## APPENDIX D: Polar Orbiter Archived TOVS Sounding Data Change and Problem Record

As a user you should be aware of the following when utilizing the data. When a problem has only a date corrected, the absence of a beginning date indicates that the problem was in the system from launch and all previous data were impacted.

Problem and Time Period that Data were Affected

January 1, 1979
TIROS-N data available. Experimental tropopause temperature and pressure. All data affected. Experimental total ozone. All data affected.

March 2, 1979 - March 16, 1979
Abnormally high number of cloudy (lower quality) retrievals.

January 1, 1979 - January 17, 1979; March 1, 1979 - April 11, 1979
Larger than normal errors in 100-500 mb water vapor retrievals.

January 1, 1979- February 11, 1979; March 1, 1979 - April 22, 1979
Bad atmospheric temperatures above 115 mb in the regions 74N latitude poleward and 74S latitude poleward.

May 5, 1979
Warm bias in TOVS soundings in the 55 -70 S latitude region due to seasonal transition; coefficients adjusted and the bias eliminated.

July 13, 1979, 1200Z
Low level cloud contamination in TIROS-N clear soundings corrected.

July 1, 1979- August 3, 1979; July 13 1979 1500Z- 1700Z; July 24, 1979 1400Z - 1600Z; July 29, 1979 1300Z - 1500Z; August 1, 1979 0900Z - 1130Z
Some mislocated data resulting in erroneous soundings; specific orbits containing bad data.

August 22, 1979, 1100Z
Improved model for water vapor correction of TIROS-N HIRS/2 window channels implemented.

August 27 1979, 1800Z
Increased tape recorder overlap from 4.5 minutes to 5 minutes to eliminate Eastern Pacific data gap.

September 17, 1979, 1800Z
Increased tape recorder overlap from 5 minutes to 6 minutes to eliminate Eastern Pacific data gap.
September 18, 1979, 1300Z

Implemented brightness temperature interpolation error correction into TOVS retrieval module.

October 4, 1979
Improved water vapor attenuation coefficients for window channels for both TIROS-N and NOAA-6.

October 9, 1979
Adjusted TOVS preprocessor to improve surface temperature handling along coastlines.

October 14, 1979
Implemented change to preprocessor to compensate for TIROS-N channel 1 calibration problem. Products lost over weekend of October 14, 1979.

October 16, 1979, 1200Z
Began routine transmission of NOAA-6 data, doubling the number of soundings each day. NOAA-6 data above the 3 mb level is inconsistent with TIROS-N - use with caution.

October 16, 1979
Modified correction for TIROS-N HIRS/2 channel 1 problem in preprocessor.

November 5, 1979, 0713Z Orbit 5470
TIROS-N spacecraft switched from nominal attitude control mode to the yaw gyro compassing Mode. A maximum possible Earth location error of 70 km may have occurred for soundings located farthest from nadir during the problem period (November 5, 1979 - November 8, 1979).

November 8, 1979, 1523Z Orbit 5517
TIROS-N spacecraft switched from yaw gyro compassing mode to nominal attitude control mode.
November 19, 1979 - December 20, 1979
NOAA-6 soundings may be inconsistent with TIROS-N derived soundings due to coefficient tuning and should be used with caution. Table D-1 contains missing TIROS-N datasets due to hardware problems.

**Table D-1. Missing TIROS-N datasets between November 19 - December 20, 1979.**

| Date Start Time | Date End Time | Missing Minutes |
|---|---|---|
| November 23, 2054Z | November 23, 0203Z | 310 |
| November 24, 2035Z | November 24, 2219Z | 105 |
| November 25, 0156Z | November 25, 0334Z | 99 |
| November 25, 1538Z | November 25, 2359Z | 502 |
| November 26, 0328Z | November 26, 1521Z | 714 |
| November 27, 1516Z | November 27, 1652Z | 97 |
| November 27, 2001Z | November 28, 0449Z | 529 |
| November 28, 0642Z | November 28, 1321Z | 400 |
| November 28, 1505Z | November 28, 1807 | 183 |
| Total Amount of Missing Data: 2939 | | |

December 6, 1979
MSU Channel 3 removed from NOAA-6 processing by changing TARM and coefficients. Some quality reduction expected in cloudy soundings (those without water vapor data).

January 20, 1980, Orbit 6548
TIROS-N onboard computer failed; last processed data from TIROS-N.
TIROS-N January 23, 1980; NOAA-6 January 24, 1980
Special change for total ozone, SSU transmittances, limb corrections, and upper level temperature coefficients; suggested by Dr. Pick of U.K.

January 27, 1980 Orbit 6635
TIROS-N normal attitude control re-established.

January 29, 1980 Orbit 6674
Sounding instruments restarted.

January 30, 1980
Restarted TIROS-N processing but only for coefficient update; no products to the world.

February 13, 1980, 1200Z
Implemented screen for precipitating clouds in the case of 3rd path sea soundings; both TIROS-N and NOAA-6.

February 20, 1980
NOAA-6 data gaps due to hardware problems.

February 27, 1980, 1200Z
TIROS-N data again available (in addition to NOAA-6).

February 29, 1980
TIROS-N soundings were not being sent beginning this date.

March 2, 1980, 0400Z; March 4, 1980, 0000Z
NOAA-6 sounding mislocated; do not use.

March 25, 1980, 1200Z
TIROS-N sounding data again available.

April 4, 1980
Possible data gaps due to hardware problems.

May 5, 1980, 1600Z
Stopped TIROS-N processing.

June 10, 1980, 0950Z

Implemented new clear radiance algorithm (TARM2) (Improved cloud determination technique) to NOAA-6.

NOAA-6 June 23, 1980, 1300Z- June 24, 1980, 1800Z; TIROS-N June 23, 1980, 1200Z - June 24, 1980, 2300Z
No TOVS soundings processed due to hardware problems.

July 7, 1980
Due to nature of the sounding technique utilized, a degradation in the third path, cloudy soundings over sea areas in the 30 to 60 N latitude belt, especially during the winter and summer periods and primarily below 700 mb, has been noted.

July 10, 1980
TOVS preprocessor changed to include quality control of raw data and gross limits.

July 14, 1980
Reintroduced MSU Channel 3 for NOAA-6 and corrected the TIROS-N coefficient problem with excessive superadiabatic soundings.

July 15, 1980
Introduced corrected TARM2 module which includes a bad data protect feature and removal of the N* surface temperature check.

July 24, 1980
Updated NOAA-6 coefficients to correct oversight when reintroducing MSU Channel 3; coefficient changed - HIRS and MSU limb correction, water vapor attenuation, upper level temperature regression (normally never updated).

July 25, 1980, Orbit 5599
N. Phillips correction to NOAA-6 NMC third path soundings between 30 N and 60 N latitude over water became operational.

August 5, 1980, 1200Z
Began transmission of TIROS-N derived soundings (N. Phillips correction not included); data volume should be increased about 70% (not doubled because of onboard computer problems).

August 22, 1980, 2200Z - August 24, 1980, 0500Z
Some TIROS-N soundings mis-Earth located due to major spacecraft attitude problems.

August 28, 1980
N. Phillips correction applied to TIROS-N.

September 10, 1980, 1430 for NOAA-6; 1830 for TIROS-N
Empirical correction for MSU scan bias; both TIROS-N and NOAA-6.

September 24, 1980

Incorrectly Earth located TIROS-N soundings. 1825Z - September 25, 1980, 0400Z

October 27, 1980, Orbit 10509/10 for TIROS-N, Orbit 6936/37 for NOAA-6
Sporadic timing problem resulted in 256 second data gap in TOVS data sets.

October 31, 1980, 1538Z - 11/01/80, 2000Z
Yaw control problems for TIROS-N; Yaw errors were as large as 6.6 degrees.

November 3, 1980, 2147Z -
TIROS-N SSU out of sync and unusable.

November 20, 1980, 1952Z - November 21, 1980, 0926Z
NOAA-6 soundings lost due to calibration parameter input data problems.

November 24, 1980, 0600Z - November 25, 1980, 0600Z
Very bad Earth location for NOAA-6 (only some of the affected data transmitted).

December 31, 1980, 8 hours beginning about 0400Z
Missing Earth location data for both TIROS-N and NOAA-6.

January 13, 1981, 0800Z - 1000Z for TIROS-N, 0600Z - 1000Z for NOAA-6
Incorrect year (included as 1980).

January 5, 1981
Placed rainfall test into preprocessor for TIROS-N.

January 13, 1981
Removed rainfall test from TRET for TIROS-N.

January 26, 1981
Moved rainfall test from TRET to preprocessor for NOAA-6.

January 27, 1981, 1000Z - 01/28/81, 0800Z
TIROS-N orbit numbers "confused"; actual data not impacted.

February 17, 1981
Rainfall test corrected in preprocessor.

February 27, 1981, 1430 - 1600Z Orbit 12248
Severe attitude problems for TIROS-N; terminated as operational spacecraft.

March 5, 1981
Reintroduced screening of rainfall contaminated third path soundings in TRET.

March 26, 1981
MSU scan bias correction inadvertently removed from TOVS processing; reimplemented as of

March 26, 1981.

April 7, 1981, 1500Z
SATEM soundings (for 30N - 65N, oceanic, microwave only soundings) height values modified to remove a continental bias.

April 7, 1981
Changed procedure to determine superadiabatic retrievals in TRET; checked only mandatory levels; fewer products rejected.

April 9, 1981
Rainfall test moved from TRET to preprocessor.

April 9, 1981
Spring ozone coefficients copied into coefficient data base.

April 9, 1981 - April 20, 1981
Surface temperature test unintentionally removed; larger than normal errors in the sounding product below 700 mb may occur in a few cases.

May 4, 1981
Began interactive operational tests; lower quality soundings marked on archive.

June 10, 1981
Summer ozone coefficients introduced.

June 30, 1981
More maritime samples in the 30 to 60N latitude zone for coefficient tuning; also, interactively rejected soundings no longer allowed in the coefficient sample.

July 9, 1981
Skin Temperature no longer contains the observed Channel 8 value for clear and N* soundings. From this time parameter will always contain the first guess surface temperature from mapped internal field.

August 14, 1981
NOAA-7 soundings became operational and were added to the archive tapes.

September 18, 1981
The quality of NOAA-6 soundings was decreased due to increased noise from the August 28, 1981 AVHRR.

September 10, 1981
A change was made to utilize the sea surface temperature as a predictor for low level third path cloudy soundings over ocean.

October 21, 1981
Implementation of a new clear radiance test to better discriminate low level clouds. This change will reduce the number of N* retrievals and increase the third path, cloudy, soundings.

November 3, 1981
A change was made that inadvertently deleted all third path products below 100 mb over water.

November 8, 1981 - November 12, 1981
The problem from Nov. 3 was corrected. A small change to the coefficient system was made to improve the third path product over the Antarctic plateau.

November 28, 1981
Clear radiance module (TARM) and the retrieval module (TRET) were changed.

January 8, 1982
TARM2 (clear radiance) was changed to increase a limit for one of the clear window channel comparison tests in the 30 N - 30 S latitude region at night.

February 18, 1982
Coefficient change made which eliminated MSU channel 3 as a predictor for water vapor.

August 16, 1982
Radiance module (TARM2) was changed. The number of partly cloudy soundings (N*) will be reduced, and the number of cloudy soundings (third path) will increase by 3 to 4%.

October 1, 1982
Problems with the TOVS soundings over Antarctic, especially above 100 MB. The problem was caused by the annual spring (southern hemisphere) stratospheric warming.

November 17, 1982
The TOVS preprocessor was modified to compensate for an instrument mirror coating problem affecting channel 10 of the HIRS.

December 16, 1982-1458Z to December 17, 1982-1441Z
All soundings have bad information at all levels above 100 mb. The lower levels are good.

December 1, 1982 - January 4, 1983
There was a significant increase in the noise in channels 1 through 12 for the NOAA-6 satellite. By Jan. 4, the noise was back to normal.

December 2, 1982 - February 17, 1983
The percent of cloudy soundings from the NOAA-6 spacecraft increased from 35% to 50%. Noisy HIRS data and improper water vapor attenuation coefficients are causing the problem.

January 13, 1983
Channel 9 limb correction changed. It should only affect the ozone products.

January 27, 1983
A new scheme for determining the existence of water droplets in clouds was placed into the TOVS preprocessor.

February 17, 1983
Water vapor attenuation coefficients changed for NOAA-6.

March 2, 1983
New channel 9 coefficients implemented.

April 17, 1983 - June 19, 1983
Only 62% of the NOAA-6 data was processed due to the checkout of the new NOAA-8 spacecraft.
June 20, 1983
NOAA-6 sounding products terminated.

June 20, 1983
NOAA-8 became operational. Soundings on the archive tapes for this satellite will have a SAT ID of 3, but the Raw Level 1B data will have a SAT ID of 6.

August 5 (2019Z) to August 7, (0119Z) l983 for NOAA-7
August 5 (1918Z) to August 7, (0256Z) l983 for NOAA-8
Water and a power outage caused a shut down of the NESDIS computer. There were no TOVS data processed during the above periods.

September 1, 1983
SSU channel 2 turned off for NOAA-7. Recalculated the upper level temperature regression coefficients without using SSU channel 2 of NOAA-7. Use SSU Channel 2 data from NOAA-8 to replace failed NOAA-7 SSU channel 2.

September 8, 1983
The surface elevation file and land/sea tags were modified to reflect the Air Force topography data for the area between 85 - 60N Latitude and 70 and 14W Longitude.

September 15, 1983
SSU channel 3 data from NOAA-8 started showing increased noise. Some orbits of TOVS soundings are being produced without SSU data.

September 20, 1983
A new Greenland Elevation field and land/sea tags were implemented into the TOVS processing system.

September 26, 1983
A change was made in the SEL software to allow all SSU data to pass through to the TOVS processing system. SSU channel 3 still shows increased noise.

October 11, 1983
The HIRS channel 7 and 8 order test has been implemented in TARM 2. The new test will prevent bad spots from going into the $N^*$ estimation procedure. This procedure reduced the percentage of $N^*$ by 1%.

October 20, 1983
Subroutine HIR8LM was modified to limb correct the HIRS channels 8 and 10 used in the water vapor attenuation correction of channel 8.

November 8, 1983
Subroutine NEARRS, which calculates distances between RAOBS and retrievals, had an error when computing longitudinal distance across the International dateline. Error corrected November 8, l983.

November 17, 1983
A subroutine has been written and tested to handle a permanent direct access read error on the DSD3 and DSD5 files.

December 7, 1983
The quality of SSU channel 3 data on NOAA-8 has deteriorated to the extent that it needs to be turned off from the processing system. Channel availability flag for SSU channel 3 was turned off.
January 12, 1984
Subroutine CLEAR was modified to read the bi-directional reflectance table as a function of solar zenith, solar azimuth, and satellite zenith angles if over ocean areas during the day. This test improved our albedo measurements over ocean areas.

February 23, 1984
Improved upon the redundant orbit check routine so that operator does not need to mark the orbits every time a data set fails.

March 20, 1984
Dewpoint temperature correction - uses uncorrected dewpoint depression data to compute water vapor. Subroutines modified: SETUP and RAOBTW.

April 13, 1984
Surface elevation change - new land/sea tags and elevation files were generated and placed in the Coefficient Data Base (CDB).

April 16, 1984
$TUFOA - changed to extract data from the TOVS soundings rather than the enhancement data.

May 7, 1984
Subroutine TOPOG2 changed to add new surface elevations between 87 S and the South Pole.

May 23, 1984
Atmospheric Transmittance coefficients were modified. This proved to be the change with the most improved impact on the TOVS operation. Cloudiness percentages dropped on NOAA-7 from 52% to 32% and the quality of clear soundings improved dramatically.

June 20, 1984
(TOVS) SSU channel 2 data turned off effectively on June 19 after NOAA-8 began experiencing operational problems. NOAA-7 became the only operational space- craft to produce TOVS soundings after NOAA-8 was turned off in late June.

July 2, 1984
New cloud algorithm better estimates cloud top temperature, cloud amount (in percent) and cloud albedo.

September 25, 1984
New NOAA-6 processing modules were produced to process the NO-HIRS data from NOAA-6. The modules modified are: 1) Preprocessor; 2) $TARM2; 3) $TRET; 4) Radiosonde Match; 5) CFLTR and 6) COFRET. Comparisons between NOAA-6 and NOAA-7 soundings showed compatibility at all levels but the surface and tropopause.

November 19, 1984
Stratospheric Smoother Algorithm corrected to provide more consistent stratospheric temperature fields at the 15, 5, and 1mb levels. Subroutine FIVEPT changed in module SSUSMOTH.

November 26, 1984
Land/Sea tag change for NOAA-6 was made to reflect earlier, similar changes made for NOAA-7 and NOAA-8.

February 2, 1985
NOAA-7 HIRS filter wheel began malfunctioning on February 5. HIRS turned off completely on February 7. The NOAA-6 NO-HIRS modules were swapped into the Sat 1 (NOAA-7) operation and we began producing NOAA-7 NO-HIRS data on February 8.

February 25, 1985
NOAA-9 becomes operational. TOVS now running on one system of processing modules that can handle NO-HIRS processing as well as regular (HIRS, MSU, and SSU) TOVS data.

March 21, 1985
Incorporated new program to periodically check and update HIRS and MSU transmittance functions (gamma coefficients).

June 5, 1985
Change radiosonde match and coefficient filter routines to allow for a satellite ID greater than 4.

July 26, 1985
Check mode in the radiosonde match network to prevent super-adiabatic and skin temperature

retrievals from being saved on the DSD5 file.

August 22, 1985
Input change to use SST values for NOAA-8 (NO-HIRS) oceanic soundings to increase accuracy of NOAA-8 lower level soundings.

October 24, 1985
Corrected the zonal coefficient interpolation for latitude zone 1 (North Polar region) by preventing any use of zone 2 coefficients in zone 1 above 70 North latitude.

November 22, 1985
Turned off the frozen sea test and the surface temperature test poleward of 50 latitude. Change made to Atmospheric Radiance module (TARM).

December 18, 1985
Error in TARM subroutine DRIVER was found causing an extra 5% of sounding data to be classified as N* (partly cloudy) instead of cloudy.

January 1, 1986
Problem encountered with TOVS archived data during transition to the new year. End of year navigation problems caused mislocated data to be archived from 1/1/86 00Z to 1/2/86 14Z. No products were archived from 1/2/86 14Z to 1/3/86 20Z.

April 4, 1986
New TRET and COFTST to change surface reference pressure level from 1000 to 1013 mb.

May 1 - August 4, 1986
Bad mapper module (TSM) installed. Destroyed SSU and surface fields.

April 15, 1986
New enhancement system installed.

May 6 - July 1, 1986
Archive generation problems.

May 13, 1986
Australia complained inaccurate soundings 45 S near Australia.

May 15, 1986
New TRET implemented at 12L to fix 45 S interpolation problem.

May 20, 1986
Earth Location error south of 65 S.

May 22, 1986
New water vapor transmittances for NOAA-9.

May 27, 1986
New Land/Sea tags for NOAA-9 installed at 1530L.

May 28, 1986
NWS reported discontinuity for NOAA-6 around zones 4 and 5 boundary. Lower troposphere data suspect due to bad surface field.

May 29 - July 15, 1986
NOAA-6 south of 50 S has

June 3, 1986
First archive tape since enhancement.

June 10-11, 1986
Hardware problems at SOCC caused loss of 2 to 3 superswaths (40 HIRS scan lines each) per orbit for both satellites.

July 1, 1986
NOAA-6 and NOAA-9 processing failed because of file problems. Problem with NMC/NESDIS housekeeping file caused TUFON to abort from 1100L to 1930L. Archive data during that period was lost.

July 8, 1986
ECMWF reported NOAA-9 soundings bad south of 50 S at levels above 150 mb. Problem found to be bad coefficients.

July 9, 1986
NMC software changes caused product formatter job to fail from 1700L July 8 to 0900L July 9. Archive data lost.

July 9, 1986
Losing 2 to 3 NOAA-9 orbits per day due to large data gaps in GAC transmission from Wallops. Bad modem replaced. (Still missing data through August.)

July 7-10, 1986
Bad NOAA-9 coefficients for zones 4 and 5.
July 22, 1986
New TARM implemented to correct cloud cover algorithm.

July 29-30, 1986
Bad NOAA-9 thicknesses for Zones 4 and 5 from 15 to 20 mb because of small sample sizes.

July 31, 1986
NMC began using NOAA-6 in operations again.

September 8, 1986
New rain filter placed in the Preprocessor.

September 17-22, 1986
Reduction in total number of soundings attributed to NOAA-9 MSU 1b Mirror Sequence flag being set about 30% of the time. Reinstalled old preprocessor on September 17 when believed it was the cause of the low data coverage. New preprocessor restored on September 22 when MSU 1b was found to be the problem.

September 24, 1986
Two NOAA-6 orbits failed due to data gaps.

October 21, 1986
Preprocessor change installed for NOAA-9 proper data scaling factor from CDB.

October 23, 1986
New Radiosonde correction method (RADCOR) implemented.

November 3, 1986
New archive module installed to fix data shuffling and delete problems.

November 3-5, 1986
Cold bias above 200 mb caused by double correction to radiosondes.

November 7, 1986
Due to instrument problems on NOAA-6 and NOAA-9 data no longer sent to users. Archive continued. Problems believed to be due to solar flare.

NOAA-9 HIRS noisy
NOAA-9 MSU channel 3 - major hit opened limits
NOAA-6 MSU channels 1 and 2 opened limits on October 31, 1986

November 10, 1986
NOAA-6 processing stopped.

November 13, 1986
NOAA-9 data near normal.

November 14, 1986
Trouble may be continuing with scan sequence flag. Started seeing reduced number of soundings.

November 18, 1986
Put in corrected preprocessor to take care of MSU mirror sequence error flag.

December 4, 1986
Erratic NOAA-9 MSU channel 3 behavior. Causing reduced sounding accuracy at 250 to 300

mb.

January 1-2, 1987
Earth Location problems from 5Z January 1 to 5Z January 2. Data mislocated.

January 7, 1987
NOAA-10 activated.

January 8-12, 1987
Increase in number of cloudy retrievals believed due to noisy HIRS for NOAA-9. On January 12 new HIRS calibration limits were applied. Percent cloudy retrievals reduced possibly because of drop in HIRS channel 1 noise.

February 3, 1987
NOAA-9 MSU channel 3 performance significantly deteriorated, resulting in large temperature biases about 250 mb.

February 5, 1987
Three NOAA-9 orbits missed due to noise.

February 9, 1987
Three NOAA-9 orbits missed due to noise and orbital processing problems.

February 20, 1987
NOAA-9 HIRS noise level unstable and generally increasing since about January 5, 1987 resulting in reduced retrieval accuracy.

February 25, 1987
Reset limits have been placed on NOAA-9 MSU channel 3 input data to filter noisy data from retrieval processing. Filtering process will result in missing NOAA-9 retrieval coverage when the MSU is unstable.

February 26, 1987
NOAA-9 HIRS noise high again.

March 4, 1987
Three NOAA-9 orbits missed due to noisy MSU channel 3.

March 6, 1987
No NOAA-9 processing from 14Z to 18Z due to no NOAA-9 MSU.

March 7, 1987
NOAA-9 MSU channel 3 unusable.

March 9, 1987
Discontinued sending NOAA-9 data to users. The failure impacted NOAA-10 retrieval accuracy

at 10 mb and above as NOAA-9 SSU was being used for NOAA-10.

March 10, 1987
Modified NOAA-9 processing to produce SSU for NOAA-10.

March 10, 1987
NOAA-9 MSU Channel 2 failed on March 7, 1987. That coupled with the previous failure of Channel 3 has caused the termination of the TOVS Sounding Product from NOAA-9.

March 18, 1987
NOAA-10 quality problem above 30 mb. Soundings for NOAA-10 above 100 mb will be discontinued.

March 26, 1987
Missing NOAA-10 HIRS data due to missing calibration coefficients.

April 8-9, 1987
From 1550L on April 8 to 10L on April 9, NOAA-9 processing was halted due to communications problems.

April 21, 1987
NOAA-10 has warm biases at 10 mb, possibly due to coefficients.

April 21, 1987
Polar redundancy changed. TUFON was upgraded to handle filter flag changes caused by the new polar redundancy algorithm. Problem was that the same DSD3 record was being read over and over again when the last record of an orbit was not filter flagged as good.

May 12, 1987
22% NOAA-9 coverage due to no HIRS calibration.

May 13, 1987
NOAA-9 missing 2 or 3 orbits between 14Z and 18Z due to noisy data.

May 16-18, 1987
Seventeen NOAA-9 orbits missing due to noisy data.

May 28, 1987
Two NOAA-10 orbits missing due to noisy transmission.

June 10, 1987
Three NOAA-9 orbits missing due to noisy HIRS.

June 18, 1987
Processing modified to accept SSU data up to 24 hours old for TRET processing.

June 21, 1987
Two NOAA-10 orbits between 16 and 19Z missing due to HIRS channel data problems.

June 23, 1987
Four NOAA-10 orbits missing due to noisy data.

June 30 - July 21, 1981
"Discovered missing coverage on NMC/NESDIS file." This is the Archive input file. Problem in directory when first sounding is not "good".

July 9, 1987
Three NOAA-10 orbits missing due to noisy HIRS data because of a bad recorder.

July 14, 1987
Four NOAA-10 orbits missing. Data noisy due to tracking problem with NASA's 24 ft. dish at Wallops.

July 16, 1987
Three NOAA-10 orbits missing due to noise.

July 28-29, 1987
No NOAA-10 processing from 1L July 28 to 13L July 29 due to power outage and resulting hardware problems.

August 3, 1987
Six NOAA-10 data sets were lost over the past three days due to noise.

August 5, 1987
Four NOAA-10 data sets were lost due to Earth Location problems.

August 5-11, 1987
Poor quality sounding data between 350-30 mb over Antarctica due to bad radiosonde in the Matchup data base for coefficient generation.

August 10-13, 1987
Cold bias for NOAA-10 from 100 to 50 mb over Hudson Bay due to noisy MSU channel 4. Calibration limits were tightened.

August 31, 1987
Began sending NOAA-9 HIRS only soundings to users (NMC and ECMWF).

September 9, 1987
Updated topography field and land/sea tags.

September 11, 1987
Three NOAA-10 data sets lost due to noise at Wallops Island CDA.

Seven NOAA-9 data sets lost due to HIRS noise.

September 15, 1987
Filter module upgraded at 1415Z to improve the noise and redundancy filtering to improve the data quality and sounding spacing.

September 23, 1987
Six NOAA-9 orbits failed due to noisy HIRS.

September 28, 1987
Two NOAA-9 orbits lost due to noisy HIRS.

October 16-19, 1987
NMC/NESDIS (archive file) Housekeeping file problem. Product formatter for NMC and Archive not working.

October 27, 1987
NOAA-9 MSU quarterly calibration.

October 28, 1987
NOAA-10 orbit 62-63 lost due to Earth Location Problems
NOAA-10 orbit 67-68 lost due to noisy HIRS and MSU
NOAA-9 orbit 08-09 and 07-08 lost due to Earth Location Problems.

December 1, 1987
Data mislocation checks installed at 1440Z.

January 1, 1988
NOAA-10 data not processed from 0Z to 4Z due to no Earth Location.
Three NOAA-10 orbits between 19Z December 31 and 640Z on January 1 were not archived.

January 2, 1988
Satellite data mislocated by 1 degree East longitude from 0Z 1/1 to 4Z 1/5 (leap year troubles).

January 7, 1988
NOAA-9 data missing due to level 1b data set problems. Orbits 15799-15800,15803, and 15806-15808.

February 2, 1988
SSU Cell pressures updated.

February 29, 1988
Gilmore Creek communication line down from 17Z February 25 to 13Z February 29.

March 9, 1988
Five NOAA-9 orbits missing. One NOAA-10 orbit missing.

March 16, 1988
Surface upgrade installed.

March 26, 1988
Four NOAA-10 orbits were missed due to no Earth Location data.

April 25, 1988
Two NOAA-10 orbits failed due to software problems.

May 4, 1988
TOVS processing down due to software problems from 14 to 22L.

May 10-11, 1988
No NOAA-10 p

July 6-8, 1988
Controller between NAS and DPSS down from 14L July 6 to 1215L July

July 13, 1988
Three NOAA-10 lost due to HIRS channel 1 missing calibration coefficients.

July 19, 1988
One NOAA-10 orbit missed.
August 16, 1988
Eight TOVS orbits not processed due to thunderstorm activity.

August 18, 1988
Thunderstorm activity between 3 and 630Z caused some data loss.

August 29, 1988
Three NOAA-10 orbits missed due to data problems.

September 1, 1988
One NOAA-10 orbit missed due to bad HIRS level 1b.

September 18, 1988
One NOAA-10 orbit was missed (0-2Z) due to no HIRS Earth Location.
One NOAA-10 orbit was missed (1040-1220Z) due to HIRS Channel 7 noise.

September 20, 1988
Physical Retrieval algorithm was implemented at 18Z.

September 27, 1988
Two NOAA-10 orbits were missed due to bad level 1b data sets.

October 18, 1988
Discontinued processing NOAA-9 TOVS Sounding Product.

October 19, 1988
Began using NOAA-11 SSU for NOAA-10 processing at 18Z.

October 25, 1988
NOAA-9 processing stopped at 10L.

October 26, 1988
Four NOAA-10 orbits from 630 to 1330Z were not processed due to missing HIRS channel 1 calibration coefficients.

November 4, 1988
Three NOAA-10 orbits missed due to level 1b problems.

November 8, 1988
New SSU cell pressures implemented at 1030L.

November 14, 1988
Five hour gap in coverage due to file problems.

December 19-20, 1988
No NOAA-10 soundings from 15L December 19 to 8L December 20 due to software problems.

December 20, 1988
Archive changed to run on Sunday evenings.

January 4, 1989
NOAA-11 processing became operational. Channel 10 moved to new wavelength to better predict water vapor attenuation and to better correct channel 8. High percent of cloudy data resulted. Channel 17 moved from stratosphere to lower troposphere.

January 7, 1989
Six NOAA-11 orbits lost due to software problem.

February 28 - March 3, 1989
Percent of cloudy NOAA-11 soundings increased. Problem corrected on March 3 at 1430Z.

March 2, 1989
Two orbits lost due to bad Earth Location.

March 16, 1989
NOAA-10 orbits 12943-46 and NOAA-11 2430-38 lost due to File Transfer problems with the DPSS to NAS.

March 18, 1989
Power down from 1130L to 2000L.

April 5, 1989
Four NOAA-11 channel attenuation coefficients changed.
Two NOAA-10 orbits bad - 13234, 13232.

April 6, 1989
DPSS down due to hardware work from 8Z to 20Z -- some data may be lost.

April 13, 1989
New surface field update installed introduced ice field updating, changed from day/night to warm/cold determination, channel 8 not used to update oceans.

April 25, 1989
New gammas for HIRS channels 17,24. New noise limits for MSU channels 1 to 4.

May 11, 1989
Added new words to NMC/AIDS file:
-added minibox number
-added sea surface temperature

May 16, 1989
Prohibited use of MSU channel 2 over high terrain. MSU 2 not used in Antarctica.

May 21, 1989
Four NOAA-11 orbits lost due to communications problems.

July 13, 1989
Added HIRS channel 17 to NOAA-11, added as a predictor for limb correction.

July 24 - 28, 1989
Severe thunderstorms impacted the processing of TOVS data. While Level 1b data sets were received, many of them were too noisy to be processed. This resulted in a fair amount of TOVS data being lost. Table D-2 contains the times of noisy data.

**Table D-2. Times of noisy data between July 24-28, 1989**.

| | | |
|---|---|---|
| NOAA-10 | July 26 | 1311-1456Z |
| | July 27 | 0031-0540, 1430-1740 |
| | July 28 | 1047-1223 (No Level 1b) |
| NOAA-11 | July 24 | 0915-1221Z |
| | July 26 | 1526-2131, 2203-2339 |
| | July 28 | 0644-0822 (No Level 1b) |

August 14, 1989

Three NOAA-9 and one NOAA-11 orbits lost due to thunderstorms.

August 16, 1989
New SSU cell pressures installed.

August 17, 1989
Four NOAA-10 orbits lost due to system problems.

August 18, 1989
Six NOAA-10 orbits lost due to noisy HIRS.

September 4, 1989
Three NOAA-11 orbits not processed.

September 17, 1989
Four NOAA-10 and four NOAA-11 orbits lost due to thunderstorms.

October 5, 1989
One NOAA-10 and two NOAA-11 orbits lost due to Auto Tracking problem at Wallops Island.

November 1, 1989
Five NOAA-10 orbits lost due to no Earth Location.

November 30, 1989
NOAA-10 data from 1745 on November 29 to 0Z on November 30 and NOAA-11 data from 1630 to 2330Z on November 29 were lost due to computer problems.

December 14, 1989
NOAA-10 data over 100 mb in oceanic regions suspect. Problem traced to first guess.

January 1, 1990
First three orbits in 1990 of Level 1b TOVS data lost.

January 19, 1990
Three NOAA-11 and four NOAA-10 orbits lost.

January 23-25, 1990
Sixteen orbits lost due to satellite readout problems.

February 5-7, 1990
Coefficient update generated bad NOAA-11 coefficients over land. New coefficients generated on February 7 to correct the problem.

February 12-23, 1990
NOAA-10 and NOAA-11 poor quality due to coefficient generation problem. Fixed on February 23.

February 26, 1990
Three NOAA-10 orbits lost due to file problems

March 13, 1990
Installed upgrade to compute cloudy coefficients from cloudy matchups.

March 13-20, 1990
Regression ozone accidentally replaced with Physical Retrieval Ozone. No NOAA-10 ozone produced because of no new coefficients.

March 28, 1990

April 10-11, 1990
No TOVS data from 1830L to 0930L due to hardware problems.

May 8, 1990
Implemented Physical Retrieval TOVS Total Ozone.

May 7-16, 1990
Implemented new TUFON to include cloud information for cloudy retrievals and to remove superadiabatic and surface failure retrievals. TUFON improperly processing TOVS data. Possible duplicates and missing data on archive tape.

June 10, 1990
Power failure, lost five NOAA-10 and one NOAA-11 orbits.

June 19, 1990
TUFON properly installed. Physical Retrieval Ozone accidentally removed.

June 22, 1990
Four NOAA-10 orbits too noisy to process.

June 28, 1990
Physical Retrieval Ozone restored to operations.

August 27, 1990
Included brightness temperatures for cloudy retrievals in the archive.

September 6-21, 1990
No NMC SST information included in file.

November 7, 1990
No archive produced November 5-6, due to file problems.

November 14-19, 1990

Tightened Radiosonde rejection requirements.

November 29 - December 3, 1990
Reduced coverage due to operational files being renamed.

December 5, 1990
Reimplemented tightened radiosonde rejection.

December 16, 1990- January 9, 1991
Missing SSU information for NOAA-10 due to problems with NOAA-11 SSU map files.

January 15, 1991
No weekly ice update performed.

January 28 - February 3, 1991
Archive data lost due to problems.

February 12, 1991
Implemented new ICE module which will not use blank data records nor place ice packs between 45 degrees North and 45 degrees South.

February 19, 1991
Modified time and distance windows in radiosonde match.

March 4, 1991
Implemented improvements to the coefficient update software.

May 16, 1991
3 NOAA-11 and 4 NOAA-10 orbits missing due to poor data quality or were not received for processing.

May 20, 1991
NOAA-10 cloudy coefficients not updated (potential bad input data).

May 23, 1991
Stability departure computation included in processing.
3 NOAA-11 orbits missing due to antenna problems at Wallops Island readout station.

May 29, 1991
Coefficients for NOAA-11 updated two days late.

May 30, 1991
Coefficients for NOAA-10 Clear and Partly Cloudy data were updated 3 days late.

June 5, 1991

Coefficients for NOAA-10 cloudy data were updated for the first time since May 20, 1991.

July 8, 1991
12 NOAA-10 orbits missing due to no earth location.

July 9, 1991
9 NOAA-10 orbits missing due to no earth location.

August 16, 1991
1 NOAA-11 orbit missing due to bad HIRS line counter
1 NOAA-10 orbit missing due to no earth location.

August 24, 1991
1 NOAA-11 orbit missing due to poor data quality.
1 NOAA-10 orbit missing due to no synchronized MSU frames.

September 4, 1991
2 NOAA-11 orbits missing due to no synchronized MSU frames and noisy data. 1 NOAA-10 orbit missing due to no earth location.

September 5, 1991
1 NOAA-11 orbit and 1 NOAA-10 orbit missing due to problem in 1b data set generation.

September 16, 1991
1 NOAA-11 orbit missing due to problem in 1b data set generation. NOAA-12 became operational with orbit start time of 1652Z. (NOAA-10 TOVS no longer processed and archived).

September 22, 1991
1 NOAA-12 orbit missing due to problem in 1b data set generation.

September 23, 1991
New asymmetric scan bias angles for NOAA-12 MSU channels 2,3, & 4.

October 28, 1991
1 NOAA-11 orbit missing due to large HIRS data gaps.

November 6, 1991
Implemented upgrade to improve selection of partly cloudy data.

November 11-15, 1991
Sparse archive due to problems in processing system (not science or data related).

November 19, 1991
1 NOAA-12 orbit missing due to channel problems in HIRS.

November 21, 1991

1 NOAA-12 orbit missing due to bad HIRS line counter.

November 22, 1991
5 NOAA-12 and 3 NOAA-11 orbits missing due to problem in 1b data set generation.

November 23, 1991
1 NOAA-11 and 1 NOAA-12 orbit missing due to problem in 1b data set generation.

November 24, 1991
4 NOAA-11 and 4 NOAA-12 orbits missing due to problem in 1b data set generation.

December 26, 1991
Reduced volume of NOAA-12 data over Antarctica (could have been present for entire time NOAA-12 operational) corrected. Radiance windows for HIRS channels 1 and 2 were too tight.

January 7, 1992
Documented steady decline in number of partly cloudy soundings for NOAA-12 since December 31, 1991 with increase in the number of cloudy soundings. Problem found with HIRS instrument - no data distributed or archived beginning with January 7, 1992.

January 13, 1992
Resumed processing of NOAA-12 data.

January 14, 1992
Resumed data distribution and archive of NOAA-12 data.

March 11, 1992
TOVS archive changed to save full resolution data (good and redundant data saved).

March 16-18, 1992
No NOAA-12 data processed due to change in calibration file which was incompatible to TOVS processing.

March 19, 1992
Discontinued distribution and archive of NOAA-11 and NOAA-12 data due to bad coefficients resulting from bad radiosonde data used as input.

March 20, 1992
Resumed distribution and archive of NOAA-11 and NOAA-12 data at 20 Z. Two NOAA-11 and four NOAA-12 orbits missing.

April 6, 1992
Implemented upgrade to improve cloudy retrievals, particularly near the surface. Replaced using NMC sea surface temperature with the NMC Aviation Forecast potential temperature for first guess determination.

April 16, 1992
No weekly coefficient update was performed. One NOAA-12 orbit missing.

May 4, 1992
Eliminated zero mean layer temperatures over high terrain.
One NOAA-12 orbit missing.

May 6, 1992
Eliminated 12 hour inconsistency of SSU data for the even numbered satellite.

May 13, 1992
Eliminated housekeeping file from TOVS archive.

May 18, 1992
Metadata file moved to separate archive tape due to size constraints. 1 NOAA-11 and 1 NOAA-12 orbits missing.

June 13-15, 1992
No matches made with radiosondes due to change in radiosonde file by NMC.

June 15, 1992
Two NOAA-11 and one NOAA-12 orbits missing. Some of the missing NOAA-11 orbits over the past few days are due to HIRS channel 15 having zero radiances; problem corrected by calibration.
July 7, 1992
MSU quarterly calibration for NOAA-11 and NOAA-12. One NOAA-12 orbit missing.

August 31, 1992
Began computing TOVS Total Ozone for cloudy retrievals.

September 9, 1992
Changed coefficients used for computing TOVS total ozone.

September 15, 1992
Implemented correction to keep bad radiosonde data about 100mb from getting into the TOVS coefficient update system. 1 NOAA-11 orbit missing.

October 20, 1992
Improved determination of cloud top temperature and cloud amount.

December 1, 1992
MSU quarterly calibration for NOAA-11 and NOAA-12.

December 5-8, 1992
A number of NOAA-12 orbits were processed 2 or 3 times causing redundant data to be written to the archive. Processing problems also caused some NOAA-11 and NOAA-12 orbits to be

missed between December 5-9.

January 4, 1993
7 NOAA-11 orbits missing.

December 30, 1992 - January 5, 1993
Many NOAA-11 orbits missing due to HIRS channels 13 and 16 space view being out of limits; new limits set by calibration.

February 24, 1993
TOVS operational processing performed on the new NESDIS computer (CEMSCS). No change in quality of TOVS products.

March 2, 1993
MSU quarterly calibration for NOAA-11 and NOAA-12.
One NOAA-11 orbit missing.

March 7, 1993
Four NOAA-11 and 3 NOAA-12 orbits missing due to power outage at the Wallops Island CDA.

March 31, 1993
No NMC Sea Surface Temperature information available.

April 14-17, 1993
No data archived for NOAA-11 and NOAA-12 due to software problems.

April 15, 1993
Two NOAA-11 orbits missing. NOAA-11 HIRS channel 13 warm black body gross filtering limits were adjusted.

April 19, 1993
NOAA-12 HIRS channel 7 warm black body gross filtering limits were adjusted.

May 3, 1993
NOAA-11 HIRS channel 14 warm black body gross filtering limits were adjusted.

May 7, 1993
No NOAA-11 and NOAA-12 archive data for May 4 and May 5 - data overwritten on the archive tape.

April 28 - May 21, 1993
Fewer retrievals than normal processed for NOAA-11 because HIRS channel 1 intercept below accepted level. Offset adjusted to make channel 1 usable.

May 26, 1993
Added check to coefficient update job to compare stability departure of radiosonde and retrieval

match pairs. If beyond limit, radiosonde not used for coefficient generation or added to first guess library.

May 27, 1993
NOAA-12 HIRS internal target gross filtering limits were adjusted.
NOAA-11 HIRS channels 15 and 16 space view gross filtering limits were adjusted.

June 10-18, 1993
HIRS channels for NOAA-12 have increased noise, induced by vibrations from the AVHRR instrument, for portions of some orbits. The TOVS data in those affected area have data dropouts due to brightness temperatures being out of range and the data are cloudy in the regions of the dropouts. (Cloudy retrievals only use the upper level HIRS channels).

July 23-24, 1993
Little to no NOAA-11 data archived due to processing problems.

July 26, 1993
Observed cases for NOAA-11 where less than 10 scans of data in an orbit were bad due to anomalies in the MSU values. (Occurrences very infrequent)

July 29, 1993
NOAA-11 MSU PRT target temperature and slope limits were reset.

August 9, 1993
Implemented new method to interpolate between levels.

August 10, 1993
Metadata restored to end of archive tape.

August 17, 1993
MSU quarterly calibration for NOAA-11 and NOAA-12.

August 19, 1993
NOAA-11 data from 18:37 to 20:00 not processed (large HIRS data gaps)

August 23, 1993
Coefficient update for NOAA-11 and NOAA-12

August 23, 1993
NOAA-12 data from 14:00 to 14:48 missing. Data not received.

August 30, 1993
Coefficient update for NOAA-11 and NOAA-12

August 30, 1993
NOAA-11 data from 9:44 to 11:30 not processed.

August 31, 1993
NOAA-11 data from 21:08 to 22:57 not processed.

September 7, 1993
Coefficient updates for NOAA-11 and NOAA-12

September 13, 1993
Coefficient updates for NOAA-11 and NOAA-12

September 14, 1993
Implemented water vapor upgrade ($PTRET) at 10 am.

September 20, 1993
Coefficient update for NOAA-11 and NOAA-12

September 27, 1993
New version of PHYSEL in radiosonde match

September 28, 1993
New PHYSEL recompiled, was flagging new matchups as redundant.

September 29, 1993
Coefficient updates for NOAA-11 and NOAA-12.

October 4, 1993
Coefficient updates for NOAA-11 and NOAA-12.

October 12, 1993
Coefficient updates for NOAA-11 and NOAA-12.

October 12, 1993
NOAA-11 space view calibration for HIRS Channels 13,14, and 16 were updated.

October 18, 1993
Coefficient updates for NOAA-11 and NOAA-12.

October 25, 1993
Coefficient updates for NOAA-11 and NOAA-12.

November 1, 1993
Some NOAA-12 orbits were not processed due to earth location problems.

November 1, 1993
Coefficient updates for NOAA-11 and NOAA-12.

November 2, 1993
Three NOAA-11 orbits were not processed due to problems with the stability departure software.

November 4, 1993
Two NOAA-12 orbits (6:40 to 9:16 Z) were not received due to tracking problems at the CDAs. Several NOAA-11 orbits were short or fragmented.

November 14, 1993
Coefficient updates for NOAA-11 and NOAA-12.

November 22, 1993
Coefficient updates for NOAA-11 and NOAA-12.

November 23, 1993
Implemented new $PTRET to include 50% Water retrieval constraint.

November 30, 1993
Coefficient updates for NOAA-11 and NOAA-12.

December 1, 1993
NOAA-12 data from 19:45 to 21:20 not received for processing.

December 6, 1993
Coefficient updates for NOAA-11 and NOAA-12.

December 13, 1993
Coefficient update for NOAA-11 and NOAA-12

December 18, 1993
NOAA-12 data from 5:27 to 6:52 not processed (large HIRS data gaps).

December 20, 1993
Coefficient updates for NOAA-11 and NOAA-12.

December 22, 1993
NOAA-11 data from 23:26 to 1:07 not processed (poor quality).

December 27, 1993
Coefficient updates for NOAA-11 and NOAA-12.

January 1, 1994
NOAA-11 data from 19:23 to 21:02 not processed (large HIRS data gaps).

January 4, 1994
NOAA-12 data from 21:47 to 22:39 not received for processing.

January 9, 1994
NOAA-11 data from 6:21 to 8:09 not processed. NOAA-11 data from 8:17 to 9:48 not processed.

January 10, 1994
Coefficient updates for NOAA-11 and NOAA-12.

January 18, 1994
NOAA-12 data from 00:15 to 2:00 not processed due to missing earth location.

January 19, 1994
HIRS channel 12 added to clear/N* channels for the calculation of the retrieval operator.

January 21, 1994
NMC/CAC reported bad temperature data at 1 and 2 mb for limited regions in both hemispheres.

January 24, 1994
HIRS channel 15 space view filtering limits were adjusted.

January 24, 1994
Coefficient updates for NOAA-11 and NOAA-12.

January 26, 1994
Re-ran coefficient update to exclude channel 12 for NOAA-11 clears.

January 28, 1994
NOAA-11 data from 19:26 to 20:30 not processed (HIRS data gaps).

January 31, 1994
Coefficient updates for NOAA-11 and NOAA-12.

February 4, 1994
Data from 04:00 to 12:38Z were not archived due to processing problems.

February 6, 1994
NOAA-11 data from 20:24 to 22:01 were not received.

February 7, 1994
Coefficient update for NOAA-11 and NOAA-12.

February 12, 1994
NOAA-11 data from 19:50 to 20:49 were not received.

February 14, 1994
Coefficient updatess for NOAA-11 and NOAA-12.

February 14, 1994
NOAA-12 data from 21:08 to 22:31 were not received.

February 15, 1994
Data from February 13, 1994 not on archive due to processing problems.

February 15, 1994
NOAA-12 data from 9:02 to 10:49 were not received.

February 19, 1994
NOAA-11 data from 6:13 to 7:59 were not processed due to MSU and SSU channel failures.

February 20, 1994
NOAA-11 data from 17:49 to 19:15 were not received.

February 20, 1994
NOAA-12 data from 6:09 to 7:00 were not received.

February 22, 1994
Coefficient updates for NOAA-11 and NOAA-12.

February 24, 1994
NOAA-11 data from 6:51 to 8:35 were not processed due to poor quality data.

February 24, 1994
NOAA-12 data from 2:09 to 5:27 were not processed due to antenna problems. NOAA-12 data from 9:08 to 12:33 were not processed because of poor quality data.

February 25, 1994
NOAA-11 data from 8:27 to 10:07 were not received.

February 27, 1994
NOAA-12 data from 9:44 to 11:31 were not processed due to poor quality data.

February 28, 1994
NOAA-11 data from 2:22 to 4:10 were not processed due to MSU channel failure.

March 2, 1994
NOAA-12 data from 23:48 to 1:36 were not processed due to poor quality data.

March 3, 1994
NOAA-12 data from 13:25 to 15:13 and from 18:22 to 19:59 were not received.

March 7, 1994
Coefficient updates for NOAA-11 and NOAA-12.

March 11, 1994
NOAA-12 data from 23:54 to 1:38 were not processed due to no earth location.

March 13, 1994
NOAA-11 data from 6:43 to 8:29 were not received.

March 14, 1994
Coefficient updates for NOAA-11 and NOAA-12.

March 15, 1994
NOAA-11 data from 6:18 to 8:03 were not received.

March 15, 1994
NOAA-12 data from 10:47 to 14:05 were not received.

March 21, 1994
Coefficient updates for NOAA-11 and NOAA-12.

March 21, 1994
NOAA-11 data from 00:15 to 1:22 were not received.

March 22, 1994
NOAA-12 data from 6:10 to 11:33 were not received.

March 23, 1994
NOAA-11 data from 2:44 to 4:51 were not received.

March 25 - 28, 1994
Some NOAA-11 data and NOAA-12 data were noisy and precluded calibration.

March 28, 1994
Coefficient updates for NOAA-11 and NOAA-12.

March 28, 1994
NOAA-11 channel 13 warm body calibration limits were adjusted.

March 29, 1994
NOAA-11 channel 8 space view calibration limits were adjusted.

March 31, 1994
NOAA-11 data from 3:20 to 4:30 were fragmented and not completely received.

April 4, 1994
Coefficient updates for NOAA-11 and NOAA-12.

April 5, 1994

NOAA-12 data from 4:26 to 6:05 and from 7:56 to 9:43 were not received.

April 6, 1994
NOAA-12 data from 22:33 to 00:07 were not received.

April 7, 1994
NOAA-12 data from 9:02 to 10:47 were not received.

April 14, 1994
NOAA-12 data from 15:08 to 16:30 were not processed due to MSU channel failure.

April 16, 1994
NOAA-11 data from 5:16 to 6:25 were not received.

April 18, 1994
NOAA-12 MSU channels 2 and 4 calibration intercept lower limits were updated.

April 20, 1994
NOAA-12 data from 16:08 to 17:55 were not received.

April 21, 1994
NOAA-12 data from 14:08 to 15:54 were not received.

April 22, 1994
NOAA-11 data from 10:26 to 12:15 were not received.

April 23, 1994
NOAA-12 data from 1:15 to 4:48 were not processed due to problems in processing.

April 26, 1994
NOAA-11 data from 9:37 to 10:07 were not received.

April 28, 1994
Implemented a new retrieval processor to use HIRS channels 10,11 and 12 (water vapor channels) in the retrieval step.

May 2, 1994
Coefficient updates for NOAA-11 and NOAA-12.

May 2, 1994
NOAA-12 data from 6:25 to 8:11 were not received.

May 9, 1994
Coefficient update for NOAA-11 and NOAA-12.

May 9, 1994

NOAA-11 data from 22:14 to 00:03 were not received.

May 10, 1994
NOAA-11 HIRS channel 13 warm black body calibration limits adjusted.

May 12, 1994
NOAA-11 data from 4:21 to 6:08 and from 7:29 to 9:41 not received.

May 16, 1994
NOAA-12 HIRS channel 14 space view calibration limits adjusted. NOAA-12 HIRS channel 8, 14, and 17 warm black body calibration limits adjusted.

May 16, 1994
Coefficient update for NOAA-11 and NOAA-12.

May 23, 1994
Coefficient update for NOAA-11 and NOAA-12.

May 25, 1994
NOAA-11 data from 23:49 to 1:37 not processed due to poor quality data.

May 31, 1994
Coefficient update for NOAA-11 and NOAA-12.

May 31, 1994
NOAA-12 data from 14:53 to 16:15 were not received.

June 6, 1994
Coefficient update for NOAA-11 and NOAA-12

June 12, 1994
NOAA-12 data from 1:35 to 3:14 and from 4:57 to 6:39 were not received.

June 13, 1994
Coefficient update for NOAA-11 and NOAA-12.

June 20, 1994
Coefficient update for NOAA-11 and NOAA-12.

June 20, 1994
NOAA-11 data from 3:45 to 4:53 and from 10:37 to 11:21 were not received.

June 24, 1994
NOAA-12 data from 21:23 to 22:58 were not received.

June 26, 1994

NOAA-12 data from 10:16 to 11:59 were not received.

June 27, 1994
Coefficient update for NOAA-11 and NOAA-12.

June 27, 1994
Two NOAA-12 orbits were not processed.

July 5, 1994
Coefficient update for NOAA-11 and NOAA-12.

July 5, 1994
NOAA-12 data from 5:00 to 6:41 were not received.

July 6, 1994
NOAA-11 data from 15:24 to 16:54 were not received.

July 11, 1994
Coefficient update for NOAA-11 and NOAA-12.

July 12, 1994
NOAA-12 data from 19:41 to 21:09 were not received.

July 18, 1994
Coefficient update for NOAA-11 and NOAA-12.

July 19, 1994
NOAA-12 data from 6:40 to 8:28 and from 9:37 to 10:15 were not received.

July 22, 1994
NOAA-12 data from 15:56 to 17:32 were not received.

July 25, 1994
Coefficient update for NOAA-11 and NOAA-12.

July 27, 1994
NOAA-12 data from 21:10 to 22:48 were not processed due to earth location errors.

August 1, 1994
Coefficient update for NOAA-11 and NOAA-12.

August 8, 1994
Coefficient update for NOAA-11 and NOAA-12.

August 15, 1994

Coefficient update for NOAA-11 and NOAA-12.

August 15, 1994
NOAA-11 data from 5:24 to 7:44 were not received due to antenna problems at Wallops Island.

August 22, 1994
Coefficient update for NOAA-11 and NOAA-12.

August 29, 1994
Coefficient update for NOAA-11 and NOAA-12.

September 3-6, 1994
Many NOAA-11 orbits were not processed due to calibration problems.

September 6, 1994
NOAA-11 HIRS channel 13, 16, and 17 cold black body calibrations were adjusted.

September 7, 1994
NOAA-11 HIRS channel 13 space view calibration were adjusted.

September 8, 1994
NOAA-11 HIRS housekeeping calibration parameters were adjusted.

September 12, 1994
NOAA-11 HIRS channel 14 space view calibration were adjusted.

October 3, 1994
Coefficient updates for NOAA-11 and NOAA-12.

October 3, 1994
NOAA-11 data from 15:20 to 17:00 were not received.

October 9, 1994
NOAA-11 data from 5:54 to 7:24 were not processed due to MSU channel 3 failures.

October 9, 1994
NOAA-11 data from 20:45 to 22:31 were not processed due to gross earth location errors.

October 10, 1994
NOAA-11 data from 5:38 to 8:56 and from 12:25 to 13:51 were not processed due to MSU channel failures.

October 11, 1994
NOAA-11 data from 7:01 to 12:10 were not processed due to MSU channel failures.

October 11, 1994

NOAA-11 MSU PRT temperature calibration was adjusted.

October 11, 1994
Coefficient update for NOAA-11 and NOAA-12.

October 17, 1994
Coefficient update for NOAA-11 and NOAA-12.

October 24, 1994
Coefficient update for NOAA-11 and NOAA-12.

October 24, 1994
NOAA-11 data from 7:36 to 9:22 were not processed due to large HIRS data gaps.

October 26, 1994
NOAA-12 data from 5:57 to 7:43 were not received.

October 28, 1994
NOAA-12 data from 20:57 to 22:20 were not received.

October 30, 1994
NOAA-12 data from 16:54 to 18:10 were not received.

October 31, 1994
Coefficient update for NOAA-11 and NOAA-12.

November 7, 1994
Coefficient update for NOAA-11 and NOAA-12.

November 14, 1994
Coefficient update for NOAA-11 and NOAA-12.

November 21, 1994
Coefficient update for NOAA-11 and NOAA-12.

November 29, 1994
Coefficient update for NOAA-11 and NOAA-12.

December 7, 1994
NOAA-11 data from 23:52 to 1:32 not processed due to poor quality data.

December 8, 1994
NOAA-11 data from 6:43 to 8:23 not processed due to poor quality data.

December 10, 1994
NOAA-11 data from 16:37 to 18:09 were not received.

December 15, 1994
NOAA-11 data from 19:03 to 3:19 were not received.

December 15, 1994
NOAA-12 data from 21:57 to 0:58 were not received.

December 18, 1994
NOAA-12 data from 22:18 to 23:52 were not received.

January 23, 1995
Implemented upgrade to improve selection of first guess for cloudy retrievals, added MSU channel 2 to retrieval process in polar regions without high terrain.

April 10, 1995
Processing from NOAA-11 discontinued due to bring up of NOAA-14 and NWS need for NOAA-9 SBUV data. Mapped SSU data for NOAA-12 supplied by NOAA-14 non-operational system operating without a MSU.

May 1, 1995
NOAA-12 data missing from 23:49 to 01:34.

May 1, 1995
NOAA-12 data missing from 17:04 to 18:42 and from 22:04 to 01:06.

May 2, 1995
NOAA-12 data missing from 11:46 to 13:24. Replaced the SSU mapped fields in NOAA-12 with NOAA-14 data with the MSU. Believed problem with the generation of SSU data from NOAA-14 system without the MSU.

May 10, 1995
NOAA-12 data missing from 23:54 to 1:40.

June 2, 1995
NOAA-12 data missing from 00:17 to 5:26.

June 7, 1995
NOAA-14 (with the MSU) became operational.

June 18, 1995
OAA-12 data missing from 9:38 to 11:31.

June 19, 1995
Implemented new asymmetrical scan coefficients for MSU on NOAA-12.

July 6, 1995

NOAA-12 data missing from 15:04 to 16:30.

July 19, 1995
NOAA-12 data missing from 10:06 to 11:50 and from 18:28 to 20:05.
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July 30, 1995
NOAA-12 data missing from 2:24 to 4:03.

July 31, 1995
NOAA-14 data missing from 10:08 to 13:26.

August 3, 1995
NOAA-14 data missing from 19:25 to 21:09.

August 10, 1995
NOAA-12 data missing from 6:56 to 8:43.

August 18, 1995
NOAA-14 data missing from 5:14 to 6:54 and from 22:05 to 23:43.

August 30, 1995
NOAA-12 data missing from 1:02 to 1:53.

September 9, 1995
NOAA-14 data missing from 23:10 to 00:51.

September 10, 1995
NOAA-12 data missing from 16:17 to 17:34.

September 12, 1995
NOAA-12 data missing from 4:49 to 6:28.

September 19, 1995
NOAA-14 data missing from 7:54 to 9:40.

September 21, 1995
NOAA-14 data missing from 12:31 to 14:09.

September 22, 1995
NOAA-12 data missing from 18:15 to 19:50.

September 23, 1995
NOAA-14 data missing from 12:09 to 13:48.

September 25, 1995

NOAA-14 data missing from 10:06 to 11:48.

September 28, 1995
NOAA-12 data missing from 00:26 to 2:17.

September 29, 1995
NOAA-14 data missing from 19:23 to 22:52.

October 1, 1995
NOAA-14 data missing from 14:04 to 15:43.

October 6, 1995
NOAA-14 data missing from 23:19 to 1:02.

October 7, 1995
NOAA-14 data missing from 21:27 to 23:04.

October 8, 1995
NOAA-14 data missing from 9:38 to 11:03 and from 21:16 to 00:40.

October 13, 1995
NOAA-14 data missing from 21:52 to 23:32.

October 15, 1995
NOAA-12 data missing from 23:23 to 1:04.

October 16, 1995
NOAA-14 data missing from 22:20 to 00:53.

October 18, 1995
NOAA-14 data missing from 22:53 to 00:32.

October 22, 1995
NOAA-14 data missing from 20:12 to 21:52.

October 24, 1995
NOAA-14 data missing from 9:06 to 13:11, from 14:57 to 16:45 and from 23:26 to 1:06.

October 25, 1995
NOAA-12 data missing from 14:57 to 16:45 and from 22:48 to 23:13.

October 30, 1995
NOAA-12 data missing from 16:07 to 17:47.

November 2, 1995
NOAA-12 data missing from 18:23 to 20:14.

November 5, 1995
NOAA-12 data missing from 12:47 to 14:24.

November 17, 1995
NOAA-12 data missing from 22:00 to 23:00.

November 27, 1995
NOAA-12 data missing from 17:38 to 19:25.

January 1, 1996
NOAA-12 data missing from 23:22 to 00:02. NOAA-14 data missing from 23:59 to 2:59

January 4, 1996
NOAA-12 data missing from 5:08 to 6:54

January 7, 1996
NOAA-14 data missing from 11:28 to 14:47

January 19, 1996
NOAA-14 data missing from 14:20 to 15:56

January 24, 1996
NOAA-12 data missing from 2:51 to 4:29 and from 13:19 to 16:56. NOAA-14 data missing from 16:46 to 19:52. Missing orbits due to a file problem in the orbital processing.

January 25, 1996
NOAA-12 data missing from 5:51 to 7:39. Daily surface update job moved from the NWS HDS computer to the NESDIS CEMSCS computer.

January 26, 1996
NOAA-12 data missing from 9:08 to 10:53. NOAA-14 data missing from 4:35 to 6:22.

February 1, 1996
Surface update job on the CEMSCS was not getting the sea data updated since the January 25 implementation. Problem corrected and sea data is now being updated. NOAA-12 data missing from 17:24 to 18:38.

February 6, 1996
NOAA-14 data missing from 19:12 to 20:58

February 11, 1996
NOAA-14 data missing from 11:51 to 13:28

February 17, 1996

NOAA-12 data missing from 14:45 to 16:09

February 21, 1996
NOAA-12 data missing from 16:46 to 18:04. NOAA-14 data missing from 10:02 to 11:46.

February 25, 1996
NOAA-14 data missing from 21:24 to 22:26.

March 1, 1996
NOAA-12 data missing from 8:29 to 9:42.

March 2, 1996
NOAA-12 data missing from 19:27 to 21:03.

March 3, 1996
NOAA-12 data missing from 15:49 to 16:53 and from 17:55 to 19:01.

March 11, 1996
NOAA-12 data missing from 12:55 to 14:41 and from 16:11 to 17:49. NOAA-14 data missing from 14:59 to 16:38 due to no synchronized MSU major frame being found.

March 12, 1996
NOAA-14 data missing from 21:36 to 2:48.

March 13, 1996
NOAA-14 data missing from 21:24 to 00:47 and from 1:07 to 2:38.

March 14, 1996
NOAA-14 data missing from 21:12 to 2:23. Problems with missing NOAA-14 data for the last 3 days are due to forecast data not being updated on a TOVS file.

March 17, 1996
NOAA-12 data missing from 3:36 to 5:14.

March 19, 1996
NOAA-14 data missing from 13:33 to 15:13 and from 20:14 to 21:45.

March 20, 1996
NOAA-14 data missing from 23:35 to 1:14.

March 23, 1996
NOAA-12 data missing from 18:15 to 19:01.

March 26, 1996
NOAA-14 data missing from 5:35 to 7:13.

March 28, 1996
NOAA-14 data missing from 15:19 to 16:40.

April 12, 1996
NOAA-14 data missing from 2:37 to 3:59.

April 25, 1996
NOAA-12 data missing from 6:09 to 9:45. NOAA-14 data missing from 10:11 to 11:50.

April 30, 1996
NOAA-14 data missing from 1:05 to 7:53.

May 6, 1996
NOAA-14 data missing from 16:35 to 17:55.

May 14, 1996
NOAA-14 data missing from 11:47 to 13:26.

June 14, 1996
NOAA-14 data missing from 21:20 to 22:58 and from 7:54 to 9:38.

June 16, 1996
NOAA-14 data missing from 2:12 to 3:57.

June 21, 199
NOAA-14 data missing from 23:27 to 1:08.

June 22, 1996
NOAA-14 data missing from 13:06 to 14:45.

July 1, 1996
NOAA-12 data missing from 17:08 to 18:44.

July 4, 1996
NOAA-12 data missing from 0:29 to 2:17. NOAA-14 data missing from 14:17 to 15:53.

July 5, 1996
NOAA-12 data missing from 5:19 to 7:05.

July 12, 1996
NOAA-14 data missing from 2:31 to 4:22.

July 18, 1996
NOAA-12 data missing from 2:13 to 3:50.

July 20, 1996

NOAA-12 data missing from 3:09 to 4:50.

July 21, 1996
NOAA-12 data missing from 4:28 to 6:09.

July 22, 1996
NOAA-12 data missing from 21:08 to 22:49.

July 23, 1996
NOAA-12 data missing from 9:04 to 10:51.

July 24, 1996
NOAA-14 data missing from 18:57 to 22:28.

July 26, 1996
NOAA-12 data missing from 13:06 to 16:17. NOAA-14 data missing from 8:40 to 10:12.

July 29, 1996
NOAA-12 data missing from 20:21 to 21:39.

July 30, 1996
NOAA-12 data missing from 23:20 to 1:08.

August 7, 1996
NOAA-14 data missing from 4:00 to 4:52.

August 10, 1996
NOAA-14 data missing from 22:46 to 0:25.

August 12, 1996
NOAA-14 data missing from 17:01 to 18:38.

August 13, 1996
NOAA-12 data missing from 20:11 to 23:13 and from 10:07 to 11:31. NOAA-14 data missing from 23:54 to 1:44.

August 16, 1996
NOAA-14 data missing from 1:04 to 2:33 and from 14:52 to 16:30.

August 23, 1996
NOAA-12 data missing from 7:39 to 8:49. NOAA-14 data missing from 10:14 to 11:50.

September 12, 1996
NOAA-12 data missing from 5:11 to 8:45 and from 20:34 to 21:54. NOAA-14 data missing from 18:43 to 19:44.

September 14, 1996
NOAA-12 data missing from 21:38 to 23:13.

September 22, 1996
NOAA-12 data missing from 20:16 to 21:37.

September 24, 1996
NOAA-12 data missing from 16:12 to 17:47.

September 27, 1996
NOAA-14 data missing from 5:47 to 7:36.
October 2, 1996

NOAA-14 data missing from 16:23 to 17:44.

October 4, 1996
NOAA-12 data missing from 15:53 to 17:30.

October 9, 1996
NOAA-12 data missing from 10:48 to 12:25.

October 12, 1996
NOAA-12 data missing from 13:02 to 14:48.

October 19, 1996
NOAA-12 data missing from 5:03 to 6:52. NOAA-14 data missing from 2:38 to 4:58.

October 21, 1996
NOAA-14 data missing from 6:16 to 7:53.

October 29, 1996
NOAA-12 data missing from 3:10 to 4:40 and from 20:16 to 21:31.

October 30, 1996
NOAA-12 data missing from 4:21 to 6:03, 7:54 to 9:10 and from 11:29 to 13:05.

November 7, 1996
NOAA-12 data missing from 10:15 to 11:53.

November 15, 1996
NOAA-12 data missing from 7:02 to 8:49, 10:40 to 12:14 and from 20:57 to 22:18.

November 16, 1996
NOAA-14 data missing from 1:08 to 3:03 and from 6:36 to 8:15.

November 20, 1996

NOAA-14 data missing from 10:50 to 12:26 and from 19:05 to 20:46.

November 28, 1996
NOAA-12 data missing from 00:17 to 2:02

December 7, 1996
NOAA-12 data missing from 21:25 to 22:39.

December 23, 1996
NOAA-12 data missing from 18:24 to 20:03.

December 28, 1996
NOAA-14 data missing from 23:10 to 0:08.

October 22, 1997
RTOVS NOAA-14 operational processing and archive began.

October 24, 1997
Data missing for NOAA-14 from 0425 to 0606UTC.

October 28, 1997
SPGDVR and BLDLIB modules were updated.

October 28, 1997
Data missing for NOAA-14 from 2347 to 0129 UTC on October 29.

October 29, 1997
Updated NOAA-14 coefficients.

October 29, 1997
Coefficient database (CDB) archive began

November 2, 1997
Radiosonde match did not run today, changes in JCL=s for other days didn=t get into the Sunday JCL.

November 3, 1997
Updated NOAA-14 coefficients.

November 10, 1997
Radiosonde match did not run again. Correction to Sunday JCL had error in the typing.

November 12, 1997
Updated NOAA-14 coefficients.

November 18, 1997
Updated NOAA-14 coefficients.

November 19, 1997
RTOVS NOAA-11 operational processing and archive began.

November 19, 1997
Data missing for NOAA-14 from 0812 to 1445UTC.

November 20, 1997
Data missing for NOAA-14 from 1925 to 0038 UTC on November 21.

November 23, 1997
Reported NOAA-11 processing is using NOAA-14 transmittance coefficients.

November 25, 1997
Data missing for NOAA-11 from 1734 to 1838 UTC.

November 28, 1997
Updated NOAA-14 and NOAA-11 coefficients.

November 29, 1997
Data missing for NOAA-14 from 2007 to 2359 UTC.

November 30, 1997
Data missing for NOAA-14 from 0000 to 2103 UTC.

December 1, 1997
NOAA-14 data missing from 0220 to 0433 UTC.

December 2, 1997
NOAA-14 data missing from 2041 to 1358 UTC on December 3.

December 8, 1997
NOAA-14 data missing from 0244 to 0427 and from 1303 to 1436 UTC.

December 9, 1997
NOAA-14 data missing from 0935 to 1104 UTC.

December 11, 1997
NOAA-14 data missing from 0903 to 1403 UTC.

December 16, 1997
Orbital processing modified to look for most recent forecast file instead of only file in certain time frame. Some orbital processing was lost when current forecast file was unavailable.

December 19, 1997
NOAA-14 data missing from 0223 to 0405 UTC.

December 25, 1997
NOAA-11 data missing from 0007 to 0619 UTC.

December 28, 1997
NOAA-14 data missing from 0035 to 0357 and from 2059 to 2235 UTC.

December 29, 1997
NOAA-14 data missing from 0544 to 0910 UTC.

January 5, 1998
Updated NOAA-11 coefficients.

January 6, 1998
Updated NOAA-14 coefficients.

January 11, 1998
NOAA-14 data missing from 0752 to 0825 UTC.

January 12, 1998
Updated NOAA-14 and NOAA-11 coefficients.

January 20, 1998
Updated NOAA-14 and NOAA-11 coefficients.

January 26, 1998
Updated NOAA-14 and NOAA-11 coefficients.

January 29, 1998
The filter flag was incorrectly packed in the file. Logic was added to convert the HIRS scan number to box and minibox numbers.

February 1, 1998
NOAA-11 data missing from 0845 to 1357 UTC. NOAA-14 data missing from 0000 to 2258 UTC.

February 2, 1998
Updated NOAA-14 and NOAA-11 coefficients.

February 2, 1998
NOAA-11 data missing from 1924 to 2005 UTC.

February 04, 1998

NOAA-14 data missing from 0910 to 1039 UTC.

February 9, 1998
Updated NOAA-14 and NOAA-11 coefficients.

February 10, 1998
NOAA-14 data missing from 2116 to 0040 UTC on February 11.

February 12, 1998
NOAA-11 data missing from 0002 to 0150 UTC.

February 16, 1998
NOAA-11 data missing from 1135 to 1242 UTC.

February 17, 1998
Updated NOAA-14 and NOAA-11 coefficients.

February 17, 1998
NOAA-11 data missing from 0627 to 1349 UTC.

February 19, 1998
NOAA-11 data missing from 1339 to 1831 UTC.

February 23, 1998
Updated NOAA-14 and NOAA-11 coefficients.

February 24, 1998
NOAA-11 data missing from 1103 to 1232UTC. NOAA-14 data missing from 2206 to 2341 UTC.

February 25, 1998
Corrected inconsistent handling of time less than 0100 UTC. The product generation software would assign the hour of 24 which was unacceptable for the archive software. This prevented the archive of data less than 0100 UTC.

February 25, 1998
NOAA-11 data missing from 0035 to 0136 UTC.

February 27, 1998
NOAA-14 data missing from 1316 to 1450 UTC.

March 2, 1998
Updated NOAA-14 and NOAA-11 coefficients.

March 5, 1998
Added six thresholds to cloud detection. Improved use of land and sea eigenvectors. Enhanced

SSU quality checks. Require first guess records to have first significant level greater than or equal to 950mb. Improved product over sea ice by allowing flexible field of view selection and improved application of window channel tests.

March 7, 1998
NOAA-11 data missing from 0502 to 0626; 1105 to 1206, and from 1735 to 1835 UTC.

March 9, 1998
Updated NOAA-14 and NOAA-11 coefficients.

March 15, 1998
NOAA-11 data missing from 0018 to 0206 UTC. NOAA-14 data missing from 0216 to 0318 UTC.

March 16, 1998
Updated NOAA-14 and NOAA-11 coefficients.

March 18, 1998
NOAA-11 data missing from 0041 to 0231 UTC.

March 20, 1998
NOAA-14 data missing from 1912 to 2053 UTC.

March 23, 1998
Updated NOAA-14 and NOAA-11 coefficients.

March 28, 1998
NOAA-14 data missing from 2111 to 0035 UTC on March 29.

March 30, 1998
Updated NOAA-14 and NOAA-11 coefficients.

April 1, 1998
NOAA-11 data missing from 1906 to 2004 UTC

April 3, 1998
NOAA-11 data missing from 0829 to 0935 UTC.

April 11, 1998
NOAA-11 data missing from 0557 to 0747 UTC and from 1308 to 1456 UTC. NOAA-14 data missing from 0142 to 0303 UTC.

April 11, 1998
NOAA-11 data missing from 2331 on April 11 to 0119 UTC on April 12.

April 12, 1998

Improved coefficient update system: (1) improved the cloud products by using water vapor attenuated HIRS channel 8; (2) improved computation of the sum of squares.

April 13, 1998
NOAA-14 data missing from 1808 to 0102 UTC on April 14.

April 19, 1998
NOAA-14 data missing from 0250 to 0337 UTC.

April 21, 1998
NOAA-11 data missing from 2334 on April 21 to 0109 UTC on April 22.

April 24, 1998
NOAA-11 data missing from 0022 to 0211 UTC.

April 27, 1998
NOAA-11 data missing from 1742 to 1844 UTC.

April 28, 1998
NOAA-11 data missing from 0546 to 0924 UTC. NOAA-14 data missing from 1926 to 2019 UTC.

May 6, 1998
NOAA-14 data missing from 2039 to 2221 UTC.

May 7, 1998
NOAA-14 data missing from 1307 to 1352 UTC.

May 8 - 10, 1998
A line problem with the Fairbanks Command Data Acquisition Station prevented the receipt of NOAA-11 orbits read out at that site. No recovery was possible.

May 8, 1998
NOAA-11 data missing from1413 to 1905 UTC. NOAA-14 data missing from 0141 to 0328 UTC.

May 9, 1998
NOAA-11 data missing from 0138 to 0646 and from 1401 to 1852 UTC.

May 10, 1998
NOAA-11 data missing from 0125 to 0632 UTC.

May 13, 1998
Improved total ozone computation by using the weighted average of 0.85 limb corrected HIRS channel 8 and 0.15 limb corrected HIRS channel 10 to compute the stratospheric background temperature.

May 17, 1998
NOAA-11 data missing from1745 to 2123 UTC.

May 18, 1998
NOAA-11 data missing from 0344 to 0723; 1112 to 1450 and from 1840 to 2219 UTC.

May 19, 1998
NOAA-11 data missing from 0332 to 0726 and from 1116 to 1547 UTC.

May 19-20, 1998
NOAA-11 data missing from 2322 on May 19 to 0005 UTC on May 20.

May 20, 1998
NOAA-11 data missing from 0740 to 1534 UTC.

May 29, 1998
NOAA-11 data missing from 2040 to 2141 UTC.

June 1, 1998
Updated NOAA-14 and NOAA-11 coefficients.

June 2, 1998
Radiosonde match-up selection was changed to base selection on timeliness as well a geographic representation, as geographic representation was weighted too heavily.

June 2, 1998
NOAA-11 data missing from 1041 to 1328 UTC.

June 8, 1998
Updated NOAA-14 and NOAA-11 coefficients.

June 15, 1998
Updated NOAA-14 and NOAA-11 coefficients.

June 17, 1998
Corrected problem with SSU products over the poles.

June 17, 1998
NOAA-11 data missing from 1052 to 1241 UTC.

June 21, 1998
NOAA-11 data missing from 0448 to 0637 UTC.

June 22, 1998
Disabled SSU channel 3 from NOAA-11 and NOAA-14 processing (NOAA-11 SSU is mapped

to NOAA-14 data). Poor quality data at 2mb was reported prior to disabling SSU channel 3.

June 22, 1998
Updated NOAA-14 and NOAA-11 coefficients.

June 22-28, 1998
No archive available for NOAA-11 data.

June 23, 1998
NOAA-14 data missing from 1526 to 1659 UTC.

June 24, 1998
Plumbing problems caused problems in the computer room and prevented processing of orbital data from midnight until 0826 EST, some data may be missing from the archive as a result.

June 25, 1998
Improved filtering of SSU data to filter out data that fails the gross limits check. SSU channel 3 enabled since bad data will now be filtered.

June 25, 1998
Radiation correction software was updated with latest version from NCEP. Earlier version was not correcting all of the radiosondes it should have been correcting.

June 25, 1998
NAA-11 data missing from 1053 to 1411 and from 1608 to 1755 UTC.

June 26, 1998
The SSU map from the parallel system was copied in to the operations. The operational map was found to contain bad data whereas the parallel map was clean.

June 26, 1998
NOAA-11 data missing from 0142 to 0330; 0526 to 0650; 0847 to 1034; 1231 to 1358 and from 1749 to 1859 UTC. NOAA-14 data missing from 0439 to 0621 UTC.

June 29, 1998
NOAA-11 data missing from 1509 to 1657 UTC.

June 30, 1998
Updated NOAA-14 and NOAA-11 coefficients.

June 30, 1998
Updated NOAA-11 limb correction coefficients for MSU at 2000 UTC. Small impact on channels 1, 2, and 3 of about 0.5K. Channels 2 and 3 appear to have slightly less scan angle pattern in the tropics. Channel 4 has a bimodal impact and a definite improvement.

July 1, 1998

NOAA-11 data missing from 0605 to 0729 UTC

July 1, 1998
NOAA-11 data missing from 2326 on July 1 to 0115 UTC on July 2.

July 2, 1998
The problem with the SSU data was isolated to the smoothing software. At 1600 UTC, the TOVS smoother was installed (which was tested and determined to be working properly) while the RTOVS version was corrected.

July 3, 1998
NOAA-11 data missing from 1106 to 1245 UTC.

July 5, 1998
NOAA-14 data missing from 0443 to 0623 UTC.

July 7, 1998
Updated NOAA-14 and NOAA-11 coefficients.

July 12, 1998
NOAA-14 data missing from 0504 to 0646 UTC.

July 13, 1998
Updated NOAA-14 and NOAA-11 coefficients.

July 13, 1998
Turned on SSU channel 3 in NOAA-11 and NOAA-14 CDBs.

July 13, 1998
NOAA-14 data missing from 0453 to 0634 UTC.

July 14, 1998
Updated NOAA-14 limb coefficients for MSU and HIRS at 1400 UTC. The impact for MSU is very similar to that for the NOAA-11 MSU. For the HIRS, channels 4 through 13 showed a reduction on the limb range from 0.5K for channel12 to 1.3K for channel 10. Channel 13 was the only HIRS channel with a bimodal impact (vs. latitude). Other channels had an impact of less than 0.25K.

July 14, 1998
NOAA-11 data missing from 1726 to 1914 UTC.

July 16, 1998
Development SSU Map was copied into operations.

July 17, 1998
NOAA-14 data missing from 2251 to 0013 UTC on July 18.

July 18, 1998
NOAA-14 data missing from 0540 to 0721 and from 2238 to 2359 UTC.

July 19, 1998
NOAA-14 data missing from 0528 to 0716 UTC.

July 20, 1998
Updated NOAA-14 and NOAA-11 coefficients.

July 20, 1998
NOAA-14 data missing from 0517 to 0658 UTC.

July 21, 1998
Installed new software to check incoming SSU information and reject it if it is inconsistent.

July 21, 1998
NOAA-11 data missing from 1036 to 1219 UTC.

July 22, 1998
NOAA-11 data missing from 0402 to 0506 UTC.

July 23, 1998
NOAA-14 data missing from 0254 to 0436 UTC.

July 24, 1998
NOAA-11 data missing from 0446 to 0602 UTC.

July 27, 1998
Updated NOAA-14 and NOAA-11 coefficients.

July 27, 1998
Noted that RTOVS products and archive define nighttime as those occasions when the solar zenith angle is greater than 90 degrees.

July 28, 1998
NOAA-11 data missing from 0145 to 0334 UTC

Julyl 29, 1998
NOAA-11 data missing from 0000 to 0041 and from 1449 to 1533 UTC. NOAA-14 data missing from 0000 to 0136 UTC.

July 30, 1998
NOAA-14 data missing from 0000 to 0123 UTC.

August 3, 1998

Updated NOAA-14 and NOAA-11 coefficients.

August 4, 1998
NOAA-11 data missing from 0258 to 0440 UTC.

August 5, 1998
NOAA-11 data missing from0146 to 0334 UTC.

August 6, 1998
NOAA-11 data missing from 1033 to 1221 UTC.

August 8, 1998
NOAA-11 data missing from 0524 to 0616 and from 2318 to 0050 UTC on August 9.

August 9, 1998
NOAA-14 data missing from 1951 to 2135 UTC.

August 10, 1998
NOAA-11 data missing from 1138 to 1223 and from 2341 to 0119 UTC on August 11.

August 11, 1998
NOAA-11 data missing from 0157 to 0319 UTC.

August 13, 1998
NOAA-11 data missing from 0155 to 0338 UTC.

August 17, 1998
Updated NOAA-14 coefficients.

August 18, 1998
Updated NOAA-11 coefficients.

August 18, 1998
NOAA-14 data missing from 2139 to 0810 UTC on August 19 due to a processing problem.

August 24, 1998
Updated NOAA-14 and NOAA-11 coefficients.

August 26, 1998
Corrected SSU Smoother was placed in production. Problem isolated to improper accessing of the file. TOVS Smoother was removed. However, there is still a problem producing retrievals at the extreme polar locations.

August 27, 1998
NOAA-11 data missing from 0843 to 0923 and from 1356 to 1520 UTC. NOAA-14 data missing from 1159 to 1321 UTC.

August 31, 1998
Updated NOAA-14 and NOAA-11 coefficients.

September 1, 1998
NOAA-11 data missing from 1158 to 1344 and from 2202 to 2350 UTC. NOAA-14 data missing from 2038 to 2223 UTC due to incorrect time codes in the input data.

September 2, 1998
Reduced volume of NOAA-14 data from 09/01-02 due to incorrect TIP time codes in the Level 1b files.

September 3, 1998
NOAA-11 data missing from 0611 to 0734 UTC.

September 4, 1998
NOAA-11 data missing from 0404 to 0551; and 1136 to 1303 UTC.

September 6, 1998
NOAA-14 data missing from 0818 to 0959 UTC

September 7, 1998
NOAA-11 data missing from 1102 to 1223 UTC.

September 8, 1998
Updated NOAA-14 and NOAA-11 coefficients.

September 13, 1998
NOAA-11 data missing from 0110 to 0156 UTC.

September 15, 1998
Updated NOAA-14 and NOAA-11 coefficients.

September 16. 1998
NOAA-14 data missing from 0949 to 1117 UTC.

September 17, 1998
NOAA-14 data missing from 1920 to 2104 UTC.

September 18, 1998
Installed updated EFNDSS in SPGDVR as final fix to SSU problem.

September 19, 1998
NOAA-11 data missing from 2332 on September 19 to 0121 UTC on September 20.

September 20, 1998
NOAA-14 data missing from 0155 to 0339 UTC.

September 21, 1998
Updated NOAA-14 and NOAA-11 coefficients.

September 22, 1998
NOAA-14 data missing from 0258 to 0505 UTC.

September 24, 1998
Updated thresholds on NOAA-11 CDB.

September 26, 1998
NOAA-14 data missing from 1255 to 1429 UTC.

September 28, 1998
Updated NOAA-14 and NOAA-11 coefficients.

October 5, 1998
Updated NOAA-14 and NOAA-11 coefficients.

October 8, 1998
NOAA-11 data missing from 0431 to 0621 UTC.
October 11, 1998
NOAA-11 data missing from 0525 to 0622 UTC.

October 13, 1998
Updated NOAA-14 coefficients.

October 14, 1998
NOAA-14 data missing from 1438 to 1613 UTC.

October 18, 1998
NOAA-11 data missing from 1743 to 1923 UTC.

October 19, 1998
Updated NOAA-14 coefficients.

October 19, 1998
NOAA-11 data missing from 1107 to 1201 UTC.

October 21, 1998
Users were notified of a problem in the upper troposphere over Antarctica=s high terrain. Problem stems from RTOVS=s improperly responding to the warming in the stratosphere as spring progresses in that region. Problem expected to persist for another two weeks then RTOVS

will have automatically adjusted.

October 26, 1998
Updated NOAA-14 and NOAA-11 coefficients.

October 27, 1998
NOAA-11 data missing from 0023 to 0107 UTC.

October 28, 1998
Geopotential heights for the first 20 heights were improperly scaled. The first 9 heights had been scaled by 10 twice instead of once and the 11$^{th}$ through 20$^{th}$ heights were not scaled by 10 when they should have been. This was corrected at 1500 UTC.

November 1, 1998
NOAA-14 data missing from 0616 to 0752 UTC.

November 2, 1998
Updated NOAA-14 and NOAA-11 coefficients.

November 2, 1998
NOAA-11 data missing from 1753 to 2035 UTC.
November 6, 1998
NOAA-11 data missing from 1450 to 1544 UTC.

November 7, 1998
NOAA-11 data missing from 0559 to 0727 UTC. NOAA-14 data missing from 0000 to 0900 UTC.

November 9, 1998
NOAA-11 data missing from 2329 to 0046 UTC on November 10.

November 11, 1998
NOAA-11 data missing from 0126 to 0633 and from 1531 to 0121 UTC on November 12.

November 12, 1998
NOAA-11 HIRS began exhibiting problems with calibration and higher than normal orbital average current values from the scan motor.

November 12-13, 1998
Products from one Command Data Acquisition Station were sporadic.

November 12, 1998
NOAA-11 data missing from 0510 to 0622 UTC.

November 15, 1998
NOAA-11 data missing from 0116 to 0304 UTC

November 16, 1998
Updated NOAA-14 and NOAA-11 coefficients.

November 16, 1998
NOAA-11 data missing from 1427 to 2100 UTC due to data corruption.

November 17, 1998
NOAA-11 data missing from 0051 to 0700 and from 1759 to 2048 UTC.

November 18, 1998
NOAA-11 data missing from 0038 to 0647 and from 1757 to 2036 UTC.

November 19, 1998
NOAA-11 data missing from 1026 to 1214 UTC.

November 21, 1998
NOAA-11 data missing from 1820 to 1958 UTC.

November 22, 1998
NOAA-11 data missing from 1138 to 1307 UTC.

November 23, 1998
Updated NOAA-14 and NOAA-11 coefficients.

November 24, 1998
NOAA-11 data missing from 1223 to 1306 UTC.

November 28, 1998
NOAA-14 data missing from 1627 to 1844 UTC.

November 30, 1998
Updated NOAA-14 and NOAA-11 coefficients.

November 30, 1998
NOAA-11 data missing from 1453 to 1642 and from 1837 to 1946 UTC.

December 1-18, 1998
All software migrated from the mainframe computer to the Amdal Enterprise Server.

December 1, 1998
NOAA-11 data missing from 1441 to 1630 UTC.

December 2, 1998
NOAA-11 data missing from 0205 to 0353 UTC.

December 6, 1998
NOAA-11 data missing from 1738 to 1913 UTC.

December 7, 1998
Updated NOAA-14 and NOAA-11 coefficients.

December 7, 1998
NOAA-11 data missing from 0345 to 0608 UTC.

December 9, 1998
Cloud product upgrade (experimental product) implemented.

December 12, 1998
NOAA-11 data missing from 1403 to 1552 UTC.

December 14, 1998
Updated NOAA-14 and NOAA-11 coefficients.

December 16, 1998
NOAA-14 data missing from 0450 to 0613 UTC.

December 17, 1998
NOAA-11 data missing from 1440 to 1631 UTC.

December 18, 1998
NOAA-14 data missing from 0028 to 0204 UTC.

December 19, 1998
NOAA-11 data missing from 1800 to 1949 UTC.

December 21, 1998
Updated NOAA-14 and NOAA-11 coefficients.

December 22, 1998
NOAA-11 data missing from 1903 to 2011 UTC.

December 23, 1998
NOAA-11 data missing from 0758 to 0947 UTC.

December 24, 1998
NOAA-14 data missing from 0812 to 0947 UTC.

December 26, 1998
NOAA-11 data missing from 1931 to 2117 UTC.

December 28, 1998

Updated NOAA-14 and NOAA-11 coefficients.

December 28, 1998
NOAA-11 data missing from 2043 to 2231 UTC.

January 1, 1999
NOAA-14 data missing from 0001 to 0109 UTC.

January 4, 1999
Updated NOAA-14 and NOAA-11 coefficients.

January 5, 1999
NOAA-11 data missing from 1929 to 2118 UTC.

January 6, 1999
Modified orbital processing: (1) expanded the possible high terrain channel combinations and retrievals. (2) modified the gross temperature check. (3) Added the use of variable distance windows. (4) added use of variable eignevectors across channels. (5) Added the use of orbital node for the binning of radiosonde-retrieval match data. (6) Improved the upper level check for radiosondes.

January 11, 1999
Updated NOAA-14 and NOAA-11 coefficients.

January 10, 1999
NOAA-11 data missing from 0733 to 0923 UTC.

January 13, 1999
NOAA-11 data missing from 1730 to 2119 UTC.

January 15, 1999
NOAA-14 data missing from 0223 to 0344 UTC.

January 18, 1999
NOAA-14 data missing from 0317 to 0459 UTC.

January 19, 1999
Updated NOAA-14 and NOAA-11 coefficients.

January 23, 1999
NOAA-14 data missing from 1559 to 1732 UTC.

January 25, 1999
Updated NOAA-14 and NOAA-11 coefficients.

January 31, 1999

NOAA-14 data missing from 1142 to 1243 UTC.

February 1, 1999
Updated NOAA-14 and NOAA-11 coefficient.

February 1, 1999
NOAA-14 data missing from 0212 to 0359 UTC.

February 2, 1999
NOAA-11 data missing from 0802 to 0936 UTC.

February 3, 1999
NOAA-11 data missing from 0000 to 0127 and from 0730 to 0923 UTC.

February 8, 1999
Updated NOAA-14 and NOAA-11 coefficients.

February 8, 1999
NOAA-14 data missing from 0000 to 2256 UTC.

February 9, 1999
NOAA-14 data missing from 0000to 2248 UTC.

February 12-15, 1999
Did not receive any forecast or radiosonde data due to serious computer problems at the National Centers for Environmental Prediction (NCEP)

February 22, 1999
Updated NOAA-14 and NOAA-11 coefficients.

February 23, 1999
NOAA-11 data missing from 1448 to 1528 UTC.

February 26, 1999
At 0935Z, the NOAA-11 telemetry indicated the MSU scanner came to a stuck position. Investigation of the quality of NOAA-11 soundings began, little to no data are being processed due to the problem. No data was archived after 0818Z.

Problem with MSU on NOAA-11 is a broken drive belt for channels 3 and 4 (As reported on March 16, 1999) . Both of the these channels are essential to RTOVS for processing so RTOVS NOAA-11 processing has stopped.

March 1, 1999
Updated NOAA-14 coefficients.

March 8, 1999

Updated NOAA-14 coefficients.

March 9, 1999
NOAA-14 data missing from 0257 to 0359 UTC.

March 15, 1999
Updated NOAA-14 coefficients.

March 22, 1999
Updated NOAA-14 coefficients.

March 27, 1999
NOAA-14 data missing from 0220 to 0354 UTC.

March 29, 1999
Updated NOAA-14 coefficients.

March 31, 1999
NOAA-14 data missing from 1330 to 1510 UTC.

April 5, 1999
Updated NOAA-14 coefficients.

April 5, 1999
NOAA-14 data missing from 0214 to 0327 UTC.

April 7, 1999
NOAA-14 data missing from 2020 to 2204 UTC.

April 8, 1999
RTOVS system successfully tested as Year2000 compatible. Some modifications were made, primarily to the reporting software.

April 12, 1999
Updated NOAA-14 coefficients.

April 19, 1999
Updated NOAA-14 coefficients.

April 23, 1999
NOAA-14 data missing from 0739 to 0915 UTC.

April 26, 1999
Updated NOAA-14 coefficients.

May 3, 1999

Updated NOAA-14 coefficients.

May 4, 1999
Archive modified to include polar redundant data. This was done to ensure good coverage of the ozone hole.

May 10, 1999
Experimental cloud parameters were modified: (1) cloud amount calculation was changed to use the proper channel pair instead of just HIRS channels 7 and 8. (2) cloud top temperature is now used to compute the cloud amount.

May 10, 1999
Updated NOAA-14 coefficients.

May 17, 1999
Updated NOAA-14 coefficients.

May 24, 1999
Updated NOAA-14 coefficients.

June 7, 1999
Updated NOAA-14 coefficients.

June 9, 1999
Implemented correction to SSU mapping to eliminate a sporadic, localized problem on the SSU map file.

June 14, 1999
Updated NOAA-14 coefficients.

June 21, 1999
Updated NOAA-14 coefficients.

June 27, 1999
NOAA-14 data missing from 0140 to 0324 UTC.

June 28, 1999
Updated NOAA-14 coefficients.

July 6, 1999
Updated NOAA-14 coefficients.

July 6, 1999
NOAA-14 data missing from 0538 to 0702 UTC.

July 7, 1999

NOAA-14 data missing from 1357 to 1512 UTC.

July 9, 1999
NOAA-14 data missing from 2311 to 0048 UTC on July 10.

July 11, 1999
NOAA-14 data missing from 0556 to 0748 UTC.

July 12, 1999
Updated NOAA-14 coefficients.

July 14, 1999
NOAA-14 data missing from 0500 to 0714 UTC.

July 15, 1999
Correct scaling of the layer precipitable water. Changed from centimeters to millimeters.

July 15, 1999
NOAA-14 data missing from 0513 to 0701 UTC.

July 19, 1999
Updated NOAA-14 coefficients.

July 22, 1999
NOAA-14 missing data from 0534 to 0724 and from 1407 to 2220 UTC.

July 25, 1999
NOAA-14 data missing from 1342 to 1510 UTC.

July 26 - August 1, 1999
Two cases of missing data due to various problems with some scan lines for the MSU as well as other sounding instruments.

August 2, 1999
Fixed pre-processed frame problem.

August 2, 1999
Updated NOAA-14 coefficients.

August 9, 1999
Updated NOAA-14 coefficients.

August 16, 1999
Updated NOAA-14 coefficients.

August 16, 1999

NOAA-14 data missing from 2055 to 2239 UTC.

August 23, 1999
Updated NOAA-14 coefficients.

August 30, 1999
Updated NOAA-14 coefficients.

September 7, 1999
Updated NOAA-14 coefficients.

September 13, 1999
Updated NOAA-14 coefficients.

September 20, 1999
Updated NOAA-14 coefficients.

September 24, 1999
NOAA-14 data missing from 1739 to 1832 UTC.

September 27, 1999
Updated NOAA-14 coefficients.

October 4, 1999
Updated NOAA-14 coefficients.

October 4, 1999
NOAA-14 data missing from 0127 to 0313 UTC.

October 12, 1999
Updated NOAA-14 coefficients.

October 15, 1999
NOAA-14 data missing from 0812 to 0953 UTC.

October 18, 1999
Updated NOAA-14 coefficients.

October 22, 1999
NOAA-14 data missing from 1333 to 1509 UTC.

October 25, 1999
Updated NOAA-14 coefficients.

October 31, 1999
NOAA-14 data missing from 0000 to 0118 UTC.

November 1, 1999
Updated NOAA-14 coefficients.

November 8, 1999
Updated NOAA-14 coefficients.

November 8, 1999
NOAA-14 data missing from 0132 to 0317 UTC.

November 16, 1999
Updated NOAA-14 coefficients.

November 22, 1999
Updated NOAA-14 coefficients.

November 29, 1999
Updated NOAA-14 coefficients.

December 6, 1999
Updated NOAA-14 coefficients.

December 7, 1999
NOAA-14 data missing from 1454 to 1638 UTC.

December 8, 1999
NOAA-14 data missing from 0000 to 0048 UTC.

December 13, 1999
Updated NOAA-14 coefficients.

December 20, 1999
Updated NOAA-14 coefficients.

December 21, 1999
NOAA-14 data missing from 1714 to 1838 UTC.

December 27, 1999
Updated NOAA-14 coefficients.

December 28, 1999
NOAA-14 data missing from 1415 to 1554 UTC.

January 1, 2000
NOAA-14 data missing from 0001 to 0109 UTC

January 2, 2000
NOAA-14 data missing from 1500 to 1643 UTC.

January 4, 2000
Updated NOAA-14 coefficients.

January 4, 2000
NOAA-14 data missing from 1757 to 1918 UTC.

January 5, 2000
NOAA-14 data missing from 0744 to 0922 and from 1114 to 1239 UTC.

January 10, 2000
Updated NOAA-14 coefficients.

January 11, 2000
NOAA-14 data missing from 2313 to 0051 UTC on January 12.

January 18, 2000
NOAA-14 data missing from 0317 to 0459 UTC.

January 23, 2000
NOAA-14 data missing from 1559 to 1732 UTC.

January 24, 2000
Updated NOAA-14 coefficients.

January 31, 2000
Updated NOAA-14 coefficients.

February 7, 2000
Modified radiosonde-retrieval match software to accept matchups in the year 2000.

February 7, 2000
Updated NOAA-14 coefficients.

February 7, 2000
NOAA-14 data missing from 0433 to 0615 UTC.

February 8, 2000
NOAA-14 data missing from 0049 to 0225 and from 0611 to 0753 UTC.

February 14, 2000
Updated NOAA-14 coefficients.

February 16, 2000

Total number of first guesses was steadily decreasing. This was corrected today and a satisfactory number of clear and cloudy first guesses were generated.

February 17, 2000
NOAA-14 data missing from 0000 to 2251 UTC.

February 18, 2000
NOAA-14 data missing from 0000 to 2241 UTC.

February 23, 2000
Updated NOAA-14 coefficients.

February 28, 2000
Updated NOAA-14 coefficients.

March 1, 2000
Modified the first guess library system to accept data in the year 2000, by removing date checking. Modified the eigenvector update to accept data in the year 2000 by making 2000 the base year instead of 1998.

March 6, 2000
NOAA-14 data missing from 1621 to 1745 UTC.

March 9, 2000
NOAA-14 data missing from 0859 to 1033 UTC.

March 14, 2000
Updated NOAA-14 coefficients.

March 20, 2000
Updated NOAA-14 coefficients.

March 26, 2000
NOAA-14 data missing from 1457 to 1539 and from1733 to 1845 UTC.

March 27, 2000
Updated NOAA-14 coefficients.

March 28, 2000
NOAA-14 data missing from 0841 to 1015 UTC.

April 3, 2000
Updated NOAA-14 coefficients.

April 11, 2000
NOAA-14 coefficients were not updated due to software problems.

April 11, 2000
NOAA-14 data missing from 2235 to 2358 UTC.

April 18, 2000
Corrected operator component update to accept data from the year 2000 and beyond.

April 18, 2000
Updated NOAA-14 coefficients.

April 19, 2000
Corrected the archive job to ensure complete archive of products. Some data in past few days were generated but did not get archived.

April 19, 2000
NOAA-14 data missing from 0220 to 0402 UTC.

April 24, 2000
Updated NOAA-14 coefficients.

May 1, 2000
Updated NOAA-14 coefficients.

May 8, 2000
Updated NOAA-14 coefficients.

May 9, 2000
NOAA-14 data missing from 1445 to 1534 UTC.

May 15, 2000
Updated NOAA-14 coefficients.

May 22, 2000
Updated NOAA-14 coefficients.

May 22, 2000
NOAA-14 data missing from 1530 to 1622 UTC.

May 30, 2000
Updated NOAA-14 coefficients.

June 5, 2000
Updated NOAA-14 coefficients.

June 12, 2000
Updated NOAA-14 coefficients.

June 19, 2000
Updated NOAA-14 coefficients.

June 26, 2000
Updated NOAA-14 coefficients.

July 13, 2000
Archive now completely done on an orbital basis. Hence, NESDIS Operations provide NCDC with orbital files of RTOVS data instead of weekly tapes.

September 12, 2000
NOAA-14 data missing from 1447 to 1526 UTC.

September 14, 2000
NOAA-14 data missing from 0320 to 0352 UTC.

September 29, 2000
NOAA-14 data missing from 1501 to 1614 UTC.

October 23, 2000
NOAA-14 data missing from 1320 to 1502 UTC.

October 25, 2000
NOAA-14 data missing from 2104 to 2247 UTC.

October 26, 2000
NOAA-14 data missing from 1756 to 1920 UTC.

November 10, 2000
NOAA-14 data missing from 1459 to 1543 UTC.

November 16, 2000
NOAA-14 data missing from 1022 to 1205 UTC.

November 17, 2000
NOAA-14 data missing from 1955 to 0100 UTC on November 18.

November 18, 2000
NOAA-14 data missing from 1610 to 1714 and from 1802 to 2150 UTC. Missing data related to problems with the Cross Strap Unit on NOAA-14.

November 19, 2000
NOAA-14 data missing from 0127 to 0234 UTC. Cross Strap Units were swapped on NOAA-14 and problems with missing data subsided.

December 9, 2000
NOAA-14 data missing from 1250 to 1403 UTC.

December 19, 2000
NOAA-14 data missing from 0341 to 0523 UTC.

January 6, 2001
NOAA-14 data missing from 2030 to 2149 UTC.

January 22, 2001
NOAA-14 data missing from 2208 to 2344 UTC.

January 23, 2001
NOAA-14 data missing from 0348 to 0456 UTC.

January 26, 2001
NOAA-14 data missing from 0237 to 0319 UTC.

February 1, 2001
NOAA-14 data missing from 1523 to 1649 and from 2001 to 2040 UTC.

February 3, 2001
NOAA-14 data missing from 1454 to 1628 UTC.

February 5, 2001
Updated NOAA-14 coefficients.

February 12, 2001
Updated NOAA-14 coefficients.
February 17, 2001
NOAA-14 data missing from 0508 to 0651 UTC.

February 19, 2001
NOAA-14 data missing from 2318 to 0100 UTC on February 20.

February 20, 2001
Updated NOAA-14 coefficients.

February 26, 2001
Updated NOAA-14 coefficients.

February 27, 2001
NOAA-14 data missing from 1516 to 1643 UTC.

March 1, 2001
NOAA-14 data missing from 1303 to 1445 UTC.

March 5, 2001
Updated NOAA-14 coefficients.

March 12, 2001
Updated NOAA-14 coefficients.

March 19, 2001
Updated NOAA-14 coefficients.

March 26, 2001
Updated NOAA-14 coefficients.

April 2, 2001
Updated NOAA-14 coefficients.

April 9, 2001
NOAA-14 data missing from 1124 to 1207 UTC.

April 16, 2001
Updated NOAA-14 coefficients.

April 16, 2001
NOAA-14 data missing from 1359 to 1542 UTC.

April 23, 2001
Updated NOAA-14 coefficients.

April 30, 2001
Updated NOAA-14 coefficients.

May 1, 2001
NOAA-14 data missing from 0213 to 0351 UTC.

May 7, 2001
Updated NOAA-14 coefficients.

May 14, 2001
Updated NOAA-14 coefficients.

May 22, 2001
Updated NOAA-14 coefficients.

May 29, 2001
Updated NOAA-14 coefficients.

June 4, 2001
Updated NOAA-14 coefficients.

June 7, 2001
NOAA-14 data missing from 2149 to 2331 UTC.

June 8, 2001
NOAA-14 data missing from 0123 to 0254 UTC.

June 11, 2001
Updated NOAA-14 coefficients.

June 18, 2001
Updated NOAA-14 coefficients.

June 21, 2001
NOAA-14 data missing from 1056 to 1238 UTC.

June 25, 2001
Updated NOAA-14 coefficients.

July 2, 2001
Updated NOAA-14 coefficients.
July l2, 2001
NOAA-14 data missing from 0654 to 0836 UTC.

July 3, 2001
Stopped operational distribution of NOAA-14 data. Archive continued to allow overlap of RTOVS NOAA-14 archive and ATOVS NOAA-16 archive.

July l3, 2001
NOAA-14 data missing from 0642 to 0824 UTC.

July 6, 2001
NOAA-14 data missing from 0410 to 0554 UTC.

July 9, 2001
Updated NOAA-14 coefficients.

July 10, 2001
NOAA-14 data missing from 0659 to 0841 UTC.

July 11, 2001
NOAA-14 data missing from 2142 to 2324 UTC.

July 15, 2001

NOAA-14 data missing from 0741 to 0922 and from 2235 to 0017 UTC on July 16.

July 16, 2001
Updated NOAA-14 coefficients.

July 23, 2001
Updated NOAA-14 coefficients.

July 26, 2001
NOAA-14 data missing from 0708 to 0850 UTC.

July 28, 2001
NOAA-14 data missing from 0643 to 0825 UTC.

July 29, 2001
NOAA-14 data missing from 0631 to 0813 UTC.

July 31, 2001
Updated NOAA-14 coefficients.

August 6, 2001
Updated NOAA-14 coefficients.

August 13, 2001
Updated NOAA-14 coefficients.

August 20, 2001
Updated NOAA-14 coefficients.

August 27, 2001
Updated NOAA-14 coefficients.

September 4, 2001
Updated NOAA-14 coefficients.

September 10, 2001
Updated NOAA-14 coefficients.

September 11, 2001
Some HIRS channels had drifted beyond the gross calibration limits. Processing was stopped.

September 12, 2001
Calibration adjusted the limits and processing and archive were resumed.

September 17, 2001
Updated NOAA-14 coefficients.

September 24, 2001
Updated NOAA-14 coefficients.

October 1, 2001
Updated NOAA-14 coefficients.

October 9, 2001
Updated NOAA-14 coefficients.

October 15, 2001
Updated NOAA-14 coefficients.

October 19, 2001
End of RTOVS processing. The last data processed was from NOAA-14 from 0455 to 0648 UTC. This orbit has reduced coverage due to complications with the AVHRR instrument affecting the delivery of data from the satellite.