

Supplemental File for “The Niwot Ridge Subalpine Forest US-NR1 AmeriFlux site – Part I: Data acquisition and site record-keeping”

by S. P. Burns et al.

README for: USNR1_logger_code.zip

S. P. Burns et al.

sean@ucar.edu

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This is a listing of the archive of data logger programs used at the Niwot Ridge US-NR1 AmeriFlux site. The order of logger programs follows Table 2 within the paper.

For more info on the programs see:

http://urquell.colorado.edu/docs_tower/tower_logger_info.html

which is also saved as a pdf within this zip archive as:

88588 Apr 7 13:05 README_usnr1_data_logger_program_web_summary.pdf

Listing of data logger programs:

The files are listed in approximately reverse chronological order. For the older files, the file order, file names, and associated dates are less certain compared to the newer files. There are two “MISC” directories: “MISC_cr3000” contains files written for a CR3000 that was never deployed at the site, and “MISC” contains logger programs that were not part of the primary set of CR23X data loggers used at the site.

campbell_logger_code_archive/FAST:

```
-rwxr-xr-x 1 sburns aster 9913 Nov 2 14:44 fast_24.csi*
-rwxr-xr-x 1 sburns aster 9372 Jul 21 2015 fast_23.csi*
-rwxr-xr-x 1 sburns aster 9874 Jan 7 2014 fast_22.csi*
-rwxr-xr-x 1 sburns aster 9192 Nov 29 2013 fast_21.csi*
-rwxr-xr-x 1 sburns aster 8861 Nov 29 2013 fast_20.csi*
-rwxr-xr-x 1 sburns aster 9148 Nov 29 2013 fast_20a.csi*
-rwxr-xr-x 1 sburns aster 7539 Oct 24 2013 fast_19.csi*
-rwxr-xr-x 1 sburns aster 7878 Oct 8 2013 fast_18.csi*
-rwxr-xr-x 1 sburns aster 7470 May 7 2013 fast_17.csi*
-rwxr-xr-x 1 sburns aster 7400 Mar 28 2013 fast_16.csi*
-rwxr-xr-x 1 sburns aster 6770 Nov 15 2011 fast_15.csi*
```

-rwxr-xr-x	1	sburns	aster	7779	Nov	4	2011	fast_14.csi*
-rwxr-xr-x	1	sburns	aster	7991	Oct	22	2011	fast_13.csi*
-rwxr-xr-x	1	sburns	aster	9058	May	17	2010	fast_12.csi*
-rwxr-xr-x	1	sburns	aster	9444	May	5	2010	fast_11.csi*
-rwxr-xr-x	1	sburns	aster	8886	Sep	27	2009	fast_10.csi*
-rwxr-xr-x	1	sburns	aster	10769	Jul	10	2009	fast_09.csi*
-rwxr-xr-x	1	sburns	aster	10661	Jun	25	2009	fast_08.csi*
-rwxr-xr-x	1	sburns	aster	10565	Oct	24	2008	fast_07.csi*
-rwxr-xr-x	1	sburns	aster	10129	Sep	30	2008	fast_06.csi*
-rwxr-xr-x	1	sburns	aster	9556	Sep	26	2007	fast_05.csi*
-rwxr-xr-x	1	sburns	aster	9632	Apr	3	2007	fast_04.csi*
-rwxr-xr-x	1	sburns	aster	9471	Nov	26	2006	fast_03.csi*
-rwxr-xr-x	1	sburns	aster	9391	Oct	24	2006	fast_02.csi*
-rwxr-xr-x	1	sburns	aster	9252	Oct	16	2006	fast_01.csi*
-rw-rw-r--	1	sburns	aster	9335	May	26	2005	FAST2X10.CSI
-rw-rw-r--	1	sburns	aster	9088	Feb	11	2005	FAST23X9.CSI
-rw-rw-r--	1	sburns	aster	8895	Oct	8	2004	FAST23X8.CSI
-rw-rw-r--	1	sburns	aster	8815	Oct	8	2004	FAST23X7.CSI
-rw-rw-r--	1	sburns	aster	8503	Oct	22	2001	FAST23X5.CSI
-rw-rw-r--	1	sburns	aster	8245	Jan	15	2002	FAST23X4.CSI
-rw-rw-r--	1	sburns	aster	7083	Dec	3	2000	FAST23X3.CSI
-rw-rw-r--	1	sburns	aster	6690	Jan	15	2002	FAST23X2.CSI
-rw-rw-r--	1	sburns	aster	5009	Sep	26	2000	FAST23X.CSI
-rw-rw-r--	1	sburns	aster	5125	Aug	29	2000	FAST30.CSI
-rw-rw-r--	1	sburns	aster	7450	Jan	5	1999	FAST23XB.CSI
-rw-rw-r--	1	sburns	aster	1937	Jan	16	1998	FAST.CSI

campbell_logger_code_archive/PROF:

-rwxr-xr-x	1	sburns	aster	15863	Jul	29	2009	prf_02.csi*
-rwxr-xr-x	1	sburns	aster	15561	Nov	19	2007	prf_01.csi*
-rw-rw-r--	1	sburns	aster	15366	Jun	2	2004	PROF30B_new2.CSI
-rwxrwxr-x	1	sburns	aster	17693	Aug	15	2003	PROF30B_new1.CSI*
-rw-rw-r--	1	sburns	aster	17695	Jul	7	2002	PROF30B.CSI
-rw-rw-r--	1	sburns	aster	14054	Aug	5	2002	PROF4TB.CSI
-rw-rw-r--	1	sburns	aster	14054	Aug	5	2002	PROF4T.CSI
-rw-rw-r--	1	sburns	aster	12213	Jul	18	2001	PROF14B.CSI
-rw-rw-r--	1	sburns	aster	13155	Aug	2	2001	PROF14C.CSI
-rw-rw-r--	1	sburns	aster	14000	May	3	2000	PROF30.CSI
-rw-rw-r--	1	sburns	aster	9505	Jun	14	1999	PROF12T.CSI

campbell_logger_code_archive/MET:

-rwxr-xr-x	1	sburns	aster	15601	Dec	11	2014	met_10.csi*
-rwxr-xr-x	1	sburns	aster	14917	Nov	6	2014	met_09.csi*
-rwxr-xr-x	1	sburns	aster	12053	Mar	16	2011	met_07.csi*
-rwxr-xr-x	1	sburns	aster	11779	Dec	13	2007	met_06.csi*
-rwxr-xr-x	1	sburns	aster	11710	Sep	26	2007	met_05.csi*

-rwxr-xr-x	1	sburns	aster	11250	Jun	14	2007	met_04.csi*
-rwxr-xr-x	1	sburns	httpd	10481	May	30	2007	met_03.csi*
-rwxr-xr-x	1	sburns	httpd	10457	May	30	2007	met_02.csi*
-rwxr-xr-x	1	sburns	aster	9838	Apr	23	2007	met_01.csi*
-rw-rw-r--	1	sburns	aster	8744	May	15	2003	MET30D_new1.CSI
-rw-rw-r--	1	sburns	aster	8800	May	13	2003	MET30D.CSI
-rw-rw-r--	1	sburns	aster	7732	Jul	23	2001	MET30C.CSI
-rw-rw-r--	1	sburns	aster	6945	Oct	16	2000	MET30B.CSI
-rw-rw-r--	1	sburns	aster	6985	Oct	16	2000	MET30A.CSI
-rw-rw-r--	1	sburns	aster	6161	Jul	5	2000	MET30A_ver1.CSI
-rw-rw-r--	1	sburns	aster	6486	Jan	12	2000	MET30.CSI
-rw-rw-r--	1	sburns	aster	6307	Feb	25	2003	MET21X.CSI
-rw-rw-r--	1	sburns	aster	6131	Sep	21	1999	MET.CSI

campbell_logger_code_archive/SOIL:

-rwxr-xr-x	1	sburns	aster	12138	Oct	7	2008	soil_03.csi*
-rwxr-xr-x	1	sburns	aster	7475	Oct	7	2008	soil_03c.csi*
-rwxr-xr-x	1	sburns	aster	7353	Oct	7	2008	soil_03b.csi*
-rwxr-xr-x	1	sburns	aster	14379	Oct	1	2008	soil_03_oct1.csi*
-rwxr-xr-x	1	sburns	aster	10953	Oct	26	2007	soil_02.csi*
-rwxr-xr-x	1	sburns	aster	10584	Oct	16	2005	soil_01.csi*
-rw-rw-r--	1	sburns	aster	9659	Jun	30	2005	SOILSNO2.CSI
-rw-rw-r--	1	sburns	aster	3138	Oct	19	2004	SOILHYD.CSI
-rw-rw-r--	1	sburns	aster	2449	Oct	14	2004	SOILHYD2.CSI
-rw-rw-r--	1	sburns	aster	4522	Dec	10	2004	SOILHY.CSI
-rw-rw-r--	1	sburns	aster	9309	Oct	29	2003	SOILSNOW.CSI
-rw-rw-r--	1	sburns	aster	6510	Aug	3	2003	SOIL23XC.CSI
-rw-rw-r--	1	sburns	aster	7073	May	15	2003	SOIL23XB.CSI
-rw-rw-r--	1	sburns	aster	13007	Jun	22	1999	SOIL_TDP.CSI
-rw-rw-r--	1	sburns	aster	13007	Jun	22	1999	SOIL2TDP.CSI
-rw-rw-r--	1	sburns	aster	12203	Jul	22	1998	SOILSAP.CSI
-rw-rw-r--	1	sburns	aster	5999	Nov	10	1998	SOIL.CSI
-rw-rw-r--	1	sburns	aster	10805	Jul	7	1998	SOILTEMP.CSI
-rw-rw-r--	1	sburns	aster	3968	Jun	8	1998	SOIL23.CSI

campbell_logger_code_archive/CNR:

-rwxr-xr-x	1	sburns	aster	9036	Nov	19	2007	rad_03.csi*
-rwxr-xr-x	1	sburns	aster	8856	Sep	13	2006	rad_02.csi*
-rwxr-xr-x	1	sburns	aster	7738	Dec	21	2005	rad_01.csi*
-rwxr-xr-x	1	sburns	aster	7964	Dec	16	2005	rad_01_old.csi*
-rw-rw-r--	1	sburns	aster	6361	Oct	4	2004	RAD.CSI
-rw-rw-r--	1	sburns	aster	5128	Jun	4	2004	CNR30B.CSI
-rw-rw-r--	1	sburns	aster	4873	Jun	2	2003	CNR30.CSI
-rw-rw-r--	1	sburns	aster	4873	Jul	5	2002	CNR30_ver2.CSI
-rw-rw-r--	1	sburns	aster	4603	Mar	1	2000	CNR30_ver1.CSI
-rw-rw-r--	1	sburns	aster	4708	Sep	21	1999	CNR3.CSI

```
-rw-rw-r-- 1 sburns aster 4642 Aug 25 1999 CNR2.CSI
-rw-rw-r-- 1 sburns aster 3479 Aug 25 1999 CNR21X.CSI
-rw-rw-r-- 1 sburns aster 2866 Jul 8 1999 CNR1.CSI
```

campbell_logger_code_archive/UC:

```
-rwxr-xr-x 1 sburns aster 5162 Sep 26 2014 uc_06.csi*
-rwxr-xr-x 1 sburns aster 4657 Nov 7 2013 uc_05.csi*
-rwxr-xr-x 1 sburns aster 5621 Oct 24 2013 uc_04.csi*
-rwxr-xr-x 1 sburns aster 4840 Oct 24 2013 uc_04b.csi*
-rwxr-xr-x 1 sburns aster 8201 Aug 4 2009 uc_03.csi*
-rwxr-xr-x 1 sburns aster 8082 Jul 29 2009 uc_02.csi*
-rwxr-xr-x 1 sburns aster 7991 Aug 11 2008 uc_01.csi*
-rw-rw-r-- 1 sburns aster 10165 Jul 14 2005 UC01.CSI
-rw-rw-r-- 1 sburns aster 8796 Jan 20 2005 TWOSONIC.CSI
-rw-rw-r-- 1 sburns aster 8286 Nov 9 2004 TWOSONIC_ver4.CSI
-rw-rw-r-- 1 sburns aster 8485 Jun 5 2003 TWOSONIC_ver3.CSI
-rw-rw-r-- 1 sburns aster 8485 Oct 6 2002 TWOSONIC_ver2.CSI
-rw-rw-r-- 1 sburns aster 3595 Jan 24 2002 FAST23UC.CSI
-rw-rw-r-- 1 sburns aster 5125 Sep 7 2000 TWOSONIC_ver1.CSI
-rw-rw-r-- 1 sburns aster 5712 Feb 6 2001 FASTUC.CSI
```

campbell_logger_code_archive/TC:

```
-rwxr-xr-x 1 sburns aster 7481 Mar 21 2014 tc_13.csi*
-rwxr-xr-x 1 sburns aster 8737 Oct 13 2006 tc_12.csi*
-rwxr-xr-x 1 sburns aster 7331 Oct 12 2006 tc_11.csi*
-rwxr-xr-x 1 sburns aster 7208 Oct 6 2006 tc_10.csi*
-rwxr-xr-x 1 sburns aster 7711 Oct 5 2006 tc_09.csi*
-rwxr-xr-x 1 sburns aster 7300 Sep 29 2006 tc_08.csi*
-rwxr-xr-x 1 sburns aster 6477 Sep 24 2006 tc_07.csi*
-rwxr-xr-x 1 sburns aster 6783 Aug 31 2006 tc_06.csi*
-rwxr-xr-x 1 sburns aster 6641 Aug 29 2006 tc_05.csi*
-rwxr-xr-x 1 sburns aster 6107 Aug 24 2006 tc_04.csi*
-rwxr-xr-x 1 sburns aster 5092 Aug 22 2006 tc_03.csi*
-rwxr-xr-x 1 sburns aster 5722 Sep 15 2005 tc_02.csi*
-rw-rw-r-- 1 sburns aster 7019 Jul 19 2005 tc_01.csi
```

campbell_logger_code_archive/MRS:

```
-rwxr-xr-x 1 sburns aster 13340 Sep 23 2008 mrs_03b.csi*
-rwxr-xr-x 1 sburns aster 13265 Aug 11 2008 mrs_03a.csi*
-rwxr-xr-x 1 sburns aster 13193 Oct 4 2007 mrs_02.csi*
-rwxr-xr-x 1 sburns aster 13279 Oct 26 2007 mrs_02a.csi*
-rwxr-xr-x 1 sburns aster 12907 Oct 12 2006 mrs_01.csi*
-rw-rw-r-- 1 sburns aster 12758 Nov 8 2001 MRSTEMP.CSI
```

campbell_logger_code_archive/NCARTC:

```

-rwxr-xr-x 1 sburns aster 2939 May 1 2015 nctc_05.csi*
-rwxr-xr-x 1 sburns aster 4839 Nov 6 2014 nctc_04.csi*
-rwxr-xr-x 1 sburns aster 4705 Apr 24 2014 nctc_03.csi*
-rwxr-xr-x 1 sburns aster 2363 Oct 25 2005 nctc_02.csi*
-rwxr-xr-x 1 sburns aster 2770 Aug 29 2005 nctc_01.csi*
-rw-rw-r-- 1 sburns aster 2363 Oct 3 2004 NCARTC.CSI
-rw-rw-r-- 1 sburns aster 2160 Aug 20 2002 NCARTC_ver1.CSI

```

campbell_logger_code_archive/UCB:

```

-rwxr-xr-x 1 sburns aster 9463 Nov 8 2012 ucb_17.csi*
-rwxr-xr-x 1 sburns aster 8474 Oct 31 2012 ucb_16.csi*
-rwxr-xr-x 1 sburns aster 8158 Nov 4 2011 ucb_15.csi*
-rwxr-xr-x 1 sburns aster 7716 Oct 5 2011 ucb_14.csi*
-rwxr-xr-x 1 sburns aster 9011 Sep 20 2010 ucb_13.csi*
-rwxr-xr-x 1 sburns aster 8788 Aug 11 2010 ucb_12.csi*
-rwxr-xr-x 1 sburns aster 8700 Nov 6 2009 ucb_11.csi*
-rwxr-xr-x 1 sburns aster 5185 Feb 22 2008 ucb10x_2.csi*
-rwxr-xr-x 1 sburns aster 5111 Feb 21 2008 ucb10x_1.csi*
-rwxr-xr-x 1 sburns aster 8088 Oct 31 2008 ucb_10.csi*
-rwxr-xr-x 1 sburns aster 7472 Aug 11 2008 ucb_09.csi*
-rwxr-xr-x 1 sburns aster 6299 Jul 17 2007 ucb_08.csi*
-rwxr-xr-x 1 sburns aster 5595 Sep 20 2006 ucb_07_notused.csi*
-rwxr-xr-x 1 sburns aster 6190 Oct 1 2006 ucb_07.csi*
-rwxr-xr-x 1 sburns aster 5445 Sep 19 2006 ucb_06.csi*
-rwxr-xr-x 1 sburns aster 4852 Oct 25 2005 ucb_05.csi*
-rwxr-xr-x 1 sburns aster 4783 Oct 15 2005 ucb_04.csi*
-rwxr-xr-x 1 sburns aster 4607 Oct 8 2005 ucb_03.csi*
-rwxr-xr-x 1 sburns aster 4053 Sep 20 2005 ucb_02.csi*
-rw-rw-r-- 1 sburns aster 3503 Jul 21 2005 ucb_01.csi

```

campbell_logger_code_archive/MARK:

```

-rwxr-xr-x 1 sburns aster 5010 Nov 2 09:27 mark_11.csi*
-rwxr-xr-x 1 sburns aster 4855 Oct 13 13:52 mark_10.csi*
-rwxr-xr-x 1 sburns aster 4812 Sep 21 2015 mark_09.csi*
-rwxr-xr-x 1 sburns aster 4728 Sep 4 2015 mark_08.csi*
-rwxr-xr-x 1 sburns aster 4358 Aug 14 2015 mark_07.csi*
-rwxr-xr-x 1 sburns aster 4260 Aug 6 2015 mark_06.csi*
-rwxr-xr-x 1 sburns aster 4108 Jul 21 2015 mark_05.csi*
-rwxr-xr-x 1 sburns aster 4088 Jul 16 2015 mark_04.csi*
-rwxr-xr-x 1 sburns aster 3901 Jun 24 2015 mark_03.csi*
-rwxr-xr-x 1 sburns aster 3002 Nov 6 2014 mark_02.csi*
-rwxr-xr-x 1 sburns aster 2761 Oct 30 2014 mark_01.csi*

```

campbell_logger_code_archive/MISC_cr3000:

* code used with CPEC200 and CR3000

```
-rwxr-xr-x 1 sburns aster 159554 Oct 24 2013 Cpec200_v1_4_01_2.cr3*
-rwxr-xr-x 1 sburns aster 160310 Oct 23 2013 Cpec200_v1_4_01_3.cr3*
-rw-r--r-- 1 sburns aster 160586 Jul 11 2014 Cpec200_v1_4_01_4.cr3
-rw-r--r-- 1 sburns aster 160654 Jul 11 2014 Cpec200_v1_4_01_5.cr3
-rw-r--r-- 1 sburns aster 160654 Jul 11 2014 Cpec200_v1_4_01_6.cr3
-rw-r--r-- 1 sburns aster 160655 Jul 11 2014 Cpec200_v1_4_01_7.cr3
-rw-r--r-- 1 sburns aster 160586 Jul 17 2014 Cpec200_v1_4_01_8.cr3
-rw-r--r-- 1 sburns aster 160619 Jul 30 2014 Cpec200_v1_4_01_9.cr3
```

* Similar to FAST CR23X logger code, but for a CR3000 data logger:

```
-rw-r--r-- 1 sburns aster 4747 Aug 31 2014 Nr1_fast_0_0_01.cr3
-rw-r--r-- 1 sburns aster 4968 Sep 3 2014 Nr1_fast_0_0_02.cr3
-rw-r--r-- 1 sburns aster 5017 Sep 15 2014 Nr1_fast_0_0_03.cr3
-rw-r--r-- 1 sburns aster 5021 Sep 12 2014 Nr1_fast_0_0_03_ver1.cr3
-rw-r--r-- 1 sburns aster 4638 Aug 3 2014 Nr1_fast.cr3
```

campbell_logger_code_archive/MISC:

* these are various other misc logger programs that have been used at the site.

```
-rwxr-xr-x 1 sburns aster 5061 Sep 21 2015 noah_150921.dld*
-rwxr-xr-x 1 sburns aster 28564 Nov 16 2007 noah_m.csi*
-rwxr-xr-x 1 sburns aster 6246 Jun 23 2004 brant21x.csi*
drwxrwxr-x 6 sburns aster 4096 Jan 14 2004 Data.jed/
-rwxrwxr-x 1 sburns aster 4019 Jul 3 2003 21sonic.csi*
-rw-rw-r-- 1 sburns aster 6901 Nov 9 2001 AUTODEND.CSI
-rw-rw-r-- 1 sburns aster 10584 Sep 18 2001 MTOWER.CSI
-rw-rw-r-- 1 sburns aster 7554 Aug 1 2001 AUTODEN2.CSI
-rw-rw-r-- 1 sburns aster 2022 Jul 16 2001 PARBALL.CSI
-rw-rw-r-- 1 sburns aster 1832 Jun 2 2000 TRAC.CSI
-rw-rw-r-- 1 sburns aster 10674 Mar 13 2000 3D_7500.CSI
-rw-rw-r-- 1 sburns aster 6307 Aug 30 1999 LIGHT2.CSI
-rw-rw-r-- 1 sburns aster 32016 Aug 19 1999 HREA2.CSI
-rw-rw-r-- 1 sburns aster 13007 Jun 22 1999 SOIL2TDP.CSI
-rw-rw-r-- 1 sburns aster 13007 Jun 22 1999 SOIL_TDP.CSI
-rw-rw-r-- 1 sburns aster 6131 May 26 1999 LIGHT.CSI
-rw-rw-r-- 1 sburns aster 5999 Nov 10 1998 SOIL.CSI
-rw-rw-r-- 1 sburns aster 12203 Jul 22 1998 SOILSAP.CSI
-rw-rw-r-- 1 sburns aster 10805 Jul 7 1998 SOILTEMP.CSI
-rw-rw-r-- 1 sburns aster 3968 Jun 8 1998 SOIL23.CSI
-rw-rw-r-- 1 sburns aster 30943 Apr 22 1998 HREA.CSI
```