

Drifter buoy data collected by NOAA/PMEL/EcoFOCI from multiple cruises in the Northeast Pacific, Coastal Gulf of Alaska, SE Bering Sea from 2001-2004 (NEP project)

Website: <https://www.bco-dmo.org/dataset/3550>

Version: 2007-10-09

Project

» [U.S. GLOBEC Northeast Pacific](#) (NEP)

Program

» [U.S. GLOBal ocean Ecosystems dynamics](#) (U.S. GLOBEC)

Contributors	Affiliation	Role
Stabeno, Phyllis	National Oceanic and Atmospheric Administration (NOAA-PMEL)	Principal Investigator

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Dataset Description

NEP-CGOA (Northeast Pacific - Coastal Gulf of Alaska) Ecosystems and Fisheries Oceanography Coordinated Investigations (NOAA/PMEL/EcoFOCI)

Some drifters were deployed from FOCI/PMEL cruises that were not associated with a GLOBEC NEP cruises. Information on these deployments can be found in the following FOCI cruise reports:

[HX245](#) - 06/04/2001 to 06/25/2001; Drifter ID's 13144, 13151, 13152, 13170.

[LA0101](#) - 10/07/2001 to 10/16/2001; Drifter ID's 13143, 13163, 22025, 22244, 22383, 22578, 23827, 24213.

[MF0205](#) - 04/21/2002 to 05/11/2002; Drifter ID's 36246, 36247, 36248, 36249, 36250, 36251.

[HX259](#) - 05/16/2002 to 06/19/2002; Drifter ID's 36264, 36265.

[MF0307](#) - 05/17/2003 to 05/24/2003; Drifter ID's 37489, 37520.

[MF0312](#) - 09/23/2003 to 10/04/2003; Drifter ID's 43820, 43821.

[MF0404](#) - 04/09/2004 to 04/22/2004; Drifter ID's 43703, 43704, 43707, 43708, 43729, 43733, 43735, 43737, 43738.

[MF0405](#) - 04/24/2004 to 05/02/2004; Drifter ID's 43711, 43712.

[MF0405 \(Leg 2\)](#) - 05/15/2004 to 05/21/2004; Drifter ID's 43723, 43724, 43701, 43702.

[LA0401](#) - 07/09/2004 to 07/22/2004; Drifter ID's 43705, 43706.

[HX288](#) - 07/26/2004 to 08/20/2004; Drifter ID's 43709, 43710, 43715, 43721, 43722, 43730, 43731, 43732, 43734. (Cruise also known as 3HX04.)

[MF0409](#) - 08/13/2004 to 09/06/2004; Drifter ID's 53297, 53288.

[MF0410](#) - 09/09/2004 to 09/22/2004; Drifter ID's 43699, 43700.

For access to the original data, see http://www.ecofoci.noaa.gov/drifters/efoci_drifterData.shtml.

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Methods & Sampling

Data are provided for all FOCI drifters released within each year, 2001-2004, including Gulf of Alaska, Aleutian Islands, and Bering Sea. All drifter data begin in the designated year, with some extending beyond the calendar year. Drifters are drogued at 40 meters depth. Other metadata provided:

Drogue type 2004: holey sock

Drogue manufacturer 2001: MetOcean

Drogue manufacturer 2002: Technocean

Drogue manufacturer 2003: MetOcean

Drogue manufacturer 2004: MetOcean

Deployment Comments:

13126: aground

13127: aground

13129: aground on Umnak Is

13130: aground

13131: aground Port Chatham

13135: lost drogue

13137: aground

13138: aground

13140: aground

13145: aground

13147: aground

13148: aground

13152: aground

13153: aground

13154: aground

13156: JD 131 (?) picked up by boat at 53 66 27.47 , heading for Seattle

13157: aground

13159: aground

21957: aground

21966: this drifter was never deployed

22343: aground

22366: aground

22383: aground

22394: aground 23929: in March 2002 this mooring headed ttle

24053: lost its drogue

24213: aground

22354: aground

22778: aground

34240: picked up by boat

34241: aground

34242: Marine Mammal people deployed this drifter

34245: aground

34246: aground

34248: aground

34249: aground

34250: aground

34291: aground on Sutwik Island

34292: last 3 days of spotty data and Dutch Harbor data cut off

34293: aground on St George Island

36249: aground

36256: aground

36258: aground

36259: aground

36261: aground

36263: aground

36265: aground

36268: aground
36269: aground - deployed in box (Great Pacific)
36270: deployed in box (Great Pacific)
37475: lost drogue
37476: aground
37479: aground
37483: went into sea grass area
37502: aground
37515: aground
37517: aground
37519: aground 37522: aground

37484: stopped transmitting
37486: released at GAK-2
37489: ~7/15/03 fisherman picked up buoy at 56 33N, 159 49W - instructed (by METOCEAN) to redeploy buoy
-
37490: picked up by boat
37492: stopped transmitting
37493: Cordova
37494: released at GAK-6
37496: released at GAK-4
37497: stopped transmitting
37499: stopped transmitting
37500: aground
37503: aground
37504: stopped transmitting
37506: aground
37507: aground
37508: aground - for MF fisheries cruise - deployed near center of line 8 - depl info fm M Guttormsen (but he couldn't verify ARGOS ID) - these 2 drifters appear to have been deployed at the same time
37511: Cordova
37512: stopped transmitting
37513: for MF fisheries cruise - deployed near center of line 8 - depl info fm M Guttormsen (but he couldn't verify ARGOS ID) - these 2 drifters appear to have been deployed at the same time
37514: stopped transmitting
37520: stopped transmitting
43736: after depl no tx received - file is for Seattle tx only 43820: stopped transmitting

43700: lost drogue -
43701: aground
43702: probably lost drogue in mid-June
43703: aground
43704: aground
43705: stopped tx
43707: deployed in eddy
43708: aground
43712: stopped transmitting JD 99/2005
43713: aground
43715: stopped transmitting
43716: aground
43718: stopped transmitting
43719: stopped transmitting
43720: stopped transmitting
43721: aground
43722: stopped tx (altho not moving too much twds end)
43725: stopped transmitting
43727: aground
43728: aground
43730: stopped transmitting
43732: stopped transmitting
43733: aground
43734: stopped transmitting
43738: stopped transmitting

53287: aground
53288: aground

Data Comments:

13128: re-run velacc; then Phyllis wants to re-look at this data - velacc missing 292 days - drogue sensor doesn't work
13129: re-run velacc - velacc missing 63 days
13130: re-run velacc
13131: re-run velacc - velacc missing 66 days - looks like drifter lost drogue in pass
13132: re-run velacc - velacc missing 66 days -
13136: re-run velacc - velacc missing 139 days -
13142: 3/6/03, but started transmitting again on 5/25/03 - put back in pgm 30572 inactivated status
13154: one old hit in 1/02
13156: JD 131 (?) picked up by boat at 53 55.56, 166 27.47 , heading for Seattle
13158: re-run velacc - velacc missing 141 days -
13162: re-run velacc - velacc missing 147 days - 2 bad pts (removed JD 278, 2329 GMT and 361, 0004 GMT)
13163: re-run vel file (cut too soon) - Phyllis cut end of file -
13164: re-run vel file (cut too soon) - Phyllis cut end of file -
13169: lg vels due to gaps in data (DOES PHYLLIS WANT TO EDIT THIS TO GET RID OF HUGE VELs?) - re-run vel file (cut too soon) - Phyllis cut end of file -
13170: Phyllis cut end of data file
21956: Phyllis cut end of data file
21966: this drifter was never deployed
22025: Phyllis cut end of data file
22089: DeWitt removed 1 bad pt (JD 251, 1320 GMT) - Phyllis cut end of data file
22244: DeWitt removed on more bad pt (JD 305, 1354 GMT) - re-run vel file (cut too soon) - 2 bad pts (removed JD 288, 0752 and JD 303, 1918 GMT) - Phyllis cut end of file -
22383: Phyllis cut very end of file
22469: Phyllis cut end of data file (in bay)
22578: Phyllis cut end of file
22579: Phyllis cut end of file
22580: re-run vel file (cut too short) - Phyllis wants to re-check this file
22666: re-run vel file (cut too short) - Phyllis wants to re-check this file
23828: re-run vel file (cut too short)
23929: re-run vel file (cut too short) - Phyllis cut end of file - in March 2002 this mooring headed twds Seattle
24036: re-run vel file - cut too short
24053: DeWitt removed 2 bad pts (JD 364, 0113 GMT and JD 365, 0102 GMT) - re-run vel file (cut too short)
24210: add missing data fm 287-300 and re-run file
24213: re-run vel file (cut too short)
29347: re-run vel file (cut too short) - long ARGOS msg
29348: DeWitt removed 1 bad pt (JD 216, 1421 GMT)
29349: long ARGOS msg

22778: Phyllis cut end of file
23787: re-run vel file (cut too short) - Phyllis cut end of data
34241: Phyllis cut end of file (circling Chirikof)
34242: re-run vel file - 1 bad pt (removed JD 287, 0045 GMT) - Phyllis cut end of data (trailing west)
34243: Phyllis cut end of file
34244: re-run vel (removed 1 bad pt: JD 289, 2050 GMT)
34245: Phyllis cut end of file
34246: Phyllis cut end of file - after JD 268 the only tx rec'd was when it was aground
34248: Phyllis cut end of data
34249: re-run vel file - 1 bad pt (removed JD 282, 1806 GMT)
34250: Phyllis cut end of file
34288: re-run vel file (cut too short) - Phyllis cut end of data
36246: data lost btwn 123-135
36247: data lost btwn 120-135
36248: data lost btwn 119-135
36249: Phyllis cut end of file - aground after JD 260 - data lost btwn 121-135
36250: Phyllis cut end of file - data lost btwn 122-135
36251: re-run vel file - 1 bad pt (removed JD 274, 1156 GMT) - data lost btwn 123-135
36252: Phyllis wants to re-check this file - Phyllis cut end of file
36253: Phyllis cut end of file

36257: re-run vel file (cut too short)
 36258: re-run vel file (missing first 8 days of depl)
 36259: Phyllis cut end of file
 36260: Phyllis cut end of file
 36263: re-run vel file - 1 bad pt (removed JD 289, 1912 GMT)
 36265: Phyllis cut end of file
 36267: Phyllis cut end of file
 36269: Phyllis cut data in bay
 36270: Phyllis cut end of file
 37474: Phyllis wants to look at this file closer
 37475: Phyllis cut this file
 37477: re-run vel file - 1 bad pt (removed JD 358, 1829 GMT) - Phyllis cut data at end of file
 37480: re-run vel file (cut too short)
 37483: re-run vel file (cut too short)
 37502: re-run vel file (cut too short)
 37517: Phyllis cut end of file
 37518: re-run vel (cut too short) - Phyllis lopped off beginning data (zero vels)
 37519: Phyllis cut end of data (in bay)
 37523: re-run vel (cut too short)

 37478: Phyllis chopped file (submergence decreased)
 37484: Phyllis chopped end of file (Port Chatham)
 37485: Phyllis chopped data
 37486: I don't have submergence data for end of file - what do we do with data?
 37487: re-run vel file (cut too short)
 37488: sporadic hits later
 37490: Dkachel's file states that JD 146 was the last good data point
 37491: Phyllis cut data (low submerg)
 37492: Phyllis cut data - stopped transmitting - 3/31/05 Returned to ARGOS
 37493: Phyllis cut data (low submerg)
 37494: re-run vel file (cut too short)
 37496: re-run vel file (cut too short) - Phyllis cut end of file
 37497: re-run vel file (cut too short) - Phyllis cut end of file
 37498: Phyllis cut end of file (low submerg)
 37499: re-run vel file (cut too short)
 37501: Phyllis wants blowup of end of data
 37503: run vel file (no good vel file exists) - no ARGOS IDs recorded in cruise report - best guess -
 37504: re-run vel file (cut too short) - Phyllis cut end of file - returned to ARGOS 3/9/05 (submitted request to ARGOS again on 6/30/05)
 37505: re-run vel file (cut too short) - returned to ARGOS 3/9/05 - Alpha Helix - no ARGOS IDs recorded in cruise report - best guess
 37510: re-run vel file (cut too short) - Phyllis cut end of file
 37511: re-run vel file (cut too short)
 37512: re-run vel file (cut too short)
 37516: re-run vel file (cut too short)
 37520: Phyllis cut end of file (sptty data)
 43736: after depl no tx received - file is for Seattle tx only
 43820: re-run vel file (cut too short)

 43697: still transmitting as of 8/29/05
 43698: still transmitting as of 8/29/05 - since no ARGOS IDs were included in MOA I'm not pos whether this is 43698 or 43719
 43700: Phyllis chopped data at JD 128 2256 GMT - still transmitting as of 8/29/05 - 3/3/04 - aboard FREEMAN (for Janet Duffy-Anderson)
 43701: Phyllis cut data after JD 322 - returned to ARGOS 3/31/05 - velacc too short
 43702: returned to ARGOS 6/30/05
 43703: Phyllis cut data after JD 123, 0638 GMT - 3/31/05 Returned to ARGOS 43706: stopped transmitting - returned to ARGOS 3/9/05 - velacc file chopped off too early
 43707: stopped tx - returned to ARGOS 6/30/05
 43708: velacc file cropped too soon
 43709: stopped tx - returned to ARGOS 6/30/05
 43710: stopped tx - returned to ARGOS 6/30/05
 43711: removed 2 bad points (JD 158, 153 GMT and JD 158, 154 GMT) - returned to ARGOS 3/31/05 - it looks

like velacc chopped too soon (spotty tx near end)
43712: velacc too short (returned to ARGOS 6/3/05)
43713: (returned to ARGOS 6/30/05)
43714: Phyllis cut data after JD 17, 622 GMT - still transmitting as of 8/29/05
43715: returned to ARGOS 3/31/05 - velacc file chopped off too early
43717: still transmitting as of 8/29/05
43718: Phyllis cut data after JD 291, 2349 GMT
43719: since no ARGOS IDs were included in MOA I'm not pos whether this is 43698 or 43719
43721: Phyllis chopped data after JD 262, 0900 GMT - velacc file needs to be cropped
43722: returned to ARGOS 3/9/05
43723: still transmitting as of 8/29/05
43726: still transmitting as of 8/29/05
43727: Phyllis chopped data after JD 181, 2329 GMT
43730: returned to ARGOS 3/9/05 - velacc file chopped off too early
43731: still transmitting as of 8/29/05
43732: returned to ARGOS 3/31/05 - velacc file chopped off too early
43733: 3/31/05 Returned to ARGOS - Phyllis says to cut the data set at JD124, 1900
43734: returned to ARGOS 3/9/05 - velacc file chopped off too early
43735: removed 1 bad point (JD 143, 2330 GMT) - Phyllis says to cut the data set at JD155, 1900
43738: returned to ARGOS 3/9/05 - velacc file chopped off too early
53287: fm MetOcean to Kodiak for Libby Loggerwell
53288: Phyllis cut data after JD 330, 1130 GMT - Libby Loggerwell/Chris Wilson
53289: Phyllis chopped data after JD 116, 1204 GMT - still transmitting as of 8/29/05
53291: still transmitting as of 8/29/05
53292: Phyllis chopped data after JD 42, 0831 GMT - stopped tx - returned to ARGOS 3/31/05 - it looks like velacc chopped too soon
53293: still transmitting as of 8/29/05

4 Jan 2007

Data Processing Description

Values of '2400' in time_gmt column have been changed to '2359'.
Cruise ID's of 'KM0305' have been changed to 'KM0309'. KM0305 was leg one of a two-leg cruise also known as KM0309 or KM0309B.

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Data Files

File
drifters_pmel.csv (Comma Separated Values (.csv), 74.25 MB) MD5:ad85f2dc0d2e72bed1ecb68566dbc268
Primary data file for dataset ID 3550

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Parameters

Parameter	Description	Units
speed_v	Originally named 'V-COMP'. Northward component of current velocity, in cm/s. Northward flow is positive.	cm/sec
speed_u	Originally named 'U-COMP'. Eastward component of current velocity, in cm/s. Eastward flow is positive.	cm/sec
time_gmt	Time, in GMT format.	HHMM
yday_gmt	Yearday, in GMT format.	day of year
year_gmt	Year, in GMT format.	YYYY
lat	Latitude, in decimal degrees. Positive is North.	decimal degrees
lon	Longitude, in decimal degrees. Positive is West.	decimal degrees
speed	Velocity of the current/drifter.	cm/sec
dir	Direction the current/drifter is moving.	degrees
drifter	Specific drifter number.	unitless
lat_start	Latitude where the drifter was deployed.	decimal degrees
lon_start	Longitude where the drifter was deployed.	decimal degrees
deployment	Unique ID number for the drifter deployment, represents mmddHHMM.	unitless
cruiseid	Unique identifier for the cruise.	unitless
year_start	Year the drifter was deployed.	YYYY

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Deployments

MF0111

Website	https://www.bco-dmo.org/deployment/57554
Platform	R/V Miller Freeman
Report	http://globec.who.edu/nep/reports/psullivan/mf0111.pdf
Start Date	2001-09-21
End Date	2001-09-29

EW0205

Website	https://www.bco-dmo.org/deployment/57495
Platform	R/V Maurice Ewing
Report	http://globec.who.edu/nep/reports/cgoa_cruises/ew0205bcr.pdf
Start Date	2002-05-25
End Date	2002-06-10
Description	Original cruise data for both legs are available from the NSF R2R data catalog

MF0211

Website	https://www.bco-dmo.org/deployment/57555
Platform	R/V Miller Freeman
Report	http://globec.who.edu/nep/reports/cgoa_cruises/mf0211bcr.pdf
Start Date	2002-10-04
End Date	2002-10-09

MF0303

Website	https://www.bco-dmo.org/deployment/57970
Platform	R/V Miller Freeman
Report	http://globec.who.edu/nep/reports/psullivan/mf0303_rpt.pdf
Start Date	2003-02-24
End Date	2003-03-07

MF0310

Website	https://www.bco-dmo.org/deployment/57556
Platform	R/V Miller Freeman
Report	http://globec.who.edu/nep/reports/cgoa_cruises/mf0310cr.pdf
Start Date	2003-07-18
End Date	2003-08-09

KM0313

Website	https://www.bco-dmo.org/deployment/57553
Platform	R/V Kilo Moana
Report	http://globec.whoi.edu/nep/reports/cgoa_cruises/km0313cr.pdf
Start Date	2003-09-13
End Date	2003-09-28
Description	Cruise information and original data are available from the NSF R2R data catalog.

HX271

Website	https://www.bco-dmo.org/deployment/57540
Platform	R/V Alpha Helix
Report	http://globec.whoi.edu/nep/reports/cgoa_cruises/hx271cr.pdf
Start Date	2003-04-24
End Date	2003-05-15
Description	Original cruise data are available from the NSF R2R data catalog

HX287

Website	https://www.bco-dmo.org/deployment/57549
Platform	R/V Alpha Helix
Report	http://globec.whoi.edu/nep/reports/cgoa_cruises/hx287cr.pdf
Start Date	2004-07-08
End Date	2004-07-19
Description	Original cruise data are available from the NSF R2R data catalog

HX284

Website	https://www.bco-dmo.org/deployment/57971
Platform	R/V Alpha Helix
Report	http://globec.whoi.edu/nep/reports/cgoa_cruises/hx284cr.pdf
Start Date	2004-05-15
End Date	2004-05-26
Description	Original cruise data are available from the NSF R2R data catalog

GP0401-02

Website	https://www.bco-dmo.org/deployment/58671
Platform	F/V Great Pacific
Report	http://globec.whoi.edu/nep/reports/cgoa_cruises/gp0401cr.pdf
Start Date	2004-11-01
End Date	2004-11-12
Description	23 May 2011, dld - This cruise consisted of Leg 1 and Leg 2. Metadata is edited to reflect this information gleaned from the event log and the cruise report. Leg 1 departed Dutch Harbor. The Leg ended in Kodiak. Chief Scientist was Jamal H. Moss. Leg 2 departed Kodiak and arrived in Dutch Harbor. Chief Scientist was Edward D. Cokelet.

GP0108

Website	https://www.bco-dmo.org/deployment/57499
Platform	F/V Great Pacific
Report	http://globec.whoi.edu/nep/reports/cgoa_cruises/gp0108cr.pdf
Start Date	2001-07-17
End Date	2001-08-06
Description	The July - August 2001 OCC/GLOBEC cruise focused on salmon (<i>Oncorhynchus</i> spp.), and zooplankton distribution, and physical properties (current, temperature, and salinity) along 11 transects beginning at Icy Point near northern Southeast Alaska and ending at Cape Kaguyak at the western end of Kodiak Island. Sampling along each transect occurred over the continental shelf of the Gulf of Alaska and beyond the 200-m slope and into oceanic depths. The purpose was to investigate the relationships between biological and physical oceanographic processes that affect the distribution of juvenile salmon in the coastal Gulf of Alaska. This deployment was also known as GP0101.

GP0207-01

Website	https://www.bco-dmo.org/deployment/57500
Platform	F/V Great Pacific
Report	http://globec.whoi.edu/nep/reports/cgoa_cruises/gp0207cr.pdf
Start Date	2002-07-11
End Date	2002-07-27
Description	NEP GLOBEC gave this cruise the designation GP0207 and NOAA gave this cruise the designation GP0201. The data say 0201. The cruise report, inventory and eventlog say GP0207. 18 May 2011, dld - This cruise consisted of Leg 1 and Leg 2. Metadata is edited to reflect this information gleaned from the event log and the cruise report. The cruise report starts with a transit, not the science. Leg 1 includes the 11-16 July 2002 transit from Dutch Harbor to Yakutat where science personnel and gear were picked up. The Leg ends on 27 July in Seward. Chief Scientist was Edward D. Cokelet. Leg 2 departed Seward on 28 July and arrived in Dutch Harbor on 8 August with Christine Kondzela as Chief Scientist.

MF0105

Website	https://www.bco-dmo.org/deployment/57968
Platform	R/V Miller Freeman
Report	http://globec.who.edu/nep/reports/psullivan/mf0105_rpt.pdf
Start Date	2001-04-28
End Date	2001-05-08

KM0309B

Website	https://www.bco-dmo.org/deployment/57552
Platform	R/V Kilo Moana
Report	http://globec.who.edu/nep/reports/cgoa_cruises/KM0305_FCI.pdf
Start Date	2003-04-18
End Date	2003-05-18
Description	There were two legs to this cruise: Leg 1 Report (known by cruise ID KM0305) - 18 April 2003 to 27 April 2003 Leg 2 Report (known by cruise ID KM0309B) - 29 April 2003 to 18 May 2003 Cruise information and original data are available from the NSF R2R data catalog.

RB0103b

Website	https://www.bco-dmo.org/deployment/57575
Platform	NOAA Ship Ronald H. Brown
Report	http://globec.who.edu/nep/reports/cgoa_cruises/rb0103cr.pdf
Start Date	2001-05-13
End Date	2001-05-23
Description	FOCI Cruise RB0103 Leg 2 Seward, AK to Kodiak, AK This cruise was divided into three legs: RB0103a - Leg 1 FOCI deployment report - 06 May 2001 to 13 May 2001 RB0103b - Leg 2 FOCI deployment report - 13 May 2001 to 23 May 2001 RB0103L3 - Leg 3 FOCI deployment report - 25 May 2001 to 08 June 2001

RB0103L3

Website	https://www.bco-dmo.org/deployment/58826
Platform	NOAA Ship Ronald H. Brown
Report	http://globec.who.edu/nep/reports/cgoa_cruises/rb0103_l3r.pdf
Start Date	2001-05-25
End Date	2001-06-08
Description	Leg 3 Kodiak, AK to Dutch Harbor, AK This cruise was divided into three legs: RB0103a - Leg 1 FOCI deployment report - 06 May 2001 to 13 May 2001 RB0103b - Leg 2 FOCI deployment report - 13 May 2001 to 23 May 2001 RB0103L3 - Leg 3 FOCI deployment report - 25 May 2001 to 08 June 2001

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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
National Science Foundation (NSF)	unknown NEP NSF
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