APPENDIX 8. ABBREVIATIONS

AABW Antarctic Bottom Water

AAIW Antarctic Intermediate Surface Water

AASW Antarctic Surface Water

AATSR Advanced ATSR

ABE Autonomous Benthic Explorer

ABF Angola-Benguela Front ABW Arctic Bottom Water

ACC Antarctic Circumpolar Current ACD aragonite compensation depth

ACOUS Arctic Climate Observations Using Underwater Sound (project)

ADAS Airborne Diode Array Spectrometer ADCP acoustic Doppler current profiler ADEOS Advanced Earth Observing Satellite

ADL aerobic diving limits
ADV Adventure Bank Vortex
ADW Adriatic Deep Water

AEE anomalously enriched elements
AFC Automatic Flow Cytometry
antifreeze glycopeptides

AGCM atmospheric general circulation model(s)

AGDW Aegean Deep Water AIRSAR Airborne SAR

AIS Atlantic Ionian Stream

AISI Airborne Imaging Spectrometer AIW Atlantic Intermediate Water

ALACE Autonomous Lagrangian Circulation Explorer

ALOS Advanced Land Observing Satellite

AMC axial magma chamber

AMIP Atmospheric Model Intercomparison Project

AMS accelerator mass spectrometry

AMSR Advanced Microwave Scanning Radiometer

AMT Atlantic Meridional Transect AOCI Airborne Ocean Color Instrument

AOGCM atmosphere-ocean general circulation models

AOL Airborne Oceanographic LIDAR

AOP apparent optical property
APC Advanced Piston Corer
APE available potential energy
APFZ Antarctic Polar Frontal Zone
APTS astronomical polarity timescale

ARIES Autosampling and Recording Instrumental Environmental Sampler

ASDIC Antisubmarine Detection Investigation Committee

ASMR Advanced Scanning Microwave Radiometer

ASP amnesic shellfish poisoning AST axial summit trough

ASUW Atlantic Subarctic Upper Water

ASW Arabian Sea Water; or antisubmarine warfare

ATM Airborne Topographic Mapper

ATOC Acoustic Thermometry of Ocean Climate

ATP adenosine triphosphate

ATSR Along-Track Scanning Radiometer AUV autonomous underwater vehicle

AVHRR Advanced Very High Resolution Radiometer
AVIRIS Airborne Visible/Infrared Imaging Spectrometer

AVP axial volcanic ridge(s)

AVPPO Autonomous Vertically Profiling Plankton Observatory

AW Atlantic Water
AXBT air-launched XBT
AXSV air-launched XSV

AZP azaspirazid shellfish poisoning

BB broadband

BBL benthic boundary layer
BBW Bengal Bay Water

BCD bacterial carbon demand BGE bacterial growth efficiency BGHS base of gas hydrate stability

BI baroclinic instability

BIO Bedford Institute of Oceanography (Canada)

BIOMASS Biological Investigations of Marine Antarctic Systems and Stocks

BIONESS Bedford Institute of Oceanography Net and Environmental Sensing System

BMC Brazil/Malvinas Confluence
BOD biological oxygen demand
BP bacterial production
BR bacterial respiration
BSR bottom-simulating reflector
BTM Bermuda Testbed Mooring
BWT bottom water temperature

CASI Compact Airborne Spectrographic Imager

CBDW Canadian Basin Deep Water

CCAMLR Commission for the Conservation of Antarctic Marine Living Resources

CCD calcite compensation depth CCrD carbonate critical depth

CDOM colored dissolved organic matter

CDW Circumpolar Deep Water; or Cretan Deep Water CFA carbonate fluoroapatite; or continuous flow analyser

CFC chlorofluorocarbon
CFP ciguatera fish poisoning
CFT controlled flux technique

CHAMP Challenging Minisatellite Payload

Chl-a chlorophyll-a

CIW Californian Intermediate Water; *or* Cretan Intermediate Water CLE/CSV competitive ligand equilibration with cathode stripping voltammetry

CLIVAR Climate Variability and Predictability Program

CMA Chemical Manufacturers Association
CNES Centre Nationale d'Etudes Spatiales
COIS Coastal Ocean Imaging Spectrometer

COS carbonyl sulfide COT cost of transport

CPR Continuous Plankton Recorder CRM chemical remanent magnetization

CS₂ carbon disulfide

CSA Canadian Space Agency CSO combined sewer overflow

CSSF Canadian Scientific Submersible Facility

CTD conductivity, temperature, and depth; or conductivity-temperature-depth (profiler)

CUFES continuous underway fish egg sampler

CZCS Coastal Zone Color Scanner
D/O Dansgaard-Oeschger
DCC direct current condenser
DCM deep chlorophyll maximum

DCMU 3-(3,4-dichlorophenyl)-1,1-dimethylurea

DDT dichlorodiphenyltrichloroethane
DIC dissolved inorganic carbon
DIN dissolved inorganic nitrogen
DIP dissolved inorganic phosphorus

DMGe dimethylgermanic acid DMHg dimethylmercury DMS dimethyl sulfide DMSb dimethylantimonate

DMSP Defense Meteorological Satellite Program; or 3-(dimethylsulfonium) propionate

DNA deoxyribonucleic acid
DOC dissolved organic carbon
DOM dissolved organic matter
DON dissolved organic nitrogen
dissolved organic phosphorus

DPASV differential pulse anodic stripping voltammetry

dpm disintegrations per minute

DRM detrital remanent magnetization/depositional detrital remanent magnetization

DSDP Deep Sea Drilling Project
DSL deep scattering layer
DSP diarrhetic shellfish poisoning

DVM diel vertical migration DW Deep Arctic Water

DWBC deep western boundary current

DWT deadweight tonnage
EAC East Australian Current
EACC East Africa Coastal Current
EAIS East Antarctic ice sheet

EASIW Eastern Atlantic Subarctic Intermediate Water

EBDW Eurasian Basin Deep Water

ECMWF European Centre for Medium-Range Weather Forecasts

EEM excitation-emission matrix (spectroscopy)

EEZ exclusive economic zone
EF enrichment factor
EGC East Greenland Current

EIC Equatorial Intermediate Current

EKE eddy kinetic energy

ELM external limiting membrane

EM electromagnetic

EMDW Eastern Mediterranean Deep Water
EMT Eastern Mediterranean Transient
ENACW Eastern North Atlantic Central Water
ENPCW Eastern North Pacific Central Water
ENPTW Eastern North Pacific Transition Water

ENSO El Niño Southern Oscillation Envisat Environmental Satellite EOS Earth Observing System EPI epifluorescence microscopy

EPR East Pacific Rise

EPS extracellular polysaccharides

ERS Earth Resources Satellite
ESA European Space Agency
ESD equivalent spherical diameter

ESMR Electrically Scanning Microwave Radiometer

ESPCW Eastern South Pacific Central Water
ESPIW Eastern South Pacific Intermediate Water
ESPTW Eastern South Pacific Transition Water

ESS evolutionarily stable strategy
ESSE error subspace statistical estimation

ESTAR Electrically Scanning Thinned Array Radiometer

ETR electron transport rate
EUC Equatorial Undercurrent

FAO (UN) Food and Agriculture Organization FBI fresh water-brackish water interface

FCLS ferrochrome lignosulfate

FDOM fluorescent (dissolved) organic matter

FFP fast field program
FIA flow injection analyzer

FID flame ionization detector/detection
FLIP Floating Instrument Platform
FMI Formation Micro-Image
FMP Fishery Management Plan

FMS formation scanner FOM figure of merit

FPA fixed-potential amperometry FRAM Fine Resolution Antarctic Model

FRR fast repetition rate

FRRF fast repetition rate fluorometry

FSU Florida State University

FTIR Fourier transform infrared spectrometry/spectrometer

FY first-year (ice) GAC global area coverage

GBRUC Great Barrier Reef Undercurrent

GC gas chromatography GCM general circulation model

GCOS Global Climate Observing System
GEF Global Environmental Facility

GEOHAB Global Ecology and Oceanography HABs (program)

GEOSECS Geochemical Ocean Sections Study

GLI Global Imager

GLOBEC Global Ocean Ecosystem Dynamics GLORIA geological long-range ASDIC GMOs genetically modified organism(s)

GOCE Gravity Field and Steady-state Ocean Circulation Explorer

GODAE Global Ocean Data Assimilation Experiment

GOM Gulf of Mexico

GOOS Global Ocean Observing System
GPS Global Positioning System
GPTS geomagnetic polarity timescale

GRACE Gravity Recovery and Climate Experiment

GSNW Gulf Stream North Wall (index)

GSSP Global Boundary Stratotype Section and Point

GT gross tonnage HAB harmful algal bloom HCB hexachlorobenzene HCH hexachlorocyclohexane HE Halmahera Eddy

HEXMAX HEXOS Main Experiment

HEXOS Humidity Exchange Over the Sea (experiment)

HIRIS High-Resolution Imaging Spectometer

HMW high-molecular weight
HNDA high natural dispersing areas
HNLC high-nutrients, low-chlorophyll
HOPLASA Horizontal Plankton Sampler
HOPS Harvard Ocean Prediction System
HOT Hawaiian Ocean Time Series

HPLC high-performance liquid chromatography

HRGB hard rock guide base

HRPT high-resolution picture transmission

HRS high-resolution sampler
HSSW high-salinity shelf water
HST high stand system tract

IABO International Association for Biological Oceanography

IAPSO International Association for the Physical Sciences of the Ocean

IAS Intra-Americas Sea
IBM individual-based model
IC integrated circuit

ICCAT International Commission for the Conservation of Atlantic Tuna

ICES International Council for the Exploration of the Sea

ICJ International Court of Justice

ICNAF International Commission for the Northwest Atlantic Fisheries

ICP International Conferences on Paleo-oceanography
ICP-MS inductively coupled plasma mass spectrometry
ICRP International Commission on Radiological Protection

ICSU International Council for Science (formerly International Council of Scientific University)

ICZM Integrated Coastal Zone Management

IEW Indian Equatorial Water IFQ Individual Fishery Quota

IFREMER l'Institut Français de Recherche pour l'Exploitation de la Mer

IGBP International Geosphere-Biosphere Program

IGW internal gravity waves

IIOE International Indian Ocean Experiment
IIP (US Coast Guard) International Ice Patrol

IIW Indonesian Intermediate Water IKMT Isaacs-Kidd midwater trawl

IMO International Maritime Organization

INDEX Indian Ocean Experiment

INPFC International North Pacific Fisheries Commission IOC International Oceanographic Commission IOCCG International Ocean Color Coordinating Group

IODP Integrated Ocean Drilling Program

IOP inherent optical properties

IPCC Intergovernmental Panel on Climate Change

IPI interpulse interval

IPNV infectious pancreatic necrosis virus

IPSFC International Pacific Salmon Fisheries Commission

IR infrared

IRD iceberg rafted detrital
IRONEX Iron Enrichment Experiment
IronEx II Iron Fertilization Experiment II

ISAV infectious salmon anemia virus

ISE ion-selective electrode ISV Ionian Shelfbreak Vortex

ISW ice shelf water

ITCZ Intertropical Convergence Zone ITQ individual transferable quota

IUCN International Union for the Conservation of Nature

IUW Indonesian Upper Water IVF in vivo fertilization

JAMSTEC Japan Marine Science and Technology Center JERS Japan Environmental Resources Satellite

IGOFS Joint Global Ocean Flux Study

JLS join, leave, or stay

JOI Joint Oceanographic Institutions Incorporated

JOIDES Joint Oceanographic Institutions for Deep Earth Sampling

JPL Jet Propulsion Laboratory
K/T Cretaceous/Tertiary (boundary)

KE kinetic energy

KHI Kelvin-Helmholtz Instability

KYM krill yield model

LAA large amorphous aggregates

LAC local area coverage

LADCP Lowered Acoustic Doppler Current Profiler

LADS Laser Airborne Depth Sounder
LARS launch and recovery system
LBMP land-based marine pollution
LCDW Lower Circumpolar Deep Water
LDEO Lamont-Doherty Earth Observatory

LDW Levantine Deep Water

LHPR Longhurst-Hardy plankton recorder

LIA Little Ice Age

LIDAR light detection and ranging
LIP large igneous province
LIW Levantine Intermediate Water

LLD liquid line of defense
LME large marine ecosystems
LMW low-molecular weight
LNG liquefied natural gas

LNHC low-nitrate, high-chlorophyll LNLC low-nitrate, low-chlorophyll

LOAEL lowest observed adverse effect level

LOCHNESS Large Opening/Closing High Speed Net and Environmental Sampling System

LOICZ Land Ocean Interaction in the Coastal Zone (program)
LOOPS Littoral Ocean Observing and Prediction System

Littoral Ocean Observing and Tredicti

LPG liquefied petroleum gas

LSFC laser-stimulated fluorescence of chlorophyll

LST low stand systems tract MAB Mid-Atlantic Bight

MAD Magnetic Airborne Detector

MAR Mid-Atlantic Ridge MARPOL Marine Pollution (treaty)

MASZP moored, automated, serial zooplankton pump

MAW Modified Atlantic Water mbsf meters below seafloor

MBT mechanical bathythermograph

MC Mindanao Current; or Mozambique Current

MCC Maltese Channel Crest
MCP Medieval Cold Period
MCSST multichannel SST
ME Mindanao Eddy

MFP matched field processing

MIJ Mid-Ionian Jet MIZ marginal ice zone

MIZEX marginal ice zone experiments

MMAs monomethylarsenate
MMD mass median diameter
MMGe monomethylegermanic acid
MMHg monomethylmercury
MMJ Mid-Mediterranean Jet
MMSb monomethylantimonate
MOBY Marine Optical Buoy

MOC Meridional Overturning Circulation

MOCNESS Multiple Opening/Closing Net and Environmental Sensing System

MOCS Multichannel Ocean Color Sensor MODE Mid-Ocean Dynamics Experiment

MODIS Moderate Resolution Imaging Spectroradiometer

MOM modular ocean model
MOR mid-ocean ridge
MORB mid-ocean ridge basalt
MPA marine protected area
MPS multiple plankton sampler

MSFCMA Magnuson-Stevens Fishery Conservation Management Act

MSL mean sea level

MST Mediterranean Salt Tongue; or multisensor track

MSVPA multispecies virtual population analysis

MSY maximum sustainable yield MUC Mindanao Undercurrent

MVDF maximum variance distortion filter

MW Mediterranean Water; or molecular weight

MWDW modified warm deep water MWP Medieval Warm Period

MY multiyear (ice)

NABE North Atlantic Bloom Experiment

NADPH reduced form of nicotinamide-adenine dinucleotide phosphate

NADW North Atlantic Deep Water

NAFO Northwest Atlantic Fishery Organization

NAO North Atlantic Oscillation

NASCO North Atlantic Salmon Conservation Organization NASDA Japanese National Space Development Agency

NASF North Atlantic Salmon Fund

NCAR National Center for Atmospheric Research

NCC Norwegian Coastal Current

NCEP National Centers for Environmental Prediction

NDBC National Data Buoy Center

NDSF National Deep Submergence Facility
NEΔT noise equivalent temperature difference
NEADS North East Atlantic Dynamics Study
NEAFC North-east Atlantic Fisheries Commission

NEC North Equatorial Current

NECC North Equatorial Countercurrent

NEE nonenriched elements NEMO Naval Earth Map Observer

NEW North-east Water

NGCC New Guinea Coastal Current NGCUC New Guinea Coastal Undercurrent

NLSST nonlinear SST NM normal mode

NMC North-east Monsoon Current NMHC nonmethane hydrocarbons NMR nuclear magnetic resonance

NOAA National Oceanographic and Atmospheric Administration

NOAEL no observed adverse effect level

NOSAMS National Ocean Sciences Accelerator Mass Spectrometry facility

NOSS National Oceanographic Satellite System NPAFC North Pacific Anadromous Fisheries NPOESS National Polar-Orbiting Satellite System

NPP NPOESS Preparatory Program NRM natural remanent magnetization

NROSS Navy Remote Ocean Observing Satellite

NSP neurotoxic shellfish poisoning

NSSC Northern Subsurface Countercurrent

NTU nephelometric turbidity unit NWP numerical weather prediction OBS ocean bottom seismograph

OCMIP Ocean Carbon Model Intercomparison Project

OCTS Ocean Color and Temperature Sensor
ODAS Ocean Data Acquisition System
ODE ordinary differential equation(s)

ODP Ocean Drilling Program

OGCM ocean general circulation model

OI optimal interpolation
OML ocean mixed layer
OMZ oxygen minimum zone
OOP object-oriented programming

OPA Oil Pollution Act

OPC optical plankton counter
OSC overlapping spreading centers
OTEC Ocean Thermal Energy Conversion
OTIP Optimal Thermal Interpolation Scheme
PAH polycyclic aromatic hydrocarbons

PALACE Profiling Autonomous Lagrangian Circulation Explorer

PALK potential alkalinity

PAM pulse amplitude modulation PAR photosynthetic available radiation

PBB passive broadband

PCBs polychlorobiphenyls/polychlorinated biphenyls

PCG Panama-Columbia Gyre

PCGC preparatory capillary gas chromatography

PCR polymerase chain reaction PCS pressure core sampler PCUC Peru-Chile Undercurrent PDM particulate detrital matter

pDRM postdepositional detrital remanent magnetization

PDW Pacific Deep Water PE parabolic equation PEAS possible estuary-associated syndrome

PEW Pacific Equatorial Water

PF Polar Front PFSST Pathfinder SST

PGE platinum-group elements

PHILLS Portable Hyper-spectral Imager for Low-Light Spectroscopy

PICES North Pacific Marine Science Organization

PML Polar Mixed Layer **PMM** photomultiplier module **PMT** photomultiplier tube PN particulate nitrogen passive narrowband **PNB PNM** primary NO₂ maximum particulate organic carbon POC **POCM** Parallel Ocean Climate Model

POEM Physical Oceanography of the Eastern Mediterranean

POM particulate organic matter PON particulate organic nitrogen POP persistent organic pollution PP primary production

ppbv parts per billion by volume
PPF Pump and Probe Fluorometer
ppmv parts per million by volume
pptv parts per trillion by volume
PRF pulse repetition frequency
PRN pseudo random noise

PS II Photosystem II

PSC Pacific Salmon Commission

PSIW Pacific Subarctic Intermediate Water PSMSL permanent service for mean sea level

PSP paralytic shellfish poisoning

PSSF Passive Solar Stimulated Fluorescence

PSU practical salinity unit PSUW Pacific Subarctic Upper Water

PSW Polar Surface Water

PTCS pressure and temperature core sampler

PV potential vorticity

PW Polar Water; or Pacific Water

QSU quinine sulfate unit
RAD ridge axis discontinuity
RAR real aperture radar
RCB rotary core barrel
REE rare-earth elements

REMUS remote environmental measuring units

rf radiofrequency

RMT rectangular mouth opening trawl

RNA ribonucleic acid RO reverse osmosis

ROFI region of fresh water influence ROS reactive oxygen species ROV remotely operated vehicle

ROWS Radar Ocean Wave Spectrometer

RPE retinal pigment epithelium RR refracted-refracted (rays)

rRNA ribosomal RNA

RS remote sensing

RSPGIW Red Sea-Persian Gulf Intermediate Water

RSR refracted-surface-reflected (rays) RTE radiative transfer equation

RTR relative tide range RV research vessel

SACW South Atlantic Central Water

SAH South Atlantic High

SAHFOS Sir Alister Hardy Foundation for Ocean Science

SAMW Subantarctic Mode Water
SAR synthetic aperture radar
SAS SeaWiFS Aircraft Simulator
SASW Subantarctic Surface Water
SAV submerged aquatic vegetation

SAVE South Atlantic Ventilation Experiment

SC Somali Current

SCAR Scientific Committee for Antarctic Research SCOR Science Commission on Oceanic Research SCUBA self-contained underwater breathing apparatus

SCV sub-mesoscale coherent vortex

SeaWiFS Sea-viewing Wide Field-of-view Sensor

SEC South Equatorial Current

SECC South Equatorial Countercurrent SEM scanning electron microscopy

SF₆ sulfur hexafluoride

SHOALS Scanning Hydrographic Operational Airborne LIDAR Survey

SICW South Indian Central Water

SIMBIOS Sensor Intercomparison and Merger for Biological and Interdisciplinary Oceanic Studies

SINODE Surface Indian Ocean Dynamic Experiment

SIO Scripps Institution of Oceanography

SIPPER Shadowed Image Particle Profiling and Evaluation Recorder

SIR Shuttle Imaging Radar

SLFMR Scanning Low Frequency Microwave Radiometer

SMC South-west Monsoon Current

SMMR Scanning Multichannel Microwave Radiometer

SMOS Soil Moisture and Ocean Salinity
SMOW standard mean ocean water
SMR Scanning Microwave Radiometer
SNP soluble nonreactive phosphorus

SNR signal-to-noise ratio

SOC Southampton Oceanography Centre (UK)

SOFAR sound fixing and ranging SOI Southern Oscillation Index

SOIREE Southern Ocean Iron Enrichment Experiment

SP short period (instrumentation)
SPCZ South Pacific Convergence Zone

SPE solid-phase extraction
SPM suspended particulate matter
SPMW subpolar mode water
SRA Scanning Radar Altimeter
SSB spawning stock biomass
SSH sea surface height
SSL sound-scattering layer

SSM/I Special Sensor Microwave/Imager SSSC South Subsurface Countercurrent SST sea surface temperature
SSU rRNA small subunit rRNA
SSXBT submarine-launched XBT
STCC Subtropical Countercurrent

STD salinity, temperature, and depth (measuring instrument)

STMW Subtropical Mode Water
SVD singular-value decomposition
SWG Science Working Group(s)
T/P Topex/Poseidon (system)
TAC total allowable catch

TAP Transarctic Arctic Propagation (experiment)

TBT tributyltin

TDN total dissolved nitrogen

TEM transmission electron microscopy
TEP transparent exopolymer particles
TEU twenty-foot equivalent unit
THC thermohaline circulation

TIMS thermal ionization mass spectrometry

TIROS-N Television and Infrared Observing Satellite-version N

TKE turbulent kinetic energy
TLC total lung capacity
TLE total lipid extract

TMI TRMM Microwave Imager
TMS tether management system
TMW Transitional Mediterranean Water

TMZ turbidity maximum zone

TOBI Towed Ocean Bottom Instrument

TOC total organic carbon

TOGA Tropical Ocean-Global Atmosphere (program)

TOMS Total Ozone Mapping Spectrometer

TON total oxidized nitrate

TOVS Total Ozone Vertical Sounder
TRM thermoremanent magnetization
TRMM Tropical Rainfall Measuring Mission

TS curve temperature–salinity curve TST transgressive stand systems tract

TTO Tropical Tracers in the Ocean (experiment)

TTONAS TTO North Atlantic Study
TTOTAS TTO Tropical Atlantic Study

TU tritium unit TW tropical waters

UBL under-ice boundary layer
UCDW upper Circumpolar Deep Water
ULES upward-looking echo sounders

UML upper mixed layer

UN(O) United Nations (Organization)

UNCED United Nations Conference on Environment and Development

UNCLOS United Nations Convention on the Law of the Sea

UNEP United Nations Environmental Program

UNESCO United Nations Educational, Scientific, and Cultural Organization

UOR undulating oceanographic recorder

uPDW Upper Polar Deep Water
UTC Coordinated Universal Time
UUV unmanned underwater vehicle
UVP underwater video profiler

VACM vector averaging current meter VAD vertical advection diffusion VHSV viral hemorrhagic septicemia virus

VIIRS Visible and Infrared Imaging Radiometer Suite VISR Visible and Infrared Scanning Radiometer

VLCC very large crude carrier

VMCM vector measuring current meter VMM volume-weighted mean concentration

VMS vehicle monitoring system

VOC vapor-phase organic carbon or volatile organic compounds

VPR video plankton recorder

VRM viscous remanent magnetization
VSF volume scattering function
WAIS West Antarctic Ice Sheet

WASIW Western Atlantic Subarctic Intermediate Water

WCP World Climate Program

WCR warm core ring

WHO World Health Organization

WHOI Woods Hole Oceanographic Institution

WIW Winter Intermediate Water

WMDW Western Mediterranean Deep Water
WMO World Meteorological Organization
WNACW West North Atlantic Central Water
WNPCW Western North Pacific Central Water
WOCE World Ocean Circulation Experiment

WSC West Spitsbergen Current WSDW Weddell Sea Deep Water

WSPCW Western South Pacific Central Water

WWGS Winter Weddell Gyre Study
WWSP Winter Weddell Sea Project
XBT expendable bathythermograph
XCP expendable current profiler

XCTD expendable conductivity-temperature-depth probe

XKT expendable optical irradiance probe XSV expendable sound velocity probe