

**ACTS Propagation System Status**  
and  
**ACTS Propagation Data Base**

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## Engineering Support and Systems Upgrades Status

### Software Status / Deficiencies and Known Problems

DRX software status:

Current version 17 of 4/25/96.

Need to open beacon acquisition constraints.

DACS software status:

Current version 10 of 4/01 /96.

Need to add force beacon reacquisition.

Need to prevent repeating radiometer setups.

TSR software status:

Current version 14 of 6/1 8/98.

Some Traps added for DOS Critical-Errors.

Works with Zip Drive except when operator error.

Complete Drive: \Path Information added.

Data missing from RVO; Maybe fixed.

Changed to keep 61 days of\* .rv0 data on disc.

High Data Rate files are not automatically removed.

Works with new GPS receivers for Timing.

ActsView software status:

Current version 4.5 of 8/6/97.

Actspp Preprocessing software status:

Current version 7.4 of 8/19/98.

# ACTS Data Center RAW Data Files as of 10-15-1998

Yr	Month	AK	BC	CO	FL	MD	NM	OK
93	Dec	31	31	30	28	.	.	29 31
94	Jan	31	31	31	31	.	.	31 31
94	Feb	28	28	28	28	.	.	26 28
94	Mar	31	31	31	29	17	31	31
94	Apr	30	30	30	30	30	30	30
94	May	31	31	25	30	31	31	31
94	Jun	30	30	30	30	30	30	30
94	Jul	31	31	31	31	31	31	31
9A	Aug	31	31	31	31	31	31	31
94	Sep	30	30	29	30	30	30	30
94	Ott	31	31	29	31	31	31	31
94	Nov	27	30	30	30	30	30	30
94	Dec	31	31	31	28	22	31	31
95	Jan	31	31	31	31	19	31	31
95	Feb	28	28	28	28	28	28	28
95	Mar	31	31	31	31	31	31	31
95	Apr	30	30	30	30	28	30	30
95	May	31	31	31	31	31	31	31
95	Jun	30	30	30	30	30	30	30
95	Jul	31	31	31	31	31	31	31
95	Aug	31	30	31	31	31	31	31
95	Sep	30	30	30	30	30	30	30
95	Oct	31	31	31	31	31	31	31
95	Nov	30	30	30	30	30	30	30
95	Dec	31	31	31	31	31	31	31
96	Jan	31	31	31	31	31	31	31
96	Feb	29	29	27	29	29	27	29
96	Mar	31	31	30	31	31	24	31
96	Apr	30	30	30	30	20	30	30
96	May	31	31	31	31	31	31	31
96	Jun	30	30	30	30	30	30	30

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Yr	Month	AK	BC	CO	FL	MD	NM	OK
96	Jul	31	31	23	31	31	31	31
96	Aug	31	31	31	31	31	31	31
96	Sep	30	30	29	28	30	30	30
96	Ott	31	31	28	31	30	31	31
96	Nov	30	30	30	30	23	30	30
96	Dec	31	31	31	31	31	26	31
97	Jan	31	31	31	31	31	29	31
97	Feb	28	28	28	28	28	28	28
97	Mar	31	31	31	31	31	31	31
97	Apr	30	30	30	30	30	27	30
97	May	31	30	31	31	31	31	31
97	Jun	30	30	24	30	30	30	30
97	Jul	30	31	31	31	31	24	31
97	Aug	31	31	31	31	31	31	31
97	Sep	30	30	21	30	30	30	30
97	Oct	31	31	30	13	29	31	31
97	Nov	30	30	30	17	30	30	30
97	Dec	31	31	31	31	31	31	31
98	Jan	31	31	31	31	31	31	31
98	Feb	28	28	28	28	28	28	28
98	Mar	31	31	27	31	31	31	31
98	Apr	30	30	26	30	30	30	30
98	May	31	31	21	31	25	30	31
98	Jun	30	30	30	30	16	25	29
98	Jul	31	31	31	31	31	31	31
98	Aug	31	31	31	31	.	.	31 31 Due
98	Sep	..	..	30	30	.	.	30

Total Daily RVO Files: 11,894

Total Compressed MegaBytes: 4,091

# ACTS Data Center Processed Data Files as of 10-15-1998

Yr	Month	AK	BC	CO	FL	MD	NM	OK
93	Dec	31	31	30	28	.	.	29 31
94	Jan	31	31	31	31	..	31	31
94	Feb	28	28	28	28	..	26	28
94	Mar	31	31	31	29	17	31	31
94	Apr	30	30	30	30	30	30	30
94	May	31	31	25	30	31	31	31
94	Jun	30	30	30	30	30	30	30
94	Jul	31	31	31	31	31	31	31
94	Aug	31	31	31	31	31	31	31
94	Sep	30	30	29	30	30	30	30
94	Oct	31	31	29	31	31	31	31
94	Nov	27	30	30	30	30	30	30
94	Dec	31	31	31	28	22	31	31
95	Jan	31	31	31	31	19	31	31
95	Feb	28	28	28	28	28	28	28
95	Mar	31	31	31	31	31	31	31
95	Apr	30	30	30	30	28	30	30
95	May	31	31	31	31	31	31	31
95	Jun	30	30	30	30	30	30	30
95	Jul	31	31	31	31	31	31	31
95	Aug	31	30	31	31	31	31	31
95	Sep	30	30	30	30	30	30	30
95	Ott	31	31	31	31	31	31	31
95	Nov	30	30	30	30	30	30	30
95	Dec	31	31	31	31	31	31	31
96	Jan	31	31	31	31	31	31	31
96	Feb	29	29	27	29	29	27	29
96	Mar	31	31	30	31	31	24	31
96	Apr	30	30	30	30	20	30	30
96	May	31	31	31	31	31	31	31
96	Jun	30	30	30	30	30	30	30

Yr	Month	AK	BC	CO	FL	MD	NM	OK
96	Jul	31	31	23	31	31	31	31
96	Aug	31	31	31	31	31	31	31
96	Sep	30	30	29	28	30	30	30
96	Ott	31	31	28	31	30	31	31
96	Nov	30	30	30	30	23	30	30
96	Dec	31	31	31	31	31	26	31
97	Jan	31	31	31	31	31	29	31
97	Feb	28	28	28	28	28	28	28
97	Mar	31	31	31	31	31	31	31
97	Apr	30	30	30	30	30	27	30
97	May	31	30	31	31	31	31	31
97	Jun	30	30	24	30	30	30	30
97	Jul	30	31	31	31	31	24	31
97	Aug	31	31	31	31	31	31	31
97	Sep	30	30	21	30	30	30	30
97	Oct	31	31	30	13	29	31	31
97	Nov	30	30	30	17	30	30	30
97	Dec	31	31	31	31	31	31	31
98	Jan	31	31	31	31	31	31	31
98	Feb	28	28	28	28	28	28	28
98	Mar	31	31	28	31	31	31	31
98	Apr	30	.	26	30	30	30	30 Due
98	May	31	.	21	31	25	30	31 Due
98	Jun	30	.	.	30	.	25	29 Due
98	Jul	31	.	.	31	.	31	. Due
98	Aug	.	.	.	31	.	.	.

Total Daily PV2 Files: 11,388  
 Total Compressed MegaBytes: 3,086

## **ACTS Propagation Data Base Procedures Review**

- The detailed Data Base Procedures described in June 98 have worked very well.
- The logs indicate over 60 archive input sessions - over 10,000 days of data since June 98.
- The primary archives are on 2 each 6.4 GB disk (D:\ for processed data and E:\ for raw data).
- All processed and new raw data are copied to an "Image" 8.5GB disk on another PC.
- The new processed and raw files are transferred to a CD when we have >550 MB.
- The Archived RAW data CDs for 9312-9808 are in the vault.
- The Archived Processed CDs for 9312-9712 are in the vault.
- Several sites have requested CDs of the “current as of this date” archived raw data.
- Are new “current as of this date” archived raw data CDs needed? Send me an email request.

**Archived data on CDS is the primary data source for the Experimenters.**

## **4 Year ACTS Propagation Data Quality Checking is still in Progress.**

- The current checking programs are Rd\_log6 and Rd\_\_edf3.
- The new updates have been improved to detect more “questionable data” - data that needs another review.
- The yymmxx.log files are scanned using the Rd\_log program.
- The yymmxx.edf files are scanned using the Rd\_edf program.
- The most common “questionable data” are a result of:
  - ♦ “Clear Sky Delta” is higher than expected.
  - ♦ “High Bias Coeff” which is an indication of a higher than expected system gain change or wet snow on the antenna or antenna pointing errors .
  - ♦ “Ratio errors” which is an indication that the length of time for the Beacon to Radiometer ratio is higher than expected due to calibration error or water in the wave guide or feed horn.
  - ♦ “Stray See” which may be an indication that data should be marked “bad” due to a step change in system gain.
- The “questionable data” have been reviewed with the experimenters.
- When water is known to be in the feed horn the calibration should be done daily.
- Many sites have reprocessed all data and it has been entered into the Archives.
- There are still days with “questionable data” in the Archives after the Quality Checking of the Preprocessed data. Further review of these days data is needed to resolve these “questions” in our data archives.

## **ACTS Propagation Data CD-ROM Distribution**

- The 4 year Peer Review Copies were distributed Sept. 25 to the Experimenters.
- Request for comments from the ACTS Experimenters of the Peer Review data on the CDs.
- By site: AK, BC, CO, FL, MD, NM, OK
- We have more copies for distribution. The Data Request form must be filled out, signed and reviewed before distribution.
- Please read the Readme.txt file first.