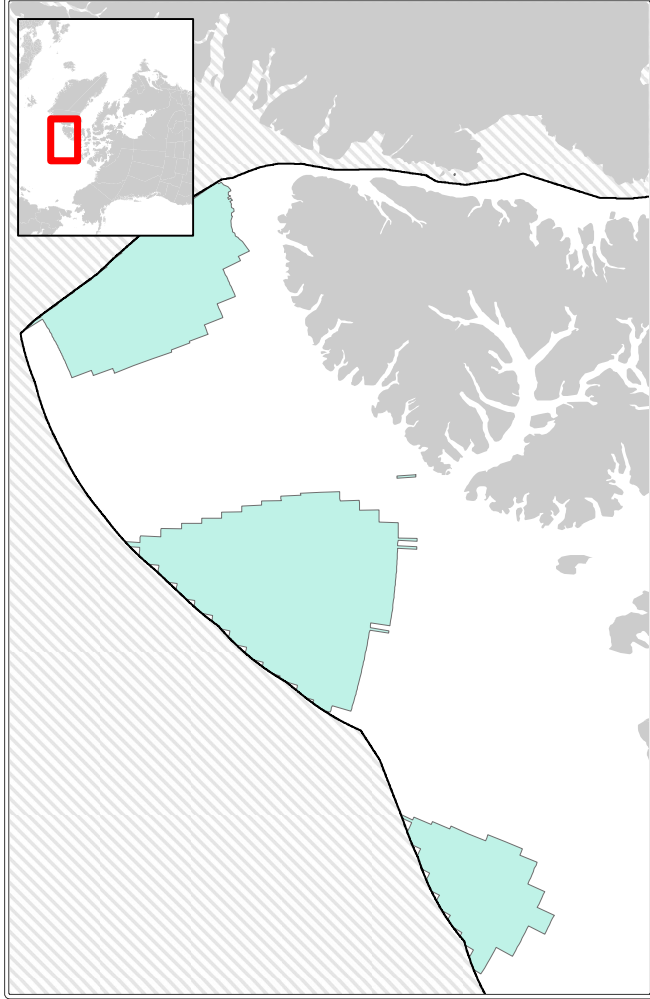


3250: Pelagic Seascapes



Stratification: <4, 13, Ice: PermanentlyIce, Temperature: <0C, Salinity: <30.4 AB

Date: (1), (3), & (4): 2013; (2) 2013

Open Source: (1) & (3) & (4): Yes; (2) Yes

Organization: (1), (3), & (4): NOAA; (2) Canadian Ice Service

Associated Report: (1) Stratification: NOAA World Ocean Atlas; (2) ice cover regime: Sea Ice Climatic Atlas for the Northern Canadian Waters; (3) temperature: NOAA World Ocean Atlas; (4) salinity: NOAA World Ocean Atlas

Authors: (1) & (3): NOAA World Ocean Atlas (Temperature): R. A. Locarnini, A. V. Mishonov, J. I. Antonov, T. P. Boyer, H. E. Garcia, O. K. Baranova, M. M. Zweng, C. R. Paver, J. R. Reagan, D. R. Johnson, M. Hamilton, and D. Seidov; (1) & (4): NOAA World Ocean Atlas (Salinity): M. M. Zweng, J. R. Reagan, J. I. Antonov, R. A. Locarnini,

Data Summary

Management Unit: N/A

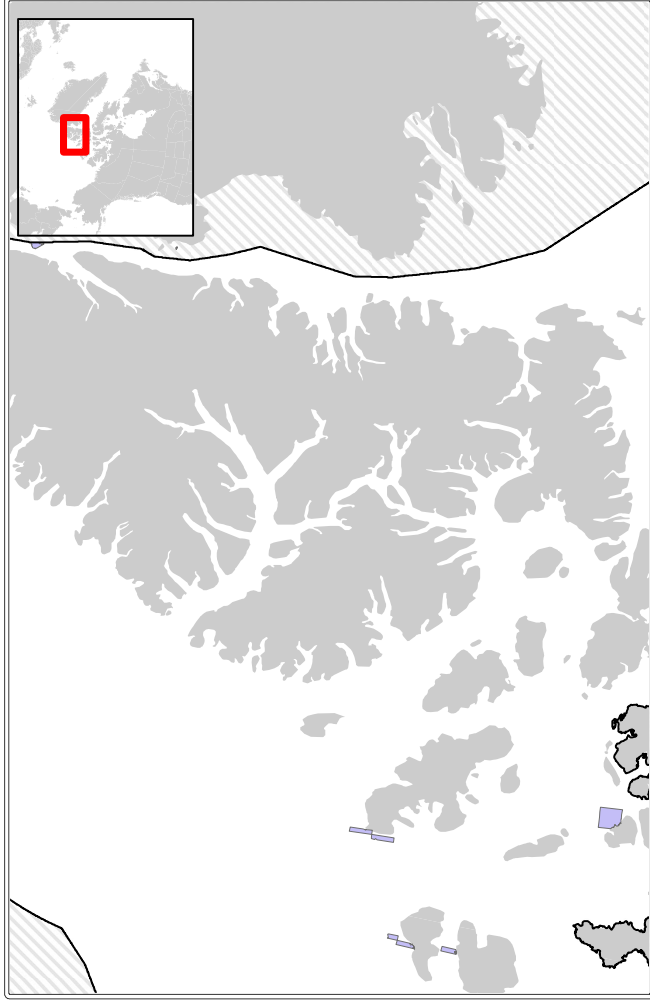
Marine Bioregion: Arctic Basin

Description: Pelagic seascapes were identified using three classes of stratification (1), ice cover regime (2), temperature (3), and salinity (4). Once each individual data layer required for construction of the pelagic seascapes had been assembled they were combined using a simple spatial intersection operation in ArcMap 10.2. Following this a generic descriptive attribute was constructed for each individual polygon created by the intersection based on the class values present for each layer involved. Note that areas containing no-data values for 1 or more layer (e.g. shallow coastal areas) were classified generally as NoData. Each assembled seascape type was then split by bioregion. Water column stratification was derived from the temperature and salinity data extracted from NOAA's World Ocean Atlas 2013. Data on long-term mean annual salinity and temperature was selected across the study area at a resolution of 0.25° as a CSV containing latitude/longitude coordinates. Using a custom script written in Python 2.7, stratification was calculated as $\frac{1}{2} \left(\frac{1}{T} + \frac{1}{S} \right)$ using the Seawater-3.3 module. Ice cover regime was assessed using data obtained from the Canadian Ice Service. Using the 30-year (1981-2010) Sea Ice Climatic Atlas's Median Ice Concentration data product, ice cover regimes were classified into 3 categories of permanent ice areas, permanently open, and seasonally open (table 1). This data product comes in the form of 30-year averaged weekly median ice concentrations in vector format. Using a custom Python 2.7 script, polygons with median ice concentrations below 30% (open-water) and above 90% (closed-water) were identified for each weekly dataset and extracted. Temperature data for pelagic seascapes was obtained from NOAA's World Ocean Atlas 2013 (WOD13). Data on long-term mean annual salinity was extracted across the study area at a resolution of 0.25° as a CSV containing latitude/longitude coordinates. Using a custom script written in Python 2.7, temperature values were taken at the desired depths and an average was calculated for each 0.25° grid point. All available values in the upper 30m of the water were considered when calculating averages. Salinity data for pelagic seascapes was obtained from NOAA's World Ocean Atlas 2013. Data on long-term mean annual salinity was extracted across the study area at a resolution of 0.25° as a CSV containing latitude/longitude coordinates. Using a custom script written in Python 2.7, salinity values were taken at the desired depths and an average was calculated for each 0.25° grid point.

Associated Links

(2) Sea Ice Climatic Atlas: <https://www.canada.ca/en/environment-climate-change/services/ice-forecasts-observations/publications/sea-climatic-atlas-northern-waters-1981-2010.html>; (1, 3, & 4): NOAA: <https://www.nodc.noaa.gov/OC5/woa13/pubwoa13.html>

3251: Pelagic Seascapes



Stratification: <4, 13, Ice: PermanentlyIce, **Temperature:** <0C, **Salinity:** <31.8 AA

Date: (1), (3), & (4): 2013; (2) 2013

Open Source: (1) & (3) & (4): Yes; (2) Yes

Organization: (1), (3), & (4): NOAA; (2) Canadian Ice Service

Associated Report: (1) Stratification: NOAA World Ocean Atlas; (2) ice cover regime: Sea Ice Climatic Atlas for the Northern Canadian Waters; (3) temperature: NOAA World Ocean Atlas; (4) salinity: NOAA World Ocean Atlas

Authors: (1) & (3): NOAA World Ocean Atlas (Temperature): R. A. Locarnini, A. V. Mishonov, J. I. Antonov, T. P. Boyer, H. E. Garcia, O. K. Baranova, M. M. Zweng, C. R. Paver, J. R. Reagan, D. R. Johnson, M. Hamilton, and D. Seidov; (1) & (4): NOAA World Ocean Atlas (Salinity): M. M. Zweng, J. R. Reagan, J. I. Antonov, R. A. Locarnini,

Data Summary

Management Unit: N/A

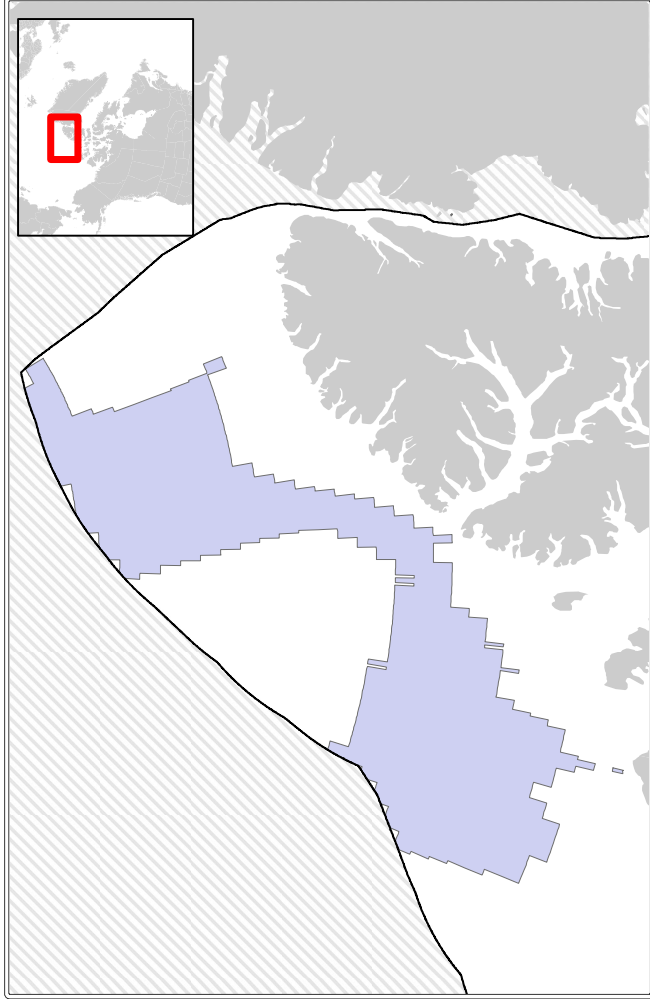
Marine Bioregion: Arctic Archipelago

Description: Pelagic seascapes were identified using three classes of stratification (1), ice cover regime (2), temperature (3), and salinity (4). Once each individual data layer required for construction of the pelagic seascapes had been assembled they were combined using a simple spatial intersection operation in ArcMap 10.2. Following this a generic descriptive attribute was constructed for each individual polygon created by the intersection based on the class values present for each layer involved. Note that areas containing no-data values for 1 or more layer (e.g. shallow coastal areas) were classified generally as NoData. Each assembled seascape type was then split by bioregion. Water column stratification was derived from the temperature and salinity data extracted from NOAA's World Ocean Atlas 2013. Data on long-term mean annual salinity and temperature was selected across the study area at a resolution of 0.25° as a CSV containing latitude/longitude coordinates. Using a custom script written in Python 2.7, stratification was calculated as $\frac{1}{2} \left(\frac{1}{T} + \frac{1}{S} \right)$ using the Seawater-3.3 module. Ice cover regime was assessed using data obtained from the Canadian Ice Service. Using the 30-year (1981-2010) Sea Ice Climatic Atlas's Median Ice Concentration data product, ice cover regimes were classified into 3 categories of permanent ice areas, permanently open, and seasonally open (table 1). This data product comes in the form of 30-year averaged weekly median ice concentrations in vector format. Using a custom Python 2.7 script, polygons with median ice concentrations below 30% (open-water) and above 90% (closed-water) were identified for each weekly dataset and extracted. Temperature data for pelagic seascapes was obtained from NOAA's World Ocean Atlas 2013 (WOD13). Data on long-term mean annual salinity was extracted across the study area at a resolution of 0.25° as a CSV containing latitude/longitude coordinates. Using a custom script written in Python 2.7, temperature values were taken at the desired depths and an average was calculated for each 0.25° grid point. All available values in the upper 30m of the water were considered when calculating averages. Salinity data for pelagic seascapes was obtained from NOAA's World Ocean Atlas 2013. Data on long-term mean annual salinity was extracted across the study area at a resolution of 0.25° as a CSV containing latitude/longitude coordinates. Using a custom script written in Python 2.7, salinity values were taken at the desired depths and an average was calculated for each 0.25° grid point.

Associated Links

(2) Sea Ice Climatic Atlas: <https://www.canada.ca/en/environment-climate-change/services/ice-forecasts-observations/publications/sea-climatic-atlas-northern-waters-1981-2010.html>; (1, 3, & 4): NOAA: <https://www.nodc.noaa.gov/OC5/woa13/pubwoa13.html>

3252: Pelagic Seascapes



Stratification: <4, 13, Ice: PermanentlyIce, Temperature: <0C, Salinity: <31.8 AB

Date: (1), (3), & (4): 2013; (2) 2013

Open Source: (1) & (3) & (4): Yes; (2) Yes

Organization: (1), (3), & (4): NOAA; (2) Canadian Ice Service

Associated Report: (1) Stratification: NOAA World Ocean Atlas; (2) ice cover regime: Sea Ice Climatic Atlas for the Northern Canadian Waters ; (3) temperature: NOAA World Ocean Atlas ; (4) salinity: NOAA World Ocean Atlas

Authors: (1) & (3): NOAA World Ocean Atlas (Temperature): R. A. Locarnini, A. V. Mishonov, J. I. Antonov, T. P. Boyer, H. E. Garcia, O. K. Baranova, M. M. Zweng, C. R. Paver, J. R. Reagan, D. R. Johnson, M. Hamilton, and D. Seidov; (1) & (4): NOAA World Ocean Atlas (Salinity): M. M. Zweng, J.R. Reagan, J.I. Antonov, R.A. Locarnini,

Data Summary

Management Unit: N/A

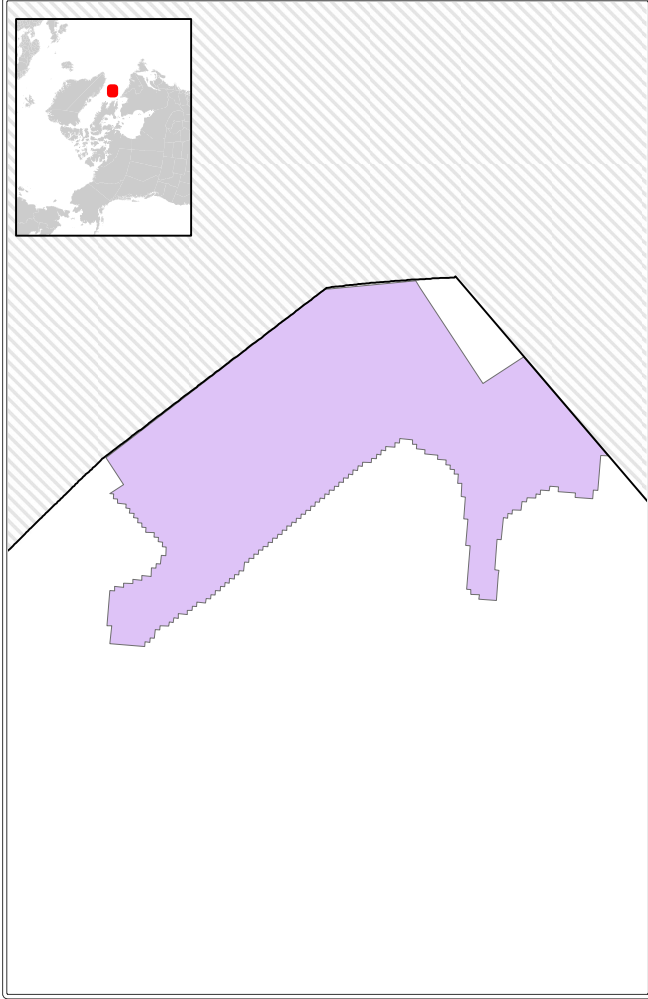
Marine Bioregion: Arctic Basin

Description: Pelagic seascapes were identified using three classes of stratification (1), ice cover regime (2), temperature (3), and salinity (4). Once each individual data layer required for construction of the pelagic seascapes had been assembled they were combined using a simple spatial intersection operation in ArcMap 10.2. Following this a generic descriptive attribute was constructed for each individual polygon created by the intersection based on the class values present for each layer involved. Note that areas containing no-data values for 1 or more layer (e.g. shallow coastal areas) were classified generally as NoData. Each assembled seascape type was then split by bioregion. Water column stratification was derived from the temperature and salinity data extracted from NOAA's World Ocean Atlas 2013. Data on long-term mean annual salinity and temperature was selected across the study area at a resolution of 0.25° as a CSV containing latitude/longitude coordinates. Using a custom script written in Python 2.7, stratification was calculated as $\frac{1}{2} \left(\frac{1}{T} + \frac{1}{S} \right)$ using the Seawater-3.3 module. Ice cover regime was assessed using data obtained from the Canadian Ice Service. Using the 30-year (1981-2010) Sea Ice Climatic Atlas's Median Ice Concentration data product, ice cover regimes were classified into 3 categories of permanent ice areas, permanently open, and seasonally open (table 1). This data product comes in the form of 30-year averaged weekly median ice concentrations in vector format. Using a custom Python 2.7 script, polygons with median ice concentrations below 30% (open-water) and above 90% (closed-water) were identified for each weekly dataset and extracted. Temperature data for pelagic seascapes was obtained from NOAA's World Ocean Atlas 2013 (WOD13). Data on long-term mean annual salinity was extracted across the study area at a resolution of 0.25° as a CSV containing latitude/longitude coordinates. Using a custom script written in Python 2.7, temperature values were taken at the desired depths and an average was calculated for each 0.25° grid point. All available values in the upper 30m of the water were considered when calculating averages. Salinity data for pelagic seascapes was obtained from NOAA's World Ocean Atlas 2013. Data on long-term mean annual salinity was extracted across the study area at a resolution of 0.25° as a CSV containing latitude/longitude coordinates. Using a custom script written in Python 2.7, salinity values were taken at the desired depths and an average was calculated for each 0.25° grid point.

Associated Links

(2) Sea Ice Climatic Atlas: <https://www.canada.ca/en/environment-climate-change/services/ice-forecasts-observations/publications/sea-climatic-atlas-northern-waters-1981-2010.html>; (1, 3, & 4): NOAA: <https://www.nodc.noaa.gov/OC5/woa13/pubwoa13.html>

3253: Pelagic Seascapes



Stratification: <4. 13, Ice: PermanentlyOpen, Temperature: >2C, Salinity: >31.8 EA

Date: (1), (3), & (4): 2013; (2) 2013

Open Source: (1) & (3) & (4): Yes; (2) Yes

Organization: (1), (3), & (4): NOAA; (2) Canadian Ice Service

Associated Report: (1) Stratification: NOAA World Ocean Atlas; (2) ice cover regime: Sea Ice Climatic Atlas for the Northern Canadian Waters; (3) temperature: NOAA World Ocean Atlas; (4) salinity: NOAA World Ocean Atlas

Authors: (1) & (3): NOAA World Ocean Atlas (Temperature): R. A. Locarnini, A. V. Mishonov, J. I. Antonov, T. P. Boyer, H. E. Garcia, O. K. Baranova, M. M. Zweng, C. R. Paver, J. R. Reagan, D. R. Johnson, M. Hamilton, and D. Seidov; (1) & (4): NOAA World Ocean Atlas (Salinity): M. M. Zweng, J. R. Reagan, J. I. Antonov, R. A. Locarnini,

Data Summary

Management Unit: N/A

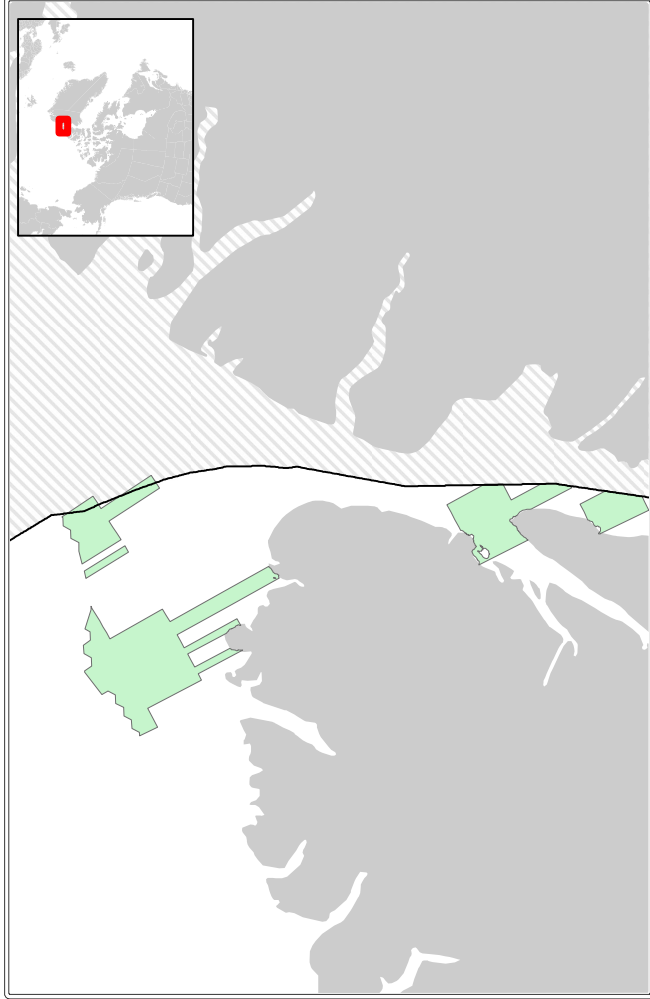
Marine Bioregion: Eastern Arctic

Description: Pelagic seascapes were identified using three classes of stratification (1), ice cover regime (2), temperature (3), and salinity (4). Once each individual data layer required for construction of the pelagic seascapes had been assembled they were combined using a simple spatial intersection operation in ArcMap 10.2. Following this a generic descriptive attribute was constructed for each individual polygon created by the intersection based on the class values present for each layer involved. Note that areas containing no-data values for 1 or more layer (e.g. shallow coastal areas) were classified generally as NoData. Each assembled seascape type was then split by bioregion. Water column stratification was derived from the temperature and salinity data extracted from NOAA's World Ocean Atlas 2013. Data on long-term mean annual salinity and temperature was selected across the study area at a resolution of 0.25° as a CSV containing latitude/longitude coordinates. Using a custom script written in Python 2.7, stratification was calculated as $\frac{1}{2} \left(\frac{1}{T} + \frac{1}{S} \right)$ using the Seawater-3.3 module. Ice cover regime was assessed using data obtained from the Canadian Ice Service. Using the 30-year (1981-2010) Sea Ice Climatic Atlas's Median Ice Concentration data product, ice cover regimes were classified into 3 categories of permanent ice areas, permanently open, and seasonally open (table 1). This data product comes in the form of 30-year averaged weekly median ice concentrations in vector format. Using a custom Python 2.7 script, polygons with median ice concentrations below 30% (open-water) and above 90% (closed-water) were identified for each weekly dataset and extracted. Temperature data for pelagic seascapes was obtained from NOAA's World Ocean Atlas 2013 (WOD13). Data on long-term mean annual salinity was extracted across the study area at a resolution of 0.25° as a CSV containing latitude/longitude coordinates. Using a custom script written in Python 2.7, temperature values were taken at the desired depths and an average was calculated for each 0.25° grid point. All available values in the upper 30m of the water were considered when calculating averages. Salinity data for pelagic seascapes was obtained from NOAA's World Ocean Atlas 2013. Data on long-term mean annual salinity was extracted across the study area at a resolution of 0.25° as a CSV containing latitude/longitude coordinates. Using a custom script written in Python 2.7, salinity values were taken at the desired depths and an average was calculated for each 0.25° grid point.

Associated Links

(2) Sea Ice Climatic Atlas: <https://www.canada.ca/en/environment-climate-change/services/ice-forecasts-observations/publications/sea-climatic-atlas-northern-waters-1981-2010.html>; (1, 3, & 4): NOAA: <https://www.nodc.noaa.gov/OC5/woa13/pubwoa13.html>

3254: Pelagic Seascapes



Stratification: <4, 13, Ice: SeasonallyOpen, Temperature: <0C, Salinity: <30.4 AA

Date: (1), (3), & (4): 2013; (2) 2013

Open Source: (1) & (3) & (4): Yes; (2) Yes

Organization: (1), (3), & (4): NOAA; (2) Canadian Ice Service

Associated Report: (1) Stratification: NOAA World Ocean Atlas; (2) ice cover regime: Sea Ice Climatic Atlas for the Northern Canadian Waters ; (3) temperature: NOAA World Ocean Atlas ; (4) salinity: NOAA World Ocean Atlas

Authors: (1) & (3): NOAA World Ocean Atlas (Temperature): R. A. Locarnini, A. V. Mishonov, J. I. Antonov, T. P. Boyer, H. E. Garcia, O. K. Baranova, M. M. Zweng, C. R. Paver, J. R. Reagan, D. R. Johnson, M. Hamilton, and D. Seidov; (1) & (4): NOAA World Ocean Atlas (Salinity): M. M. Zweng, J.R. Reagan, J.I. Antonov, R.A. Locarnini,

Data Summary

Management Unit: N/A

Marine Bioregion: Arctic Archipelago

Description: Pelagic seascapes were identified using three classes of stratification (1), ice cover regime (2), temperature (3), and salinity (4). Once each individual data layer required for construction of the pelagic seascapes had been assembled they were combined using a simple spatial intersection operation in ArcMap 10.2. Following this a generic descriptive attribute was constructed for each individual polygon created by the intersection based on the class values present for each layer involved. Note that areas containing no-data values for 1 or more layer (e.g. shallow coastal areas) were classified generally as NoData. Each assembled seascape type was then split by bioregion. Water column stratification was derived from the temperature and salinity data extracted from NOAA's World Ocean Atlas 2013. Data on long-term mean annual salinity and temperature was selected across the study area at a resolution of 0.25° as a CSV containing latitude/longitude coordinates. Using a custom script written in Python 2.7, stratification was calculated as $\frac{1}{2} \left(\frac{1}{T} + \frac{1}{S} \right)$ using the Seawater-3.3 module. Ice cover regime was assessed using data obtained from the Canadian Ice Service. Using the 30-year (1981-2010) Sea Ice Climatic Atlas's Median Ice Concentration data product, ice cover regimes were classified into 3 categories of permanent ice areas, permanently open, and seasonally open (table 1). This data product comes in the form of 30-year averaged weekly median ice concentrations in vector format. Using a custom Python 2.7 script, polygons with median ice concentrations below 30% (open-water) and above 90% (closed-water) were identified for each weekly dataset and extracted. Temperature data for pelagic seascapes was obtained from NOAA's World Ocean Atlas 2013 (WOD13). Data on long-term mean annual salinity was extracted across the study area at a resolution of 0.25° as a CSV containing latitude/longitude coordinates. Using a custom script written in Python 2.7, temperature values were taken at the desired depths and an average was calculated for each 0.25° grid point. All available values in the upper 30m of the water were considered when calculating averages. Salinity data for pelagic seascapes was obtained from NOAA's World Ocean Atlas 2013. Data on long-term mean annual salinity was extracted across the study area at a resolution of 0.25° as a CSV containing latitude/longitude coordinates. Using a custom script written in Python 2.7, salinity values were taken at the desired depths and an average was calculated for each 0.25° grid point.

Associated Links

(2) Sea Ice Climatic Atlas: <https://www.canada.ca/en/environment-climate-change/services/ice-forecasts-observations/publications/sea-climatic-atlas-northern-waters-1981-2010.html>; (1, 3, & 4): NOAA: <https://www.nodc.noaa.gov/OC5/woa13/pubwoa13.html>

3255: Pelagic Seascapes



Stratification: <4, 13, Ice: SeasonallyOpen, Temperature: <0C, Salinity: <30.4 EA

Date: (1), (3), & (4): 2013; (2) 2013

Open Source: (1) & (3) & (4): Yes; (2) Yes

Organization: (1), (3), & (4): NOAA; (2) Canadian Ice Service

Associated Report: (1) Stratification: NOAA World Ocean Atlas; (2) ice cover regime: Sea Ice Climatic Atlas for the Northern Canadian Waters; (3) temperature: NOAA World Ocean Atlas; (4) salinity: NOAA World Ocean Atlas

Authors: (1) & (3): NOAA World Ocean Atlas (Temperature): R. A. Locarnini, A. V. Mishonov, J. I. Antonov, T. P. Boyer, H. E. Garcia, O. K. Baranova, M. M. Zweng, C. R. Paver, J. R. Reagan, D. R. Johnson, M. Hamilton, and D. Seidov; (1) & (4): NOAA World Ocean Atlas (Salinity): M. M. Zweng, J. R. Reagan, J. I. Antonov, R. A. Locarnini,

Data Summary

Management Unit: N/A

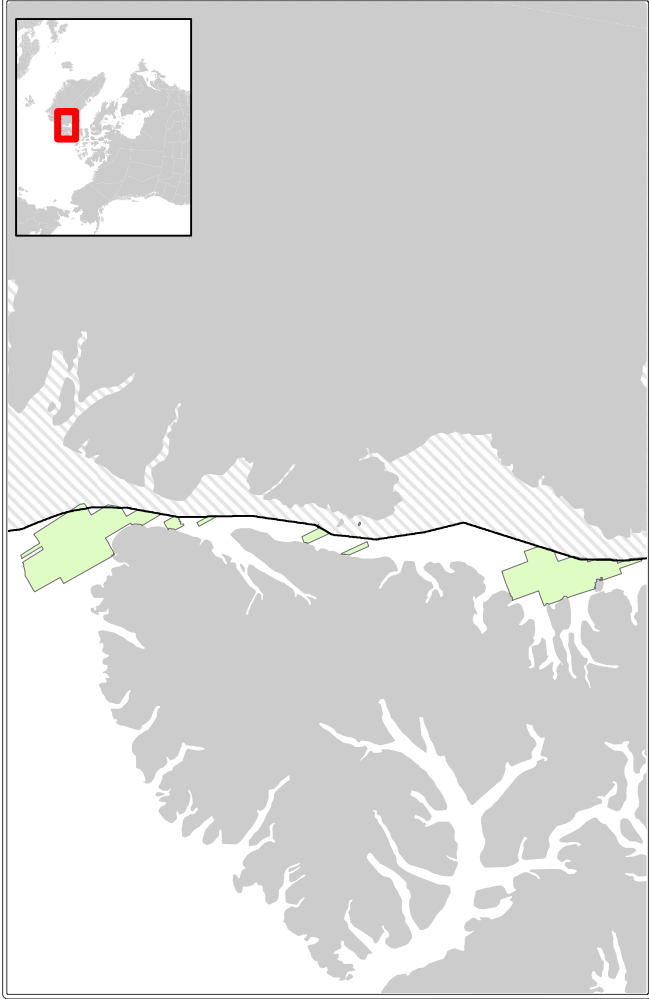
Marine Bioregion: Eastern Arctic

Description: Pelagic seascapes were identified using three classes of stratification (1), ice cover regime (2), temperature (3), and salinity (4). Once each individual data layer required for construction of the pelagic seascapes had been assembled they were combined using a simple spatial intersection operation in ArcMap 10.2. Following this a generic descriptive attribute was constructed for each individual polygon created by the intersection based on the class values present for each layer involved. Note that areas containing no-data values for 1 or more layer (e.g. shallow coastal areas) were classified generally as NoData. Each assembled seascape type was then split by bioregion. Water column stratification was derived from the temperature and salinity data extracted from NOAA's World Ocean Atlas 2013. Data on long-term mean annual salinity and temperature was selected across the study area at a resolution of 0.25° as a CSV containing latitude/longitude coordinates. Using a custom script written in Python 2.7, stratification was calculated as $\frac{1}{2} \left(\frac{1}{T} + \frac{1}{S} \right)$ using the Seawater-3.3 module. Ice cover regime was assessed using data obtained from the Canadian Ice Service. Using the 30-year (1981-2010) Sea Ice Climatic Atlas's Median Ice Concentration data product, ice cover regimes were classified into 3 categories of permanent ice areas, permanently open, and seasonally open (table 1). This data product comes in the form of 30-year averaged weekly median ice concentrations in vector format. Using a custom Python 2.7 script, polygons with median ice concentrations below 30% (open-water) and above 90% (closed-water) were identified for each weekly dataset and extracted. Temperature data for pelagic seascapes was obtained from NOAA's World Ocean Atlas 2013 (WOD13). Data on long-term mean annual salinity was extracted across the study area at a resolution of 0.25° as a CSV containing latitude/longitude coordinates. Using a custom script written in Python 2.7, temperature values were taken at the desired depths and an average was calculated for each 0.25° grid point. All available values in the upper 30m of the water were considered when calculating averages. Salinity data for pelagic seascapes was obtained from NOAA's World Ocean Atlas 2013. Data on long-term mean annual salinity was extracted across the study area at a resolution of 0.25° as a CSV containing latitude/longitude coordinates. Using a custom script written in Python 2.7, salinity values were taken at the desired depths and an average was calculated for each 0.25° grid point.

Associated Links

(2) Sea Ice Climatic Atlas: <https://www.canada.ca/en/environment-climate-change/services/ice-forecasts-observations/publications/sea-climatic-atlas-northern-waters-1981-2010.html>; (1, 3, & 4): NOAA: <https://www.nodc.noaa.gov/OC5/woa13/pubwoa13.html>

3256: Pelagic Seascapes



Stratification: <4, 13, Ice: SeasonallyOpen, Temperature: <0C, Salinity: <31.8 AA

Date: (1), (3), & (4): 2013; (2) 2013

Open Source: (1) & (3) & (4): Yes; (2) Yes

Organization: (1), (3), & (4): NOAA; (2) Canadian Ice Service

Associated Report: (1) Stratification: NOAA World Ocean Atlas; (2) ice cover regime: Sea Ice Climatic Atlas for the Northern Canadian Waters; (3) temperature: NOAA World Ocean Atlas; (4) salinity: NOAA World Ocean Atlas

Authors: (1) & (3): NOAA World Ocean Atlas (Temperature): R. A. Locarnini, A. V. Mishonov, J. I. Antonov, T. P. Boyer, H. E. Garcia, O. K. Baranova, M. M. Zweng, C. R. Paver, J. R. Reagan, D. R. Johnson, M. Hamilton, and D. Seidov; (1) & (4): NOAA World Ocean Atlas (Salinity): M. M. Zweng, J.R. Reagan, J.I. Antonov, R.A. Locarnini,

Data Summary

Management Unit: N/A

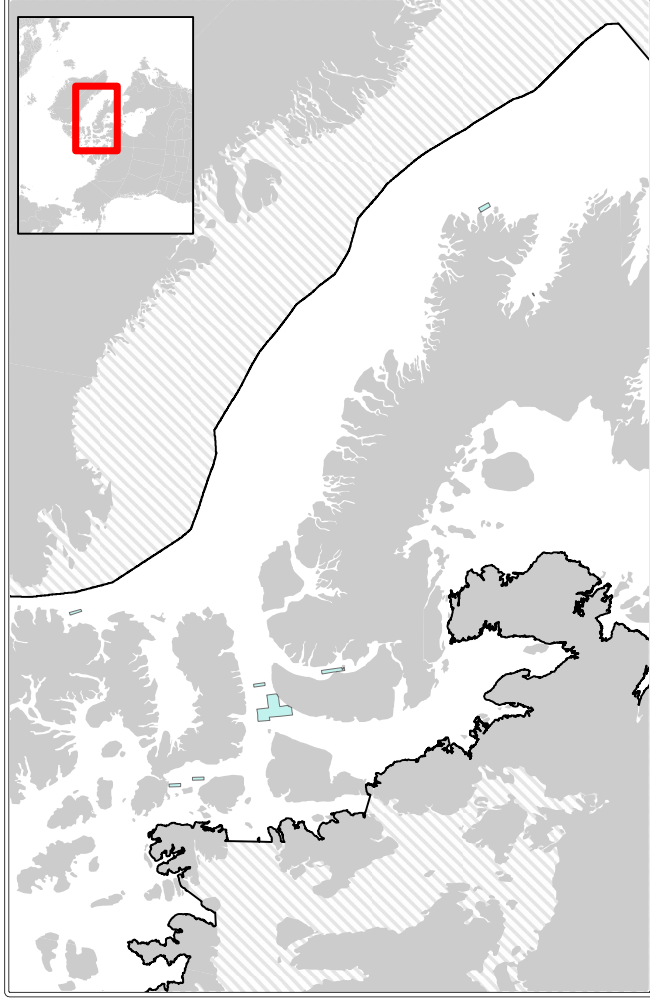
Marine Bioregion: Arctic Archipelago

Description: Pelagic seascapes were identified using three classes of stratification (1), ice cover regime (2), temperature (3), and salinity (4). Once each individual data layer required for construction of the pelagic seascapes had been assembled they were combined using a simple spatial intersection operation in ArcMap 10.2. Following this a generic descriptive attribute was constructed for each individual polygon created by the intersection based on the class values present for each layer involved. Note that areas containing no-data values for 1 or more layer (e.g. shallow coastal areas) were classified generally as NoData. Each assembled seascape type was then split by bioregion. Water column stratification was derived from the temperature and salinity data extracted from NOAA's World Ocean Atlas 2013. Data on long-term mean annual salinity and temperature was selected across the study area at a resolution of 0.25° as a CSV containing latitude/longitude coordinates. Using a custom script written in Python 2.7, stratification was calculated as $\frac{1}{2} \left(\frac{1}{2} \right)$ using the Seawater-3.3 module. Ice cover regime was assessed using data obtained from the Canadian Ice Service. Using the 30-year (1981-2010) Sea Ice Climatic Atlas's Median Ice Concentration data product, ice cover regimes were classified into 3 categories of permanent ice areas, permanently open, and seasonally open (table 1). This data product comes in the form of 30-year averaged weekly median ice concentrations in vector format. Using a custom Python 2.7 script, polygons with median ice concentrations below 30% (open-water) and above 90% (closed-water) were identified for each weekly dataset and extracted. Temperature data for pelagic seascapes was obtained from NOAA's World Ocean Atlas 2013 (WOD13). Data on long-term mean annual salinity was extracted across the study area at a resolution of 0.25° as a CSV containing latitude/longitude coordinates. Using a custom script written in Python 2.7, temperature values were taken at the desired depths and an average was calculated for each 0.25° grid point. All available values in the upper 30m of the water were considered when calculating averages. Salinity data for pelagic seascapes was obtained from NOAA's World Ocean Atlas 2013. Data on long-term mean annual salinity was extracted across the study area at a resolution of 0.25° as a CSV containing latitude/longitude coordinates. Using a custom script written in Python 2.7, salinity values were taken at the desired depths and an average was calculated for each 0.25° grid point.

Associated Links

(2) Sea Ice Climatic Atlas: <https://www.canada.ca/en/environment-climate-change/services/ice-forecasts-observations/publications/sea-climatic-atlas-northern-waters-1981-2010.html>; (1, 3, & 4): NOAA: <https://www.nodc.noaa.gov/OC5/woa13/pubwoa13.html>

3257: Pelagic Seascapes



Stratification: <4, 13, Ice: SeasonallyOpen, Temperature: <0C, Salinity: <31.8 EA

Date: (1), (3), & (4): 2013; (2) 2013

Open Source: (1) & (3) & (4): Yes; (2) Yes

Organization: (1), (3), & (4): NOAA; (2) Canadian Ice Service

Associated Report: (1) Stratification: NOAA World Ocean Atlas; (2) ice cover regime: Sea Ice Climatic Atlas for the Northern Canadian Waters; (3) temperature: NOAA World Ocean Atlas; (4) salinity: NOAA World Ocean Atlas

Authors: (1) & (3): NOAA World Ocean Atlas (Temperature): R. A. Locarnini, A. V. Mishonov, J. I. Antonov, T. P. Boyer, H. E. Garcia, O. K. Baranova, M. M. Zweng, C. R. Paver, J. R. Reagan, D. R. Johnson, M. Hamilton, and D. Seidov; (1) & (4): NOAA World Ocean Atlas (Salinity): M. M. Zweng, J. R. Reagan, J. I. Antonov, R. A. Locarnini,

Data Summary

Management Unit: N/A

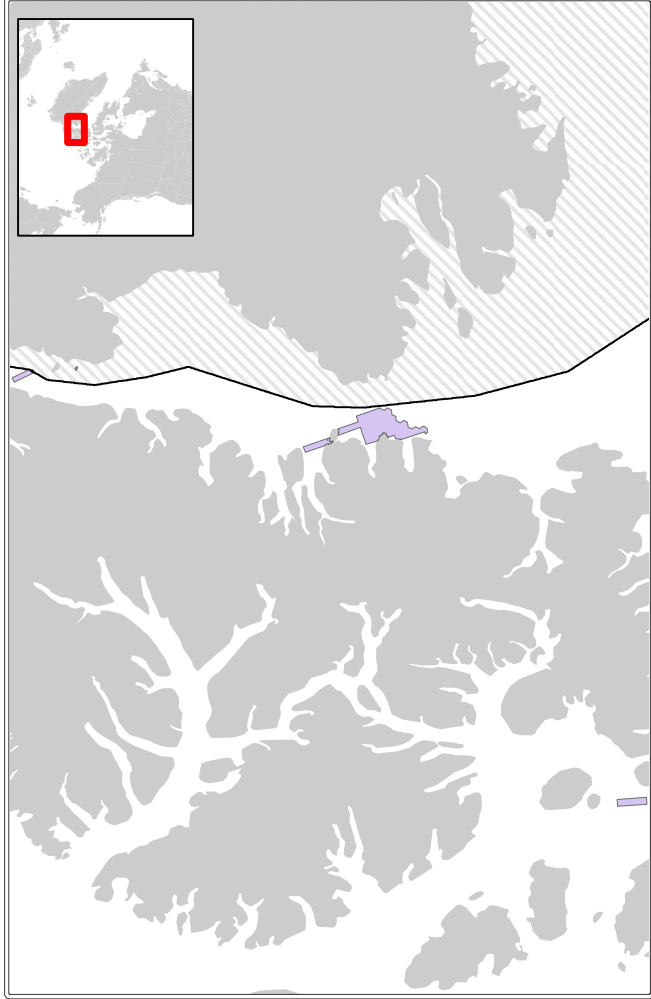
Marine Bioregion: Eastern Arctic

Description: Pelagic seascapes were identified using three classes of stratification (1), ice cover regime (2), temperature (3), and salinity (4). Once each individual data layer required for construction of the pelagic seascapes had been assembled they were combined using a simple spatial intersection operation in ArcMap 10.2. Following this a generic descriptive attribute was constructed for each individual polygon created by the intersection based on the class values present for each layer involved. Note that areas containing no-data values for 1 or more layer (e.g. shallow coastal areas) were classified generally as NoData. Each assembled seascape type was then split by bioregion. Water column stratification was derived from the temperature and salinity data extracted from NOAA's World Ocean Atlas 2013. Data on long-term mean annual salinity and temperature was selected across the study area at a resolution of 0.25° as a CSV containing latitude/longitude coordinates. Using a custom script written in Python 2.7, stratification was calculated as $\frac{1}{2} \left(\frac{1}{T} + \frac{1}{S} \right)$ using the Seawater-3.3 module. Ice cover regime was assessed using data obtained from the Canadian Ice Service. Using the 30-year (1981-2010) Sea Ice Climatic Atlas's Median Ice Concentration data product, ice cover regimes were classified into 3 categories of permanent ice areas, permanently open, and seasonally open (table 1). This data product comes in the form of 30-year averaged weekly median ice concentrations in vector format. Using a custom Python 2.7 script, polygons with median ice concentrations below 30% (open-water) and above 90% (closed-water) were identified for each weekly dataset and extracted. Temperature data for pelagic seascapes was obtained from NOAA's World Ocean Atlas 2013 (WOD13). Data on long-term mean annual salinity was extracted across the study area at a resolution of 0.25° as a CSV containing latitude/longitude coordinates. Using a custom script written in Python 2.7, temperature values were taken at the desired depths and an average was calculated for each 0.25° grid point. All available values in the upper 30m of the water were considered when calculating averages. Salinity data for pelagic seascapes was obtained from NOAA's World Ocean Atlas 2013. Data on long-term mean annual salinity was extracted across the study area at a resolution of 0.25° as a CSV containing latitude/longitude coordinates. Using a custom script written in Python 2.7, salinity values were taken at the desired depths and an average was calculated for each 0.25° grid point.

Associated Links

(2) Sea Ice Climatic Atlas: <https://www.canada.ca/en/environment-climate-change/services/ice-forecasts-observations/publications/sea-climatic-atlas-northern-waters-1981-2010.html>; (1, 3, & 4): NOAA: <https://www.nodc.noaa.gov/OC5/woa13/pubwoa13.html>

3258: Pelagic Seascapes



Stratification: <4, 13, Ice: SeasonallyOpen, Temperature: <0C, Salinity: >31.8 AA

Date: (1), (3), & (4): 2013; (2) 2013

Open Source: (1) & (3) & (4): Yes; (2) Yes

Organization: (1), (3), & (4): NOAA; (2) Canadian Ice Service

Associated Report: (1) Stratification: NOAA World Ocean Atlas; (2) ice cover regime: Sea Ice Climatic Atlas for the Northern Canadian Waters ; (3) temperature: NOAA World Ocean Atlas ; (4) salinity: NOAA World Ocean Atlas

Authors: (1) & (3): NOAA World Ocean Atlas (Temperature): R. A. Locarnini, A. V. Mishonov, J. I. Antonov, T. P. Boyer, H. E. Garcia, O. K. Baranova, M. M. Zweng, C. R. Paver, J. R. Reagan, D. R. Johnson, M. Hamilton, and D. Seidov; (1) & (4): NOAA World Ocean Atlas (Salinity): M. M. Zweng, J.R. Reagan, J.I. Antonov, R.A. Locarnini,

Data Summary

Management Unit: N/A

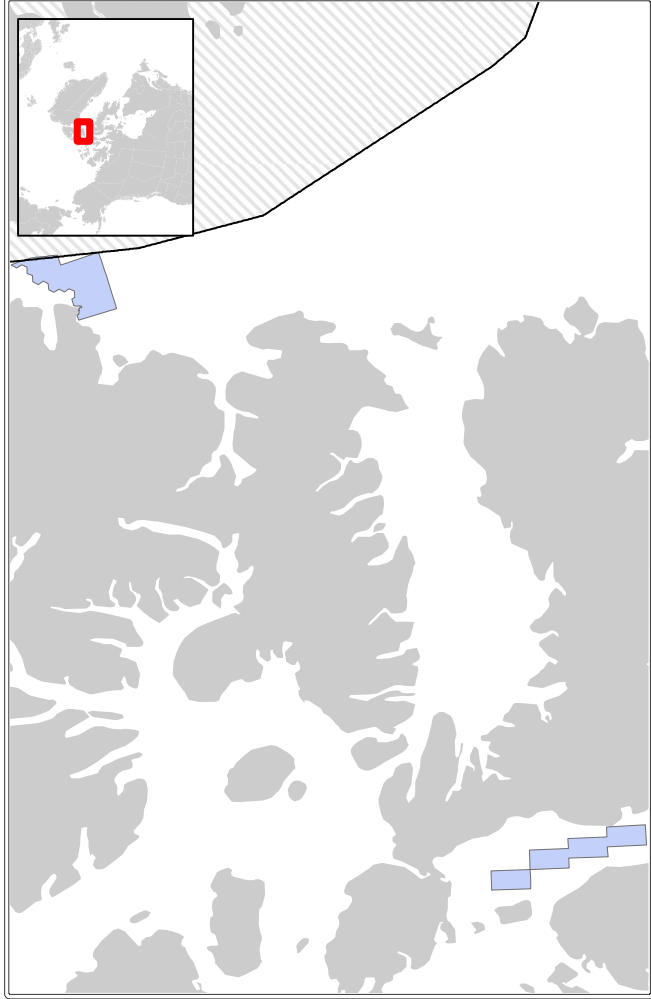
Marine Bioregion: Arctic Archipelago

Description: Pelagic seascapes were identified using three classes of stratification (1), ice cover regime (2), temperature (3), and salinity (4). Once each individual data layer required for construction of the pelagic seascapes had been assembled they were combined using a simple spatial intersection operation in ArcMap 10.2. Following this a generic descriptive attribute was constructed for each individual polygon created by the intersection based on the class values present for each layer involved. Note that areas containing no-data values for 1 or more layer (e.g. shallow coastal areas) were classified generally as NoData. Each assembled seascape type was then split by bioregion. Water column stratification was derived from the temperature and salinity data extracted from NOAA's World Ocean Atlas 2013. Data on long-term mean annual salinity and temperature was selected across the study area at a resolution of 0.25° as a CSV containing latitude/longitude coordinates. Using a custom script written in Python 2.7, stratification was calculated as $\frac{1}{2} \left(\frac{1}{T} + \frac{1}{S} \right)$ using the Seawater-3.3 module. Ice cover regime was assessed using data obtained from the Canadian Ice Service. Using the 30-year (1981-2010) Sea Ice Climatic Atlas's Median Ice Concentration data product, ice cover regimes were classified into 3 categories of permanent ice areas, permanently open, and seasonally open (table 1). This data product comes in the form of 30-year averaged weekly median ice concentrations in vector format. Using a custom Python 2.7 script, polygons with median ice concentrations below 30% (open-water) and above 90% (closed-water) were identified for each weekly dataset and extracted. Temperature data for pelagic seascapes was obtained from NOAA's World Ocean Atlas 2013 (WOD13). Data on long-term mean annual salinity was extracted across the study area at a resolution of 0.25° as a CSV containing latitude/longitude coordinates. Using a custom script written in Python 2.7, temperature values were taken at the desired depths and an average was calculated for each 0.25° grid point. All available values in the upper 30m of the water were considered when calculating averages. Salinity data for pelagic seascapes was obtained from NOAA's World Ocean Atlas 2013. Data on long-term mean annual salinity was extracted across the study area at a resolution of 0.25° as a CSV containing latitude/longitude coordinates. Using a custom script written in Python 2.7, salinity values were taken at the desired depths and an average was calculated for each 0.25° grid point.

Associated Links

(2) Sea Ice Climatic Atlas: <https://www.canada.ca/en/environment-climate-change/services/ice-forecasts-observations/publications/sea-climatic-atlas-northern-waters-1981-2010.html>; (1, 3, & 4): NOAA: <https://www.nodc.noaa.gov/OC5/woa13/pubwoa13.html>

3259: Pelagic Seascapes



Stratification: <4, 13, Ice: SeasonallyOpen, Temperature: <0C, Salinity: >31.8 EA

Date: (1), (3), & (4): 2013; (2) 2013

Open Source: (1) & (3) & (4): Yes; (2) Yes

Organization: (1), (3), & (4): NOAA; (2) Canadian Ice Service

Associated Report: (1) Stratification: NOAA World Ocean Atlas; (2) ice cover regime: Sea Ice Climatic Atlas for the Northern Canadian Waters; (3) temperature: NOAA World Ocean Atlas; (4) salinity: NOAA World Ocean Atlas

Authors: (1) & (3): NOAA World Ocean Atlas (Temperature): R. A. Locarnini, A. V. Mishonov, J. I. Antonov, T. P. Boyer, H. E. Garcia, O. K. Baranova, M. M. Zweng, C. R. Paver, J. R. Reagan, D. R. Johnson, M. Hamilton, and D. Seidov; (1) & (4): NOAA World Ocean Atlas (Salinity): M. M. Zweng, J.R. Reagan, J.I. Antonov, R.A. Locarnini,

Data Summary

Management Unit: N/A

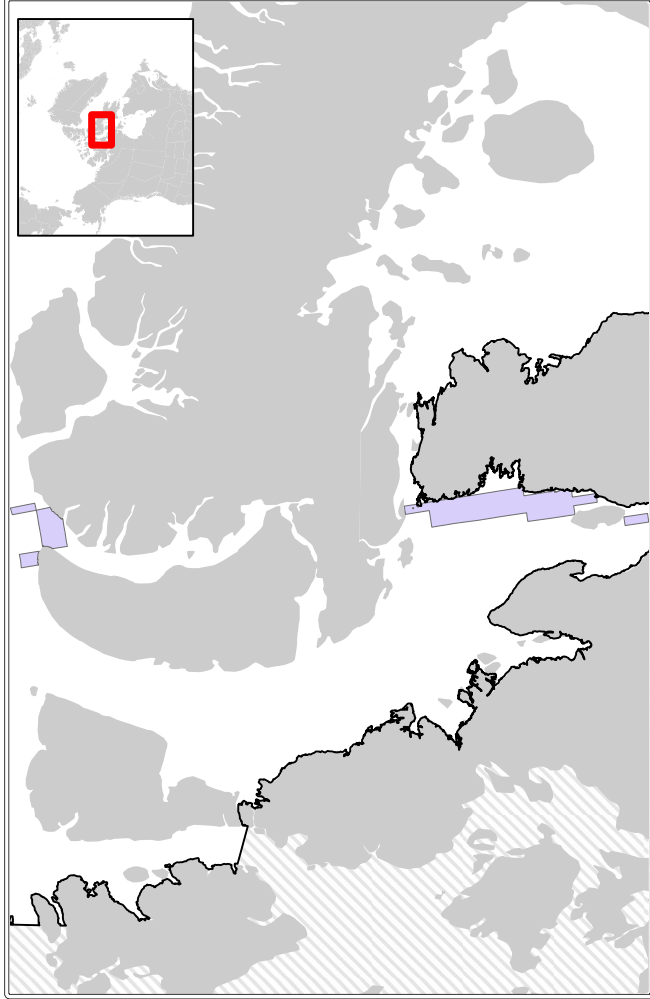
Marine Bioregion: Eastern Arctic

Description: Pelagic seascapes were identified using three classes of stratification (1), ice cover regime (2), temperature (3), and salinity (4). Once each individual data layer required for construction of the pelagic seascapes had been assembled they were combined using a simple spatial intersection operation in ArcMap 10.2. Following this a generic descriptive attribute was constructed for each individual polygon created by the intersection based on the class values present for each layer involved. Note that areas containing no-data values for 1 or more layer (e.g. shallow coastal areas) were classified generally as NoData. Each assembled seascape type was then split by bioregion. Water column stratification was derived from the temperature and salinity data extracted from NOAA's World Ocean Atlas 2013. Data on long-term mean annual salinity and temperature was selected across the study area at a resolution of 0.25° as a CSV containing latitude/longitude coordinates. Using a custom script written in Python 2.7, stratification was calculated as $\frac{t}{t + 7d}$ using the Seawater-3.3 module. Ice cover regime was assessed using data obtained from the Canadian Ice Service. Using the 30-year (1981-2010) Sea Ice Climatic Atlas's Median Ice Concentration data product, ice cover regimes were classified into 3 categories of permanent ice areas, permanently open, and seasonally open (table 1). This data product comes in the form of 30-year averaged weekly median ice concentrations in vector format. Using a custom Python 2.7 script, polygons with median ice concentrations below 30% (open-water) and above 90% (closed-water) were identified for each weekly dataset and extracted. Temperature data for pelagic seascapes was obtained from NOAA's World Ocean Atlas 2013 (WOD13). Data on long-term mean annual salinity was extracted across the study area at a resolution of 0.25° as a CSV containing latitude/longitude coordinates. Using a custom script written in Python 2.7, temperature values were taken at the desired depths and an average was calculated for each 0.25° grid point. All available values in the upper 30m of the water were considered when calculating averages. Salinity data for pelagic seascapes was obtained from NOAA's World Ocean Atlas 2013. Data on long-term mean annual salinity was extracted across the study area at a resolution of 0.25° as a CSV containing latitude/longitude coordinates. Using a custom script written in Python 2.7, salinity values were taken at the desired depths and an average was calculated for each 0.25° grid point.

Associated Links

(2) Sea Ice Climatic Atlas: <https://www.canada.ca/en/environment-climate-change/services/ice-forecasts-observations/publications/sea-climatic-atlas-northern-waters-1981-2010.html>; (1, 3, & 4): NOAA: <https://www.nodc.noaa.gov/OC5/woa13/pubwoa13.html>

3260: Pelagic Seascapes



Stratification: <4, 13, Ice: SeasonallyOpen, Temperature: <2C, Salinity: <30.4 EA

Date: (1), (3), & (4): 2013; (2) 2013

Open Source: (1) & (3) & (4): Yes; (2) Yes

Organization: (1), (3), & (4): NOAA; (2) Canadian Ice Service

Associated Report: (1) Stratification: NOAA World Ocean Atlas; (2) ice cover regime: Sea Ice Climatic Atlas for the Northern Canadian Waters; (3) temperature: NOAA World Ocean Atlas; (4) salinity: NOAA World Ocean Atlas

Authors: (1) & (3): NOAA World Ocean Atlas (Temperature): R. A. Locarnini, A. V. Mishonov, J. I. Antonov, T. P. Boyer, H. E. Garcia, O. K. Baranova, M. M. Zweng, C. R. Paver, J. R. Reagan, D. R. Johnson, M. Hamilton, and D. Seidov; (1) & (4): NOAA World Ocean Atlas (Salinity): M. M. Zweng, J.R. Reagan, J.I. Antonov, R.A. Locarnini,

Data Summary

Management Unit: N/A

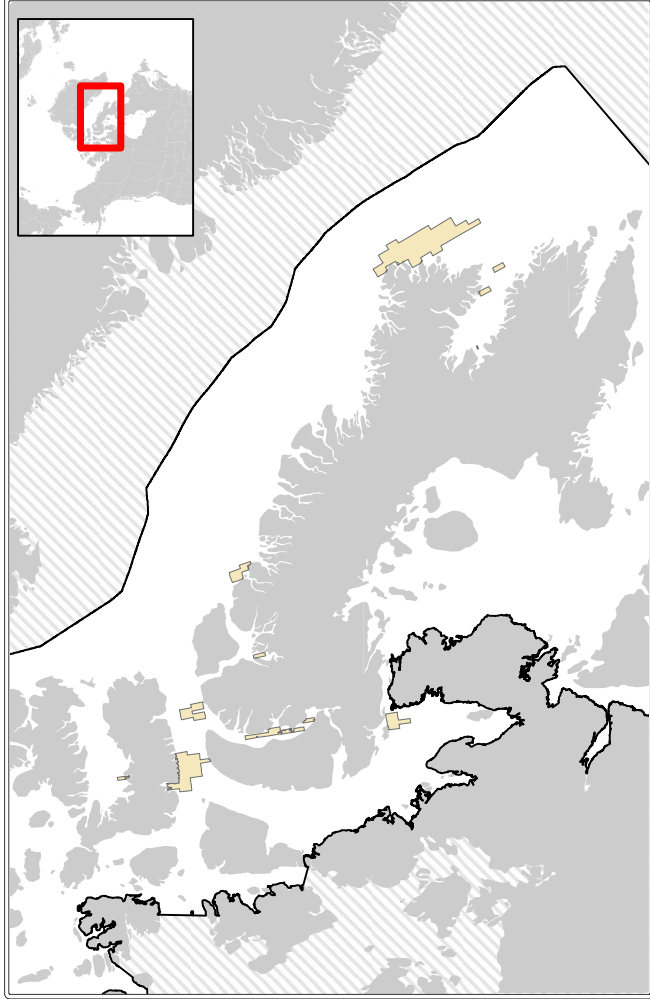
Marine Bioregion: Eastern Arctic

Description: Pelagic seascapes were identified using three classes of stratification (1), ice cover regime (2), temperature (3), and salinity (4). Once each individual data layer required for construction of the pelagic seascapes had been assembled they were combined using a simple spatial intersection operation in ArcMap 10.2. Following this a generic descriptive attribute was constructed for each individual polygon created by the intersection based on the class values present for each layer involved. Note that areas containing no-data values for 1 or more layer (e.g. shallow coastal areas) were classified generally as NoData. Each assembled seascape type was then split by bioregion. Water column stratification was derived from the temperature and salinity data extracted from NOAA's World Ocean Atlas 2013. Data on long-term mean annual salinity and temperature was selected across the study area at a resolution of 0.25° as a CSV containing latitude/longitude coordinates. Using a custom script written in Python 2.7, stratification was calculated as $\frac{1}{2} \left(\frac{1}{T} + \frac{1}{S} \right)$ using the Seawater-3.3 module. Ice cover regime was assessed using data obtained from the Canadian Ice Service. Using the 30-year (1981-2010) Sea Ice Climatic Atlas's Median Ice Concentration data product, ice cover regimes were classified into 3 categories of permanent ice areas, permanently open, and seasonally open (table 1). This data product comes in the form of 30-year averaged weekly median ice concentrations in vector format. Using a custom Python 2.7 script, polygons with median ice concentrations below 30% (open-water) and above 90% (closed-water) were identified for each weekly dataset and extracted. Temperature data for pelagic seascapes was obtained from NOAA's World Ocean Atlas 2013 (WOD13). Data on long-term mean annual salinity was extracted across the study area at a resolution of 0.25° as a CSV containing latitude/longitude coordinates. Using a custom script written in Python 2.7, temperature values were taken at the desired depths and an average was calculated for each 0.25° grid point. All available values in the upper 30m of the water were considered when calculating averages. Salinity data for pelagic seascapes was obtained from NOAA's World Ocean Atlas 2013. Data on long-term mean annual salinity was extracted across the study area at a resolution of 0.25° as a CSV containing latitude/longitude coordinates. Using a custom script written in Python 2.7, salinity values were taken at the desired depths and an average was calculated for each 0.25° grid point.

Associated Links

(2) Sea Ice Climatic Atlas: <https://www.canada.ca/en/environment-climate-change/services/ice-forecasts-observations/publications/sea-climatic-atlas-northern-waters-1981-2010.html>; (1, 3, & 4): NOAA: <https://www.nodc.noaa.gov/OC5/woa13/pubwoa13.html>

3261: Pelagic Seascapes



Stratification: <4, 13, Ice: SeasonallyOpen, Temperature: <2C, Salinity: <31.8 EA

Date: (1), (3), & (4): 2013; (2) 2013

Open Source: (1) & (3) & (4): Yes; (2) Yes

Organization: (1), (3), & (4): NOAA; (2) Canadian Ice Service

Associated Report: (1) Stratification: NOAA World Ocean Atlas; (2) ice cover regime: Sea Ice Climatic Atlas for the Northern Canadian Waters; (3) temperature: NOAA World Ocean Atlas; (4) salinity: NOAA World Ocean Atlas

Authors: (1) & (3): NOAA World Ocean Atlas (Temperature): R. A. Locarnini, A. V. Mishonov, J. I. Antonov, T. P. Boyer, H. E. Garcia, O. K. Baranova, M. M. Zweng, C. R. Paver, J. R. Reagan, D. R. Johnson, M. Hamilton, and D. Seidov; (1) & (4): NOAA World Ocean Atlas (Salinity): M. M. Zweng, J. R. Reagan, J. I. Antonov, R. A. Locarnini,

Data Summary

Management Unit: N/A

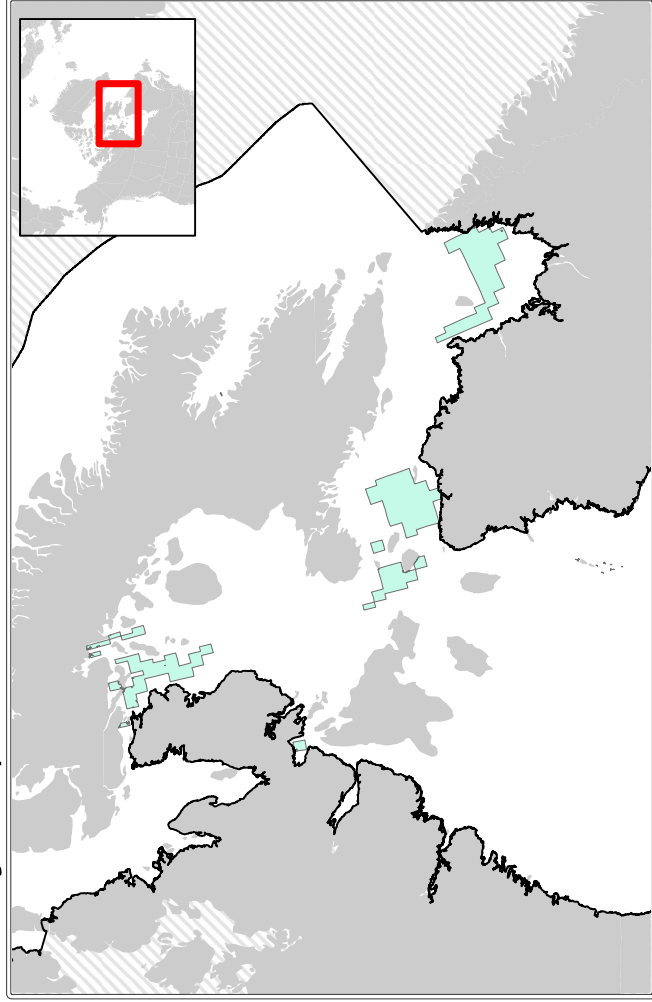
Marine Bioregion: Eastern Arctic

Description: Pelagic seascapes were identified using three classes of stratification (1), ice cover regime (2), temperature (3), and salinity (4). Once each individual data layer required for construction of the pelagic seascapes had been assembled they were combined using a simple spatial intersection operation in ArcMap 10.2. Following this a generic descriptive attribute was constructed for each individual polygon created by the intersection based on the class values present for each layer involved. Note that areas containing no-data values for 1 or more layer (e.g. shallow coastal areas) were classified generally as NoData. Each assembled seascape type was then split by bioregion. Water column stratification was derived from the temperature and salinity data extracted from NOAA's World Ocean Atlas 2013. Data on long-term mean annual salinity and temperature was selected across the study area at a resolution of 0.25° as a CSV containing latitude/longitude coordinates. Using a custom script written in Python 2.7, stratification was calculated as $\frac{1}{2} \left(\frac{1}{T} + \frac{1}{S} \right)$ using the Seawater-3.3 module. Ice cover regime was assessed using data obtained from the Canadian Ice Service. Using the 30-year (1981-2010) Sea Ice Climatic Atlas's Median Ice Concentration data product, ice cover regimes were classified into 3 categories of permanent ice areas, permanently open, and seasonally open (table 1). This data product comes in the form of 30-year averaged weekly median ice concentrations in vector format. Using a custom Python 2.7 script, polygons with median ice concentrations below 30% (open-water) and above 90% (closed-water) were identified for each weekly dataset and extracted. Temperature data for pelagic seascapes was obtained from NOAA's World Ocean Atlas 2013 (WOD13). Data on long-term mean annual salinity was extracted across the study area at a resolution of 0.25° as a CSV containing latitude/longitude coordinates. Using a custom script written in Python 2.7, temperature values were taken at the desired depths and an average was calculated for each 0.25° grid point. All available values in the upper 30m of the water were considered when calculating averages. Salinity data for pelagic seascapes was obtained from NOAA's World Ocean Atlas 2013. Data on long-term mean annual salinity was extracted across the study area at a resolution of 0.25° as a CSV containing latitude/longitude coordinates. Using a custom script written in Python 2.7, salinity values were taken at the desired depths and an average was calculated for each 0.25° grid point.

Associated Links

(2) Sea Ice Climatic Atlas: <https://www.canada.ca/en/environment-climate-change/services/ice-forecasts-observations/publications/sea-climatic-atlas-northern-waters-1981-2010.html>; (1, 3, & 4): NOAA: <https://www.nodc.noaa.gov/OC5/woa13/pubwoa13.html>

3262: Pelagic Seascapes



Stratification: <4, 13, Ice: SeasonallyOpen, Temperature: <2C, Salinity: <31.8 HB

Date: (1), (3), & (4): 2013; (2) 2013

Open Source: (1) & (3) & (4): Yes; (2) Yes

Organization: (1), (3), & (4): NOAA; (2) Canadian Ice Service

Associated Report: (1) Stratification: NOAA World Ocean Atlas; (2) ice cover regime: Sea Ice Climatic Atlas for the Northern Canadian Waters; (3) temperature: NOAA World Ocean Atlas; (4) salinity: NOAA World Ocean Atlas

Authors: (1) & (3): NOAA World Ocean Atlas (Temperature): R. A. Locarnini, A. V. Mishonov, J. I. Antonov, T. P. Boyer, H. E. Garcia, O. K. Baranova, M. M. Zweng, C. R. Paver, J. R. Reagan, D. R. Johnson, M. Hamilton, and D. Seidov; (1) & (4): NOAA World Ocean Atlas (Salinity): M. M. Zweng, J. R. Reagan, J. I. Antonov, R. A. Locarnini,

Data Summary

Management Unit: N/A

Marine Bioregion: Hudson Bay Complex

Description: Pelagic seascapes were identified using three classes of stratification (1), ice cover regime (2), temperature (3), and salinity (4). Once each individual data layer required for construction of the pelagic seascapes had been assembled they were combined using a simple spatial intersection operation in ArcMap 10.2. Following this a generic descriptive attribute was constructed for each individual polygon created by the intersection based on the class values present for each layer involved. Note that areas containing no-data values for 1 or more layer (e.g. shallow coastal areas) were classified generally as NoData. Each assembled seascape type was then split by bioregion. Water column stratification was derived from the temperature and salinity data extracted from NOAA's World Ocean Atlas 2013. Data on long-term mean annual salinity and temperature was selected across the study area at a resolution of 0.25° as a CSV containing latitude/longitude coordinates. Using a custom script written in Python 2.7, stratification was calculated as $\frac{1}{2} \left(\frac{1}{T} + \frac{1}{S} \right)$ using the Seawater-3.3 module. Ice cover regime was assessed using data obtained from the Canadian Ice Service. Using the 30-year (1981-2010) Sea Ice Climatic Atlas's Median Ice Concentration data product, ice cover regimes were classified into 3 categories of permanent ice areas, permanently open, and seasonally open (table 1). This data product comes in the form of 30-year averaged weekly median ice concentrations in vector format. Using a custom Python 2.7 script, polygons with median ice concentrations below 30% (open-water) and above 90% (closed-water) were identified for each weekly dataset and extracted. Temperature data for pelagic seascapes was obtained from NOAA's World Ocean Atlas 2013 (WOD13). Data on long-term mean annual salinity was extracted across the study area at a resolution of 0.25° as a CSV containing latitude/longitude coordinates. Using a custom script written in Python 2.7, temperature values were taken at the desired depths and an average was calculated for each 0.25° grid point. All available values in the upper 30m of the water were considered when calculating averages. Salinity data for pelagic seascapes was obtained from NOAA's World Ocean Atlas 2013. Data on long-term mean annual salinity was extracted across the study area at a resolution of 0.25° as a CSV containing latitude/longitude coordinates. Using a custom script written in Python 2.7, salinity values were taken at the desired depths and an average was calculated for each 0.25° grid point.

Associated Links

(2) Sea Ice Climatic Atlas: <https://www.canada.ca/en/environment-climate-change/services/ice-forecasts-observations/publications/sea-climatic-atlas-northern-waters-1981-2010.html>; (1, 3, & 4): NOAA: <https://www.nodc.noaa.gov/OC5/woa13/pubwoa13.html>

3263: Pelagic Seascapes



Stratification: <4, 13, Ice: SeasonallyOpen, Temperature: <2C, Salinity: >31.8 AA

Date: (1), (3), & (4): 2013; (2) 2013

Open Source: (1) & (3) & (4): Yes; (2) Yes

Organization: (1), (3), & (4): NOAA; (2) Canadian Ice Service

Associated Report: (1) Stratification: NOAA World Ocean Atlas; (2) ice cover regime: Sea Ice Climatic Atlas for the Northern Canadian Waters ; (3) temperature: NOAA World Ocean Atlas ; (4) salinity: NOAA World Ocean Atlas

Authors: (1) & (3): NOAA World Ocean Atlas (Temperature): R. A. Locarnini, A. V. Mishonov, J. I. Antonov, T. P. Boyer, H. E. Garcia, O. K. Baranova, M. M. Zweng, C. R. Paver, J. R. Reagan, D. R. Johnson, M. Hamilton, and D. Seidov; (1) & (4): NOAA World Ocean Atlas (Salinity): M. M. Zweng, J.R. Reagan, J.I. Antonov, R.A. Locarnini,

Data Summary

Management Unit: N/A

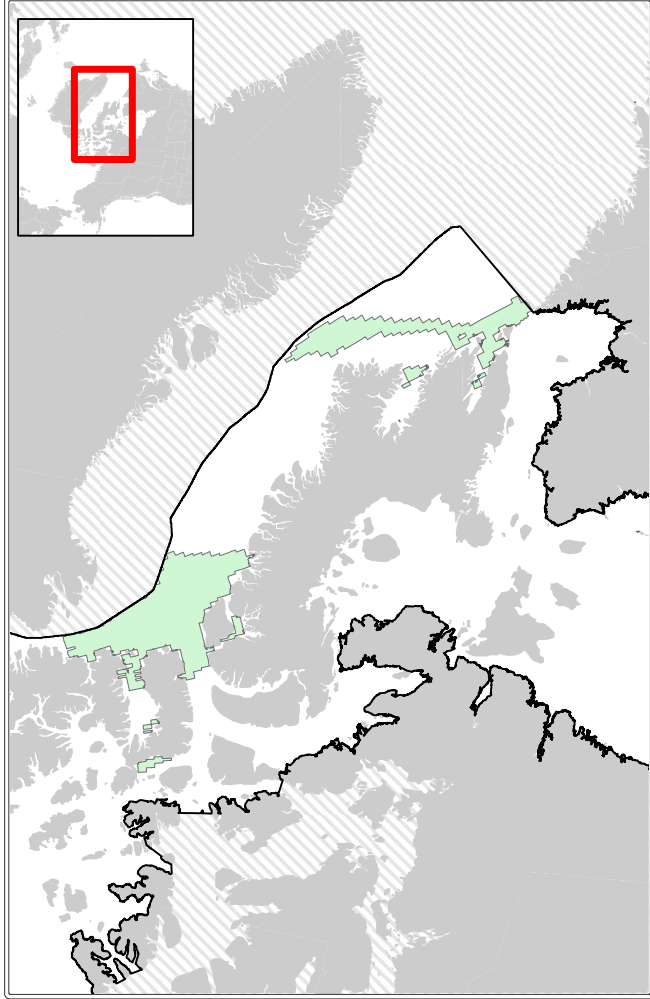
Marine Bioregion: Arctic Archipelago

Description: Pelagic seascapes were identified using three classes of stratification (1), ice cover regime (2), temperature (3), and salinity (4). Once each individual data layer required for construction of the pelagic seascapes had been assembled they were combined using a simple spatial intersection operation in ArcMap 10.2. Following this a generic descriptive attribute was constructed for each individual polygon created by the intersection based on the class values present for each layer involved. Note that areas containing no-data values for 1 or more layer (e.g. shallow coastal areas) were classified generally as NoData. Each assembled seascape type was then split by bioregion. Water column stratification was derived from the temperature and salinity data extracted from NOAA's World Ocean Atlas 2013. Data on long-term mean annual salinity and temperature was selected across the study area at a resolution of 0.25° as a CSV containing latitude/longitude coordinates. Using a custom script written in Python 2.7, stratification was calculated as $\frac{1}{2} \left(\frac{1}{T} + \frac{1}{S} \right)$ using the Seawater-3.3 module. Ice cover regime was assessed using data obtained from the Canadian Ice Service. Using the 30-year (1981-2010) Sea Ice Climatic Atlas's Median Ice Concentration data product, ice cover regimes were classified into 3 categories of permanent ice areas, permanently open, and seasonally open (table 1). This data product comes in the form of 30-year averaged weekly median ice concentrations in vector format. Using a custom Python 2.7 script, polygons with median ice concentrations below 30% (open-water) and above 90% (closed-water) were identified for each weekly dataset and extracted. Temperature data for pelagic seascapes was obtained from NOAA's World Ocean Atlas 2013 (WOD13). Data on long-term mean annual salinity was extracted across the study area at a resolution of 0.25° as a CSV containing latitude/longitude coordinates. Using a custom script written in Python 2.7, temperature values were taken at the desired depths and an average was calculated for each 0.25° grid point. All available values in the upper 30m of the water were considered when calculating averages. Salinity data for pelagic seascapes was obtained from NOAA's World Ocean Atlas 2013. Data on long-term mean annual salinity was extracted across the study area at a resolution of 0.25° as a CSV containing latitude/longitude coordinates. Using a custom script written in Python 2.7, salinity values were taken at the desired depths and an average was calculated for each 0.25° grid point.

Associated Links

(2) Sea Ice Climatic Atlas: <https://www.canada.ca/en/environment-climate-change/services/ice-forecasts-observations/publications/sea-climatic-atlas-northern-waters-1981-2010.html>; (1, 3, & 4): NOAA: <https://www.nodc.noaa.gov/OC5/woa13/pubwoa13.html>

3264: Pelagic Seascapes



Stratification: <4, 13, Ice: SeasonallyOpen, Temperature: <2C, Salinity: >31.8 EA

Date: (1), (3), & (4): 2013; (2) 2013

Open Source: (1) & (3) & (4): Yes; (2) Yes

Organization: (1), (3), & (4): NOAA; (2) Canadian Ice Service

Associated Report: (1) Stratification: NOAA World Ocean Atlas; (2) ice cover regime: Sea Ice Climatic Atlas for the Northern Canadian Waters; (3) temperature: NOAA World Ocean Atlas; (4) salinity: NOAA World Ocean Atlas

Authors: (1) & (3): NOAA World Ocean Atlas (Temperature): R. A. Locarnini, A. V. Mishonov, J. I. Antonov, T. P. Boyer, H. E. Garcia, O. K. Baranova, M. M. Zweng, C. R. Paver, J. R. Reagan, D. R. Johnson, M. Hamilton, and D. Seidov; (1) & (4): NOAA World Ocean Atlas (Salinity): M. M. Zweng, J. R. Reagan, J. I. Antonov, R. A. Locarnini,

Data Summary

Management Unit: N/A

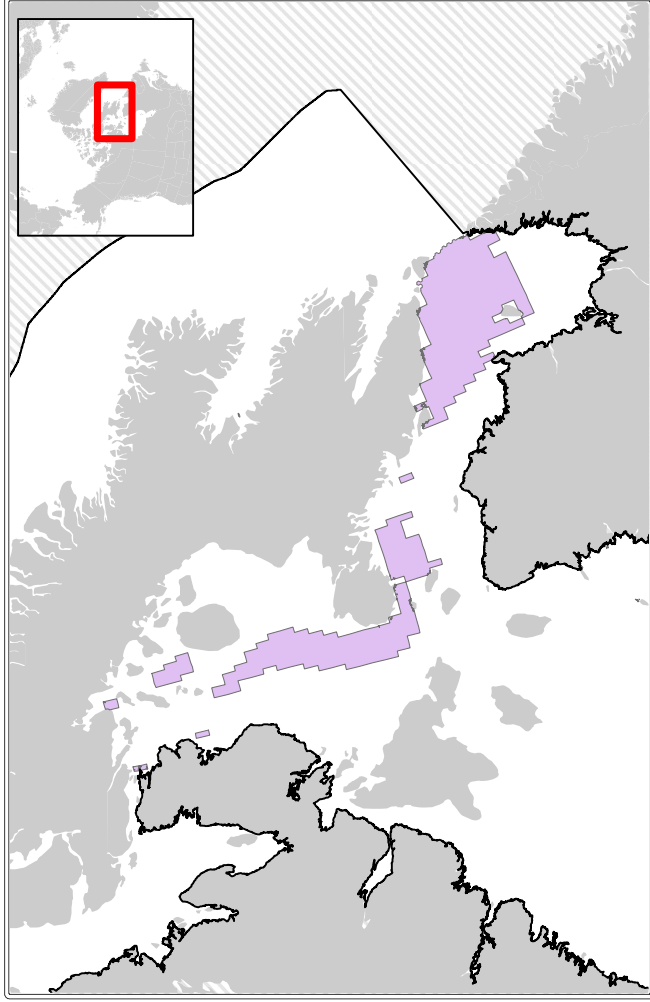
Marine Bioregion: Eastern Arctic

Description: Pelagic seascapes were identified using three classes of stratification (1), ice cover regime (2), temperature (3), and salinity (4). Once each individual data layer required for construction of the pelagic seascapes had been assembled they were combined using a simple spatial intersection operation in ArcMap 10.2. Following this a generic descriptive attribute was constructed for each individual polygon created by the intersection based on the class values present for each layer involved. Note that areas containing no-data values for 1 or more layer (e.g. shallow coastal areas) were classified generally as NoData. Each assembled seascape type was then split by bioregion. Water column stratification was derived from the temperature and salinity data extracted from NOAA's World Ocean Atlas 2013. Data on long-term mean annual salinity and temperature was selected across the study area at a resolution of 0.25° as a CSV containing latitude/longitude coordinates. Using a custom script written in Python 2.7, stratification was calculated as $\frac{1}{2} \left(\frac{1}{T} + \frac{1}{S} \right)$ using the Seawater-3.3 module. Ice cover regime was assessed using data obtained from the Canadian Ice Service. Using the 30-year (1981-2010) Sea Ice Climatic Atlas's Median Ice Concentration data product, ice cover regimes were classified into 3 categories of permanent ice areas, permanently open, and seasonally open (table 1). This data product comes in the form of 30-year averaged weekly median ice concentrations in vector format. Using a custom Python 2.7 script, polygons with median ice concentrations below 30% (open-water) and above 90% (closed-water) were identified for each weekly dataset and extracted. Temperature data for pelagic seascapes was obtained from NOAA's World Ocean Atlas 2013 (WOD13). Data on long-term mean annual salinity was extracted across the study area at a resolution of 0.25° as a CSV containing latitude/longitude coordinates. Using a custom script written in Python 2.7, temperature values were taken at the desired depths and an average was calculated for each 0.25° grid point. All available values in the upper 30m of the water were considered when calculating averages. Salinity data for pelagic seascapes was obtained from NOAA's World Ocean Atlas 2013. Data on long-term mean annual salinity was extracted across the study area at a resolution of 0.25° as a CSV containing latitude/longitude coordinates. Using a custom script written in Python 2.7, salinity values were taken at the desired depths and an average was calculated for each 0.25° grid point.

Associated Links

(2) Sea Ice Climatic Atlas: <https://www.canada.ca/en/environment-climate-change/services/ice-forecasts-observations/publications/sea-climatic-atlas-northern-waters-1981-2010.html>; (1, 3, & 4): NOAA: <https://www.nodc.noaa.gov/OC5/woa13/pubwoa13.html>

3265: Pelagic Seascapes



Stratification: <4, 13, Ice: SeasonallyOpen, Temperature: <2C, Salinity: >31.8 HB

Date: (1), (3), & (4): 2013; (2) 2013

Open Source: (1) & (3) & (4): Yes; (2) Yes

Organization: (1), (3), & (4): NOAA; (2) Canadian Ice Service

Associated Report: (1) Stratification: NOAA World Ocean Atlas; (2) ice cover regime: Sea Ice Climatic Atlas for the Northern Canadian Waters; (3) temperature: NOAA World Ocean Atlas; (4) salinity: NOAA World Ocean Atlas

Authors: (1) & (3): NOAA World Ocean Atlas (Temperature): R. A. Locarnini, A. V. Mishonov, J. I. Antonov, T. P. Boyer, H. E. Garcia, O. K. Baranova, M. M. Zweng, C. R. Paver, J. R. Reagan, D. R. Johnson, M. Hamilton, and D. Seidov; (1) & (4): NOAA World Ocean Atlas (Salinity): M. M. Zweng, J. R. Reagan, J. I. Antonov, R. A. Locarnini,

Data Summary

Management Unit: N/A

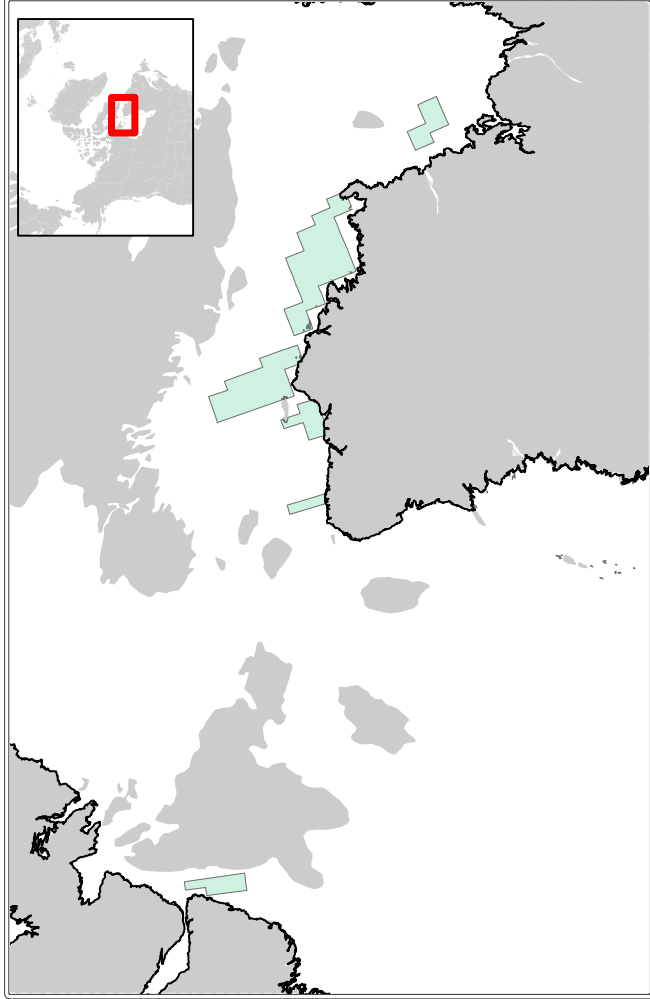
Marine Bioregion: Hudson Bay Complex

Description: Pelagic seascapes were identified using three classes of stratification (1), ice cover regime (2), temperature (3), and salinity (4). Once each individual data layer required for construction of the pelagic seascapes had been assembled they were combined using a simple spatial intersection operation in ArcMap 10.2. Following this a generic descriptive attribute was constructed for each individual polygon created by the intersection based on the class values present for each layer involved. Note that areas containing no-data values for 1 or more layer (e.g. shallow coastal areas) were classified generally as NoData. Each assembled seascape type was then split by bioregion. Water column stratification was derived from the temperature and salinity data extracted from NOAA's World Ocean Atlas 2013. Data on long-term mean annual salinity and temperature was selected across the study area at a resolution of 0.25° as a CSV containing latitude/longitude coordinates. Using a custom script written in Python 2.7, stratification was calculated as $\frac{1}{2} \left(\frac{1}{T} + \frac{1}{S} \right)$ using the Seawater-3.3 module. Ice cover regime was assessed using data obtained from the Canadian Ice Service. Using the 30-year (1981-2010) Sea Ice Climatic Atlas's Median Ice Concentration data product, ice cover regimes were classified into 3 categories of permanent ice areas, permanently open, and seasonally open (table 1). This data product comes in the form of 30-year averaged weekly median ice concentrations in vector format. Using a custom Python 2.7 script, polygons with median ice concentrations below 30% (open-water) and above 90% (closed-water) were identified for each weekly dataset and extracted. Temperature data for pelagic seascapes was obtained from NOAA's World Ocean Atlas 2013 (WOD13). Data on long-term mean annual salinity was extracted across the study area at a resolution of 0.25° as a CSV containing latitude/longitude coordinates. Using a custom script written in Python 2.7, temperature values were taken at the desired depths and an average was calculated for each 0.25° grid point. All available values in the upper 30m of the water were considered when calculating averages. Salinity data for pelagic seascapes was obtained from NOAA's World Ocean Atlas 2013. Data on long-term mean annual salinity was extracted across the study area at a resolution of 0.25° as a CSV containing latitude/longitude coordinates. Using a custom script written in Python 2.7, salinity values were taken at the desired depths and an average was calculated for each 0.25° grid point.

Associated Links

(2) Sea Ice Climatic Atlas: <https://www.canada.ca/en/environment-climate-change/services/ice-forecasts-observations/publications/sea-climatic-atlas-northern-waters-1981-2010.html>; (1, 3, & 4): NOAA: <https://www.nodc.noaa.gov/OC5/woa13/pubwoa13.html>

3266: Pelagic Seascapes



Stratification: <4, 13, Ice: SeasonallyOpen, Temperature: >2C, Salinity: <31.8 HB

Date: (1), (3), & (4): 2013; (2) 2013

Open Source: (1) & (3) & (4): Yes; (2) Yes

Organization: (1), (3), & (4): NOAA; (2) Canadian Ice Service

Associated Report: (1) Stratification: NOAA World Ocean Atlas; (2) ice cover regime: Sea Ice Climatic Atlas for the Northern Canadian Waters; (3) temperature: NOAA World Ocean Atlas; (4) salinity: NOAA World Ocean Atlas

Authors: (1) & (3): NOAA World Ocean Atlas (Temperature): R. A. Locarnini, A. V. Mishonov, J. I. Antonov, T. P. Boyer, H. E. Garcia, O. K. Baranova, M. M. Zweng, C. R. Paver, J. R. Reagan, D. R. Johnson, M. Hamilton, and D. Seidov; (1) & (4): NOAA World Ocean Atlas (Salinity): M. M. Zweng, J. R. Reagan, J. I. Antonov, R. A. Locarnini,

Data Summary

Management Unit: N/A

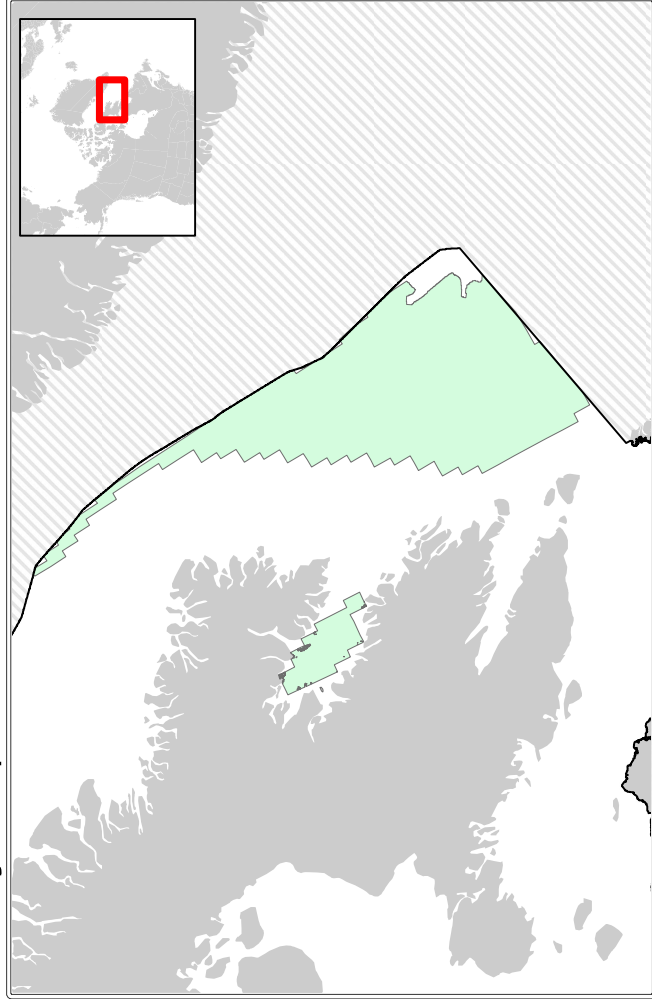
Marine Bioregion: Hudson Bay Complex

Description: Pelagic seascapes were identified using three classes of stratification (1), ice cover regime (2), temperature (3), and salinity (4). Once each individual data layer required for construction of the pelagic seascapes had been assembled they were combined using a simple spatial intersection operation in ArcMap 10.2. Following this a generic descriptive attribute was constructed for each individual polygon created by the intersection based on the class values present for each layer involved. Note that areas containing no-data values for 1 or more layer (e.g. shallow coastal areas) were classified generally as NoData. Each assembled seascape type was then split by bioregion. Water column stratification was derived from the temperature and salinity data extracted from NOAA's World Ocean Atlas 2013. Data on long-term mean annual salinity and temperature was selected across the study area at a resolution of 0.25° as a CSV containing latitude/longitude coordinates. Using a custom script written in Python 2.7, stratification was calculated as $\frac{t}{t + 7d}$ using the Seawater-3.3 module. Ice cover regime was assessed using data obtained from the Canadian Ice Service. Using the 30-year (1981-2010) Sea Ice Climatic Atlas's Median Ice Concentration data product, ice cover regimes were classified into 3 categories of permanent ice areas, permanently open, and seasonally open (table 1). This data product comes in the form of 30-year averaged weekly median ice concentrations in vector format. Using a custom Python 2.7 script, polygons with median ice concentrations below 30% (open-water) and above 90% (closed-water) were identified for each weekly dataset and extracted. Temperature data for pelagic seascapes was obtained from NOAA's World Ocean Atlas 2013 (WOD13). Data on long-term mean annual salinity was extracted across the study area at a resolution of 0.25° as a CSV containing latitude/longitude coordinates. Using a custom script written in Python 2.7, temperature values were taken at the desired depths and an average was calculated for each 0.25° grid point. All available values in the upper 30m of the water were considered when calculating averages. Salinity data for pelagic seascapes was obtained from NOAA's World Ocean Atlas 2013. Data on long-term mean annual salinity was extracted across the study area at a resolution of 0.25° as a CSV containing latitude/longitude coordinates. Using a custom script written in Python 2.7, salinity values were taken at the desired depths and an average was calculated for each 0.25° grid point.

Associated Links

(2) Sea Ice Climatic Atlas: <https://www.canada.ca/en/environment-climate-change/services/ice-forecasts-observations/publications/sea-climatic-atlas-northern-waters-1981-2010.html>; (1, 3, & 4): NOAA: <https://www.nodc.noaa.gov/OC5/woa13/pubwoa13.html>

3267: Pelagic Seascapes



Stratification: <4, 13, Ice: SeasonallyOpen, Temperature: >2C, Salinity: >31.8 EA

Date: (1), (3), & (4): 2013; (2) 2013

Open Source: (1) & (3) & (4): Yes; (2) Yes

Organization: (1), (3), & (4): NOAA; (2) Canadian Ice Service

Associated Report: (1) Stratification: NOAA World Ocean Atlas; (2) ice cover regime: Sea Ice Climatic Atlas for the Northern Canadian Waters ; (3) temperature: NOAA World Ocean Atlas ; (4) salinity: NOAA World Ocean Atlas

Authors: (1) & (3): NOAA World Ocean Atlas (Temperature): R. A. Locarnini, A. V. Mishonov, J. I. Antonov, T. P. Boyer, H. E. Garcia, O. K. Baranova, M. M. Zweng, C. R. Paver, J. R. Reagan, D. R. Johnson, M. Hamilton, and D. Seidov; (1) & (4): NOAA World Ocean Atlas (Salinity): M. M. Zweng, J.R. Reagan, J.I. Antonov, R.A. Locarnini,

Data Summary

Management Unit: N/A

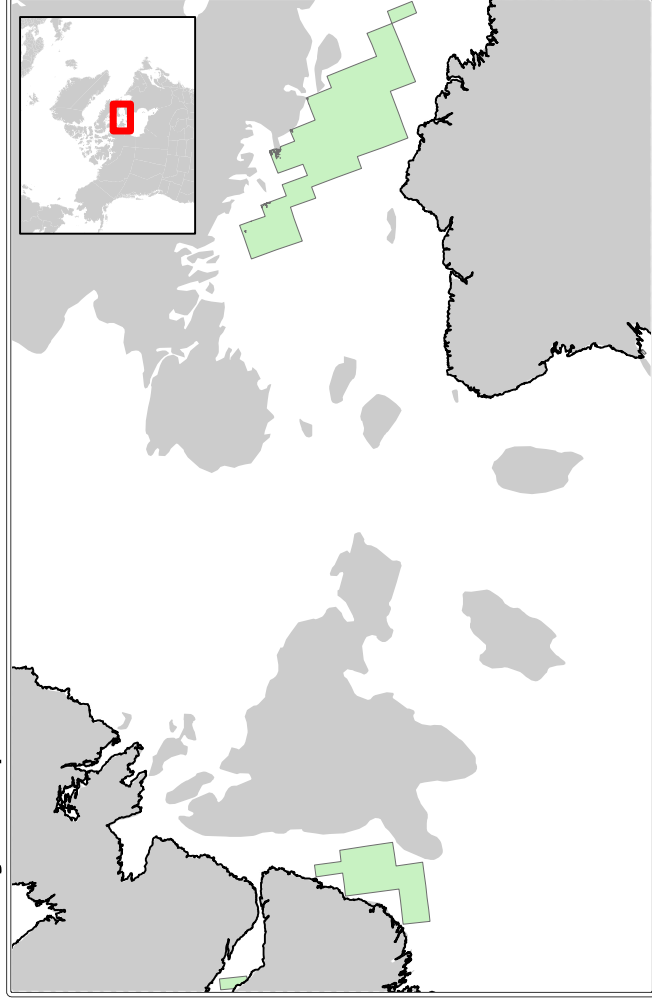
Marine Bioregion: Eastern Arctic

Description: Pelagic seascapes were identified using three classes of stratification (1), ice cover regime (2), temperature (3), and salinity (4). Once each individual data layer required for construction of the pelagic seascapes had been assembled they were combined using a simple spatial intersection operation in ArcMap 10.2. Following this a generic descriptive attribute was constructed for each individual polygon created by the intersection based on the class values present for each layer involved. Note that areas containing no-data values for 1 or more layer (e.g. shallow coastal areas) were classified generally as NoData. Each assembled seascape type was then split by bioregion. Water column stratification was derived from the temperature and salinity data extracted from NOAA's World Ocean Atlas 2013. Data on long-term mean annual salinity and temperature was selected across the study area at a resolution of 0.25° as a CSV containing latitude/longitude coordinates. Using a custom script written in Python 2.7, stratification was calculated as $\frac{t}{t + 7d}$ using the Seawater-3.3 module. Ice cover regime was assessed using data obtained from the Canadian Ice Service. Using the 30-year (1981-2010) Sea Ice Climatic Atlas's Median Ice Concentration data product, ice cover regimes were classified into 3 categories of permanent ice areas, permanently open, and seasonally open (table 1). This data product comes in the form of 30-year averaged weekly median ice concentrations in vector format. Using a custom Python 2.7 script, polygons with median ice concentrations below 30% (open-water) and above 90% (closed-water) were identified for each weekly dataset and extracted. Temperature data for pelagic seascapes was obtained from NOAA's World Ocean Atlas 2013 (WOD13). Data on long-term mean annual salinity was extracted across the study area at a resolution of 0.25° as a CSV containing latitude/longitude coordinates. Using a custom script written in Python 2.7, temperature values were taken at the desired depths and an average was calculated for each 0.25° grid point. All available values in the upper 30m of the water were considered when calculating averages. Salinity data for pelagic seascapes was obtained from NOAA's World Ocean Atlas 2013. Data on long-term mean annual salinity was extracted across the study area at a resolution of 0.25° as a CSV containing latitude/longitude coordinates. Using a custom script written in Python 2.7, salinity values were taken at the desired depths and an average was calculated for each 0.25° grid point.

Associated Links

(2) Sea Ice Climatic Atlas: <https://www.canada.ca/en/environment-climate-change/services/ice-forecasts-observations/publications/sea-climatic-atlas-northern-waters-1981-2010.html>; (1, 3, & 4): NOAA: <https://www.nodc.noaa.gov/OC5/woa13/pubwoa13.html>

3268: Pelagic Seascapes



Stratification: <4, 13, Ice: SeasonallyOpen, Temperature: >2C, Salinity: >31.8 HB

Date: (1), (3), & (4): 2013; (2) 2013

Open Source: (1) & (3) & (4): Yes; (2) Yes

Organization: (1), (3), & (4): NOAA; (2) Canadian Ice Service

Associated Report: (1) Stratification: NOAA World Ocean Atlas; (2) ice cover regime: Sea Ice Climatic Atlas for the Northern Canadian Waters; (3) temperature: NOAA World Ocean Atlas; (4) salinity: NOAA World Ocean Atlas

Authors: (1) & (3): NOAA World Ocean Atlas (Temperature): R. A. Locarnini, A. V. Mishonov, J. I. Antonov, T. P. Boyer, H. E. Garcia, O. K. Baranova, M. M. Zweng, C. R. Paver, J. R. Reagan, D. R. Johnson, M. Hamilton, and D. Seidov; (1) & (4): NOAA World Ocean Atlas (Salinity): M. M. Zweng, J. R. Reagan, J. I. Antonov, R. A. Locarnini,

Data Summary

Management Unit: N/A

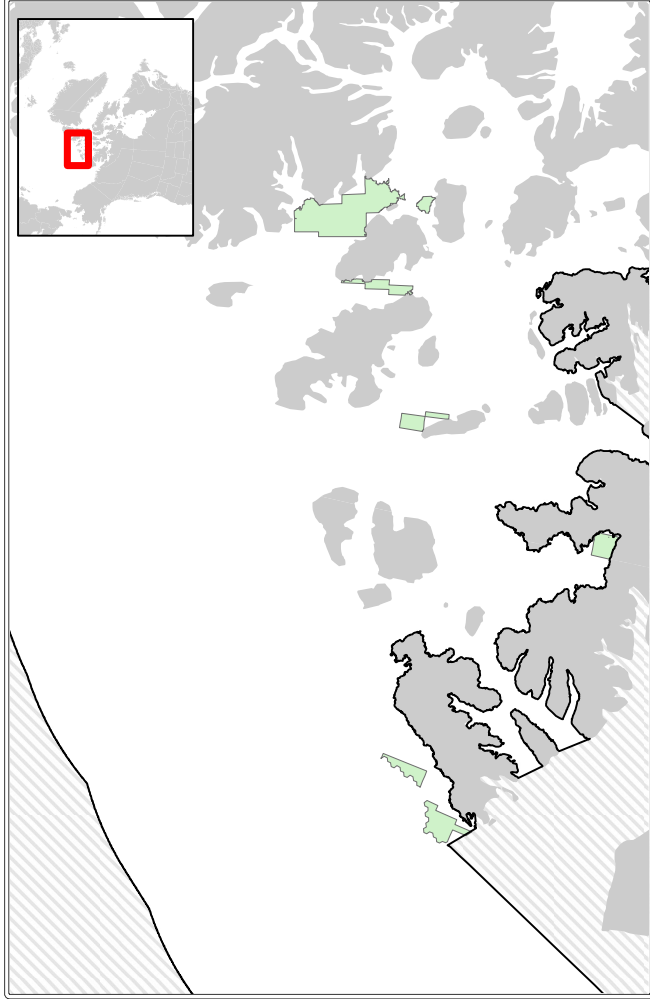
Marine Bioregion: Hudson Bay Complex

Description: Pelagic seascapes were identified using three classes of stratification (1), ice cover regime (2), temperature (3), and salinity (4). Once each individual data layer required for construction of the pelagic seascapes had been assembled they were combined using a simple spatial intersection operation in ArcMap 10.2. Following this a generic descriptive attribute was constructed for each individual polygon created by the intersection based on the class values present for each layer involved. Note that areas containing no-data values for 1 or more layer (e.g. shallow coastal areas) were classified generally as NoData. Each assembled seascape type was then split by bioregion. Water column stratification was derived from the temperature and salinity data extracted from NOAA's World Ocean Atlas 2013. Data on long-term mean annual salinity and temperature was selected across the study area at a resolution of 0.25° as a CSV containing latitude/longitude coordinates. Using a custom script written in Python 2.7, stratification was calculated as $\frac{t}{t + 7d}$ using the Seawater-3.3 module. Ice cover regime was assessed using data obtained from the Canadian Ice Service. Using the 30-year (1981-2010) Sea Ice Climatic Atlas's Median Ice Concentration data product, ice cover regimes were classified into 3 categories of permanent ice areas, permanently open, and seasonally open (table 1). This data product comes in the form of 30-year averaged weekly median ice concentrations in vector format. Using a custom Python 2.7 script, polygons with median ice concentrations below 30% (open-water) and above 90% (closed-water) were identified for each weekly dataset and extracted. Temperature data for pelagic seascapes was obtained from NOAA's World Ocean Atlas 2013 (WOD13). Data on long-term mean annual salinity was extracted across the study area at a resolution of 0.25° as a CSV containing latitude/longitude coordinates. Using a custom script written in Python 2.7, temperature values were taken at the desired depths and an average was calculated for each 0.25° grid point. All available values in the upper 30m of the water were considered when calculating averages. Salinity data for pelagic seascapes was obtained from NOAA's World Ocean Atlas 2013. Data on long-term mean annual salinity was extracted across the study area at a resolution of 0.25° as a CSV containing latitude/longitude coordinates. Using a custom script written in Python 2.7, salinity values were taken at the desired depths and an average was calculated for each 0.25° grid point.

Associated Links

(2) Sea Ice Climatic Atlas: <https://www.canada.ca/en/environment-climate-change/services/ice-forecasts-observations/publications/sea-climatic-atlas-northern-waters-1981-2010.html>; (1, 3, & 4): NOAA: <https://www.nodc.noaa.gov/OC5/woa13/pubwoa13.html>

3269: Pelagic Seascapes



Stratification: >8.55, Ice: PermanentlyIce, Temperature: <0C, Salinity: <30.4 AA

Date: (1), (3), & (4): 2013; (2) 2013

Open Source: (1) & (3) & (4): Yes; (2) Yes

Organization: (1), (3), & (4): NOAA; (2) Canadian Ice Service

Associated Report: (1) Stratification: NOAA World Ocean Atlas; (2) ice cover regime: Sea Ice Climatic Atlas for the Northern Canadian Waters; (3) temperature: NOAA World Ocean Atlas; (4) salinity: NOAA World Ocean Atlas

Authors: (1) & (3): NOAA World Ocean Atlas (Temperature): R. A. Locarnini, A. V. Mishonov, J. I. Antonov, T. P. Boyer, H. E. Garcia, O. K. Baranova, M. M. Zweng, C. R. Paver, J. R. Reagan, D. R. Johnson, M. Hamilton, and D. Seidov; (1) & (4): NOAA World Ocean Atlas (Salinity): M. M. Zweng, J. R. Reagan, J. I. Antonov, R. A. Locarnini,

Data Summary

Management Unit: N/A

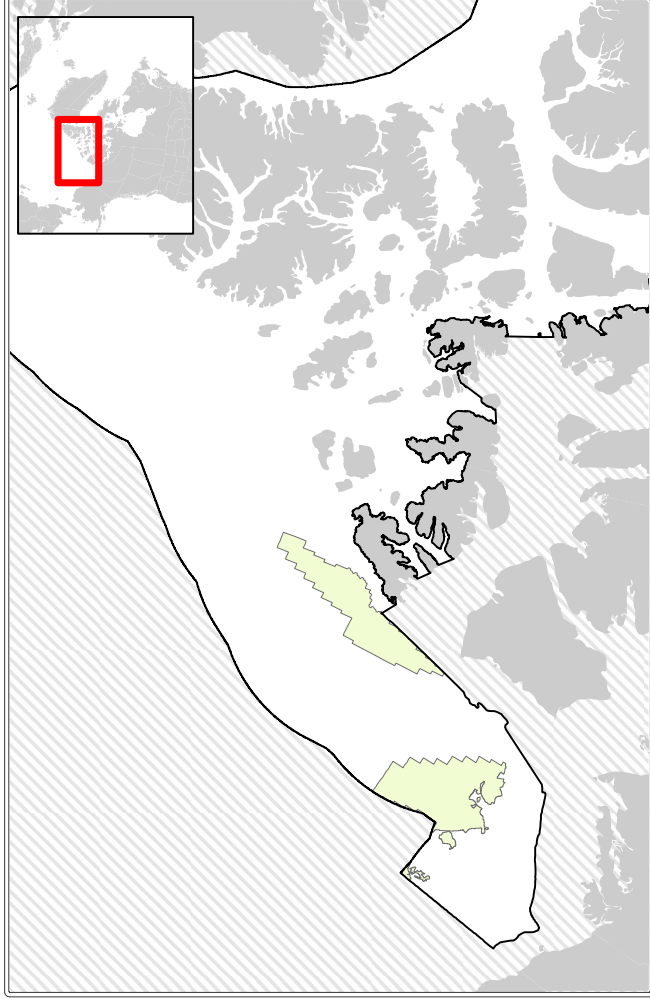
Marine Bioregion: Arctic Archipelago

Description: Pelagic seascapes were identified using three classes of stratification (1), ice cover regime (2), temperature (3), and salinity (4). Once each individual data layer required for construction of the pelagic seascapes had been assembled they were combined using a simple spatial intersection operation in ArcMap 10.2. Following this a generic descriptive attribute was constructed for each individual polygon created by the intersection based on the class values present for each layer involved. Note that areas containing no-data values for 1 or more layer (e.g. shallow coastal areas) were classified generally as NoData. Each assembled seascape type was then split by bioregion. Water column stratification was derived from the temperature and salinity data extracted from NOAA's World Ocean Atlas 2013. Data on long-term mean annual salinity and temperature was selected across the study area at a resolution of 0.25° as a CSV containing latitude/longitude coordinates. Using a custom script written in Python 2.7, stratification was calculated as $\frac{1}{2} \left(\frac{1}{T} + \frac{1}{S} \right)$ using the Seawater-3.3 module. Ice cover regime was assessed using data obtained from the Canadian Ice Service. Using the 30-year (1981-2010) Sea Ice Climatic Atlas's Median Ice Concentration data product, ice cover regimes were classified into 3 categories of permanent ice areas, permanently open, and seasonally open (table 1). This data product comes in the form of 30-year averaged weekly median ice concentrations in vector format. Using a custom Python 2.7 script, polygons with median ice concentrations below 30% (open-water) and above 90% (closed-water) were identified for each weekly dataset and extracted. Temperature data for pelagic seascapes was obtained from NOAA's World Ocean Atlas 2013 (WOD13). Data on long-term mean annual salinity was extracted across the study area at a resolution of 0.25° as a CSV containing latitude/longitude coordinates. Using a custom script written in Python 2.7, temperature values were taken at the desired depths and an average was calculated for each 0.25° grid point. All available values in the upper 30m of the water were considered when calculating averages. Salinity data for pelagic seascapes was obtained from NOAA's World Ocean Atlas 2013. Data on long-term mean annual salinity was extracted across the study area at a resolution of 0.25° as a CSV containing latitude/longitude coordinates. Using a custom script written in Python 2.7, salinity values were taken at the desired depths and an average was calculated for each 0.25° grid point.

Associated Links

(2) Sea Ice Climatic Atlas: <https://www.canada.ca/en/environment-climate-change/services/ice-forecasts-observations/publications/sea-climatic-atlas-northern-waters-1981-2010.html>; (1, 3, & 4): NOAA: <https://www.nodc.noaa.gov/OC5/woa13/pubwoa13.html>

3270: Pelagic Seascapes



Stratification: >8.55, Ice: PermanentlyIce, Temperature: <0C, Salinity: <30.4 AB

Date: (1), (3), & (4): 2013; (2) 2013

Open Source: (1) & (3) & (4): Yes; (2) Yes

Organization: (1), (3), & (4): NOAA; (2) Canadian Ice Service

Associated Report: (1) Stratification: NOAA World Ocean Atlas; (2) ice cover regime: Sea Ice Climatic Atlas for the Northern Canadian Waters; (3) temperature: NOAA World Ocean Atlas; (4) salinity: NOAA World Ocean Atlas

Authors: (1) & (3): NOAA World Ocean Atlas (Temperature): R. A. Locarnini, A. V. Mishonov, J. I. Antonov, T. P. Boyer, H. E. Garcia, O. K. Baranova, M. M. Zweng, C. R. Paver, J. R. Reagan, D. R. Johnson, M. Hamilton, and D. Seidov; (1) & (4): NOAA World Ocean Atlas (Salinity): M. M. Zweng, J. R. Reagan, J. I. Antonov, R. A. Locarnini,

Data Summary

Management Unit: N/A

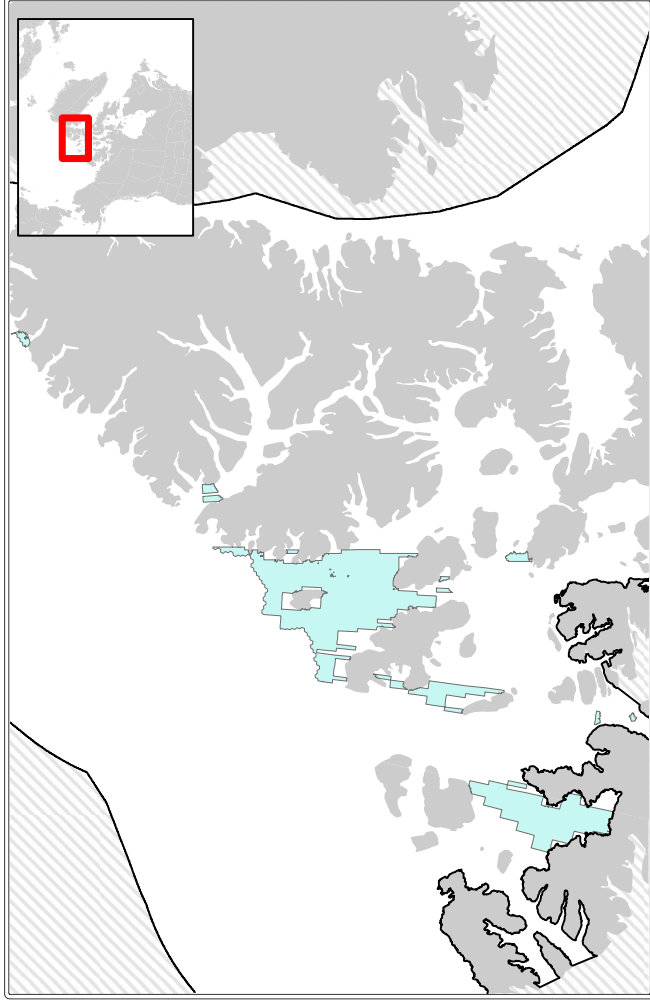
Marine Bioregion: Arctic Basin

Description: Pelagic seascapes were identified using three classes of stratification (1), ice cover regime (2), temperature (3), and salinity (4). Once each individual data layer required for construction of the pelagic seascapes had been assembled they were combined using a simple spatial intersection operation in ArcMap 10.2. Following this a generic descriptive attribute was constructed for each individual polygon created by the intersection based on the class values present for each layer involved. Note that areas containing no-data values for 1 or more layer (e.g. shallow coastal areas) were classified generally as NoData. Each assembled seascape type was then split by bioregion. Water column stratification was derived from the temperature and salinity data extracted from NOAA's World Ocean Atlas 2013. Data on long-term mean annual salinity and temperature was selected across the study area at a resolution of 0.25° as a CSV containing latitude/longitude coordinates. Using a custom script written in Python 2.7, stratification was calculated as $\frac{1}{2} \left(\frac{1}{T} + \frac{1}{S} \right)$ using the Seawater-3.3 module. Ice cover regime was assessed using data obtained from the Canadian Ice Service. Using the 30-year (1981-2010) Sea Ice Climatic Atlas's Median Ice Concentration data product, ice cover regimes were classified into 3 categories of permanent ice areas, permanently open, and seasonally open (table 1). This data product comes in the form of 30-year averaged weekly median ice concentrations in vector format. Using a custom Python 2.7 script, polygons with median ice concentrations below 30% (open-water) and above 90% (closed-water) were identified for each weekly dataset and extracted. Temperature data for pelagic seascapes was obtained from NOAA's World Ocean Atlas 2013 (WOD13). Data on long-term mean annual salinity was extracted across the study area at a resolution of 0.25° as a CSV containing latitude/longitude coordinates. Using a custom script written in Python 2.7, temperature values were taken at the desired depths and an average was calculated for each 0.25° grid point. All available values in the upper 30m of the water were considered when calculating averages. Salinity data for pelagic seascapes was obtained from NOAA's World Ocean Atlas 2013. Data on long-term mean annual salinity was extracted across the study area at a resolution of 0.25° as a CSV containing latitude/longitude coordinates. Using a custom script written in Python 2.7, salinity values were taken at the desired depths and an average was calculated for each 0.25° grid point.

Associated Links

(2) Sea Ice Climatic Atlas: <https://www.canada.ca/en/environment-climate-change/services/ice-forecasts-observations/publications/sea-climatic-atlas-northern-waters-1981-2010.html>; (1, 3, & 4): NOAA: <https://www.nodc.noaa.gov/OC5/woa13/pubwoa13.html>

3271: Pelagic Seascapes



Stratification: >8.55, Ice: PermanentlyIce, Temperature: <0C, Salinity: <31.8 AA

Date: (1), (3), & (4): 2013; (2) 2013

Open Source: (1) & (3) & (4): Yes; (2) Yes

Organization: (1), (3), & (4): NOAA; (2) Canadian Ice Service

Associated Report: (1) Stratification: NOAA World Ocean Atlas; (2) ice cover regime: Sea Ice Climatic Atlas for the Northern Canadian Waters; (3) temperature: NOAA World Ocean Atlas; (4) salinity: NOAA World Ocean Atlas

Authors: (1) & (3): NOAA World Ocean Atlas (Temperature): R. A. Locarnini, A. V. Mishonov, J. I. Antonov, T. P. Boyer, H. E. Garcia, O. K. Baranova, M. M. Zweng, C. R. Paver, J. R. Reagan, D. R. Johnson, M. Hamilton, and D. Seidov; (1) & (4): NOAA World Ocean Atlas (Salinity): M. M. Zweng, J. R. Reagan, J. I. Antonov, R. A. Locarnini,

Data Summary

Management Unit: N/A

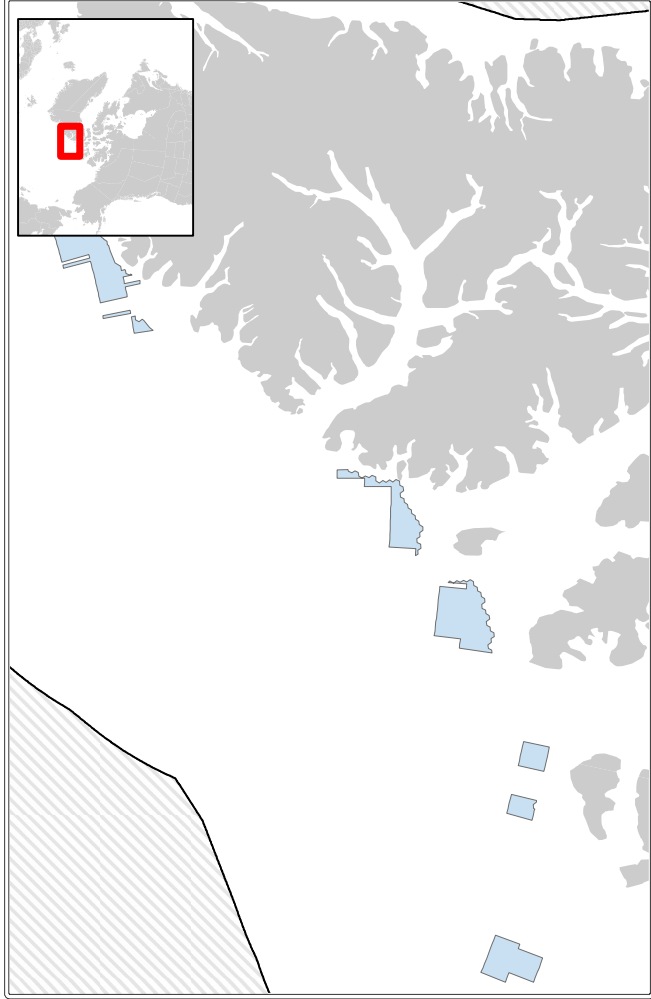
Marine Bioregion: Arctic Archipelago

Description: Pelagic seascapes were identified using three classes of stratification (1), ice cover regime (2), temperature (3), and salinity (4). Once each individual data layer required for construction of the pelagic seascapes had been assembled they were combined using a simple spatial intersection operation in ArcMap 10.2. Following this a generic descriptive attribute was constructed for each individual polygon created by the intersection based on the class values present for each layer involved. Note that areas containing no-data values for 1 or more layer (e.g. shallow coastal areas) were classified generally as NoData. Each assembled seascape type was then split by bioregion. Water column stratification was derived from the temperature and salinity data extracted from NOAA's World Ocean Atlas 2013. Data on long-term mean annual salinity and temperature was selected across the study area at a resolution of 0.25° as a CSV containing latitude/longitude coordinates. Using a custom script written in Python 2.7, stratification was calculated as $\frac{1}{2} \left(\frac{1}{T} + \frac{1}{S} \right)$ using the Seawater-3.3 module. Ice cover regime was assessed using data obtained from the Canadian Ice Service. Using the 30-year (1981-2010) Sea Ice Climatic Atlas's Median Ice Concentration data product, ice cover regimes were classified into 3 categories of permanent ice areas, permanently open, and seasonally open (table 1). This data product comes in the form of 30-year averaged weekly median ice concentrations in vector format. Using a custom Python 2.7 script, polygons with median ice concentrations below 30% (open-water) and above 90% (closed-water) were identified for each weekly dataset and extracted. Temperature data for pelagic seascapes was obtained from NOAA's World Ocean Atlas 2013 (WOD13). Data on long-term mean annual salinity was extracted across the study area at a resolution of 0.25° as a CSV containing latitude/longitude coordinates. Using a custom script written in Python 2.7, temperature values were taken at the desired depths and an average was calculated for each 0.25° grid point. All available values in the upper 30m of the water were considered when calculating averages. Salinity data for pelagic seascapes was obtained from NOAA's World Ocean Atlas 2013. Data on long-term mean annual salinity was extracted across the study area at a resolution of 0.25° as a CSV containing latitude/longitude coordinates. Using a custom script written in Python 2.7, salinity values were taken at the desired depths and an average was calculated for each 0.25° grid point.

Associated Links

(2) Sea Ice Climatic Atlas: <https://www.canada.ca/en/environment-climate-change/services/ice-forecasts-observations/publications/sea-climatic-atlas-northern-waters-1981-2010.html>; (1, 3, & 4): NOAA: <https://www.nodc.noaa.gov/OC5/woa13/pubwoa13.html>

3272: Pelagic Seascapes



Stratification: >8.55, Ice: PermanentlyIce, Temperature: <0C, Salinity: <31.9 AB

Date: (1), (3), & (4): 2013; (2) 2013

Open Source: (1) & (3) & (4): Yes; (2) Yes

Organization: (1), (3), & (4): NOAA; (2) Canadian Ice Service

Associated Report: (1) Stratification: NOAA World Ocean Atlas; (2) ice cover regime: Sea Ice Climatic Atlas for the Northern Canadian Waters; (3) temperature: NOAA World Ocean Atlas; (4) salinity: NOAA World Ocean Atlas

Authors: (1) & (3): NOAA World Ocean Atlas (Temperature): R. A. Locarnini, A. V. Mishonov, J. I. Antonov, T. P. Boyer, H. E. Garcia, O. K. Baranova, M. M. Zweng, C. R. Paver, J. R. Reagan, D. R. Johnson, M. Hamilton, and D. Seidov; (1) & (4): NOAA World Ocean Atlas (Salinity): M. M. Zweng, J. R. Reagan, J. I. Antonov, R. A. Locarnini,

Data Summary

Management Unit: N/A

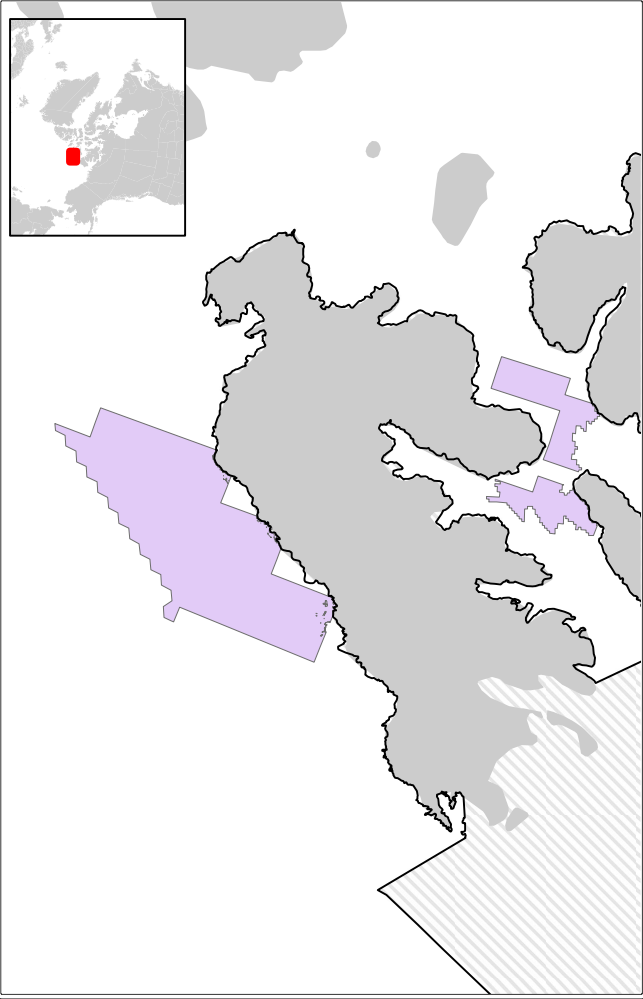
Marine Bioregion: Arctic Basin

Description: Pelagic seascapes were identified using three classes of stratification (1), ice cover regime (2), temperature (3), and salinity (4). Once each individual data layer required for construction of the pelagic seascapes had been assembled they were combined using a simple spatial intersection operation in ArcMap 10.2. Following this a generic descriptive attribute was constructed for each individual polygon created by the intersection based on the class values present for each layer involved. Note that areas containing no-data values for 1 or more layer (e.g. shallow coastal areas) were classified generally as NoData. Each assembled seascape type was then split by bioregion. Water column stratification was derived from the temperature and salinity data extracted from NOAA's World Ocean Atlas 2013. Data on long-term mean annual salinity and temperature was selected across the study area at a resolution of 0.25° as a CSV containing latitude/longitude coordinates. Using a custom script written in Python 2.7, stratification was calculated as $\frac{1}{2} \left(\frac{1}{T} + \frac{1}{S} \right)$ using the Seawater-3.3 module. Ice cover regime was assessed using data obtained from the Canadian Ice Service. Using the 30-year (1981-2010) Sea Ice Climatic Atlas's Median Ice Concentration data product, ice cover regimes were classified into 3 categories of permanent ice areas, permanently open, and seasonally open (table 1). This data product comes in the form of 30-year averaged weekly median ice concentrations in vector format. Using a custom Python 2.7 script, polygons with median ice concentrations below 30% (open-water) and above 90% (closed-water) were identified for each weekly dataset and extracted. Temperature data for pelagic seascapes was obtained from NOAA's World Ocean Atlas 2013 (WOD13). Data on long-term mean annual salinity was extracted across the study area at a resolution of 0.25° as a CSV containing latitude/longitude coordinates. Using a custom script written in Python 2.7, temperature values were taken at the desired depths and an average was calculated for each 0.25° grid point. All available values in the upper 30m of the water were considered when calculating averages. Salinity data for pelagic seascapes was obtained from NOAA's World Ocean Atlas 2013. Data on long-term mean annual salinity was extracted across the study area at a resolution of 0.25° as a CSV containing latitude/longitude coordinates. Using a custom script written in Python 2.7, salinity values were taken at the desired depths and an average was calculated for each 0.25° grid point.

Associated Links

(2) Sea Ice Climatic Atlas: <https://www.canada.ca/en/environment-climate-change/services/ice-forecasts-observations/publications/sea-climatic-atlas-northern-waters-1981-2010.html>; (1, 3, & 4): NOAA: <https://www.nodc.noaa.gov/OC5/woa13/pubwoa13.html>

3273: Pelagic Seascapes



Stratification: >8.55, Ice: PermanentlyIce, Temperature: <2C, Salinity: <30.4 AA

Date: (1), (3), & (4): 2013; (2) 2013

Open Source: (1) & (3) & (4): Yes; (2) Yes

Organization: (1), (3), & (4): NOAA; (2) Canadian Ice Service

Associated Report: (1) Stratification: NOAA World Ocean Atlas; (2) ice cover regime: Sea Ice Climatic Atlas for the Northern Canadian Waters ; (3) temperature: NOAA World Ocean Atlas ; (4) salinity: NOAA World Ocean Atlas

Authors: (1) & (3): NOAA World Ocean Atlas (Temperature): R. A. Locarnini, A. V. Mishonov, J. I. Antonov, T. P. Boyer, H. E. Garcia, O. K. Baranova, M. M. Zweng, C. R. Paver, J. R. Reagan, D. R. Johnson, M. Hamilton, and D. Seidov; (1) & (4): NOAA World Ocean Atlas (Salinity): M. M. Zweng, J.R. Reagan, J.I. Antonov, R.A. Locarnini,

Data Summary

Management Unit: N/A

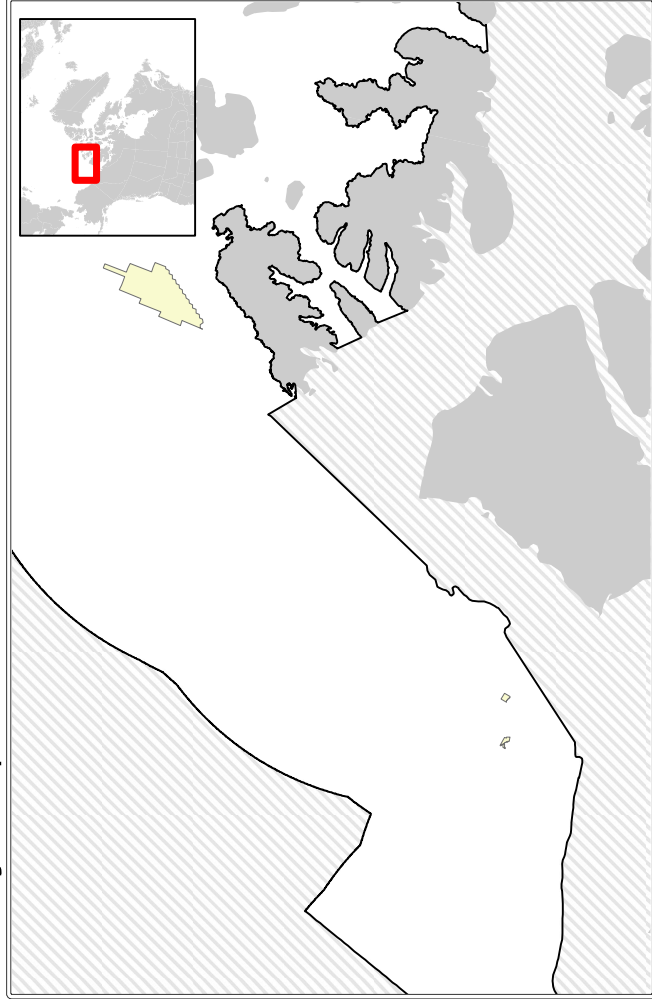
Marine Bioregion: Arctic Archipelago

Description: Pelagic seascapes were identified using three classes of stratification (1), ice cover regime (2), temperature (3), and salinity (4). Once each individual data layer required for construction of the pelagic seascapes had been assembled they were combined using a simple spatial intersection operation in ArcMap 10.2. Following this a generic descriptive attribute was constructed for each individual polygon created by the intersection based on the class values present for each layer involved. Note that areas containing no-data values for 1 or more layer (e.g. shallow coastal areas) were classified generally as NoData. Each assembled seascape type was then split by bioregion. Water column stratification was derived from the temperature and salinity data extracted from NOAA's World Ocean Atlas 2013. Data on long-term mean annual salinity and temperature was selected across the study area at a resolution of 0.25° as a CSV containing latitude/longitude coordinates. Using a custom script written in Python 2.7, stratification was calculated as $\frac{1}{2} \left(\frac{1}{T} + \frac{1}{S} \right)$ using the Seawater-3.3 module. Ice cover regime was assessed using data obtained from the Canadian Ice Service. Using the 30-year (1981-2010) Sea Ice Climatic Atlas's Median Ice Concentration data product, ice cover regimes were classified into 3 categories of permanent ice areas, permanently open, and seasonally open (table 1). This data product comes in the form of 30-year averaged weekly median ice concentrations in vector format. Using a custom Python 2.7 script, polygons with median ice concentrations below 30% (open-water) and above 90% (closed-water) were identified for each weekly dataset and extracted. Temperature data for pelagic seascapes was obtained from NOAA's World Ocean Atlas 2013 (WOD13). Data on long-term mean annual salinity was extracted across the study area at a resolution of 0.25° as a CSV containing latitude/longitude coordinates. Using a custom script written in Python 2.7, temperature values were taken at the desired depths and an average was calculated for each 0.25° grid point. All available values in the upper 30m of the water were considered when calculating averages. Salinity data for pelagic seascapes was obtained from NOAA's World Ocean Atlas 2013. Data on long-term mean annual salinity was extracted across the study area at a resolution of 0.25° as a CSV containing latitude/longitude coordinates. Using a custom script written in Python 2.7, salinity values were taken at the desired depths and an average was calculated for each 0.25° grid point.

Associated Links

(2) Sea Ice Climatic Atlas: <https://www.canada.ca/en/environment-climate-change/services/ice-forecasts-observations/publications/sea-climatic-atlas-northern-waters-1981-2010.html>; (1, 3, & 4): NOAA: <https://www.nodc.noaa.gov/OC5/woa13/pubwoa13.html>

3274: Pelagic Seascapes



Stratification: >8.55, Ice: PermanentlyIce, Temperature: <2C, Salinity: <30.4 AB

Date: (1), (3), & (4): 2013; (2) 2013

Open Source: (1) & (3) & (4): Yes; (2) Yes

Organization: (1), (3), & (4): NOAA; (2) Canadian Ice Service

Associated Report: (1) Stratification: NOAA World Ocean Atlas; (2) ice cover regime: Sea Ice Climatic Atlas for the Northern Canadian Waters; (3) temperature: NOAA World Ocean Atlas; (4) salinity: NOAA World Ocean Atlas

Authors: (1) & (3): NOAA World Ocean Atlas (Temperature): R. A. Locarnini, A. V. Mishonov, J. I. Antonov, T. P. Boyer, H. E. Garcia, O. K. Baranova, M. M. Zweng, C. R. Paver, J. R. Reagan, D. R. Johnson, M. Hamilton, and D. Seidov; (1) & (4): NOAA World Ocean Atlas (Salinity): M. M. Zweng, J. R. Reagan, J. I. Antonov, R. A. Locarnini,

Data Summary

Management Unit: N/A

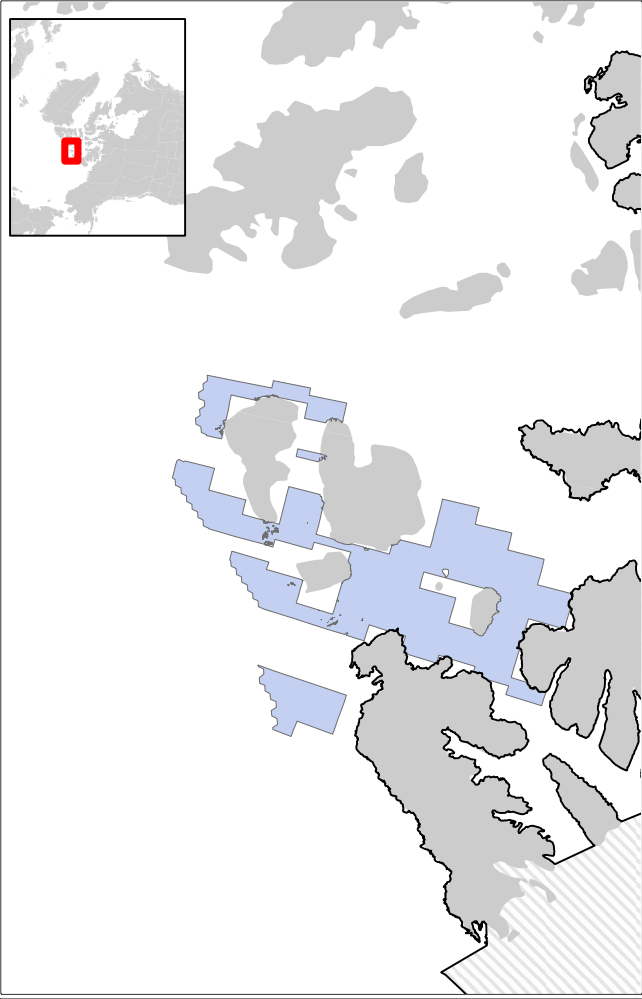
Marine Bioregion: Arctic Basin

Description: Pelagic seascapes were identified using three classes of stratification (1), ice cover regime (2), temperature (3), and salinity (4). Once each individual data layer required for construction of the pelagic seascapes had been assembled they were combined using a simple spatial intersection operation in ArcMap 10.2. Following this a generic descriptive attribute was constructed for each individual polygon created by the intersection based on the class values present for each layer involved. Note that areas containing no-data values for 1 or more layer (e.g. shallow coastal areas) were classified generally as NoData. Each assembled seascape type was then split by bioregion. Water column stratification was derived from the temperature and salinity data extracted from NOAA's World Ocean Atlas 2013. Data on long-term mean annual salinity and temperature was selected across the study area at a resolution of 0.25° as a CSV containing latitude/longitude coordinates. Using a custom script written in Python 2.7, stratification was calculated as $\frac{1}{2} \left(\frac{1}{T} + \frac{1}{S} \right)$ using the Seawater-3.3 module. Ice cover regime was assessed using data obtained from the Canadian Ice Service. Using the 30-year (1981-2010) Sea Ice Climatic Atlas's Median Ice Concentration data product, ice cover regimes were classified into 3 categories of permanent ice areas, permanently open, and seasonally open (table 1). This data product comes in the form of 30-year averaged weekly median ice concentrations in vector format. Using a custom Python 2.7 script, polygons with median ice concentrations below 30% (open-water) and above 90% (closed-water) were identified for each weekly dataset and extracted. Temperature data for pelagic seascapes was obtained from NOAA's World Ocean Atlas 2013 (WOD13). Data on long-term mean annual salinity was extracted across the study area at a resolution of 0.25° as a CSV containing latitude/longitude coordinates. Using a custom script written in Python 2.7, temperature values were taken at the desired depths and an average was calculated for each 0.25° grid point. All available values in the upper 30m of the water were considered when calculating averages. Salinity data for pelagic seascapes was obtained from NOAA's World Ocean Atlas 2013. Data on long-term mean annual salinity was extracted across the study area at a resolution of 0.25° as a CSV containing latitude/longitude coordinates. Using a custom script written in Python 2.7, salinity values were taken at the desired depths and an average was calculated for each 0.25° grid point.

Associated Links

(2) Sea Ice Climatic Atlas: <https://www.canada.ca/en/environment-climate-change/services/ice-forecasts-observations/publications/sea-climatic-atlas-northern-waters-1981-2010.html>; (1, 3, & 4): NOAA: <https://www.nodc.noaa.gov/OC5/woa13/pubwoa13.html>

3275: Pelagic Seascapes



Stratification: >8.55, Ice: PermanentlyIce, Temperature: <2C, Salinity: <31.8 AA

Date: (1), (3), & (4): 2013; (2) 2013

Open Source: (1) & (3) & (4): Yes; (2) Yes

Organization: (1), (3), & (4): NOAA; (2) Canadian Ice Service

Associated Report: (1) Stratification: NOAA World Ocean Atlas; (2) ice cover regime: Sea Ice Climatic Atlas for the Northern Canadian Waters ; (3) temperature: NOAA World Ocean Atlas ; (4) salinity: NOAA World Ocean Atlas

Authors: (1) & (3): NOAA World Ocean Atlas (Temperature): R. A. Locarnini, A. V. Mishonov, J. I. Antonov, T. P. Boyer, H. E. Garcia, O. K. Baranova, M. M. Zweng, C. R. Paver, J. R. Reagan, D. R. Johnson, M. Hamilton, and D. Seidov; (1) & (4): NOAA World Ocean Atlas (Salinity): M. M. Zweng, J.R. Reagan, J.I. Antonov, R.A. Locarnini,

Data Summary

Management Unit: N/A

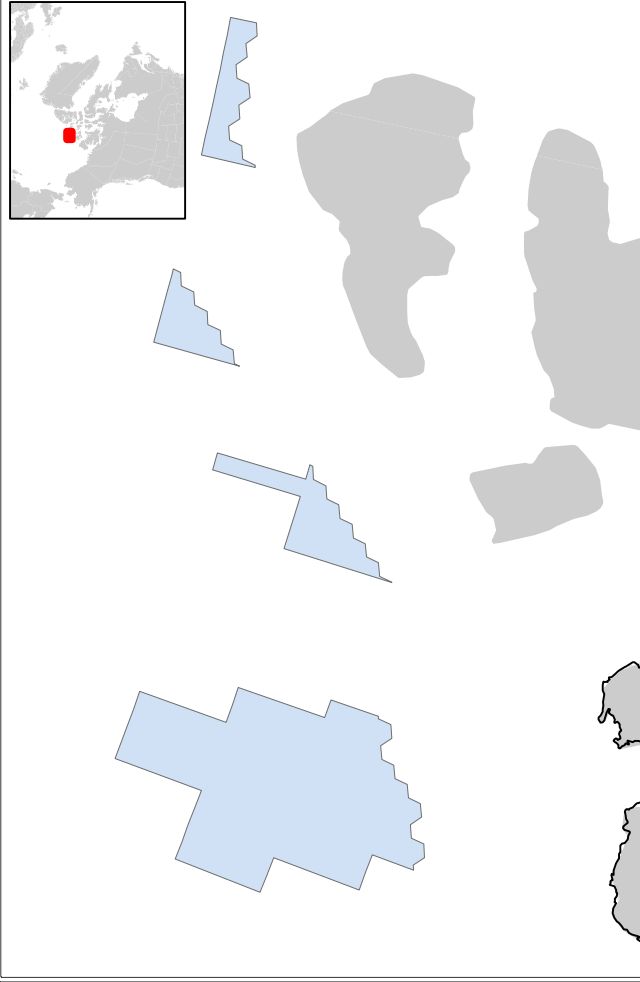
Marine Bioregion: Arctic Archipelago

Description: Pelagic seascapes were identified using three classes of stratification (1), ice cover regime (2), temperature (3), and salinity (4). Once each individual data layer required for construction of the pelagic seascapes had been assembled they were combined using a simple spatial intersection operation in ArcMap 10.2. Following this a generic descriptive attribute was constructed for each individual polygon created by the intersection based on the class values present for each layer involved. Note that areas containing no-data values for 1 or more layer (e.g. shallow coastal areas) were classified generally as NoData. Each assembled seascape type was then split by bioregion. Water column stratification was derived from the temperature and salinity data extracted from NOAA's World Ocean Atlas 2013. Data on long-term mean annual salinity and temperature was selected across the study area at a resolution of 0.25° as a CSV containing latitude/longitude coordinates. Using a custom script written in Python 2.7, stratification was calculated as $\frac{1}{2} \left(\frac{1}{2} \right)$ using the Seawater-3.3 module. Ice cover regime was assessed using data obtained from the Canadian Ice Service. Using the 30-year (1981-2010) Sea Ice Climatic Atlas's Median Ice Concentration data product, ice cover regimes were classified into 3 categories of permanent ice areas, permanently open, and seasonally open (table 1). This data product comes in the form of 30-year averaged weekly median ice concentrations in vector format. Using a custom Python 2.7 script, polygons with median ice concentrations below 30% (open-water) and above 90% (closed-water) were identified for each weekly dataset and extracted. Temperature data for pelagic seascapes was obtained from NOAA's World Ocean Atlas 2013 (WOD13). Data on long-term mean annual salinity was extracted across the study area at a resolution of 0.25° as a CSV containing latitude/longitude coordinates. Using a custom script written in Python 2.7, temperature values were taken at the desired depths and an average was calculated for each 0.25° grid point. All available values in the upper 30m of the water were considered when calculating averages. Salinity data for pelagic seascapes was obtained from NOAA's World Ocean Atlas 2013. Data on long-term mean annual salinity was extracted across the study area at a resolution of 0.25° as a CSV containing latitude/longitude coordinates. Using a custom script written in Python 2.7, salinity values were taken at the desired depths and an average was calculated for each 0.25° grid point.

Associated Links

(2) Sea Ice Climatic Atlas: <https://www.canada.ca/en/environment-climate-change/services/ice-forecasts-observations/publications/sea-climatic-atlas-northern-waters-1981-2010.html>; (1, 3, & 4): NOAA: <https://www.nodc.noaa.gov/OC5/woa13/pubwoa13.html>

3276: Pelagic Seascapes



Stratification: >8.55, Ice: PermanentlyIce, Temperature: <2C, Salinity: <31.8 AB

Date: (1), (3), & (4): 2013; (2) 2013

Open Source: (1) & (3) & (4): Yes; (2) Yes

Organization: (1), (3), & (4): NOAA; (2) Canadian Ice Service

Associated Report: (1) Stratification: NOAA World Ocean Atlas; (2) ice cover regime: Sea Ice Climatic Atlas for the Northern Canadian Waters; (3) temperature: NOAA World Ocean Atlas; (4) salinity: NOAA World Ocean Atlas

Authors: (1) & (3): NOAA World Ocean Atlas (Temperature): R. A. Locarnini, A. V. Mishonov, J. I. Antonov, T. P. Boyer, H. E. Garcia, O. K. Baranova, M. M. Zweng, C. R. Paver, J. R. Reagan, D. R. Johnson, M. Hamilton, and D. Seidov; (1) & (4): NOAA World Ocean Atlas (Salinity): M. M. Zweng, J. R. Reagan, J. I. Antonov, R. A. Locarnini,

Data Summary

Management Unit: N/A

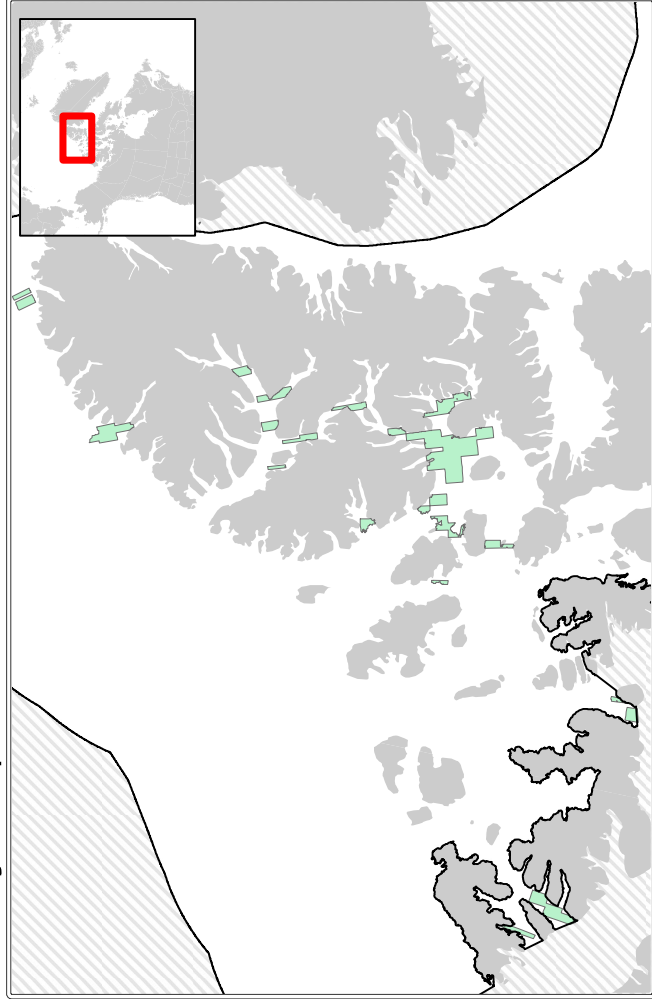
Marine Bioregion: Arctic Basin

Description: Pelagic seascapes were identified using three classes of stratification (1), ice cover regime (2), temperature (3), and salinity (4). Once each individual data layer required for construction of the pelagic seascapes had been assembled they were combined using a simple spatial intersection operation in ArcMap 10.2. Following this a generic descriptive attribute was constructed for each individual polygon created by the intersection based on the class values present for each layer involved. Note that areas containing no-data values for 1 or more layer (e.g. shallow coastal areas) were classified generally as NoData. Each assembled seascape type was then split by bioregion. Water column stratification was derived from the temperature and salinity data extracted from NOAA's World Ocean Atlas 2013. Data on long-term mean annual salinity and temperature was selected across the study area at a resolution of 0.25° as a CSV containing latitude/longitude coordinates. Using a custom script written in Python 2.7, stratification was calculated as $\frac{1}{2} \left(\frac{1}{T} + \frac{1}{S} \right)$ using the Seawater-3.3 module. Ice cover regime was assessed using data obtained from the Canadian Ice Service. Using the 30-year (1981-2010) Sea Ice Climatic Atlas's Median Ice Concentration data product, ice cover regimes were classified into 3 categories of permanent ice areas, permanently open, and seasonally open (table 1). This data product comes in the form of 30-year averaged weekly median ice concentrations in vector format. Using a custom Python 2.7 script, polygons with median ice concentrations below 30% (open-water) and above 90% (closed-water) were identified for each weekly dataset and extracted. Temperature data for pelagic seascapes was obtained from NOAA's World Ocean Atlas 2013 (WOD13). Data on long-term mean annual salinity was extracted across the study area at a resolution of 0.25° as a CSV containing latitude/longitude coordinates. Using a custom script written in Python 2.7, temperature values were taken at the desired depths and an average was calculated for each 0.25° grid point. All available values in the upper 30m of the water were considered when calculating averages. Salinity data for pelagic seascapes was obtained from NOAA's World Ocean Atlas 2013. Data on long-term mean annual salinity was extracted across the study area at a resolution of 0.25° as a CSV containing latitude/longitude coordinates. Using a custom script written in Python 2.7, salinity values were taken at the desired depths and an average was calculated for each 0.25° grid point.

Associated Links

(2) Sea Ice Climatic Atlas: <https://www.canada.ca/en/environment-climate-change/services/ice-forecasts-observations/publications/sea-climatic-atlas-northern-waters-1981-2010.html>; (1, 3, & 4): NOAA: <https://www.nodc.noaa.gov/OC5/woa13/pubwoa13.html>

3277: Pelagic Seascapes



Stratification: >8.55, Ice: SeasonallyOpen, Temperature: <0C, Salinity: <30.4 AA

Date: (1), (3), & (4): 2013; (2) 2013

Open Source: (1) & (3) & (4): Yes; (2) Yes

Organization: (1), (3), & (4): NOAA; (2) Canadian Ice Service

Associated Report: (1) Stratification: NOAA World Ocean Atlas; (2) ice cover regime: Sea Ice Climatic Atlas for the Northern Canadian Waters; (3) temperature: NOAA World Ocean Atlas; (4) salinity: NOAA World Ocean Atlas

Authors: (1) & (3): NOAA World Ocean Atlas (Temperature): R. A. Locarnini, A. V. Mishonov, J. I. Antonov, T. P. Boyer, H. E. Garcia, O. K. Baranova, M. M. Zweng, C. R. Paver, J. R. Reagan, D. R. Johnson, M. Hamilton, and D. Seidov; (1) & (4): NOAA World Ocean Atlas (Salinity): M. M. Zweng, J. R. Reagan, J. I. Antonov, R. A. Locarnini,

Data Summary

Management Unit: N/A

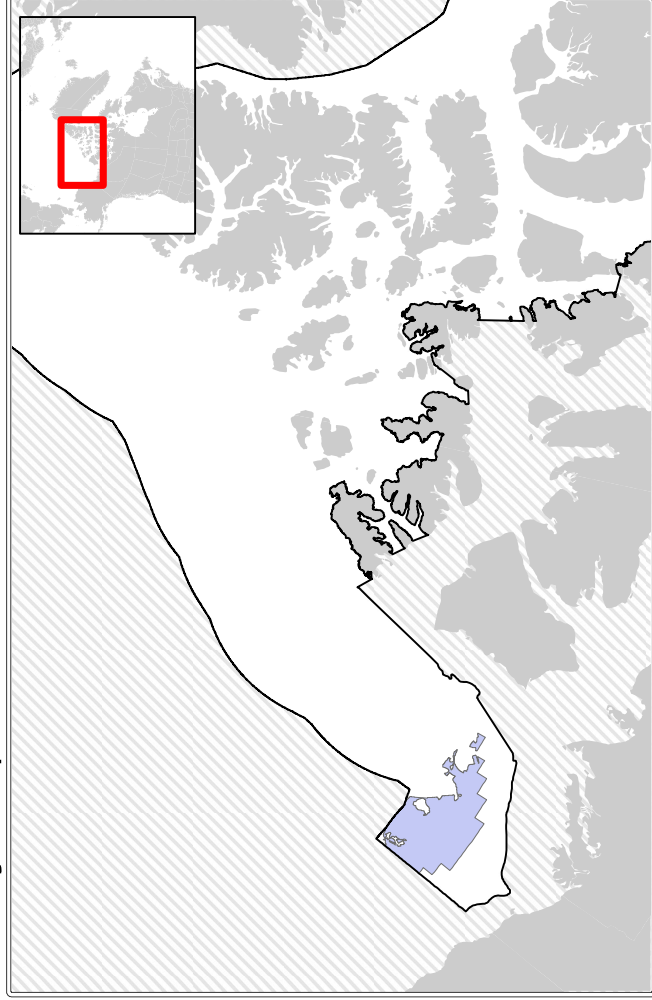
Marine Bioregion: Arctic Archipelago

Description: Pelagic seascapes were identified using three classes of stratification (1), ice cover regime (2), temperature (3), and salinity (4). Once each individual data layer required for construction of the pelagic seascapes had been assembled they were combined using a simple spatial intersection operation in ArcMap 10.2. Following this a generic descriptive attribute was constructed for each individual polygon created by the intersection based on the class values present for each layer involved. Note that areas containing no-data values for 1 or more layer (e.g. shallow coastal areas) were classified generally as NoData. Each assembled seascape type was then split by bioregion. Water column stratification was derived from the temperature and salinity data extracted from NOAA's World Ocean Atlas 2013. Data on long-term mean annual salinity and temperature was selected across the study area at a resolution of 0.25° as a CSV containing latitude/longitude coordinates. Using a custom script written in Python 2.7, stratification was calculated as $\frac{1}{2} \left(\frac{1}{T} + \frac{1}{S} \right)$ using the Seawater-3.3 module. Ice cover regime was assessed using data obtained from the Canadian Ice Service. Using the 30-year (1981-2010) Sea Ice Climatic Atlas's Median Ice Concentration data product, ice cover regimes were classified into 3 categories of permanent ice areas, permanently open, and seasonally open (table 1). This data product comes in the form of 30-year averaged weekly median ice concentrations in vector format. Using a custom Python 2.7 script, polygons with median ice concentrations below 30% (open-water) and above 90% (closed-water) were identified for each weekly dataset and extracted. Temperature data for pelagic seascapes was obtained from NOAA's World Ocean Atlas 2013 (WOD13). Data on long-term mean annual salinity was extracted across the study area at a resolution of 0.25° as a CSV containing latitude/longitude coordinates. Using a custom script written in Python 2.7, temperature values were taken at the desired depths and an average was calculated for each 0.25° grid point. All available values in the upper 30m of the water were considered when calculating averages. Salinity data for pelagic seascapes was obtained from NOAA's World Ocean Atlas 2013. Data on long-term mean annual salinity was extracted across the study area at a resolution of 0.25° as a CSV containing latitude/longitude coordinates. Using a custom script written in Python 2.7, salinity values were taken at the desired depths and an average was calculated for each 0.25° grid point.

Associated Links

(2) Sea Ice Climatic Atlas: <https://www.canada.ca/en/environment-climate-change/services/ice-forecasts-observations/publications/sea-climatic-atlas-northern-waters-1981-2010.html>; (1, 3, & 4): NOAA: <https://www.nodc.noaa.gov/OC5/woa13/pubwoa13.html>

3278: Pelagic Seascapes



Stratification: >8.55, Ice: SeasonallyOpen, Temperature: <0C, Salinity: <30.4 AB

Date: (1), (3), & (4): 2013; (2) 2013

Open Source: (1) & (3) & (4): Yes; (2) Yes

Organization: (1), (3), & (4): NOAA; (2) Canadian Ice Service

Associated Report: (1) Stratification: NOAA World Ocean Atlas; (2) ice cover regime: Sea Ice Climatic Atlas for the Northern Canadian Waters; (3) temperature: NOAA World Ocean Atlas; (4) salinity: NOAA World Ocean Atlas

Authors: (1) & (3): NOAA World Ocean Atlas (Temperature): R. A. Locarnini, A. V. Mishonov, J. I. Antonov, T. P. Boyer, H. E. Garcia, O. K. Baranova, M. M. Zweng, C. R. Paver, J. R. Reagan, D. R. Johnson, M. Hamilton, and D. Seidov; (1) & (4): NOAA World Ocean Atlas (Salinity): M. M. Zweng, J. R. Reagan, J. I. Antonov, R. A. Locarnini,

Data Summary

Management Unit: N/A

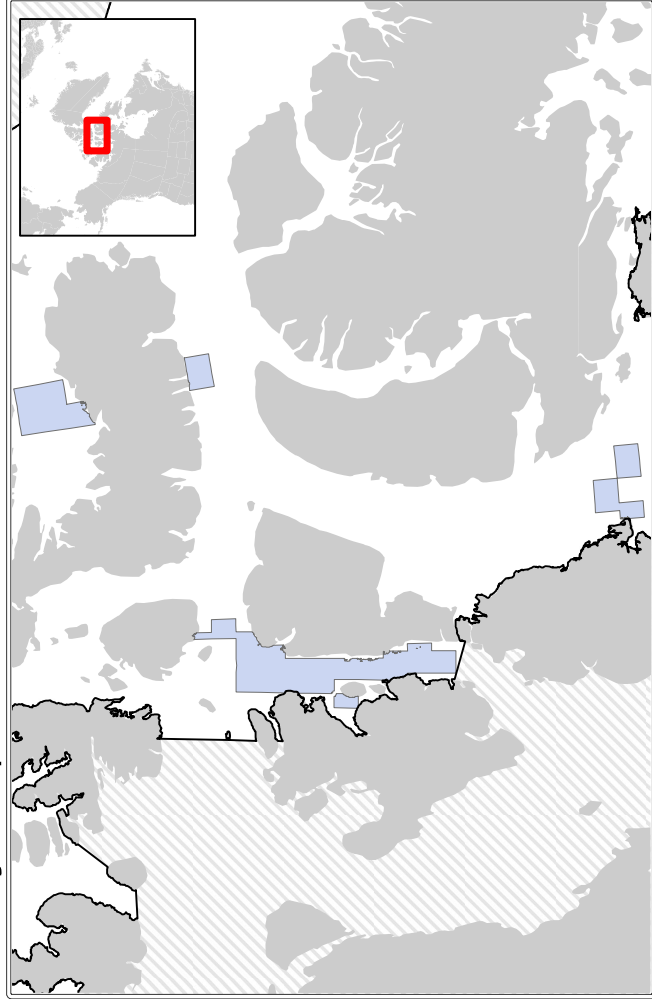
Marine Bioregion: Arctic Basin

Description: Pelagic seascapes were identified using three classes of stratification (1), ice cover regime (2), temperature (3), and salinity (4). Once each individual data layer required for construction of the pelagic seascapes had been assembled they were combined using a simple spatial intersection operation in ArcMap 10.2. Following this a generic descriptive attribute was constructed for each individual polygon created by the intersection based on the class values present for each layer involved. Note that areas containing no-data values for 1 or more layer (e.g. shallow coastal areas) were classified generally as NoData. Each assembled seascape type was then split by bioregion. Water column stratification was derived from the temperature and salinity data extracted from NOAA's World Ocean Atlas 2013. Data on long-term mean annual salinity and temperature was selected across the study area at a resolution of 0.25° as a CSV containing latitude/longitude coordinates. Using a custom script written in Python 2.7, stratification was calculated as $\frac{1}{2} \left(\frac{1}{T} + \frac{1}{S} \right)$ using the Seawater-3.3 module. Ice cover regime was assessed using data obtained from the Canadian Ice Service. Using the 30-year (1981-2010) Sea Ice Climatic Atlas's Median Ice Concentration data product, ice cover regimes were classified into 3 categories of permanent ice areas, permanently open, and seasonally open (table 1). This data product comes in the form of 30-year averaged weekly median ice concentrations in vector format. Using a custom Python 2.7 script, polygons with median ice concentrations below 30% (open-water) and above 90% (closed-water) were identified for each weekly dataset and extracted. Temperature data for pelagic seascapes was obtained from NOAA's World Ocean Atlas 2013 (WOD13). Data on long-term mean annual salinity was extracted across the study area at a resolution of 0.25° as a CSV containing latitude/longitude coordinates. Using a custom script written in Python 2.7, temperature values were taken at the desired depths and an average was calculated for each 0.25° grid point. All available values in the upper 30m of the water were considered when calculating averages. Salinity data for pelagic seascapes was obtained from NOAA's World Ocean Atlas 2013. Data on long-term mean annual salinity was extracted across the study area at a resolution of 0.25° as a CSV containing latitude/longitude coordinates. Using a custom script written in Python 2.7, salinity values were taken at the desired depths and an average was calculated for each 0.25° grid point.

Associated Links

(2) Sea Ice Climatic Atlas: <https://www.canada.ca/en/environment-climate-change/services/ice-forecasts-observations/publications/sea-climatic-atlas-northern-waters-1981-2010.html>; (1, 3, & 4): NOAA: <https://www.nodc.noaa.gov/OC5/woa13/pubwoa13.html>

3279: Pelagic Seascapes



Stratification: >8.55, Ice: SeasonallyOpen, Temperature: <0C, Salinity: <30.4 EA

Date: (1), (3), & (4): 2013; (2) 2013

Open Source: (1) & (3) & (4): Yes; (2) Yes

Organization: (1), (3), & (4): NOAA; (2) Canadian Ice Service

Associated Report: (1) Stratification: NOAA World Ocean Atlas; (2) ice cover regime: Sea Ice Climatic Atlas for the Northern Canadian Waters; (3) temperature: NOAA World Ocean Atlas; (4) salinity: NOAA World Ocean Atlas

Authors: (1) & (3): NOAA World Ocean Atlas (Temperature): R. A. Locarnini, A. V. Mishonov, J. I. Antonov, T. P. Boyer, H. E. Garcia, O. K. Baranova, M. M. Zweng, C. R. Paver, J. R. Reagan, D. R. Johnson, M. Hamilton, and D. Seidov; (1) & (4): NOAA World Ocean Atlas (Salinity): M. M. Zweng, J. R. Reagan, J. I. Antonov, R. A. Locarnini,

Data Summary

Management Unit: N/A

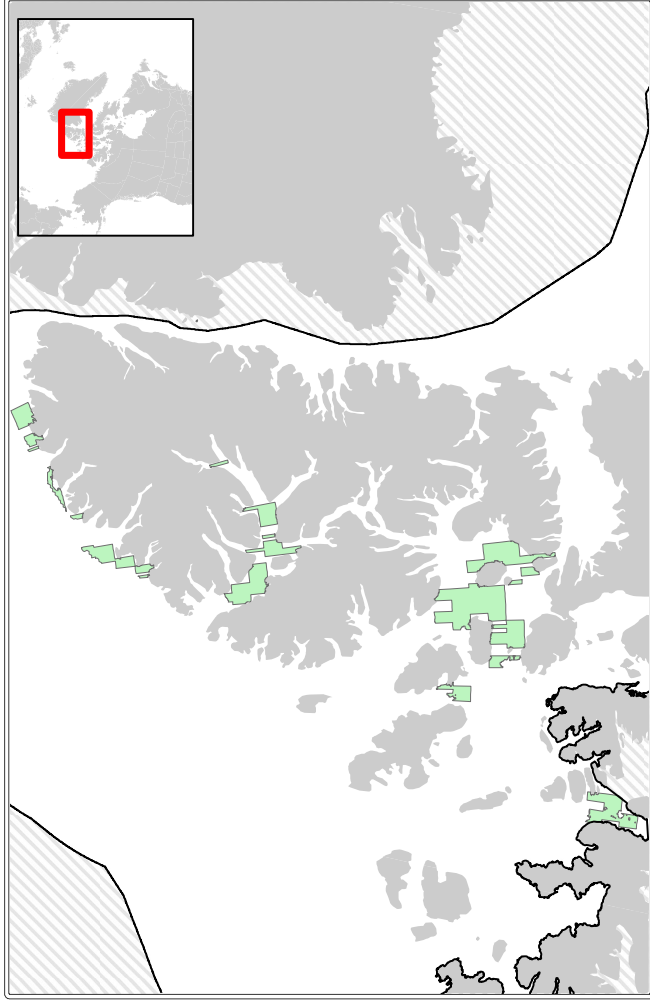
Marine Bioregion: Eastern Arctic

Description: Pelagic seascapes were identified using three classes of stratification (1), ice cover regime (2), temperature (3), and salinity (4). Once each individual data layer required for construction of the pelagic seascapes had been assembled they were combined using a simple spatial intersection operation in ArcMap 10.2. Following this a generic descriptive attribute was constructed for each individual polygon created by the intersection based on the class values present for each layer involved. Note that areas containing no-data values for 1 or more layer (e.g. shallow coastal areas) were classified generally as NoData. Each assembled seascape type was then split by bioregion. Water column stratification was derived from the temperature and salinity data extracted from NOAA's World Ocean Atlas 2013. Data on long-term mean annual salinity and temperature was selected across the study area at a resolution of 0.25° as a CSV containing latitude/longitude coordinates. Using a custom script written in Python 2.7, stratification was calculated as $\frac{1}{2} \left(\frac{1}{T} + \frac{1}{S} \right)$ using the Seawater-3.3 module. Ice cover regime was assessed using data obtained from the Canadian Ice Service. Using the 30-year (1981-2010) Sea Ice Climatic Atlas's Median Ice Concentration data product, ice cover regimes were classified into 3 categories of permanent ice areas, permanently open, and seasonally open (table 1). This data product comes in the form of 30-year averaged weekly median ice concentrations in vector format. Using a custom Python 2.7 script, polygons with median ice concentrations below 30% (open-water) and above 90% (closed-water) were identified for each weekly dataset and extracted. Temperature data for pelagic seascapes was obtained from NOAA's World Ocean Atlas 2013 (WOD13). Data on long-term mean annual salinity was extracted across the study area at a resolution of 0.25° as a CSV containing latitude/longitude coordinates. Using a custom script written in Python 2.7, temperature values were taken at the desired depths and an average was calculated for each 0.25° grid point. All available values in the upper 30m of the water were considered when calculating averages. Salinity data for pelagic seascapes was obtained from NOAA's World Ocean Atlas 2013. Data on long-term mean annual salinity was extracted across the study area at a resolution of 0.25° as a CSV containing latitude/longitude coordinates. Using a custom script written in Python 2.7, salinity values were taken at the desired depths and an average was calculated for each 0.25° grid point.

Associated Links

(2) Sea Ice Climatic Atlas: <https://www.canada.ca/en/environment-climate-change/services/ice-forecasts-observations/publications/sea-climatic-atlas-northern-waters-1981-2010.html>; (1, 3, & 4): NOAA: <https://www.nodc.noaa.gov/OC5/woa13/pubwoa13.html>

3280: Pelagic Seascapes



Stratification: >8.55, Ice: SeasonallyOpen, Temperature: <0C, Salinity: <31.8 AA

Date: (1), (3), & (4): 2013; (2) 2013

Open Source: (1) & (3) & (4): Yes; (2) Yes

Organization: (1), (3), & (4): NOAA; (2) Canadian Ice Service

Associated Report: (1) Stratification: NOAA World Ocean Atlas; (2) ice cover regime: Sea Ice Climatic Atlas for the Northern Canadian Waters; (3) temperature: NOAA World Ocean Atlas; (4) salinity: NOAA World Ocean Atlas

Authors: (1) & (3): NOAA World Ocean Atlas (Temperature): R. A. Locarnini, A. V. Mishonov, J. I. Antonov, T. P. Boyer, H. E. Garcia, O. K. Baranova, M. M. Zweng, C. R. Paver, J. R. Reagan, D. R. Johnson, M. Hamilton, and D. Seidov; (1) & (4): NOAA World Ocean Atlas (Salinity): M. M. Zweng, J.R. Reagan, J.I. Antonov, R.A. Locarnini,

Data Summary

Management Unit: N/A

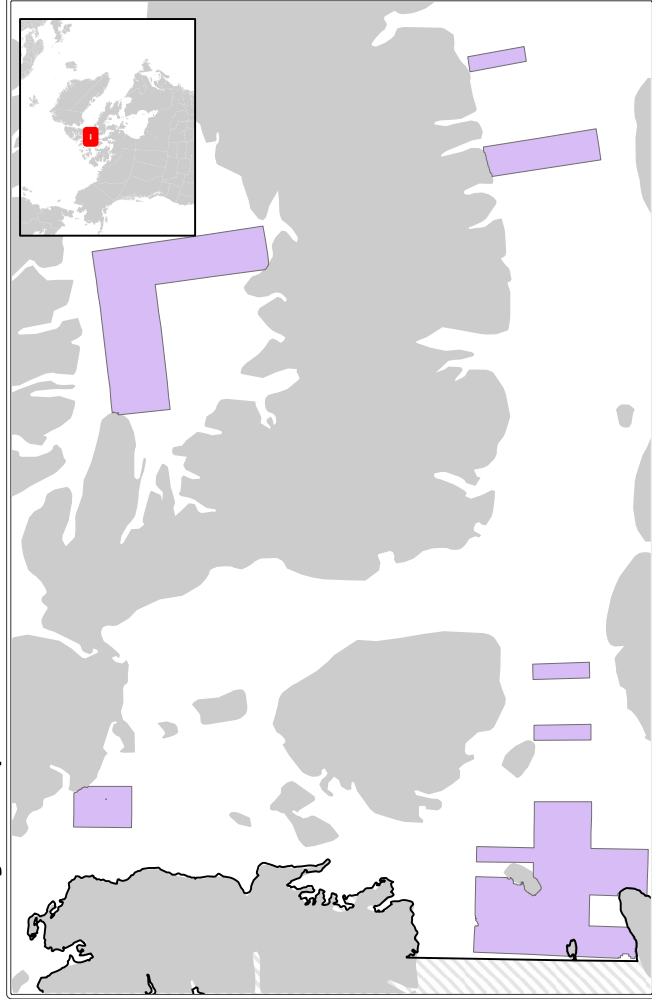
Marine Bioregion: Arctic Archipelago

Description: Pelagic seascapes were identified using three classes of stratification (1), ice cover regime (2), temperature (3), and salinity (4). Once each individual data layer required for construction of the pelagic seascapes had been assembled they were combined using a simple spatial intersection operation in ArcMap 10.2. Following this a generic descriptive attribute was constructed for each individual polygon created by the intersection based on the class values present for each layer involved. Note that areas containing no-data values for 1 or more layer (e.g. shallow coastal areas) were classified generally as NoData. Each assembled seascape type was then split by bioregion. Water column stratification was derived from the temperature and salinity data extracted from NOAA's World Ocean Atlas 2013. Data on long-term mean annual salinity and temperature was selected across the study area at a resolution of 0.25° as a CSV containing latitude/longitude coordinates. Using a custom script written in Python 2.7, stratification was calculated as $\frac{1}{2} \left(\frac{1}{T} + \frac{1}{S} \right)$ using the Seawater-3.3 module. Ice cover regime was assessed using data obtained from the Canadian Ice Service. Using the 30-year (1981-2010) Sea Ice Climatic Atlas's Median Ice Concentration data product, ice cover regimes were classified into 3 categories of permanent ice areas, permanently open, and seasonally open (table 1). This data product comes in the form of 30-year averaged weekly median ice concentrations in vector format. Using a custom Python 2.7 script, polygons with median ice concentrations below 30% (open-water) and above 90% (closed-water) were identified for each weekly dataset and extracted. Temperature data for pelagic seascapes was obtained from NOAA's World Ocean Atlas 2013 (WOD13). Data on long-term mean annual salinity was extracted across the study area at a resolution of 0.25° as a CSV containing latitude/longitude coordinates. Using a custom script written in Python 2.7, temperature values were taken at the desired depths and an average was calculated for each 0.25° grid point. All available values in the upper 30m of the water were considered when calculating averages. Salinity data for pelagic seascapes was obtained from NOAA's World Ocean Atlas 2013. Data on long-term mean annual salinity was extracted across the study area at a resolution of 0.25° as a CSV containing latitude/longitude coordinates. Using a custom script written in Python 2.7, salinity values were taken at the desired depths and an average was calculated for each 0.25° grid point.

Associated Links

(2) Sea Ice Climatic Atlas: <https://www.canada.ca/en/environment-climate-change/services/ice-forecasts-observations/publications/sea-climatic-atlas-northern-waters-1981-2010.html>; (1, 3, & 4): NOAA: <https://www.nodc.noaa.gov/OC5/woa13/pubwoa13.html>

3281: Pelagic Seascapes



Stratification: >8.55, Ice: SeasonallyOpen, Temperature: <0C, Salinity: <31.8 EA

Date: (1), (3), & (4): 2013; (2) 2013

Open Source: (1) & (3) & (4): Yes; (2) Yes

Organization: (1), (3), & (4): NOAA; (2) Canadian Ice Service

Associated Report: (1) Stratification: NOAA World Ocean Atlas; (2) ice cover regime: Sea Ice Climatic Atlas for the Northern Canadian Waters; (3) temperature: NOAA World Ocean Atlas; (4) salinity: NOAA World Ocean Atlas

Authors: (1) & (3): NOAA World Ocean Atlas (Temperature): R. A. Locarnini, A. V. Mishonov, J. I. Antonov, T. P. Boyer, H. E. Garcia, O. K. Baranova, M. M. Zweng, C. R. Paver, J. R. Reagan, D. R. Johnson, M. Hamilton, and D. Seidov; (1) & (4): NOAA World Ocean Atlas (Salinity): M. M. Zweng, J. R. Reagan, J. I. Antonov, R. A. Locarnini,

Data Summary

Management Unit: N/A

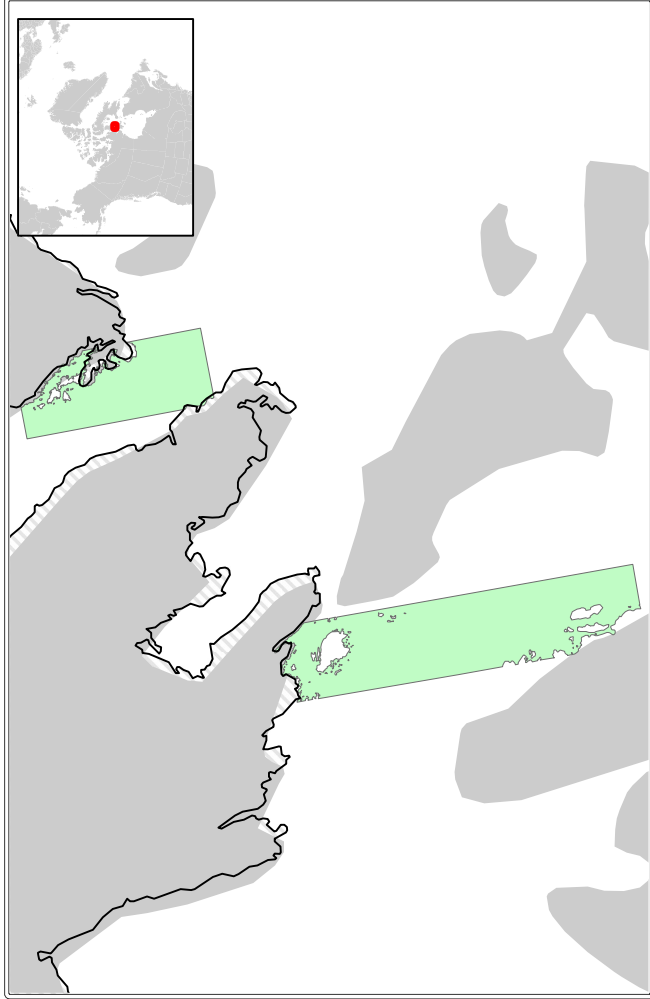
Marine Bioregion: Eastern Arctic

Description: Pelagic seascapes were identified using three classes of stratification (1), ice cover regime (2), temperature (3), and salinity (4). Once each individual data layer required for construction of the pelagic seascapes had been assembled they were combined using a simple spatial intersection operation in ArcMap 10.2. Following this a generic descriptive attribute was constructed for each individual polygon created by the intersection based on the class values present for each layer involved. Note that areas containing no-data values for 1 or more layer (e.g. shallow coastal areas) were classified generally as NoData. Each assembled seascape type was then split by bioregion. Water column stratification was derived from the temperature and salinity data extracted from NOAA's World Ocean Atlas 2013. Data on long-term mean annual salinity and temperature was selected across the study area at a resolution of 0.25° as a CSV containing latitude/longitude coordinates. Using a custom script written in Python 2.7, stratification was calculated as $\frac{1}{2} \left(\frac{1}{T} + \frac{1}{S} \right)$ using the Seawater-3.3 module. Ice cover regime was assessed using data obtained from the Canadian Ice Service. Using the 30-year (1981-2010) Sea Ice Climatic Atlas's Median Ice Concentration data product, ice cover regimes were classified into 3 categories of permanent ice areas, permanently open, and seasonally open (table 1). This data product comes in the form of 30-year averaged weekly median ice concentrations in vector format. Using a custom Python 2.7 script, polygons with median ice concentrations below 30% (open-water) and above 90% (closed-water) were identified for each weekly dataset and extracted. Temperature data for pelagic seascapes was obtained from NOAA's World Ocean Atlas 2013 (WOD13). Data on long-term mean annual salinity was extracted across the study area at a resolution of 0.25° as a CSV containing latitude/longitude coordinates. Using a custom script written in Python 2.7, temperature values were taken at the desired depths and an average was calculated for each 0.25° grid point. All available values in the upper 30m of the water were considered when calculating averages. Salinity data for pelagic seascapes was obtained from NOAA's World Ocean Atlas 2013. Data on long-term mean annual salinity was extracted across the study area at a resolution of 0.25° as a CSV containing latitude/longitude coordinates. Using a custom script written in Python 2.7, salinity values were taken at the desired depths and an average was calculated for each 0.25° grid point.

Associated Links

(2) Sea Ice Climatic Atlas: <https://www.canada.ca/en/environment-climate-change/services/ice-forecasts-observations/publications/sea-climatic-atlas-northern-waters-1981-2010.html>; (1, 3, & 4): NOAA: <https://www.nodc.noaa.gov/OC5/woa13/pubwoa13.html>

3282: Pelagic Seascapes



Stratification: >8.55, Ice: SeasonallyOpen, Temperature: <0C, Salinity: <31.8 HB

Date: (1), (3), & (4): 2013; (2) 2013

Open Source: (1) & (3) & (4): Yes; (2) Yes

Organization: (1), (3), & (4): NOAA; (2) Canadian Ice Service

Associated Report: (1) Stratification: NOAA World Ocean Atlas; (2) ice cover regime: Sea Ice Climatic Atlas for the Northern Canadian Waters; (3) temperature: NOAA World Ocean Atlas; (4) salinity: NOAA World Ocean Atlas

Authors: (1) & (3): NOAA World Ocean Atlas (Temperature): R. A. Locarnini, A. V. Mishonov, J. I. Antonov, T. P. Boyer, H. E. Garcia, O. K. Baranova, M. M. Zweng, C. R. Paver, J. R. Reagan, D. R. Johnson, M. Hamilton, and D. Seidov; (1) & (4): NOAA World Ocean Atlas (Salinity): M. M. Zweng, J. R. Reagan, J. I. Antonov, R. A. Locarnini,

Data Summary

Management Unit: N/A

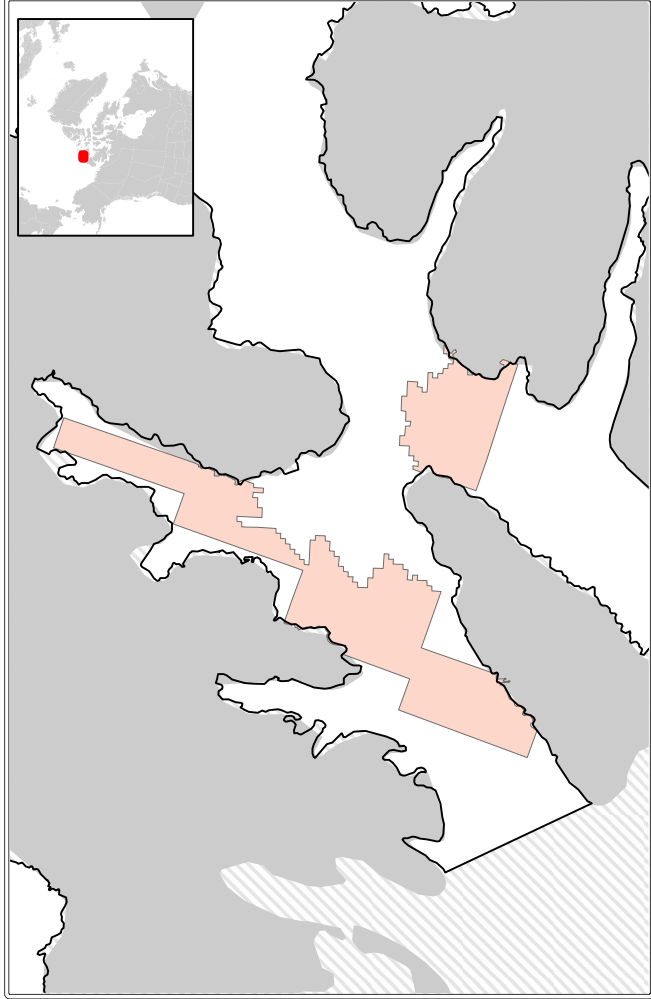
Marine Bioregion: Hudson Bay Complex

Description: Pelagic seascapes were identified using three classes of stratification (1), ice cover regime (2), temperature (3), and salinity (4). Once each individual data layer required for construction of the pelagic seascapes had been assembled they were combined using a simple spatial intersection operation in ArcMap 10.2. Following this a generic descriptive attribute was constructed for each individual polygon created by the intersection based on the class values present for each layer involved. Note that areas containing no-data values for 1 or more layer (e.g. shallow coastal areas) were classified generally as NoData. Each assembled seascape type was then split by bioregion. Water column stratification was derived from the temperature and salinity data extracted from NOAA's World Ocean Atlas 2013. Data on long-term mean annual salinity and temperature was selected across the study area at a resolution of 0.25° as a CSV containing latitude/longitude coordinates. Using a custom script written in Python 2.7, stratification was calculated as $\frac{1}{2} \left(\frac{1}{T} + \frac{1}{S} \right)$ using the Seawater-3.3 module. Ice cover regime was assessed using data obtained from the Canadian Ice Service. Using the 30-year (1981-2010) Sea Ice Climatic Atlas's Median Ice Concentration data product, ice cover regimes were classified into 3 categories of permanent ice areas, permanently open, and seasonally open (table 1). This data product comes in the form of 30-year averaged weekly median ice concentrations in vector format. Using a custom Python 2.7 script, polygons with median ice concentrations below 30% (open-water) and above 90% (closed-water) were identified for each weekly dataset and extracted. Temperature data for pelagic seascapes was obtained from NOAA's World Ocean Atlas 2013 (WOD13). Data on long-term mean annual salinity was extracted across the study area at a resolution of 0.25° as a CSV containing latitude/longitude coordinates. Using a custom script written in Python 2.7, temperature values were taken at the desired depths and an average was calculated for each 0.25° grid point. All available values in the upper 30m of the water were considered when calculating averages. Salinity data for pelagic seascapes was obtained from NOAA's World Ocean Atlas 2013. Data on long-term mean annual salinity was extracted across the study area at a resolution of 0.25° as a CSV containing latitude/longitude coordinates. Using a custom script written in Python 2.7, salinity values were taken at the desired depths and an average was calculated for each 0.25° grid point.

Associated Links

(2) Sea Ice Climatic Atlas: <https://www.canada.ca/en/environment-climate-change/services/ice-forecasts-observations/publications/sea-climatic-atlas-northern-waters-1981-2010.html>; (1, 3, & 4): NOAA: <https://www.nodc.noaa.gov/OC5/woa13/pubwoa13.html>

3283: Pelagic Seascapes



Stratification: >8.55, Ice: SeasonallyOpen, Temperature: <2C, Salinity: <30.4 AA

Date: (1), (3), & (4): 2013; (2) 2013

Open Source: (1) & (3) & (4): Yes; (2) Yes

Organization: (1), (3), & (4): NOAA; (2) Canadian Ice Service

Associated Report: (1) Stratification: NOAA World Ocean Atlas; (2) ice cover regime: Sea Ice Climatic Atlas for the Northern Canadian Waters ; (3) temperature: NOAA World Ocean Atlas ; (4) salinity: NOAA World Ocean Atlas

Authors: (1) & (3): NOAA World Ocean Atlas (Temperature): R. A. Locarnini, A. V. Mishonov, J. I. Antonov, T. P. Boyer, H. E. Garcia, O. K. Baranova, M. M. Zweng, C. R. Paver, J. R. Reagan, D. R. Johnson, M. Hamilton, and D. Seidov; (1) & (4): NOAA World Ocean Atlas (Salinity): M. M. Zweng, J.R. Reagan, J.I. Antonov, R.A. Locarnini,

Data Summary

Management Unit: N/A

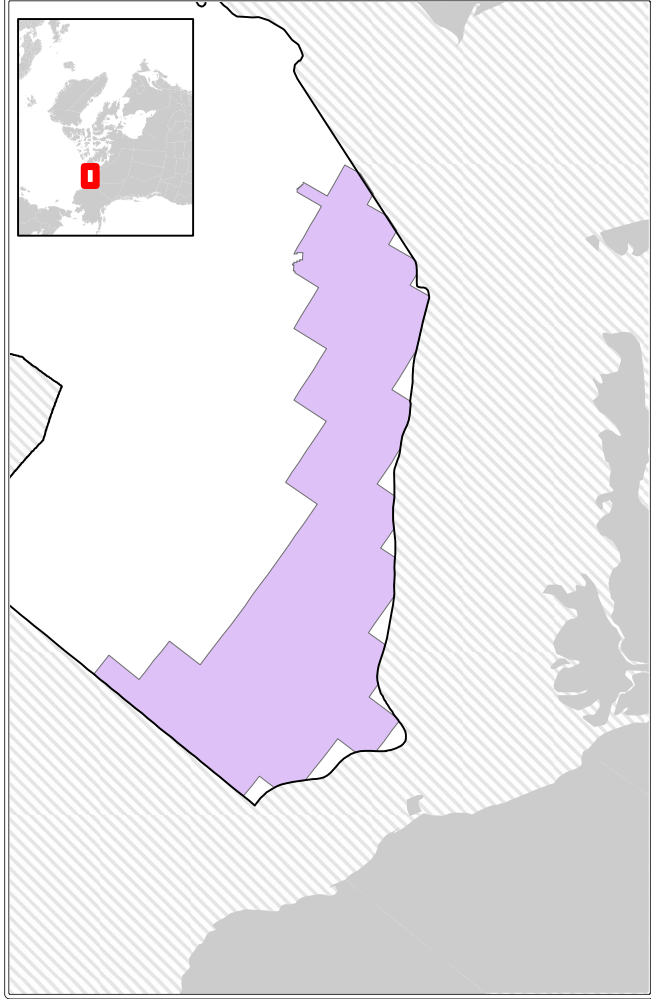
Marine Bioregion: Arctic Archipelago

Description: Pelagic seascapes were identified using three classes of stratification (1), ice cover regime (2), temperature (3), and salinity (4). Once each individual data layer required for construction of the pelagic seascapes had been assembled they were combined using a simple spatial intersection operation in ArcMap 10.2. Following this a generic descriptive attribute was constructed for each individual polygon created by the intersection based on the class values present for each layer involved. Note that areas containing no-data values for 1 or more layer (e.g. shallow coastal areas) were classified generally as NoData. Each assembled seascape type was then split by bioregion. Water column stratification was derived from the temperature and salinity data extracted from NOAA's World Ocean Atlas 2013. Data on long-term mean annual salinity and temperature was selected across the study area at a resolution of 0.25° as a CSV containing latitude/longitude coordinates. Using a custom script written in Python 2.7, stratification was calculated as $\frac{1}{2} \left(\frac{1}{T} + \frac{1}{S} \right)$ using the Seawater-3.3 module. Ice cover regime was assessed using data obtained from the Canadian Ice Service. Using the 30-year (1981-2010) Sea Ice Climatic Atlas's Median Ice Concentration data product, ice cover regimes were classified into 3 categories of permanent ice areas, permanently open, and seasonally open (table 1). This data product comes in the form of 30-year averaged weekly median ice concentrations in vector format. Using a custom Python 2.7 script, polygons with median ice concentrations below 30% (open-water) and above 90% (closed-water) were identified for each weekly dataset and extracted. Temperature data for pelagic seascapes was obtained from NOAA's World Ocean Atlas 2013 (WOD13). Data on long-term mean annual salinity was extracted across the study area at a resolution of 0.25° as a CSV containing latitude/longitude coordinates. Using a custom script written in Python 2.7, temperature values were taken at the desired depths and an average was calculated for each 0.25° grid point. All available values in the upper 30m of the water were considered when calculating averages. Salinity data for pelagic seascapes was obtained from NOAA's World Ocean Atlas 2013. Data on long-term mean annual salinity was extracted across the study area at a resolution of 0.25° as a CSV containing latitude/longitude coordinates. Using a custom script written in Python 2.7, salinity values were taken at the desired depths and an average was calculated for each 0.25° grid point.

Associated Links

(2) Sea Ice Climatic Atlas: <https://www.canada.ca/en/environment-climate-change/services/ice-forecasts-observations/publications/sea-climatic-atlas-northern-waters-1981-2010.html>; (1, 3, & 4): NOAA: <https://www.nodc.noaa.gov/OC5/woa13/pubwoa13.html>

3284: Pelagic Seascapes



Stratification: >8.55, Ice: SeasonallyOpen, Temperature: <2C, Salinity: <30.4 AB

Date: (1), (3), & (4): 2013; (2) 2013

Open Source: (1) & (3) & (4): Yes; (2) Yes

Organization: (1), (3), & (4): NOAA; (2) Canadian Ice Service

Associated Report: (1) Stratification: NOAA World Ocean Atlas; (2) ice cover regime: Sea Ice Climatic Atlas for the Northern Canadian Waters; (3) temperature: NOAA World Ocean Atlas; (4) salinity: NOAA World Ocean Atlas

Authors: (1) & (3): NOAA World Ocean Atlas (Temperature): R. A. Locarnini, A. V. Mishonov, J. I. Antonov, T. P. Boyer, H. E. Garcia, O. K. Baranova, M. M. Zweng, C. R. Paver, J. R. Reagan, D. R. Johnson, M. Hamilton, and D. Seidov; (1) & (4): NOAA World Ocean Atlas (Salinity): M. M. Zweng, J. R. Reagan, J. I. Antonov, R. A. Locarnini,

Data Summary

Management Unit: N/A

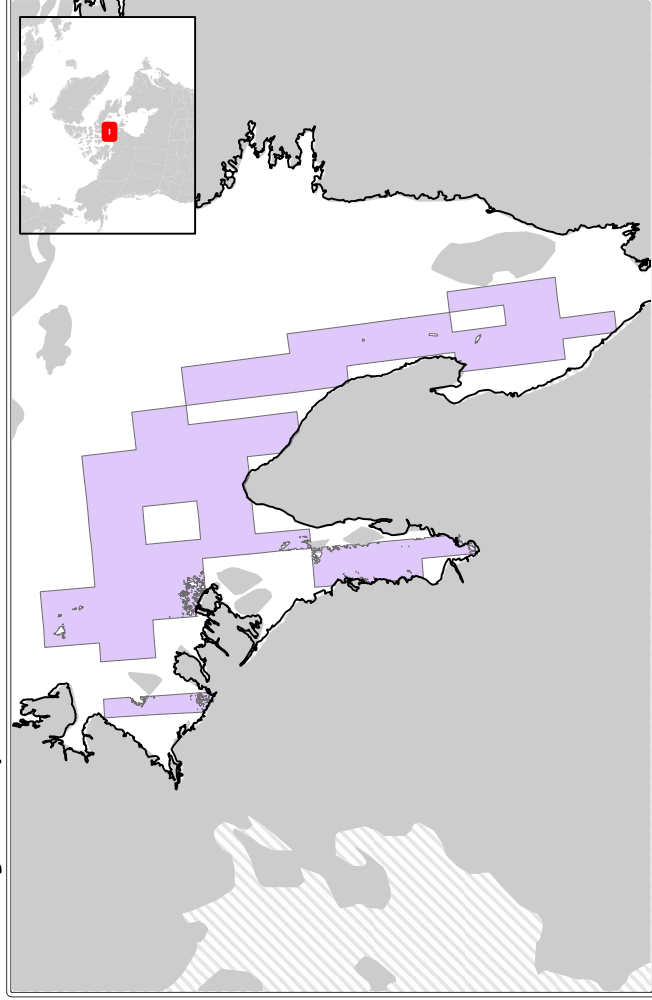
Marine Bioregion: Arctic Basin

Description: Pelagic seascapes were identified using three classes of stratification (1), ice cover regime (2), temperature (3), and salinity (4). Once each individual data layer required for construction of the pelagic seascapes had been assembled they were combined using a simple spatial intersection operation in ArcMap 10.2. Following this a generic descriptive attribute was constructed for each individual polygon created by the intersection based on the class values present for each layer involved. Note that areas containing no-data values for 1 or more layer (e.g. shallow coastal areas) were classified generally as NoData. Each assembled seascape type was then split by bioregion. Water column stratification was derived from the temperature and salinity data extracted from NOAA's World Ocean Atlas 2013. Data on long-term mean annual salinity and temperature was selected across the study area at a resolution of 0.25° as a CSV containing latitude/longitude coordinates. Using a custom script written in Python 2.7, stratification was calculated as $\frac{1}{2}(\frac{1}{T} + \frac{1}{S})$ using the Seawater-3.3 module. Ice cover regime was assessed using data obtained from the Canadian Ice Service. Using the 30-year (1981-2010) Sea Ice Climatic Atlas's Median Ice Concentration data product, ice cover regimes were classified into 3 categories of permanent ice areas, permanently open, and seasonally open (table 1). This data product comes in the form of 30-year averaged weekly median ice concentrations in vector format. Using a custom Python 2.7 script, polygons with median ice concentrations below 30% (open-water) and above 90% (closed-water) were identified for each weekly dataset and extracted. Temperature data for pelagic seascapes was obtained from NOAA's World Ocean Atlas 2013 (WOD13). Data on long-term mean annual salinity was extracted across the study area at a resolution of 0.25° as a CSV containing latitude/longitude coordinates. Using a custom script written in Python 2.7, temperature values were taken at the desired depths and an average was calculated for each 0.25° grid point. All available values in the upper 30m of the water were considered when calculating averages. Salinity data for pelagic seascapes was obtained from NOAA's World Ocean Atlas 2013. Data on long-term mean annual salinity was extracted across the study area at a resolution of 0.25° as a CSV containing latitude/longitude coordinates. Using a custom script written in Python 2.7, salinity values were taken at the desired depths and an average was calculated for each 0.25° grid point.

Associated Links

(2) Sea Ice Climatic Atlas: <https://www.canada.ca/en/environment-climate-change/services/ice-forecasts-observations/publications/sea-climatic-atlas-northern-waters-1981-2010.html>; (1, 3, & 4): NOAA: <https://www.nodc.noaa.gov/OC5/woa13/pubwoa13.html>

3285: Pelagic Seascapes



Stratification: >8.55, Ice: SeasonallyOpen, Temperature: <2C, Salinity: <30.4 EA

Date: (1), (3), & (4): 2013; (2) 2013

Open Source: (1) & (3) & (4): Yes; (2) Yes

Organization: (1), (3), & (4): NOAA; (2) Canadian Ice Service

Associated Report: (1) Stratification: NOAA World Ocean Atlas; (2) ice cover regime: Sea Ice Climatic Atlas for the Northern Canadian Waters; (3) temperature: NOAA World Ocean Atlas; (4) salinity: NOAA World Ocean Atlas

Authors: (1) & (3): NOAA World Ocean Atlas (Temperature): R. A. Locarnini, A. V. Mishonov, J. I. Antonov, T. P. Boyer, H. E. Garcia, O. K. Baranova, M. M. Zweng, C. R. Paver, J. R. Reagan, D. R. Johnson, M. Hamilton, and D. Seidov; (1) & (4): NOAA World Ocean Atlas (Salinity): M. M. Zweng, J. R. Reagan, J. I. Antonov, R. A. Locarnini,

Data Summary

Management Unit: N/A

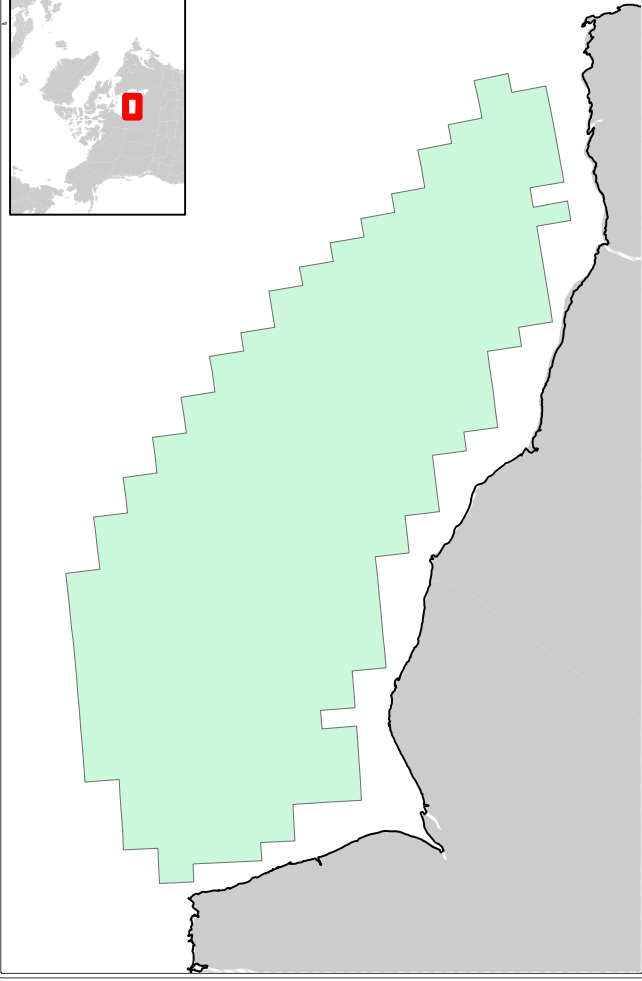
Marine Bioregion: Eastern Arctic

Description: Pelagic seascapes were identified using three classes of stratification (1), ice cover regime (2), temperature (3), and salinity (4). Once each individual data layer required for construction of the pelagic seascapes had been assembled they were combined using a simple spatial intersection operation in ArcMap 10.2. Following this a generic descriptive attribute was constructed for each individual polygon created by the intersection based on the class values present for each layer involved. Note that areas containing no-data values for 1 or more layer (e.g. shallow coastal areas) were classified generally as NoData. Each assembled seascape type was then split by bioregion. Water column stratification was derived from the temperature and salinity data extracted from NOAA's World Ocean Atlas 2013. Data on long-term mean annual salinity and temperature was selected across the study area at a resolution of 0.25° as a CSV containing latitude/longitude coordinates. Using a custom script written in Python 2.7, stratification was calculated as $\frac{1}{2} \left(\frac{1}{T} + \frac{1}{S} \right)$ using the Seawater-3.3 module. Ice cover regime was assessed using data obtained from the Canadian Ice Service. Using the 30-year (1981-2010) Sea Ice Climatic Atlas's Median Ice Concentration data product, ice cover regimes were classified into 3 categories of permanent ice areas, permanently open, and seasonally open (table 1). This data product comes in the form of 30-year averaged weekly median ice concentrations in vector format. Using a custom Python 2.7 script, polygons with median ice concentrations below 30% (open-water) and above 90% (closed-water) were identified for each weekly dataset and extracted. Temperature data for pelagic seascapes was obtained from NOAA's World Ocean Atlas 2013 (WOD13). Data on long-term mean annual salinity was extracted across the study area at a resolution of 0.25° as a CSV containing latitude/longitude coordinates. Using a custom script written in Python 2.7, temperature values were taken at the desired depths and an average was calculated for each 0.25° grid point. All available values in the upper 30m of the water were considered when calculating averages. Salinity data for pelagic seascapes was obtained from NOAA's World Ocean Atlas 2013. Data on long-term mean annual salinity was extracted across the study area at a resolution of 0.25° as a CSV containing latitude/longitude coordinates. Using a custom script written in Python 2.7, salinity values were taken at the desired depths and an average was calculated for each 0.25° grid point.

Associated Links

(2) Sea Ice Climatic Atlas: <https://www.canada.ca/en/environment-climate-change/services/ice-forecasts-observations/publications/sea-climatic-atlas-northern-waters-1981-2010.html>; (1, 3, & 4): NOAA: <https://www.nodc.noaa.gov/OC5/woa13/pubwoa13.html>

3286: Pelagic Seascapes



Stratification: >8.55, Ice: SeasonallyOpen, Temperature: <2C, Salinity: <30.4 HB

Date: (1), (3), & (4): 2013; (2) 2013

Open Source: (1) & (3) & (4): Yes; (2) Yes

Organization: (1), (3), & (4): NOAA; (2) Canadian Ice Service

Associated Report: (1) Stratification: NOAA World Ocean Atlas; (2) ice cover regime: Sea Ice Climatic Atlas for the Northern Canadian Waters; (3) temperature: NOAA World Ocean Atlas; (4) salinity: NOAA World Ocean Atlas

Authors: (1) & (3): NOAA World Ocean Atlas (Temperature): R. A. Locarnini, A. V. Mishonov, J. I. Antonov, T. P. Boyer, H. E. Garcia, O. K. Baranova, M. M. Zweng, C. R. Paver, J. R. Reagan, D. R. Johnson, M. Hamilton, and D. Seidov; (1) & (4): NOAA World Ocean Atlas (Salinity): M. M. Zweng, J. R. Reagan, J. I. Antonov, R. A. Locarnini,

Data Summary

Management Unit: N/A

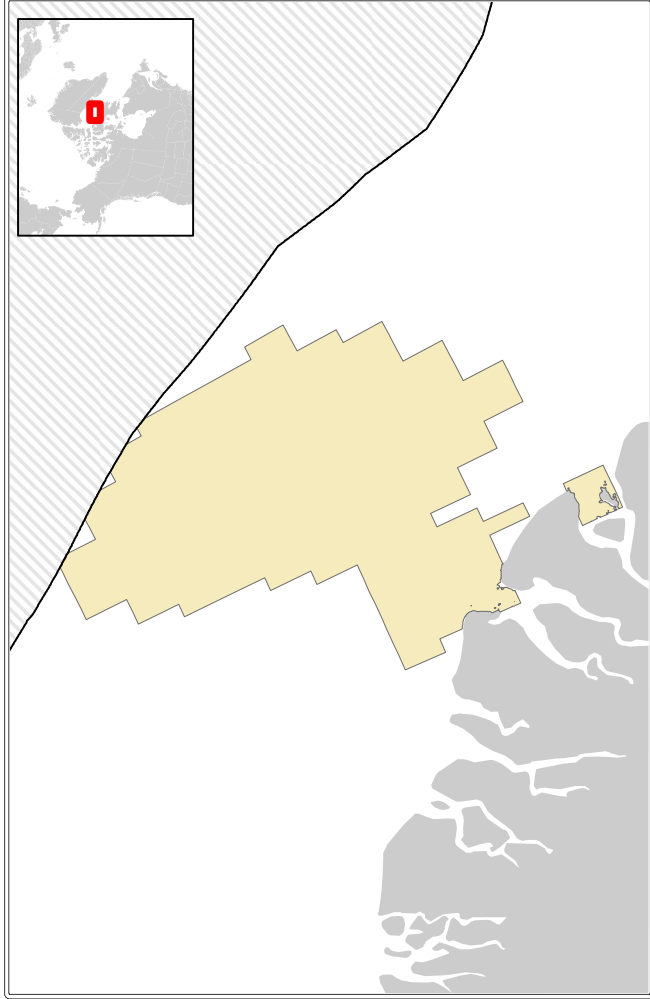
Marine Bioregion: Hudson Bay Complex

Description: Pelagic seascapes were identified using three classes of stratification (1), ice cover regime (2), temperature (3), and salinity (4). Once each individual data layer required for construction of the pelagic seascapes had been assembled they were combined using a simple spatial intersection operation in ArcMap 10.2. Following this a generic descriptive attribute was constructed for each individual polygon created by the intersection based on the class values present for each layer involved. Note that areas containing no-data values for 1 or more layer (e.g. shallow coastal areas) were classified generally as NoData. Each assembled seascape type was then split by bioregion. Water column stratification was derived from the temperature and salinity data extracted from NOAA's World Ocean Atlas 2013. Data on long-term mean annual salinity and temperature was selected across the study area at a resolution of 0.25° as a CSV containing latitude/longitude coordinates. Using a custom script written in Python 2.7, stratification was calculated as $\frac{1}{2} \left(\frac{1}{T} + \frac{1}{S} \right)$ using the Seawater-3.3 module. Ice cover regime was assessed using data obtained from the Canadian Ice Service. Using the 30-year (1981-2010) Sea Ice Climatic Atlas's Median Ice Concentration data product, ice cover regimes were classified into 3 categories of permanent ice areas, permanently open, and seasonally open (table 1). This data product comes in the form of 30-year averaged weekly median ice concentrations in vector format. Using a custom Python 2.7 script, polygons with median ice concentrations below 30% (open-water) and above 90% (closed-water) were identified for each weekly dataset and extracted. Temperature data for pelagic seascapes was obtained from NOAA's World Ocean Atlas 2013 (WOD13). Data on long-term mean annual salinity was extracted across the study area at a resolution of 0.25° as a CSV containing latitude/longitude coordinates. Using a custom script written in Python 2.7, temperature values were taken at the desired depths and an average was calculated for each 0.25° grid point. All available values in the upper 30m of the water were considered when calculating averages. Salinity data for pelagic seascapes was obtained from NOAA's World Ocean Atlas 2013. Data on long-term mean annual salinity was extracted across the study area at a resolution of 0.25° as a CSV containing latitude/longitude coordinates. Using a custom script written in Python 2.7, salinity values were taken at the desired depths and an average was calculated for each 0.25° grid point.

Associated Links

(2) Sea Ice Climatic Atlas: <https://www.canada.ca/en/environment-climate-change/services/ice-forecasts-observations/publications/sea-climatic-atlas-northern-waters-1981-2010.html>; (1, 3, & 4): NOAA: <https://www.nodc.noaa.gov/OC5/woa13/pubwoa13.html>

3287: Pelagic Seascapes



Stratification: >8.55, Ice: SeasonallyOpen, Temperature: <2C, Salinity: <31.8 EA

Date: (1), (3), & (4): 2013; (2) 2013

Open Source: (1) & (3) & (4): Yes; (2) Yes

Organization: (1), (3), & (4): NOAA; (2) Canadian Ice Service

Associated Report: (1) Stratification: NOAA World Ocean Atlas; (2) ice cover regime: Sea Ice Climatic Atlas for the Northern Canadian Waters; (3) temperature: NOAA World Ocean Atlas; (4) salinity: NOAA World Ocean Atlas

Authors: (1) & (3): NOAA World Ocean Atlas (Temperature): R. A. Locarnini, A. V. Mishonov, J. I. Antonov, T. P. Boyer, H. E. Garcia, O. K. Baranova, M. M. Zweng, C. R. Paver, J. R. Reagan, D. R. Johnson, M. Hamilton, and D. Seidov; (1) & (4): NOAA World Ocean Atlas (Salinity): M. M. Zweng, J. R. Reagan, J. I. Antonov, R. A. Locarnini,

Data Summary

Management Unit: N/A

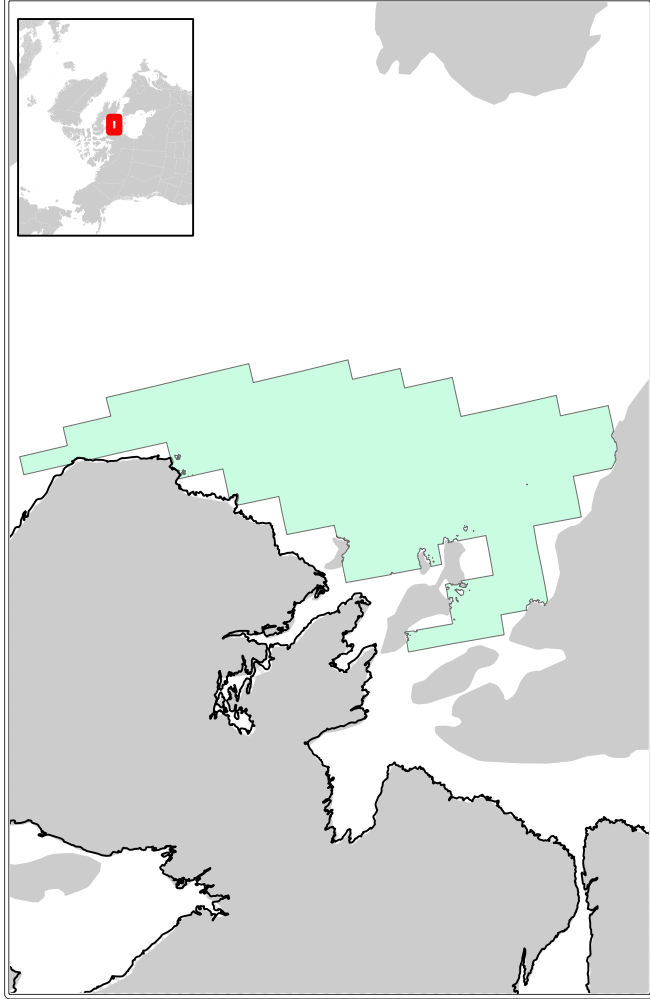
Marine Bioregion: Eastern Arctic

Description: Pelagic seascapes were identified using three classes of stratification (1), ice cover regime (2), temperature (3), and salinity (4). Once each individual data layer required for construction of the pelagic seascapes had been assembled they were combined using a simple spatial intersection operation in ArcMap 10.2. Following this a generic descriptive attribute was constructed for each individual polygon created by the intersection based on the class values present for each layer involved. Note that areas containing no-data values for 1 or more layer (e.g. shallow coastal areas) were classified generally as NoData. Each assembled seascape type was then split by bioregion. Water column stratification was derived from the temperature and salinity data extracted from NOAA's World Ocean Atlas 2013. Data on long-term mean annual salinity and temperature was selected across the study area at a resolution of 0.25° as a CSV containing latitude/longitude coordinates. Using a custom script written in Python 2.7, stratification was calculated as $\frac{1}{2} \left(\frac{1}{T} + \frac{1}{S} \right)$ using the Seawater-3.3 module. Ice cover regime was assessed using data obtained from the Canadian Ice Service. Using the 30-year (1981-2010) Sea Ice Climatic Atlas's Median Ice Concentration data product, ice cover regimes were classified into 3 categories of permanent ice areas, permanently open, and seasonally open (table 1). This data product comes in the form of 30-year averaged weekly median ice concentrations in vector format. Using a custom Python 2.7 script, polygons with median ice concentrations below 30% (open-water) and above 90% (closed-water) were identified for each weekly dataset and extracted. Temperature data for pelagic seascapes was obtained from NOAA's World Ocean Atlas 2013 (WOD13). Data on long-term mean annual salinity was extracted across the study area at a resolution of 0.25° as a CSV containing latitude/longitude coordinates. Using a custom script written in Python 2.7, temperature values were taken at the desired depths and an average was calculated for each 0.25° grid point. All available values in the upper 30m of the water were considered when calculating averages. Salinity data for pelagic seascapes was obtained from NOAA's World Ocean Atlas 2013. Data on long-term mean annual salinity was extracted across the study area at a resolution of 0.25° as a CSV containing latitude/longitude coordinates. Using a custom script written in Python 2.7, salinity values were taken at the desired depths and an average was calculated for each 0.25° grid point.

Associated Links

(2) Sea Ice Climatic Atlas: <https://www.canada.ca/en/environment-climate-change/services/ice-forecasts-observations/publications/sea-climatic-atlas-northern-waters-1981-2010.html>; (1, 3, & 4): NOAA: <https://www.nodc.noaa.gov/OC5/woa13/pubwoa13.html>

3288: Pelagic Seascapes



Stratification: >8.55, Ice: SeasonallyOpen, Temperature: <2C, Salinity: <31.8 HB

Date: (1), (3), & (4): 2013; (2) 2013

Open Source: (1) & (3) & (4): Yes; (2) Yes

Organization: (1), (3), & (4): NOAA; (2) Canadian Ice Service

Associated Report: (1) Stratification: NOAA World Ocean Atlas; (2) ice cover regime: Sea Ice Climatic Atlas for the Northern Canadian Waters; (3) temperature: NOAA World Ocean Atlas; (4) salinity: NOAA World Ocean Atlas

Authors: (1) & (3): NOAA World Ocean Atlas (Temperature): R. A. Locarnini, A. V. Mishonov, J. I. Antonov, T. P. Boyer, H. E. Garcia, O. K. Baranova, M. M. Zweng, C. R. Paver, J. R. Reagan, D. R. Johnson, M. Hamilton, and D. Seidov; (1) & (4): NOAA World Ocean Atlas (Salinity): M. M. Zweng, J. R. Reagan, J. I. Antonov, R. A. Locarnini,

Data Summary

Management Unit: N/A

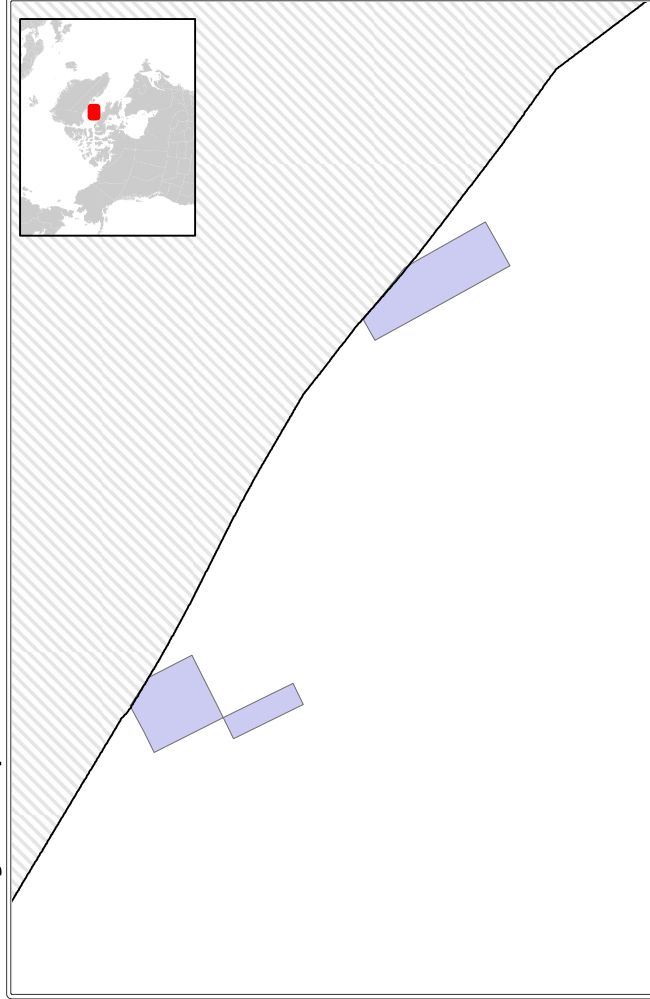
Marine Bioregion: Hudson Bay Complex

Description: Pelagic seascapes were identified using three classes of stratification (1), ice cover regime (2), temperature (3), and salinity (4). Once each individual data layer required for construction of the pelagic seascapes had been assembled they were combined using a simple spatial intersection operation in ArcMap 10.2. Following this a generic descriptive attribute was constructed for each individual polygon created by the intersection based on the class values present for each layer involved. Note that areas containing no-data values for 1 or more layer (e.g. shallow coastal areas) were classified generally as NoData. Each assembled seascape type was then split by bioregion. Water column stratification was derived from the temperature and salinity data extracted from NOAA's World Ocean Atlas 2013. Data on long-term mean annual salinity and temperature was selected across the study area at a resolution of 0.25° as a CSV containing latitude/longitude coordinates. Using a custom script written in Python 2.7, stratification was calculated as $\frac{1}{2} \left(\frac{1}{T} + \frac{1}{S} \right)$ using the Seawater-3.3 module. Ice cover regime was assessed using data obtained from the Canadian Ice Service. Using the 30-year (1981-2010) Sea Ice Climatic Atlas's Median Ice Concentration data product, ice cover regimes were classified into 3 categories of permanent ice areas, permanently open, and seasonally open (table 1). This data product comes in the form of 30-year averaged weekly median ice concentrations in vector format. Using a custom Python 2.7 script, polygons with median ice concentrations below 30% (open-water) and above 90% (closed-water) were identified for each weekly dataset and extracted. Temperature data for pelagic seascapes was obtained from NOAA's World Ocean Atlas 2013 (WOD13). Data on long-term mean annual salinity was extracted across the study area at a resolution of 0.25° as a CSV containing latitude/longitude coordinates. Using a custom script written in Python 2.7, temperature values were taken at the desired depths and an average was calculated for each 0.25° grid point. All available values in the upper 30m of the water were considered when calculating averages. Salinity data for pelagic seascapes was obtained from NOAA's World Ocean Atlas 2013. Data on long-term mean annual salinity was extracted across the study area at a resolution of 0.25° as a CSV containing latitude/longitude coordinates. Using a custom script written in Python 2.7, salinity values were taken at the desired depths and an average was calculated for each 0.25° grid point.

Associated Links

(2) Sea Ice Climatic Atlas: <https://www.canada.ca/en/environment-climate-change/services/ice-forecasts-observations/publications/sea-climatic-atlas-northern-waters-1981-2010.html>; (1, 3, & 4): NOAA: <https://www.nodc.noaa.gov/OC5/woa13/pubwoa13.html>

3289: Pelagic Seascapes



Stratification: >8.55, Ice: SeasonallyOpen, Temperature: <2C, Salinity: >31.8 EA

Date: (1), (3), & (4): 2013; (2) 2013

Open Source: (1) & (3) & (4): Yes; (2) Yes

Organization: (1), (3), & (4): NOAA; (2) Canadian Ice Service

Associated Report: (1) Stratification: NOAA World Ocean Atlas; (2) ice cover regime: Sea Ice Climatic Atlas for the Northern Canadian Waters; (3) temperature: NOAA World Ocean Atlas; (4) salinity: NOAA World Ocean Atlas

Authors: (1) & (3): NOAA World Ocean Atlas (Temperature): R. A. Locarnini, A. V. Mishonov, J. I. Antonov, T. P. Boyer, H. E. Garcia, O. K. Baranova, M. M. Zweng, C. R. Paver, J. R. Reagan, D. R. Johnson, M. Hamilton, and D. Seidov; (1) & (4): NOAA World Ocean Atlas (Salinity): M. M. Zweng, J. R. Reagan, J. I. Antonov, R. A. Locarnini,

Data Summary

Management Unit: N/A

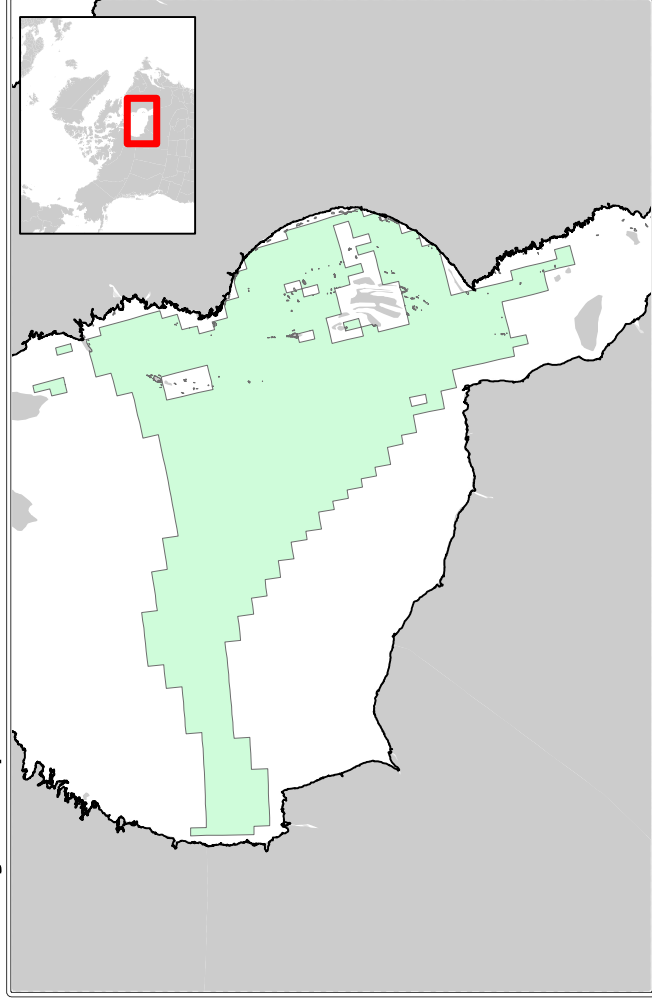
Marine Bioregion: Eastern Arctic

Description: Pelagic seascapes were identified using three classes of stratification (1), ice cover regime (2), temperature (3), and salinity (4). Once each individual data layer required for construction of the pelagic seascapes had been assembled they were combined using a simple spatial intersection operation in ArcMap 10.2. Following this a generic descriptive attribute was constructed for each individual polygon created by the intersection based on the class values present for each layer involved. Note that areas containing no-data values for 1 or more layer (e.g. shallow coastal areas) were classified generally as NoData. Each assembled seascape type was then split by bioregion. Water column stratification was derived from the temperature and salinity data extracted from NOAA's World Ocean Atlas 2013. Data on long-term mean annual salinity and temperature was selected across the study area at a resolution of 0.25° as a CSV containing latitude/longitude coordinates. Using a custom script written in Python 2.7, stratification was calculated as $\frac{1}{2} \left(\frac{1}{T} + \frac{1}{S} \right)$ using the Seawater-3.3 module. Ice cover regime was assessed using data obtained from the Canadian Ice Service. Using the 30-year (1981-2010) Sea Ice Climatic Atlas's Median Ice Concentration data product, ice cover regimes were classified into 3 categories of permanent ice areas, permanently open, and seasonally open (table 1). This data product comes in the form of 30-year averaged weekly median ice concentrations in vector format. Using a custom Python 2.7 script, polygons with median ice concentrations below 30% (open-water) and above 90% (closed-water) were identified for each weekly dataset and extracted. Temperature data for pelagic seascapes was obtained from NOAA's World Ocean Atlas 2013 (WOD13). Data on long-term mean annual salinity was extracted across the study area at a resolution of 0.25° as a CSV containing latitude/longitude coordinates. Using a custom script written in Python 2.7, temperature values were taken at the desired depths and an average was calculated for each 0.25° grid point. All available values in the upper 30m of the water were considered when calculating averages. Salinity data for pelagic seascapes was obtained from NOAA's World Ocean Atlas 2013. Data on long-term mean annual salinity was extracted across the study area at a resolution of 0.25° as a CSV containing latitude/longitude coordinates. Using a custom script written in Python 2.7, salinity values were taken at the desired depths and an average was calculated for each 0.25° grid point.

Associated Links

(2) Sea Ice Climatic Atlas: <https://www.canada.ca/en/environment-climate-change/services/ice-forecasts-observations/publications/sea-climatic-atlas-northern-waters-1981-2010.html>; (1, 3, & 4): NOAA: <https://www.nodc.noaa.gov/OC5/woa13/pubwoa13.html>

3290: Pelagic Seascapes



Stratification: >8.55, Ice: SeasonallyOpen, Temperature: >2C, Salinity: <30.4 HB

Date: (1), (3), & (4): 2013; (2) 2013

Open Source: (1) & (3) & (4): Yes; (2) Yes

Organization: (1), (3), & (4): NOAA; (2) Canadian Ice Service

Associated Report: (1) Stratification: NOAA World Ocean Atlas; (2) ice cover regime: Sea Ice Climatic Atlas for the Northern Canadian Waters; (3) temperature: NOAA World Ocean Atlas; (4) salinity: NOAA World Ocean Atlas

Authors: (1) & (3): NOAA World Ocean Atlas (Temperature): R. A. Locarnini, A. V. Mishonov, J. I. Antonov, T. P. Boyer, H. E. Garcia, O. K. Baranova, M. M. Zweng, C. R. Paver, J. R. Reagan, D. R. Johnson, M. Hamilton, and D. Seidov; (1) & (4): NOAA World Ocean Atlas (Salinity): M. M. Zweng, J. R. Reagan, J. I. Antonov, R. A. Locarnini,

Data Summary

Management Unit: N/A

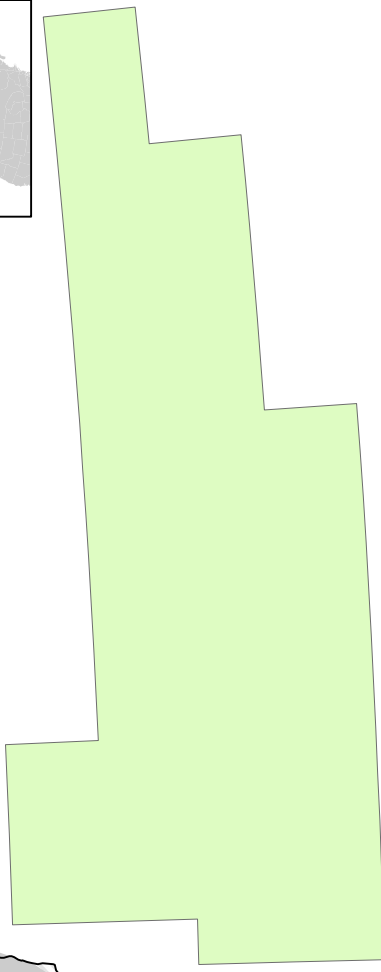
Marine Bioregion: Hudson Bay Complex

Description: Pelagic seascapes were identified using three classes of stratification (1), ice cover regime (2), temperature (3), and salinity (4). Once each individual data layer required for construction of the pelagic seascapes had been assembled they were combined using a simple spatial intersection operation in ArcMap 10.2. Following this a generic descriptive attribute was constructed for each individual polygon created by the intersection based on the class values present for each layer involved. Note that areas containing no-data values for 1 or more layer (e.g. shallow coastal areas) were classified generally as NoData. Each assembled seascape type was then split by bioregion. Water column stratification was derived from the temperature and salinity data extracted from NOAA's World Ocean Atlas 2013. Data on long-term mean annual salinity and temperature was selected across the study area at a resolution of 0.25° as a CSV containing latitude/longitude coordinates. Using a custom script written in Python 2.7, stratification was calculated as $\frac{1}{2} \left(\frac{1}{T} + \frac{1}{S} \right)$ using the Seawater-3.3 module. Ice cover regime was assessed using data obtained from the Canadian Ice Service. Using the 30-year (1981-2010) Sea Ice Climatic Atlas's Median Ice Concentration data product, ice cover regimes were classified into 3 categories of permanent ice areas, permanently open, and seasonally open (table 1). This data product comes in the form of 30-year averaged weekly median ice concentrations in vector format. Using a custom Python 2.7 script, polygons with median ice concentrations below 30% (open-water) and above 90% (closed-water) were identified for each weekly dataset and extracted. Temperature data for pelagic seascapes was obtained from NOAA's World Ocean Atlas 2013 (WOD13). Data on long-term mean annual salinity was extracted across the study area at a resolution of 0.25° as a CSV containing latitude/longitude coordinates. Using a custom script written in Python 2.7, temperature values were taken at the desired depths and an average was calculated for each 0.25° grid point. All available values in the upper 30m of the water were considered when calculating averages. Salinity data for pelagic seascapes was obtained from NOAA's World Ocean Atlas 2013. Data on long-term mean annual salinity was extracted across the study area at a resolution of 0.25° as a CSV containing latitude/longitude coordinates. Using a custom script written in Python 2.7, salinity values were taken at the desired depths and an average was calculated for each 0.25° grid point.

Associated Links

(2) Sea Ice Climatic Atlas: <https://www.canada.ca/en/environment-climate-change/services/ice-forecasts-observations/publications/sea-climatic-atlas-northern-waters-1981-2010.html>; (1, 3, & 4): NOAA: <https://www.nodc.noaa.gov/OC5/woa13/pubwoa13.html>

3291: Pelagic Seascapes



Stratification: >8.55, Ice: SeasonallyOpen, Temperature: >2C, Salinity: <31.8 HB

Date: (1), (3), & (4): 2013; (2) 2013

Open Source: (1) & (3) & (4): Yes; (2) Yes

Organization: (1), (3), & (4): NOAA; (2) Canadian Ice Service

Associated Report: (1) Stratification: NOAA World Ocean Atlas; (2) ice cover regime: Sea Ice Climatic Atlas for the Northern Canadian Waters; (3) temperature: NOAA World Ocean Atlas; (4) salinity: NOAA World Ocean Atlas

Authors: (1) & (3): NOAA World Ocean Atlas (Temperature): R. A. Locarnini, A. V. Mishonov, J. I. Antonov, T. P. Boyer, H. E. Garcia, O. K. Baranova, M. M. Zweng, C. R. Paver, J. R. Reagan, D. R. Johnson, M. Hamilton, and D. Seidov; (1) & (4): NOAA World Ocean Atlas (Salinity): M. M. Zweng, J. R. Reagan, J. I. Antonov, R. A. Locarnini,

Data Summary

Management Unit: N/A

Marine Bioregion: Hudson Bay Complex

Description: Pelagic seascapes were identified using three classes of stratification (1), ice cover regime (2), temperature (3), and salinity (4). Once each individual data layer required for construction of the pelagic seascapes had been assembled they were combined using a simple spatial intersection operation in ArcMap 10.2. Following this a generic descriptive attribute was constructed for each individual polygon created by the intersection based on the class values present for each layer involved. Note that areas containing no-data values for 1 or more layer (e.g. shallow coastal areas) were classified generally as NoData. Each assembled seascape type was then split by bioregion. Water column stratification was derived from the temperature and salinity data extracted from NOAA's World Ocean Atlas 2013. Data on long-term mean annual salinity and temperature was selected across the study area at a resolution of 0.25° as a CSV containing latitude/longitude coordinates. Using a custom script written in Python 2.7, stratification was calculated as $\frac{1}{2} \left(\frac{1}{T} + \frac{1}{S} \right)$ using the Seawater-3.3 module. Ice cover regime was assessed using data obtained from the Canadian Ice Service. Using the 30-year (1981-2010) Sea Ice Climatic Atlas's Median Ice Concentration data product, ice cover regimes were classified into 3 categories of permanent ice areas, permanently open, and seasonally open (table 1). This data product comes in the form of 30-year averaged weekly median ice concentrations in vector format. Using a custom Python 2.7 script, polygons with median ice concentrations below 30% (open-water) and above 90% (closed-water) were identified for each weekly dataset and extracted. Temperature data for pelagic seascapes was obtained from NOAA's World Ocean Atlas 2013 (WOD13). Data on long-term mean annual salinity was extracted across the study area at a resolution of 0.25° as a CSV containing latitude/longitude coordinates. Using a custom script written in Python 2.7, temperature values were taken at the desired depths and an average was calculated for each 0.25° grid point. All available values in the upper 30m of the water were considered when calculating averages. Salinity data for pelagic seascapes was obtained from NOAA's World Ocean Atlas 2013. Data on long-term mean annual salinity was extracted across the study area at a resolution of 0.25° as a CSV containing latitude/longitude coordinates. Using a custom script written in Python 2.7, salinity values were taken at the desired depths and an average was calculated for each 0.25° grid point.

Associated Links

(2) Sea Ice Climatic Atlas: <https://www.canada.ca/en/environment-climate-change/services/ice-forecasts-observations/publications/sea-climatic-atlas-northern-waters-1981-2010.html>; (1, 3, & 4): NOAA: <https://www.nodc.noaa.gov/OC5/woa13/pubwoa13.html>

3292: Pelagic Seascapes



Stratification: 4, 13-8.55, Ice: PermanentlyIce, Temperature: <0C, Salinity: <30.4 AA

Date: (1), (3), & (4): 2013; (2) 2013

Open Source: (1) & (3) & (4): Yes; (2) Yes

Organization: (1), (3), & (4): NOAA; (2) Canadian Ice Service

Associated Report: (1) Stratification: NOAA World Ocean Atlas; (2) ice cover regime: Sea Ice Climatic Atlas for the Northern Canadian Waters; (3) temperature: NOAA World Ocean Atlas; (4) salinity: NOAA World Ocean Atlas

Authors: (1) & (3): NOAA World Ocean Atlas (Temperature): R. A. Locarnini, A. V. Mishonov, J. I. Antonov, T. P. Boyer, H. E. Garcia, O. K. Baranova, M. M. Zweng, C. R. Paver, J. R. Reagan, D. R. Johnson, M. Hamilton, and D. Seidov; (1) & (4): NOAA World Ocean Atlas (Salinity): M. M. Zweng, J. R. Reagan, J. I. Antonov, R. A. Locarnini,

Data Summary

Management Unit: N/A

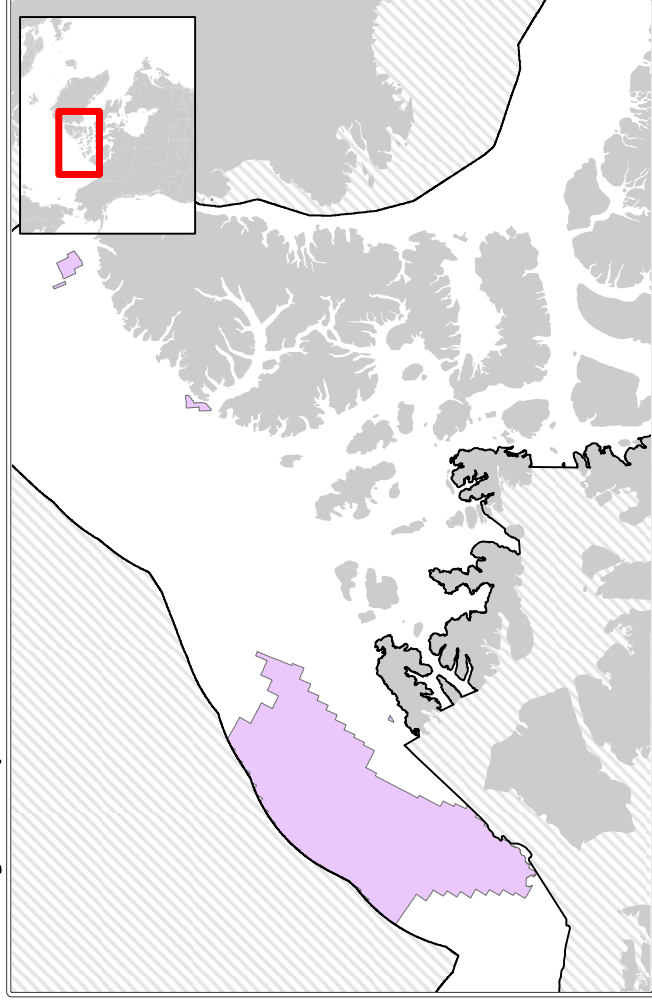
Marine Bioregion: Arctic Archipelago

Description: Pelagic seascapes were identified using three classes of stratification (1), ice cover regime (2), temperature (3), and salinity (4). Once each individual data layer required for construction of the pelagic seascapes had been assembled they were combined using a simple spatial intersection operation in ArcMap 10.2. Following this a generic descriptive attribute was constructed for each individual polygon created by the intersection based on the class values present for each layer involved. Note that areas containing no-data values for 1 or more layer (e.g. shallow coastal areas) were classified generally as NoData. Each assembled seascape type was then split by bioregion. Water column stratification was derived from the temperature and salinity data extracted from NOAA's World Ocean Atlas 2013. Data on long-term mean annual salinity and temperature was selected across the study area at a resolution of 0.25° as a CSV containing latitude/longitude coordinates. Using a custom script written in Python 2.7, stratification was calculated as $\frac{1}{2} \left(\frac{1}{T} + \frac{1}{S} \right)$ using the Seawater-3.3 module. Ice cover regime was assessed using data obtained from the Canadian Ice Service. Using the 30-year (1981-2010) Sea Ice Climatic Atlas's Median Ice Concentration data product, ice cover regimes were classified into 3 categories of permanent ice areas, permanently open, and seasonally open (table 1). This data product comes in the form of 30-year averaged weekly median ice concentrations in vector format. Using a custom Python 2.7 script, polygons with median ice concentrations below 30% (open-water) and above 90% (closed-water) were identified for each weekly dataset and extracted. Temperature data for pelagic seascapes was obtained from NOAA's World Ocean Atlas 2013 (WOD13). Data on long-term mean annual salinity was extracted across the study area at a resolution of 0.25° as a CSV containing latitude/longitude coordinates. Using a custom script written in Python 2.7, temperature values were taken at the desired depths and an average was calculated for each 0.25° grid point. All available values in the upper 30m of the water were considered when calculating averages. Salinity data for pelagic seascapes was obtained from NOAA's World Ocean Atlas 2013. Data on long-term mean annual salinity was extracted across the study area at a resolution of 0.25° as a CSV containing latitude/longitude coordinates. Using a custom script written in Python 2.7, salinity values were taken at the desired depths and an average was calculated for each 0.25° grid point.

Associated Links

(2) Sea Ice Climatic Atlas: <https://www.canada.ca/en/environment-climate-change/services/ice-forecasts-observations/publications/sea-climatic-atlas-northern-waters-1981-2010.html>; (1, 3, & 4): NOAA: <https://www.nodc.noaa.gov/OC5/woa13/pubwoa13.html>

3293: Pelagic Seascapes



Stratification: 4, 13-8.55, Ice: PermanentlyIce, Temperature: <0C, Salinity: <30.4 AB

Date: (1), (3), & (4): 2013; (2) 2013

Open Source: (1) & (3) & (4): Yes; (2) Yes

Organization: (1), (3), & (4): NOAA; (2) Canadian Ice Service

Associated Report: (1) Stratification: NOAA World Ocean Atlas; (2) ice cover regime: Sea Ice Climatic Atlas for the Northern Canadian Waters; (3) temperature: NOAA World Ocean Atlas; (4) salinity: NOAA World Ocean Atlas

Authors: (1) & (3): NOAA World Ocean Atlas (Temperature): R. A. Locarnini, A. V. Mishonov, J. I. Antonov, T. P. Boyer, H. E. Garcia, O. K. Baranova, M. M. Zweng, C. R. Paver, J. R. Reagan, D. R. Johnson, M. Hamilton, and D. Seidov; (1) & (4): NOAA World Ocean Atlas (Salinity): M. M. Zweng, J. R. Reagan, J. I. Antonov, R. A. Locarnini,

Data Summary

Management Unit: N/A

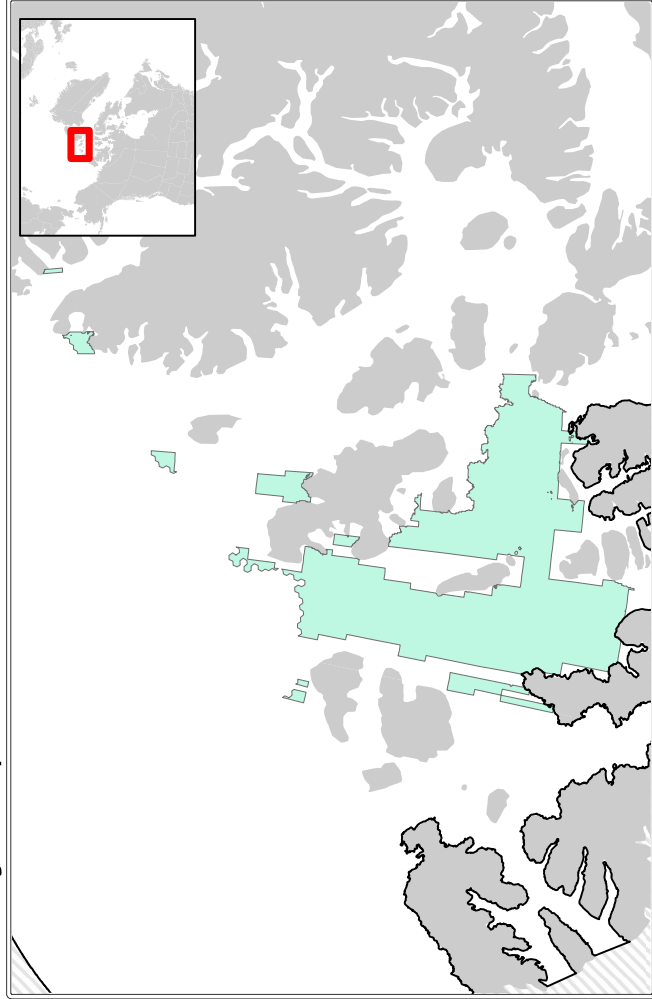
Marine Bioregion: Arctic Basin

Description: Pelagic seascapes were identified using three classes of stratification (1), ice cover regime (2), temperature (3), and salinity (4). Once each individual data layer required for construction of the pelagic seascapes had been assembled they were combined using a simple spatial intersection operation in ArcMap 10.2. Following this a generic descriptive attribute was constructed for each individual polygon created by the intersection based on the class values present for each layer involved. Note that areas containing no-data values for 1 or more layer (e.g. shallow coastal areas) were classified generally as NoData. Each assembled seascape type was then split by bioregion. Water column stratification was derived from the temperature and salinity data extracted from NOAA's World Ocean Atlas 2013. Data on long-term mean annual salinity and temperature was selected across the study area at a resolution of 0.25° as a CSV containing latitude/longitude coordinates. Using a custom script written in Python 2.7, stratification was calculated as $\frac{1}{2} \left(\frac{1}{T} + \frac{1}{S} \right)$ using the Seawater-3.3 module. Ice cover regime was assessed using data obtained from the Canadian Ice Service. Using the 30-year (1981-2010) Sea Ice Climatic Atlas's Median Ice Concentration data product, ice cover regimes were classified into 3 categories of permanent ice areas, permanently open, and seasonally open (table 1). This data product comes in the form of 30-year averaged weekly median ice concentrations in vector format. Using a custom Python 2.7 script, polygons with median ice concentrations below 30% (open-water) and above 90% (closed-water) were identified for each weekly dataset and extracted. Temperature data for pelagic seascapes was obtained from NOAA's World Ocean Atlas 2013 (WOD13). Data on long-term mean annual salinity was extracted across the study area at a resolution of 0.25° as a CSV containing latitude/longitude coordinates. Using a custom script written in Python 2.7, temperature values were taken at the desired depths and an average was calculated for each 0.25° grid point. All available values in the upper 30m of the water were considered when calculating averages. Salinity data for pelagic seascapes was obtained from NOAA's World Ocean Atlas 2013. Data on long-term mean annual salinity was extracted across the study area at a resolution of 0.25° as a CSV containing latitude/longitude coordinates. Using a custom script written in Python 2.7, salinity values were taken at the desired depths and an average was calculated for each 0.25° grid point.

Associated Links

(2) Sea Ice Climatic Atlas: <https://www.canada.ca/en/environment-climate-change/services/ice-forecasts-observations/publications/sea-climatic-atlas-northern-waters-1981-2010.html>; (1, 3, & 4): NOAA: <https://www.nodc.noaa.gov/OC5/woa13/pubwoa13.html>

3294: Pelagic Seascapes



Stratification: 4, 13-8.55, Ice: PermanentlyIce, Temperature: <0C, Salinity: <31.8 AA

Date: (1), (3), & (4): 2013; (2) 2013

Open Source: (1) & (3) & (4): Yes; (2) Yes

Organization: (1), (3), & (4): NOAA; (2) Canadian Ice Service

Associated Report: (1) Stratification: NOAA World Ocean Atlas; (2) ice cover regime: Sea Ice Climatic Atlas for the Northern Canadian Waters ; (3) temperature: NOAA World Ocean Atlas ; (4) salinity: NOAA World Ocean Atlas

Authors: (1) & (3): NOAA World Ocean Atlas (Temperature): R. A. Locarnini, A. V. Mishonov, J. I. Antonov, T. P. Boyer, H. E. Garcia, O. K. Baranova, M. M. Zweng, C. R. Paver, J. R. Reagan, D. R. Johnson, M. Hamilton, and D. Seidov; (1) & (4): NOAA World Ocean Atlas (Salinity): M. M. Zweng, J.R. Reagan, J.I. Antonov, R.A. Locarnini,

Data Summary

Management Unit: N/A

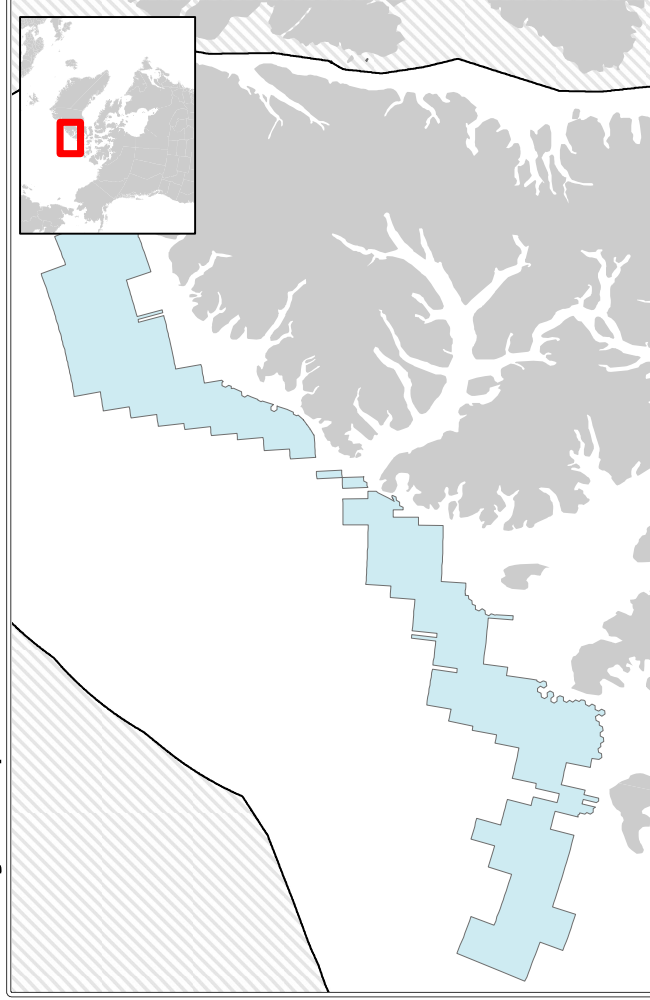
Marine Bioregion: Arctic Archipelago

Description: Pelagic seascapes were identified using three classes of stratification (1), ice cover regime (2), temperature (3), and salinity (4). Once each individual data layer required for construction of the pelagic seascapes had been assembled they were combined using a simple spatial intersection operation in ArcMap 10.2. Following this a generic descriptive attribute was constructed for each individual polygon created by the intersection based on the class values present for each layer involved. Note that areas containing no-data values for 1 or more layer (e.g. shallow coastal areas) were classified generally as NoData. Each assembled seascape type was then split by bioregion. Water column stratification was derived from the temperature and salinity data extracted from NOAA's World Ocean Atlas 2013. Data on long-term mean annual salinity and temperature was selected across the study area at a resolution of 0.25° as a CSV containing latitude/longitude coordinates. Using a custom script written in Python 2.7, stratification was calculated as $\frac{1}{2} \left(\frac{1}{T} + \frac{1}{S} \right)$ using the Seawater-3.3 module. Ice cover regime was assessed using data obtained from the Canadian Ice Service. Using the 30-year (1981-2010) Sea Ice Climatic Atlas's Median Ice Concentration data product, ice cover regimes were classified into 3 categories of permanent ice areas, permanently open, and seasonally open (table 1). This data product comes in the form of 30-year averaged weekly median ice concentrations in vector format. Using a custom Python 2.7 script, polygons with median ice concentrations below 30% (open-water) and above 90% (closed-water) were identified for each weekly dataset and extracted. Temperature data for pelagic seascapes was obtained from NOAA's World Ocean Atlas 2013 (WOD13). Data on long-term mean annual salinity was extracted across the study area at a resolution of 0.25° as a CSV containing latitude/longitude coordinates. Using a custom script written in Python 2.7, temperature values were taken at the desired depths and an average was calculated for each 0.25° grid point. All available values in the upper 30m of the water were considered when calculating averages. Salinity data for pelagic seascapes was obtained from NOAA's World Ocean Atlas 2013. Data on long-term mean annual salinity was extracted across the study area at a resolution of 0.25° as a CSV containing latitude/longitude coordinates. Using a custom script written in Python 2.7, salinity values were taken at the desired depths and an average was calculated for each 0.25° grid point.

Associated Links

(2) Sea Ice Climatic Atlas: <https://www.canada.ca/en/environment-climate-change/services/ice-forecasts-observations/publications/sea-climatic-atlas-northern-waters-1981-2010.html>; (1, 3, & 4): NOAA: <https://www.nodc.noaa.gov/OC5/woa13/pubwoa13.html>

3295: Pelagic Seascapes



Stratification: 4, 13-8.55, Ice: Permanently, Temperature: <0C, Salinity: <31.8 AB

Date: (1), (3), & (4): 2013; (2) 2013

Open Source: (1) & (3) & (4): Yes; (2) Yes

Organization: (1), (3), & (4): NOAA; (2) Canadian Ice Service

Associated Report: (1) Stratification: NOAA World Ocean Atlas; (2) ice cover regime: Sea Ice Climatic Atlas for the Northern Canadian Waters; (3) temperature: NOAA World Ocean Atlas; (4) salinity: NOAA World Ocean Atlas

Authors: (1) & (3): NOAA World Ocean Atlas (Temperature): R. A. Locarnini, A. V. Mishonov, J. I. Antonov, T. P. Boyer, H. E. Garcia, O. K. Baranova, M. M. Zweng, C. R. Paver, J. R. Reagan, D. R. Johnson, M. Hamilton, and D. Seidov; (1) & (4): NOAA World Ocean Atlas (Salinity): M. M. Zweng, J. R. Reagan, J. I. Antonov, R. A. Locarnini,

Data Summary

Management Unit: N/A

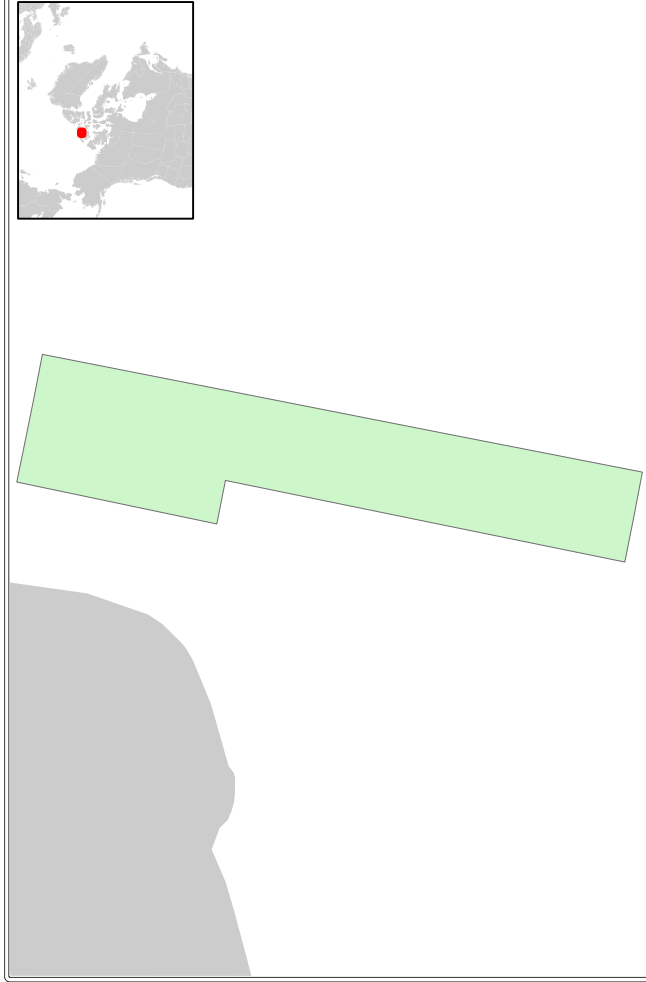
Marine Bioregion: Arctic Basin

Description: Pelagic seascapes were identified using three classes of stratification (1), ice cover regime (2), temperature (3), and salinity (4). Once each individual data layer required for construction of the pelagic seascapes had been assembled they were combined using a simple spatial intersection operation in ArcMap 10.2. Following this a generic descriptive attribute was constructed for each individual polygon created by the intersection based on the class values present for each layer involved. Note that areas containing no-data values for 1 or more layer (e.g. shallow coastal areas) were classified generally as NoData. Each assembled seascape type was then split by bioregion. Water column stratification was derived from the temperature and salinity data extracted from NOAA's World Ocean Atlas 2013. Data on long-term mean annual salinity and temperature was selected across the study area at a resolution of 0.25° as a CSV containing latitude/longitude coordinates. Using a custom script written in Python 2.7, stratification was calculated as $\frac{1}{2} \left(\frac{1}{T} + \frac{1}{S} \right)$ using the Seawater-3.3 module. Ice cover regime was assessed using data obtained from the Canadian Ice Service. Using the 30-year (1981-2010) Sea Ice Climatic Atlas's Median Ice Concentration data product, ice cover regimes were classified into 3 categories of permanent ice areas, permanently open, and seasonally open (table 1). This data product comes in the form of 30-year averaged weekly median ice concentrations in vector format. Using a custom Python 2.7 script, polygons with median ice concentrations below 30% (open-water) and above 90% (closed-water) were identified for each weekly dataset and extracted. Temperature data for pelagic seascapes was obtained from NOAA's World Ocean Atlas 2013 (WOD13). Data on long-term mean annual salinity was extracted across the study area at a resolution of 0.25° as a CSV containing latitude/longitude coordinates. Using a custom script written in Python 2.7, temperature values were taken at the desired depths and an average was calculated for each 0.25° grid point. All available values in the upper 30m of the water were considered when calculating averages. Salinity data for pelagic seascapes was obtained from NOAA's World Ocean Atlas 2013. Data on long-term mean annual salinity was extracted across the study area at a resolution of 0.25° as a CSV containing latitude/longitude coordinates. Using a custom script written in Python 2.7, salinity values were taken at the desired depths and an average was calculated for each 0.25° grid point.

Associated Links

(2) Sea Ice Climatic Atlas: <https://www.canada.ca/en/environment-climate-change/services/ice-forecasts-observations/publications/sea-climatic-atlas-northern-waters-1981-2010.html>; (1, 3, & 4): NOAA: <https://www.nodc.noaa.gov/OC5/woa13/pubwoa13.html>

3296: Pelagic Seascapes



Stratification: 4, 13-8.55, Ice: Permanently, Temperature: <0C, Salinity: >31.8 AA

Date: (1), (3), & (4): 2013; (2) 2013

Open Source: (1) & (3) & (4): Yes; (2) Yes

Organization: (1), (3), & (4): NOAA; (2) Canadian Ice Service

Associated Report: (1) Stratification: NOAA World Ocean Atlas; (2) ice cover regime: Sea Ice Climatic Atlas for the Northern Canadian Waters; (3) temperature: NOAA World Ocean Atlas; (4) salinity: NOAA World Ocean Atlas

Authors: (1) & (3): NOAA World Ocean Atlas (Temperature): R. A. Locarnini, A. V. Mishonov, J. I. Antonov, T. P. Boyer, H. E. Garcia, O. K. Baranova, M. M. Zweng, C. R. Paver, J. R. Reagan, D. R. Johnson, M. Hamilton, and D. Seidov; (1) & (4): NOAA World Ocean Atlas (Salinity): M. M. Zweng, J.R. Reagan, J.I. Antonov, R.A. Locarnini,

Data Summary

Management Unit: N/A

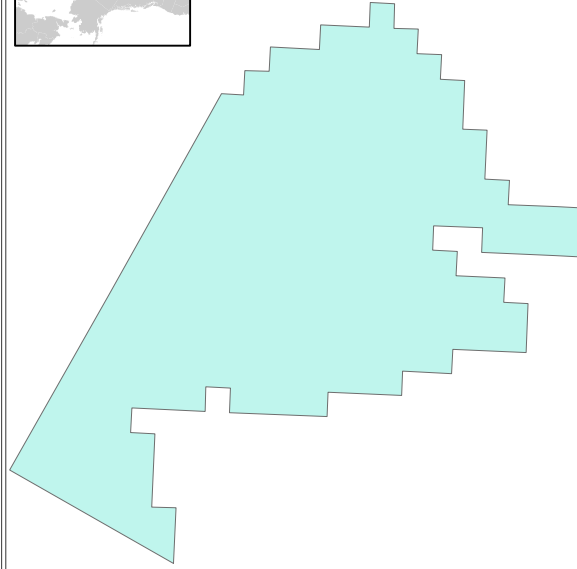
Marine Bioregion: Arctic Archipelago

Description: Pelagic seascapes were identified using three classes of stratification (1), ice cover regime (2), temperature (3), and salinity (4). Once each individual data layer required for construction of the pelagic seascapes had been assembled they were combined using a simple spatial intersection operation in ArcMap 10.2. Following this a generic descriptive attribute was constructed for each individual polygon created by the intersection based on the class values present for each layer involved. Note that areas containing no-data values for 1 or more layer (e.g. shallow coastal areas) were classified generally as NoData. Each assembled seascape type was then split by bioregion. Water column stratification was derived from the temperature and salinity data extracted from NOAA's World Ocean Atlas 2013. Data on long-term mean annual salinity and temperature was selected across the study area at a resolution of 0.25° as a CSV containing latitude/longitude coordinates. Using a custom script written in Python 2.7, stratification was calculated as $\frac{1}{2} \left(\frac{1}{T} + \frac{1}{S} \right)$ using the Seawater-3.3 module. Ice cover regime was assessed using data obtained from the Canadian Ice Service. Using the 30-year (1981-2010) Sea Ice Climatic Atlas's Median Ice Concentration data product, ice cover regimes were classified into 3 categories of permanent ice areas, permanently open, and seasonally open (table 1). This data product comes in the form of 30-year averaged weekly median ice concentrations in vector format. Using a custom Python 2.7 script, polygons with median ice concentrations below 30% (open-water) and above 90% (closed-water) were identified for each weekly dataset and extracted. Temperature data for pelagic seascapes was obtained from NOAA's World Ocean Atlas 2013 (WOD13). Data on long-term mean annual salinity was extracted across the study area at a resolution of 0.25° as a CSV containing latitude/longitude coordinates. Using a custom script written in Python 2.7, temperature values were taken at the desired depths and an average was calculated for each 0.25° grid point. All available values in the upper 30m of the water were considered when calculating averages. Salinity data for pelagic seascapes was obtained from NOAA's World Ocean Atlas 2013. Data on long-term mean annual salinity was extracted across the study area at a resolution of 0.25° as a CSV containing latitude/longitude coordinates. Using a custom script written in Python 2.7, salinity values were taken at the desired depths and an average was calculated for each 0.25° grid point.

Associated Links

(2) Sea Ice Climatic Atlas: <https://www.canada.ca/en/environment-climate-change/services/ice-forecasts-observations/publications/sea-climatic-atlas-northern-waters-1981-2010.html>; (1, 3, & 4): NOAA: <https://www.nodc.noaa.gov/OC5/woa13/pubwoa13.html>

3297: Pelagic Seascapes



Stratification: 4, 13-8.55, Ice: Permanently, Temperature: <2C, Salinity: <30.4 AB

Date: (1), (3), & (4): 2013; (2) 2013

Open Source: (1) & (3) & (4): Yes; (2) Yes

Organization: (1), (3), & (4): NOAA; (2) Canadian Ice Service

Associated Report: (1) Stratification: NOAA World Ocean Atlas; (2) ice cover regime: Sea Ice Climatic Atlas for the Northern Canadian Waters; (3) temperature: NOAA World Ocean Atlas; (4) salinity: NOAA World Ocean Atlas

Authors: (1) & (3): NOAA World Ocean Atlas (Temperature): R. A. Locarnini, A. V. Mishonov, J. I. Antonov, T. P. Boyer, H. E. Garcia, O. K. Baranova, M. M. Zweng, C. R. Paver, J. R. Reagan, D. R. Johnson, M. Hamilton, and D. Seidov; (1) & (4): NOAA World Ocean Atlas (Salinity): M. M. Zweng, J. R. Reagan, J. I. Antonov, R. A. Locarnini,

Data Summary

Management Unit: N/A

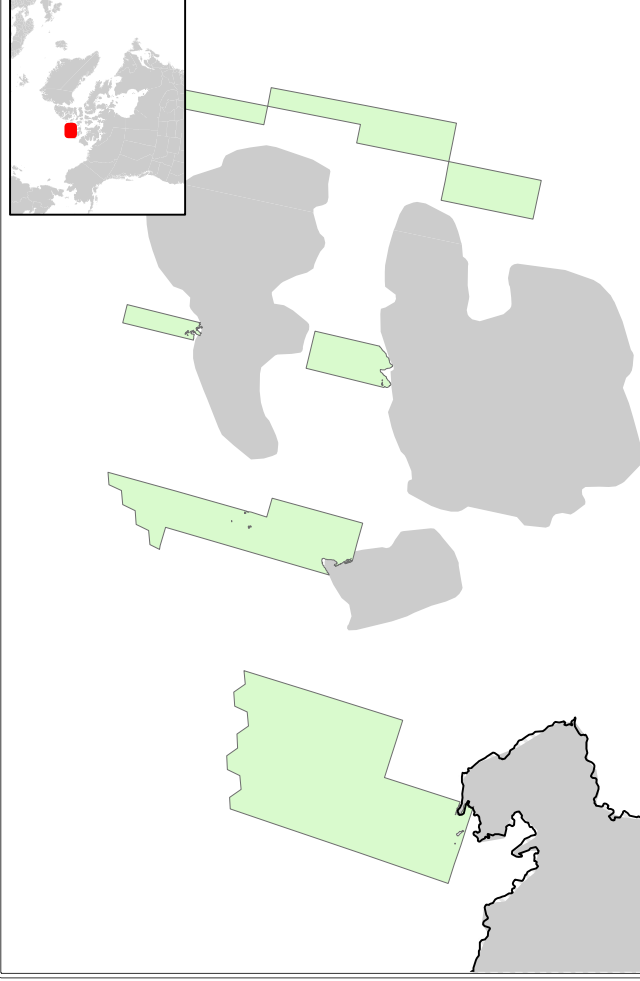
Marine Bioregion: Arctic Basin

Description: Pelagic seascapes were identified using three classes of stratification (1), ice cover regime (2), temperature (3), and salinity (4). Once each individual data layer required for construction of the pelagic seascapes had been assembled they were combined using a simple spatial intersection operation in ArcMap 10.2. Following this a generic descriptive attribute was constructed for each individual polygon created by the intersection based on the class values present for each layer involved. Note that areas containing no-data values for 1 or more layer (e.g. shallow coastal areas) were classified generally as NoData. Each assembled seascape type was then split by bioregion. Water column stratification was derived from the temperature and salinity data extracted from NOAA's World Ocean Atlas 2013. Data on long-term mean annual salinity and temperature was selected across the study area at a resolution of 0.25° as a CSV containing latitude/longitude coordinates. Using a custom script written in Python 2.7, stratification was calculated as $\frac{1}{2} \left(\frac{1}{T} + \frac{1}{S} \right)$ using the Seawater-3.3 module. Ice cover regime was assessed using data obtained from the Canadian Ice Service. Using the 30-year (1981-2010) Sea Ice Climatic Atlas's Median Ice Concentration data product, ice cover regimes were classified into 3 categories of permanent ice areas, permanently open, and seasonally open (table 1). This data product comes in the form of 30-year averaged weekly median ice concentrations in vector format. Using a custom Python 2.7 script, polygons with median ice concentrations below 30% (open-water) and above 90% (closed-water) were identified for each weekly dataset and extracted. Temperature data for pelagic seascapes was obtained from NOAA's World Ocean Atlas 2013 (WOD13). Data on long-term mean annual salinity was extracted across the study area at a resolution of 0.25° as a CSV containing latitude/longitude coordinates. Using a custom script written in Python 2.7, temperature values were taken at the desired depths and an average was calculated for each 0.25° grid point. All available values in the upper 30m of the water were considered when calculating averages. Salinity data for pelagic seascapes was obtained from NOAA's World Ocean Atlas 2013. Data on long-term mean annual salinity was extracted across the study area at a resolution of 0.25° as a CSV containing latitude/longitude coordinates. Using a custom script written in Python 2.7, salinity values were taken at the desired depths and an average was calculated for each 0.25° grid point.

Associated Links

(2) Sea Ice Climatic Atlas: <https://www.canada.ca/en/environment-climate-change/services/ice-forecasts-observations/publications/sea-climatic-atlas-northern-waters-1981-2010.html>; (1, 3, & 4): NOAA: <https://www.nodc.noaa.gov/OC5/woa13/pubwoa13.html>

3298: Pelagic Seascapes



Stratification: 4, 13-8.55, Ice: PermanentlyIce, Temperature: <2C, Salinity: <31.8 AA

Date: (1), (3), & (4): 2013; (2) 2013

Open Source: (1) & (3) & (4): Yes; (2) Yes

Organization: (1), (3), & (4): NOAA; (2) Canadian Ice Service

Associated Report: (1) Stratification: NOAA World Ocean Atlas; (2) ice cover regime: Sea Ice Climatic Atlas for the Northern Canadian Waters; (3) temperature: NOAA World Ocean Atlas; (4) salinity: NOAA World Ocean Atlas

Authors: (1) & (3): NOAA World Ocean Atlas (Temperature): R. A. Locarnini, A. V. Mishonov, J. I. Antonov, T. P. Boyer, H. E. Garcia, O. K. Baranova, M. M. Zweng, C. R. Paver, J. R. Reagan, D. R. Johnson, M. Hamilton, and D. Seidov; (1) & (4): NOAA World Ocean Atlas (Salinity): M. M. Zweng, J. R. Reagan, J. I. Antonov, R. A. Locarnini,

Data Summary

Management Unit: N/A

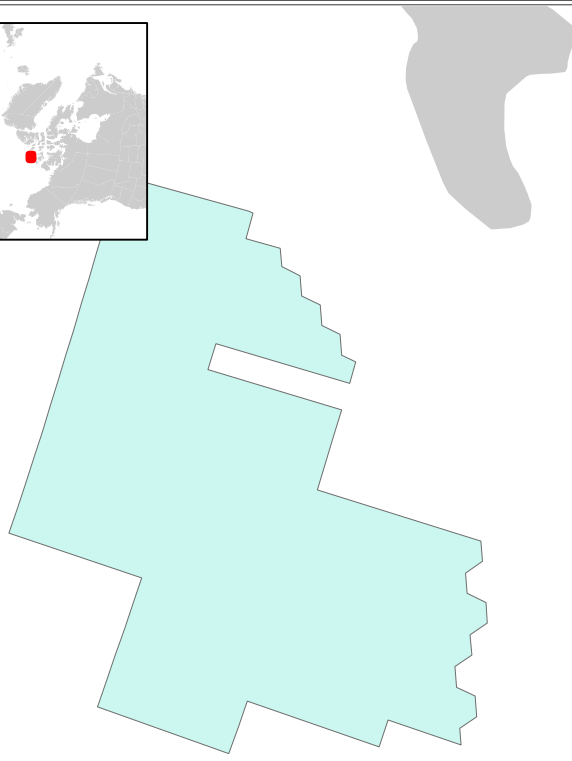
Marine Bioregion: Arctic Archipelago

Description: Pelagic seascapes were identified using three classes of stratification (1), ice cover regime (2), temperature (3), and salinity (4). Once each individual data layer required for construction of the pelagic seascapes had been assembled they were combined using a simple spatial intersection operation in ArcMap 10.2. Following this a generic descriptive attribute was constructed for each individual polygon created by the intersection based on the class values present for each layer involved. Note that areas containing no-data values for 1 or more layer (e.g. shallow coastal areas) were classified generally as NoData. Each assembled seascape type was then split by bioregion. Water column stratification was derived from the temperature and salinity data extracted from NOAA's World Ocean Atlas 2013. Data on long-term mean annual salinity and temperature was selected across the study area at a resolution of 0.25° as a CSV containing latitude/longitude coordinates. Using a custom script written in Python 2.7, stratification was calculated as $\frac{t}{t + 7d}$ using the Seawater-3.3 module. Ice cover regime was assessed using data obtained from the Canadian Ice Service. Using the 30-year (1981-2010) Sea Ice Climatic Atlas's Median Ice Concentration data product, ice cover regimes were classified into 3 categories of permanent ice areas, permanently open, and seasonally open (table 1). This data product comes in the form of 30-year averaged weekly median ice concentrations in vector format. Using a custom Python 2.7 script, polygons with median ice concentrations below 30% (open-water) and above 90% (closed-water) were identified for each weekly dataset and extracted. Temperature data for pelagic seascapes was obtained from NOAA's World Ocean Atlas 2013 (WOD13). Data on long-term mean annual salinity was extracted across the study area at a resolution of 0.25° as a CSV containing latitude/longitude coordinates. Using a custom script written in Python 2.7, temperature values were taken at the desired depths and an average was calculated for each 0.25° grid point. All available values in the upper 30m of the water were considered when calculating averages. Salinity data for pelagic seascapes was obtained from NOAA's World Ocean Atlas 2013. Data on long-term mean annual salinity was extracted across the study area at a resolution of 0.25° as a CSV containing latitude/longitude coordinates. Using a custom script written in Python 2.7, salinity values were taken at the desired depths and an average was calculated for each 0.25° grid point.

Associated Links

(2) Sea Ice Climatic Atlas: <https://www.canada.ca/en/environment-climate-change/services/ice-forecasts-observations/publications/sea-climatic-atlas-northern-waters-1981-2010.html>; (1, 3, & 4): NOAA: <https://www.nodc.noaa.gov/OC5/woa13/pubwoa13.html>

3299: Pelagic Seascapes



Stratification: 4, 13-8.55, Ice: PermanentlyIce, Temperature: <2C, Salinity: <31.8 AB

Date: (1), (3), & (4): 2013; (2) 2013

Open Source: (1) & (3) & (4): Yes; (2) Yes

Organization: (1), (3), & (4): NOAA; (2) Canadian Ice Service

Associated Report: (1) Stratification: NOAA World Ocean Atlas; (2) ice cover regime: Sea Ice Climatic Atlas for the Northern Canadian Waters ; (3) temperature: NOAA World Ocean Atlas ; (4) salinity: NOAA World Ocean Atlas

Authors: (1) & (3): NOAA World Ocean Atlas (Temperature): R. A. Locarnini, A. V. Mishonov, J. I. Antonov, T. P. Boyer, H. E. Garcia, O. K. Baranova, M. M. Zweng, C. R. Paver, J. R. Reagan, D. R. Johnson, M. Hamilton, and D. Seidov; (1) & (4): NOAA World Ocean Atlas (Salinity): M. M. Zweng, J.R. Reagan, J.I. Antonov, R.A. Locarnini,

Data Summary

Management Unit: N/A

Marine Bioregion: Arctic Basin

Description: Pelagic seascapes were identified using three classes of stratification (1), ice cover regime (2), temperature (3), and salinity (4). Once each individual data layer required for construction of the pelagic seascapes had been assembled they were combined using a simple spatial intersection operation in ArcMap 10.2. Following this a generic descriptive attribute was constructed for each individual polygon created by the intersection based on the class values present for each layer involved. Note that areas containing no-data values for 1 or more layer (e.g. shallow coastal areas) were classified generally as NoData. Each assembled seascape type was then split by bioregion. Water column stratification was derived from the temperature and salinity data extracted from NOAA's World Ocean Atlas 2013. Data on long-term mean annual salinity and temperature was selected across the study area at a resolution of 0.25° as a CSV containing latitude/longitude coordinates. Using a custom script written in Python 2.7, stratification was calculated as $\frac{1}{2} \left(\frac{1}{T} + \frac{1}{S} \right)$ using the Seawater-3.3 module. Ice cover regime was assessed using data obtained from the Canadian Ice Service. Using the 30-year (1981-2010) Sea Ice Climatic Atlas's Median Ice Concentration data product, ice cover regimes were classified into 3 categories of permanent ice areas, permanently open, and seasonally open (table 1). This data product comes in the form of 30-year averaged weekly median ice concentrations in vector format. Using a custom Python 2.7 script, polygons with median ice concentrations below 30% (open-water) and above 90% (closed-water) were identified for each weekly dataset and extracted. Temperature data for pelagic seascapes was obtained from NOAA's World Ocean Atlas 2013 (WOD13). Data on long-term mean annual salinity was extracted across the study area at a resolution of 0.25° as a CSV containing latitude/longitude coordinates. Using a custom script written in Python 2.7, temperature values were taken at the desired depths and an average was calculated for each 0.25° grid point. All available values in the upper 30m of the water were considered when calculating averages. Salinity data for pelagic seascapes was obtained from NOAA's World Ocean Atlas 2013. Data on long-term mean annual salinity was extracted across the study area at a resolution of 0.25° as a CSV containing latitude/longitude coordinates. Using a custom script written in Python 2.7, salinity values were taken at the desired depths and an average was calculated for each 0.25° grid point.

Associated Links

(2) Sea Ice Climatic Atlas: <https://www.canada.ca/en/environment-climate-change/services/ice-forecasts-observations/publications/sea-climatic-atlas-northern-waters-1981-2010.html>; (1, 3, & 4): NOAA: <https://www.nodc.noaa.gov/OC5/woa13/pubwoa13.html>

3300: Pelagic Seascapes



Stratification: 4, 13-8.55, Ice: Permanently, Ice, Temperature: <2C, Salinity: >31.8 AA

Date: (1), (3), & (4): 2013; (2) 2013

Open Source: (1) & (3) & (4): Yes; (2) Yes

Organization: (1), (3), & (4): NOAA; (2) Canadian Ice Service

Associated Report: (1) Stratification: NOAA World Ocean Atlas; (2) ice cover regime: Sea Ice Climatic Atlas for the Northern Canadian Waters; (3) temperature: NOAA World Ocean Atlas; (4) salinity: NOAA World Ocean Atlas

Authors: (1) & (3): NOAA World Ocean Atlas (Temperature): R. A. Locarnini, A. V. Mishonov, J. I. Antonov, T. P. Boyer, H. E. Garcia, O. K. Baranova, M. M. Zweng, C. R. Paver, J. R. Reagan, D. R. Johnson, M. Hamilton, and D. Seidov; (1) & (4): NOAA World Ocean Atlas (Salinity): M. M. Zweng, J. R. Reagan, J. I. Antonov, R. A. Locarnini,

Data Summary

Management Unit: N/A

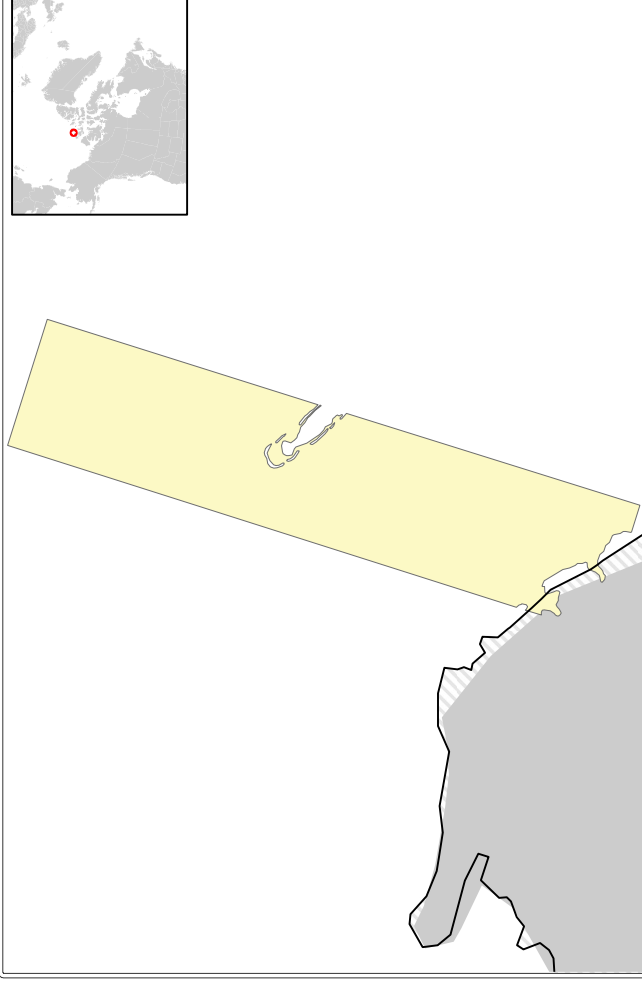
Marine Bioregion: Arctic Archipelago

Description: Pelagic seascapes were identified using three classes of stratification (1), ice cover regime (2), temperature (3), and salinity (4). Once each individual data layer required for construction of the pelagic seascapes had been assembled they were combined using a simple spatial intersection operation in ArcMap 10.2. Following this a generic descriptive attribute was constructed for each individual polygon created by the intersection based on the class values present for each layer involved. Note that areas containing no-data values for 1 or more layer (e.g. shallow coastal areas) were classified generally as NoData. Each assembled seascape type was then split by bioregion. Water column stratification was derived from the temperature and salinity data extracted from NOAA's World Ocean Atlas 2013. Data on long-term mean annual salinity and temperature was selected across the study area at a resolution of 0.25° as a CSV containing latitude/longitude coordinates. Using a custom script written in Python 2.7, stratification was calculated as $\frac{1}{2} \left(\frac{1}{T} + \frac{1}{S} \right)$ using the Seawater-3.3 module. Ice cover regime was assessed using data obtained from the Canadian Ice Service. Using the 30-year (1981-2010) Sea Ice Climatic Atlas's Median Ice Concentration data product, ice cover regimes were classified into 3 categories of permanent ice areas, permanently open, and seasonally open (table 1). This data product comes in the form of 30-year averaged weekly median ice concentrations in vector format. Using a custom Python 2.7 script, polygons with median ice concentrations below 30% (open-water) and above 90% (closed-water) were identified for each weekly dataset and extracted. Temperature data for pelagic seascapes was obtained from NOAA's World Ocean Atlas 2013 (WOD13). Data on long-term mean annual salinity was extracted across the study area at a resolution of 0.25° as a CSV containing latitude/longitude coordinates. Using a custom script written in Python 2.7, temperature values were taken at the desired depths and an average was calculated for each 0.25° grid point. All available values in the upper 30m of the water were considered when calculating averages. Salinity data for pelagic seascapes was obtained from NOAA's World Ocean Atlas 2013. Data on long-term mean annual salinity was extracted across the study area at a resolution of 0.25° as a CSV containing latitude/longitude coordinates. Using a custom script written in Python 2.7, salinity values were taken at the desired depths and an average was calculated for each 0.25° grid point.

Associated Links

(2) Sea Ice Climatic Atlas: <https://www.canada.ca/en/environment-climate-change/services/ice-forecasts-observations/publications/sea-climatic-atlas-northern-waters-1981-2010.html>; (1, 3, & 4): NOAA: <https://www.nodc.noaa.gov/OC5/woa13/pubwoa13.html>

3301: Pelagic Seascapes



Stratification: 4, 13-8.55, Ice: Permanently, Temperature: >2C, Salinity: >31.8 AA

Date: (1), (3), & (4): 2013; (2) 2013

Open Source: (1) & (3) & (4): Yes; (2) Yes

Organization: (1), (3), & (4): NOAA; (2) Canadian Ice Service

Associated Report: (1) Stratification: NOAA World Ocean Atlas; (2) ice cover regime: Sea Ice Climatic Atlas for the Northern Canadian Waters; (3) temperature: NOAA World Ocean Atlas; (4) salinity: NOAA World Ocean Atlas

Authors: (1) & (3): NOAA World Ocean Atlas (Temperature): R. A. Locarnini, A. V. Mishonov, J. I. Antonov, T. P. Boyer, H. E. Garcia, O. K. Baranova, M. M. Zweng, C. R. Paver, J. R. Reagan, D. R. Johnson, M. Hamilton, and D. Seidov; (1) & (4): NOAA World Ocean Atlas (Salinity): M. M. Zweng, J. R. Reagan, J. I. Antonov, R. A. Locarnini,

Data Summary

Management Unit: N/A

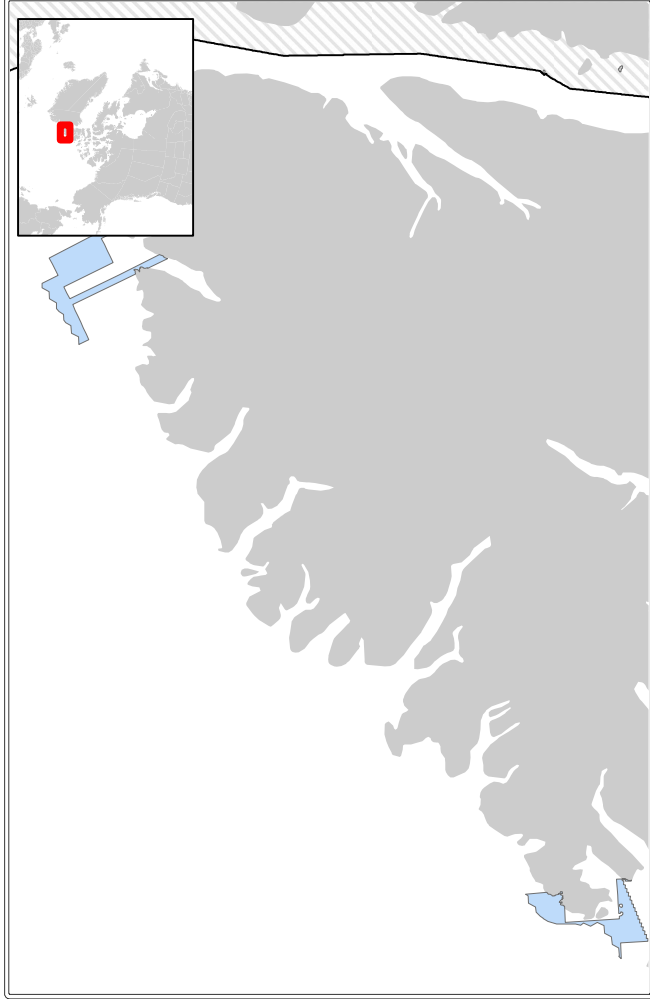
Marine Bioregion: Arctic Archipelago

Description: Pelagic seascapes were identified using three classes of stratification (1), ice cover regime (2), temperature (3), and salinity (4). Once each individual data layer required for construction of the pelagic seascapes had been assembled they were combined using a simple spatial intersection operation in ArcMap 10.2. Following this a generic descriptive attribute was constructed for each individual polygon created by the intersection based on the class values present for each layer involved. Note that areas containing no-data values for 1 or more layer (e.g. shallow coastal areas) were classified generally as NoData. Each assembled seascape type was then split by bioregion. Water column stratification was derived from the temperature and salinity data extracted from NOAA's World Ocean Atlas 2013. Data on long-term mean annual salinity and temperature was selected across the study area at a resolution of 0.25° as a CSV containing latitude/longitude coordinates. Using a custom script written in Python 2.7, stratification was calculated as $\frac{t}{t + 7d}$ using the Seawater-3.3 module. Ice cover regime was assessed using data obtained from the Canadian Ice Service. Using the 30-year (1981-2010) Sea Ice Climatic Atlas's Median Ice Concentration data product, ice cover regimes were classified into 3 categories of permanent ice areas, permanently open, and seasonally open (table 1). This data product comes in the form of 30-year averaged weekly median ice concentrations in vector format. Using a custom Python 2.7 script, polygons with median ice concentrations below 30% (open-water) and above 90% (closed-water) were identified for each weekly dataset and extracted. Temperature data for pelagic seascapes was obtained from NOAA's World Ocean Atlas 2013 (WOD13). Data on long-term mean annual salinity was extracted across the study area at a resolution of 0.25° as a CSV containing latitude/longitude coordinates. Using a custom script written in Python 2.7, temperature values were taken at the desired depths and an average was calculated for each 0.25° grid point. All available values in the upper 30m of the water were considered when calculating averages. Salinity data for pelagic seascapes was obtained from NOAA's World Ocean Atlas 2013. Data on long-term mean annual salinity was extracted across the study area at a resolution of 0.25° as a CSV containing latitude/longitude coordinates. Using a custom script written in Python 2.7, salinity values were taken at the desired depths and an average was calculated for each 0.25° grid point.

Associated Links

(2) Sea Ice Climatic Atlas: <https://www.canada.ca/en/environment-climate-change/services/ice-forecasts-observations/publications/sea-climatic-atlas-northern-waters-1981-2010.html>; (1, 3, & 4): NOAA: <https://www.nodc.noaa.gov/OC5/woa13/pubwoa13.html>

3302: Pelagic Seascapes



Stratification: 4, 13-8.55, Ice: SeasonallyOpen, Temperature: <0C, Salinity: <30.4 AA

Date: (1), (3), & (4): 2013; (2) 2013

Open Source: (1) & (3) & (4): Yes; (2) Yes

Organization: (1), (3), & (4): NOAA; (2) Canadian Ice Service

Associated Report: (1) Stratification: NOAA World Ocean Atlas; (2) ice cover regime: Sea Ice Climatic Atlas for the Northern Canadian Waters; (3) temperature: NOAA World Ocean Atlas; (4) salinity: NOAA World Ocean Atlas

Authors: (1) & (3): NOAA World Ocean Atlas (Temperature): R. A. Locarnini, A. V. Mishonov, J. I. Antonov, T. P. Boyer, H. E. Garcia, O. K. Baranova, M. M. Zweng, C. R. Paver, J. R. Reagan, D. R. Johnson, M. Hamilton, and D. Seidov; (1) & (4): NOAA World Ocean Atlas (Salinity): M. M. Zweng, J.R. Reagan, J.I. Antonov, R.A. Locarnini,

Data Summary

Management Unit: N/A

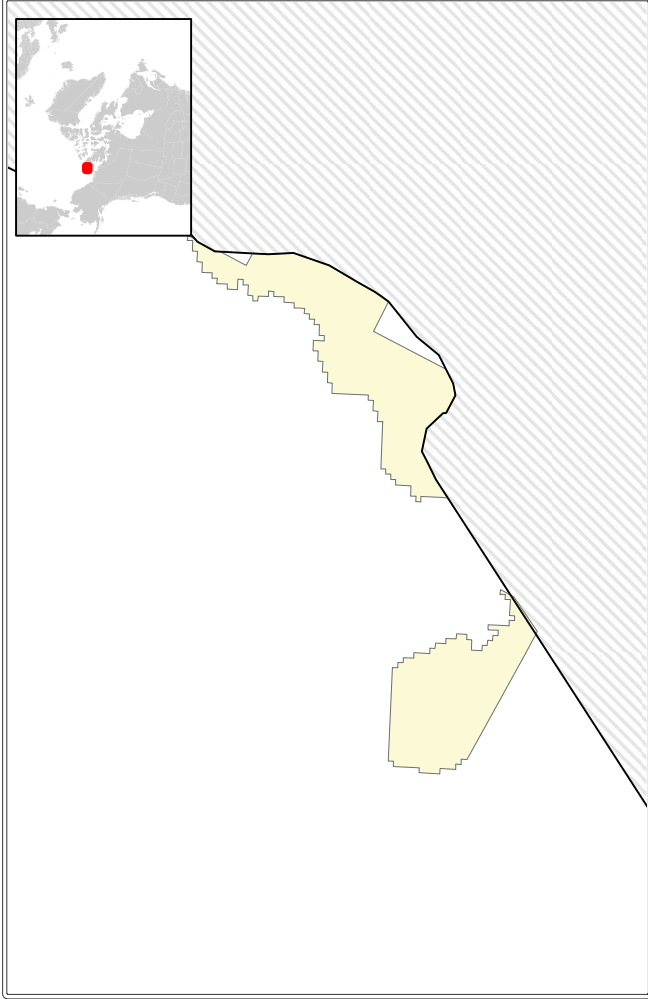
Marine Bioregion: Arctic Archipelago

Description: Pelagic seascapes were identified using three classes of stratification (1), ice cover regime (2), temperature (3), and salinity (4). Once each individual data layer required for construction of the pelagic seascapes had been assembled they were combined using a simple spatial intersection operation in ArcMap 10.2. Following this a generic descriptive attribute was constructed for each individual polygon created by the intersection based on the class values present for each layer involved. Note that areas containing no-data values for 1 or more layer (e.g. shallow coastal areas) were classified generally as NoData. Each assembled seascape type was then split by bioregion. Water column stratification was derived from the temperature and salinity data extracted from NOAA's World Ocean Atlas 2013. Data on long-term mean annual salinity and temperature was selected across the study area at a resolution of 0.25° as a CSV containing latitude/longitude coordinates. Using a custom script written in Python 2.7, stratification was calculated as $\frac{1}{2} \left(\frac{1}{T} + \frac{1}{S} \right)$ using the Seawater-3.3 module. Ice cover regime was assessed using data obtained from the Canadian Ice Service. Using the 30-year (1981-2010) Sea Ice Climatic Atlas's Median Ice Concentration data product, ice cover regimes were classified into 3 categories of permanent ice areas, permanently open, and seasonally open (table 1). This data product comes in the form of 30-year averaged weekly median ice concentrations in vector format. Using a custom Python 2.7 script, polygons with median ice concentrations below 30% (open-water) and above 90% (closed-water) were identified for each weekly dataset and extracted. Temperature data for pelagic seascapes was obtained from NOAA's World Ocean Atlas 2013 (WOD13). Data on long-term mean annual salinity was extracted across the study area at a resolution of 0.25° as a CSV containing latitude/longitude coordinates. Using a custom script written in Python 2.7, temperature values were taken at the desired depths and an average was calculated for each 0.25° grid point. All available values in the upper 30m of the water were considered when calculating averages. Salinity data for pelagic seascapes was obtained from NOAA's World Ocean Atlas 2013. Data on long-term mean annual salinity was extracted across the study area at a resolution of 0.25° as a CSV containing latitude/longitude coordinates. Using a custom script written in Python 2.7, salinity values were taken at the desired depths and an average was calculated for each 0.25° grid point.

Associated Links

(2) Sea Ice Climatic Atlas: <https://www.canada.ca/en/environment-climate-change/services/ice-forecasts-observations/publications/sea-climatic-atlas-northern-waters-1981-2010.html>; (1, 3, & 4): NOAA: <https://www.nodc.noaa.gov/OC5/woa13/pubwoa13.html>

3303: Pelagic Seascapes



Stratification: 4, 13-8.55, Ice: SeasonallyOpen, Temperature: <0C, Salinity: <30.4 AB

Date: (1), (3), & (4): 2013; (2) 2013

Open Source: (1) & (3) & (4): Yes; (2) Yes

Organization: (1), (3), & (4): NOAA; (2) Canadian Ice Service

Associated Report: (1) Stratification: NOAA World Ocean Atlas; (2) ice cover regime: Sea Ice Climatic Atlas for the Northern Canadian Waters; (3) temperature: NOAA World Ocean Atlas; (4) salinity: NOAA World Ocean Atlas

Authors: (1) & (3): NOAA World Ocean Atlas (Temperature): R. A. Locarnini, A. V. Mishonov, J. I. Antonov, T. P. Boyer, H. E. Garcia, O. K. Baranova, M. M. Zweng, C. R. Paver, J. R. Reagan, D. R. Johnson, M. Hamilton, and D. Seidov; (1) & (4): NOAA World Ocean Atlas (Salinity): M. M. Zweng, J.R. Reagan, J.I. Antonov, R.A. Locarnini,

Data Summary

Management Unit: N/A

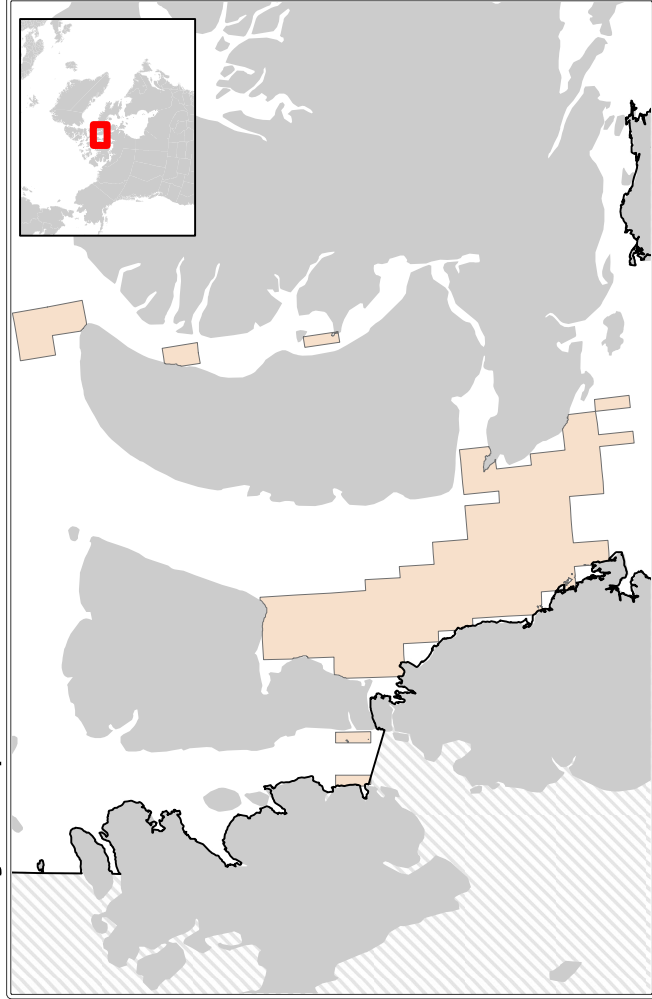
Marine Bioregion: Arctic Basin

Description: Pelagic seascapes were identified using three classes of stratification (1), ice cover regime (2), temperature (3), and salinity (4). Once each individual data layer required for construction of the pelagic seascapes had been assembled they were combined using a simple spatial intersection operation in ArcMap 10.2. Following this a generic descriptive attribute was constructed for each individual polygon created by the intersection based on the class values present for each layer involved. Note that areas containing no-data values for 1 or more layer (e.g. shallow coastal areas) were classified generally as NoData. Each assembled seascape type was then split by bioregion. Water column stratification was derived from the temperature and salinity data extracted from NOAA's World Ocean Atlas 2013. Data on long-term mean annual salinity and temperature was selected across the study area at a resolution of 0.25° as a CSV containing latitude/longitude coordinates. Using a custom script written in Python 2.7, stratification was calculated as $\frac{1}{2} \left(\frac{1}{T} + \frac{1}{S} \right)$ using the Seawater-3.3 module. Ice cover regime was assessed using data obtained from the Canadian Ice Service. Using the 30-year (1981-2010) Sea Ice Climatic Atlas's Median Ice Concentration data product, ice cover regimes were classified into 3 categories of permanent ice areas, permanently open, and seasonally open (table 1). This data product comes in the form of 30-year averaged weekly median ice concentrations in vector format. Using a custom Python 2.7 script, polygons with median ice concentrations below 30% (open-water) and above 90% (closed-water) were identified for each weekly dataset and extracted. Temperature data for pelagic seascapes was obtained from NOAA's World Ocean Atlas 2013 (WOD13). Data on long-term mean annual salinity was extracted across the study area at a resolution of 0.25° as a CSV containing latitude/longitude coordinates. Using a custom script written in Python 2.7, temperature values were taken at the desired depths and an average was calculated for each 0.25° grid point. All available values in the upper 30m of the water were considered when calculating averages. Salinity data for pelagic seascapes was obtained from NOAA's World Ocean Atlas 2013. Data on long-term mean annual salinity was extracted across the study area at a resolution of 0.25° as a CSV containing latitude/longitude coordinates. Using a custom script written in Python 2.7, salinity values were taken at the desired depths and an average was calculated for each 0.25° grid point.

Associated Links

(2) Sea Ice Climatic Atlas: <https://www.canada.ca/en/environment-climate-change/services/ice-forecasts-observations/publications/sea-climatic-atlas-northern-waters-1981-2010.html>; (1, 3, & 4): NOAA: <https://www.nodc.noaa.gov/OC5/woa13/pubwoa13.html>

3304: Pelagic Seascapes



Stratification: 4, 13-8.55, Ice: SeasonallyOpen, Temperature: <0C, Salinity: <30.4 EA

Date: (1), (3), & (4): 2013; (2) 2013

Open Source: (1) & (3) & (4): Yes; (2) Yes

Organization: (1), (3), & (4): NOAA; (2) Canadian Ice Service

Associated Report: (1) Stratification: NOAA World Ocean Atlas; (2) ice cover regime: Sea Ice Climatic Atlas for the Northern Canadian Waters; (3) temperature: NOAA World Ocean Atlas; (4) salinity: NOAA World Ocean Atlas

Authors: (1) & (3): NOAA World Ocean Atlas (Temperature): R. A. Locarnini, A. V. Mishonov, J. I. Antonov, T. P. Boyer, H. E. Garcia, O. K. Baranova, M. M. Zweng, C. R. Paver, J. R. Reagan, D. R. Johnson, M. Hamilton, and D. Seidov; (1) & (4): NOAA World Ocean Atlas (Salinity): M. M. Zweng, J. R. Reagan, J. I. Antonov, R. A. Locarnini,

Data Summary

Management Unit: N/A

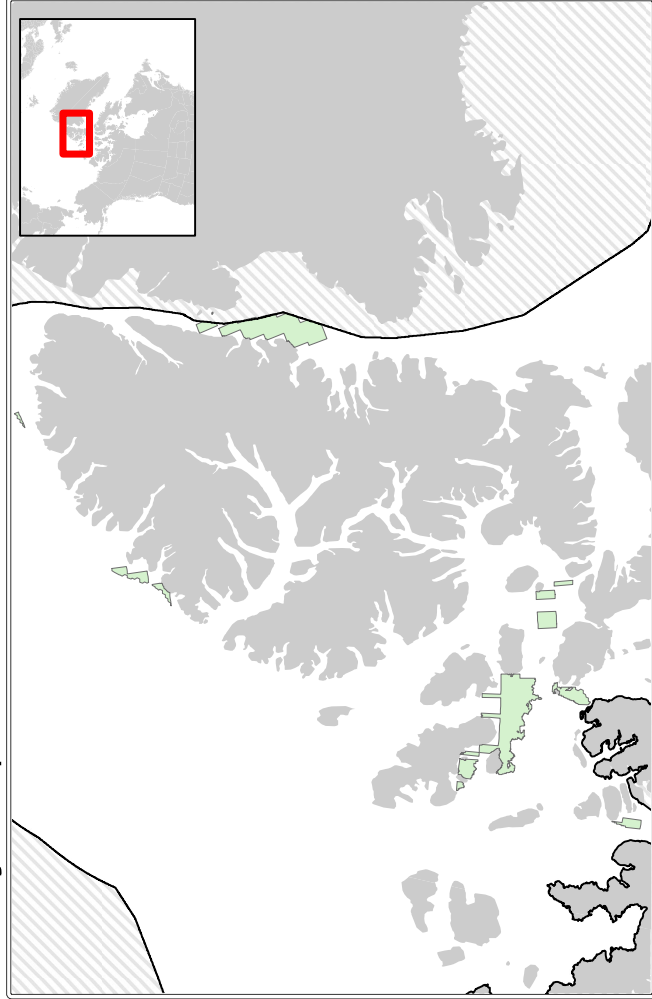
Marine Bioregion: Eastern Arctic

Description: Pelagic seascapes were identified using three classes of stratification (1), ice cover regime (2), temperature (3), and salinity (4). Once each individual data layer required for construction of the pelagic seascapes had been assembled they were combined using a simple spatial intersection operation in ArcMap 10.2. Following this a generic descriptive attribute was constructed for each individual polygon created by the intersection based on the class values present for each layer involved. Note that areas containing no-data values for 1 or more layer (e.g. shallow coastal areas) were classified generally as NoData. Each assembled seascape type was then split by bioregion. Water column stratification was derived from the temperature and salinity data extracted from NOAA's World Ocean Atlas 2013. Data on long-term mean annual salinity and temperature was selected across the study area at a resolution of 0.25° as a CSV containing latitude/longitude coordinates. Using a custom script written in Python 2.7, stratification was calculated as $\frac{1}{2} \left(\frac{1}{T} + \frac{1}{S} \right)$ using the Seawater-3.3 module. Ice cover regime was assessed using data obtained from the Canadian Ice Service. Using the 30-year (1981-2010) Sea Ice Climatic Atlas's Median Ice Concentration data product, ice cover regimes were classified into 3 categories of permanent ice areas, permanently open, and seasonally open (table 1). This data product comes in the form of 30-year averaged weekly median ice concentrations in vector format. Using a custom Python 2.7 script, polygons with median ice concentrations below 30% (open-water) and above 90% (closed-water) were identified for each weekly dataset and extracted. Temperature data for pelagic seascapes was obtained from NOAA's World Ocean Atlas 2013 (WOD13). Data on long-term mean annual salinity was extracted across the study area at a resolution of 0.25° as a CSV containing latitude/longitude coordinates. Using a custom script written in Python 2.7, temperature values were taken at the desired depths and an average was calculated for each 0.25° grid point. All available values in the upper 30m of the water were considered when calculating averages. Salinity data for pelagic seascapes was obtained from NOAA's World Ocean Atlas 2013. Data on long-term mean annual salinity was extracted across the study area at a resolution of 0.25° as a CSV containing latitude/longitude coordinates. Using a custom script written in Python 2.7, salinity values were taken at the desired depths and an average was calculated for each 0.25° grid point.

Associated Links

(2) Sea Ice Climatic Atlas: <https://www.canada.ca/en/environment-climate-change/services/ice-forecasts-observations/publications/sea-climatic-atlas-northern-waters-1981-2010.html>; (1, 3, & 4): NOAA: <https://www.nodc.noaa.gov/OC5/woa13/pubwoa13.html>

3305: Pelagic Seascapes



Stratification: 4, 13-8.55, Ice: SeasonallyOpen, Temperature: <0C, Salinity: <31.8 AA

Date: (1), (3), & (4): 2013; (2) 2013

Open Source: (1) & (3) & (4): Yes; (2) Yes

Organization: (1), (3), & (4): NOAA; (2) Canadian Ice Service

Associated Report: (1) Stratification: NOAA World Ocean Atlas; (2) ice cover regime: Sea Ice Climatic Atlas for the Northern Canadian Waters; (3) temperature: NOAA World Ocean Atlas; (4) salinity: NOAA World Ocean Atlas

Authors: (1) & (3): NOAA World Ocean Atlas (Temperature): R. A. Locarnini, A. V. Mishonov, J. I. Antonov, T. P. Boyer, H. E. Garcia, O. K. Baranova, M. M. Zweng, C. R. Paver, J. R. Reagan, D. R. Johnson, M. Hamilton, and D. Seidov; (1) & (4): NOAA World Ocean Atlas (Salinity): M. M. Zweng, J. R. Reagan, J. I. Antonov, R. A. Locarnini,

Data Summary

Management Unit: N/A

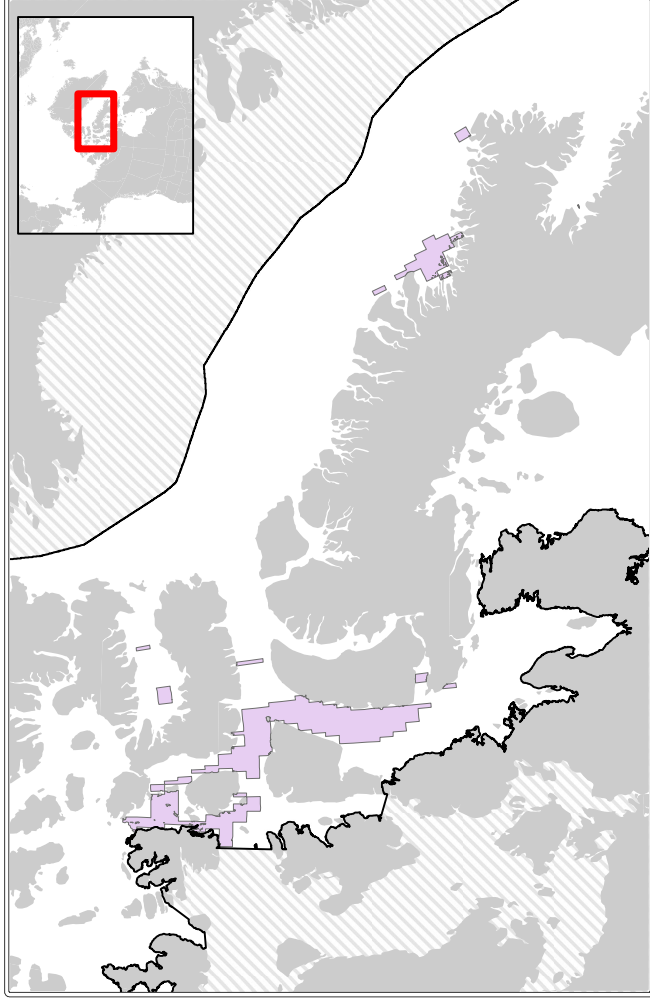
Marine Bioregion: Arctic Archipelago

Description: Pelagic seascapes were identified using three classes of stratification (1), ice cover regime (2), temperature (3), and salinity (4). Once each individual data layer required for construction of the pelagic seascapes had been assembled they were combined using a simple spatial intersection operation in ArcMap 10.2. Following this a generic descriptive attribute was constructed for each individual polygon created by the intersection based on the class values present for each layer involved. Note that areas containing no-data values for 1 or more layer (e.g. shallow coastal areas) were classified generally as NoData. Each assembled seascape type was then split by bioregion. Water column stratification was derived from the temperature and salinity data extracted from NOAA's World Ocean Atlas 2013. Data on long-term mean annual salinity and temperature was selected across the study area at a resolution of 0.25° as a CSV containing latitude/longitude coordinates. Using a custom script written in Python 2.7, stratification was calculated as $\frac{1}{2} \left(\frac{1}{T} + \frac{1}{S} \right)$ using the Seawater-3.3 module. Ice cover regime was assessed using data obtained from the Canadian Ice Service. Using the 30-year (1981-2010) Sea Ice Climatic Atlas's Median Ice Concentration data product, ice cover regimes were classified into 3 categories of permanent ice areas, permanently open, and seasonally open (table 1). This data product comes in the form of 30-year averaged weekly median ice concentrations in vector format. Using a custom Python 2.7 script, polygons with median ice concentrations below 30% (open-water) and above 90% (closed-water) were identified for each weekly dataset and extracted. Temperature data for pelagic seascapes was obtained from NOAA's World Ocean Atlas 2013 (WOD13). Data on long-term mean annual salinity was extracted across the study area at a resolution of 0.25° as a CSV containing latitude/longitude coordinates. Using a custom script written in Python 2.7, temperature values were taken at the desired depths and an average was calculated for each 0.25° grid point. All available values in the upper 30m of the water were considered when calculating averages. Salinity data for pelagic seascapes was obtained from NOAA's World Ocean Atlas 2013. Data on long-term mean annual salinity was extracted across the study area at a resolution of 0.25° as a CSV containing latitude/longitude coordinates. Using a custom script written in Python 2.7, salinity values were taken at the desired depths and an average was calculated for each 0.25° grid point.

Associated Links

(2) Sea Ice Climatic Atlas: <https://www.canada.ca/en/environment-climate-change/services/ice-forecasts-observations/publications/sea-climatic-atlas-northern-waters-1981-2010.html>; (1, 3, & 4): NOAA: <https://www.nodc.noaa.gov/OC5/woa13/pubwoa13.html>

3306: Pelagic Seascapes



Stratification: 4, 13-8.55, Ice: SeasonallyOpen, Temperature: <0C, Salinity: <31.8 EA

Date: (1), (3), & (4): 2013; (2) 2013

Open Source: (1) & (3) & (4): Yes; (2) Yes

Organization: (1), (3), & (4): NOAA; (2) Canadian Ice Service

Associated Report: (1) Stratification: NOAA World Ocean Atlas; (2) ice cover regime: Sea Ice Climatic Atlas for the Northern Canadian Waters; (3) temperature: NOAA World Ocean Atlas; (4) salinity: NOAA World Ocean Atlas

Authors: (1) & (3): NOAA World Ocean Atlas (Temperature): R. A. Locarnini, A. V. Mishonov, J. I. Antonov, T. P. Boyer, H. E. Garcia, O. K. Baranova, M. M. Zweng, C. R. Paver, J. R. Reagan, D. R. Johnson, M. Hamilton, and D. Seidov; (1) & (4): NOAA World Ocean Atlas (Salinity): M. M. Zweng, J. R. Reagan, J. I. Antonov, R. A. Locarnini,

Data Summary

Management Unit: N/A

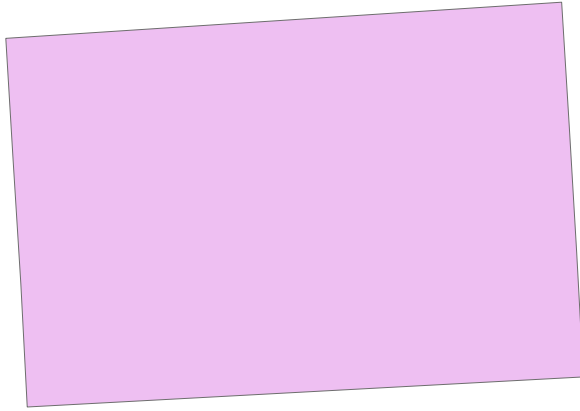
Marine Bioregion: Eastern Arctic

Description: Pelagic seascapes were identified using three classes of stratification (1), ice cover regime (2), temperature (3), and salinity (4). Once each individual data layer required for construction of the pelagic seascapes had been assembled they were combined using a simple spatial intersection operation in ArcMap 10.2. Following this a generic descriptive attribute was constructed for each individual polygon created by the intersection based on the class values present for each layer involved. Note that areas containing no-data values for 1 or more layer (e.g. shallow coastal areas) were classified generally as NoData. Each assembled seascape type was then split by bioregion. Water column stratification was derived from the temperature and salinity data extracted from NOAA's World Ocean Atlas 2013. Data on long-term mean annual salinity and temperature was selected across the study area at a resolution of 0.25° as a CSV containing latitude/longitude coordinates. Using a custom script written in Python 2.7, stratification was calculated as $\frac{1}{2} \left(\frac{1}{T} + \frac{1}{S} \right)$ using the Seawater-3.3 module. Ice cover regime was assessed using data obtained from the Canadian Ice Service. Using the 30-year (1981-2010) Sea Ice Climatic Atlas's Median Ice Concentration data product, ice cover regimes were classified into 3 categories of permanent ice areas, permanently open, and seasonally open (table 1). This data product comes in the form of 30-year averaged weekly median ice concentrations in vector format. Using a custom Python 2.7 script, polygons with median ice concentrations below 30% (open-water) and above 90% (closed-water) were identified for each weekly dataset and extracted. Temperature data for pelagic seascapes was obtained from NOAA's World Ocean Atlas 2013 (WOD13). Data on long-term mean annual salinity was extracted across the study area at a resolution of 0.25° as a CSV containing latitude/longitude coordinates. Using a custom script written in Python 2.7, temperature values were taken at the desired depths and an average was calculated for each 0.25° grid point. All available values in the upper 30m of the water were considered when calculating averages. Salinity data for pelagic seascapes was obtained from NOAA's World Ocean Atlas 2013. Data on long-term mean annual salinity was extracted across the study area at a resolution of 0.25° as a CSV containing latitude/longitude coordinates. Using a custom script written in Python 2.7, salinity values were taken at the desired depths and an average was calculated for each 0.25° grid point.

Associated Links

(2) Sea Ice Climatic Atlas: <https://www.canada.ca/en/environment-climate-change/services/ice-forecasts-observations/publications/sea-climatic-atlas-northern-waters-1981-2010.html>; (1, 3, & 4): NOAA: <https://www.nodc.noaa.gov/OC5/woa13/pubwoa13.html>

3307: Pelagic Seascapes



Stratification: 4, 13-8.55, Ice: SeasonallyOpen, Temperature: <0C, Salinity: >31.8 AA

Date: (1), (3), & (4): 2013; (2) 2013

Open Source: (1) & (3) & (4): Yes; (2) Yes

Organization: (1), (3), & (4): NOAA; (2) Canadian Ice Service

Associated Report: (1) Stratification: NOAA World Ocean Atlas; (2) ice cover regime: Sea Ice Climatic Atlas for the Northern Canadian Waters; (3) temperature: NOAA World Ocean Atlas; (4) salinity: NOAA World Ocean Atlas

Authors: (1) & (3): NOAA World Ocean Atlas (Temperature): R. A. Locarnini, A. V. Mishonov, J. I. Antonov, T. P. Boyer, H. E. Garcia, O. K. Baranova, M. M. Zweng, C. R. Paver, J. R. Reagan, D. R. Johnson, M. Hamilton, and D. Seidov; (1) & (4): NOAA World Ocean Atlas (Salinity): M. M. Zweng, J.R. Reagan, J.I. Antonov, R.A. Locarnini,

Data Summary

Management Unit: N/A

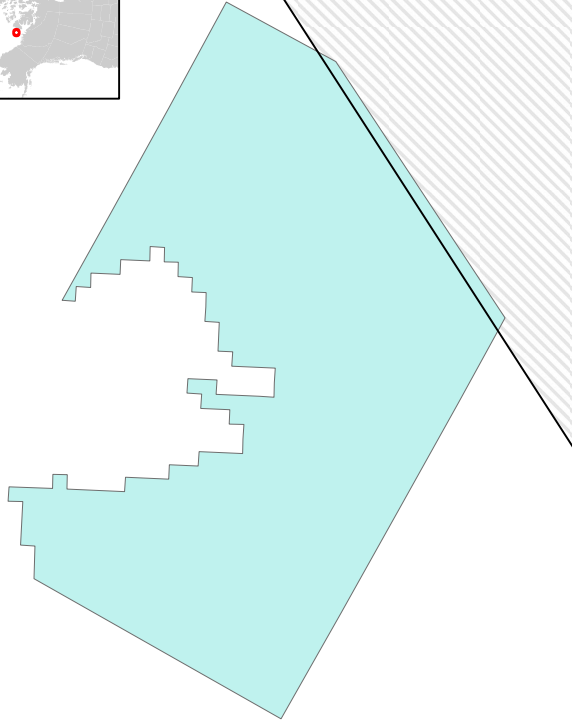
Marine Bioregion: Arctic Archipelago

Description: Pelagic seascapes were identified using three classes of stratification (1), ice cover regime (2), temperature (3), and salinity (4). Once each individual data layer required for construction of the pelagic seascapes had been assembled they were combined using a simple spatial intersection operation in ArcMap 10.2. Following this a generic descriptive attribute was constructed for each individual polygon created by the intersection based on the class values present for each layer involved. Note that areas containing no-data values for 1 or more layer (e.g. shallow coastal areas) were classified generally as NoData. Each assembled seascape type was then split by bioregion. Water column stratification was derived from the temperature and salinity data extracted from NOAA's World Ocean Atlas 2013. Data on long-term mean annual salinity and temperature was selected across the study area at a resolution of 0.25° as a CSV containing latitude/longitude coordinates. Using a custom script written in Python 2.7, stratification was calculated as $\frac{t}{t + 7d}$ using the Seawater-3.3 module. Ice cover regime was assessed using data obtained from the Canadian Ice Service. Using the 30-year (1981-2010) Sea Ice Climatic Atlas's Median Ice Concentration data product, ice cover regimes were classified into 3 categories of permanent ice areas, permanently open, and seasonally open (table 1). This data product comes in the form of 30-year averaged weekly median ice concentrations in vector format. Using a custom Python 2.7 script, polygons with median ice concentrations below 30% (open-water) and above 90% (closed-water) were identified for each weekly dataset and extracted. Temperature data for pelagic seascapes was obtained from NOAA's World Ocean Atlas 2013 (WOD13). Data on long-term mean annual salinity was extracted across the study area at a resolution of 0.25° as a CSV containing latitude/longitude coordinates. Using a custom script written in Python 2.7, temperature values were taken at the desired depths and an average was calculated for each 0.25° grid point. All available values in the upper 30m of the water were considered when calculating averages. Salinity data for pelagic seascapes was obtained from NOAA's World Ocean Atlas 2013. Data on long-term mean annual salinity was extracted across the study area at a resolution of 0.25° as a CSV containing latitude/longitude coordinates. Using a custom script written in Python 2.7, salinity values were taken at the desired depths and an average was calculated for each 0.25° grid point.

Associated Links

(2) Sea Ice Climatic Atlas: <https://www.canada.ca/en/environment-climate-change/services/ice-forecasts-observations/publications/sea-climatic-atlas-northern-waters-1981-2010.html>; (1, 3, & 4): NOAA: <https://www.nodc.noaa.gov/OC5/woa13/pubwoa13.html>

3308: Pelagic Seascapes



Stratification: 4, 13-8.55, Ice: SeasonallyOpen, Temperature: <2C, Salinity: <30.4 AB

Date: (1), (3), & (4): 2013; (2) 2013

Open Source: (1) & (3) & (4): Yes; (2) Yes

Organization: (1), (3), & (4): NOAA; (2) Canadian Ice Service

Associated Report: (1) Stratification: NOAA World Ocean Atlas; (2) ice cover regime: Sea Ice Climatic Atlas for the Northern Canadian Waters; (3) temperature: NOAA World Ocean Atlas; (4) salinity: NOAA World Ocean Atlas

Authors: (1) & (3): NOAA World Ocean Atlas (Temperature): R. A. Locarnini, A. V. Mishonov, J. I. Antonov, T. P. Boyer, H. E. Garcia, O. K. Baranova, M. M. Zweng, C. R. Paver, J. R. Reagan, D. R. Johnson, M. Hamilton, and D. Seidov; (1) & (4): NOAA World Ocean Atlas (Salinity): M. M. Zweng, J. R. Reagan, J. I. Antonov, R. A. Locarnini,

Data Summary

Management Unit: N/A

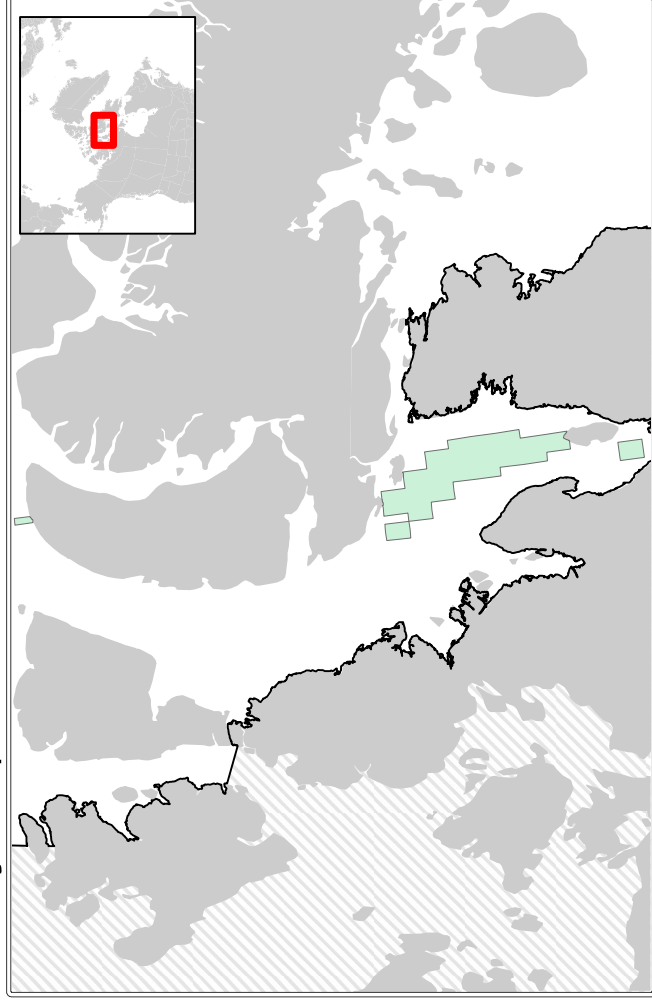
Marine Bioregion: Arctic Basin

Description: Pelagic seascapes were identified using three classes of stratification (1), ice cover regime (2), temperature (3), and salinity (4). Once each individual data layer required for construction of the pelagic seascapes had been assembled they were combined using a simple spatial intersection operation in ArcMap 10.2. Following this a generic descriptive attribute was constructed for each individual polygon created by the intersection based on the class values present for each layer involved. Note that areas containing no-data values for 1 or more layer (e.g. shallow coastal areas) were classified generally as NoData. Each assembled seascape type was then split by bioregion. Water column stratification was derived from the temperature and salinity data extracted from NOAA's World Ocean Atlas 2013. Data on long-term mean annual salinity and temperature was selected across the study area at a resolution of 0.25° as a CSV containing latitude/longitude coordinates. Using a custom script written in Python 2.7, stratification was calculated as $\frac{t}{t + 7d}$ using the Seawater-3.3 module. Ice cover regime was assessed using data obtained from the Canadian Ice Service. Using the 30-year (1981-2010) Sea Ice Climatic Atlas's Median Ice Concentration data product, ice cover regimes were classified into 3 categories of permanent ice areas, permanently open, and seasonally open (table 1). This data product comes in the form of 30-year averaged weekly median ice concentrations in vector format. Using a custom Python 2.7 script, polygons with median ice concentrations below 30% (open-water) and above 90% (closed-water) were identified for each weekly dataset and extracted. Temperature data for pelagic seascapes was obtained from NOAA's World Ocean Atlas 2013 (WOD13). Data on long-term mean annual salinity was extracted across the study area at a resolution of 0.25° as a CSV containing latitude/longitude coordinates. Using a custom script written in Python 2.7, temperature values were taken at the desired depths and an average was calculated for each 0.25° grid point. All available values in the upper 30m of the water were considered when calculating averages. Salinity data for pelagic seascapes was obtained from NOAA's World Ocean Atlas 2013. Data on long-term mean annual salinity was extracted across the study area at a resolution of 0.25° as a CSV containing latitude/longitude coordinates. Using a custom script written in Python 2.7, salinity values were taken at the desired depths and an average was calculated for each 0.25° grid point.

Associated Links

(2) Sea Ice Climatic Atlas: <https://www.canada.ca/en/environment-climate-change/services/ice-forecasts-observations/publications/sea-climatic-atlas-northern-waters-1981-2010.html>; (1, 3, & 4): NOAA: <https://www.nodc.noaa.gov/OC5/woa13/pubwoa13.html>

3309: Pelagic Seascapes



Stratification: 4, 13-8.55, Ice: SeasonallyOpen, Temperature: <2C, Salinity: <30.4 EA

Date: (1), (3), & (4): 2013; (2) 2013

Open Source: (1) & (3) & (4): Yes; (2) Yes

Organization: (1), (3), & (4): NOAA; (2) Canadian Ice Service

Associated Report: (1) Stratification: NOAA World Ocean Atlas; (2) ice cover regime: Sea Ice Climatic Atlas for the Northern Canadian Waters; (3) temperature: NOAA World Ocean Atlas; (4) salinity: NOAA World Ocean Atlas

Authors: (1) & (3): NOAA World Ocean Atlas (Temperature): R. A. Locarnini, A. V. Mishonov, J. I. Antonov, T. P. Boyer, H. E. Garcia, O. K. Baranova, M. M. Zweng, C. R. Paver, J. R. Reagan, D. R. Johnson, M. Hamilton, and D. Seidov; (1) & (4): NOAA World Ocean Atlas (Salinity): M. M. Zweng, J. R. Reagan, J. I. Antonov, R. A. Locarnini,

Data Summary

Management Unit: N/A

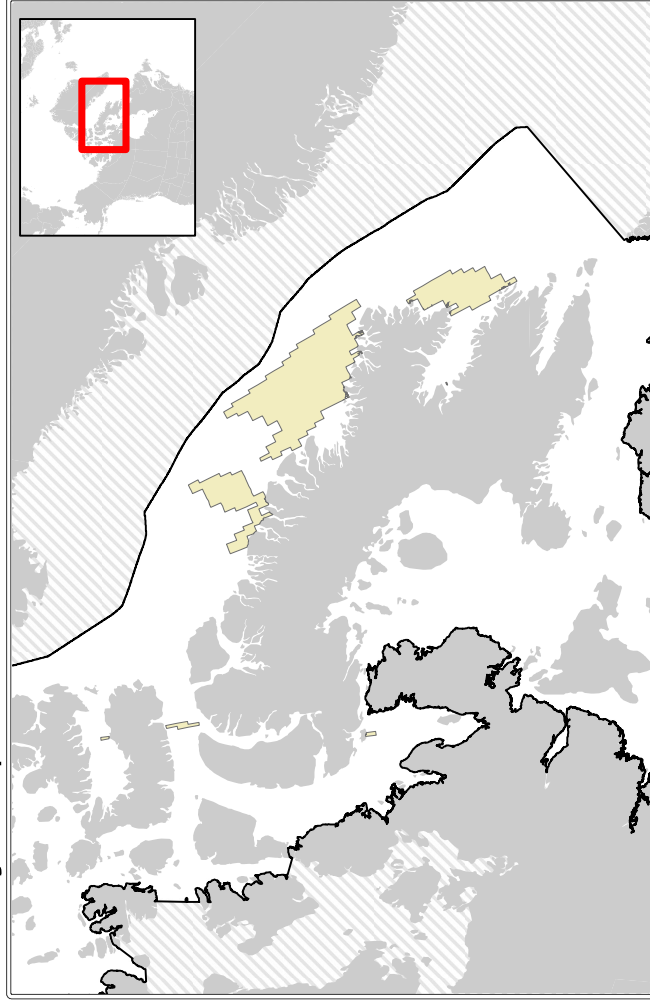
Marine Bioregion: Eastern Arctic

Description: Pelagic seascapes were identified using three classes of stratification (1), ice cover regime (2), temperature (3), and salinity (4). Once each individual data layer required for construction of the pelagic seascapes had been assembled they were combined using a simple spatial intersection operation in ArcMap 10.2. Following this a generic descriptive attribute was constructed for each individual polygon created by the intersection based on the class values present for each layer involved. Note that areas containing no-data values for 1 or more layer (e.g. shallow coastal areas) were classified generally as NoData. Each assembled seascape type was then split by bioregion. Water column stratification was derived from the temperature and salinity data extracted from NOAA's World Ocean Atlas 2013. Data on long-term mean annual salinity and temperature was selected across the study area at a resolution of 0.25° as a CSV containing latitude/longitude coordinates. Using a custom script written in Python 2.7, stratification was calculated as $\frac{1}{2} \left(\frac{1}{T} + \frac{1}{S} \right)$ using the Seawater-3.3 module. Ice cover regime was assessed using data obtained from the Canadian Ice Service. Using the 30-year (1981-2010) Sea Ice Climatic Atlas's Median Ice Concentration data product, ice cover regimes were classified into 3 categories of permanent ice areas, permanently open, and seasonally open (table 1). This data product comes in the form of 30-year averaged weekly median ice concentrations in vector format. Using a custom Python 2.7 script, polygons with median ice concentrations below 30% (open-water) and above 90% (closed-water) were identified for each weekly dataset and extracted. Temperature data for pelagic seascapes was obtained from NOAA's World Ocean Atlas 2013 (WOD13). Data on long-term mean annual salinity was extracted across the study area at a resolution of 0.25° as a CSV containing latitude/longitude coordinates. Using a custom script written in Python 2.7, temperature values were taken at the desired depths and an average was calculated for each 0.25° grid point. All available values in the upper 30m of the water were considered when calculating averages. Salinity data for pelagic seascapes was obtained from NOAA's World Ocean Atlas 2013. Data on long-term mean annual salinity was extracted across the study area at a resolution of 0.25° as a CSV containing latitude/longitude coordinates. Using a custom script written in Python 2.7, salinity values were taken at the desired depths and an average was calculated for each 0.25° grid point.

Associated Links

(2) Sea Ice Climatic Atlas: <https://www.canada.ca/en/environment-climate-change/services/ice-forecasts-observations/publications/sea-climatic-atlas-northern-waters-1981-2010.html>; (1, 3, & 4): NOAA: <https://www.nodc.noaa.gov/OC5/woa13/pubwoa13.html>

3310: Pelagic Seascapes



Stratification: 4, 13-8.55, Ice: SeasonallyOpen, Temperature: <2C, Salinity: <31.8 EA

Date: (1), (3), & (4): 2013; (2) 2013

Open Source: (1) & (3) & (4): Yes; (2) Yes

Organization: (1), (3), & (4): NOAA; (2) Canadian Ice Service

Associated Report: (1) Stratification: NOAA World Ocean Atlas; (2) ice cover regime: Sea Ice Climatic Atlas for the Northern Canadian Waters; (3) temperature: NOAA World Ocean Atlas; (4) salinity: NOAA World Ocean Atlas

Authors: (1) & (3): NOAA World Ocean Atlas (Temperature): R. A. Locarnini, A. V. Mishonov, J. I. Antonov, T. P. Boyer, H. E. Garcia, O. K. Baranova, M. M. Zweng, C. R. Paver, J. R. Reagan, D. R. Johnson, M. Hamilton, and D. Seidov; (1) & (4): NOAA World Ocean Atlas (Salinity): M. M. Zweng, J.R. Reagan, J.I. Antonov, R.A. Locarnini,

Data Summary

Management Unit: N/A

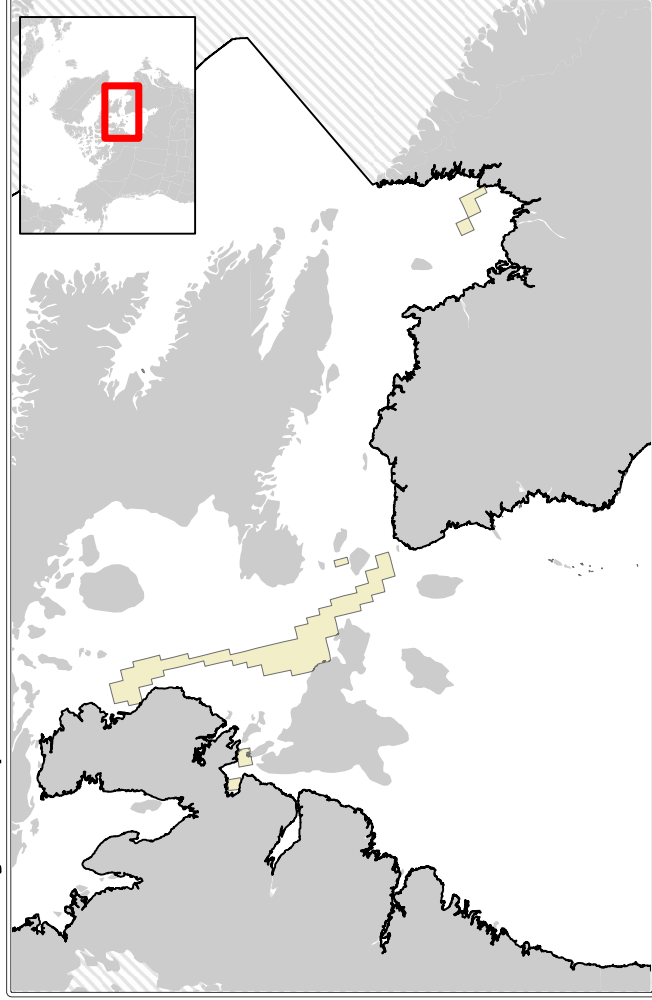
Marine Bioregion: Eastern Arctic

Description: Pelagic seascapes were identified using three classes of stratification (1), ice cover regime (2), temperature (3), and salinity (4). Once each individual data layer required for construction of the pelagic seascapes had been assembled they were combined using a simple spatial intersection operation in ArcMap 10.2. Following this a generic descriptive attribute was constructed for each individual polygon created by the intersection based on the class values present for each layer involved. Note that areas containing no-data values for 1 or more layer (e.g. shallow coastal areas) were classified generally as NoData. Each assembled seascape type was then split by bioregion. Water column stratification was derived from the temperature and salinity data extracted from NOAA's World Ocean Atlas 2013. Data on long-term mean annual salinity and temperature was selected across the study area at a resolution of 0.25° as a CSV containing latitude/longitude coordinates. Using a custom script written in Python 2.7, stratification was calculated as $\frac{1}{2} \left(\frac{1}{T} + \frac{1}{S} \right)$ using the Seawater-3.3 module. Ice cover regime was assessed using data obtained from the Canadian Ice Service. Using the 30-year (1981-2010) Sea Ice Climatic Atlas's Median Ice Concentration data product, ice cover regimes were classified into 3 categories of permanent ice areas, permanently open, and seasonally open (table 1). This data product comes in the form of 30-year averaged weekly median ice concentrations in vector format. Using a custom Python 2.7 script, polygons with median ice concentrations below 30% (open-water) and above 90% (closed-water) were identified for each weekly dataset and extracted. Temperature data for pelagic seascapes was obtained from NOAA's World Ocean Atlas 2013 (WOD13). Data on long-term mean annual salinity was extracted across the study area at a resolution of 0.25° as a CSV containing latitude/longitude coordinates. Using a custom script written in Python 2.7, temperature values were taken at the desired depths and an average was calculated for each 0.25° grid point. All available values in the upper 30m of the water were considered when calculating averages. Salinity data for pelagic seascapes was obtained from NOAA's World Ocean Atlas 2013. Data on long-term mean annual salinity was extracted across the study area at a resolution of 0.25° as a CSV containing latitude/longitude coordinates. Using a custom script written in Python 2.7, salinity values were taken at the desired depths and an average was calculated for each 0.25° grid point.

Associated Links

(2) Sea Ice Climatic Atlas: <https://www.canada.ca/en/environment-climate-change/services/ice-forecasts-observations/publications/sea-climatic-atlas-northern-waters-1981-2010.html>; (1, 3, & 4): NOAA: <https://www.nodc.noaa.gov/OC5/woa13/pubwoa13.html>

3311: Pelagic Seascapes



Stratification: 4, 13-8.55, Ice: SeasonallyOpen, Temperature: <2C, Salinity: <31.8 HB

Date: (1), (3), & (4): 2013; (2) 2013

Open Source: (1) & (3) & (4): Yes; (2) Yes

Organization: (1), (3), & (4): NOAA; (2) Canadian Ice Service

Associated Report: (1) Stratification: NOAA World Ocean Atlas; (2) ice cover regime: Sea Ice Climatic Atlas for the Northern Canadian Waters; (3) temperature: NOAA World Ocean Atlas; (4) salinity: NOAA World Ocean Atlas

Authors: (1) & (3): NOAA World Ocean Atlas (Temperature): R. A. Locarnini, A. V. Mishonov, J. I. Antonov, T. P. Boyer, H. E. Garcia, O. K. Baranova, M. M. Zweng, C. R. Paver, J. R. Reagan, D. R. Johnson, M. Hamilton, and D. Seidov; (1) & (4): NOAA World Ocean Atlas (Salinity): M. M. Zweng, J.R. Reagan, J.I. Antonov, R.A. Locarnini,

Data Summary

Management Unit: N/A

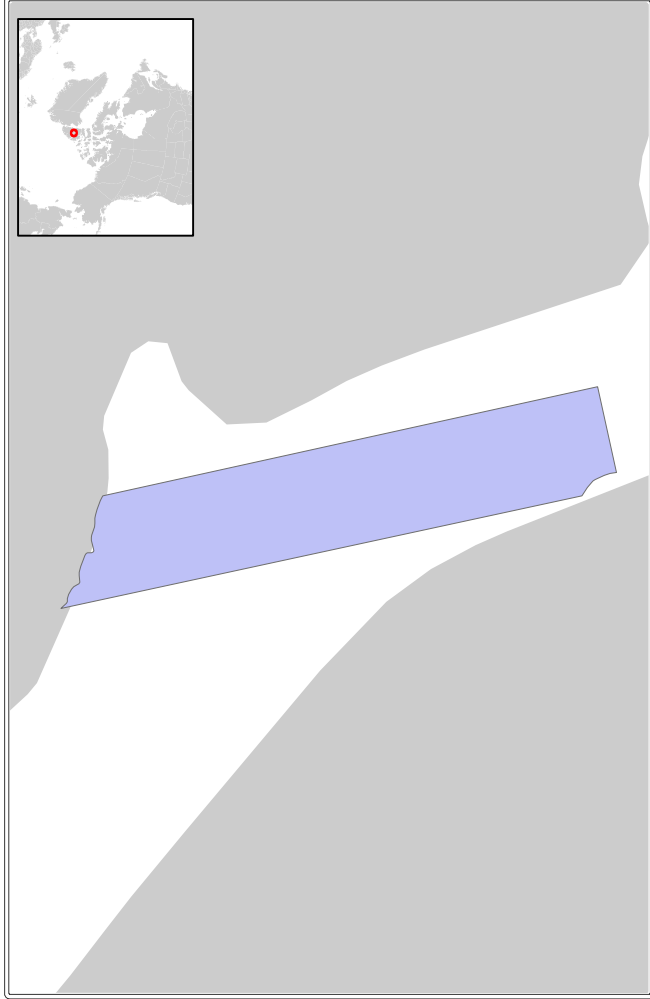
Marine Bioregion: Hudson Bay Complex

Description: Pelagic seascapes were identified using three classes of stratification (1), ice cover regime (2), temperature (3), and salinity (4). Once each individual data layer required for construction of the pelagic seascapes had been assembled they were combined using a simple spatial intersection operation in ArcMap 10.2. Following this a generic descriptive attribute was constructed for each individual polygon created by the intersection based on the class values present for each layer involved. Note that areas containing no-data values for 1 or more layer (e.g. shallow coastal areas) were classified generally as NoData. Each assembled seascape type was then split by bioregion. Water column stratification was derived from the temperature and salinity data extracted from NOAA's World Ocean Atlas 2013. Data on long-term mean annual salinity and temperature was selected across the study area at a resolution of 0.25° as a CSV containing latitude/longitude coordinates. Using a custom script written in Python 2.7, stratification was calculated as $\frac{1}{2} \left(\frac{1}{T} + \frac{1}{S} \right)$ using the Seawater-3.3 module. Ice cover regime was assessed using data obtained from the Canadian Ice Service. Using the 30-year (1981-2010) Sea Ice Climatic Atlas's Median Ice Concentration data product, ice cover regimes were classified into 3 categories of permanent ice areas, permanently open, and seasonally open (table 1). This data product comes in the form of 30-year averaged weekly median ice concentrations in vector format. Using a custom Python 2.7 script, polygons with median ice concentrations below 30% (open-water) and above 90% (closed-water) were identified for each weekly dataset and extracted. Temperature data for pelagic seascapes was obtained from NOAA's World Ocean Atlas 2013 (WOD13). Data on long-term mean annual salinity was extracted across the study area at a resolution of 0.25° as a CSV containing latitude/longitude coordinates. Using a custom script written in Python 2.7, temperature values were taken at the desired depths and an average was calculated for each 0.25° grid point. All available values in the upper 30m of the water were considered when calculating averages. Salinity data for pelagic seascapes was obtained from NOAA's World Ocean Atlas 2013. Data on long-term mean annual salinity was extracted across the study area at a resolution of 0.25° as a CSV containing latitude/longitude coordinates. Using a custom script written in Python 2.7, salinity values were taken at the desired depths and an average was calculated for each 0.25° grid point.

Associated Links

(2) Sea Ice Climatic Atlas: <https://www.canada.ca/en/environment-climate-change/services/ice-forecasts-observations/publications/sea-climatic-atlas-northern-waters-1981-2010.html>; (1, 3, & 4): NOAA: <https://www.nodc.noaa.gov/OC5/woa13/pubwoa13.html>

3312: Pelagic Seascapes



Stratification: 4, 13-8.55, Ice: SeasonallyOpen, Temperature: <2C, Salinity: >31.8 AA

Date: (1), (3), & (4): 2013; (2) 2013

Open Source: (1) & (3) & (4): Yes; (2) Yes

Organization: (1), (3), & (4): NOAA; (2) Canadian Ice Service

Associated Report: (1) Stratification: NOAA World Ocean Atlas; (2) ice cover regime: Sea Ice Climatic Atlas for the Northern Canadian Waters; (3) temperature: NOAA World Ocean Atlas; (4) salinity: NOAA World Ocean Atlas

Authors: (1) & (3): NOAA World Ocean Atlas (Temperature): R. A. Locarnini, A. V. Mishonov, J. I. Antonov, T. P. Boyer, H. E. Garcia, O. K. Baranova, M. M. Zweng, C. R. Paver, J. R. Reagan, D. R. Johnson, M. Hamilton, and D. Seidov; (1) & (4): NOAA World Ocean Atlas (Salinity): M. M. Zweng, J. R. Reagan, J. I. Antonov, R. A. Locarnini,

Data Summary

Management Unit: N/A

Marine Bioregion: Arctic Archipelago

Description: Pelagic seascapes were identified using three classes of stratification (1), ice cover regime (2), temperature (3), and salinity (4). Once each individual data layer required for construction of the pelagic seascapes had been assembled they were combined using a simple spatial intersection operation in ArcMap 10.2. Following this a generic descriptive attribute was constructed for each individual polygon created by the intersection based on the class values present for each layer involved. Note that areas containing no-data values for 1 or more layer (e.g. shallow coastal areas) were classified generally as NoData. Each assembled seascape type was then split by bioregion. Water column stratification was derived from the temperature and salinity data extracted from NOAA's World Ocean Atlas 2013. Data on long-term mean annual salinity and temperature was selected across the study area at a resolution of 0.25° as a CSV containing latitude/longitude coordinates. Using a custom script written in Python 2.7, stratification was calculated as $\frac{1}{2} \left(\frac{1}{T} + \frac{1}{S} \right)$ using the Seawater-3.3 module. Ice cover regime was assessed using data obtained from the Canadian Ice Service. Using the 30-year (1981-2010) Sea Ice Climatic Atlas's Median Ice Concentration data product, ice cover regimes were classified into 3 categories of permanent ice areas, permanently open, and seasonally open (table 1). This data product comes in the form of 30-year averaged weekly median ice concentrations in vector format. Using a custom Python 2.7 script, polygons with median ice concentrations below 30% (open-water) and above 90% (closed-water) were identified for each weekly dataset and extracted. Temperature data for pelagic seascapes was obtained from NOAA's World Ocean Atlas 2013 (WOD13). Data on long-term mean annual salinity was extracted across the study area at a resolution of 0.25° as a CSV containing latitude/longitude coordinates. Using a custom script written in Python 2.7, temperature values were taken at the desired depths and an average was calculated for each 0.25° grid point. All available values in the upper 30m of the water were considered when calculating averages. Salinity data for pelagic seascapes was obtained from NOAA's World Ocean Atlas 2013. Data on long-term mean annual salinity was extracted across the study area at a resolution of 0.25° as a CSV containing latitude/longitude coordinates. Using a custom script written in Python 2.7, salinity values were taken at the desired depths and an average was calculated for each 0.25° grid point.

Associated Links

(2) Sea Ice Climatic Atlas: <https://www.canada.ca/en/environment-climate-change/services/ice-forecasts-observations/publications/sea-climatic-atlas-northern-waters-1981-2010.html>; (1, 3, & 4): NOAA: <https://www.nodc.noaa.gov/OC5/woa13/pubwoa13.html>