ESS-DIVE Data Archive of "Data, Photographs, Videos, and Information for the Niwot Ridge Subalpine Forest US-NR1 AmeriFlux site" *by* S. P. Burns, P. D. Blanken, and R. K. Monson

Overview of ZIP archives

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This README file provides an overview of the US-NR1 ZIP archives. Our goal with this archive is to provide data users with additional data, photos, and videos taken at the US-NR1 AmeriFlux site. This is done to mirror the content of the current websites,

http://urquell.colorado.edu/calendar/

and

http://urquell.colorado.edu/data_ameriflux/

These websites contain a wealth of information about data collected at the US-NR1 site as well as supplemental data currently archived there. By creating this ESS-DIVE archive, it is our hope that this information will exist beyond the lifetime of the urquell webserver. As a starting point and overview we strongly suggest looking at Burns et al 2016 (Geosci. Instrum. Method. Data Syst., 5, 451-471, https://doi.org/10.5194/gi-5-451-2016). Many of the data and tools provided in the ESS-DIVE archive are described within that paper.

The extraction and setup of the ZIP archives on a local computer is explained below. After properly setting up the extracted files, a web browser can be used to access a lot of the information and photos.

The ZIP archives files have an associated README file with more detailed information about each particular archive. The ZIP archive files and associated README files we have provided are as follows:

```
-rw-r--r--@       210653 Oct  1 11:20 README_ESS_DIVE_USNR1_calendar.pdf
-rw-r--r--        949197 Sep 23 22:12 ess_dive_USNR1_calendar.zip

-rw-r--r--@        81825 Oct  1 11:20 README_ESS_DIVE_USNR1_data_5min.pdf
-rw-r--r--@   2278254934 Sep 22 20:51 ess_dive_USNR1_data_5min.zip

-rw-r--r--@        68204 Oct  1 11:19 README_ESS_DIVE_USNR1_data_logger.pdf
-rw-r--r--    2214218798 Sep 24 22:04 ess_dive_USNR1_data_logger.zip
```

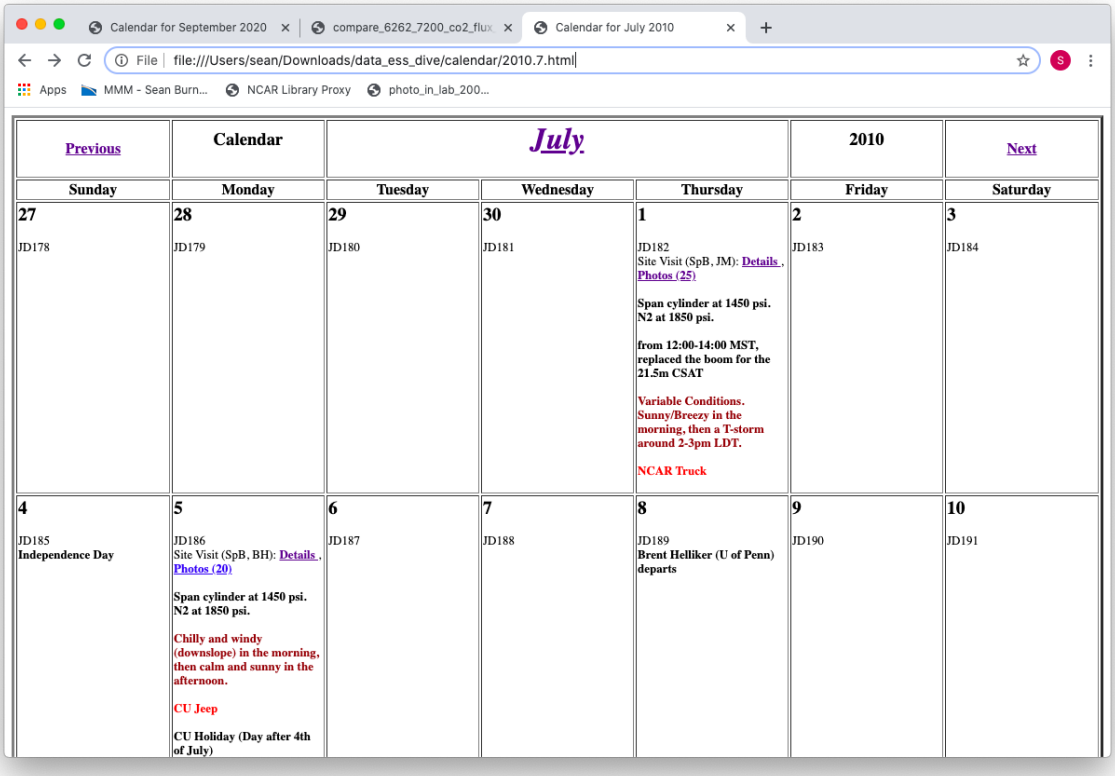
```
-rw-r--r--@    219269380 Sep 22 20:27 ess_dive_USNR1_data_logger_30min.zip
-rw-r--r--@    305757016 Sep 22 20:28 ess_dive_USNR1_data_logger_30min_matfiles.zip

-rw-r--r--@        59680 Oct  1 11:20 README_ESS_DIVE_USNR1_logbook.pdf
-rw-r--r--       9579419 Sep 27 20:21 ess_dive_USNR1_logbook.zip

-rw-r--r--@        85327 Oct  1 11:19 README_ESS_DIVE_USNR1_data_ameriflux.pdf
-rw-r--r--     309534613 Sep 27 23:24 ess_dive_USNR1_data_ameriflux.zip

-rw-r--r--@        60889 Oct  1 11:19 README_ESS_DIVE_USNR1_photos_videos.pdf
-rw-r--r--    3137198398 Sep 24 00:24 ess_dive_USNR1_photos_2001_2009.zip
-rw-r--r--    8798263154 Sep 24 00:33 ess_dive_USNR1_photos_2010_2020.zip
-rw-r--r--@   2526426540 Sep 23 22:05 ess_dive_USNR1_videos.zip
-rw-r--r--     700622264 Sep 24 02:39 ess_dive_USNR1_forestcam.zip
```

The size of each ZIP archive ranges from 8.6 Gbytes down to 928 Kbytes, with the other sizes as follows:

```
8.601736 ess_dive_USNR1_photos_2010_2020.zip
3.064576 ess_dive_USNR1_photos_2001_2009.zip
2.474580 ess_dive_USNR1_videos.zip
2.228640 ess_dive_USNR1_data_5min.zip
2.163076 ess_dive_USNR1_data_logger.zip
0.688616 ess_dive_USNR1_forestcam.zip
0.311508 ess_dive_USNR1_data_logger_30min_matfiles.zip
0.307044 ess_dive_USNR1_data_ameriflux.zip
0.229428 ess_dive_USNR1_data_logger_30min.zip
0.09356  ess_dive_USNR1_logbook.zip
0.00928  ess_dive_USNR1_calendar.zip
```

After unzipping all the zip archives the following 10 directories should exist:

```
drwxr-xr-x   321      10272 Sep 23 21:43 calendar/
drwxr-xr-x     9        288 Sep 27 22:30 data_ameriflux/
drwxr-xr-x    28        896 Sep 13 20:41 data_archive_5min_covar/
drwxr-xr-x    42       1344 Sep 24 21:53 data_logger/
drwxr-xr-x  2047      65504 Sep 22 19:58 data_logger_30min/
drwxr-xr-x    25        800 Sep 23 02:14 data_logger_30min_matfiles/
drwxr-xr-x    89       2848 Sep 24 02:38 forestcam/
drwxr-xr-x    30        960 Sep 27 19:50 logbook/
drwxr-xr-x@ 1543      49376 Sep 16 20:21 photos/
drwxr-xr-x    28        896 Sep 23 22:03 video/
```



Previous	Calendar	July			2010	Next
Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
27 JD178	28 JD179	29 JD180	30 JD181	1 JD182 Site Visit (SpB, JM): Details , Photos (25) Span cylinder at 1450 psi. N2 at 1850 psi. from 12:00-14:00 MST, replaced the boom for the 21.5m CSAT Variable Conditions. Sunny/Breezy in the morning, then a T-storm around 2-3pm LDT. NCAR Truck	2 JD183	3 JD184
4 JD185 Independence Day	5 JD186 Site Visit (SpB, BH): Details , Photos (20) Span cylinder at 1450 psi. N2 at 1850 psi. Chilly and windy (downslope) in the morning, then calm and sunny in the afternoon. CU Jeep CU Holiday (Day after 4th of July)	6 JD187	7 JD188	8 JD189 Brent Helliker (U of Penn) departs	9 JD190	10 JD191

Figure 1: Screenshot of a local HTML calendar page in a web browser.

In order for the weblinks to work properly, it is important that all the directories (or folders) exist off of a single directory (i.e., exactly as what is shown above). To access the calendar use a web browser to open any of the HTML files. For example, on my MacBook Air, an HTML file can be opened from a terminal window using:

```
/Applications/Google\ Chrome.app/Contents/MacOS/Google\ Chrome calendar/2010.7.html
```

Alternatively, as shown in Fig. 1, the file can be opened within a web browser using:

```
file:///Users/sean/Downloads/data_ess_dive/calendar/2010.7.html
```

Once you have opened a calendar page, all the links in the calendar should work with the local files (including the links to photos and the logbook, provided you have extracted those ZIP archives). For the the example shown in Fig. 1, the link for the month “July” will take you to the forestcam photos (Fig. 2), the link ‘Details” in a site visit will take you to the electronic logbook (Fig. 3), and the link to the photos for July 1st will take you to the photos from that day (Fig. 4).

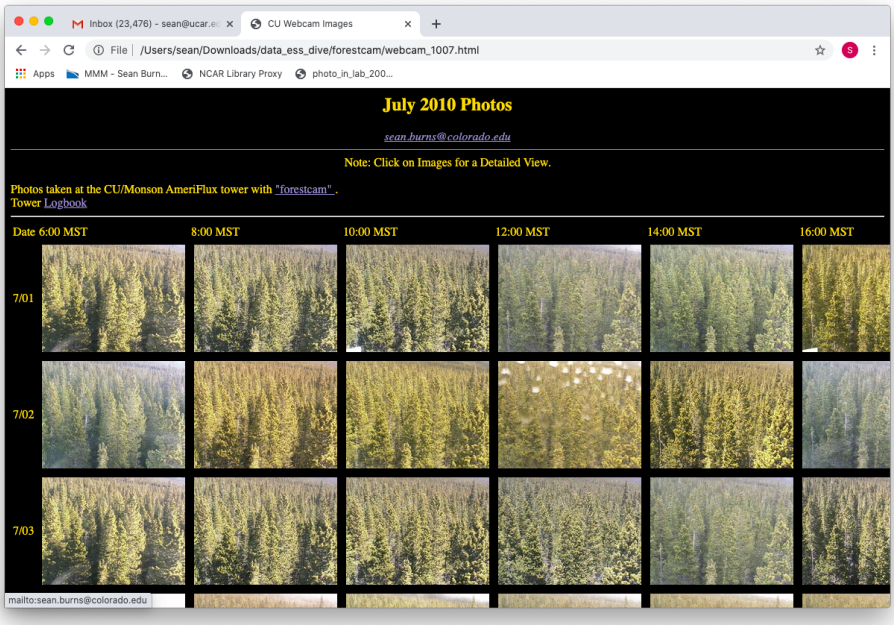


Figure 2: Screenshot of a local HTML forestcam page in a web browser.

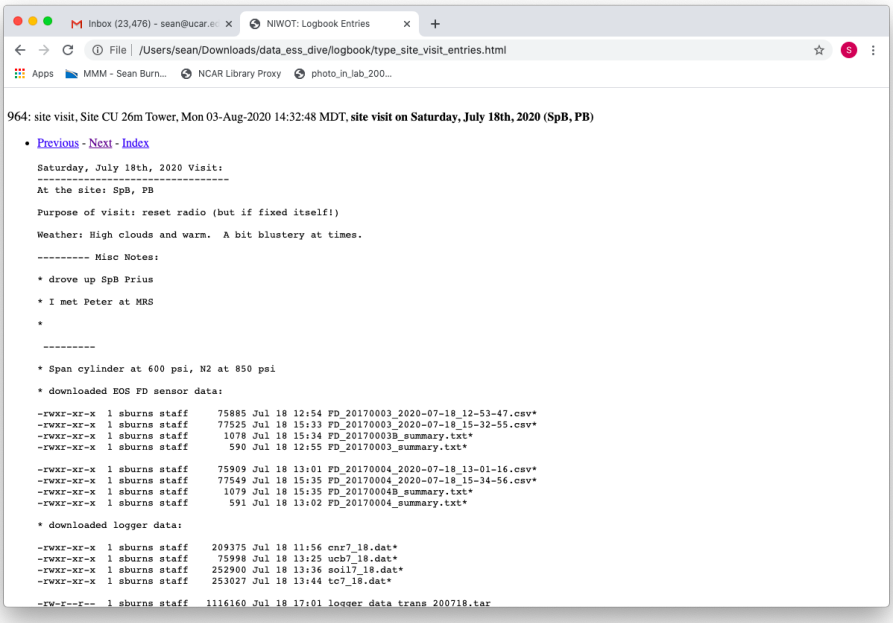


Figure 3: Screenshot of a local HTML logbook page in a web browser.

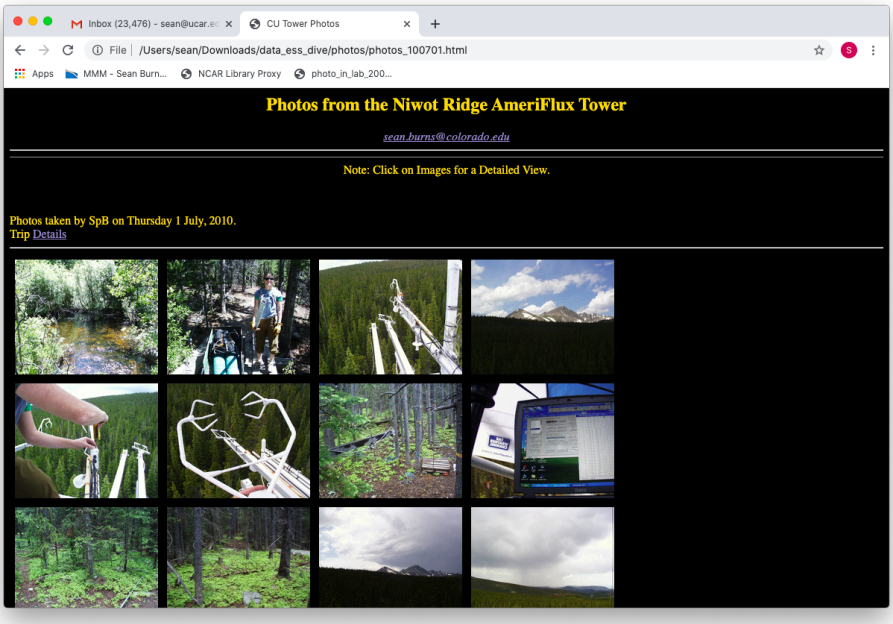


Figure 4: Screenshot of a local HTML photos page from 1 July 2010.

The individual photos can be clicked on to get a larger version of the photo (Fig. 5). It is also possible to look at all the photos from a particular year by opening a file such as "photos_2010.html", with an example shown in Fig. 6. More details about the photos can be found within the README file for the photos (README_ESS_DIVE_USNR1_photos.pdf)

Provided the urquell website is active, what is shown in the local HTML calendar pages should be similar to what is found by visiting: http://urquell.colorado.edu/calendar/

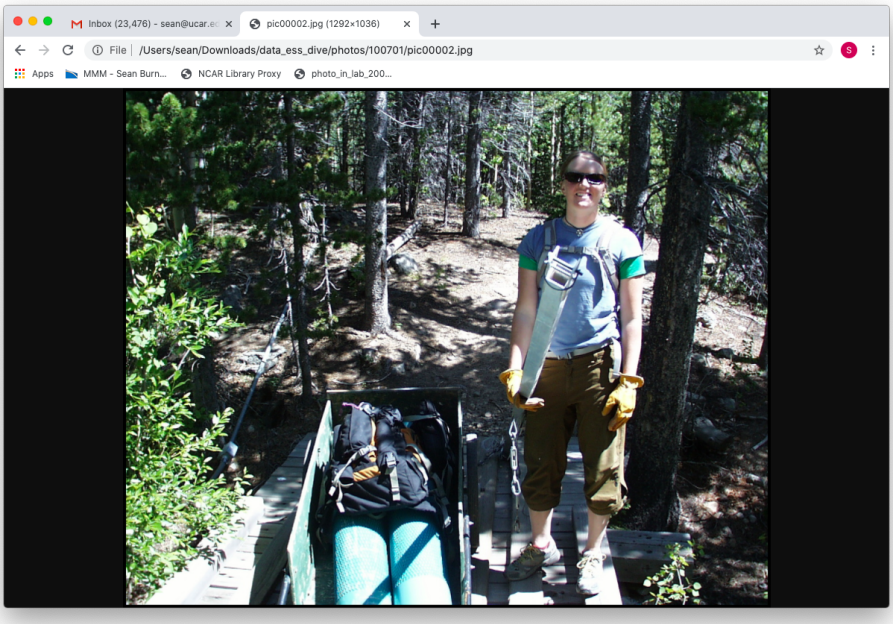


Figure 5: Screenshot of one full size photo from 1 July 2010 (this is Jen Morse who works at MRS).

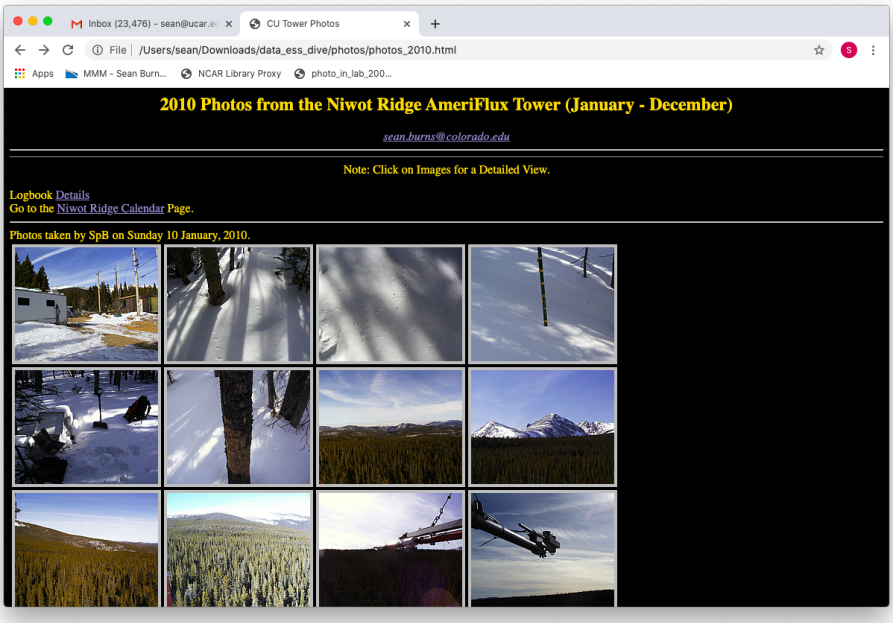


Figure 6: Screenshot of a local HTML webpage for all photos in 2010.

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http://urquell.colorado.edu/photos/photos_niwot_people.html

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