         NA           2011         0         1983         NA				
1990         0         1997         0           1991         0         1999         0           1993         0         2000         0           1996         0         2001         0           1997         0         2004         0           2000         0         2006         0           2001         0         2007         0           2004         0         1981         NA           2008         0         1982         NA           2011         0         1983         NA				
1991         0         1999         0           1993         0         2000         0           1996         0         2001         0           1997         0         2004         0           2000         0         2006         0           2001         0         2007         0           2004         0         1981         NA           2008         0         1982         NA           2011         0         1983         NA				
1993         0         2000         0           1996         0         2001         0           1997         0         2004         0           2000         0         2006         0           2001         0         2007         0           2004         0         1981         NA           2008         0         1982         NA           2011         0         1983         NA				
1996         0         2001         0           1997         0         2004         0           2000         0         2006         0           2001         0         2007         0           2004         0         1981         NA           2008         0         1982         NA           2011         0         1983         NA				
1997         0         2004         0           2000         0         2006         0           2001         0         2007         0           2004         0         1981         NA           2008         0         1982         NA           2011         0         1983         NA				
2000         0         2006         0           2001         0         2007         0           2004         0         1981         NA           2008         0         1982         NA           2011         0         1983         NA				_
2001         0         2007         0           2004         0         1981         NA           2008         0         1982         NA           2011         0         1983         NA				
2004         0         1981         NA           2008         0         1982         NA           2011         0         1983         NA				
2008         0         1982         NA           2011         0         1983         NA				
2011 0 1983 NA				
2021   NA 1984   NA				
	2021	NA	1984	NA_

# SCOTTSL3 Yearly Sum of Moderate and High DHW Values in CCI and NOAA data





#### SCOTTSL3 Number of days with high DHW values

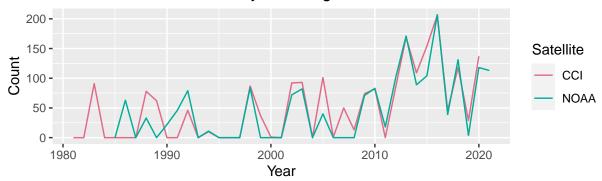


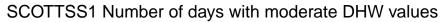
Table 21: Number of Days with moderate Degree Heating Week values

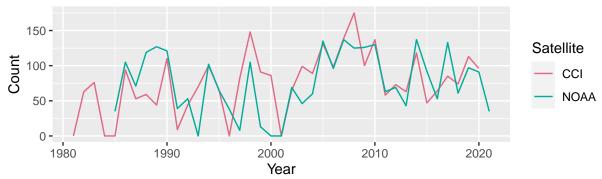
3.7	aar biiiii	- 3.7	NIOAA DIIII
Year	CCI_DHW4	Year	NOAA_DHW4
1998	152	2005	145
2008	136	2008	139
2010	136	2007	136
1990	133	2014	136
1986	131	1990	131
2014	118	2010	131
2005	107	2009	116
2009	101	2020	107
1994	99	1998	106
2019	96	1994	101
2006	95	1989	99
2017	93	2019	99
2020	93	1986	97
1999	92	2015	97
2004	88	1988	94
2007	85	2006	94
2000	80	1995	92
2011	80	2017	85
2012	78	2002	72
1983	77	2012	66
2018	75	2011	64
2002	68	1987	61
1993	67	2018	61
1995	65	1992	54
1982	64	2003	47
2013	63	2004	47
1992	56	1991	44
2016	55	2016	44
1988	54	2013	43
2015	53	1996	36
1987	50	2021	36
2003	50	1985	30
1991	46	1999	9
1989	44	1997	8
1997	40	1993	0
1996	12	2000	0
1981	0	$\frac{2000}{2001}$	0
1984	0	1981	NA
$\frac{1981}{1985}$	0	$\frac{1981}{1982}$	NA
2001	0	$\frac{1982}{1983}$	NA
$\frac{2001}{2021}$	NA	$\frac{1984}{1984}$	NA NA
	1111	1304	l IVA

Table 22: Number of Days with high Degree Heating Week values

Year	CCI DHW8	Year	NOAA DHW8
2016	206	2016	207
2013	169	2013	171
2015	154	2018	131
2020	137	2020	118
2018	118	2021	113
2014	109	2015	104
2005	101	2012	101
2003	93	2014	89
2002	92	1998	84
1983	91	2010	83
1998	87	2003	82
2012	85	1992	79
2010	82	2002	72
1988	78	2009	71
2009	74	1986	63
1989	62	1991	46
2007	50	2005	40
1992	46	2017	39
2017	46	1988	33
1999	37	1990	22
2019	29	2011	18
2008	13	1994	11
1994	10	2019	4
2000	1	1985	0
2006	1	1987	0
1981	0	1989	0
1982	0	1993	0
1984	0	1995	0
1985	0	1996	0
1986	0	1997	0
1987	0	1999	0
1990	0	2000	0
1991	0	2001	0
1993	0	2004	0
1995	0	2006	0
1996	0	2007	0
1997	0	2008	0
2001	0	1981	NA
2004	0	1982	NA
2011	0	1983	NA
2021	NA	1984	NA

# SCOTTSS1 Yearly Sum of Moderate and High DHW Values in CCI and NOAA data





#### SCOTTSS1 Number of days with high DHW values

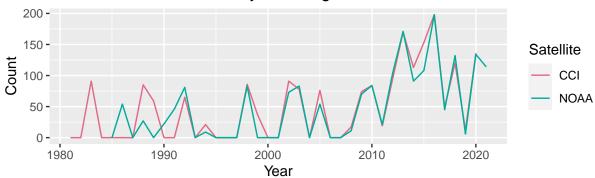


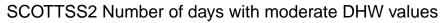
Table 23: Number of Days with moderate Degree Heating Week values  $\,$ 

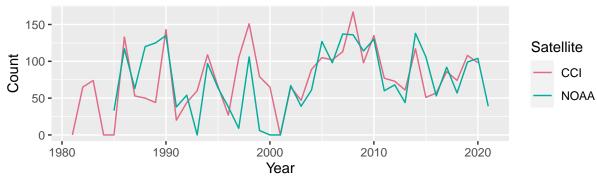
Year	CCI_DHW4	Year	NOAA_DHW4
2008	175	2007	137
1998	148	2014	137
2007	139	2005	135
2010	137	2017	133
2005	131	2010	130
2014	118	1989	127
2019	113	2009	126
1990	110	2008	125
1994	100	1990	121
2009	100	1988	119
2003	99	1986	105
2006	98	1998	105
2020	96	1994	102
1986	94	2019	97
1999	91	2006	96
2004	89	2015	92
2000	86	2020	91
2017	85	1987	71
1997	82	2002	69
1983	76	2012	69
2018	74	1995	65
2012	73	2011	63
1993	70	2018	61
1995	66	2004	60
2002	65	1992	53
2016	64	2016	53
1982	63	2003	46
2013	63	2013	43
1988	59	1991	39
2011	58	1996	38
1987	53	1985	35
2015	47	2021	35
1989	44	1999	13
1992	44	1997	8
1991	9	1993	0
1981	0	2000	0
1984	0	2001	0
1985	0	1981	NA
1996	0	1982	NA
2001	0	1983	NA
2021	NA	1984	NA
			1

Table 24: Number of Days with high Degree Heating Week values

Year	CCI DHW8	Year	NOAA DHW8
2016	198	2016	198
2013	170	2013	171
2015	153	2020	134
2020	136	2018	132
2018	120	2021	114
2014	113	2015	108
2012	95	2012	104
1983	91	2014	91
2002	91	2010	84
1998	86	1998	83
1988	85	2003	83
2010	84	1992	81
2003	78	2002	73
2005	76	2009	70
2009	74	1986	54
1992	65	2005	54
1989	59	1991	46
2017	49	2017	45
1999	37	1988	27
1994	21	1990	22
2011	19	2011	21
2008	17	2008	11
2019	12	1994	9
1981	0	2019	6
1982	0	1985	0
1984	0	1987	0
1985	0	1989	0
1986	0	1993	0
1987	0	1995	0
1990	0	1996	0
1991	0	1997	0
1993	0	1999	0
1995	0	2000	0
1996	0	2001	0
1997	0	2004	0
2000	0	2006	0
2001	0	2007	0
2004	0	1981	NA
2006	0	1982	NA
2007	0	1983	NA
2021	NA	1984	NA

# SCOTTSS2 Yearly Sum of Moderate and High DHW Values in CCI and NOAA data





#### SCOTTSS2 Number of days with high DHW values

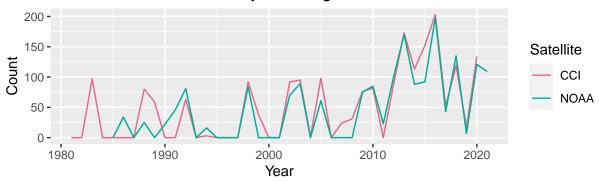


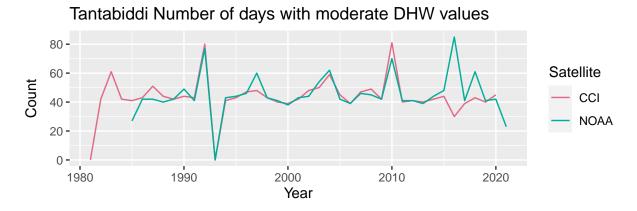
Table 25: Number of Days with moderate Degree Heating Week values  $\,$ 

2008         167         2014         138           1998         151         2007         137           1990         143         2008         136           2010         135         1990         135           1986         133         2010         130           2014         117         2005         127           2007         113         1989         125           1994         109         1988         120           2019         108         1986         117           1997         105         2009         114           2005         105         1998         106           2005         105         1998         106           2006         102         2015         106           2009         98         2020         104           2009         98         2020         104           2020         98         2019         99           204         89         2006         98           2017         86         1994         97           1999         79         2017         92           2011         77         <				
1998         151         2007         137           1990         143         2008         136           2010         135         1990         135           1986         133         2010         130           2014         117         2005         127           2007         113         1989         125           1994         109         1988         120           2019         108         1986         117           1997         105         2009         114           2005         105         1998         106           2006         102         2015         106           2009         98         2020         104           2009         98         2020         104           2020         98         2019         99           2004         89         2006         98           2017         86         1994         97           1999         79         2017         92           2011         77         2012         68           2012         73         1987         63           1995         66	Year	CCI_DHW4	Year	NOAA_DHW4
1990         143         2008         136           2010         135         1990         135           1986         133         2010         130           2014         117         2005         127           2007         113         1989         125           1994         109         1988         120           2019         108         1986         117           1997         105         2009         114           2005         105         1998         106           2006         102         2015         106           2009         98         2020         104           2020         98         2019         99           2004         89         2006         98           2017         86         1994         97           1999         79         2017         92           2011         77         2012         68           1983         74         2002         67           2018         74         1995         64           2012         73         1987         63           1995         66         200	2008	167	2014	138
2010         135         1990         135           1986         133         2010         130           2014         117         2005         127           2007         113         1989         125           1994         109         1988         120           2019         108         1986         117           1997         105         2009         114           2005         105         1998         106           2006         102         2015         106           2009         98         2020         104           2020         98         2019         99           2004         89         2006         98           2017         86         1994         97           1999         79         2017         92           2011         77         2012         68           1983         74         2002         67           2018         74         1995         64           2012         73         1987         63           1995         66         2004         61           1982         65         2011<	1998	151	2007	137
1986         133         2010         130           2014         117         2005         127           2007         113         1989         125           1994         109         1988         120           2019         108         1986         117           1997         105         2009         114           2005         105         1998         106           2006         102         2015         106           2009         98         2020         104           2020         98         2019         99           2004         89         2006         98           2017         86         1994         97           1999         79         2017         92           2011         77         2012         68           1983         74         2002         67           2018         74         1995         64           2012         73         1987         63           1995         66         2004         61           1982         65         2011         60           2000         65         2018 <td>1990</td> <td>143</td> <td>2008</td> <td>136</td>	1990	143	2008	136
2014         117         2005         127           2007         113         1989         125           1994         109         1988         120           2019         108         1986         117           1997         105         2009         114           2005         105         1998         106           2006         102         2015         106           2009         98         2020         104           2020         98         2019         99           2004         89         2006         98           2017         86         1994         97           1999         79         2017         92           2011         77         2012         68           1983         74         2002         67           2018         74         1995         64           2012         73         1987         63           1995         66         2004         61           1982         65         2011         60           2000         65         2018         57           2001         65         1992	2010	135	1990	135
2007         113         1989         125           1994         109         1988         120           2019         108         1986         117           1997         105         2009         114           2005         105         1998         106           2006         102         2015         106           2009         98         2020         104           2020         98         2019         99           2004         89         2006         98           2017         86         1994         97           1999         79         2017         92           2011         77         2012         68           1983         74         2002         67           2018         74         1995         64           2012         73         1987         63           1995         66         2004         61           1982         65         2011         60           2000         65         2018         57           2002         65         1992         54           2013         61         2016	1986	133	2010	130
1994         109         1988         120           2019         108         1986         117           1997         105         2009         114           2005         105         1998         106           2006         102         2015         106           2009         98         2020         104           2020         98         2019         99           2004         89         2006         98           2017         86         1994         97           1999         79         2017         92           2011         77         2012         68           1983         74         2002         67           2018         74         1995         64           2012         73         1987         63           1995         66         2004         61           1982         65         2011         60           2000         65         2018         57           2002         65         1992         54           2013         61         2016         53           1993         60         2013	2014	117	2005	127
2019         108         1986         117           1997         105         2009         114           2005         105         1998         106           2006         102         2015         106           2009         98         2020         104           2020         98         2019         99           2004         89         2006         98           2017         86         1994         97           1999         79         2017         92           2011         77         2012         68           1983         74         2002         67           2018         74         1995         64           2012         73         1987         63           1995         66         2004         61           1982         65         2011         60           2000         65         2018         57           2002         65         1992         54           2013         61         2016         53           1993         60         2013         44           2016         57         2003	2007	113	1989	125
1997         105         2009         114           2006         102         2015         106           2009         98         2020         104           2020         98         2019         99           2004         89         2006         98           2017         86         1994         97           1999         79         2017         92           2011         77         2012         68           1983         74         2002         67           2018         74         1995         64           2012         73         1987         63           1995         66         2004         61           1982         65         2011         60           2000         65         2018         57           2002         65         1992         54           2013         61         2016         53           1993         60         2013         44           2016         57         2003         39           1987         53         2021         39           2015         51         1991         <	1994	109	1988	120
2006         102         2015         106           2009         98         2020         104           2020         98         2019         99           2004         89         2006         98           2017         86         1994         97           1999         79         2017         92           2011         77         2012         68           1983         74         2002         67           2018         74         1995         64           2012         73         1987         63           1995         66         2004         61           1982         65         2011         60           2000         65         2018         57           2002         65         1992         54           2013         61         2016         53           1993         60         2013         44           2016         57         2003         39           1987         53         2021         39           2015         51         1991         38           2003         47         1985 <td< td=""><td>2019</td><td>108</td><td>1986</td><td>117</td></td<>	2019	108	1986	117
2006         102         2015         106           2009         98         2020         104           2020         98         2019         99           2004         89         2006         98           2017         86         1994         97           1999         79         2017         92           2011         77         2012         68           1983         74         2002         67           2018         74         1995         64           2012         73         1987         63           1995         66         2004         61           1982         65         2011         60           2000         65         2018         57           2002         65         1992         54           2013         61         2016         53           1993         60         2013         44           2016         57         2003         39           1987         53         2021         39           2015         51         1991         38           2003         47         1985 <td< td=""><td>1997</td><td>105</td><td>2009</td><td>114</td></td<>	1997	105	2009	114
2009         98         2020         104           2020         98         2019         99           2004         89         2006         98           2017         86         1994         97           1999         79         2017         92           2011         77         2012         68           1983         74         2002         67           2018         74         1995         64           2012         73         1987         63           1995         66         2004         61           1982         65         2011         60           2000         65         2018         57           2002         65         1992         54           2013         61         2016         53           1993         60         2013         44           2016         57         2003         39           1987         53         2021         39           2015         51         1991         38           2003         47         1985         33           1989         44         1997         9	2005	105	1998	106
2020         98         2019         99           2004         89         2006         98           2017         86         1994         97           1999         79         2017         92           2011         77         2012         68           1983         74         2002         67           2018         74         1995         64           2012         73         1987         63           1995         66         2004         61           1982         65         2011         60           2000         65         2018         57           2002         65         1992         54           2013         61         2016         53           1993         60         2013         44           2016         57         2003         39           1987         53         2021         39           2015         51         1991         38           2003         47         1985         33           1989         44         1997         9           1996         27         1993         0 </td <td>2006</td> <td>102</td> <td>2015</td> <td>106</td>	2006	102	2015	106
2004         89         2006         98           2017         86         1994         97           1999         79         2017         92           2011         77         2012         68           1983         74         2002         67           2018         74         1995         64           2012         73         1987         63           1995         66         2004         61           1982         65         2011         60           2000         65         2018         57           2002         65         1992         54           2013         61         2016         53           1993         60         2013         44           2016         57         2003         39           1987         53         2021         39           2015         51         1991         38           2003         47         1985         33           1989         44         1997         9           1996         27         1993         0           1991         20         2000         0 <td>2009</td> <td>98</td> <td>2020</td> <td>104</td>	2009	98	2020	104
2017         86         1994         97           1999         79         2017         92           2011         77         2012         68           1983         74         2002         67           2018         74         1995         64           2012         73         1987         63           1995         66         2004         61           1982         65         2011         60           2000         65         2018         57           2002         65         1992         54           2013         61         2016         53           1993         60         2013         44           2016         57         2003         39           1987         53         2021         39           2015         51         1991         38           2003         47         1985         33           1989         44         1997         9           1992         44         1999         6           1991         20         2000         0           1981         0         2001         0	2020	98	2019	99
1999         79         2017         92           2011         77         2012         68           1983         74         2002         67           2018         74         1995         64           2012         73         1987         63           1995         66         2004         61           1982         65         2011         60           2000         65         2018         57           2002         65         1992         54           2013         61         2016         53           1993         60         2013         44           2016         57         2003         39           1987         53         2021         39           2015         51         1991         38           2003         47         1985         33           1989         44         1997         9           1992         44         1999         6           1996         27         1993         0           1991         20         2000         0           1984         0         1981         NA	2004	89	2006	98
2011         77         2012         68           1983         74         2002         67           2018         74         1995         64           2012         73         1987         63           1995         66         2004         61           1982         65         2011         60           2000         65         2018         57           2002         65         1992         54           2013         61         2016         53           1993         60         2013         44           2016         57         2003         39           1987         53         2021         39           2015         51         1991         38           2003         47         1985         33           1989         44         1997         9           1992         44         1999         6           1996         27         1993         0           1991         20         2000         0           1984         0         1981         NA           1985         0         1982         NA	2017	86	1994	97
1983         74         2002         67           2018         74         1995         64           2012         73         1987         63           1995         66         2004         61           1982         65         2011         60           2000         65         2018         57           2002         65         1992         54           2013         61         2016         53           1993         60         2013         44           2016         57         2003         39           1987         53         2021         39           2015         51         1991         38           2003         47         1985         33           1989         44         1997         9           1996         27         1993         0           1991         20         2000         0           1981         0         2001         0           1984         0         1981         NA           1985         0         1982         NA	1999	79	2017	92
2018         74         1995         64           2012         73         1987         63           1995         66         2004         61           1982         65         2011         60           2000         65         2018         57           2002         65         1992         54           2013         61         2016         53           1993         60         2013         44           2016         57         2003         39           1987         53         2021         39           2015         51         1991         38           2003         47         1985         33           1989         44         1997         9           1996         27         1993         0           1991         20         2000         0           1981         0         2001         0           1984         0         1981         NA           1985         0         1982         NA	2011	77	2012	68
2012         73         1987         63           1995         66         2004         61           1982         65         2011         60           2000         65         2018         57           2002         65         1992         54           2013         61         2016         53           1993         60         2013         44           2016         57         2003         39           1987         53         2021         39           2015         51         1991         38           2003         47         1985         33           1989         44         1997         9           1992         44         1999         6           1991         20         2000         0           1981         0         2001         0           1984         0         1981         NA           1985         0         1982         NA	1983	74	2002	67
1995         66         2004         61           1982         65         2011         60           2000         65         2018         57           2002         65         1992         54           2013         61         2016         53           1993         60         2013         44           2016         57         2003         39           1987         53         2021         39           2015         51         1991         38           1988         50         1996         38           2003         47         1985         33           1989         44         1997         9           1992         44         1999         6           1996         27         1993         0           1991         20         2000         0           1984         0         1981         NA           1985         0         1982         NA	2018	74	1995	64
1982         65         2011         60           2000         65         2018         57           2002         65         1992         54           2013         61         2016         53           1993         60         2013         44           2016         57         2003         39           1987         53         2021         39           2015         51         1991         38           1988         50         1996         38           2003         47         1985         33           1989         44         1997         9           1992         44         1999         6           1996         27         1993         0           1991         20         2000         0           1981         0         2001         0           1984         0         1981         NA           1985         0         1982         NA	2012	73	1987	63
2000         65         2018         57           2002         65         1992         54           2013         61         2016         53           1993         60         2013         44           2016         57         2003         39           1987         53         2021         39           2015         51         1991         38           1988         50         1996         38           2003         47         1985         33           1989         44         1997         9           1992         44         1999         6           1996         27         1993         0           1991         20         2000         0           1981         0         2001         0           1984         0         1981         NA           1985         0         1982         NA	1995	66	2004	61
2002         65         1992         54           2013         61         2016         53           1993         60         2013         44           2016         57         2003         39           1987         53         2021         39           2015         51         1991         38           1988         50         1996         38           2003         47         1985         33           1989         44         1997         9           1992         44         1999         6           1996         27         1993         0           1991         20         2000         0           1981         0         2001         0           1984         0         1981         NA           1985         0         1982         NA	1982	65	2011	60
2013         61         2016         53           1993         60         2013         44           2016         57         2003         39           1987         53         2021         39           2015         51         1991         38           1988         50         1996         38           2003         47         1985         33           1989         44         1997         9           1992         44         1999         6           1996         27         1993         0           1991         20         2000         0           1981         0         2001         0           1984         0         1981         NA           1985         0         1982         NA	2000	65	2018	57
1993         60         2013         44           2016         57         2003         39           1987         53         2021         39           2015         51         1991         38           1988         50         1996         38           2003         47         1985         33           1989         44         1997         9           1992         44         1999         6           1996         27         1993         0           1991         20         2000         0           1981         0         2001         0           1984         0         1981         NA           1985         0         1982         NA		65	1992	54
2016         57         2003         39           1987         53         2021         39           2015         51         1991         38           1988         50         1996         38           2003         47         1985         33           1989         44         1997         9           1992         44         1999         6           1996         27         1993         0           1991         20         2000         0           1981         0         2001         0           1984         0         1981         NA           1985         0         1982         NA	2013	61	2016	53
1987         53         2021         39           2015         51         1991         38           1988         50         1996         38           2003         47         1985         33           1989         44         1997         9           1992         44         1999         6           1996         27         1993         0           1991         20         2000         0           1981         0         2001         0           1984         0         1981         NA           1985         0         1982         NA	1993	60	2013	44
2015         51         1991         38           1988         50         1996         38           2003         47         1985         33           1989         44         1997         9           1992         44         1999         6           1996         27         1993         0           1991         20         2000         0           1981         0         2001         0           1984         0         1981         NA           1985         0         1982         NA	2016	57	2003	39
1988         50         1996         38           2003         47         1985         33           1989         44         1997         9           1992         44         1999         6           1996         27         1993         0           1991         20         2000         0           1981         0         2001         0           1984         0         1981         NA           1985         0         1982         NA	1987	53	2021	39
2003         47         1985         33           1989         44         1997         9           1992         44         1999         6           1996         27         1993         0           1991         20         2000         0           1981         0         2001         0           1984         0         1981         NA           1985         0         1982         NA	2015	51	1991	38
1989         44         1997         9           1992         44         1999         6           1996         27         1993         0           1991         20         2000         0           1981         0         2001         0           1984         0         1981         NA           1985         0         1982         NA	1988	50	1996	38
1992         44         1999         6           1996         27         1993         0           1991         20         2000         0           1981         0         2001         0           1984         0         1981         NA           1985         0         1982         NA	2003	47		33
1996         27         1993         0           1991         20         2000         0           1981         0         2001         0           1984         0         1981         NA           1985         0         1982         NA	1989	44	1997	9
1991         20         2000         0           1981         0         2001         0           1984         0         1981         NA           1985         0         1982         NA	1992	44	1999	6
1981         0         2001         0           1984         0         1981         NA           1985         0         1982         NA	1996	27	1993	0
1984         0         1981         NA           1985         0         1982         NA	1991	20		0
1985 0 1982 NA		0		0
	1984	0	1981	NA
2001 0 1082 NA	1985	0	1982	NA
2001   0 1905   NA	2001	0	1983	NA
2021 NA 1984 NA	2021	NA	1984	NA

Table 26: Number of Days with high Degree Heating Week values

Year	CCI DHW8	Year	NOAA DHW8
2016	203	2016	198
2013	173	2013	170
2015	152	2018	135
2020	134	2020	121
2018	119	2021	109
2014	113	2012	101
2005	98	2015	92
1983	97	2003	89
2003	95	2014	88
1998	92	2010	85
2002	92	1998	84
2012	89	1992	81
2010	82	2009	75
1988	80	2002	70
2009	76	2005	61
1992	63	1991	46
1989	59	2017	43
2017	52	1986	34
1999	38	1988	25
2008	31	2011	23
2007	24	1990	22
2019	17	1994	16
1994	3	2019	7
2004	2	1985	0
1981	0	1987	0
1982	0	1989	0
1984	0	1993	0
1985	0	1995	0
1986	0	1996	0
1987	0	1997	0
1990	0	1999	0
1991	0	2000	0
1993	0	2001	0
1995	0	2004	0
1996	0	2006	0
1997	0	2007	0
2000	0	2008	0
2001	0	1981	NA
2006	0	1982	NA
2011	0	1983	NA
2021	NA	1984	NA

# Tantabiddi Yearly Sum of Moderate and High DHW Values in CCI and NOAA data



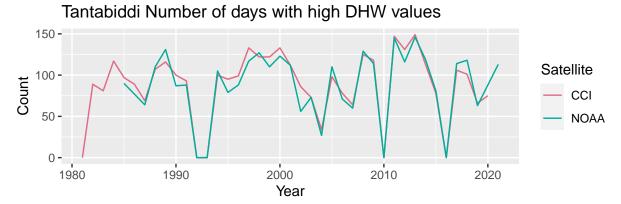


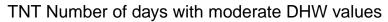
Table 27: Number of Days with moderate Degree Heating Week values

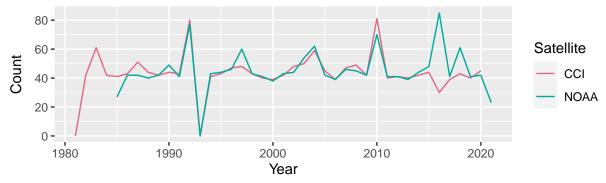
Year 2010	CCI_DHW4	Year	NOAA DHW4
2010 I	81	2016	85
1992	80	1992	77
1983	61	2010	70
2004	59	2004	62
1987	51	2018	61
2003	50	1997	60
2008	49	2003	54
1997	48	1990	49
2002	48	2015	48
1996	47	1996	46
2007	47	2007	46
2005	45	2008	45
2020	45	1995	44
1988	44	2002	44
1990	44	2014	44
2015	44	1994	43
1986	43	1998	43
1991	43	2001	43
1995	43	1986	42
1998	43	1987	42
2018	43	1989	42
1982	42	2005	42
1984	42	2009	42
1989	42	2020	42
2001	42	1991	41
2009	42	1999	41
2014	42	2011	41
1985	41	2012	41
1994	41	2017	41
2012	41	2019	41
1999	40	1988	40
2011	40	2006	39
2013	40	2013	39
2019	40	2000	38
2000	39	1985	27
2006	39	2021	23
2017	39	1993	0
2016	30	1981	NA
1981	0	1982	NA
1993	0	1983	NA
2021	NA	1984	NA

Table 28: Number of Days with high Degree Heating Week values

Year	CCI DHW8	Year	NOAA DHW8
2013	149	2013	146
2011	147	2011	145
1997	133	1989	131
2000	133	2008	129
2012	131	1998	127
2008	125	2000	123
1998	122	2014	119
1999	122	2018	118
2009	118	1997	117
1984	117	2012	116
1989	116	2009	114
2014	113	2017	114
2001	112	2021	113
1988	107	2001	112
2017	106	1988	110
2018	101	1999	110
1990	100	2005	110
1994	100	1994	105
1996	99	1985	90
2005	98	1991	88
1985	97	1996	88
1995	95	2020	88
1991	93	1990	87
1982	89	2015	81
1986	89	1995	79
2002	86	1986	77
1983	81	2003	73
2006	78	2006	71
2015	78	1987	64
2020	75	2019	63
2003	73	2007	60
1987	69	2002	56
2019	66	2004	27
2007	64	1992	0
2004	34	1993	0
1981	0	2010	0
1992	0	2016	0
1993	0	1981	NA
2010	0	1982	NA
2016	0	1983	NA
2021	NA	1984	NA

# TNT Yearly Sum of Moderate and High DHW Values in CCI and NOAA data $\,$





#### TNT Number of days with high DHW values

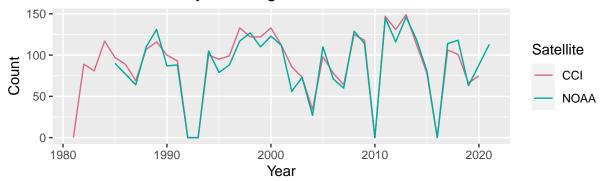


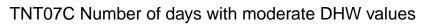
Table 29: Number of Days with moderate Degree Heating Week values  $\,$ 

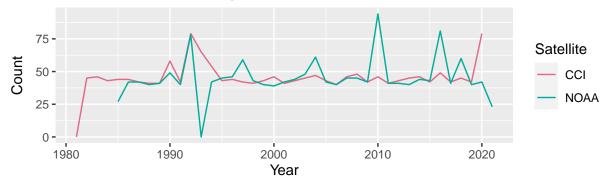
Year 2010	CCI_DHW4	Year	NOAA DHW4
2010 I	81	2016	85
1992	80	1992	77
1983	61	2010	70
2004	59	2004	62
1987	51	2018	61
2003	50	1997	60
2008	49	2003	54
1997	48	1990	49
2002	48	2015	48
1996	47	1996	46
2007	47	2007	46
2005	45	2008	45
2020	45	1995	44
1988	44	2002	44
1990	44	2014	44
2015	44	1994	43
1986	43	1998	43
1991	43	2001	43
1995	43	1986	42
1998	43	1987	42
2018	43	1989	42
1982	42	2005	42
1984	42	2009	42
1989	42	2020	42
2001	42	1991	41
2009	42	1999	41
2014	42	2011	41
1985	41	2012	41
1994	41	2017	41
2012	41	2019	41
1999	40	1988	40
2011	40	2006	39
2013	40	2013	39
2019	40	2000	38
2000	39	1985	27
2006	39	2021	23
2017	39	1993	0
2016	30	1981	NA
1981	0	1982	NA
1993	0	1983	NA
2021	NA	1984	NA

Table 30: Number of Days with high Degree Heating Week values  $\,$ 

Year	CCI_DHW8	Year	NOAA_DHW8
2013	149	2013	146
2011	147	2011	145
1997	133	1989	131
2000	133	2008	129
2012	131	1998	127
2008	125	2000	123
1998	122	2014	119
1999	122	2018	118
2009	118	1997	117
1984	117	2012	116
1989	116	2009	114
2014	113	2017	114
2001	112	2021	113
1988	107	2001	112
2017	106	1988	110
2018	101	1999	110
1990	100	2005	110
1994	100	1994	105
1996	99	1985	90
2005	98	1991	88
1985	97	1996	88
1995	95	2020	88
1991	93	1990	87
1982	89	2015	81
1986	89	1995	79
2002	86	1986	77
1983	81	2003	73
2006	78	2006	71
2015	78	1987	64
2020	75	2019	63
2003	73	2007	60
1987	69	2002	56
2019	66	2004	27
2007	64	1992	0
2004	34	1993	0
1981	0	2010	0
1992	0	2016	0
1993	0	1981	NA
2010	0	1982	NA
2016	0	1983	NA
2021	NA	1984	NA

# TNT07C Yearly Sum of Moderate and High DHW Values in CCI and NOAA data





#### TNT07C Number of days with high DHW values

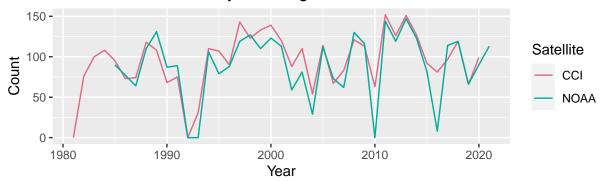


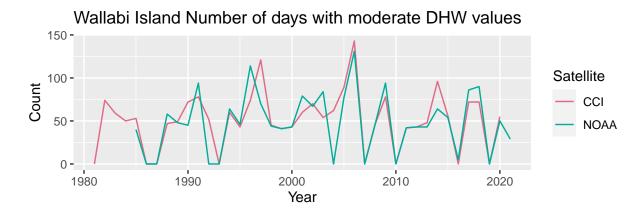
Table 31: Number of Days with moderate Degree Heating Week values  $\,$ 

Year	CCI DHW4	Year	NOAA DHW4
1992	79	2010	94
2020	79	2016	81
1993	65	1992	78
1990	58	2004	61
1994	54	2018	60
2016	49	1997	59
2008	48	1990	49
2004	47	2003	48
1983	46	1996	46
2000	46	1995	45
2007	46	2007	45
2010	46	2008	45
2014	46	2002	44
1982	45	2014	44
2003	45	1998	43
2013	45	2015	43
2018	45	1986	42
1985	44	1987	42
1986	44	1994	42
1996	44	2001	42
1984	43	2005	42
1995	43	2009	42
1999	43	2020	42
2002	43	1989	41
2005	43	2011	41
2012	43	2012	41
1987	42	2017	41
1991	42	1988	40
1997	42	1991	40
2009	42	1999	40
2015	42	2006	40
2017	42	2013	40
2019	42	2019	40
1988	41	2000	39
1989	41	1985	27
1998	41	2021	23
2001	41	1993	0
2011	41	1981	NA
2006	40	1982	NA
1981	0	1983	NA
2021	NA	1984	NA

Table 32: Number of Days with high Degree Heating Week values  $\,$ 

Year	CCI_DHW8	Year	NOAA_DHW8
2011	152	2013	147
2013	151	2011	144
1997	143	1989	131
2000	139	2008	130
1999	133	1998	127
2014	127	2000	123
2012	126	2014	123
1998	123	1997	119
2008	121	2012	119
2001	120	2018	119
2018	119	2009	116
1988	118	2017	114
2005	114	2001	113
2009	113	2021	113
1994	110	2005	112
2003	110	1988	110
1984	108	1999	110
1989	108	1994	106
1995	107	1985	90
1983	100	2020	90
2020	99	1991	89
2017	97	1996	88
1985	95	1990	87
2015	92	2015	82
1996	90	2003	81
2002	88	1995	79
2007	83	1986	77
2016	81	2006	73
1982	76	2019	66
1991	75	1987	64
1987	74	2007	62
1986	73	2002	59
1990	68	2004	29
2006	67	2016	8
2019	66	1992	0
2010	63	1993	0
2004	54	2010	0
1993	31	1981	NA
1981	0	1982	NA
1992	0	1983	NA
2021	NA	1984	NA

# Wallabi Island Yearly Sum of Moderate and High DHW Values in CCI and NOAA data



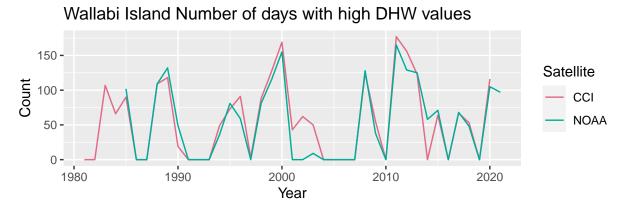


Table 33: Number of Days with moderate Degree Heating Week values

Year	CCI_DHW4	Year	NOAA_DHW4
2006	143	2006	131
1997	121	1996	114
2014	96	1991	94
2005	89	2009	94
1991	78	2018	90
2009	78	2017	86
1982	74	2003	84
1996	74	2001	79
1990	72	2005	77
2017	72	1997	70
2018	72	2002	67
2002	70	1994	64
2004	62	2014	64
1994	60	1988	58
2001	60	2015	54
1983	59	2020	50
2015	56	1989	48
2020	55	1995	46
2003	54	2008	46
1985	53	1990	45
1992	52	1998	44
1984	50	2000	43
1989	49	2012	43
2013	48	2013	43
1988	47	2011	42
2008	46	1999	41
1998	45	1985	40
1995	43	2021	29
2000	43	2016	5
2012	43	1986	0
2011	42	1987	0
1999	41	1992	0
1981	0	1993	0
1986	0	2004	0
1987	0	2007	0
1993	0	2010	0
2007	0	2019	0
2010	0	1981	NA
2016	0	1982	NA
2019	0	1983	NA
2021	NA	1984	NA
			<u> </u>

Table 34: Number of Days with high Degree Heating Week values

Year	CCI DHW8	Year	NOAA DHW8
2011	177	2011	165
2000	169	2000	155
2012	156	1989	132
1999	127	2012	129
2008	124	2008	128
2013	123	2013	125
1989	118	1999	115
2020	116	1988	109
1988	109	2020	105
1983	107	1985	102
1996	91	2021	97
1985	90	1995	81
1998	88	1998	81
1995	73	2015	71
2017	67	2017	68
1984	66	1996	59
2015	64	2014	58
2002	62	1990	49
2009	55	2018	48
2018	53	2009	38
2003	50	1994	36
1994	49	2003	9
2001	43	1986	0
1990	19	1987	0
1997	3	1991	0
1981	0	1992	0
1982	0	1993	0
1986	0	1997	0
1987	0	2001	0
1991	0	2002	0
1992	0	2004	0
1993	0	2005	0
2004	0	2006	0
2005	0	2007	0
2006	0	2010	0
2007	0	2016	0
2010	0	2019	0
2014	0	1981	NA
2016	0	1982	NA
2019	0	1983	NA
2021	NA	1984	NA
	•		

# $\rm HAB05B~Yearly~Sum$ of Moderate and High DHW Values in CCI and NOAA data

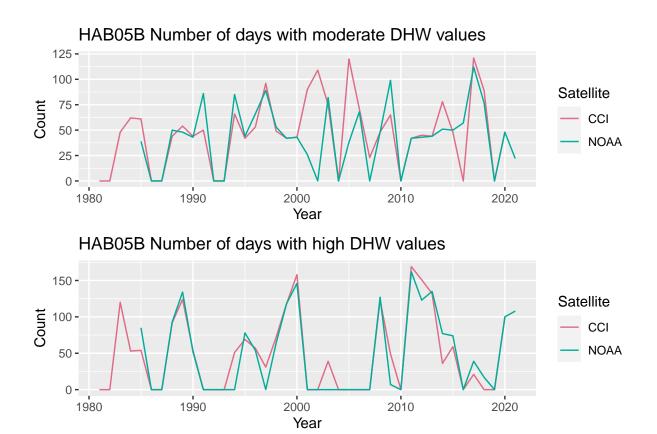


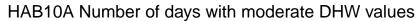
Table 35: Number of Days with moderate Degree Heating Week values  $\,$ 

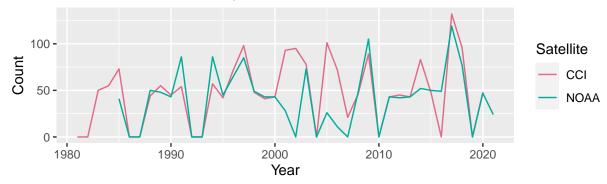
Year	CCI DHW4	Year	NOAA DHW4
2017	121	2017	112
2005	120	2009	99
2002	109	1997	89
1997	96	1991	86
2001	90	1994	85
2018	89	2003	82
2014	78	2018	77
2003	75	2006	68
2006	71	1996	66
1994	66	2016	57
2009	65	1998	53
1984	62	2014	51
1985	61	1988	50
1989	54	2015	50
1996	53	1989	48
1991	50	2008	48
1998	49	2020	48
1983	48	1995	44
2008	48	2013	44
2015	48	1990	43
2020	48	2000	43
2012	45	2012	43
1988	44	1999	42
1990	44	2011	42
2013	44	1985	39
2000	43	2005	38
1995	42	2001	26
1999	42	2021	22
2011	42	1986	0
2007	23	1987	0
1981	0	1992	0
1982	0	1993	0
1986	0	2002	0
1987	0	2004	0
1992	0	2007	0
1993	0	2010	0
2004	0	2019	0
2010	0	1981	NA
2016	0	1982	NA
2019	0	1983	NA
2021	NA	1984	NA

Table 36: Number of Days with high Degree Heating Week values

Year         CCI_DHW8         Year         NOAA_DHW8           2011         169         2011         162           2000         158         2000         146           2012         151         2013         135           2013         132         1989         134           1989         124         2008         127           2008         123         2012         123           1983         120         1999         118           1999         118         2021         108           2020         99         2020         100           1988         92         1988         93           1998         72         1985         85           1995         69         1995         78           2015         59         2014         77           1996         57         2015         74           1985         54         1998         64           1990         54         1998         64           1990         54         1998         64           1990         54         1998         64           1990         52				
2000         158         2000         146           2012         151         2013         135           2013         132         1989         134           1989         124         2008         127           2008         123         2012         123           1983         120         1999         118           1999         118         2021         108           2020         99         2020         100           1988         92         1988         93           1998         72         1985         85           1995         69         1995         78           2015         59         2014         77           1996         57         2015         74           1985         54         1998         64           1990         54         1996         54           1994         51         2017         39           2009         49         2018         17           2003         39         2009         7           2014         36         1986         0           1997         31         1987		CCI_DHW8	Year	NOAA_DHW8
2012         151         2013         135           2013         132         1989         134           1989         124         2008         127           2008         123         2012         123           1983         120         1999         118           1999         118         2021         108           2020         99         2020         100           1988         92         1988         93           1998         72         1985         85           1995         69         1995         78           2015         59         2014         77           1996         57         2015         74           1996         57         2015         74           1985         54         1998         64           1990         54         1996         54           1994         51         2017         39           2009         49         2018         17           2003         39         2009         7           2014         36         1986         0           1997         31         1987	2011	169	2011	162
2013         132         1989         134           1989         124         2008         127           2008         123         2012         123           1983         120         1999         118           1999         118         2021         108           2020         99         2020         100           1988         92         1988         93           1998         72         1985         85           1995         69         1995         78           2015         59         2014         77           1996         57         2015         74           1985         54         1998         64           1990         54         1998         64           1990         54         1998         64           1990         54         1998         64           1990         54         1998         64           1990         54         1998         64           1994         51         2017         39           2009         49         2018         17           2003         39         2009	2000	158	2000	146
1989         124         2008         127           2008         123         2012         123           1983         120         1999         118           1999         118         2021         108           2020         99         2020         100           1988         92         1988         93           1998         72         1985         85           1995         69         1995         78           2015         59         2014         77           1996         57         2015         74           1985         54         1998         64           1990         54         1996         54           1994         51         2017         39           2009         49         2018         17           2003         39         2009         7           2014         36         1986         0           1997         31         1987         0           2017         21         1991         0           1982         0         1993         0           1986         0         1994	2012		2013	135
2008         123         2012         123           1983         120         1999         118           1999         118         2021         108           2020         99         2020         100           1988         92         1988         93           1998         72         1985         85           1995         69         1995         78           2015         59         2014         77           1996         57         2015         74           1985         54         1998         64           1990         54         1996         54           1994         51         2017         39           2009         49         2018         17           2003         39         2009         7           2014         36         1986         0           1997         31         1987         0           2017         21         1991         0           1981         0         1992         0           1982         0         1993         0           1993         0         2001         0 <td>2013</td> <td></td> <td>1989</td> <td>134</td>	2013		1989	134
1983         120         1999         118           1999         118         2021         108           2020         99         2020         100           1988         92         1988         93           1998         72         1985         85           1995         69         1995         78           2015         59         2014         77           1996         57         2015         74           1985         54         1998         64           1990         54         1996         54           1984         53         1990         52           1994         51         2017         39           2009         49         2018         17           2003         39         2009         7           2014         36         1986         0           1997         31         1987         0           2017         21         1991         0           1982         0         1993         0           1987         0         1997         0           1991         0         2001         0	1989		2008	
1999         118         2021         108           2020         99         2020         100           1988         92         1988         93           1998         72         1985         85           1995         69         1995         78           2015         59         2014         77           1996         57         2015         74           1985         54         1998         64           1990         54         1996         54           1984         53         1990         52           1994         51         2017         39           2009         49         2018         17           2003         39         2009         7           2014         36         1986         0           1997         31         1987         0           2017         21         1991         0           1982         0         1993         0           1986         0         1994         0           1991         0         2001         0           1993         0         2002         0				
2020         99         2020         100           1988         92         1988         93           1998         72         1985         85           1995         69         1995         78           2015         59         2014         77           1996         57         2015         74           1985         54         1998         64           1990         54         1996         54           1984         53         1990         52           1994         51         2017         39           2009         49         2018         17           2003         39         2009         7           2014         36         1986         0           1997         31         1987         0           2017         21         1991         0           1981         0         1992         0           1982         0         1993         0           1997         0         1997         0           1993         0         2002         0           1993         0         2003         0 <td></td> <td></td> <td></td> <td>118</td>				118
1988         92         1988         93           1998         72         1985         85           1995         69         1995         78           2015         59         2014         77           1996         57         2015         74           1985         54         1998         64           1990         54         1996         54           1984         53         1990         52           1994         51         2017         39           2009         49         2018         17           2003         39         2009         7           2014         36         1986         0           1997         31         1987         0           2017         21         1991         0           1981         0         1992         0           1982         0         1993         0           1997         0         1997         0           1991         0         2001         0           1992         0         2002         0           1993         0         2003         0		118		
1998         72         1985         85           1995         69         1995         78           2015         59         2014         77           1996         57         2015         74           1985         54         1998         64           1990         54         1996         54           1984         53         1990         52           1994         51         2017         39           2009         49         2018         17           2003         39         2009         7           2014         36         1986         0           1997         31         1987         0           2017         21         1991         0           1981         0         1992         0           1982         0         1993         0           1986         0         1994         0           1991         0         2001         0           1993         0         2002         0           1993         0         2003         0           2001         0         2004         0		99		
1995         69         1995         78           2015         59         2014         77           1996         57         2015         74           1985         54         1998         64           1990         54         1996         54           1984         53         1990         52           1994         51         2017         39           2009         49         2018         17           2003         39         2009         7           2014         36         1986         0           1997         31         1987         0           2017         21         1991         0           1981         0         1992         0           1982         0         1993         0           1986         0         1994         0           1991         0         2001         0           1993         0         2002         0           1993         0         2002         0           1993         0         2003         0           2001         0         2004         0	1988	92	1988	93
2015         59         2014         77           1996         57         2015         74           1985         54         1998         64           1990         54         1996         54           1984         53         1990         52           1994         51         2017         39           2009         49         2018         17           2003         39         2009         7           2014         36         1986         0           1997         31         1987         0           2017         21         1991         0           1981         0         1992         0           1982         0         1993         0           1986         0         1994         0           1997         0         1997         0           1991         0         2001         0           1992         0         2002         0           1993         0         2003         0           2001         0         2004         0           2002         0         2005         0 <t< td=""><td>1998</td><td>72</td><td>1985</td><td>85</td></t<>	1998	72	1985	85
1996         57         2015         74           1985         54         1998         64           1990         54         1996         54           1984         53         1990         52           1994         51         2017         39           2009         49         2018         17           2003         39         2009         7           2014         36         1986         0           1997         31         1987         0           2017         21         1991         0           1981         0         1992         0           1982         0         1993         0           1986         0         1994         0           1991         0         2001         0           1992         0         2002         0           1993         0         2002         0           1993         0         2003         0           2001         0         2004         0           2002         0         2005         0           2004         0         2006         0	1995	69	1995	78
1985         54         1998         64           1990         54         1996         54           1984         53         1990         52           1994         51         2017         39           2009         49         2018         17           2003         39         2009         7           2014         36         1986         0           1997         31         1987         0           2017         21         1991         0           1981         0         1992         0           1982         0         1993         0           1986         0         1994         0           1987         0         1997         0           1991         0         2001         0           1992         0         2002         0           1993         0         2003         0           2001         0         2004         0           2002         0         2003         0           2004         0         2006         0           2005         0         2007         0				
1990         54         1996         54           1984         53         1990         52           1994         51         2017         39           2009         49         2018         17           2003         39         2009         7           2014         36         1986         0           1997         31         1987         0           2017         21         1991         0           1981         0         1992         0           1982         0         1993         0           1986         0         1994         0           1987         0         1997         0           1991         0         2001         0           1992         0         2002         0           1993         0         2003         0           2001         0         2004         0           2002         0         2003         0           2004         0         2004         0           2005         0         2005         0           2006         0         2010         0				
1984         53         1990         52           1994         51         2017         39           2009         49         2018         17           2003         39         2009         7           2014         36         1986         0           1997         31         1987         0           2017         21         1991         0           1981         0         1992         0           1982         0         1993         0           1986         0         1994         0           1997         0         1997         0           1991         0         2001         0           1992         0         2002         0           1993         0         2002         0           1993         0         2003         0           2001         0         2004         0           2002         0         2005         0           2004         0         2006         0           2005         0         2007         0           2006         0         2010         0				
1994         51         2017         39           2009         49         2018         17           2003         39         2009         7           2014         36         1986         0           1997         31         1987         0           2017         21         1991         0           1981         0         1992         0           1982         0         1993         0           1986         0         1994         0           1991         0         2001         0           1992         0         2002         0           1993         0         2003         0           2001         0         2004         0           2002         0         2003         0           2004         0         2004         0           2004         0         2005         0           2004         0         2006         0           2005         0         2007         0           2006         0         2010         0           2007         0         2016         0		-		
2009         49         2018         17           2003         39         2009         7           2014         36         1986         0           1997         31         1987         0           2017         21         1991         0           1981         0         1992         0           1982         0         1993         0           1986         0         1994         0           1991         0         2001         0           1992         0         2002         0           1993         0         2003         0           2001         0         2004         0           2001         0         2004         0           2002         0         2005         0           2004         0         2006         0           2005         0         2007         0           2006         0         2010         0           2007         0         2016         0           2010         0         2019         0           2016         0         1981         NA				
2003         39         2009         7           2014         36         1986         0           1997         31         1987         0           2017         21         1991         0           1981         0         1992         0           1982         0         1993         0           1986         0         1994         0           1987         0         1997         0           1991         0         2001         0           1993         0         2002         0           1993         0         2003         0           2001         0         2004         0           2002         0         2005         0           2004         0         2005         0           2004         0         2006         0           2005         0         2007         0           2006         0         2010         0           2007         0         2016         0           2010         0         2019         0           2016         0         1981         NA <t< td=""><td></td><td></td><td></td><td></td></t<>				
2014         36         1986         0           1997         31         1987         0           2017         21         1991         0           1981         0         1992         0           1982         0         1993         0           1986         0         1994         0           1997         0         0         0           1991         0         2001         0           1992         0         2002         0           1993         0         2003         0           2001         0         2004         0           2002         0         2005         0           2004         0         2005         0           2004         0         2006         0           2005         0         2007         0           2006         0         2010         0           2007         0         2016         0           2010         0         2019         0           2016         0         1981         NA           2018         0         1982         NA           2				
1997         31         1987         0           2017         21         1991         0           1981         0         1992         0           1982         0         1993         0           1986         0         1994         0           1987         0         1997         0           1991         0         2001         0           1992         0         2002         0           1993         0         2003         0           2001         0         2004         0           2002         0         2005         0           2004         0         2006         0           2004         0         2006         0           2005         0         2007         0           2006         0         2010         0           2007         0         2016         0           2010         0         2019         0           2016         0         1981         NA           2018         0         1982         NA           2019         0         1983         NA				
2017         21         1991         0           1981         0         1992         0           1982         0         1993         0           1986         0         1994         0           1987         0         1997         0           1991         0         2001         0           1992         0         2002         0           1993         0         2003         0           2001         0         2004         0           2002         0         2005         0           2004         0         2006         0           2004         0         2006         0           2005         0         2007         0           2006         0         2010         0           2007         0         2016         0           2010         0         2019         0           2016         0         1981         NA           2018         0         1982         NA           2019         0         1983         NA				0
1981         0         1992         0           1982         0         1993         0           1986         0         1994         0           1987         0         1997         0           1991         0         2001         0           1992         0         2002         0           1993         0         2003         0           2001         0         2004         0           2002         0         2005         0           2004         0         2006         0           2005         0         2007         0           2006         0         2010         0           2007         0         2016         0           2010         0         2019         0           2016         0         1981         NA           2018         0         1982         NA           2019         0         1983         NA				0
1982         0         1993         0           1986         0         1994         0           1987         0         1997         0           1991         0         2001         0           1992         0         2002         0           1993         0         2003         0           2001         0         2004         0           2002         0         2005         0           2004         0         2006         0           2005         0         2007         0           2006         0         2010         0           2007         0         2016         0           2010         0         2019         0           2016         0         1981         NA           2018         0         1982         NA           2019         0         1983         NA		21		0
1986         0         1994         0           1987         0         1997         0           1991         0         2001         0           1992         0         2002         0           1993         0         2003         0           2001         0         2004         0           2002         0         2005         0           2004         0         2006         0           2005         0         2007         0           2006         0         2010         0           2007         0         2016         0           2010         0         2019         0           2016         0         1981         NA           2018         0         1982         NA           2019         0         1983         NA				
1987         0         1997         0           1991         0         2001         0           1992         0         2002         0           1993         0         2003         0           2001         0         2004         0           2002         0         2005         0           2004         0         2006         0           2005         0         2007         0           2006         0         2010         0           2007         0         2016         0           2010         0         2019         0           2016         0         1981         NA           2018         0         1982         NA           2019         0         1983         NA				0
1991         0         2001         0           1992         0         2002         0           1993         0         2003         0           2001         0         2004         0           2002         0         2005         0           2004         0         2006         0           2005         0         2007         0           2006         0         2010         0           2007         0         2016         0           2010         0         2019         0           2016         0         1981         NA           2018         0         1982         NA           2019         0         1983         NA				_
1992         0         2002         0           1993         0         2003         0           2001         0         2004         0           2002         0         2005         0           2004         0         2006         0           2005         0         2007         0           2006         0         2010         0           2007         0         2016         0           2010         0         2019         0           2016         0         1981         NA           2018         0         1982         NA           2019         0         1983         NA				
1993         0         2003         0           2001         0         2004         0           2002         0         2005         0           2004         0         2006         0           2005         0         2007         0           2006         0         2010         0           2007         0         2016         0           2010         0         2019         0           2016         0         1981         NA           2018         0         1982         NA           2019         0         1983         NA				
2001         0         2004         0           2002         0         2005         0           2004         0         2006         0           2005         0         2007         0           2006         0         2010         0           2007         0         2016         0           2010         0         2019         0           2016         0         1981         NA           2018         0         1982         NA           2019         0         1983         NA				
2002         0         2005         0           2004         0         2006         0           2005         0         2007         0           2006         0         2010         0           2007         0         2016         0           2010         0         2019         0           2016         0         1981         NA           2018         0         1982         NA           2019         0         1983         NA				
2004         0         2006         0           2005         0         2007         0           2006         0         2010         0           2007         0         2016         0           2010         0         2019         0           2016         0         1981         NA           2018         0         1982         NA           2019         0         1983         NA				
2005         0         2007         0           2006         0         2010         0           2007         0         2016         0           2010         0         2019         0           2016         0         1981         NA           2018         0         1982         NA           2019         0         1983         NA				
2006         0         2010         0           2007         0         2016         0           2010         0         2019         0           2016         0         1981         NA           2018         0         1982         NA           2019         0         1983         NA				
2007         0         2016         0           2010         0         2019         0           2016         0         1981         NA           2018         0         1982         NA           2019         0         1983         NA				_
2010         0         2019         0           2016         0         1981         NA           2018         0         1982         NA           2019         0         1983         NA				
2016         0         1981         NA           2018         0         1982         NA           2019         0         1983         NA				
2018         0         1982         NA           2019         0         1983         NA				
2019 0 1983 NA				
2021   NA 1984   NA				
	2021	NA NA	-1984	NA_

# $\rm HAB10A$ Yearly Sum of Moderate and High DHW Values in CCI and NOAA data





#### HAB10A Number of days with high DHW values

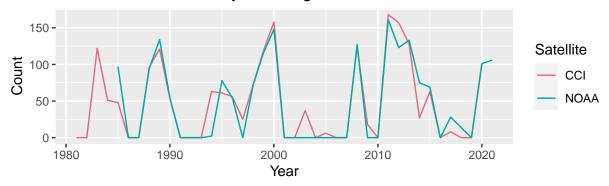


Table 37: Number of Days with moderate Degree Heating Week values  $\,$ 

Year         CCI_DHW4         Year         NOAA_DHW4           2017         121         2017         119           2005         120         2009         105           2002         109         1991         86           1997         96         1994         86           2001         90         1997         85           2018         89         2018         77           2014         78         2003         73           2003         75         1996         65           2006         71         2014         52           1994         66         1988         50           2009         65         2015         50           1984         62         1998         49           1985         61         2016         49           1989         54         1989         48           1991         50         2020         47           1998         49         1995         45           1981         49         1995         45           1983         48         1999         43           2008         48         1999 </th <th></th> <th></th> <th></th> <th></th>				
2005         120         2009         105           2002         109         1991         86           1997         96         1994         86           2001         90         1997         85           2018         89         2018         77           2014         78         2003         73           2003         75         1996         65           2006         71         2014         52           1994         66         1988         50           2009         65         2015         50           1984         62         1998         49           1985         61         2016         49           1989         54         1989         48           1996         53         2008         48           1991         50         2020         47           1998         49         1995         45           1983         48         1990         43           2008         48         1999         43           2015         48         2000         43           2020         48         2011 <td< td=""><td></td><td></td><td></td><td></td></td<>				
2002         109         1991         86           1997         96         1994         86           2001         90         1997         85           2018         89         2018         77           2014         78         2003         73           2003         75         1996         65           2006         71         2014         52           1994         66         1988         50           2009         65         2015         50           1984         62         1998         49           1985         61         2016         49           1989         54         1989         48           1996         53         2008         48           1991         50         2020         47           1998         49         1995         45           1983         48         1990         43           2008         48         1999         43           2015         48         2000         43           2020         48         2011         43           2012         45         2013         4				119
1997         96         1994         86           2001         90         1997         85           2018         89         2018         77           2014         78         2003         73           2003         75         1996         65           2006         71         2014         52           1994         66         1988         50           2009         65         2015         50           1984         62         1998         49           1985         61         2016         49           1989         54         1989         48           1996         53         2008         48           1991         50         2020         47           1998         49         1995         45           1998         49         1995         45           1983         48         1990         43           2008         48         1999         43           2015         48         2000         43           2020         48         2011         43           2012         45         2013         43	2005	120	2009	105
2001         90         1997         85           2018         89         2018         77           2014         78         2003         73           2003         75         1996         65           2006         71         2014         52           1994         66         1988         50           2009         65         2015         50           1984         62         1998         49           1985         61         2016         49           1989         54         1989         48           1996         53         2008         48           1991         50         2020         47           1998         49         1995         45           1983         48         1990         43           2008         48         1999         43           2015         48         2000         43           2020         48         2011         43           2015         48         2000         43           1988         44         2012         42           1990         44         1985         41	2002	109		86
2018         89         2018         77           2014         78         2003         73           2003         75         1996         65           2006         71         2014         52           1994         66         1988         50           2009         65         2015         50           1984         62         1998         49           1985         61         2016         49           1989         54         1989         48           1996         53         2008         48           1991         50         2020         47           1998         49         1995         45           1983         48         1990         43           2008         48         1999         43           2015         48         2000         43           2020         48         2011         43           2015         48         2000         43           2020         48         2011         43           2012         45         2013         43           1988         44         2012         42	1997	96	1994	86
2014         78         2003         73           2003         75         1996         65           2006         71         2014         52           1994         66         1988         50           2009         65         2015         50           1984         62         1998         49           1985         61         2016         49           1989         54         1989         48           1996         53         2008         48           1991         50         2020         47           1998         49         1995         45           1983         48         1990         43           2008         48         1999         43           2015         48         2000         43           2020         48         2011         43           2015         48         2000         43           2020         48         2011         43           2012         45         2013         43           1988         44         2012         42           1990         44         1985         41	2001	90	1997	85
2003         75         1996         65           2006         71         2014         52           1994         66         1988         50           2009         65         2015         50           1984         62         1998         49           1985         61         2016         49           1989         54         1989         48           1996         53         2008         48           1991         50         2020         47           1998         49         1995         45           1983         48         1990         43           2008         48         1999         43           2015         48         2000         43           2020         48         2011         43           2015         48         2000         43           2012         45         2013         43           1988         44         2012         42           1990         44         1985         41           2013         44         2001         28           2000         43         2005         26	2018	89	2018	77
2006         71         2014         52           1994         66         1988         50           2009         65         2015         50           1984         62         1998         49           1985         61         2016         49           1989         54         1989         48           1996         53         2008         48           1991         50         2020         47           1998         49         1995         45           1983         48         1990         43           2008         48         1999         43           2015         48         2000         43           2020         48         2011         43           2015         48         2000         43           2020         48         2011         43           2012         45         2013         43           1988         44         2012         42           1990         44         1985         41           2013         44         2001         28           2000         43         2005         26	2014	78	2003	73
1994         66         1988         50           2009         65         2015         50           1984         62         1998         49           1985         61         2016         49           1989         54         1989         48           1996         53         2008         48           1991         50         2020         47           1998         49         1995         45           1983         48         1990         43           2008         48         1999         43           2015         48         2000         43           2020         48         2011         43           2015         48         2000         43           2020         48         2011         43           2012         45         2013         43           1988         44         2012         42           1990         44         1985         41           2013         44         2001         28           2000         43         2005         26           1995         42         2021         24	2003	75	1996	65
2009         65         2015         50           1984         62         1998         49           1985         61         2016         49           1989         54         1989         48           1996         53         2008         48           1991         50         2020         47           1998         49         1995         45           1983         48         1990         43           2008         48         1999         43           2015         48         2000         43           2020         48         2011         43           2015         48         2000         43           2020         48         2011         43           2012         45         2013         43           1988         44         2012         42           1990         44         1985         41           2013         44         2001         28           2000         43         2005         26           1995         42         2021         24           1999         42         2006         11	2006	71	2014	52
1984         62         1998         49           1985         61         2016         49           1989         54         1989         48           1996         53         2008         48           1991         50         2020         47           1998         49         1995         45           1983         48         1990         43           2008         48         1999         43           2015         48         2000         43           2020         48         2011         43           2015         48         2000         43           2020         48         2011         43           2012         45         2013         43           1988         44         2012         42           1990         44         1985         41           2013         44         2001         28           2000         43         2005         26           1995         42         2021         24           1999         42         2006         11           2011         42         1986         0<	1994	66	1988	50
1985         61         2016         49           1989         54         1989         48           1996         53         2008         48           1991         50         2020         47           1998         49         1995         45           1983         48         1990         43           2008         48         1999         43           2015         48         2000         43           2020         48         2011         43           2012         45         2013         43           1988         44         2012         42           1990         44         1985         41           2013         44         2001         28           2000         43         2005         26           1995         42         2021         24           1999         42         2006         11           2011         42         1986         0           2007         23         1987         0           1981         0         1993         0           1986         0         2002         0	2009	65	2015	50
1989         54         1989         48           1996         53         2008         48           1991         50         2020         47           1998         49         1995         45           1983         48         1990         43           2008         48         1999         43           2015         48         2000         43           2020         48         2011         43           2012         45         2013         43           1988         44         2012         42           1990         44         1985         41           2013         44         2001         28           2000         43         2005         26           1995         42         2021         24           1999         42         2006         11           2011         42         1986         0           2007         23         1987         0           1981         0         1992         0           1986         0         2002         0           1987         0         2004         0	1984	62	1998	49
1996         53         2008         48           1991         50         2020         47           1998         49         1995         45           1983         48         1990         43           2008         48         1999         43           2015         48         2000         43           2020         48         2011         43           2012         45         2013         43           1988         44         2012         42           1990         44         1985         41           2013         44         2001         28           2000         43         2005         26           1995         42         2021         24           1999         42         2006         11           2011         42         1986         0           2007         23         1987         0           1981         0         1992         0           1985         0         1993         0           1986         0         2002         0           1987         0         2004         0	1985	61	2016	49
1991         50         2020         47           1998         49         1995         45           1983         48         1990         43           2008         48         1999         43           2015         48         2000         43           2020         48         2011         43           2012         45         2013         43           1988         44         2012         42           1990         44         1985         41           2013         44         2001         28           2000         43         2005         26           1995         42         2021         24           1999         42         2006         11           2011         42         1986         0           2007         23         1987         0           1981         0         1992         0           1982         0         1993         0           1986         0         2002         0           1993         0         2010         0           2004         0         2019         0 </td <td>1989</td> <td>54</td> <td>1989</td> <td>48</td>	1989	54	1989	48
1998         49         1995         45           1983         48         1990         43           2008         48         1999         43           2015         48         2000         43           2020         48         2011         43           2012         45         2013         43           1988         44         2012         42           1990         44         1985         41           2013         44         2001         28           2000         43         2005         26           1995         42         2021         24           1999         42         2006         11           2011         42         1986         0           2007         23         1987         0           1981         0         1992         0           1982         0         1993         0           1986         0         2002         0           1993         0         2010         0           1993         0         2010         0           2004         0         2019         0 <td>1996</td> <td>53</td> <td>2008</td> <td>48</td>	1996	53	2008	48
1983         48         1990         43           2008         48         1999         43           2015         48         2000         43           2020         48         2011         43           2012         45         2013         43           1988         44         2012         42           1990         44         1985         41           2013         44         2001         28           2000         43         2005         26           1995         42         2021         24           1999         42         2006         11           2011         42         1986         0           2007         23         1987         0           1981         0         1992         0           1982         0         1993         0           1986         0         2002         0           1993         0         2004         0           1993         0         2010         0           2004         0         2019         0           2010         0         1981         NA	1991	50	2020	47
2008         48         1999         43           2015         48         2000         43           2020         48         2011         43           2012         45         2013         43           1988         44         2012         42           1990         44         1985         41           2013         44         2001         28           2000         43         2005         26           1995         42         2021         24           1999         42         2006         11           2011         42         1986         0           2007         23         1987         0           1981         0         1992         0           1982         0         1993         0           1986         0         2002         0           1987         0         2004         0           1992         0         2007         0           1993         0         2010         0           2004         0         2019         0           2010         0         1981         NA	1998	49	1995	45
2015         48         2000         43           2020         48         2011         43           2012         45         2013         43           1988         44         2012         42           1990         44         1985         41           2013         44         2001         28           2000         43         2005         26           1995         42         2021         24           1999         42         2006         11           2011         42         1986         0           2007         23         1987         0           1981         0         1992         0           1982         0         1993         0           1986         0         2002         0           1987         0         2004         0           1993         0         2010         0           2004         0         2010         0           2010         0         1981         NA           2016         0         1982         NA           2019         0         1982         NA	1983	48	1990	43
2020         48         2011         43           2012         45         2013         43           1988         44         2012         42           1990         44         1985         41           2013         44         2001         28           2000         43         2005         26           1995         42         2021         24           1999         42         2006         11           2011         42         1986         0           2007         23         1987         0           1981         0         1992         0           1982         0         1993         0           1986         0         2002         0           1987         0         2004         0           1993         0         2010         0           2004         0         2019         0           2010         0         1981         NA           2016         0         1982         NA           2019         0         1982         NA           2019         0         1983         NA </td <td>2008</td> <td>48</td> <td>1999</td> <td>43</td>	2008	48	1999	43
2012         45         2013         43           1988         44         2012         42           1990         44         1985         41           2013         44         2001         28           2000         43         2005         26           1995         42         2021         24           1999         42         2006         11           2011         42         1986         0           2007         23         1987         0           1981         0         1992         0           1982         0         1993         0           1986         0         2002         0           1987         0         2004         0           1993         0         2010         0           2004         0         2019         0           2010         0         1981         NA           2016         0         1982         NA           2019         0         1982         NA           2019         0         1983         NA	2015	48	2000	43
1988         44         2012         42           1990         44         1985         41           2013         44         2001         28           2000         43         2005         26           1995         42         2021         24           1999         42         2006         11           2011         42         1986         0           2007         23         1987         0           1981         0         1992         0           1982         0         1993         0           1986         0         2002         0           1987         0         2004         0           1992         0         2007         0           1993         0         2010         0           2004         0         2019         0           2010         0         1981         NA           2016         0         1982         NA           2019         0         1982         NA           2019         0         1983         NA	2020	48	2011	43
1990         44         1985         41           2013         44         2001         28           2000         43         2005         26           1995         42         2021         24           1999         42         2006         11           2011         42         1986         0           2007         23         1987         0           1981         0         1992         0           1982         0         1993         0           1986         0         2002         0           1987         0         2004         0           1992         0         2007         0           1993         0         2010         0           2004         0         2019         0           2010         0         1981         NA           2016         0         1982         NA           2019         0         1983         NA	2012	45	2013	43
2013         44         2001         28           2000         43         2005         26           1995         42         2021         24           1999         42         2006         11           2011         42         1986         0           2007         23         1987         0           1981         0         1992         0           1982         0         1993         0           1986         0         2002         0           1987         0         2004         0           1992         0         2007         0           1993         0         2010         0           2004         0         2019         0           2010         0         1981         NA           2016         0         1982         NA           2019         0         1983         NA	1988	44	2012	42
2000         43         2005         26           1995         42         2021         24           1999         42         2006         11           2011         42         1986         0           2007         23         1987         0           1981         0         1992         0           1982         0         1993         0           1986         0         2002         0           1987         0         2004         0           1993         0         2010         0           2004         0         2010         0           2004         0         2019         0           2010         0         1981         NA           2016         0         1982         NA           2019         0         1983         NA	1990	44	1985	
1995         42         2021         24           1999         42         2006         11           2011         42         1986         0           2007         23         1987         0           1981         0         1992         0           1982         0         1993         0           1986         0         2002         0           1987         0         2004         0           1992         0         2007         0           1993         0         2010         0           2004         0         2019         0           2010         0         1981         NA           2016         0         1982         NA           2019         0         1983         NA	2013	44	2001	28
1999         42         2006         11           2011         42         1986         0           2007         23         1987         0           1981         0         1992         0           1982         0         1993         0           1986         0         2002         0           1987         0         2004         0           1992         0         2007         0           1993         0         2010         0           2004         0         2019         0           2010         0         1981         NA           2016         0         1982         NA           2019         0         1983         NA	2000	43	2005	26
2011         42         1986         0           2007         23         1987         0           1981         0         1992         0           1982         0         1993         0           1986         0         2002         0           1987         0         2004         0           1992         0         2007         0           1993         0         2010         0           2004         0         2019         0           2010         0         1981         NA           2016         0         1982         NA           2019         0         1983         NA	1995	42	2021	24
2007         23         1987         0           1981         0         1992         0           1982         0         1993         0           1986         0         2002         0           1987         0         2004         0           1992         0         2007         0           1993         0         2010         0           2004         0         2019         0           2010         0         1981         NA           2016         0         1982         NA           2019         0         1983         NA	1999	42	2006	11
1981         0         1992         0           1982         0         1993         0           1986         0         2002         0           1987         0         2004         0           1992         0         2007         0           1993         0         2010         0           2004         0         2019         0           2010         0         1981         NA           2016         0         1982         NA           2019         0         1983         NA	2011	42		0
1982         0         1993         0           1986         0         2002         0           1987         0         2004         0           1992         0         2007         0           1993         0         2010         0           2004         0         2019         0           2010         0         1981         NA           2016         0         1982         NA           2019         0         1983         NA	2007	23	1987	0
1986         0         2002         0           1987         0         2004         0           1992         0         2007         0           1993         0         2010         0           2004         0         2019         0           2010         0         1981         NA           2016         0         1982         NA           2019         0         1983         NA	1981	0	1992	0
1987         0         2004         0           1992         0         2007         0           1993         0         2010         0           2004         0         2019         0           2010         0         1981         NA           2016         0         1982         NA           2019         0         1983         NA	1982	0	1993	0
1992         0         2007         0           1993         0         2010         0           2004         0         2019         0           2010         0         1981         NA           2016         0         1982         NA           2019         0         1983         NA	1986	0		0
1993         0         2010         0           2004         0         2019         0           2010         0         1981         NA           2016         0         1982         NA           2019         0         1983         NA				_
2004         0         2019         0           2010         0         1981         NA           2016         0         1982         NA           2019         0         1983         NA	1992	0	2007	0
2010         0         1981         NA           2016         0         1982         NA           2019         0         1983         NA		0		0
2016         0         1982         NA           2019         0         1983         NA				
2019 0 1983 NA		0		
		0		
2021 NA 1024 NA				
2021 NA 1984 NA	2021	NA	1984	NA

Table 38: Number of Days with high Degree Heating Week values  $\,$ 

Year 2011 2000 2012 2013	CCI_DHW8 168 158	Year 2011	NOAA_DHW8
2000 2012		2011	161
2012	150		101
	198	2000	148
2013	157	1989	134
	128	2013	133
2008	125	2008	127
1983	122	2012	123
1989	121	1999	116
1999	119	2021	106
2020	101	2020	101
1988	96	1985	97
1998	72	1988	94
1994	63	1995	78
2015	63	2014	75
1995	61	1998	72
1996	56	2015	69
1990	53	1990	54
1984	51	1996	54
1985	48	2017	28
2003	37	2018	14
2014	27	1994	2
1997	25	1986	0
2009	18	1987	0
2017	8	1991	0
2005	6	1992	0
1981	0	1993	0
1982	0	1997	0
1986	0	2001	0
1987	0	2002	0
1991	0	2003	0
1992	0	2004	0
1993	0	2005	0
2001	0	2006	0
2002	0	2007	0
2004	0	2009	0
2006	0	2010	0
2007	0	2016	0
2010	0	2019	0
2016	0	1981	NA
2018	0	1982	NA
2019	0	1983	NA
2021	NA	1984	NA