

Accessing Palmer LTER Data (Instructions for Datazoo)

1. Datazoo is the name of the data catalog (online data portal) for all of the available online Palmer LTER data. You can access the data via:
<http://oceaninformatics.ucsd.edu/datazoo/data/pallter/datasets> (Use Step 1.a. if you are required to “Log In” to access the datasets):
 - a. Select the “Log In” button in the top-right corner of the webpage and register as a public user by entering your NAME, EMAIL, and EDUCATION (K-12)

Palmer Station Antarctica LTER
Login / Accept Data Agreement

Guest user Local Account

Guest access to publicly available data

Name

Email

Use

By logging in you accept the following data-use agreement

Agreement

The data available here are intended for scholarly use by the academic research community, with the express understanding that data users will properly acknowledge the originating investigator. Use or reproduction of any material herein for any commercial or redistribution purposes is prohibited without prior written permission from the responsible party.

Data collected under the auspices of the Palmer Station Antarctica (PAL) LTER are available to the public after primary publication, or at most two

- b. Once registered, you will be able to access the Adelie Penguin Diet Composition dataset at: <http://oceaninformatics.ucsd.edu/datazoo/data/pallter/datasets>

Palmer Station Antarctica LTER
Data catalog / Datasets

Search datasets

« 1 2 » 40 of 73 total

87	Adelie Penguin Census Adelie penguin area-wide breeding population census, 1991 - present.	Fraser, William	1991 - 2014
86	Adelie Penguin Chick Broods Adelie penguin 1:2 chick nest ratio, 1991 - present.	Fraser, William	1991 - 2015
88	Adelie Penguin Chick Counts Adelie penguin colony-specific chick production, 1991 - present.	Fraser, William	1991 - 2015
89	Adelie Penguin Diet Composition Adelie penguin diet composition, preliminary analyses of whole lavaged samples, 1991 - present.	Fraser, William	1991 - 2015
97	Adelie Penguin Diet Composition, Fish Adelie penguin diet composition, fish species and numbers, 1991 - present.	Fraser, William	1991 - 2015
96	Adelie Penguin Diet Composition, Krill Adelie penguin diet composition, krill size-frequency distribution, 1991 - present.	Fraser, William	1991 - 2015

(Continued)

- c. Review the abstract to provide an overview of the dataset being used. Select the “View/Download” button in the bottom-right corner of the page.

Palmer Station Antarctica LTER
Data catalog / Datasets / Adelie Penguin Diet Composition

Adelie Penguin Diet Composition

Data Methods, Protocols, Files, etc.

Title
Adelie penguin diet composition, preliminary analyses of whole lavaged samples, 1991 - present.

Abstract
The fundamental long-term objective of the seabird component of the Palmer LTER (PAL) has been to identify and understand the mechanistic processes that regulate the mean fitness (population growth rate) of regional penguin populations. Two hypotheses have guided this research, with one suggesting that population mean fitness is best explained by changes in regional krill biomass, and the other proposing that long-term changes in sea ice affects mean fitness by tipping the balance in favor of one species over another in accordance with species-specific evolved life history affinities to sea ice. Although these hypotheses are not mutually exclusive, current evidence in the PAL region tends to favor the latter over the former. Since the inception of PAL, Adélie penguin populations have effectively collapsed, while those of gentoo and chinstrap penguins have increased dramatically, trends that are spatially and temporally coherent with decreasing regional sea ice duration. Adélie penguins are an ice-obligate polar species whose life history is intimately linked to the presence of sea ice, while chinstrap and gentoo penguins are ice-intolerant species whose life histories evolved in the sub-Antarctic, where sea ice is a less permanent feature of the marine ecosystem. In contrast, although krill constitute the most important component of the summer diets by mass of these three penguin species, changes in PAL krill abundances have exhibited no long-term trends, and thus fail to explain the divergent patterns in penguin populations evident in our time series.

Adélie penguin diet samples obtained in the field (see HEADER) are initially drained and weighed and returned to laboratories for further processing. This includes resuspension of the samples in fresh water to release fish otoliths, squid beaks and other prey hard parts, and then draining to a consistency that facilitates separating the diet samples into subsamples of primary and secondary prey components. Primary prey components include krill and fish, and secondary prey components include octopus, squid amphipods, mysids shrimp, limpets and small clams. Each prey component is weighed (total weight) and, if possible, sorted according to species for further analyses. Variability in diets within and between seasons is strongly linked to variability in the marine environment such as the presence or absence of sea ice and the timing and persistence of phytoplankton blooms, and thus affects a host of Adélie penguin life history parameters.

Keywords
habitats, marine, taxonomy, birds, Population Studies, population and community properties, population dynamics

Projects
Palmer Station Antarctica LTER

Creators
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LTER Data System Record
<http://dx.doi.org/10.6073/pasta/8fd119a1127394ef9aa82a1dbc33ca27>

Contact
PAL LTER Information Manager (pallter-im@ucsd.edu)

Data

AdeliePenguinDiet
Main data table for dataset

Rows: 746
Columns: 9

[View / Download](#)

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- d. Select the “Download” button

Palmer Station Antarctica LTER
Data catalog / Datasets / Adelie Penguin Diet Composition / Data table

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Data Columns ⁹ Data Sources / Studies ²⁴

Date Date, UTC	
Sample Number record number of a sampling event	
Sample Weight weight of prey retrieved from an organism's digestive system	g
E. superba Weight weight of prey retrieved from an organism's digestive system	g
Number of E. superba abundance of krill	
T. macrura Weight weight of prey retrieved from an organism's digestive system	g
Number of T. macrura abundance of krill	
Fish Weight weight of prey retrieved from an organism's digestive system	g
Number of Fish number of fish	

Name	AdeliePenguinDiet
Description	Main data table for dataset
Rows	746
Columns	9
Approx. CSV file size	41.97kB

(Continued)

- e. Locate **Data Fields** and *unselect* the following variables: *Sample weight*, *E. superba Weight*, *T. macrura Weight*, and *Fish Weight*. Select **Get Data** and then (after the data has been completely processed) select **CVS Ready**.

Palmer Station Antarctica LTER

Data catalog / Datasets / Adelie Penguin Diet Composition / Data table / Download

Download Form

Directions

1. By default, all fields and sources/studies (if applicable) are selected
2. Deselect fields and sources/studies if desired, or leave all selected
3. Click "Download" to generate data and view, plot or save

Notes

1. Times for generating preview results and download files vary depending on table size
2. Generating CSV or XLSX file takes longer than generating preview results
3. Data results larger than 500,000 cannot be download as XLSX format

Data Fields

- Sample Weight
- E. superba Weight
- T. macrura Weight
- Fish Weight

Data Sources / Studies

- PAL1415
- PAL1314
- PAL1213
- PAL1112
- PAL1011
- PAL0910
- PAL0809
- PAL0708
- PAL0607

✓ Query successfully processed.

Rows: 746
Columns: 5
Results expire: 2019-03-07 14:51:06

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2. Open the downloaded data into a spreadsheet for processing. This sample includes column heading changes (optional). a. **Insert a Row** to generate a formula for column totals used in graphing:

	A	B	C	D	E	F	G
1	studyName	Date	Sample #	E. superba # (Krill)	T. macrura # (Krill)	Fish #	
2	PAL9192	1/15/92	91001	754	0	0	
3	PAL9192	1/15/92	91002	860	0	0	
4	PAL9192	1/15/92	91003	739	0	0	
5	PAL9192	1/15/92	91004	888	0	0	
6	PAL9192	1/15/92	91005	530	0	0	
7	PAL9192	1/20/92	91006	445	0	0	
8	PAL9192	1/20/92	91007	467	0	0	
9	PAL9192	1/20/92	91008	587	0	0	
10	PAL9192	1/20/92	91009	541	0	0	
11	PAL9192	1/20/92	91010	534	0	0	
12	PAL9192	1/25/92	91011	639	0	0	
13	PAL9192	1/25/92	91012	941	0	0	
14	PAL9192	1/25/92	91013	878	0	0	
15	PAL9192	1/25/92	91014	395	2220	0	
16	PAL9192	1/25/92	91015	595	125	0	
17	PAL9192	1/30/92	91016	486	0	0	
18	PAL9192	1/30/92	91017	713	0	0	
19	PAL9192	1/30/92	91018	1013	0	0	
20	PAL9192	1/30/92	91019	428	0	0	
21	PAL9192	1/30/92	91020	670	0	0	
22	PAL9192	2/4/92	91021	565	0	0	
23	PAL9192	2/4/92	91022	1034	0	0	

Excel File Edit View **Insert** Format Tools Data Window

Insert > Rows

1 studyName Date Sample # E. superba # (Krill) T. macrura # (Krill) Fish #

2 PAL9192 1/15/92 91001 754 0 0

3 PAL9192 1/15/92 91002 860 0 0

4 PAL9192 1/15/92 91003 739 0 0

5 PAL9192 1/15/92 91004 888 0 0

6 PAL9192 1/15/92 91005 530 0 0

7 PAL9192 1/20/92 91006 445 0 0

8 PAL9192 1/20/92 91007 467 0 0

9 PAL9192 1/20/92 91008 587 0 0

10 PAL9192 1/20/92 91009 541 0 0

11 PAL9192 1/20/92 91010 534 0 0

12 PAL9192 1/25/92 91011 639 0 0

13 PAL9192 1/25/92 91012 941 0 0

14 PAL9192 1/25/92 91013 878 0 0

15 PAL9192 1/25/92 91014 395 2220 0

16 PAL9192 1/25/92 91015 595 125 0

17 PAL9192 1/30/92 91016 486 0 0

18 PAL9192 1/30/92 91017 713 0 0

19 PAL9192 1/30/92 91018 1013 0 0

20 PAL9192 1/30/92 91019 428 0 0

21 PAL9192 1/30/92 91020 670 0 0

22 PAL9192 1/30/92 91020 670 0 0

23 PAL9192 2/4/92 91021 565 0 0

24 PAL9192 2/4/92 91022 1034 0 0

a. (Continued)

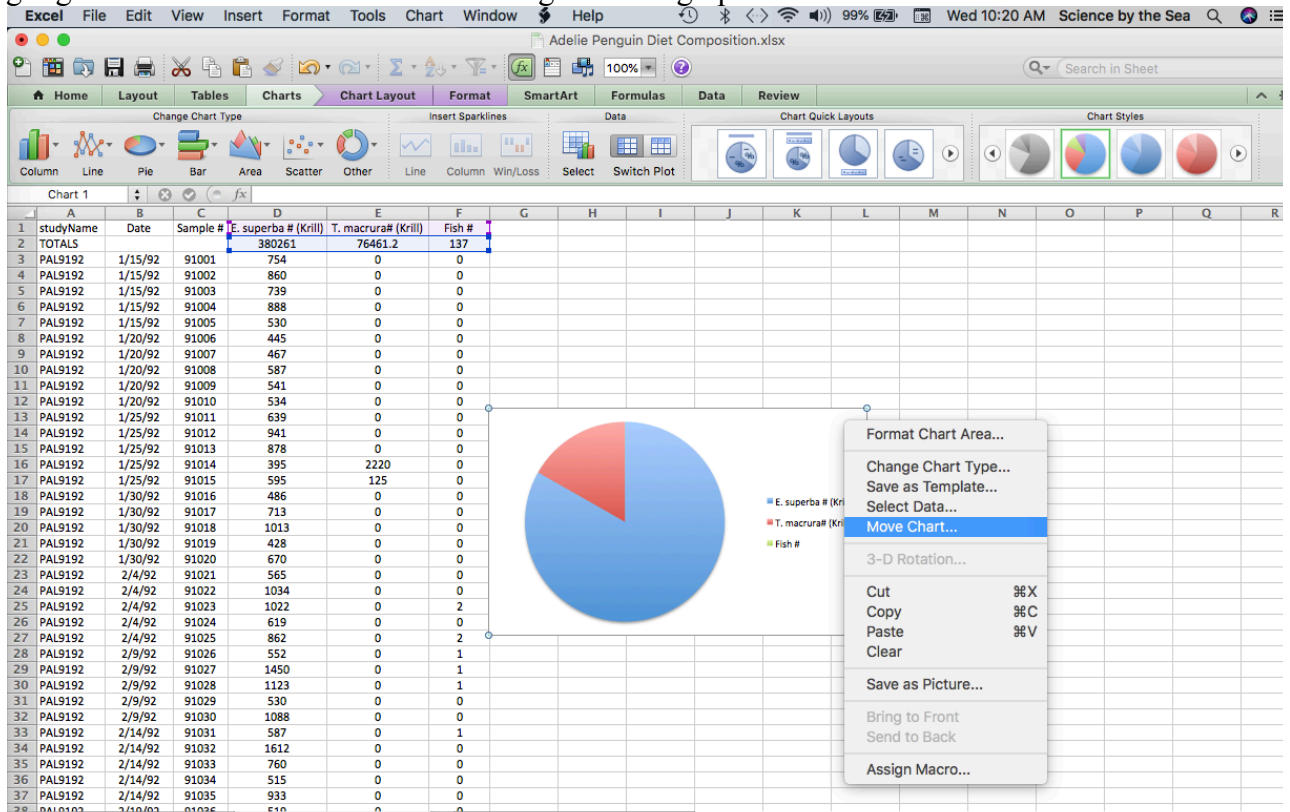
b. Create a **formula** for column totals:

The screenshot shows an Excel spreadsheet with the following data:

	A	B	C	D	E	F	G
1	studyName	Date	Sample #	E. superba # (Krill)	T. macrura# (Krill)	Fish #	
2	TOTALS			=SUM(D3:D748)	76461.2	137	
3	PAL9192	1/15/92	91001	754	0	0	
4	PAL9192	1/15/92	91002	860	0	0	
5	PAL9192	1/15/92	91003	739	0	0	
6	PAL9192	1/15/92	91004	888	0	0	
7	PAL9192	1/15/92	91005	530	0	0	
8	PAL9192	1/20/92	91006	445	0	0	
9	PAL9192	1/20/92	91007	467	0	0	
10	PAL9192	1/20/92	91008	587	0	0	
11	PAL9192	1/20/92	91009	541	0	0	
12	PAL9192	1/20/92	91010	534	0	0	
13	PAL9192	1/25/92	91011	639	0	0	
14	PAL9192	1/25/92	91012	941	0	0	
15	PAL9192	1/25/92	91013	878	0	0	
16	PAL9192	1/25/92	91014	395	2220	0	
17	PAL9192	1/25/92	91015	595	125	0	
18	PAL9192	1/30/92	91016	486	0	0	
19	PAL9192	1/30/92	91017	713	0	0	
20	PAL9192	1/30/92	91018	1013	0	0	
21	PAL9192	1/30/92	91019	428	0	0	
22	PAL9192	1/30/92	91020	670	0	0	
23	PAL9192	2/4/92	91021	565	0	0	
24	PAL9192	2/4/92	91022	1034	0	0	
25	PAL9192	2/4/92	91023	1022	0	2	
26	PAL9192	2/4/92	91024	619	0	0	
27	PAL9192	2/4/92	91025	862	0	2	
28	PAL9192	2/9/92	91026	552	0	1	
29	PAL9192	2/9/92	91027	1450	0	1	
30	PAL9192	2/9/92	91028	1123	0	1	
31	PAL9192	2/9/92	91029	530	0	0	
32	PAL9192	2/9/92	91030	1088	0	0	
33	PAL9192	2/14/92	91031	587	0	1	
34	PAL9192	2/14/92	91032	1612	0	0	
35	PAL9192	2/14/92	91033	760	0	0	
36	PAL9192	2/14/92	91034	515	0	0	
37	PAL9192	2/14/92	91035	933	0	0	

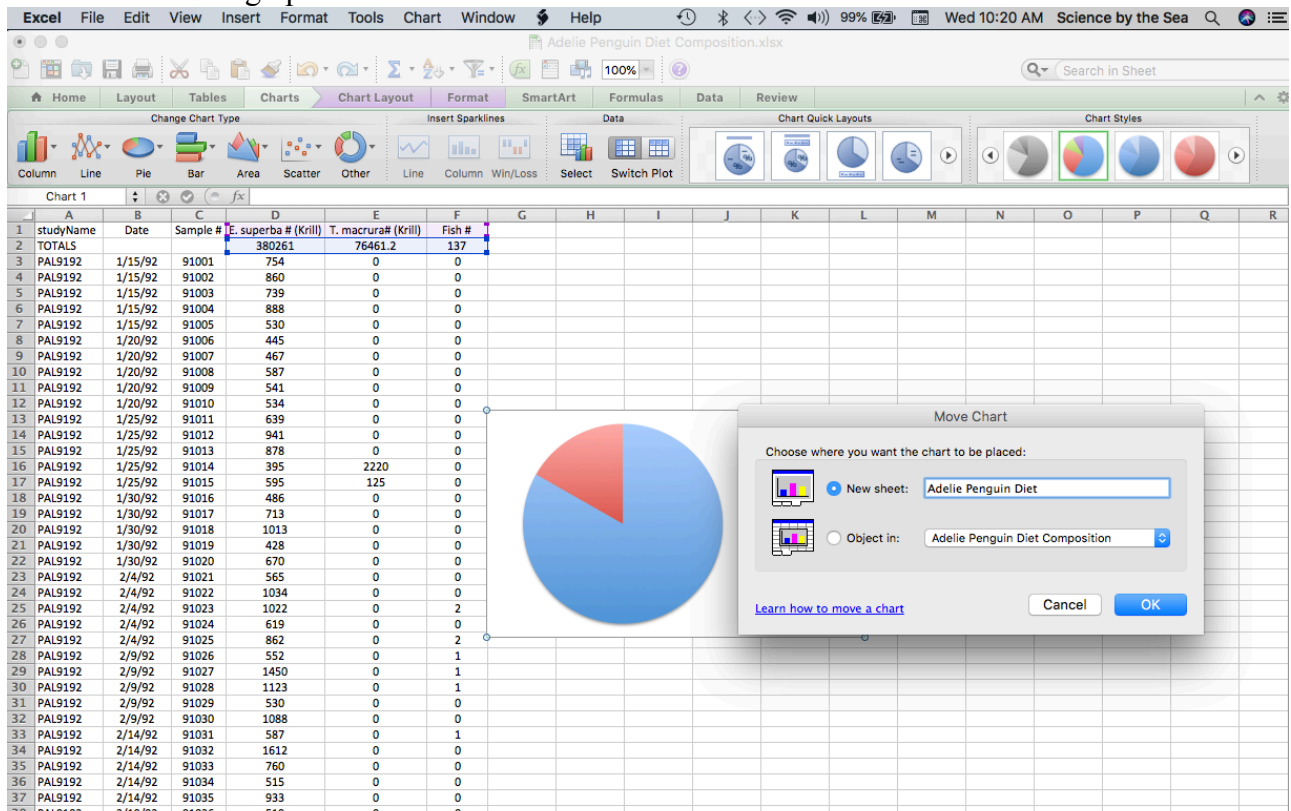
The screenshot shows the same Excel spreadsheet as above, but with the 'TOTALS' row (row 2) highlighted in blue. The formula bar shows the formula for cell D2: `=SUM(D3:D748)`.

c. Highlight the totals and select Charts:Pie to generate a graph:



(Continued)

d. Move and name the graph as shown below:



e. Completed chart including Legend and Chart Title:

