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A

- **3D-Space** (Mental Representation of Spatial Cues During Space Flight)
- **Acoustika-M** (Acoustical Investigation of Voice and Audio Links (Connections) of the Crew on ISS)
- **Actin** (Role of Weightlessness on Metabolism)
- **ADF-Otolith** (Avian Development Facility - Development and Function of the Avian Otolith System in Normal Altered Gravity Environments)
- **ADF-Skeletal** (Avian Development Facility - Skeletal Development in Embryonic Quail)
- **ADUM** (Advanced Diagnostic Ultrasound in Microgravity)
- **ADVASC** (Advanced Astroculture™)
- **AgCam** (Agricultural Camera - AgCam name used historically from 2005-2010, later version known as ISAAC)
- **Akvarium** (Study of the Stability of a Model of Self-Contained (Closed) Ecological System and Elements, Included in the Model in Microgravity)
- **Alloy_Semiconductor** (Crystal Growth of Alloy Semiconductor Under Microgravity)
- **ALTCRISS** (Alteino Long Term Cosmic Ray Measurements on board the International Space Station)
- **ALTEA** (Anomalous Long Term Effects in Astronauts' Central Nervous System)
- **ALTEA-Dosi** (Anomalous Long Term Effects in Astronauts' - Dosimetry)
- **ALTEA-Shield** (Anomalous Long Term Effects in Astronauts' Central Nervous System - Shield)
- **Alteino** (Space Radiation Effects on the Central Nervous System)
- **Amine_Swingbed** (Amine Swingbed)
- **AMS-02** (Alpha Magnetic Spectrometer - 02)
- **ANDE-2** (Atmospheric Neutral Density Experiment - 2)
- **ANITA** (Analyzing Interferometer for Ambient Air)
- **Antigen** (Optimization of Heterologous Expression in Yeasts-True Yeasts in Microgravity for Example Synthesis of the HBS Antigen of the Virus Hepatitis B)
- **APCF-Camelids** (Advanced Protein Crystallization Facility - Extraordinary Structural Features of Antibodies from Camelids)
- **APCF-Crystal_Growth** (Advanced Protein Crystallization Facility - Solution Flows and Molecular Disorder of Protein Crystals: Growth of High Quality Crystals, Motions of Lumazine Crystals and Growth of Ferritin Crystals)
- **APCF-Crystal_Quality** (Advanced Protein Crystallization Facility - Effect of Different Growth Conditions on the Quality of Thaumatin and Aspartyl-tRNA Synthetase Crystals Grown in Microgravity)
- **APCF-Lipoprotein** (Advanced Protein Crystallization Facility - Crystallization of Human Low Density Lipoprotein (LDL) Subfractions in Microgravity)
- **APCF-Lysozyme** (Advanced Protein Crystallization Facility - Testing New Trends in Microgravity Protein Crystallization)
- **APCF-Octarellins** (Advanced Protein Crystallization Facility - Crystallization of the Next Generation of Octarellins)
- **APCF-PPG10** (Advanced Protein Crystallization Facility - Protein Crystallization in Microgravity, Collagen Model (X-Y-Gly) Polypeptides - the case of (Pro-Pro-Gly) 10)
- **APCF-Rhodopsin** (Advanced Protein Crystallization Facility - Crystallization of Rhodopsin in Microgravity)
- **APEX-CSA2** (Advanced Plant Experiment - Canadian Space Agency 2)
- **ARIS-ICE** (Active Rack Isolation System - ISS Characterization Experiment)
- **ARISS** (Amateur Radio on the International Space Station)
- **Aryl** (Influencing Factors of Space Flight on Expression of Strains of Interleukin)
- **Astrovaccina** (Cultivation in Weightless of E.coli- Producer of the Caf1 Protein)
- **AT-Space** (*Arabidopsis Thaliana* in Space: Perception of Gravity, Signal Transduction and Gravitoresponse in Higher Plants)
- **Avatar_Explore** (Avatar Explore: Autonomous Robotic Operations Performed from the ISS)

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- **Bacteriophage** (Investigation of the Effects of Space Flight Factors on Bacteriophages)
- **Bar** (Choice and Development of Methods and Instruments to Detect the Location of a Loss of Pressurization of a Module on ISS)
- **BASE-A** (Bacterial Acclimation and Adaptation to the Space Environment Conditions-A)
- **BASS** (Burning and Suppression of Solids)
- **BBND** (Bonner Ball Neutron Detector)
- **BCAT-3-4-CP** (Binary Colloidal Alloy Test - 3 and 4: Critical Point)
- **BCAT-3-BA** (Binary Colloidal Alloy Test - 3: Binary Alloys)
- **BCAT-3-SC** (Binary Colloidal Alloy Test - 3: Surface Crystallization)
- **BCAT-4-Poly** (Binodal Colloidal Aggregation Test - 4: Polydispersion)
- **BCAT-5-3D-Melt** (Binary Colloidal Alloy Test - 5: Three-Dimensional Melt)
- **BCAT-5-Compete** (Binary Colloidal Alloy Test - 5: Compete)
- **BCAT-5-PhaseSep** (Binary Colloidal Alloy Test-5: Phase Separation)
- **BCAT-5-Seeded_Growth** (Binary Colloidal Alloy Test - 5: Seeded Growth)
- **BCAT-6-Colloidal_Disks** (Binary Colloidal Alloy Test - 6 - Colloidal Disks)
- **BCAT-6-Phase_Separation** (Binary Colloidal Alloy Test - 6 - Phase Separation)
- **BCAT-6-PS-DNA** (Binary Colloidal Alloy Test - 6: Polystyrene - Deoxyribonucleic Acid)
- **BCAT-6-Seeded_Growth** (Binary Colloidal Alloy Test - 6: Seeded Growth)
- **Bif** (Investigation of the Effects of Space Flight Factors on the Technological and Biomedical Characteristics of Bifidobacterium)
- **BIMS** (Assessment of the Efficiency of the Use of Telemedicine Technologies On-Board ISS)
- **Biodegradation** (Initial stage of Biodegradation and Biodeterioration in Space)
- **Bioekologia** (Generation of High Efficiency of Microorganisms for the Production of Preparations of Biodegradable Oil, Organophosphorus Material, Measures for the Protection of Plants, as well as, of Exopolysaccharides Uses in the Petroleum Industry)
- **Bioemulsia** (Research and Development of a Self-Contained Reactor of the Shielded Type For Production of Biomass of Microorganisms and Biologically Active Substances)
- **Biokin-4** (Microbial Growth Kinetics Under Conditions of Microgravity)
- **BIOKIS** (BIOKon In Space)
- **Biological_Rhythms** (The Effect of Long-term Microgravity Exposure on Cardiac Autonomic Function by Analyzing 24-hours Electrocardiogram)
- **Biopsy** (Effect of Prolonged Space Flight on Human Skeletal Muscle)
- **Biorisk** (Influence of Factors of the Space Environment on the Condition of the System of Microorganisms-Hosts Relating to the Problem of Environmental Safety of Flight Techniques and Planetary Quarantine)
- **Biosfera** (Investigation of a Closed Ecological System)
- **Biotest** (Biochemical Status of Humans in Long Duration Space Flight)
- **Biotrek** (Influence of the Flow of Heavily Charged Particles of Space Radiation on Genetic Properties of Cell Production)
- **BISE** (Bodies In the Space Environment: Relative Contributions of Internal and External Cues to Self - Orientation, During and After Zero Gravity Exposure)
- **Bisphosphonates** (Bisphosphonates as a Countermeasure to Space Flight Induced Bone Loss)
- **BLT** (Boundary Layer Transition, Detailed Test Objective 854)
- **BONEMAC** (Differentiation of Bone Marrow Macrophages in Space)
- **BOP** (Bone Proteomics)
- **BPS** (Biomass Production System)
- **Brados** (Acquisition of Data About the Radiological, Electromagnetic and Different Physical Environments on Board ISS, and Their Effects on the Safety of the Crew, Space Equipment and Materials)
- **Braslet** (Validation of On-Orbit Methodology for the Assessment of Cardiac Function and Changes in the Circulating Volume Using Ultrasound and Braslet-M Occlusion Cuffs, SDTO 17011 U/R)
- **BRIC-16-Cytoskeleton** (Biological Research In Canisters - 16: Investigations of the plant cytoskeleton in microgravity with gene profiling and cytochemistry)
- **BRIC-16-DNA** (Biological Research In Canisters - 16: The Impact of Spaceflight on Arabidopsis: Deep Sequencing and DNA Arrays as Collaborative Readouts of the Transcriptome of Arabidopsis Seedlings and Undifferentiated Cells in Space)
- **BRIC-16-Regulation** (Biological Research In Canisters -16: Actin Regulation of Arabidopsis Root Growth and Orientation During Space Flight)
- **BRIC-SyNRGE** (Biological Research in Canisters Symbiotic Nodulation in a Reduced Gravity Environment)
- **BTN-M1** (Examination of the Flow of High Speed and Thermal Neutrons)
- **Buzz_Lightyear** (Buzz Lightyear)

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C

- **Caf** (Crystallization of the Protein Caf1M and its Combination with the Terminal Peptide Caf1 as the Elements for the Development of a New Generation of Antimicrobial Medicinal Preparations and Components of Vaccines from Yeasts)
- **Cambium** (Cambium)
- **Card** (Long Term Microgravity: A Model for Investigating Mechanisms of Heart Disease with New Portable Equipment)
- **Cardio-ODNT** (Dynamics of the Main Factors of Cardiac Function, of Central and Regional Circulation in Rest and During the Influence of Lower Body Negative Pressure)
- **Cardiocog-2** (Cognitive Cardiovascular Experiment)

- **CardioRespir** (Cardiorespiratory Adaptation to the Space Environment)
- **CardioScience** (Study of Cardiovascular Deconditioning Under Weightlessness Conditions)
- **CASPER** (Cardiac Adapted Sleep Parameter Electrocardiogram Recorder)
- **CBOSS-01-02-Renal** (Cellular Biotechnology Operations Support Systems: Human Renal Cortical Cell Differentiation and Hormone Production)
- **CBOSS-01-Colon** (Cellular Biotechnology Operations Support Systems: Use of NASA Bioreactor to Study Cell Cycle Regulation: Mechanisms of Colon Carcinoma Metastasis in Microgravity)
- **CBOSS-01-Ovarian** (Cellular Biotechnology Operations Support Systems: Evaluation of Ovarian Tumor Cell Growth and Gene Expression)
- **CBOSS-01-PC12** (Cellular Biotechnology Operations Support Systems: PC12 Pheochromocytoma Cells - A Proven Model System for Optimizing 3-D Cell Culture Biotechnology in Space)
- **CBOSS-02-Erythropoietin** (Cellular Biotechnology Operations Support Systems: Production of Recombinant Human Erythropoietin by Mammalian Cells)
- **CBOSS-02-HLT** (Cellular Biotechnology Operations Support Systems: The Effect of Microgravity on the Immune Function of Human Lymphoid Tissue)
- **CBOSS-FDI** (Cellular Biotechnology Operations Support Systems: Fluid Dynamics Investigation)
- **CBTM** (Commercial Biomedical Testing Module: Effects of Osteoprotegerin on Bone Maintenance in Microgravity)
- **CBTM-2** (Commercial Biomedical Test Module - 2)
- **CBTM-3-Sclerostin_Antibody** (Commercial Biomedical Testing Module-3: Assessment of sclerostin antibody as a novel bone forming agent for prevention of spaceflight-induced skeletal fragility in mice)
- **CBTM-3-Vascular_Atrophy** (Commercial Biomedical Testing Module-3: STS-135 space flight's affects on vascular atrophy in the hind limbs of mice)
- **CCE** (Cardiovascular Responses During Rest and Exercise, and Evaluation of Energy Inputs During Exercise)
- **CCF** (Capillary Channel Flow)
- **CCISS** (Cardiovascular and Cerebrovascular Control on Return from ISS)
- **CCM-Immune_Response** (Cell Culture Module - Immune Response of Human Monocytes in Microgravity)
- **CCM-Wound_Repair** (Cell Culture Module - Effect of Microgravity on Wound Repair: In Vitro Model of New Blood Vessel Development)
- **Cell_Wall** (Reverse Genetic Approach to Exploring Genes Responsible for Cell Wall Dynamics in Supporting Tissues of Arabidopsis Under Microgravity Conditions)
- **Cemex** (Assessment of the Technical Characteristics of a Capillary Evaporator in Microgravity)
- **CEO** (Crew Earth Observations)
- **CEO-IPY** (Crew Earth Observations - International Polar Year)
- **CERISE** (RNA Interference and Protein Phosphorylation in Space Environment Using the Nematode *Caenorhabditis elegans*)
- **CFE** (Capillary Flow Experiment)
- **CFE-2** (Capillary Flow Experiment - 2)
- **CFS-A** (Growth and Survival of Colored Fungi in Space)
- **CGBA-APS** (Commercial Generic Bioprocessing Apparatus - Antibiotic Production in Space)
- **CGBA-KCGE** (Commercial Generic Bioprocessing Apparatus - Kidney Cell Gene Expression)
- **CGBA-SM** (Commercial Generic Bioprocessing Apparatus - Synaptogenesis in Microgravity)
- **Chlorophyll** (Observation of the Chlorophyll Chromatography Process in Weightlessness)
- **Chromosome-1** (Chromosomal Aberrations in Blood Lymphocytes of Astronauts-1)
- **Chromosome-2** (Cytogenetic Effects of Ionizing Radiation in Peripheral Lymphocytes of ISS Crewmembers)
- **CIS** (Effect of Microgravity and Radiation on Eukaryotic, Endothelial and Osteoblasts)
- **Clinical_Nutrition_Assessment** (Clinical Nutrition Assessment of ISS Astronauts, SMO-016E)
- **Cogni** (Cognitive Process for 3-D Orientation perception and Navigation in Weightlessness)
- **Conjugation** (Development of Methods for Designing New Recombinants Producing Strains of Bacteria in Space Flight)
- **CPCF-2** (Commercial Protein Crystallization Factory - 2: Producing Protein Crystals with Highly Refined Crystal Structure for the Development of New-Generation Medicines)
- **CPCG-H** (Commercial Protein Crystal Growth - High Density)
- **CRE-1** (Component Repair Experiment - 1, SDTO 17012U)
- **CSA_Comm_and_Outreach** (Canadian Space Agency Communication and Outreach)
- **CSI-01** (Commercial Generic Bioprocessing Apparatus Science Insert - 01: *C. elegans* and Seed Germination)
- **CSI-02** (Commercial Generic Bioprocessing Apparatus Science Insert - 02: Silicate Garden, Seed Germination, Plant Cell Culture and Yeast)
- **CSI-03** (Commercial Generic Bioprocessing Apparatus Science Insert - 03: Spiders and Butterflies)
- **CSI-05** (Commercial Generic Bioprocessing Apparatus Science Insert - 05: Spiders, Fruit Flies and Directional Plant Growth)
- **CSI-06** (Commercial Generic Bioprocessing Apparatus Science Insert - 06)
- **CSLM-2** (Coarsening in Solid Liquid Mixtures-2)
- **CsPINs** (Dynamism of Auxin Efflux Facilitators, CsPINs, Responsible for Gravity-regulated Growth and Development in Cucumber)
- **Cult** (Cultural Determinations of Co-working, Performance and Error Management in Space Operations)
- **CVB** (Constrained Vapor Bubble)

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- **DAFT** (Dust and Aerosol Measurement Feasibility Test)

- **DCPCG** (Dynamically Controlled Protein Crystal Growth)
- **DECLIC-ALI** (DEvice for the study of Critical LIquids and Crystallization - Alice Like Insert)
- **DECLIC-DSI** (DEvice for the study of Critical LIquids and Crystallization - Directional Solidification Insert)
- **DECLIC-HTI** (DEvice for the study of Critical LIquids and Crystallization - High Temperature Insert)
- **Diatomeya** (Stability of Geographical Position and Configuration of Borders of Bioproductive Water Zones of the World Oceans, Observations by Orbition Station Crews)
- **Diurez** (Fluid and Electrolyte Metabolism and Hormonal Regulation of Fluid Volume)
- **DNARM** (DNA Repair in Microgravity: Investigation of the Effects of High Levels of Radiation on DNA Repair Mechanisms in Microgravity)
- **DOD_SPHERES-CSAC** (Department of Defense Synchronized Position, Hold, Engage, Reorient, Experimental Satellites ? Chip Scale Atomic Clock (DoD SPHERES ? CSAC))
- **DomeGene** (Dome Gene Experiment)
- **DOSIS-DOBIES** (Dose Distribution Inside ISS - Dosimetry for Biological Experiments in Space)
- **DOSMAP** (Dosimetric Mapping)
- **DOSTEL** (DOSimetry TELesopes)
- **DRAGONSat** (Dual RF Astrodynamic GPS Orbital Navigator Satellite)
- **DREAMTiME** (DREAMTiME)
- **DTN** (Disruption Tolerant Networking for Space Operations)
- **Dykhania** (Regulation and Biomechanics of Respiration in Space Flight)

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E

- **E-Learning** (Electronic - Learning)
- **EarthKAM** (Earth Knowledge Acquired by Middle School Students)
- **EDOS** (Early Detection of Osteoporosis in Space)
- **Education-SA** (Education - South Africa: Demonstration of Mass and Weight of Objects, and Action of Reactive Forces in Microgravity)
- **Education-SEEDS** (Space Exposed Experiment Developed for Students)
- **Education-Solar_Cells** (Education - How Solar Cells Work)
- **EKE** (Assessment of Endurance Capacity by Gas Exchange and Heart Rate Kinetics During Physical Training)
- **Ekon** (Experimental Survey on Evaluating the Possibility of Using th Russian Segment of ISS for Environmental Inspection of Work Areas of Various Facilities (Features))
- **ELITE-S2** (ELaboratore Immagini TELEvisive - Space 2)
- **EMCH** (Elastic Memory Composite Hinge)
- **Energy** (Astronaut's Energy Requirements for Long-Term Space Flight)
- **ENose** (JPL Electronic Nose)
- **Environmental_Monitoring** (Environmental Monitoring of the International Space Station)
- **EPO** (Education Payload Operations)
- **EPO-Cloud_Observation-Demos** (Education Payload Operations-Cloud Observation-Demonstrations)
- **EPO-Demos** (Education Payload Operation - Demonstrations)
- **EPO-Educator** (Education Payload Operations-Educator)
- **EPO-Kit_C** (Education Payload Operations - Kit C: Plant Growth Chambers)
- **EPO-Kit_D** (Education Payload Operation - Kit D)
- **EPO-Scientific_Principles-Demos** (Education Payload Operations-Scientific Principles-Demonstrations)
- **Epstein-Barr** (Space Flight Induced Reactivation of Latent Epstein-Barr Virus)
- **ERB** (Erasmus Recording Binocular)
- **ERB-2** (Erasmus Recording Binocular - 2)
- **ESA-EPO** (European Space Agency - Education Payload Operations)
- **ESA-GCF** (European Space Agency - Granada Crystallisation Facility)
- **ESCD** (Study of Embryonic and Stem Cell Development in Microgravity)
- **ETD** (Eye Tracking Device)
- **EVARM** (A Study of Radiation Doses Experienced by Astronauts in EVA)
- **Expert** (Investigation of Early Symptoms of Microdestruction of Structures and Instrument Modules in the Russian Segment of ISS)
- **EXPPCS** (EXPRESS Physics of Colloids in Space)
- **ExPRESS_Payload_Simulator** (ExPRESS Payload Simulator)

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- **Facet** (Investigation of Mechanism of Faceted Cellular Array Growth)
- **Farma** (Characteristics of Pharmacological Responses (absorption, distribution and elimination of acetaminophene) in Long Duration Space Flight)
- **FASTER** (Facility for Absorption and Surface Tension)
- **Ferulate** (Regulation by Gravity of Ferulate Formation in Cell Walls of Rice Seedlings)
- **FIS** (Sensory (Taste) Evaluation of Malaysian Food on Earth and in Space)
- **Fischer_Rat_Thyroid_Low_Serum_5** (Fischer Rat Thyroid Low Serum 5%)

- **Fish_Scales** (Investigation of the Osteoclastic and Osteoblastic Responses to Microgravity Using Goldfish Scales)
- **FIT** (Fungal Pathogenesis, Tumorigenesis, and Effects of Host Immunity in Space)
- **Fizika-Obrazovanie** (Educational Demonstration of Basic Physics Laws of Motion)
- **FLEX** (Flame Extinguishment Experiment)
- **FLEX-2** (Flame Extinguishment Experiment - 2)
- **FMVM** (Fluid Merging Viscosity Measurement)
- **Foam** (Viscous Liquid Foam - Bulk Metallic Glass)
- **Foam-Stability** (Foam Optics And Mechanics - Stability)
- **FOB** (Forward Osmosis Bag)
- **FOCUS** (Foam Casting and Utilization in Space)
- **Foot** (Foot Reaction Forces During Space Flight)
- **Functional_Task_Test** (Physiological Factors Contributing to Changes in Postflight Functional Performance)

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G

- **Gematologia** (Morphofunctional Characteristic of Blood Cells and the Intensity of Erythropoiesis in Humans by the Influence of Factors of Space Flight)
- **Genara-A** (Gravity Related Genes in *Arabidopsis* - A)
- **Geoflow-1** (Simulation of Geophysical Fluid Flow Under Microgravity-1)
- **Geoflow-2** (Simulation of Geophysical Fluid Flow Under Microgravity - 2)
- **Get_Fit_for_Space** (Get Fit for Space Challenge with Bob Thirsk)
- **Glidoproteid** (Extraction and Investigation of surface glycoproteins E1-E2 Alphaviruses on Earth and in Space)
- **GolfSat** (Photo and Video Filming Onboard the Russian Segment of ISS)
- **Gosum** (Comparison of Seed Growth on Earth and in Space)

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- **H-Reflex** (Effects of Altered Gravity on Spinal Cord Excitability)
- **Hair** (Biomedical Analyses of Human Hair Exposed to a Long-term Space Flight)
- **Heart** (Physiological Parameters that Predict Orthostatic Intolerance After Spaceflight)
- **HiMassSEE** (Spacecraft Single Event Environments at High Shielding Mass)
- **HMD** (Demonstration of Head Mounted Display (HMD) System for Crew)
- **Holter_ECG** (Digital Holter ECG)
- **HPA** (Hand Posture Analyzer)
- **HREP-HICO** (HICO and RAIDS Experiment Payload - Hyperspectral Imager for the Coastal Ocean)
- **HREP-RAIDS** (HICO and RAIDS Experiment Payload - Remote Atmospheric and Ionospheric Detection System (RAIDS))
- **HTV-Environmental_Monitoring** (Transport Environment Monitoring Package at HTV Cargo Transfer Bag)
- **HydroTropi** (Hydrotropism and Auxin-Inducible Gene expression in Roots Grown Under Microgravity Conditions)
- **Hypersole** (Cutaneous Hypersensitivity and Balance Control in Humans)

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- **I-APE** (Italian-Astronaut Personal Eye)
- **I-ENOS** (Italian-Electronic NOse for Space exploration)
- **I-FOAM** (Italian-Foam)
- **ICE-First-Aging** (International Caenorhabditis elegans Experiment First Flight-Aging)
- **ICE-First-Apoptosis** (International Caenorhabditis elegans Experiment First Flight-Apoptosis)
- **ICE-First-Cells** (International Caenorhabditis elegans Experiment First Flight-Cells)
- **ICE-First-Development** (International Caenorhabditis elegans Experiment First Flight-Development)
- **ICE-First-Genomics** (International Caenorhabditis elegans Experiment First Flight-Genomics)
- **ICE-First-Muscle Proteins** (International Caenorhabditis elegans Experiment First Flight-Muscle Proteins)
- **ICE-First-Radiobiology** (International Caenorhabditis elegans Experiment First Flight-Radiobiology)
- **Ice_Crystal** (Pattern Formation during Ice Crystal Growth)
- **Identifikatsia** (Identification of the Sources of Dynamic Loads on ISS)
- **Imedias** (Observation of Environmental Phenomena)
- **Immuno** (Neuroendocrine and Immune Responses in Humans During and After Long Term Stay at ISS)
- **Impuls** (Impulse)
- **Inflight_Education_Downlinks** (International Space Station Inflight Education Downlinks)
- **InfoTekh** (S Band Radio Signal Passage Through ISS and Test of Data Downlink)
- **Infrazvuk-M** (Integrated Research of Electromagnetic and Acoustical Fields of Extremely Low Frequency Bands Inside the Russian Modules on ISS)
- **InSPACE** (Investigating the Structure of Paramagnetic Aggregates from Colloidal Emulsions)

- **InSPACE-2** (Investigating the Structure of Paramagnetic Aggregates from Colloidal Emulsions - 2)
- **InSPACE-3** (Investigating the Structure of Paramagnetic Aggregates from Colloidal Emulsions - 3)
- **Integrated_Cardiovascular** (Cardiac Atrophy and Diastolic Dysfunction During and After Long Duration Spaceflight: Functional Consequences for Orthostatic Intolerance, Exercise Capability and Risk for Cardiac Arrhythmias)
- **Integrated_Immune** (Validation of Procedures for Monitoring Crewmember Immune Function)
- **Integrated_Immune-SDBI** (Validation of Procedures for Monitoring Crewmember Immune Function - Short Duration Biological Investigation)
- **Interactions** (Crewmember and Crew-Ground Interaction During International Space Station Missions)
- **Interleukin-K** (Production of High Quality Crystals of Interleukin -1Alpha, -1Beta and Receptor of Antagonist of Interleukin-1)
- **Iris** (Image Reversal In Space)
- **Iskazheniye** (Determination and Analysis of Magnetic Interference on ISS)
- **ISSAC** (International Space Station Agricultural Camera)
- **ISSI** (In Space Soldering Investigation)
- **ISS_Acoustics** (International Space Station Acoustic Measurement Program)
- **ISS_Ham_Radio** (International Space Station Ham Radio)
- **IVGEN** (IntraVenous Fluid GENeration for Exploration Missions)
- **Izhib** (Effect of Performance of Flight and Science Activities on the Function of On-Orbit Systems on ISS (Mathematical Model))

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- **JAXA-AstroReport** (Japan Aerospace and Exploration Agency - Astronaut Report)
- **JAXA-GCF** (Japan Aerospace and Exploration Agency - Granada Crystallization Facility High Quality Protein Crystallization Project)
- **JAXA-HDTV** (Activation and Test Downlink of HDTV System)
- **JAXA_EPO_1** (Japan Aerospace Exploration Agency Education Payload Observation 1)
- **JAXA_EPO_2** (Japan Aerospace Exploration Agency Education Payload Observation 2)
- **JAXA_EPO_3** (Japan Aerospace Exploration Agency Education Payload Observation 3)
- **JAXA_EPO_4** (Japan Aerospace Exploration Agency Education Payload Observation 4)
- **JAXA_EPO_5** (Japan Aerospace Exploration Agency Education Payload Observation 5)
- **JAXA_EPO_6** (Japan Aerospace Exploration Agency Education Payload Observation 6)
- **JAXA_EPO_7** (Japan Aerospace Exploration Agency Education Payload Observation 7)
- **JAXA_PCG** (Japan Aerospace Exploration Agency Protein Crystal Growth)
- **Journals** (Behavioral Issues Associated with Isolation and Confinement: Review and Analysis of Astronaut Journals)

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- **Kaskad** (Investigation of the Processes of Cultivation of Different Types of Cells)
- **Kibo_Kids_Tour** (Kibo Kids Tour)
- **Kids_In_Micro-g** (Kids In Micro-gravity (2009-2010))
- **Kids_In_Micro-g-2** (Kids In Microgravity-2 (2010-2011))
- **Kids_In_Micro-g-3** (Kids In Microgravity-3 (2011-2012))
- **Kolibry** (Developmental Testing of the Kolibri Microsatellite Deployment Profile)
- **Konstruktor** (Filming of Space Robot "Jitter" Assembled out of Legos)
- **Kontur** (Development of a System of Supervisory Control Over the Internet of the Robotic Manipulator in the Russian Segment of ISS)
- **Kristallizator** (Crystallization of Biological Macromolecules and Generation of Biocrystal Film in the Conditions of Microgravity)
- **Kromka** (Verification of the Effectiveness of Devices for the Protection of the Exterior Surface of ISS from Contaminants Deposited by Pulsed Cycling of Liquid-Jet)

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- **Lactolen** (Influence of Factors of Space Flight on Lactolen Producer Strains)
- **Lada-VPU-P3R** (Validating Vegetable Production Unit (VPU) Plants, Protocols, Procedures and Requirements (P³R) Using Currently Existing Flight Resources)
- **Latent_Virus** (Incidence of Latent Virus Shedding During Space Flight)
- **LEGO_Bricks** (LEGO® Bricks, formerly known as NLO-Education-2)
- **LOCAD-PTS** (Lab-on-a-Chip Application Development-Portable Test System)
- **LOCAD-PTS-Exploration** (Lab-on-a-Chip Application Development-Portable Test System - Exploration)

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M

- **MABE** (Microheater Array Boiling Experiment)
- **MACE-II** (Middeck Active Control Experiment-II)
- **MAI-75** (Space Devices and Modern Technology for Personal Communication)
- **Marangoni-Exp** (Chaos, Turbulence and its Transition Process in Marangoni Convection-Exp)
- **MATI-75** (Educational Demonstration of the Effects of Shape and Size on the Recovery of Precompressed Plastic Material)
- **Matritsa-Z1** (Study of the Condition of CCD Matrices of Video Cameras On-Board ISS)
- **Matryeshka-R** (Matryeshka-R)
- **MAUI** (Maui Analysis of Upper Atmospheric Injections)
- **MAXI** (Monitor of All-sky X-ray Image)
- **MDRV** (Microbial Drug Resistance and Virulence)
- **MDS** (Mice Drawer System)
- **MEPS** (Microencapsulation Electrostatic Processing System)
- **Meteoroid** (Recording Meteoroidal and Technogenic Particles on the External Surface of the Service Module of the Russian Segment of ISS)
- **Mezhkletchnoe_Vzaimodeistvie** (Intercellular Interactions in Space Flight)
- **MFMG** (Miscible Fluids in Microgravity)
- **Micro-2** (Gravitational Effects on Biofilm Formation During Space Flight)
- **Micro-2A** (Microbial biofilm formation during space flight)
- **Micro-4** (Genotypic and Phenotypic Changes in Yeast Related to Selective Growth Pressures Unique to Microgravity)
- **Micro-5** (Investigation of host-pathogen interactions, conserved cellular responses, and countermeasure efficacy during spaceflight using the human surrogate model *Caenorhabditis elegans*)
- **Micro-6** (Draft Content for Planning Purposes Only: Microbiology - 6)
- **Microbe** (Effect of Spaceflight on Microbial Gene Expression and Virulence)
- **Microbe-1** (Microbial Dynamics in International Space Station - 1)
- **Microspace** (Microbial Life in Space: Response to Environmental Factors in a Space Vehicle)
- **Midodrine-Long** (Test of Midodrine as a Countermeasure Against Post-flight Orthostatic Hypotension - Long)
- **Midodrine-SDBI** (Test of Midodrine as a Countermeasure Against Post-flight Orthostatic Hypotension - Short Duration Biological Investigation)
- **Mimetik-K** (Crystalization of antigen Binding Fragment of Monoclonal Antibody to Glucosaminilmuramildeptide)
- **MIS** (Microbes In Space: Effects of Microgravity and Space Radiation on Growth Kinetics and Mutation Processes in *E. Cloacae* and *Acinetobacter Baumannii* Cells)
- **MISSE-1_and_2** (Materials International Space Station Experiment - 1 and 2)
- **MISSE-3_and_4** (Materials International Space Station Experiment - 3 and 4)
- **MISSE-5** (Materials International Space Station Experiment - 5)
- **MISSE-6A_and_6B** (Materials International Space Station Experiment - 6A and 6B)
- **MISSE-7** (Materials International Space Station Experiment - 7)
- **MISSE-8** (Materials International Space Station Experiment - 8)
- **Mobility** (Promoting Sensorimotor Response Generalizability: A Countermeasure to Mitigate Locomotor Dysfunction After Long-Duration Space Flight)
- **Molniya-SM** (Investigation of Lightning Discharges in the Earth's Atmosphere and Lower Ionosphere)
- **MOP** (Motion Perception: Vestibular Adaptation to G-Transitions)
- **Mouse_Immunology** (Mouse Antigen-Specific CD4+ T Cell Priming and Memory Response during Spaceflight)
- **Mouse_Immunology-2** (Effect of Space Flight on Innate Immunity to Respiratory Viral Infections)
- **MSK** (Cultivation of Mesenchymal Stem Cells From Bone Marrow in Space Flight)
- **MSL-CETSOL_and_MICAST** (Materials Science Laboratory - Columnar-to-Equiaxed Transition in Solidification Processing and Microstructure Formation in Casting of Technical Alloys under Diffusive and Magnetically Controlled Convective Conditions)
- **Multigen** (Molecular and Plant Physiological Analyses of the Microgravity Effects on Multigeneration Studies of *Arabidopsis thaliana*)
- **Muscle** (Study of Low Back Pain in Crewmembers During Space Flight)
- **Myco** (Mycological Evaluation of Crew Exposure to ISS Ambient Air)
- **Myco-2** (Mycological Evaluation of Crew Exposure to ISS Ambient Air - 2)
- **MyoLab** (Molecular Mechanism of Microgravity-Induced Skeletal Muscle Atrophy - Physiological Relevance of Cbl-b Ubiquitin Ligase)

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- **NanoRacks-CubeLabs_Module-10** (NanoRacks-CubeLabs_Module-10)
- **NanoRacks-CubeLabs_Module-1_and_-3** (NanoRacks-CubeLabs Module-1 and -3)
- **NanoRacks-CubeLabs_Module-2_and_-4** (NanoRacks-CubeLabs Module-2 and -4)
- **NanoRacks-CubeLabs_Module-7** (NanoRacks-CubeLabs Module-7)
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- **NanoRacks-CubeLabs_Module-9** (NanoRacks-CubeLabs Module-9)
- **NanoRacks-NCESSE-2** (NanoRacks-National Center for Earth and Space Science Education - 2)

- **Nanoskeleton** (Production of High Performance Nanomaterials in Microgravity)
- **Neocytolysis** (Effects of Microgravity on the Haemopoietic System: A Study on Neocytolysis)
- **NeuroRad** (Biological Effects of Space Radiation and Microgravity on Mammalian Cells)
- **Neurospat** (Effect of Gravitational Context on EEG Dynamics: A Study of Spatial Cognition, Novelty Processing and Sensorimotor Integration)
- **Night_Vision** (Eyespots and Macular Pigments Extracted from Algal Organisms Immobilized in Organic Matrix with the Purpose to Protect Astronaut's Retina)
- **Nip** (Interaction of Sprayed Proteins (luciferin and luciferase) By Bioluminescence Image)
- **NLP-Cells** (National Laboratory Pathfinder - Cells)
- **NLP-Cells-3** (National Laboratory Pathfinder - Cells - 3: *Jatropha* Biofuels)
- **NLP-Cells-4** (National Laboratory Pathfinder - Cells - 4: *Jatropha*-2)
- **NLP-Cells-6** (National Laboratory Pathfinder - Cells - 6: *Jatropha* - 3)
- **NLP-Vaccine** (National Laboratory Pathfinder - Vaccine)
- **NLP-Vaccine-MRSA** (National Laboratory Pathfinder - Vaccine - Methicillin-resistant *Staphylococcus aureus*)
- **NLP-Vaccine-Salmonella** (National Laboratory Pathfinder - Vaccine - *Salmonella*)
- **NLP-Vaccine-Survey** (National Laboratory Pathfinder - Vaccine - Survey)
- **NOA-1** (Exhaled Nitric Oxide-1)
- **NOA-2** (Exhaled Nitric Oxide-2)
- **NPBX** (Nucleate Pool Boiling eXperiment)
- **Nutrition** (Nutritional Status Assessment)

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- **OChB** (Influence of Factors of Space Flight on Superoxide Strain Producer)
- **OEE** (Oil Emulsion Experiment)
- **ORZS** (The Optimization of Root Zone Substrates (ORZS) for Reduced Gravity Experiments Program)
- **Otolith** (Otolith Assessment During Postflight Re-adaptation)
- **OVAR** (Off-Vertical Axis Rotation: Eye Movements and Motion Perception Induced By Off-Axis Rotation at Small Angles of Tilt After Spaceflight, DSO 499)

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- **PACE** (Preliminary Advanced Colloids Experiment: 100X Oil Test Target)
- **PACE-2** (Preliminary Advanced Colloids Experiment - 2: 3D Particle Test)
- **PACE-LMM-Bio** (Preliminary Advanced Colloids Experiment - Light Microscopy Module: Biological Samples)
- **PADIAC** (PAtHway Different ACtigators)
- **Paradont** (Condition of Peridontal Tissues in Space Flight)
- **Particle_Flux** (Particle Flux Demonstrator)
- **Passages** (Scaling Body-Related Actions in the Absence of Gravity)
- **PCG-EGN** (Protein Crystal Growth-Enhanced Gaseous Nitrogen Dewar)
- **PCG-STES-IDQC** (Protein Crystal Growth-Single Locker Thermal Enclosure System-Improved Diffraction Quality of Crystals)
- **PCG-STES-IMP** (Protein Crystal Growth-Single Locker Thermal Enclosure System-Crystallization of the Integral Membrane Protein Using Microgravity)
- **PCG-STES-MM** (Protein Crystal Growth-Single Locker Thermal Enclosure System-Synchrotron Based Mosaicity Measurements of Crystal Quality and Theoretical Modeling)
- **PCG-STES-MMTP** (Protein Crystal Growth-Single Locker Thermal Enclosure System-Crystallization of the Mitochondrial Metabolite Transport Proteins)
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- **PCG-STES-RDP** (Protein Crystal Growth-Single Locker Thermal Enclosure System-Engineering a Ribozyme for Diffraction Properties)
- **PCG-STES-RGE** (Protein Crystal Growth-Single Locker Thermal Enclosure System-Regulation of Gene Expression)
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- **PCG-STES-VEKS** (Protein Crystal Growth-Single Locker Thermal Enclosure System-Vapor Equilibrium Kinetics Studies)
- **PCS** (Protein Crystallization in Space: Characterization of the Effect of Microgravity on the Crystal Growth Behavior of Lipases)
- **PESTO** (Photosynthesis Experiment and System Testing and Operation)
- **PFE-OUM** (Periodic Fitness Evaluation with Oxygen Uptake Measurement)
- **PFMI** (Toward Understanding Pore Formation and Mobility During Controlled Directional Solidification in a Microgravity Environment)
- **PGBA** (Plant Generic Bioprocessing Apparatus)
- **Pharmacokinetics** (Pharmacokinetics and Contributing Physiologic Changes During Spaceflight, DSO 632B)
- **Photosynth** (Photosynth™ Three-Dimensional Modeling of ISS Interior and Exterior)
- **Pilot** (Individual Characteristics of Psychophysiological Regulatory Status and Reliability of Professional Activities of Cosmonauts in Long Duration Space Flight)
- **PK-3_Plus** (PK-3 Plus: Plasma Crystal Research on the ISS)
- **PKinase** (Mechanisms and Functional Consequences of Protein Kinase C Isoform Translocation in Monocytes Exposed)

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- **Plankton-Linza-SA** (Characterizing the Effects of Atmospheric, Hydrophysical and Geological Factors on Biological Productivity of Oceanic Waters Surrounding The Republic of South Africa)
- **Plant_Signaling** (Plant Signaling (formerly known as Seed Growth-1))
- **Plasma-MKS** (Plasma-ISS: Examination of Plasmic Environments on the External Surface of ISS Through the Characterization of Optical Radiance)
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- **PMZ** (Bioavailability and Performance Effects of Promethazine During Space Flight)
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- **POEMS** (Passive Observatories for Experimental Microbial Systems)
- **Polca** ()
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- **Privyazka** (Development of High Precision Orientation of Scientific Devices in Space with Reports of Deformation of the ISS Hull)
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- **Prognoz** (Development of a Method of Operational Prediction of Work Load on Crew Piloting Objectives)
- **Pro_K** (Dietary Intake Can Predict and Protect Against Changes in Bone Metabolism during Spaceflight and Recovery)
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- **PuFF** (The Effects of EVA and Long-Term Exposure to Microgravity on Pulmonary Function)
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- **RAMBO-2** (Ram Burn Observations - 2)
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- **RASV** (Recombinant Attenuated Salmonella Vaccine)
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- **Relaksatia** (Processes of Relaxation in the Ultraviolet Band Spectrum by High Velocity Interaction of Exhaust Products on ISS)
- **Renal_Stone** (Renal Stone Risk During Spaceflight: Assessment and Countermeasure Validation)
- **Repository** (National Aeronautics and Space Administration Biological Specimen Repository)
- **Resist_Wall** (Role of Microtubule-Membrane-Cell Wall Continuum in Gravity Resistance in Plants)
- **RIGEX** (Rigidizable Inflatable Get-Away-Special Experiment)
- **ROALD** (ROle of Apoptosis in Lymphocyte Depression)
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- **Robonaut** (Robonaut)
- **ROKVISS** (Robotic Component Verification on the ISS: Verification of Lightweight Robotic Hinge Elements in Space)
- **RRM** (Robotic Refueling Mission)
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- **SAME** (Smoke and Aerosol Measurement Experiment)
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- **SEDA-AP** (Space Environment Data Acquisition Equipment - Attached Payload)
- **Seedling_Growth** (Seedling Growth, formerly Seed Growth-2)
- **Seeds** (Seeds in Space)
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- **SEM** (Space Experiment Module)
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- **SMILES** (Superconducting Submillimeter-Wave Limb-Emission Sounder)
- **SNFM** (Serial Network Flow Monitor)
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