
List of Acronyms

AAS	American Astronomical Society
AC	(IVS) Analysis Center
ACF	AutoCorrelation Function
ACU	Antenna Control Unit
ADC	Analog to Digital Converter
AES	Advanced Engineering Services Co., Ltd (Japan)
AGILE	Astro-rivelatore Gamma ad Immagini LEggero satellite (Italy)
AGN	Active Galactic Nuclei
AIPS	Astronomical Image Processing System
AIUB	Astronomical Institute, University of Bern (Switzerland)
AO	Astronomical Object
APSG	Asia-Pacific Space Geodynamics program
APT	Asia Pacific Telescope
ARIES	Astronomical Radio Interferometric Earth Surveying program
ASD	Allan Standard Deviation
ASI	Agenzia Spaziale Italiana (Italy)
ATA	Allen Telescope Array (USA)
ATCA	Australia Telescope Compact Array (Australia)
ATM	Asynchronous Transfer Mode
ATNF	Australia Telescope National Facility (Australia)
AUT	Auckland University of Technology (New Zealand)
A-WVR	Advanced Water Vapor Radiometer
BBC	Base Band Converter
BdRAO	Badary Radio Astronomical Observatory (Russia)
BIPM	Bureau International de Poids et Mesures (France)
BKG	Bundesamt für Kartographie und Geodäsie (Germany)
BMC	Basic Module of Correlator
BOSSNET	BOSon South NETwork
BVID	Bordeaux VLBI Image Database
BWG	Beam WaveGuide
CARAVAN	Compact Antenna of Radio Astronomy for VLBI Adapted Network (Japan)
CAS	Chinese Academy of Sciences (China)
CASPER	Center for Astronomy Signal Processing and Electronics Research (USA)
CAY	Centro Astronómico de Yebes (Spain)
CC	(IVS) Coordinating Center
CDDIS	Crustal Dynamics Data Information System (USA)
CDP	Crustal Dynamics Project
CE	Conformité Européene
CE-1	Chang'E-1 (China)
CGS	Centro di Geodesia Spaziale (Italy)
CIB	Correlator Interface Board
CIP	Celestial Intermediate Pole

CLARA	Cooperación Latino Americana de Redes Avanzadas
CMB	Core-Mantle Boundary
CMONC	Crustal Movement Observation Network of China (China)
CNES	Centre National d'Etudes Spatiales (France)
CNIG	Centro Nacional de Información Geográfica (Spain)
CNRS	Centre National de la Recherche Scientifique (France)
CNS	Communication, Navigation and Surveillance systems, Inc. (USA)
CODA	Correlator Output Data Analyzer
CORE	Continuous Observations of the Rotation of the Earth
CORS	Continuously Operating Reference Stations
CRAAE	Centro de Rádio Astronomia e Aplicações Espaciais (Brazil)
CRAAM	Centro de Rádio Astronomia e Astrofísica Mackenzie (Brazil)
CrAO	Crimean Astrophysical Observatory (Ukraine)
CRESTech	Centre for Research in Earth and Space Technology (Canada)
CRF	Celestial Reference Frame
CRL	Communications Research Laboratory (now NICT) (Japan)
CSA	Canadian Space Agency (Canada)
C-SART	Constrained Simultaneous Algebraic Reconstruction Technique
CSIR	Council for Scientific and Industrial Research (South Africa)
CSRIFS	Combined Square Root Information Filter and Smoother
CSTnet	China Science and Technology Network (China)
CVN	Chinese VLBI Network
DAR	Data Acquisition Rack
DAS	Data Acquisition System
DBBC	Digital Base Band Converter
DBE	Digital BackEnd
Δ DOR	Delta Differenced One-way Range
DGFI	Deutsches Geodätisches ForschungsInstitut (Germany)
DLR	Deutsches Zentrum für Luft- und Raumfahrt (German Aerospace Center)
DOM	Data Output Module
DORIS	Doppler Orbitography and Radiopositioning Integrated by Satellite
DR	Dichroic Reflector
DRAGON	Dynamic Resource Allocation through GMPLS over Optical Networks
DRAO	Dominion Radio Astrophysical Observatory (Canada)
DSN	Deep Space Network
DSP	Digital Signal Processor
DSS	Deep Space Station
ECMWF	European Centre for Medium-Range Weather Forecasts
EDM	Electronic Distance Measurement
EFTF	European Frequency and Time Forum
EGU	European Geosciences Union
ENVISAT	ENVironmental SATellite
EOP	Earth Orientation Parameters
EOS	Earth Observing System
EOT8A	Empirical Ocean Tide 2008 model from multi-mission satellite Altimetry

ERP	Earth Rotation Parameters
ETS-Lindgren	EMC Test Systems-Lindgren (USA)
EUREF	EUropean REference Frame
EVGA	European VLBI for Geodesy and Astrometry
EVLA	Expanded Very Large Array
e-VLBI	Electronic VLBI
EVN	European VLBI Network
EXPreS	Express Production Real-time e-VLBI Service
FAGS	Federation of Astronomical and Geophysical data analysis Services
FCN	Free Core Nutation
FEM	Finite Element Modeling
FESG	Forschungseinrichtung Satellitengeodäsie/Technical University of Munich (Germany)
FFI	Forsvarets ForskningsInstitutt (Norwegian Defence Research Establishment) (Norway)
FICN	Free Inner Core Nutation
FILA	FIRst LAst
FITS	Flexible Image Transport System
FPDP	Front Panel Data Port
FS	Field System
FSL	Field System Linux
FTP	File Transfer Protocol
FWF	Fonds zur Förderung der wissenschaftlichen Forschung (Austrian Science Fund)
GA	Geoscience Australia (Australia)
GAPE	Great Alaska and Pacific Experiment
GARNET	GSI Advanced Radiotelescope NETwork (Japan)
GARS	German Antarctic Receiving Station (Germany)
GASP	GLAST-AGILE Support Program
GEMD	Geospatial and Earth Monitoring Division (Australia)
GeoDAF	Geodetic Data Archiving Facility (Italy)
GEX	Giga-bit series VLBI EXperiment
GFZ	GeoForschungsZentrum (Germany)
GGAO	Goddard Geophysical and Astronomical Observatory (USA)
GGFC	Global Geophysical Fluids Center
GGOS	Global Geodetic Observing System
GGP	Global Geodynamics Project
GINs	Géodésie par Intégrations Numériques Simultanées
GISTM	GPS Ionospheric Scintillation and TEC Monitor
GLAST	Gamma ray Large Area Space Telescope (USA)
GLONASS	GLOBAL NAVIGATION Satellite System (Russia)
GLORIA	GLOBAL Radio Interferometry Analysis
GMPLS	Generalized MultiProtocol Label Switching
GNS Science	Geological and Nuclear Sciences Research Institute (New Zealand)
GNSS	Global Navigation Satellite Systems
GOT	Goddard/Grenoble Ocean Tide

GPS	Global Positioning System
GPT	Global Pressure and Temperature
GREF	German GPS REFERENCE network
GRGS	Groupe de Recherches de Géodésie Spatiale (France)
GSD	Geodetic Survey Division of Natural Resources Canada (Canada)
GSFC	Goddard Space Flight Center (USA)
GSJ	Geographical Survey Institute (Japan)
GSS	Generator of Synchronization Signals
HartRAO	Hartebeesthoek Radio Astronomy Observatory (South Africa)
HEMT	High Electron Mobility Transistor
HPBW	Half Power Beam Width
HTS	High Temperature Superconductor
HTSI	Honeywell Technology Solutions Incorporated (USA)
IAA	Institute of Applied Astronomy (Russia)
IAG	International Association of Geodesy
IAU	International Astronomical Union
ICRF	International Celestial Reference Frame
IERS	International Earth Rotation and Reference Systems Service
IF	Intermediate Frequency
IGFN	Italian Space Agency GPS Fiducial Network (Italy)
IGG	Institute of Geodesy and Geophysics (Austria)
IGGB	Institut für Geodäsie und Geoinformation der Universität Bonn (Germany)
IGM	Instituto Geográfico Militar (Chile)
IGN	Instituto Geográfico Nacional (Spain)
IGS	International GNSS Service
ILRS	International Laser Ranging Service
IMC	Interface Module of Correlator
INAF	Istituto Nazionale di Astrofisica (Italy)
INGV	Institute of Geophysics and Volcanology (Italy)
INPE	Instituto Nacional de Pesquisas Espaciais (Brazil)
InSAR	Interferometric Synthetic Aperture Radar
IP	Internet Protocol
IRA	Istituto di RadioAstronomia (Italy)
IRAS	InfraRed Astronomy Satellite
IRSR	Institute for Radiophysics and Space Research (New Zealand)
ISBN	International Standard Book Number
ITRF	International Terrestrial Reference Frame
ITRS	International Terrestrial Reference System
IUGG	International Union of Geodesy and Geophysics
IVOA	International Virtual Observatory Alliance
IVS	International VLBI Service for Geodesy and Astrometry
JADE	Japanese Dynamic Earth observation by VLBI
JARE	Japanese Antarctic Research Expedition (Japan)
JAXA	Japan Aerospace Exploration Agency (Japan)
JGN	Japan Gigabit Network (Japan)

JHB	JoHannesBurg
JIVE	Joint Institute for VLBI in Europe
JLRA	Joint Laboratory for Radio Astronomy (China)
JMA	Japan Meteorological Agency (Japan)
JPL	Jet Propulsion Laboratory (USA)
JST	Japan Standard Time
KARAT	KAshima RAY-tracing Tools (Japan)
KARATS	KAshima RAY-Tracing Service (Japan)
KAREN	Kiwi Advanced Research and Education Network (New Zealand)
KASI	Korea Astronomy and Space Science Institute (Korea)
KPGO	Koike Park Geophysical Observatory (USA)
KSP	KeyStone Project (Japan)
KSRC	Kashima Space Research Center (Japan)
KVN	Korean VLBI Network
LBA	Long Baseline Array (Australia)
LCS	Long baseline array Calibrator Survey
LED	Light-Emitting Diode
LEO	Low Earth Orbit
LLR	Lunar Laser Ranging
LNA	Low Noise Amplifier
LO	Local Oscillator
LOD	Length Of Day
LRS	Laser Ranging System
LSB	Lower Side Band
LSC	Least Squares Collocation
LSM	Least Squares Method
MAO	Main Astronomical Observatory (Ukraine)
MARBLE	Multiple Antenna Radio-interferometry for Baseline Length Evaluation
MIT	Massachusetts Institute of Technology (USA)
MITEQ	Microwave Information Transmission Equipment (USA)
MJD	Modified Julian Date
MLRO	Matera Laser Ranging Observatory (Italy)
MOBLAS	MOBile LASer
MODEST	MODEL and ESTimate
MPI	Max-Planck-Institute (Germany)
MPIfR	Max-Planck-Institute for Radioastronomy (Germany)
MTLRS	Modular Transportable Laser Ranging System
NAO	National Astronomical Observatories (China)
NAOJ	National Astronomical Observatory of Japan (Japan)
NASA	National Aeronautics and Space Administration (USA)
NCRIS	National Collaborative Research Infrastructure Strategy (Australia)
NEOS	National Earth Orientation Service (USA)
NetCDF	Network Common Data Form
NGS	National Geodetic Survey (USA)
NICT	National Institute of Information and Communications Technology (Japan)

NIPR	National Institute of Polar Research (Japan)
NMA	Norwegian Mapping Authority (Norway)
NMF	Niell Mapping Function
NNR	No-Net-Rotation
NNT	No-Net-Translation
NOAA	National Oceanic and Atmospheric Administration (USA)
NOFS	U.S. Naval Observatory Flagstaff Station (USA)
NRAO	National Radio Astronomy Observatory (USA)
NRCan	Natural Resources Canada (Canada)
NSF	National Science Foundation (USA)
NTT	Nippon Telegraph and Telephone Corporation (Japan)
NVI	NVI, Inc. (USA)
OAM	Observatorio Astronómico de Madrid (Spain)
OAN	Observatorio Astronómico Nacional (Spain)
OCA	Observatoire de la Côte d'Azur (France)
OPAR	Observatoire de Paris (France)
OPC	(IVS) Observing Program Committee
ORCA	Optical ReCeiver/splitter/Amplifier
OS	Operating System
OSO	Onsala Space Observatory (Sweden)
PARNASSUS	Processing Application in Reference to NICT's Advanced Set of Softwares Usable for Synchronization
PASJ	Publications of the Astronomical Society of Japan
PCAL	Phase CALibration
PFB	Polyphase Filter Bank
PLO	Phase Locked Oscillator
PM	Polar Motion
POLARIS	POlAr motion Analysis by Radio Interferometric Surveying
PPN	Parameterized Post-Newtonian
PPP	Precise Point Positioning
PRAO	Pushchino Radio Astronomy Observatory (Russia)
QRHA	Quad-Ridge Horn Antenna
QZSS	Quasi Zenith Satellite System (Japan)
RAS	Russian Academy of Sciences (Russia)
RDV	Research and Development sessions using the VLBA
REUNA	Red Universitaria Nacional (Chile)
RFCN	Retrograde Free Core Nutation
RFI	Radio Frequency Interference
ROACH	Reconfigurable Open Architecture Computing Hardware
ROEN	Rádio-Observatório Espacial do Nordeste (Brazil)
RRFID	Radio Reference Frame Image Database
RS-232C	Recommended Standard-232C
RTNF	Radio Telescope National Facility (New Zealand)
SATA	Serial Advanced Technology Attachment
SDK	Software Development Kit

SDM	Signal Distribution Modules
SDSS	Signal Distribution and Synchronization System
SEFD	System Equivalent Flux Density
SGT	Stinger Ghaffarian Technologies (USA)
SHAO	SHanghai Astronomical Observatory (China)
SI	Structure Index
SINEX	Solution INdependent EXchange format
SLR	Satellite Laser Ranging
SOSW	Satellite Observing System Wettzell (Germany)
SPbU	Saint-Petersburg University (Russia)
SPEED	Short Period and Episodic Earth rotation Determination
SPU	Saint-Petersburg University (Russia)
SRIF	Square Root Information Filter
SRT	Sardinia Radio Telescope (Italy)
SRTM	Shuttle Radar Topography Mission
SSA	Singular Spectrum Analysis
STEREO	Solar TERrestrial RELations Observatory
SvRAO	Svetloe Radio Astronomical Observatory (Russia)
SWT	SW Technology (USA)
TAC	Totally Accurate Clock
TANAMI	Tracking Active galactic Nuclei with Australia Milliarcsecond Interferometry (Australia)
TAO	Telecommunications Advanced Organization (Japan)
TDC	(IVS) Technology Development Center
TEC	Total Electron Content
TEMPO	Time and Earth Motion Precision Observations
TENET	Tertiary Education and Research Network of South Africa (South Africa)
TERENA	Trans-European Research and Education Networking Association
TerraSAR-X	Terra Synthetic Aperture Radars X-band (Germany)
TIGO	Transportable Integrated Geodetic Observatory (Germany, Chile)
TLRS	Transportable Laser Ranging System
TRF	Terrestrial Reference Frame
TUM	Technical University of Munich (Germany)
TWSTFT	Two-Way Satellite Time and Frequency Transfer
UC Berkeley	University of California, Berkeley (USA)
UD	Upper Diagonal
UDC	Up-Down Converter
URSI	Union Radio-Scientifique Internationale
USB	Upper Side Band
USNO	United States Naval Observatory (USA)
UT	Universal Time
UT1	Universal Time
UTAS	University of TASmania (Australia)
UTC	Coordinated Universal Time
UV	UltraViolet

VC	Video Converter
VDBE	VLBA Digital BackEnd
VDIF	VLBI Data Interchange Format
VERA	VLBI Exploration of Radio Astrometry
VEX	VLBI EXchange format
VieVS	Vienna VLBI Software
VLA	Very Large Array (USA)
VLBA	Very Long Baseline Array (USA)
VLBI	Very Long Baseline Interferometry
VMF	Vienna Mapping Functions
VO	Virtual Observatory
VSI	VLBI Standard Interface
VSI-H	VLBI Standard Interface Hardware
VSOP	VLBI Space Observatory Program
VSSP	Versatile Scientific Sampling Processor
VTRF	VLBI Terrestrial Reference Frame
WACO	WAShington COrrrelator (USA)
WEBT	Whole Earth Blazar Telescope
WG	Working Group
WGS84	World Geodetic System 1984
WMAP	Wilkinson Microwave Anisotropy Probe
WVR	Water Vapor Radiometer
WWW	World Wide Web
ZcRAO	Zelenchukskaya Radio Astronomical Observatory (Russia)
ZTD	Zenith Total Delay
ZWD	Zenith Wet Delay