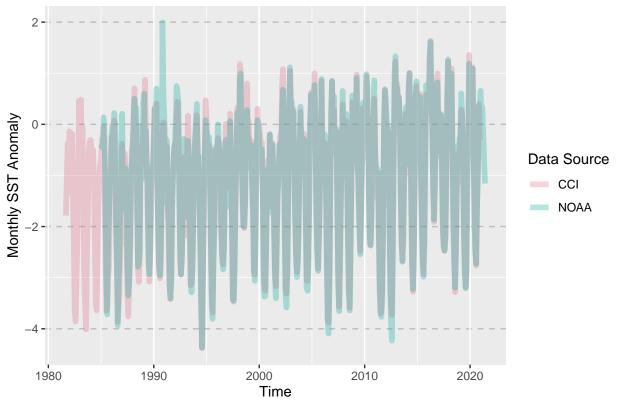
# Degree Heating Month Analysis

Vanessa

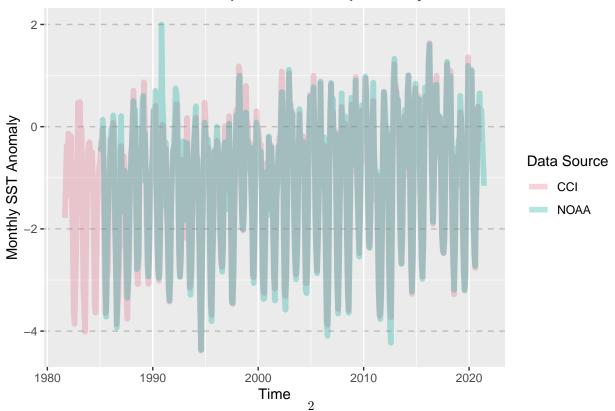
2021-09-28

#### Degree Heating Month Anomaly Time Series Plots:

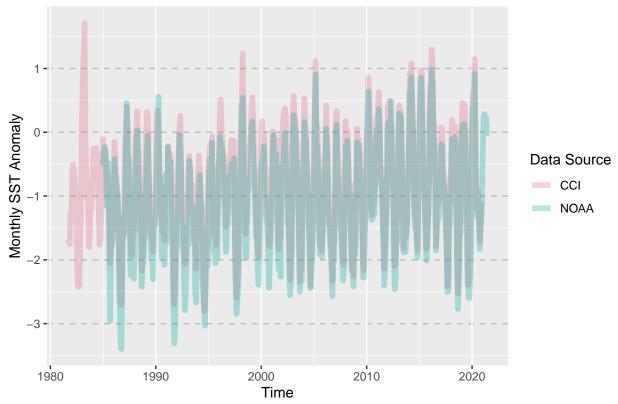
#### Time Series of BRS05 (-14.11, 123.54) Monthly SST Anomalies



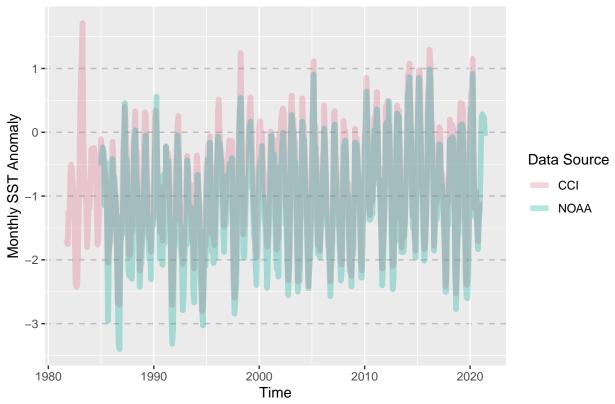
#### Time Series of BRS07 (-14.12, 123.55) Monthly SST Anomalies



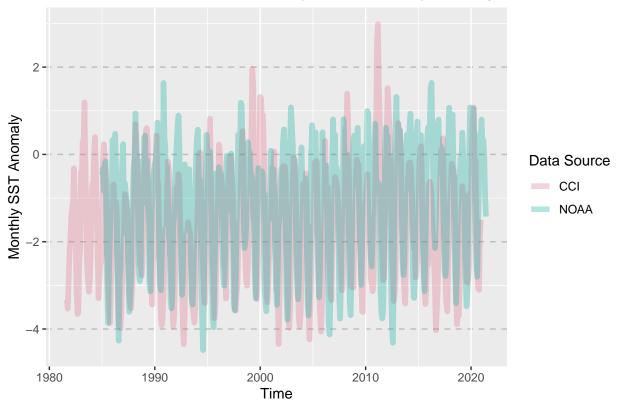


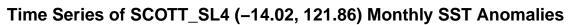


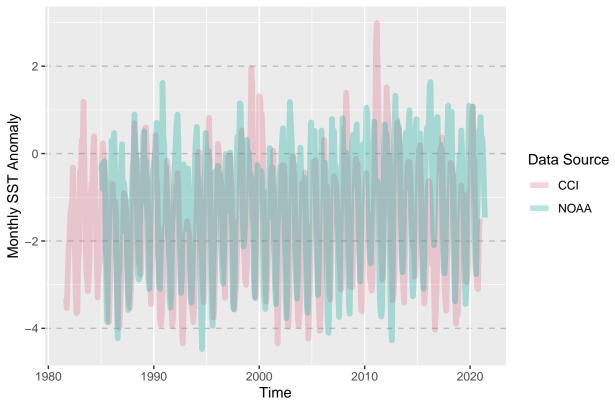




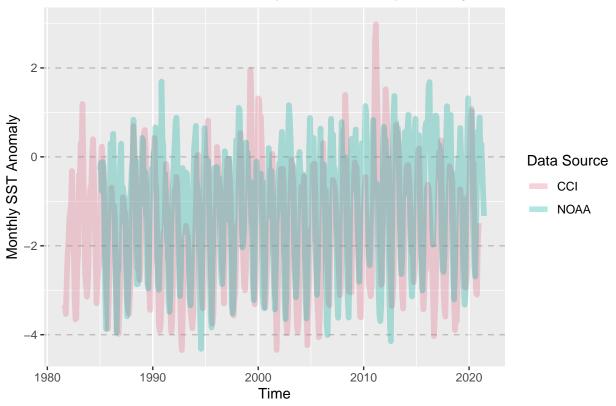




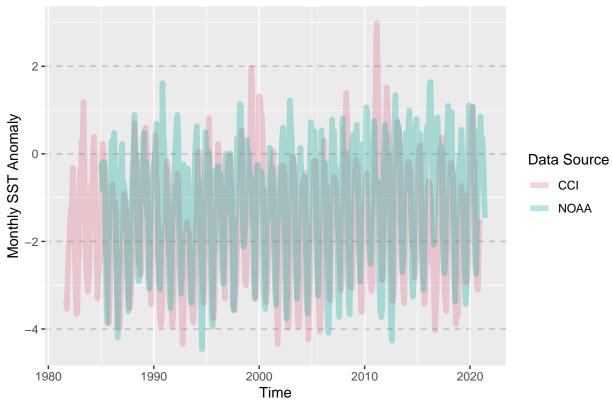


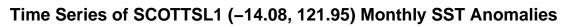


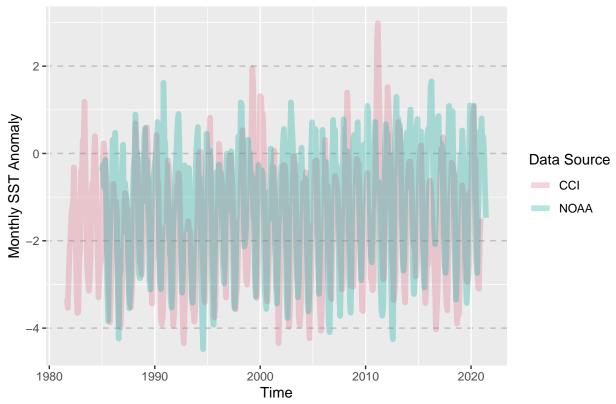




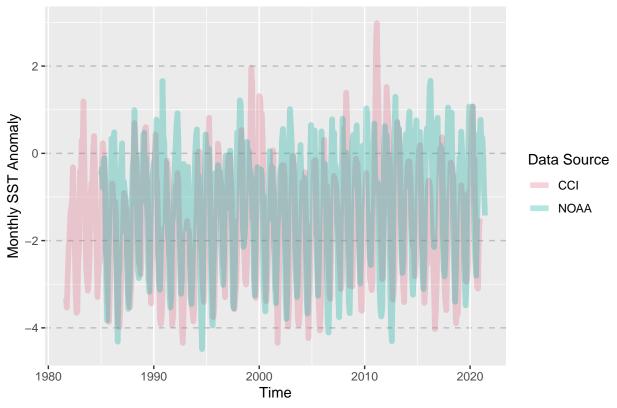


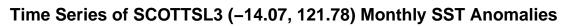


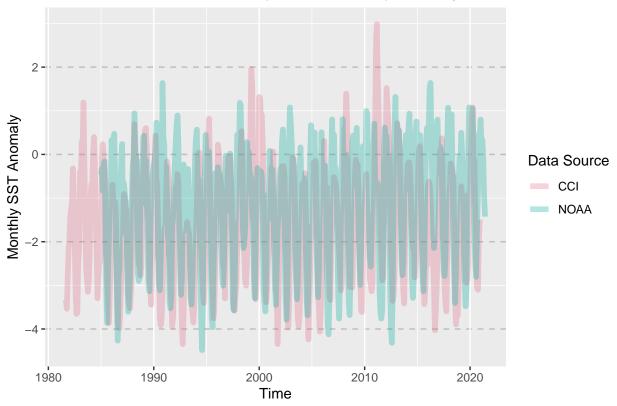


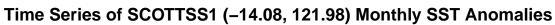


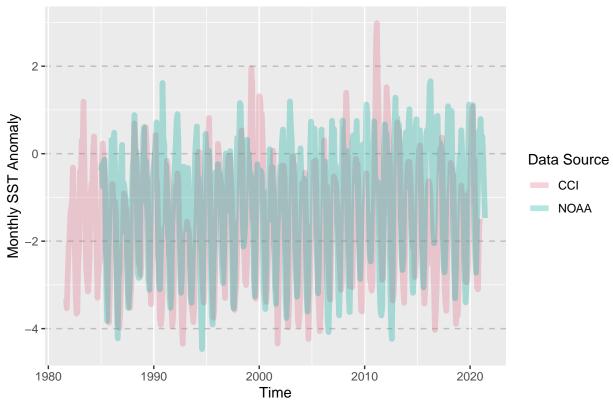


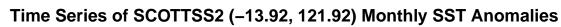


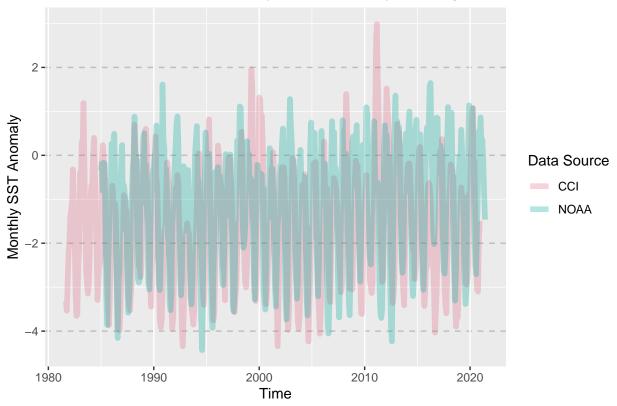


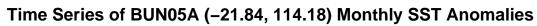


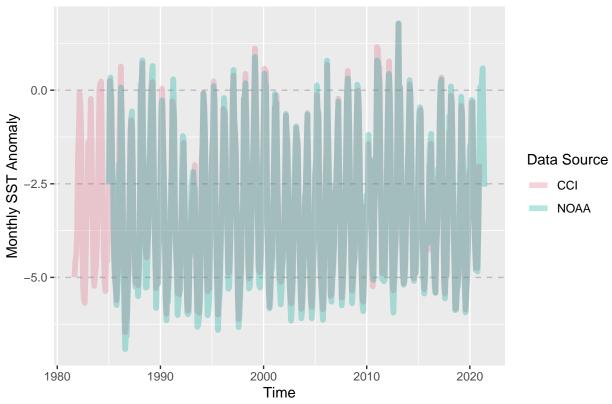


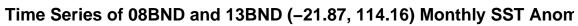


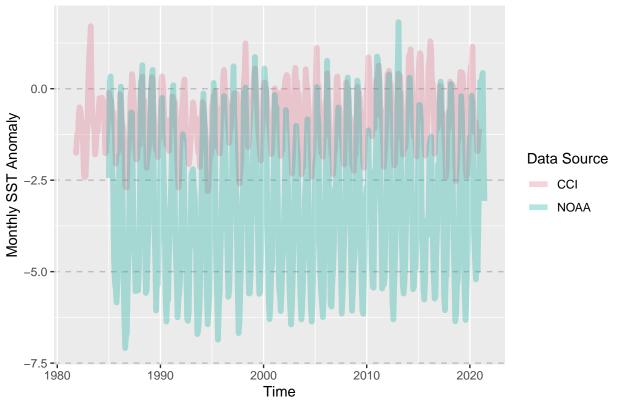


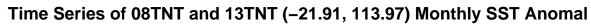


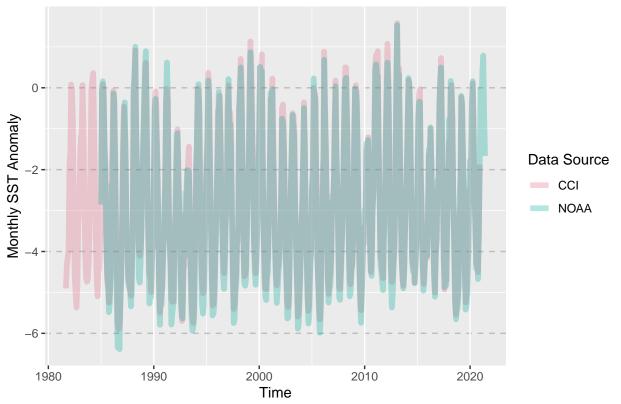


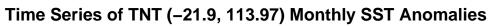


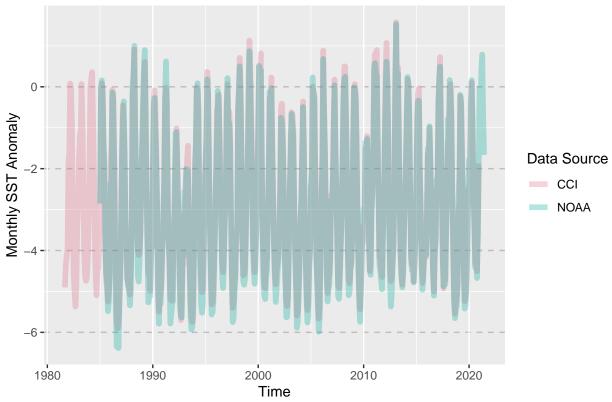


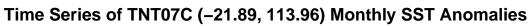


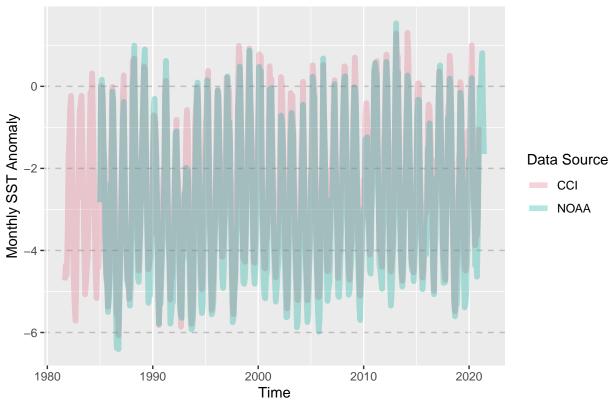




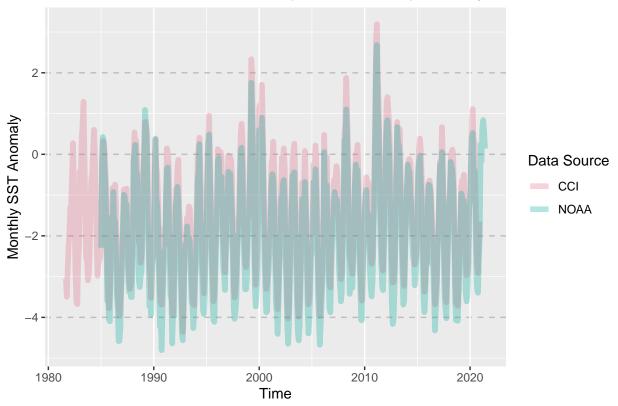




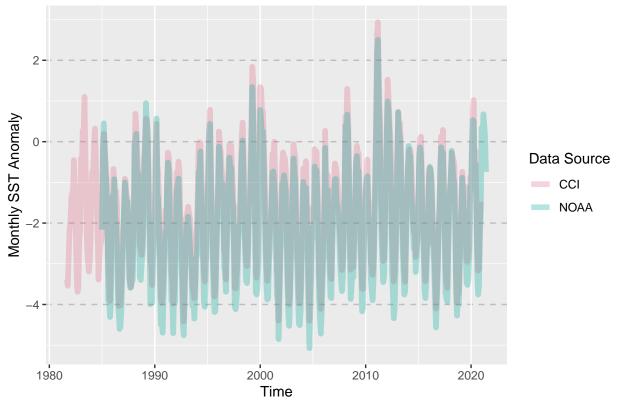




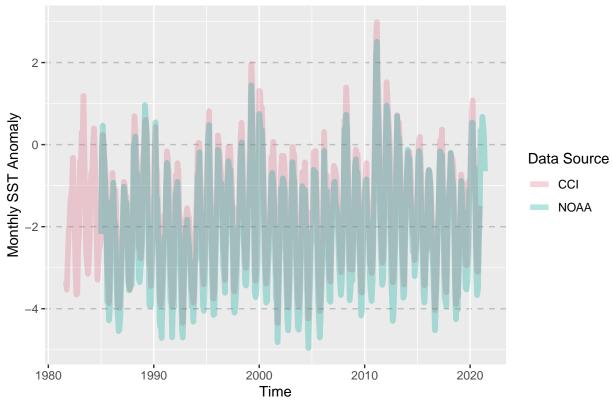












# BRS05 Degree Heating Months Time Series



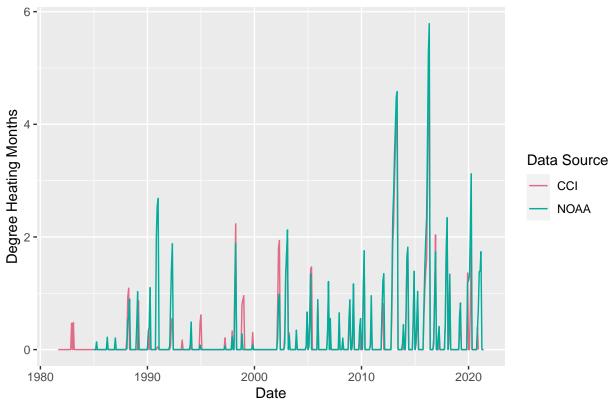


Table 1: Degree Heating Month values in BRS05 from CCI (left) and NOAA (right)

D-4.	DIIM 1	D-4-	DIIM 1
Date 2016 Mary	DHM value	Date 2016 May	DHM value
2016-May	4.9138356	2016-May	5.7875939
2016-Apr	4.4931284	2016-Apr	5.2680868
2013-May	4.1719409	2013-May	4.5822122
2013-Apr	4.0534936	2013-Apr	4.4839954
2013-Mar	3.5139354	2013-Mar	3.9546065
2013-Feb	3.0383931	2016-Mar	3.6593645
2016-Mar	2.8559068	2013-Feb	3.4705832
2013-Jan	2.2353115	2020-Apr	3.1212218
1998-Apr	2.2326042	2013-Jan	2.7682419
2018-Jan	2.0906884	1991-Jan	2.6860591
2016-Dec	2.0352166	1990-Dec	2.5481649
2003-Feb	1.9770090	2016-Feb	2.3459864
	1.9377682	2018-Jan	2.3448763
2012-Dec	1.8507361	2012-Dec	2.3045412
2020-Apr	1.8204313	2003-Feb	2.1244242
2002-Apr	1.8109296	2020-Mar	2.0318329
2017-Dec	1.7580481	1990-Nov	1.9967222
2003-Jan	1.7082150	2016-Jan	1.9525860
2014-May	1.6835130	1998-Apr	1.8862186
2016-Feb	1.6061709	1992-May	1.8792845
2014-Apr	1.5918405	2014-May	1.8178548
2010-Apr	1.5836529	2017-Dec	1.7708530
2005-May	1.4675617	2010-Apr	1.7559240
2005-Apr	1.4310482	2021-Mar	1.7388961
2016-Jan	1.3909484	2016-Dec	1.7332097
2019-Dec	1.3600599	2003-Jan	1.6867258
2002-Dec	1.3475094	2014-Apr	1.6660896
2014-Dec	1.2521967	1992-Apr	1.4742935
2018-Apr	1.2443084	2015-Dec	1.4446918
1998-Mar	1.1803822	2021-Feb	1.4084211
1988-Apr	1.0905470	2014-Dec	1.3917778
2009-Apr	1.0872204	2021-Jan	1.3778656
2006-Dec	1.0644172	2012-Feb	1.3481656
2015-Dec	1.0641133	2005-Apr	1.3451866
2016-Nov	1.0387047	2018-Apr	1.3392294
1999-Jan	0.9570460	2020-Feb	1.3171644
2010-Mar	0.9490944	2020-Jan	1.2251434
2015-Apr	0.9229799	2002-Dec	1.2214122
1988-Mar	0.9223226	2012-Jan	1.2206272
1998-Dec	0.8763381	2006-Dec	1.2083369
1989-Mar	0.8684493	2019-Dec	1.1898297
2005-Dec	0.8494171	2009-Apr	1.1665735
2012-Jan	0.8146396	1990-Apr	1.1019386
1998-Nov	0.7978895	2015-Apr	1.0332657
2002-Mar	0.7307077	1989-Feb	1.0301318
2020-Mar	0.7055435	2010-Mar	1.0055351
2004-Dec	0.6696972	2002-May	0.9825538
2011-Dec	0.6684469	2012-Nov	0.9743889
2012-Nov	0.6242221	2012 Nov	0.9558100
1995-Jan	0.6159298	2016-Dec 2016-Nov	0.9114444
2015-Nov	0.5888899	1988-May	0.8956968
$\frac{2019-\text{Nov}}{2014-\text{Mar}}$	$0.5832881^{-2}$		0.8898297
$\frac{2014\text{-Mai}}{2010\text{-Dec}}$	0.5781204	$\frac{1996-\text{Mai}}{2005-\text{Dec}}$	0.8872491
1992-May	0.5781204	2003-Dec 2008-Dec	0.8830466
2017-Nov	0.5308912	$\frac{2008\text{-Dec}}{2002\text{-Apr}}$	0.8698208
2017-INOV	0.0308912	∠∪∪Z-Apr	0.8098208

# BRS07 Degree Heating Months Time Series



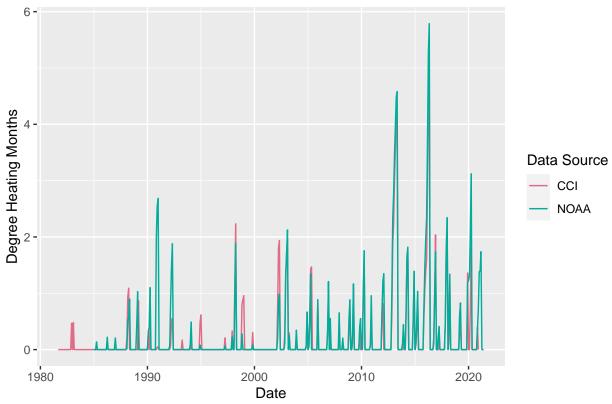


Table 2: Degree Heating Month values in BRS07 from CCI (left) and NOAA (right)

Date	DHM value	Date	DHM value
2016-May	4.9138356	2016-May	5.7875939
	4.4931284		5.2680868
$\frac{2016\text{-Apr}}{2013\text{-May}}$	4.4931284 4.1719409	$\frac{2016\text{-Apr}}{2013\text{-May}}$	4.5822122
$\frac{2013\text{-May}}{2013\text{-Apr}}$	4.1719409	$\frac{2013\text{-May}}{2013\text{-Apr}}$	4.3822122
$\frac{2013\text{-Apr}}{2013\text{-Mar}}$	3.5139354	$\frac{2013\text{-Apr}}{2013\text{-Mar}}$	3.9546065
$\frac{2013\text{-Mar}}{2013\text{-Feb}}$	3.0383931	2015-Mar 2016-Mar	
$\frac{2015\text{-reb}}{2016\text{-Mar}}$	2.8559068	$\frac{2010\text{-Mar}}{2013\text{-Feb}}$	3.6593645 $3.4705832$
$\frac{2010\text{-Mai}}{2013\text{-Jan}}$	2.2353115	$\frac{2013\text{-Feb}}{2020\text{-Apr}}$	3.4703632
	2.2326042	$\frac{2020\text{-Apr}}{2013\text{-Jan}}$	2.7682419
$\frac{1998-\mathrm{Apr}}{2018-\mathrm{Jan}}$	2.2320042	1991-Jan	2.6860591
$\frac{2018\text{-Jan}}{2016\text{-Dec}}$	2.0900884	1991-Jan 1990-Dec	2.5481649
2010-Dec 2003-Feb	1.9770090	2016-Feb	
	1.977682	$\frac{2010\text{-reb}}{2018\text{-Jan}}$	2.3459864 2.3448763
2002-May 2012-Dec		$\frac{2018\text{-Jan}}{2012\text{-Dec}}$	2.3448703
	1.8507361 1.8204313		
2020-Apr		2003-Feb	2.1244242
2002-Apr 2017-Dec	1.8109296	2020-Mar 1990-Nov	2.0318329 1.9967222
	1.7580481	$\frac{1990\text{-Nov}}{2016\text{-Jan}}$	
2003-Jan	1.7082150		1.9525860 1.8862186
2014-May	1.6835130	1998-Apr	
2016-Feb	1.6061709 1.5918405	1992-May	1.8792845
2014-Apr		2014-May	1.8178548
2010-Apr	1.5836529	2017-Dec	1.7708530
2005-May	1.4675617	2010-Apr	1.7559240
2005-Apr	1.4310482	2021-Mar	1.7388961
2016-Jan	1.3909484	2016-Dec	1.7332097
2019-Dec	1.3600599	2003-Jan	1.6867258
2002-Dec	1.3475094	2014-Apr	1.6660896
2014-Dec	1.2521967	1992-Apr	1.4742935
$\frac{2018\text{-Apr}}{1998\text{-Mar}}$	1.2443084	2015-Dec 2021-Feb	1.4446918
	1.1803822	$\frac{2021\text{-Feb}}{2014\text{-Dec}}$	1.4084211 1.3917778
1988-Apr 2009-Apr	1.0905470	$\frac{2014\text{-Dec}}{2021\text{-Jan}}$	1.3917778
$\frac{2009\text{-Apr}}{2006\text{-Dec}}$	$\frac{1.0872204}{1.0644172}$	$\frac{2021\text{-Jan}}{2012\text{-Feb}}$	
			1.3481656
$\frac{2015\text{-Dec}}{2016\text{-Nov}}$	1.0641133	2005-Apr	1.3451866
	1.0387047	2018-Apr	1.3392294
1999-Jan	0.9570460	2020-Feb	1.3171644
2010-Mar	0.9490944	2020-Jan	1.2251434
2015-Apr	0.9229799	2002-Dec	1.2214122
1988-Mar	0.9223226	2012-Jan	1.2206272 1.2083369
1998-Dec	0.8763381	2006-Dec	
1989-Mar	0.8684493	2019-Dec	1.1898297
2005-Dec	0.8494171	2009-Apr 1990-Apr	1.1665735
2012-Jan	$\begin{array}{r} 0.8146396 \\ \hline 0.7978895 \end{array}$	$\frac{1990\text{-Apr}}{2015\text{-Apr}}$	1.1019386
1998-Nov			1.0332657
$\frac{2002\text{-Mar}}{2020\text{-Mar}}$	0.7307077	1989-Feb 2010-Mar	1.0301318 1.0055351
	0.7055435		
2004-Dec	0.6696972	2002-May	0.9825538
2011-Dec	0.6684469	2012-Nov	0.9743889
2012-Nov	0.6242221	2010-Dec	0.9558100
1995-Jan	0.6159298	2016-Nov	0.9114444
2015-Nov	$\begin{array}{r} 0.5888899 \\ \hline 0.5832881 \ 2 \end{array}$	1988-May	0.8956968
2014-Mar			0.8898297
2010-Dec	0.5781204	2005-Dec	0.8872491
1992-May	0.5580780	2008-Dec	0.8830466
2017-Nov	0.5308912	2002-Apr	0.8698208

### DAR3 Degree Heating Months Time Series



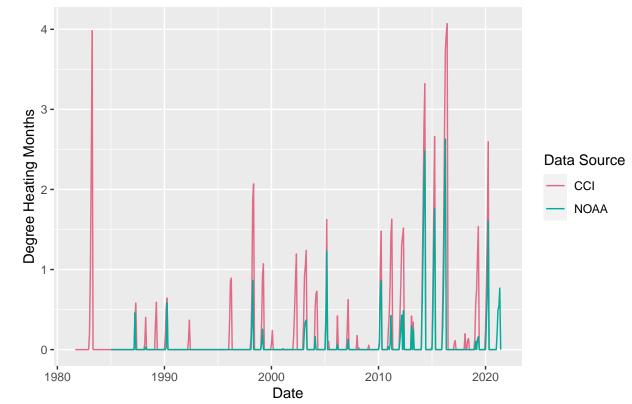


Table 3: Degree Heating Month values in DAR3 from CCI (left) and NOAA (right)

Date	DHM value	Date	DHM value
2016-Jun	4.0709144	2016-Apr	2.6280683
1983-Apr	3.9839208	2014-May	2.4771831
2016-May	3.9347101	2014-Apr	2.0976759
2016-Apr	3.7442817	2016-Mar	1.8606795
2014-May	3.3209593	2015-Apr	1.7597519
2014-Apr	2.7898849	2020-Apr	1.6053113
2016-Mar	2.6890772	2015-Mar	1.3356964
2015-Apr	2.6610193	2005-Mar	1.2332655
2020-Apr	2.5963338	2014-Mar	1.2326203
1983-Mar	2.2733838	2016-Feb	0.8747207
1998-May	2.0698542	1998-Apr	0.8647240
1998-Apr	1.8658770	2010-Apr	0.8585960
2015-Mar	1.7704816	2021-May	0.7679235
2014-Mar	1.7120120	2010-Mar	0.6928738
2011-Apr	1.6294489	2020-Mar	0.6862557
2005-Mar	1.6245417	2014-Feb	0.5969841
2019-May	1.5374549	1990-Apr	0.5853692
2012-May	1.5176929	2021-Apr	0.5351905
2010-Apr	1.4792122	2021-Mar	0.5014683
2020-Mar	1.4457954	2012-May	0.4853136
2011-Mar	1.4379123	2015-Feb	0.4787698
2012-Apr	1.4111337	1987-Apr	0.4593889
2016-Feb	1.3928385	2012-Mar	0.4302456
2012-Mar	1.2999305	2011-Mar	0.4254890
2003-Apr	1.2385086	2020-Feb	0.3802969
2002-May	1.1936400	2003-Apr	0.3694040
2019-Apr	1.1754154	$\frac{2003\text{-Mar}}{2003\text{-Mar}}$	0.3493484
1999-Apr	1.0720771	2005-Feb	0.3269841
2003-Mar	1.0369713	1998-Mar	0.3246685
1983-Feb	1.0229540	2016-Jan	0.2982168
2010-Mar	0.9813421	2013-Feb	0.2969841
1999-Mar	0.9238743	2003-Feb	0.2698413
2003-Feb	0.9178300	2012-Feb	0.2642869
2014-Feb	0.9057763	1999-Mar	0.2547401
1996-Apr	0.8926295	2013-Apr	0.2457222
2002-Apr	0.8854689	2021-Feb	0.2184127
2020-Feb	0.8631049	2004-Feb	0.1644349
1996-Mar	0.8490889	2019-May	0.1607348
2011-Feb	0.8084511	2007-Mar	0.1280581
2012-Feb	0.8069213	2019-Apr	0.1263889
2015-Feb	0.7968265	2012-Jan	0.1095072
2004-Apr	0.7297618	2019-Feb	0.1048413
2019-Mar	0.7285432	1999-Feb	0.0855556
2004-Mar	0.6988920	2011-Feb	0.0666270
1990-Apr	0.6440420	2006-Mar	0.0591846
2007-Mar	0.6249715	2010-Feb	0.0562698
1998-Mar	0.6230098	2010-Dec	0.0359588
2016-Jan	0.6149446	1988-Apr	0.0320556
2019-Feb	0.5984363	1990-Mar	0.0253136
1989-Apr	0.5914373	2007-Feb	0.0098413
1987-May	0.5809463	1985-Jan	0.0000000
$\frac{1901 \text{ May}}{2004\text{-Feb}}$	$0.5316875^{\circ}$		0.0000000
1990-Mar	0.5201679	1985-Mar	0.0000000
2002-Mar	0.5105979	1985-Apr	0.0000000
$\frac{2002\text{-Wai}}{2005\text{-Feb}}$	0.5086303	1985-May	0.0000000
7000-1.CD	0.000000	1900-111ay	0.0000000

### DAR Long Degree Heating Months Time Series



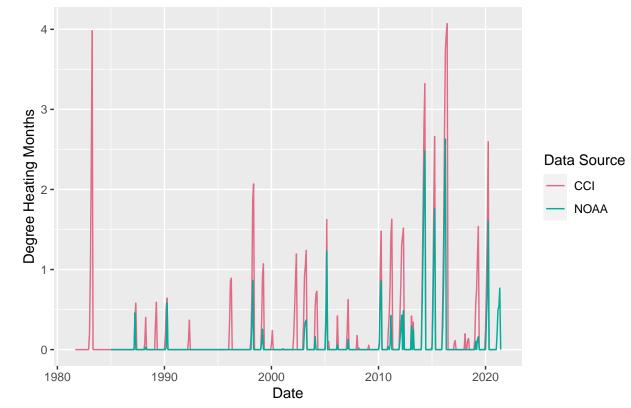


Table 4: Degree Heating Month values in DARL from CCI (left) and NOAA (right)

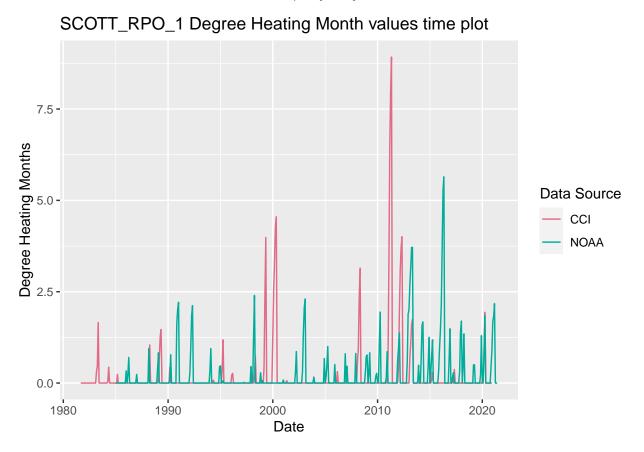
Date	DHM value	Date	DHM value
2016-Jun	4.0709144	2016-Apr	2.6280683
1983-Apr	3.9839208	2010-Apr 2014-May	2.4771831
2016-May	3.9347101	2014-May 2014-Apr	2.4771831
2016-May 2016-Apr	3.7442817	2014-Apr 2016-Mar	1.8606795
$\frac{2010\text{-Apr}}{2014\text{-May}}$	3.3209593	2015-Apr	1.7597519
			1.6053113
2014-Apr	$\frac{2.7898849}{2.6890772}$	2020-Apr	
2016-Mar		2015-Mar 2005-Mar	1.3356964 1.2332655
2015-Apr	2.6610193		
2020-Apr	2.5963338	2014-Mar	1.2326203
1983-Mar	2.2733838	2016-Feb	0.8747207
1998-May	2.0698542	1998-Apr	0.8647240
1998-Apr	1.8658770	2010-Apr	0.8585960
2015-Mar	1.7704816	2021-May	0.7679235
2014-Mar	1.7120120	2010-Mar	0.6928738
2011-Apr	1.6294489	2020-Mar	0.6862557
2005-Mar	1.6245417	2014-Feb	0.5969841
2019-May	1.5374549	1990-Apr	0.5853692
2012-May	1.5176929	2021-Apr	0.5351905
2010-Apr	1.4792122	2021-Mar	0.5014683
2020-Mar	1.4457954	2012-May	0.4853136
2011-Mar	1.4379123	2015-Feb	0.4787698
2012-Apr	1.4111337	1987-Apr	0.4593889
2016-Feb	1.3928385	2012-Mar	0.4302456
2012-Mar	1.2999305	2011-Mar	0.4254890
2003-Apr	1.2385086	2020-Feb	0.3802969
2002-May	1.1936400	2003-Apr	0.3694040
2019-Apr	1.1754154	2003-Mar	0.3493484
1999-Apr	1.0720771	2005-Feb	0.3269841
2003-Mar	1.0369713	1998-Mar	0.3246685
1983-Feb	1.0229540	2016-Jan	0.2982168
2010-Mar	0.9813421	2013-Feb	0.2969841
1999-Mar	0.9238743	2003-Feb	0.2698413
2003-Feb	0.9178300	2012-Feb	0.2642869
2014-Feb	0.9057763	1999-Mar	0.2547401
1996-Apr	0.8926295	2013-Apr	0.2457222
2002-Apr	0.8854689	2021-Feb	0.2184127
2020-Feb	0.8631049	2004-Feb	0.1644349
1996-Mar	0.8490889	2019-May	0.1607348
2011-Feb	0.8084511	2007-Mar	0.1280581
2012-Feb	0.8069213	2019-Apr	0.1263889
2015-Feb	0.7968265	2012-Jan	0.1095072
2004-Apr	0.7297618	2019-Feb	0.1048413
2019-Mar	0.7285432	1999-Feb	0.0855556
2004-Mar	0.6988920	2011-Feb	0.0666270
1990-Apr	0.6440420	2006-Mar	0.0591846
2007-Mar	0.6249715	2010-Feb	0.0562698
1998-Mar	0.6230098	2010-Dec	0.0359588
2016-Jan	0.6149446	1988-Apr	0.0320556
2019-Feb	0.5984363	1990-Mar	0.0253136
1989-Apr	0.5914373	2007-Feb	0.0098413
1987-May	0.5809463	1985-Jan	0.0000000
2004-Feb	0.5316875 29		0.0000000
1990-Mar	0.5201679	1985-Mar	0.0000000
$\frac{1990\text{-Mar}}{2002\text{-Mar}}$	0.5105979	1985-Mai 1985-Apr	0.0000000
2002-Mai 2005-Feb	0.5086303	1985-Apr 1985-May	0.0000000
∠ooo-reb	0.000000	тэоо-тиау	0.0000000

#### ${\bf SCOTT\_RPO\_1\ Degree\ Heating\ Months\ Time\ Series}$

 $\label{lem:continuous} $$\left( \operatorname{Degree\ Heating\ Month\ values\ in\ SCOTT\_RPO\_1\ from\ CCI\ (left)\ and\ NOAA\ (right) \right)$}$ 

	D		D.T. 1
Date	DHM value	Date	DHM value
2011-May	8.9216712	2016-May	5.6440170
2011-Apr	7.9922101	2016-Apr	5.2728466
2011-Mar	6.3379939	2013-May	3.7172995
2000-May	4.5487244	2013-Apr	3.7090323
2000-Apr	4.2786143	2016-Mar	3.6348375
2012-May	4.0057916	2013-Mar	3.1490232
1999-May	3.9830644	2013-Feb	2.7172077
2012-Apr	3.7172991	1998-Apr	2.3973729
2000-Mar	3.3710665	2003-Feb	2.3024189
2011-Feb	3.3536937	1991-Jan	2.2112854
2008-May	3.1441705	2021-Mar	2.1741346
2012-Mar	3.0750824	2016-Feb	2.1268929
2000-Feb	2.5996668	1992-May	2.1183134
1999-Apr	2.3861819	2003-Jan	2.0571241
2008-Apr	2.3421272	1990-Dec	2.0210827
2012-Feb	1.9565885	2013-Jan	2.0179843
2020-Apr	1.9366954	2010-Apr	1.9427477
2013-May	1.7396613	2012-Dec	1.8835881
1983-May	1.6568706	1992-Apr	1.8513365
2013-Apr	1.6147134	2020-Apr	1.8467600
1989-May	1.4663243	2021-Feb	1.8358674
2000-Jan	1.3162369	2018-Jan	1.6949950
1989-Apr	1.2778330	2021-Jan	1.6877155
1995-Apr	1.1815256	2014-May	1.6748553
$\frac{1939 \text{ Apr}}{2013 \text{-Mar}}$	1.0701682	1990-Nov	1.6370091
1988-Apr	1.0421725	2014-Apr	1.5852978
2008-Mar	0.9485789	2014-Hpi 2016-Dec	1.4866096
2020-Mar	0.8588158	2016-Jan	1.4426079
1998-May	0.7425296	2017-Dec	1.3935021
2011-Jan	0.7275272	2002-Dec	1.3756311
2013-Feb	0.7197388	2012-Feb	1.3711752
1988-Mar	0.6946244	2018-Apr	1.3443730
1989-Mar	0.6749514	2019-Dec	1.2969429
2008-Feb	0.5965350	1998-Mar	1.2873638
1983-Apr	0.4686982	2014-Dec	1.2524483
$\frac{1303-\text{Hpr}}{2012-\text{Jan}}$	0.4359160	$\frac{2014\text{-Dec}}{2015\text{-Apr}}$	1.1816271
1984-May	0.4327731	$\frac{2010\text{-Apr}}{2010\text{-Mar}}$	1.0104053
1990-Mar	0.4291392	$\frac{2010\text{-Mar}}{2005\text{-Apr}}$	0.9998038
1999-Mar	0.4243016	1992-Mar	0.9603274
2017-May	0.3694625	2012-Jan	0.9513730
1995-Mar	0.3639772	$\frac{2012-3an}{2015-Dec}$	0.9495021
2006-Mar	0.3094610	1994-Feb	0.9424445
1983-Mar	0.3094010	1984-Feb 1988-Mar	0.9424445
2015-Apr	0.2980183	2020-Dec	0.9421381
1996-Mar	0.2642276	2020-Dec 2002-Apr	0.8622117
$\frac{1996\text{-Mar}}{1985\text{-Mar}}$	0.2042270	2002-Apr 2010-Dec	0.8594268
1905-Mai 1996-Feb	0.2330344	1989-Feb	0.8394208
1990-Feb 1998-Apr	0.2241210	2009-Apr	0.8288892
2017-Mar	0.2089487	2009-Apr 2007-Dec	0.828892
1989-Feb	0.1059137	2007-Dec 2006-Dec	0.8079440
2015-Mar	0.1038123	2000-Dec 2020-Mar	0.8021381
1994-May	0.0997800	1990-Apr	0.8014173
$\frac{1994\text{-May}}{2001\text{-May}}$	0.0104010	1990-Apr 1 2009-Jan	0.7698875
1994-Apr	$\frac{0.0668837}{0.0422137}3$	$\frac{1^{2009-3an}}{2015-Mar}$	0.7098873
			0.7379514
1984-Apr	0.0362129	2008-Dec	
1981-Sep	0.0000000	1986-Apr 2016 Nov	0.7006634
LUXILLICT		ALL NOT	UDXX3/17/1

 $\verb|\end{table}|$ 

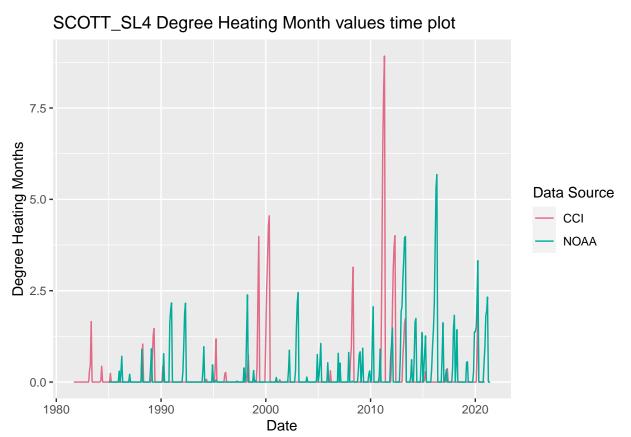


#### SCOTT\_SL4 Degree Heating Months Time Series

 $\label{table} $$ \operatorname{CCI (left) and NOAA (right)} $$ \operatorname{CCI (left) and NOAA (right)} $$$ 

Date	DHM value	Date	DHM value
2011-May	8.9216712	2016-May	5.6795685
2011-Apr	7.9922101	2016-Apr	5.3197732
2011-Mar	6.3379939	2013-May	3.9826668
2000-May	4.5487244	2013-Apr	3.9548070
2000-Apr	4.2786143	2016-Mar	3.6815370
2012-May	4.0057916	2013-Mar	3.3265709
1999-May	3.9830644	2020-Apr	3.3217565
2012-Apr	3.7172991	2013-Feb	2.8335498
2000-Mar	3.3710665	2003-Feb	2.4512818
2011-Feb	3.3536937	1998-Apr	2.3854911
2008-May	3.1441705	2021-Mar	2.3251462
2012-Mar	3.0750824	2020-Mar	2.2458537
2000-Feb	2.5996668	2003-Jan	2.1657837
1999-Apr	2.3861819	1991-Jan	2.1655902
2008-Apr	2.3421272	1992-May	2.1594526
2012-Feb	1.9565885	2016-Feb	2.1407740
$\frac{2012\text{-}\text{Feb}}{2020\text{-}\text{Apr}}$	1.9366954	2010-Feb 2010-Apr	2.0613482
$\frac{2020\text{-Apr}}{2013\text{-May}}$	1.7396613	$\frac{2010\text{-Apr}}{2013\text{-Jan}}$	$\frac{2.0013482}{2.0598375}$
$\frac{2015\text{-May}}{1983\text{-May}}$	1.7590015	1990-Dec	1.9851497
2013-Apr	1.6147134	2021-Feb	1.9627702
1989-May	1.4663243	2012-Dec	1.9352035
2000-Jan	1.3162369	1992-Apr	1.8886895
1989-Apr	1.2778330	2018-Jan	1.8260095
1995-Apr	1.1815256	2021-Jan	1.8065579
2013-Mar	1.0701682	2014-May	1.7391816
1988-Apr	1.0421725	2014-Apr	1.6322895
2008-Mar	0.9485789	2016-Dec	1.6227519
2020-Mar	0.8588158	1990-Nov	1.6189028
1998-May	0.7425296	2020-Feb	1.5060584
2011-Jan	0.7275272	2012-Feb	1.4821667
2013-Feb	0.7197388	2017-Dec	1.4797626
1988-Mar	0.6946244	2002-Dec	1.4650207
1989-Mar	0.6749514	2018-Apr	1.4315906
2008-Feb	0.5965350	2016-Jan	1.4235149
1983-Apr	0.4686982	2020-Jan	1.3715579
2012-Jan	0.4359160	2019-Dec	1.3698271
1984-May	0.4327731	2014-Dec	1.3556658
1990-Mar	0.4291392	1998-Mar	1.2885883
1999-Mar	0.4243016	2015-Apr	1.2644980
2017-May	0.3694625	2010-Mar	1.1064454
1995-Mar	0.3639772	2005-Apr	1.0553067
2006-Mar	0.3094610	2012-Jan	1.0224938
1983-Mar	0.2988183	1992-Mar	0.9961200
2015-Apr	0.2890034	2020-Dec	0.9706336
1996-Mar	0.2642276	1994-Feb	0.9677127
1985-Mar	0.2336544	2015-Dec	0.9559777
1996-Feb	0.2241216	2009-Apr	0.9265798
1998-Apr	0.2085487	1989-Feb	0.9115721
$\frac{1990 \text{ Apr}}{2017\text{-Mar}}$	0.1059137	2010-Dec	0.9029669
1989-Feb	0.1058123	1988-Mar	0.8949566
$\frac{1909-\text{Feb}}{2015-\text{Mar}}$	0.1038123	2002-Apr	0.8697519
1994-May	0.0997800	2002-Apr 2009-Jan	0.8097319
	0.0104010	$\frac{2009\text{-Jan}}{\sqrt{2007\text{-Dec}}}$	0.8273044
2001-May	0.0668837 3	4 2007-Dec	
1994-Apr	0.0422137	2015-Mar	0.8015952
1984-Apr	0.0362129	2006-Dec	0.7894727
1981-Sep	0.0000000	2016-Nov	0.7845695
1081 Oct	0.000000	1000 Apr	0.7766766

 $\verb|\end{table}|$ 

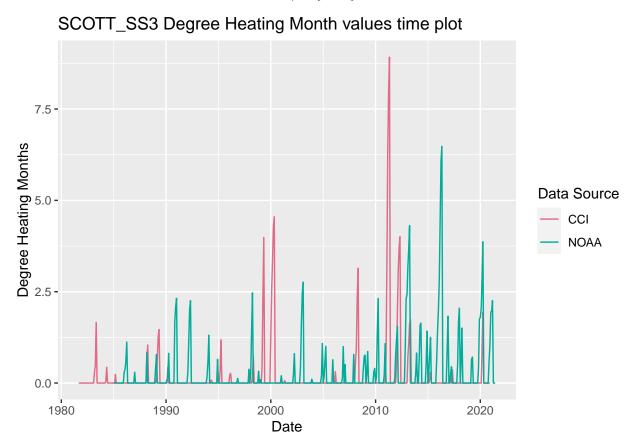


### SCOTT\_SS3 Degree Heating Months Time Series

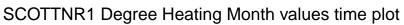
 $\label{table} $$ \operatorname{CCI (left) and NOAA (right)} $$ \operatorname{CCI (left) and NOAA (right)} $$$ 

- D +	DIDI	- D	DIDI
Date	DHM value	Date	DHM value
2011-May	8.9216712	2016-May	6.4767806
2011-Apr	7.9922101	2016-Apr	6.0942372
2011-Mar	6.3379939	2016-Mar	4.4121776
2000-May	4.5487244	2013-Apr	4.3079664
2000-Apr	4.2786143	2020-Apr	3.8639502
2012-May	4.0057916	2013-Mar	3.6632402
1999-May	3.9830644	2013-Feb	3.1955354
2012-Apr	3.7172991	2020-Mar	2.8405573
2000-Mar	3.3710665	2016-Feb	2.8257632
2011-Feb	3.3536937	2003-Feb	2.7643427
2008-May	3.1441705	1998-Apr	2.4671671
2012-Mar	3.0750824	2003-Jan	2.4544260
2000-Feb	2.5996668	2013-Jan	2.4174045
1999-Apr	2.3861819	1991-Jan	2.3191249
2008-Apr	2.3421272	2010-Apr	2.3139029
2012-Feb	1.9565885	2012-Dec	2.3113127
2020-Apr	1.9366954	2021-Mar	2.2571081
2013-May	1.7396613	1992-May	2.2554281
1983-May	1.6568706	1990-Dec	2.0781944
2013-Apr	1.6147134	2018-Jan	2.0486625
1989-May	1.4663243	2020-Feb	2.0447881
2000-Jan	1.3162369	1992-Apr	2.0212717
1989-Apr	1.2778330	2016-Jan	2.0045658
1995-Apr	1.1815256	2021-Feb	1.9748872
2013-Mar	1.0701682	2021-Jan	1.9438991
1988-Apr	1.0421725	2016-Dec	1.8314094
2008-Mar	0.9485789	2020-Jan	1.7970389
2020-Mar	0.8588158	2019-Dec	1.7483664
1998-May	0.7425296	1990-Nov	1.6933929
2011-Jan	0.7275272	2017-Dec	1.6596675
2013-Feb	0.7197388	2014-May	1.6426410
1988-Mar	0.6946244	2002-Dec	1.5909148
1989-Mar	0.6749514	2014-Apr	1.5765492
2008-Feb	0.5965350	2012-Feb	1.5515975
1983-Apr	0.4686982	2012-1 co 2018-Apr	1.5067213
2012-Jan	0.4359160	2014-Dec	1.4243772
$\frac{2012-3an}{1984-May}$	0.4327731	1998-Mar	1.4191076
1904-May 1990-Mar	0.4327731	2015-Dec	1.3975062
1990-Mar 1999-Mar	0.4291392	$\frac{2015\text{-Dec}}{2010\text{-Mar}}$	1.3391767
2017-May	0.4245010 $0.3694625$	1994-Feb	1.3096694
1995-Mar	0.3639772		
		2015-Apr	1.2488031
2006-Mar	0.3094610	2012-Jan	1.1724690
1983-Mar	0.2988183	1992-Mar	1.1378788
2015-Apr	0.2890034	1986-Apr	1.1228911
1996-Mar	0.2642276	2004-Dec	1.0841514
1985-Mar	0.2336544	2010-Dec	1.0799578
1996-Feb	0.2241216	2020-Dec	1.0549041
1998-Apr	0.2085487	2005-Apr	1.0067823
2017-Mar	0.1059137	2006-Dec	0.9981406
1989-Feb	0.1058123	2012-Nov	0.9400596
2015-Mar	0.0997866	2016-Nov	0.9330596
1994-May	0.0784518	2009-Apr	0.8624739
2001-May	0.0668837 3	$7\frac{1988-Mar}{2012 D}$	0.8360918
1994-Apr	0.0422137	2013-Dec	0.8222266
1984-Apr	0.0362129	1990-Apr	0.8118161
1981-Sep	0.0000000	2002-Apr	0.8056030
1081 Oct	0.0000000	2007 Doc	0.7835119

 $\verb|\end{table}|$ 



# SCOTTNR1 Degree Heating Months Time Series



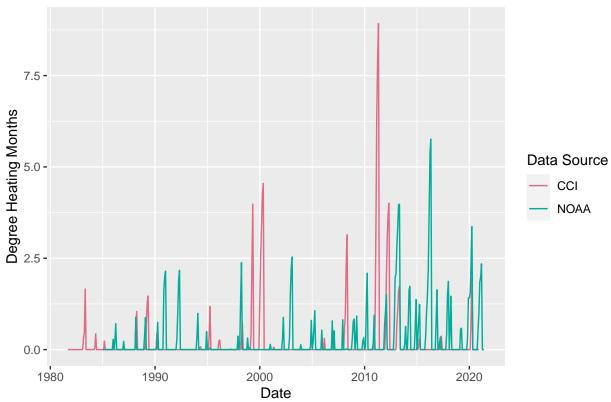
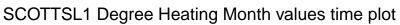


Table 5: Degree Heating Month values in SCOTTNR1 from CCI (left) and NOAA (right)

Date	DHM value	Date	DHM value
$\frac{\text{Date}}{2011\text{-May}}$	8.9216712	$\frac{\text{Date}}{2016\text{-May}}$	5.7619588
$\frac{2011\text{-May}}{2011\text{-Apr}}$	7.9922101	$\frac{2016-May}{2016-Apr}$	5.7019388
$\frac{2011\text{-Apr}}{2011\text{-Mar}}$	6.3379939	$\frac{2010\text{-Apr}}{2013\text{-May}}$	3.9777275
$\frac{2011-\text{Mar}}{2000-\text{May}}$	4.5487244	2013-May 2013-Apr	3.9671919
$\frac{2000\text{-May}}{2000\text{-Apr}}$	4.3487244 4.2786143	$\frac{2015\text{-Apr}}{2016\text{-Mar}}$	3.7555866
$\frac{2000\text{-Apr}}{2012\text{-May}}$	4.2750145		3.3660940
1999-May	3.9830644	2020-Apr 2013-Mar	3.3371510
$\frac{1999\text{-May}}{2012\text{-Apr}}$	3.7172991	2013-Mai 2013-Feb	2.8424218
$\frac{2012\text{-Apr}}{2000\text{-Mar}}$	3.3710665	2013-Feb 2003-Feb	2.5365232
2000-Mar 2011-Feb	3.3536937		2.3789869
		$\frac{1998-\mathrm{Apr}}{2021-\mathrm{Mar}}$	2.3466963
2008-May 2012-Mar	3.1441705	$\frac{2021\text{-Mar}}{2020\text{-Mar}}$	2.3400903
2012-Mar 2000-Feb	3.0750824	2020-Mar 2003-Jan	2.2945804 2.2454347
	2.5996668	$\frac{2003\text{-Jan}}{2016\text{-Feb}}$	
1999-Apr	2.3861819		2.2037607
2008-Apr	2.3421272	1992-May	2.1683918
2012-Feb	1.9565885	1991-Jan	2.1458110
2020-Apr	1.9366954	2010-Apr	2.0918863
2013-May	1.7396613	2013-Jan 2021-Feb	2.0770476 1.9922897
1983-May	1.6568706		
2013-Apr	1.6147134	1990-Dec 2012-Dec	1.9855980 1.9661894
1989-May	1.4663243		
2000-Jan	1.3162369	1992-Apr	1.8997917
1989-Apr	1.2778330	2018-Jan	1.8671873
1995-Apr	1.1815256	2021-Jan	1.8490583
2013-Mar	1.0701682	2014-May	1.7332734
1988-Apr	1.0421725	2016-Dec	1.6361787
2008-Mar	0.9485789	2014-Apr	1.6301572
2020-Mar	0.8588158	1990-Nov	1.6157076
1998-May	0.7425296	2020-Feb	1.5425605
2011-Jan	0.7275272	2002-Dec	1.5339313
$\frac{2013\text{-Feb}}{1988\text{-Mar}}$	0.7197388	2012-Feb 2017-Dec	1.5116347 1.5069744
$\frac{1988-Mar}{1989-Mar}$	0.6946244	2017-Dec 2016-Jan	1.4808002
	$\begin{array}{r} 0.6749514 \\ \hline 0.5965350 \end{array}$		
2008-Feb		2018-Apr	1.4612754
1983-Apr	0.4686982	2020-Jan	1.4127035
2012-Jan	0.4359160	2019-Dec	1.4105550
1984-May	0.4327731	2014-Dec	1.3696733
1990-Mar	0.4291392	1998-Mar	1.2916126
1999-Mar	0.4243016	$\frac{2015\text{-Apr}}{2010\text{-Mar}}$	1.2367135
2017-May	0.3694625		1.1378453
1995-Mar	$\begin{array}{r} 0.3639772 \\ \hline 0.3094610 \end{array}$	$\frac{2005\text{-Apr}}{2012\text{-Jan}}$	$\frac{1.0678801}{1.0472949}$
2006-Mar			
1983-Mar	0.2988183	1992-Mar	1.0127508
$\frac{2015\text{-Apr}}{1996\text{-Mar}}$	0.2890034	$\frac{2015\text{-Dec}}{2020\text{-Dec}}$	0.9983292
	0.2642276	1994-Feb	0.9959421
1985-Mar	0.2336544		0.9919467
1996-Feb	0.2241216	2010-Dec	0.9384690
1998-Apr	0.2085487	2009-Apr	0.9176195
2017-Mar	0.1059137	1988-Mar	0.8876323
1989-Feb	0.1058123	2002-Apr	0.8798238
2015-Mar	0.0997866	1989-Feb	0.8781679
1994-May	0.0784518 4		0.8344239
2001-May	0.0668837	2007-Dec	0.8134388
1994-Apr	0.0422137	2016-Nov	0.8037076
1984-Apr	0.0362129	2004-Dec	0.7991249

# SCOTTSL1 Degree Heating Months Time Series



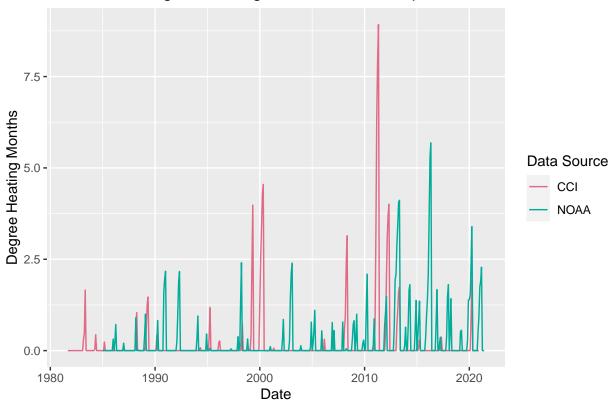
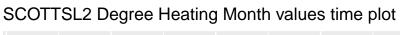


Table 6: Degree Heating Month values in SCOTTSL1 from CCI (left) and NOAA (right)

- D /	DIIM 1	- D /	DIIM 1
Date	DHM value	Date	DHM value
2011-May	8.9216712	2016-May	5.6842482
2011-Apr	7.9922101	2016-Apr	5.3105778
2011-Mar	6.3379939	2013-May	4.1132273
2000-May	4.5487244	2013-Apr	4.0592343
2000-Apr	4.2786143	2016-Mar	3.6621654
2012-May	4.0057916	2013-Mar	3.4071553
1999-May	3.9830644	2020-Apr	3.3922926
2012-Apr	3.7172991	2013-Feb	2.8950978
2000-Mar	3.3710665	1998-Apr	2.4071341
2011-Feb	3.3536937	2003-Feb	2.3953490
2008-May	3.1441705	2020-Mar	2.2932136
2012-Mar	3.0750824	2021-Mar	2.2819487
2000-Feb	2.5996668	1991-Jan	2.1702800
1999-Apr	2.3861819	1992-May	2.1640664
2008-Apr	2.3421272	2003-Jan	2.1171510
2012-Feb	1.9565885	2016-Feb	2.1146241
2020-Apr	1.9366954	2010-Apr	2.0920741
2013-May	1.7396613	2013-Jan	2.0908284
1983-May	1.6568706	1990-Dec	1.9672548
2013-Apr	1.6147134	2012-Dec	1.9397386
1989-May	1.4663243	2021-Feb	1.9037622
2000-Jan	1.3162369	1992-Apr	1.8836218
1989-Apr	1.2778330	2018-Jan	1.8083122
1995-Apr	1.1815256	2014-May	1.8031617
2013-Mar	1.0701682	2021-Jan	1.7348499
1988-Apr	1.0421725	2016-Dec	1.6692548
2008-Mar	0.9485789	2014-Apr	1.6659429
2020-Mar	0.8588158	1990-Nov	1.6187457
1998-May	0.7425296	2020-Feb	1.5414787
2011-Jan	0.7275272	2012-Feb	1.4885195
2013-Feb	0.7197388	2017-Dec	1.4665773
1988-Mar	0.6946244	2002-Dec	1.4331580
1989-Mar	0.6749514	2018-Apr	1.4207924
2008-Feb	0.5965350	2016-Jan	1.3949359
1983-Apr	0.4686982	2020-Jan	1.3893768
2012-Jan	0.4359160	2019-Dec	1.3818354
1984-May	0.4327731	2014-Dec	1.3759429
1990-Mar	0.4291392	2015-Apr	1.3538576
1999-Mar	0.4243016	1998-Mar	1.2980551
2017-May	0.3694625	2010-Mar	1.1269952
1995-Mar	0.3639772	2005-Apr	1.1005411
2006-Mar	0.3094610	2012-Jan	1.0357279
1983-Mar	0.2988183	1989-Feb	0.9957970
2015-Apr	0.2890034	2009-Apr	0.9955666
1996-Mar	0.2642276	1992-Mar	0.9792095
1985-Mar	0.2336544	1994-Feb	0.9450712
1996-Feb	0.2241216	2015-Dec	0.9367494
1998-Apr	0.2085487	2020-Dec	0.9308569
2017-Mar	0.1059137	1988-Mar	0.8920575
1989-Feb	0.1058123	2010-Dec	0.8678139
2015-Mar	0.0997866	2002-Apr	0.8527386
1994-May	0.0784518 4		0.8477786
2001-May	0.0668837	1990-Apr	0.8234483
1994-Apr	0.0422137	2009-Jan	0.8179574
1984-Apr	0.0362129	2016-Nov	0.8107457

## SCOTTSL2 Degree Heating Months Time Series



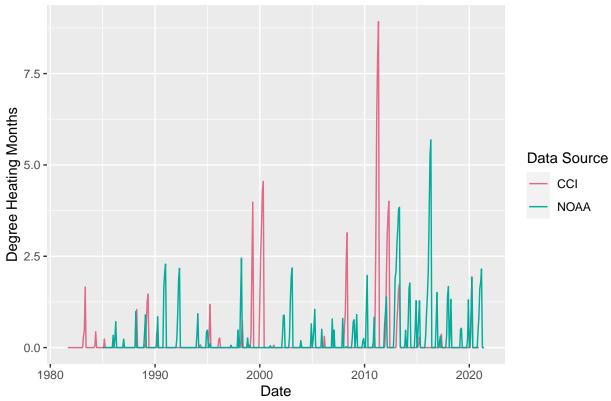
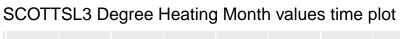


Table 7: Degree Heating Month values in SCOTTSL2 from CCI (left) and NOAA (right)

Date	DHM value	Doto	DHM value
$\frac{\text{Date}}{2011\text{-May}}$	8.9216712	$\frac{\text{Date}}{2016\text{-May}}$	5.6846977
$\frac{2011\text{-May}}{2011\text{-Apr}}$	7.9922101	$\frac{2016\text{-May}}{2016\text{-Apr}}$	5.2700967
$\frac{2011\text{-Apr}}{2011\text{-Mar}}$	6.3379939	2010-Apr 2013-May	3.8401065
$\frac{2011\text{-Mar}}{2000\text{-May}}$	4.5487244	$\frac{2013\text{-May}}{2013\text{-Apr}}$	3.7964734
$\frac{2000\text{-May}}{2000\text{-Apr}}$	4.2786143	$\frac{2015\text{-Apr}}{2016\text{-Mar}}$	3.6049044
$\frac{2000\text{-Apr}}{2012\text{-May}}$	4.2750145	2010-Mar 2013-Mar	3.2246144
$\frac{2012\text{-May}}{1999\text{-May}}$	3.9830644	2013-Mai 2013-Feb	2.8006586
$\frac{1999-\text{May}}{2012-\text{Apr}}$	3.7172991	1998-Apr	2.4463557
$\frac{2012\text{-Apr}}{2000\text{-Mar}}$	3.3710665	1990-Apr 1991-Jan	2.2838457
2011-Feb	3.3536937	2003-Feb	2.1806341
$\frac{2011-\text{Feb}}{2008-\text{May}}$	3.1441705	1992-May	2.1694663
$\frac{2000\text{-May}}{2012\text{-Mar}}$	3.0750824	2021-Mar	2.1513010
2000-Feb	2.5996668	2016-Feb	2.1022390
1999-Apr	2.3861819	2010-Feb 2013-Jan	2.0809425
$\frac{1999-\text{Apr}}{2008-\text{Apr}}$	2.3421272	1990-Dec	2.0392448
$\frac{2000-\text{Kpr}}{2012-\text{Feb}}$	1.9565885	2010-Apr	1.9745674
$\frac{2012\text{-Feb}}{2020\text{-Apr}}$	1.9366954	$\frac{2010\text{-Apr}}{2003\text{-Jan}}$	1.9530608
$\frac{2020\text{-Apr}}{2013\text{-May}}$	1.7396613	$\frac{2009-3an}{2020-Apr}$	1.9178124
1983-May	1.6568706	2012-Dec	1.8985997
2013-Apr	1.6147134	1992-Apr	1.8771235
$\frac{2019-\text{Mpr}}{1989-\text{May}}$	1.4663243	2021-Feb	1.7957324
$\frac{1000 \text{ May}}{2000 \text{-Jan}}$	1.3162369	2014-May	1.7687275
1989-Apr	1.2778330	2018-Jan	1.6732328
1995-Apr	1.1815256	1990-Nov	1.6581923
$\frac{1000 \mathrm{Mpr}}{2013\mathrm{-Mar}}$	1.0701682	2014-Apr	1.6312233
1988-Apr	1.0421725	2021-Jan	1.6195877
$\frac{1000 \mathrm{Mpr}}{2008\mathrm{-Mar}}$	0.9485789	2016-Dec	1.5084491
$\frac{2020\text{-Mar}}{2020\text{-Mar}}$	0.8588158	2016-Jan	1.4319318
1998-May	0.7425296	2012-Feb	1.3896269
2011-Jan	0.7275272	2017-Dec	1.3808900
2013-Feb	0.7197388	2018-Apr	1.3194706
1988-Mar	0.6946244	2019-Dec	1.3080835
1989-Mar	0.6749514	1998-Mar	1.3074968
2008-Feb	0.5965350	2002-Dec	1.2997502
1983-Apr	0.4686982	2014-Dec	1.2852986
2012-Jan	0.4359160	2015-Apr	1.2823250
1984-May	0.4327731	2005-Apr	1.0459725
1990-Mar	0.4291392	2010-Mar	1.0313751
1999-Mar	0.4243016	1988-Mar	0.9894396
2017-May	0.3694625	2012-Jan	0.9789748
1995-Mar	0.3639772	1992-Mar	0.9555978
2006-Mar	0.3094610	1994-Feb	0.9266788
1983-Mar	0.2988183	2015-Dec	0.9215244
2015-Apr	0.2890034	2009-Apr	0.9026534
1996-Mar	0.2642276	1989-Feb	0.8996511
1985-Mar	0.2336544	2002-May	0.8880931
1996-Feb	0.2241216	2002-Apr	0.8770405
1998-Apr	0.2085487	2020-Dec	0.8495029
2017-Mar	0.1059137	2020-Mar	0.8456201
1989-Feb	0.1058123	1990-Apr	0.8449868
2015-Mar	0.0997866	2010-Dec	0.8309007
1994-May	0.0784518 4		0.7981493
2001-May	0.0668837	2015-Mar	0.7891327
1994-Apr	0.0422137	2006-Dec	0.7829880
1984-Apr	0.0362129	2009-Jan	0.7622758
1996-Feb 1998-Apr 2017-Mar 1989-Feb 2015-Mar 1994-May 2001-May 1994-Apr	$\begin{array}{c} 0.2241216 \\ 0.2085487 \\ 0.1059137 \\ 0.1058123 \\ 0.0997866 \\ 0.0784518 \\ 4 \\ 0.0668837 \\ 0.0422137 \end{array}$	2002-Apr 2020-Dec 2020-Mar 1990-Apr 2010-Dec 4 2007-Dec 2015-Mar 2006-Dec	0.8770405 0.8495029 0.8456201 0.8449868 0.8309007 0.7981493 0.7891327 0.7829880

# SCOTTSL3 Degree Heating Months Time Series



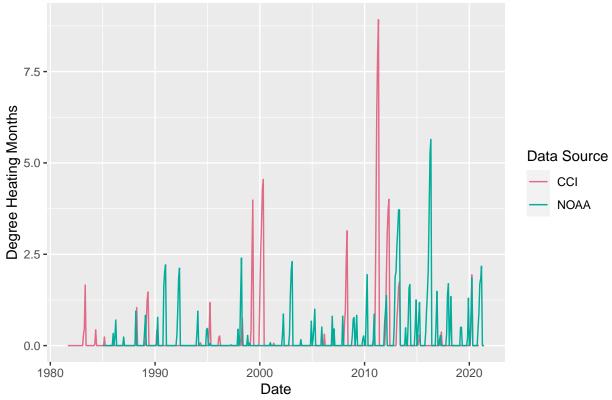
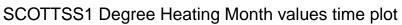


Table 8: Degree Heating Month values in SCOTTSL3 from CCI (left) and NOAA (right)

Date	DHM value	Date	DHM value
2011-May	8.9216712	2016-May	5.6440170
$\frac{2011-\text{May}}{2011-\text{Apr}}$	7.9922101	2016-May 2016-Apr	5.2728466
$\frac{2011\text{-Mpr}}{2011\text{-Mar}}$	6.3379939	2010-Apr 2013-May	3.7172995
$\frac{2011\text{-Mar}}{2000\text{-May}}$	4.5487244	$\frac{2013\text{-May}}{2013\text{-Apr}}$	3.7090323
$\frac{2000\text{-May}}{2000\text{-Apr}}$	4.2786143	$\frac{2016\text{-Mpr}}{2016\text{-Mar}}$	3.6348375
$\frac{2000\text{-Mpr}}{2012\text{-May}}$	4.0057916	2010-Mar	3.1490232
1999-May	3.9830644	2013-Wai 2013-Feb	2.7172077
$\frac{1939-\text{May}}{2012-\text{Apr}}$	3.7172991	1998-Apr	2.3973729
$\frac{2012\text{-Mpr}}{2000\text{-Mar}}$	3.3710665	2003-Feb	2.3024189
2011-Feb	3.3536937	1991-Jan	2.2112854
2008-May	3.1441705	2021-Mar	2.1741346
$\frac{2000 \text{ May}}{2012 \text{-Mar}}$	3.0750824	2016-Feb	2.1268929
2000-Feb	2.5996668	1992-May	2.1183134
1999-Apr	2.3861819	2003-Jan	2.0571241
$\frac{1999 \mathrm{Apr}}{2008 - \mathrm{Apr}}$	2.3421272	1990-Dec	2.0210827
$\frac{2000-\text{Kpr}}{2012-\text{Feb}}$	1.9565885	2013-Jan	2.0179843
$\frac{2012\text{-Feb}}{2020\text{-Apr}}$	1.9366954	$\frac{2013-3an}{2010-Apr}$	1.9427477
$\frac{2020\text{-Apr}}{2013\text{-May}}$	1.7396613	$\frac{2010 - \text{Apr}}{2012 - \text{Dec}}$	1.8835881
$\frac{2013\text{-May}}{1983\text{-May}}$	1.6568706	$\frac{2012\text{-Dec}}{1992\text{-Apr}}$	1.8513365
$\frac{1303\text{-May}}{2013\text{-Apr}}$	1.6147134	2020-Apr	1.8467600
1989-May	1.4663243	2020-Rpi 2021-Feb	1.8358674
$\frac{1303\text{-Way}}{2000\text{-Jan}}$	1.3162369	2018-Jan	1.6949950
1989-Apr	1.2778330	$\frac{2010\text{-Jan}}{2021\text{-Jan}}$	1.6877155
1995-Apr	1.1815256	2014-May	1.6748553
$\frac{1939-\text{Mpr}}{2013-\text{Mar}}$	1.0701682	1990-Nov	1.6370091
1988-Apr	1.0421725	2014-Apr	1.5852978
$\frac{1900-\text{Mpr}}{2008-\text{Mar}}$	0.9485789	2014-Apr 2016-Dec	1.4866096
$\frac{2000\text{-Mar}}{2020\text{-Mar}}$	0.8588158	2016-Jan	1.4426079
1998-May	0.7425296	$\frac{2010-5an}{2017-Dec}$	1.3935021
$\frac{1930 \text{ Way}}{2011 \text{-Jan}}$	0.7275272	2002-Dec	1.3756311
2013-Feb	0.7197388	2012-Feb	1.3711752
1988-Mar	0.6946244	$\frac{2012 - 165}{2018 - Apr}$	1.3443730
1989-Mar	0.6749514	2019-Dec	1.2969429
2008-Feb	0.5965350	1998-Mar	1.2873638
1983-Apr	0.4686982	2014-Dec	1.2524483
2012-Jan	0.4359160	$\frac{2011 \text{ Dec}}{2015\text{-Apr}}$	1.1816271
1984-May	0.4327731	$\frac{2010 \text{ Hpr}}{2010 \text{-Mar}}$	1.0104053
1990-Mar	0.4291392	2005-Apr	0.9998038
1999-Mar	0.4243016	1992-Mar	0.9603274
2017-May	0.3694625	2012-Jan	0.9513730
1995-Mar	0.3639772	2015-Dec	0.9495021
2006-Mar	0.3094610	1994-Feb	0.9424445
1983-Mar	0.2988183	1988-Mar	0.9421381
$\frac{1905 \text{ Mar}}{2015 \text{-Apr}}$	0.2890034	2020-Dec	0.8888031
1996-Mar	0.2642276	2002-Apr	0.8622117
1985-Mar	0.2336544	2010-Dec	0.8594268
1996-Feb	0.2241216	1989-Feb	0.8294606
1998-Apr	0.2085487	2009-Apr	0.8288892
$\frac{1930 \mathrm{Mpr}}{2017 \cdot \mathrm{Mar}}$	0.1059137	2007-Dec	0.8079446
1989-Feb	0.1058123	2007-Dec 2006-Dec	0.8021381
$\frac{1303-165}{2015-Mar}$	0.1033123	2020-Mar	0.8014175
1994-May	0.0784518 4		0.7737494
2001-May	0.0668837	2009-Jan	0.7698875
1994-Apr	0.0422137	$\frac{2005-5411}{2015-Mar}$	0.7379514
1984-Apr	0.0362129	2015-Mai 2008-Dec	0.7258139
100 r-11p1	0.0002120	2000-D00	0.1200100

# SCOTTSS1 Degree Heating Months Time Series



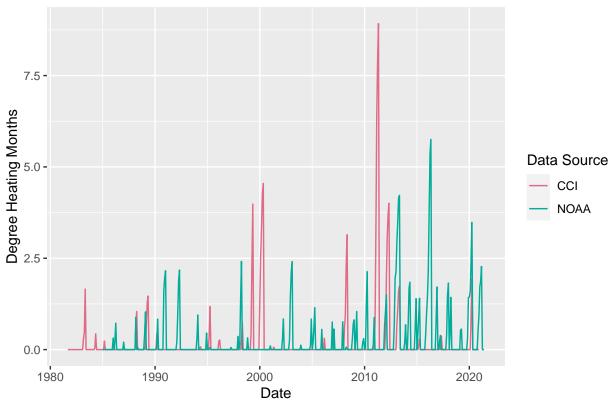
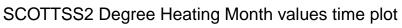


Table 9: Degree Heating Month values in SCOTTSS1 from CCI (left) and NOAA (right)

	1 D	DIIM 1
Date DHM v		DHM value
2011-May 8.9210	<u> </u>	5.7525065
2011-Apr 7.9925		5.3674486
2011-Mar 6.3379	v	4.2217140
2000-May 4.548'		4.1566562
2000-Apr 4.2780		3.7113585
2012-May 4.005'		3.4838993
1999-May 3.9830	1	3.4818847
2012-Apr 3.7172		2.9478737
2000-Mar 3.3710		2.4137782
2011-Feb 3.3530	5937 2003-Feb	2.4089735
2008-May 3.144	1705 2020-Mar	2.3664612
2012-Mar 3.0750	0824 2021-Mar	2.2752780
2000-Feb 2.5990	6668 1992-May	2.1757144
1999-Apr 2.386	1819 1991-Jan	2.1575608
2008-Apr 2.342	1272 2016-Feb	2.1498489
2012-Feb 1.956	5885 2010-Apr	2.1346261
2020-Apr 1.9360		2.1259264
2013-May 1.739		2.1248834
1983-May 1.6568		1.9599007
2013-Apr 1.614'		1.9534706
1989-May 1.4663		1.8900113
2000-Jan 1.3165		1.8847362
1989-Apr 1.2778		1.8430232
1995-Apr 1.181		1.8213457
2013-Mar 1.070		1.7174318
1988-Apr 1.042		1.7140620
2008-Mar 0.948		1.6892556
2020-Mar 0.8588		1.6180902
1998-May 0.7428		1.5955968
2011-Jan 0.727		1.5007926
2013-Feb 0.719		1.4714491
1988-Mar 0.6940		1.4485352
1989-Mar 0.6749		1.4366791
2008-Feb 0.5968		1.4314814
1983-Apr 0.4680		1.4245244
2012-Jan 0.4359		1.4236898
1984-May 0.432'		1.4048926
1990-Mar 0.4291		1.3959760
1999-Mar 0.4243		1.3040213
2017-May 0.3694		1.1678693
1995-Mar 0.3639	*	1.1479994
2006-Mar 0.3094		1.0508404
1983-Mar 0.2988		1.0424706
2015-Apr 0.2890		1.0325928
1996-Mar 0.2649		0.9849211
1985-Mar 0.2330		0.9634706
1996-Feb 0.224		0.9469706
1998-Apr 0.208		0.9236642
2017-Mar 0.1059		0.8827998
1989-Feb 0.1058		0.8766749
2015-Mar 0.099'		0.8688024
1994-May 0.078	4518 <sup>48</sup> 2016-Nov	0.8464235
2001-May 0.0668	8837 2002-Apr	0.8381373
1994-Apr 0.0425	2137 2004-Dec	0.8362126
1984-Apr 0.0365	2129 1990-Apr	0.8338040

# SCOTTSS2 Degree Heating Months Time Series



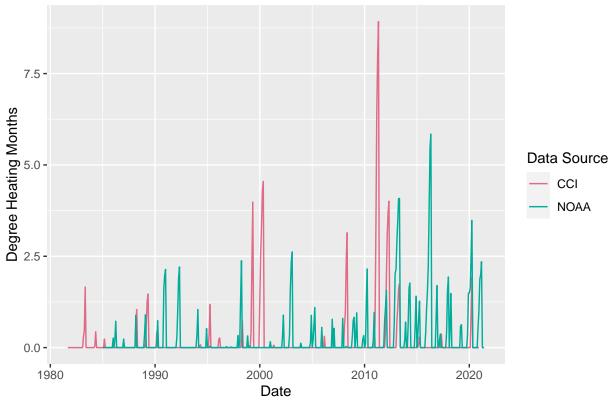


Table 10: Degree Heating Month values in SCOTTSS2 from CCI (left) and NOAA (right)

- D	DIII 1	- D /	DIII 1
Date	DHM value	Date	DHM value
2011-May	8.9216712	2016-May	5.8426428
2011-Apr	7.9922101	2016-Apr	5.4613214
2011-Mar	6.3379939	2013-May	4.0837202
2000-May	4.5487244	2013-Apr	4.0782053
2000-Apr	4.2786143	2016-Mar	3.8163334
2012-May	4.0057916	2020-Apr	3.4823941
1999-May	3.9830644	2013-Mar	3.4285506
2012-Apr	3.7172991	2013-Feb	2.9169067
2000-Mar	3.3710665	2003-Feb	2.6198929
2011-Feb	3.3536937	2020-Mar	2.4127394
2008-May	3.1441705	1998-Apr	2.3785769
2012-Mar	3.0750824	2021-Mar	2.3500806
2000-Feb	2.5996668	2003-Jan	2.3210715
1999-Apr	2.3861819	2016-Feb	2.2540444
2008-Apr	2.3421272	1992-May	2.2066261
2012-Feb	1.9565885	2010-Apr	2.1522244
2020-Apr	1.9366954	2013-Jan	2.1409425
2013-May	1.7396613	1991-Jan	2.1391361
1983-May	1.6568706	2012-Dec	2.0267179
2013-Apr	1.6147134	2021-Feb	1.9981141
1989-May	1.4663243	1990-Dec	1.9739438
2000-Jan	1.3162369	2018-Jan	1.9327597
1989-Apr	1.2778330	1992-Apr	1.9288532
1995-Apr	1.1815256	2021-Jan	1.8650070
2013-Mar	1.0701682	2014-May	1.7660178
1988-Apr	1.0421725	2016-Dec	1.6989653
2008-Mar	0.9485789	2014-Apr	1.6408255
2020-Mar	0.8588158	2020-Feb	1.6356116
1998-May	0.7425296	2002-Dec	1.6116857
2011-Jan	0.7275272	1990-Nov	1.6116547
2013-Feb	0.7197388	2012-Feb	1.5641389
1988-Mar	0.6946244	2017-Dec	1.5414384
1989-Mar	0.6749514	2016-Jan	1.5247920
2008-Feb	0.5965350	2020-Jan	1.4925662
1983-Apr	0.4686982	2019-Dec	1.4867287
2012-Jan	0.4359160	2018-Apr	1.4821803
1984-May	0.4327731	2014-Dec	1.4074169
1990-Mar	0.4291392	1998-Mar	1.2992556
1999-Mar	0.4243016	2015-Apr	1.2684709
2017-May	0.3694625	2010-Mar	1.1959030
1995-Mar	0.3639772	2005-Apr	1.0987213
2006-Mar	0.3094610	2012-Jan	1.0959210
1983-Mar	0.2988183	1994-Feb	1.0430539
2015-Apr	0.2890034	1992-Mar	1.0428651
1996-Mar	0.2642276	2015-Dec	1.0276642
1985-Mar	0.2336544	2020-Dec	1.0033631
1996-Feb	0.2241216	2010-Dec	0.9625459
1998-Apr	0.2085487	2009-Apr	0.9515567
2017-Mar	0.1059137	1989-Feb	0.8992786
1989-Feb	0.1058123	2002-Apr	0.8896749
2015-Mar	0.0997866	2004-Dec	0.8824384
1994-May	0.0784518 5	0 1988-Mar	0.8803536
2001-May	0.0668837	2016-Nov	0.8573213
1994-Apr	0.0422137	2009-Jan	0.8277490
1984-Apr	0.0362129	2007-Dec	0.7987407

# BUN05A Degree Heating Months Time Series

## BUN05A Degree Heating Month values time plot

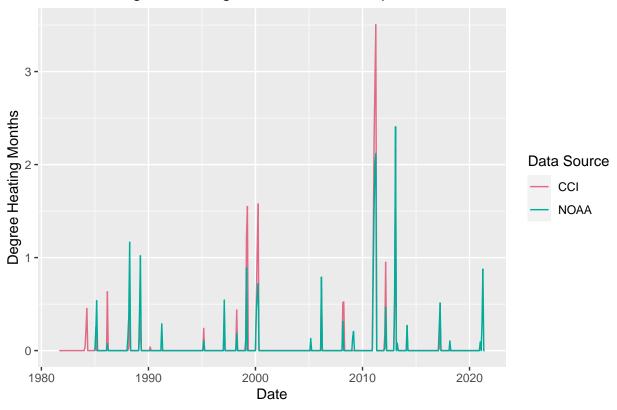


Table 11: Degree Heating Month values in BUN05A from CCI (left) and NOAA (right)

Date	DHM value	Date	DHM value
2011-Apr	3.5047295	2013-Feb	2.4075384
$\frac{2011\text{-Apr}}{2011\text{-Mar}}$	2.8765642	$\frac{2013\text{-Feb}}{2011\text{-Apr}}$	2.1200538
2011-Wai	2.2791442	$\frac{2011-\text{Mpr}}{2011-\text{Mar}}$	1.9959677
2011-Feb	2.1829070	2011-Mai 2011-Feb	1.5563978
$\frac{2019 \text{-} \text{Feb}}{2000 \text{-} \text{Apr}}$	1.5783603	1988-Apr	1.1652329
1999-Apr	1.5497903	1989-Apr	1.0202903
1999-Mar	1.2272922	1999-Mar	0.8892473
2011-Jan	1.1561260	$\frac{1939-\text{Mar}}{2021-\text{Apr}}$	0.8769785
$\frac{2011-3an}{2000-Mar}$	1.0768654	2021-Apr 2011-Jan	0.7973118
$\frac{2000\text{-Mar}}{2012\text{-Mar}}$	0.9503007	$\frac{2011-3an}{2006-Mar}$	0.7902151
$\frac{2012\text{-Mai}}{1988\text{-Apr}}$	0.7673450	2000-Mar 2000-Apr	0.7211617
$\frac{1900-\text{Mpr}}{2006-\text{Mar}}$	0.6764546	2013-Jan	0.6166667
1986-Mar	0.6332230	$\frac{2019-3an}{2000-Mar}$	0.5814090
2000-Feb	0.5765425	1997-Feb	0.5433717
2008-Apr	0.5239251	1985-Mar	0.5376536
$\frac{2008\text{-Apr}}{2008\text{-Mar}}$	0.5170977	2017-Apr	0.5120430
1984-Apr	0.4531066	$\frac{2017-\text{Apr}}{2012-\text{Mar}}$	0.3120430
1984-Apr 1998-Apr	0.4351000 $0.4364945$	2000-Feb	0.4039918 $0.4492584$
$\frac{1998-Apr}{2013-Jan}$	0.4304945 $0.4077434$	1989-Mar	$0.4492384 \\ \hline 0.3705376$
1997-Feb	0.3955206	1989-Mar	0.3654802
$\frac{1997-\text{Feb}}{2017-\text{Apr}}$	0.3664080	2008-Mar	0.3034802
$\frac{2017 - \text{Apr}}{1989 - \text{Apr}}$	0.3054080	$\frac{2008\text{-Mar}}{2021\text{-Mar}}$	0.3140800
1985-Feb	0.3233031	1991-Apr	0.2898923 $0.2877527$
1905-Feb 1995-Mar	0.2393563	$\frac{1991-\text{Apr}}{2014-\text{Mar}}$	0.2708602
1984-Mar	0.2393303	$\frac{2014\text{-Mar}}{2017\text{-Mar}}$	0.2703002
$\frac{1964\text{-Niai}}{2012\text{-Feb}}$	0.2209400	$\frac{2017\text{-Mar}}{2009\text{-Mar}}$	0.2279370
$\frac{2012\text{-}\text{Feb}}{2014\text{-}\text{Mar}}$	0.1748183	1985-Feb	0.2002390
1999-Feb	0.1331002	1998-Apr	0.1987289
1999-Feb 1989-Mar	0.1103191	1988-Feb	0.1523619
$\frac{1909-\text{Mar}}{2013-\text{Apr}}$	0.1038710	2009-Feb	0.1323019
1984-Feb	0.0318284	$\frac{2009\text{-}\text{Feb}}{2005\text{-}\text{Mar}}$	0.1308602
1984-Peb	0.0445183	1995-Mar	0.1098925
1990-Mar	0.0400007	$\frac{1999-\text{Mar}}{2018-\text{Mar}}$	0.1030323
$\frac{1990\text{-Mar}}{2017\text{-Mar}}$	0.0225791	2016-Mai 2021-Jan	0.1040800
1981-Sep	0.00223791	$\frac{2021-3an}{2013-Apr}$	0.0750860
1981-Sep 1981-Oct	0.0000000	1986-Mar	0.0730860
1981-Nov	0.0000000	2012-Feb	0.0302929
1981-Nov 1981-Dec	0.0000000	1985-Jan	0.0000000
1981-Dec 1982-Jan	0.0000000	1985-Jan 1985-Apr	0.0000000
$\frac{1982\text{-}5an}{1982\text{-}\text{Feb}}$	0.0000000	1985-May	0.0000000
1982-Mar	0.0000000	1985-Jun	0.0000000
1982-Apr	0.0000000	1985-Jul	0.0000000
1982-Apr 1982-May	0.0000000	1985-Aug	0.0000000
1982-Jun	0.0000000	1985-Sep	0.0000000
1982-Jul	0.0000000	1985-Oct	0.0000000
1982-Jul 1982-Aug	0.0000000	1985-Nov	0.0000000
1982-Aug 1982-Sep	0.0000000	1985-Nov 1985-Dec	0.0000000
1982-Sep 1982-Oct	0.0000000	1986-Jan	0.0000000
1982-Nov	0.0000000	1986-Feb	0.0000000
1982-Nov 1982-Dec	0.0000000	1986-Apr	0.0000000
1982-Dec 1983-Jan	0.0000000	1986-May	0.0000000
1983-Jan 1983-Feb	0.0000000 5		0.0000000
1983-Feb 1983-Mar	0.0000000	1986-Jul	0.0000000
1983-Mar 1983-Apr	0.0000000	1986-Jul 1986-Aug	0.0000000
	0.0000000	1986-Aug 1986-Sep	0.0000000
1983-May	0.0000000	1990-9eb	0.0000000

#### Bundegi Degree Heating Months Time Series

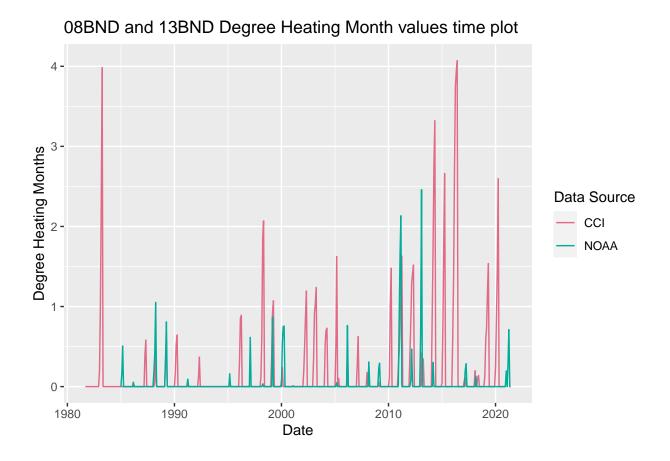


Table 12: Degree Heating Month values in 08BND and 13BND from CCI (left) and NOAA (right)

Date	DHM value	Date	DHM value
$\frac{\text{Date}}{2016\text{-Jun}}$	4.0709144	2013-Feb	2.4595161
1983-Apr	3.9839208	$\frac{2013\text{-Feb}}{2011\text{-Mar}}$	2.4393101 2.1338479
2016-May	3.9347101	2011-Mai 2011-Feb	1.6912673
$\frac{2016\text{-May}}{2016\text{-Apr}}$	3.7442817	1988-Apr	1.0514260
$\frac{2010\text{-Mpr}}{2014\text{-May}}$	3.3209593	2011-Jan	0.8809677
$\frac{2014\text{-May}}{2014\text{-Apr}}$	2.7898849	1999-Mar	0.8680645
$\frac{2014\text{-Mpr}}{2016\text{-Mar}}$	2.6890772	$\frac{1989-\text{Nar}}{1989-\text{Apr}}$	0.8083763
$\frac{2016\text{-Mar}}{2015\text{-Apr}}$	2.6610193	$\frac{1909-\text{Mpr}}{2006-\text{Mar}}$	0.7638710
$\frac{2010-\text{Apr}}{2020-\text{Apr}}$	2.5963338	2000-Mar 2000-Apr	0.7555261
$\frac{2020\text{-Mpr}}{1983\text{-Mar}}$	2.2733838	2000-Apr 2000-Mar	0.7496552
1998-May	2.0698542	2021-Apr	0.7115484
1998-Apr	1.8658770	2013-Jan	0.6406452
$\frac{1936 \text{ Apr}}{2015 \text{-Mar}}$	1.7704816	1997-Feb	0.6149424
$\frac{2016 \text{ Mar}}{2014 \text{-Mar}}$	1.7120120	2000-Feb	0.5535261
2011-Apr	1.6294489	1985-Mar	0.5067166
$\frac{2011-\text{Apr}}{2005-\text{Mar}}$	1.6245417	$\frac{1303-\text{Mar}}{2012-\text{Mar}}$	0.4686318
$\frac{2009\text{-Mar}}{2019\text{-May}}$	1.5374549	1988-Mar	0.4095551
$\frac{2013\text{-May}}{2012\text{-May}}$	1.5176929	2008-Mar	0.3080645
$\frac{2012\text{-Nray}}{2010\text{-Apr}}$	1.4792122	$\frac{2008\text{-Mar}}{2014\text{-Mar}}$	0.3019355
$\frac{2010\text{-Mpr}}{2020\text{-Mar}}$	1.4457954	1989-Mar	0.2948387
$\frac{2020\text{-Mar}}{2011\text{-Mar}}$	1.4379123	2009-Mar	0.2914286
$\frac{2011-\text{Mar}}{2012-\text{Apr}}$	1.4111337	$\frac{2003\text{-Mar}}{2017\text{-Apr}}$	0.2856452
$\frac{2012\text{-}Kpl}{2016\text{-}Feb}$	1.3928385	$\frac{2017-\text{Apr}}{2021-\text{Mar}}$	0.2796774
$\frac{2010\text{-}\text{Yeb}}{2012\text{-}\text{Mar}}$	1.2999305	2009-Feb	0.2252995
$\frac{2012\text{-Mar}}{2003\text{-Apr}}$	1.2385086	1988-Feb	0.1969744
$\frac{2003\text{-Mpr}}{2002\text{-May}}$	1.1936400	2017-Mar	0.1967742
$\frac{2002\text{-May}}{2019\text{-Apr}}$	1.1754154	2021-Jan	0.1961290
$\frac{2019-\text{Apr}}{1999-\text{Apr}}$	1.0720771	1985-Feb	0.1699424
$\frac{1999-\text{Mpr}}{2003-\text{Mar}}$	1.0369713	1995-Mar	0.1600000
1983-Feb	1.0229540	2018-Mar	0.1296774
$\frac{1900 \text{ Teb}}{2010 \text{-Mar}}$	0.9813421	1991-Apr	0.0938710
1999-Mar	0.9238743	2012-Feb	0.0776641
2003-Feb	0.9178300	1986-Mar	0.0551613
2014-Feb	0.9057763	2005-Mar	0.0487097
1996-Apr	0.8926295	1998-Apr	0.0345376
$\frac{1000 \mathrm{Apr}}{2002\mathrm{-Apr}}$	0.8854689	1985-Jan	0.0000000
2020-Feb	0.8631049	1985-Apr	0.0000000
1996-Mar	0.8490889	1985-May	0.0000000
2011-Feb	0.8084511	1985-Jun	0.0000000
2012-Feb	0.8069213	1985-Jul	0.0000000
2015-Feb	0.7968265	1985-Aug	0.0000000
$\frac{2010 \text{ Feb}}{2004\text{-Apr}}$	0.7297618	1985-Sep	0.0000000
$\frac{2001 \mathrm{Mpr}}{2019 \cdot \mathrm{Mar}}$	0.7285432	1985-Oct	0.0000000
$\frac{2013 \text{ Mar}}{2004 \text{-Mar}}$	0.6988920	1985-Nov	0.0000000
1990-Apr	0.6440420	1985-Dec	0.0000000
$\frac{1990 \mathrm{Mpr}}{2007 \cdot \mathrm{Mar}}$	0.6249715	1986-Jan	0.0000000
1998-Mar	0.6230098	1986-Feb	0.0000000
2016-Jan	0.6149446	1986-Apr	0.0000000
2019-Feb	0.5984363	1986-May	0.0000000
1989-Apr	0.5914373	1986-Jun	0.0000000
1987-May	0.5809463	1986-Jul	0.0000000
$\frac{1307 \text{-Way}}{2004 \text{-Feb}}$	$0.5316875^{-5}$		0.0000000
1990-Mar	0.5201679	1986-Sep	0.0000000
$\frac{1990\text{-Mar}}{2002\text{-Mar}}$	0.5105979	1986-Oct	0.0000000
$\frac{2002\text{-Wai}}{2005\text{-Feb}}$	0.5086303	1986-Nov	0.0000000
2000-I CD	0.000000	1000-1101	0.0000000

#### Tantabiddi Degree Heating Months Time Series



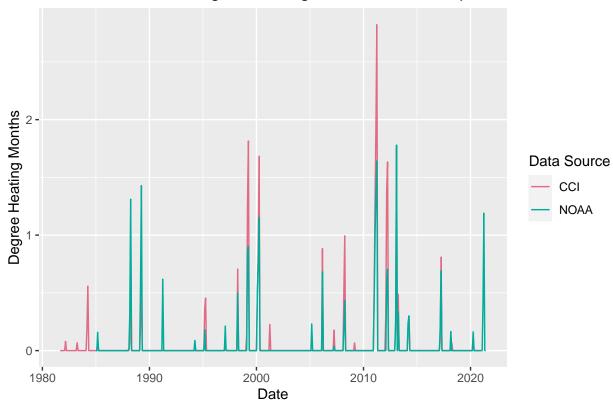


Table 13: Degree Heating Month values in 08TNT and 13TNT from CCI (left) and NOAA (right)

Date	DHM value	Date	DHM value
2011-Apr	2.8227783	2013-Feb	1.7796767
$\frac{2011\text{-Apr}}{2011\text{-Mar}}$	1.9265552	2013-Feb 2011-Apr	1.6426582
1999-Apr	1.8149194	1989-Apr	1.4287527
$\frac{1999-\text{Apr}}{2013-\text{Feb}}$	1.7491836	2011-Mar	1.3768249
$\frac{2019\text{-Feb}}{2000\text{-Apr}}$	1.6833459	1988-Apr	1.3112994
$\frac{2000\text{-Apr}}{2012\text{-Apr}}$	1.6337238	$\frac{1900-\text{Apr}}{2021-\text{Apr}}$	1.1897849
$\frac{2012\text{-Mpr}}{2012\text{-Mar}}$	1.3785041	$\frac{2021-\text{Apr}}{2000-\text{Apr}}$	1.1545456
2011-Feb	1.3506323	2011-Feb	1.0255292
1999-Mar	1.2553652	1999-Apr	0.9028817
$\frac{1999-\text{Mar}}{2008-\text{Apr}}$	0.9936661	1999-Mar	0.8687151
$\frac{2008-\text{Apr}}{1988-\text{Apr}}$	0.9901796	2000-Mar	0.7513789
$\frac{1900-\text{Mpr}}{2006-\text{Mar}}$	0.8836622	2012-Apr	0.7040645
$\frac{2000\text{-Mar}}{2000\text{-Mar}}$	0.8674593	$\frac{2012-Apr}{2017-Apr}$	0.6913548
$\frac{2000\text{-Mai}}{2017\text{-Apr}}$	0.8095752	$\frac{2017-\text{Apr}}{2006-\text{Mar}}$	0.6819409
$\frac{2017 - \text{Apr}}{1989 - \text{Apr}}$	0.7967356	1991-Apr	0.6188333
1998-Apr	0.7967330	$\frac{1991-\text{Apr}}{2012-\text{Mar}}$	0.6132312
$\frac{1996-Apr}{1984-Apr}$	0.7002217	1989-Mar	0.5325860
$\frac{1964-Apr}{2011-Jan}$	0.5363200	2000-Feb	0.5323800
$\frac{2011-3an}{2008-Mar}$	0.5001133	1998-Apr	0.5001667
$\frac{2006\text{-Mai}}{2000\text{-Feb}}$	0.3001133	2011-Jan	0.3001007
$\frac{2000\text{-Feb}}{2013\text{-Apr}}$	0.4989384 $0.4862235$	2011-Jan 2008-Apr	0.4300034 $0.4329355$
$\frac{2015-Apr}{1995-Apr}$	0.4502233	$\frac{2008-\text{Apr}}{2021-\text{Mar}}$	0.4016183
$\frac{1995-\text{Apr}}{1995-\text{Mar}}$	0.4545704	2013-Apr	0.3351667
$\frac{1995\text{-Niai}}{2012\text{-Feb}}$	0.3051634	$\frac{2013-\text{Apr}}{1988-\text{Mar}}$	0.3097994
$\frac{2012\text{-}\text{Feb}}{2014\text{-}\text{Apr}}$	0.2966564	2014-Apr	0.3008710
$\frac{2014-Apr}{2001-Apr}$	0.2265535	$\frac{2014-\text{Apr}}{2013-\text{Jan}}$	0.3008710
$\frac{2001-\text{Apr}}{1984-\text{Mar}}$	0.220333	$\frac{2013-3an}{2014-Mar}$	0.2312937
$\frac{1964\text{-Mar}}{2014\text{-Mar}}$	0.2004300	$\frac{2014\text{-Mar}}{2005\text{-Mar}}$	0.2396505
1989-Mar	0.1904337	1997-Feb	0.2300303
$\frac{1989\text{-Mai}}{2007\text{-Apr}}$	0.1001003	2017-Mar	0.2123093
$\frac{2007\text{-Apr}}{2013\text{-Jan}}$	0.1697940	2017-Mar 2008-Mar	0.1945215 $0.1871022$
1999-Feb	0.1097940 $0.1233175$	1995-Mar	0.1871022
2020-Apr	0.1253175	$\frac{1995\text{-Mar}}{2018\text{-Mar}}$	0.1654892
$\frac{2020\text{-Apr}}{1985\text{-Mar}}$	0.1038800	$\frac{2016\text{-Mai}}{2020\text{-Apr}}$	0.1618333
$\frac{1985\text{-Mar}}{2017\text{-Mar}}$	0.0830207	1985-Mar	0.1018333
$\frac{2017 - Mar}{1982 - Mar}$			
1982-Mar 1988-Mar	0.0797927	$\frac{1994\text{-Apr}}{2007\text{-Apr}}$	0.0878333
	$\begin{array}{r} 0.0749562 \\ \hline 0.0682242 \end{array}$	1988-Feb	$\begin{array}{c} 0.0381667 \\ \hline 0.0168908 \end{array}$
$\frac{2018-Apr}{1983-Apr}$	0.0672223	1985-Jan	0.0108908
$\frac{1985-\text{Apr}}{2009-\text{Mar}}$	0.0672223	1985-Feb	0.0000000
1997-Feb	0.0626028	1985-Feb 1985-Apr	0.0000000
		_	0.0000000
2005-Mar	0.0010840	1985-May	
1981-Sep	0.0000000	1985-Jun	0.0000000
1981-Oct	0.0000000	1985-Jul	0.0000000
1981-Nov	0.0000000	1985-Aug	0.0000000
1981-Dec	0.0000000	1985-Sep	0.0000000
1982-Jan	0.0000000	1985-Oct	0.0000000
1982-Feb	0.0000000	1985-Nov	0.0000000
1982-Apr	0.0000000	1985-Dec	0.0000000
1982-May		1986-Jan	0.0000000
1982-Jun	$\begin{array}{c} 0.0000000 \\ 0.0000000 \ 5 \end{array}$	1986-Feb	0.0000000
1982-Jul			0.0000000
1982-Aug	0.0000000	1986-Apr	0.0000000
1982-Sep	0.0000000	1986-May	0.0000000
1982-Oct	0.0000000	1986-Jun	0.0000000

# TNT Degree Heating Months Time Series



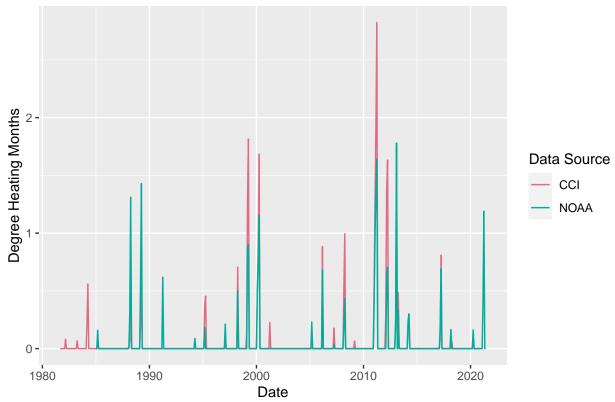
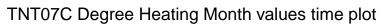


Table 14: Degree Heating Month values in TNT from CCI (left) and NOAA (right)

Data	DIIM1	Data	DHM value
$\frac{\text{Date}}{2011\text{-Apr}}$	DHM value 2.8227783	$\frac{\text{Date}}{2013\text{-Feb}}$	1.7796767
$\frac{2011\text{-Apr}}{2011\text{-Mar}}$	1.9265552	$\frac{2013\text{-Feb}}{2011\text{-Apr}}$	1.6426582
1999-Apr	1.9203332	1989-Apr	1.4287527
$\frac{1999-\text{Apr}}{2013-\text{Feb}}$	1.7491836	2011-Mar	1.4287327
	1.6833459		1.3112994
2000-Apr		1988-Apr	
2012-Apr	1.6337238	2021-Apr	1.1897849
2012-Mar	1.3785041	2000-Apr	1.1545456
2011-Feb	1.3506323	2011-Feb	1.0255292
1999-Mar	1.2553652	1999-Apr	0.9028817
2008-Apr	0.9936661	1999-Mar	0.8687151
1988-Apr	0.9901796	2000-Mar	0.7513789
2006-Mar	0.8836622	2012-Apr	0.7040645
2000-Mar	0.8674593	2017-Apr	0.6913548
2017-Apr	0.8095752	2006-Mar	0.6819409
1989-Apr	0.7967356	1991-Apr	0.6188333
1998-Apr	0.7062217	2012-Mar	0.6132312
1984-Apr	0.5583266	1989-Mar	0.5325860
2011-Jan	0.5462431	2000-Feb	0.5113736
2008-Mar	0.5001133	1998-Apr	0.5001667
2000-Feb	0.4989584	2011-Jan	0.4500054
2013-Apr	0.4862235	2008-Apr	0.4329355
1995-Apr	0.4545764	2021-Mar	0.4016183
1995-Mar	0.3630205	2013-Apr	0.3351667
2012-Feb	0.3051634	1988-Mar	0.3097994
2014-Apr	0.2966564	2014-Apr	0.3008710
2001-Apr	0.2265535	2013-Jan	0.2512957
1984-Mar	0.2004366	2014-Mar	0.2390376
2014-Mar	0.1904337	2005-Mar	0.2306505
1989-Mar	0.1881803	1997-Feb	0.2123095
2007-Apr	0.1775586	2017-Mar	0.1945215
2013-Jan	0.1697940	2008-Mar	0.1871022
1999-Feb	0.1233175	1995-Mar	0.1806505
2020-Apr	0.1058860	2018-Mar	0.1654892
1985-Mar	0.0868915	2020-Apr	0.1618333
2017-Mar	0.0830207	1985-Mar	0.1583925
1982-Mar	0.0797927	1994-Apr	0.0878333
1988-Mar	0.0749562	2007-Apr	0.0381667
2018-Apr	0.0682242	1988-Feb	0.0168908
1983-Apr	0.0672223	1985-Jan	0.0000000
2009-Mar	0.0656001	1985-Feb	0.0000000
1997-Feb	0.0626028	1985-Apr	0.0000000
2005-Mar	0.0010840	1985-May 1985-Jun	0.0000000
1981-Sep 1981-Oct	0.0000000	1985-Jun 1985-Jul	0.0000000
1981-Oct 1981-Nov	0.0000000		0.0000000
1981-Nov 1981-Dec	0.0000000	1985-Aug 1985-Sep	0.0000000
1981-Dec 1982-Jan	0.0000000	1985-Sep 1985-Oct	0.0000000
1982-Jan 1982-Feb	0.0000000	1985-Oct 1985-Nov	0.0000000
1982-Feb 1982-Apr	0.0000000	1985-Nov 1985-Dec	0.0000000
1982-Apr 1982-May	0.0000000	1986-Jan	0.0000000
1982-May 1982-Jun	0.0000000	1986-Feb	0.0000000
1982-Jul	0.0000000		0.0000000
1982-Aug	0.0000000	1986-Apr	0.0000000
1982-Nug 1982-Sep	0.0000000	1986-May	0.0000000
1982-Oct	0.0000000	1986-Jun	0.0000000
1002-006	0.0000000	1900-9 mm	0.0000000

# TNT07C Degree Heating Months Time Series



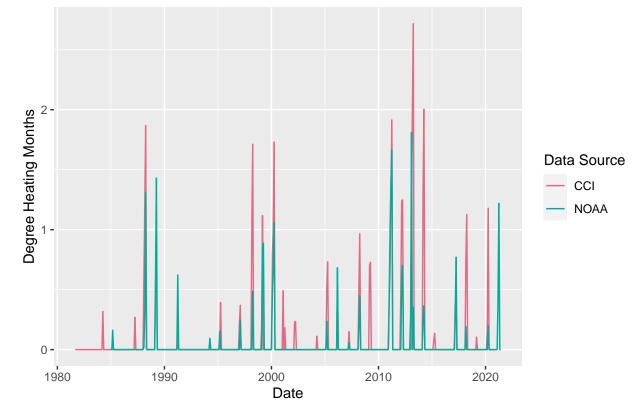


Table 15: Degree Heating Month values in TNT07C from CCI (left) and NOAA (right)

Data	DIIM reduc	Data	DIIM reduc
$\frac{\text{Date}}{2013\text{-Apr}}$	DHM value 2.7178574	Date 2013-Feb	DHM value 1.8107716
$\frac{2013\text{-Apr}}{2014\text{-Apr}}$	2.0041040	2013-Feb 2011-Apr	1.6667322
$\frac{2014\text{-Apr}}{2013\text{-Mar}}$	1.9830514	1989-Apr	1.4300358
$\frac{2015\text{-Mar}}{2011\text{-Apr}}$	1.9650514	2011-Mar	1.4500558
-			
1988-Apr	1.8685407	1988-Apr	1.3076188
2000-Apr	1.7304011	2021-Apr	1.2194875
1998-Apr	1.7126357	2000-Apr	1.0589811
2014-Mar	1.3059658	2011-Feb	1.0191587
2011-Mar	1.3010337	1999-Apr	0.8878423
2013-Feb	1.2890191	1999-Mar	0.8672867
2012-Apr	1.2484796	2017-Apr	0.7701649
2012-Mar	1.2386756	2012-Apr	0.7022079
1988-Mar	1.1920680	2006-Mar	0.6821254
2020-Apr	1.1787466	2000-Mar	0.6814255
2018-Apr	1.1257715	1991-Apr	0.6222222
1999-Mar	1.1166702	2012-Mar	0.5963190
1998-Mar	1.0011644	1989-Mar	0.5314803
2000-Mar	0.9955971	1998-Apr	0.4868889
2008-Apr	0.9649547	2000-Feb	0.4754291
1989-Apr	0.8746312	2011-Jan	0.4492222
2000-Feb	0.7825317	2008-Apr	0.4471219
2018-Mar	0.7459663	2021-Mar	0.4079319
2005-Apr	0.7314433	2014-Apr	0.3651864
2009-Apr	0.7285332	2013-Apr	0.3502222
2011-Feb	0.7144214	1988-Mar	0.3153966
2009-Mar	0.7030625	2013-Jan	0.2708351
1988-Feb	0.6228753	2014-Mar	0.2669642
2006-Mar	0.5253222	2017-Mar	0.2576093
2005-Mar	0.5159681	1997-Feb	0.2463651
2008-Mar	0.4904829	2005-Mar	0.2356738
2001-Feb	0.4904472	2020-Apr	0.2012222
1989-Mar	0.4801582	2008-Mar	0.1988996
2012-Feb	0.4652878	2018-Mar	0.1918029
2017-Apr	0.4134197	1985-Mar	0.1614803
1995-Apr	0.3923861	1995-Mar	0.1518029
2011-Jan	0.3779016	1994-Apr	0.0942222
1997-Feb	0.3684454	2007-Apr	0.0552222
2017-Mar	0.3666131	1988-Feb	0.0219808
1984-Apr	0.3181394	1985-Jan	0.0000000
1987-Apr	0.2701403	1985-Feb	0.0000000
2002-Apr	0.2343518	1985-Apr	0.0000000
2002-Mar	0.2285476	1985-May	0.0000000
1997-Jan	0.2137102	1985-Jun	0.0000000
1999-Feb	0.1897357	1985-Jul	0.0000000
2001-Apr	0.1818072	1985-Aug	0.0000000
2020-Mar	0.1766097	1985-Sep	0.0000000
2007-Apr	0.1501391	1985-Oct	0.0000000
1991-Apr	0.1378090	1985-Nov	0.0000000
2015-Apr	0.1358157	1985-Dec	0.0000000
2004-Apr	0.1121396	1986-Jan	0.0000000
2019-Mar	0.1043519	1986-Feb	0.0000000
2015-Mar	0.0746770 60		0.0000000
1995-Mar	0.0175786	1986-Apr	0.0000000
1998-Feb	0.0161648	1986-May	0.0000000
1985-Feb	0.0047348	1986-Jun	0.0000000

## Wallabi Island Degree Heating Months Time Series

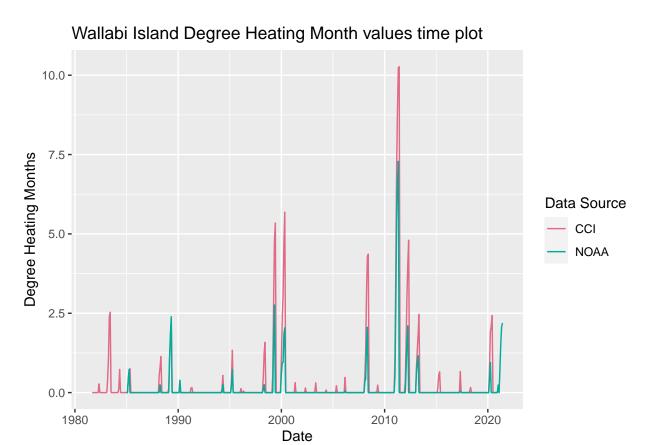


Table 16: Degree Heating Month values in Wallabi Island from CCI (left) and NOAA (right)

Data	DIIM reduc	Data	DIIM reduc
$\frac{\text{Date}}{2011\text{-Jun}}$	DHM value 10.2702600	Date 2011-May	DHM value 7.2852435
2011-Jun 2011-May	10.2307737	2011-May 2011-Apr	6.6701359
$\frac{2011\text{-May}}{2011\text{-Apr}}$	8.9230320	2011-Apr 2011-Mar	5.4815553
$\frac{2011\text{-Apr}}{2011\text{-Mar}}$	6.9975462	2011-Mai 2011-Feb	2.8003187
2000-May	5.6839095	1999-May	2.7600753
1999-Jun	5.3412969	1989-May	2.3908925
1999-May	4.8138143	2021-Jun	2.1929570
2012-May	4.7998186	2012-Apr	2.1015135
2000-Apr	4.7797135	2008-May	2.0581713
2008-Jun	4.3626736	2021-May	2.0520430
2008-May	4.2965231	2000-May	2.0397657
2012-Apr	4.0823980	2000-Apr	1.8533678
2011-Feb	3.8046441	1989-Apr	1.8444946
2008-Apr	3.1639395	1999-Apr	1.7565806
2000-Mar	3.0735616	2012-Mar	1.6062662
2012-Mar	3.0209137	2008-Apr	1.5301605
1999-Apr	2.8705893	2021-Apr	1.4917742
1983-Jun	2.5329065	2013-Apr	1.1624785
2013-May	2.4655717	1989-Mar	1.0909140
2020-Jun	2.4285268	2000-Mar	0.9534538
1983-May	2.3864215	2013-Mar	0.9522312
2000-Feb	2.3458163	2020-Apr	0.9487312
1989-May	2.2210505	2000-Feb	0.9406044
2020-May	2.0923741	2012-Feb	0.7647071
2020-Apr	1.9330147	1985-Apr	0.7273333
2013-Apr	1.8442796	1995-Apr	0.7187312
1989-Apr	1.7100814	2013-Feb	0.6684140
2012-Feb	1.6183332	2021-Mar	0.6525269
1998-Jun	1.5849687	2000-Jan	0.5986559
_1995-Apr	1.3336488	2011-Jan	0.5083333
2013-Mar	1.3297934	2008-Mar	0.4285799
2008-Mar	1.2871211	1985-Mar	0.4257527
1998-May	1.2464834	2020-Mar	0.4238172
1988-May	1.1370735	1990-Mar	0.3883333
2000-Jan	1.1251610	2008-Feb	0.3505692
1983-Apr	1.0964224	1998-May	0.2521613
2011-Jan	1.0045161	1994-May	0.2518817
1989-Mar	0.9189289	1988-Apr	0.2441613
2020-Mar	0.8241956	2021-Jan	0.2399462
1988-Apr	0.7935258	1995-Mar	0.2338172
2013-Feb	0.7933411	1998-Apr	0.0912473
1985-May	0.7561529	2006-Mar	0.0551075
1984-May	0.7321182	2017-May	0.0538172
2017-May	0.6667741	1988-Mar	0.0109140
2015-May	0.6565252	1985-Jan	0.0000000
1985-Apr	0.6413128	1985-Feb	0.0000000
2015-Apr	0.5536234	1985-May	0.0000000
1994-May	0.5434729	1985-Jun	0.0000000
1988-Mar	0.5387086	1985-Jul	0.0000000
1999-Mar	0.5367722	1985-Aug	0.0000000
2008-Feb	0.5258301	1985-Sep	0.0000000
1998-Apr	0.4964839 62		0.0000000
2006-Mar	0.4777423	1985-Nov	0.0000000
1983-Mar	0.3919377	1985-Dec	0.0000000
1995-Mar	0.3851609	1986-Jan	0.0000000
	- 300-000		- 300000

# ${ m HAB05B}$ Degree Heating Months Time Series

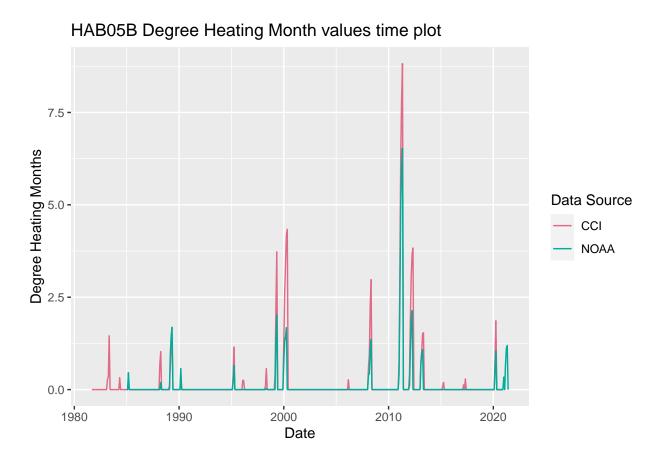


Table 17: Degree Heating Month values in HAB05B from CCI (left) and NOAA (right)

D-4-	DIIM1	D-4-	DIIM 1
Date 2011 Mars	DHM value 8.8214220	Date	DHM value 6.5254593
2011-May		2011-May	
2011-Apr	7.9186266	2011-Apr	6.0679862
2011-Mar	6.2842826	2011-Mar	5.0625346
2000-May	4.3345639	2011-Feb	2.5566743
2000-Apr	4.1856412	2012-Apr	2.1361772
2012-May	3.8318281	1999-May	2.0233441
1999-May	3.7314855	2012-Mar	1.8880590
2012-Apr	3.6780660	1989-May	1.6871398
2000-Mar	3.4452974	2000-Apr	1.6761272
2011-Feb	3.3476166	1989-Apr	1.4622473
2012-Mar	3.0727238	2000-Mar	1.4230089
2008-May	2.9775431		1.3632770
2000-Feb	2.6399180	1999-Apr	1.3484516
2008-Apr	2.2511993	2000-Feb	1.3223100
1999-Apr	2.2215951	2021-May	1.1946559
2012-Feb	1.9521884	2021-Apr	1.1233118
2020-Apr	1.8628822	2012-Feb	1.1076826
2013-May	1.5392558	2008-Apr	1.0909651
2013-Apr	1.5045230	2013-Apr	1.0838886
1983-May	1.4547544	2020-Apr	1.0441398
2000-Jan	1.3415043	2013-Mar	0.9584370
1989-May	1.3283965	1989-Mar	0.9477957
1989-Apr	1.2152759	2000-Jan	0.7800538
1995-Apr	1.1512787	2013-Feb	0.7241897
2013-Mar	1.0435138	2021-Mar	0.6758602
1988-Apr	1.0279805	1995-Apr	0.6556344
2008-Mar	0.9531865	1990-Mar	0.5690860
2020-Mar	0.8405356	2020-Mar	0.5310215
2011-Jan	0.7369905	1985-Mar	0.4569278
2013-Feb	0.7349133	2008-Mar	0.4255135
1988-Mar	0.6876347	2011-Jan	0.4106989
1989-Mar	0.6742669	2008-Feb	0.4019114
2008-Feb	0.6191008	2021-Jan	0.3374731
1998-May	0.5655347	1995-Mar	0.2161828
1990-Mar	0.4402169	1988-Apr	0.1947849
2012-Jan	0.4286045	2012-Jan	0.1171505
1999-Mar	0.3789228	1998-May	0.0319892
1995-Mar	0.3686020	1985-Feb	0.0052611
1983-Apr	0.3538940	1985-Jan	0.0000000
1984-May	0.3237628	1985-Apr	0.0000000
2017-May	0.2885997	1985-May	0.0000000
1983-Mar	0.2702153	1985-Jun	0.0000000
2006-Mar	0.2660206	1985-Jul	0.0000000
1996-Mar	0.2503342	1985-Aug	0.0000000
1996-Feb	0.2497940	1985-Sep	0.0000000
1985-Mar	0.1950524	1985-Oct	0.0000000
2015-Apr	0.1939017	1985-Nov	0.0000000
2017-Mar	0.1298925	1985-Dec	0.0000000
1989-Feb	0.1059874	1986-Jan	0.0000000
1998-Apr	0.0946752	1986-Feb	0.0000000
2015-Mar	0.0698930	1986-Mar	0.0000000
1981-Sep	0.0000000 6	<sup>4</sup> 1986-Apr	0.0000000
1981-Oct	0.0000000	1986-May	0.0000000
1981-Nov	0.0000000	1986-Jun	0.0000000
1981-Dec	0.0000000	1986-Jul	0.0000000

# HAB10A Degree Heating Months Time Series

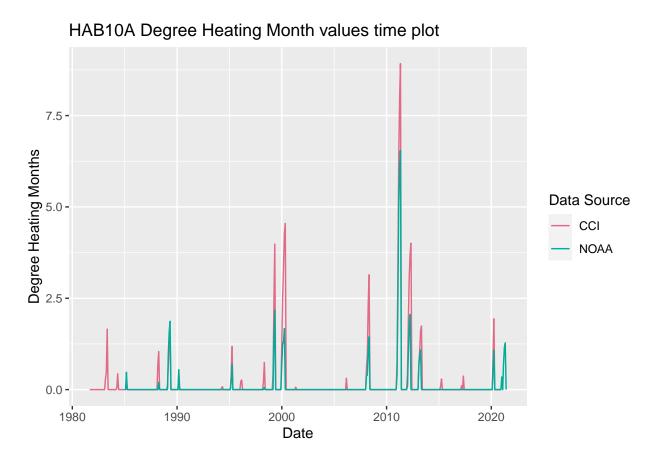


Table 18: Degree Heating Month values in HAB10A from CCI (left) and NOAA (right)

Data	DIIMl	Data	DIIMl
Date Date	DHM value	Date	DHM value
2011-May	8.9216712	2011-May	6.5397704
2011-Apr	7.9922101	2011-Apr	6.0591790
2011-Mar	6.3379939	2011-Mar	5.0533295
2000-May	4.5487244	2011-Feb	2.5449962
2000-Apr	4.2786143	1999-May	2.1693011
2012-May	4.0057916	2012-Apr	2.0573185
1999-May	3.9830644	1989-May	1.8702473
2012-Apr	3.7172991	2012-Mar	1.7971357
2000-Mar	3.3710665	2000-Apr	1.6711884
2011-Feb	3.3536937	1989-Apr	1.5722366
_2008-May	3.1441705	2008-May	1.4446515
2012-Mar	3.0750824	1999-Apr	1.4445161
2000-Feb	2.5996668	2000-Mar	1.3100056
1999-Apr	2.3861819	2021-May	1.2791183
2008-Apr	2.3421272	2000-Feb	1.2474787
2012-Feb	1.9565885	2021-Apr	1.1585269
2020-Apr	1.9366954	2008-Apr	1.1250278
2013-May	1.7396613	2013-Apr	1.0860169
1983-May	1.6568706	2020-Apr	1.0677742
2013-Apr	1.6147134	2012-Feb	1.0558991
1989-May	1.4663243	1989-Mar	0.9667204
2000-Jan	1.3162369	2013-Mar	0.9245008
1989-Apr	1.2778330	2000-Jan	0.7470430
1995-Apr	1.1815256	2013-Feb	0.6971352
2013-Mar	1.0701682	1995-Apr	0.6803656
1988-Apr	1.0421725	2021-Mar	0.6780108
2008-Mar	0.9485789	1990-Mar	0.5431720
2020-Mar	0.8588158	2020-Mar	0.5405914
1998-May	0.7425296	1985-Mar	0.4736713
2011-Jan	0.7275272	2008-Mar	0.3971783
2013-Feb	0.7197388	2011-Jan	0.3960753
1988-Mar	0.6946244	2008-Feb	0.3807805
1989-Mar	0.6749514	2021-Jan	0.3457527
2008-Feb	0.5965350	1995-Mar	0.2028495
1983-Apr	0.4686982	1988-Apr	0.1978495
2012-Jan	0.4359160	2012-Jan	0.0999462
1984-May	0.4327731	1998-May	0.0557527
1990-Mar	0.4291392	1985-Feb	0.0085637
1999-Mar	0.4243016	1985-Jan	0.0000000
2017-May	0.3694625	1985-Apr	0.0000000
1995-Mar	0.3639772	1985-May	0.0000000
2006-Mar	0.3094610	1985-Jun	0.0000000
1983-Mar	0.2988183	1985-Jul	0.0000000
$\frac{1905 \text{ War}}{2015 \text{-Apr}}$	0.2890034	1985-Aug	0.0000000
$\frac{2019-\text{Mpr}}{1996-\text{Mar}}$	0.2642276	1985-Sep	0.0000000
1985-Mar	0.2336544	1985-Oct	0.0000000
1996-Feb	0.2241216	1985-Nov	0.0000000
1998-Apr	0.2085487	1985-Nov	0.0000000
$\frac{1990\text{-Apr}}{2017\text{-Mar}}$	0.1059137	1986-Jan	0.0000000
1989-Feb	0.1059137	1986-Feb	0.0000000
$\frac{1969\text{-Feb}}{2015\text{-Mar}}$	0.1036123	1986-Mar	0.0000000
1994-May	0.0997800		0.0000000
$\frac{1994\text{-May}}{2001\text{-May}}$	0.0784518	$\frac{1980\text{-Apr}}{1986\text{-May}}$	0.0000000
$\frac{2001-\text{May}}{1994-\text{Apr}}$	0.0608837	1986-May 1986-Jun	0.0000000
1984-Apr	0.0362129	1986-Jul	0.0000000