

### **For January 1, 2012 release**

This version of the database includes satellites launched through December 31, 2011.

The changes to this version of the database include:

- The addition (or re-addition) of 53 satellites
- The deletion of 33 satellites
- The addition of and corrections to some satellite data.

### **Satellites Added**

Chinasat 1A – 2011-047A  
Garpun-1 (Cosmos 2473) – 2011-048A  
SES-2 -- 2011-049A  
Arabsat-5C -- 2011-049B  
IGS-Optical 4 – 2011-050A  
Atlantic Bird 7 – 2011-051A  
TacSat-4 – 2011-052A  
Tiangong-1 – 2011-053A  
QuetzSat-1 – 2011-054A  
Glonass 742 (Cosmos 2474) – 2011-055A  
Intelsat 18 – 2011-056A  
Eutelsat W3C – 2011-057A  
Megha-Tropiques – 2011-058A  
Jugnu – 2011-058B  
Vesselsat-1 – 2011-058C  
SRMSat – 2011-058D  
Viasat-1 – 2011-059A  
Galileo IOV-1 PFM – 2011-060A  
Galileo IOV-1 FM2 – 2011-060B  
NPP – 2011-061A  
Glonass-743 (Cosmos 2476) – 2011-064A  
Glonass 744 (Cosmos 2477) – 2011-064B  
Glonass 745 (Cosmos 2475) – 2011-064C  
Tian Xun-1 – 2011-066A  
Yaogan-12 – 2011-066B  
Chuangxin 3 – 2011-068A  
Shiyan-4 – 2011-068B  
AsiaSat-7 – 2011-069A  
Glonass 746 (Cosmos 2478) – 2011-071A  
Yaogan-13 – 2011-072A  
Compass-G10 -- 2011-073A

Amos 5 – 2011-074A  
Luch-5A – 2011-074B  
IGS-7A – 2011-075A  
ELISA-W23 – 2011-076A  
ELISA- E12 – 2011-076B  
ELISA-24 – 2011-076C  
ELISA-11 – 2011-076D  
SSOT – 2011-076E  
Pléiades HR1 – 2011-076F  
NigComSat-1R – 2011-077A  
Ziyuan-1-2C – 2011-079A  
Globalstar 2-13 MO84 – 2011-080A  
Globalstar 2-14 MO80 – 2011-080B  
Globalstar 2-15 MO82 – 2011-080C  
Globalstar 2-16 MO92 – 2011-080D  
Globalstar 2-17 MO90 – 2011-080E  
Globalstar 2-18 MO86 – 2011-080F

#### **Satellites Returned to Database Based on New Information**

Measat-2 – 1996-063B  
SCD-1 – 1993-009B  
Iridium 51 – 1998-018A  
Orbcomm FM-31  
Orbcomm FM-32

#### **Notes:**

Measat-2 – 1996-063B [Kuala Lumpur, 18 September 2011 – MEASAT Satellite Systems Sdn. Bhd. (“MEASAT”) announced today that MEASAT-2 had been successfully brought back into operational service at 148°E.

SCD-1 – 1993-009B: Although functioning on a very limited level, this satellite is still gathering data.

#### **Satellites Removed from Database for January 1, 2012 Release**

FLTSATCOM-7 (USA 20) – 1986-096A  
INMARSAT 2F1 – 1990-093A  
GPS Navstar II-11 SVN-24 (USA 71) – 1991-047A  
Intelsat 601 – 1991-075A  
Asiasat-2 – 1995-064A  
Iridium 26 – 1997-043A  
IRS-1D – 1997-057A  
Sirius 3 – 1998-056B  
INSAT 3B – 2000-016B  
Geizer 11 (Cosmos 2371) – 2000-036A  
Ekran-M1 – 2001-014A

STSat-1 – 2003-042G  
Naxing-1 – 2004-012B  
ChinaSat-20 – 2003-052A  
DEMETER – 2004-025C  
Double Star-2 – 2004-029A  
GSAT-3 – 2004-036A  
ESSAIM-1 – 2004-049C  
ESSAIM-2 – 2004-049D  
ESSAIM-3 – 2004-049E  
ESSAIM-4 – 2004-049F  
Gonets D1M – 2005-048A  
COSMIC-C – 2006-011C  
MIDstar-1 – 2007-006B  
IGS-4B – 2007-005B  
Egyptsat-1 – 2007-012A  
Koronas-Foton – 2009-003A  
Sterkh-1 – 2009-039B  
Sterkh-2 – 2009-049B  
Tatiana-2 – 2009-049D  
Ugatusat – 2009-049E  
SERVIS – 2010-023A  
Kobalt-M (Cosmos 2472) – 2011-028A

---

---

### **For September 1, 2011 release**

This version of the database includes satellites launched through August 31, 2011.

The changes to this version of the database include:

- The addition of 35 satellites
- The deletion of 26 satellites
- The addition of and corrections to some satellite data.

There is unusually large number of deletions in this update. We were recently able to confirm that 19 Globalstar satellites are being moved or have been moved to disposal orbits.

### **Satellites Added**

Meridian 4 – 2011-018A  
SBIRS GEO 1 (USA 230) – 2011-019A  
Telstar 14R – 2011-021A  
GSAT 8 – 2011-022A  
ST 2 – 2011-022B  
SAC-D – 2011-024A  
Chinasat 10 – 2011-026A  
Kobalt-M (Cosmos 2472) – 2011-028A  
ORS 1 (USA 231) – 2011-029A

Shijian 11-03 – 2011-030A  
TianLian I-02 – 2011-032A  
Globalstar M081 – 2011-033E  
Globalstar M083 – 2011-033A  
Globalstar M085 – 2011-033D  
Globalstar M088 – 2011-033B  
Globalstar M089 – 2011-033F  
Globalstar M091 – 2011-033C  
GSAT 12 – 2011-034A  
SES 3 – 2011-035A  
Kazsat 2 – 2011-035B  
Navstar GPS IIF-2 (USA 232) – 2011-036A  
Spektr-R/RadioAstron – 2011-037A  
Compass IG4 – 2011-038A  
Shijian 11-02 – 2011-039A  
Astra 1N – 2011-041A  
BSAT 3c/JCSat 110-R – 2011-041B  
PakSat-1R – 2011-042A  
HaiYang 2A – 2011-043A  
EduSAT – 2011-044A  
NigeriaSat 2 – 2011-044B  
NigeriaSat-X – 2011-044C  
RASAT – 2011-044D  
AprizeSat-5 – 2011-044E  
AprizeSat-6 – 2011-044F  
Sich-2 – 2011-044G

### **Satellites Removed**

Intelsat 705 – 1995-013A  
ERS-2 – 1995-021A  
Intelsat-3R – 1996-002A  
GPS-30 (USA 128) – 1996-056A  
Echostar 4 – 1998-028A  
Globalstar M003 – 1998-003D  
Globalstar M008 – 1998-023D  
Globalstar M036 – 1999-004C  
Globalstar M022 – 1999-012A  
Globalstar M041 – 1999-012B  
Globalstar M046 – 1999-012C  
Globalstar M019 – 1999-019B  
Globalstar M044 – 1999-019C  
Globalstar M042 – 1999-019D  
Globalstar M043 – 1999-041C  
Globalstar M024 – 1999-043A  
Globalstar M053 – 1999-043D  
Globalstar M058 – 1999-049A

Globalstar M050 – 1999-049B  
Globalstar M055 – 1999-049D  
Globalstar M057 – 1999-058A  
Globalstar M034 – 1999-062B  
Globalstar M062 – 2000-008B  
Globalstar M060 – 2000-008C  
GPS-49 (USA 203) – 2009-014A  
WISE – 2009-071A

---

---

### **Satellites Added and Deleted for May 1, 2011 release**

This version of the database includes satellites launched through April 30, 2011.

The changes to this version of the database include:

- The addition of 12 satellites
- The deletion of 5 satellites
- The addition of and corrections to some satellite data.

### **Satellites Added**

Rapid Pathfinder Program (USA 225) – 2011-006A  
Glonass 701 (Cosmos 2471) – 2011-009A  
X-37B Orbital Test Vehicle-2 (USA 226) – 2011-010A  
SDS III-6 (USA 227) – 2011-011A  
Compass G-8 (Beidou IGSO-3) – 2011-013A  
SB-WASS 3-5 (USA 229) – 2011-014A  
SB-WASS 3-5 (USA 229) – 2011-014B  
Resourcesat 2 – 2011-015A  
YouthSat – 2011-015B  
X-Sat – 2011-015C  
Intelsat New Dawn – 2011-016A  
Yahsat 1A – 2011-016B

Additionally, Galaxy 15 was returned to the database after its jaunt through space.

### **Satellites Removed**

Satcom-C3 – 1992-060B  
Meteosat-6 -- 1993-073B  
Nahuel 1 – 1997-002B  
ALOS (Daichi) -- 2006-002A  
Insat-4CR – 2007-037A

---

---

## **Satellites Added and Deleted for February 1, 2011 release**

This version of the database includes satellites launched through January 31, 2011.

The changes to this version of the database include:

- The addition of 19 satellites
- The deletion of 18 satellites
- The addition of and corrections to some satellite data. We undertook a thorough look to make sure the NORAD numbers and satellite names still correctly corresponded, since some satellites get renamed after launch and some confusion can result during multiple launches and in constellations. A number of changes were made to the COSMOS/GLONASS satellites, the GLOBALSTAR satellites, the GONETS and STRELA series. More variations were added to the “Additional names” column in a number of cases.

### **Satellites Added**

(December 2010 saw the launch of numerous nanosats/cubesats: Perseus 0-3, QBX1-2, Mayflower, SMDC ONE, Dragon C1. These satellites had all deorbited by the time of this release.)

Meridian 3 – 2010-058A  
Fengyun 3B – 2010-059A  
Skymed 4 – 2010-060A  
SkyTerra 1 – 2010-061A  
STPSAT 2 (USA 217) – 2010-062A  
RAX (USA 218) – 2010-062B  
O/OREOS (USA 219) – 2010-062C  
FalconSat 5 (USA 221) – 2010-062E  
FAST 1 (USA 222) – 2010-062F  
USA 223 – 2010-063A  
Zhongxing 20A – 2010-064A  
HYLAS 1 – 2010-065A  
Intelsat 17 – 2010-065B  
Compass Beidou IGSO 2 – 2010-068A  
KA-SAT – 2010-069A  
Hispasat 1E – 2010-070A  
Koreasat 6 – 2010-070B  
Electro-L1 – 2011-001A  
USA 224 (NRO L49) – 2011-002A

### **Satellites Removed**

Intelsat-2 – 1994-040A  
Oceansat-1 (IPS P4) – 1999-029C  
Globalstar M49 – 1999-031B

QuikSCAT – 1999-034A  
Globalstar M51 – 1999-037D  
Globalstar M48 – 1999-0411D  
MTI (Multispectral Thermal Imager) – 2000-014A  
WMAP – 2001-027A  
Alsat-1 – 2002-054A  
FY-2C – 2004-042A  
Kirari (OICETS) – 2005-031A  
Orbcomm QL1 – 2008-031A  
Orbcomm QL3 – 2008-031C  
Orbcomm CDS – 2008-031F  
Aerocube-3 – 2009-028E  
Meridian-2 – 2009-029A  
X-37B (OTV-1) – 2010-015A  
SDS-1 – 2009-002C

---

---

### **Satellites Added and Deleted for November 1, 2010 release**

This version of the database includes satellites launched through November 1, 2010.

The changes to this version of the database include:

- The addition of 37 satellites
- The deletion of 24 satellites
- The addition of and corrections to some satellite data, in particular correcting the association of satellite ID number with the names of some of the large constellation (ORBCOMM, Iridium, Globalstar) satellites
- The addition of a link to the What's Up? tool. This database, developed by our colleague Wang Ting, combines information from the U.S. Space Track catalog and the UCS Satellite Database and presents it visually in Google Earth.  
<http://wangting.org/whatsup/> .

### **Satellites Added**

Echostar 15 – 2010-034A  
Cartosat 2B – 2010-035A  
STUDSat – 2010-035B  
AISSat 1 – 2010-035C  
Alsat 2A – 2010-035D  
TISat 1 – 2010-035E  
Compass IGSO-1 – 2010-036A  
Nilesat 201 – 2010-037A  
Rascom QAF 1 R – 2010-037B  
Yaogan 10 – 2010-038A  
AEHF 1 (USA 214) – 2010-039A

Tianhui 1 – 2010-040A  
Glonass 736 (Cosmos 2464) – 2010-041A  
Glonass 737 (Cosmos 2465) – 2010-041B  
Glonass 738 (Cosmos 2466) – 2010-041C  
Sinosat 6A (Chinasat 6A) – 2010-042A  
Strela-3 (Cosmos 2467) – 2010-043A  
Strela-3 (Cosmos 2468) – 2010-043B  
Gonets-M – 2010-043C  
QZS 1 (Michibiki) – 2010-045A  
FIA Radar 1 (USA 215) – 2010-046A  
Yaogan 11 – 2010-047A  
XP-1A – 2010-047B  
XP-1B – 2010-047C  
SBSS (USA 216) – 2010-048A  
US-KS 0ko (Cosmos 2469) – 2010-049A  
Shijian 6G -- 2010-050A  
Shijian 6H – 2010-050B  
Sirius-XM5 – 2010-053A  
Globalstar MO79 – 2010-054A  
Globalstar MO74 – 2010-054B  
Globalstar MO76 – 2010-054C  
Globalstar MO77 – 2010-054D  
Globalstar MO75 – 2010-054E  
Globalstar MO73 – 2010-054F  
BSAT-3B – 2010-056B  
Compass-G4 (Beidou G4) – 2010-057A

### **Satellites Removed from Database**

Trumpet-1 (USA 103) – 1994-026A  
Trumpet-2 (USA 112) – 1995-034A  
Keyhole 1 (USA 116) – 1995-066A  
Measat-2 – 1996-063B  
BSAT-1A – 1997-016B  
Intelsat-802 – 1997-031A  
TRACE – 1998-020A  
Yamal-102 – 1999-047B  
Jian Bing 3A – 2000-050A  
Prognoz-13 (Cosmos 2379) – 2001-037A  
CBERS-2 – 2003-049A  
Genesat-1 – 2006-058C  
US-KS Oko-87 (Cosmos 2422) – 2006-030A  
THEMIS-B – 2007-004B  
THEMIS-C – 2007-004C  
IGS-3B – 2007-005A  
Zheda Pixing – 2007-019B

CBERS-2B – 2007-042A  
Rascom QAF-1 – 2007-063A  
Prognoz (Cosmos 2440) – 2008-033A  
Pharmasat – 2009-028B  
Ande-Castor – 2009-038F  
Ande-Pollux – 2009-038E  
Kobalt-M (Cosmos 2462) – 2010-014A

---

### **Satellites Added and Deleted for July 1, 2010 release**

This version of the database includes satellites launched through July 1, 2010.

The changes to this version of the database include:

- The addition of 18 satellites
- The deletion of 4 satellites
- The addition of and corrections to some satellite data

### **Satellites Added**

Cryosat-2 – 2010-013A  
Kobalt-M [Cosmos 2462] – 2010-014A  
X-37B OTV-1 [USA 212) – 2010-015A  
SES 1 – 2010-016A  
Parus-99 [Cosmos 2463] – 2010-017A  
Astra 3B – 2010-021A  
ComsatBw-2 – 2010-021B  
Navstar GPS 62 [USA 213] – 2010-022A  
SERVIS 2 – 2010-023A  
Compass G-3 – 2010-024A  
Arabsat 5B – 2010-025A  
Shijian-12 – 2010-027A  
Picard – 2010-028A  
PRISMA – 2010-028B  
TanDEM-X – 2010-030A  
Ofeq 9 – 2010-031A  
COMS-1 – 2010-032A  
Arabsat 5A – 2010-032B

### **Satellites Removed**

LES-9 – 1976-023B  
Galaxy-9 -- 1996-033A  
SERVIS-1 – 2003-050A  
Galaxy-15 – 2005-041A

---

### **Satellites Added and Deleted for April 1, 2010 release**

This version of the database includes satellites launched through April 1, 2010.

The changes to this version of the database include:

- The addition of 12 satellites
- The deletion of 10 satellites
- The addition of and corrections to some satellite data

#### **Satellites Added**

Beidou 3 – 2010-001A  
Raduga 1M – 2010-002A  
SDO (Solar Dynamics Observatory) – 2010-005A  
Intelsat 16 – 2010-006A  
Glonass 731 [Cosmos 2459] – 2010-007A  
Glonass 735 [Cosmos 2461] – 2010-007B  
Glonass 732 [Cosmos 2460] – 2010-007C  
GOES-15 [GOES-P] – 2010-008A  
Yaogan 9A – 2010-009A  
Yaogan 9B – 2010-009B  
Yaogan 9C – 2010-009C  
Echostar 14 – 2010-010A

#### **Satellites Removed**

Thaicom-1A – 1993-078B  
Intelsat-4 – 1995-040A  
Eutelsat W2 – 1998-056A  
Raduga 1-5 [Cosmos 2372] – 2000-049A  
IceSat – 2003-002A  
Raduga 1-7 [Cosmos 2406] – 2004-010A  
Glonass 713 [Cosmos 2418) – 2005-050B  
Yaogan-1 – 2006-015A  
CAPE-1 – 2007-012P  
Beidou-2 [Compass G2] – 2009-018A

---

### **Satellites Added and Deleted for January 1, 2010 release**

This version of the database includes satellites launched through January 1, 2010.

The changes to this version of the database include:

- The addition of 24 satellites
- The deletion of 17 satellites
- The addition of and corrections to some satellite data

## **Satellites Added**

Amazonas 2 – 2009-054A  
COMSATBW 1 – 2009-054B  
Worldview 2 – 2009-055A  
DMSP 5D-3 F18 [USA 210] – 2009-057A  
NSS 12 – 2009-058A  
Thor 6 – 2009-058B  
SMOS – 2009-059A  
PROBA 2 – 2009-059B  
Shijian 11-01 – 2009-061A  
Lotos-S [Cosmos 2455] – 2009-063A  
Intelsat 14 – 2009-064A  
Eutelsat W7 – 2009-065A  
IGS 5A – 2009-066A  
Intelsat 15 – 2009-067A  
WGS F3 [USA 211] – 2009-068A  
Yaogan 7 – 2009-069A  
Glonass 730 [Cosmos 2456] – 2009-070A  
Glonass 733 [Cosmos 2457] – 2009-070B  
Glonass 734 [Cosmos 2458] – 2009-070C  
WISE – 2009-071A  
Yaogan 8 – 2009-072A  
Xi Wang 1 – 2009-072B  
Helios 2B – 2009-073A  
DirecTV 12 – 2009-075A

## **Satellites Removed**

Superbird A1 – 1992-084A  
Intelsat 704 – 1995-001A  
Telecom 2C – 1995-067A  
GOES-10 [GOES-K] – 1997-019A  
Globalstar FM-32 – 1999-037A  
Clémentine – 1999-064B  
Express-A3 – 2000-031A  
Glonass-701 [Cosmos 2404] – 2003-056C  
STPSat-1 – 2007-006D  
Orbcomm QL2 – 2008-031B  
Orbcomm QL5 – 2008-031E  
Orbcomm CDS 3-1 – 2008-031F  
Kagayaki – 2009-002D  
Kukai – 2009-002G  
SpriteSAT – 2009-002F  
KKS-1 – 2009-002H  
UWE-2 – 2009-051B

---

## **Changes to the October 1, 2009 release of the UCS Satellite Database**

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

The changes to this version of the database include:

- The addition of 34 satellites
- The deletion of 18 satellites
- The addition of and corrections to some satellite data

### **Satellites Added:**

TerreStar 1 – 2009-035A  
Rodnik-5 [Cosmos 2451] – 2009-036A  
Rodnik-6 [Cosmos 2452] – 2009-036B  
Rodnik-7 [Cosmos 2453] – 2009-036C  
RazakSat – 2009-037A  
ANDE Pollux – 2009-038E  
ANDE Castor – 2009-038F  
Parus-98 [Cosmos 2454] – 2009-039A  
Sterkh-1 – 2009-039B  
Deimos 1 – 2009-041A  
DubaiSat 1 – 2009-041B  
UK-DMC-2 – 2009-041C  
AprizeSat-4 -- 2009-041D  
Nanosat-1 – 2009-041E  
AprizeSat-5 – 2009-041F  
AsiaSat 5 – 2009-042A  
Navstar GPS 50 [USA 206] – 2009-043A  
JCSAT-12 – 2009-044A  
Optus D3 – 2009-044B  
Palapa D – 2009-046A  
PAN-1 [USA 207] – 2009-047A  
Meteor-M – 2009-049A  
Sterkh-2 – 2009-049B  
Tatiana 2 – 2009-049D  
UGATUSAT – 2009-049E  
SumbandilaSat – 2009-049F  
Nimiq 5 – 2009-050A  
Oceansat-2 – 2009-051A  
BeeSat – 2009-051B  
UWE 2 – 2009-051C  
SwissCube – 2009-051D  
ITU-pSAT1 – 2009-051E  
STSS Demo 1 [USA 208] – 2009-052A  
STSS Demo 2 [USA 209] – 2009-052B

### **Satellites Removed:**

Spot 2 – 1990-005A  
Navstar GPS 25 [USA 79] – 1992-009A  
Wavsat-1 – 1993-061E  
Apstar-1 1994 -- 043A  
Optus-B3 --1994-055A  
Nimiq-3 [DirecTV-3] – 1995-029A  
Amos-1 – 1996-030B  
Apstar-1A -- 1996-039A  
Echostar-5 -- 1999-050A  
Wavsat-2 – 1999-021A  
Bilsat-1 – 2003-042E  
Glonass 795 [Cosmos 2403] – 2003-056B  
XSS-11 [USA 165] – 2005-011A  
Meridian-1 – 2006-061A  
Beidou-1D – 2007-003A  
Orbcomm QL4 -- 2008-031D  
Kobalt-M [Cosmos 2450] – 2009-022A  
CP-6 -- 2009-028D

---

### **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](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