

Dear Renee,

Thank you sincerely for submitting assessments to the Myers II database. We have entered 31 of your assessments, and now wish to quality assure/quality control (QA/QC) these data for a release version of the database. Please follow the steps below to ensure that your assessments have been dutifully represented:

QA/QC steps

For each assessment:

1. Ensure that the General assessment details are correct.
2. Ensure that the units for all Biometrics and Time Series shown are correct. To aid in this, we have included the minimum, maximum, first year, and last year of the spawning stock biomass, recruitment, fishing mortality, total biomass, and catch (where provided).
3. If there are blank values in the Biometrics table, please include these in your response (see below), where they are available. Please note that in the Biometrics table, the following abbreviations are used:
 - SSB-AGE-yr = Ages for which the spawning stock biomass is defined
 - REC-AGE = Age at recruitment
 - F-AGE-yr = Ages for which the fishing mortality is defined
 - TB-AGE-yr = Ages for which the total biomass is defined
 - M = Natural mortality
 - A50-yr = The age at 50% maturity
 - L50-cm = The length at 50% maturity
 - MORATOR-yr-yr = Moratorium years
 - LME = Large Marine Ecosystem
4. To ensure that the recruitment time series has been offset by the age at recruitment so that yearclass matches up with spawner biomass, please make sure that the difference between the last year of the recruitment and last year of the SSB time series is equal to the age at recruitment supplied (unless there is another reason, e.g. estimates unavailable).
5. Provide Large Marine Ecosystem (LME) designation(s) for your stock (unless it is a high seas stock). Please enter a primary, secondary and tertiary LME (if they exist) in the issue you submit (see below). A map of the LMEs is provided on the last page of this document.

QA/QC submission process

If you (or someone else) submitted the assessments via the RAM legacy site, please log into : <http://www.marinebiodiversity.ca/RAMlegacy/ramlegacy-bug-reporting> and locate the issue(s) associated with your spreadsheet submission(s). Once you locate your assessment, open the associated issue and choose 'Add response'. At the top of this response write:

QAQC: Assessment ID (this ID is located at the top of each assessment in the current document)

If you did not submit via the RAM Legacy site, please go to the url above and click "Submit a new issue" with the title: *QAQC: Assessment ID* (located at the top of each assessment in this pdf).

If you found no issues with the QA/QC document, please type:

"QA/QC correct". If you have found issues, please update the assessment spreadsheet accordingly or write the details of corrections to be made in the dialogue box. Once we have received and processed your response, the assessment will be flagged as quality controlled and the data it contains will be used for analyses.

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Assessment of Georges Bank atlantic cod (*Gadus morhua*)

Assessment ID:DFO-COD5Zjm-1978-2003-PREFONTAINE

Area ID: Canada-DFO-5Zjm

General assessment details.

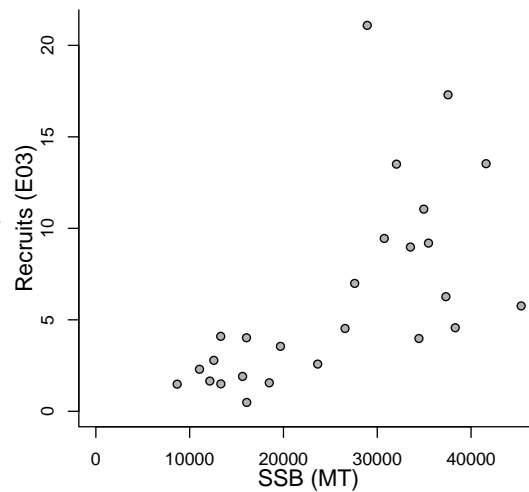
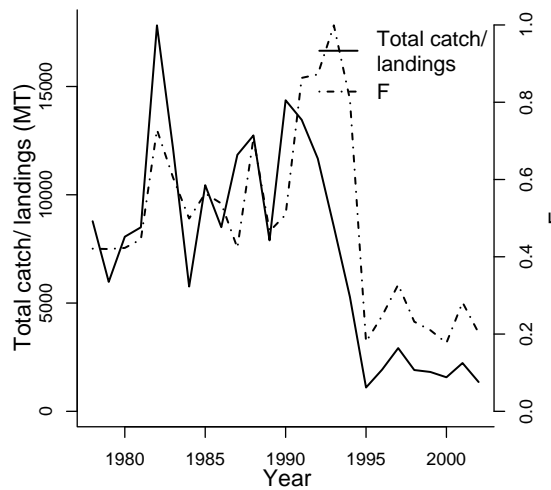
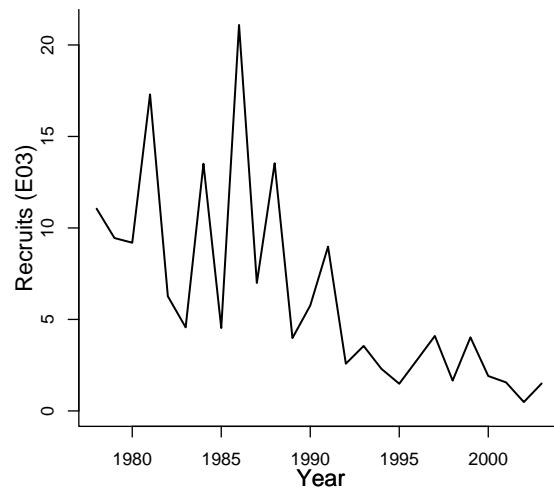
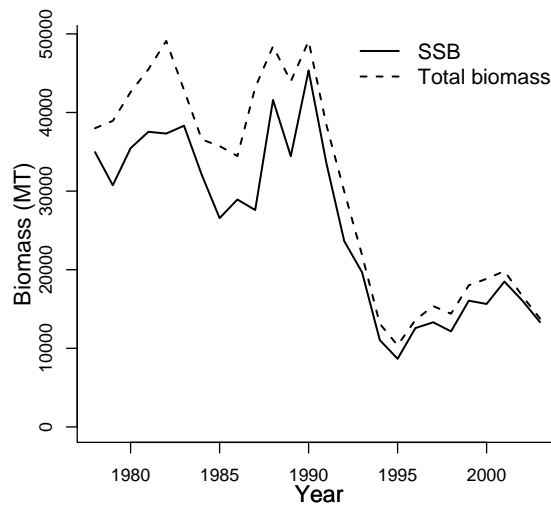
Detail	Value
Management body	DFO
Assessment group	Department of Fisheries and Oceans
Assessment authors	Hunt, J.J.
Assessment method	A general approach to fitting VPA models. ADAPT is based on minimising the sum-of-squares over any number of indices of abundance to find best-fit parameters.
Publication year	2003
Timeseries span	1978-2003
Document	NAFO-COD5Zjm-2003.pdf (pdf not in database)
Recorder	PREFONTAINE
Date entered	2009-03-10

Biometrics provided. Note that the assumed timeseries to which the reference point pertains is indicated in parentheses.

Parameter	Value	Units
SSB-AGE-yr	3+	yr
REC-AGE-yr	1+	yr
TB-AGE-yr	1-10	yr
M-1/T	0.2	1/T
F-AGE-yr		
M		
A50-yr		
L50-cm		
MORATOR-yr-yr		
LME		

Reference points		
Parameter	Value	Units

Time series minima and maxima					
	SSB	R	F	TB	Catch
Minimum year	1978	1978	1978	1978	1978
Maximum year	2003	2003	2002	2003	2002
Time series minimum	8667	0.485	0.177	10384	1100
Time series maximum	45343	21.094	0.999	49102	17824
Units	MT	E03	1/T	MT	MT



Assessment of Western Scotian Shelf, Bay of Fundy and Gulf of Maine haddock (*Melanogrammus aeglefinus*)

Assessment ID:DFO-HAD4X5Y-1960-2003-PREFONTAINE

Area ID: Canada-DFO-4X5Y

General assessment details.

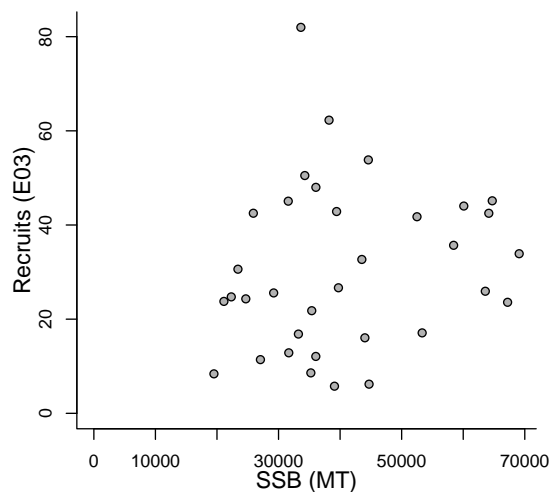
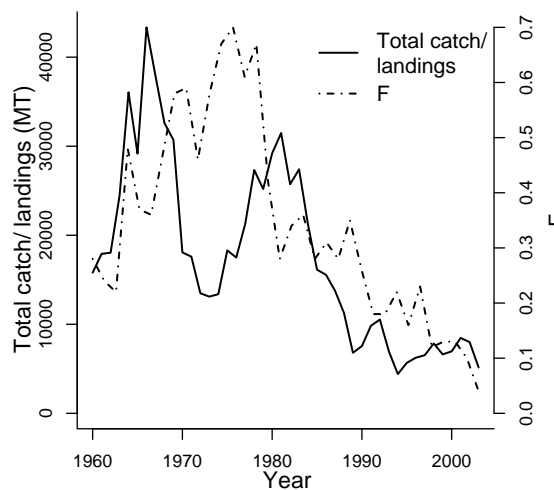
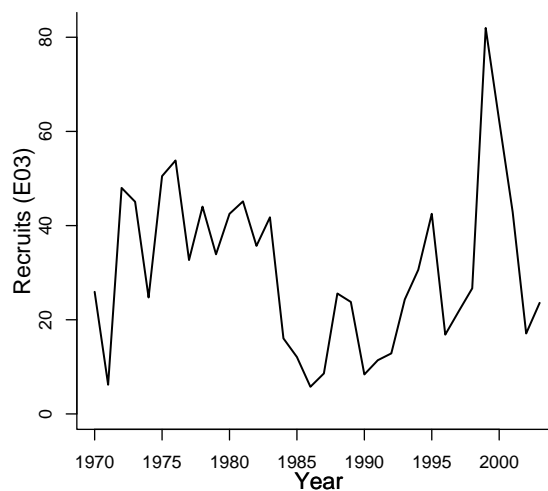
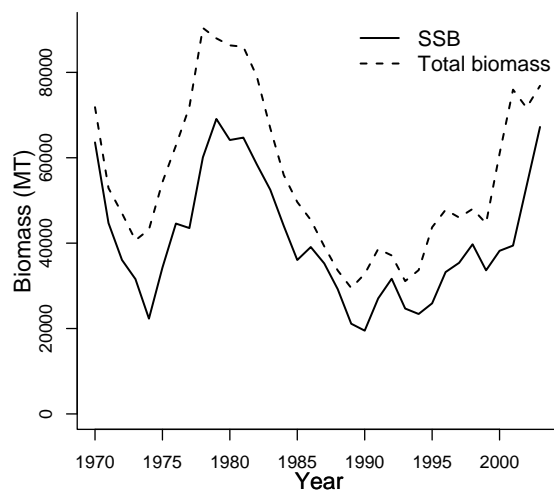
Detail	Value
Management body	DFO
Assessment group	Department of Fisheries and Oceans
Assessment authors	Hurley, P.C.F.
Assessment method	A general approach to fitting VPA models. ADAPT is based on minimising the sum-of-squares over any number of indices of abundance to find best-fit parameters.
Publication year	2003
Timeseries span	1960-2003
Document	NAFO-HAD4X5Y-2003.pdf (pdf not in database)
Recorder	PREFONTAINE
Date entered	2009-03-10

Biometrics provided. Note that the assumed timeseries to which the reference point pertains is indicated in parentheses.

Parameter	Value	Units
SSB-AGE-yr	4+	yr
REC-AGE-yr	1	yr
TB-AGE-yr	1-10	yr
M-1/T	0.2	1/T
F-AGE-yr		
M		
A50-yr		
L50-cm		
MORATOR-yr-yr		
LME		

Reference points		
Parameter	Value	Units

Time series minima and maxima					
	SSB	R	F	TB	Catch
Minimum year	1970	1970	1970	1970	1960
Maximum year	2003	2003	2003	2003	2003
Time series minimum	19506	5.765	0.04	29495	4406
Time series maximum	69091	81.978	0.7	90408	43349
Units	MT	E03	1/T	MT	MT



Assessment of Georges Bank haddock (*Melanogrammus aeglefinus*)

Assessment ID:DFO-HAD5Zejm-1969-2003-PREFONTAINE

Area ID: Canada-DFO-5Zejm

General assessment details.

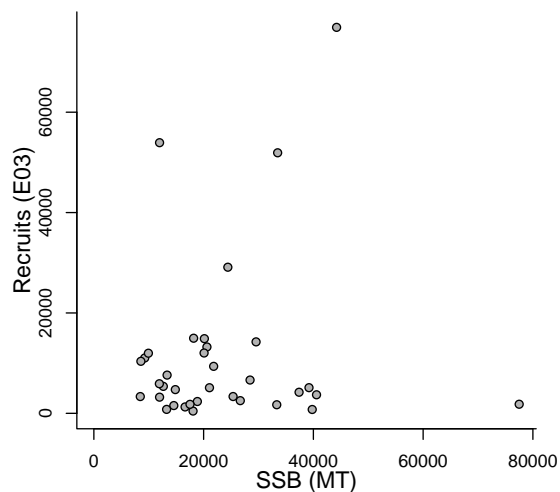
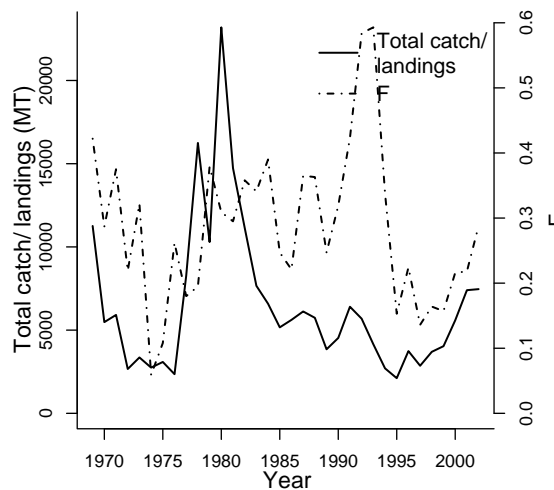
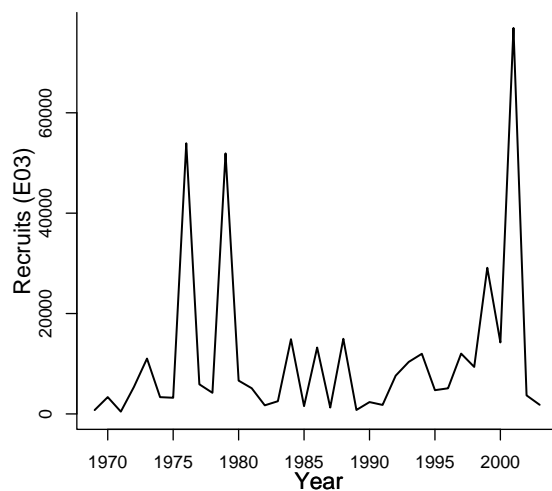
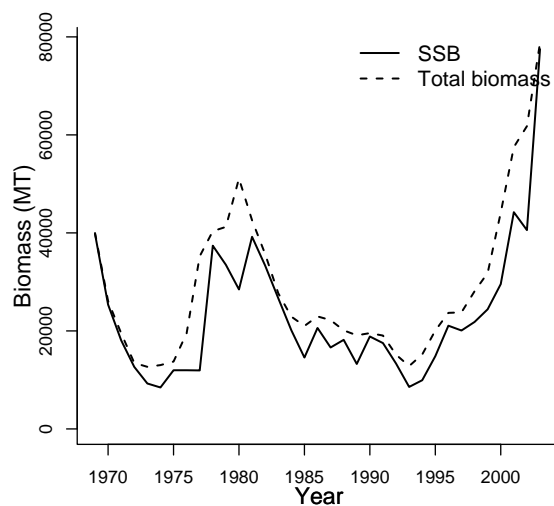
Detail	Value
Management body	DFO
Assessment group	Department of Fisheries and Oceans
Assessment authors	Van Eeckhaute, L.
Assessment method	A general approach to fitting VPA models. ADAPT is based on minimising the sum-of-squares over any number of indices of abundance to find best-fit parameters.
Publication year	2003
Timeseries span	1969-2003
Document	NAFO-HAD5Zejm-2003.pdf (pdf not in database)
Recorder	PREFONTAINE
Date entered	2009-03-10

Biometrics provided. Note that the assumed timeseries to which the reference point pertains is indicated in parentheses.

Parameter	Value	Units
SSB-AGE-yr	3+	yr
REC-AGE-yr	1+	yr
TB-AGE-yr	1-9+	yr
M-1/T	0.2	1/T
F-AGE-yr		
M		
A50-yr		
L50-cm		
MORATOR-yr-yr		
LME		

Reference points		
Parameter	Value	Units
Fref-1/T (F)	0.26	1/T

Time series minima and maxima					
	SSB	R	F	TB	Catch
Minimum year	1969	1969	1969	1969	1969
Maximum year	2003	2003	2002	2003	2002
Time series minimum	8458	456	0.059	12672	2112
Time series maximum	77501	76905	0.593	78763	23193
Units	MT	E03	1/T	MT	MT



Assessment of Scotian Shelf and Bay of Fundy herring (*Clupea harengus*)

Assessment ID:DFO-HERR4VWX-1965-2006-PREFONTAINE

Area ID: Canada-DFO-4VWX

General assessment details.

Detail	Value
Management body	DFO
Assessment group	Department of Fisheries and Oceans
Assessment authors	Power, M.J.
Assessment method	A general approach to fitting VPA models. ADAPT is based on minimising the sum-of-squares over any number of indices of abundance to find best-fit parameters.
Publication year	2006
Timeseries span	1965-2006
Document	NAFO-HERR4VWX-2006.pdf (pdf not in database)
Recorder	PREFONTAINE
Date entered	2009-03-10

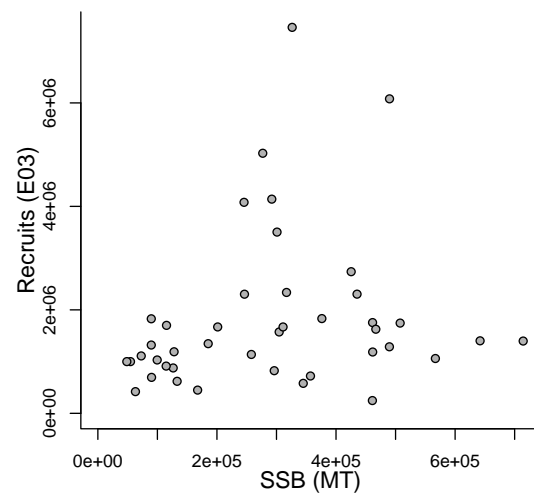
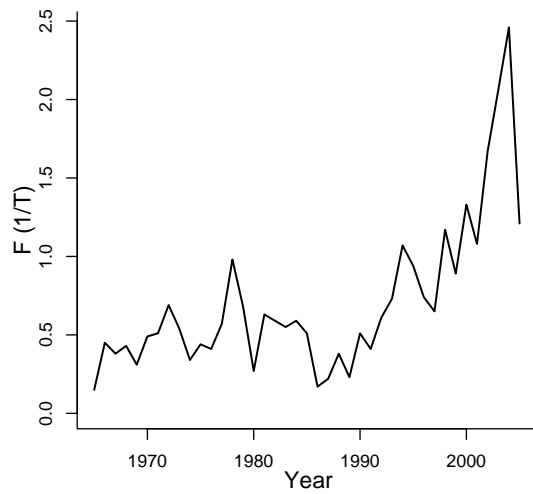
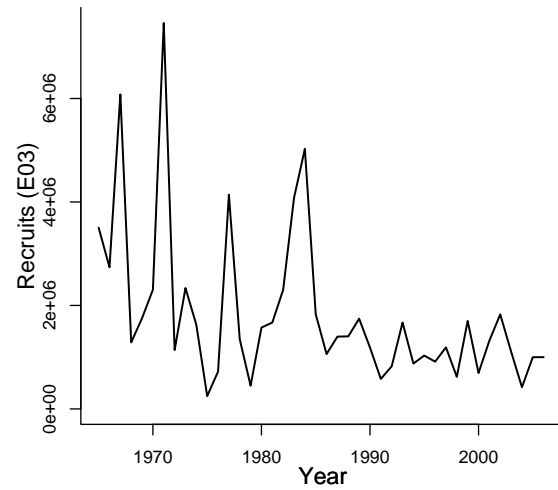
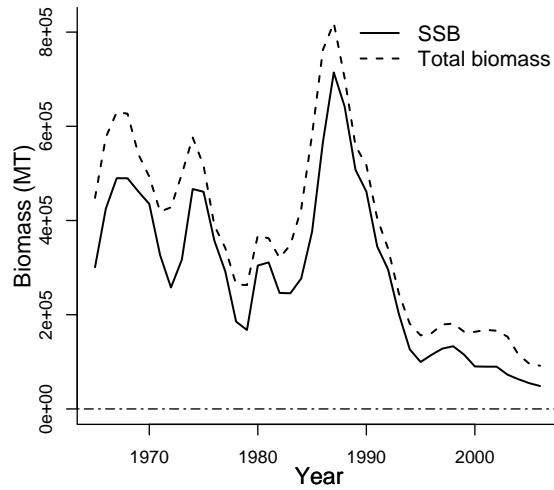
Biometrics provided. Note that the assumed timeseries to which the reference point pertains is indicated in parentheses.

Parameter	Value	Units
SSB-AGE-yr	3+	yr
REC-AGE-yr	1	yr
TB-AGE-yr	NA	yr
A50-yr	3	yr
M-1/T	0.2	1/T
F-AGE-yr		
M		
L50-cm		
MORATOR-yr-yr		
LME		

Parameter	Reference points Value	Units
BH-h-dimensionless	4 to 8 compared with ages 5-9 the following year	dimensionless
Bmsy-MT (TB)	SEE NOTES	MT
F0.1-1/yr (F)	0.23	1/yr

Time series minima and maxima

	SSB	R	F	TB	Catch
Minimum year	1965	1965	1965	1965	
Maximum year	2006	2006	2005	2006	
Time series minimum	48646	247148	0.15	91734	
Time series maximum	714331	7460417	2.46	819446	
Units	MT	E03	1/T	MT	



Assessment of Canadian Atlantic Ocean barndoor skate (*Dipturus laevis*)

Assessment ID:DFO-MAR-BSKATCANATL-1970-1987-PREFONTAINE

Area ID: Canada-DFO-ATL

General assessment details.

Detail	Value
Management body	DFO
Assessment group	Department of Fisheries and Oceans - Maritimes Region
Assessment authors	Simon, James E.
Assessment method	Temporal indices derived from scientific survey data
Publication year	2002
Timeseries span	1970-1987
Document	NAFO-BARNSK-2002.pdf (pdf not in database)
Recorder	PREFONTAINE
Date entered	2009-03-10

Biometrics provided. Note that the assumed timeseries to which the
reference point pertains is indicated in parentheses.

Parameter	Value	Units
REC-AGE		
SSB-AGE-yr		
TB-AGE-yr		
F-AGE-yr		
M		
A50-yr		
L50-cm		
MORATOR-yr-yr		
LME		

Reference points		
Parameter	Value	Units

Time series minima and maxima					
	SSB	R	F	TB	Catch
Minimum year					
Maximum year					
Time series minimum					
Time series maximum					
Units					

No biomass data
available

No recruitment
data available

No exploitation
data available

No SSB–recruit
data available

Assessment of Eastern Scotian Shelf atlantic cod (*Gadus morhua*)

Assessment ID:DFO-MAR-COD4VsW-1958-2002-PREFONTAINE

Area ID: Canada-DFO-4VsW

General assessment details.

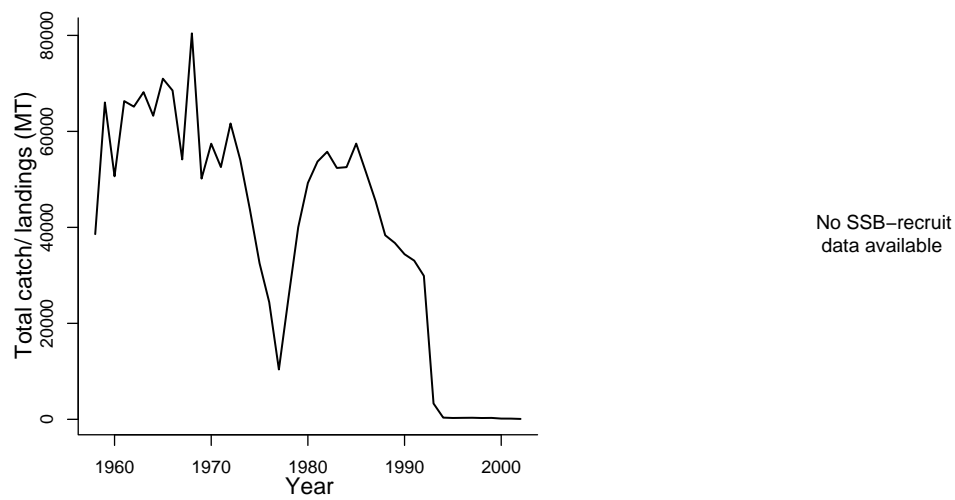
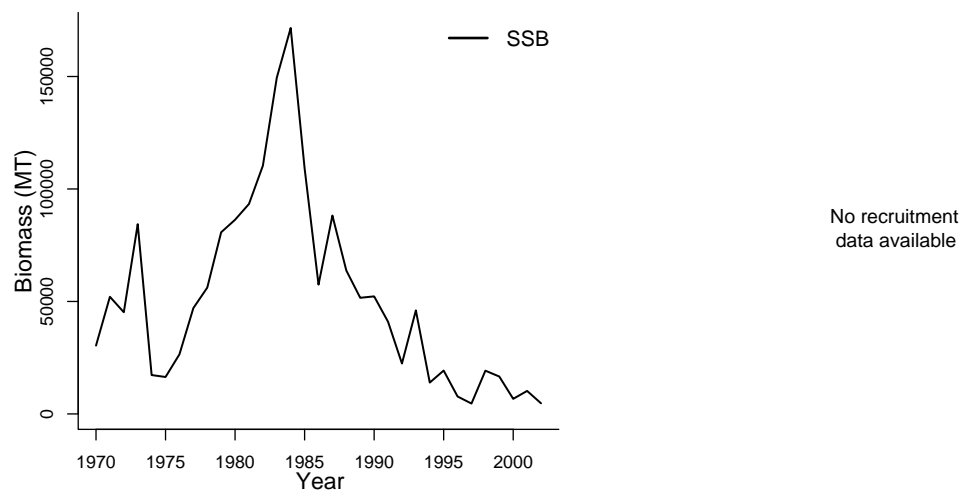
Detail	Value
Management body	DFO
Assessment group	Department of Fisheries and Oceans - Maritimes Region
Assessment authors	Fanning, L.P.
Assessment method	Unknown
Publication year	2003
Timeseries span	1958-2002
Document	NAFO-COD4VsW-2003.pdf (pdf not in database)
Recorder	PREFONTAINE
Date entered	2009-03-10

Biometrics provided. Note that the assumed timeseries to which the reference point pertains is indicated in parentheses.

Parameter	Value	Units
A50-yr	3	yr
L50-cm	SEE FIGURES 15 AND 16 OF THE ASSESSMENT	cm
MORATOR-yr-yr	1993-2008	yr-yr
REC-AGE		
SSB-AGE-yr		
TB-AGE-yr		
F-AGE-yr		
M		
LME		

Reference points		
Parameter	Value	Units
MORATOR-yr-yr	1993-2008	yr-yr
SSB recovery-MT	16420	MT
SSB _{np50} -MT	53990	MT
SSB _{rk50} -MT	23940	MT
SSB _{bh50} -MT	33670	MT

Time series minima and maxima					
	SSB	R	F	TB	Catch
Minimum year	1970				1958
Maximum year	2002				2002
Time series minimum	4607				83
Time series maximum	171591.6				80428
Units	MT				MT



Assessment of Scotian Shelf, Bay of Fundy and Georges Bank white hake (*Urophycis tenuis*)

Assessment ID:DFO-MAR-WHAKE4VWX5-1964-2005-PREFONTAINE

Area ID: Canada-DFO-4VWX5

General assessment details.

Detail	Value
Management body	DFO
Assessment group	Department of Fisheries and Oceans - Maritimes Region
Assessment authors	Bundy, A.
Assessment method	Unknown
Publication year	2005
Timeseries span	1964-2005
Document	NULL (pdf not in database)
Recorder	PREFONTAINE
Date entered	2009-03-11

Biometrics provided. Note that the assumed timeseries to which the reference point pertains is indicated in parentheses.

Parameter	Value	Units
REC-AGE		
SSB-AGE-yr		
TB-AGE-yr		
F-AGE-yr		
M		
A50-yr		
L50-cm		
MORATOR-yr-yr		
LME		

Reference points		
Parameter	Value	Units

Time series minima and maxima					
	SSB	R	F	TB	Catch
Minimum year					
Maximum year					
Time series minimum					
Time series maximum					
Units					MT

No biomass data
available

No recruitment
data available

No exploitation
data available

No SSB–recruit
data available

Assessment of Labrador - NE Newfoundland american plaice (*Hippoglossoides platessoides*)

Assessment ID:DFO-NFLD-AMPL23K-1960-2004-PREFONTAINE

Area ID: multinational-NAFO-23K

General assessment details.

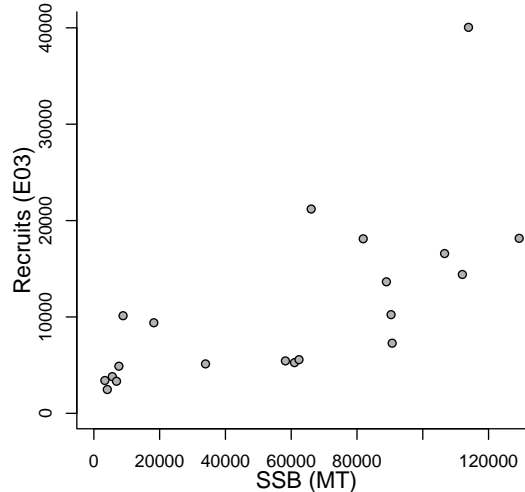
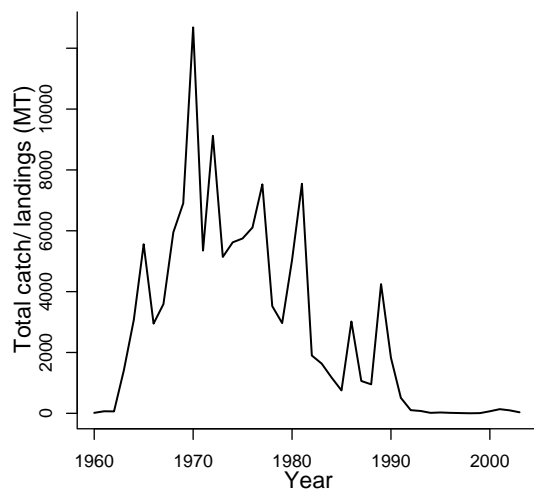
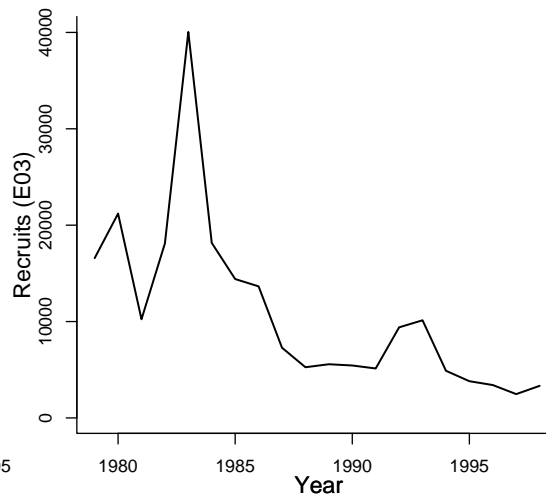
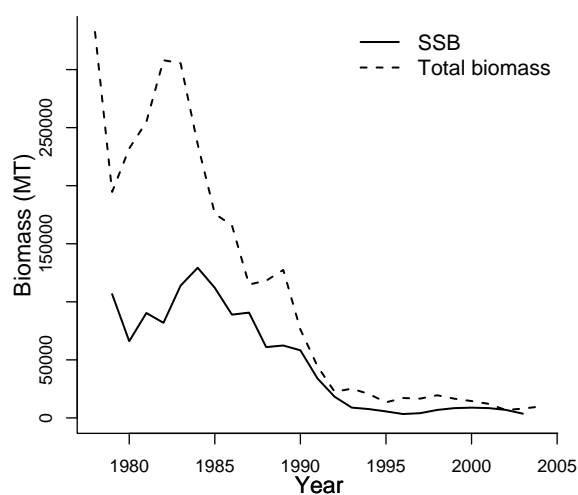
Detail	Value
Management body	DFO
Assessment group	Department of Fisheries and Oceans - Newfoundland Region
Assessment authors	Dwyer, K.S.
Assessment method	Unknown
Publication year	2003
Timeseries span	1960-2004
Document	NAFO-AMPL23K-2003.pdf (pdf not in database)
Recorder	PREFONTAINE
Date entered	2009-03-10

Biometrics provided. Note that the assumed timeseries to which the
reference point pertains is indicated in parentheses.

Parameter	Value	Units
REC-AGE-yr	3+	yr
TB-AGE-yr	0-19	yr
A50-yr	FOUND AS A TIME SERIES IN FIGURE 10	yr
L50-cm	FOUND AS A TIME SERIES IN FIGURE 11	cm
SSB-AGE-yr		
F-AGE-yr		
M		
MORATOR-yr-yr		
LME		

Reference points		
Parameter	Value	Units

Time series minima and maxima					
	SSB	R	F	TB	Catch
Minimum year	1979	1979		1978	1960
Maximum year	2003	1998		2004	2003
Time series minimum	3350	2470		6820	2
Time series maximum	129310	40050		332410	12686
Units	MT	E03		MT	MT



Assessment of St. Pierre Bank american plaice (*Hippoglossoides platessoides*)

Assessment ID:DFO-NFLD-AMPL3Ps-1960-2005-PREFONTAINE

Area ID: Canada-DFO-3Ps

General assessment details.

Detail	Value
Management body	DFO
Assessment group	Department of Fisheries and Oceans - Newfoundland Region
Assessment authors	Morgan, M.J.
Assessment method	Unknown
Publication year	2005
Timeseries span	1960-2005
Document	NAFO-AMPL3Ps-2005.pdf (pdf not in database)
Recorder	PREFONTAINE
Date entered	2009-03-10

Biometrics provided. Note that the assumed timeseries to which the reference point pertains is indicated in parentheses.

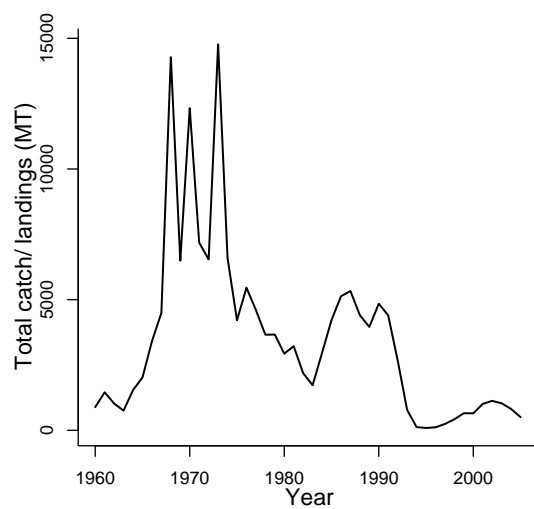
Parameter	Value	Units
MORATOR-yr-yr	1993-present	yr-yr
REC-AGE		
SSB-AGE-yr		
TB-AGE-yr		
F-AGE-yr		
M		
A50-yr		
L50-cm		
LME		

Reference points		
Parameter	Value	Units
Blim-MT (SSB)	7.7-16.2	MT
MORATOR-yr-yr	1993-present	yr-yr

Time series minima and maxima					
	SSB	R	F	TB	Catch
Minimum year					1960
Maximum year					2005
Time series minimum					90
Time series maximum					14769
Units					MT

No biomass data
available

No recruitment
data available



No SSB–recruit
data available

Assessment of Southern Labrador-Eastern Newfoundland atlantic cod (*Gadus morhua*)

Assessment ID:DFO-NFLD-COD2J3KLIS-1959-2006-PREFONTAINE

Area ID: Canada-DFO-2J3KL

General assessment details.

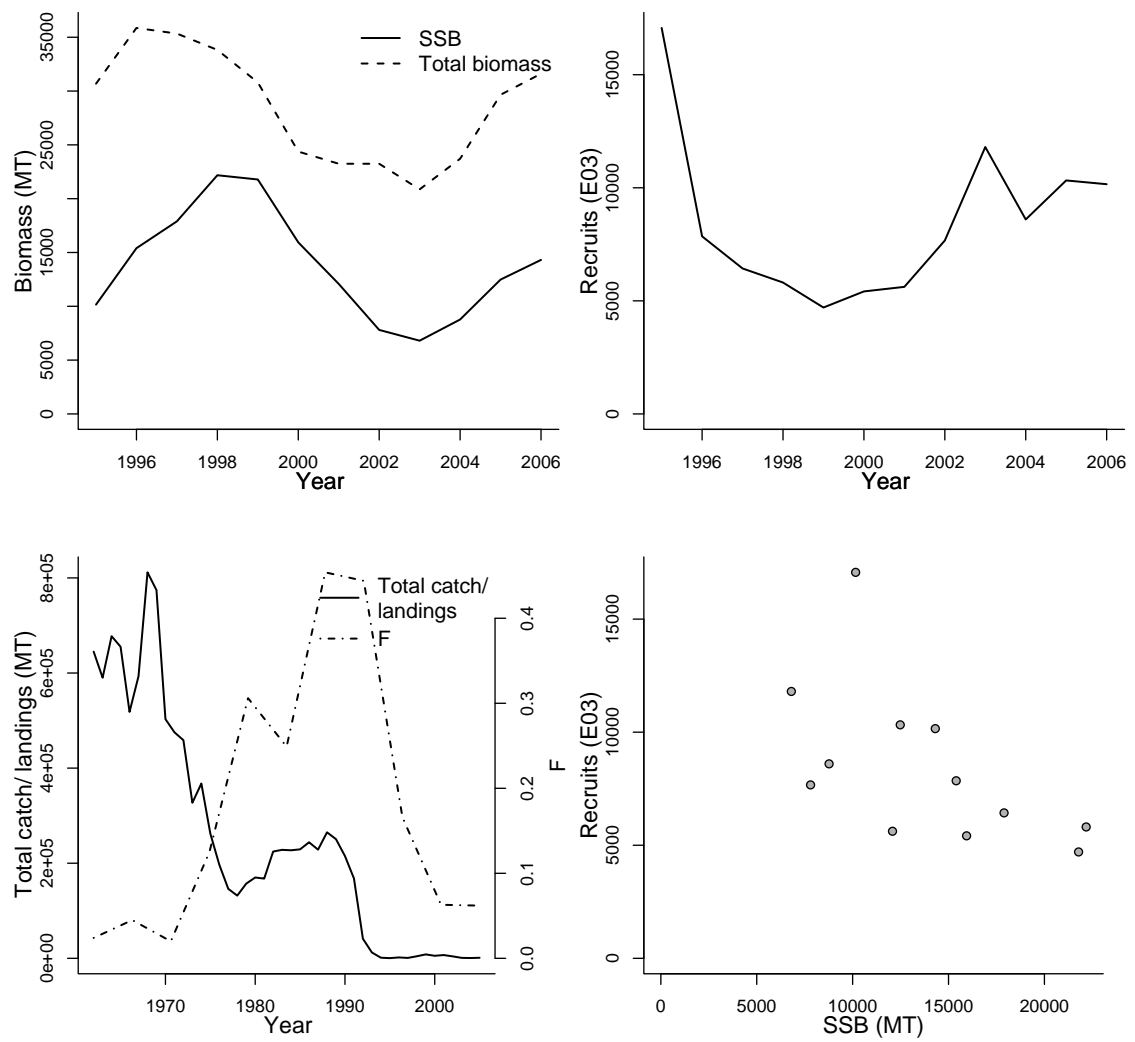
Detail	Value
Management body	DFO
Assessment group	Department of Fisheries and Oceans - Newfoundland Region
Assessment authors	Lilly, G.R.
Assessment method	A general approach to fitting VPA models. ADAPT is based on minimising the sum-of-squares over any number of indices of abundance to find best-fit parameters.
Publication year	2006
Timeseries span	1959-2006
Document	DFO-COD2J3KLIS-2006.pdf (pdf not in database)
Recorder	PREFONTAINE
Date entered	2009-03-10

Biometrics provided. Note that the assumed timeseries to which the reference point pertains is indicated in parentheses.

Parameter	Value	Units
SSB-AGE-yr	2+	yr
REC-AGE-yr	3	yr
A50-yr	6-7	yr
M-1/T	0.4	1/T
TB-AGE-yr		
F-AGE-yr		
M		
L50-cm		
MORATOR-yr-yr		
LME		

Reference points		
Parameter	Value	Units

Time series minima and maxima					
	SSB	R	F	TB	Catch
Minimum year	1995	1995	1995	1995	1962
Maximum year	2006	2006	2005	2006	2005
Time series minimum	6804	4705	0.02	20866	411
Time series maximum	22178	17068	0.454	35864	811698
Units	MT	E03	1/T	MT	MT



Assessment of St. Pierre Bank atlantic cod (*Gadus morhua*)

Assessment ID:DFO-NFLD-COD3Ps-1959-2004-PREFONTAINE

Area ID: Canada-DFO-3Ps

General assessment details.

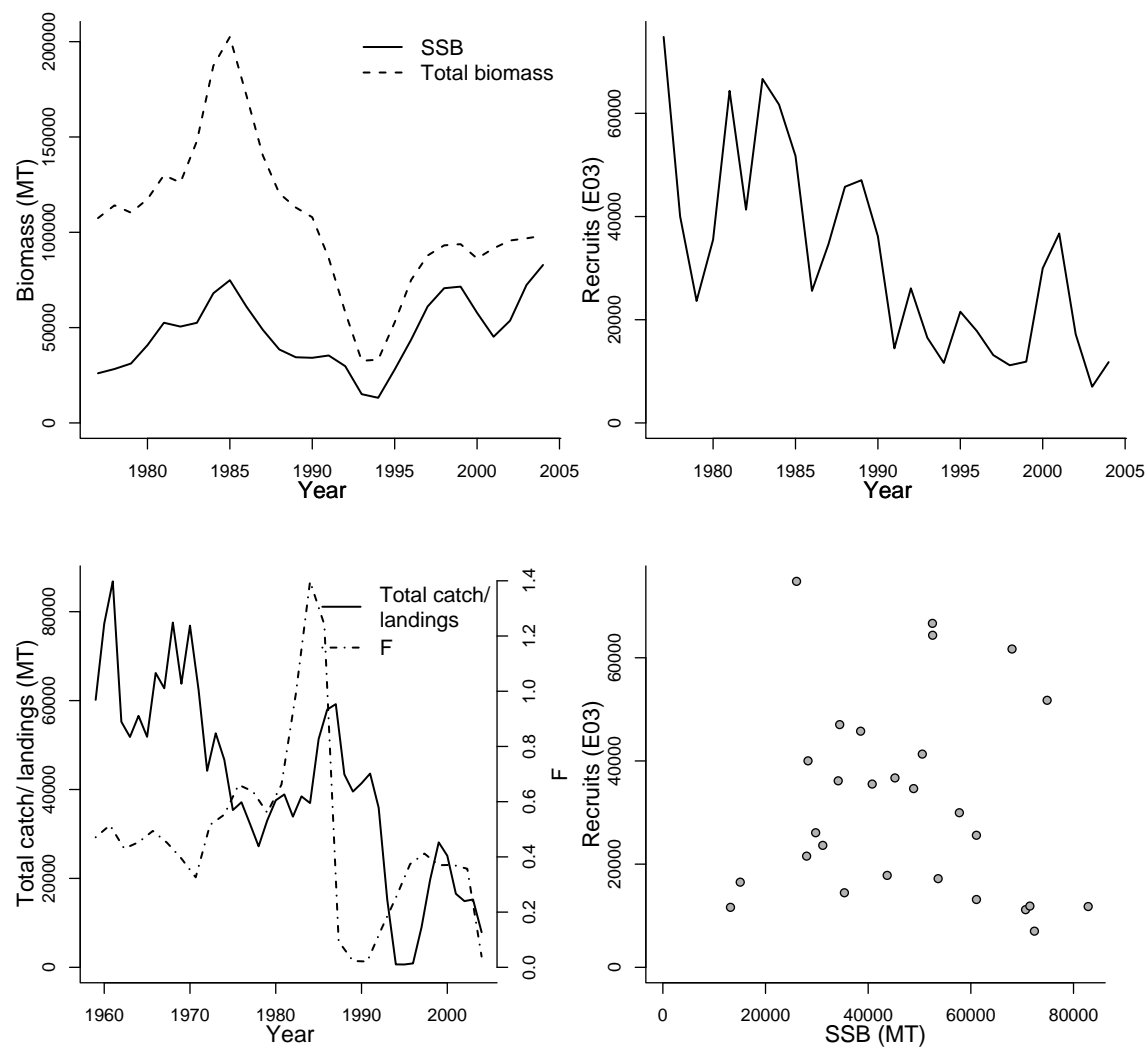
Detail	Value
Management body	DFO
Assessment group	Department of Fisheries and Oceans - Newfoundland Region
Assessment authors	Bratley, J.
Assessment method	The ADAPT approach with year effects in a catch multiplier
Publication year	2004
Timeseries span	1959-2004
Document	DFO-COD3Ps-2004.pdf (pdf not in database)
Recorder	PREFONTAINE
Date entered	2009-03-10

Biometrics provided. Note that the assumed timeseries to which the reference point pertains is indicated in parentheses.

Parameter	Value	Units
A50-yr	7-8	yr
M-1/T	0.2	1/T
MORATOR-yr-yr	1993-1997	yr-yr
REC-AGE		
SSB-AGE-yr		
TB-AGE-yr		
F-AGE-yr		
M		
L50-cm		
LME		

Reference points		
Parameter	Value	Units
MORATOR-yr-yr	1993-1997	yr-yr
SSB recovery-1-MT	36000	MT

Time series minima and maxima					
	SSB	R	F	TB	Catch
Minimum year	1977	1977	1977	1977	1959
Maximum year	2004	2004	2004	2004	2004
Time series minimum	13173	7014	0.021	32591	641
Time series maximum	82857	74809	1.398	202478	86824
Units	MT	E03	1/T	MT	MT



Assessment of Labrador Shelf-Grand Banks-S. Pierre Bank monkfish (*Lophius americanus*)

Assessment

ID:DFO-NFLD-MONK2J3KLNOps-1985-2000-PREFONTAINE

Area ID: Canada-DFO-2J3KLNOps

General assessment details.

Detail	Value
Management body	DFO
Assessment group	Department of Fisheries and Oceans - Newfoundland Region
Assessment authors	Kulka, D.W.
Assessment method	Unknown
Publication year	2001
Timeseries span	1985-2000
Document	NAFO-MONK2J3KLNOps-2001.pdf (pdf not in database)
Recorder	PREFONTAINE
Date entered	2009-03-10

Biometrics provided. Note that the assumed timeseries to which the reference point pertains is indicated in parentheses.

Parameter	Value	Units
REC-AGE		
SSB-AGE-yr		
TB-AGE-yr		
F-AGE-yr		
M		
A50-yr		
L50-cm		
MORATOR-yr-yr		
LME		

Reference points		
Parameter	Value	Units

Time series minima and maxima					
	SSB	R	F	TB	Catch
Minimum year					1985
Maximum year					2000
Time series minimum					126
Time series maximum					1997
Units					MT

No biomass data
available

No recruitment
data available



No SSB–recruit
data available

Assessment of Labrador - NE Newfoundland redfish species (*Redfish species*)

Assessment

ID:DFO-NFLD-REDFISHSPP23K-1959-2001-PREFONTAINE

Area ID: Canada-DFO-23K

General assessment details.

Detail	Value
Management body	DFO
Assessment group	Department of Fisheries and Oceans - Newfoundland Region
Assessment authors	Power, D.
Assessment method	Unknown
Publication year	2001
Timeseries span	1959-2001
Document	NULL (pdf not in database)
Recorder	PREFONTAINE
Date entered	2009-03-11

Biometrics provided. Note that the assumed timeseries to which the reference point pertains is indicated in parentheses.

Parameter	Value	Units
REC-AGE		
SSB-AGE-yr		
TB-AGE-yr		
F-AGE-yr		
M		
A50-yr		
L50-cm		
MORATOR-yr-yr		
LME		

Reference points		
Parameter	Value	Units
F0.1-1/yr (F)	0.12	1/yr

Time series minima and maxima					
	SSB	R	F	TB	Catch
Minimum year					
Maximum year					
Time series minimum					
Time series maximum					
Units					MT

No biomass data
available

No recruitment
data available

No exploitation
data available

No SSB–recruit
data available

Assessment of Scotian Shelf, Bay of Fundy and Georges Bank pollock (*Pollachius virens*)

Assessment ID:DFO-POLL4VWX5Zc-1974-2007-PREFONTAINE

Area ID: Canada-DFO-4VWX5Zc

General assessment details.

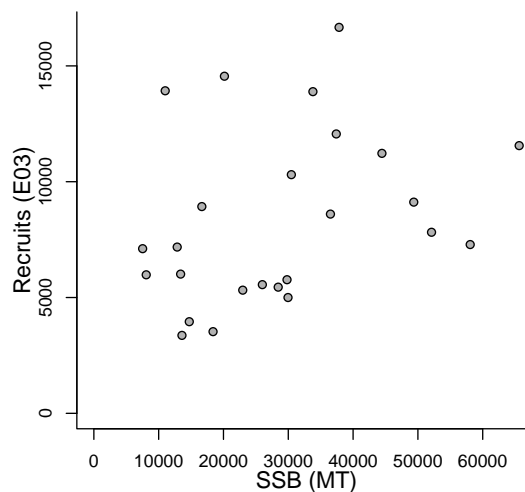
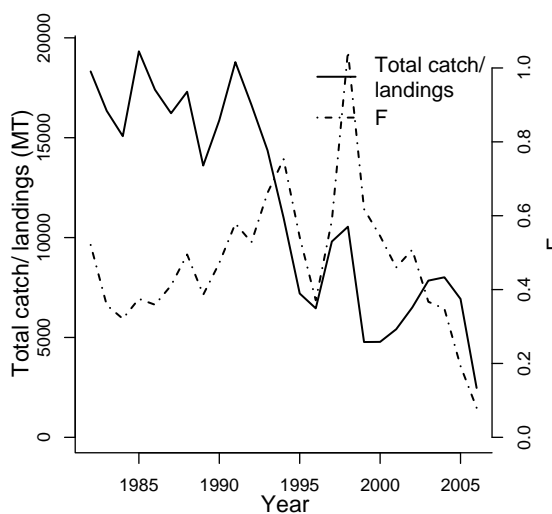
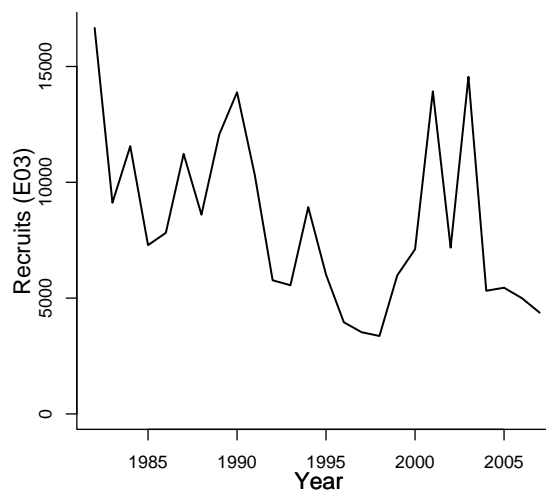
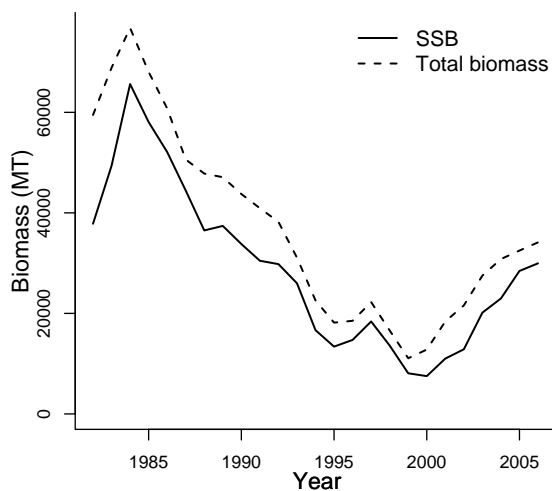
Detail	Value
Management body	DFO
Assessment group	Department of Fisheries and Oceans
Assessment authors	Stone, Heath
Assessment method	A general approach to fitting VPA models. ADAPT is based on minimising the sum-of-squares over any number of indices of abundance to find best-fit parameters.
Publication year	2006
Timeseries span	1974-2007
Document	NAFO-POLL4VWX5Zc-2006.pdf (pdf not in database)
Recorder	PREFONTAINE
Date entered	2009-03-10

Biometrics provided. Note that the assumed timeseries to which the reference point pertains is indicated in parentheses.

Parameter	Value	Units
SSB-AGE-yr	4+	yr
REC-AGE-yr	2+	yr
M-1/T	0.2	1/T
TB-AGE-yr		
F-AGE-yr		
M		
A50-yr		
L50-cm		
MORATOR-yr-yr		
LME		

Reference points		
Parameter	Value	Units

Time series minima and maxima					
	SSB	R	F	TB	Catch
Minimum year	1982	1982	1982	1982	1982
Maximum year	2006	2007	2006	2006	2006
Time series minimum	7524	3365	0.08	11074	2474
Time series maximum	65627	16664	1.045	76792	19323
Units	MT	E03	1/T	MT	MT



Assessment of Northern Gulf of St. Lawrence atlantic cod (*Gadus morhua*)

Assessment ID:DFO-QUE-COD3Pn4RS-1964-2007-PREFONTAINE

Area ID: Canada-DFO-3Pn4RS

General assessment details.

Detail	Value
Management body	DFO
Assessment group	Department of Fisheries and Oceans - Quebec Region
Assessment authors	Frchet, Alain
Assessment method	A general approach to fitting VPA models. ADAPT is based on minimising the sum-of-squares over any number of indices of abundance to find best-fit parameters.
Publication year	2007
Timeseries span	1964-2007
Document	DFO-COD3Pn4Rs-2007.pdf (pdf not in database)
Recorder	PREFONTAINE
Date entered	2009-03-10

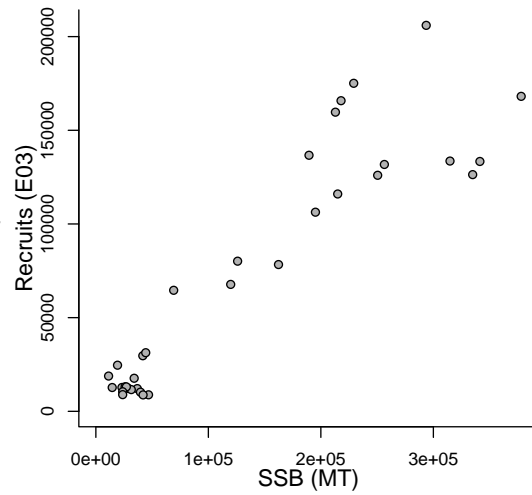
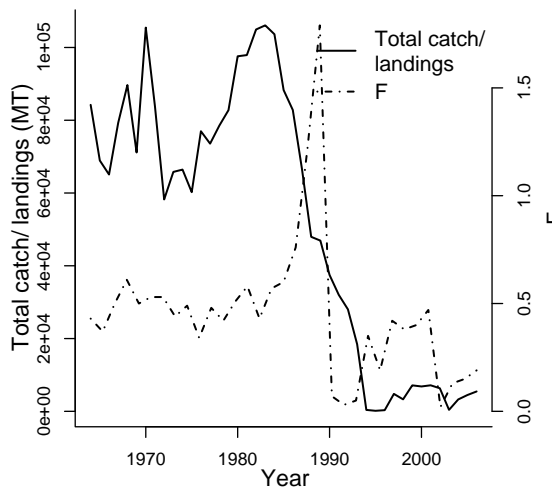
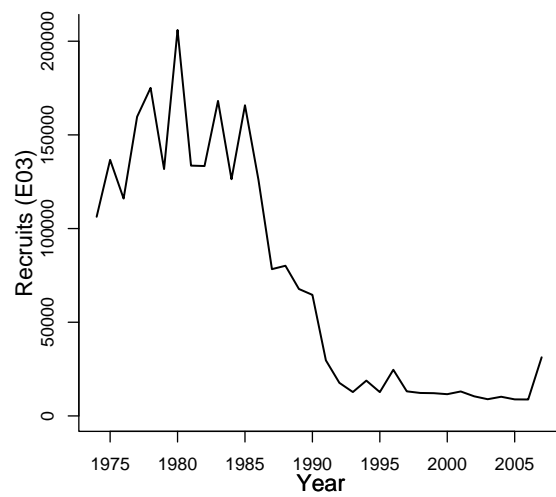
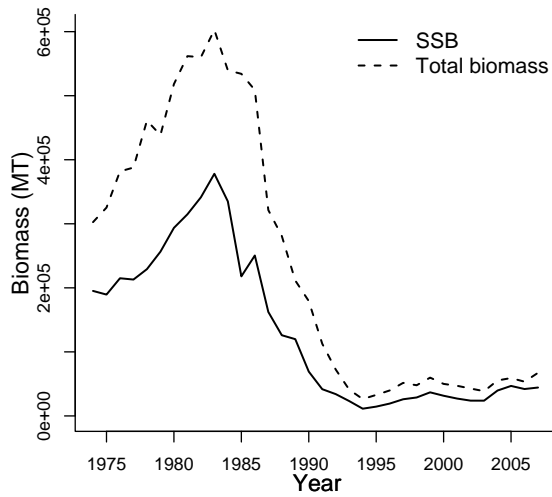
Biometrics provided. Note that the assumed timeseries to which the reference point pertains is indicated in parentheses.

Parameter	Value	Units
SSB-AGE-yr	3+	yr
REC-AGE-yr	3+	yr
A50-yr	4-5	yr
M-1/T	timeseries	1/T
TB-AGE-yr		
F-AGE-yr		
M		
L50-cm		
MORATOR-yr-yr		
LME		

Reference points		
Parameter	Value	Units

Time series minima and maxima

	SSB	R	F	TB	Catch
Minimum year	1974	1974	1974	1974	1964
Maximum year	2007	2007	2006	2007	2006
Time series minimum	11307	8769	0.02	26347	148
Time series maximum	378057	206009	1.79	602678	106080
Units	MT	E03	1/T	MT	MT



Assessment of Gulf of St. Lawrence greenland halibut (*Reinhardtius hippoglossoides*)

Assessment ID:DFO-QUE-GHAL4RST-1970-2002-PREFONTAINE

Area ID: Canada-DFO-4RST

General assessment details.

Detail	Value
Management body	DFO
Assessment group	Department of Fisheries and Oceans - Quebec Region
Assessment authors	Bernier, B.
Assessment method	Unknown
Publication year	2003
Timeseries span	1970-2002
Document	NAFO-GHAL4RST-2003.pdf (pdf not in database)
Recorder	PREFONTAINE
Date entered	2009-03-10

Biometrics provided. Note that the assumed timeseries to which the reference point pertains is indicated in parentheses.

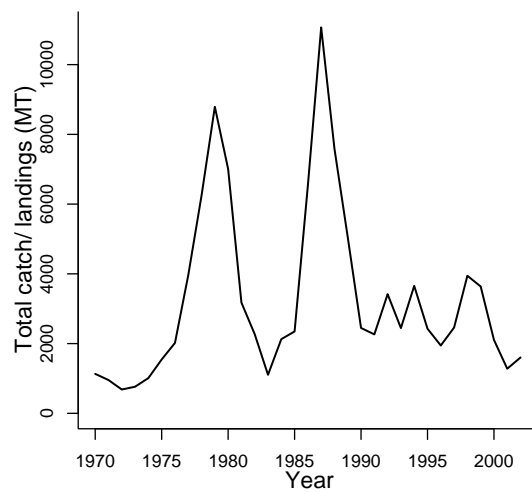
Parameter	Value	Units
REC-AGE		
SSB-AGE-yr		
TB-AGE-yr		
F-AGE-yr		
M		
A50-yr		
L50-cm		
MORATOR-yr-yr		
LME		

Reference points		
Parameter	Value	Units

Time series minima and maxima					
	SSB	R	F	TB	Catch
Minimum year					1970
Maximum year					2002
Time series minimum					683
Time series maximum					11069
Units					MT

No biomass data
available

No recruitment
data available



No SSB–recruit
data available

Assessment of NAFO 4R herring (*Clupea harengus*)

Assessment ID:DFO-QUE-HERR4RFA-1973-2003-PREFONTAINE

Area ID: Canada-DFO-4R

General assessment details.

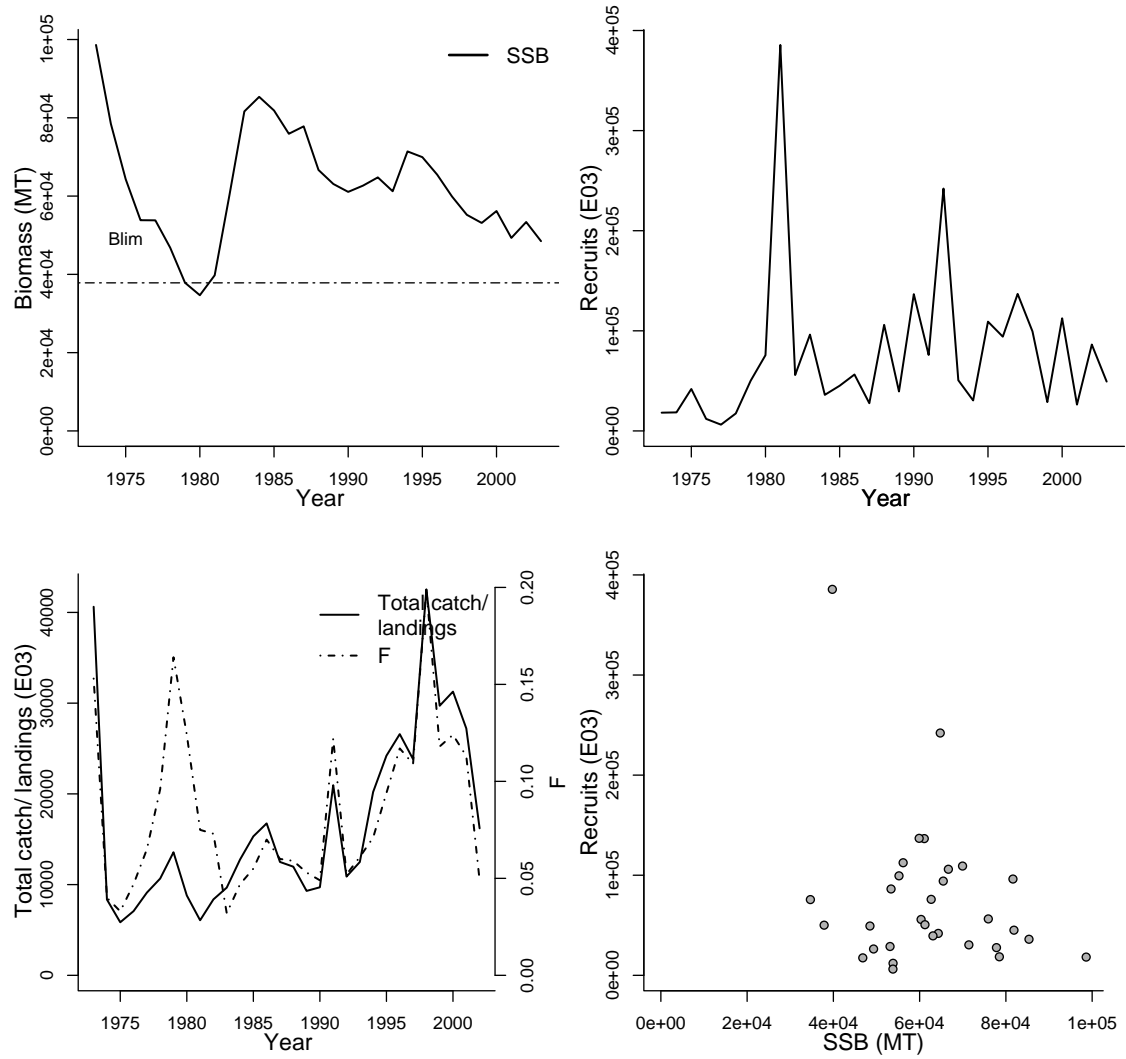
Detail	Value
Management body	DFO
Assessment group	Department of Fisheries and Oceans - Quebec Region
Assessment authors	Gregoire, Francois
Assessment method	Sequential Population Analysis / ADAPT
Publication year	2004
Timeseries span	1973-2003
Document	NAFO-HERR4RFA-2004.pdf (pdf not in database)
Recorder	PREFONTAINE
Date entered	2009-03-10

Biometrics provided. Note that the assumed timeseries to which the reference point pertains is indicated in parentheses.

Parameter	Value	Units
SSB-AGE-yr	2+	yr
REC-AGE-yr	2	yr
A50-yr	4-5	yr
M-1/T	0.2	1/T
TB-AGE-yr		
F-AGE-yr		
M		
L50-cm		
MORATOR-yr-yr		
LME		

Reference points		
Parameter	Value	Units
Blim-MT (SSB)	37831	MT
F0.1-1/yr (F)	0.3	1/yr
Fmax-1/yr (F)	0.55	1/yr
SSB_{2003}/B_{lim}	1.282	

Time series minima and maxima					
	SSB	R	F	TB	Catch
Minimum year	1973	1973	1973		1973
Maximum year	2003	2003	2002		2002
Time series minimum	34671	6244	0.032		5849
Time series maximum	98616	385586	0.199		42543
Units	MT	E03	1/T		E03



Assessment of NAFO 4R herring (*Clupea harengus*)

Assessment ID:DFO-QUE-HERR4RSP-1965-2004-PREFONTAINE

Area ID: Canada-DFO-4R

General assessment details.

Detail	Value
Management body	DFO
Assessment group	Department of Fisheries and Oceans - Quebec Region
Assessment authors	Gregoire, Francois
Assessment method	Sequential Population Analysis / ADAPT
Publication year	2004
Timeseries span	1965-2004
Document	NAFO-HERR4RSP-2004.pdf (pdf not in database)
Recorder	PREFONTAINE
Date entered	2009-03-10

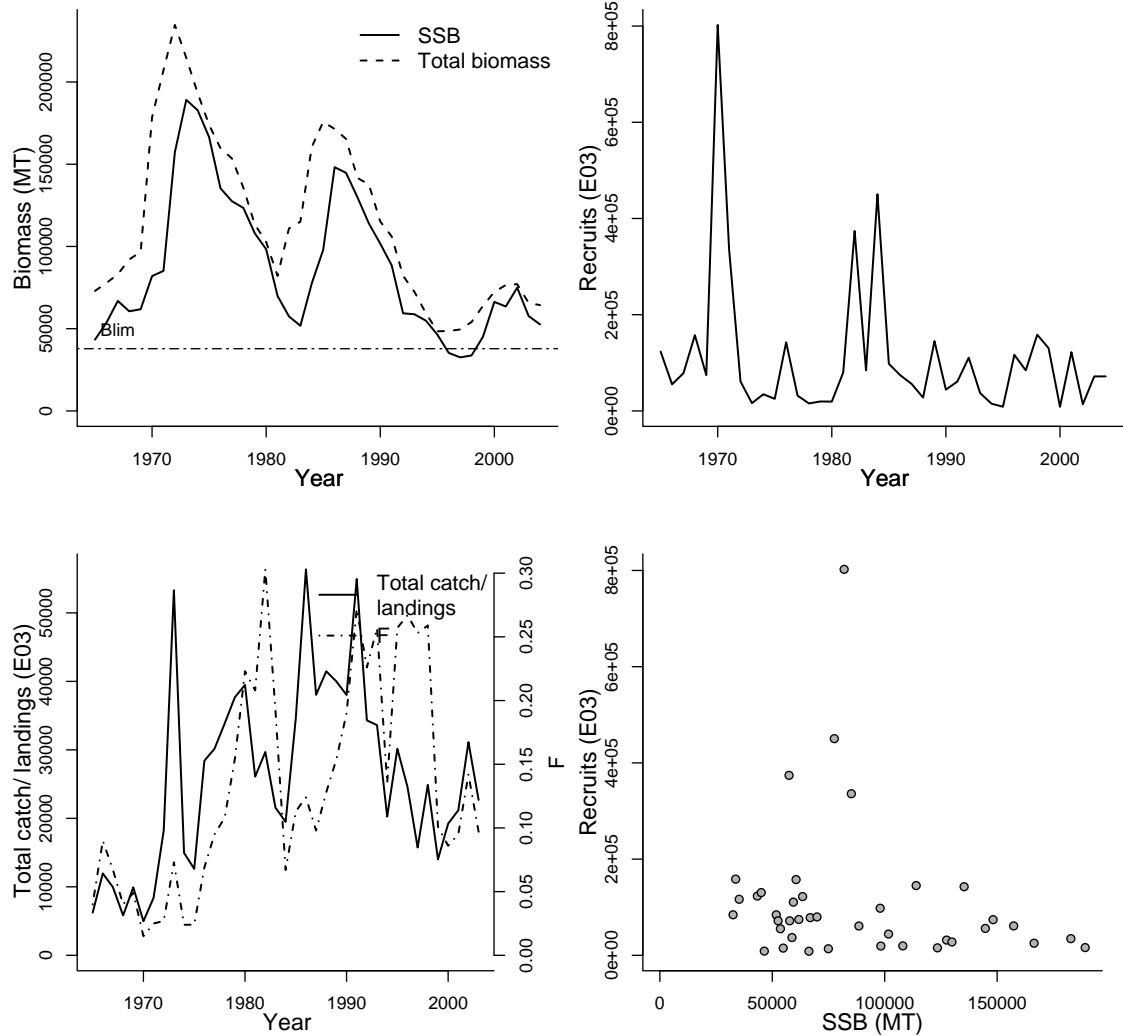
Biometrics provided. Note that the assumed timeseries to which the reference point pertains is indicated in parentheses.

Parameter	Value	Units
SSB-AGE-yr	2+	yr
REC-AGE-yr	2	yr
A50-yr	3-4	yr
M-1/T	0.2	1/T
TB-AGE-yr		
F-AGE-yr		
M		
L50-cm		
MORATOR-yr-yr		
LME		

Reference points		
Parameter	Value	Units
Blim-MT (SSB)	37831	MT
F0.1-1/yr (F)	0.3	1/yr
Fmax-1/yr (F)	0.55	1/yr
SSB_{2004}/B_{lim}	1.390	

Time series minima and maxima

	SSB	R	F	TB	Catch
Minimum year	1965	1965	1965	1965	1965
Maximum year	2004	2004	2003	2004	2003
Time series minimum	32559	8533	0.015	48431	4983
Time series maximum	189156	802298	0.303	234686	56356
Units	MT	E03	1/T	MT	E03



Assessment of Gulf of St. Lawrence and Cabot Strait redfish species (*Redfish species*)

Assessment

ID:DFO-QUE-REDFISHSPP3Pn4RSTVn-1953-2000-PREFONTAINE

Area ID: Canada-DFO-3Pn4RSTVn

General assessment details.

Detail	Value
Management body	DFO
Assessment group	Department of Fisheries and Oceans - Quebec Region
Assessment authors	Morin, B.
Assessment method	Temporal indices derived from scientific survey data
Publication year	2001
Timeseries span	1953-2000
Document	NULL (pdf not in database)
Recorder	PREFONTAINE
Date entered	2009-03-11

Biometrics provided. Note that the assumed timeseries to which the reference point pertains is indicated in parentheses.

Parameter	Value	Units
REC-AGE		
SSB-AGE-yr		
TB-AGE-yr		
F-AGE-yr		
M		
A50-yr		
L50-cm		
MORATOR-yr-yr		
LME		

Reference points		
Parameter	Value	Units

Time series minima and maxima					
	SSB	R	F	TB	Catch
Minimum year					
Maximum year					
Time series minimum					
Time series maximum					
Units					MT

No biomass data
available

No recruitment
data available

No exploitation
data available

No SSB–recruit
data available

Assessment of Southern Gulf of St. Lawrence atlantic cod (*Gadus morhua*)

Assessment ID:DFO-SG-COD4TVn-1965-2007-PREFONTAINE

Area ID: Canada-DFO-4T

General assessment details.

Detail	Value
Management body	DFO
Assessment group	Department of Fisheries and Oceans - Southern Gulf Region
Assessment authors	Swain, D.P.
Assessment method	A general approach to fitting VPA models. ADAPT is based on minimising the sum-of-squares over any number of indices of abundance to find best-fit parameters.
Publication year	2007
Timeseries span	1965-2007
Document	NAFO-COD4TVn-2007.pdf (pdf not in database)
Recorder	PREFONTAINE
Date entered	2009-03-10

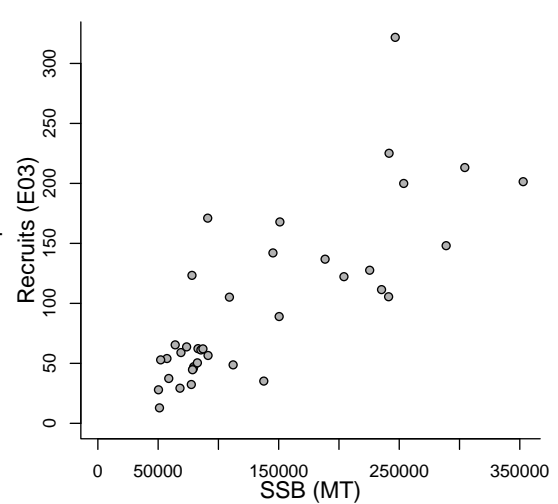
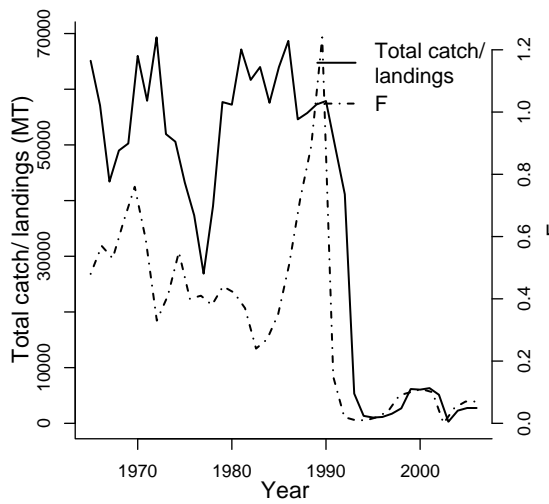
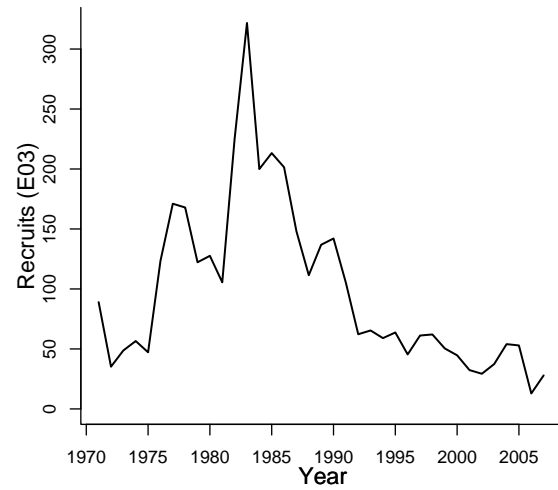
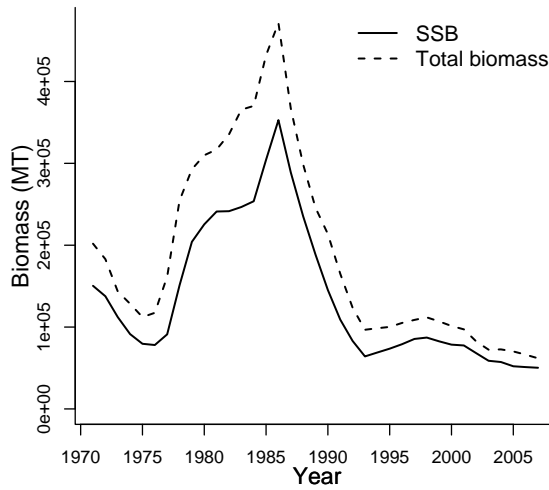
Biometrics provided. Note that the assumed timeseries to which the reference point pertains is indicated in parentheses.

Parameter	Value	Units
A50-yr	4-5	yr
M-1/T	SEE TIMESERIES	1/T
REC-AGE		
SSB-AGE-yr		
TB-AGE-yr		
F-AGE-yr		
M		
L50-cm		
MORATOR-yr-yr		
LME		

Reference points		
Parameter	Value	Units

Time series minima and maxima

	SSB	R	F	TB	Catch
Minimum year	1971	1971	1971	1971	1965
Maximum year	2007	2007	2006	2007	2006
Time series minimum	50276	12.896	0	61834	289
Time series maximum	352804	321.751	1.24	471519	69317
Units	MT	E03	1/T	MT	MT



Assessment of Southern Gulf of St. Lawrence herring (*Clupea harengus*)

Assessment ID:DFO-SG-HERR4TFA-1978-2007-PREFONTAINE

Area ID: Canada-DFO-4T

General assessment details.

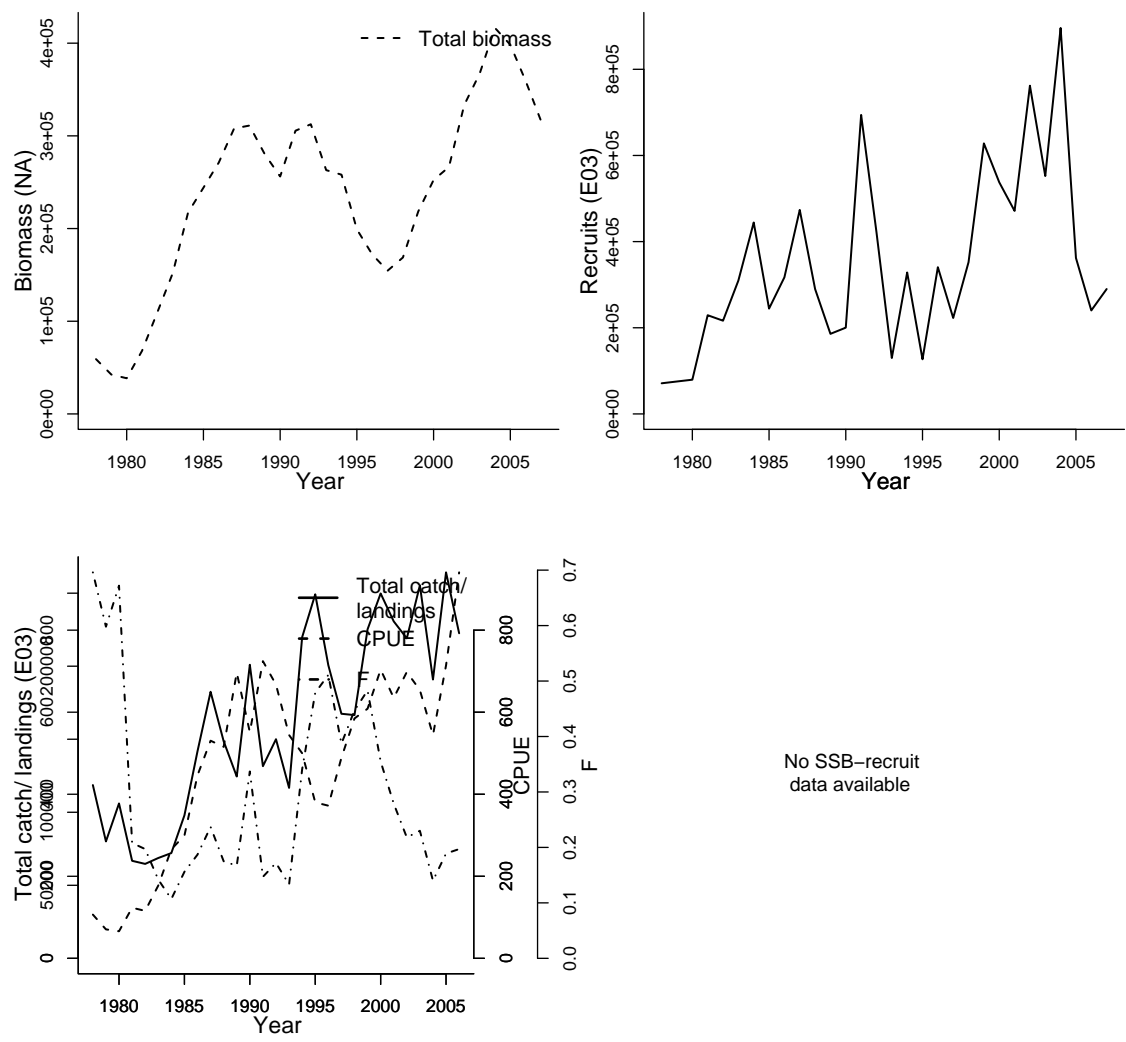
Detail	Value
Management body	DFO
Assessment group	Department of Fisheries and Oceans - Southern Gulf Region
Assessment authors	LeBlanc, C.H.
Assessment method	Sequential Population Analysis / ADAPT
Publication year	2007
Timeseries span	1978-2007
Document	NAFO-HERR4TFA-2007.pdf (pdf not in database)
Recorder	PREFONTAINE
Date entered	2009-03-10

Biometrics provided. Note that the assumed timeseries to which the reference point pertains is indicated in parentheses.

Parameter	Value	Units
REC-AGE-yr	4	yr
TB-AGE-yr	4+	yr
M-1/T	0.2	1/T
SSB-AGE-yr		
F-AGE-yr		
M		
A50-yr		
L50-cm		
MORATOR-yr-yr		
LME		

Reference points		
Parameter	Value	Units
Busr-MT	172000	MT
Blrp-MT	51000	MT

Time series minima and maxima					
	SSB	R	F	TB	Catch
Minimum year		1978	1978	1978	1978
Maximum year		2007	2006	2007	2006
Time series minimum		71101	0.107	38470	64654
Time series maximum		896001	0.696	416422	264254
Units		E03	1/T	MT	E03



Assessment of Southern Gulf of St. Lawrence herring (*Clupea harengus*)

Assessment ID:DFO-SG-HERR4TSP-1978-2007-PREFONTAINE

Area ID: Canada-DFO-4T

General assessment details.

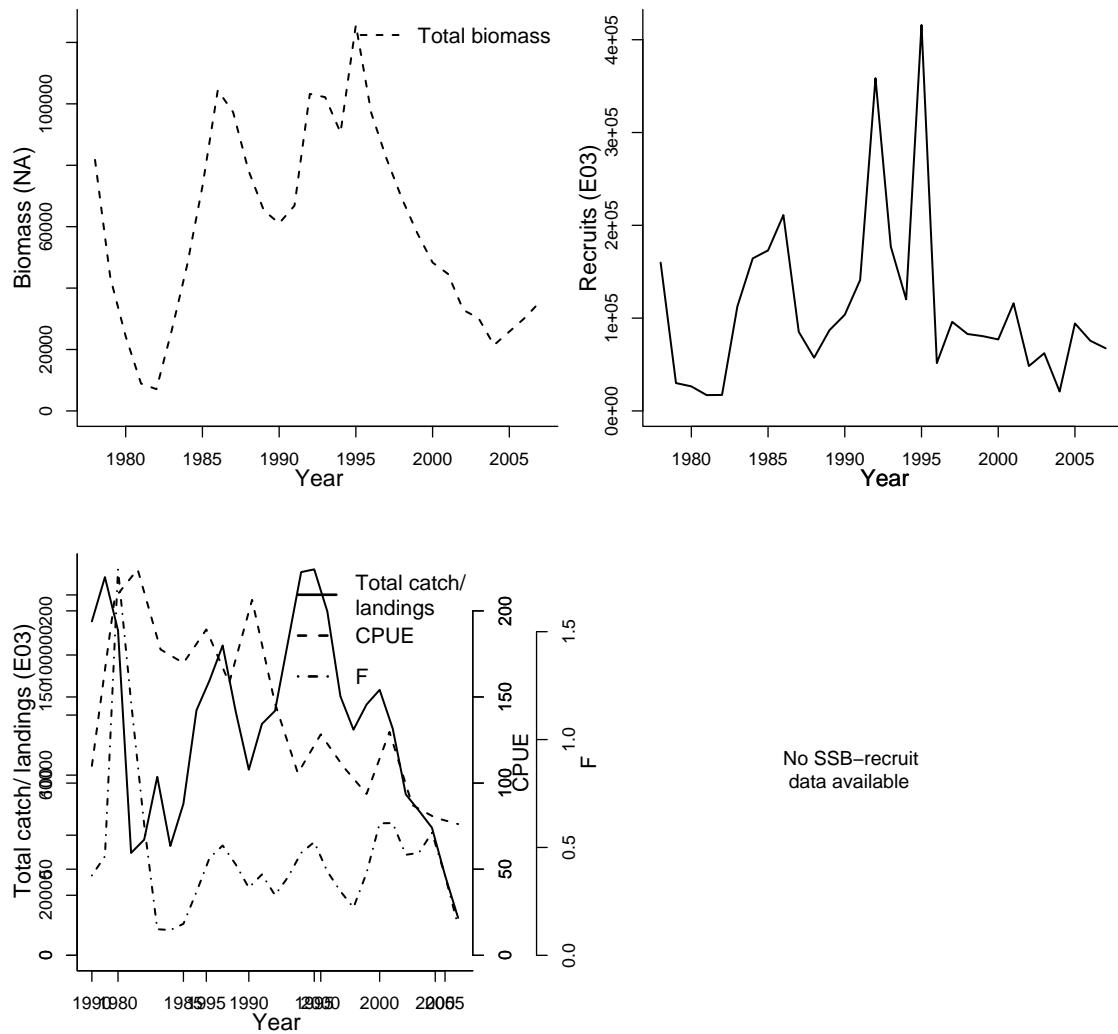
Detail	Value
Management body	DFO
Assessment group	Department of Fisheries and Oceans - Southern Gulf Region
Assessment authors	LeBlanc, C.H.
Assessment method	Sequential Population Analysis / ADAPT
Publication year	2007
Timeseries span	1978-2007
Document	NAFO-HERR4T-2007.pdf (pdf not in database)
Recorder	PREFONTAINE
Date entered	2009-03-10

Biometrics provided. Note that the assumed timeseries to which the reference point pertains is indicated in parentheses.

Parameter	Value	Units
REC-AGE-yr	4	yr
TB-AGE-yr	4-10	yr
M-1/T	0.2	1/T
SSB-AGE-yr		
F-AGE-yr		
M		
A50-yr		
L50-cm		
MORATOR-yr-yr		
LME		

Reference points		
Parameter	Value	Units
F0.1-1/yr (F)	0.35	1/yr
Busr-MT	54000	MT
Blrp-MT	22000	MT

Time series minima and maxima					
	SSB	R	F	TB	Catch
Minimum year		1978	1978	1978	1978
Maximum year		2007	2006	2007	2006
Time series minimum		17034	0.117	7085	12464
Time series maximum		415931	1.789	125698	128513
Units		E03	1/T	MT	E03



Assessment of Grand Banks american plaice (*Hippoglossoides platessoides*)

Assessment ID:NAFO-SC-AMPL3LNO-1960-2007-PREFONTAINE

Area ID: multinational-NAFO-3LNO

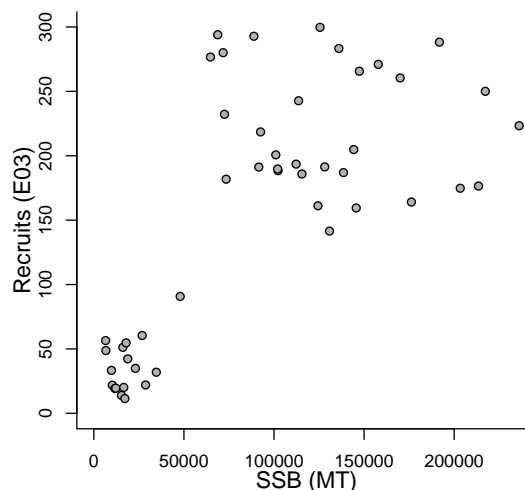
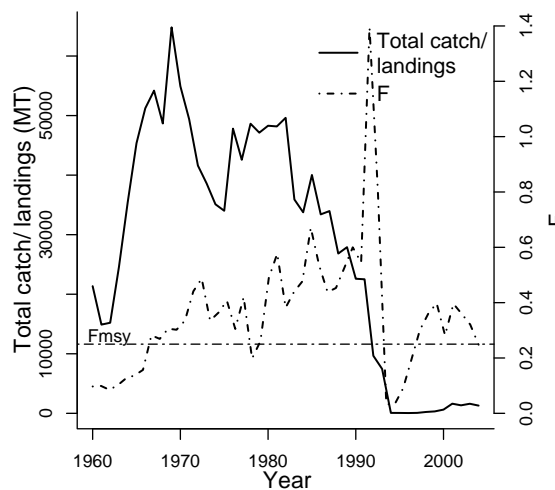
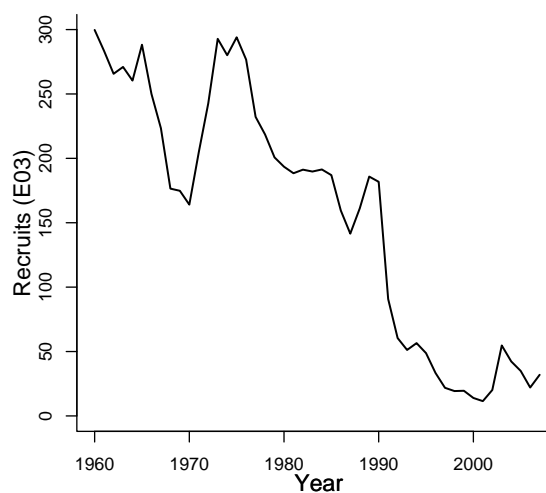
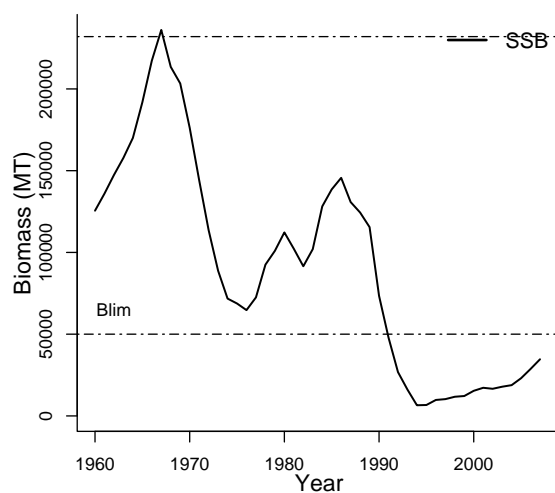
General assessment details.

Detail	Value
Management body	NAFO
Assessment group	NAFO Scientific Council
Assessment authors	Dwyer, K.S.
Assessment method	A general approach to fitting VPA models. ADAPT is based on minimising the sum-of-squares over any number of indices of abundance to find best-fit parameters.
Publication year	2005
Timeseries span	1960-2007
Document	NAFO-AMPL3LNO-2005.pdf (pdf not in database)
Recorder	PREFONTAINE
Date entered	2009-03-10

Biometrics provided. Note that the assumed timeseries to which the reference point pertains is indicated in parentheses.

Parameter	Value	Units	Reference points		
			Parameter	Value	Units
REC-AGE-yr	5	yr	Blim-MT (SSB)	50000	MT
TB-AGE-yr	5+	yr	Bmsy-MT (TB)	232000	MT
M-1/T	SEE TIMESERIES	1/T	F0.1-1/yr (F)	0.19	1/yr
SSB-AGE-yr			Fmsy-1/yr (F)	0.25	1/yr
F-AGE-yr			SSB_{2007}/B_{lim}	0.693	
M			F_{2006}/F_{msy}	0.992	
A50-yr					
L50-cm					
MORATOR-yr-yr					
LME					

Time series minima and maxima					
	SSB	R	F	TB	Catch
Minimum year	1960	1960	1960		1960
Maximum year	2007	2007	2006		2004
Time series minimum	6522.74	11.46947	0.033		49
Time series maximum	236082.43	299.71077	1.395		64815
Units	MT	E03	1/T		MT



Assessment of Flemish Cap american plaice (*Hippoglossoides platessoides*)

Assessment ID:NAFO-SC-AMPL3M-1960-2005-PREFONTAINE

Area ID: multinational-NAFO-3M

General assessment details.

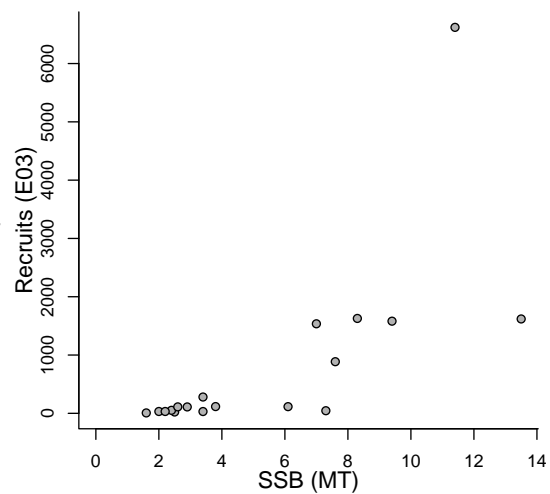
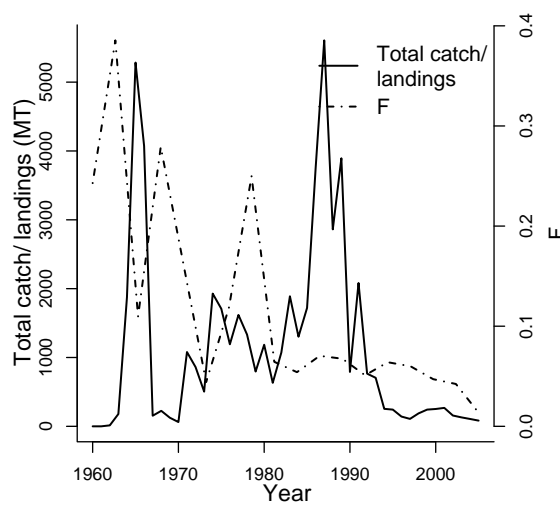
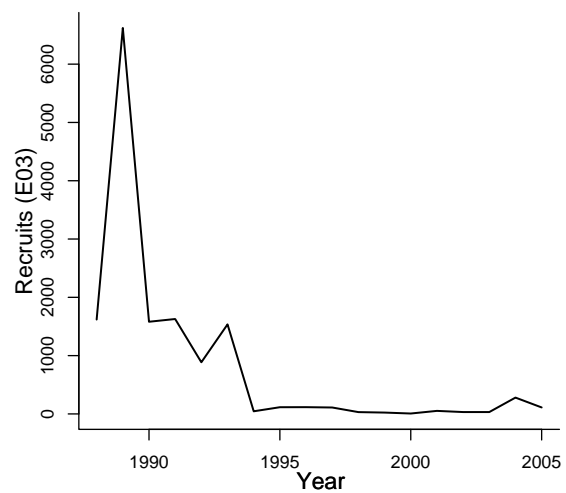
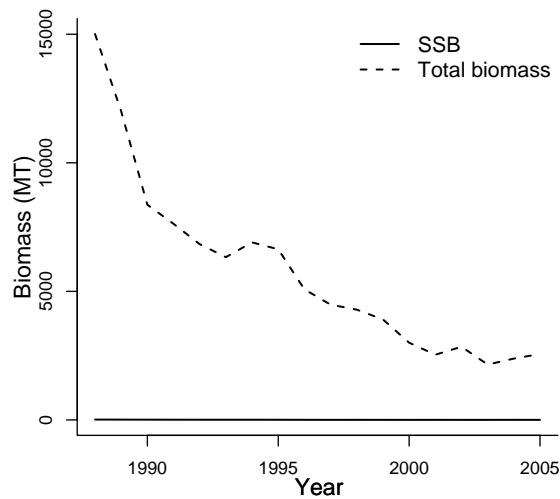
Detail	Value
Management body	NAFO
Assessment group	NAFO Scientific Council
Assessment authors	Alpoim, R.
Assessment method	Extended Survivor Analysis
Publication year	2006
Timeseries span	1960-2005
Document	NAFO-AMPL3M-2006.pdf (pdf not in database)
Recorder	PREFONTAINE
Date entered	2009-03-10

Biometrics provided. Note that the assumed timeseries to which the reference point pertains is indicated in parentheses.

Parameter	Value	Units
SSB-AGE-yr	5+	yr
REC-AGE-yr	SEE NOTES	yr
M-1/T	0.2	1/T
TB-AGE-yr		
F-AGE-yr		
M		
A50-yr		
L50-cm		
MORATOR-yr-yr		
LME		

Reference points		
Parameter	Value	Units
F0.1-1/yr (F)	0.165	1/yr
Fmax-1/yr (F)	0.365	1/yr

Time series minima and maxima					
	SSB	R	F	TB	Catch
Minimum year	1988	1988	1988	1988	1960
Maximum year	2005	2005	2005	2005	2005
Time series minimum	1.6	7	0.0136	2154	0
Time series maximum	13.5	6621	0.3855	15012	5607
Units	MT	E03	1/T	MT	MT



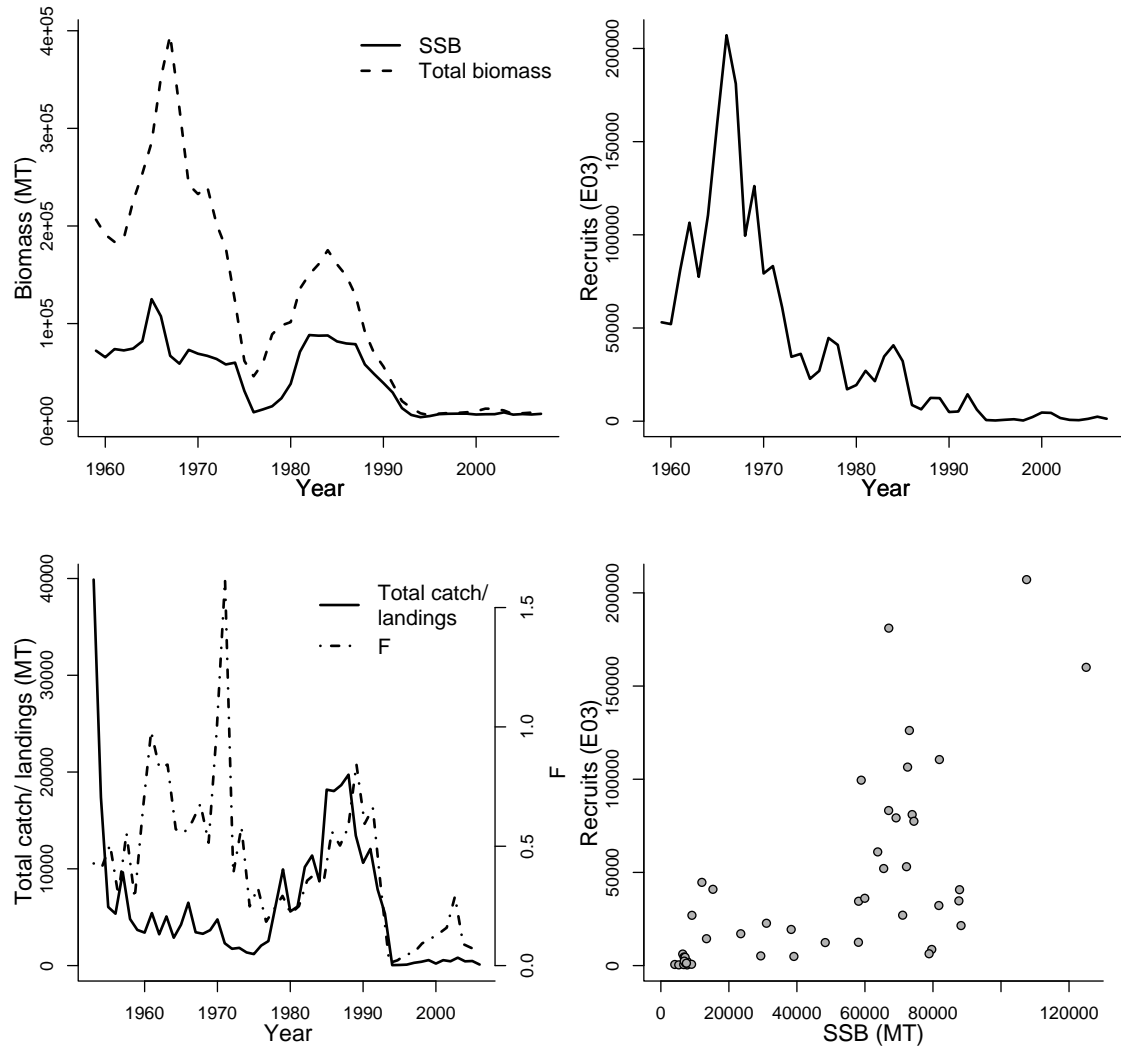
Assessment of Southern Grand Banks atlantic cod (*Gadus morhua*)

General assessment details:

Detail	Value
Management body	NAFO
Assessment group	NAFO Scientific Council
Assessment authors	Morgan, M.J.
Assessment method	A general approach to fitting VPA models. ADAPT is based on minimising the sum-of-squares over any number of indices of abundance to find best-fit parameters.
Years	1953-2007
Document	NULL
Recorder	PREFONTAINE
Date entered	2008-12-02

Timeseries and biometrics provided:

Detail	Value
Timeseries	F, R, SSB, TB, TC-1, TC-2, TC-3
Biometrics	A50, A50max, A50min, F-AGE, F-CALC, Habitat, M, MAT-CALC, MAT-MODEL, MAT-SEX, REC-AGE, SSB-AGE, TB-AGE, TB-TYPE
Reference points	



Assessment of NAFO 01ABCDEF greenland halibut (*Reinhardtius hippoglossoides*)

Assessment ID:NAFO-SC-GHAL01ABCDEF-1987-2006-PREFONTAINE

Area ID: multinational-NAFO-01ABCDEF

General assessment details.

Detail	Value
Management body	NAFO
Assessment group	NAFO Scientific Council
Assessment authors	Jrgensen, O.A.
Assessment method	Temporal indices derived from scientific survey data
Publication year	2007
Timeseries span	1987-2006
Document	NAFO-GHAL01ABCDEF-2007.pdf (pdf not in database)
Recorder	PREFONTAINE
Date entered	2009-03-10

Biometrics provided. Note that the assumed timeseries to which the reference point pertains is indicated in parentheses.

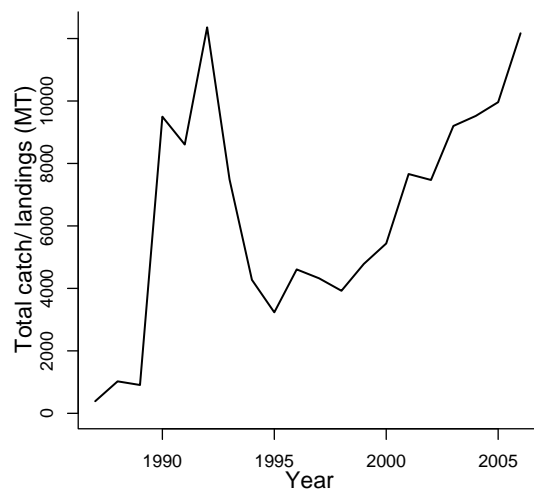
Parameter	Value	Units
REC-AGE-yr	1	yr
SSB-AGE-yr		
TB-AGE-yr		
F-AGE-yr		
M		
A50-yr		
L50-cm		
MORATOR-yr-yr		
LME		

Reference points		
Parameter	Value	Units

Time series minima and maxima					
	SSB	R	F	TB	Catch
Minimum year					1987
Maximum year					2006
Time series minimum					388
Time series maximum					12358
Units					MT

No biomass data
available

No recruitment
data available



No SSB–recruit
data available

Assessment of Labrador Shelf - Grand Banks greenland halibut (*Reinhardtius hippoglossoides*)

Assessment ID:NAFO-SC-GHAL23KLMNO-1960-2006-PREFONTAINE

Area ID: multinational-NAFO-23KLMNO

General assessment details.

Detail	Value
Management body	NAFO
Assessment group	NAFO Scientific Council
Assessment authors	Healey, B.P.
Assessment method	Extended Survivor Analysis
Publication year	2007
Timeseries span	1960-2006
Document	NAFO-GHAL23KLMNO-2007.pdf (pdf not in database)
Recorder	PREFONTAINE
Date entered	2009-03-10

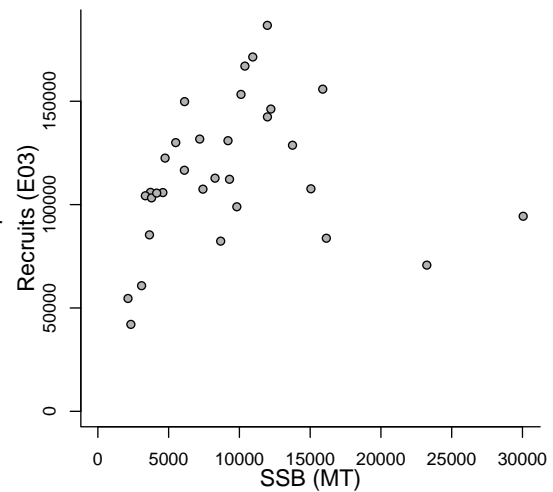
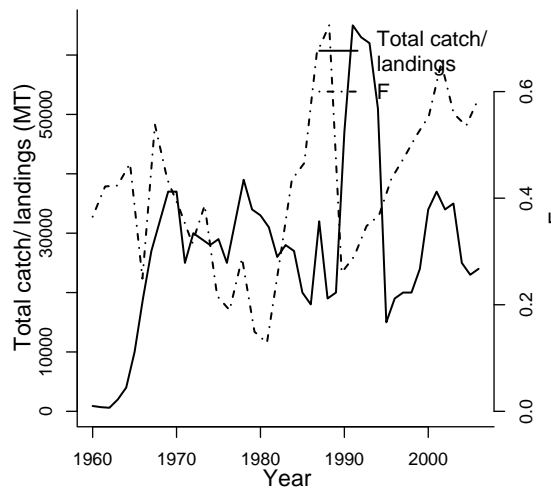
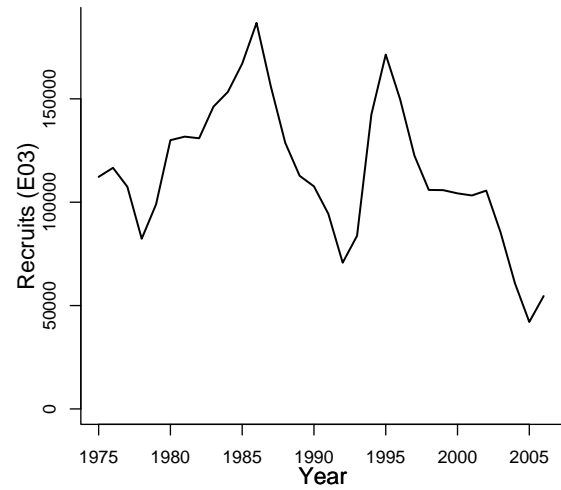
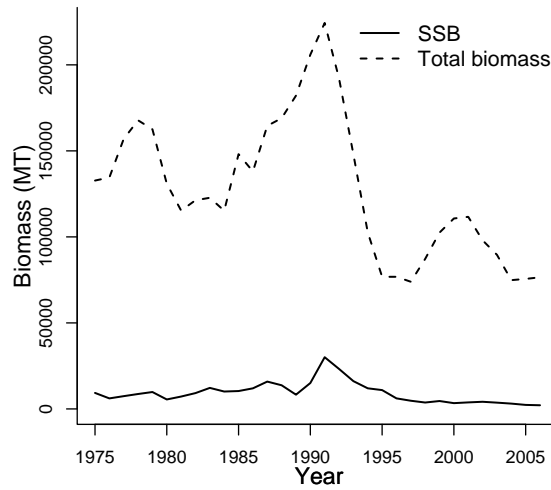
Biometrics provided. Note that the assumed timeseries to which the reference point pertains is indicated in parentheses.

Parameter	Value	Units
REC-AGE-yr	1	yr
M-1/T	0.2	1/T
SSB-AGE-yr		
TB-AGE-yr		
F-AGE-yr		
M		
A50-yr		
L50-cm		
MORATOR-yr-yr		
LME		

Reference points		
Parameter	Value	Units
F0.1-1/yr (F)	0.14	1/yr

Time series minima and maxima

	SSB	R	F	TB	Catch
Minimum year	1975	1975	1975	1975	1960
Maximum year	2006	2006	2006	2006	2006
Time series minimum	2129	42064	0.1285	73913	600
Time series maximum	30050	186714	0.7243	224362	65000
Units	MT	E03	1/T	MT	MT



Assessment of West Greenland redfish species (*Redfish species*)

Assessment ID:NAFO-SC-REDFISHSPP1-1965-2004-PREFONTAINE

Area ID: multinational-NAFO-1

General assessment details.

Detail	Value
Management body	NAFO
Assessment group	NAFO Scientific Council
Assessment authors	Siegstad, Helle
Assessment method	Unknown
Publication year	2005
Timeseries span	1965-2004
Document	NAFO-RED1-2005.pdf (pdf not in database)
Recorder	PREFONTAINE
Date entered	2009-03-10

Biometrics provided. Note that the assumed timeseries to which the reference point pertains is indicated in parentheses.

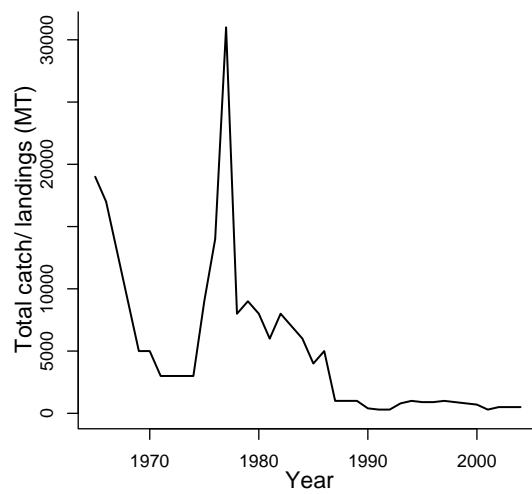
Parameter	Value	Units
REC-AGE		
SSB-AGE-yr		
TB-AGE-yr		
F-AGE-yr		
M		
A50-yr		
L50-cm		
MORATOR-yr-yr		
LME		

Reference points		
Parameter	Value	Units

Time series minima and maxima					
	SSB	R	F	TB	Catch
Minimum year					1965
Maximum year					2004
Time series minimum					300
Time series maximum					31000
Units					MT

No biomass data
available

No recruitment
data available



No SSB–recruit
data available

Assessment of N and SW Grand Banks redfish species (*Redfish species*)

Assessment ID:NAFO-SC-REDFISHSPP3LN-1959-2007-PREFONTAINE

Area ID: multinational-NAFO-3LN

General assessment details.

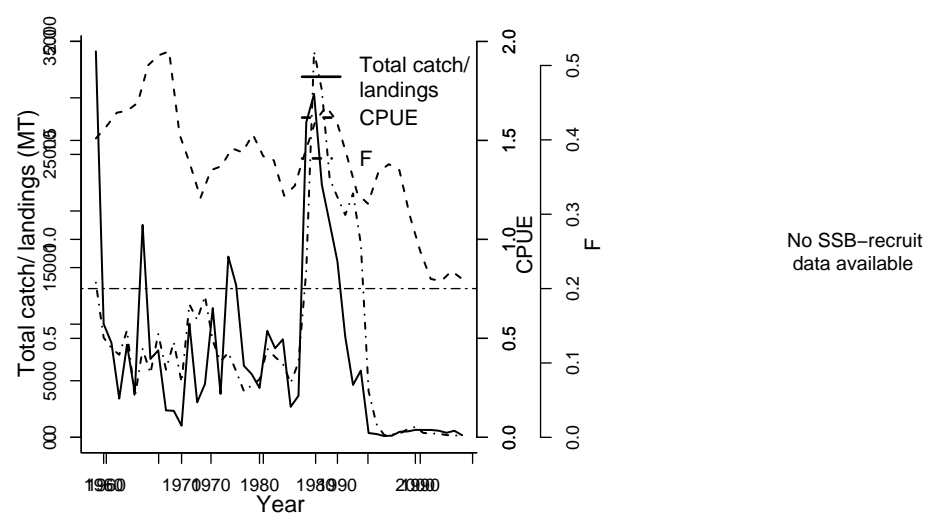
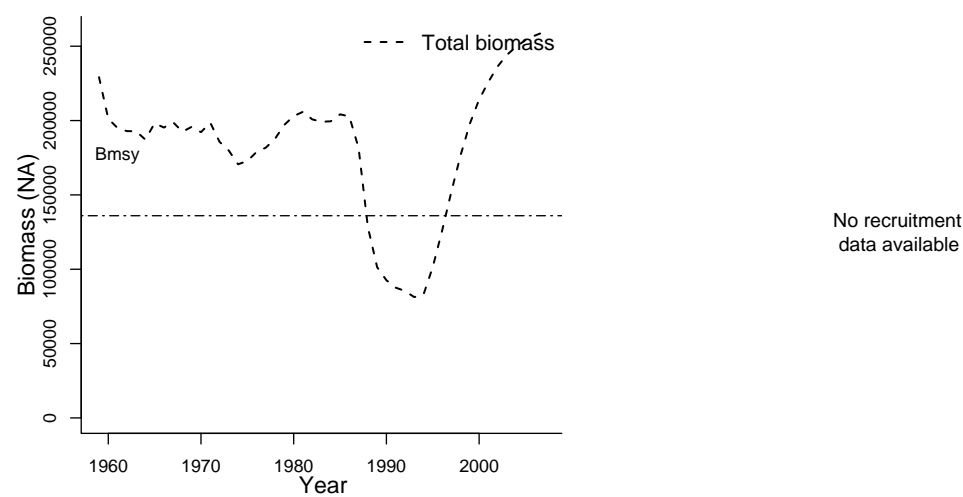
Detail	Value
Management body	NAFO
Assessment group	NAFO Scientific Council
Assessment authors	vila de Melo, A. M.
Assessment method	Surplus production model
Publication year	2007
Timeseries span	1959-2007
Document	NAFO-RED3LN-2007.pdf (pdf not in database)
Recorder	PREFONTAINE
Date entered	2009-03-10

Biometrics provided. Note that the assumed timeseries to which the reference point pertains is indicated in parentheses.

Parameter	Value	Units
REC-AGE-yr	NULL	yr
L50-cm	30-34	cm
SSB-AGE-yr		
TB-AGE-yr		
F-AGE-yr		
M		
A50-yr		
MORATOR-yr-yr		
LME		

Reference points		
Parameter	Value	Units
Bmsy-MT (TB)	136000	MT
Fmsy-1/yr (F)	0.2	1/yr
TB_{2007}/B_{msy}	1.909	
F_{2006}/F_{msy}	0.005	

Time series minima and maxima					
	SSB	R	F	TB	Catch
Minimum year			1959	1959	1959
Maximum year			2006	2007	2006
Time series minimum			0.001	81260	112
Time series maximum			0.519	259600	34107
Units			1/T	MT	MT



Assessment of Flemish Cap redfish species (*Redfish species*)

Assessment ID:NAFO-SC-REDFISHSPP3M-1989-2006-PREFONTAINE

Area ID: multinational-NAFO-3M

General assessment details.

Detail	Value
Management body	NAFO
Assessment group	NAFO Scientific Council
Assessment authors	vila de Melo, A. M.
Assessment method	Extended Survivor Analysis
Publication year	2007
Timeseries span	1989-2006
Document	NAFO-RED3M-2007.pdf (pdf not in database)
Recorder	PREFONTAINE
Date entered	2009-03-10

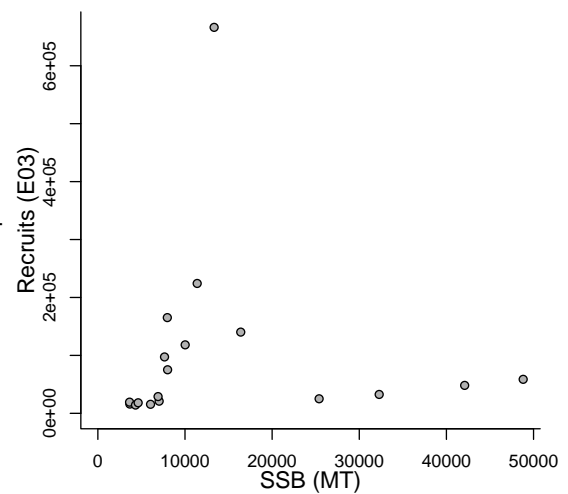
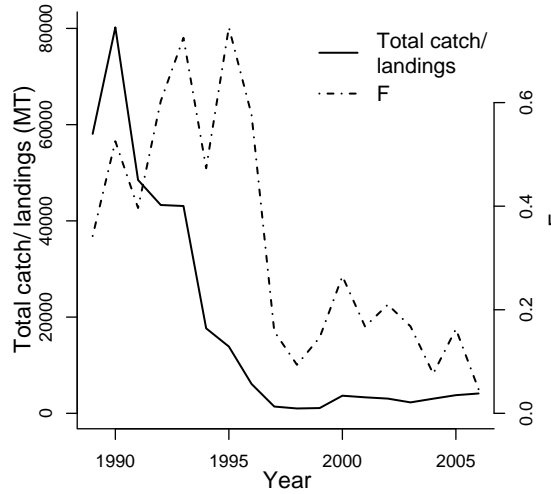
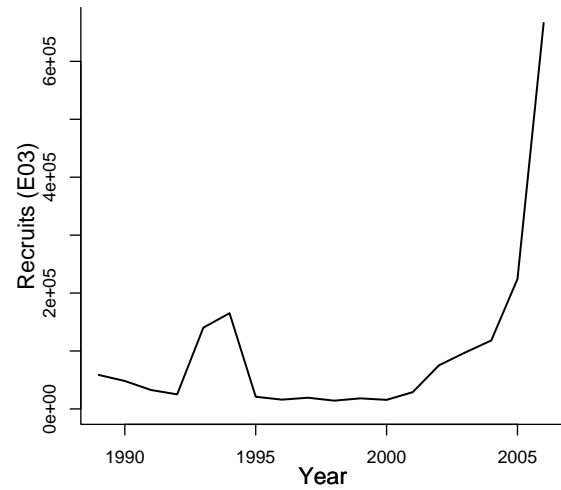
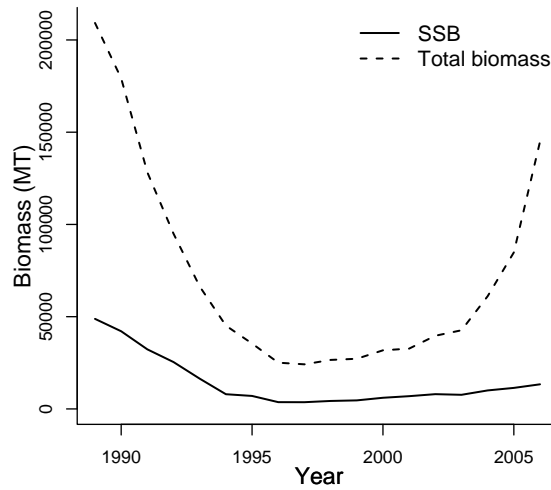
Biometrics provided. Note that the assumed timeseries to which the reference point pertains is indicated in parentheses.

Parameter	Value	Units
REC-AGE-yr	4	yr
TB-AGE-yr	4+	yr
A50-yr	15	yr
SSB-AGE-yr		
F-AGE-yr		
M		
L50-cm		
MORATOR-yr-yr		
LME		

Reference points		
Parameter	Value	Units

Time series minima and maxima

	SSB	R	F	TB	Catch
Minimum year	1989	1989	1989	1989	1989
Maximum year	2006	2006	2006	2006	2006
Time series minimum	3640	14280	0.0463	24168	1011
Time series maximum	48810	666290	0.7453	209223	80223
Units	MT	E03	1/T	MT	MT



Assessment of Grand Banks yellowtail flounder (*Limanda ferruginea*)

Assessment ID:NAFO-SC-YELL3LNO-1960-2006-PREFONTAINE

Area ID: multinational-NAFO-3LNO

General assessment details.

Detail	Value
Management body	NAFO
Assessment group	NAFO Scientific Council
Assessment authors	Walsh, Stephen J.
Assessment method	Surplus production model
Publication year	2006
Timeseries span	1960-2006
Document	NULL (pdf not in database)
Recorder	PREFONTAINE
Date entered	2009-03-11

Biometrics provided. Note that the assumed timeseries to which the reference point pertains is indicated in parentheses.

Parameter	Value	Units
REC-AGE		
SSB-AGE-yr		
TB-AGE-yr		
F-AGE-yr		
M		
A50-yr		
L50-cm		
MORATOR-yr-yr		
LME		

Reference points		
Parameter	Value	Units
Bmsy-MT (TB)	78930	MT
Fmsy-1/T (F)	0.22	1/T

Time series minima and maxima					
	SSB	R	F	TB	Catch
Minimum year					
Maximum year					
Time series minimum					
Time series maximum					
Units					MT

No biomass data
available

No recruitment
data available

No exploitation
data available

No SSB–recruit
data available

Large Marine Ecosystems of the World and Linked Watersheds

MAP KEY:

LME Numbers:

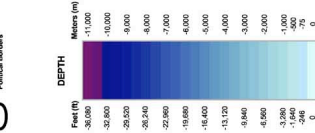
- 1 East African Shelf
- 2 Gulf of Mexico
- 3 Caribbean Current
- 4 North Atlantic
- 5 Gulf of Mexico
- 6 Northwest U.S. Continental Shelf
- 7 Northeast U.S. Continental Shelf
- 8 Labrador Current
- 9 Newfoundland-Labrador Shelf
- 10 Arctic Ocean
- 11 Pacific Central American Coastal
- 12 Humboldt Current
- 13 Peru Current
- 14 Patagonian Shelf
- 15 Brazil Shelf
- 16 East Brazil Shelf
- 17 West Greenland Shelf
- 18 West Greenland Shelf
- 19 Barents Sea
- 20 Barents Sea
- 21 North Sea
- 22 North Sea
- 23 Celtic Shelf
- 24 Celtic Shelf
- 25 Iberian Coastal
- 26 Canary Current
- 27 Canary Current
- 28 Benguela Current
- 29 Benguela Current
- 30 Somali Current
- 31 Somali Current
- 32 Red Sea
- 33 Red Sea
- 34 Gulf of Thailand
- 35 Gulf of Thailand
- 36 Indonesian Sea
- 37 Indonesian Sea
- 38 Southeast Asian Shelf
- 39 Southeast Asian Shelf
- 40 Southeast Asian Shelf
- 41 East China Sea
- 42 East China Sea
- 43 East China Sea
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- 62 East China Sea
- 63 East China Sea
- 64 East China Sea

Large Marine Ecosystems

Watershed Boundaries

Political Boundaries

Depth



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