Vertical Plankton Tow (VPT) data from 1997 - 2003 from multiple cruises from the Northeast Pacific, California Current System (NEP project)

Website: https://www.bco-dmo.org/dataset/2453
Data Type: Cruise Results
Version: 1
Version Date: 2010-08-16

Project
» U.S. GLOBEC Northeast Pacific (NEP)

Program
» U.S. GLOBal ocean ECosystems dynamics (U.S. GLOBEC)

Contributors	Affiliation	Role
Peterson, William T.	Northwest Fisheries Science Center - Newport (NOAA NWFSC)	Principal Investigator
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Abstract
Vertical Plankton Tow (VPT) data from 1997 - 2003 from multiple cruises from the Northeast Pacific, California Current System

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Coverage

Spatial Extent: **N**:44.65 **E**:-123.44 **S**:38.29 **W**:-126.19
Temporal Extent: 1997 - 2003

Dataset Description

This project was designed to make a comparison of the effects of coastal upwelling on the population dynamics and vital rates of the euphausiids Euphausia pacifica and Thysanoessa spinifera in the Northern California Current, north and south of Cape Blanco, Oregon.

These data are part of a project which describes the population dynamics of these two GLOBEC target organisms. The nets sampled along several transect lines off the central Oregon coast for the purpose of describing temporal variations in euphausiid abundance, recruitment, vital rates and production. A high-frequency sampling program will be supplemented with bimonthly cruises sampling along four transect lines: two off Oregon (Newport and Coos Bay) and two off northern California (Crescent City and Eureka) during GLOBEC Long-Term Observations Program (L-TOP) cruises. Data from these survey cruises will provide information on spatial variations in euphausiid biomass, numerical abundance, vital rates and production in the

waters throughout the GLOBEC study region (Newport OR south to Eureka CA). The project proposed here has four objectives:

(1) determine the seasonal cycles of abundance of the two euphausiid species in relation to interannual variations in circulation, hydrography and upwelling;
(2) determine the seasonal, interannual and spatial variations in egg production rates, cohort development, and recruitment as a function of upwelling and phy toplankton blooms;
(3) examine the seasonal, interannual and spatial variations in mortality rates and production as a means to develop a better understanding of euphausiid population dynamics; and
(4) determine overwintering strategies and the role of seasonal reversals in circulation and the spring transition in redistributing euphausiids in shelf and slope waters.

All of the above data will be passed to one of the GLOBEC modelers (H. Batchelder, Univ. of California at Berkeley) who is developing an individual-based model for both euphausiid species; the proposed work is presented in the context of examining the relationship between the ecology of euphausiids and salmonid growth and survival.

The VPT data are organized on the GLOBEC server by cruise within year. The master page (Level 0) lists all of the cruises in chronological order. Clicking on a cruise will show all of the casts collected/processes from that cruise (Level 1). Clicking on a cast will bring up the Level 2 file that shows a single line with additional header information for a sample. Clicking on the sample_id (always "1" for this type of data) will display the Level 3 data, which are the actual taxonomic categories and abundances for that particular sample. Additional info about the variables are described below.

Program Codes	Description
LTOP	samples collected on Long-term Observation Program Cruises (ca. 4-6 cruises per year; all sample the Newport Hydrographic (NH) Line; some sample other standard lines further south)
NH	more frequent, small vessel, nearshore sampling of Newport Hydrographic Line
MESO_1	samples collected from process cruise in June 2000
MESO_2	samples collected from process cruise in August 2000

Life Stage Info Codes (partial listing)	Description
most are self explanatory; Male, Female, CV => Copepodite 5, Zoea, Nauplii, N2 => Nauplius 2, Egg--a few are not, esp. for the euphausiids (Thysanoessa and Euphausia)	
F2	Second Stage Furcilia (aka Furcilia 2)
F3	Third Stage Furcilia (aka Furcilia 3)
F1_0	First Stage Furcilia with 0 legs
F2_32 or Furcilia_2_3L2S	Second Stage Furcilia with 3 pairs of legs total, with 2 pairs of legs having setae; this xLyS pattern is common, with x and y varying depending on stage of development

(See Hooff and Peterson, 2006)

Methods & Sampling

"Zooplankton were collected using a 0.5 meter diameter, 202 micron mesh net towed verticaly from within 5 meters of the bottom (to a maximum depth of 100 m) to the surface at a rate of 30 meters per minute. A TSK flowmeter was used to monitor the amount of water filtered. The samples were preserved in a 5% buffered formalin/seawater solution." (W.T. Peterson, et al., 2002 p. 392)

Data Processing Description

"In the laboratory, the zooplankton samples were diluted and subsampled with a 1.1 ml Stempel pipette. Two to four such subsamples, about 2% of the total sample, were counted at 25-50x magnification. Copepods and Euphausiids were identified to species and developmental stage; other zooplankton were assigned to broad taxonomic groups (e.g. polychaetes, medusae, larvaceans, chaetognaths.) All euphausiids, pteropods, salps, and chaetognaths were measured. In each sample, the population density of each taxonomic group (number of individuals per cubic meter) was calculated. Copepod densities were converted to biomass estimates using dry weight/developmental-stage values found in the literature; biomasses of euphausiids, pteropods, salps, and chaetognaths were calculated from densities using length-weight regressions found in the literature." (W.T.Peterson, et al., 2002, p.392)

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Data Files

File
vpt.csv (Comma Separated Values (.csv), 4.00 MB) MD5:385b5e3e28137dd54860d281f8a3563c Primary data file for dataset ID 2453

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Related Publications

Hooff, R. C., & Peterson, W. T. (2006). Copepod biodiversity as an indicator of changes in ocean and climate conditions of the northern California current ecosystem. Limnology and Oceanography, 51(6), 2607-2620.
Methods

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Parameters

Parameter	Description	Units
year	Year	dimensionless
program	See codes in table above (under 'Dataset Description').	dimensionless
cruise_id	Cruise ID	dimensionless
cast	Cast number within the cruise.	dimensionless
station	Standard Station Name.	dimensionless
lat	Latitude (decimal degrees North).	decimal degrees
lon	Longitude (decimal degrees East).	decimal degrees
depth_w	Bottom depth at station location (in meters).	meters
sample_id	Always '1' for VPT casts, which have a single net only.	dimensionless
min_sample_depth	Always '0' for vertical tows (meters).	meters
max_sample_depth	Maximum depth of vertical tow (meters);estimated from wire out and wire angle.	meters
month_local	Month (local time).	dimensionless
day_local	Day (local time).	dimensionless
time_local	Time (local); 24 hour clock (HHMM).	dimensionless
d_n_flag	'DAY' or 'NIGHT' if flagged; many sampleswere not flagged	dimensionless
gear_type	Name of instrument; 'VPT' for this gear.	dimensionless
gear_area_m2	Mouth area of net (square meters).	m^2
gear_mesh	Size of mesh of net (mm).	mm
vol_filt	Volume filtered (cubic meters).	meters^3
counter_id	Initials of Plankton Taxonomist.	dimensionless
comments	Misc. comments pertaining to sample.	dimensionless
nodc_code	Standard NODC taxonomic code.	dimensionless
species	Genus and species.	dimensionless
life_stage	Life Stage info (see Life Stage Codes table above under 'Dataset Description').	dimensionless
abund	Density (individuals per cubic meter).	individuals per meter^3
perc_counted	Percentage of sample evaluated for this taxon (0-100%).	0-100%

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Instruments

Dataset-specific Instrument Name	Meter Net
Generic Instrument Name	Meter Net
Dataset-specific Description	This instrument is a variation on the Meter Net in that it is 0.5 m in diameter (1/2 meter) with a mesh of 202 microns.
Generic Instrument Description	A meter net is a plankton net with a one meter diameter opening and a mesh size of .333 mm, towed horizontally, obliquely or vertically, also known as a Ring Net.

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Deployments

W9711C

Website	https://www.bco-dmo.org/deployment/57622
Platform	R/V Wecoma
Start Date	1997-11-15
End Date	1997-11-22
Description	**Methods & Sampling** NEP-CCS VPT data collected by Bill Peterson

W9801B

Website	https://www.bco-dmo.org/deployment/57623
Platform	R/V Wecoma
Start Date	1998-01-30
End Date	1998-02-02
Description	**Methods & Sampling** NEP-CCS VPT data collected by Bill Peterson

W9804A

Website	https://www.bco-dmo.org/deployment/57624
Platform	R/V Wecoma
Start Date	1998-04-04
End Date	1998-04-10
Description	**Methods & Sampling** NEP-CCS VPT data collected by Bill Peterson

AR9807

Website	https://www.bco-dmo.org/deployment/57489
Platform	R/V McArthur
Start Date	1998-06-02
End Date	1998-06-05
Description	**Methods & Sampling** NEP-CCS VPT data collected by Bill Peterson

W9808A

Website	https://www.bco-dmo.org/deployment/57625
Platform	R/V Wecoma
Start Date	1998-08-06
End Date	1998-08-14
Description	**Methods & Sampling** NEP-CCS VPT data collected by Bill Peterson

W9809A

Website	https://www.bco-dmo.org/deployment/57626
Platform	R/V Wecoma
Start Date	1998-09-24
End Date	1998-09-26
Description	**Methods & Sampling** NEP-CCS VPT data collected by Bill Peterson

W9811A

Website	https://www.bco-dmo.org/deployment/57627
Platform	R/V Wecoma
Start Date	1998-11-16
End Date	1998-11-20
Description	**Methods & Sampling** NEP-CCS VPT data collected by Bill Peterson

W9902A

Website	https://www.bco-dmo.org/deployment/57628
Platform	R/V Wecoma
Start Date	1999-02-17
End Date	1999-02-18
Description	**Methods & Sampling** NEP-CCS VPT data collected by Bill Peterson

W9904B

Website	https://www.bco-dmo.org/deployment/57629
Platform	R/V Wecoma
Start Date	1999-04-19
End Date	1999-04-22
Description	**Methods & Sampling** NEP-CCS VPT data collected by Bill Peterson

SJ990401

Website	https://www.bco-dmo.org/deployment/57578
Platform	R/V Sacajawea
Start Date	1999-04-29
End Date	1999-04-29
Description	**Methods & Sampling** NEP-CCS VPT data collected by Bill Peterson

SJ990501

Website	https://www.bco-dmo.org/deployment/57579
Platform	R/V Sacajawea
Start Date	1999-05-14
End Date	1999-05-14
Description	**Methods & Sampling** NEP-CCS VPT data collected by Bill Peterson

SJ990601

Website	https://www.bco-dmo.org/deployment/57580
Platform	R/V Sacajawea
Start Date	1999-06-10
End Date	1999-06-10
Description	**Methods & Sampling** NEP-CCS VPT data collected by Bill Peterson

W9907A

Website	https://www.bco-dmo.org/deployment/57630
Platform	R/V Wecoma
Start Date	1999-07-03
End Date	1999-07-09
Description	**Methods & Sampling** NEP-CCS VPT data collected by Bill Peterson

SJ990701

Website	https://www.bco-dmo.org/deployment/57581
Platform	R/V Sacajawea
Start Date	1999-07-15
End Date	1999-07-15
Description	**Methods & Sampling** NEP-CCS VPT data collected by Bill Peterson

SJ990702

Website	https://www.bco-dmo.org/deployment/57582
Platform	R/V Sacajawea
Start Date	1999-07-19
End Date	1999-07-19
Description	**Methods & Sampling** NEP-CCS VPT data collected by Bill Peterson

SJ990703

Website	https://www.bco-dmo.org/deployment/57583
Platform	R/V Sacajawea
Start Date	1999-07-26
End Date	1999-07-26
Description	**Methods & Sampling** NEP-CCS VPT data collected by Bill Peterson

SJ990801

Website	https://www.bco-dmo.org/deployment/57584
Platform	R/V Sacajawea
Start Date	1999-08-05
End Date	1999-08-05
Description	**Methods & Sampling** NEP-CCS VPT data collected by Bill Peterson

SJ990802

Website	https://www.bco-dmo.org/deployment/57585
Platform	R/V Sacajawea
Start Date	1999-08-19
End Date	1999-08-19
Description	**Methods & Sampling** NEP-CCS VPT data collected by Bill Peterson

W9909C

Website	https://www.bco-dmo.org/deployment/57631
Platform	R/V Wecoma
Report	http://globec.whoi.edu/nep/reports/ccs_cruises/sep99cr.pdf
Start Date	1999-09-22
End Date	1999-09-27
Description	**Methods & Sampling** NEP-CCS VPT data collected by Bill Peterson

W9911A

Website	https://www.bco-dmo.org/deployment/57632
Platform	R/V Wecoma
Report	http://globec.whoi.edu/nep/reports/ccs_cruises/nov99cr.pdf
Start Date	1999-11-03
End Date	1999-11-05
Description	**Methods & Sampling** NEP-CCS VPT data collected by Bill Peterson

SJ991201

Website	https://www.bco-dmo.org/deployment/57586
Platform	R/V Sacajawea
Start Date	1999-12-20
End Date	1999-12-20
Description	**Methods & Sampling** NEP-CCS VPT data collected by Bill Peterson

SJ000101

Website	https://www.bco-dmo.org/deployment/57587
Platform	R/V Sacajawea
Start Date	2000-01-20
End Date	2000-01-20
Description	**Methods & Sampling** NEP-CCS VPT data collected by Bill Peterson

W0002A

Website	https://www.bco-dmo.org/deployment/57596
Platform	R/V Wecoma
Report	http://globec.whoi.edu/nep/reports/ccs_cruises/feb00cr.pdf
Start Date	2000-02-01
End Date	2000-02-03
Description	**Methods & Sampling** NEP-CCS VPT data collected by Bill Peterson

SJ000201

Website	https://www.bco-dmo.org/deployment/57588
Platform	R/V Sacajawea
Start Date	2000-02-16
End Date	2000-02-16
Description	**Methods & Sampling** NEP-CCS VPT data collected by Bill Peterson

SJ000301

Website	https://www.bco-dmo.org/deployment/57589
Platform	R/V Sacajawea
Start Date	2000-03-07
End Date	2000-03-07
Description	**Methods & Sampling** NEP-CCS VPT data collected by Bill Peterson

SJ000401

Website	https://www.bco-dmo.org/deployment/57590
Platform	R/V Sacajawea
Start Date	2000-04-06
End Date	2000-04-06
Description	**Methods & Sampling** NEP-CCS VPT data collected by Bill Peterson

W0004B

Website	https://www.bco-dmo.org/deployment/57597
Platform	R/V Wecoma
Report	http://globec.whoi.edu/nep/reports/ccs_cruises/apr00cr.pdf
Start Date	2000-04-11
End Date	2000-04-17
Description	**Methods & Sampling** NEP-CCS VPT data collected by Bill Peterson

SJ000402

Website	https://www.bco-dmo.org/deployment/57591
Platform	R/V Sacajawea
Start Date	2000-04-30
End Date	2000-04-30
Description	**Methods & Sampling** NEP-CCS VPT data collected by Bill Peterson

SJ000501

Website	https://www.bco-dmo.org/deployment/57592
Platform	R/V Sacajawea
Start Date	2000-05-17
End Date	2000-05-17
Description	**Methods & Sampling** NEP-CCS VPT data collected by Bill Peterson

SJ000502

Website	https://www.bco-dmo.org/deployment/57593
Platform	R/V Sacajawea
Start Date	2000-05-22
End Date	2000-05-22
Description	**Methods & Sampling** NEP-CCS VPT data collected by Bill Peterson

NH0005

Website	https://www.bco-dmo.org/deployment/57557
Platform	R/V New Horizon
Report	http://globec.whoi.edu/nep/reports/ccs_cruises/nh0005/nh0005cr.pdf
Start Date	2000-05-28
End Date	2000-06-13
Description	**Methods & Sampling** NEP-CCS VPT data collected by Bill Peterson

SJ000601

Website	https://www.bco-dmo.org/deployment/57594
Platform	R/V Sacajawea
Start Date	2000-06-23
End Date	2000-06-23
Description	**Methods & Sampling** NEP-CCS VPT data collected by Bill Peterson

W0007A

Website	https://www.bco-dmo.org/deployment/57599
Platform	R/V Wecoma
Report	http://globec.whoi.edu/nep/reports/ccs_cruises/jul00cr.pdf
Start Date	2000-07-07
End Date	2000-07-13
Description	**Methods & Sampling** NEP-CCS VPT data collected by Bill Peterson

NH0007

Website	https://www.bco-dmo.org/deployment/57558
Platform	R/V New Horizon
Report	http://globec.whoi.edu/nep/reports/ccs_cruises/nh0007/nh0007cr.pdf
Start Date	2000-07-27
End Date	2000-08-12
Description	**Methods & Sampling** NEP-CCS VPT data collected by Bill Peterson

W0009A

Website	https://www.bco-dmo.org/deployment/57601
Platform	R/V Wecoma
Report	http://globec.whoi.edu/nep/reports/ccs_cruises/sep00cr.pdf
Start Date	2000-09-07
End Date	2000-09-12
Description	**Methods & Sampling** NEP-CCS VPT data collected by Bill Peterson

EL000901

Website	https://www.bco-dmo.org/deployment/57769
Platform	R/V Elakha
Start Date	2000-09-25
End Date	2000-09-26
Description	**Methods & Sampling** NEP-CCS VPT data collected by Bill Peterson

EL001001

Website	https://www.bco-dmo.org/deployment/57770
Platform	R/V Elakha
Start Date	2000-10-06
End Date	2000-10-06
Description	**Methods & Sampling** NEP-CCS VPT data collected by Bill Peterson

EL001002

Website	https://www.bco-dmo.org/deployment/57771
Platform	R/V Elakha
Start Date	2000-10-23
End Date	2000-10-23
Description	**Methods & Sampling** NEP-CCS VPT data collected by Bill Peterson

EL001101

Website	https://www.bco-dmo.org/deployment/57772
Platform	R/V Elakha
Start Date	2000-11-07
End Date	2000-11-07
Description	**Methods & Sampling** NEP-CCS VPT data collected by Bill Peterson

EL001201

Website	https://www.bco-dmo.org/deployment/57773
Platform	R/V Elakha
Start Date	2000-12-06
End Date	2000-12-06
Description	**Methods & Sampling** NEP-CCS VPT data collected by Bill Peterson

EL010101

Website	https://www.bco-dmo.org/deployment/57774
Platform	R/V Elakha
Start Date	2001-01-16
End Date	2001-01-16
Description	**Methods & Sampling** NEP-CCS VPT data collected by Bill Peterson

W0101C

Website	https://www.bco-dmo.org/deployment/57602
Platform	R/V Wecoma
Report	http://globec.whoi.edu/nep/reports/ccs_cruises/jan01cr.pdf
Start Date	2001-01-27
End Date	2001-01-29
Description	**Methods & Sampling** NEP-CCS VPT data collected by Bill Peterson

EL010201

Website	https://www.bco-dmo.org/deployment/57775
Platform	R/V Elakha
Start Date	2001-02-14
End Date	2001-02-14
Description	**Methods & Sampling** NEP-CCS VPT data collected by Bill Peterson

EL010202

Website	https://www.bco-dmo.org/deployment/57776
Platform	R/V Elakha
Start Date	2001-02-28
End Date	2001-02-28
Description	**Methods & Sampling** NEP-CCS VPT data collected by Bill Peterson

EL010301

Website	https://www.bco-dmo.org/deployment/57777
Platform	R/V Elakha
Start Date	2001-03-12
End Date	2001-03-12
Description	**Methods & Sampling** NEP-CCS VPT data collected by Bill Peterson

W0103B

Website	https://www.bco-dmo.org/deployment/57603
Platform	R/V Wecoma
Report	http://globec.whoi.edu/nep/reports/ccs_cruises/mar01cr.pdf
Start Date	2001-03-20
End Date	2001-03-24
Description	**Methods & Sampling** NEP-CCS VPT data collected by Bill Peterson

EL010401

Website	https://www.bco-dmo.org/deployment/57778
Platform	R/V Elakha
Start Date	2001-04-03
End Date	2001-04-03
Description	**Methods & Sampling** NEP-CCS VPT data collected by Bill Peterson

EL010402

Website	https://www.bco-dmo.org/deployment/57779
Platform	R/V Elakha
Start Date	2001-04-11
End Date	2001-04-11
Description	**Methods & Sampling** NEP-CCS VPT data collected by Bill Peterson

EL010403

Website	https://www.bco-dmo.org/deployment/57780
Platform	R/V Elakha
Start Date	2001-04-25
End Date	2001-04-25
Description	**Methods & Sampling** NEP-CCS VPT data collected by Bill Peterson

EL010501

Website	https://www.bco-dmo.org/deployment/57781
Platform	R/V Elakha
Start Date	2001-05-09
End Date	2001-05-09
Description	**Methods & Sampling** NEP-CCS VPT data collected by Bill Peterson

EL010601

Website	https://www.bco-dmo.org/deployment/57782
Platform	R/V Elakha
Start Date	2001-06-04
End Date	2001-06-04
Description	**Methods & Sampling** NEP-CCS VPT data collected by Bill Peterson

EL010602

Website	https://www.bco-dmo.org/deployment/57783
Platform	R/V Elakha
Start Date	2001-06-16
End Date	2001-06-16
Description	**Methods & Sampling** NEP-CCS VPT data collected by Bill Peterson

EL010603

Website	https://www.bco-dmo.org/deployment/57784
Platform	R/V Elakha
Start Date	2001-06-26
End Date	2001-06-26
Description	**Methods & Sampling** NEP-CCS VPT data collected by Bill Peterson

W0107A

Website	https://www.bco-dmo.org/deployment/57604
Platform	R/V Wecoma
Report	http://globec.whoi.edu/nep/reports/ccs_cruises/jul01cr.pdf
Start Date	2001-07-06
End Date	2001-07-09
Description	**Methods & Sampling** NEP-CCS VPT data collected by Bill Peterson

EL010701

Website	https://www.bco-dmo.org/deployment/57785
Platform	R/V Elakha
Start Date	2001-07-18
End Date	2001-07-18
Description	**Methods & Sampling** NEP-CCS VPT data collected by Bill Peterson

EL010702

Website	https://www.bco-dmo.org/deployment/57786
Platform	R/V Elakha
Start Date	2001-07-30
End Date	2001-07-30
Description	**Methods & Sampling** NEP-CCS VPT data collected by Bill Peterson

EL010801

Website	https://www.bco-dmo.org/deployment/57787
Platform	R/V Elakha
Start Date	2001-08-05
End Date	2001-08-05
Description	**Methods & Sampling** NEP-CCS VPT data collected by Bill Peterson

EL010802

Website	https://www.bco-dmo.org/deployment/57788
Platform	R/V Elakha
Start Date	2001-08-09
End Date	2001-08-09
Description	**Methods & Sampling** NEP-CCS VPT data collected by Bill Peterson

EL010803

Website	https://www.bco-dmo.org/deployment/57789
Platform	R/V Elakha
Start Date	2001-08-24
End Date	2001-08-24
Description	**Methods & Sampling** NEP-CCS VPT data collected by Bill Peterson

W0109A

Website	https://www.bco-dmo.org/deployment/57605
Platform	R/V Wecoma
Report	http://globec.whoi.edu/nep/reports/ccs_cruises/sep01cr.pdf
Start Date	2001-09-04
End Date	2001-09-10
Description	**Methods & Sampling** NEP-CCS VPT data collected by Bill Peterson

EL010901

Website	https://www.bco-dmo.org/deployment/57790
Platform	R/V Elakha
Start Date	2001-09-18
End Date	2001-09-18
Description	**Methods & Sampling** NEP-CCS VPT data collected by Bill Peterson

EL010902

Website	https://www.bco-dmo.org/deployment/57791
Platform	R/V Elakha
Start Date	2001-09-25
End Date	2001-09-25
Description	**Methods & Sampling** NEP-CCS VPT data collected by Bill Peterson

EL011001

Website	https://www.bco-dmo.org/deployment/57792
Platform	R/V Elakha
Start Date	2001-10-02
End Date	2001-10-02
Description	**Methods & Sampling** NEP-CCS VPT data collected by Bill Peterson

EL011002

Website	https://www.bco-dmo.org/deployment/57793
Platform	R/V Elakha
Start Date	2001-10-29
End Date	2001-10-29
Description	**Methods & Sampling** NEP-CCS VPT data collected by Bill Peterson

EL011101

Website	https://www.bco-dmo.org/deployment/57794
Platform	R/V Elakha
Start Date	2001-11-07
End Date	2001-11-07
Description	**Methods & Sampling** NEP-CCS VPT data collected by Bill Peterson

W0111B

Website	https://www.bco-dmo.org/deployment/57606
Platform	R/V Wecoma
Report	http://globec.whoi.edu/nep/reports/ccs_cruises/nov01cr.pdf
Start Date	2001-11-27
End Date	2001-11-29
Description	**Methods & Sampling** NEP-CCS VPT data collected by Bill Peterson

EL020101

Website	https://www.bco-dmo.org/deployment/57795
Platform	R/V Elakha
Start Date	2002-01-14
End Date	2002-01-14
Description	**Methods & Sampling** NEP-CCS VPT data collected by Bill Peterson

EL020102

Website	https://www.bco-dmo.org/deployment/57796
Platform	R/V Elakha
Start Date	2002-01-29
End Date	2002-01-29
Description	**Methods & Sampling** NEP-CCS VPT data collected by Bill Peterson

W0202A

Website	https://www.bco-dmo.org/deployment/57607
Platform	R/V Wecoma
Report	http://globec.whoi.edu/nep/reports/ccs_cruises/feb02cr.pdf
Start Date	2002-02-19
End Date	2002-02-21
Description	**Methods & Sampling** NEP-CCS VPT data collected by Bill Peterson

EL020301

Website	https://www.bco-dmo.org/deployment/57797
Platform	R/V Elakha
Start Date	2002-03-04
End Date	2002-03-04
Description	**Methods & Sampling** NEP-CCS VPT data collected by Bill Peterson

EL020302

Website	https://www.bco-dmo.org/deployment/57798
Platform	R/V Elakha
Start Date	2002-03-20
End Date	2002-03-20
Description	**Methods & Sampling** NEP-CCS VPT data collected by Bill Peterson

EL020303

Website	https://www.bco-dmo.org/deployment/57799
Platform	R/V Elakha
Start Date	2002-03-27
End Date	2002-03-27
Description	**Methods & Sampling** NEP-CCS VPT data collected by Bill Peterson

W0204A

Website	https://www.bco-dmo.org/deployment/57608
Platform	R/V Wecoma
Report	http://globec.whoi.edu/nep/reports/ccs_cruises/apr02cr.pdf
Start Date	2002-04-04
End Date	2002-04-10
Description	**Methods & Sampling** NEP-CCS VPT data collected by Bill Peterson

EL020401

Website	https://www.bco-dmo.org/deployment/57800
Platform	R/V Elakha
Start Date	2002-04-18
End Date	2002-04-18
Description	**Methods & Sampling** NEP-CCS VPT data collected by Bill Peterson

EL020402

Website	https://www.bco-dmo.org/deployment/57801
Platform	R/V Elakha
Start Date	2002-04-30
End Date	2002-04-30
Description	**Methods & Sampling** NEP-CCS VPT data collected by Bill Peterson

EL020501

Website	https://www.bco-dmo.org/deployment/57802
Platform	R/V Elakha
Start Date	2002-05-09
End Date	2002-05-09
Description	**Methods & Sampling** NEP-CCS VPT data collected by Bill Peterson

EL020502

Website	https://www.bco-dmo.org/deployment/57803
Platform	R/V Elakha
Start Date	2002-05-20
End Date	2002-05-20
Description	**Methods & Sampling** NEP-CCS VPT data collected by Bill Peterson

W0205A

Website	https://www.bco-dmo.org/deployment/57609
Platform	R/V Wecoma
Report	http://globec.whoi.edu/nep/reports/ccs_cruises/w0205acr.pdf
Start Date	2002-05-29
End Date	2002-06-18
Description	**Methods & Sampling** NEP-CCS VPT data collected by Bill Peterson

EL020701

Website	https://www.bco-dmo.org/deployment/57804
Platform	R/V Elakha
Start Date	2002-07-03
End Date	2002-07-03
Description	**Methods & Sampling** NEP-CCS VPT data collected by Bill Peterson

W0207A

Website	https://www.bco-dmo.org/deployment/57610
Platform	R/V Wecoma
Report	http://globec.whoi.edu/nep/reports/ccs_cruises/jul02cr.pdf
Start Date	2002-07-09
End Date	2002-07-15
Description	**Methods & Sampling** NEP-CCS VPT data collected by Bill Peterson

EL020702

Website	https://www.bco-dmo.org/deployment/57805
Platform	R/V Elakha
Start Date	2002-07-23
End Date	2002-07-23
Description	**Methods & Sampling** NEP-CCS VPT data collected by Bill Peterson

NH0207

Website	https://www.bco-dmo.org/deployment/57559
Platform	R/V New Horizon
Report	http://globec.whoi.edu/nep/reports/ccs_cruises/nh0207acr.pdf
Start Date	2002-07-31
End Date	2002-08-19
Description	**Methods & Sampling** NEP-CCS VPT data collected by Bill Peterson

AT7-21

Website	https://www.bco-dmo.org/deployment/57490
Platform	R/V Atlantis
Report	http://globec.whoi.edu/nep/reports/ccs_cruises/sep02cr.pdf
Start Date	2002-09-27
End Date	2002-10-03
Description	funded by NSF OCE-0000733 UNOLS schedule link The original data from this cruise are available from the NSF R2R data catalog. **Methods & Sampling** NEP-CCS VPT data collected by Bill Peterson

EL021001

Website	https://www.bco-dmo.org/deployment/57806
Platform	R/V Elakha
Start Date	2002-10-15
End Date	2002-10-15
Description	**Methods & Sampling** NEP-CCS VPT data collected by Bill Peterson

EL021101

Website	https://www.bco-dmo.org/deployment/57807
Platform	R/V Elakha
Start Date	2002-11-01
End Date	2002-11-01
Description	**Methods & Sampling** NEP-CCS VPT data collected by Bill Peterson

W0212A

Website	https://www.bco-dmo.org/deployment/57611
Platform	R/V Wecoma
Report	http://globec.whoi.edu/nep/reports/ccs_cruises/dec02cr.pdf
Start Date	2002-12-03
End Date	2002-12-05
Description	**Methods & Sampling** NEP-CCS VPT data collected by Bill Peterson

EL030101

Website	https://www.bco-dmo.org/deployment/57808
Platform	R/V Elakha
Start Date	2003-01-09
End Date	2003-01-09
Description	**Methods & Sampling** NEP-CCS VPT data collected by Bill Peterson

EL030201

Website	https://www.bco-dmo.org/deployment/57809
Platform	R/V Elakha
Start Date	2003-02-06
End Date	2003-02-06
Description	**Methods & Sampling** NEP-CCS VPT data collected by Bill Peterson

W0302A

Website	https://www.bco-dmo.org/deployment/57612
Platform	R/V Wecoma
Report	http://globec.whoi.edu/nep/reports/ccs_cruises/feb03cr.pdf
Start Date	2003-02-14
End Date	2003-02-16
Description	**Methods & Sampling** NEP-CCS VPT data collected by Bill Peterson

EL030202

Website	https://www.bco-dmo.org/deployment/57810
Platform	R/V Elakha
Start Date	2003-02-25
End Date	2003-02-25
Description	**Methods & Sampling** NEP-CCS VPT data collected by Bill Peterson

EL030302

Website	https://www.bco-dmo.org/deployment/57811
Platform	R/V Elakha
Start Date	2003-03-24
End Date	2003-03-24
Description	**Methods & Sampling** NEP-CCS VPT data collected by Bill Peterson

W0304A

Website	https://www.bco-dmo.org/deployment/57613
Platform	R/V Wecoma
Report	http://globec.whoi.edu/nep/reports/ccs_cruises/apr03cr.pdf
Start Date	2003-04-01
End Date	2003-04-06
Description	**Methods & Sampling** NEP-CCS VPT data collected by Bill Peterson

EL030401

Website	https://www.bco-dmo.org/deployment/57812
Platform	R/V Elakha
Start Date	2003-04-16
End Date	2003-04-16
Description	**Methods & Sampling** NEP-CCS VPT data collected by Bill Peterson

EL030402

Website	https://www.bco-dmo.org/deployment/57813
Platform	R/V Elakha
Start Date	2003-04-30
End Date	2003-04-30
Description	**Methods & Sampling** NEP-CCS VPT data collected by Bill Peterson

EL030501

Website	https://www.bco-dmo.org/deployment/57814
Platform	R/V Elakha
Start Date	2003-05-06
End Date	2003-05-06
Description	**Methods & Sampling** NEP-CCS VPT data collected by Bill Peterson

EL030502

Website	https://www.bco-dmo.org/deployment/57815
Platform	R/V Elakha
Start Date	2003-05-21
End Date	2003-05-21
Description	**Methods & Sampling** NEP-CCS VPT data collected by Bill Peterson

EL030601

Website	https://www.bco-dmo.org/deployment/57816
Platform	R/V Elakha
Start Date	2003-06-05
End Date	2003-06-05
Description	**Methods & Sampling** NEP-CCS VPT data collected by Bill Peterson

EL030602

Website	https://www.bco-dmo.org/deployment/57817
Platform	R/V Elakha
Start Date	2003-06-25
End Date	2003-06-25
Description	**Methods & Sampling** NEP-CCS VPT data collected by Bill Peterson

NH0307A

Website	https://www.bco-dmo.org/deployment/57560
Platform	R/V New Horizon
Report	http://globec.whoi.edu/nep/reports/ccs_cruises/jul03cr.pdf
Start Date	2003-07-02
End Date	2003-07-08
Description	**Methods & Sampling** NEP-CCS VPT data collected by Bill Peterson

EL030701

Website	https://www.bco-dmo.org/deployment/57818
Platform	R/V Elakha
Start Date	2003-07-17
End Date	2003-07-17
Description	**Methods & Sampling** NEP-CCS VPT data collected by Bill Peterson

EL030702

Website	https://www.bco-dmo.org/deployment/57819
Platform	R/V Elakha
Start Date	2003-07-24
End Date	2003-07-24
Description	**Methods & Sampling** NEP-CCS VPT data collected by Bill Peterson

EL030801

Website	https://www.bco-dmo.org/deployment/57820
Platform	R/V Elakha
Start Date	2003-08-05
End Date	2003-08-05
Description	**Methods & Sampling** NEP-CCS VPT data collected by Bill Peterson

EL030901

Website	https://www.bco-dmo.org/deployment/57821
Platform	R/V Elakha
Start Date	2003-09-04
End Date	2003-09-04
Description	**Methods & Sampling** NEP-CCS VPT data collected by Bill Peterson

EL030902

Website	https://www.bco-dmo.org/deployment/57822
Platform	R/V Elakha
Start Date	2003-09-17
End Date	2003-09-17
Description	**Methods & Sampling** NEP-CCS VPT data collected by Bill Peterson

W0309B

Website	https://www.bco-dmo.org/deployment/57617
Platform	R/V Wecoma
Report	http://globec.whoi.edu/nep/reports/ccs_cruises/sep03cr.pdf
Start Date	2003-09-26
End Date	2003-10-01
Description	**Methods & Sampling** NEP-CCS VPT data collected by Bill Peterson

EL031001

Website	https://www.bco-dmo.org/deployment/57823
Platform	R/V Elakha
Start Date	2003-10-23
End Date	2003-10-23
Description	**Methods & Sampling** NEP-CCS VPT data collected by Bill Peterson

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Project Information

U.S. GLOBEC Northeast Pacific (NEP)

Website: http://nepglobec.bco-dmo.org

Coverage: Northeast Pacific Ocean, Gulf of Alaska

Program in a Nutshell

Goal: To understand the effects of climate variability and climate change on the distribution, abundance and production of marine animals (including commercially important living marine resources) in the eastern North Pacific. To embody this understanding in diagnostic and prognostic ecosystem models, capable of capturing the ecosystem response to major climatic fluctuations.

Approach: To study the effects of past and present climate variability on the population ecology and population dynamics of marine biota and living marine resources, and to use this information as a proxy for how the ecosystems of the eastern North Pacific may respond to future global climate change. The strong temporal variability in the physical and biological signals of the NEP will be used to examine the biophysical mechanisms through which zooplankton and salmon populations respond to physical forcing and biological interactions in the coastal regions of the two gyres. Annual and interannual variability will be studied directly through **long-term observations** and detailed **process studies**; variability at longer time scales will be examined through **retrospective analysis** of directly measured and proxy data. Coupled **biophysical models** of the ecosystems of these regions will be developed and tested using the process studies and data collected from the long-term observation programs, then further tested and improved by hindcasting selected retrospective data series.

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Program Information

U.S. GLOBal ocean ECosystems dynamics (U.S. GLOBEC)

Website: http://www.usglobec.org/

Coverage: Global

U.S. GLOBEC (GLOBal ocean ECosystems dynamics) is a research program organized by oceanographers and fisheries scientists to address the question of how global climate change may affect the abundance and production of animals in the sea.

The U.S. GLOBEC Program currently had major research efforts underway in the Georges Bank / Northwest Atlantic Region, and the Northeast Pacific (with components in the California Current and in the Coastal Gulf of Alaska). U.S. GLOBEC was a major contributor to International GLOBEC efforts in the Southern Ocean and Western Antarctic Peninsula (WAP).

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Funding

Funding Source	Award
NSF Division of Ocean Sciences (NSF OCE)	OCE-0000733
NSF Division of Ocean Sciences (NSF OCE)	OCE-9732386
National Oceanic and Atmospheric Administration (NOAA)	NA67RJ0151 (NEP)
National Oceanic and Atmospheric Administration (NOAA)	NA86OP0589 (NEP)

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