

## ODP/IODP Dictionary: A

*Revised 8/2005*

**A** ampere (amp)

**Å** Angstrom unit (=  $10^{-10}$  m)

**A&G-DPG** Atolls and Guyots Detailed Planning Group [JOIDES]

**a\*** color reflectance parameter component

**A/D** analog-to-digital converter [science]

**AA** atomic absorption

**AAAS** (1) American Association for the Advancement of Science; (2) American Academy of Arts and Sciences

**AABW** Antarctic Bottom Water [science]

**AACT** aluminum activation clay tool

**AAG** Australo-Antarctic Gulf

**AAPG** American Association of Petroleum Geologists

**AAR** accumulation/area ratio

**AAS** atomic absorption spectroscopy (or spectrometry)

**AASC** Association for the Advancement of Science in Canada

**AASG** Association of American State Geologists

**AASP** American Association of Stratigraphic Palynologists

**Ab** albite

**ABM** assigned board member (of the ERB) [publications]

**aboard** on, onto, or within a ship (but "on board")

**ABS** American Bureau of Shipping [logistics]

**abs.** (1) absolute; (2) abstract

**abscissa, abscissas (plural)**

**absolute pollen frequency** APF

**abyssal plain**

**AC** alternating current

**ACAD** (or AUTOCAD, CAD, CADD) computer-aided design and/or drafting

**ACC** Antarctic Circumpolar Current

**accumulation/area ratio** AAR

**ACerS** American Ceramic Society (formerly ACS)

**ACES** Atlantic Coral Ecosystem Study

**ACF** diagram three-component triangular diagram used in metamorphic petrology: A =  $(Al_2O_3 + Fe_2O_3) - (Na_2O + K_2O)$ ; C = CaO; F =  $(FeO + MgO + MnO)$

**ACIC** Aeronautical Chart and Information Center

**acid-insoluble** (adj.)

**acme** zone AZ (biostratigraphy)

**ACORK** advanced circulation obviation retrofit kit

**acoustic impedance profile**

**acoustic impedance** [n., adj.]

**ACS** (1) American Ceramic Society (now ACerS); (2) American Chemical Society; (3) altitude control system

**ACSN** American Commission on Stratigraphic Nomenclature

**ACT** Aluminum Clay Tool; neutron porosity (Cf source) logging tool [logging]  
**AD** (1) assistant driller [drilling]; (2) Antarctic Divergence [science]  
**Adara temperature tool** brand name of the temperature tool  
**ADCB** advanced diamond core barrel  
**ADN** Azimuthal Density Neutron tool  
**ADTIC** Arctic, Desert, Tropic Information Center (U.S.)  
**advanced hydraulic piston corer** APC  
**Advanced Ocean Drilling Program** AODP (formerly DSDP and replaced by ODP)  
**advanced very high resolution radiometer** AVHRR  
**AEC** Atomic Energy Commission (U.S.)  
**AEG** (1) Association of Engineering Geologists; (2) Association of Exploration Geochemists  
**aeolian** use eolian  
**Aeronautical Chart and Information Center** ACIC  
**AES** (1) atomic emission spectroscopy; (2) auger electron spectroscopy  
**AESE** Association of Earth Science Editors  
**AF** alternating field (demagnetization) [science]  
**aff.** related to (affinis<Latin)  
**AFM** atomic force microscopy  
**AFM** diagram three-component triangular diagram used to show chemical variation trends in magmas: A = (Na<sub>2</sub>O + K<sub>2</sub>O); F = (FeO + Fe<sub>2</sub>O<sub>3</sub> + MnO); M = MgO (weight percentages) or A = Na + K; F = Fe + Mn; and M = Mg (atomic percentages)  
**AFMAG** audio-frequency electromagnetic noise  
**AFMS** American Federation of Mineralogical Societies  
**A-frame** the structural support frame at the top of the derrick; used for servicing the crown block  
**AFS** atomic fluorescence spectroscopy  
**AFT** ash fusion temperature (coal analysis)  
**AGA** American Gas Association  
**AGC** automatic gain control  
**AGI** American Geological Institute  
**AGID** Association of Geoscientists for International Development  
**AGS** American Geographical Society  
**AGU** American Geophysical Union  
**AHC** (1) advanced hydraulic corer (also APC); (2) active heave compensator  
**AI** (1) Arctic Institute; (2) artificial intelligence  
**AIME** American Institute of Mining, Metallurgical, and Petroleum Engineers  
**AINA** Arctic Institute of North America  
**AIP** American Institute of Physics  
**AIPG** American Institute of Professional Geologists  
**air fall** [n., adj.]  
**air gun** [n., adj.]  
**airway bill for air-freight shipments** AWB  
**AJS** American Journal of Science

**AKF** diagram three-component triangular diagram used in metamorphic petrology: A =  $(\text{Al}_2\text{O}_3 + \text{Fe}_2\text{O}_3) - (\text{Na}_2\text{O} + \text{K}_2\text{O} + \text{CaO})$ ; K =  $\text{K}_2\text{O}$ ; F =  $(\text{FeO} + \text{MgO} + \text{MnO})$

**Alb.** Albian

**allochthonous** of foreign origin

**along-slope** (vs. "downslope")

**ALSEP** Apollo Lunar Surface Experimental Package

**alt** altitude

**alternating field** [n.] AF (demagnetization); alternating-field [adj.]

**altitude control system** ACS

**Alvin** name of a submersible research vessel

**Amazon deep-sea fan**

**Amazon Fan**

**American Academy of Arts and Sciences** AAAS

**American Association for the Advancement of Science** AAAS

**American Association of Petroleum Geologists** AAPG

**American Association of Stratigraphic Palynologists** AASP

**American Bureau of Shipping** ABS

**American Ceramic Society ACerS** (formerly ACS)

**American Chemical Society** ACS

**American Commission on Stratigraphic Nomenclature** ACSN

**American Federation of Mineralogical Societies** AFMS

**American Gas Association** AGA

**American Geographical Society** AGS

**American Geological Institute** AGI

**American Geophysical Union** AGU

**American Institute of Mining, Metallurgical, and Petroleum Engineers** AIME

**American Institute of Physics** AIP

**American Institute of Professional Geologists** AIPG

**American Journal of Science** AJS

**American Museum of Natural History** AMNH

**American National Standards Institute** ANSI (formerly ASA)

**American Nuclear Society** ANS

**American Petroleum Institute** API

**American Quaternary Association** AMQUA

**American Society for Photogrammetry and Remote Sensing** ASPRS

**American Society for Photogrammetry** ASP

**American Society for Testing and Materials** ASTM

**American Society of Civil Engineers** ASCE

**American Society of Limnology and Oceanography** ASLO

**American Standard Code for Information Interchange** ASCII

**American Standards Association** ASA (replaced by ANSI)

**American wire gauge** AWG

**AMNH** American Museum of Natural History

**amor.** amorphous

**AMQUA** American Quaternary Association

**AMS** (1) Army Mapping Service (U.S.); (2) Auxiliary Measurement Sonde (a Schlumberger tool that can be added to any digital string to give temperature and tension measurements) [logging]; (3) anisotropy of magnetic susceptibility [science]; (4) accelerator mass spectrometry (radiocarbon dating); (5) acceleration mass spectrometry

**AMST** archive multisensor track

**AMT** audio-magneto-telluric method

**AMU** atomic mass unit, also amu

**Amygdale** (not amygdale)

**An** anorthite

**analog**

**analog-to-digital converter** A/D

**analysis of variance** ANOVA

**ANAPS** Association of North American Paleontological Societies

**anhysteretic remanent magnetization** ARM

**anisotropy of magnetic susceptibility** AMS

**ANL** Argonne National Laboratory (U.S.)

**annular velocity** AV

**annulus** the space between the walls of concentric cylinders; in drilling, the space between the hole wall or casing and the drill string.

**Anomaly M0**

**anorthosite-norite-troctolite suite of rock types** ANT

**ANOVA** analysis of variance

**ANS** American Nuclear Society

**ANSI** American National Standards Institute (formerly ASA)

**ANT** anorthosite-norite-troctolite suite of rock types

**Antarctic Bottom Water** AABW

**Antarctic Circumpolar Current** ACC

**Antarctic Convergence**

**Antarctic Divergence**

**Antarctic Water Mass**

**AO** acridine orange

**AODC** acridine orange direct count method

**AODP** Advanced Ocean Drilling Program (formerly DSDP and replaced by ODP)

**AP** arborescent pollen

**APC** advanced piston corer

**APCT** advanced piston corer temperature tool

**APF** absolute pollen frequency

**API** (1) American Petroleum Institute; (2) application programming interface [computers]

**API units** natural gamma ray units; also gAPI

**Apollo Lunar Surface Experimental Package** ALSEP

**appendixes** (not appendices)

**AppleCORE** software version 8.1m or 8.1p

**application programming interface** API

**APS** Accelerator Porosity Sonde (IPLT Sonde)

**Apt.** Aptian  
**aq** aqueous  
**arborescent pollen** AP  
**Arctic Institute** AI  
**Arctic Institute of North America** AINA  
**Arctic, Desert, Tropic Information Center** ADTIC (U.S.)  
**ARDRA** amplified ribosomal DNA restriction analysis  
**Argonne National Laboratory** ANL (U.S.)  
**ARI** Azimuthal Resistivity Imager  
**ARM** anhysteretic remanent magnetization [science]  
**ARP** Atlantic Regional Panel [JOIDES]  
**artificial intelligence** AI  
**ASA** American Standards Association (now ANSI)  
**ASCE** American Society of Civil Engineers  
**ASCII** American Standard Code for Information Interchange [computers]  
**ASFE** Association of Soil and Foundation Engineers  
**ash fall** [n., adj.]  
**ash fusion temperature** AFT (coal analysis)  
**ASI** Array Sonic Imager  
**ASK** automatic station keeping (see "DPS") [ship]  
**ASLO** American Society of Limnology and Oceanography  
**ASP** (1) American Society for Photogrammetry; (2) Atlantic Slope Project  
**ASPRS** American Society for Photogrammetry and Remote Sensing  
**assigned board member** ABM (of the ERB)  
**assistant driller** AD  
**Association for the Advancement of Science in Canada** AASC  
**Association for Women Geoscientists** AWG  
**Association of American State Geologists** AASG  
**Association of Earth Science Editors** AESE  
**Association of Engineering Geologists** AEG  
**Association of Exploration Geochemists** AEG  
**Association of Geoscientists for International Development** AGID  
**Association of North American Paleontological Societies** ANAPS  
**Association of Soil and Foundation Engineers** ASFE  
**ASTM** American Society for Testing and Materials  
**at (or AT)** assay ton  
**Atlantic Regional Panel** ARP  
**Atlantic Slope Project** ASP  
**atm.** atmosphere  
**Atolls and Guyots Detailed Planning Group** A&G-DPG  
**atomic absorption spectroscopy** AAS (or spectrometry)  
**atomic emission spectroscopy** AES  
**Atomic Energy Commission** AEC (U.S.)  
**atomic fluorescence spectroscopy** AFS  
**atomic force microscopy** AFM  
**atomic mass unit** AMU

**ATP** adenosine triphosphate  
**audio-frequency electromagnetic noise AFMAG**  
**audio-magneto-telluric method AMT**  
**audiotapes**  
**auger electron spectroscopy AES**  
**AUTOCAD (or ACAD, CAD, CADD)** computer-aided design and/or drafting  
**autochthonous** produced in situ  
**automatic station keeping ASK** (see "DPS")  
**auxiliary measuring sonde AMS** (a Schlumberger tool that can be added to any digital string to give temperature and tension measurements)  
**AV** annular velocity  
**AV** annular velocity  
**av., avg.** average  
**AVCC** average carbonaceous chondrites  
**avdp** avoirdupois  
**average carbonaceous chondrites AVCC**  
**AVHRR** advanced very high resolution radiometer  
**AWB** airway bill for air-freight shipments [logistics]  
**AWG** (1) Association for Women Geoscientists; (2) American wire gauge  
**AZ** acme zone (biostratigraphy) [science]  
**az** azimuth

## ODP/IODP Dictionary: B

*Revised 8/2005*

**b** barn (=  $10^{-28}$  m<sup>2</sup>)

**b\*** color reflectance parameter component

**b.y.** billion years

**b/d** barrels per day

**b/e<sup>-</sup>** (unit of photoelectric effect)

**B/L** bill of lading for surface (ocean) freight [logistics]

**Ba** barium

**BABI** basaltic achondrite best initial (<sup>86</sup>Sr/<sup>87</sup>Sr ratio of primordial mantle)

**back off** to unscrew a threaded connection; method of releasing stuck pipe downhole by means of "jarring" a tool joint with a small explosive charge

**backarc** basin (not back-arc)

**backflow**

**backscattering**

**Bahama Platform**

**bails** also "bail links"; the two heavy rods forged with eyes in each end that connect the upper elevator or the swivel to the traveling block connector

**band saw**

**band-pass filter**

**bandwidth**

**banktop**

**barite (bar)** barium sulfate; finely ground barite in suspension used to increase the density of drilling mud

**barrel sheet** [n.; adj]

**Barrem.** Barremian

**BAS** British Antarctic Survey

**baseline**

**basin floor** [adj.]

**basinward**

**basinwide**

**bay** section of piperacker or hold where tubulars are stored

**Bbbl** billion barrels

**bbbl** 42-gallon barrel (U.S.)

**BBS** bulletin-board system [computers]

**bcc** blind courtesy copy

**bcf** billion cubic feet

**bcf/d** billion cubic feet per day

**BCOM** Budget Committee [JOIDES]

**benthic** (not "benthonic"; adj., not used as noun)

**bentonite** (gel) sodium montmorillonite clay; finely ground bentonite mixed with water to impart viscosity to drilling mud used for cleaning hole

**Berrias.** Berriasian

**BF** bright field

**BGDS** bit-guide deployment system [drilling]  
**BGKT** Vertical Seismic Profile Tool  
**BGR** Bundesanstalt für Geowissenschaften und Rohstoffe (Federal Republic of Germany)  
**BGS** British Geological Survey  
**BHA** bottom-hole assembly [drilling]  
**BHC** Borehole Compensated Sonic tool [logging]  
**BHGM** borehole gravity meter  
**BHP** bottom-hole pressure  
**BHSIP** bottom-hole shut-in pressure  
**BHT** bottom-hole temperature  
**BHTV** Borehole Televiewer tool  
**BHV** Baker Hughes Video  
**BIF** banded iron-formation  
**biocoenosis**  
**bio-event** bioevent  
**biogenic** (not "biogenous")  
**BIOS** basic input/output system [computers]  
**biozone**  
**bit** cutting device at the end of the drill string that advances the hole when rotated  
**bit deplugger** punch-type device resembling heavy-walled pipe that is attached to the bottom of an inner core barrel and pumped down the pipe to clear the bit throat of clay, cuttings, nodules, or other obstructions; similar to the core breaker and center bit  
**bit sub** lowermost drill collar; also houses the float valve (also the lower support bearing in the case of the RCB system)  
**BLM** Bureau of Land Management (U.S.)  
**blowout preventer** BOP  
**blowout** uncontrolled flow of formation fluid to the surface, resulting from loss of contained pressure in the well bore; blowouts can be catastrophic and result in loss of hole, rig, and life  
**BM** bench mark  
**BMER** Board on Minerals and Energy Resources (U.S.) (under National Research Council)  
**BMR** Bureau of Mineral Resources (Australia)  
**BMS** (1) base metal sulfides; (2) British Micropalaeontology Society  
**BNL** Brookhaven National Laboratory (U.S.)  
**BOD** biochemical oxygen demand  
**BOMB** carbonate analysis (sample designation mostly defunct) [curation]  
**bomb** pressure-measuring device or sample container [science/drilling]  
**BOP** (1) blowout preventer [drilling]; (2) device for sealing either an annular space or the entire well bore against formation pressure to prevent uncontrolled flow to the surface  
**borehole**  
**BOS** back-off sub [drilling]  
**bottom-hole assembly** BHA

**bottom water** (n., adj.)

**box** female portion of a threaded connection

**BP** (1) before present (or B.P.)

**bp** British Petroleum

**BPH** breakaway piston head (for APC) [drilling]

**BPL** bone phosphate of lime

**breakup**

**brf** below rig floor (as in mbrf, meters below rig floor) [drilling]

**BRG** Borehole Research Group, Lamont-Doherty Earth Observatory

**BRGM** Bureau de Recherches Géologiques et Minières (France)

**BSE** backscattered electron (image)

**BSEM** backscattering electron microscope

**bsf** below seafloor (as in mbsf, meters below seafloor) [science]

**bsl** below sea level (as in mbsl, meters below sea level) [science]

**BSR** bottom-simulating reflector [science]

**BT** bathythermograph (as in XBT, expendable bathythermograph)[science]

**btu** British thermal unit [science]

**bulk density** [n., adj.]

**bulkhead** [ship]

**bullnose** blunt terminal end of a downhole tool; used on logging tools to provide full diameter for opening the lockable float valve (LFV)

**bumper sub** splined, telescoping section of the BHA used to decouple the ship's heave motion from the bit; largely supplanted by the heave compensator and seldom used in modern operations

**burrow-fill structure**

**BVA** ball-valve assembly [drilling]

**BW** borehole water [drilling]

**BWT** bottom water temperature

**bypass**

**byproduct**

## ODP/IODP Dictionary: C

*Revised 8/2005*

**C** (1) degrees Celsius (= degrees Centigrade); (2) coulomb; (3) concentration

**C/C** course change

**c/s** counts per second [cps is preferred by ODP style]

**C<sub>1</sub>/C<sub>2</sub>** methane/ethane ratio [science]

**C<sub>6+</sub>** hexane and higher hydrocarbons [science]

**CA** Chemical Abstracts

**ca.** circa; only used with age or time; use "about" with any other unit

**cabhead** the component that terminates the logging cable and attaches to the various logging tools

**CaCO<sub>3</sub>** calcium carbonate

**CAD** computer-aided design and/or drafting (or ACAD, AUTOCAD, CADD)

**Cafemic** Ca-, Fe-, and Mg-rich

**CAI** (1) computer-aided instruction; (2) computer-assisted instruction; (3) calcium aluminum inclusion; (4) conodont alteration index

**cal** calorie

**calc-alkaline**

**CALI** caliper logging tool [logging]

**Camp.** Campanian

**CANDEL** Canadian Committee on the Dynamics and Evolution of the Lithosphere

**CANHIGEO** Canadian Committee on History of Geological Sciences

**CANMET** Canada Centre for Mineral and Energy Technology

**CANQUA** Canadian Quaternary Association

**CAP** Canadian Association of Palynologists

**CAP-DPG** Cascadia Accretionary Prism Detailed Planning Group [JOIDES]

**caprock** [adj.] (AGI)

**CAS** Chemical Abstracts Registry Service

**casing** steel pipe used to line a hole against collapse or erosion or to isolate the bore from formation fluid or pressure; casing of various sizes can be set by means of the reentry cone, HRB, or DIC systems; in some modes, the casing can be cemented into place

**CASP** Cambridge Arctic Shelf Programme

**CASSI** Chemical Abstracts Service Source Index

**catwalk** on JOIDES Resolution, the casing-hold hatch cover, but "catwalk" may also be used in reference to the core-handling platform or the area of the piperacker located between the bays and occupied by the skate track

**CAVA** Central American volcanic arc

**CB** center bit [drilling]

**CBL** Casing Bond Log

**CBR** California bearing ratio

**CBT** cement bonding tool

**cc** carbon copy; courtesy copy (anachronistic term!)

**CC** core catcher [n.; adj.]

**CCD** carbonate compensation depth or calcite compensation depth [science]  
**CCL** casing-collar log  
**cd** candela (luminous intensity)  
**CDN** Compensated Density Neutron tool  
**CDP** Common Depth Point  
**CDR** Compensated Dual Resistivity tool  
**CD-ROM** compact disc read-only memory [computers]  
**CDS** colleted delivery system [drilling]  
**CDW** Circumpolar Deep Water  
**cement** finely ground Portland cement in a water slurry, used to secure casing strings and to plug holes when they are abandoned; oilfield cement differs from concrete in that no aggregate is used  
**Cenom.** Cenomanian  
**Cenoz.** Cenozoic  
**center bit** device attached to the bottom of an inner core barrel to blank off the center hole of the core bit in certain drilling situations  
**CEP** circular error probable  
**CEPAC** Central and Eastern Pacific Panel [JOIDES]  
**CEPDGP** Central and Eastern Pacific Detailed Planning Group  
**CEQ** Council on Environmental Quality (U.S.)  
**CESP** correlative echo-sounder processor  
**cf.** confer, compare (no comma follows)  
**CFP** Compagnie Française du Pétrole (France)  
**cg** centigram  
**CGC** Canadian Geoscience Council  
**cgI** conglomerate  
**CGMW** Commission for the Geological Map of the World  
**CGR** computed gamma ray  
**cgs** centimeter-gram-second (system of units) [magnetic susceptibility]  
**CGS** Coast and Geodetic Survey (U.S.)  
**CGU** Canadian Geophysical Union  
**channel-levee** [adj.]  
**check shot** [n., adj.]  
**CHEMDB** database program for carbonate, interstitial water, gas chromatography, and Rock-Eval analysis results  
**CHL** core height logger (electronics unit of SCM system) [drilling]  
**CHN** carbon-hydrogen-nitrogen analyzer [science]  
**ChRM** characteristic remanent magnetization  
**CI** (1) crystallization index; (2) contour interval  
**ci** curie  
**CIDNP** chemically induced dynamic nuclear polarization  
**CIM** (also CIMM) Canadian Institute of Mining and Metallurgy  
**CIMP** (1) Commission on Metamorphic Petrogenesis; (2) Commission Internationale de Microflore du Paléozoïque  
**CIPW norm** Cross, Iddings, Pirsson, and Washington

**circulating head** sometimes known as a "poorboy swivel"; a device for attaching a circulating hose directly to the top of the drill string; it saves time over picking up the top drive when circulation is desired without the necessity for rotation

**CIS** (1) Chemical Information System; (2) Commonwealth of Independent States

**clathrate** gas hydrates are naturally occurring icelike solids in which water molecules trap gas molecules in a cagelike structure known as a clathrate. Although many gases form hydrates in nature, methane hydrate is by far the most common; methane is the most abundant natural gas. The volume of carbon contained in methane hydrates worldwide is estimated to be twice the amount contained in all fossil fuels on Earth, including coal. Gas hydrate also occurs as nodules, laminae, and veins within sediment and in some cases as a pure gas hydrate layers, meters thick.

**clay-sized** sediment

**claystone**

**CLDC** control length drill collar

**close-up** (noun)

**cm** centimeter

**cm<sup>3</sup>** (not "cc")

**CMAS** same as MCAS

**cmcd** corrected meters composite depth

**CMD** cable-measuring device [drilling]

**CMIA** Coal Mining Institute of America

**CMP** common midpoint

**CMS** Clay Minerals Society

**CN** (1) coordination number; (2) chondrite-normalized

**CNMMN** Commission on New Minerals and Mineral Names (of the IMA)

**CNRS** Centre Nationale de Recherche Scientifique (France)

**CNS** carbon-nitrogen-sulfur analyzer [science]; Cocos-Nazca Spreading center

**CNT** Compensated Neutron Tool

**CNT-G** dual porosity compensated neutron tool

**coarsening-downward sandstone**

**coarsening-upward** coarsening-upward [adj.]

**COCORP** Consortium for Continental Reflection Profiling

**COCRUST** Consortium for Continental Reconnaissance Using Seismic Techniques

**COD** chemical oxygen demand

**CODATA** Committee on Data for Science and Technology (of ICSU)

**COE** Corps of Engineers (of U.S. Department of Defense)

**coeval** same age; contemporary

**COGS** Computer Oriented Geological Society

**Colmek TV** underwater television system manufactured by Colmek Systems, Inc., used in conjunction with the scanning sonar for entering boreholes and conducting seafloor surveys

**COM** Commission on Ore Microscopy (of the IMA)

**compressional wave** [n., adj.]

**compressional wave velocity** P-wave velocity; seismic wave

**computer-aided design and/or drafting** CAD, CADD, ACAD, or AUTOCAD

**conc.** concentrated

**Coniac.** Coniacian

**contact probe** [n., adj.]

**core barrel** generally, the chamber that receives a core as it is formed; ODP coring systems utilize both outer and inner core barrels

**core bit** bit especially designed to cut around and form a core for retrieval and sampling; essentially a drill bit with a hole in the center; special features provide for trimming, guiding, and protecting the core as it passes through the bit

**core breaker** chisel-shaped device similar to a center bit that is attached to an inner core barrel; it is pumped down the drill string to break up and/or dislodge core pieces or other debris that may be obstructing the bit throat

**core catcher** [n., adj.] one-way device analogous to a check valve that prevents core from falling from the inner core barrel once it has entered. CC

**core liner** plastic tube inside the inner core barrel in which the core is encased; an ODP core usually is removed from the inner barrel with the liner and remains in that liner for sectioning, splitting, description, sampling, and eventual storage

**core scale** [n., adj.]

**CORELOG** database program for core-inventory information [ODP]

**C<sub>org</sub>** organic carbon [science]

**coring** advancing a hole for the purpose of retrieving core

**coring line** wire rope with which the inner core barrels are retrieved; analogous to the "sand line" of an oil field-drilling rig

**coring system** combination of bit, BHA components, and retrievable components designed to recover cores under specified conditions and lithologies

**coring winch** custom-built winch designed for ODP coring and located one level above the drawworks; it features full redundancy (except for the motor), with coring lines installed on two winch drums so coring need not be interrupted in case of mechanical failure of the winch or coring line

**CORK** circulation obviation retrofit kit; mechanical borehole seal retrofitted to a reentry cone after coring and wireline measurements are completed; it prevents circulation into or out of the borehole and can be fitted with a sensor assembly that extends down the hole to measure temperature and/or pressure, sample borehole fluid, etc.

**CORSAIRES** Coring Stable and Instable Realms in European Seas

**COSOD** Conference on Scientific Ocean Drilling

**COST** Continental Offshore Stratigraphic Test

**coverslip**

**CP** cross-polarization

**CPA** (1) Canadian Petroleum Association; (2) closest point of approach

**CPI** carbon preference index [science]

**CPMAS** cross-polarization/magic angle spinning conditions

**cps** counts per second or cycles per second [science]

**CPU** central processing unit [computers]

**CR** color reflectance

**CRC** concurrent range zone (biostratigraphy) [science]  
**Cret., K** Cretaceous  
**CRIB** Computerized Resources Information Bank (USGS)  
**criss-crossing**  
**CRM** chemical remanent magnetization [science]  
**cross bar** (1) a short, bifurcating 'ridge' of a transverse ripple mark. (2) a low ridge trending across a *blind valley*.  
**cross section** [n.]; cross-section [adj.]  
**crossbar** [n] the complete skeletal rim on which the fixed edge of the mandible of the avicularium pivots in some cheilostome bryozoans  
**cross-bedding**  
**crosscorrelation**  
**crosscut** [n.] intersecting at an angle to the general direction  
**crosscutting** (verb or adj.)  
**crossed nicols**  
**crossed polars**  
**cross-laminae** [n.]  
**cross-lamination** [n.]  
**cross-latitude measurement**  
**cross-line** [n.; adj.]  
**crossover** critical distance  
**crossplot** [n.]  
**cross section** [n.]  
**cross-stratification**  
**cross-strike profile**  
**crown** top of the derrick; the crown area is occupied by the "water table" platform and the crown-block assembly crown block array of six drilling-line sheaves that forms the upper end of the rig's hoisting system  
**CRREL** Cold Regions Research and Engineering Laboratory (of COE)  
**CRT** cathode ray tube  
**cryomag** cryogenic magnetometer  
**CRZ** carbonate reduction zone  
**CSDP** Continental Shelf Drilling Program [science]  
**CSEG** Canadian Society of Exploration Geophysicists  
**CSES** conical side-entry sub [drilling]  
**CSIRO** Commonwealth Scientific and Industrial Research Organization (Australia)  
**CSPG** Canadian Society of Petroleum Geologists  
**CSR** color spectral reflectance  
**CSRS** coherent Stokes Raman spectroscopy  
**CSU** cyber service unit [logging]  
**CT** coring technician [drilling]  
**CTBE** Cenomanian/Turonian Boundary Event  
**CTD** concentration/temperature/depth recorder  
**CUB** concentric underreaming bit  
**CUEA** Coastal Upwelling Ecosystems Analysis

**curate (a hard rock core)** to add dividers (plastic separators) between noncontiguous rock pieces; a curated length is measured after dividers are glued in.

**CUSEC** Central U.S. Earthquake Consortium

**CUSMAP** Conterminous U.S. Mineral Assessment Program

**cut and slip** maintenance/safety operation performed to extend the life of the drilling line; it is necessary to slack the line by hanging it off the traveling block; then the line is "slipped" through the entire system by about 30 m, and that much wire is cut from the end; the action must be done whenever a prescribed number of ton-miles has accrued, and it occasionally interrupts tripping or coring operations for about 1 1/2 hours

**cutaway** [adj.]

**cutoff** a boundary

**cutting shoe** "business" end of an XCB inner core barrel; the cutting shoe extends past the main core bit and actually forms the core

**cuttings** accumulated fragments of rock or sediment produced by the drilling operation

**CVA** canonical varieties analysis

**CVD** chemical vapor deposition

**CWA** Clean Water Act

**cwt** hundredweight

**CY** calendar year

## ODP/IODP Dictionary: D

*Revised 8/2005*

- D** density (specific gravity in some publications) [*Note: density and specific gravity are NOT the same thing but are sometimes confused by nonscientists.*]
- D/O** Dansgaard/Oeschger cycles
- D5BC** radio call sign of *JOIDES Resolution* [ship]
- DAC** digital-to-analog converter [computers]
- DAI** Dissertation Abstracts International (publication of UMI)
- Dan.** Danian
- Dansgaard-Oeschger Events 1–10
- DAPI** 4',6-diamindino-2-phenylindole
- DARPA** Defense Advanced Research Projects Agency (U.S. Navy)
- DAS** directional acquisition system
- data set**
- database**
- dB** decibel
- DBD** dry bulk density
- DBMI** drill-bit motion indicator [drilling]
- DC** (1) drill collar [drilling]; (2) direct current [electronics]
- dcalc** calculated d-spacing
- DCB** diamond core barrel [drilling]
- DCE** distributed computing environment [computers]
- DCM** deep chlorophyll maximum
- DCP** direct-current plasma spectrometry
- DCS** diamond coring system [drilling]
- DC-SQUID** direct-current superconducting quantum interference device
- DDE** dynamic data exchange [computers]
- dead line** length of nonmoving drilling line that extends from the crown block to an anchor at the drill floor
- debris flow** [n., adj.]
- DEC** Digital Equipment Corporation [computers]
- décollement** a detachment fault
- deep water** [n.]
- deep-sea sediments**
- deep-tow camera**
- deepwater sediments** [adj.]
- derrick** tower of the drilling rig above the drill floor; *JOIDES Resolution's* derrick is rated at 650 tons' working load and stands about 60 m above the floor
- derrickman** contractor employee whose primary responsibilities are operation and maintenance of the pipe-handling equipment and circulating pumps; his station is on the "monkey board" in the derrick when the BHA or pipe is being racked in the derrick
- DES** dual-elevator stool on the rig floor (the top of the DES is the point from which drill pipe measurements are made) [drilling]

**DESS** digiseis enhanced streamer survey  
**DF** dark field  
**df** direction-finding (adj.)  
**DFD** data-file documents [science]  
**DGE** Department of Geothermal Energy (of DOE)  
**DGGE** denaturing gradient gel electrophoresis  
**DHL** (1) see "DML;" (2) difficult hole logging  
**DHML** (see "DML")  
**DI** (1) durability index; (2) differentiation index; (3) deionized water  
**diamond coring system** (DCS) complete and separate coring system incorporating the advantages of small-diameter, high-speed, narrow-kerf coring as developed by the mining industry; a small drilling rig is suspended in the derrick of the drillship, and a small-diameter drill string operates inside the standard drill string, which acts as a marine riser; the small-diameter drill string is rotated by a high speed top drive, and core is cut by a diamond core bit; retrieval of the inner barrels is accomplished by a smaller coring winch on the suspended rig; the system is designed for hard-rock coring applications in fractured and/or glassy material  
**diamond saw**  
**diapirs** dome-like structures broken out at top from underneath  
**DI-BHA** drill-in bottom-hole assembly [drilling]  
**DIC** drill-in casing [drilling]; differential interference contrast  
**DIL** dual induction log (resistivity) [logging]  
**dil.** dilute  
**dip-slip fault**  
**DIS** digital imaging system  
**disc** used for laser disc, video disc, CD-ROM, or vertebrae  
**disk** used for computer disk  
**DIT** Dual Induction Tool  
**DIT-E** Digital Dual Induction Tool model E (resistivity) (a.k.a. phasor induction tool)(also DIT-E) [logging]  
**DITE-SFL** phasor dual induction–spherically focused resistivity tool  
**DLIS** digital log information standard  
**DLL** Dual Laterolog (resistivity) [logging]  
**dm** decimeter  
**DMATC** Defense Mapping Agency Topographic Center (U.S.) ???  
**DMI** desktop-management interface [computers]  
**DML** downhole measurements laboratory aboard JOIDES Resolution (a.k.a. "DHML" and "DHL") [logging]  
**DMP** Downhole Measurements Panel [JOIDES]  
**DMT** drop-modulated technology (color scanner)  
**DMV** deep margin velocity  
**DNA** deoxyribonucleic acid  
**DNAG** Decade of North American Geology  
**DNL** dual-energy neutron log  
**DO** dissolved oxygen

**dobs** observed d-spacing  
**DOC** dissolved organic carbon  
**DOE** (1) Department of Energy (U.S.) (formerly ERDA, AEC); (2) Department of the Environment (Canada)  
**dolerite**  
**DOMES** Deep Ocean Mining Environmental Study  
**dope** thread lubricant for drilling tubulars; usually consists of grease with a high concentration of lead, zinc, or copper particles  
**Doppler**  
**DOS** Disk Operating System [computers]  
**DOSECC** Deep Observation and Sampling of the Earth's Continental Crust  
**DOT** internal drilling operations team  
**double piston coring** taking duplicate piston cores at adjacent sites only a few meters apart  
**double** two joints of drill pipe made up together to form a length of about 19 m  
**downcore**  
**downcurrent**  
**downdepth**  
**downdip**  
**down-dropped**  
**downfan**  
**downflow**  
**downgoing**  
**downhole**  
**downlap**  
**download**  
**downsection**  
**downslope**  
**downtime**  
**DP** (1) dynamic positioning [ship]; (2) drill pipe [drilling]; (3) data processing [computer]  
**DPG** Detailed Planning Group [JOIDES]  
**DPM** drill pipe measurement [drilling]  
**DPO** dynamic-positioning operator [ship]  
**DPP** differential pulse polarography  
**DPS** dynamic positioning system [ship]  
**DPT** deep propagation tool  
**DQ** Dril-Quip, manufacturer of casing-running tools [drilling]  
**DR** dead reckoning [ship]  
**dr** dram  
**drawworks** main hoisting winch of the drilling rig  
**DRB** DCS retractable bit system [drilling]  
**DRE** dense rock equivalent  
**drift shot** measurement to determine deviation of the hole from vertical; usually does not give azimuth

**drill bit** bit designed for making hole without coring; usually of tri-cone construction; drilling is more efficient with a drill bit, but coring is not an option with a drill bit

**drill collar** [n., adj.] heavy-walled tubular, which is the principal BHA component; the main purpose of drill collars is to provide weight on bit (WOB) for the drilling/coring operation; in addition, the lowermost drill collar is modified to serve as the outer core barrel in ODP coring BHAs

**drill core**

**drill floor** [n., adj.] also "rig floor" or "floor"; the main work platform of the drilling rig; location of the rotary table, iron roughneck, dual elevator system, tuggers, etc.

**drill hole**

**drill pipe** [n., adj.] relatively thin-walled tubular that is the main component of the drill string; to maximize depth capability, tensile strength of the drill string is maximized relative to its weight; for that reason, ODP drill pipe is special high-strength heat-treated steel, and a tapered drill string is used, with larger pipe at the top; drill pipe is always run in tension, or it will twist off; therefore all bit weight is supplied by drill collars

**drill site**

**drill string** [n., adj.] entire drilling assembly supported by the hoisting system extending from the top drive or kelly to the bit

**driller** contractor employee in charge of actual drilling/coring operation; operates the hoisting equipment and supervises the drill crew; reports to the pusher

**drillers depth** (no apostrophe)

**drill-in casing** an experimental system of implanting casing while the hole is being drilled rather than setting casing as a secondary operation. The casing does not have to be hung from the surface with a reentry cone.

**drilling** advancing a hole without retrieving or attempting to recover core; sometimes referred to as "washing"

**drilling fluid** [n., adj.] fluid medium required for rotary drilling to remove cuttings, cool and lubricate the bit, condition the hole, control formation pressure, etc.; in ODP operations, it is seawater with occasional "slugs" of drilling mud; in other operations, it may be drilling mud, fresh water, air, gas, foam, or mist

**drilling line** heavy wire cable of the hoisting system

**drilling parameters** measures of the drilling operation, such as bit weight, rotary rpm, circulation rate, circulation pressure, penetration rate, torque, etc.

**drilling recorder** instrumentation for recording drilling parameters as measured by various sensors on the rig; some parameters, such as penetration rate vs. depth, are useful in scientific investigation

**drillover** [n.]

**drillship**

**drill-stem test**

**DRM** depositional (or detrital) remanent magnetization

**drop point**

**dropstones**

**dry bulk** [n., adj.]

**dry bulk density**

**dry water content**

**DS** drilling superintendent [drilling]  
**DSA** (1) drill string acceleration tool; (2) downhole seismic array  
**DSC** differential scanning calorimetry  
**DSDP** Deep Sea Drilling Project  
**DSI** Dipole Sonic Imager  
**DSOW** Denmark Strait Overflow Water  
**DSP** downhole sensor package  
**DSRV** deep submersible research vessel  
**DSS** deep sound (sonic) source, 3.5-kHz bottom profiler deployed on drill string [drilling]  
**DST** drill-stem test [drilling] OR internal Downhole Systems Team  
**DSV** digital signal velocimeter  
**DT** differential transformer  
**DTA** (or dta) differential thermal analysis  
**DTC** (1) digital telemetry cartridge; (2) compressional-wave traveltime logs  
**DTD** document-type definition [computers]  
**DTG** differential thermogravimetry  
**DTL** detection threshold limit  
**DTSR** delta-t shearwave traveltime reconstructed  
**dual elevator handler** pneumatic device that positions and retracts pipe elevators as drill string connections are made; located just forward of the rotary table  
**dual elevator system** pipe-handling system modified for use with high-strength pipe that substitutes a second elevator set for slips when the drill string is landed at the drill floor  
**dual-element packer**  
**DVTP** Davis-Villinger Temperature Probe  
**DVTPP** Davis-Villinger Temperature-Pressure Probe  
**DW** drawworks [drilling]  
**DWOB** downhole weight on bit  
**dynamic-positioning thrusters**

## ODP/IODP Dictionary: E

*Revised 8/2005*

**EAC** East Antarctic Current

**EAR** Eastern American Realm (paleogeography)

**EASE** European Association of Science Editors

**East Coast passive continental margin**

**East Greenland Current**

**East Greenland Margin**

**East Greenland Shelf**

**East Pacific Rise**

**echinoid**

**echo sounder** [n., adj.]

**ECOD** European Science Foundation (ESF) Consortium for the Ocean Drilling Program

**ECOMOUND** Environmental Controls on Mound Formation along the European Margin

**ECR** (1) East Coast Repository at LDEO [ODP]; (2) ship's engine-control room [ship]

**EDAX** energy dispersive analysis, X-ray

**EDI** electronic data interchange [computers]

**EDM** electronic distance-measuring instrument

**EDO** EDO-Western, manufacturer of reentry sonar system and seismic recorders

**EDS** (1) energy dispersive spectrometry; (2) Environmental Data Service (of NOAA)

**EDX** energy dispersive X-ray analyzer

**EELS** electron energy-loss spectroscopy

**Eemian**

**EEZ** Exclusive Economic Zone

**EGA** evolved gas analysis

**EGS** European Geophysical Society

**Eh** redox (oxygen reduction) potential

**EI** (1) energy index; (2) electronic imaging [computers]

**EIA** (1) environmental impact assessment; (2) enterprise information architecture [computers]

**EIS** environmental impact statement (or study)

**Ekman transport**

**elevator** device that locks around the drill pipe tube to support the pipe when the larger diameter of the tool joint rests upon the smaller diameter of the latched elevator

**EM** electromagnetic

**e-mail** electronic mail [computers]

**EMCO** ESF Management Committee for the ODP

**EMD** electromotive diesel (engines and electric motors) [ship]

**emf** (or EMF) electromotive force

**E-MORB** enriched midocean ridge basalt

**EMPA** electron microprobe analysis

**EMPSA** Electro-resistance Multichannel Particle-Size Analyzer  
**EMR** (1) Department of Energy, Mines and Resources (Canada); (2) electromagnetic radiation  
**EMS** electronic multishot instrument [drilling], Environment Measurement Sonde  
**emu** electromagnetic unit(s)  
**en echelon**  
**end cap** [n., adj.]  
**end point** [n., adj.]  
**end-member** [n., adj.]  
**ENDOR** electron nuclear double resonance  
**endorheic**  
**endpoint-vectors**  
**engineer** generally believed to be a mythical creature who knows all the secrets of the universe and who frequently speaks in foreign tongues  
**ENSO** El Niño Southern Oscillation  
**Eoc.** Eocene  
**Eocene Impact (NP21)** Evidence exists to support the occurrence of at least two large closely spaced extraterrestrial impact events on Earth during early late Eocene time. In particular, two large craters (order ~100 km diameter; Chesapeake Bay, North America, and Popigai, Northern Siberia) have been proposed to explain impact-ejecta strewn fields that are documented in deep-sea sediments from around the world.  
**Eocene–Oligocene Boundary** The Eocene–Oligocene transition of 34 million years ago was a critical turning point in Earth’s climatic history when the warm, high-diversity “greenhouse” world of the early Eocene ceded to the glacial, “icehouse” conditions of the early Oligocene.  
**eolian** also aeolian; eolian preferred  
**EOM** extractable organic matter [science]  
**EOP** end of pipe  
**EOS** Earth Observing System (of NASA)  
**Eos** Weekly publication of American Geophysical Union; named for Greek goddess of the dawn  
**EPA** Environmental Protection Agency (U.S.)  
**epm** equivalents per million  
**EPMA** electron probe microanalyzer  
**EPR** (1) electron paramagnetic resonance; (2) East Pacific Rise  
**EPR-DPG** East Pacific Rise Detailed Planning Group [JOIDES]  
**EPS** encapsulated PostScript [computers]  
**EPT** East Tasman Plateau  
**equi-ripple**  
**ERB** Editorial Review Board [publications]  
**ERDA** Energy Research and Development Administration (formerly AEC; now DOE) (U.S.)  
**ERL** Earth Resources Laboratory (Stennis Space Center)  
**EROS** Earth Resources Observation Systems (includes Landsat)  
**ERTS** Earth Resource Technology Satellite

**ESA** (1) Endangered Species Act; (2) European Space Agency  
**ESCA** electron spectroscopy (chemical analysis)  
**ESCO** ESF Scientific Committee for ODP  
**esd** estimated standard deviation  
**ESDD** Earth Science Data Directory (of USGS)  
**ESF** (1) European Science Foundation (in terms of ODP, the European Science Foundation Consortium for the Ocean Drilling Program (Belgium, Denmark, Finland, Iceland, Ireland, Italy, The Netherlands, Norway, Portugal, Spain, Sweden, and Switzerland) [*current as of 12/2001*] (2) European Social Fund  
**ESR** (also esr) electron spin resonance  
**ESSA** Environmental Science Services Administration (now NOAA) (U.S.)  
**ET** electronics technician [ODP]  
**ETA** estimated time of arrival  
**ETD** estimated time of departure  
**ETH** Eidgenössische Technische Hochschule (Switzerland)  
**ETS** electron transmission spectroscopy  
**EUB** eccentric underreaming bit  
**EUSIDIC** European Association of Information Services  
**eV** electron volt  
**evaporates** rock composed of minerals precipitated from solutions concentrated by evaporation (halite = NaCl, gypsum = CaSO<sub>4</sub> 2H<sub>2</sub>O [hydrous calcium sulfate], and anhydrite = CaSO<sub>4</sub> [calcium sulfate, i.e., gypsum without water]).  
**EX** extinction [science]  
**EXAFS** extended X-ray absorption fine structure  
**EXCOM** Executive Committee [JOIDES]

## ODP/IODP Dictionary: F

*Revised 8/2005*

**F** (1) Fahrenheit; (2) farad; (3) fusibility

**f** fugacity (followed by chemical subscript)

**Fa** fault

**FA** first appearance (biostratigraphy)

**FAAD** first abundant appearance datum

**FAD** first-appearance datum (biostratigraphy) [science]

**Faeroe-Iceland Ridge**

**Faeroe-Iceland-Greenland Ridge**

**FAGS** (1) ferrosilite-anorthite-garnet-silica (geobarometer); (2) Federation of Astronomical and Geophysical Services (of ICSU)

**fallout**

**FAMOUS** Franco-American Mid-Ocean Undersea Study [science]

**fast line** length of drilling line extending from the drawworks drum to the first sheave in the crown block; it travels faster than any other line

**fast-spreading center**

**fath** fathom

**faunas** (pl.)

**FC** fall cone

**Fc** fracture cleavage

**F<sub>calc</sub>** calculated structure factor

**fcc** face-centered cubic

**FCO** (1) first common occurrence (biostratigraphy) [science]; (2) first consistent occurrence

**FCSP** final cruise sampling program (end-of-cruise summary of each sample request for a leg; included in Hole Summary) [curation]

**Fe oxide**

**Fe oxyhydroxide**

**FEA** finite-element (stress) analysis

**feather edge**

**FERC** Federal Energy Regulatory Commission (U.S.)

**FFF** free-fall funnel (a.k.a. minicone) [drilling]

**FFI** free-fluid index log

**FFQ** ferrosilite-fayalite-quartz (geobarometer)

**FH** full hole [drilling]

**FI** felsic index

**FIA** fluorescent indication analysis

**fiber-optic cable**

**FID** (1) free induction decay; (2) flame ionization detector

**Fig.** (in parentheses)

**Figure** (write out in text)

**Figure F1A**

**fine silt fraction**

**fine-grained clays**

**fining upward** (v.) fining-upward (adj.) or up and fining (adj.)

**fining-downward layers**

**first-appearance datum** FAD

**fish** any object remaining in a hole that is not attached to the drill string and needs to be removed

**FISH** fluorescent in situ hybridization

**fishing** the art/skill of removing a fish from the hole, either in one piece or in fragments

**fishing** tool any device, such as an overshot, spear, or mill, that is used to break up a fish or to remove it from a hole

**flat lying** (adj.)

**float valve** check valve in the drill string, usually just above the bit, that permits the circulation of drilling fluid down the pipe but prevents backflow of fluid and cuttings into the drill string

**floatstone**

**floe** (as in ice floe)

**floorman** contractor employee who works on the drill floor; roughneck

**flow base**

**flow line**

**flow-in** (n.)

**flowmeter**

**fluxgate magnetometer**

**fm** formation

**FMA** ( $\text{FeO} + \text{Fe}_2\text{O}_3$ ) +  $\text{MgO}$  + ( $\text{Na}_2\text{O} + \text{K}_2\text{O}$ ) triangular plot

**FMD** first-motion detector

**FMQ** fayalite-magnetite-quartz buffer

**FMS** Formation MicroScanner logging tool [logging]

**FO** first occurrence (biostratigraphy) [science]

**F<sub>obs</sub>** observed structure factor

**Footwall** [n., adj.]

**foraminifers** (not foraminifera), but note Foraminifera for the Order

**forearc**

**formation** driller's term for the rock or sediment being drilled; not used in the geological sense to identify a unit or grouping of specific age and lithology

**Formation MicroScanner** FMS [logging]

**formulas**

**forward** front of ship [shipboard]

**fossil-rich**

**FPAPWG** Fluid Processes in Accretionary Prisms Working Group [JOIDES]

**FPGA** field programmable gate array

**free-fall funnel** FFF

**freeze-dried** (n., adj.)

**freeze-dry** (v.)

**freshwater**

**FRG** Federal Republic of Germany

**FRIS** fayalite-rutile-ilmenite-silica (geobarometer)

**FRP** fiber-reinforced plastic

**ft** foot or feet

**FT** Fourier-transform techniques

**FTIR** Fourier transform infrared spectroscopy

**FTP** file-transfer protocol [computers]

**FV** flapper valve

**FWHM** full width at half maximum

**FY** fiscal year

**FZ** (1) fracture zone; (2) fault zone

## ODP/IODP Dictionary G

*Revised 8/2005*

**G** (1) specific gravity; (2) gauss; (3) Gibbs free energy  
**g** gram  
**g** gravity field strength  
**g.** (or gen.) genus  
**G.y.** gigayears  
**g/cm<sup>3</sup>** grams per cubic centimeter unit for density (do not use cc)  
**Ga** billions of years before the present  
**GAC** Geological Association of Canada  
**GAD** geomagnetic axial dipole  
**GADS** garnet-anorthite-diopside-silica (geobarometer)  
**GAES** garnet-anorthite-enstatite-silica (geobarometer)  
**GAf** garnet-anorthite-fayalite (geobarometer)  
**GAfS** garnet-anorthite-ferrosilite-silica (geobarometer)  
**GAHS** garnet-anorthite-hedenbergite-silica (geobarometer)  
**gamma ray** [n., adj.]  
**Ganges fan**  
**gAPI** American Petroleum Institute gamma ray units  
**gas chromatography mass spectrometry** GCMS or GC-MS  
**gas hydrate** [n., adj.] (see clathrate)  
**GASP** garnet-aluminosilicate-silica-plagioclase (geobarometer)  
**gauge**  
**GB** gigabytes  
**GC** (1) gas chromatography [science]; (2) Glomar Challenger [DSDP]  
**GCAGS** Gulf Coast Association of Geological Societies  
**GCR** Gulf Coast Repository at TAMU [ODP]  
**GDGT** glycerol dialkyl glycerol tetraethers  
**GEBCO** General Bathymetric Chart of the Oceans  
**GEK** geomagnetic electrokinetograph  
**GEMS** Global Environmental Monitoring System (of United Nations)  
**geomagnetic field** [n., adj.]  
**GEOMAR** FRG Research Center for Marine Geosciences  
**GEOMOUND** The Mound Factory—Internal Controls  
**GEOPROPS** geophysical properties tool  
**GeoRef** geological reference database of the American Geological Institute  
**geotherm**  
**GER** Geriatric Core Study [curation]  
**GERM** Geochemical Earth Reference Model  
**GF** growth factor  
**GFDL** Geophysics Fluid Dynamics Laboratory (Princeton)  
**GFZ** Charlie Gibbs Factor Zone  
**GHMT** Geologic High-Resolution Magnetic Tool  
**GHOST** global horizontal sounding technique

**GHSZ** gas hydrate stability zone  
**GI** gun generator-injector gun  
**GIA** Geological Institute of America  
**GIS** (1) Geoscience Information Society; (2) geographic information system(s)  
**GISP2** Greenland Summit ice core  
**glacio-eustatic**  
**glaciogenic**  
**glaciomarine**  
**globorotaliid**  
**GLT** geochemical tool string  
**G-M** counter Geiger-Müller counter  
**GM** Geiger-Müller (better spelled out in isolated or infrequent occurrences)  
**GMR** grain/micrite ratio  
**GMT** Greenwich Mean Time (replaced by UTC) – generic mapping tools  
**GNAIW** Glacial North Atlantic Intermediate Water  
**GNP** gross national product  
**GOBO** Geophysical Ocean-Bottom Observatory  
**go-devil** a tool that free-falls down the drill pipe [logging]  
**gooseneck** the curved upper termination of the standpipe, where the kelly hose attaches  
**GOR** gas/oil ratio  
**GPa** gigapascal  
**GPIT** General Purpose Inclinator Tool  
**gpm** gallons per minute (or gal/min) [GPM in Stone Soup]  
**GPS** Global Positioning System (satellite navigation system) [ship]  
**GPTS** geomagnetic polarity time scale  
**GQL** graphical query language [computers]  
**GR** natural gamma ray logging tool [logging]  
**gr.** group  
**GRA** gamma ray attenuation  
**GRAIL** garnet-rutile-alumino-silicate-ilmenite (geobarometer)  
**grain size analyzer**  
**gram-negative bacteria**  
**gram-positive bacteria**  
**GRAPE** (1) gamma ray attenuation porosity evaluator (bulk-density analyzer) [science]; (2) GRAPE gamma ray attenuation porosity evaluator (shipboard physical properties measurement) (replaced by GRA bulk density)  
**gravel-sized**  
**gravity flow unit**  
**gray** not grey  
**GRC** Geothermal Resources Council  
**Great Isaac 1 well**  
**greenhouse gas** [n., adj.]  
**Greenland Ice Sheet**  
**GRIP** Greenland Summit ice core  
**GRIPS** garnet-rutile-ilmenite-plagioclase-silica (geobarometer)

**groundmass**

**groundwater** [n., adj.]

**GRS** Geodetic Reference System

**GS** (1) Geochemical Society; (2) overshot for wireline coring [drilling]

**GS** pulling tool device attached to the coring line that is used to engage and retrieve inner core barrels and other downhole tools

**GS** pulling tool device attached to the coring line that is used to engage and retrieve inner core barrels and other downhole tools

**GSA** Geological Society of America

**GSC** (1) Geological Survey of Canada; (2) gas-solid chromatography

**GSGP** Global Sedimentary Geology Program [JOIDES]

**GSL** Geological Society of London

**GST** induced gamma ray spectroscopy logging tool [logging]

**GSTA** gamma ray spectrometry tool

**Gt** gigaton

**GTS** geological timescale

**guide base** (see "HRGB")

**guide horn** [n., adj.] (also "guide shoe"); structure extending from the keel to the drill floor that provides a 350-ft (107 m) bending radius to reduce bending stresses in the drill string

**Gulf of Mexico Basin**

**Gulf Stream**

**GURC** Gulf Universities Research Consortium

**GVR** GeoVision resistivity (at the bit)

## ODP/IODP Dictionary: H

*Revised (1/2005)*

**H** (1) hardness; (2) enthalpy

**H wave** hydrodynamic wave

**ha** hectare

**half graben** [n.]

**half-graben** [adj.]

**half-life**

**halfway**

**Halliburton unit** system for mixing and pumping cement slurry down a hole; it consists of dual pumps, water tanks, and a continuous mixing subsystem and is manufactured by the Halliburton Oil Well Cementing Company

**ham** hypothetical ancestral mollusk

**Hamilton Frame** device that measures *P*-wave velocity

**hand** crew member; helper

**hand lens**

**hand specimen** [n., adj.]

**handheld**

**hanging wall** [n., adj.]

**HAR** high-amplitude reflection

**hard rock** [n., adj.] igneous or metamorphic rock. Volcaniclastics are not considered hard rock. They are handled as other sediment cores (i.e., they do not get piece numbers).

**hardground**

**Haut.** Hauterivian

**HBR** hydraulic bit release (obsolete) [drilling]

**HC** (1) heave compensator [drilling]; (2) hydrocarbons [science]

**HCGR** computed gamma ray headspace

**HDM** humic degradation matter

**HDPE** high-density polyethylene or high-density plastic elastomer

**HDR** hot dry rock

**HDS** hammer drilling system

**HE** horizontal equivalent

**headspace**

**headspace gas** [n., adj.]

**heat flow** [n., adj.]

**heavy-wall drilling joints** (see "knobby joints")

**HEE** high-energy engineering (pipe-severing system) [drilling]

**hemipelagic**

**HESS** History of Earth Sciences Society

**hex.** (or hexag) hexagonal

**HF** (1) heat flow [science]; (2) high frequency; (3) hydrofluoric acid

**HFS** high-frequency depositional sequences

**HFSE** high-field-strength elements [science]

**HFU** heat flow units  
**HGU** heat-generation unit  
**HI** hydrogen index [science]  
**hiatus, hiatuses**  
**HIG** Hawaii Institute of Geophysics (University of Hawaii)  
**high ground**  
**highstand**  
**HIRM** hard isothermal remanent magnetization  
**HLDS** Hostile Environment Litho-Density Sonde  
**HLDT** Hostile Environment Litho-Density Toll  
**HNGS** spectral gamma ray; Hostile Environment Gamma Ray Sonde  
**hom.** homonym  
**homolog**  
**horizontal error bars**  
**horstlike**  
**hot plate**  
**hotspot**  
**HP** Hewlett-Packard  
**HPC** hydraulic piston corer (replaced by the advanced hydraulic piston corer, APC)  
[drilling]  
**hr** hour  
**HRB** hard rock base [drilling]  
**HREE** heavy rare earth element(s) [science]  
**HRELS** high-resolution electron loss spectroscopy  
**HRGB** hard rock guide base [drilling]  
**HRO** hard rock orientation [drilling]  
**HRRS** hard rock reentry system  
**HRTEM** high-resolution transmission electron microscopy  
**HRTHIN** database program for hard-rock thin-section descriptions [ODP]  
**HRV** hard rock visual core description  
**HRVCD** hard rock visual core description  
**HS** (1) horizontal scale; (2) head sub [drilling]; (3) headspace sampling  
**HSDP** Hawaiian Scientific Drilling Project  
**HSGR** total spectral gamma ray  
**HV** high velocity  
**HVDYN** heave dynamics drill-string program [drilling]  
**HW high water**  
**HWDJ** heavy-wall drilling joint [drilling]  
**HYACE** Hydrate Autoclave Coring Equipment  
**hydrogen sulfide (H<sub>2</sub>S)** Low levels of H<sub>2</sub>S gas may be encountered in cores in which microbial sulfate reduction is occurring or in cores from hydrothermal vent areas in which seawater sulfate has reacted with high-temperature intrusions. H<sub>2</sub>S is a highly reactive and toxic gas which is normally maintained at negligible concentrations by rapid reaction with iron or other metals present in the sediment. In some cases, such as iron-deficient carbonate sediments and where gas hydrates or sulfate-rich brines are present, H<sub>2</sub>S concentrations

may be sufficient to cause a toxic gas breathing hazard, especially when cores are being handled in confined or poorly ventilated areas. In these situations, the *JOIDES Resolution* is equipped with H<sub>2</sub>S sensors on the rig floor, the core receiving platform, and in the interior core-handling areas. H<sub>2</sub>S levels of 10–20 ppm should activate audible and visual alarms and bring about an H<sub>2</sub>S alert. H<sub>2</sub>S odor is apparent at levels below those detectable by sensors or analytical instruments. If H<sub>2</sub>S presence is suspected, the hydrocarbon monitoring techniques should include analysis by thermal conductivity detector gas chromatography (NGA) to provide information on concentration levels and any trends of H<sub>2</sub>S occurrence in cores.

**hypocenter**

## ODP/IODP Dictionary: I

*Revised (1/2005)*

**IAB** International Abstracting Board (of ICSU)  
**IADC** International Association of Drilling Contractors (formerly American Association of Oilwell Drilling Contractors)  
**IAEA** International Atomic Energy Agency  
**IAEG** International Association of Engineering Geology  
**IAG** International Association of Geodesy  
**IAGA** International Association of Geomagnetism and Aeronomy  
**IAGC** International Association of Geochemistry and Cosmochemistry  
**IAGOD** International Association on the Genesis of Ore Deposits  
**IAH** International Association of Hydrogeologists  
**IAHR** International Association for Hydraulic Research  
**IAHS** International Association for Hydrological Sciences  
**IAMAP** International Association of Meteorology and Atmospheric Physics  
**IAMG** International Association for Mathematical Geology  
**IAP** International Association of Planetology  
**IAPO** International Association of Physical Oceanography  
**IAPSO** (1) International Association for the Physical Sciences of the Ocean (provides bottled standard seawater for analytical calibrations);  
**IAS** International Association of Sedimentologists; (2) International Association of Physical Sciences Organization  
**IASH** International Association of Scientific Hydrology  
**IASPEI** International Association of Seismology and Physics of the Earth's Interior  
**IASY** international active sun years  
**IAU** International Astronomical Society  
**IAVCEI** International Association of Volcanology and Chemistry of the Earth's Interior  
**IAWPR** International Association on Water Pollution Research  
**IAWPRC** International Association on Water Pollution Research and Control  
**IBM** International Business Machines (used generically as a term to describe personal computers)  
**IC** (1) inorganic carbon; (2) ion chromatography  
**ICBN** International Code of Botanical Nomenclature  
**ICC** International Carboniferous Congress  
**ICCP** International Committee for Coal Petrology  
**ice sheet** [n., adj.]  
**Iceland-Greenland Ridge**  
**ice-rafted debris** IRD  
**ICL** Inter-Union Commission on the Lithosphere  
**ICP** inductively coupled plasma spectroscopy [science]  
**ICP-AES** inductively coupled plasma–atomic emission spectroscopy  
**ICP-MS** inductively coupled plasma–mass spectrometry  
**ICR** ion cyclotron resonance

**ICS** International Commission on Stratigraphy  
**ICSU** International Council of Scientific Unions  
**ICT** international critical tables  
**ICZN** International Commission on Zoological Nomenclature  
**ID** (1) inside diameter; (2) identification  
**IDAS** isothermal decompression analysis system  
**IDEAL** integrated drilling evaluation and logging  
**IDPH** deep induction phasor-processed resistivity  
**IDSS** instrumented drill-string sub [drilling]  
**IDW** (1) integrated depth wheel [drilling]; (2) Indian Deep Water [science]  
**I-ES** induction-electric survey  
**IFP** Institut Français du Pétrole (France)  
**IFPS** International Federation of Palynological Societies  
**IFREMER** Institut Français de Recherche pour l'Exploitation de la Mer (France)  
**IGC** International Geological Congress  
**IGCP** International Geological Correlation Programme  
**IGES** International Geochemical Exploration Symposium  
**IGRF** International Geomagnetic Reference Field  
**IGS** International Glaciological Society  
**IGU** International Geographical Union  
**IGY** International Geophysical Year  
**IHP** Information Handling Panel [JOIDES]  
**ILD** deep induction resistivity [logging]  
**ILM** medium induction resistivity [logging]  
**ILP** International Lithosphere Program [JOIDES]  
**ILW** international low water  
**IMA** International Mineralogical Association  
**IMC** International Map Committee  
**IMCO** Intergovernmental Maritime Consultative Organization  
**IMPH** medium induction phasor-processed resistivity  
**IMW** international map of the world  
**in** inch(es) - no period effective 164IR, 151SR  
**in situ** [n., adj.]  
**INAA** instrumental neutron activation analysis  
**inboard**  
**inc. sed.** incertae sedis  
**indet.** indeterminate  
**index properties** [n.] moisture and density analyses; index-properties [adj.]  
**index** species  
**indexes** (in books), but indices of refraction index properties  
**inland**  
**in-line** [n., adj.]  
**inner core barrel** steel tube fitted with core catchers and (usually) a plastic core liner, in which the core is retained and transported to the drill floor; ODP inner core barrels for all coring systems are retrievable through the drill string by means of a wireline

**inorganic carbon** [n., adj.]  
**INQUA** International Union for Quaternary Research  
**insertion probe** [n., adj.]  
**interbedded**  
**interglacial**  
**interstitial water** IW; [n., adj.]  
**interval** usually a general term and should not be capped  
**IOC** Intergovernmental Oceanographic Commission  
**IODP** Integrated Ocean Drilling Program  
**ION** International Ocean Network  
**ion-exchange reactions**  
**IOP** (1) International Organization of Paleobotany; (2) Indian Ocean Panel [JOIDES]  
**IP** (1) induced polarization; (2) initial production; (3) index properties  
**IPA** (1) International Palaeontological Association; (2) isopropyl alcohol [science]  
**IPAA** Independent Petroleum Association of America  
**IPG** Institut de Physique du Globe (France)  
**IPLT** integrated porosity-lithology tool string  
**IPOD** International Phase of Ocean Drilling  
**IQSY** international years of the quiet sun  
**IR** (1) iron roughneck [drilling]; (2) infrared [science]; (3) insoluble residue; (4) *Initial Reports of the Proceedings of ODP* [publications]  
**IRD** ice-rafted debris  
**IRIS** infrared interferometer spectrometer  
**IRM** isothermal remanent magnetization [science]  
**IS** information system(s) [computers]  
**ISA** (1) Instrument Society of America; (2) infrared spectrometric sulfur analyzer  
**ISBN** International Standard Book Number (see also "ISSN"-#1)  
**ISD** Information Services Department [ODP]  
**ISEE** International Society for Environmental Education  
**ISG** International Stratigraphic Guide  
**iso...** isobutane, isopentane, etc.  
**ISONIC** IDEAL Sonic-While-Drilling tool  
**ISOW** Iceland Sea Overflow Water  
**ISRM** International Society for Rock Mechanics  
**ISS** ion-scattering spectrometry [science]  
**ISSN** (1) International Standard Serial Number (see also "ISBN"); (2) International Subcommission on Stratigraphic Nomenclature  
**IT** information technology [computers]  
**ITRM** inverse thermo-remanent magnetization  
**ITT** interval transit time  
**ITZ** imbricate thrust zone  
**IUCr** International Union of Crystallography  
**IUGG** International Union of Geodesy and Geophysics  
**IUGS** International Union of Geological Sciences  
**IUHPS** International Union of the History and Philosophy of Science  
**IW** interstitial water (sample designation) [curation]

## ODP/IODP Dictionary: J

*Revised (1/2005)*

**J** joule

**JAMSTEC** Japan Marine Science and Technology Center

**Janus** database

**jars** any downhole device that imparts a "jar" or blow to a stuck drill-string or wireline component

**JCPDS** Joint Committee on [X-ray] Powder Diffraction Standards

**JD** Julian day; the number of a day within a calendar year

**Jean Charcot** French research vessel

**jet in** [v.] to advance a hole without rotation and by means of fluid circulation only; used to set reentry-cone/conductor-casing strings because rotation would damage the large, heavy reentry-cone assembly; jet-in [adj.] a jet-in test is conducted at the exploratory hole for each reentry site

**JOI** Joint Oceanographic Institutions, Inc.

**JOI-BOG** JOI Board of Governors [JOIDES]

**JOIDES** Joint Oceanographic Institutions for Deep Earth Sampling

**JOIDES Resolution** or *Resolution*

**joint** length of pipe, usually 20-45 ft (6-14 m) in length; lengths of drill pipe or tubing less than 20 ft are known as pup joints

**JPL** Jet Propulsion Laboratory

**junk** any unwanted object or material, usually metal, in a hole; junk is a hazard to drilling and coring tools and often must be fished

**junk basket device** for fishing small pieces of junk

**junk mill** (see "mill")

**junk sub** (also "boot basket", "trophy sub", "skirted sub"); a sub located just above the bit and designed with side pockets to catch small bits of junk during the drilling/coring operation

**Jur.** Jurassic

## ODP/IODP Dictionary: K

*Revised (1/2005)*

**K** (1) Kelvin; (2) potassium

**k** low-field magnetic susceptibility

**k.y.** thousand years; used to express duration or interval of time

**K/T** Cretaceous/Tertiary boundary [science]; also K/P: Cretaceous/Paleogene

**ka** thousands of years before the present

**KB** (1) kelly bushing [drilling]; (2) kilobyte

**kb** (or kbar) kilobar

**kcal** kilocalorie

**KCN** K<sub>2</sub>O-CaO-Na<sub>2</sub>O triangular plot

**KE** kinetic energy

**Kelly hose** length of flexible hose that extends from the gooseneck to the swivel for circulation of the drilling fluid

**kelly** in conventional rotary drilling, the uppermost component of the drill string; the kelly is an extra-heavy joint of pipe with flat or fluted sides that is free to move vertically through a "kelly bushing" in the rotary table; the kelly bushing imparts torque to the kelly and thereby the drill string is rotated; on *JOIDES Resolution*, the kelly is replaced by the top drive and a length of "knobby" drill pipe

**kerf** in coring, the "wall" of the core bit between its outside diameter and the core diameter

**KFZ** Kane Fracture Zone [science]

**kg** kilogram

**kHz** kilohertz

**Kimm.** Kimmeridgian

**Kinley wireline cutter and crimper** devices to cut and/or crimp coring or logging line downhole if tools become stuck

**kips** kilopounds

**kJ** kilojoule

**km** kilometer

**km/s** kilometers per second

**knobby joints** (also "heavy-wall drilling joints") special drill-pipe joints machined from drill collar stock; 8-in. hubs are spaced at 5-ft intervals to distribute bending stresses as the pipe is bent through the guide horn when the vessel rolls or is displaced off the hole

**Koenigsberger ratio** The ratio of the remanent magnetization to magnetization induced by the Earth's field. Its symbol is Q.

**kPa** kilopascal unit of pressure

**KREEP** Lunar rock type high in potassium (K), rare-earth elements (REE), and phosphorus (P)

**kt** knot(s) nautical speed unit

**KTB** German continental deep-drilling project

**kV** kilovolt

**KWG** Kerguelen Working Group [JOIDES]

## ODP/IODP Dictionary: L

*Revised 8/2005*

**L** liter  
**L\*** lightness factor; color reflectance parameter  
**LA** last appearance (biostratigraphy)  
**LAAD** last abundant appearance datum  
**LAD** last-appearance datum (biostratigraphy) [science]  
**LA-ICP-MS** laser ablation-inductively coupled plasma-mass spectrometry  
**LAMMA** laser microprobe mass analysis  
**LAN** local-area network [computers]  
**landmass** (n.)  
**LANDSAT** (usually "Landsat") land satellite  
**LANL** Los Alamos National Laboratory (U.S.)  
**LAS** laboratory automation system [science]  
**LASER** light amplification through stimulated emission response  
**LAST** lateral-stress tool [logging]  
**lay down** LD (also "lay out") take out of service; stop using  
**layer-cake geology**  
**lb** pound  
**LBL** Lawrence Berkeley Laboratory (U.S.)  
**LCD** liquid crystal display [computers]  
**LCO** (1) last common occurrence; (2) last consistent occurrence  
**LD** lay down [drilling]  
**LDC** low detrital carbonate (events)  
**LDEO** Lamont-Doherty Earth Observatory (formerly LDGO)  
**LDEO-BRG** Lamont-Doherty Earth Observatory Borehole Research Group  
**LDGO** Lamont-Doherty Geological Observatory (now LDEO)  
**LDRZ** landward-dipping reflector zone  
**LDT** lithodensity logging tool [logging]  
**LDW** Lower Deep Water  
**LECO** brand name of the carbon/carbonate analyzer  
**LED** light emitting diode  
**LEED** low-energy electron diffraction  
**left-coiling** (adj.)  
**LEGS** database program to write reports with leg, site, hole, and core-recovery information [ODP]  
**LEL** lower expansive limit [safety]  
**LENAD** feldspathoidal "standard" minerals (leucite and nepheline)  
**LFV** lockable float valve [drilling]  
**LGH** lower guide horn  
**LGM** Last Glacial Maximum  
**L-group** low Fe-content chondrite  
**LH** left hand [drilling]  
**LIF** laser-induced fluorescence

**LILE** large ion lithophile element [science]  
**LIP** large igneous province  
**LIS** (1) log information standard; (2) Laurentide Ice Sheet  
**lithologic Units I and II**  
**LITHP** Lithosphere Panel [JOIDES]  
**LLD** deep laterolog [logging]  
**LL-group** low total Fe- and low metallic Fe-content chondrite  
**LLS** shallow laterolog [logging]  
**LMWFA** low molecular weight fatty acids  
**LO** (1) laboratory officer [ODP]; (2) last occurrence (biostratigraphy) [science]  
**log-core correlation tool**  
**logging-while-drilling** LWD  
**LOI** loss on ignition  
**long-core measurements**  
**loran long-range navigation** (a radio position-fixing system)  
**low latitude** (n.); low-latitude (adj.)  
**lowstand**  
**LPG** liquefied petroleum gas  
**LPI** Lunar and Planetary Institute (U.S.)  
**LPTM** The late Paleocene thermal maximum (LPTM, also called the Paleocene/Eocene thermal maximum or PETM) is associated with a brief but intense interval of global warming and a massive perturbation of the global carbon cycle as well as extinction of numerous deep-sea benthic foraminifera. It is theorized that the timing is associated with a series of nearly catastrophic releases of methane from gas hydrates, punctuated by intervals of relative equilibria between hydrate dissociation and carbon burial.  
**LREE** light rare-earth element(s) [science]  
**LRL** Lawrence Radiation Laboratory (U.S.)  
**LRP** long-range plan [JOIDES]  
**ls** limestone  
**LSB** lower support bearing [drilling]  
**LSR** linear sedimentation rate  
**LSS** Long Spacing Sonic tool  
**LSW** Labrador Sea Water  
**LTSZ** large thrust slice zone  
**LUBR** Leicester University Borehole Research  
**LV** left valve  
**LVL** low-velocity layer  
**LVZ** low-velocity zone  
**LW** low water  
**L-wave** long (surface) wave  
**LWD** logging while drilling; logging-while-drilling (adj. only)

## ODP/IODP Dictionary: M

*Revised 8/2005*

**M** molar (also the SI prefix for mega; thus 10<sup>6</sup> yr, for example, may be preferable in some instances to avoid confusion)

**m.y.** million years; used to express duration

**m/m.y.** meters per million years (accumulation rate)

**mA** milliampere

**Ma** millions of years before the present

**Maast.** Maastrichtian

**MABS** muscovite-almandine-biotite-sillimanite (geobarometer)

**Mac** Apple Macintosh computer [computers]

**MAC** Mineralogical Association of Canada

**MAD** (1) moisture and density measurements; (2) mean angular deviation; (3) mean angular dispersion; (4) maximum angular deviation

**mafic** Mg- and Fe-rich

**magnaflux** trade name for electromagnetic inspection given to BHA connections at least once per leg to check for fatigue cracks and other flaws in the threaded areas make up to screw a threaded connection together; to assemble

**magnetic field** [n., adj.]

**magnetic susceptibility** [n., adj.]

**major element** [n., adj.]

**MAK** Makanchi seismic array

**MAR** (1) Mid-Atlantic Ridge [science]; (2) mass accumulation rate

**MARK** Mid-Atlantic Ridge Kane Fracture Zone [science]

**MAS** magic-angle spinning

**MASCON** mass concentration (a large-scale high-density lunar mass)

**MASH** MgO-Al<sub>2</sub>O<sub>3</sub>-SiO<sub>2</sub>-H<sub>2</sub>O system

**mass flow**

**mass-gravity flow deposits**

**MAT** Middle American Trench

**MATMAN** ODP (materials management) inventory database system [logistics]

**matrices**

**matrix-supported**

**MAXIS** multi-tasking acquisition and imaging system [logging]

**Mb** megabit

**MB** megabyte

**mb** millibar

**Mba** megabar

**MBR** mechanical bit release [drilling]

**mbr** member (stratigraphy)

**mbrf** meters below rig floor [drilling]

**mbsf** meters below seafloor [science]

**mbsl** meters below sea level [science]

**MCAS** MgO-CaO-Al<sub>2</sub>O<sub>3</sub>-SiO<sub>2</sub> system

**MCD** caliper tool; measures hole diameter [logging]  
**mcd** meters composite depth  
**Mcf** thousand cubic feet  
**MCM** Schlumberger Minimum Configuration Maxix  
**MCR** mehtyl coenzyme-M reductase  
**MCS** (1) multichannel seismic [science]; (2) multichannel sonic (12-channel) logging tool [logging]  
**MCT** motor-control transformer [drilling]  
**M-D** Martin-Decker rig-weight indicator [drilling]  
**md** millidarcy  
**MDCB** motor-driven core barrel (replaces NCB) [drilling]  
**MDF** median destructive field  
**MEG** multiple-access expandable gateway  
**meltwater**  
**MEM** maximum entropy method  
**mesotech** sonar scanning sonar system manufactured by Mesotech, Ltd.; used on the VIT in conjunction with the Colmek TV for reentry and seafloor survey purposes  
**Mesoz.** Mesozoic  
**MESTB** micro-electrical scanner tool  
**METS** marine emergency technical squad  
**MF** (1) molecular formula; (2) metal factor  
**MG** marin gräns (maximum stand of sea)  
**mg** milligram  
**mGal** milligal  
**mgd** million gallons per day: rate of water flow  
**MGT** Multi-Senor Spectral Gamma Ray Tool  
**MGUS** Mathematical Geologists of the United States  
**MH**  $\text{Fe}_3\text{O}_4\text{-Fe}_2\text{O}_3$  buffer  
**MHHW** mean higher high water  
**MHS** message-handling system [computers]  
**MHW** mean high water  
**MHWN** mean high-water neap  
**MHWS** mean high-water spring  
**MHz** megahertz  
**mHz** millihertz  
**MI** mafic index  
**mi<sup>2</sup>** square miles  
**MIB** management information base [computers]  
**microbreccia**  
**microcomputer**  
**microcore**  
**microcross-lamination**  
**microcycles**  
**microfault(ing)**  
**microfauna**

**microflaser**  
**microfossils**  
**microfractures**  
**micron micrometers** ( $\mu\text{m}$ )  
**micronodules**  
**microresistivity**  
**microslumps**  
**microtectonic**  
**microunits**  
**midcontinental**  
**Middle America Trench**  
**midlatitude**  
**mid-ocean, mid-oceanic**  
**midpoint**  
**midslope**  
**Milankovitch cyclicality**  
**mill** (also "junk mill"); cutting device, usually faced with tungsten carbide, used to reduce junk or a fish to small particles that can be removed from the hole by fluid circulation  
**MIMS** magnetic ion mass spectrometer  
**min** minute(s)  
**mine riser** pipe structure, usually with some self buoyancy, suspended below the rig and connected to the wellhead, effectively extending the casing string to the rig for purposes of fluid circulation and reentry into the wellbore  
**minicore**  
**minor element** [n., adj.]  
**Mio.** Miocene  
**MIR** subsmersible  
**MIS** (1) management information system(s) [computers]; (2) marine oxygen isotope stage; (3) marine isotope stage  
**ML** microlog [logging]  
**mL** milliliter (use instead of cc)  
**MLLW** mean lower low water  
**MLW** mean low water  
**MLWN** mean low-water neap  
**MLWS** mean low-water spring  
**mm** millimeter  
**mM** millimole/liter  
**MM** scale modified Mercalli scale (earthquake characterization)  
**MMcf/d** million cubic feet per day  
**mmol** millimoles  
**MMS** Minerals Management Service (of U.S. Department of the Interior)  
**Mn** (1) mean range (between mean high and mean low water); (2) symbol for manganese  
**MN** magnetic north  
**MOCNESS** multiple opening/closing net and environmental sensing system

**MODU** Mobile Offshore Drilling Unit  
**MOHO** Mohorovicic seismic discontinuity [science]  
**Mohole** a hypothetical drill hole that was to penetrate the Moho  
**mol** mole  
**mol%** molar percent  
**molluscan** (adj.)  
**mollusk** (noun)  
**Molspin** spinner magnetometer (MSM)  
**MOM** Transocean Sedco Forex's Marine Operations Manual [ship]  
**monkey board** small work platform in the derrick occupied by the derrickman when drill collars or other tubulars are being set back vertically in the derrick  
**moonpool** circular opening through the center of the drillship, extending from the main deck through the keel, through which the drill string passes  
**MOR** mid-ocean ridge  
**MORB** mid-ocean-ridge basalt [science]  
**MOSFET** metal oxide silicon field effect transistor  
**MOU** Memorandum of Understanding  
**mousehole** temporary holding tube located just to port of the rotary table; the mousehole is used to hold one or more joints of drill pipe while a joint is made up to or disconnected from the top drive  
**MP** melting point  
**MPa** megapascal  
**MPN** most probable number method  
**MREE** middle rare earth elements  
**MRM** magnetometric resistivity method  
**MRT** maximum-reading thermometer [science]  
**MS** (1) mass spectrometry; (2) magnetic susceptibility  
**ms** bsf milliseconds below seafloor  
**MSA** Mineralogical Society of America  
**MSCL** multisensor core logger  
**MSDC** Mass Spectrometry Data Centre  
**MSDS** (1) Marine Science and Development Shop (SIO) [logistics]; (2) Material Safety Data Sheet [OSHA]  
**MSIS** mass spectrometer incoherent scatter  
**MSL** magnetic susceptibility logger  
**msl** mean sea level (also MSL)  
**MSM** (1) Molspin spinner magnetometer; (2) magnetic susceptibility meter  
**MSP** master sampling plan (defunct term, replaced by FCSP) [curation]  
**MSP** point magnetic susceptibility  
**MSS** minimum signal strength  
**MSS** multispectral scanner  
**MST** multisensor track [science] OR Material Services team  
**MT** (1) marine technician [ODP]; (2) empty  
**mT** millitesla (unit of magnetism)  
**MTF** multiple toolface  
**MTL** (1) mean tide level; (2) median tectonic line

**MU** make up [drilling]

**mud clast** [n., adj.]

**mud** drilling mud; a fluid, either water- or oil-based, used in drilling operations, with clay, polymer, barite, or a variety of other substances added to alter its physical and/or chemical properties

**mud motor** also Positive Displacement Motor (PDM), Navidrill, Dynadrill, etc.; a downhole motor operated by pumping drilling mud or water through it; mud motors are used for applications in which it is not desirable to rotate the entire drill string

**mud sweep** (also "pill" or "slug"); a small batch of high-viscosity drilling mud circulated through the hole/drill-string annulus to clean cuttings and debris from the hole

**mudline** [n., adj.]

**multi-** all multi combinations are not hyphenated, except when i is doubled

**multichannel**

**multilog**

**multisensor track** MST

**multishot** (also "Eastman Multishot"); mechanical magnetic orientation device used in the sinker bar assembly of the coring line to collect orientation data for APC cores and for drift shots during deeper coring/drilling operations

**MW** molecular weight

**MWC** measurement while coring [drilling]

**MWD** measurement while drilling [drilling]

**MWL** mean water level

## ODP/IODP Dictionary: N

*Revised (1/2005)*

**NAD** nonaxial-dipole

**NAIW** North Atlantic Intermediate Water

**N** newton (unit of force)

**N** number

**n. gen.** new genus (also *gen. nov.* ‹Latin)

**n. sp.** new species (also *sp. nov.* ‹Latin)

**NAA** neutron activation analysis

**NAAG-DPG** North Atlantic-Arctic Gateways Detailed Planning Group [JOIDES]

**NACSN** North American Commission on Stratigraphic Nomenclature

**NAD** North American datum

**NADW** North Atlantic Deep Water [science]

**NAEP** National Association of Environmental Professionals

**NAGT** National Association of Geology Teachers

**NAMOC** Northwest Atlantic Mid-Ocean Canyon [science]

**NAMS** North American Micropaleontology Section (of SEPM)

**nannofossil ooze**

**nannoplankton**

**nanopure water**

**NAP** nonarborescent pollen

**NAPC** North American Paleontology Convention

**NARM-DPG** North Atlantic Rifted Margins Detailed Planning Group [JOIDES]

**NAS** National Academy of Science

**NASA** National Aeronautics and Space Administration

**natural gamma ray** NGR

**naut.** nautical

***Nautil*** submersible craft

**NBS** National Bureau of Standards (now NIST)

***n*-butane** normal isomer of butane

**NCB** Navidrill core barrel (replaced by MDCB) [drilling]

**near-infrared** [n.; adj.]

**nearshore**

**near-surface** [adj.]

**needle probe** [n., adj.]

**Neog.** Neogene

**NERC** Natural Environment Research Council (U.K.)

**NEREID** 'neath seafloor equipment for recording Earth's internal deformation

**NESTA** National Earth Science Teachers Association

**NF** normal faults

**NFG** not functioning good; useless

**NFS** network file system [computers]

**NGA** natural gas analyzer [science]

**NGDC** National Geophysical Data Center (of NOAA)

**NGR** (1) nuclear gamma resonance (= Mössbauer spectroscopy); (2) natural gamma ray

**NGS** (1) National Geodetic Survey; (2) Norwegian Greenland Sea

**NGT** Natural Gamma Ray Spectrometry tool

**NIH** National Institutes of Health (U.S.)

**nIR** near infrared

**NIST** National Institute of Standards and Technology (U.S.) (formerly NBS)

**nm** nanometer

**NMDC** nonmagnetic (stainless steel) drill collar [drilling]

**nmi** nautical mile [science and boating]

**NML** nuclear-magnetism log

**NMNH** National Museum of Natural History (Smithsonian Institution)

**NMO** normal moveout

**N-MORB** normal mid-ocean-ridge basalt

**NMR** (1) Nuclear Magnetic Resonance; (2) natural remanent magnetization

**NMRS** high-sensitivity magnetic field sensor (scalar magnetometer)

**NNO** Ni-NiO buffer

**NOAA** National Oceanic and Atmospheric Administration (U.S.) (formerly ESSA)

**nonbiogenic**

**nondeposition** (and most other "non" combinations)

**nonindurated**

**NORDQUA** Nordic Association for Quaternary Research

**norm** normative analysis (calculated)

**North American plate**

**North Atlantic Ocean**

**North Indian Intermediate Water**

**North Pacific Ocean**

**NOS** National Ocean Survey (U.S.) (formerly USCGS)

**NPDW** North Pacific Deep Water

**NPHI** neutron porosity log

**NPS** National Park Service (U.S.)

**NQR** nuclear quadrupole resonance

**NRC** (1) National Research Council; (2) Nuclear Regulatory Commission; (3) National Referral Center (Library of Congress) (U.S.)

**NRL** (1) Naval Research Laboratory; (2) National Research Laboratory

**NRM** natural remanent magnetization [science]

**NRMT** nuclear resonance magnetometer tool

**NSB** National Science Board (U.S.)

**NSERC** Natural Science and Engineering Research Council (of Canada)

**NSF** National Science Foundation (U.S.)

**NSO** nitrogen, sulfur, oxygen [science]

**NSOW** Norwegian Sea Overflow Water [science]

**NSRDS** National Standard Reference Data System (U.S.)

**NSS** National Speleological Society (U.S.)

**NSSDC** National Space Science Data Center (U.S.)

**NTP** nontree pollen

**NTS** National Topographic System (U.S.)  
**NUC** not-under-command mode [ship condition]  
**NURE** National Uranium Resource Evaluation (U.S.)  
**NURP** National Undersea Research Program  
**NWTS** National Waste Terminal Storage (U.S.)  
**NWWA** National Water Well Association (U.S.)

## ODP/IODP Dictionary: O

*Revised (1/2005)*

**OA** optic axis

**OAE** ocean anoxic event

**OAP** optical axial plane

**OBH** (1) ocean borehole seismometer; also OBHS; (2) ocean-bottom hydrophones

**OBS** ocean-bottom seismometer [science]

**OCB** outer core barrel [drilling]

**OCLC** Online Computer Library Center

**OCR** (1) optical character recognition [computers]; (2) overconsolidation ratio

**OCS** outer continental shelf [science]

**OD** outside diameter

**ODL** Overseas Drilling Limited

**ODMR** optically deflected magnetic resonance

**ODP** Ocean Drilling Program

**ODPC** ODP Council

**ODWG** Offset Drilling Working Group [JOIDES]

**Oe** oersted

**OEC** optical/electric conversion unit

**off shore** (adv.)

**offlapping**

**off-scale** [adj.]

**offset**

**offshore** (adj., not to be used in an adverbial sense)

**OG** organic geochemistry (sample designation) [curation]

**OHP** Ocean History Panel [JOIDES]

**OI** oxygen index [science]

**OIB** ocean-island basalt; also oceanic island basalt

**oilsaver** (also "wireline packoff"); device at the top of the drill string to "squeeze" a wireline and prevent leakage from the drill string around the wire; the oilsaver is used to prevent swabbing water onto the rig floor during wireline trips and to permit fluid circulation while wire is inside the drill string

**Oki-Daito Ridge**

**Olduvai**

**OLE** object linking and embedding [computers]

**Oligo.** Oligocene

**OLTP** online transaction processing [computers]

**OM** organic matter [science]

**OMDP** Ocean Margin Drilling Program [JOIDES]

**OMZ** oxygen minimum zone

**on board** [n.] not "onboard"; thus, "aboard ship", not "onboard ship"

**onboard** [adj.] "an onboard computer"

**ONDO** ODP Nankai Downhole Observatory

**onlap**

**onloading**

**ONR** Office of Naval Research (U.S.)

**onshore** [adj.]

**on-site** [adj.]; **on site** [prep.]

**Ontong Java Plateau**

**ONWI** Office of Nuclear Waste Isolation (U.S.)

**OOP** (1) object-oriented programming [computers]; (2) out of print

**OOST** out-of-sequence thrust zone

**opal-A**

**opal-CT**

**OPEC** Organization of Petroleum Exporting Countries

**open hole** uncased hole

**open-marine** [adj.]

**open-ocean** [adj.]

**Operation Superintendent** a mere mortal charged with the responsibility of implementing the mystical findings of the engineers and producing results

**organic carbon** [n., adj.]

**organic matter** [n., adj.]

**organic-rich**

**ORI** Ocean Research Institute, University of Tokyo

**ORNL** Oak Ridge National Laboratory (U.S.)

**ORP** oxidation-reduction potential

**ORS** Old Red Sandstone

**OS** (1) operations superintendent [drilling]; (2) operating system [computers]

**OSE** oblique seismic experiment [science]

**OSHA** Occupational Safety and Health Administration (U.S.) (not just a small town in upstate Wisconsin)

**OsmoSampler**

**OSMRE** Office of Surface Mining Reclamation and Enforcement (U.S.)

**OSN** Ocean Seismic Network

**OSS** open-source spectrometer

**ostracode**

**OSU** Oregon State University (rarely, Ohio State University; hardly ever, Oklahoma State University)

**OT** object technology [computers]

**OTC** Offshore Technology Conference

**overload**

**overpressure** (same for "under")

**overpull**

**overshot** basic type of fishing or retrieving tool with a down-looking skirt that "swallows" the fish or pulling neck of the object to be recovered

**OWR** Old World Realm (paleogeography)

**OWS** Ocean Weather Ship Station

## ODP/IODP Dictionary: P

*Revised (1/2005)*

**(Pt. 2)** Part number in References

**P** pressure

**P/U** pick up [drilling]

**PA** (1) Palaeontology Association (British); (2) public-address system

**Pa** pascal (= 1 newton/meter<sup>2</sup>)

**PAC** paleo-intensity-assisted chronology

**pack off** to plug the annular space between tubular components or between the hole wall and the drill string (verb)

**packer** downhole device for sealing the annulus between drill string and open hole, drill string and casing, tubing and casing, etc.; the packer isolates a section of annulus or hole hydraulically for testing, sampling, or production purposes

**pack-off** device for sealing an annular space, usually at the surface; the seal usually permits relative motion of the wire, rod, or tube (noun)

**Palau-Kyushu Ridge**

**Paleoc.** Paleocene

**paleoceanography**

**Paleog.** Paleogene

**paleoslope**

**paleostress**

**paleowater depth**

**Parece Vela Basin**

**PAT** power access terminal

**Patton Escarpment**

**PBM** permanent benchmark

**PBS** phosphate buffered saline

**PC** (1) personal computer (as in IBM PC) [computers]; (2) program counter; (3) printed circuit [electronics]

**pc** photocopy

**PCA** principal component analysis

**PCB** (1) pressure core barrel (obsolete DSDP tool) [drilling]; (2) printed circuit board; (3) polychlorinated biphenyl

**PCD** polycrystalline diamond [drilling]; (also PDC)

**pcf** pounds per cubic foot

**PCOM** Planning Committee [JOIDES]; (also Pcom)

**PCR** polymerase chain reaction

**PCS** pressure core sampler [drilling]

**PCSP** preliminary cruise sampling plan (brief outline of each sample request accepted, rejected, or deferred at the beginning of each leg) [curation]

**PDB** Peedee belemnite, a standard for oxygen- and carbon- isotope analyses (from Peedee Formation of South Carolina) [science]

**PDC** polycrystalline diamond compact drill bit [drilling]

**PDCM** positive displacement coring motor [drilling]  
**PDM** (1) positive displacement (drilling) motor [drilling]; (2) power distribution module  
**PDR** precision depth recorder [science]  
**PDRM** postdepositional remanent magnetization [science]  
**PEC** Performance Evaluation Committee [JOIDES]  
**PEF** photoelectric effect; also PEFL  
**PERC** Preliminary Editorial Review Checklist [publications]  
**percentage** when not preceded by numerals  
**periplatform**  
**perireef**  
**PETM** see LPTM  
**PFT** perfluorocarbon trace  
**PGE** platinum-group elements  
**PGM** (1) platinum-group minerals; (2) platinum-group metals  
**pH** expression of acidity vs. alkalinity (i.e., effective hydrogen ion concentration)  
**photomicrograph** not microphotograph  
**physical property** [adj.]  
**PI** (1) principal investigator [ODP]; (2) production index [science]  
**PICG** Programme International de Corrélation Géologique  
**PIE** personal interactive electronics [computers]  
**pig** drill pipe internal rust scraper [drilling]  
**pill** (see "slug")  
**PIMA** (1) pattern-induced multiple sequence alignment; (2) portable infrared mineral analyzer  
**pin** male portion of a threaded connection; also a short, unthreaded piece of rod or wire used to position or restrain parts of a mechanism (e.g., a shear pin)  
**pinch out** [v.]; **pinch-out** [n.]  
**pipe tally** record of lengths of all drill-string components kept on the drill floor by the driller and the AD; the "bottom line" for all depth determinations below the drill floor  
**piperacker** automated pipe-handling and storage system located aft of the drill floor and used to store a "working string" of up to 9100 m of drill pipe horizontally in 29-m stands  
**PIXE** particle-induced X-ray emission  
**plane-polarized light**  
**planktonic** (not "planktic")  
**planktonic foraminiferal biostratigraphy**  
**plate tectonic** [n., adj].  
**Pleist.** Pleistocene  
**PLFA** phospholipid fatty acid analysis  
**Plio.** Pliocene  
**PLUME**  
**PMAG** paleomagnetism  
**PMS** (1) power-management system [ship]; (2) preventive- maintenance system

**polar front**

**POOH** pull out of hole (in reality, lift the bit up off the bottom of the hole, not necessarily clear the mud line) [drilling]

**pore fluid** [n., adj.]

**pore water** [n., adj.]

**port call** [n., adj.]

**Port.** Portlandian

**postcruise**

**postdate**

**postdepositional**

**postglacial**

**postrift**

**PP** physical properties (a.k.a. "fizz props") [science]

**ppb** parts per billion [science]

**ppg** pounds per gallon (or lb/gal)

**ppm** parts per million [science]

**ppmv** parts per million by volume

**PPSP** Pollution Prevention and Safety Panel (a.k.a. "Safety Panel") [JOIDES]

**ppt** (1) parts per thousand (‰ preferred); (2) parts per trillion; (3) precipitate

**Precambrian**

**precruise**

**predate**

**predominant** [adj.]

**predominate** [v.]

**pre-evaporitic deposits**

**pre-rift**

**present-day** (adj.)

**presite**

**pressure** MPa or kPa

**printout** (noun)

**PRISM** projection and integrated stand alone monitor [computers]

**PRO** Digital Equipment Corporation PRO-350 or PRO-380 computer (obsolete)  
[computers]

**profile** ES-05

**protodécollement**

**PRR** pervasive radial remagnetization

**PS** Paleontological Society

**PSB** Porcupine Seabight

**PSD** pseudosingle-domain (adj.); pseudosingle domain (n.)

**psi** pounds per square inch [science]

**psia** pounds per square inch absolute

**PTFE** polytetra-fluoroethylene (generic name for Teflon) (polytetrafluoroethylene according to IUPAC nomenclature)

**PTRM** partial thermoremanent magnetization

**PTt** pressure-temperature-time

**PTX** pressure-temperature-composition

**P-T-X-T** pressure-temperature-composition-time

**PTZ** prothrust zone

**PUPPIs** pop-up pore pressure instruments

**pusher** (also "tool pusher", "night pusher", "day pusher", "drilling foreman"); the contractor employee in charge of the entire rig operation at any given time

**PVC** polyvinyl chloride [logistics]

**PVT** pressure-volume-temperature

***P*-wave** primary seismic or compressional wave [science]

**PWL** *P*-wave logger

**PWS** (1) pore water sampler [science]; (2) discrete *P*-wave velocity ( $V_p$ ) sensors  
PWS1, PWS2, PWS3 on the Hamilton frame probe

## ODP/IODP Dictionary: Q

*Revised 8/2005*

**Q ratio** Koenigsberger ratio

**QA** quality assurance

**QA/QC**

**QC** quality control

**QCC** quadrupole coupling constant

**QLM** quartz-feldspathoid-olivine and ore minerals plot

**QSC** Quesada sharp contortion

**QSST** Inline Checkshot Tool

**qte** quartzite

**quad combo** string of logging tools, including dual induction, litho- density, neutron, natural gamma ray, sonic [logging]

**Quat.** Q Quaternary

## ODP/IODP Dictionary: R

*Revised (1/2005)*

**R** correlation coefficient (also  $R^2$  and  $r$ )

**R/D** rig down [drilling]

**R/E** reentry [drilling]

**RAB** Resistivity-at-the-Bit tool

**rabbit** small piece of bar or tubing of known diameter that is passed through tubulars to ensure that they are free of obstructions or diameter restrictions

**RAD** resistivity attenuation deep measurement

**radii** plural of "radius"

**RAM** random-access memory [computers]

**rare earth** [n., adj.]

**rare earth element** [n., adj.]

**rathole** temporary holding tube for the kelly/swivel assembly during pipe trips on rigs that are so equipped; on a land rig, a special hole must be drilled for that purpose

**RBI** Rock Bit International (drill-bit manufacturer) [drilling]

**RBS** Rutherford backscattering spectroscopy

**RCB** rotary core barrel [drilling]

**RDNA** ribosomal DNA

**RDX** explosive used in pipe-severing system [drilling]

**RE** rare earth

**real time** (n.); **real-time** (adj.)

**Recent/Modern** use "Holocene"

**redeposited** (and other re-compounds where the vowel is not doubled)

**REE** rare earth element(s) [science]

**reef front** [n., adj.]

**reefer** refrigerated core/sample storage area [curation]

**reentrant**

**reentry cone** large (12 ft. diameter) funnel-shaped installation that is anchored in the seafloor by conductor casing on reentry sites. It serves as a conduit for reentry and wellhead for landing and supporting the surface-casing string

**reentry** the procedure of relocating a previously drilled hole and reinserting the drill string into it

**relic** [n.]

**relict** [adj.]

**REMPT** resonance-enhanced multi-photon ionization spectroscopy

**REO** rare earth oxide

**reoriented**

**REPSAM** repository sampling computer program [curation]

**resistivity at the bit** (n.); **resistivity-at-the-bit** (adj.) RAB

**Reykjanes Ridge**

**RF** (1) representative fraction; (2) radio frequency; (3) reverse fault

**RFP** request for proposals [ODP]

**RFQ** request for quotations [ODP]  
**RFT** retrievable formation tester (water sampler) [drilling]  
**RHEED** reflection high-energy electron diffraction  
**RHOB** rho- (greek letter) and b for bulk density (Schlumberger term)  
**RHOM** bulk density  
**RI** (1) refractive index; (2) reduction index  
**ridgetop**  
**rig down** [v.]  
**rig floor** [n., adj.]  
**rig up** [v.]  
**RIH** run in hole (actually, lower drill string below the rig floor, not necessarily below the mud line) [drilling]  
**RISC** reduced instruction set computing [computers]  
**RK** radial coefficient  
**RKB** rotary kelly bushing [drilling]  
**RM** remanent magnetism  
**RMGS** low-resolution susceptibility  
**RMS** root-mean-square (e.g., in seismic velocities) [science]; also rms  
**RNA** ribonucleic acid  
**RNAA** radiochemical neutron activation analysis  
**rock saw**  
**Rock-Eval pyrolysis** instrument for evaluating source character and maturity of organic matter in rock samples  
**ROD** rich-oil demethanizer  
**roller-cone bit**  
**ROM** (1) read-only memory [computers]; (2) Royal Ontario Museum  
**ROP** rate of penetration in drilling or coring [drilling]  
**ropesocket** means of attaching a cable to its termination  
**rotary** shifting tool actuating tool run on the coring line to shift an internal sleeve in a downhole tool, such as the MBR, DIC, or casing-running tool  
**roughneck** crew member who works on the drill floor; "floorman"  
**round trip** complete operation of tripping the drill string into the hole and back out again (or vice versa)  
**roustabout** crew member who works around the rig but not on the drill floor, usually on maintenance and general labor  
**ROV** remotely operated vehicle [science]  
**RP** rock pressure  
**RPD** redox potential discontinuity  
**rpm** revolutions per minute  
**rps** resistivity phase shift  
**rRNA** (1) ribosomal ribonucleic acid; (2) ribosomal RNA  
**RS** pulling tool overshot device run on the coring line to engage and retrieve inner core barrels and downhole tools; for most applications, it has been replaced by the GS pulling tool  
**RSA** rapid sediment analyzer  
**RSD** relative standard deviation (%)

**RSI** ripple symmetry index

**RSMAS** Rosenstiel School of Marine and Atmospheric Science (University of Miami)

**RSME** root-mean-square errors

**RSS** regional stratigraphic scale

**RST** rotary shifting tool [drilling]

**RSWG** Red Sea Working Group [JOIDES]

**RT** (1) rotary table [drilling]; (2) round trip of the drill string (= POOH + bit change + RIH)

**RTD** resistance-temperature device

**RU** rig up [drilling]

**rubber** rubber "knot" attached to the drill pipe to provide a "standoff" and protect the pipe by reducing bending stresses when the pipe is positioned in the guide horn

**RV** (1) right valve; (2) revised version; (3) recreation vehicle

**R-wave** Rayleigh wave

**RZ** range zone (biostratigraphy) [science]

## ODP/IODP Dictionary: S

*Revised (1/2005)*

**S** (1) entropy; (2) sieman

**s** second

**s.l.** *sensu lato*, broadly defined

**s.s.** *sensu stricto*, narrowly defined

**S/B** set back [drilling]

**S/N** signal-to-noise ratio

**SAC** Sample Allocation Committee

**salic** Si- and Al-rich

**SAM** (1) shipboard sampling computer program [curation]; (2) scanning Auger microscopy; (3) storage acquisition module

**SAMUTL** curation program to edit sample databases and write sample reports [ODP]

**sand line** wireline installed on an auxiliary winch on the drawworks of an oilfield rig; analagous to coring line in ODP operations

**sand-sized** (adj.)

**Sant.** Santonian

**sapropel** an aquatic ooze rich in organic matter believed to be source material for petroleum and natural gas.

**SAR** sediment-accumulation rate

**saver sub** very short tubular component made up to and having the same thread as a longer or more valuable component that is connected/disconnected frequently

**sawtooth**

**SBA** shipboard analysis (sample designation) [curation]

**SBDC** seal bore drill collar [drilling]

**sbsf** seconds below seafloor (amplitude reflection)

**SCADA** Supervisory Control And Data Acquisition system used with the J/R heave compensator

**SCBA** self-contained breathing apparatus [safety]

**SCCS** Subcommission on Carboniferous Stratigraphy

**scf/d** standard cubic feet per day

**SCM** sonic core monitor [drilling]

**SCR** silicon control rectifier [electronics]

**SCS** single-channel seismic [science]

**SCSI** small computer system interface [computers]

**SCUBA** self-contained underwater breathing apparatus [safety]

**SCuM** sonic core motor

**sd** sand

**SD** standard deviation

**SDP** Sample Distribution Policy [curation]

**SDRS** seaward-dipping reflector sequence

**SDT** Digital Sonic Tool

**Sea Beam 2000** (type of equipment)  
**sea bottom**  
**sea grass**  
**sea ice** [n., adj.]  
**sea level** [n., adj.]  
**SeaBeam** (name of company)  
**seabed**  
**seafloor**  
**seafloor-spreading center**  
**seagoing**  
**SeaMARC**  
**seamount**  
**SeaPERC**  
**Seasat sea satellite**  
**sea-surface temperature SST**  
**seaward**  
**seawater**  
**seaway**  
**SECTIONLOG** curatorial database for individual core-section histories [ODP]  
**SEDCO/BP 471** previous registered name of drilling vessel used by ODP; (a.k.a. *JOIDES Resolution*) [ship]  
**Sediment accumulation** [n., adj.]  
**Sediment accumulation rate SAR**  
**SEG** (1) Society of Exploration Geophysicists; (2) Society of Economic Geologists  
**SEIR** Southeast Indian Ridge  
**seismic reflection** [n., adj.]  
**seismic stratigraphic** [n., adj.]  
**seismic stratigraphic log**  
**seismic wave** [n., adj.]  
**SEM** scanning electron microscope [science]  
**SEM/EDA** scanning electron microscope/energy dispersive analysis [science]  
**semi-** (compounds should be closed up unless the vowel is doubled)  
**SEMS** seafloor earthquake measurement system  
**SEPM** Society of Economic Paleontologists and Mineralogists (now called Society for Sedimentary Geology)  
**SERS** surface-enhanced Raman spectroscopy  
**SES** sidewall-entry sub (inserted in the drill string when logging) [drilling]  
**set back** to take out of service, stop using; (same as "lay down")  
**severing** operation involved in parting the drill string by means of explosives  
**SEXAFS** surface-extended X-ray absorption fine structure  
**SF** (1) surface freight [logistics]; (2) satellite fix [ship]  
**SFL** spherically focused log (tool name, probably older one) [logging]  
**SFLU** spherically focused resistivity measurement (header on plots and data tables)  
**SFR** spherically focused resistivity (tool name, in combination with "DITE") [logging]  
**SG** (1) specific gravity (or "sp. gr."); (2) sea ground  
**SGA** Society of Geology Applied to Mineral Deposits

**SGCS** standard global stratigraphic scale  
**SGML** Standard Generalized Markup Language [computers]  
**SGPP** Sedimentary and Geochemical Processes Panel [JOIDES]  
**SGR** standard gamma ray  
**SGT** Scintillation Gamma Ray Tool  
**sh** shale  
**shallow-water environment**  
**shatterbox**  
**shear pin** a pin, usually metal, designed to fail under a given shear stress for a specific purpose  
**shear wave** [n., adj.]  
**sheave** pulley  
**SHEED** scanning high-energy electron diffraction  
**shelf edge** [n., adj.]  
**shelf slope** [n.] **shelf-slope** [adj.]  
**shelf-slope break**  
**shipboard**  
**shiptime**  
**shoran** short-range navigation (an electronic position-fixing system)  
**shore based** [n.]; **shore-based** [adj.]  
**shoreline**  
**short trip** any pipe trip short of a round trip; may be done for purposes of checking hole conditions, clearing obstructions from the hole, repositioning the pipe for logging, etc.; (see "wiper trip")  
**shotpoint**  
**SHRIMP** sensitive high-mass resolution ion microprobe  
**shuck** handling/storage scabbard for inner core barrels and other long, cylindrical tools; may be filled with fluid for preservation of tools  
**SI** (1) international system of units (Système International d' Unités); (2) Smithsonian Institution; (3) solidification index; (4) saturation index  
**SIAL** silica- and alumina-rich portion of Earth's crust  
**SID** sample investigations computer database [curation]  
**side-scan sonar**  
**sidewall**  
**sill-sediment complex**  
**silt-sized** (adj.)  
**SIMA** silica- and magnesium-rich portion of Earth's crust  
**SIMS** secondary-ion mass spectrometry  
**single** single joint of drill pipe or tubing; used to differentiate from a "double" or a "stand," which are two and three joints, respectively  
**single-bit hole** any borehole not planned for reentry and equipped with a reentry-cone installation  
**single-channel data**  
**sinker bar** heavy bar run at the end of a wireline to help keep the slack out and to provide jarring action  
**SIO** Scripps Institution of Oceanography (University of California, San Diego)

**SIOSEIS** SIO's seismic software  
**SIPES** Society of Independent Professional Earth Scientists  
**SIR** shuttle-imaging radar  
**SIRM** saturation remanent magnetization  
**site survey** [n., adj.]  
**site-approach-survey track chart-**  
**skate** wheeled vehicle that runs forward and aft in the track of the piperacker carrying the pin end of a stand of pipe as it is handled in or out of the racker  
**SLAR** side-looking airborne radar  
**SLIDES** database program for smear-slide descriptions [ODP]  
**slim-hole** logging tools  
**slips** tapered segmented bushing with hardened steel teeth for holding the weight of the drill string when it is set down on the rotary table  
**SLM** steel-line measurement (measurement of drill string and BHA with steel measuring tape) [drilling]  
**slope-apron** [adj.]  
**slts** siltstone  
**slug** small batch of mud or drilling fluid; a "pill"  
**slug the pipe** to introduce an amount of weighted mud sufficient to overbalance the system hydrostatically and stop the flow of fluid up the pipe from the borehole  
**SLWG** Sea Level Working Group [JOIDES]  
**SMDC** short monel drill collar (nonmagnetic) [drilling]  
**SME** Society of Mining Engineers (of AIME)  
**smear slide** [n., adj.]  
**SMF** standard message format [computers]  
**SMI** sulfate-methane interface  
**SMOOTH** shipboard navigation-plotting program [ODP]  
**SMOW** standard mean ocean water [science]  
**SMP** Shipboard Measurements Panel [JOIDES]  
**SMS** storage-management system [computers]  
**SN** satellite navigation [ship]  
**SOE** special operating expense [JOIDES]  
**SOEST** School of Ocean and Earth Science and Technology (University of Hawaii)  
**SOHP** Sediments and Ocean History Panel [JOIDES]  
**sonic-induction tool**  
**SOP** (1) Southern Oceans Panel [JOIDES]; (2) standard operating procedure [general]  
**source rock** [n., adj.]  
**South Florida Basin**  
**Southern Ocean**  
**SOW** statement of work [JOIDES]  
**SP** (1) shotpoint (on seismic survey lines) (also S.P.) [science]; (2) spontaneous (self) potential [logging]; (3) superparamagnetic [paleomag]  
**sp.** species  
**SPE** Society of Petroleum Engineers (of AIME)

**spear** fishing or retrieving tool designed to engage the inside of a tubular object; the male equivalent of an overshot

**spm** strokes per minute [drilling]

**SPOT** Système Probatoire d'Observation de la Terre

**SPR** software problem report [computers]

**spreite** ("spreiten", plural)

**sps** samples per second

**spud-in** to start a hole; to begin drilling or coring at the seafloor

**sq.** square

**squeeze cake** [n., adj.]

**SQUID** super-conducting quantum interference device

**SR** *Scientific Results* of the *Proceedings of the Ocean Drilling Program* [publications]

**Sr** strontium

**SR-DPG** Sedimented Ridges Detailed Planning Group [JOIDES]

**SRM** (1) standard reference material; (2) superconducting rock magnetometer

**SRZ** sulfate reduction zone

**SS** (1) smear slide; (2) seismic stratigraphy

**ss** sandstone

**SSA** Seismological Society of America

**SSB** spinning sidebands

**SSDB** Site Survey Databank (at LDEO) [JOIDES]

**SSF** strike-slip fault

**SSH** Shipboard Scientist's Handbook

**SSP** Site Survey Panel [JOIDES]

**SSR** subsea release cementing system [drilling]

**SSS** (1) standard stratigraphic scale; (2) sea-surface salinity

**SST** sea-surface temperature [science] OR internal Ship Systems Team

**SSUrDNA** small-subunit ribosomal deoxyribonucleic acid

**SSW** surface sea water

**stabber** mechanism between the piperacker and the rotary table that restrains the lower end of a stand of pipe and positions it over the skate or over the top of the drill string (depending whether the stand is being picked up or laid down)

**stainless steel** [n., adj.]

**stand** three joints of pipe screwed together; the greatest length of pipe that can be handled above the drill floor by the rig

**stationkeeping**

**STEM** scanning transmission electron microscope

**STM** scanning tunneling microscopy

**STP** (1) standard temperature and pressure; (2) salinity, temperature, and pressure

**STR** South Tasman Rise

**strap** to measure the length of drill-string components; (also known as "steel-line measurement") (SLM)

**strike-slip** [adj.]

**S<sub>u</sub>** undrained shear strength

**sub** any short tubular component, usually in the drill string

**subaerial**

**subangular**  
**subbasement**  
**subbasin**  
**subbottom**  
**subchron**  
**subhedral**  
**subophitic** (and other sub- compounds)  
**subsea**  
**subseafloor**  
**subsequence**  
**Subtropical Divergence**  
**sulfate reduction** [n., adj.]  
**SUMS** susceptometer or susceptibility magnetic sonde  
**SUMT** susceptibility magnetic tool  
**super-** (prefixes are closed up)  
**surface water** [n., adj.]  
**surface-seawater samples**  
**SUSLOG** magnetic susceptibility borehole tool  
**SVP** Society of Vertebrate Paleontology  
**SW** sea (salt) water [drilling]  
**swab cup** device run on a wireline and designed to seal against the inside of the drill string or tubing and lift fluid as it is pulled up the pipe  
**swab** to pull fluid up the pipe or into the hole by the piston action of a moving drill string or wireline; may occur inadvertently if the bit, inner core barrel, or wireline tool is moved too fast  
**S-wave** secondary/shear wave [science]  
**swivelS** assembly immediately above the top drive that supports the entire weight of the drill string, acts as thrust bearing to permit rotation, and provides a rotating packoff and entry point for circulation down the drill string; also any component that provides continuity through a wire, tubular string, rod, or shaft while permitting relative rotation above and below  
**syn-** compounds should be closed up (synrift, synsedimentary, etc.)  
**syn.** (1) synonym; (2) synthetic  
**syndepositional**  
**synrift**  
**synsedimentary**

## ODP/IODP Dictionary: T

*Revised (1/2005)*

**t** (1) time; (2) tonne

**T** ton

**T/D** top drive [drilling]

**TAG** Trans-Atlantic Geotraverse [science]

**TAI** thermal alteration index [science]

**TAM** International manufacturer of packers used in ODP operations

**TAMRF** Texas A&M Research Foundation

**TAMU** Texas A&M University

**TAP** Temperature/Acceleration/Pressure tool

**TAS** total alkali vs. silica diagram

**TAZ** Taphronomically Active Zone (actively rifting zone)

**tbg** tubing [drilling]

**TBM** temporary bench mark

**TC** total carbon

**TCC** telemetry cartridge

**TCCB** digital telemetry tool [logging]

**TCD** thermal-conductivity detector [science]

**Tcf/d** trillion cubic feet per day

**TCI** tungsten carbide inserts [drilling]

**TCP/IP** networking protocol available on the ship [computers]

**TCPA** time of closest point of approach [ship]

**TD** total depth of a hole [drilling]

**TDC** tapered drill collar

**TDK** tension device (Schlumberger) [drilling]

**TDP** TAM drilling packer (obsolete) [logging]

**TDS** total dissolved solids

**TECP** Tectonics Panel [JOIDES]

**TEDCOM** Technology and Engineering Development Committee [JOIDES]

**TEM** transmission electron microscopy

**tensor tool** electronic magnetic orientation device incorporated in the sinker bar assembly of the coring line for collecting orientation data for APC cores

**terrain** region of the Earth's surface considered as a physical feature, an ecologic environment, or a site of some planned activity of man

**terrane** region where a particular rock or group of rocks predominates

**terrigenous matter** [n., adj.]

**Tert.** (T) Tertiary

**TFZ** Tasman Fracture Zone

**TG** thermogravimetry

**TGA** thermogravimetric analysis

**TGB** temporary guide base [drilling]

**TGS** transcontinental geophysical survey

**THDM** translucent humic degradation matter

**thermal conductivity** [n.]; **thermal-conductivity** [adj.]

**thin section** [n., adj.]

**tie point**

**TIFF** tagged image file format [computers]

**TIH** trip into hole (lower drill string below the rig floor, not necessarily below the mud line, by adding drill pipe) [drilling]

**time-rock unit**

**timescale** [n., adj.]

**TL** thermoluminescence

**TLC** thin-layer chromatography

**TLT** temperature-logging tool [logging]

**$T_{\max}$**  maximum temperature of hydrocarbon generation during pyrolysis [science]

**TN** total nitrogen

**TOB** thrown overboard (float test failure) [ship]

**TOBI** towed ocean bottom instrument

**TOC** total organic carbon [science]

**toe-of-slope** (n.)

**TOH** trip out of hole (a.k.a. "POOH") [drilling]

**tongs** large, jointed "wrenches" used by the rig crew to make and break threaded connections in the drill string; largely replaced by the iron roughneck but still used occasionally

**tool joint** drill-pipe threaded connection; characterized by diameter larger than the tube diameter and a special "upset" providing a transition to the thinner, more flexible section of the tube

**tool string** [n., adj.]

**toolpusher** (see "pusher")

**top drive** electric or hydraulic motor suspended in the derrick that provides primary rotation of the drill string; replaces the rotary table/kelly bushing/kelly system

**total inorganic carbon** [n., adj.]

**total organic carbon**

**total-count variability**

**TOTCO** drilling-rig instrumentation company

**tr** trace

**TR** transit satellite [ship]

**trace element** (n., adj.)

**track line**

**trade-off**

**Trans-Mexican Neovolcanic Belt**

**traveling block** large assembly suspended in the derrick and composed of the lower sheave assembly of the main hoisting system, the movable piston/cylinder portion of the heave compensator, and the connector subassembly

**traveltime**

**trench-wedge** [adj.]

**T-RFLP** terminal-restriction fragment length polymorphism

**trip** (or tripping) act of assembling/disassembling the drill string to run drilling tools into the hole or to recover them

**triple combination** [n., adj.]; also triple combo

**TRM** thermoremanent magnetization [science]

**TS** (1) top sub [drilling]; (2) ODP code for thin section

**TSB** thin-section billet (sample designation) [curation]

**TSINFO** ODP program to track condition and location of ODP thin sections [curation]

**TSOP** The Society for Organic Petrology

**TSP** TAM straddle packer, consisting of two packer elements that can be actuated simultaneously to isolate a limited interval of hole [logging]

**TSS** traditional stratigraphic scale

**TSV** total support vessel [ship]

**TTL** transistor-transistor logic

**TTR** Training through Research

**tu** University of Texas at Austin

**tugger** (also "air tugger"); air-operated hoisting winch used extensively in the drill floor and moonpool areas for rigging, hoisting personnel into the derrick, etc.

**Tur.** Turonian

**turnaround**

**TWT** two-way traveltime [science]

**Type IV kerogen**

## ODP/IODP Dictionary: U

*Revised (1/2005)*

**UBG** used but good

**UBI** Ultrasonic Borehole Imager

**UCSD** University of California, San Diego

**UCTU** underwater cable termination unit

**UDI** Underseas Drilling, Inc. (now ODL)

**UGH** upper guide horn [drilling]

**UHF** ultrahigh frequency

**ULSEL** ultra-long-spaced electric log

**UMBRELLA** ODP database containing descriptions of all ODP databases [science]

**UMI** University Microfilms [of theses and dissertations] International

**unconformity** surface of erosion or nondeposition that separates younger strata from older rocks and represents a significant hiatus.

**underpressured**

**under way** (adv.)

**underway** (adj.)

**UNDP** United Nations Development Program

**UNEP** United Nations Environment Programme

**UNESCO** United Nations Educational Scientific and Cultural Organization

**Universal Time Coordinated** UTC

**UNIX**

**UNOLS** University National Oceanic Laboratory System

**upcore**

**upcurrent**

**updip**

**upgoing**

**uphole**

**upload**

**upper slope** [n., adj.]

**upsection**

**upslope**

**upward-coarsening sandstone** use coarsening-upward sandstone instead (standard in scientific community)

**upward-fining layer** use fining-upward layers instead (standard in scientific community) (adj.)

**URI** University of Rhode Island

**USAP** United States Antarctic Program

**USARP** United States Antarctic Research Program

**USBM** United States Bureau of Mines

**USCG** United States Coast Guard

**USCGS** United States Coast and Geodetic Survey (now NOS)

**USDA** United States Department of Agriculture

**USDOC** United States Department of Commerce

**USDOI** United States Department of the Interior  
**USEPA** United States Environmental Protection Agency  
**USFS** United States Forest Service  
**USGS** United States Geological Survey  
**USNEPEC** United States National Earthquake Predictions Evaluation Council  
**USNO** United States Naval Observatory  
**USSAC** United States Science Advisory Committee  
**USSSP** United States Science Support Program  
**U-stage** universal stage  
**UT** University of Texas at Austin  
**UTC** Universal Time Coordinated; (also "Coordinated Universal Time") (used in place of "GMT" or "Z")  
**UTIG** University of Texas Institute for Geophysics  
**UTM** projection universal transverse Mercator projection  
**uv** ultraviolet; also UV  
  
**UW** (1) University of Washington; (2) (also "U/W", "UW") under way (adv.) [ship]; underway (adj.)  
**UWG** underway geophysics laboratory [ship]

## ODP/IODP Dictionary: V

*Revised 8/2005*

**V** (1) volume; (2) volt

**V/H** ratio velocity/height ratio

**VABM** vertical-angle bench mark

**vacutainer**

**VADM** virtual arial geodipole moment

**Val.** Valanginian

**var.** variety

**VAX** Virtual Addressing Extended; the name of the computer used to store ODP data [computers]

**VCD** visual core-description form; database program for visual core descriptions of sedimentary cores [ODP]

**V-CDT** vs. Canyon Diablo troilite

**VDN** Vision Density Neutron (tool)

**V-door** opening in the side of the derrick at the base, shaped like an inverted "V," through which tubular components are moved to and from the drill floor

**VE** vertical exaggeration

**VGP** virtual geomagnetic pole

**VHA** basalt very high alumina basalt

**VHF** very high frequency

**VHN** Vickers hardness number

**VI** vertical interval

**VIT** (1) vibration-isolated television [drilling]; (2) vibration isolation tool

**VLBI** very long baseline interferometry

**VLH** volatile liquid hydrocarbons

**VLHPC** variable-length hydraulic piston corer (obsolete) [drilling]

$V_{\max}$  maximum velocity

$V_p$  compressional wave velocity

**VMS** (1) Virtual Memory System (operating system of the VAX computer) [computers]; (2) volcanogenic massive sulfides

**vol%** volume percent

**volcanic glass**

**volcaniclastic**

**volcanogenic**

**volcano-tectonic** [adj.]

**VPC** vibra-percussive corer [drilling]

**VPDB** Vienna Peedee belemnite

**VRM** (1) viscous remanent magnetization [science]; volcanic rifted margin

**VS** syringe samling

**VSP** vertical seismic profile [science]

**VSI** Vertical Seismic Imager

## ODP/IODP Dictionary: W

*Revised (1/2005)*

**W** (1) watt; (2) ODP core-type letter indicating a wash core

**W/L R/E** wireline reentry into a reentry cone without a drill ship [drilling]

**W/L, WL** wireline [drilling]

**WAGS** wollastonite-anorthite-garnet-silica (geobarometer)

**wall rock** [n., adj.]

**WAN** wide-area network [computers]

**wash core** sample of sediment or rock recovered from an inner core barrel that was in place during a "washing" operation

**wash** to drill ahead with a coring assembly, making no attempt to retrieve core barrels or recover core; "drill" is the preferred term

**washout**

**water column** [n., adj.]

**water depth** [n., adj.]

**water gun**

**water table** [n., adj.] platform around the crown block at the top of the derrick

**watermass** [n.]

**wavefield**

**waveform**

**wavefront**

**wavelength**

**wavetrain**

**WBUC** Western Boundary Undercurrent

**WCC** whole-core cryogenic magnetometer

**WCR** West Coast Repository at SIO [ODP]

**WD** water depth [ship]

**WDC** World Data Center

**WDS** wavelength-dispersive spectrometry

**Web site**

**Weddell Gyre**

**well bore**

**well log**

**well-preserved** [adj.]

**WES** Waterways Experiment Station (of COE)

**wet bulk** [n., adj.] density

**wet/dry weight ratios**

**WG** Working Group [JOIDES]

**WGC** West Greenland Current

**WGS** World Geodetic System

**WHC** wireline heave compensator [logging]

**Whirl-Pak**

**WHOI** Woods Hole Oceanographic Institution

**whole-core** (adj.)

**whole-round samples**

**WinFrog**

**wiper trip** short trip of the drill string made for purposes of opening a hole that may be restricted by a swelling formation or (where a circulating mud system is used) "wiping" excess mud filter cake from the borehole wall

**wireline**

**wireline trip** procedure of lowering the sinker bars on the coring line to retrieve an inner core barrel or other downhole tool; also the lowering and retrieving of a logging tool through the water column with the logging winch

**WLBOP** small blowout preventer mounted on the swivel and used to contain drill string pressure in APC coring operations (see "BOP")

**WLHC** system for removing vessel's heave motion from the logging cable during logging operations

**WLP** wireline packer [drilling]

**WLR** wireline reentry [drilling]

**WLS** wireline logging services [logging]

**WM** wüstite-magnetite buffer

**WO** (1) weight on bit [drilling]; (2) waiting on iceberg (suspended operations in high latitudes)

**WOB** weight on bit (n.), weight-on-bit (adj.)

**WOC** waiting on cement (suspended operations) [drilling]

**WOCE** World Ocean Circulation Experiment

**WOR** water/oil ratio

**WORM** "write once, read many" laser disk drive [computers]

**WOW** waiting on weather (suspended operations) [drilling]

**WPAC** Western Pacific Panel [JOIDES]

**WP-DPG** Western Pacific Detailed Planning Group [JOIDES]

**WST** Well Seismic Tool (used in VSP experiments) [logging]

**WST-3** Three-component Well Seismic Tool

**WSTP** water-sampling temperature probe and water-sampling temperature-pressure tool

**wt%** weight percent

**WTRO** Wyville Thomson Ridge Overflow

## ODP/IODP Dictionary: X

*Revised (1/2005)*

**XANES** X-ray absorption near-edge structure

**XAS** X-ray absorption spectroscopy

**XBT** expendable bathythermograph [science]

**XCB** extended core barrel [drilling]

**XCB/FC** extended core barrel flow-control system [drilling]

**xI** crystal

**xIn** crystalline

**XO** crossover (connecting pipe) [drilling]

**XPS** X-ray photoelectron spectroscopy

**X-ray diffraction**

**X-ray fluorescence**

**XRD** (1) X-ray diffraction [science]; (2) sample designation (or XD) [curation]

**XRF** (1) X-ray fluorescence [science]; (2) sample designation (or XF) [curation]

## ODP/IODP Dictionary: Y & Z

*Revised 8/2005*

**y** year

**Z** Zulu; (also "GMT") replaced by UTC

**Z.** zone (biological or paleontological)

**ZGT-index** zircon-garnet-tourmaline index (a maturity index for detrital sediments)

**ZT-index** zircon-tourmaline index (as above)

**ZTR-index** zircon-tourmaline-rutile index (as above)