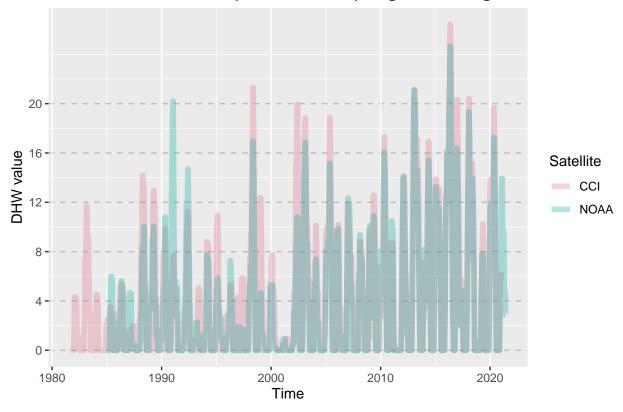
Degree Heating Week Analysis

Vanessa

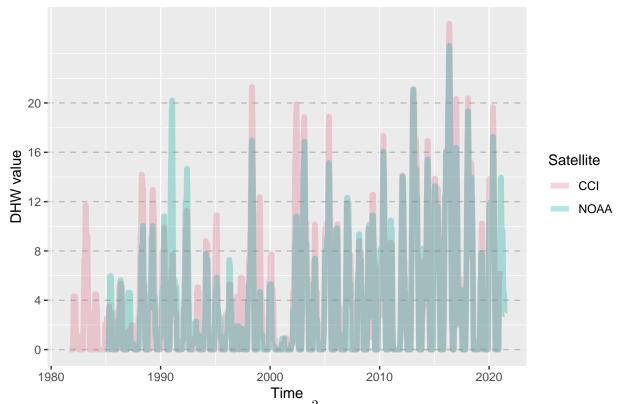
2021-09-17

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

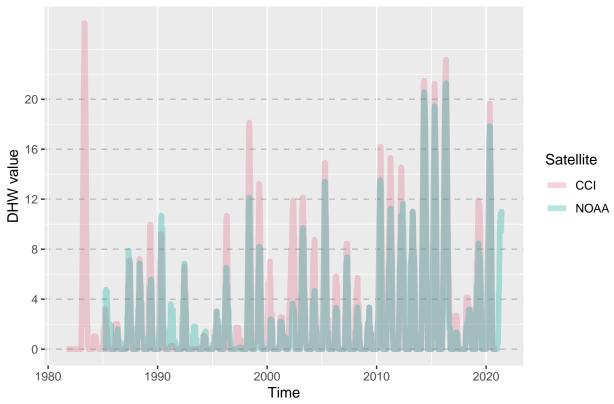
Time Series of BRS05 (-14.11, 123.54) Degree Heating Week values

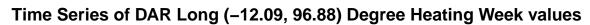


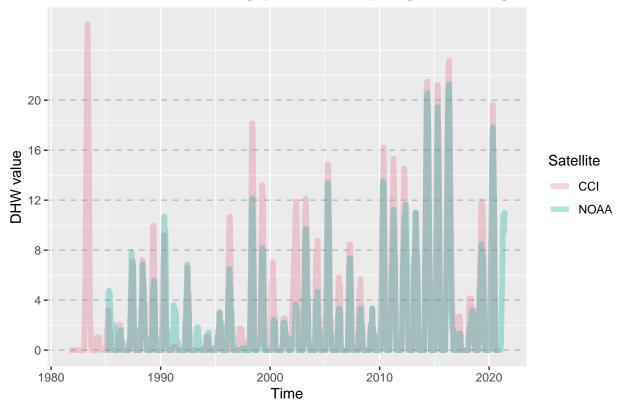
Time Series of BRS07 (-14.12, 123.55) Degree Heating Week values



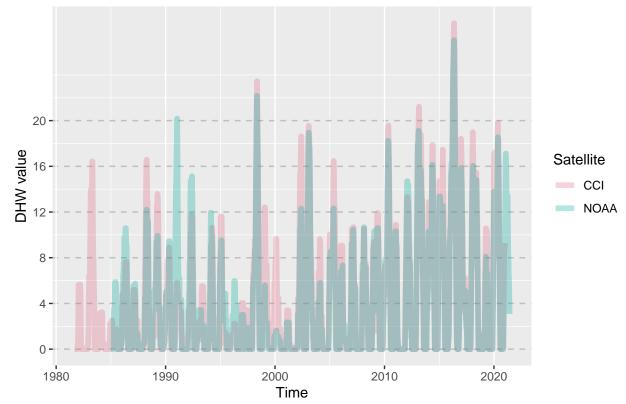


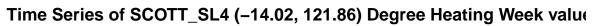


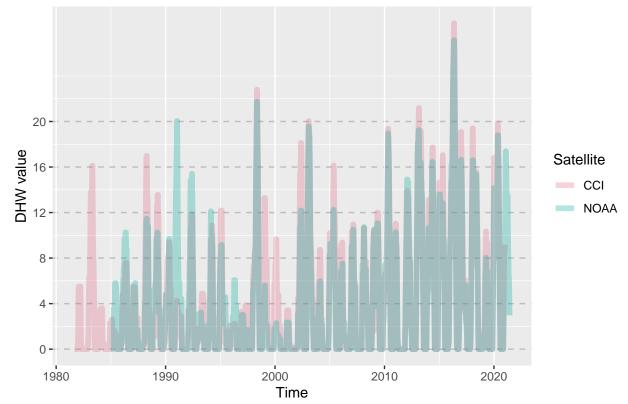




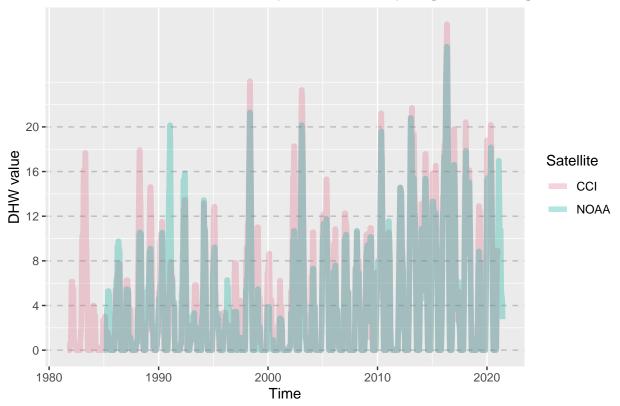




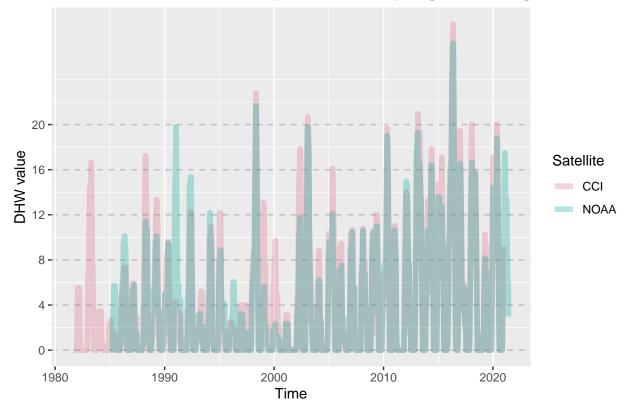


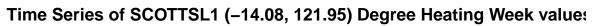


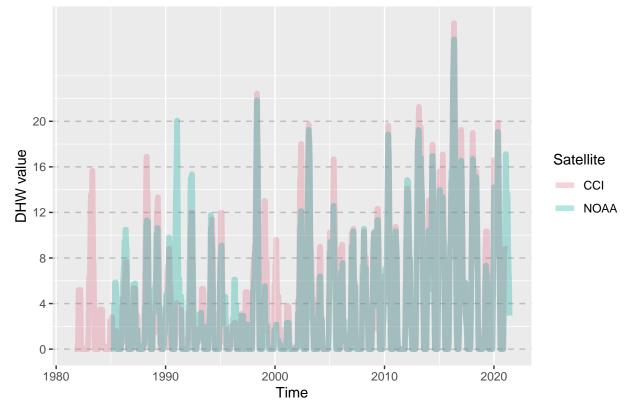


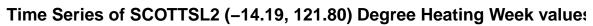


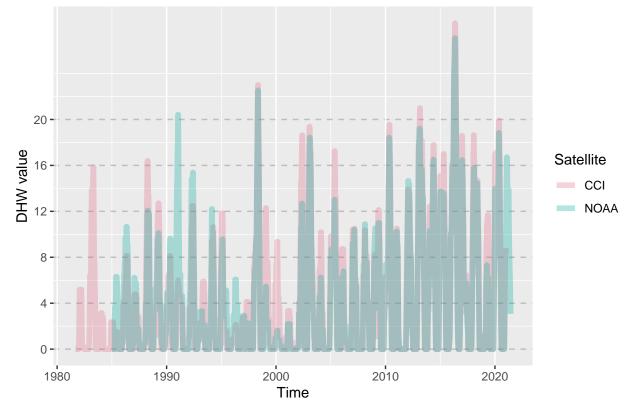


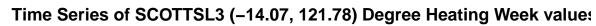


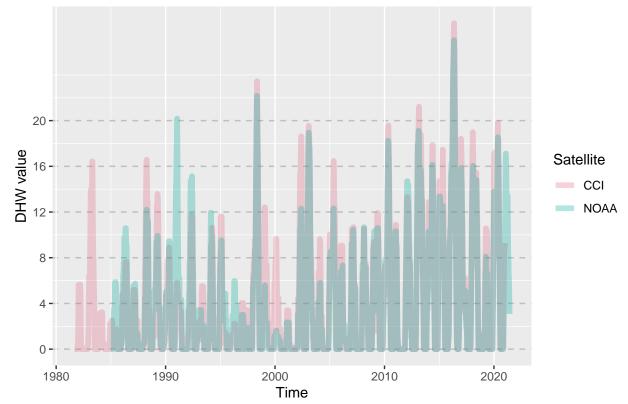




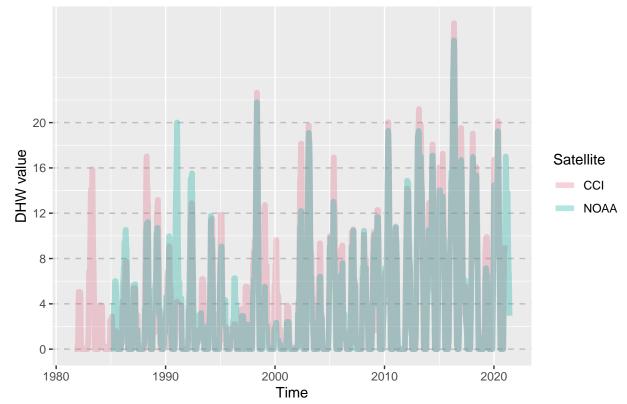


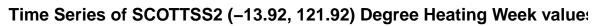


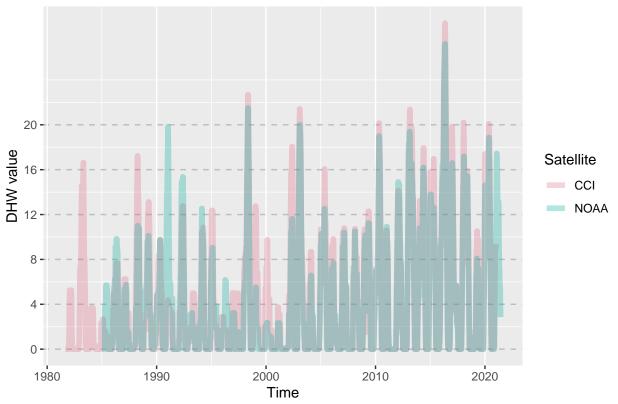




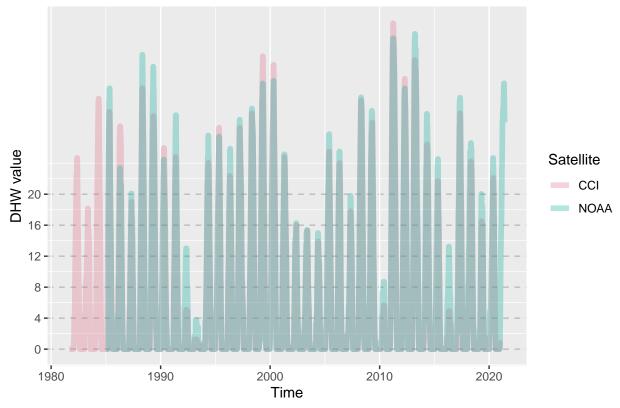


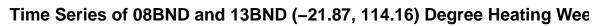


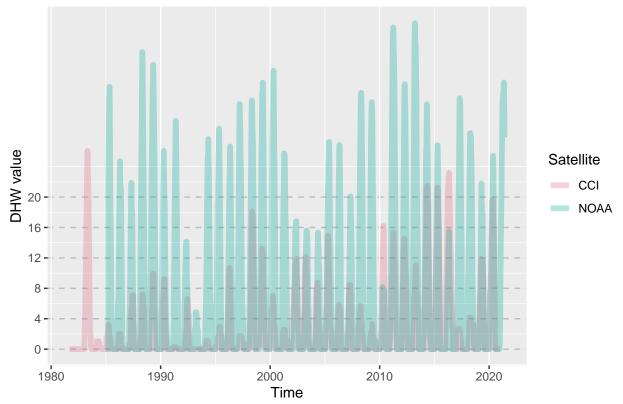


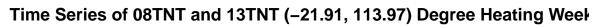


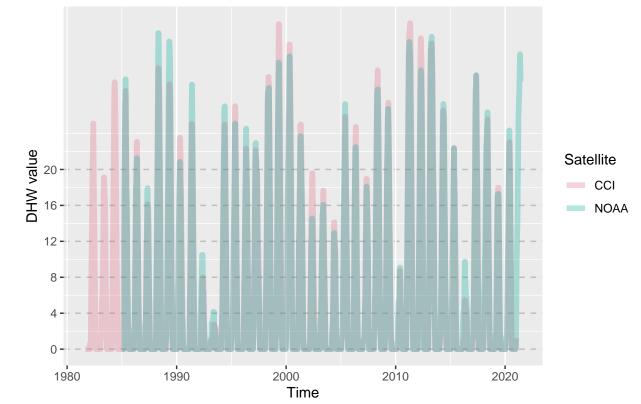




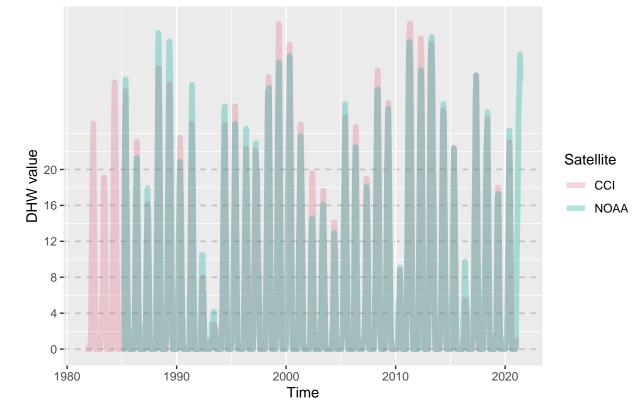




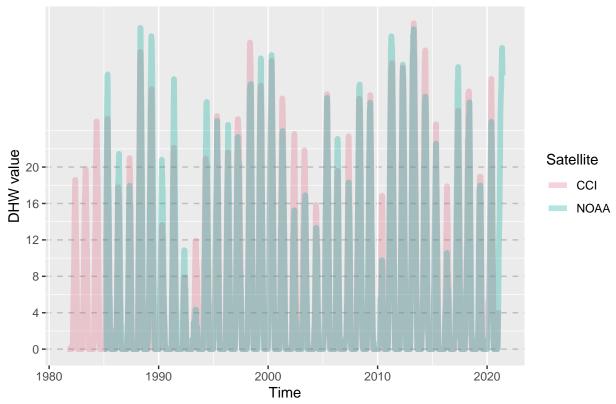




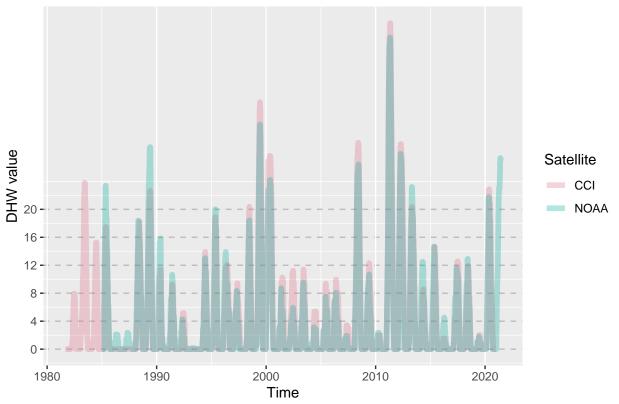


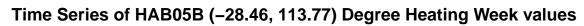


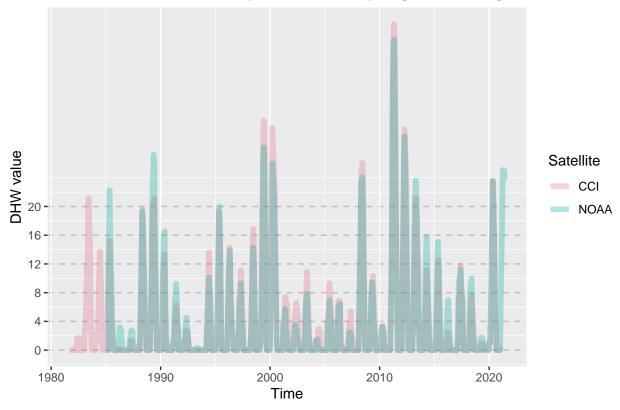




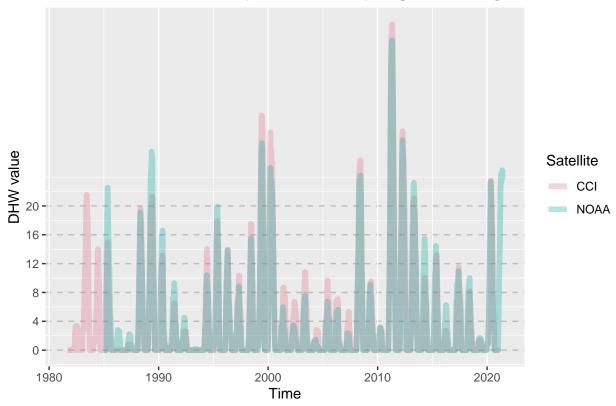




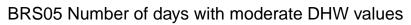


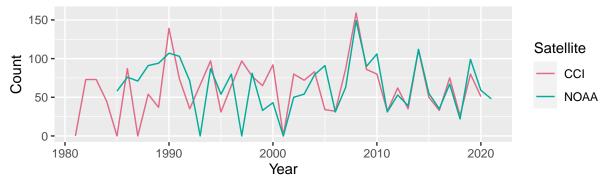






$BRS05\ Yearly\ Sum$ of Moderate and High DHW Values in CCI and NOAA data





BRS05 Number of days with high DHW values

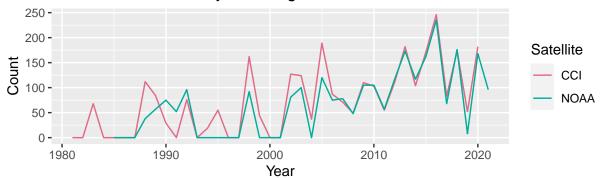


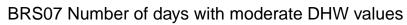
Table 1: Number of Days with moderate Degree Heating Week values

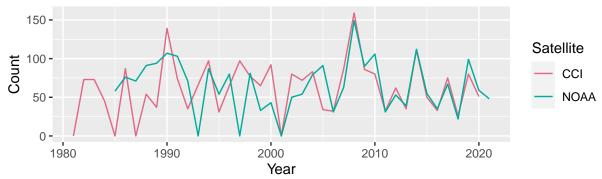
| Vern | CCI DHW4 | Year | NOAA DHW4 |
|----------------------------|----------|----------------------------|-----------|
| $\frac{\text{Year}}{2008}$ | 159 | $\frac{\text{rear}}{2008}$ | NOAA_DHW4 |
| $\frac{2008}{1990}$ | 139 | $\frac{2008}{2014}$ | 112 |
| $\frac{1990}{2014}$ | 111 | $\frac{2014}{1990}$ | 107 |
| $\frac{2014}{1994}$ | 97 | $\frac{1990}{2010}$ | 107 |
| $\frac{1994}{1997}$ | 97 | $\frac{2010}{1991}$ | 103 |
| | | $\frac{1991}{2019}$ | |
| $\frac{2000}{1986}$ | 92 87 | $\frac{2019}{1989}$ | 99 |
| | | | |
| 2007 | 87 | 1988 | 91 |
| 2009 | 86 | 2005 | 91 |
| 2004 | 83 | 2009 | 90 |
| 2002 | 80 | 1994 | 87 |
| 2010 | 80 | 1998 | 81 |
| 2019 | 80 | 1996 | 80 |
| 1998 | 77 | 2004 | 79 |
| 2017 | 75 | 1986 | 76 |
| 1991 | 74 | 1987 | 71 |
| 1982 | 73 | 1992 | 71 |
| 1983 | 73 | 2017 | 67 |
| 2003 | 72 | 2007 | 63 |
| 1993 | 66 | 2020 | 59 |
| 1996 | 65 | 1985 | 58 |
| 1999 | 65 | 2015 | 55 |
| 2012 | 62 | 1995 | 54 |
| 1988 | 54 | 2003 | 54 |
| 2020 | 51 | 2012 | 53 |
| 2015 | 50 | 2002 | 50 |
| 1984 | 45 | 2021 | 48 |
| 1989 | 37 | 2000 | 43 |
| 1992 | 35 | 2013 | 39 |
| 2013 | 35 | 2016 | 35 |
| 2005 | 34 | 1999 | 33 |
| 2016 | 33 | 2006 | 31 |
| 2006 | 32 | 2011 | 31 |
| 2011 | 32 | 2018 | 22 |
| 1995 | 31 | 1993 | 0 |
| 2018 | 26 | 1997 | 0 |
| 1981 | 0 | 2001 | 0 |
| $\frac{1985}{1985}$ | 0 | 1981 | NA |
| $\frac{1987}{1987}$ | 0 | $\frac{1981}{1982}$ | NA |
| 2001 | 0 | $\frac{1302}{1983}$ | NA |
| $\frac{2001}{2021}$ | NA | $\frac{1363}{1984}$ | NA |
| 2021 | INA | 1304 | IVA |

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

| Year | CCI_DHW8 | Year | NOAA_DHW8 |
|------|----------|-------|-----------|
| 2016 | 246 | 2016 | 235 |
| 2005 | 189 | 2018 | 176 |
| 2013 | 182 | 2013 | 173 |
| 2020 | 182 | 2020 | 168 |
| 2018 | 174 | 2015 | 162 |
| 2015 | 171 | 2005 | 120 |
| 1998 | 162 | 2012 | 117 |
| 2002 | 127 | 2014 | 117 |
| 2003 | 124 | 2009 | 105 |
| 1988 | 112 | 2010 | 105 |
| 2012 | 111 | 2003 | 100 |
| 2009 | 110 | 1992 | 96 |
| 2014 | 104 | 2021 | 96 |
| 2010 | 103 | 1998 | 92 |
| 2006 | 87 | 2002 | 81 |
| 1989 | 84 | 2007 | 78 |
| 2017 | 83 | 1990 | 75 |
| 1992 | 76 | 2006 | 75 |
| 2007 | 71 | 2017 | 68 |
| 1983 | 68 | 1989 | 57 |
| 1995 | 55 | 2011 | 57 |
| 2011 | 55 | 1991 | 52 |
| 2019 | 52 | 2008 | 48 |
| 2008 | 49 | 1988 | 38 |
| 1999 | 44 | 2019 | 8 |
| 2004 | 37 | 1985 | 0 |
| 1990 | 29 | 1986 | 0 |
| 1994 | 19 | 1987 | 0 |
| 1981 | 0 | 1993 | 0 |
| 1982 | 0 | 1994 | 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 | 2004 | 0 |
| 1997 | 0 | 1981 | NA |
| 2000 | 0 | 1982 | NA |
| 2001 | 0 | 1983 | NA |
| 2021 | NA | 1984 | NA |
| | | | |

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





BRS07 Number of days with high DHW values

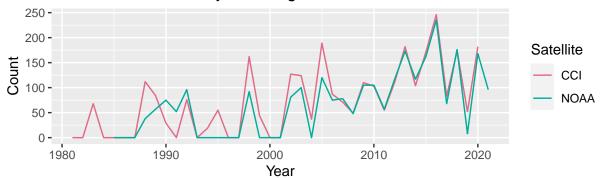


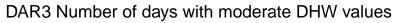
Table 3: Number of Days with moderate Degree Heating Week values

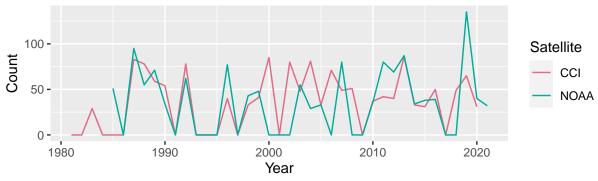
| Year | CCI_DHW4 | Year | NOAA_DHW4 |
|------|----------|------|-----------|
| 2008 | 159 | 2008 | 149 |
| 1990 | 139 | 2014 | 112 |
| 2014 | 111 | 1990 | 107 |
| 1994 | 97 | 2010 | 106 |
| 1997 | 97 | 1991 | 103 |
| 2000 | 92 | 2019 | 99 |
| 1986 | 87 | 1989 | 94 |
| 2007 | 87 | 1988 | 91 |
| 2009 | 86 | 2005 | 91 |
| 2004 | 83 | 2009 | 90 |
| 2002 | 80 | 1994 | 87 |
| 2010 | 80 | 1998 | 81 |
| 2019 | 80 | 1996 | 80 |
| 1998 | 77 | 2004 | 79 |
| 2017 | 75 | 1986 | 76 |
| 1991 | 74 | 1987 | 71 |
| 1982 | 73 | 1992 | 71 |
| 1983 | 73 | 2017 | 67 |
| 2003 | 72 | 2007 | 63 |
| 1993 | 66 | 2020 | 59 |
| 1996 | 65 | 1985 | 58 |
| 1999 | 65 | 2015 | 55 |
| 2012 | 62 | 1995 | 54 |
| 1988 | 54 | 2003 | 54 |
| 2020 | 51 | 2012 | 53 |
| 2015 | 50 | 2002 | 50 |
| 1984 | 45 | 2021 | 48 |
| 1989 | 37 | 2000 | 43 |
| 1992 | 35 | 2013 | 39 |
| 2013 | 35 | 2016 | 35 |
| 2005 | 34 | 1999 | 33 |
| 2016 | 33 | 2006 | 31 |
| 2006 | 32 | 2011 | 31 |
| 2011 | 32 | 2018 | 22 |
| 1995 | 31 | 1993 | 0 |
| 2018 | 26 | 1997 | 0 |
| 1981 | 0 | 2001 | 0 |
| 1985 | 0 | 1981 | NA |
| 1987 | 0 | 1982 | NA |
| 2001 | 0 | 1983 | NA |
| 2021 | NA | 1984 | NA |
| | - | | 1 |

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

| Year | CCI_DHW8 | Year | NOAA_DHW8 |
|------|----------|-------|-----------|
| 2016 | 246 | 2016 | 235 |
| 2005 | 189 | 2018 | 176 |
| 2013 | 182 | 2013 | 173 |
| 2020 | 182 | 2020 | 168 |
| 2018 | 174 | 2015 | 162 |
| 2015 | 171 | 2005 | 120 |
| 1998 | 162 | 2012 | 117 |
| 2002 | 127 | 2014 | 117 |
| 2003 | 124 | 2009 | 105 |
| 1988 | 112 | 2010 | 105 |
| 2012 | 111 | 2003 | 100 |
| 2009 | 110 | 1992 | 96 |
| 2014 | 104 | 2021 | 96 |
| 2010 | 103 | 1998 | 92 |
| 2006 | 87 | 2002 | 81 |
| 1989 | 84 | 2007 | 78 |
| 2017 | 83 | 1990 | 75 |
| 1992 | 76 | 2006 | 75 |
| 2007 | 71 | 2017 | 68 |
| 1983 | 68 | 1989 | 57 |
| 1995 | 55 | 2011 | 57 |
| 2011 | 55 | 1991 | 52 |
| 2019 | 52 | 2008 | 48 |
| 2008 | 49 | 1988 | 38 |
| 1999 | 44 | 2019 | 8 |
| 2004 | 37 | 1985 | 0 |
| 1990 | 29 | 1986 | 0 |
| 1994 | 19 | 1987 | 0 |
| 1981 | 0 | 1993 | 0 |
| 1982 | 0 | 1994 | 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 | 2004 | 0 |
| 1997 | 0 | 1981 | NA |
| 2000 | 0 | 1982 | NA |
| 2001 | 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

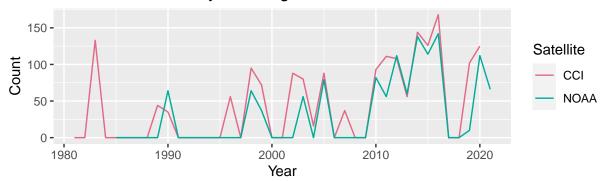


Table 5: Number of Days with moderate Degree Heating Week values

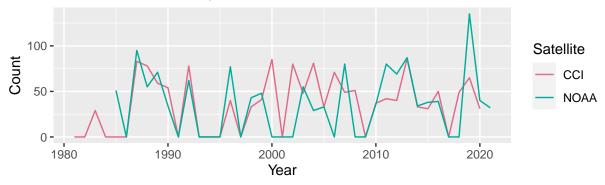
| Year | CCI DHW4 | Year | NOAA DHW4 |
|------|----------|------|-----------|
| 2013 | 86 | 2019 | 135 |
| 2000 | 85 | 1987 | 95 |
| 1987 | 83 | 2013 | 87 |
| 2004 | 81 | 2007 | 80 |
| 2002 | 80 | 2011 | 80 |
| 1988 | 78 | 1996 | 77 |
| 1992 | 78 | 1989 | 71 |
| 2006 | 71 | 2012 | 69 |
| 2019 | 65 | 1992 | 62 |
| 1989 | 59 | 1988 | 55 |
| 1990 | 54 | 2003 | 55 |
| 2008 | 51 | 1985 | 51 |
| 2016 | 50 | 1999 | 48 |
| 2007 | 49 | 1998 | 43 |
| 2018 | 49 | 2020 | 40 |
| 2003 | 48 | 2016 | 39 |
| 2011 | 42 | 2015 | 38 |
| 1999 | 41 | 2010 | 36 |
| 1996 | 40 | 1990 | 34 |
| 2012 | 40 | 2014 | 34 |
| 2010 | 37 | 2005 | 33 |
| 1998 | 33 | 2021 | 32 |
| 2005 | 33 | 2004 | 29 |
| 2014 | 33 | 1986 | 0 |
| 2015 | 31 | 1991 | 0 |
| 2020 | 31 | 1993 | 0 |
| 1983 | 29 | 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

| 2016 168 2016 142 2014 144 2014 138 1983 133 2015 114 2015 126 2012 112 2015 126 2012 112 2010 125 2020 112 2011 111 2010 82 2012 108 2005 79 2019 102 2021 66 1998 95 1990 64 2010 93 1998 64 2001 93 1998 64 2002 88 2013 60 2003 80 2011 56 1999 72 1999 37 1996 56 2019 10 2013 56 1985 0 1989 44 1986 0 2007 37 1987 0 1981 0 1991 | Year | CCI DHW8 | Year | NOAA DHW8 |
|--|------|----------|------|-----------|
| 2014 144 2014 138 1983 133 2015 114 2015 126 2012 112 2020 125 2020 112 2011 111 2010 82 2012 108 2005 79 2019 102 2021 66 1998 95 1990 64 2010 93 1998 64 2002 88 2013 60 2005 88 2003 56 2003 80 2011 56 1999 72 1999 37 1996 56 2019 10 2013 56 1985 0 1989 44 1986 0 2007 37 1987 0 1990 35 1988 0 2004 16 1989 0 1981 0 1993 < | | | | |
| 1983 133 2015 114 2015 126 2012 112 2020 125 2020 112 2011 111 2010 82 2012 108 2005 79 2019 102 2021 66 1998 95 1990 64 2010 93 1998 64 2002 88 2013 60 2005 88 2003 56 2003 80 2011 56 2003 80 2011 56 1999 72 1999 37 1996 56 2019 10 2013 56 1985 0 1996 56 2019 10 2013 56 1985 0 1989 44 1986 0 2007 37 1987 0 1981 0 1991 <t< td=""><td></td><td></td><td></td><td></td></t<> | | | | |
| 2015 126 2012 112 2020 125 2020 112 2011 111 2010 82 2012 108 2005 79 2019 102 2021 66 1998 95 1990 64 2010 93 1998 64 2002 88 2013 60 2005 88 2003 56 2003 80 2011 56 2003 80 2011 56 1999 72 1999 37 1996 56 2019 10 2013 56 1985 0 1989 44 1986 0 2007 37 1987 0 1989 44 1986 0 2004 16 1989 0 1981 0 1991 0 1984 0 1993 0 </td <td></td> <td></td> <td></td> <td></td> | | | | |
| 2020 125 2020 112 2011 111 2010 82 2012 108 2005 79 2019 102 2021 66 1998 95 1990 64 2010 93 1998 64 2002 88 2013 60 2005 88 2003 56 2003 80 2011 56 2003 80 2011 56 1999 72 1999 37 1996 56 2019 10 2013 56 1985 0 1989 44 1986 0 2007 37 1987 0 1990 35 1988 0 2004 16 1989 0 1981 0 1991 0 1985 0 1993 0 1986 0 1995 0 | | | | |
| 2011 111 2010 82 2012 108 2005 79 2019 102 2021 66 1998 95 1990 64 2010 93 1998 64 2002 88 2013 60 2005 88 2003 56 2003 80 2011 56 1999 72 1999 37 1996 56 2019 10 2013 56 1985 0 1989 44 1986 0 2007 37 1987 0 1990 35 1988 0 2004 16 1989 0 1981 0 1991 0 1982 0 1992 0 1984 0 1993 0 1985 0 1994 0 1988 0 1997 0 </td <td></td> <td></td> <td></td> <td></td> | | | | |
| 2012 108 2005 79 2019 102 2021 66 1998 95 1990 64 2010 93 1998 64 2002 88 2013 60 2005 88 2003 56 2003 80 2011 56 1999 72 1999 37 1996 56 2019 10 2013 56 1985 0 1989 44 1986 0 2007 37 1987 0 1990 35 1988 0 2004 16 1989 0 1981 0 1991 0 1982 0 1991 0 1984 0 1993 0 1985 0 1994 0 1986 0 1995 0 1988 0 1997 0 | | | | |
| 2019 102 2021 66 1998 95 1990 64 2010 93 1998 64 2002 88 2013 60 2005 88 2003 56 2003 80 2011 56 1999 72 1999 37 1996 56 2019 10 2013 56 1985 0 1989 44 1986 0 2007 37 1987 0 1990 35 1988 0 2004 16 1989 0 1981 0 1991 0 1982 0 1992 0 1984 0 1993 0 1985 0 1994 0 1986 0 1995 0 1987 0 1996 0 1993 0 2000 0 | | | | |
| 1998 95 1990 64 2010 93 1998 64 2002 88 2013 60 2005 88 2003 56 2003 80 2011 56 1999 72 1999 37 1996 56 2019 10 2013 56 1985 0 1989 44 1986 0 2007 37 1987 0 1990 35 1988 0 2004 16 1989 0 1981 0 1991 0 1982 0 1992 0 1984 0 1993 0 1985 0 1994 0 1986 0 1995 0 1987 0 1996 0 1991 0 2000 0 1992 0 2001 0 < | | | | |
| 2010 93 1998 64 2002 88 2013 60 2005 88 2003 56 2003 80 2011 56 1999 72 1999 37 1996 56 2019 10 2013 56 1985 0 1989 44 1986 0 2007 37 1987 0 1990 35 1988 0 2004 16 1989 0 1981 0 1991 0 1982 0 1992 0 1984 0 1993 0 1985 0 1994 0 1986 0 1995 0 1988 0 1997 0 1991 0 2000 0 1993 0 2001 0 1994 0 2004 0 <tr< td=""><td></td><td></td><td></td><td></td></tr<> | | | | |
| 2002 88 2013 60 2003 80 2011 56 1999 72 1999 37 1996 56 2019 10 2013 56 1985 0 1989 44 1986 0 2007 37 1987 0 1990 35 1988 0 2004 16 1989 0 1981 0 1991 0 1982 0 1992 0 1984 0 1993 0 1985 0 1994 0 1986 0 1995 0 1987 0 1996 0 1991 0 2000 0 1992 0 2001 0 1993 0 2000 0 1994 0 2000 0 1993 0 2000 0 | | | | |
| 2005 88 2003 56 2003 80 2011 56 1999 72 1999 37 1996 56 2019 10 2013 56 1985 0 1989 44 1986 0 2007 37 1987 0 1990 35 1988 0 2004 16 1989 0 1981 0 1991 0 1982 0 1992 0 1984 0 1993 0 1985 0 1994 0 1986 0 1995 0 1987 0 1996 0 1991 0 2000 0 1992 0 2001 0 1993 0 2002 0 1994 0 2004 0 1993 0 2002 0 | | | | |
| 2003 80 2011 56 1999 72 1999 37 1996 56 2019 10 2013 56 1985 0 1989 44 1986 0 2007 37 1987 0 1990 35 1988 0 2004 16 1989 0 1981 0 1991 0 1982 0 1992 0 1984 0 1993 0 1985 0 1994 0 1986 0 1995 0 1987 0 1996 0 1988 0 1997 0 1991 0 2000 0 1993 0 2002 0 1994 0 2004 0 1993 0 2002 0 1994 0 2004 0 | | | | |
| 1999 72 1999 37 1996 56 2019 10 2013 56 1985 0 1989 44 1986 0 2007 37 1987 0 1990 35 1988 0 2004 16 1989 0 1981 0 1991 0 1982 0 1992 0 1984 0 1993 0 1985 0 1994 0 1986 0 1995 0 1987 0 1996 0 1991 0 2000 0 1992 0 2001 0 1993 0 2002 0 1994 0 2004 0 1993 0 2002 0 1994 0 2004 0 1995 0 2006 0 | | | | |
| 1996 56 2019 10 2013 56 1985 0 1989 44 1986 0 2007 37 1987 0 1990 35 1988 0 2004 16 1989 0 1981 0 1991 0 1982 0 1992 0 1984 0 1993 0 1985 0 1994 0 1986 0 1995 0 1988 0 1997 0 1991 0 2000 0 1992 0 2001 0 1993 0 2002 0 1994 0 2004 0 1995 0 2001 0 1995 0 2004 0 1997 0 2004 0 1997 0 2004 0 | | | | |
| 2013 56 1985 0 1989 44 1986 0 2007 37 1987 0 1990 35 1988 0 2004 16 1989 0 1981 0 1991 0 1982 0 1992 0 1984 0 1993 0 1985 0 1994 0 1986 0 1995 0 1988 0 1997 0 1991 0 2000 0 1992 0 2001 0 1993 0 2002 0 1994 0 2004 0 1995 0 2004 0 1995 0 2006 0 1997 0 2004 0 1995 0 2006 0 1997 0 2006 0 <t< td=""><td></td><td></td><td></td><td></td></t<> | | | | |
| 1989 44 1986 0 2007 37 1987 0 1990 35 1988 0 2004 16 1989 0 1981 0 1991 0 1982 0 1992 0 1984 0 1993 0 1985 0 1994 0 1986 0 1995 0 1988 0 1997 0 1991 0 2000 0 1992 0 2001 0 1993 0 2002 0 1994 0 2004 0 1995 0 2004 0 1995 0 2004 0 1997 0 2004 0 1997 0 2006 0 2000 0 2008 0 2001 0 2008 0 <td< td=""><td></td><td></td><td></td><td></td></td<> | | | | |
| 2007 37 1987 0 1990 35 1988 0 2004 16 1989 0 1981 0 1991 0 1982 0 1992 0 1984 0 1993 0 1985 0 1994 0 1986 0 1995 0 1987 0 1996 0 1991 0 2000 0 1992 0 2001 0 1993 0 2002 0 1994 0 2004 0 1995 0 2004 0 1997 0 2004 0 1997 0 2006 0 1997 0 2007 0 2000 0 2008 0 2001 0 2008 0 2002 0 2008 0 | | | | |
| 1990 35 1988 0 2004 16 1989 0 1981 0 1991 0 1982 0 1992 0 1984 0 1993 0 1985 0 1994 0 1986 0 1995 0 1987 0 1996 0 1991 0 2000 0 1992 0 2001 0 1993 0 2002 0 1994 0 2004 0 1995 0 2004 0 1997 0 2004 0 1997 0 2004 0 1997 0 2006 0 2000 0 2008 0 2001 0 2008 0 2000 0 2008 0 2008 0 2018 0 2 | | | | |
| 2004 16 1989 0 1981 0 1991 0 1982 0 1992 0 1984 0 1993 0 1985 0 1994 0 1986 0 1995 0 1987 0 1996 0 1988 0 1997 0 1991 0 2000 0 1992 0 2001 0 1993 0 2002 0 1994 0 2004 0 1995 0 2006 0 1997 0 2006 0 2000 0 2008 0 2001 0 2008 0 2001 0 2009 0 2008 0 2018 0 2009 0 1981 NA 2017 0 1982 NA | | | | |
| 1981 0 1991 0 1982 0 1992 0 1984 0 1993 0 1985 0 1994 0 1986 0 1995 0 1987 0 1996 0 1988 0 1997 0 1991 0 2000 0 1992 0 2001 0 1993 0 2002 0 1994 0 2004 0 1995 0 2006 0 1997 0 2007 0 2000 0 2008 0 2001 0 2008 0 2001 0 2009 0 2008 0 2018 0 2009 0 1981 NA 2017 0 1982 NA 2018 0 1983 NA | | | | |
| 1982 0 1992 0 1984 0 1993 0 1985 0 1994 0 1986 0 1995 0 1987 0 1996 0 1988 0 1997 0 1991 0 2000 0 1992 0 2001 0 1993 0 2002 0 1994 0 2004 0 1995 0 2006 0 1997 0 2007 0 2000 0 2008 0 2001 0 2009 0 2006 0 2017 0 2008 0 2018 0 2009 0 1981 NA 2017 0 1982 NA 2018 0 1983 NA | | | | |
| 1984 0 1993 0 1985 0 1994 0 1986 0 1995 0 1987 0 1996 0 1988 0 1997 0 1991 0 2000 0 1992 0 2001 0 1993 0 2002 0 1994 0 2004 0 1995 0 2006 0 2000 0 2008 0 2001 0 2008 0 2001 0 2009 0 2008 0 2017 0 2008 0 2018 0 2009 0 1981 NA 2017 0 1982 NA 2018 0 1983 NA | | | | |
| 1985 0 1994 0 1986 0 1995 0 1987 0 1996 0 1988 0 1997 0 1991 0 2000 0 1992 0 2001 0 1993 0 2002 0 1994 0 2004 0 1995 0 2006 0 2000 0 2008 0 2001 0 2008 0 2001 0 2009 0 2008 0 2017 0 2009 0 1981 NA 2017 0 1982 NA 2018 0 1983 NA | | | | |
| 1986 0 1995 0 1987 0 1996 0 1988 0 1997 0 1991 0 2000 0 1992 0 2001 0 1993 0 2002 0 1994 0 2004 0 1995 0 2006 0 1997 0 2007 0 2000 0 2008 0 2001 0 2009 0 2006 0 2017 0 2008 0 2018 0 2009 0 1981 NA 2017 0 1982 NA 2018 0 1983 NA | | | | _ |
| 1987 0 1996 0 1988 0 1997 0 1991 0 2000 0 1992 0 2001 0 1993 0 2002 0 1994 0 2004 0 1995 0 2006 0 1997 0 2007 0 2000 0 2008 0 2001 0 2009 0 2006 0 2017 0 2008 0 2018 0 2009 0 1981 NA 2017 0 1982 NA 2018 0 1983 NA | | | | - |
| 1988 0 1997 0 1991 0 2000 0 1992 0 2001 0 1993 0 2002 0 1994 0 2004 0 1995 0 2006 0 2000 0 2008 0 2001 0 2009 0 2006 0 2017 0 2008 0 2018 0 2009 0 1981 NA 2017 0 1982 NA 2018 0 1983 NA | | | | |
| 1991 0 2000 0 1992 0 2001 0 1993 0 2002 0 1994 0 2004 0 1995 0 2006 0 2000 0 2008 0 2001 0 2009 0 2006 0 2017 0 2008 0 2018 0 2009 0 1981 NA 2017 0 1982 NA 2018 0 1983 NA | | | | |
| 1992 0 2001 0 1993 0 2002 0 1994 0 2004 0 1995 0 2006 0 1997 0 2007 0 2000 0 2008 0 2001 0 2009 0 2006 0 2017 0 2008 0 2018 0 2009 0 1981 NA 2017 0 1982 NA 2018 0 1983 NA | | | | 0 |
| 1993 0 2002 0 1994 0 2004 0 1995 0 2006 0 1997 0 2007 0 2000 0 2008 0 2001 0 2009 0 2006 0 2017 0 2008 0 2018 0 2009 0 1981 NA 2017 0 1982 NA 2018 0 1983 NA | | | | |
| 1994 0 2004 0 1995 0 2006 0 1997 0 2007 0 2000 0 2008 0 2001 0 2009 0 2006 0 2017 0 2008 0 2018 0 2009 0 1981 NA 2017 0 1982 NA 2018 0 1983 NA | | 0 | | 0 |
| 1995 0 2006 0 1997 0 2007 0 2000 0 2008 0 2001 0 2009 0 2006 0 2017 0 2008 0 2018 0 2009 0 1981 NA 2017 0 1982 NA 2018 0 1983 NA | | | | 0 |
| 1997 0 2007 0 2000 0 2008 0 2001 0 2009 0 2006 0 2017 0 2008 0 2018 0 2009 0 1981 NA 2017 0 1982 NA 2018 0 1983 NA | | 0 | | 0 |
| 2000 0 2008 0 2001 0 2009 0 2006 0 2017 0 2008 0 2018 0 2009 0 1981 NA 2017 0 1982 NA 2018 0 1983 NA | 1995 | 0 | 2006 | 0 |
| 2001 0 2009 0 2006 0 2017 0 2008 0 2018 0 2009 0 1981 NA 2017 0 1982 NA 2018 0 1983 NA | | 0 | | 0 |
| 2006 0 2017 0 2008 0 2018 0 2009 0 1981 NA 2017 0 1982 NA 2018 0 1983 NA | | 0 | | 0 |
| 2008 0 2018 0 2009 0 1981 NA 2017 0 1982 NA 2018 0 1983 NA | 2001 | 0 | 2009 | 0 |
| 2009 0 1981 NA 2017 0 1982 NA 2018 0 1983 NA | 2006 | 0 | 2017 | 0 |
| 2017 0 1982 NA 2018 0 1983 NA | 2008 | 0 | 2018 | 0 |
| 2018 0 1983 NA | 2009 | 0 | 1981 | NA |
| | 2017 | 0 | 1982 | NA |
| 2021 NA 1984 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

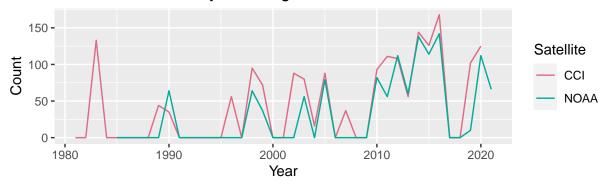


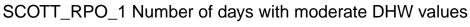
Table 7: Number of Days with moderate Degree Heating Week values

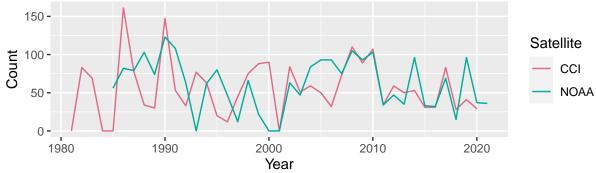
| Year | CCI DHW4 | Year | NOAA DHW4 |
|------|----------|------|-----------|
| 2013 | 86 | 2019 | 135 |
| 2000 | 85 | 1987 | 95 |
| 1987 | 83 | 2013 | 87 |
| 2004 | 81 | 2007 | 80 |
| 2002 | 80 | 2011 | 80 |
| 1988 | 78 | 1996 | 77 |
| 1992 | 78 | 1989 | 71 |
| 2006 | 71 | 2012 | 69 |
| 2019 | 65 | 1992 | 62 |
| 1989 | 59 | 1988 | 55 |
| 1990 | 54 | 2003 | 55 |
| 2008 | 51 | 1985 | 51 |
| 2016 | 50 | 1999 | 48 |
| 2007 | 49 | 1998 | 43 |
| 2018 | 49 | 2020 | 40 |
| 2003 | 48 | 2016 | 39 |
| 2011 | 42 | 2015 | 38 |
| 1999 | 41 | 2010 | 36 |
| 1996 | 40 | 1990 | 34 |
| 2012 | 40 | 2014 | 34 |
| 2010 | 37 | 2005 | 33 |
| 1998 | 33 | 2021 | 32 |
| 2005 | 33 | 2004 | 29 |
| 2014 | 33 | 1986 | 0 |
| 2015 | 31 | 1991 | 0 |
| 2020 | 31 | 1993 | 0 |
| 1983 | 29 | 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 8: Number of Days with high Degree Heating Week values

| 2016 168 2016 142 2014 144 2014 138 1983 133 2015 114 2015 126 2012 112 2015 126 2012 112 2010 125 2020 112 2011 111 2010 82 2012 108 2005 79 2019 102 2021 66 1998 95 1990 64 2010 93 1998 64 2001 93 1998 64 2002 88 2013 60 2003 80 2011 56 1999 72 1999 37 1996 56 2019 10 2013 56 1985 0 1989 44 1986 0 2007 37 1987 0 1981 0 1991 | Year | CCI DHW8 | Year | NOAA DHW8 |
|--|------|----------|------|-----------|
| 2014 144 2014 138 1983 133 2015 114 2015 126 2012 112 2020 125 2020 112 2011 111 2010 82 2012 108 2005 79 2019 102 2021 66 1998 95 1990 64 2010 93 1998 64 2002 88 2013 60 2005 88 2003 56 2003 80 2011 56 1999 72 1999 37 1996 56 2019 10 2013 56 1985 0 1989 44 1986 0 2007 37 1987 0 1990 35 1988 0 2004 16 1989 0 1981 0 1993 < | | | | |
| 1983 133 2015 114 2015 126 2012 112 2020 125 2020 112 2011 111 2010 82 2012 108 2005 79 2019 102 2021 66 1998 95 1990 64 2010 93 1998 64 2002 88 2013 60 2005 88 2003 56 2003 80 2011 56 2003 80 2011 56 1999 72 1999 37 1996 56 2019 10 2013 56 1985 0 1996 56 2019 10 2013 56 1985 0 1989 44 1986 0 2007 37 1987 0 1981 0 1991 <t< td=""><td></td><td></td><td></td><td></td></t<> | | | | |
| 2015 126 2012 112 2020 125 2020 112 2011 111 2010 82 2012 108 2005 79 2019 102 2021 66 1998 95 1990 64 2010 93 1998 64 2002 88 2013 60 2005 88 2003 56 2003 80 2011 56 2003 80 2011 56 1999 72 1999 37 1996 56 2019 10 2013 56 1985 0 1989 44 1986 0 2007 37 1987 0 1989 44 1986 0 2004 16 1989 0 1981 0 1991 0 1984 0 1993 0 </td <td></td> <td></td> <td></td> <td></td> | | | | |
| 2020 125 2020 112 2011 111 2010 82 2012 108 2005 79 2019 102 2021 66 1998 95 1990 64 2010 93 1998 64 2002 88 2013 60 2005 88 2003 56 2003 80 2011 56 2003 80 2011 56 1999 72 1999 37 1996 56 2019 10 2013 56 1985 0 1989 44 1986 0 2007 37 1987 0 1990 35 1988 0 2004 16 1989 0 1981 0 1991 0 1985 0 1993 0 1986 0 1995 0 | | | | |
| 2011 111 2010 82 2012 108 2005 79 2019 102 2021 66 1998 95 1990 64 2010 93 1998 64 2002 88 2013 60 2005 88 2003 56 2003 80 2011 56 1999 72 1999 37 1996 56 2019 10 2013 56 1985 0 1989 44 1986 0 2007 37 1987 0 1990 35 1988 0 2004 16 1989 0 1981 0 1991 0 1982 0 1992 0 1984 0 1993 0 1985 0 1994 0 1988 0 1997 0 </td <td></td> <td></td> <td></td> <td></td> | | | | |
| 2012 108 2005 79 2019 102 2021 66 1998 95 1990 64 2010 93 1998 64 2002 88 2013 60 2005 88 2003 56 2003 80 2011 56 1999 72 1999 37 1996 56 2019 10 2013 56 1985 0 1989 44 1986 0 2007 37 1987 0 1990 35 1988 0 2004 16 1989 0 1981 0 1991 0 1982 0 1991 0 1984 0 1993 0 1985 0 1994 0 1986 0 1995 0 1988 0 1997 0 | | | | |
| 2019 102 2021 66 1998 95 1990 64 2010 93 1998 64 2002 88 2013 60 2005 88 2003 56 2003 80 2011 56 1999 72 1999 37 1996 56 2019 10 2013 56 1985 0 1989 44 1986 0 2007 37 1987 0 1990 35 1988 0 2004 16 1989 0 1981 0 1991 0 1982 0 1992 0 1984 0 1993 0 1985 0 1994 0 1986 0 1995 0 1987 0 1996 0 1993 0 2000 0 | | | | |
| 1998 95 1990 64 2010 93 1998 64 2002 88 2013 60 2005 88 2003 56 2003 80 2011 56 1999 72 1999 37 1996 56 2019 10 2013 56 1985 0 1989 44 1986 0 2007 37 1987 0 1990 35 1988 0 2004 16 1989 0 1981 0 1991 0 1982 0 1992 0 1984 0 1993 0 1985 0 1994 0 1986 0 1995 0 1987 0 1996 0 1991 0 2000 0 1992 0 2001 0 < | | | | |
| 2010 93 1998 64 2002 88 2013 60 2005 88 2003 56 2003 80 2011 56 1999 72 1999 37 1996 56 2019 10 2013 56 1985 0 1989 44 1986 0 2007 37 1987 0 1990 35 1988 0 2004 16 1989 0 1981 0 1991 0 1982 0 1992 0 1984 0 1993 0 1985 0 1994 0 1986 0 1995 0 1988 0 1997 0 1991 0 2000 0 1993 0 2001 0 1994 0 2004 0 <tr< td=""><td></td><td></td><td></td><td></td></tr<> | | | | |
| 2002 88 2013 60 2003 80 2011 56 1999 72 1999 37 1996 56 2019 10 2013 56 1985 0 1989 44 1986 0 2007 37 1987 0 1990 35 1988 0 2004 16 1989 0 1981 0 1991 0 1982 0 1992 0 1984 0 1993 0 1985 0 1994 0 1986 0 1995 0 1987 0 1996 0 1991 0 2000 0 1992 0 2001 0 1993 0 2000 0 1994 0 2000 0 1993 0 2000 0 | | | | |
| 2005 88 2003 56 2003 80 2011 56 1999 72 1999 37 1996 56 2019 10 2013 56 1985 0 1989 44 1986 0 2007 37 1987 0 1990 35 1988 0 2004 16 1989 0 1981 0 1991 0 1982 0 1992 0 1984 0 1993 0 1985 0 1994 0 1986 0 1995 0 1987 0 1996 0 1991 0 2000 0 1992 0 2001 0 1993 0 2002 0 1994 0 2004 0 1993 0 2002 0 | | | | |
| 2003 80 2011 56 1999 72 1999 37 1996 56 2019 10 2013 56 1985 0 1989 44 1986 0 2007 37 1987 0 1990 35 1988 0 2004 16 1989 0 1981 0 1991 0 1982 0 1992 0 1984 0 1993 0 1985 0 1994 0 1986 0 1995 0 1987 0 1996 0 1988 0 1997 0 1991 0 2000 0 1993 0 2002 0 1994 0 2004 0 1993 0 2002 0 1994 0 2004 0 | | | | |
| 1999 72 1999 37 1996 56 2019 10 2013 56 1985 0 1989 44 1986 0 2007 37 1987 0 1990 35 1988 0 2004 16 1989 0 1981 0 1991 0 1982 0 1992 0 1984 0 1993 0 1985 0 1994 0 1986 0 1995 0 1987 0 1996 0 1991 0 2000 0 1992 0 2001 0 1993 0 2002 0 1994 0 2004 0 1993 0 2002 0 1994 0 2004 0 1995 0 2006 0 | | | | |
| 1996 56 2019 10 2013 56 1985 0 1989 44 1986 0 2007 37 1987 0 1990 35 1988 0 2004 16 1989 0 1981 0 1991 0 1982 0 1992 0 1984 0 1993 0 1985 0 1994 0 1986 0 1995 0 1988 0 1997 0 1991 0 2000 0 1992 0 2001 0 1993 0 2002 0 1994 0 2004 0 1995 0 2001 0 1995 0 2004 0 1997 0 2004 0 1997 0 2004 0 | | | | |
| 2013 56 1985 0 1989 44 1986 0 2007 37 1987 0 1990 35 1988 0 2004 16 1989 0 1981 0 1991 0 1982 0 1992 0 1984 0 1993 0 1985 0 1994 0 1986 0 1995 0 1988 0 1997 0 1991 0 2000 0 1992 0 2001 0 1993 0 2002 0 1994 0 2004 0 1995 0 2004 0 1995 0 2006 0 1997 0 2004 0 1995 0 2006 0 1997 0 2006 0 <t< td=""><td></td><td></td><td></td><td></td></t<> | | | | |
| 1989 44 1986 0 2007 37 1987 0 1990 35 1988 0 2004 16 1989 0 1981 0 1991 0 1982 0 1992 0 1984 0 1993 0 1985 0 1994 0 1986 0 1995 0 1988 0 1997 0 1991 0 2000 0 1992 0 2001 0 1993 0 2002 0 1994 0 2004 0 1995 0 2004 0 1995 0 2004 0 1997 0 2004 0 1997 0 2006 0 2000 0 2008 0 2001 0 2008 0 <td< td=""><td></td><td></td><td></td><td></td></td<> | | | | |
| 2007 37 1987 0 1990 35 1988 0 2004 16 1989 0 1981 0 1991 0 1982 0 1992 0 1984 0 1993 0 1985 0 1994 0 1986 0 1995 0 1987 0 1996 0 1991 0 2000 0 1992 0 2001 0 1993 0 2002 0 1994 0 2004 0 1995 0 2004 0 1997 0 2004 0 1997 0 2006 0 1997 0 2007 0 2000 0 2008 0 2001 0 2008 0 2002 0 2008 0 | | | | |
| 1990 35 1988 0 2004 16 1989 0 1981 0 1991 0 1982 0 1992 0 1984 0 1993 0 1985 0 1994 0 1986 0 1995 0 1987 0 1996 0 1991 0 2000 0 1992 0 2001 0 1993 0 2002 0 1994 0 2004 0 1995 0 2004 0 1997 0 2004 0 1997 0 2004 0 1997 0 2006 0 2000 0 2008 0 2001 0 2008 0 2000 0 2008 0 2008 0 2018 0 2 | | | | |
| 2004 16 1989 0 1981 0 1991 0 1982 0 1992 0 1984 0 1993 0 1985 0 1994 0 1986 0 1995 0 1987 0 1996 0 1988 0 1997 0 1991 0 2000 0 1992 0 2001 0 1993 0 2002 0 1994 0 2004 0 1995 0 2006 0 1997 0 2006 0 2000 0 2008 0 2001 0 2008 0 2001 0 2009 0 2008 0 2018 0 2009 0 1981 NA 2017 0 1982 NA | | | | |
| 1981 0 1991 0 1982 0 1992 0 1984 0 1993 0 1985 0 1994 0 1986 0 1995 0 1987 0 1996 0 1988 0 1997 0 1991 0 2000 0 1992 0 2001 0 1993 0 2002 0 1994 0 2004 0 1995 0 2006 0 1997 0 2007 0 2000 0 2008 0 2001 0 2008 0 2001 0 2009 0 2008 0 2018 0 2009 0 1981 NA 2017 0 1982 NA 2018 0 1983 NA | | | | |
| 1982 0 1992 0 1984 0 1993 0 1985 0 1994 0 1986 0 1995 0 1987 0 1996 0 1988 0 1997 0 1991 0 2000 0 1992 0 2001 0 1993 0 2002 0 1994 0 2004 0 1995 0 2006 0 1997 0 2007 0 2000 0 2008 0 2001 0 2009 0 2006 0 2017 0 2008 0 2018 0 2009 0 1981 NA 2017 0 1982 NA 2018 0 1983 NA | | | | |
| 1984 0 1993 0 1985 0 1994 0 1986 0 1995 0 1987 0 1996 0 1988 0 1997 0 1991 0 2000 0 1992 0 2001 0 1993 0 2002 0 1994 0 2004 0 1995 0 2006 0 2000 0 2008 0 2001 0 2008 0 2001 0 2009 0 2008 0 2017 0 2008 0 2018 0 2009 0 1981 NA 2017 0 1982 NA 2018 0 1983 NA | | | | |
| 1985 0 1994 0 1986 0 1995 0 1987 0 1996 0 1988 0 1997 0 1991 0 2000 0 1992 0 2001 0 1993 0 2002 0 1994 0 2004 0 1995 0 2006 0 2000 0 2008 0 2001 0 2008 0 2001 0 2009 0 2008 0 2017 0 2009 0 1981 NA 2017 0 1982 NA 2018 0 1983 NA | | | | |
| 1986 0 1995 0 1987 0 1996 0 1988 0 1997 0 1991 0 2000 0 1992 0 2001 0 1993 0 2002 0 1994 0 2004 0 1995 0 2006 0 1997 0 2007 0 2000 0 2008 0 2001 0 2009 0 2006 0 2017 0 2008 0 2018 0 2009 0 1981 NA 2017 0 1982 NA 2018 0 1983 NA | | | | _ |
| 1987 0 1996 0 1988 0 1997 0 1991 0 2000 0 1992 0 2001 0 1993 0 2002 0 1994 0 2004 0 1995 0 2006 0 1997 0 2007 0 2000 0 2008 0 2001 0 2009 0 2006 0 2017 0 2008 0 2018 0 2009 0 1981 NA 2017 0 1982 NA 2018 0 1983 NA | | | | - |
| 1988 0 1997 0 1991 0 2000 0 1992 0 2001 0 1993 0 2002 0 1994 0 2004 0 1995 0 2006 0 2000 0 2008 0 2001 0 2009 0 2006 0 2017 0 2008 0 2018 0 2009 0 1981 NA 2017 0 1982 NA 2018 0 1983 NA | | | | |
| 1991 0 2000 0 1992 0 2001 0 1993 0 2002 0 1994 0 2004 0 1995 0 2006 0 2000 0 2008 0 2001 0 2009 0 2006 0 2017 0 2008 0 2018 0 2009 0 1981 NA 2017 0 1982 NA 2018 0 1983 NA | | | | |
| 1992 0 2001 0 1993 0 2002 0 1994 0 2004 0 1995 0 2006 0 1997 0 2007 0 2000 0 2008 0 2001 0 2009 0 2006 0 2017 0 2008 0 2018 0 2009 0 1981 NA 2017 0 1982 NA 2018 0 1983 NA | | | | 0 |
| 1993 0 2002 0 1994 0 2004 0 1995 0 2006 0 1997 0 2007 0 2000 0 2008 0 2001 0 2009 0 2006 0 2017 0 2008 0 2018 0 2009 0 1981 NA 2017 0 1982 NA 2018 0 1983 NA | | | | |
| 1994 0 2004 0 1995 0 2006 0 1997 0 2007 0 2000 0 2008 0 2001 0 2009 0 2006 0 2017 0 2008 0 2018 0 2009 0 1981 NA 2017 0 1982 NA 2018 0 1983 NA | | 0 | | 0 |
| 1995 0 2006 0 1997 0 2007 0 2000 0 2008 0 2001 0 2009 0 2006 0 2017 0 2008 0 2018 0 2009 0 1981 NA 2017 0 1982 NA 2018 0 1983 NA | | | | 0 |
| 1997 0 2007 0 2000 0 2008 0 2001 0 2009 0 2006 0 2017 0 2008 0 2018 0 2009 0 1981 NA 2017 0 1982 NA 2018 0 1983 NA | | 0 | | 0 |
| 2000 0 2008 0 2001 0 2009 0 2006 0 2017 0 2008 0 2018 0 2009 0 1981 NA 2017 0 1982 NA 2018 0 1983 NA | 1995 | 0 | 2006 | 0 |
| 2001 0 2009 0 2006 0 2017 0 2008 0 2018 0 2009 0 1981 NA 2017 0 1982 NA 2018 0 1983 NA | | 0 | | 0 |
| 2006 0 2017 0 2008 0 2018 0 2009 0 1981 NA 2017 0 1982 NA 2018 0 1983 NA | | 0 | | 0 |
| 2008 0 2018 0 2009 0 1981 NA 2017 0 1982 NA 2018 0 1983 NA | 2001 | 0 | 2009 | 0 |
| 2009 0 1981 NA 2017 0 1982 NA 2018 0 1983 NA | 2006 | 0 | 2017 | 0 |
| 2017 0 1982 NA 2018 0 1983 NA | 2008 | 0 | 2018 | 0 |
| 2018 0 1983 NA | 2009 | 0 | 1981 | NA |
| | 2017 | 0 | 1982 | NA |
| 2021 NA 1984 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

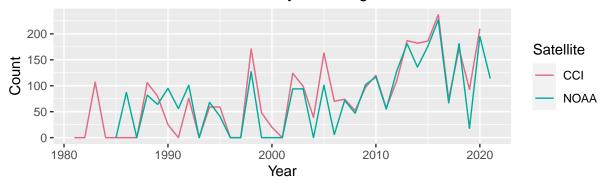


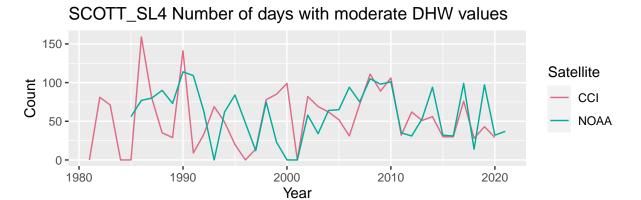
Table 9: Number of Days with moderate Degree Heating Week values

| Year | CCI_DHW4 | Year | NOAA_DHW4 |
|------|----------|------|-----------|
| 1986 | 161 | 1990 | 123 |
| 1990 | 147 | 1991 | 108 |
| 2008 | 110 | 2008 | 105 |
| 2010 | 107 | 1988 | 103 |
| 2000 | 90 | 2010 | 103 |
| 2009 | 89 | 2014 | 96 |
| 1999 | 88 | 2019 | 96 |
| 2002 | 84 | 2005 | 93 |
| 1982 | 83 | 2006 | 93 |
| 2017 | 83 | 2009 | 93 |
| 1987 | 78 | 2004 | 84 |
| 1993 | 77 | 1986 | 82 |
| 1998 | 75 | 1995 | 80 |
| 2007 | 73 | 1987 | 79 |
| 1983 | 69 | 2007 | 75 |
| 1994 | 63 | 1989 | 74 |
| 2004 | 59 | 2017 | 69 |
| 2012 | 59 | 1998 | 66 |
| 1991 | 53 | 1992 | 63 |
| 2014 | 53 | 2002 | 63 |
| 2003 | 51 | 1994 | 62 |
| 2005 | 50 | 1985 | 56 |
| 2013 | 50 | 1996 | 47 |
| 1997 | 45 | 2003 | 47 |
| 2019 | 41 | 2012 | 47 |
| 1988 | 34 | 2020 | 37 |
| 2011 | 34 | 2021 | 36 |
| 1992 | 33 | 2013 | 35 |
| 2006 | 32 | 2011 | 34 |
| 2015 | 31 | 2015 | 33 |
| 2016 | 31 | 2016 | 32 |
| 1989 | 30 | 1999 | 22 |
| 2020 | 29 | 2018 | 15 |
| 2018 | 28 | 1997 | 12 |
| 1995 | 20 | 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 | | <u> </u> |

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

| Year | CCI_DHW8 | Year | NOAA_DHW8 |
|------|----------|------|-----------|
| 2016 | 237 | 2016 | 227 |
| 2020 | 210 | 2020 | 195 |
| 2013 | 187 | 2013 | 181 |
| 2015 | 186 | 2018 | 181 |
| 2014 | 182 | 2015 | 176 |
| 1998 | 171 | 2014 | 136 |
| 2018 | 171 | 2012 | 128 |
| 2005 | 163 | 1998 | 127 |
| 2002 | 124 | 2010 | 117 |
| 2010 | 120 | 2021 | 114 |
| 2012 | 109 | 2009 | 102 |
| 1983 | 107 | 1992 | 101 |
| 1988 | 106 | 2005 | 101 |
| 2003 | 99 | 1990 | 95 |
| 2009 | 97 | 2002 | 94 |
| 2019 | 93 | 2003 | 94 |
| 1989 | 80 | 1986 | 87 |
| 1992 | 76 | 1988 | 82 |
| 2007 | 74 | 2007 | 72 |
| 2017 | 74 | 1994 | 68 |
| 2006 | 70 | 2017 | 67 |
| 1994 | 59 | 1989 | 64 |
| 1995 | 59 | 1991 | 56 |
| 2011 | 57 | 2011 | 55 |
| 2008 | 52 | 2008 | 47 |
| 1999 | 48 | 1995 | 41 |
| 2004 | 39 | 2019 | 18 |
| 1990 | 25 | 2006 | 6 |
| 2000 | 20 | 1985 | 0 |
| 1981 | 0 | 1987 | 0 |
| 1982 | 0 | 1993 | 0 |
| 1984 | 0 | 1996 | 0 |
| 1985 | 0 | 1997 | 0 |
| 1986 | 0 | 1999 | 0 |
| 1987 | 0 | 2000 | 0 |
| 1991 | 0 | 2001 | 0 |
| 1993 | 0 | 2004 | 0 |
| 1996 | 0 | 1981 | NA |
| 1997 | 0 | 1982 | NA |
| 2001 | 0 | 1983 | NA |
| 2021 | NA | 1984 | NA |
| | | | I |

SCOTT_SL4 Yearly Sum of Moderate and High DHW Values in CCI and NOAA data



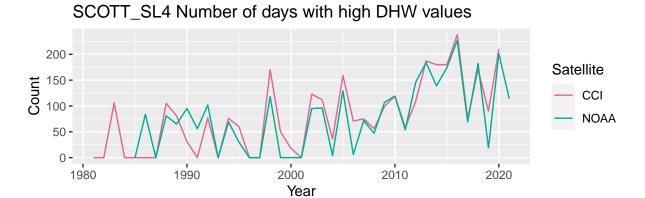


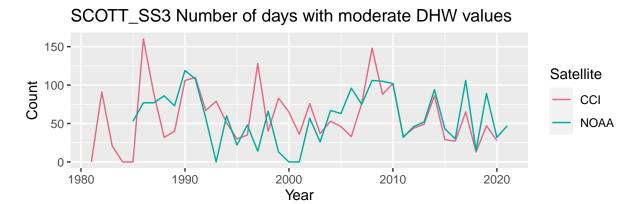
Table 11: Number of Days with moderate Degree Heating Week values

| Year | CCI_DHW4 | Year | NOAA_DHW4 |
|------|----------|------|-----------|
| 1986 | 159 | 1990 | 114 |
| 1990 | 141 | 1991 | 109 |
| 2008 | 111 | 2008 | 105 |
| 2010 | 106 | 2010 | 101 |
| 2000 | 99 | 2017 | 99 |
| 2009 | 89 | 2009 | 98 |
| 1999 | 85 | 2019 | 97 |
| 2002 | 82 | 2006 | 94 |
| 1982 | 81 | 2014 | 94 |
| 1987 | 80 | 1988 | 90 |
| 1998 | 78 | 1995 | 84 |
| 2017 | 76 | 1987 | 80 |
| 2007 | 72 | 1986 | 77 |
| 1983 | 71 | 1998 | 75 |
| 1993 | 69 | 2007 | 75 |
| 2003 | 69 | 1989 | 73 |
| 2004 | 62 | 2005 | 65 |
| 2012 | 62 | 2004 | 64 |
| 2014 | 56 | 1992 | 63 |
| 2005 | 52 | 1994 | 62 |
| 2013 | 51 | 2002 | 58 |
| 1994 | 49 | 1985 | 56 |
| 2019 | 43 | 2013 | 53 |
| 1988 | 35 | 1996 | 48 |
| 1992 | 33 | 2021 | 37 |
| 2011 | 32 | 2011 | 35 |
| 2006 | 31 | 2003 | 34 |
| 2015 | 30 | 2015 | 32 |
| 2016 | 30 | 2020 | 32 |
| 1989 | 29 | 2012 | 31 |
| 2020 | 29 | 2016 | 31 |
| 2018 | 28 | 1999 | 23 |
| 1995 | 20 | 2018 | 14 |
| 1997 | 14 | 1997 | 12 |
| 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 |
| | - | | |

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

| Year | CCI_DHW8 | Year | NOAA_DHW8 |
|------|----------|------|-----------|
| 2016 | 238 | 2016 | 227 |
| 2020 | 210 | 2020 | 201 |
| 2013 | 187 | 2013 | 184 |
| 2014 | 180 | 2018 | 182 |
| 2015 | 180 | 2015 | 174 |
| 2018 | 171 | 2012 | 146 |
| 1998 | 170 | 2014 | 139 |
| 2005 | 159 | 2005 | 129 |
| 2002 | 123 | 2010 | 119 |
| 2010 | 119 | 1998 | 118 |
| 2003 | 112 | 2021 | 114 |
| 2012 | 109 | 2009 | 107 |
| 1983 | 106 | 1992 | 102 |
| 1988 | 105 | 2003 | 96 |
| 2009 | 99 | 1990 | 95 |
| 2019 | 90 | 2002 | 95 |
| 1989 | 81 | 1986 | 84 |
| 1992 | 77 | 1988 | 81 |
| 1994 | 76 | 2007 | 72 |
| 2007 | 75 | 1994 | 69 |
| 2017 | 75 | 2017 | 69 |
| 2006 | 71 | 1989 | 65 |
| 1995 | 60 | 1991 | 56 |
| 2011 | 58 | 2011 | 54 |
| 2008 | 56 | 2008 | 47 |
| 1999 | 50 | 1995 | 30 |
| 2004 | 36 | 2019 | 19 |
| 1990 | 31 | 2006 | 6 |
| 2000 | 18 | 2004 | 4 |
| 1981 | 0 | 1985 | 0 |
| 1982 | 0 | 1987 | 0 |
| 1984 | 0 | 1993 | 0 |
| 1985 | 0 | 1996 | 0 |
| 1986 | 0 | 1997 | 0 |
| 1987 | 0 | 1999 | 0 |
| 1991 | 0 | 2000 | 0 |
| 1993 | 0 | 2001 | 0 |
| 1996 | 0 | 1981 | NA |
| 1997 | 0 | 1982 | NA |
| 2001 | 0 | 1983 | NA |
| 2021 | NA | 1984 | NA |
| | | | I |

SCOTT_SS3 Yearly Sum of Moderate and High DHW Values in CCI and NOAA data



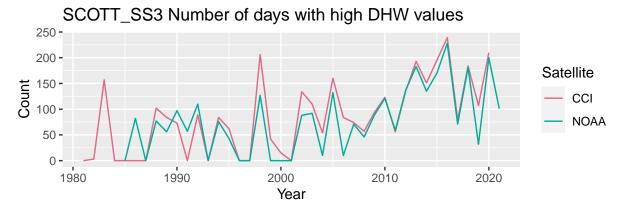


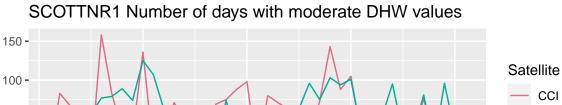
Table 13: Number of Days with moderate Degree Heating Week values $\,$

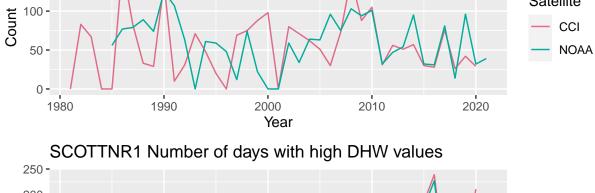
| Year | CCI DHW4 | Year | NOAA DHW4 |
|------|----------|------|-----------|
| 1986 | 160 | 1990 | 119 |
| 2008 | 148 | 1991 | 108 |
| 1997 | 128 | 2008 | 106 |
| 1991 | 110 | 2017 | 106 |
| 1990 | 106 | 2009 | 105 |
| 2010 | 102 | 2010 | 102 |
| 1982 | 91 | 2006 | 96 |
| 1987 | 89 | 2014 | 94 |
| 2009 | 88 | 2019 | 89 |
| 2014 | 86 | 1988 | 86 |
| 1999 | 83 | 1986 | 77 |
| 1993 | 79 | 1987 | 77 |
| 2002 | 76 | 2007 | 75 |
| 2007 | 76 | 1989 | 73 |
| 1992 | 67 | 2004 | 67 |
| 2000 | 65 | 1998 | 66 |
| 2017 | 65 | 2005 | 63 |
| 2004 | 53 | 1994 | 60 |
| 1994 | 51 | 1992 | 57 |
| 2013 | 49 | 2002 | 57 |
| 2019 | 47 | 1985 | 53 |
| 2005 | 46 | 2013 | 52 |
| 2012 | 44 | 1996 | 48 |
| 1989 | 40 | 2021 | 47 |
| 1998 | 40 | 2012 | 46 |
| 2003 | 37 | 2015 | 43 |
| 2001 | 36 | 2011 | 32 |
| 1996 | 35 | 2020 | 32 |
| 2006 | 33 | 2016 | 30 |
| 2011 | 33 | 2003 | 26 |
| 1988 | 32 | 1995 | 22 |
| 1995 | 30 | 2018 | 15 |
| 2015 | 29 | 1997 | 14 |
| 2020 | 28 | 1999 | 13 |
| 2016 | 27 | 1993 | 0 |
| 1983 | 21 | 2000 | 0 |
| 2018 | 13 | 2001 | 0 |
| 1981 | 0 | 1981 | NA |
| 1984 | 0 | 1982 | NA |
| 1985 | 0 | 1983 | NA |
| 2021 | NA | 1984 | NA |

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

| Year 0 2016 2020 1998 2015 2013 2018 2005 1983 2014 2012 | CCI_DHW8 239 210 206 195 193 184 160 157 | Year 2016 2020 2013 2018 2015 2012 | NOAA_DHW8 228 200 183 181 170 |
|--|--|---|------------------------------------|
| 2020 1998 2015 2013 2018 2005 1983 2014 | 210 206 195 193 184 160 | 2020 2013 2018 2015 2012 | 200 183 181 |
| 1998 2015 2013 2018 2005 1983 2014 | 206 195 193 184 160 | 2013 2018 2015 2012 | 183 181 |
| 2015 2013 2018 2005 1983 2014 | 195 193 184 160 | $ \begin{array}{r} 2018 \\ \hline 2015 \\ \hline 2012 \end{array} $ | 181 |
| 2013 2018 2005 1983 2014 | 193 184 160 | 2015 2012 | |
| 2018 2005 1983 2014 | 184 160 | 2012 | 170 |
| 2005 1983 2014 | 160 | | |
| 1983 2014 | | 0014 | 137 |
| 2014 | 157 | 2014 | 135 |
| | | 2005 | 132 |
| 2012 | 151 | 1998 | 127 |
| | 135 | 2010 | 121 |
| 2002 | 134 | 1992 | 110 |
| 2010 | 123 | 2021 | 101 |
| 2003 | 110 | 1990 | 97 |
| 2019 | 107 | 2003 | 92 |
| 1988 | 102 | 2009 | 89 |
| 2009 | 94 | 2002 | 88 |
| 1992 | 89 | 1986 | 82 |
| 1989 | 84 | 1988 | 77 |
| 1994 | 84 | 1994 | 76 |
| 2006 | 84 | 2007 | 71 |
| 2017 | 79 | 2017 | 71 |
| 2007 | 74 | 2011 | 59 |
| 1990 | 73 | 1991 | 57 |
| 1995 | 62 | 1989 | 56 |
| 2008 | 57 | 2008 | 46 |
| 2011 | 56 | 1995 | 43 |
| 2004 | 54 | 2019 | 32 |
| 1999 | 42 | 2004 | 10 |
| 2000 | 15 | 2006 | 10 |
| 1982 | 3 | 1985 | 0 |
| 1981 | 0 | 1987 | 0 |
| 1984 | 0 | 1993 | 0 |
| 1985 | 0 | 1996 | 0 |
| 1986 | 0 | 1997 | 0 |
| 1987 | 0 | 1999 | 0 |
| 1991 | 0 | 2000 | 0 |
| 1993 | 0 | 2001 | 0 |
| 1996 | 0 | 1981 | NA |
| 1997 | 0 | 1982 | NA |
| 2001 | 0 | 1983 | NA |
| 2021 | NA | 1984 | NA |

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





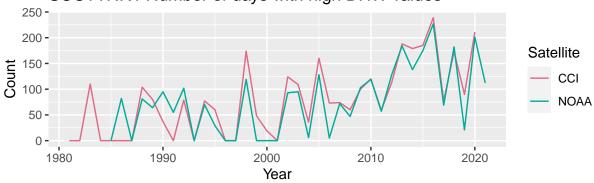


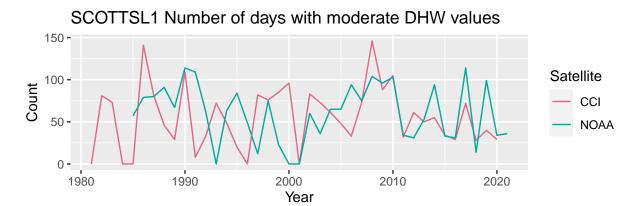
Table 15: Number of Days with moderate Degree Heating Week values

| Year | CCI_DHW4 | Year | NOAA_DHW4 |
|------|----------|------|-----------|
| 1986 | 158 | 1990 | 125 |
| 2008 | 143 | 1991 | 107 |
| 1990 | 136 | 2008 | 103 |
| 2010 | 105 | 2010 | 101 |
| 2000 | 98 | 2006 | 96 |
| 1999 | 88 | 2019 | 96 |
| 2009 | 88 | 2014 | 95 |
| 1982 | 83 | 2009 | 94 |
| 1987 | 83 | 1988 | 89 |
| 2002 | 80 | 2017 | 81 |
| 2017 | 76 | 1987 | 79 |
| 1998 | 75 | 1986 | 77 |
| 2007 | 73 | 2007 | 75 |
| 1993 | 71 | 1989 | 74 |
| 2003 | 71 | 1998 | 74 |
| 1997 | 69 | 2004 | 64 |
| 1983 | 67 | 1992 | 63 |
| 2004 | 62 | 2005 | 63 |
| 2014 | 57 | 1994 | 61 |
| 2012 | 56 | 1995 | 59 |
| 2005 | 51 | 2002 | 59 |
| 2013 | 51 | 1985 | 56 |
| 1994 | 48 | 2013 | 54 |
| 2019 | 42 | 1996 | 48 |
| 1988 | 33 | 2012 | 47 |
| 1992 | 31 | 2021 | 39 |
| 2011 | 31 | 2003 | 34 |
| 2006 | 30 | 2011 | 32 |
| 2015 | 30 | 2015 | 32 |
| 1989 | 29 | 2020 | 32 |
| 2020 | 29 | 2016 | 31 |
| 2016 | 28 | 1999 | 22 |
| 2018 | 26 | 2018 | 14 |
| 1995 | 20 | 1997 | 12 |
| 1991 | 10 | 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 | CCI DHW8 | | NOAA DHW8 |
|-------------|----------|----------------------------|-----------|
| ZU10 1 | 239 | $\frac{\text{Year}}{2016}$ | NOAA_DHW8 |
| 2020 | 211 | 2020 | 201 |
| 2013 | 188 | 2013 | 184 |
| 2015 | 185 | 2018 | 182 |
| 2014 | 179 | 2015 | 175 |
| 1998 | 174 | 2014 | 138 |
| 2018 | 173 | 2005 | 128 |
| 2005 | 160 | 2012 | 128 |
| 2002 | 124 | 1998 | 119 |
| 2010 | 120 | 2010 | 119 |
| 2012 | 113 | 2021 | 112 |
| 1983 | 110 | 2009 | 103 |
| 2003 | 109 | 1992 | 102 |
| 1988 | 104 | 1990 | 95 |
| 2009 | 100 | 2003 | 95 |
| 2019 | 90 | 2002 | 93 |
| 1989 | 80 | 1986 | 82 |
| 1992 | 79 | 1988 | 81 |
| 1994 | 77 | 2007 | 72 |
| 2017 | 77 | 1994 | 70 |
| 2007 | 74 | 2017 | 69 |
| 2006 | 73 | 1989 | 64 |
| 1995 | 60 | 2011 | 57 |
| 2008 | 60 | 1991 | 55 |
| 2011 | 59 | 2008 | 47 |
| 1999 | 48 | 1995 | 29 |
| 1990 | 37 | 2019 | 21 |
| 2004 | 36 | 2004 | 6 |
| 2000 | 19 | 2006 | 5 |
| 1981 | 0 | 1985 | 0 |
| 1982 | 0 | 1987 | 0 |
| 1984 | 0 | 1993 | 0 |
| 1985 | 0 | 1996 | 0 |
| 1986 | 0 | 1997 | 0 |
| 1987 | 0 | 1999 | 0 |
| 1991 | 0 | 2000 | 0 |
| 1993 | 0 | 2001 | 0 |
| 1996 | 0 | 1981 | NA |
| 1997 | 0 | 1982 | NA |
| 2001 | 0 | 1983 | NA |
| 2021 | NA | 1984 | NA |

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



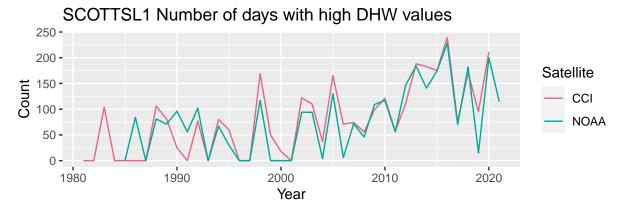


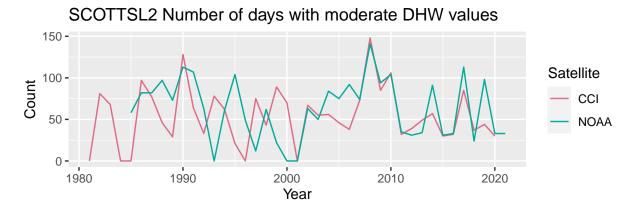
Table 17: Number of Days with moderate Degree Heating Week values

| Veer | CCI DHW4 | Veer | NOAA DIIWA |
|----------------------------|----------|----------------------------|------------|
| $\frac{\text{Year}}{2008}$ | CCI_DHW4 | $\frac{\text{Year}}{1990}$ | NOAA_DHW4 |
| | 140 | $\frac{1990}{2017}$ | 114 |
| 1986 | | | |
| 1990 | 109 | 1991 | 109 |
| 2010 | 105 | 2008 | 104 |
| 2000 | 96 | 2010 | 103 |
| 2009 | 88 | 2019 | 99 |
| 1999 | 85 | 2009 | 96 |
| 2002 | 83 | 2006 | 94 |
| 1997 | 82 | 2014 | 94 |
| 1982 | 81 | 1988 | 91 |
| 1987 | 81 | 1995 | 84 |
| 1998 | 76 | 1987 | 80 |
| 1983 | 73 | 1986 | 79 |
| 2003 | 73 | 1998 | 75 |
| 2007 | 73 | 2007 | 75 |
| 1993 | 72 | 1989 | 67 |
| 2017 | 72 | 2004 | 65 |
| 2004 | 61 | 2005 | 65 |
| 2012 | 61 | 1994 | 63 |
| 2014 | 55 | 1992 | 62 |
| 2013 | 50 | 2002 | 60 |
| 1994 | 49 | 1985 | 57 |
| 2005 | 48 | 2013 | 53 |
| 1988 | 46 | 1996 | 49 |
| 2019 | 40 | 2003 | 36 |
| 2015 | 34 | 2021 | 36 |
| 1992 | 33 | 2011 | 34 |
| 2006 | 33 | 2020 | 34 |
| 2011 | 32 | 2015 | 33 |
| 1989 | 29 | 2012 | 31 |
| 2016 | 29 | 2016 | 31 |
| 2020 | 29 | 1999 | 23 |
| 2018 | 28 | 2018 | 14 |
| 1995 | 20 | 1997 | 12 |
| 1991 | 8 | 1993 | 0 |
| 1981 | 0 | 2000 | 0 |
| 1984 | 0 | 2001 | 0 |
| $\frac{1981}{1985}$ | 0 | $\frac{2001}{1981}$ | NA |
| 1996 | 0 | 1982 | NA |
| 2001 | 0 | $\frac{1982}{1983}$ | NA |
| $\frac{2001}{2021}$ | NA | $\frac{1303}{1984}$ | NA NA |
| | 11/11 | 1004 | l IVI |

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

| Year | CCI_DHW8 | Year | NOAA_DHW8 |
|------|----------|------|-----------|
| 2016 | 239 | 2016 | 228 |
| 2020 | 211 | 2020 | 200 |
| 2013 | 188 | 2013 | 184 |
| 2014 | 183 | 2018 | 182 |
| 2015 | 175 | 2015 | 174 |
| 2018 | 171 | 2012 | 147 |
| 1998 | 169 | 2014 | 141 |
| 2005 | 165 | 2005 | 130 |
| 2002 | 122 | 1998 | 117 |
| 2010 | 121 | 2010 | 117 |
| 2012 | 111 | 2021 | 115 |
| 2003 | 110 | 2009 | 109 |
| 1988 | 106 | 1992 | 102 |
| 1983 | 104 | 1990 | 96 |
| 2009 | 99 | 2002 | 94 |
| 2019 | 95 | 2003 | 94 |
| 1989 | 81 | 1986 | 84 |
| 1994 | 80 | 1988 | 81 |
| 1992 | 77 | 2007 | 72 |
| 2017 | 75 | 1989 | 71 |
| 2007 | 74 | 2017 | 70 |
| 2006 | 71 | 1994 | 67 |
| 1995 | 60 | 1991 | 56 |
| 2011 | 57 | 2011 | 56 |
| 2008 | 56 | 2008 | 46 |
| 1999 | 50 | 1995 | 30 |
| 2004 | 37 | 2019 | 15 |
| 1990 | 25 | 2006 | 6 |
| 2000 | 18 | 2004 | 4 |
| 1981 | 0 | 1985 | 0 |
| 1982 | 0 | 1987 | 0 |
| 1984 | 0 | 1993 | 0 |
| 1985 | 0 | 1996 | 0 |
| 1986 | 0 | 1997 | 0 |
| 1987 | 0 | 1999 | 0 |
| 1991 | 0 | 2000 | 0 |
| 1993 | 0 | 2001 | 0 |
| 1996 | 0 | 1981 | NA |
| 1997 | 0 | 1982 | NA |
| 2001 | 0 | 1983 | NA |
| 2021 | NA | 1984 | NA |
| | 1 | | ı |

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



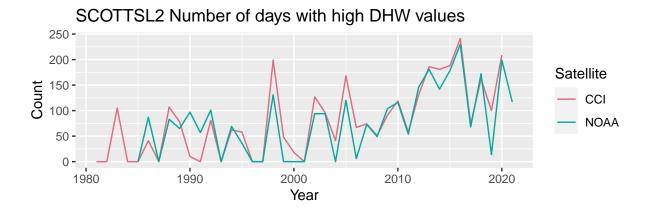


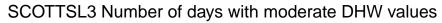
Table 19: Number of Days with moderate Degree Heating Week values $\,$

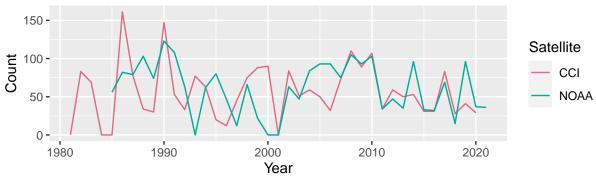
| Year | CCI DHW4 | Year | NOAA DHW4 |
|------|----------|------|-----------|
| 2008 | 148 | 2008 | 141 |
| 1990 | 128 | 1990 | 113 |
| 2010 | 106 | 2017 | 113 |
| 1986 | 97 | 1991 | 107 |
| 1999 | 89 | 1995 | 104 |
| 2009 | 85 | 2010 | 104 |
| 2017 | 85 | 2019 | 98 |
| 1982 | 81 | 1988 | 97 |
| 1993 | 78 | 2009 | 94 |
| 1987 | 77 | 2006 | 92 |
| 1997 | 75 | 2014 | 91 |
| 2007 | 73 | 2004 | 84 |
| 2000 | 70 | 1986 | 82 |
| 1983 | 68 | 1987 | 82 |
| 2002 | 67 | 2005 | 75 |
| 1991 | 64 | 2007 | 74 |
| 1994 | 62 | 1989 | 73 |
| 2014 | 57 | 1992 | 63 |
| 2004 | 56 | 2002 | 63 |
| 2003 | 55 | 1998 | 62 |
| 2013 | 49 | 1994 | 61 |
| 1988 | 46 | 1985 | 58 |
| 2005 | 46 | 2003 | 50 |
| 2019 | 44 | 1996 | 49 |
| 1998 | 43 | 2011 | 35 |
| 2012 | 39 | 2013 | 34 |
| 2006 | 38 | 2016 | 33 |
| 2018 | 37 | 2020 | 33 |
| 1992 | 33 | 2021 | 33 |
| 2011 | 32 | 2012 | 31 |
| 2016 | 32 | 2015 | 31 |
| 2015 | 30 | 2018 | 24 |
| 2020 | 30 | 1999 | 22 |
| 1989 | 29 | 1997 | 12 |
| 1995 | 21 | 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 20: Number of Days with high Degree Heating Week values

| Year Control 2016 | CI_DHW8 241 209 199 188 186 181 168 162 131 127 | Year 2016 2020 2013 2015 2018 2012 2014 1998 2005 | NOAA_DHW8 230 199 181 178 172 146 142 |
|--|---|--|--|
| 2020 1998 2015 2013 2014 2005 2018 2012 2002 | 209 199 188 186 181 168 162 131 | 2020 2013 2015 2018 2012 2014 1998 2005 | 199 181 178 172 146 142 |
| 1998 2015 2013 2014 2005 2018 2012 2002 | 199 188 186 181 168 162 131 127 | 2013 2015 2018 2012 2014 1998 2005 | 181 178 172 146 142 |
| 2015 2013 2014 2005 2018 2012 2002 | 188 186 181 168 162 131 127 | 2015 2018 2012 2014 1998 2005 | 178 172 146 142 |
| 2013 2014 2005 2018 2012 2002 | 186 181 168 162 131 127 | 2018 2012 2014 1998 2005 | 172 146 142 |
| 2014 2005 2018 2012 2002 | 181 168 162 131 127 | 2012 2014 1998 2005 | 146 142 |
| 2005 2018 2012 2002 | 168 162 131 127 | 2014 1998 2005 | 142 |
| 2018 2012 2002 | 162 131 127 | 1998 2005 | |
| 2012 2002 | 131 127 | 2005 | |
| 2002 | 127 | | 131 |
| | | | 120 |
| 2010 | | 2021 | 117 |
| | 119 | 2010 | 116 |
| 1988 | 107 | 2009 | 104 |
| 1983 | 105 | 1992 | 101 |
| 2019 | 100 | 1990 | 97 |
| 2003 | 96 | 2002 | 94 |
| 2009 | 91 | 2003 | 94 |
| 1992 | 81 | 1986 | 87 |
| 1989 | 78 | 1988 | 83 |
| 2007 | 74 | 2007 | 73 |
| 2017 | 74 | 1994 | 69 |
| 2006 | 67 | 2017 | 68 |
| 1994 | 62 | 1989 | 65 |
| 1995 | 58 | 1991 | 57 |
| 2011 | 58 | 2011 | 54 |
| 2008 | 51 | 2008 | 49 |
| 1999 | 48 | 1995 | 36 |
| 1986 | 41 | 2019 | 14 |
| 2004 | 41 | 2006 | 6 |
| 2000 | 18 | 1985 | 0 |
| 1990 | 10 | 1987 | 0 |
| 1981 | 0 | 1993 | 0 |
| 1982 | 0 | 1996 | 0 |
| 1984 | 0 | 1997 | 0 |
| 1985 | 0 | 1999 | 0 |
| 1987 | 0 | 2000 | 0 |
| 1991 | 0 | 2001 | 0 |
| 1993 | 0 | 2004 | 0 |
| 1996 | 0 | 1981 | NA |
| 1997 | 0 | 1982 | NA |
| 2001 | 0 | 1983 | 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

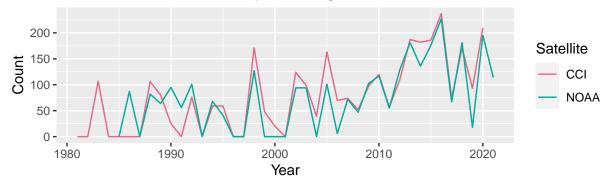


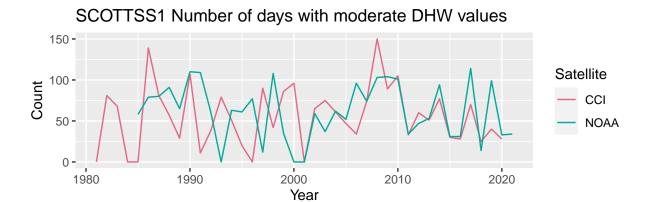
Table 21: Number of Days with moderate Degree Heating Week values

| Year | CCI_DHW4 | Year | NOAA_DHW4 |
|------|----------|------|-----------|
| 1986 | 161 | 1990 | 123 |
| 1990 | 147 | 1991 | 108 |
| 2008 | 110 | 2008 | 105 |
| 2010 | 107 | 1988 | 103 |
| 2000 | 90 | 2010 | 103 |
| 2009 | 89 | 2014 | 96 |
| 1999 | 88 | 2019 | 96 |
| 2002 | 84 | 2005 | 93 |
| 1982 | 83 | 2006 | 93 |
| 2017 | 83 | 2009 | 93 |
| 1987 | 78 | 2004 | 84 |
| 1993 | 77 | 1986 | 82 |
| 1998 | 75 | 1995 | 80 |
| 2007 | 73 | 1987 | 79 |
| 1983 | 69 | 2007 | 75 |
| 1994 | 63 | 1989 | 74 |
| 2004 | 59 | 2017 | 69 |
| 2012 | 59 | 1998 | 66 |
| 1991 | 53 | 1992 | 63 |
| 2014 | 53 | 2002 | 63 |
| 2003 | 51 | 1994 | 62 |
| 2005 | 50 | 1985 | 56 |
| 2013 | 50 | 1996 | 47 |
| 1997 | 45 | 2003 | 47 |
| 2019 | 41 | 2012 | 47 |
| 1988 | 34 | 2020 | 37 |
| 2011 | 34 | 2021 | 36 |
| 1992 | 33 | 2013 | 35 |
| 2006 | 32 | 2011 | 34 |
| 2015 | 31 | 2015 | 33 |
| 2016 | 31 | 2016 | 32 |
| 1989 | 30 | 1999 | 22 |
| 2020 | 29 | 2018 | 15 |
| 2018 | 28 | 1997 | 12 |
| 1995 | 20 | 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 |
| | | | L |

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

| Year | CCI_DHW8 | Year | NOAA_DHW8 |
|------|----------|------|-----------|
| 2016 | 237 | 2016 | 227 |
| 2020 | 210 | 2020 | 195 |
| 2013 | 187 | 2013 | 181 |
| 2015 | 186 | 2018 | 181 |
| 2014 | 182 | 2015 | 176 |
| 1998 | 171 | 2014 | 136 |
| 2018 | 171 | 2012 | 128 |
| 2005 | 163 | 1998 | 127 |
| 2002 | 124 | 2010 | 117 |
| 2010 | 120 | 2021 | 114 |
| 2012 | 109 | 2009 | 102 |
| 1983 | 107 | 1992 | 101 |
| 1988 | 106 | 2005 | 101 |
| 2003 | 99 | 1990 | 95 |
| 2009 | 97 | 2002 | 94 |
| 2019 | 93 | 2003 | 94 |
| 1989 | 80 | 1986 | 87 |
| 1992 | 76 | 1988 | 82 |
| 2007 | 74 | 2007 | 72 |
| 2017 | 74 | 1994 | 68 |
| 2006 | 70 | 2017 | 67 |
| 1994 | 59 | 1989 | 64 |
| 1995 | 59 | 1991 | 56 |
| 2011 | 57 | 2011 | 55 |
| 2008 | 52 | 2008 | 47 |
| 1999 | 48 | 1995 | 41 |
| 2004 | 39 | 2019 | 18 |
| 1990 | 25 | 2006 | 6 |
| 2000 | 20 | 1985 | 0 |
| 1981 | 0 | 1987 | 0 |
| 1982 | 0 | 1993 | 0 |
| 1984 | 0 | 1996 | 0 |
| 1985 | 0 | 1997 | 0 |
| 1986 | 0 | 1999 | 0 |
| 1987 | 0 | 2000 | 0 |
| 1991 | 0 | 2001 | 0 |
| 1993 | 0 | 2004 | 0 |
| 1996 | 0 | 1981 | NA |
| 1997 | 0 | 1982 | NA |
| 2001 | 0 | 1983 | NA |
| 2021 | NA | 1984 | NA |
| | - | | |

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



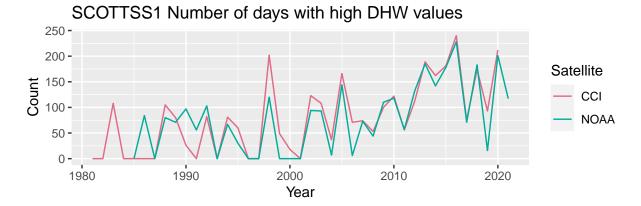


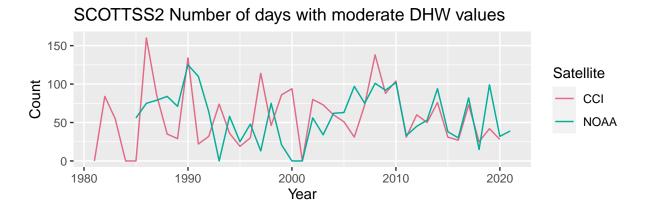
Table 23: Number of Days with moderate Degree Heating Week values $\,$

| Year | CCI DHW4 | Year | NOAA DHW4 |
|------|----------|---------------------|-----------|
| 2008 | 150 | $\frac{1001}{2017}$ | 114 |
| 1986 | 139 | 1990 | 110 |
| 1990 | 107 | 1991 | 109 |
| 2010 | 105 | 1998 | 108 |
| 2000 | 96 | 2009 | 104 |
| 1997 | 90 | 2008 | 103 |
| 2009 | 89 | 2010 | 101 |
| 1999 | 86 | 2019 | 99 |
| 1982 | 81 | 2006 | 96 |
| 1987 | 81 | 2014 | 94 |
| 1993 | 79 | 1988 | 91 |
| 2014 | 77 | 1987 | 80 |
| 2003 | 75 | 1986 | 79 |
| 2007 | 74 | 1996 | 77 |
| 2017 | 70 | 2007 | 74 |
| 1983 | 68 | 1989 | 65 |
| 2002 | 65 | 1994 | 63 |
| 2004 | 61 | 2004 | 62 |
| 2012 | 60 | 1992 | 61 |
| 1988 | 57 | 1995 | 61 |
| 1994 | 51 | 2002 | 59 |
| 2013 | 51 | 1985 | 58 |
| 2005 | 47 | 2013 | 53 |
| 1998 | 42 | 2005 | 52 |
| 2019 | 40 | 2012 | 47 |
| 1992 | 38 | 2003 | 37 |
| 2006 | 34 | 1999 | 35 |
| 2011 | 33 | 2011 | 34 |
| 2015 | 30 | 2021 | 34 |
| 1989 | 29 | 2020 | 33 |
| 2016 | 28 | 2015 | 31 |
| 2020 | 28 | 2016 | 31 |
| 2018 | 25 | 2018 | 14 |
| 1995 | 20 | 1997 | 12 |
| 1991 | 11 | 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 24: Number of Days with high Degree Heating Week values

| Year | CCI_DHW8 | Year | NOAA_DHW8 |
|------|----------|------|-----------|
| 2016 | 240 | 2016 | 228 |
| 2020 | 212 | 2020 | 201 |
| 1998 | 202 | 2013 | 185 |
| 2013 | 189 | 2018 | 183 |
| 2015 | 181 | 2015 | 178 |
| 2018 | 174 | 2005 | 144 |
| 2005 | 166 | 2014 | 142 |
| 2014 | 162 | 2012 | 132 |
| 2002 | 123 | 1998 | 120 |
| 2010 | 122 | 2010 | 118 |
| 2012 | 112 | 2021 | 117 |
| 1983 | 108 | 2009 | 110 |
| 2003 | 108 | 1992 | 103 |
| 1988 | 105 | 1990 | 97 |
| 2009 | 100 | 2002 | 94 |
| 2019 | 93 | 2003 | 93 |
| 1992 | 82 | 1986 | 84 |
| 1994 | 81 | 1988 | 80 |
| 1989 | 80 | 2007 | 73 |
| 2017 | 75 | 1989 | 71 |
| 2007 | 74 | 2017 | 71 |
| 2006 | 71 | 1994 | 67 |
| 1995 | 60 | 2011 | 57 |
| 2011 | 56 | 1991 | 56 |
| 2008 | 53 | 2008 | 44 |
| 1999 | 49 | 1995 | 30 |
| 2004 | 37 | 2019 | 16 |
| 1990 | 26 | 2004 | 7 |
| 2000 | 18 | 2006 | 6 |
| 1981 | 0 | 1985 | 0 |
| 1982 | 0 | 1987 | 0 |
| 1984 | 0 | 1993 | 0 |
| 1985 | 0 | 1996 | 0 |
| 1986 | 0 | 1997 | 0 |
| 1987 | 0 | 1999 | 0 |
| 1991 | 0 | 2000 | 0 |
| 1993 | 0 | 2001 | 0 |
| 1996 | 0 | 1981 | NA |
| 1997 | 0 | 1982 | NA |
| 2001 | 0 | 1983 | NA |
| 2021 | NA | 1984 | NA |
| | - | | ı |

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



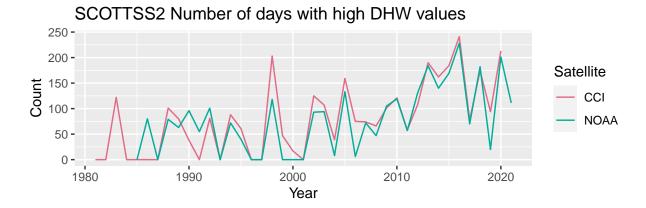


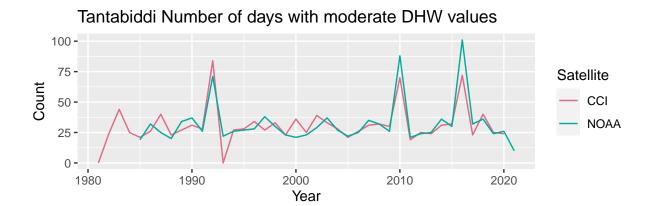
Table 25: Number of Days with moderate Degree Heating Week values $\,$

| | COT DITTE | | 37044 577777 |
|---------------------|-----------|---------------------|--------------|
| Year | CCI_DHW4 | Year | NOAA_DHW4 |
| 1986 | 160 | 1990 | 125 |
| 2008 | 138 | 1991 | 110 |
| 1990 | 134 | 2010 | 102 |
| 1997 | 114 | 2008 | 101 |
| 2010 | 104 | 2019 | 99 |
| 2000 | 94 | 2006 | 97 |
| 2009 | 88 | 2014 | 94 |
| 1999 | 86 | 2009 | 92 |
| 1987 | 85 | 1988 | 84 |
| 1982 | 84 | 2017 | 82 |
| 2002 | 80 | 1987 | 79 |
| 2014 | 76 | 1986 | 75 |
| 1993 | 74 | 1998 | 75 |
| 2003 | 73 | 2007 | 75 |
| 2007 | 73 | 1989 | 71 |
| 2017 | 73 | 1992 | 64 |
| 2004 | 60 | 2005 | 63 |
| 2012 | 60 | 2004 | 62 |
| 1983 | 55 | 1994 | 58 |
| 2005 | 51 | 1985 | 56 |
| 2013 | 50 | 2002 | 56 |
| 1998 | 46 | 2013 | 53 |
| 2019 | 42 | 1996 | 48 |
| 1994 | 36 | 2012 | 45 |
| 1988 | 35 | 2021 | 39 |
| 1992 | 32 | 2015 | 38 |
| 2006 | 31 | 2003 | 34 |
| 2011 | 31 | 2011 | 33 |
| 2015 | 31 | 2020 | 32 |
| 1996 | 30 | 2016 | 30 |
| 1989 | 29 | 1995 | 25 |
| 2020 | 28 | 1999 | 21 |
| 2016 | 27 | 2018 | 15 |
| 2018 | 25 | 1997 | 13 |
| 1991 | 22 | 1993 | 0 |
| 1995 | 19 | 2000 | 0 |
| 1981 | 0 | 2001 | 0 |
| 1984 | 0 | 1981 | NA |
| $\frac{1981}{1985}$ | 0 | 1982 | NA |
| 2001 | 0 | $\frac{1982}{1983}$ | NA |
| $\frac{2001}{2021}$ | NA | $\frac{1303}{1984}$ | NA NA |
| | 11/1 | 1004 | 11/1 |

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

| Year | CCI_DHW8 | Year | NOAA_DHW8 |
|------|----------|------|-----------|
| 2016 | 241 | 2016 | 228 |
| 2020 | 213 | 2020 | 201 |
| 1998 | 203 | 2013 | 184 |
| 2013 | 190 | 2018 | 182 |
| 2015 | 184 | 2015 | 169 |
| 2018 | 174 | 2014 | 140 |
| 2014 | 162 | 2005 | 133 |
| 2005 | 159 | 2012 | 131 |
| 2002 | 125 | 2010 | 119 |
| 1983 | 122 | 1998 | 118 |
| 2010 | 121 | 2021 | 111 |
| 2012 | 108 | 2009 | 105 |
| 2003 | 107 | 1992 | 101 |
| 1988 | 101 | 1990 | 96 |
| 2009 | 101 | 2003 | 94 |
| 2019 | 94 | 2002 | 93 |
| 1994 | 88 | 1986 | 80 |
| 1992 | 81 | 1988 | 79 |
| 1989 | 80 | 1994 | 72 |
| 2017 | 78 | 2007 | 72 |
| 2006 | 75 | 2017 | 70 |
| 2007 | 74 | 1989 | 63 |
| 2008 | 66 | 2011 | 57 |
| 1995 | 61 | 1991 | 55 |
| 2011 | 58 | 2008 | 47 |
| 1999 | 47 | 1995 | 40 |
| 2004 | 39 | 2019 | 20 |
| 1990 | 38 | 2004 | 8 |
| 2000 | 17 | 2006 | 6 |
| 1981 | 0 | 1985 | 0 |
| 1982 | 0 | 1987 | 0 |
| 1984 | 0 | 1993 | 0 |
| 1985 | 0 | 1996 | 0 |
| 1986 | 0 | 1997 | 0 |
| 1987 | 0 | 1999 | 0 |
| 1991 | 0 | 2000 | 0 |
| 1993 | 0 | 2001 | 0 |
| 1996 | 0 | 1981 | NA |
| 1997 | 0 | 1982 | NA |
| 2001 | 0 | 1983 | NA |
| 2021 | NA | 1984 | NA |
| | - | | |

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



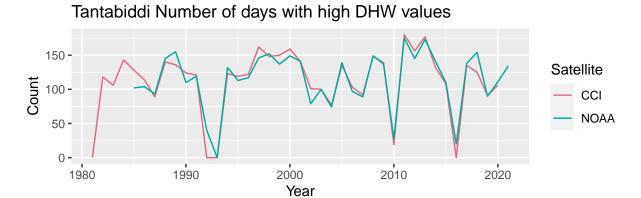


Table 27: Number of Days with moderate Degree Heating Week values

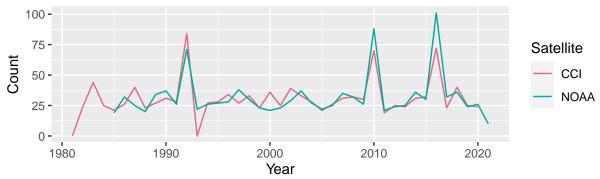
| Year | CCI DHW4 | Year | NOAA DHW4 |
|------|----------|------|-----------|
| 1992 | 84 | 2016 | 101 |
| 2016 | 72 | 2010 | 88 |
| 2010 | 70 | 1992 | 71 |
| 1983 | 44 | 1997 | 38 |
| 1987 | 40 | 1990 | 37 |
| 2018 | 40 | 2003 | 37 |
| 2002 | 39 | 2014 | 36 |
| 2000 | 36 | 2018 | 36 |
| 1996 | 34 | 2007 | 35 |
| 1998 | 33 | 1989 | 34 |
| 2003 | 33 | 1986 | 32 |
| 2008 | 32 | 2008 | 32 |
| 2015 | 32 | 2017 | 32 |
| 1990 | 31 | 1998 | 30 |
| 2007 | 31 | 2015 | 30 |
| 2014 | 31 | 2002 | 29 |
| 2009 | 30 | 1996 | 28 |
| 1991 | 28 | 1995 | 27 |
| 1995 | 28 | 2004 | 27 |
| 2004 | 28 | 1991 | 26 |
| 1989 | 27 | 1994 | 26 |
| 1994 | 27 | 2009 | 26 |
| 1997 | 27 | 2020 | 26 |
| 1986 | 26 | 1987 | 25 |
| 2006 | 26 | 2006 | 25 |
| 1984 | 25 | 2013 | 25 |
| 2001 | 25 | 2012 | 24 |
| 2012 | 25 | 2019 | 24 |
| 2019 | 25 | 1999 | 23 |
| 1982 | 24 | 2001 | 23 |
| 2013 | 24 | 1993 | 22 |
| 2020 | 24 | 2005 | 22 |
| 1988 | 23 | 2000 | 21 |
| 1999 | 23 | 2011 | 21 |
| 2017 | 23 | 1988 | 20 |
| 1985 | 21 | 1985 | 19 |
| 2005 | 21 | 2021 | 10 |
| 2011 | 19 | 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 |
|------|----------|------|-----------|
| 2011 | 180 | 2011 | 175 |
| 2013 | 177 | 2013 | 173 |
| 1997 | 162 | 1989 | 155 |
| 2000 | 159 | 2018 | 154 |
| 2012 | 156 | 1998 | 152 |
| 1999 | 150 | 2000 | 149 |
| 1998 | 148 | 2008 | 149 |
| 2008 | 148 | 1997 | 146 |
| 1984 | 143 | 1988 | 145 |
| 2001 | 141 | 2012 | 145 |
| 1988 | 140 | 2001 | 141 |
| 2009 | 139 | 2014 | 141 |
| 1989 | 136 | 2005 | 139 |
| 2005 | 135 | 2017 | 138 |
| 2017 | 135 | 1999 | 137 |
| 2014 | 132 | 2009 | 137 |
| 1985 | 128 | 2021 | 134 |
| 2018 | 125 | 1994 | 132 |
| 1990 | 124 | 1991 | 119 |
| 1994 | 123 | 1996 | 117 |
| 1996 | 122 | 1995 | 113 |
| 1991 | 121 | 2020 | 111 |
| 1995 | 119 | 1990 | 110 |
| 1982 | 118 | 2015 | 110 |
| 1986 | 114 | 1986 | 104 |
| 2015 | 108 | 1985 | 102 |
| 1983 | 106 | 2003 | 100 |
| 2020 | 106 | 2006 | 97 |
| 2006 | 103 | 1987 | 93 |
| 2002 | 101 | 2019 | 90 |
| 2003 | 100 | 2007 | 89 |
| 2007 | 92 | 2002 | 79 |
| 2019 | 91 | 2004 | 74 |
| 1987 | 89 | 1992 | 40 |
| 2004 | 77 | 2010 | 28 |
| 2010 | 19 | 2016 | 20 |
| 1981 | 0 | 1993 | 0 |
| 1992 | 0 | 1981 | NA |
| 1993 | 0 | 1982 | NA |
| 2016 | 0 | 1983 | NA |
| 2021 | NA | 1984 | NA |
| - | <u> </u> | | <u> </u> |

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





TNT Number of days with high DHW values

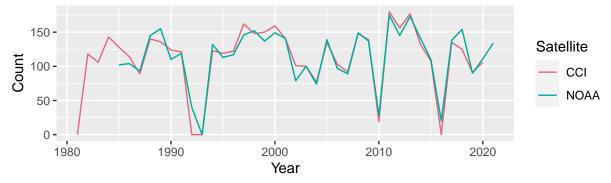


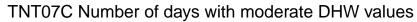
Table 29: Number of Days with moderate Degree Heating Week values $\,$

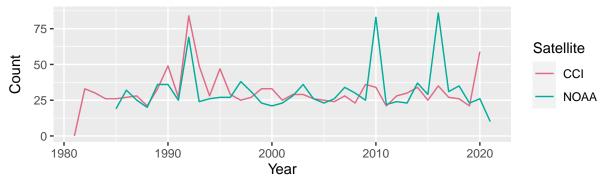
| Year | CCI DHW4 | Year | NOAA DHW4 |
|------|----------|------|-----------|
| 1992 | 84 | 2016 | 101 |
| 2016 | 72 | 2010 | 88 |
| 2010 | 70 | 1992 | 71 |
| 1983 | 44 | 1997 | 38 |
| 1987 | 40 | 1990 | 37 |
| 2018 | 40 | 2003 | 37 |
| 2002 | 39 | 2014 | 36 |
| 2000 | 36 | 2018 | 36 |
| 1996 | 34 | 2007 | 35 |
| 1998 | 33 | 1989 | 34 |
| 2003 | 33 | 1986 | 32 |
| 2008 | 32 | 2008 | 32 |
| 2015 | 32 | 2017 | 32 |
| 1990 | 31 | 1998 | 30 |
| 2007 | 31 | 2015 | 30 |
| 2014 | 31 | 2002 | 29 |
| 2009 | 30 | 1996 | 28 |
| 1991 | 28 | 1995 | 27 |
| 1995 | 28 | 2004 | 27 |
| 2004 | 28 | 1991 | 26 |
| 1989 | 27 | 1994 | 26 |
| 1994 | 27 | 2009 | 26 |
| 1997 | 27 | 2020 | 26 |
| 1986 | 26 | 1987 | 25 |
| 2006 | 26 | 2006 | 25 |
| 1984 | 25 | 2013 | 25 |
| 2001 | 25 | 2012 | 24 |
| 2012 | 25 | 2019 | 24 |
| 2019 | 25 | 1999 | 23 |
| 1982 | 24 | 2001 | 23 |
| 2013 | 24 | 1993 | 22 |
| 2020 | 24 | 2005 | 22 |
| 1988 | 23 | 2000 | 21 |
| 1999 | 23 | 2011 | 21 |
| 2017 | 23 | 1988 | 20 |
| 1985 | 21 | 1985 | 19 |
| 2005 | 21 | 2021 | 10 |
| 2011 | 19 | 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 |
|------|----------|------|-----------|
| 2011 | 180 | 2011 | 175 |
| 2013 | 177 | 2013 | 173 |
| 1997 | 162 | 1989 | 155 |
| 2000 | 159 | 2018 | 154 |
| 2012 | 156 | 1998 | 152 |
| 1999 | 150 | 2000 | 149 |
| 1998 | 148 | 2008 | 149 |
| 2008 | 148 | 1997 | 146 |
| 1984 | 143 | 1988 | 145 |
| 2001 | 141 | 2012 | 145 |
| 1988 | 140 | 2001 | 141 |
| 2009 | 139 | 2014 | 141 |
| 1989 | 136 | 2005 | 139 |
| 2005 | 135 | 2017 | 138 |
| 2017 | 135 | 1999 | 137 |
| 2014 | 132 | 2009 | 137 |
| 1985 | 128 | 2021 | 134 |
| 2018 | 125 | 1994 | 132 |
| 1990 | 124 | 1991 | 119 |
| 1994 | 123 | 1996 | 117 |
| 1996 | 122 | 1995 | 113 |
| 1991 | 121 | 2020 | 111 |
| 1995 | 119 | 1990 | 110 |
| 1982 | 118 | 2015 | 110 |
| 1986 | 114 | 1986 | 104 |
| 2015 | 108 | 1985 | 102 |
| 1983 | 106 | 2003 | 100 |
| 2020 | 106 | 2006 | 97 |
| 2006 | 103 | 1987 | 93 |
| 2002 | 101 | 2019 | 90 |
| 2003 | 100 | 2007 | 89 |
| 2007 | 92 | 2002 | 79 |
| 2019 | 91 | 2004 | 74 |
| 1987 | 89 | 1992 | 40 |
| 2004 | 77 | 2010 | 28 |
| 2010 | 19 | 2016 | 20 |
| 1981 | 0 | 1993 | 0 |
| 1992 | 0 | 1981 | NA |
| 1993 | 0 | 1982 | NA |
| 2016 | 0 | 1983 | NA |
| 2021 | NA | 1984 | NA |
| - | <u> </u> | | <u> </u> |

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





TNT07C Number of days with high DHW values

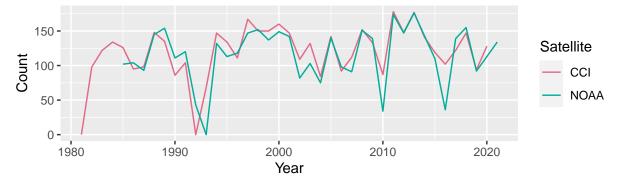


Table 31: Number of Days with moderate Degree Heating Week values $\,$

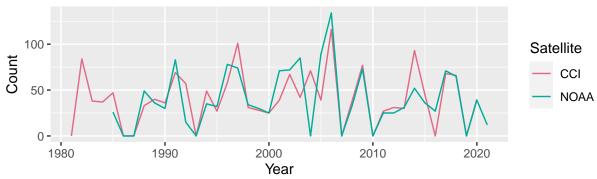
| Year | CCI DHW4 | Year | NOAA DHW4 |
|------|----------|------|-----------|
| 1992 | 84 | 2016 | 86 |
| 2020 | 59 | 2010 | 83 |
| 1990 | 49 | 1992 | 69 |
| 1993 | 49 | 1997 | 38 |
| 1995 | 47 | 2014 | 37 |
| 2009 | 36 | 1989 | 36 |
| 2016 | 35 | 1990 | 36 |
| 2010 | 34 | 2003 | 36 |
| 2014 | 34 | 2018 | 35 |
| 1982 | 33 | 2007 | 34 |
| 1989 | 33 | 1986 | 32 |
| 1999 | 33 | 1998 | 31 |
| 2000 | 33 | 2017 | 31 |
| 1983 | 30 | 2008 | 30 |
| 2013 | 30 | 2015 | 29 |
| 1996 | 29 | 2002 | 28 |
| 2002 | 29 | 1995 | 27 |
| 2003 | 29 | 1996 | 27 |
| 1987 | 28 | 1994 | 26 |
| 1994 | 28 | 2004 | 26 |
| 2007 | 28 | 2006 | 26 |
| 2012 | 28 | 2020 | 26 |
| 1986 | 27 | 1987 | 25 |
| 1991 | 27 | 1991 | 25 |
| 1998 | 27 | 2009 | 25 |
| 2017 | 27 | 1993 | 24 |
| 1984 | 26 | 2012 | 24 |
| 1985 | 26 | 1999 | 23 |
| 2004 | 26 | 2001 | 23 |
| 2018 | 26 | 2005 | 23 |
| 1997 | 25 | 2013 | 23 |
| 2001 | 25 | 2019 | 23 |
| 2005 | 25 | 2011 | 22 |
| 2015 | 25 | 2000 | 21 |
| 2006 | 24 | 1988 | 20 |
| 2008 | 23 | 1985 | 19 |
| 1988 | 21 | 2021 | 10 |
| 2011 | 21 | 1981 | NA |
| 2019 | 21 | 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 | 178 | 2013 | 176 |
| 2013 | 177 | 2011 | 174 |
| 1997 | 167 | 2018 | 155 |
| 2000 | 160 | 1989 | 154 |
| 2008 | 152 | 1998 | 152 |
| 1998 | 150 | 2008 | 151 |
| 1999 | 150 | 2000 | 149 |
| 1988 | 148 | 1997 | 147 |
| 2012 | 148 | 2012 | 147 |
| 1994 | 147 | 1988 | 145 |
| 2001 | 147 | 2014 | 143 |
| 2018 | 147 | 2001 | 142 |
| 2005 | 142 | 2005 | 140 |
| 2014 | 141 | 2009 | 139 |
| 1989 | 135 | 2017 | 139 |
| 1984 | 134 | 1999 | 137 |
| 1995 | 134 | 2021 | 134 |
| 2009 | 133 | 1994 | 132 |
| 2003 | 132 | 1991 | 120 |
| 2020 | 128 | 1996 | 118 |
| 1985 | 126 | 1995 | 113 |
| 1983 | 122 | 2020 | 113 |
| 2017 | 122 | 1990 | 111 |
| 2015 | 119 | 2015 | 110 |
| 2007 | 112 | 1986 | 104 |
| 1996 | 111 | 2003 | 103 |
| 2002 | 109 | 1985 | 102 |
| 1991 | 104 | 2006 | 98 |
| 2016 | 102 | 1987 | 93 |
| 1982 | 98 | 2019 | 92 |
| 1987 | 98 | 2007 | 91 |
| 1986 | 95 | 2002 | 82 |
| 2019 | 94 | 2004 | 75 |
| 2006 | 92 | 1992 | 43 |
| 2010 | 87 | 2016 | 36 |
| 1990 | 86 | 2010 | 34 |
| 2004 | 84 | 1993 | 0 |
| 1993 | 68 | 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





Wallabi Island Number of days with high DHW values

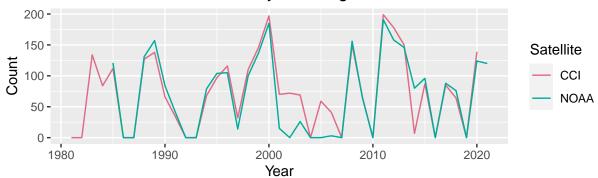


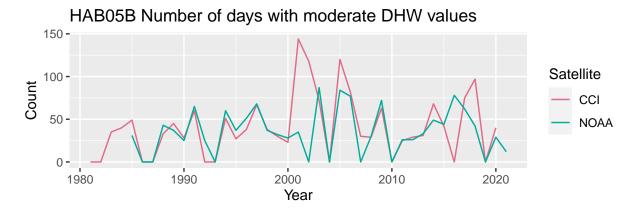
Table 33: Number of Days with moderate Degree Heating Week values $\,$

| Year | CCI_DHW4 | Year | NOAA_DHW4 |
|------|----------|------|-----------|
| 2006 | 116 | 2006 | 134 |
| 1997 | 101 | 2005 | 89 |
| 2014 | 93 | 2003 | 85 |
| 1982 | 84 | 1991 | 83 |
| 2009 | 77 | 1996 | 78 |
| 2004 | 71 | 1997 | 74 |
| 1991 | 69 | 2009 | 73 |
| 2017 | 68 | 2002 | 72 |
| 2002 | 67 | 2001 | 71 |
| 2018 | 66 | 2017 | 71 |
| 1996 | 58 | 2018 | 65 |
| 1992 | 57 | 2014 | 52 |
| 1994 | 49 | 1988 | 49 |
| 1985 | 47 | 2020 | 39 |
| 2015 | 45 | 1989 | 36 |
| 2003 | 42 | 2015 | 36 |
| 1989 | 40 | 1994 | 35 |
| 2020 | 40 | 1998 | 34 |
| 2001 | 39 | 2008 | 33 |
| 2005 | 39 | 1995 | 32 |
| 1983 | 38 | 2013 | 31 |
| 2008 | 38 | 1990 | 30 |
| 1984 | 37 | 1999 | 30 |
| 1990 | 36 | 2016 | 27 |
| 1988 | 33 | 1985 | 26 |
| 1998 | 31 | 2000 | 25 |
| 2012 | 31 | 2011 | 25 |
| 2013 | 30 | 2012 | 25 |
| 1999 | 28 | 1992 | 15 |
| 1995 | 27 | 2021 | 12 |
| 2011 | 27 | 1986 | 0 |
| 2000 | 25 | 1987 | 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 |
| | - | | I |

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

| Year 2011 2000 2012 2008 | CCI_DHW8 199 197 | Year 2011 | NOAA_DHW8 |
|--------------------------|------------------------|-----------|-----------|
| 2000 2012 | | 2011 | 191 |
| 2012 | 107 | | 101 |
| | 191 | 2000 | 185 |
| 2008 | 178 | 2012 | 158 |
| | 150 | 1989 | 157 |
| 2013 | 150 | 2008 | 156 |
| 1999 | 146 | 2013 | 146 |
| 2020 | 139 | 1999 | 137 |
| 1989 | 138 | 1988 | 131 |
| 1983 | 134 | 2020 | 124 |
| 1988 | 127 | 1985 | 121 |
| 1996 | 116 | 2021 | 120 |
| 1985 | 112 | 1996 | 105 |
| 1998 | 110 | 1995 | 104 |
| 1995 | 97 | 1998 | 100 |
| 2015 | 87 | 2015 | 96 |
| 2017 | 85 | 2017 | 88 |
| 1984 | 84 | 1990 | 84 |
| 2002 | 72 | 2014 | 80 |
| 2001 | 70 | 1994 | 79 |
| 2003 | 69 | 2018 | 76 |
| 1994 | 68 | 2009 | 64 |
| 1990 | 66 | 1991 | 41 |
| 2009 | 65 | 2003 | 26 |
| 2018 | 64 | 2001 | 15 |
| 2005 | 59 | 1997 | 14 |
| 2006 | 41 | 2006 | 3 |
| 1991 | 34 | 1986 | 0 |
| 1997 | 32 | 1987 | 0 |
| 2014 | 7 | 1992 | 0 |
| 1981 | 0 | 1993 | 0 |
| 1982 | 0 | 2002 | 0 |
| 1986 | 0 | 2004 | 0 |
| 1987 | 0 | 2005 | 0 |
| 1992 | 0 | 2007 | 0 |
| 1993 | 0 | 2010 | 0 |
| 2004 | 0 | 2016 | 0 |
| 2007 | 0 | 2019 | 0 |
| 2010 | 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



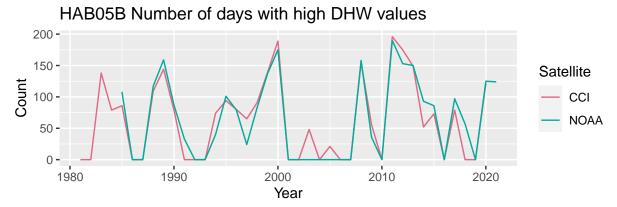


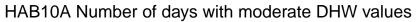
Table 35: Number of Days with moderate Degree Heating Week values $\,$

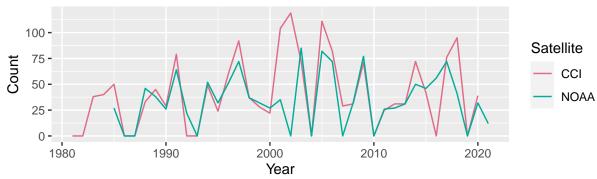
| Year 2001 2005 2002 2018 2006 2017 | CCI_DHW4 144 120 118 | Year 2003 2005 | NOAA_DHW4 |
|------------------------------------|-------------------------|----------------------|-----------|
| 2005 2002 2018 2006 | 120 | | |
| 2002 2018 2006 | | 2005 | 0.4 |
| 2018 2006 | 118 | | 84 |
| 2006 | | 2016 | 78 |
| | 97 | 2006 | 77 |
| 2017 | 82 | 2009 | 72 |
| | 75 | 1997 | 68 |
| 2003 | 72 | 1991 | 65 |
| 2014 | 68 | 2017 | 62 |
| 1997 | 67 | 1994 | 60 |
| 2009 | 63 | 1996 | 51 |
| 1991 | 60 | 2014 | 49 |
| 1994 | 51 | 2015 | 44 |
| 1985 | 49 | 1988 | 43 |
| 1989 | 45 | 2018 | 42 |
| 2015 | 42 | 1989 | 37 |
| 1984 | 40 | 1995 | 37 |
| 2020 | 40 | 1998 | 37 |
| 1996 | 38 | 2001 | 35 |
| 1998 | 38 | 2013 | 33 |
| 1983 | 35 | 1999 | 32 |
| 1988 | 33 | 1985 | 31 |
| 2013 | 31 | 2008 | 30 |
| 1999 | 30 | 2020 | 29 |
| 2007 | 30 | 2000 | 28 |
| 2008 | 29 | 2011 | 26 |
| 2012 | 29 | 2012 | 26 |
| 1990 | 28 | 1990 | 25 |
| 1995 | 27 | 1992 | 25 |
| 2011 | 25 | 2021 | 12 |
| 2000 | 23 | 1986 | 0 |
| 1981 | 0 | 1987 | 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 | 196 | 2011 | 190 |
| 2000 | 189 | 2000 | 175 |
| 2012 | 175 | 1989 | 159 |
| 2008 | 155 | 2008 | 158 |
| 2013 | 149 | 2012 | 153 |
| 1989 | 144 | 2013 | 150 |
| 1999 | 139 | 1999 | 137 |
| 1983 | 138 | 2020 | 125 |
| 2020 | 121 | 2021 | 124 |
| 1988 | 109 | 1988 | 117 |
| 1995 | 94 | 1985 | 108 |
| 1998 | 91 | 1995 | 101 |
| 1985 | 86 | 2017 | 97 |
| 1996 | 80 | 2014 | 93 |
| 1984 | 79 | 1990 | 87 |
| 1990 | 79 | 2015 | 86 |
| 2017 | 79 | 1998 | 83 |
| 1994 | 74 | 1996 | 79 |
| 2015 | 73 | 2018 | 57 |
| 1997 | 65 | 1994 | 40 |
| 2009 | 56 | 2009 | 36 |
| 2014 | 52 | 1991 | 33 |
| 2003 | 48 | 1997 | 24 |
| 2005 | 21 | 1986 | 0 |
| 1981 | 0 | 1987 | 0 |
| 1982 | 0 | 1992 | 0 |
| 1986 | 0 | 1993 | 0 |
| 1987 | 0 | 2001 | 0 |
| 1991 | 0 | 2002 | 0 |
| 1992 | 0 | 2003 | 0 |
| 1993 | 0 | 2004 | 0 |
| 2001 | 0 | 2005 | 0 |
| 2002 | 0 | 2006 | 0 |
| 2004 | 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 |
| 2021 | NA | 1984 | NA |
| | | | I |

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





HAB10A Number of days with high DHW values

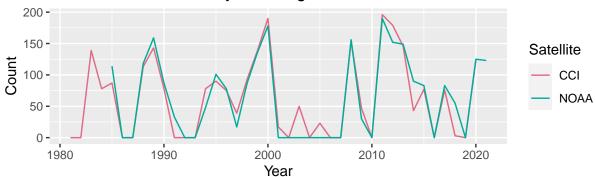


Table 37: Number of Days with moderate Degree Heating Week values $\,$

| Year | CCI_DHW4 | Year | NOAA_DHW4 |
|------|----------|------|-----------|
| 2001 | 144 | 2003 | 85 |
| 2005 | 120 | 2005 | 82 |
| 2002 | 118 | 2009 | 77 |
| 2018 | 97 | 1997 | 72 |
| 2006 | 82 | 2006 | 72 |
| 2017 | 75 | 2017 | 72 |
| 2003 | 72 | 1991 | 64 |
| 2014 | 68 | 2016 | 56 |
| 1997 | 67 | 1994 | 52 |
| 2009 | 63 | 1996 | 51 |
| 1991 | 60 | 2014 | 50 |
| 1994 | 51 | 1988 | 46 |
| 1985 | 49 | 2015 | 46 |
| 1989 | 45 | 2018 | 41 |
| 2015 | 42 | 1989 | 38 |
| 1984 | 40 | 1998 | 37 |
| 2020 | 40 | 2001 | 35 |
| 1996 | 38 | 1995 | 32 |
| 1998 | 38 | 1999 | 32 |
| 1983 | 35 | 2008 | 32 |
| 1988 | 33 | 2020 | 32 |
| 2013 | 31 | 2013 | 31 |
| 1999 | 30 | 1985 | 27 |
| 2007 | 30 | 2000 | 27 |
| 2008 | 29 | 2012 | 27 |
| 2012 | 29 | 1990 | 26 |
| 1990 | 28 | 2011 | 26 |
| 1995 | 27 | 1992 | 22 |
| 2011 | 25 | 2021 | 12 |
| 2000 | 23 | 1986 | 0 |
| 1981 | 0 | 1987 | 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 38: Number of Days with high Degree Heating Week values $\,$

| 2011 196 2 2000 190 2 2012 179 1 2008 154 2 2013 146 2 1989 143 2 1983 139 1 1999 139 2 2020 123 2 1988 113 1 1998 93 1 1995 90 1 1984 78 1 | Zear NOAA_DHW8 011 190 000 178 989 159 008 156 012 152 013 149 999 136 020 125 021 123 988 118 985 114 995 101 014 90 990 87 |
|---|--|
| 2000 190 2 2012 179 1 2008 154 2 2013 146 2 1989 143 2 1983 139 1 1999 139 2 2020 123 2 1988 113 1 1998 93 1 1995 90 1 1984 78 1 | 000 178 989 159 008 156 012 152 013 149 999 136 020 125 021 123 988 118 985 114 995 101 014 90 |
| 2012 179 1 2008 154 2 2013 146 2 1989 143 2 1983 139 1 1999 139 2 2020 123 2 1988 113 1 1998 93 1 1995 90 1 1985 87 2 1984 78 1 | 989 159 008 156 012 152 013 149 999 136 020 125 021 123 988 118 985 114 995 101 014 90 |
| 2008 154 2 2013 146 2 1989 143 2 1983 139 1 1999 139 2 2020 123 2 1988 113 1 1998 93 1 1995 90 1 1985 87 2 1984 78 1 | 008 156 012 152 013 149 999 136 020 125 021 123 988 118 985 114 995 101 014 90 |
| 2013 146 2 1989 143 2 1983 139 1 1999 139 2 2020 123 2 1988 113 1 1998 93 1 1995 90 1 1985 87 2 1984 78 1 | 012 152 013 149 999 136 020 125 021 123 988 118 985 114 995 101 014 90 |
| 1989 143 2 1983 139 1 1999 139 2 2020 123 2 1988 113 1 1998 93 1 1995 90 1 1985 87 2 1984 78 1 | 013 149 999 136 020 125 021 123 988 118 985 114 995 101 014 90 |
| 1983 139 1 1999 139 2 2020 123 2 1988 113 1 1998 93 1 1995 90 1 1985 87 2 1984 78 1 | 999 136 020 125 021 123 988 118 985 114 995 101 014 90 |
| 1999 139 2 2020 123 2 1988 113 1 1998 93 1 1995 90 1 1985 87 2 1984 78 1 | 020 125 021 123 988 118 985 114 995 101 014 90 |
| 2020 123 2 1988 113 1 1998 93 1 1995 90 1 1985 87 2 1984 78 1 | 021 123 988 118 985 114 995 101 014 90 |
| 1988 113 1 1998 93 1 1995 90 1 1985 87 2 1984 78 1 | 988 118 985 114 995 101 014 90 |
| 1998 93 1 1995 90 1 1985 87 2 1984 78 1 | 985 114 995 101 014 90 |
| 1995 90 1 1985 87 2 1984 78 1 | 995 101 014 90 |
| 1985 87 2 1984 78 1 | 014 90 |
| 1984 78 1 | |
| | 990 87 |
| 1000 | |
| 1990 78 1 | 998 87 |
| | 015 83 |
| | 017 83 |
| | 996 78 |
| | 018 55 |
| | 994 48 |
| | 991 33 |
| | 009 30 |
| | 997 17 |
| | 986 0 |
| | 987 0 |
| | 992 0 |
| | 993 0 |
| | 001 0 |
| | 002 0 |
| | 003 0 |
| | 004 0 |
| | 005 0 |
| | 006 0 |
| | 007 0 |
| | 010 0 |
| | 016 0 |
| | 019 0 |
| | 981 NA |
| | 982 NA |
| | 983 NA |
| 2021 NA 1 | 984 NA |