
Appendix: NanTroSEIZE acronyms¹

Expedition 319 Scientists²

- AAI: angular acceleration index
AB: acme beginning
A/D: analog-to-digital
AE: acme end
AF: alternating field
AIST: National Institute of Advanced Industrial Science and Technology
AMO: anaerobic methane oxidation
AMS: anisotropy of magnetic susceptibility
APRS: average annular pressure measurement
APC: advanced piston coring
APCT-3: advanced piston coring temperature tool
APWD: annular pressure while drilling
ARC: Array Resistivity Compensated (tool)
ARM: anhysteretic remanent magnetization
ASR: anelastic strain recovery
AVS: acid volatile sulfide
BBOBS: broadband ocean-bottom seismometer
BGO: bismuth germanate
BHA: bottom-hole assembly
BOP: blowout preventer
bps: bits per second
BSR: bottom-simulating reflector
CARD-FISH: catalyzed reporter deposition–fluorescence in situ hybridization
CBL: cement-bond log
CCD: carbonate compensation depth
CDEX: Center for Deep Earth Exploration
CDP: complex drilling project
CDS: collected delivery system
CGG: Compagnie Générale de Géophysique
CHNS: carbon-hydrogen-nitrogen-sulfur analyzer
CHNS/O: carbon-hydrogen-nitrogen-sulfur/oxygen analyzer
ChRM: characteristic remanent magnetization
CLSI: core-log-seismic integration
CMC: crown-mounted motion compensator
CMP: common midpoint
CMS: corrected volume magnetic susceptibility
CORK: circulation obviation retrofit kit
CPOs: crystallographic preferred orientations
cps: counts per second
CQG: crystal quartz gauge

¹Expedition 319 Scientists, 2010. Appendix: NanTroSEIZE acronyms. In Saffer, D., McNeill, L., Byrne, T., Araki, E., Toczko, S., Eguchi, N., Takahashi, K., and the Expedition 319 Scientists, *Proc. IODP*, 319: Tokyo (Integrated Ocean Drilling Program Management International, Inc.). doi:10.2204/iodp.proc.319.app.2010

²Expedition 319 Scientists' addresses.



CT: computed tomography
 DAT: drilling ahead tool
 DCS: Data Consulting Services
 DC-SQUID: direct-current superconducting quantum interference device
 DDW: distilled deionized water
 DIC: dissolved inorganic carbon
 DICOM: Digital Imaging and Communication in Medicine
 DIRM: drilling-induced remanent magnetization
 DITF: drilling-induced tensile fractures
 DLIS: digital logging interchange standard (file format)
 DNA: deoxyribonucleic acid
 DONET: Dense Oceanfloor Network System for Earthquakes and Tsunamis
 DP: dynamic positioning
 DPS: dynamic positioning system
 DSI: Dipole Sonic Imager
 DTCO: compressional wave delay time
 DVTP: Davis-Villinger Temperature Probe
 DVTPP: Davis-Villinger Temperature-Pressure Probe
 ECD: equivalent circulating density
 EDS: energy dispersive spectrometry
 EDTC: Enhanced Digital Telemetry Cartridge
 EMI: electromagnetic interference
 EMS: Environmental Measurement Sonde
 EMW: equivalent mud weight
 EPSP: Environmental Protection and Safety Panel
 ESCS: extended shoe coring system
 EUE: external upset end
 FCO: first consistent occurrence
 FFF: free-fall funnel
 FID: flame ionization detector
 FISH: fluorescence in situ hybridization
 FMI: Formation MicroImager
 FMS: Formation MicroScanner
 FO: first occurrence
 FOV: field of view
 FWHM: full widths half maximum
 GC: gas chromatograph
 GFZ: GeoForschungsZentrum
 GHSZ: gas hydrate stability zone
 GMI: Geomechanics International
 GPIT: General Purpose Inclinometry Tool
 GPS: Global Positioning System
 GPTS: geomagnetic polarity timescale
 GR: gamma ray (only in figures)
 GRA: gamma ray attenuation
 GSJ: Geological Survey of Japan
 GVR: geoVISION resistivity tool
 HDPE: high-density polyethylene
 HGNS: Highly Integrated Gamma Ray Neutron Sonde
 HLDS: Hostile Environment Litho-Density Sonde

HNGC: Hostile Natural Gamma Ray Spectrometry Cartridge
 HNGS: Hostile Environment Natural Gamma Ray Sonde
 HPCS: hydraulic piston coring system
 HRDD: High-Resolution Density Device
 HRLA: High-Resolution Laterolog Array
 HRLT: High Resolution Laterolog Array Tool
 HRMS: High-Resolution Mechanical Sonde
 HU: Hounsfield units
 IAPSO: International Association of Physical Sciences of the Oceans
 IBOP: inline blowout preventer
 IC: ion chromatography
 ICP-AES: inductively coupled plasma–atomic emission spectroscopy
 ICP-MS: inductively coupled plasma–mass spectrometry
 ICS: International Commission on Stratigraphy
 ID: inside diameter
 IDEAL: integrated drilling evaluation and logging
 IFREE: Institute for Research on Earth Evolution
 IGRF: International Geomagnetic Reference Field
 IL: in-line
 IPL: intact polar lipid
 IR: infrared
 IRM: isothermal remanent magnetization
 ISIP: instantaneous shut in pressure
 JAMSTEC: Japan Agency for Marine-Earth Science and Technology
 JST: Japan Standard Time
 KCC: Kochi Core Center
 LAC: linear attenuation coefficient
 LAS: log ASCII standard (file format)
 LCM: lost circulation material
 LCO: last consistent occurrence
 LILE: large ion lithophile elements
 LO: last occurrence
 LOI: loss on ignition
 LOT: leak-off test
 LWD: logging while drilling (n.), logging-while-drilling (adj.)
 MAD: moisture and density
 MAXIS: Multitask Acquisition Imaging System
 mbsf: meters below seafloor
 MCFL: Micro-Cylindrically Focused Log
 MCS: multichannel seismic
 MDT: Modular Formation Dynamics Tester
 MDT modules:
 MRPO: pumpout module
 MRPA: dual packer module
 MRFC: flow control module
 MMS: mass magnetic susceptibility
 MP: mixed processing
 MPS: monopole P-wave/S-wave-wide (sonicVISION data filtering sequence; also MP)

MS: magnetic susceptibility
 MSCL: multisensor core logger
 MSCL-C: color spectroscopy logger
 MSCL-I: photo image logger
 MSCL-W: whole-round multisensor core logger
 MSPI: multishot shear parametric inversion
 MTL: miniature temperature logger
 MWD: measurement while drilling (n.), measurement-while-drilling (adj.)
 NanTroSEIZE: Nankai Trough Seismogenic Zone Experiment
 NGA: natural gas analyzer
 NGR: natural gamma ray
 NMO: normal moveout
 NRM: natural remanent magnetization
 NT-PMT: NanTroSEIZE Project Management Team
 NVT: nonvolcanic tremor
 OBS: ocean-bottom seismometer
 OD: outside diameter
 OOST: out-of-sequence thrust
 OSI: Operations Superintendent
 PB: paracme beginning
 PBS: phosphate-buffered saline
 PDS: picture description standard (file format)
 PE: paracme end
 PEF: photoelectric effect
 PEX: Platform Express
 PFC: perfluorocarbon
 PGS: Petroleum Geo-Services
 PI: principal investigator
 PNMDc: pony nonmagnetic drill collar
 ppb: parts per billion
 PPC: Power Positioning Device and Caliper Tool
 ppmv: parts per million by volume
 PSD: power spectral density
 PSDM: prestack depth migration
 psi: pounds per square inch
 PSTM: prestack time migration
 P-T: pressure-temperature
 PTFE: polytetrafluoroethylene
 PWL-D: *P*-wave logger for discrete samples
 QA: quality assurance
 QC: quality control
 QMS: quadrupole mass spectrometer
 RAB: resistivity-at-the-bit (adj.)
 RARS: Riser Antirecoil System
 RCB: rotary core barrel
 RCP: reducing compound photometer
 RE: reentrance
 RNA: ribonucleic acid
 ROP: rate of penetration
 ROV: remotely operated vehicle
 rpm: rotations per minute
 RSD: relative standard deviation
 SAC: Sample Allocation Committee
 SAFOD: San Andreas Fault Observatory at Depth

SAS: Science Advisory Structure
 SD: standard deviation
 SEGY: Society of Exploration Geophysicists standard (file format "Y")
 SEM: scanning electron microscope
 SET: sediment temperature
 SET-P: sediment temperature-pressure
 SFA: slowness frequency analysis
 SG: specific gravity
 SMT: sulfate-methane transition (preferred term, replaces SMI; as per G. Wheat, 3/25/08)
 SP: spontaneous potential
 SPT: single probe test
 SQUID: superconducting quantum interference device
 SRM: superconducting rock magnetometer
 SSE: slow slip events
 STC: slowness time coherence
 STP: Science and Technology Panel
 SVD: singular value decomposition
 SWD: seismic while drilling (n.), seismic-while-drilling (adj.)
 TAB: time after bit
 TC: total carbon
 TCD: thermal conductivity detector
 TD: total depth
 TEM: transmission electron microscopy
 TLD: Three-Detector Lithology Density [tool]
 TN: total nitrogen
 TOC: total organic carbon
 TS: total sulfur
 UTC: Universal Time Coordinated
 UV: ultraviolet
 VAM: Valourec and Mannesmann
 VCD: visual core description
 VE: vertical exaggeration
 VHF: very high frequency
 VIV: vortex-induced vibration
 VLF: very low frequency
 VRM: viscous remanent magnetization
 VSI: Versatile Seismic Imager
 VSP: vertical seismic profile
 WOB: weight on bit
 WOW: wait on weather
 XCB: extended core barrel
 XL: cross-line
 XRD: X-ray diffraction
 XRF: X-ray fluorescence

