

Changes to the July 1, 2009 release of the UCS Satellite Database

This version of the database includes launches through July 1, 2009.

The changes to this version of the database include:

- The addition of 19 satellites
- The deletion of 8 satellites
- The addition of and corrections to some satellite data

Satellites Added:

Eutelsat W2A – 2009-016A
WGS F2 (Wideband Global Satcom 2 [USA 204]) – 2009-017A
Beidou 2 (Compass G2) – 2009-018A
RISAT 2 (Radar Imaging Satellite 2) – 2009-019A
ANUSAT (Anna University Satellite) – 2009-019B
Sicral 1B – 2009-020A
Yaogan 6 – 2009-021A
Kobalt-M (Cosmos 2450) – 2009-022A
STSS ATRR (USA 205) – 2009-023A
Protostar 2 – 2009-027A
Tacsat-3 – 2009-028A
Pharmasat – 2009-028B
Hawksat 1 – 2009-028C
CP-6 – 2009-028D
Aerocube 3 – 2009-028E
Meridian 2 – 2009-029A
Measat 3A – 2009-032A
GOES 14 – 2009-033A
Sirius FM5 – 2009-034A

Satellites Deleted:

DSCS III-F7 (USA 93) – 1993-046A
GFO (GEOSAT Follow-on) – 1998-007A
Galaxy 4R – 2000-020A
Gorizont-45 (Gorizont-33) – 2000-029A
Beidou-1A – 2000-069A
Monitor-E (2005-032A)
Eutelsat W2M – 2008-065B
TDRS-1 – 1983-026B

Changes to the April 13, 2009 release of the UCS Satellite Database

This version of the database includes launches through April 1, 2009.

The changes to this version of the database include:

- The addition of 21 satellites
- The deletion of 41 satellites
- The addition of and corrections to some satellite data

The relatively large number of satellites removed in this update does not reflect a surge in satellite failures. Instead, we had suspected many of these satellites were no longer operational, but only recently found enough sources to confirm it.

Nota bene: the Iranian satellite Omid was launched after the last update and became inactive before this update, so it never appears in the UCS Satellite Database.

Satellites Added:

NROL-26 [USA 202] – 2009-001A
 Ibuki [GOSat) – 2009-002A
 Prism – 2009-002B
 SDS-1 – 2009-002C
 Kagayaki –2009-002D
 SOHLA 1 – 2009-002E
 SpriteSAT – 2009-002F
 Kukai – 2009-002G
 KKS-1 – 2009-002H
 Koronas-Foton – 2009-003A
 NOAA-19 – 2009-005A
 Express-AM44 – 2009-007A
 Express-MD1 – 2009-007B
 NSS-9 – 2009-008A
 Hot Bird 10 – 2009-008B
 SPIRALE-A – 2009-008C
 SPIRALE-B – 2009-008D
 Telstar 11N – 2009-009A
 Radula 1 [Cosmos 2450] – 2009-10A
 GOCE – 2009-013A
 Navstar GPS 49 [USA 203] – 2009-014A

Satellites Deleted:

UoSat-2 [Oscar 11] – 1984-021B
 SLDCOM-1 [USA 59] – 1990-050A
 SB-WASS 2-1 [USA 60] – 1990-050B
 SB-WASS 2-1 [USA 61] – 1990-050C
 SB-WASS 2-1 [USA 62] – 1990-050D
 LaCrosse/Onyx 2 [USA 69] – 1991-017A
 Intelsat 605 – 1991-055A
 Tubsat-A – 1991-050D
 SLDCOM-2 [USA 72] – 1991-076A

Navstar GPS-35 [USA 94] – 1993-054A
PoSat-1 [Oscar 28] – 1993-061D
DirecTV-1 – 1993-078A
Orbcomm FM1 – 1995-017A
Orbcomm FM2 – 1995-017B
Gorizont-44 -- 1996-034A
SDS-II-3 [USA 125] – 1996-038A
Iridium 33 – 1997-051C
Iridium 28 – 1997-051E
LaCrosse/Onyx 3 [USA 133] – 1997-064A
Astra 5A – 1997-071A
Orbcomm FM3 – 1998-007B
Strela-3 [Cosmos 2352] – 1998-036A
Strela-3 [Cosmos 2353] – 1998-036B
Strela-3 [Cosmos 2354] – 1998-036C
Strela-3 [Cosmos 2355] – 1998-036D
Strela-3 [Cosmos 2356] – 1998-036E
Strela-3 [Cosmos 2357] – 1998-036F
Orbcomm FM17 – 1998-046A
Orbcomm FM26 – 1998-053F
Orbcomm FM28 – 1998-053H
WavSat-2 [UoSat-12] – 1999-021A
Orbcomm FM32 – 1999-065C
Multispectral Thermal Imager – 2000-014A
Meteor-3M-N1 – 2001-056A
Nadezhda 7 [COSPAS 10] – 2002-046A
KazSat 1 – 2006-022A
PehuenSat-1 [Oscar 63] – 2007-001D
CP-4 – 2007-012Q
CSTB-1 – 2007-012R
Persona N1 [Cosmos 2441] – 2008-037A
Kobalt-M [Cosmos 2445] – 2008-058A

Changes to the January 21, 2009 release of the UCS Satellite Database

This version of the database includes launches through January 1, 2009.

The Database page has been newly organized for easier navigation, and it has several new features, including some analysis:

- a **Satellite Quick Facts** box, giving current satellite counts, updated quarterly, and
- a **Quick Facts & Analysis** page, explaining the derivation of the **Satellite Quick Facts** and answering some more in-depth questions, updated occasionally

Also new to the Database page are:

- a **Quick Guide to Using the Database**, a how-to for several basic database tasks
- a **Featured Satellite**, detailing one of the interesting active satellites in the database, updated quarterly
- a link to the new **Space Age Trivia** page, highlighting interesting facts about space, past and present, updated quarterly

The other changes to this version of the database include:

- a reorganization of the orbital information into columns with “Class of Orbit,” e.g., *LEO*, and “Type of Orbit,” e.g., *Sun-Synchronous*. All GEO longitude information has been moved to the column “Longitude of GEO”
- The addition of 20 satellites
- The deletion of 14 inactive satellites
- The addition of and corrections to some satellite data
- The updating of the orbital information for the GEO satellites

Satellites Added:

THEOS (Thailand Earth Observation System) – 2008-049A

Interstellar Boundary Explorer (IBEX) – 2008-051A

Shijian 6E – 2008-053A

Shijian 6F – 2008-053B

COSMO-SkyMed 3 – 2008-054A

VeneSat-1 – 2008-055A

Shiyuan 3 – 2008-056A

Chuangxin 2 – 2008-056B

Astra 1M – 2008-057A

Kobalt M [Cosmos 2445] – 2008-058A

Yaogan-4 – 2008-061A

Cosmos 2446 – 2008-062A

Ceil-2 2008-063A

Yaogan 5 – 2008-064A

Hot Bird 9 – 2008-065A

Eutelsat W2M – 2008-065B

Fengyun 2E – 2008-066A

Glonass 727 [Cosmos 2447] -- 2008-067A

Glonass 728 [Cosmos 2448] -- 2008-067B

Glonass 729 [Cosmos 2449] -- 2008-067C

Satellites Removed:

Marisat-F2 – 1976-101A

TDRS-1 – 1983-026B

Orion/Magnum 3 [USA 67] – 1990-097B

DSP-16 [USA 72] – 1991-080B

Gorizont-40 – 1993-069A

DSP-17 [USA 107] – 1994-084A
KH-12-4 [USA 129] – 1996-072A
Chinasat-6 – 1997-021A
Thor-2 – 1997-025A
BSAT-1B – 1998-024B
UFO-9 [USA 140] – 1998-058A
Glonass 796 [Cosmos 2411] – 2004-053C
NigComSat-1 – 2007-018A
DSP-23 [USA 197] – 2007-054A

Changes to the October 6, 2008 release of the UCS Satellite Database

This version of the database includes launches through October 1, 2008.

The changes to this version of the database include:

- The addition of 22 satellites
- The deletion of 15 inactive satellites
- The addition of and corrections to some satellite data

Satellites Added:

Protostar 1 – 2008-034A
Badr 6 – 2008-034B
Echostar 11 – 2008-035A
Sar Lupe 5 – 2008-036A
Persona-N1 [Cosmos 2441] – 2008-037A
Superbird 7 – 2008-038A
AMC 21 – 2008-038B
INMARSAT 4F3 – 2008-039A
RapidEye-A – 2008-040A
RapidEye-B – 2008-040B
RapidEye-C – 2008-040C
RapidEye-D – 2008-040D
RapidEye-E – 2008-040E
HJ-1A [Huan Jing 1A] – 2008-041A
HJ-1B [Huan Jing 1B] – 2008-041B
GeoEye-1 – 2008-042A
Nimiq 4 – 2008-044A
Galaxy 19 – 2008-045A
Glonass 724 [Cosmos 2442] – 2008-046A
Glonass 725 [Cosmos 2443] – 2008-046B
Glonass 726 [Cosmos 2444] – 2008-046C
Theos – 2008-049A

Satellites Removed:

Telstar 11 – 1994-079A
Milstar DFS-2 – 1995-060A
NStar-B – 1996-007A
Echostar 2 – 1996-055A
Badr C – 1997-046A
BSat-1B – 1998-024B
Molniya 1-91 – 1998-054A
Intelsat 6B – 1998-075A
Yamal-102 – 1999-047B
Galaxy 11 – 1999-071A
Galaxy 10R – 2000-002A
Milstar DFS-5 – 2002-001A
Molniya 1-93 – 2004-005A
Superbird-6 – 2004-011A
Glonass 797 [Cosmos 2412] – 2004-053B

Changes to the July 8, 2008 release of the UCS Satellite Database

This version of the database includes launches through July 1, 2008.

The changes to this version of the database include:

- The addition of 34 satellites
- The deletion of 17 inactive satellites
- The addition of and corrections to some satellite data

Satellites Added:

ICO G1 – 2008-016A
C/NOFS (Communication/Navigation Outage Forecasting System) – 2008-017A
Vinasat 1 – 2008-018A
Star One C2 – 2008-018B
TianLian 1 – 2008-019A
GIOVE-B – 2008-020A
CartoSat 2A – 2008-021A
CAN-X6 – 2008-021B
Cute 1.7 + APD II – 2008-021C
IMS-1 – 2008-021D
Compass-1 – 2008-021E
AAUSat-2 – 2008-021F
Delfi-C3 – 2008-021G
CAN-X2 – 2008-021H
SEEDS 2 – 2008-021J
Amos-3 – 2008-022A
Galaxy 18 – 2008-024A
Yubileiny – 2008-025A

Cosmos 2437 – 2008-025A
Cosmos 2438 – 2008-025B
Cosmos 2439 – 2008-025C
Fengyun 3A – 2008-026A
Zhongxing 9 – 2008-028A
GLAST – 2008-029A
Skynet 5C – 2008-030A
Turksat 3A – 2008-030B
Orbcomm QL1 – 2008-031A
Orbcomm QL2 – 2008-031B
Orbcomm QL3 – 2008-031C
Orbcomm QL4 – 2008-031D
Orbcomm QL5 – 2008-031E
Orbcomm CDS 3-1 – 2008-031F
Jason 2 – 2008-032A
Cosmos 2440 – 2008-033A

Satellites Removed:

ATS-3 – 1967-111A
SBS-6 – 1990-091A
SB-WASS 2-2 (USA 74) – 1991-076C
SB-WASS 2-2 (USA 76) – 1991-076D
SB-WASS 2-2 (USA 77) – 1991-076E
Navstar GPS 32 – 1992-079A
Navstar GPS 29 – 1992-089A
Navstar GPS 37 – 1993-032A
Polar – 1996-013A
SB-WASS 2-3 (USA 121) – 1996-029C
SB-WASS 2-3 (USA 119) – 1996-029D
SB-WASS 2-3 (USA 120) – 1996-029E
Skynet 4D – 1998-002A
Thuraya 1 – 2000-066A
CHIPSat – 2003-002B
EORSAT (Cosmos 2421) – 2006-026A
AMC-14 – 2008-011A

Changes to the April 7, 2008 release of the UCS Satellite Database
This version of the database includes launches through April 1, 2008

The changes to this version of the database include:

- The addition of 10 satellites
- The deletion of 9 inactive satellites
- The addition of a column denoting the longitude for GEO satellites

- The addition of and corrections to some satellite data

Satellites Added:

Thuraya 3 – 2008-001A
TecSAR – 2008-002A
Express AM-33 – 2008-003A
Thor 2R – 2008-006A
Kizuna (WINDS – 2008-007A
NROL-28 (USA 200) – 2008-010A
AMC 14 – 2008-011A
Navstar GPS 48 – 2008-012A
DirectTV-11 – 2008-013A
SAR-Lupe 4 – 2008-014A

Satellites Deleted:

Kompsat-1 – 1999-070A
CHAMP – 2000-039B
Glonass-789 – 2001-053B
Fedsat – 2002-056B
Glonass-792 – 2002-060B
Quakesat – 2003-031F
Glonass-798 – 2005-050C
Tacsat-2 – 2006-058A
CP-3 – 2007-012M

Changes to the January 7, 2008 release of the UCS Satellite Database

This version of the database includes launches through December 31, 2007

The changes to this version of the database include:

- The addition of 28 satellites
- The deletion of 11 inactive satellites
- The addition of and corrections to some satellite data

Satellites Added:

Optus D2 (2007-044A)
Intelsat 11 (2007-044B)
WGS F1 [USA 195] (2007-046A)
Navstar GPS 55 [GPS 2R-17, USA 196] (2007-047A)
Globalstar MO67 (2007-048A)
Globalstar MO70 (2007-048B)
Globalstar MO66 (2007-048C)
Globalstar MO68 (2007-048D)
US-KS Oko 88 [Cosmos 2430] (2007-049A)
Glonass 718 [Cosmos 2431] (2007-052A)
Glonass 719 [Cosmos 2432] (2007-052B)

Glonass 720 [Cosmos 2433] (2007-052C)
SAR-Lupe 3 (2007-053A)
DSP-23 [USA 197] (2007-054A)
Yaogan 3 (2007-055A)
Star One C1 (2007-056A)
Skynet 5B (2007-056B)
Sirius 4 (2007-057A)
Raduga 1-8 [Cosmos 2434] (2007-058A)
COSMO-Skymed 2 (2007-059A)
SDS III-6 [NROL-24, Scorpius, USA 198] (2007-060A)
Radarsat-2 (2007-061A)
Navstar GPS 57 [GPS 2R-18, USA 199] (2007-062A)
RASCOM-QAF 1 (2007-063A)
Horizons 2 (2007-063B)
Glonass 721 [Cosmos 2435] (2007-065A)
Glonass 722 [Cosmos 2436] (2007-065B)
Glonass 723 [Cosmos 2437] (2007-065C)

Satellites Deleted:

NATO-4A (1991-001A)
DirecTV-2 [Nimiq 4i] (1994-047A)
FUSE (1999-035A)
Molniya 3-49 (1998-040A)
Molniya 3-50 (1999-036A)
Tselina-2 [Cosmos 2369] (2000-006A)
Molniya 3-51 (2001-030A)
Nadezhda-6 [COSPAS-9] (2000-033A)
HETE-2 (2000-061A)
Molniya 3-52 (2001-050A)
Double Star 1 [TC-1] (2003-061A)

Changes to the September 27, 2007 release of the UCS Satellite Database

This version of the database includes launches through September 25, 2007

The changes to this version of the database include:

- The addition of 12 satellites
- The deletion of 14 inactive satellites
- The addition of and corrections to some satellite data

Satellites Added:

SB-WASS 3-4 [USA 194, NRO L30] (2007-027A)
SB-WASS 3-4 [USA 194, NRO L30] (2007-027C)
Cosmos-2428 (2007-029A)

SAR-Lupe 2 (2007-030A)
ChinaSat 6B (2007-031A)
DirecTV 10 (2007-032A)
Spaceway-3 (2007-036A)
BSAT-3A (2007-036B)
INSAT-4CR (2007-037A)
Parus-97 [Cosmos 2429] (2007-038A)
Worldview 1 (2007-041A)
CBERS-2B (2007-042A)

Satellites Deleted:

GOES-7 [GOES-H] (1987-022A)
NOAA-12 (1991-032A)
Gorizont-37 [Gorizont 26] (1992-043A)
GOES-9 [GOES-J] (1995-025A)
JAS-2 [Fuji-Oscar 29] (1996-046B)
HALCA (1997-005A)
IMAGE (2000-017A)
Orbview-3 (2003-030A)
Gravity Probe B (2004-014A)
HitSat (2006-041D)
NextSat (2007-006C)
Orbital Express 1A (2007-006A)
Libertad-1 (2007-012N)
Cosmos-2427 [Kobalt M] (2007-022A)

Changes to the April 9, 2007 release of the UCS Satellite Database

This version of the database includes launches through April 6, 2007

The changes to this version of the database include:

- The addition of 18 satellites
- The deletion of 16 inactive satellites
- The addition of and corrections to some satellite data

Satellites Added:

LAPAN-Tubsat (2007-001A)
CartoSat 2A (2007-001B)
PehuenSat 1 (2007-001D)
THEMIS 1 (2007-004A)
THEMIS 2 (2007-004B)
THEMIS 3 (2007-004C)
THEMIS 4 (2007-004D)
THEMIS 5 (2007-004E)
IGS 3B (2007-005A)
IGS 4A (2007-005B)

ASTRO [part of Orbital Express] (2007-006A)
MIDStar 1 (2007-006B)
NextSat/CSC [part of Orbital Express] (2007-006C)
STPSat-1 (2007-006D)
FalconSat 3 (2007-006E)
CFESat (2007-006F)
INSAT-4B (2007-007A)
Skynet-5A (2007-007B)

Satellites Deleted:

Navstar GPS 15 (1990-088A)
Gorizont 36 (1992-017A)
Optus B1 (1992-054A)
Satcom-C4 (1992-057A)
DMSP F12 (1994-057A)
JCSat 3 (1995-043A)
Thaicom-3 (1997-016A)
Iridium 36 (1997-056C)
Sapphire (2001-043D)
Cosmos 2388 (2002-017A)
IGS-1B (2003-009B)
Streak [STP-R1] (2005-037A)
Cute-1.7 (2006-005C)
Space Technology 5A (2006-008A)
Space Technology 5B (2006-008B)
Space Technology 5C (2006-008C)

Changes to the January 4, 2007 release of the UCS Satellite Database

This version of the database includes launches through December 27, 2006

The changes to this version of the database include:

- The addition of 27 satellites
- The deletion of 11 inactive satellites
- The addition of and corrections to some satellite data

Satellites Added:

IGS-3A (Information Gathering Satellite 3A) – 2006-037A
Zhongxing 22A – 2006-038A
Hinode (Solar B) – 2006-041A
HitSat (Oscar 59) – 2006-041B
Navstar 52 (USA 190) – 2006-042A
DirecTV-9S – 2006-043A
Optus D1 – 2006-043B
MetOp-A – 2006-044A
Shijian 6C – 2006-046A

Shijian 6D – 2006-046B
XM-4 – 2006-049A
DMSP 5D-3 F17 (USA 191) – 2006-050A
Arabsat 4B – 2006-051A
Navstar 58 (USA 192) – 2006-052A
Fengyun-2D – 2006-053A
WildBlue-1 – 2006-054A
Americom-18 – 2006-054B
Measat-3 – 2006-056A
NROL-21 (USA 193) – 2006-057A
TacSat-2 – 2006-058A
GeneSat-1 – 2006-058B
SAR-Lupe 1 – 2006-060A
Meridian 1 – 2006-061A
Glonass (Cosmos 2424) – 2006-062A
Glonass (Cosmos 2425) – 2006-062B
Glonass (Cosmos 2426) – 2006-062C
CoRoT (Convection, Rotation des Étoiles et Transits des Planètes Extrasolaires) – 2006-063A

Satellites Deleted:

Intelsat 604 – 1990-056A
UoSAT-5 (Oscar 22) – 1991-050B
Hispasat 1B – 1993-048A
Amrad (Oscar 27) – 1993-061C
N Star A – 1995-044A
DirecTV-6 (Tempo 2) – 1997-011A
Techsat 1B (Oscar 32) – 1998-043D
Raduga 1-6 (Globus) – 2001-045A
Tiungsat-1 (Oscar 46) – 2000-057A
MicroLabSat – 2002-056D
Shenzhou 6 – 2005-040A

Changes to the September 21, 2006 release of the UCS Satellite Database

This version of the database includes launches through September 10, 2006

The changes to this version of the database include:

- The addition of 14 satellites
- The deletion of 7 inactive satellites
- The addition of and corrections to some satellite data

Satellites Added:

Resurs DK-1 – 2006-021A
KazSat 1 – 2006-022A

Galaxy 16 – 2006-023A
MITEX (Micro-Satellite Technology Experiment, USA 187) – 2006-024A
MITEX (Micro-Satellite Technology Experiment, USA 188) – 2006 -024B
EORSAT (Cosmos 2421) – 2006-026A
NROL-22 (USA 184) – 2006-027A
Genesis-1 – 2006-029A
Oko-87 (Cosmos 2422) – 2006-030A
Kompsat 2 – 2006-031A
Hot Bird 8 – 2006-032A
JCSat 10 – 2006-033A
Syracuse 3B – 2006-033B
KoreaSat 5 – 2006-034A

Satellites Deleted:

Astra-1B – 1991-015A
Eutelsat II-F2 – 1991-003B
Nadezhda 1 (COSPAS 4) – 1989-050a
Kobalt-M (Cosmos 2420) – 2006-017A
Galaxy 1R – 1994-013A
Esiafi-1 – 1981-018A
Raduga 1-4 – 1999-010A

Changes to the June 19, 2006 release of the UCS Satellite Database
This version of the database includes launches through June 15, 2006.

The changes to this version of the database include:

- The addition of 19 satellites
- The deletion of 14 inactive satellites
- The addition of and corrections to some satellite data

We have also added a tab-delimited text version in which the “Name” column contains only the official name of the satellite in the case of government and military satellites, and the most commonly used name in the case of commercial and civil satellites. This file is called “UCS_Satellite_Database_officialname_6-19-06.txt”.

And we have added some supporting materials which can be accessed from http://ucsusa.org/satellite_database : 1) this document listing the changes to the database, including the names of the satellites added and deleted, and 2) a brief note addressing some of the common misconceptions about the database and its contents.

Satellites Added:

Space Technology 5-A (ST5-A) - 2006-008A
Space Technology 5-B (ST5-B) - 2006-008B

Space Technology 5-C (ST5-C) - 2006-008C
JCSAT 9 – 2006-010A
COSMIC-A – 2006-011A
COSMIC-B – 2006-011B
COSMIC-C – 2006-011C
COSMIC-D – 2006-011D
COSMIC-E – 2006-011E
COSMIC-F – 2006-011F
Astra 1KR – 2006-012A
EROS B-1 – 2006-014A
Remote Sensing Satellite 1 (RSS 1) - 2006-015A
CloudSat – 2006-016A
Calipso – 2006-016B
Cosmos 2420 (Kobalt-M) – 2006-017A
GOES 13 – 2006-018A
SatMex 6 – 2006-020A
Thaicom 5 – 2006-020B

Satellites Deleted:

Anik E-1 (Telesat 11) - 1991-067A
Anik E-2 (Telesat 10) - 1991-026A
DSCS III-F4 (DSCS III A-2, USA 44) – 1989-069B
DSCS III-FT (DSCS III B-14, USA 78) – 1992-006A
EORSAT (Cosmos 2405) - 2004-020A
Eutelsat-II F-3 - 1991-083A
Express AM11 – 2004-015A
Gonets D1-8 (Cosmos 2385) – 2001-058B
Gorizont-43 - 1996-005A
Inmarsat 2-F3 - 1991-084B
Newsat-1 (Palapa B2R) - 1990-034A
Spacenet-4 - 1991-028A
Telecom 2A - 1991-084A
UFO-3 (USA 104) – 1994-035A

Changes to the March 17, 2006 release of the UCS Satellite Database

This version of the database includes launches through March 11, 2006.

The new file is named “UCS_Satellite_Database_3-17-06.xls”. In addition, we have posted a tab-delimited text version of the data, named “UCS_Satellite_Database_3-17-06.txt” that can be used in other database programs.

The changes to this version of the database include:

- The addition of 19 satellites
- The deletion of 15 inactive satellites
- The addition of and corrections to some satellite data

- The addition of a column giving the eccentricity of the satellite's orbit
- The addition of our definition of “active” satellites to the User Guide