Software Dictionary AIPS/aips++

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Contents

Chapter 1

The AIPS/AIPS++ dictionary

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1.1 Summary

This chapter provides a list of common AIPS tasks, and their equivalent AIPS++ tool or tool function names. The two packages differ in both their architecture and calibration and imaging models, and there is often not a direct correspondence. However, this index does provide a scientific user of AIPS++ who is familiar with AIPS, with a simple translation table to map their existing data reduction knowledge to the new package.

The index includes common AIPS tasks and verbs; adverbs are not included. Capabilities which exceed those available in AIPS are not listed here by definition; users are referred to the other chapters in this guide for full descriptions of these capabilities. However, the current index entries offer starting points in which to explore related facilities in AIPS++ which exceed those in AIPS.

AIPS++is structured as a toolkit at the lower levels, while AIPS is a comprehensive collection of more monolithic applications. In general, the counterpart of an AIPS task is an AIPS++tool function, although the toolkit structure of AIPS++will generally mean that these functions are more fine-grained, except for the more integrated tools at the higher levels (such as map. The counterparts of AIPS adverbs are the parameters of AIPS++tool functions. The command-line interpreter in AIPS is POPS, while the counterpart in AIPS++is Glish. Scripts in *Glish* are more powerful equivalents of AIPS runfiles.

1.2 AIPS task and verb index

AIPS Task/Verb	Description	AIPS++ tool/function
APCLN	CLEAN deconvolution	imager.clean
BLCAL	Baseline-based (A, ϕ) calibration	calibrater.solve
BLING	Baseline-based fringe-fitter	*not yet available*
BPASS	Bandpass calibration	calibrater.solve
CCEDT	Edit CC tables	componentmodels
COMB	Image combination	image.calc imagepol
CPASS	Polynomial bandpass calibration	calibrater.solve
CALIB	(A, ϕ) self-calibration	calibrater.solve
DBCON	uv-data concatenation	*not yet available*
DTSIM	Simulator	simulator
DTSUM	uv-data summary	ms.summary
FILLM	VLA filler	vlafiller
FITLD	VLBA filler	*not yet available*
FITTP	UVFITS writer	ms.tofits
FRING	VLBI fringe-fitter	*not yet available*
GETJY	Set flux density scale	calibater.fluxscale
IBLED	Interactive VLBI editor	*not yet available*
IMAGR	Synthesis imaging	imager
IMFIT	Image-plane component fitter	imagefitter
IMLOD	FITS image filler	image.imagefromfits
IMH	File header summary	table.summary
IMSTAT	Image statistics	image.statistics
ISPEC	Plot image slice	*not yet available*
JMFIT	Image-plane component fitter	imagefitter
LISTR	List uv- and calibration data	tablebrowser
MCAT	List image catalog	catalog
MK3IN	MK3 VLBI filler	*not yet available*
MOVE	Move uv-data files	tablecopy
MSORT	Sort uv-data	tablecommand
MX	Synthesis imaging	imager
PBCOR	Primary beam correction	imager.setvp vpmanager
PCAL	Polarization calibration	calibrater.solve
PRTAB	List table data	tablebrowser
PRTAN	List AN table data	tablebrowser
PRTUV	List uv-data	tablebrowser
RENAME	Rename file name	tablerename
SETJY	Set source properties	imager.setjy
SNPLT	Plot calibration solutions	calibrater.plotcal
SUBIM	Extract sub-image	image.subimage
SPFLG	Interactive line data editing	*not yet available*

AIPS Task/Verb	Description	AIPS++ tool/function
SPLIT	Apply calibration	calibrater.correct
		map.applycal
TAPLT	General table plotting	pgplotter
		table
TBIN	Read table from ASCII format	tablefromascii
TBOUT	Write table to ASCII format	table.toascii
TRANS	Transpose an image	*not required in AIPS++*
TVBOX	Set regions in an image	regionmanager
TVFID	Adjust TV display	viewer
TVFLG	Interactive TB data editing	msplot
TVLOD	Load image to TV display	viewer
UCAT	List uv-data catalog	catalog
UVCON	Simulator	simulator
UVFIT	uv-plane component fitter	*not yet available*
UVFLG	Command-based flagging	flagger
UVLOD	UV-FITS filler	ms.fitstoms
UVMOD	Simulator	simulator
UVPRT	List uv-data	tablebrowser
UVSRT	Sort uv-data	tablecommand
UVSUB	Source model computation	imager.ft
VBGLU	Concatenate VLBI data	*not yet available*
VBPLT	Baseline-based uv-data plotting	msplot
VMEM	MEM deconvolution	imager.mem
VPLOT	Baseline-based uv-data plotting	msplot
ZAP	Delete a file	tabledelete

1.3 References

AIPS project, *http://www.nrao.edu.*

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