1. Chronology: June 2009–May 2010

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1.1. Access to space

Europe	Other countries
LAUNCH LOG	
June 09	
	18 Atlas V 40-LRO LCROSS (S)
	21 Zenit-3SLB-Measat 3a (C)
	27 Delta-4M + GOES 14 (M)
	30 Proton-M-Sirius FM5 (C)
July 09	
01 Ariane V- Terrestar 1 (C)	06 Rokot- Kosmos-2451, Kosmos-06 06 2452, Kosmos-2453 (C)
	14 Falcon 1- Razaksat (C)
	15 Space Shuttle- STS-127 (MF)
	21 Kosmos-3M- Kosmos-2454 (N)
	24 Soyuz-U- Progress M-67 (ISS)
	29 Dnepr- Dubaisat-1 Deimos 1 UK-DMC 2 Nanosat-1B AprizeSat 3 AprizeSat 4 (R) (C)
August 09	
21 Ariane V- JCSAT 12, Optus D3 (C)	11 Proton-M- Asiasat 5 (C)
	17 Delta 7925- GPS 50 (N)
	25 Naro KSLV-1- STSAT-2 (S)
	28 Space Shuttle- STS-128 (MF)
	31 Long March 3B- Palapa-D1 (C)
September 09	
	08 Atlas V 401- USA 207 (C)
	10 H-IIB- HTV-1 (ISS)
	17 Soyuz-2-1b- Meteor-M... (M) (S) (R)
	17 Proton-M- Nimiq-5 (C)
	23 PSLV-CA- Oceansat-2 (C) (R) (S)

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	25 Delta 7920- USA 208,209 (EW)
	30 Soyuz-FG- Soyuz TMA-16 (ISS)
October 09	
01 Ariane V- ComsatBw-1, Amazonas-2(C)	08 Delta 7920- WorldView-2 (R)
29 Ariane V- NSS-12, Thor 6 (C)	15 Soyuz-U- Progress M-03M (ISS)
	18 Atlas V 401- DMSP 5D F-18 (M)
November 09	
	02 Rokot- SMOS, PROBA-2 (R)
	10 Soyuz-U- Poisk (ISS)
	12 Long March 2C- Shi Jian XI-1 (D)
	16 Space Shuttle-STS-129 (ISS)
	20 Soyuz-U- Kosmos-2455 (I)
	23 Atlas V 431- Intelsat IS-14 (C)
	24 Proton-M- Eutelsat W7 (C)
	28 H-IIA- IGS-5A (R)
	30 Zenit-3SLB- Intelsat IS-15 (C)
December 09	
18 Ariane V GS- Helios IIB (R)	06 Delta 4 M+- WGS SV3
	09 Long March 2D- Yaohan Weixing VII (R)
	14 Proton-M- Kosmos-2456, Kosmos-2457, Kosmos-2458 (N)
	14 Delta 2 7320- WISE (S)
	15 Long March 4C- Yoagan Weixing VIII Xi Wang 1 (R) (C)
	20 Soyuz-FG- Soyuz TMA-17 (ISS)
	29 Proton-M- DirecTV 12 (C)
January 10	
	28 Long March 3C- Beidou DW3 (N)
February 10	
	03 Proton-M- Raduga-1M (C)
	08 Soyuz-U- Progress M-04M (ISS)
	11 Space Shuttle- STS-130 (MF)
	12 Atlas V 401-SDO (S)
March 10	
	01 Proton-M- Intelsat IS-16 (C)
	04 Proton-M- Kosmos-2459, Kosmos-2460, Kosmos-2461 (N)

	05 Long March 4C- Yaogon Weixing 9, YW-9 subsat 1, YW-9 subsat 2 (I)
	20 Proton-M- Echostar XIV ©
April 10	
	02 Soyuz-FG- Soyuz TMA-18 (ISS)
	05 Space Shuttle- STS-13 (MF)
	08 Dnepr- CryoSat-2 (S)
	15 GSLV Mk II- GSAT-4 (C)
	16 Soyuz-U- Kosmos-2462 (R)
	22 Atlas V 501- USA 212 (D)
	24 Proton-M- SES-1 (C)
	28 Kosmos-3M- Kosmos-2463 (N)
May 10	
21 Ariane V- Astra 3B, ComsatBw-2 (C)	14 Space Shuttle- STS-132 (MF)
	20 H-2A 202- Akatsuki, IKAROS, Unitec-1 Cubesat Negal, Cubesat Waseda-Sat2, Cubesat KSAT (S) (D) (R)
	28 Delta 4M+- GPS 62 (N)

C: Communications – D: Development – I: Intelligence – ISS: International Space Station – M: Meteorological – MF: Manned Flight – N: Navigation – R: Remote Sensing – S: Scientific – EW: Early Warning System

1.2. Space science and exploration

Europe	Other countries
EARTH SCIENCES	
February 10 High-thrust engine demonstrator industrial day in Germany	*February 10* NASA funded research discovers life built with toxic chemical
ASTRONOMY	
February 10 SDO solar observatory launched successfully *May 10* Herschel infrared space observatory has discovered the key ingredient for making water in space *May 10* Final assembling in the CERN of the AMS destined to ISS	*January 10* A new particle of the sun under study *May 10* Primordial Magnetic Fields Discovered Across The Universe
EXPLORATION	
October 10 Venus Express new discoveries about Venus's atmosphere *March 10* Newly Found Exoplanet discovered with Water-laden Clouds	*July 09* New Russian plan decided to launch an interplanetary mission to Venus *September 10* NASA's Kepler mission discovers two planets transiting the Same Star *October 10* China's Chang'e 2 probe enters orbit around Moon *October 10* NASA and NSF-Funded Research Finds First Potentially Habitable Exoplanet *March 10* The NASA's ion-propelled spacecraft eclipsed the record for velocity change
MANNED SPACEFLIGHT	
	February 10 Atlantis' Final Mission *April 10* NASA to Launch Human-Like Robot to Join Space Station Crew

1.3. Applications

Europe	Other countries
EARTH OBSERVATION	
November 2 ESA launches the Soil Moisture and Ocean Salinity (SMOS) satellite *November 19* ESA selects e-Geos to provide EO products for GMES *December 18* Launch of HELIOS 2B satellite February 4 France-Germany agreement to jointly develop the CH4 Atmospheric Remote Monitoring Explorer (CHARME) *February 3* ESA selects the ThalesAleniaSpace/OHB consortium to built the METEOSAT third generation satellites *February 24* CNES selects ThalesAleniaSpace to build Jason-3 Ocean altimetry satellite *May 4* OHB contracted to build common Franco-German EO ground segment platform	*June 21* demonstration of Israel's TecSAR Synthetic Aperture Radar (SAR) satellite *August 25* Loss of S. Korean STSAT-2 weather satellite during launch *September 17* Launch of the South African Sumbandila environment monitoring satellite *September 23* India launches Oceansat-2, its second ocean monitoring satellite *November 23* NOAA QuikScat satellite's scatterometer instrument ceases to function *November 28* Japan launches first new generation Information Gathering Satellite (IGS) Optical-3 *February 4* Cancellation of the U.S. National Polar-orbiting Operational Environmental Satellite System (NPOESS) development programme *May 19* USAF launches TacSat-3, its first hyper-spectral reconnaissance satellite
INTELLIGENCE AND EARLY WARNING	
	June 10 USAF selects Lockheed Martin to build the first three Space Based Infrared System satellites (SBIRS) *June 11* USAF awards first contracts to develop the ground segment of the future U.S. space surveillance system *June 15* Northrop Grumman delivers second Space Tracking and Surveillance System (STSS) satellite to USAF *September 25* U.S. Missile Defence Agency launches two Space Tracking and Surveillance System (STSS) demonstration satellites *October 26* Raytheon selected to integrate U.S. Missile Defence Agency and USAF space surveillance sensors

NAVIGATION	
October 1 ESA declares the freely accessible service of the European GPS Navigation Overlay Service (Egnos) operational *January 7* European Commission selects OHB to build the first 14 Galileo GNSS satellites	*March 2* Launch of three Glonass GNSS satellites by Russia
TELECOMMUNICATIONS/BROADCASTING	
July 1 Launch of Terrestar-1, largest commercial spacecraft built to date *October 13* ESA-DLR agreement on the management of the European Data Relay System (EDRS) *October 27-29* Decision to create Space Data Association (SDA), a voluntary satellite database during the annual meeting of the Satellite Users Interference Reduction Group (SUIRG) in Cannes, France *November 3* EDA selects London Satellite Exchange to establish a central European Union database for purchasing commercial communication satellite services *November 30* SES Astra selects EADS Astrium to build four direct broadcast television satellites *February 9* CNES selects ThalesAleniaSpace to build Athena-Fidus satellite *March 9* UK announces the deployment of a fourth Skynet-5 satellite	*July 23* Indian government approves development of next generation communications satellite GSAT-11 *November 23* U.S. Defence Department launches the Internet Routing in Space (IRIS) technology demonstrator, the first dedicated U.S. military payload to orbit on a commercial satellite *December 7* first public presentation of Virgin Galactic's SpaceShipTwo suborbital space-plane *February 3* DARPA selects Inmarsat to provide internet connectivity to LEO satellites services demonstrator *April 15* Loss of the Indian GSAT-1 satellite during launch
TECHNOLOGY DEVELOPMENT	
July 20 ESA selects ThalesAleniaSpace to build the Experimental Re-Entry Test Bed (EXPERT)	*July 11* JAXA and Mitsubishi Heavy Industries complete H-2B launcher ground testing *August 11* Raytheon Space and Airborne Systems presents a new infrared light-wave detector *September 17* DARPA initiates concept studies on LEO orbital debris removal

October 26 ESA launches two experimental maritime Automatic Identification System (AIS) receivers to the ISS	*October 22* DARPA issues RfI to develop an internet connectivity to Low Earth Orbit (LEO) satellites system
November 2 ESA launches Proba-2 future satellite systems demonstrator	*November 23* Cisco Systems Inc. launches the first space-based internet router on board Intelsat 14 commercial SatCom
	December 16 Japanese government cancels GX launcher development
	January 13 Cisco Systems Inc. successfully completes in-orbit testing of first space based internet router
February 24 OHB selected to develop the German Orbital Servicing Mission (DEOS) technology demonstration satellite	*February 3* Iran launches the Kavoshgar-3 carrying small animals to orbit and unveils the full scale model of its future Simorgh rocket
	February 6 NASA Administrator confirms that development of future heavy-lift launcher technologies will continue under the new NASA direction
	April 22 USAF launches its winged unmanned spaceplane demonstrator X-37B Orbital Test Vehicle
	March 3 ISRO successfully tests the Advanced Technology Vehicle (ATV), a new type of sounding rocket
	March 3 MacDonald, Dettwiler and Associates Corp. (MDA) of Canada announces the development of a technology and business model for in-orbit servicing satellites
BUSINESS	
June 9 Signature of an agreement between ThalesAleniaSpace and ESA for the development of the IXV	*June 22 Sea Launch Co LLC declares bankruptcy*
July 1 ASI and Telespazio create e-Geos to commercialise Cosmo-SkyMed radar images	*August 12* ISRO launches indigenous version of Google Earth for India
November 30 SES Astra negotiates sale of its ND SatCom subsidiary to EADS Astrium Services	*November 23* Inmarsat acquires Segovia Inc, a U.S. communications services provider

January 26 OHB selects EADS Astrium as prime subcontractor in manufacturing Galileo satellites *February 23* Dutch Space selected to build solar panels for GMES spacecrafts	*January 26* Intelsat awarded a five year services contract by the U.S. Navy

1.4. Policy and international cooperation

Europe	Other countries
GENERAL POLICY	
October 15 EC President J. M. Barroso delivers the first ever speech dedicated entirely to European Space Policy	
December 1 The Lisbon Treaty on the functioning of the European Union enters into force, inviting under its Article 189 European institutions to implement a long-term European space policy	*December 2* The President of the U.S. Aerospace Industries Association (AIA) urges U.S. President B. Obama to ease ITAR export control restrictions *January 27* U.S. President B. Obama addresses the issue of U.S. export controls reform in his State of the Union speech
February 5 Creation of the GMES Partners Board by the European Commission *March 15* EC announces its intention to remove non-European built components from future Galileo satellites *March 23* Official announcement of the establishment of the UK Space Agency	*February 1* U.S. President B. Obama announces the NASA FY2011 budget, effectively canceling the Constellation programme and outsourcing Human space flight to the private sector *February 23* NASA administrative structure changes announced, emphasizing on R&D activities and expanding the NASA Administrator's capacities *April 14* The Head of China Manned Space Engineering Office confirms plans to build a 30 ton space station by 2022
GENERAL COOPERATION	
	July 20 U.S. And India sign a Technology Safeguards Agreement allowing the latter to launch civil and non-commercial satellites containing U.S. made components *September 14-18* Fourth annual meeting of the International Committee on Global Navigation Satellite Systems (ICG) held in St. Petersburg
October 23 Joint EU-ESA conference on Human Space Exploration held in Prague	*October 19-21* Tenth annual meeting of the United Nations Geographic Information Working Group (UNGIWG) held in Bonn

October 26-27 11th European Inter Parliamentary Space Conference held in London *March 15* EU Member States reach preliminary agreement on the Public Regulated Service user policy for Galileo	November 17 U.S. And China agree to resume annual exchange of Heads of space agencies visits *December 2* The United Nations General Assembly (UNGA) adopts Resolutions 64/28 and 64/49, emphasizing the role of transparency and confidence building measures (TCBM) to avoid an arms race in spacer *December 10* UNGA adopts by consensus resolution 64/86, emphasizing the importance of international cooperation in the peaceful use of outer space *April 9* Kazakh Parliament ratifies agreement with Russia to extent the use of the Baikonur Cosmodrome to 2050
SPACE SCIENCE	
July 30 EC issues the 3rd call for proposals on space related R&D projects within the FP7 framework *October 8* Brazilian space agency AEB signs a technology exchange agreement with Liege space centre of Belgium	*November 24* U.S. And India sign cooperation agreement on science and technology research, nuclear energy and space
APPLICATIONS	
October 13 ESA and DLR reach agreement on the management of the future European Data Relay System (EDRS) *October 26* the European Commission officially recognizes maritime surveillance as the next major area of space applications investment	*May 30* Russia and India agree to establish a joint venture in India to produce Glonass/GPS compatible navigation equipment *November 18* NOAA and ISRO agree to share data from India's Oceansat-2 meteorological and oceanographic satellite