CDO Reference Card

Climate Data Operators Version 1.0.8 May 2007

Uwe Schulzweida Max-Planck-Institute for Meteorology

Syntax

cdo	[Options]	Operators
-----	-----------	-----------

Options

-	
-a	Convert from a relative to an absolute time axis
-b < nbits >	Set the number of bits for the output precision
	(32/64 for nc, nc2, srv, ext, ieg; 1 - 32 for grb)
$-\mathbf{f} < format >$	Output file format (grb, nc, nc2, srv, ext, ieg)
-g < grid>	Grid name or file
	Available grids: t <res>grid, r<nx>x<ny></ny></nx></res>
-h	Help information for the operators
-m $<$ $missval >$	Set the default missing value (default: -9e+33)
-R	Convert GRIB data from reduced to regular grid
-r	Convert from an absolute to a relative time axis
$-\mathbf{t} $	Set the parameter table name or file
	Predefined tables: echam4 echam5 mpiom1
-V	Print the version number
-v	Print extra details for some operators

showdate

 $\mathbf{showtime}$

vardes griddes

Syntax

Dataset information listed by code number
Dataset information listed by variable name
Dataset information and simple map
<pre><operator> ifiles</operator></pre>
Short dataset information listed by code number
Short dataset information listed by variable name
< operator > ifile
Compare two datasets listed by code number
Compare two datasets listed by variable name
<pre><operator> ifile1 ifile2</operator></pre>
Number of codes
Number of variables
Number of levels
Number of years
Number of months
Number of dates
Number of time steps
<pre><operator> ifile</operator></pre>
Show file format
Show codes
Show variable names
Show standard names
Show levels
Show GRIB level types
Show GRIB level types Show years

Show dates

Syntax operator > ifile

Show time steps

< operator >ifile Variable description Grid description

Vertical coordinate table

File operations

copy	Copy datasets		
cat	Concatenate datasets		
Syntax	$<\!operator\!>$ ifiles ofile		
replace	Replace variables		
Syntax	replace ifile1 ifile2 ofile		
merge	Merge datasets with different fields		
mergetime	Merge datasets sorted by date and time		
Syntax	<pre><operator> ifiles ofile</operator></pre>		
splitcode	Split codes		
splitvar	Split variables		
splitlevel	Split levels		
splitgrid	Split grids		
splitzaxis	Split zaxis		
splitrec	Split records		
Syntax	< operator > ifile oprefix		
splithour	Split hours		
splitday	Split days		
splitmon	Split months		
splitseas	Split seasons		
splityear	Split years		
Syntax	<pre><operator> ifile oprefix</operator></pre>		

Select codes

Selection selcode

	selcode	Select codes
7	delcode	Delete codes
1	Syntax	<pre><operator>,codes ifile ofile</operator></pre>
- 1	selvar	Select variables
	delvar	Delete variables
	Syntax	<pre><operator>,vars ifile ofile</operator></pre>
1	selstdname	Select standard names
_	Syntax	selstdname,stdnames ifile ofile
1	sellevel	Select levels
	Syntax	sellevel, levels ifile ofile
	selgrid	Select grids
	Syntax	selgrid, grids ifile ofile
71	selgridname	Select grids by name
	Syntax	selgridname, gridnames ifile ofile
	selzaxis	Select zaxes
Ŧ'	Syntax	selzaxis,zaxes ifile ofile
1	selzaxisname	Select zaxes by name
	Syntax	selzaxisname,zaxisnames ifile ofile
ا ك	selltype	Select GRIB level types
	Syntax	selltype,ltypes ifile ofile
1	seltabnum	Select parameter table numbers
	Syntax	seltabnum,tabnums ifile ofile
	selrec	Select records
	Syntax	selrec, records ifile ofile
1	seltimestep	Select time steps
- 1 '	Syntax	seltimestep, timesteps ifile ofile
= 1	seltime	Select times
	Syntax	seltime, times ifile ofile
1	selhour	Select hours
	Syntax	selhour, hours ifile ofile
	selday	Select days
	Syntax	selday,days ifile ofile
1	selmon	Select months
	Syntax	selmon, months ifile ofile
	selyear	Select years
	Syntax	selyear, years ifile ofile
	selseas	Select seasons
₫ '	Syntax	selseas,seasons ifile ofile
	seldate	Select dates
	Syntax	seldate,date1[,date2] ifile ofile
	selsmon	Select single month
	Syntax	selsmon,month[,nts1[,nts2]] ifile ofile
-	V	, , , , , , , , , , , , , , , , , , , ,

sellonlatbox	Select a longitude/latitude box	chcode	Change code number
Syntax	sellonlatbox,lon1,lon2,lat1,lat2 ifile ofile	Syntax	${f chcode}, oldcode, newcode[,]$ ifile ofile
selindexbox	Select an index box	chvar	Change variable name
Syntax	selindexbox,idx1,idx2,idy1,idy2 ifile ofile	Syntax	chvar,ovar,nvar, ifile ofile
		chlevel	Change level
		Syntax	chlevel,oldlev,newlev, ifile ofile
		chlevelc	Change level of one code
Conditional s	election	Syntax	chlevelc,code,oldlev,newlev ifile ofile
ifthen	If then	chlevelv	Change level of one variable chlevelv,var,oldlev,newlev ifile ofile
ifnotthen	If not then	Syntax	· · · · · · · · · · · · · · · · · · ·
Syntax	<pre><pre>< operator > ifile1 ifile2 ofile</pre></pre>	setgrid	Set grid
ifthenelse	If then else	Syntax	setgrid,grid ifile ofile
Syntax	ifthenelse ifile1 ifile2 ifile3 ofile	setgridtype	Set grid type
		Syntax	setgridtype,gridtype ifile ofile
ifthenc	If then constant	setzaxis	Set zaxis
ifnotthenc	If not then constant	Syntax	setzaxis,zaxis ifile ofile
Syntax	< operator >, c ifile ofile	setgatt	Set global attribute
		Syntax	setgatt, attname, attstring ifile ofile
		setgatts	Set global attributes
a .		Syntax	setgatts, attfile ifile ofile
Comparison		invertlat	Invert latitude
eq	Equal	invertion	Invert longitude
ne	Not equal	invertlatdes	Invert latitude description
le	Less equal	invertiondes	Invert longitude description
lt	Less than	invertlatdata	Invert latitude data
ge	Greater equal	invertiondata	Invert longitude data
gt	Greater than	Syntax	< operator > ifile ofile
Syntax	<pre><operator> ifile1 ifile2 ofile</operator></pre>	masklonlatbox	Mask a longitude/latitude box
eqc	Equal constant	Syntax	masklonlatbox,lon1,lon2,lat1,lat2 ifile ofile
nec	Not equal constant	maskindexbox	Mask an index box
lec	Less equal constant	Syntax	maskindexbox,idx1,idx2,idy1,idy2 ifile ofile
ltc	Less then constant	setclonlatbox	Set a longitude/latitude box to constant
gec	Greater equal constant	Syntax	setclonlatbox,c,lon1,lon2,lat1,lat2 ifile ofile
gtc	Greater then constant	setcindexbox	Set an index box to constant
Syntax	< operator >, c ifile ofile	Syntax	setcindexbox,c,idx1,idx2,idy1,idy2 ifile ofile
		enlarge	Enlarge fields
		Syntax	enlarge,grid ifile ofile
		setmissval	Set a new missing value
Modification		Syntax	setmissval,miss ifile ofile
setpartab	Set parameter table	setctomiss	Set constant to missing value
Syntax	setpartab,table ifile ofile	setmisstoc	Set missing value to constant
setcode	Set code number	Syntax	< operator >, c ifile ofile
Syntax	setcode,code ifile ofile	setrtomiss	Set range to missing value
setvar	Set variable name	Syntax	setrtomiss,rmin,rmax ifile ofile
Syntax	setvar,name ifile ofile		
setlevel	Set level		
Syntax	setlevel, level ifile ofile	4	
setltype	Set GRIB level type		
Syntax	setltype,ltype ifile ofile	Arithmetic	
setdate	Set date	I	Embert
Syntax	setdate,date ifile ofile	expr	Evaluate expressions
settime	Set time	Syntax	expr,instr ifile ofile Evaluate expressions from script file
Syntax	settime, time ifile ofile	Syntax	exprf, filename ifile ofile
setday Syntax	Set day setday,day ifile ofile		
setmon	Set month	abs	Absolute value
Syntax	setmon, month ifile ofile	int	Integer value Nearest integer value
setyear	Set year	nint sqr	Nearest integer value Square
Syntax	setyear, year ifile ofile	sqr	Square root
settunits	Set time units	exp	Exponential
Syntax	settunits, units ifile ofile	ln	Natural logarithm
settaxis	Set time axis	log10	Base 10 logarithm
Syntax	settaxis,date,time[,inc] ifile ofile	sin	Sine
setreftime	Set reference time	cos	Cosine
Syntax	${f setreftime}, date, time \ {f ifile} \ {f ofile}$	tan	Tangent
setcalendar	Set calendar	asin	Arc sine
Syntax	setcalendar,calendar ifile ofile	acos	Arc cosine
shifttime	Shift time steps	atan	Arc tangent
			<pre><operator> ifile ofile</operator></pre>
Syntax	shifttime,sval ifile ofile	Syntax	<pre>coperator > fiffe office</pre>

addc	A 11	T	Vti1ii		Variation		Colores et torred
	Add a constant	vertmin	Vertical minimum	yearmin	Yearly minimum	subtrend	Subtract trend
subc	Subtract a constant	vertmax	Vertical maximum	yearmax	Yearly maximum	Syntax	subtrend ifile1 ifile2 ifile3 ofile
mulc	Multiply with a constant	vertsum	Vertical sum	yearsum	Yearly sum		
divc	Divide by a constant	vertmean	Vertical mean	yearmean	Yearly mean		
Syntax	< operator >, c ifile ofile	vertavg	Vertical average	yearavg	Yearly average	Interpolation	
add	Add two fields	vertvar	Vertical variance	yearvar	Yearly variance		
sub	Subtract two fields	vertstd	Vertical standard deviation	yearstd	Yearly standard deviation	remapbil	Bilinear interpolation
mul	Multiply two fields	Syntax	<pre><operator> ifile ofile</operator></pre>	Syntax	<pre><operator> ifile ofile</operator></pre>	remapbic	Bicubic interpolation
div	Divide two fields		Ti	yearpctl	V	remapcon	Conservative remapping
		selmin	Time range minimum		Yearly percentiles	remapdis	Distance-weighted averaging
min	Minimum of two fields	selmax	Time range maximum	Syntax	yearpctl,p ifile1 ifile2 ifile3 ofile	Syntax	<pre><operator>,grid ifile ofile</operator></pre>
max	Maximum of two fields	selsum	Time range sum	seasmin	Seasonal minimum		
atan2	Arc tangent of two fields	selmean	Time range mean	seasmax	Seasonal maximum	genbil	Generate bilinear interpolation weights
Syntax	< operator > ifile1 ifile2 ofile	selavg	Time range average	seassum	Seasonal sum	genbic	Generate bicubic interpolation weights
ymonadd	Add multi-year monthly time average	selvar	Time range variance		Seasonal mean	gencon	Generate conservative interpolation weights
ymonsub	Subtract multi-year monthly time average	selstd	Time range standard deviation	seasmean		gendis	Generate distance-weighted averaging weights
	Multiply multi-year monthly time average	Syntax	<pre>< operator > ,nsets[,noffset[,nskip]] ifile ofile</pre>	seasavg	Seasonal average	Syntax	<pre><operator>,grid ifile ofile</operator></pre>
ymonmul				seasvar	Seasonal variance	remap	SCRIP grid remapping
ymondiv	Divide multi-year monthly time average	selpctl	Time range percentiles	seasstd	Seasonal standard deviation		
Syntax	< operator > ifile1 ifile2 ofile	Syntax	selpctl,p,nsets[,noffset[,nskip]] in1 in2 in3 out	Syntax	< operator > ifile ofile	Syntax	remap,grid,weights ifile ofile
muldpm	Multiply with days per month	runmin	Running minimum	seaspctl	Seasonal percentiles	interpolate	PINGO grid interpolation
divdpm	Divide by days per month	runmax	Running maximum		seaspctl,p ifile1 ifile2 ifile3 ofile	intgridbil	Bilinear grid interpolation
muldpy	Multiply with days per year	runsum	Running sum			Syntax	<pre>< operator > ,grid ifile ofile</pre>
divdpy	Divide by days per year		Running sum Running mean	ydaymin	Multi-year daily minimum		, ,,,
		runmean	_	ydaymax	Multi-year daily maximum	ml2pl	Model to pressure level interpolation
Syntax	<pre><operator> ifile ofile</operator></pre>	runavg	Running average	ydaysum	Multi-year daily sum	Syntax	ml2pl,plevels ifile ofile
		runvar	Running variance	ydaymean	Multi-year daily mean	ml2hl	Model to height level interpolation
		runstd	Running standard deviation	ydayavg	Multi-year daily average	Syntax	ml2hl,hlevels ifile ofile
		Syntax	$<\!operator\!>,\!nts$ ifile ofile	ydayvar	Multi-year daily variance	inttime	Time interpolation
		runpctl	Running percentiles	ydaystd	Multi-year daily standard deviation		
		Syntax	runpctl,p,nts ifile1 ofile		<pre><pre><pre><pre><pre><pre>operator> ifile ofile</pre></pre></pre></pre></pre></pre>	Syntax	inttime,date,time[,inc] ifile ofile
			* '/4 '/		*	intntime	Time interpolation
Statistical val	ues	timmin	Time minimum	ydaypctl	Multi-year daily percentiles	Syntax	intntime,n ifile ofile
		timmax	Time maximum	Syntax	ydaypctl,p ifile1 ifile2 ifile3 ofile	intyear	Year interpolation
ensmin	Ensemble minimum	timsum	Time sum		Multi-year monthly minimum	Syntax	intyear, years ifile1 ifile2 oprefix
ensmax	Ensemble maximum	timmean	Time mean	ymonmin		Dyntax	intyear, years liller lillez opielix
enssum	Ensemble sum	timavg	Time average	ymonmax	Multi-year monthly maximum		
ensmean	Ensemble mean	timvar	Time variance	ymonsum	Multi-year monthly sum		
Chamean	Elisemble mean			ymonmean	Multi-year monthly mean	Transformation	on.
oncove	Encamble average	timstd	Time standard deviation	-	· ·	11 ansioi mati	OII
ensavg	Ensemble average	timstd	Time standard deviation	ymonavg	Multi-year monthly average		
ensvar	Ensemble variance	Syntax	<pre><operator> ifile ofile</operator></pre>	-	· ·	sp2gp	Spectral to gridpoint
ensvar ensstd	Ensemble variance Ensemble standard deviation		<pre>< operator > ifile ofile</pre> Time percentiles	ymonavg	Multi-year monthly average	$\begin{array}{c} \mathrm{sp2gp} \\ \mathrm{sp2gpl} \end{array}$	Spectral to gridpoint Spectral to gridpoint (linear)
ensvar ensstd Syntax	Ensemble variance Ensemble standard deviation <pre>coperator> ifiles ofile</pre>	Syntax	<pre><operator> ifile ofile</operator></pre>	ymonavg ymonvar	Multi-year monthly average Multi-year monthly variance	$\begin{array}{c} \mathrm{sp2gp} \\ \mathrm{sp2gpl} \\ \mathrm{gp2sp} \end{array}$	Spectral to gridpoint Spectral to gridpoint (linear) Gridpoint to spectral
ensvar ensstd Syntax enspctl	Ensemble variance Ensemble standard deviation <pre>coperator> ifiles ofile</pre> Ensemble percentiles	Syntax timpctl Syntax	<pre><operator> ifile ofile Time percentiles timpctl,p ifile1 ifile2 ifile3 ofile</operator></pre>	ymonavg ymonvar ymonstd Syntax	Multi-year monthly average Multi-year monthly variance Multi-year monthly standard deviation <operator> ifile ofile</operator>	$\begin{array}{c} \mathrm{sp2gp} \\ \mathrm{sp2gpl} \\ \mathrm{gp2sp} \\ \mathrm{gp2spl} \end{array}$	Spectral to gridpoint Spectral to gridpoint (linear) Gridpoint to spectral Gridpoint to spectral (linear)
ensvar ensstd Syntax	Ensemble variance Ensemble standard deviation <pre>coperator> ifiles ofile</pre>	Syntax timpctl Syntax hourmin	<pre><operator> ifile ofile Time percentiles timpctl,p ifile1 ifile2 ifile3 ofile Hourly minimum</operator></pre>	ymonavg ymonvar ymonstd Syntax	Multi-year monthly average Multi-year monthly variance Multi-year monthly standard deviation <operator> ifile ofile Multi-year monthly percentiles</operator>	sp2gp sp2gpl gp2sp gp2spl Syntax	Spectral to gridpoint Spectral to gridpoint (linear) Gridpoint to spectral Gridpoint to spectral (linear) < operator > ifile ofile
ensvar ensstd Syntax enspctl	Ensemble variance Ensemble standard deviation <pre><operator> ifiles ofile</operator></pre> Ensemble percentiles enspctl,p ifiles ofile	Syntax timpctl Syntax hourmin hourmax	<pre><operator> ifile ofile Time percentiles timpctl,p ifile1 ifile2 ifile3 ofile Hourly minimum Hourly maximum</operator></pre>	ymonavg ymonvar ymonstd Syntax	Multi-year monthly average Multi-year monthly variance Multi-year monthly standard deviation <operator> ifile ofile</operator>	sp2gp sp2gpl gp2sp gp2spl Syntax sp2sp	Spectral to gridpoint Spectral to gridpoint (linear) Gridpoint to spectral Gridpoint to spectral (linear) <pre><operator> ifile ofile</operator></pre> Spectral to spectral
ensvar ensstd Syntax enspctl Syntax fldmin	Ensemble variance Ensemble standard deviation <pre><operator> ifiles ofile Ensemble percentiles enspctl,p ifiles ofile Field minimum</operator></pre>	Syntax timpctl Syntax hourmin hourmax hoursum	<pre></pre> <pre></pre> <pre>Time percentiles timpctl,p ifile1 ifile2 ifile3 ofile</pre> Hourly minimum Hourly maximum Hourly sum	ymonavg ymonvar ymonstd Syntax	Multi-year monthly average Multi-year monthly variance Multi-year monthly standard deviation <operator> ifile ofile Multi-year monthly percentiles</operator>	sp2gp sp2gpl gp2sp gp2spl Syntax	Spectral to gridpoint Spectral to gridpoint (linear) Gridpoint to spectral Gridpoint to spectral (linear) < operator > ifile ofile
ensvar ensstd Syntax enspetl Syntax fldmin fldmax	Ensemble variance Ensemble standard deviation <operator> ifiles ofile Ensemble percentiles enspctl,p ifiles ofile Field minimum Field maximum</operator>	Syntax timpctl Syntax hourmin hourmax hoursum hourmean	<pre><operator> ifile ofile Time percentiles timpctl,p ifile1 ifile2 ifile3 ofile Hourly minimum Hourly maximum Hourly sum Hourly mean</operator></pre>	ymonavg ymonvar ymonstd Syntax ymonpctl Syntax yseasmin	Multi-year monthly average Multi-year monthly variance Multi-year monthly standard deviation <operator> ifile ofile Multi-year monthly percentiles ymonpctl,p ifile1 ifile2 ifile3 ofile</operator>	sp2gp sp2gpl gp2sp gp2spl Syntax sp2sp Syntax	Spectral to gridpoint Spectral to gridpoint (linear) Gridpoint to spectral Gridpoint to spectral (linear) <pre><operator> ifile ofile</operator></pre> Spectral to spectral sp2sp,trunc ifile ofile
ensvar ensstd Syntax enspectl Syntax fldmin fldmax fldsum	Ensemble variance Ensemble standard deviation <operator> ifiles ofile Ensemble percentiles enspctl,p ifiles ofile Field minimum Field sum</operator>	Syntax timpctl Syntax hourmin hourmax hoursum hoursum hourayg	<pre><operator> ifile ofile Time percentiles timpctl,p ifile1 ifile2 ifile3 ofile Hourly minimum Hourly maximum Hourly sum Hourly mean Hourly average</operator></pre>	ymonavg ymonvar ymonstd Syntax ymonpctl Syntax yseasmin yseasmax	Multi-year monthly average Multi-year monthly variance Multi-year monthly standard deviation <operator> ifile ofile Multi-year monthly percentiles ymonpctl,p ifile1 ifile2 ifile3 ofile Multi-year seasonal minimum Multi-year seasonal maximum</operator>	sp2gp sp2gpl gp2sp gp2spl Syntax sp2sp Syntax dv2uv	Spectral to gridpoint Spectral to gridpoint (linear) Gridpoint to spectral Gridpoint to spectral (linear) <pre><operator> ifile ofile</operator></pre> Spectral to spectral sp2sp,trunc ifile ofile Divergence and vorticity to U and V wind
ensvar ensstd Syntax enspettl Syntax fldmin fldmax fldsum fldmean	Ensemble variance Ensemble standard deviation <operator> ifiles ofile Ensemble percentiles enspctl,p ifiles ofile Field minimum Field maximum Field mean</operator>	Syntax timpctl Syntax hourmin hourmax hoursum hourmean houravg hourvar	<pre><operator> ifile ofile Time percentiles timpctl,p ifile1 ifile2 ifile3 ofile Hourly minimum Hourly maximum Hourly sum Hourly wean Hourly average Hourly variance</operator></pre>	ymonavg ymonvar ymonstd Syntax ymonpctl Syntax yseasmin yseasmax yseassum	Multi-year monthly average Multi-year monthly variance Multi-year monthly standard deviation <operator> ifile ofile Multi-year monthly percentiles ymonpctl,p ifile1 ifile2 ifile3 ofile Multi-year seasonal minimum Multi-year seasonal maximum Multi-year seasonal sum</operator>	sp2gp sp2gpl gp2sp gp2spl Syntax sp2sp Syntax dv2uv dv2uvl	Spectral to gridpoint Spectral to gridpoint (linear) Gridpoint to spectral Gridpoint to spectral (linear) <operator> ifile ofile Spectral to spectral sp2sp,trunc ifile ofile Divergence and vorticity to U and V wind Divergence and vorticity to U and V wind (linear)</operator>
ensvar ensstd Syntax enspetl Syntax fldmin fldmax fldsum fldmean fldavg	Ensemble variance Ensemble standard deviation <pre><operator> ifiles ofile Ensemble percentiles enspctl,p ifiles ofile Field minimum Field maximum Field sum Field sum Field average</operator></pre>	Syntax timpctl Syntax hourmin hourmax hoursum hoursum hourayg	<pre><operator> ifile ofile Time percentiles timpctl,p ifile1 ifile2 ifile3 ofile Hourly minimum Hourly maximum Hourly sum Hourly mean Hourly average</operator></pre>	ymonavg ymonvar ymonstd Syntax ymonpctl Syntax yseasmin yseasmax yseassum yseasman	Multi-year monthly average Multi-year monthly variance Multi-year monthly standard deviation <operator> ifile ofile Multi-year monthly percentiles ymonpctl,p ifile1 ifile2 ifile3 ofile Multi-year seasonal minimum Multi-year seasonal sum Multi-year seasonal sum Multi-year seasonal mean</operator>	sp2gp sp2gpl gp2sp gp2spl sp2spl sp2sp Syntax dv2uv dv2uvl uv2dv	Spectral to gridpoint Spectral to gridpoint (linear) Gridpoint to spectral Gridpoint to spectral (linear) <operator> ifile ofile Spectral to spectral sp2sp,trunc ifile ofile Divergence and vorticity to U and V wind Divergence and vorticity to U and V wind (linear) U and V wind to divergence and vorticity</operator>
ensvar ensstd Syntax enspetl Syntax fldmin fldmax fldsum fldmean fldavg fldvar	Ensemble variance Ensemble standard deviation <operator> ifiles ofile Ensemble percentiles enspetl,p ifiles ofile Field minimum Field maximum Field sum Field mean Field average Field variance</operator>	Syntax timpctl Syntax hourmin hourmax hoursum hourmean houravg hourvar	<pre></pre> <pre>< operator > ifile ofile Time percentiles timpctl,p ifile1 ifile2 ifile3 ofile Hourly minimum Hourly maximum Hourly sum Hourly wean Hourly average Hourly variance</pre>	ymonavg ymonvar ymonstd Syntax ymonpctl Syntax yseasmin yseasmax yseassum yseassum yseassum	Multi-year monthly average Multi-year monthly variance Multi-year monthly standard deviation <pre><operator> ifile ofile</operator></pre> Multi-year monthly percentiles ymonpctl,p ifile1 ifile2 ifile3 ofile Multi-year seasonal minimum Multi-year seasonal maximum Multi-year seasonal sum Multi-year seasonal mean Multi-year seasonal average	sp2gp sp2gpl gp2spl gp2spl Syntax sp2sp Syntax dv2uv dv2uvl uv2dv uv2dv	Spectral to gridpoint Spectral to gridpoint (linear) Gridpoint to spectral Gridpoint to spectral Gridpoint to spectral (linear) <operator> ifile ofile Spectral to spectral sp2sp,trunc ifile ofile Divergence and vorticity to U and V wind Divergence and vorticity to U and V wind (linear) U and V wind to divergence and vorticity U and V wind to divergence and vorticity (linear)</operator>
ensvar ensstd Syntax enspettl Syntax fldmin fldmax fldsum fldmean fldavg fldvar fldstd	Ensemble variance Ensemble standard deviation <operator> ifiles ofile Ensemble percentiles enspetl,p ifiles ofile Field minimum Field maximum Field sum Field wean Field average Field variance Field standard deviation</operator>	Syntax timpctl Syntax hourmin hourmax hoursum hourman houravg hourvar hourstd Syntax	<pre><operator> ifile ofile Time percentiles timpctl,p ifile1 ifile2 ifile3 ofile Hourly minimum Hourly maximum Hourly sum Hourly sum Hourly average Hourly average Hourly standard deviation <operator> ifile ofile</operator></operator></pre>	ymonavg ymonvar ymonstd Syntax ymonpctl Syntax yseasmin yseasmax yseassum yseasavg yseasvar	Multi-year monthly average Multi-year monthly variance Multi-year monthly standard deviation <operator> ifile ofile Multi-year monthly percentiles ymonpctl,p ifile1 ifile2 ifile3 ofile Multi-year seasonal minimum Multi-year seasonal sum Multi-year seasonal sum Multi-year seasonal mean Multi-year seasonal average Multi-year seasonal variance</operator>	sp2gp sp2gpl gp2sp gp2spl sp2spl sp2sp Syntax dv2uv dv2uvl uv2dv	Spectral to gridpoint Spectral to gridpoint (linear) Gridpoint to spectral Gridpoint to spectral (linear) <operator> ifile ofile Spectral to spectral sp2sp,trunc ifile ofile Divergence and vorticity to U and V wind Divergence and vorticity to U and V wind (linear) U and V wind to divergence and vorticity</operator>
ensvar ensstd Syntax enspetl Syntax fldmin fldmax fldsum fldmean fldavg fldvar fldstd Syntax	Ensemble variance Ensemble standard deviation <pre><operator> ifiles ofile Ensemble percentiles enspctl,p ifiles ofile Field minimum Field maximum Field sum Field average Field variance Field variance Field variance <pre>Field standard deviation <operator> ifile ofile</operator></pre></operator></pre>	Syntax timpctl Syntax hourmin hourmax hoursum houraean houravg hourstd Syntax hourpctl	<pre><operator> ifile ofile Time percentiles timpctl,p ifile1 ifile2 ifile3 ofile Hourly minimum Hourly maximum Hourly sum Hourly mean Hourly average Hourly variance Hourly standard deviation <operator> ifile ofile Hourly percentiles</operator></operator></pre>	ymonavg ymonvar ymonstd Syntax ymonpctl Syntax yseasmin yseasmax yseassum yseassum yseasavar yseasvar yseasstd	Multi-year monthly average Multi-year monthly variance Multi-year monthly standard deviation <operator>ifile ofile Multi-year monthly percentiles ymonpctl,p ifile1 ifile2 ifile3 ofile Multi-year seasonal minimum Multi-year seasonal maximum Multi-year seasonal sum Multi-year seasonal mean Multi-year seasonal average Multi-year seasonal variance Multi-year seasonal standard deviation</operator>	sp2gp sp2gpl gp2spl gp2spl Syntax sp2sp Syntax dv2uv dv2uvl uv2dv uv2dv	Spectral to gridpoint Spectral to gridpoint (linear) Gridpoint to spectral Gridpoint to spectral Gridpoint to spectral (linear) <operator> ifile ofile Spectral to spectral sp2sp,trunc ifile ofile Divergence and vorticity to U and V wind Divergence and vorticity to U and V wind (linear) U and V wind to divergence and vorticity U and V wind to divergence and vorticity (linear)</operator>
ensvar ensstd Syntax enspetl Syntax fldmin fldmax fldsum fldmean fldavg fldvar fldstd Syntax	Ensemble variance Ensemble standard deviation <pre><operator> ifiles ofile Ensemble percentiles enspctl,p ifiles ofile Field minimum Field maximum Field sum Field average Field variance Field standard deviation <pre><operator> ifile ofile</operator></pre> Field percentiles</operator></pre>	Syntax timpctl Syntax hourmin hourmax hoursum houravg hourvar hourstd Syntax hourpetl Syntax	<pre><operator> ifile ofile Time percentiles timpctl,p ifile1 ifile2 ifile3 ofile Hourly minimum Hourly maximum Hourly sum Hourly average Hourly variance Hourly standard deviation <operator> ifile ofile Hourly percentiles hourpctl,p ifile1 ifile2 ifile3 ofile</operator></operator></pre>	ymonavg ymonvar ymonstd Syntax ymonpctl Syntax yseasmin yseasmax yseassum yseassum yseasvar yseasvar yseasvar yseasstd Syntax	Multi-year monthly average Multi-year monthly variance Multi-year monthly standard deviation <operator> ifile ofile Multi-year monthly percentiles ymonpctl.p ifile1 ifile2 ifile3 ofile Multi-year seasonal minimum Multi-year seasonal maximum Multi-year seasonal sum Multi-year seasonal mean Multi-year seasonal average Multi-year seasonal variance Multi-year seasonal standard deviation <operator> ifile ofile</operator></operator>	sp2gp sp2gpl gp2sp gp2spl syntax sp2sp Syntax dv2uv dv2uvl uv2dv uv2dvl Syntax	Spectral to gridpoint Spectral to gridpoint (linear) Gridpoint to spectral Gridpoint to spectral (linear) <operator> ifile ofile Spectral to spectral sp2sp,trunc ifile ofile Divergence and vorticity to U and V wind Divergence and vorticity to U and V wind (linear) U and V wind to divergence and vorticity U and V wind to divergence and vorticity V and V wind to divergence and vorticity Operator> ifile ofile</operator>
ensvar ensstd Syntax enspetl Syntax fldmin fldmax fldsum fldmean fldavg fldvar fldstd Syntax	Ensemble variance Ensemble standard deviation <pre><operator> ifiles ofile Ensemble percentiles enspctl,p ifiles ofile Field minimum Field maximum Field sum Field average Field variance Field variance Field variance <pre>Field standard deviation <operator> ifile ofile</operator></pre></operator></pre>	Syntax timpctl Syntax hourmin hourmax hoursum houraean houravg hourstd Syntax hourpctl	<pre><operator> ifile ofile Time percentiles timpctl,p ifile1 ifile2 ifile3 ofile Hourly minimum Hourly maximum Hourly sum Hourly mean Hourly average Hourly variance Hourly standard deviation <operator> ifile ofile Hourly percentiles</operator></operator></pre>	ymonavg ymonvar ymonstd Syntax ymonpctl Syntax yseasmin yseasmax yseassum yseassum yseasavar yseasvar yseasstd	Multi-year monthly average Multi-year monthly variance Multi-year monthly standard deviation <operator>ifile ofile Multi-year monthly percentiles ymonpctl,p ifile1 ifile2 ifile3 ofile Multi-year seasonal minimum Multi-year seasonal maximum Multi-year seasonal sum Multi-year seasonal mean Multi-year seasonal average Multi-year seasonal variance Multi-year seasonal standard deviation</operator>	sp2gp sp2gpl gp2spl gp2spl Syntax sp2sp Syntax dv2uv dv2uvl uv2dv uv2dv	Spectral to gridpoint Spectral to gridpoint (linear) Gridpoint to spectral Gridpoint to spectral (linear) <operator> ifile ofile Spectral to spectral sp2sp,trunc ifile ofile Divergence and vorticity to U and V wind Divergence and vorticity to U and V wind (linear) U and V wind to divergence and vorticity U and V wind to divergence and vorticity V and V wind to divergence and vorticity Operator> ifile ofile</operator>
ensvar ensstd Syntax enspetl Syntax fldmin fldmax fldsum fldmean fldavg fldvar fldstd Syntax fldpetl Syntax	Ensemble variance Ensemble standard deviation <pre><operator> ifiles ofile Ensemble percentiles enspctl,p ifiles ofile Field minimum Field maximum Field sum Field average Field variance Field standard deviation <pre><operator> ifile ofile</operator></pre> Field percentiles</operator></pre>	Syntax timpctl Syntax hourmin hourmax hoursum houravg hourvar hourstd Syntax hourpetl Syntax	<pre><operator> ifile ofile Time percentiles timpctl,p ifile1 ifile2 ifile3 ofile Hourly minimum Hourly maximum Hourly sum Hourly average Hourly variance Hourly standard deviation <operator> ifile ofile Hourly percentiles hourpctl,p ifile1 ifile2 ifile3 ofile</operator></operator></pre>	ymonavg ymonvar ymonstd Syntax ymonpctl Syntax yseasmin yseasmax yseassum yseassum yseasvar yseasvar yseasvar yseasstd Syntax	Multi-year monthly average Multi-year monthly variance Multi-year monthly standard deviation <operator> ifile ofile Multi-year monthly percentiles ymonpctl.p ifile1 ifile2 ifile3 ofile Multi-year seasonal minimum Multi-year seasonal maximum Multi-year seasonal sum Multi-year seasonal mean Multi-year seasonal average Multi-year seasonal variance Multi-year seasonal standard deviation <operator> ifile ofile</operator></operator>	sp2gp sp2gpl gp2sp gp2spl Syntax sp2sp Syntax dv2uv dv2uvl uv2dv uv2dvl Syntax	Spectral to gridpoint Spectral to gridpoint (linear) Gridpoint to spectral Gridpoint to spectral Gridpoint to spectral (linear) <pre><pre><pre><pre><pre><pre><pre>spectral to gridpoint (gridpoint to spectral (linear)</pre> <pre><pre>spectral to spectral sp2sp,trunc ifile ofile Divergence and vorticity to U and V wind Divergence and vorticity to U and V wind (linear) U and V wind to divergence and vorticity U and V wind to divergence and vorticity (linear) <pre><pre><pre><pre><pre><pre><pre><pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre>
ensvar ensstd Syntax enspetl Syntax fldmin fldmax fldsum fldmean fldavg fldvar fldstd Syntax fldpetl Syntax zonmin	Ensemble variance Ensemble standard deviation <operator> ifiles ofile Ensemble percentiles enspctl,p ifiles ofile Field minimum Field maximum Field sum Field werage Field variance Field standard deviation <operator> ifile ofile Field percentiles fldpctl,p ifile ofile Zonal minimum</operator></operator>	Syntax timpctl Syntax hourmin hourmax hoursum hourmean houravg hourvar hourstd Syntax hourpctl Syntax daymin	<pre><operator> ifile ofile Time percentiles timpctl,p ifile1 ifile2 ifile3 ofile Hourly minimum Hourly maximum Hourly sum Hourly wean Hourly average Hourly variance Hourly standard deviation <operator> ifile ofile Hourly percentiles hourpctl,p ifile1 ifile2 ifile3 ofile Daily minimum</operator></operator></pre>	ymonavg ymonvar ymonstd Syntax ymonpctl Syntax yseasmin yseasmax yseassum yseasavar yseasvar yseasvar yseasstd Syntax yseaspctl Syntax	Multi-year monthly average Multi-year monthly variance Multi-year monthly standard deviation <operator>ifile ofile Multi-year monthly percentiles ymonpctl,p ifile1 ifile2 ifile3 ofile Multi-year seasonal minimum Multi-year seasonal maximum Multi-year seasonal mean Multi-year seasonal average Multi-year seasonal standard deviation <operator>ifile ofile Multi-year seasonal percentiles yseaspctl,p ifile1 ifile2 ifile3 ofile</operator></operator>	sp2gp sp2gpl gp2sp gp2spl Syntax sp2sp Syntax dv2uv dv2uvl uv2dv uv2dvl Syntax	Spectral to gridpoint Spectral to gridpoint (linear) Gridpoint to spectral Gridpoint to spectral (linear) <operator> ifile ofile Spectral to spectral sp2sp,trunc ifile ofile Divergence and vorticity to U and V wind Divergence and vorticity to U and V wind (linear) U and V wind to divergence and vorticity U and V wind to divergence and vorticity O ASCII input</operator>
ensvar ensstd Syntax enspetl Syntax fldmin fldmax fldsum fldmean fldavg fldvar fldstd Syntax fldpetl Syntax zonmin zonmax	Ensemble variance Ensemble standard deviation <operator> ifiles ofile Ensemble percentiles enspetl,p ifiles ofile Field minimum Field maximum Field sum Field werage Field variance Field standard deviation <operator> ifile ofile Field percentiles fldpetl,p ifile ofile Zonal minimum Zonal maximum</operator></operator>	Syntax timpctl Syntax hourmin hourmax hoursum hourwar hourvar hourstd Syntax daymin daymax	<pre></pre> <pre>< operator > ifile ofile Time percentiles timpctl,p ifile1 ifile2 ifile3 ofile Hourly minimum Hourly maximum Hourly sum Hourly mean Hourly average Hourly variance Hourly standard deviation < operator > ifile ofile Hourly percentiles hourpctl,p ifile1 ifile2 ifile3 ofile Daily minimum Daily maximum</pre>	ymonavg ymonvar ymonstd Syntax ymonpctl Syntax yseasmin yseasmax yseassum yseasavg yseasvar yseasstd Syntax yseaspctl Syntax ydrunmin	Multi-year monthly average Multi-year monthly variance Multi-year monthly standard deviation <pre> <pre> <pre></pre></pre></pre>	sp2gp sp2gpl gp2spl gp2spl syntax sp2sp Syntax dv2uv dv2uvl uv2dv uv2dv uv2dvl Formatted I/ input	Spectral to gridpoint Spectral to gridpoint (linear) Gridpoint to spectral Gridpoint to spectral Gridpoint to spectral (linear) <operator>ifile offile Spectral to spectral sp2sp,trunc ifile offile Divergence and vorticity to U and V wind Divergence and vorticity to U and V wind (linear) U and V wind to divergence and vorticity U and V wind to divergence and vorticity V and V wind to divergence and vorticity O ASCII input input,grid offile</operator>
ensvar ensstd Syntax enspetl Syntax fldmin fldmax fldsum fldavg fldvar fldstd Syntax fldpetl Syntax zonmin zonmax	Ensemble variance Ensemble standard deviation <pre><operator> ifiles ofile Ensemble percentiles enspctl,p ifiles ofile Field minimum Field maximum Field mean Field average Field variance Field variance Field standard deviation <operator> ifile ofile Field percentiles fldpctl,p ifile ofile Zonal minimum Zonal maximum Zonal sum</operator></operator></pre>	Syntax timpctl Syntax hourmin hourmax hoursum hourwar hourvar hourstd Syntax hourpctl Syntax daymin daymax daysum daymean	<pre><perator> ifile ofile Time percentiles timpctl,p ifile1 ifile2 ifile3 ofile Hourly minimum Hourly maximum Hourly sum Hourly average Hourly variance Hourly standard deviation <perator> ifile ofile Hourly percentiles hourpctl,p ifile1 ifile2 ifile3 ofile Daily minimum Daily maximum Daily maximum Daily mean</perator></perator></pre>	ymonavg ymonvar ymonstd Syntax ymonpctl Syntax yseasmin yseasmax yseassum yseasavag yseasvar yseasvar yseastd Syntax yseaspctl Syntax ydrunmin ydrunmax	Multi-year monthly average Multi-year monthly variance Multi-year monthly standard deviation <operator> ifile ofile Multi-year monthly percentiles ymonpctl,p ifile1 ifile2 ifile3 ofile Multi-year seasonal minimum Multi-year seasonal sum Multi-year seasonal mean Multi-year seasonal average Multi-year seasonal average Multi-year seasonal standard deviation <operator> ifile ofile Multi-year seasonal percentiles yseaspctl,p ifile1 ifile2 ifile3 ofile Multi-year daily running minimum Multi-year daily running minimum Multi-year daily running maximum</operator></operator>	sp2gp sp2gpl gp2spl gp2spl Syntax sp2sp Syntax dv2uv dv2uvl uv2dv uv2dvl syntax Formatted I/ input Syntax	Spectral to gridpoint Spectral to gridpoint (linear) Gridpoint to spectral Gridpoint to spectral Gridpoint to spectral (linear) <pre> <pre< td=""></pre<></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre>
ensvar ensstd Syntax enspetl Syntax fldmin fldmax fldsum fldwar fldvar fldstd Syntax fldpetl Syntax zonmin zonmax zonsum zonmean	Ensemble variance Ensemble standard deviation <pre><operator> ifiles ofile Ensemble percentiles enspctl,p ifiles ofile Field minimum Field maximum Field sum Field average Field variance Field standard deviation <pre><operator> ifile ofile</operator></pre> Field percentiles fldpctl,p ifile ofile Zonal minimum Zonal maximum Zonal sum Zonal mean</operator></pre>	Syntax timpctl Syntax hourmin hourmax hoursum hourwar hourvar hourstd Syntax daymin daymax daysum daymean dayavg	coperator > ifile ofile	ymonavg ymonvar ymonstd Syntax ymonpetl Syntax yseasmin yseasmax yseassum yseasavar yseasvar yseasvar yseaspetl Syntax ydrunmin ydrunmax ydrunsum	Multi-year monthly average Multi-year monthly variance Multi-year monthly standard deviation <operator> ifile ofile Multi-year monthly percentiles ymonpctl,p ifile1 ifile2 ifile3 ofile Multi-year seasonal minimum Multi-year seasonal sum Multi-year seasonal mean Multi-year seasonal average Multi-year seasonal standard deviation <operator> ifile ofile Multi-year seasonal percentiles yseaspctl,p ifile1 ifile2 ifile3 ofile Multi-year daily running minimum Multi-year daily running maximum Multi-year daily running sum</operator></operator>	sp2gp sp2gpl gp2spl gp2spl Syntax sp2sp Syntax dv2uv dv2uvl uv2dvl uv2dvl Formatted I/ input Syntax syntax	Spectral to gridpoint Spectral to gridpoint (linear) Gridpoint to spectral Gridpoint to spectral Gridpoint to spectral (linear) <operator>ifile ofile Spectral to spectral sp2sp,trunc ifile ofile Divergence and vorticity to U and V wind Divergence and vorticity to U and V wind (linear) U and V wind to divergence and vorticity U and V wind to divergence and vorticity (linear) <operator>ifile ofile O ASCII input input,grid ofile SERVICE input EXTRA input</operator></operator>
ensvar ensstd Syntax enspetl Syntax fldmin fldmax fldsum fldwar fldvar fldstd Syntax fldpetl Syntax zonmin zonmax zonsum zonumean zonavg	Ensemble variance Ensemble standard deviation <operator> ifiles ofile Ensemble percentiles enspctl,p ifiles ofile Field minimum Field maximum Field sum Field werage Field variance Field standard deviation <operator> ifile ofile Field percentiles fldpctl,p ifile ofile Zonal minimum Zonal maximum Zonal mean Zonal mean Zonal average</operator></operator>	Syntax timpctl Syntax hourmin hoursum hoursum hourvar hourstd Syntax hourpctl Syntax daymin daymax daysum daymean dayavg dayvar	Coperator > ifile ofile	ymonavg ymonvar ymonstd Syntax ymonpctl Syntax yseasmin yseasmean yseasvar yseasvar yseasvar yseaspctl Syntax ydrunmin ydrunmax ydrunsum ydrunmean	Multi-year monthly average Multi-year monthly variance Multi-year monthly standard deviation <pre><operator> ifile ofile</operator></pre> Multi-year monthly percentiles ymonpctl,p ifile1 ifile2 ifile3 ofile Multi-year seasonal minimum Multi-year seasonal maximum Multi-year seasonal mean Multi-year seasonal average Multi-year seasonal variance Multi-year seasonal standard deviation <operator> ifile ofile Multi-year seasonal percentiles yseaspctl,p ifile1 ifile2 ifile3 ofile Multi-year daily running minimum Multi-year daily running maximum Multi-year daily running sum Multi-year daily running sum Multi-year daily running mean</operator>	sp2gp sp2gpl gp2spl gp2spl Syntax sp2sp Syntax dv2uv dv2uvl uv2dvl uv2dvl Formatted I/ input Syntax syntax	Spectral to gridpoint Spectral to gridpoint (linear) Gridpoint to spectral Gridpoint to spectral Gridpoint to spectral (linear) <pre> <pre< td=""></pre<></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre>
ensvar ensstd Syntax enspetl Syntax fldmin fldmax fldsum fldmean fldavg fldvar fldstd Syntax zonmin zonmax zonsum zonmean zonavg zonvar	Ensemble variance Ensemble standard deviation <operator> ifiles ofile Ensemble percentiles enspetl,p ifiles ofile Field minimum Field maximum Field sum Field werage Field variance Field standard deviation <operator> ifile ofile Field percentiles fldpetl,p ifile ofile Zonal minimum Zonal maximum Zonal sum Zonal average Zonal variance</operator></operator>	Syntax timpctl Syntax hourmin hourmax hoursum hourwar hourstd Syntax houpctl Syntax daymin daymax daysum daywar dayvar daystd	<pre> <operator> ifile ofile Time percentiles timpctl,p ifile1 ifile2 ifile3 ofile Hourly minimum Hourly maximum Hourly mean Hourly average Hourly variance Hourly standard deviation <operator> ifile ofile Hourly percentiles hourpctl,p ifile1 ifile2 ifile3 ofile Daily minimum Daily maximum Daily sum Daily mean Daily werage Daily variance Daily standard deviation Daily sum Daily s</operator></operator></pre>	ymonavg ymonvar ymonstd Syntax ymonpctl Syntax yseasmin yseasmax yseassum yseasvar yseasvar yseastd Syntax yseaspctl Syntax ydrunmin ydrunmax ydrunmax ydrunmax ydrunman ydrunmay	Multi-year monthly average Multi-year monthly variance Multi-year monthly standard deviation <pre> <pre> <pre></pre></pre></pre>	sp2gp sp2gpl gp2spl gp2spl Syntax sp2sp Syntax dv2uv dv2uvl uv2dvl uv2dvl Syntax Formatted I/ input Syntax inputsrv inputext Syntax	Spectral to gridpoint Spectral to gridpoint (linear) Gridpoint to spectral Gridpoint to spectral Gridpoint to spectral (linear) <pre><pre><pre><pre><pre><pre><pre>spectral ro spectral</pre> Spectral to spectral sp2sp,trunc ifile ofile Divergence and vorticity to U and V wind Divergence and vorticity to U and V wind (linear) U and V wind to divergence and vorticity U and V wind to divergence and vorticity (linear) <pre><pre><pre><pre><pre><pre><pre><pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre>
ensvar ensstd Syntax enspetl Syntax fldmin fldmax fldsum fldwar fldvar fldstd Syntax fldpetl Syntax zonmin zonmax zonsum zonavg zonvar zonstd	Ensemble variance Ensemble standard deviation <pre><operator> ifiles ofile Ensemble percentiles enspctl,p ifiles ofile Field minimum Field maximum Field mean Field average Field variance Field standard deviation <operator> ifile ofile Field percentiles fldpctl,p ifile ofile Zonal minimum Zonal maximum Zonal sum Zonal wariance Zonal variance Zonal variance Zonal variance Zonal standard deviation</operator></operator></pre>	Syntax timpctl Syntax hourmin hourmax hoursum hourwar hourstd Syntax houpctl Syntax daymin daymax daysum daynean dayavg dayvar daystd Syntax	<pre> <operator> ifile ofile Time percentiles timpctl,p ifile1 ifile2 ifile3 ofile Hourly minimum Hourly maximum Hourly mean Hourly average Hourly variance Hourly standard deviation <operator> ifile ofile Daily minimum Daily maximum Daily sum Daily mean Daily werage Daily variance Daily standard deviation <operator> ifile1 ifile2 ifile3 ofile Daily minimum Daily sum Daily sum Daily sum Daily sum Daily sum Daily sum Daily sandard deviation <operator> ifile ofile</operator></operator></operator></operator></pre>	ymonavg ymonvar ymonstd Syntax ymonpctl Syntax yseasmin yseasmean yseasvar yseasvar yseasvar yseaspctl Syntax ydrunmin ydrunmax ydrunsum ydrunmean	Multi-year monthly average Multi-year monthly variance Multi-year monthly standard deviation <operator> ifile ofile Multi-year monthly percentiles ymonpctl,p ifile1 ifile2 ifile3 ofile Multi-year seasonal minimum Multi-year seasonal maximum Multi-year seasonal mean Multi-year seasonal average Multi-year seasonal average Multi-year seasonal standard deviation <operator> ifile ofile Multi-year seasonal percentiles yseaspctl,p ifile1 ifile2 ifile3 ofile Multi-year daily running minimum Multi-year daily running sum Multi-year daily running mean Multi-year daily running mean Multi-year daily running mean Multi-year daily running average Multi-year daily running variance</operator></operator>	sp2gp sp2gpl gp2sp gp2spl Syntax sp2sp Syntax dv2uv dv2uvl uv2dv uv2dvl Formatted I/ input Syntax inputsrv inputext Syntax	Spectral to gridpoint Spectral to gridpoint (linear) Gridpoint to spectral Gridpoint to spectral Gridpoint to spectral (linear) <operator> ifile ofile Spectral to spectral sp2sp.trunc ifile ofile Divergence and vorticity to U and V wind Divergence and vorticity to U and V wind (linear) U and V wind to divergence and vorticity U and V wind to divergence and vorticity U and V wind to divergence and vorticity For and V wind to divergence and vorticity Separator> ifile ofile O ASCII input input.grid ofile SERVICE input EXTRA input <operator> ofile ASCII output</operator></operator>
ensvar ensstd Syntax enspetl Syntax fldmin fldmax fldsum fldwar fldvar fldstd Syntax fldpetl Syntax zonmin zonmax zonsum zonmean zonavg zonvar zonstd Syntax	Ensemble variance Ensemble standard deviation <pre><operator> ifiles ofile Ensemble percentiles enspctl,p ifiles ofile Field minimum Field maximum Field sum Field average Field variance Field standard deviation <operator> ifile ofile Food minimum Zonal maximum Zonal maximum Zonal average Zonal variance Zonal variance Zonal sum Zonal sum Zonal sum Zonal average Zonal variance Zonal standard deviation <operator> ifile ofile </operator></operator></operator></pre>	Syntax timpctl Syntax hourmin hourmax hoursum hourwar hourstd Syntax houpctl Syntax daymin daymax daysum daywar dayvar daystd	<operator> ifile ofile Time percentiles timpctl,p ifile1 ifile2 ifile3 ofile Hourly minimum Hourly maximum Hourly sum Hourly wean Hourly variance Hourly standard deviation <operator> ifile ofile Hourly percentiles hourpctl,p ifile1 ifile2 ifile3 ofile Daily minimum Daily maximum Daily average Daily variance Daily variance Daily variance deviation Coperator> ifile ofile Daily percentiles</operator></operator>	ymonavg ymonvar ymonstd Syntax ymonpctl Syntax yseasmin yseasmax yseassum yseasvar yseasvar yseastd Syntax yseaspctl Syntax ydrunmin ydrunmax ydrunmax ydrunmax ydrunman ydrunmay	Multi-year monthly average Multi-year monthly variance Multi-year monthly standard deviation <pre> <pre> <pre></pre></pre></pre>	sp2gp sp2gpl gp2spl gp2spl Syntax sp2sp Syntax dv2uv dv2uvl uv2dv uv2dvl Syntax Formatted I/ input Syntax inputsrv inputext Syntax output	Spectral to gridpoint Spectral to gridpoint (linear) Gridpoint to spectral Gridpoint to spectral Gridpoint to spectral (linear) <operator>ifile offile Spectral to spectral sp2sp,trunc ifile offile Divergence and vorticity to U and V wind Divergence and vorticity to U and V wind (linear) U and V wind to divergence and vorticity U and V wind to divergence and vorticity O ASCII input input,grid offile SERVICE input EXTRA input <operator> offile ASCII output output ifiles</operator></operator>
ensvar ensstd Syntax enspetl Syntax fldmin fldmax fldsum fldwar fldstd Syntax fldpetl Syntax zonmin zonmax zonsum zonmean zonavg zonvar zonstd Syntax zonpetl	Ensemble variance Ensemble standard deviation <operator> ifiles ofile Ensemble percentiles enspctl,p ifiles ofile Field minimum Field maximum Field sum Field average Field variance Field standard deviation <operator> ifile ofile Field percentiles fldpctl,p ifile ofile Zonal minimum Zonal maximum Zonal sum Zonal average Zonal variance Zonal standard deviation <operator> ifile ofile Zonal mean Zonal average Zonal variance Zonal standard deviation <operator> ifile ofile Zonal percentiles</operator></operator></operator></operator>	Syntax timpctl Syntax hourmin hourmax hoursum hourwar hourstd Syntax houpctl Syntax daymin daymax daysum daynean dayavg dayvar daystd Syntax	<pre> <operator> ifile ofile Time percentiles timpctl,p ifile1 ifile2 ifile3 ofile Hourly minimum Hourly maximum Hourly mean Hourly average Hourly variance Hourly standard deviation <operator> ifile ofile Daily minimum Daily maximum Daily sum Daily mean Daily werage Daily variance Daily standard deviation <operator> ifile1 ifile2 ifile3 ofile Daily minimum Daily sum Daily sum Daily sum Daily sum Daily sum Daily sum Daily sandard deviation <operator> ifile ofile</operator></operator></operator></operator></pre>	ymonavg ymonvar ymonstd Syntax ymonpctl Syntax yseasmin yseasmax yseassum yseasavag yseasvar yseasstd Syntax yseaspctl Syntax ydrunmin ydrunmax ydrunsum ydrunavag ydrunavag ydrunvar	Multi-year monthly average Multi-year monthly variance Multi-year monthly standard deviation <operator> ifile ofile Multi-year monthly percentiles ymonpctl,p ifile1 ifile2 ifile3 ofile Multi-year seasonal minimum Multi-year seasonal maximum Multi-year seasonal mean Multi-year seasonal average Multi-year seasonal average Multi-year seasonal standard deviation <operator> ifile ofile Multi-year seasonal percentiles yseaspctl,p ifile1 ifile2 ifile3 ofile Multi-year daily running minimum Multi-year daily running sum Multi-year daily running mean Multi-year daily running mean Multi-year daily running mean Multi-year daily running average Multi-year daily running variance</operator></operator>	sp2gp sp2gpl gp2spl gp2spl Syntax sp2sp Syntax dv2uv dv2uvl uv2dv uv2dv uv2dvl Syntax Formatted I/ input Syntax inputsrv inputext Syntax output Syntax	Spectral to gridpoint Spectral to gridpoint (linear) Gridpoint to spectral Gridpoint to spectral Gridpoint to spectral (linear) <pre> <pre> <pre> <pre> <pre></pre></pre></pre></pre></pre>
ensvar ensstd Syntax enspetl Syntax fldmin fldmax fldsum fldwar fldvar fldstd Syntax fldpetl Syntax zonmin zonmax zonsum zonmean zonavg zonvar zonstd Syntax	Ensemble variance Ensemble standard deviation <operator> ifiles ofile Ensemble percentiles enspctl,p ifiles ofile Field minimum Field maximum Field sum Field average Field variance Field standard deviation <operator> ifile ofile Field percentiles fldpctl,p ifile ofile Zonal minimum Zonal maximum Zonal sum Zonal average Zonal variance Zonal standard deviation <operator> ifile ofile Zonal mean Zonal average Zonal variance Zonal standard deviation <operator> ifile ofile Zonal percentiles</operator></operator></operator></operator>	Syntax timpctl Syntax hourmin hourmax hoursum hourwar hourstd Syntax hourpctl Syntax daymin daymax daysum daynean dayavg dayvar daystd Syntax daypctl Syntax	<pre> <operator> ifile ofile Time percentiles timpctl,p ifile1 ifile2 ifile3 ofile Hourly minimum Hourly maximum Hourly sum Hourly warage Hourly variance Hourly standard deviation <operator> ifile ofile Hourly percentiles hourpctl,p ifile1 ifile2 ifile3 ofile Daily maximum Daily maximum Daily warage Daily variance Daily variance Daily standard deviation <operator> ifile ofile Daily percentiles Daily percentiles Daily percentiles Daily standard deviation <operator> ifile ofile Daily percentiles daypctl,p ifile1 ifile2 ifile3 ofile </operator></operator></operator></operator></pre>	ymonavg ymonvar ymonstd Syntax yseasmin yseasmax yseassum yseasavar yseasvar yseastd Syntax yseaspetl Syntax ydrunmin ydrunmax ydrunsum ydrunwar ydrunvar ydrunstd Syntax	Multi-year monthly average Multi-year monthly variance Multi-year monthly standard deviation <operator> ifile ofile Multi-year monthly percentiles ymonpctl,p ifile1 ifile2 ifile3 ofile Multi-year seasonal minimum Multi-year seasonal maximum Multi-year seasonal sum Multi-year seasonal average Multi-year seasonal average Multi-year seasonal standard deviation <operator> ifile ofile Multi-year seasonal percentiles yseaspctl,p ifile1 ifile2 ifile3 ofile Multi-year daily running minimum Multi-year daily running maximum Multi-year daily running max Multi-year daily running max Multi-year daily running sum Multi-year daily running sum Multi-year daily running sarage Multi-year daily running average Multi-year daily running standard deviation <operator>,nts ifile ofile</operator></operator></operator>	sp2gp sp2gpl gp2spl gp2spl Syntax sp2sp Syntax dv2uv dv2uvl uv2dv uv2dvl Syntax Formatted I/input Syntax inputsrv inputext Syntax outputf Syntax	Spectral to gridpoint Spectral to gridpoint (linear) Gridpoint to spectral Gridpoint to spectral Gridpoint to spectral (linear) <pre><pre><pre><pre><pre><pre><pre>spectral to gridpoint</pre> Spectral to spectral sp2sp,trunc ifile ofile Divergence and vorticity to U and V wind Divergence and vorticity to U and V wind (linear) U and V wind to divergence and vorticity U and V wind to divergence and vorticity (linear) <pre><pre><pre><pre><pre><pre><pre><pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre>
ensvar ensstd Syntax enspetl Syntax fldmin fldmax fldsum fldwar fldvar fldstd Syntax fldpetl Syntax zonmin zonmax zonsum zonmean zonavg zonvar zonstd Syntax	Ensemble variance Ensemble standard deviation <operator> ifiles ofile Ensemble percentiles enspctl,p ifiles ofile Field minimum Field maximum Field sum Field average Field variance Field standard deviation <operator> ifile ofile Field percentiles fldpctl,p ifile ofile Zonal minimum Zonal maximum Zonal sum Zonal average Zonal variance Zonal standard deviation <operator> ifile ofile Zonal mean Zonal percentiles Conal percentiles Conal variance Zonal standard deviation <operator> ifile ofile Zonal percentiles Zonal percentiles Zonal percentiles</operator></operator></operator></operator>	Syntax timpctl Syntax hourmin hourmax hoursum houravg hourstd Syntax hourpctl Syntax daymin daymax daysum daymean dayavg dayvar daystd Syntax daypctl Syntax monmin	coperator > ifile ofile	ymonavg ymonvar ymonstd Syntax ymonpetl Syntax yseasmin yseasmax yseassum yseasvar yseasvar yseastd Syntax ydrunmin ydrunmax ydrunmax ydrunwar ydrunvar ydrunstd Syntax ydrunpetl	Multi-year monthly average Multi-year monthly variance Multi-year monthly standard deviation <pre> <pre> <pre></pre></pre></pre>	sp2gp sp2gpl gp2spl gp2spl Syntax sp2sp Syntax dv2uv dv2uvl uv2dvl uv2dvl Syntax Formatted I/ input Syntax output Syntax output Syntax output Syntax	Spectral to gridpoint Spectral to gridpoint (linear) Gridpoint to spectral Gridpoint to spectral (linear) <pre><pre><pre><pre><pre><pre><pre><pre></pre></pre></pre></pre></pre></pre></pre></pre>
ensvar ensstd Syntax enspetl Syntax fldmin fldmax fldsum fldmean fldavg fldvar fldstd Syntax zonmin zonmax zonsum zonsum zonwean zonavg zonvar zonstd Syntax zonpetl Syntax	Ensemble variance Ensemble standard deviation <operator> ifiles ofile Ensemble percentiles enspetl,p ifiles ofile Field minimum Field maximum Field sum Field werage Field variance Field standard deviation <operator> ifile ofile Field percentiles flopetl,p ifile ofile Zonal minimum Zonal maximum Zonal sum Zonal sum Zonal average Zonal variance Zonal standard deviation <operator> ifile ofile Zonal percentiles Jonal percentiles Zonal percentiles Zonal percentiles Zonal percentiles Zonal percentiles Zonal standard deviation <operator> ifile ofile Zonal percentiles zonpetl,p ifile ofile Meridional minimum</operator></operator></operator></operator>	Syntax timpctl Syntax hourmin hourmax hoursum hourwar hourvar hourstd Syntax hourpctl Syntax daymin daymax daysum daywar daystd Syntax daystd Syntax daystd Syntax	coperator > ifile ofile	ymonavg ymonvar ymonstd Syntax ymonpetl Syntax yseasmin yseasmax yseassum yseasvar yseasvar yseastd Syntax ydrunmin ydrunmax ydrunmax ydrunwar ydrunvar ydrunstd Syntax ydrunpetl	Multi-year monthly average Multi-year monthly variance Multi-year monthly standard deviation <operator> ifile ofile Multi-year monthly percentiles ymonpctl,p ifile1 ifile2 ifile3 ofile Multi-year seasonal minimum Multi-year seasonal maximum Multi-year seasonal sum Multi-year seasonal average Multi-year seasonal average Multi-year seasonal standard deviation <operator> ifile ofile Multi-year seasonal percentiles yseaspctl,p ifile1 ifile2 ifile3 ofile Multi-year daily running minimum Multi-year daily running maximum Multi-year daily running max Multi-year daily running max Multi-year daily running sum Multi-year daily running sum Multi-year daily running sarage Multi-year daily running average Multi-year daily running standard deviation <operator>,nts ifile ofile</operator></operator></operator>	sp2gp sp2gpl gp2spl gp2spl gp2spl Syntax sp2sp Syntax dv2uv dv2uvl uv2dv uv2dvl Syntax Formatted I/ input Syntax inputsrv inputext Syntax output Syntax outputf Syntax	Spectral to gridpoint Spectral to gridpoint (linear) Gridpoint to spectral Gridpoint to spectral Gridpoint to spectral (linear) <pre><pre><pre><pre><pre><pre><pre>Spectral to spectral</pre> Spectral to spectral sp2sp,trunc ifile ofile Divergence and vorticity to U and V wind Divergence and vorticity to U and V wind (linear) U and V wind to divergence and vorticity U and V wind to divergence and vorticity Graph of the ofile O ASCII input input,grid ofile SERVICE input EXTRA input <pre><pre><pre>EXTRA input</pre> output ifiles Formatted output output,format,nelem ifiles Integer output SERVICE output SERVICE output SERVICE output</pre></pre></pre></pre></pre></pre></pre></pre>
ensvar ensstd Syntax enspetl Syntax fldmin fldmax fldsum fldwar fldvar fldstd Syntax zonmin zonmax zonsum zonwar zonsvar zonstd Syntax mermin mermax	Ensemble variance Ensemble standard deviation <pre><operator> ifiles ofile Ensemble percentiles enspctl,p ifiles ofile Field minimum Field maximum Field mean Field average Field variance Field standard deviation <operator> ifile ofile Zonal minimum Zonal maximum Zonal maximum Zonal average Zonal variance Zonal variance Zonal variance Zonal standard deviation <operator> ifile ofile Zonal minimum Zonal maximum Zonal mean Zonal variance Zonal variance Zonal variance Zonal percentiles zonpctl,p ifile ofile Meridional minimum Meridional minimum Meridional maximum</operator></operator></operator></pre>	Syntax timpctl Syntax hourmin hoursum hoursum hourvar hourstd Syntax hourpctl Syntax daymin daymax daysum daymean dayavg dayvar daystd Syntax daypctl Syntax monmin monmax monsum	coperator > ifile ofile	ymonavg ymonvar ymonstd Syntax ymonpetl Syntax yseasmin yseasmax yseassum yseasvar yseasvar yseastd Syntax ydrunmin ydrunmax ydrunmax ydrunwar ydrunvar ydrunstd Syntax ydrunpetl	Multi-year monthly average Multi-year monthly variance Multi-year monthly standard deviation <pre> <pre> <pre></pre></pre></pre>	sp2gp sp2gpl gp2spl gp2spl Syntax sp2sp Syntax dv2uv dv2uvl uv2dvl uv2dvl Syntax Formatted I/ input Syntax output Syntax output Syntax output Syntax	Spectral to gridpoint Spectral to gridpoint (linear) Gridpoint to spectral Gridpoint to spectral Gridpoint to spectral (linear) <pre> <pre> <pre> <pre> <pre></pre></pre></pre></pre></pre>
ensvar ensstd Syntax enspetl Syntax fldmin fldmax fldsum fldwar fldvar fldstd Syntax fldpetl Syntax zonmin zonmax zonsum zonwar zonstd Syntax mermin mermax mersum	Ensemble variance Ensemble standard deviation <pre><operator> ifiles ofile Ensemble percentiles enspctl,p ifiles ofile Field minimum Field maximum Field sum Field average Field variance Field standard deviation <operator> ifile ofile Foal minimum Zonal minimum Zonal maximum Zonal average Zonal variance Tonal average Itile ofile Zonal minimum Zonal maximum Zonal average Zonal variance Zonal variance Zonal variance Itile ofile Zonal percentiles Zonal percentiles Zonal percentiles Zonal percentiles Zonal percentiles Zonal percentiles Zonal maximum Meridional minimum Meridional maximum Meridional sum</operator></operator></pre>	Syntax timpctl Syntax hourmin hourmax hoursum hourwar hourstd Syntax hourpctl Syntax daymin daymax daysum daynean dayavg dayvar daystd Syntax daypctl Syntax monmin monmax monsum monmean	coperator > ifile ofile	ymonavg ymonvar ymonstd Syntax ymonpetl Syntax yseasmin yseasmax yseassum yseasvar yseasvar yseastd Syntax ydrunmin ydrunmax ydrunmax ydrunwar ydrunvar ydrunstd Syntax ydrunpetl	Multi-year monthly average Multi-year monthly variance Multi-year monthly standard deviation <pre> <pre> <pre></pre></pre></pre>	sp2gp sp2gpl gp2spl gp2spl gp2spl Syntax sp2sp Syntax dv2uv dv2uvl uv2dv uv2dvl Syntax Formatted I/ input Syntax inputsrv inputext Syntax output Syntax outputf Syntax	Spectral to gridpoint Spectral to gridpoint (linear) Gridpoint to spectral Gridpoint to spectral (linear) <pre><pre><pre><pre><pre><pre><pre><pre></pre></pre></pre></pre></pre></pre></pre></pre>
ensvar ensstd Syntax enspetl Syntax fldmin fldmax fldsum fldwar fldvar fldstd Syntax fldpctl Syntax zonmax zonsum zonmax zonsum zonwar zonstd Syntax mermin mermax mersum mermean	Ensemble variance Ensemble standard deviation <operator> ifiles ofile Ensemble percentiles enspctl,p ifiles ofile Field minimum Field maximum Field sum Field warage Field variance Field standard deviation <operator> ifile ofile Field percentiles fldpctl,p ifile ofile Zonal minimum Zonal maximum Zonal sum Zonal average Zonal variance Zonal standard deviation <operator> ifile ofile Zonal mean Zonal percentiles fldpctl,p ifile ofile Zonal mean Zonal average Zonal variance Zonal standard deviation <operator> ifile ofile Zonal percentiles zonpctl,p ifile ofile Meridional minimum Meridional maximum Meridional maximum Meridional sum Meridional mean</operator></operator></operator></operator>	Syntax timpctl Syntax hourmin hourmax hoursum houravg hourstd Syntax hourpctl Syntax daymin daymax daysum daymean dayavg dayvar daystd Syntax daypctl Syntax monmin monmax monnean monavg	coperator > ifile ofile	ymonavg ymonvar ymonstd Syntax ymonpctl Syntax yseasmin yseasmax yseassum yseasvar yseasvar yseastd Syntax ydrunmin ydrunmax ydrunsum ydrunwar ydrunavg ydrunvar ydrunstd Syntax ydrunpctl Syntax	Multi-year monthly average Multi-year monthly variance Multi-year monthly standard deviation <pre> <pre> <pre></pre></pre></pre>	sp2gp sp2gpl gp2spl gp2spl Syntax sp2sp Syntax dv2uv dv2uvl uv2dv uv2dv uv2dvl Syntax Formatted I/ input Syntax output Syntax output Syntax output outputsrv outputsrv outputsrv outputsrv outputsrv outputsrv	Spectral to gridpoint Spectral to gridpoint (linear) Gridpoint to spectral Gridpoint to spectral Gridpoint to spectral (linear) <pre> <pre> <pre> <pre> <pre></pre></pre></pre></pre></pre>
ensvar ensstd Syntax enspetl Syntax fldmin fldmax fldsum fldmean fldavg fldvar fldstd Syntax zonmin zonmax zonsum zonmean zonavg zonvar zonstd Syntax mermin mermax mersum mermean meravg	Ensemble variance Ensemble standard deviation <operator> ifiles ofile Ensemble percentiles enspctl,p ifiles ofile Field minimum Field maximum Field sum Field average Field variance Field standard deviation <operator> ifile ofile Field percentiles fldpctl,p ifile ofile Zonal minimum Zonal maximum Zonal sum Zonal sum Zonal standard deviation <operator> ifile ofile Zonal mean Zonal jercentiles Zonal mean Zonal mean Aconal suriance Zonal standard deviation <operator> ifile ofile Zonal standard deviation <operator> ifile ofile Zonal standard deviation <operator> ifile ofile Zonal percentiles zonpctl,p ifile ofile Meridional minimum Meridional maximum Meridional maximum Meridional mean Meridional average</operator></operator></operator></operator></operator></operator>	Syntax timpctl Syntax hourmin hourmax hoursum hourwar hourstd Syntax hourpctl Syntax daymin daymax daysum daynean dayavg dayvar daystd Syntax daypctl Syntax monmin monmax monsum monmean	coperator > ifile ofile	ymonavg ymonvar ymonstd Syntax ymonpetl Syntax yseasmin yseasmax yseassum yseasvar yseasvar yseastd Syntax ydrunmin ydrunmax ydrunmax ydrunwar ydrunvar ydrunstd Syntax ydrunpetl	Multi-year monthly average Multi-year monthly variance Multi-year monthly standard deviation <pre> <pre> <pre></pre></pre></pre>	sp2gp sp2gpl gp2spl gp2spl Syntax sp2sp Syntax dv2uv dv2uvl uv2dv uv2dv uv2dvl Syntax Formatted I/ input Syntax output Syntax output Syntax output outputsrv outputsrv outputsrv outputsrv outputsrv outputsrv	Spectral to gridpoint Spectral to gridpoint (linear) Gridpoint to spectral Gridpoint to spectral Gridpoint to spectral (linear) <pre> <pre> <pre> <pre> <pre></pre></pre></pre></pre></pre>
ensvar ensstd Syntax enspetl Syntax fldmin fldmax fldsum flddvar fldstd Syntax fldpctl Syntax zonmin zonmax zonsum zonavg zonvar zonstd Syntax mermin mermax mersum mermean meravg mervar	Ensemble variance Ensemble standard deviation <pre><operator> ifiles ofile Ensemble percentiles enspctl,p ifiles ofile Field minimum Field maximum Field maximum Field average Field variance Field standard deviation <operator> ifile ofile Field percentiles fidpctl,p ifile ofile Zonal minimum Zonal maximum Zonal average Zonal variance Zonal variance Zonal variance Zonal variance Zonal variance Zonal percentiles Meridional minimum Meridional maximum Meridional maximum Meridional mean Meridional average Meridional average Meridional variance Meridional variance Meridional variance</operator></operator></pre>	Syntax timpctl Syntax hourmin hourmax hoursum houravg hourstd Syntax hourpctl Syntax daymin daymax daysum daymean dayavg dayvar daystd Syntax daypctl Syntax monmin monmax monnean monavg	coperator > ifile ofile	ymonavg ymonvar ymonstd Syntax ymonpetl Syntax yseasmin yseasmax yseassum yseasvar yseasvar yseastd Syntax ydrunmin ydrunmax ydrunmax ydrunwar ydrunvar ydrunvar ydrunpetl Syntax ydrunpetl Syntax Regression	Multi-year monthly average Multi-year monthly variance Multi-year monthly standard deviation <pre> <pre> <pre></pre></pre></pre>	sp2gp sp2gpl gp2spl gp2spl Syntax sp2sp Syntax dv2uv dv2uvl uv2dv uv2dvl Syntax Formatted I/ input Syntax inputsrv inputext Syntax outputf Syntax outputf Syntax outputf Syntax	Spectral to gridpoint Spectral to gridpoint (linear) Gridpoint to spectral Gridpoint to spectral Gridpoint to spectral (linear) <operator> ifile ofile Spectral to spectral sp2sp,trunc ifile ofile Divergence and vorticity to U and V wind Divergence and vorticity to U and V wind (linear) U and V wind to divergence and vorticity U and V wind to divergence and vorticity W and V wind to divergence and vorticity Seperator > ifile ofile O ASCII input input,grid ofile SERVICE input EXTRA input <operator> ofile ASCII output output ifiles Formatted output output,format,nelem ifiles Integer output SERVICE output EXTRA output <operator> ifiles</operator></operator></operator>
ensvar ensstd Syntax enspetl Syntax fldmin fldmax fldsum fldwar fldvar fldstd Syntax fldpetl Syntax zonmin zonmax zonsum zonwar zonstd Syntax mermin mermax mersum merray mervar merstd	Ensemble variance Ensemble standard deviation <pre><operator> ifiles ofile Ensemble percentiles enspctl,p ifiles ofile Field minimum Field maximum Field sum Field average Field variance Field standard deviation <operator> ifile ofile Fool minimum Zonal minimum Zonal maximum Zonal average Zonal variance Zonal variance Zonal variance Itile ofile Zonal maximum Zonal maximum Zonal average Zonal variance Zonal variance Zonal standard deviation <operator> ifile ofile Zonal percentiles Zonetl,p ifile ofile Zonal percentiles Zonetl,p ifile ofile Meridional minimum Meridional minimum Meridional maximum Meridional wariance Meridional variance Meridional variance Meridional standard deviation Meridional standard deviation Meridional maximum Meridional sum Meridional sum Meridional sum Meridional standard deviation Meridional standard deviation</operator></operator></operator></pre>	Syntax timpctl Syntax hourmin hourmax hoursum hourwar hourvar hourstd Syntax daymin daymax daysum daywar daystd Syntax daystd Syntax daystd Syntax	coperator > ifile ofile	ymonavg ymonvar ymonstd Syntax ymonpctl Syntax yseasmin yseasmax yseassum yseasavg yseasvar yseastd Syntax ydrunmin ydrunmax ydrunsum ydrunavg ydrunvar ydrunstd Syntax ydrunpctl Syntax Regression detrend	Multi-year monthly average Multi-year monthly variance Multi-year monthly standard deviation <pre> <pre> <pre> <pre></pre></pre></pre></pre>	sp2gp sp2gpl gp2spl gp2spl Syntax sp2sp Syntax dv2uv dv2uvl uv2dv uv2dvl Syntax Formatted I/ input Syntax inputsrv inputext Syntax outputf Syntax outputf Syntax outputf Syntax outputst Syntax outputst Syntax Miscellaneous	Spectral to gridpoint Spectral to gridpoint (linear) Gridpoint to spectral Gridpoint to spectral (linear) <pre> <pre> <pre> <pre> <pre> <pre></pre></pre></pre></pre></pre></pre>
ensvar ensstd Syntax enspetl Syntax fidmin fidmax fidsum fiddwar fiddvar fidstd Syntax fidpetl Syntax zonmin zonmax zonsum zonmean zonavg zonvar zonstd Syntax mermin mermax mersum meravg mervar merstd Syntax	Ensemble variance Ensemble standard deviation <operator> ifiles ofile Ensemble percentiles enspctl,p ifiles ofile Field minimum Field maximum Field sum Field average Field variance Field standard deviation <operator> ifile ofile Zonal minimum Zonal maximum Zonal sum Zonal sum Zonal standard deviation <operator> ifile ofile Zonal minimum Zonal field Ensemble variance Zonal standard deviation <operator> ifile ofile Zonal wriance Zonal standard deviation <operator> ifile ofile Meridional minimum Meridional maximum Meridional maximum Meridional sum Meridional average Meridional variance Meridional variance Meridional variance Meridional standard deviation <operator> ifile ofile Meridional standard deviation <operator> ifile ofile Meridional variance Meridional variance Meridional standard deviation <operator> ifile ofile</operator></operator></operator></operator></operator></operator></operator></operator>	Syntax timpctl Syntax hourmin hourmax hoursum hourwar hourstd Syntax hourpctl Syntax daymin daymax daysum daywar dayvar daystd Syntax monmin monmax monnsum monnean monavg monvar monstd Syntax	coperator > ifile ofile	ymonavg ymonvar ymonstd Syntax ymonpctl Syntax yseasmin yseasmax yseassum yseasvar yseasvar yseastd Syntax ydrunmin ydrunmax ydrunsum ydrunwar ydrunvar ydrunstd Syntax Regression detrend Syntax	Multi-year monthly average Multi-year monthly variance Multi-year monthly standard deviation <pre> <pre> <pre></pre></pre></pre>	sp2gp sp2gpl gp2spl gp2spl Syntax sp2sp Syntax dv2uv dv2uvl uv2dv uv2dvl Syntax Formatted I/ input Syntax output Syntax output Syntax outputf Syntax outputsrv	Spectral to gridpoint Spectral to gridpoint (linear) Gridpoint to spectral Gridpoint to spectral Gridpoint to spectral (linear) <pre> <pre> <pre> <pre> <pre></pre></pre></pre></pre></pre>
ensvar ensstd Syntax enspetl Syntax fldmin fldmax fldsum fldwar fldvar fldstd Syntax zonmin zonmax zonsum zonmean zonavg zonvar zonstd Syntax mermin mermax mersum merray mervar merstd	Ensemble variance Ensemble standard deviation <pre><operator> ifiles ofile Ensemble percentiles enspctl,p ifiles ofile Field minimum Field maximum Field sum Field average Field variance Field standard deviation <operator> ifile ofile Fool minimum Zonal minimum Zonal maximum Zonal average Zonal variance Zonal variance Zonal variance Itile ofile Zonal maximum Zonal maximum Zonal average Zonal variance Zonal variance Zonal standard deviation <operator> ifile ofile Zonal percentiles Zonetl,p ifile ofile Zonal percentiles Zonetl,p ifile ofile Meridional minimum Meridional minimum Meridional maximum Meridional wariance Meridional variance Meridional variance Meridional standard deviation Meridional standard deviation Meridional maximum Meridional sum Meridional sum Meridional sum Meridional standard deviation Meridional standard deviation</operator></operator></operator></pre>	Syntax timpctl Syntax hourmin hourmax hoursum hourvar hourstd Syntax hourpctl Syntax daymin daymax daysum daywad dayvar daystd Syntax daypctl Syntax monmin monmax monsum monmean monavg monvar monstd Syntax syntax	< operator > ifile ofile Time percentiles timpctl,p ifile1 ifile2 ifile3 ofile Hourly minimum Hourly mainimum Hourly sum Hourly wean Hourly variance Hourly standard deviation < operator > ifile ofile Hourly percentiles hourpctl,p ifile1 ifile2 ifile3 ofile Daily minimum Daily maximum Daily werage Daily variance Daily variance deviation < operator > ifile ofile Monthly minimum Monthly monthly sum Monthly maximum Monthly wariance Monthly variance Monthly standard deviation < operator > ifile ofile Monthly percentiles	ymonavg ymonvar ymonstd Syntax ymonpctl Syntax yseasmin yseasmax yseassum yseasavg yseasvar yseastd Syntax ydrunmin ydrunmax ydrunsum ydrunavg ydrunvar ydrunstd Syntax ydrunpctl Syntax Regression detrend	Multi-year monthly average Multi-year monthly variance Multi-year monthly standard deviation <pre> <pre> <pre> <pre></pre></pre></pre></pre>	sp2gp sp2gpl gp2spl gp2spl Syntax sp2sp Syntax dv2uv dv2uvl uv2dv uv2dvl Syntax Formatted I/ input Syntax inputsrv inputext Syntax outputf Syntax outputf Syntax outputf Syntax outputst Syntax outputst Syntax Miscellaneous	Spectral to gridpoint Spectral to gridpoint (linear) Gridpoint to spectral Gridpoint to spectral Gridpoint to spectral (linear) <pre> <pre> <pre> <pre> <pre> <pre> <pre> <pre> Spectral to spectral sp2sp,trunc ifile ofile Divergence and vorticity to U and V wind Divergence and vorticity to U and V wind (linear) U and V wind to divergence and vorticity U and V wind to divergence and vorticity W and V wind to divergence and vorticity Specific ofile OO ASCII input input,grid ofile SERVICE input EXTRA input <pre> <pre> <pre> <pre> ASCII output output ifiles</pre> Formatted output output,format,nelem ifiles Integer output SERVICE output EXTRA output <pre> <pre> <pre> <pre> <pre> <pre> <pre> </pre> </pre> Integer output <pre> <pre> <pre> <pre> <pre> <pre> <pre> <pre> </pre> <pre> </pre> <pre> <pre> <pre> <pre> <pre> </pre> <pre> <pre> <pre> </pre> <pre> <pre> <pre> <pre> <pre> <pre> </pre> <pre> </pre> <pre> <pre> <pre> <pre> <pre> </pre> <pre> <pre> <pre> <pre> <pre> <pre> <pre> <pre> </pre> <pre> <pre< td=""></pre<></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre>
ensvar ensstd Syntax enspetl Syntax fldmin fldmax fldsum fldwar fldstd Syntax fldpetl Syntax zonmin zonmax zonsum zonwar zonstd Syntax mermin mermax mersum mermean meravg mervar merstd Syntax Syntax	Ensemble variance Ensemble standard deviation <operator> ifiles ofile Ensemble percentiles enspctl,p ifiles ofile Field minimum Field maximum Field sum Field average Field variance Field standard deviation <operator> ifile ofile Zonal minimum Zonal maximum Zonal sum Zonal sum Zonal standard deviation <operator> ifile ofile Zonal minimum Zonal field Ensemble variance Zonal standard deviation <operator> ifile ofile Zonal wriance Zonal standard deviation <operator> ifile ofile Meridional minimum Meridional maximum Meridional maximum Meridional sum Meridional average Meridional variance Meridional variance Meridional variance Meridional standard deviation <operator> ifile ofile Meridional standard deviation <operator> ifile ofile Meridional variance Meridional variance Meridional standard deviation <operator> ifile ofile</operator></operator></operator></operator></operator></operator></operator></operator>	Syntax timpctl Syntax hourmin hourmax hoursum hourwar hourstd Syntax hourpctl Syntax daymin daymax daysum daywar dayvar daystd Syntax monmin monmax monnsum monnean monavg monvar monstd Syntax	coperator > ifile ofile	ymonavg ymonvar ymonstd Syntax ymonpctl Syntax yseasmin yseasmax yseassum yseasavar yseasvar yseastd Syntax yseaspctl Syntax ydrunmin ydrunmax ydrunsum ydrunavg ydrunvar ydrunstd Syntax ydrunpctl Syntax Regression detrend Syntax trend	Multi-year monthly average Multi-year monthly variance Multi-year monthly standard deviation <pre> <pre> <pre></pre></pre></pre>	sp2gp sp2gpl gp2spl gp2spl Syntax sp2sp Syntax dv2uv dv2uvl uv2dv uv2dvl Syntax Formatted I/ input Syntax output Syntax output Syntax outputf Syntax outputsrv	Spectral to gridpoint Spectral to gridpoint (linear) Gridpoint to spectral Gridpoint to spectral Gridpoint to spectral (linear) <pre> <pre> <pre> <pre> <pre></pre></pre></pre></pre></pre>

timsort Syntax	Sort over the time timsort ifile ofile	eca_r95p Syntax	Very wet days wrt 95th percentile of reference period eca_r95p ifile1 ifile2 ofile
const Syntax	Create a constant field const,const,grid ofile	eca_r95ptot Syntax	Precipitation percent due to R95p days eca_r95ptot ifile1 ifile2 ofile
random Syntax	Create a field with random values random,grid ofile	eca_r99p Syntax	Extremely wet days wrt 99th percentile of reference eca_r99p ifile1 ifile2 ofile
vardup Syntax	Duplicate variables vardup ifile ofile	eca_r99ptot Syntax	Precipitation percent due to R99p days eca_r99ptot ifile1 ifile2 ofile
varmul Syntax	Multiply variables varmul,nmul ifile ofile	eca_rr1 Syntax	Wet days index per time period eca_rr1 ifile ofile
rotuvb Syntax	Backward rotation rotuvb,u,v, ifile ofile	eca_rx1day Syntax	Highest one day precipitation amount per time periodeca_rxlday[,mode] ifile ofile
mastrfu Syntax	Mass stream function mastrfu ifile ofile	eca_rx5day Syntax	Highest five-day precipitation amount per time periodeca_rx5day[,x] ifile ofile
hi Syntax	Humidity index (C) hi ifile1 ifile2 ifile3 ofile	eca_sdii	Simple daily intensity index per time period eca_sdii ifile ofile
wct Syntax	Windchill temperature (C) wct ifile1 ifile2 ofile	Syntax eca_strwin	Strong wind days index per time period
		Syntax eca_strbre	Strong breeze days index per time period
CA indices	Constitution described and the second	Syntax	eca_strbre ifile ofile
eca_cdd Syntax	Consecutive dry days index per time period eca_cdd ifile ofile	eca_strgal Syntax	Strong gale days index per time period eca_strgal ifile ofile
eca_cfd Syntax	Consecutive frost days index per time period eca_cfd ifile ofile	eca_hurr Syntax	Hurricane days index per time period eca_hurr ifile ofile
eca_csu Syntax	Consecutive summer days index per time period eca_csu[,T] ifile ofile	eca_su Syntax	Summer days index per time period $eca_su[,T]$ ifile ofile
eca_cwd Syntax	Consecutive wet days index per time period eca_cwd ifile ofile	eca_tg10p Syntax	Cold days percent wrt 10th percentile of reference peca_tg10p ifile1 ifile2 ofile
eca_cwdi Syntax	Cold wave duration index wrt mean of reference pe eca_cwdi[,nday[,T]] ifile1 ifile2 ofile	riœca_tg90p Syntax	Warm days percent wrt 90th percentile of reference eca_tg90p ifile1 ifile2 ofile
eca_cwfi Syntax	Cold-spell days index wrt 10th percentile of referencea_cwfi[,nday] ifile1 ifile2 ofile	de quaitd10p Syntax	Cold nights percent wrt 10th percentile of reference eca_tn10p ifile1 ifile2 ofile
eca_etr Syntax	Intra-period extreme temperature range eca_etr ifile1 ifile2 ofile	eca_tn90p Syntax	Warm nights percent wrt 90th percentile of reference eca_tn90p ifile1 ifile2 ofile
eca_fd Syntax	Frost days index per time period eca_fd ifile ofile	eca_tr Syntax	Tropical nights index per time period eca_tr[,T] ifile ofile
eca_fdns Syntax	Frost days where no snow index per time period eca_fdns ifile1 ifile2 ofile	eca_tx10p Syntax	Very cold days percent wrt 10th percentile of reference.ca_tx10p ifile1 ifile2 ofile
eca_gsl Syntax	Growing season length index eca_gsl[,nday[,T]] ifile ofile	eca_tx90p Syntax	Very warm days percent wrt 90th percentile of reference.ca_tx90p ifile1 ifile2 ofile
eca_hd Syntax	Heating degree days per time period eca_hd[,T1[,T2]] ifile ofile		
eca_hwdi Syntax	Heat wave duration index wrt mean of reference pe eca_hwdi[,nday[,T]] ifile1 ifile2 ofile	eriod	
eca_hwfi Syntax	Warm spell days index wrt 90th percentile of reference_hwfi[,nday] ifile1 ifile2 ofile	ence period	
eca_id Syntax	Ice days index per time period eca.id ifile ofile		
eca_r10mm Syntax	Heavy precipitation days index per time period eca_r10mm ifile ofile		
eca_r20mm Syntax	Very heavy precipitation days index per time periodeca_r20mm ifile ofile	d	
eca_r 75 p Syntax	Moderate wet days wrt 75th percentile of reference eca_r75p ifile1 ifile2 ofile	period	
eca_r75ptot Syntax	Precipitation percent due to R75p days eca_r75ptot ifile1 ifile2 ofile		
eca_r90p Syntax	Wet days wrt 90th percentile of reference period eca_r90p ifile1 ifile2 ofile		
eca_r90ptot Syntax	Precipitation percent due to R90p days eca_r90ptot ifile1 ifile2 ofile		