an_cui_yang.exe

Parameters:

```
 (string)   -id   input directory
 (string)   -od   output directory
 (string)   -iodf input-output data format
 (int)      -nwr  Nwin Row
 (int)      -nwc  Nwin Col
 (int)      -ofr  Offset Row
 (int)      -ofc  Offset Col
 (int)      -fnr  Final Number of Row
 (int)      -fnc  Final Number of Col
 (int)      -fl1  Flag Entropy (0/1)
 (int)      -fl2  Flag Alpha (0/1)
```

Optional Parameters:

```
 (string)   -mask mask file (valid pixels)
 (int)      -mem  Allocated memory for blocksize determination (in Mb)
 (string)   -errf memory error file
 (noarg)    -help displays this message
 (noarg)    -data displays the help concerning Data Format parameter
```

Usage:

Polarimetric Input-Output Data Format

```
 S2    input : quad-pol S2      output parameters derived from C3 or T3
 C3    input : covariance C3    output parameters derived from covariance
C3
 C4    input : covariance C4    output parameters derived from covariance
C4
 T3    input : coherency T3     output parameters derived from coherency
T3
 T4    input : coherency T4     output parameters derived from coherency
T4
```

an_yang_3components_decomposition.exe

Parameters:

```
 (string)   -id   input directory
 (string)   -od   output directory
 (string)   -iodf input-output data format
 (int)      -nwr  Nwin Row
 (int)      -nwc  Nwin Col
 (int)      -ofr  Offset Row
 (int)      -ofc  Offset Col
 (int)      -fnr  Final Number of Row
 (int)      -fnc  Final Number of Col
```

Optional Parameters:
```
 (string)   -mask mask file (valid pixels)
 (int)      -mem  Allocated memory for blocksize determination (in Mb)
 (string)   -errf memory error file
 (noarg)    -help displays this message
 (noarg)    -data displays the help concerning Data Format parameter
```

Usage:

Polarimetric Input-Output Data Format

```
 S2    input : quad-pol S2      output parameters derived from C3 or T3
 C3    input : covariance C3    output parameters derived from covariance
C3
 T3    input : coherency T3     output parameters derived from coherency
T3
```

---

an_yang_4components_decomposition.exe

Parameters:
```
 (string)   -id   input directory
 (string)   -od   output directory
 (string)   -iodf input-output data format
 (int)      -nwr  Nwin Row
 (int)      -nwc  Nwin Col
 (int)      -ofr  Offset Row
 (int)      -ofc  Offset Col
 (int)      -fnr  Final Number of Row
 (int)      -fnc  Final Number of Col
```

Optional Parameters:
```
 (string)   -mask mask file (valid pixels)
 (int)      -mem  Allocated memory for blocksize determination (in Mb)
 (string)   -errf memory error file
 (noarg)    -help displays this message
 (noarg)    -data displays the help concerning Data Format parameter
```

Usage:

Polarimetric Input-Output Data Format

```
 S2    input : quad-pol S2      output parameters derived from C3 or T3
 C3    input : covariance C3    output parameters derived from covariance
C3
 T3    input : coherency T3     output parameters derived from coherency
T3
```

---

arii_anned_3components_decomposition.exe

Parameters:
```
 (string)   -id   input directory
 (string)   -od   output directory
```

```
 (string)   -iodf input-output data format
 (int)      -nwr  Nwin Row
 (int)      -nwc  Nwin Col
 (int)      -ofr  Offset Row
 (int)      -ofc  Offset Col
 (int)      -fnr  Final Number of Row
 (int)      -fnc  Final Number of Col

Optional Parameters:
 (string)   -mask mask file (valid pixels)
 (int)      -mem  Allocated memory for blocksize determination (in Mb)
 (string)   -errf memory error file
 (noarg)    -help displays this message
 (noarg)    -data displays the help concerning Data Format parameter
```

Usage:

Polarimetric Input-Output Data Format

```
 S2    input : quad-pol S2      output parameters derived from C3 or T3
 C3    input : covariance C3    output parameters derived from covariance
C3
 T3    input : coherency T3     output parameters derived from coherency
T3
```

---

arii_anned_3components_decomposition.exe

Parameters:

```
 (string)   -id   input directory
 (string)   -od   output directory
 (string)   -iodf input-output data format
 (int)      -nwr  Nwin Row
 (int)      -nwc  Nwin Col
 (int)      -ofr  Offset Row
 (int)      -ofc  Offset Col
 (int)      -fnr  Final Number of Row
 (int)      -fnc  Final Number of Col
```

Optional Parameters:

```
 (string)   -mask mask file (valid pixels)
 (int)      -mem  Allocated memory for blocksize determination (in Mb)
 (string)   -errf memory error file
 (noarg)    -help displays this message
 (noarg)    -data displays the help concerning Data Format parameter
```

Usage:

Polarimetric Input-Output Data Format

```
 S2    input : quad-pol S2      output parameters derived from C3 or T3
 C3    input : covariance C3    output parameters derived from covariance
C3
 T3    input : coherency T3     output parameters derived from coherency
T3
```

arii_anned_3components_reconstruction.exe

Parameters:
```
 (string)  -id   input directory
 (string)  -od1  output directory - ground
 (string)  -od2  output directory - double
 (string)  -od3  output directory - volume
 (string)  -iodf input-output data format
 (int)     -nwr  Nwin Row
 (int)     -nwc  Nwin Col
 (int)     -ofr  Offset Row
 (int)     -ofc  Offset Col
 (int)     -fnr  Final Number of Row
 (int)     -fnc  Final Number of Col
```

Optional Parameters:
```
 (string)  -mask mask file (valid pixels)
 (int)     -mem  Allocated memory for blocksize determination (in Mb)
 (string)  -errf memory error file
 (noarg)   -help displays this message
 (noarg)   -data displays the help concerning Data Format parameter
```

Usage:

Polarimetric Input-Output Data Format

```
 S2    input : quad-pol S2      output parameters derived from C3 or T3
 C3    input : covariance C3    output parameters derived from covariance
C3
 T3    input : coherency T3     output parameters derived from coherency
T3
```


arii_anned_3components_reconstruction.exe

Parameters:
```
 (string)  -id   input directory
 (string)  -od1  output directory - ground
 (string)  -od2  output directory - double
 (string)  -od3  output directory - volume
 (string)  -iodf input-output data format
 (int)     -nwr  Nwin Row
 (int)     -nwc  Nwin Col
 (int)     -ofr  Offset Row
 (int)     -ofc  Offset Col
 (int)     -fnr  Final Number of Row
 (int)     -fnc  Final Number of Col
```

Optional Parameters:
```
 (string)  -mask mask file (valid pixels)
 (int)     -mem  Allocated memory for blocksize determination (in Mb)
 (string)  -errf memory error file
 (noarg)   -help displays this message
```

```
 (noarg)    -data displays the help concerning Data Format parameter
```

Usage:

Polarimetric Input-Output Data Format

```
 S2     input : quad-pol S2      output parameters derived from C3 or T3
 C3     input : covariance C3    output parameters derived from covariance
C3
 T3     input : coherency T3     output parameters derived from coherency
T3
```

---

arii_nned_3components_decomposition.exe

Parameters:

```
 (string)   -id   input directory
 (string)   -od   output directory
 (string)   -iodf input-output data format
 (int)      -nwr  Nwin Row
 (int)      -nwc  Nwin Col
 (int)      -ofr  Offset Row
 (int)      -ofc  Offset Col
 (int)      -fnr  Final Number of Row
 (int)      -fnc  Final Number of Col
```

Optional Parameters:

```
 (string)   -mask mask file (valid pixels)
 (int)      -mem  Allocated memory for blocksize determination (in Mb)
 (string)   -errf memory error file
 (noarg)    -help displays this message
 (noarg)    -data displays the help concerning Data Format parameter
```

Usage:

Polarimetric Input-Output Data Format

```
 S2     input : quad-pol S2      output parameters derived from C3 or T3
 C3     input : covariance C3    output parameters derived from covariance
C3
 T3     input : coherency T3     output parameters derived from coherency
T3
```

---

arii_nned_3components_reconstruction.exe

Parameters:

```
 (string)   -id   input directory
 (string)   -od1  output directory - ground
 (string)   -od2  output directory - double
 (string)   -od3  output directory - volume
 (string)   -iodf input-output data format
 (int)      -nwr  Nwin Row
 (int)      -nwc  Nwin Col
```

```
 (int)     -ofr  Offset Row
 (int)     -ofc  Offset Col
 (int)     -fnr  Final Number of Row
 (int)     -fnc  Final Number of Col
```

Optional Parameters:

```
 (string)  -mask mask file (valid pixels)
 (int)     -mem  Allocated memory for blocksize determination (in Mb)
 (string)  -errf memory error file
 (noarg)   -help displays this message
 (noarg)   -data displays the help concerning Data Format parameter
```

Usage:

Polarimetric Input-Output Data Format

```
 S2    input : quad-pol S2      output parameters derived from C3 or T3
 C3    input : covariance C3    output parameters derived from covariance
C3
 T3    input : coherency T3     output parameters derived from coherency
T3
```

---

barnes1_decomposition.exe

Parameters:

```
 (string)  -id   input directory
 (string)  -od   output directory
 (string)  -iodf input-output data format
 (int)     -nwr  Nwin Row
 (int)     -nwc  Nwin Col
 (int)     -ofr  Offset Row
 (int)     -ofc  Offset Col
 (int)     -fnr  Final Number of Row
 (int)     -fnc  Final Number of Col
```

Optional Parameters:

```
 (string)  -mask mask file (valid pixels)
 (int)     -mem  Allocated memory for blocksize determination (in Mb)
 (string)  -errf memory error file
 (noarg)   -help displays this message
 (noarg)   -data displays the help concerning Data Format parameter
```

Usage:

Polarimetric Input-Output Data Format

```
 S2C3       input : quad-pol S2     output : covariance C3
 S2T3       input : quad-pol S2     output : coherency T3
 C3         input : covariance C3   output : covariance C3
 T3         input : coherency T3    output : coherency T3
```

---

barnes2_decomposition.exe

Parameters:

```
 (string)  -id   input directory
 (string)  -od   output directory
 (string)  -iodf input-output data format
 (int)     -nwr  Nwin Row
 (int)     -nwc  Nwin Col
 (int)     -ofr  Offset Row
 (int)     -ofc  Offset Col
 (int)     -fnr  Final Number of Row
 (int)     -fnc  Final Number of Col
```

Optional Parameters:

```
 (string)  -mask mask file (valid pixels)
 (int)     -mem  Allocated memory for blocksize determination (in Mb)
 (string)  -errf memory error file
 (noarg)   -help displays this message
 (noarg)   -data displays the help concerning Data Format parameter
```

Usage:

Polarimetric Input-Output Data Format

```
 S2C3       input : quad-pol S2     output : covariance C3
 S2T3       input : quad-pol S2     output : coherency T3
 C3         input : covariance C3   output : covariance C3
 T3         input : coherency T3    output : coherency T3
```

---

cameron_decomposition.exe

Parameters:

```
 (string)  -id   input directory
 (string)  -od   output directory
 (string)  -iodf input-output data format
 (int)     -ofr  Offset Row
 (int)     -ofc  Offset Col
 (int)     -fnr  Final Number of Row
 (int)     -fnc  Final Number of Col
 (string)  -col  Colormap Cameron 8 colors
```

Optional Parameters:

```
 (string)  -mask mask file (valid pixels)
 (int)     -mem  Allocated memory for blocksize determination (in Mb)
 (string)  -errf memory error file
 (noarg)   -help displays this message
 (noarg)   -data displays the help concerning Data Format parameter
```

Usage:

Polarimetric Input-Output Data Format

```
 S2    input : quad-pol S2      output parameters derived from C3 or T3
```

---

change_detector.exe

Parameters:
```
 (string)  -if1  input file 1
 (string)  -if2  input file 2
 (string)  -of   output file
 (string)  -det  detector (mrd, gkld, ckld)
 (int)     -nwr  Nwin Row
 (int)     -nwc  Nwin Col
 (int)     -inc  Initial Number of Col
 (int)     -ofr  Offset Row
 (int)     -ofc  Offset Col
 (int)     -fnr  Final Number of Row
 (int)     -fnc  Final Number of Col
```

Optional Parameters:
```
 (string)  -mask mask file (valid pixels)
 (int)     -mem  Allocated memory for blocksize determination (in Mb)
 (string)  -errf memory error file
 (noarg)   -help displays this message
```

---

change_detector_mat.exe

Parameters:
```
 (string)  -id1  input directory 1
 (string)  -id2  input directory 2
 (string)  -of   output file
 (string)  -idf  input data format
 (int)     -nwr  Nwin Row
 (int)     -nwc  Nwin Col
 (int)     -ofr  Offset Row
 (int)     -ofc  Offset Col
 (int)     -fnr  Final Number of Row
 (int)     -fnc  Final Number of Col
```

Optional Parameters:
```
 (string)  -mask mask file (valid pixels)
 (int)     -mem  Allocated memory for blocksize determination (in Mb)
 (string)  -errf memory error file
 (noarg)   -help displays this message
 (noarg)   -data displays the help concerning Data Format parameter
```

Usage:

Polarimetric Input-Output Data Format

```
 S2    input : quad-pol S2      output parameters derived from C3 or T3
 C2    input : covariance C2    output parameters derived from covariance
C2
 C3    input : covariance C3    output parameters derived from covariance
C3
 C4    input : covariance C4    output parameters derived from covariance
C4
```

```
 T2    input : coherency T2     output parameters derived from coherency
T2
 T3    input : coherency T3     output parameters derived from coherency
T3
 T4    input : coherency T4     output parameters derived from coherency
T4
 SPP   input : dual-pol SPP     output parameters derived from C3
```

---

cloude_decomposition.exe

Parameters:

```
 (string)  -id   input directory
 (string)  -od   output directory
 (string)  -iodf input-output data format
 (int)     -nwr  Nwin Row
 (int)     -nwc  Nwin Col
 (int)     -ofr  Offset Row
 (int)     -ofc  Offset Col
 (int)     -fnr  Final Number of Row
 (int)     -fnc  Final Number of Col
```

Optional Parameters:

```
 (string)  -mask mask file (valid pixels)
 (int)     -mem  Allocated memory for blocksize determination (in Mb)
 (string)  -errf memory error file
 (noarg)   -help displays this message
 (noarg)   -data displays the help concerning Data Format parameter
```

Usage:

Polarimetric Input-Output Data Format

```
 S2C3       input : quad-pol S2     output : covariance C3
 S2T3       input : quad-pol S2     output : coherency T3
 C3         input : covariance C3   output : covariance C3
 T3         input : coherency T3    output : coherency T3
```

---

cluster_avg_prm.exe

Parameters:

```
 (string)  -if   input parameter file
 (string)  -of   output parameter file
 (string)  -icf  input cluster file
 (int)     -inc  Initial Number of Col
 (int)     -ofr  Offset Row
 (int)     -ofc  Offset Col
 (int)     -fnr  Final Number of Row
 (int)     -fnc  Final Number of Col
```

Optional Parameters:

```
 (noarg)   -help  displays this message
 (string)  -mask mask file (valid pixels)
 (int)     -mem  Allocated memory for blocksize determination (in Mb)
```

```
 (string)  -errf memory error file
```

---

cluster_avg_S2SPP.exe

```
Parameters:
 (string)  -id   input directory
 (string)  -od   output directory
 (string)  -icf  input cluster file
 (string)  -iodf input-output data format
 (int)     -ofr  Offset Row
 (int)     -ofc  Offset Col
 (int)     -fnr  Final Number of Row
 (int)     -fnc  Final Number of Col

Optional Parameters:
 (noarg)   -help  displays this message
 (string)  -mask mask file (valid pixels)
 (int)     -mem  Allocated memory for blocksize determination (in Mb)
 (string)  -errf memory error file
 (noarg)   -data displays the help concerning Data Format parameter
```

Usage:

Polarimetric Input-Output Data Format

```
 S2C3       input : quad-pol S2     output : covariance C3
 S2C4       input : quad-pol S2     output : covariance C4
 S2T3       input : quad-pol S2     output : coherency T3
 S2T4       input : quad-pol S2     output : coherency T4
 SPP        input : dual-pol SPP    output : dual-pol SPP
```

---

cluster_create.exe

```
Parameters:
 (string)  -isf  input segment file
 (string)  -ivf  input value file
 (string)  -of   output cluster file
 (int)     -fnr  Final Number of Row
 (int)     -fnc  Final Number of Col
 (int)     -npix Npix limit
 (int)     -neig Neighborood (4/8)

Optional Parameters:
 (noarg)   -help  displays this message
```

---

coeff_variation.exe

```
Parameters:
 (string)  -if   input file
 (string)  -of   output file
 (string)  -idf  input data format (cmplx, float, int)
```

```
 (string)  -odf  output data format (real, imag, mod, mod2, pha)
 (int)     -nwr  Nwin Row
 (int)     -nwc  Nwin Col
 (int)     -inc  Initial Number of Col
 (int)     -ofr  Offset Row
 (int)     -ofc  Offset Col
 (int)     -fnr  Final Number of Row
 (int)     -fnc  Final Number of Col
```

Optional Parameters:

```
 (string)  -mask mask file (valid pixels)
 (int)     -mem  Allocated memory for blocksize determination (in Mb)
 (string)  -errf memory error file
 (noarg)   -help displays this message
```

---

compact_classification.exe

Parameters:

```
 (string)  -id   input directory
 (string)  -od   output directory
 (string)  -iodf input-output data format
 (string)  -hyb  hybrid data format (RHC or LHC)
 (int)     -nwr  Nwin Row
 (int)     -nwc  Nwin Col
 (int)     -ofr  Offset Row
 (int)     -ofc  Offset Col
 (int)     -fnr  Final Number of Row
 (int)     -fnc  Final Number of Col
 (float)   -g0   Noise threshold
 (float)   -mv1  Mv1 threshold
 (float)   -mv2  Mv2 threshold
 (float)   -as1  alpha_s1 threshold
 (float)   -as2  alpha_s2 threshold
 (float)   -dp1  deg-pol1 threshold
 (float)   -dp2  deg-pol2 threshold
 (string)  -col  Colormap Compact 8 colors
```

Optional Parameters:

```
 (string)  -mask mask file (valid pixels)
 (int)     -mem  Allocated memory for blocksize determination (in Mb)
 (string)  -errf memory error file
 (noarg)   -help displays this message
 (noarg)   -data displays the help concerning Data Format parameter
```

Usage:

Polarimetric Input-Output Data Format

```
 SPP   input : dual-pol SPP     output parameters derived from C3
 C2    input : covariance C2    output parameters derived from covariance
C2
```

---

compact_decomposition.exe

Parameters:

```
 (string)  -id   input directory
 (string)  -od   output directory
 (string)  -iodf input-output data format
 (string)  -hyb  hybrid data format (RHC or LHC)
 (int)     -nwr  Nwin Row
 (int)     -nwc  Nwin Col
 (int)     -ofr  Offset Row
 (int)     -ofc  Offset Col
 (int)     -fnr  Final Number of Row
 (int)     -fnc  Final Number of Col
 (int)     -fl1  Flag Eigenvalues (0/1)
 (int)     -fl2  Flag Probabilites (0/1)
 (int)     -fl3  Flag Entropy (0/1)
 (int)     -fl4  Flag Degree of Polarisation (0/1)
 (int)     -fl5  Flag Mv (0/1)
 (int)     -fl6  Flag Ms (0/1)
 (int)     -fl7  Flag Alpha_s (0/1)
 (int)     -fl8  Flag Phi (0/1)
 (int)     -fl9  Flag Ps, Pd, Pv (0/1)
 (int)     -fl10      Flag Sigma_HV (0/1)
 (int)     -fl11      Flag RSoV (0/1)
 (int)     -fl12      Flag CPR (0/1)
 (int)     -fl13      Flag Alpha (0/1)
 (int)     -fl14      Flag Tau (0/1)
```

Optional Parameters:

```
 (string)  -mask mask file (valid pixels)
 (int)     -mem  Allocated memory for blocksize determination (in Mb)
 (string)  -errf memory error file
 (noarg)   -help displays this message
 (noarg)   -data displays the help concerning Data Format parameter
```

Usage:

Polarimetric Input-Output Data Format

```
 SPP   input : dual-pol SPP     output parameters derived from C3
 C2    input : covariance C2    output parameters derived from covariance
C2
```

---

conformity_coeff.exe

Parameters:

```
 (string)  -id   input directory
 (string)  -od   output directory
 (string)  -iodf input-output data format
 (int)     -nwr  Nwin Row
 (int)     -nwc  Nwin Col
 (int)     -ofr  Offset Row
 (int)     -ofc  Offset Col
 (int)     -fnr  Final Number of Row
 (int)     -fnc  Final Number of Col
```

Optional Parameters:
```
 (string)   -mask mask file (valid pixels)
 (int)      -mem  Allocated memory for blocksize determination (in Mb)
 (string)   -errf memory error file
 (noarg)    -help displays this message
 (noarg)    -data displays the help concerning Data Format parameter
```

Usage:

Polarimetric Input-Output Data Format

```
 S2    input : quad-pol S2      output parameters derived from C3 or T3
 C3    input : covariance C3    output parameters derived from covariance
C3
 C4    input : covariance C4    output parameters derived from covariance
C4
 T3    input : coherency T3     output parameters derived from coherency
T3
 T4    input : coherency T4     output parameters derived from coherency
T4
```

---

confusion_matrix.exe

Parameters:
```
 (string)   -id   input directory
 (string)   -od   output directory
 (string)   -af   input area file
 (int)      -nwr  Nwin Row
 (int)      -nwc  Nwin Col
 (int)      -ofr  Offset Row
 (int)      -ofc  Offset Col
 (int)      -fnr  Final Number of Row
 (int)      -fnc  Final Number of Col
 (int)      -bmp  BMP flag (0/1)
 (int)      -rej  Rejection flag (0/1)
 (string)   -col  input colormap file (valid if BMP flag = 1)
```

Optional Parameters:
```
 (string)   -mask mask file (valid pixels)
 (int)      -mem  Allocated memory for blocksize determination (in Mb)
 (string)   -errf memory error file
 (noarg)    -help displays this message
```

---

dem_estimation.exe

Parameters:
```
 (string)   -id   input directory
 (string)   -od   output directory
 (string)   -iodf input-output data format
 (int)      -ofr  Offset Row
 (int)      -ofc  Offset Col
 (int)      -fnr  Final Number of Row
 (int)      -fnc  Final Number of Col
```

```
 (float)    -alt  Altitude
 (float)    -rmin Rmin
 (float)    -rmax Rmax
 (float)    -imax Ind Max
 (float)    -resa Resol azimuth
 (float)    -resr Resol range
 (float)    -refp Refp
 (int)      -v1   V1
 (int)      -v2   V2
 (int)      -rr   Rr
 (int)      -rc   Rc
 (int)      -nf   Nf

Optional Parameters:
 (string)   -mask mask file (valid pixels)
 (int)      -mem  Allocated memory for blocksize determination (in Mb)
 (string)   -errf memory error file
 (noarg)    -help displays this message
 (noarg)    -data displays the help concerning Data Format parameter
```

Usage:

Polarimetric Input-Output Data Format

```
 S2    input : quad-pol S2      output parameters derived from C3 or T3
 C3    input : covariance C3    output parameters derived from covariance
C3
 C4    input : covariance C4    output parameters derived from covariance
C4
 T3    input : coherency T3     output parameters derived from coherency
T3
 T4    input : coherency T4     output parameters derived from coherency
T4
```

---

diversity_index.exe

Parameters:

```
 (string)   -id   input directory
 (string)   -od   output directory
 (string)   -iodf input-output data format
 (int)      -nwr  Nwin Row
 (int)      -nwc  Nwin Col
 (int)      -ofr  Offset Row
 (int)      -ofc  Offset Col
 (int)      -fnr  Final Number of Row
 (int)      -fnc  Final Number of Col
 (int)      -fl1  Flag Shannon index
 (int)      -fl2  Flag Simpson index
 (int)      -fl3  Flag Inverse Simpson index
 (int)      -fl4  Flag Gini Simpson index
 (int)      -fl5  Flag Reyni entropy 2
 (int)      -fl6  Flag Reyni entropy 3
 (int)      -fl7  Flag Reyni entropy 4
 (int)      -fl8  Flag Index of Qualitative Variation
 (int)      -fl9  Flag Perplexity
```

Optional Parameters:
```
 (string)   -mask mask file (valid pixels)
 (int)      -mem  Allocated memory for blocksize determination (in Mb)
 (string)   -errf memory error file
 (noarg)    -help displays this message
 (noarg)    -data displays the help concerning Data Format parameter
```

Usage:

Polarimetric Input-Output Data Format

```
 S2    input : quad-pol S2      output parameters derived from C3 or T3
 SPP   input : dual-pol SPP     output parameters derived from C3
 C2    input : covariance C2    output parameters derived from covariance
C2
 C3    input : covariance C3    output parameters derived from covariance
C3
 C4    input : covariance C4    output parameters derived from covariance
C4
 T3    input : coherency T3     output parameters derived from coherency
T3
 T4    input : coherency T4     output parameters derived from coherency
T4
```

---

edge_detector_black.exe

Parameters:
```
 (string)   -if   input file
 (string)   -od   output dir
 (string)   -idf  input data format (cmplx, float, int)
 (string)   -odf  output data format (real, imag, mod, mod2, pha)
 (int)      -inc  Initial Number of Col
 (int)      -ofr  Offset Row
 (int)      -ofc  Offset Col
 (int)      -fnr  Final Number of Row
 (int)      -fnc  Final Number of Col
 (float)    -det  detector coefficient (0 = coarse scale, 1 = fine scale)
 (string)   -of   output file
 (int)      -mmb  MinMaxBmp flag (0,1,2,3)
 (float)    -min  Min value (valid if MinMaxBMP = 0)
 (float)    -max  Max value (valid if MinMaxBMP = 0)
```

Optional Parameters:
```
 (noarg)    -help displays this message
 (string)   -mask mask file (valid pixels)
```

---

edge_detector_canny.exe

Parameters:
```
 (string)   -if   input file
 (string)   -od   output dir
 (string)   -idf  input data format (cmplx, float, int)
```

```
 (string)   -odf  output data format (real, imag, mod, mod2, pha)
 (int)      -inc  Initial Number of Col
 (int)      -ofr  Offset Row
 (int)      -ofc  Offset Col
 (int)      -fnr  Final Number of Row
 (int)      -fnc  Final Number of Col
 (float)    -det  detector coefficient (0 = coarse scale, 1 = fine scale)
 (string)   -of   output file
 (int)      -mmb  MinMaxBmp flag (0,1,2,3)
 (float)    -min  Min value (valid if MinMaxBMP = 0)
 (float)    -max  Max value (valid if MinMaxBMP = 0)

Optional Parameters:
 (noarg)    -help  displays this message
 (string)   -mask mask file (valid pixels)
```

---

edge_detector_marr.exe

```
Parameters:
 (string)   -if   input file
 (string)   -od   output dir
 (string)   -idf  input data format (cmplx, float, int)
 (string)   -odf  output data format (real, imag, mod, mod2, pha)
 (int)      -inc  Initial Number of Col
 (int)      -ofr  Offset Row
 (int)      -ofc  Offset Col
 (int)      -fnr  Final Number of Row
 (int)      -fnc  Final Number of Col
 (float)    -det  detector coefficient (0 = coarse scale, 1 = fine scale)
 (string)   -of   output file
 (int)      -mmb  MinMaxBmp flag (0,1,2,3)
 (float)    -min  Min value (valid if MinMaxBMP = 0)
 (float)    -max  Max value (valid if MinMaxBMP = 0)

Optional Parameters:
 (noarg)    -help  displays this message
 (string)   -mask mask file (valid pixels)
```

---

edge_detector_rothwell.exe

```
Parameters:
 (string)   -if   input file
 (string)   -od   output dir
 (string)   -idf  input data format (cmplx, float, int)
 (string)   -odf  output data format (real, imag, mod, mod2, pha)
 (int)      -inc  Initial Number of Col
 (int)      -ofr  Offset Row
 (int)      -ofc  Offset Col
 (int)      -fnr  Final Number of Row
 (int)      -fnc  Final Number of Col
 (float)    -det  detector coefficient (0 = coarse scale, 1 = fine scale)
 (string)   -of   output file
 (int)      -mmb  MinMaxBmp flag (0,1,2,3)
 (float)    -min  Min value (valid if MinMaxBMP = 0)
```

```
 (float)   -max  Max value (valid if MinMaxBMP = 0)

Optional Parameters:
 (noarg)   -help  displays this message
 (string)  -mask mask file (valid pixels)
```

---

faraday_rotation.exe

```
Parameters:
 (string)  -id   input directory
 (string)  -od   output directory
 (string)  -iodf input-output data format
 (int)     -nwr  Nwin Row
 (int)     -nwc  Nwin Col
 (int)     -ofr  Offset Row
 (int)     -ofc  Offset Col
 (int)     -fnr  Final Number of Row
 (int)     -fnc  Final Number of Col

Optional Parameters:
 (string)  -mask mask file (valid pixels)
 (int)     -mem  Allocated memory for blocksize determination (in Mb)
 (string)  -errf memory error file
 (noarg)   -help displays this message
 (noarg)   -data displays the help concerning Data Format parameter
```

Usage:

```
Polarimetric Input-Output Data Format

 S2    input : quad-pol S2      output parameters derived from C3 or T3
 C4    input : covariance C4    output parameters derived from covariance
C4
 T4    input : coherency T4     output parameters derived from coherency
T4
```

---

freeman_2components_decomposition.exe

```
Parameters:
 (string)  -id   input directory
 (string)  -od   output directory
 (string)  -iodf input-output data format
 (int)     -nwr  Nwin Row
 (int)     -nwc  Nwin Col
 (int)     -ofr  Offset Row
 (int)     -ofc  Offset Col
 (int)     -fnr  Final Number of Row
 (int)     -fnc  Final Number of Col

Optional Parameters:
 (string)  -mask mask file (valid pixels)
 (int)     -mem  Allocated memory for blocksize determination (in Mb)
 (string)  -errf memory error file
```

```
 (noarg)    -help displays this message
 (noarg)    -data displays the help concerning Data Format parameter
```

Usage:

Polarimetric Input-Output Data Format

```
 S2    input : quad-pol S2      output parameters derived from C3 or T3
 C3    input : covariance C3    output parameters derived from covariance
C3
 T3    input : coherency T3     output parameters derived from coherency
T3
```

---

freeman_2components_reconstruction.exe

Parameters:

```
 (string)   -id   input directory
 (string)   -od1  output directory - ground
 (string)   -od2  output directory - volume
 (string)   -iodf input-output data format
 (int)      -nwr  Nwin Row
 (int)      -nwc  Nwin Col
 (int)      -ofr  Offset Row
 (int)      -ofc  Offset Col
 (int)      -fnr  Final Number of Row
 (int)      -fnc  Final Number of Col
```

Optional Parameters:

```
 (string)   -mask mask file (valid pixels)
 (int)      -mem  Allocated memory for blocksize determination (in Mb)
 (string)   -errf memory error file
 (noarg)    -help displays this message
 (noarg)    -data displays the help concerning Data Format parameter
```

Usage:

Polarimetric Input-Output Data Format

```
 S2    input : quad-pol S2      output parameters derived from C3 or T3
 C3    input : covariance C3    output parameters derived from covariance
C3
 T3    input : coherency T3     output parameters derived from coherency
T3
```

---

freeman_decomposition.exe

Parameters:

```
 (string)   -id   input directory
 (string)   -od   output directory
 (string)   -iodf input-output data format
 (int)      -nwr  Nwin Row
 (int)      -nwc  Nwin Col
```

```
 (int)      -ofr  Offset Row
 (int)      -ofc  Offset Col
 (int)      -fnr  Final Number of Row
 (int)      -fnc  Final Number of Col
```

Optional Parameters:

```
 (string)   -mask mask file (valid pixels)
 (int)      -mem  Allocated memory for blocksize determination (in Mb)
 (string)   -errf memory error file
 (noarg)    -help displays this message
 (noarg)    -data displays the help concerning Data Format parameter
```

Usage:

Polarimetric Input-Output Data Format

```
 S2    input : quad-pol S2      output parameters derived from C3 or T3
 C3    input : covariance C3    output parameters derived from covariance
C3
 T3    input : coherency T3     output parameters derived from coherency
T3
```

---

freeman_reconstruction.exe

Parameters:

```
 (string)   -id   input directory
 (string)   -od1  output directory - ground
 (string)   -od2  output directory - double
 (string)   -od3  output directory - volume
 (string)   -iodf input-output data format
 (int)      -nwr  Nwin Row
 (int)      -nwc  Nwin Col
 (int)      -ofr  Offset Row
 (int)      -ofc  Offset Col
 (int)      -fnr  Final Number of Row
 (int)      -fnc  Final Number of Col
```

Optional Parameters:

```
 (string)   -mask mask file (valid pixels)
 (int)      -mem  Allocated memory for blocksize determination (in Mb)
 (string)   -errf memory error file
 (noarg)    -help displays this message
 (noarg)    -data displays the help concerning Data Format parameter
```

Usage:

Polarimetric Input-Output Data Format

```
 S2    input : quad-pol S2      output parameters derived from C3 or T3
 C3    input : covariance C3    output parameters derived from covariance
C3
 T3    input : coherency T3     output parameters derived from coherency
T3
```

gpf_confusion_matrix.exe

```
Parameters:
 (string)  -id   input directory
 (string)  -od   output directory
 (string)  -af   input area file
 (string)  -thr  threshold
 (string)  -redr reduction ratio
 (int)     -nwr  Nwin Row
 (int)     -nwc  Nwin Col
 (int)     -ofr  Offset Row
 (int)     -ofc  Offset Col
 (int)     -fnr  Final Number of Row
 (int)     -fnc  Final Number of Col
 (int)     -bmp  BMP flag (0/1)
 (string)  -col  input colormap file (valid if BMP flag = 1)

Optional Parameters:
 (string)  -mask mask file (valid pixels)
 (int)     -mem  Allocated memory for blocksize determination (in Mb)
 (string)  -errf memory error file
 (noarg)   -help displays this message
```

gpf_classifier.exe

```
Parameters:
 (string)  -id   input directory
 (string)  -od   output directory
 (string)  -iodf input-output data format
 (string)  -af   input area file
 (string)  -of   output file
 (int)     -nwr  Nwin Row
 (int)     -nwc  Nwin Col
 (int)     -ofr  Offset Row
 (int)     -ofc  Offset Col
 (int)     -fnr  Final Number of Row
 (int)     -fnc  Final Number of Col
 (string)  -cf   input cluster file
 (int)     -bmp  BMP flag (0/1)
 (string)  -col  input colormap file (valid if BMP flag = 1)
 (float)   -thr  threshold
 (float)   -redr reduction ratio

Optional Parameters:
 (string)  -mask mask file (valid pixels)
 (int)     -mem  Allocated memory for blocksize determination (in Mb)
 (string)  -errf memory error file
 (noarg)   -help displays this message
 (noarg)   -data displays the help concerning Data Format parameter
```

Usage:

Polarimetric Input-Output Data Format

```
 S2    input : quad-pol S2      output parameters derived from C3 or T3
 C2    input : covariance C2    output parameters derived from covariance
C2
 C3    input : covariance C3    output parameters derived from covariance
C3
 C4    input : covariance C4    output parameters derived from covariance
C4
 T2    input : coherency T2     output parameters derived from coherency
T2
 T3    input : coherency T3     output parameters derived from coherency
T3
 T4    input : coherency T4     output parameters derived from coherency
T4
 SPP   input : dual-pol SPP     output parameters derived from C3
```

---

gpf_training_set_sampler.exe

Parameters:

```
 (string)  -id   input directory
 (string)  -od   output directory
 (string)  -iodf input-output data format
 (string)  -af   input area file
 (string)  -cf   output cluster file
 (int)     -bmp  BMP flag (0/1)
 (string)  -col  input colormap file (valid if BMP flag = 1)
```

Optional Parameters:

```
 (string)  -mask mask file (valid pixels)
 (int)     -mem  Allocated memory for blocksize determination (in Mb)
 (string)  -errf memory error file
 (noarg)   -help displays this message
 (noarg)   -data displays the help concerning Data Format parameter
```

Usage:

Polarimetric Input-Output Data Format

```
 S2    input : quad-pol S2      output parameters derived from C3 or T3
 C2    input : covariance C2    output parameters derived from covariance
C2
 C3    input : covariance C3    output parameters derived from covariance
C3
 C4    input : covariance C4    output parameters derived from covariance
C4
 T2    input : coherency T2     output parameters derived from coherency
T2
 T3    input : coherency T3     output parameters derived from coherency
T3
 T4    input : coherency T4     output parameters derived from coherency
T4
 SPP   input : dual-pol SPP     output parameters derived from C3
```

---

haalpha_decomposition.exe

Parameters:
```
 (string)  -id   input directory
 (string)  -od   output directory
 (string)  -iodf input-output data format
 (int)     -nwr  Nwin Row
 (int)     -nwc  Nwin Col
 (int)     -ofr  Offset Row
 (int)     -ofc  Offset Col
 (int)     -fnr  Final Number of Row
 (int)     -fnc  Final Number of Col
```

Optional Parameters:
```
 (string)  -mask mask file (valid pixels)
 (int)     -mem  Allocated memory for blocksize determination (in Mb)
 (string)  -errf memory error file
 (noarg)   -help displays this message
 (noarg)   -data displays the help concerning Data Format parameter
```

Usage:

Polarimetric Input-Output Data Format

```
 S2C3       input : quad-pol S2     output : covariance C3
 S2T3       input : quad-pol S2     output : coherency T3
 C3         input : covariance C3   output : covariance C3
 T3         input : coherency T3    output : coherency T3
```

---

histogram_statistics.exe

Parameters:
```
 (string)  -if   input file
 (string)  -of   output file
 (string)  -hs   histogram statistics
(mean,mean_dev,var,coeff_var,kurtosis,median,median_dev,euclidian_distanc
e,skewness,energy,cumulant1-4,logcumulant1-4)
 (string)  -idf  input data format (cmplx, float, int)
 (string)  -odf  output data format (real, imag, mod, mod2, pha)
 (int)     -nwr  Nwin Row
 (int)     -nwc  Nwin Col
 (int)     -inc  Initial Number of Col
 (int)     -ofr  Offset Row
 (int)     -ofc  Offset Col
 (int)     -fnr  Final Number of Row
 (int)     -fnc  Final Number of Col
```

Optional Parameters:
```
 (string)  -mask mask file (valid pixels)
 (int)     -mem  Allocated memory for blocksize determination (in Mb)
 (string)  -errf memory error file
 (noarg)   -help displays this message
```

---

holm1_decomposition.exe

Parameters:

```
 (string)   -id   input directory
 (string)   -od   output directory
 (string)   -iodf input-output data format
 (int)      -nwr  Nwin Row
 (int)      -nwc  Nwin Col
 (int)      -ofr  Offset Row
 (int)      -ofc  Offset Col
 (int)      -fnr  Final Number of Row
 (int)      -fnc  Final Number of Col
```

Optional Parameters:

```
 (string)   -mask mask file (valid pixels)
 (int)      -mem  Allocated memory for blocksize determination (in Mb)
 (string)   -errf memory error file
 (noarg)    -help displays this message
 (noarg)    -data displays the help concerning Data Format parameter
```

Usage:

Polarimetric Input-Output Data Format

```
 S2C3       input : quad-pol S2     output : covariance C3
 S2T3       input : quad-pol S2     output : coherency T3
 C3         input : covariance C3   output : covariance C3
 T3         input : coherency T3    output : coherency T3
```

---

holm2_decomposition.exe

Parameters:

```
 (string)   -id   input directory
 (string)   -od   output directory
 (string)   -iodf input-output data format
 (int)      -nwr  Nwin Row
 (int)      -nwc  Nwin Col
 (int)      -ofr  Offset Row
 (int)      -ofc  Offset Col
 (int)      -fnr  Final Number of Row
 (int)      -fnc  Final Number of Col
```

Optional Parameters:

```
 (string)   -mask mask file (valid pixels)
 (int)      -mem  Allocated memory for blocksize determination (in Mb)
 (string)   -errf memory error file
 (noarg)    -help displays this message
 (noarg)    -data displays the help concerning Data Format parameter
```

Usage:

Polarimetric Input-Output Data Format

```
 S2C3       input : quad-pol S2     output : covariance C3
```

```
 S2T3       input : quad-pol S2     output : coherency T3
 C3         input : covariance C3   output : covariance C3
 T3         input : coherency T3    output : coherency T3
```

---

huynen_decomposition.exe

Parameters:

```
 (string)  -id   input directory
 (string)  -od   output directory
 (string)  -iodf input-output data format
 (int)     -nwr  Nwin Row
 (int)     -nwc  Nwin Col
 (int)     -ofr  Offset Row
 (int)     -ofc  Offset Col
 (int)     -fnr  Final Number of Row
 (int)     -fnc  Final Number of Col
```

Optional Parameters:

```
 (string)  -mask mask file (valid pixels)
 (int)     -mem  Allocated memory for blocksize determination (in Mb)
 (string)  -errf memory error file
 (noarg)   -help displays this message
 (noarg)   -data displays the help concerning Data Format parameter
```

Usage:

Polarimetric Input-Output Data Format

```
 S2C3       input : quad-pol S2     output : covariance C3
 S2T3       input : quad-pol S2     output : coherency T3
 C3         input : covariance C3   output : covariance C3
 T3         input : coherency T3    output : coherency T3
```

---

hybrid_polar.exe

Parameters:

```
 (string)  -iod  input directory
 (string)  -odf  output data format
 (int)     -nwr  Nwin Row
 (int)     -nwc  Nwin Col
 (int)     -ofr  Offset Row
 (int)     -ofc  Offset Col
 (int)     -fnr  Final Number of Row
 (int)     -fnc  Final Number of Col
 (string)  -mod  Hybrid Polar mode (pi4 / lhv / rhv)
 (string)  -recm Reconstruction mode (polar / rotsym / rotrefsym)
```

Optional Parameters:

```
 (string)  -mask mask file (valid pixels)
 (int)     -mem  Allocated memory for blocksize determination (in Mb)
 (string)  -errf memory error file
 (noarg)   -help displays this message
 (noarg)   -data displays the help concerning Data Format parameter
```

Usage:

Polarimetric Input-Output Data Format

```
 C3    input : covariance C3    output parameters derived from covariance
C3
 T3    input : coherency T3     output parameters derived from coherency
T3
```

---

h_alpha_fcm_classifier.exe

Parameters:

Parameters:

```
 (string)  -id   input directory
 (string)  -od   output directory
 (string)  -iodf input-output data format
 (int)     -nwr  Nwin Row
 (int)     -nwc  Nwin Col
 (int)     -ofr  Offset Row
 (int)     -ofc  Offset Col
 (int)     -fnr  Final Number of Row
 (int)     -fnc  Final Number of Col
 (string)  -wei  Wei
 (float)   -wem  wei_m
 (float)   -dV   dV_max
 (int)     -nit  Number of iterations
 (int)     -bmp  BMP flag (1/0)
```

Optional Parameters:

```
 (string)  -mask mask file (valid pixels)
 (int)     -mem  Allocated memory for blocksize determination (in Mb)
 (string)  -errf memory error file
 (noarg)   -help displays this message
 (noarg)   -data displays the help concerning Data Format parameter
 (string)  -clm  ColorMap Wishart8 colors (if BMP flag = 1)
```

Usage:

Polarimetric Input-Output Data Format

```
 S2    input : quad-pol S2      output parameters derived from C3 or T3
 C3    input : covariance C3    output parameters derived from covariance
C3
 C4    input : covariance C4    output parameters derived from covariance
C4
 T3    input : coherency T3     output parameters derived from coherency
T3
 T4    input : coherency T4     output parameters derived from coherency
T4
```

---

h_alpha_fuzzy_membership.exe

```
Parameters:
 (string)  -id   input dir
 (string)  -od   output dir
 (int)     -ofr  Offset Row
 (int)     -ofc  Offset Col
 (int)     -fnr  Final Number of Row
 (int)     -fnc  Final Number of Col
 (float)   -sig  Crisp value

Optional Parameters:
 (noarg)   -help  displays this message
 (string)  -mask mask file (valid pixels)
```

---

h_alpha_lambda_planes_classifier.exe

```
Parameters:
 (string)  -id   input directory
 (string)  -od   output directory
 (int)     -ofr  Offset Row
 (int)     -ofc  Offset Col
 (int)     -fnr  Final Number of Row
 (int)     -fnc  Final Number of Col
 (string)  -clm  Colormap 27 colors

Optional Parameters:
 (string)  -mask mask file (valid pixels)
 (int)     -mem  Allocated memory for blocksize determination (in Mb)
 (string)  -errf memory error file
 (noarg)   -help displays this message
```

---

h_alpha_lambda_planes_classifier_dualpol.exe

```
Parameters:
 (string)  -id   input directory
 (string)  -od   output directory
 (int)     -ofr  Offset Row
 (int)     -ofc  Offset Col
 (int)     -fnr  Final Number of Row
 (int)     -fnc  Final Number of Col
 (string)  -clm  Colormap 27 colors

Optional Parameters:
 (string)  -mask mask file (valid pixels)
 (int)     -mem  Allocated memory for blocksize determination (in Mb)
 (string)  -errf memory error file
 (noarg)   -help displays this message
```

---

h_a_alpha_decomposition.exe

```
Parameters:
```

```
 (string)   -id   input directory
 (string)   -od   output directory
 (string)   -iodf input-output data format
 (int)      -nwr  Nwin Row
 (int)      -nwc  Nwin Col
 (int)      -ofr  Offset Row
 (int)      -ofc  Offset Col
 (int)      -fnr  Final Number of Row
 (int)      -fnc  Final Number of Col
 (int)      -fl1  Flag Parameters (0/1)
 (int)      -fl2  Flag Lambda (0/1)
 (int)      -fl3  Flag Alpha (0/1)
 (int)      -fl4  Flag Entropy (0/1)
 (int)      -fl5  Flag Anisotropy (0/1)
 (int)      -fl6  Flag Comb HA (0/1)
 (int)      -fl7  Flag Comb H1mA (0/1)
 (int)      -fl8  Flag Comb 1mHA (0/1)
 (int)      -fl9  Flag Comb 1mH1mA (0/1)
```

Optional Parameters:

```
 (string)   -mask mask file (valid pixels)
 (int)      -mem  Allocated memory for blocksize determination (in Mb)
 (string)   -errf memory error file
 (noarg)    -help displays this message
 (noarg)    -data displays the help concerning Data Format parameter
```

Usage:

Polarimetric Input-Output Data Format

```
 S2T3  input : quad-pol S2      output parameters derived from coherency
T3
 S2C3  input : quad-pol S2      output parameters derived from covariance
C3
 S2T4  input : quad-pol S2      output parameters derived from coherency
T4
 S2C4  input : quad-pol S2      output parameters derived from covariance
C4
 C2    input : covariance C2    output parameters derived from covariance
C2
 C3    input : covariance C3    output parameters derived from covariance
C3
 C3T3  input : covariance C3    output parameters derived from coherency
T3
 C4    input : covariance C4    output parameters derived from covariance
C4
 C4T4  input : covariance C4    output parameters derived from coherency
T4
 T3    input : coherency T3     output parameters derived from coherency
T3
 T4    input : coherency T4     output parameters derived from coherency
T4
```

---

h_a_alpha_decompositionSPPC2.exe

Parameters:

```
 (string)  -id   input directory
 (string)  -od   output directory
 (string)  -iodf input-output data format
 (int)     -nwr  Nwin Row
 (int)     -nwc  Nwin Col
 (int)     -ofr  Offset Row
 (int)     -ofc  Offset Col
 (int)     -fnr  Final Number of Row
 (int)     -fnc  Final Number of Col
 (int)     -fl1  Flag Eigenvalues
 (int)     -fl2  Flag Probabilites
 (int)     -fl3  Flag Alpha1-2 (0/1)
 (int)     -fl4  Flag Delta1-2 (0/1)
 (int)     -fl5  Flag Parameters (0/1)
 (int)     -fl6  Flag Alpha (0/1)
 (int)     -fl7  Flag Delta (0/1)
 (int)     -fl8  Flag Lambda (0/1)
 (int)     -fl9  Flag Entropy (0/1)
 (int)     -fl10      Flag Anisotropy (0/1)
 (int)     -fl11      Flag Comb HA (0/1)
 (int)     -fl12      Flag Comb H1mA (0/1)
 (int)     -fl13      Flag Comb 1mHA (0/1)
 (int)     -fl14      Flag Comb 1mH1mA (0/1)
 (int)     -fl15 Flag Shannon
```

Optional Parameters:

```
 (string)  -mask mask file (valid pixels)
 (int)     -mem  Allocated memory for blocksize determination (in Mb)
 (string)  -errf memory error file
 (noarg)   -help displays this message
 (noarg)   -data displays the help concerning Data Format parameter
```

Usage:

Polarimetric Input-Output Data Format

```
 SPP   input : dual-pol SPP     output parameters derived from C3
 C2    input : covariance C2    output parameters derived from covariance
C2
```

---

h_a_alpha_eigenvalue_set.exe

Parameters:

```
 (string)  -id   input directory
 (string)  -od   output directory
 (string)  -iodf input-output data format
 (int)     -nwr  Nwin Row
 (int)     -nwc  Nwin Col
 (int)     -ofr  Offset Row
 (int)     -ofc  Offset Col
 (int)     -fnr  Final Number of Row
 (int)     -fnc  Final Number of Col
 (int)     -fl1  Flag Eigenvalues
 (int)     -fl2  Flag Probabilites
```

```
 (int)     -fl3  Flag Anisotropy
 (int)     -fl4  Flag Anisotropy12
 (int)     -fl5  Flag Anisotropy34
 (int)     -fl6  Flag Asymetry
 (int)     -fl7  Flag Polarisation Fraction
 (int)     -fl8  Flag Erd
 (int)     -fl9  Flag RVI
 (int)     -fl10 Flag Pedestal
 (int)     -fl11 Flag Shannon
 (int)     -fl12 Flag Lueneburg

Optional Parameters:
 (string)  -mask mask file (valid pixels)
 (int)     -mem  Allocated memory for blocksize determination (in Mb)
 (string)  -errf memory error file
 (noarg)   -help displays this message
 (noarg)   -data displays the help concerning Data Format parameter
```

Usage:

Polarimetric Input-Output Data Format

```
 S2T3  input : quad-pol S2      output parameters derived from coherency
T3
 S2C3  input : quad-pol S2      output parameters derived from covariance
C3
 S2T4  input : quad-pol S2      output parameters derived from coherency
T4
 S2C4  input : quad-pol S2      output parameters derived from covariance
C4
 C3    input : covariance C3    output parameters derived from covariance
C3
 C3T3  input : covariance C3    output parameters derived from coherency
T3
 C4    input : covariance C4    output parameters derived from covariance
C4
 C4T4  input : covariance C4    output parameters derived from coherency
T4
 T3    input : coherency T3     output parameters derived from coherency
T3
 T4    input : coherency T4     output parameters derived from coherency
T4
```

---

h_a_alpha_eigenvector_set.exe

Parameters:

```
 (string)  -id   input directory
 (string)  -od   output directory
 (string)  -iodf input-output data format
 (int)     -nwr  Nwin Row
 (int)     -nwc  Nwin Col
 (int)     -ofr  Offset Row
 (int)     -ofc  Offset Col
 (int)     -fnr  Final Number of Row
 (int)     -fnc  Final Number of Col
```

```
 (int)     -fl1  Flag All Angles
 (int)     -fl2  Flag Alpha
 (int)     -fl3  Flag Beta
 (int)     -fl4  Flag Delta
 (int)     -fl5  Flag Gamma
 (int)     -fl6  Flag Epsilon (valid only for T4 or C4, set 0 otherwise)
 (int)     -fl7  Flag Nhu (valid only for T4 or C4, set 0 otherwise)
```

Optional Parameters:

```
 (string)  -mask mask file (valid pixels)
 (int)     -mem  Allocated memory for blocksize determination (in Mb)
 (string)  -errf memory error file
 (noarg)   -help displays this message
 (noarg)   -data displays the help concerning Data Format parameter
```

Usage:

Polarimetric Input-Output Data Format

```
 S2T3  input : quad-pol S2      output parameters derived from coherency
T3
 S2C3  input : quad-pol S2      output parameters derived from covariance
C3
 S2T4  input : quad-pol S2      output parameters derived from coherency
T4
 S2C4  input : quad-pol S2      output parameters derived from covariance
C4
 C3    input : covariance C3    output parameters derived from covariance
C3
 C3T3  input : covariance C3    output parameters derived from coherency
T3
 C4    input : covariance C4    output parameters derived from covariance
C4
 C4T4  input : covariance C4    output parameters derived from coherency
T4
 T3    input : coherency T3     output parameters derived from coherency
T3
 T4    input : coherency T4     output parameters derived from coherency
T4
```

---

h_a_alpha_planes_classifier.exe

Parameters:

```
 (string)  -id   input directory
 (string)  -od   output directory
 (int)     -ofr  Offset Row
 (int)     -ofc  Offset Col
 (int)     -fnr  Final Number of Row
 (int)     -fnc  Final Number of Col
 (int)     -hal  Flag Plane H-Alpha
 (int)     -han  Flag Plane H-A
 (int)     -anal Flag Plane A-Alpha
 (string)  -clm  Colormap 9 colors
```

Optional Parameters:

```
 (string)   -mask mask file (valid pixels)
 (int)      -mem  Allocated memory for blocksize determination (in Mb)
 (string)   -errf memory error file
 (noarg)    -help displays this message
```

---

h_a_alpha_planes_classifier_dualpol.exe

Parameters:

```
 (string)   -id   input directory
 (string)   -od   output directory
 (int)      -ofr  Offset Row
 (int)      -ofc  Offset Col
 (int)      -fnr  Final Number of Row
 (int)      -fnc  Final Number of Col
 (int)      -hal  Flag Plane H-Alpha
 (int)      -han  Flag Plane H-A
 (int)      -anal Flag Plane A-Alpha
 (string)   -clm  Colormap 9 colors
```

Optional Parameters:

```
 (string)   -mask mask file (valid pixels)
 (int)      -mem  Allocated memory for blocksize determination (in Mb)
 (string)   -errf memory error file
 (noarg)    -help displays this message
```

---

h_a_combinations.exe

Parameters:

```
 (string)   -id   input directory
 (string)   -od   output directory
 (int)      -ofr  Offset Row
 (int)      -ofc  Offset Col
 (int)      -fnr  Final Number of Row
 (int)      -fnc  Final Number of Col
 (int)      -ha   Flag combination HA
 (int)      -h1a  Flag combination H(1-A)
 (int)      -1ha  Flag combination (1-H)A
 (int)      -1h1a Flag combination (1-H)(1-A)
```

Optional Parameters:

```
 (string)   -mask mask file (valid pixels)
 (int)      -mem  Allocated memory for blocksize determination (in Mb)
 (string)   -errf memory error file
 (noarg)    -help displays this message
```

---

id_class_gen.exe

Parameters:

```
 (string)   -id   input directory
 (string)   -od   output directory
 (int)      -ofr  Offset Row
 (int)      -ofc  Offset Col
```

```
 (int)     -fnr  Final Number of Row
 (int)     -fnc  Final Number of Col
 (string)  -if   input class file
 (string)  -clm  Colormap wishart 16 colors

Optional Parameters:
 (string)  -mask mask file (valid pixels)
 (int)     -mem  Allocated memory for blocksize determination (in Mb)
 (string)  -errf memory error file
 (noarg)   -help displays this message
```

---

kozlov_anisotropy.exe

```
Parameters:
 (string)  -id   input directory
 (string)  -od   output directory
 (string)  -iodf input-output data format
 (int)     -nwr  Nwin Row
 (int)     -nwc  Nwin Col
 (int)     -ofr  Offset Row
 (int)     -ofc  Offset Col
 (int)     -fnr  Final Number of Row
 (int)     -fnc  Final Number of Col

Optional Parameters:
 (string)  -mask mask file (valid pixels)
 (int)     -mem  Allocated memory for blocksize determination (in Mb)
 (string)  -errf memory error file
 (noarg)   -help displays this message
 (noarg)   -data displays the help concerning Data Format parameter
```

Usage:

```
Polarimetric Input-Output Data Format

 S2    input : quad-pol S2      output parameters derived from C3 or T3
 C3    input : covariance C3    output parameters derived from covariance
C3
 C4    input : covariance C4    output parameters derived from covariance
C4
 T3    input : coherency T3     output parameters derived from coherency
T3
 T4    input : coherency T4     output parameters derived from coherency
T4
```

---

krogager_decomposition.exe

```
Parameters:
 (string)  -id   input directory
 (string)  -od   output directory
 (string)  -iodf input-output data format
 (int)     -nwr  Nwin Row
 (int)     -nwc  Nwin Col
```

```
 (int)      -ofr  Offset Row
 (int)      -ofc  Offset Col
 (int)      -fnr  Final Number of Row
 (int)      -fnc  Final Number of Col

Optional Parameters:
 (string)   -mask mask file (valid pixels)
 (int)      -mem  Allocated memory for blocksize determination (in Mb)
 (string)   -errf memory error file
 (noarg)    -help displays this message
 (noarg)    -data displays the help concerning Data Format parameter
```

Usage:

```
Polarimetric Input-Output Data Format

 S2    input : quad-pol S2      output parameters derived from C3 or T3
 C3    input : covariance C3    output parameters derived from covariance
C3
 T3    input : coherency T3     output parameters derived from coherency
T3
```

---

lee_scattering_model_based_classification.exe

```
Parameters:
 (string)   -id   input directory
 (string)   -od   output directory
 (string)   -isf  input single bounce file
 (string)   -idf  input double bounce file
 (string)   -irf  input random bounce file
 (string)   -iodf input-output data format
 (int)      -ncl  Cluster number
 (int)      -fscn Final single bounce cluster number
 (int)      -fdcn Final double bounce cluster number
 (int)      -fvcn Final random bounce cluster number
 (float)    -mct  Mixed Scattering Category threshold
 (int)      -nwr  Nwin Row
 (int)      -nwc  Nwin Col
 (int)      -ofr  Offset Row
 (int)      -ofc  Offset Col
 (int)      -fnr  Final Number of Row
 (int)      -fnc  Final Number of Col
 (int)      -nit  maximum interation number
 (float)    -pct  maximum of pixel switching classes
 (int)      -bmp  BMP flag (0/1)
 (string)   -cms  input single bounce - colormap file (valid if BMP flag =
1)
 (string)   -cmd  input double bounce - colormap file (valid if BMP flag =
1)
 (string)   -cmr  input double bounce - colormap file (valid if BMP flag =
1)

Optional Parameters:
 (string)   -mask mask file (valid pixels)
 (int)      -mem  Allocated memory for blocksize determination (in Mb)
```

```
 (string)   -errf memory error file
 (noarg)    -help displays this message
 (noarg)    -data displays the help concerning Data Format parameter
```

Usage:

Polarimetric Input-Output Data Format

```
 S2    input : quad-pol S2      output parameters derived from C3 or T3
 C3    input : covariance C3    output parameters derived from covariance
C3
 T3    input : coherency T3     output parameters derived from coherency
T3
```

---

log-cumulant.exe

Parameters:

```
 (string)   -if1  input file k2
 (string)   -if2  input file k3
 (string)   -of   output file
 (int)      -ofr  Offset Row
 (int)      -ofc  Offset Col
 (int)      -fnr  Final Number of Row
 (int)      -fnc  Final Number of Col
```

Optional Parameters:

```
 (string)   -mask mask file (valid pixels)
 (int)      -mem  Allocated memory for blocksize determination (in Mb)
 (string)   -errf memory error file
 (noarg)    -help displays this message
```

---

mcsm_5components_decomposition.exe

Parameters:

```
 (string)   -id   input directory
 (string)   -od   output directory
 (string)   -iodf input-output data format
 (int)      -nwr  Nwin Row
 (int)      -nwc  Nwin Col
 (int)      -ofr  Offset Row
 (int)      -ofc  Offset Col
 (int)      -fnr  Final Number of Row
 (int)      -fnc  Final Number of Col
```

Optional Parameters:

```
 (string)   -mask mask file (valid pixels)
 (int)      -mem  Allocated memory for blocksize determination (in Mb)
 (string)   -errf memory error file
 (noarg)    -help displays this message
 (noarg)    -data displays the help concerning Data Format parameter
```

Usage:

Polarimetric Input-Output Data Format

```
 S2    input : quad-pol S2      output parameters derived from C3 or T3
 C3    input : covariance C3    output parameters derived from covariance
C3
 T3    input : coherency T3     output parameters derived from coherency
T3
```

---

neumann_decomposition.exe

Parameters:

```
 (string)  -id   input directory
 (string)  -od   output directory
 (string)  -iodf input-output data format
 (int)     -nwr  Nwin Row
 (int)     -nwc  Nwin Col
 (int)     -ofr  Offset Row
 (int)     -ofc  Offset Col
 (int)     -fnr  Final Number of Row
 (int)     -fnc  Final Number of Col
```

Optional Parameters:

```
 (string)  -mask mask file (valid pixels)
 (int)     -mem  Allocated memory for blocksize determination (in Mb)
 (string)  -errf memory error file
 (noarg)   -help displays this message
 (noarg)   -data displays the help concerning Data Format parameter
```

Usage:

Polarimetric Input-Output Data Format

```
 S2    input : quad-pol S2      output parameters derived from C3 or T3
 C3    input : covariance C3    output parameters derived from covariance
C3
 T3    input : coherency T3     output parameters derived from coherency
T3
```

OPCE.exe

Parameters:

```
 (string)  -id   input directory
 (string)  -od   output directory
 (string)  -iodf input-output data format
 (int)     -nwr  Nwin Row
 (int)     -nwc  Nwin Col
 (int)     -ofr  Offset Row
 (int)     -ofc  Offset Col
 (int)     -fnr  Final Number of Row
 (int)     -fnc  Final Number of Col
 (string)  -af   area file
```

Optional Parameters:
```
 (string)   -mask mask file (valid pixels)
 (int)      -mem  Allocated memory for blocksize determination (in Mb)
 (string)   -errf memory error file
 (noarg)    -help displays this message
 (noarg)    -data displays the help concerning Data Format parameter
```

Usage:

Polarimetric Input-Output Data Format

```
 S2    input : quad-pol S2      output parameters derived from C3 or T3
 C3    input : covariance C3    output parameters derived from covariance
C3
 C4    input : covariance C4    output parameters derived from covariance
C4
 T3    input : coherency T3     output parameters derived from coherency
T3
 T4    input : coherency T4     output parameters derived from coherency
T4
```

---

orientation_correction.exe

Parameters:
```
 (string)   -id   input directory
 (string)   -od   output directory
 (string)   -if   orientation angle data file
 (string)   -iodf input-output data format
 (int)      -ofr  Offset Row
 (int)      -ofc  Offset Col
 (int)      -fnr  Final Number of Row
 (int)      -fnc  Final Number of Col
```

Optional Parameters:
```
 (string)   -mask mask file (valid pixels)
 (int)      -mem  Allocated memory for blocksize determination (in Mb)
 (string)   -errf memory error file
 (noarg)    -help displays this message
 (noarg)    -data displays the help concerning Data Format parameter
```

Usage:

Polarimetric Input-Output Data Format

```
 S2          input : quad-pol S2     output : quad-pol S2
 C3          input : covariance C3   output : covariance C3
 T3          input : coherency T3    output : coherency T3
```

---

orientation_estimation.exe

Parameters:
```
 (string)   -id   input directory
```

```
 (string)   -od   output directory
 (string)   -iodf input-output data format
 (int)      -nwr  Nwin Row
 (int)      -nwc  Nwin Col
 (int)      -ofr  Offset Row
 (int)      -ofc  Offset Col
 (int)      -fnr  Final Number of Row
 (int)      -fnc  Final Number of Col

Optional Parameters:
 (string)   -mask mask file (valid pixels)
 (int)      -mem  Allocated memory for blocksize determination (in Mb)
 (string)   -errf memory error file
 (noarg)    -help displays this message
 (noarg)    -data displays the help concerning Data Format parameter
```

Usage:

Polarimetric Input-Output Data Format

```
 S2    input : quad-pol S2      output parameters derived from C3 or T3
 C3    input : covariance C3    output parameters derived from covariance
C3
 T3    input : coherency T3     output parameters derived from coherency
T3
```

Polar_Signature.exe

Parameters:

```
 (string)   -id   input directory
 (string)   -iodf input-output data format
 (string)   -fct  output copol txt file
 (string)   -fcb  output copol bin file
 (string)   -fxt  output xpol txt file
 (string)   -fxb  output xpol bin file
```

Optional Parameters:

```
 (noarg)    -help displays this message
 (noarg)    -data displays the help concerning Data Format parameter
```

Usage:

Polarimetric Input-Output Data Format

```
 S2    input : quad-pol S2      output parameters derived from C3 or T3
 C3    input : covariance C3    output parameters derived from covariance
C3
 T3    input : coherency T3     output parameters derived from coherency
T3
```

---

polar_synt.exe

Parameters:

```
 (string)   -id   input directory
 (string)   -iodf input-output data format
 (int)      -ofr  Offset Row
 (int)      -ofc  Offset Col
 (int)      -fnr  Final Number of Row
 (int)      -fnc  Final Number of Col
 (float)    -phi  Phi angle value (deg)
 (float)    -tau  Tau angle value (deg)
 (int)      -rgb  Flag RGB files creation (0/1)
 (string)   -rgbf RGB output format (pauli / sinclair)
 (string)   -bf   Blue channel output file (if rgb = 1)
 (string)   -rf   Red channel output file (if rgb = 1)
 (string)   -gf   Green channel output file (if rgb = 1)
 (int)      -bmp  Flag BMP file creation (0/1)
 (string)   -bmpf BMP output file (if bmp=1)
```

Optional Parameters:

```
 (string)   -mask mask file (valid pixels)
 (int)      -mem  Allocated memory for blocksize determination (in Mb)
 (string)   -errf memory error file
 (noarg)    -help displays this message
 (noarg)    -data displays the help concerning Data Format parameter
```

Usage:

Polarimetric Input-Output Data Format

```
 S2    input : quad-pol S2      output parameters derived from C3 or T3
 C3    input : covariance C3    output parameters derived from covariance
C3
 T3    input : coherency T3     output parameters derived from coherency
T3
```

---

pps_detection.exe

Parameters:

```
 (string)   -id   input directory
 (string)   -od   output directory
 (string)   -iodf input-output data format
 (int)      -nwr  Nwin Row
 (int)      -nwc  Nwin Col
 (int)      -ofr  Offset Row
 (int)      -ofc  Offset Col
 (int)      -fnr  Final Number of Row
 (int)      -fnc  Final Number of Col
 (float)    -a1   alpha1 threshold
 (float)    -p1   p1 threshold
```

Optional Parameters:

```
 (string)   -mask mask file (valid pixels)
 (int)      -mem  Allocated memory for blocksize determination (in Mb)
 (string)   -errf memory error file
 (noarg)    -help displays this message
 (noarg)    -data displays the help concerning Data Format parameter
```

Usage:

Polarimetric Input-Output Data Format

```
 S2    input : quad-pol S2      output parameters derived from C3 or T3
 C3    input : covariance C3    output parameters derived from covariance
C3
 C4    input : covariance C4    output parameters derived from covariance
C4
 T3    input : coherency T3     output parameters derived from coherency
T3
 T4    input : coherency T4     output parameters derived from coherency
T4
```

---

praks_colin.exe

Parameters:

```
 (string)  -id   input directory
 (string)  -od   output directory
 (string)  -iodf input-output data format
 (int)     -nwr  Nwin Row
 (int)     -nwc  Nwin Col
 (int)     -ofr  Offset Row
 (int)     -ofc  Offset Col
 (int)     -fnr  Final Number of Row
 (int)     -fnc  Final Number of Col
 (int)     -fl1  Flag Scattering Predominance (0/1)
 (int)     -fl2  Flag Scattering Diversity (0/1)
 (int)     -fl3  Flag Degree of Purity (0/1)
 (int)     -fl4  Flag Depolarization Index (0/1)
 (int)     -fl5  Flag Entropy (0/1)
 (int)     -fl6  Flag Alpha (0/1)
```

Optional Parameters:

```
 (string)  -mask mask file (valid pixels)
 (int)     -mem  Allocated memory for blocksize determination (in Mb)
 (string)  -errf memory error file
 (noarg)   -help displays this message
 (noarg)   -data displays the help concerning Data Format parameter
```

Usage:

Polarimetric Input-Output Data Format

```
 S2    input : quad-pol S2      output parameters derived from C3 or T3
 C3    input : covariance C3    output parameters derived from covariance
C3
 C4    input : covariance C4    output parameters derived from covariance
C4
 T3    input : coherency T3     output parameters derived from coherency
T3
 T4    input : coherency T4     output parameters derived from coherency
T4
```

process_contrast_IPP.exe

Parameters:

```
 (string)   -id   input directory
 (string)   -od   output directory
 (int)      -ofr  Offset Row
 (int)      -ofc  Offset Col
 (int)      -fnr  Final Number of Row
 (int)      -fnc  Final Number of Col
 (int)      -ind  index (1/2)
```

Optional Parameters:

```
 (string)   -mask mask file (valid pixels)
 (int)      -mem  Allocated memory for blocksize determination (in Mb)
 (string)   -errf memory error file
 (noarg)    -help displays this message
```

process_corr.exe

Parameters:

```
 (string)   -id   input directory
 (string)   -od   output directory
 (string)   -iodf input-output data format
 (int)      -nwr  Nwin Row
 (int)      -nwc  Nwin Col
 (int)      -ofr  Offset Row
 (int)      -ofc  Offset Col
 (int)      -fnr  Final Number of Row
 (int)      -fnc  Final Number of Col
 (int)      -elt  Element Index
```

Optional Parameters:

```
 (string)   -mask mask file (valid pixels)
 (int)      -mem  Allocated memory for blocksize determination (in Mb)
 (string)   -errf memory error file
 (noarg)    -help displays this message
 (noarg)    -data displays the help concerning Data Format parameter
```

Usage:

Polarimetric Input-Output Data Format

```
 S2m    input : quad-pol S2      output parameters derived from C3 or T3
 S2b    input : quad-pol S2      output parameters derived from C4 or T4
 C2     input : covariance C2    output parameters derived from covariance
C2
 C3     input : covariance C3    output parameters derived from covariance
C3
 C4     input : covariance C4    output parameters derived from covariance
C4
 T3     input : coherency T3     output parameters derived from coherency
T3
```

```
 T4    input : coherency T4     output parameters derived from coherency
T4
 SPP   input : dual-pol SPP     output parameters derived from C3
```

---

process_corr_CCC.exe

Parameters:

```
 (string)  -id   input directory
 (string)  -od   output directory
 (string)  -iodf input-output data format
 (int)     -nwr  Nwin Row
 (int)     -nwc  Nwin Col
 (int)     -ofr  Offset Row
 (int)     -ofc  Offset Col
 (int)     -fnr  Final Number of Row
 (int)     -fnc  Final Number of Col
```

Optional Parameters:

```
 (string)  -mask mask file (valid pixels)
 (int)     -mem  Allocated memory for blocksize determination (in Mb)
 (string)  -errf memory error file
 (noarg)   -help displays this message
 (noarg)   -data displays the help concerning Data Format parameter
```

Usage:

Polarimetric Input-Output Data Format

```
 S2    input : quad-pol S2      output parameters derived from C3 or T3
 C3    input : covariance C3    output parameters derived from covariance
C3
 C4    input : covariance C4    output parameters derived from covariance
C4
 T3    input : coherency T3     output parameters derived from coherency
T3
 T4    input : coherency T4     output parameters derived from coherency
T4
```

---

process_corr_CCC_norm.exe

Parameters:

```
 (string)  -id   input directory
 (string)  -od   output directory
 (string)  -iodf input-output data format
 (int)     -nwr  Nwin Row
 (int)     -nwc  Nwin Col
 (int)     -ofr  Offset Row
 (int)     -ofc  Offset Col
 (int)     -fnr  Final Number of Row
 (int)     -fnc  Final Number of Col
```

Optional Parameters:

```
 (string)  -mask mask file (valid pixels)
```

```
 (int)     -mem  Allocated memory for blocksize determination (in Mb)
 (string)  -errf memory error file
 (noarg)   -help displays this message
 (noarg)   -data displays the help concerning Data Format parameter
```

Usage:

Polarimetric Input-Output Data Format

```
 S2    input : quad-pol S2      output parameters derived from C3 or T3
 C3    input : covariance C3    output parameters derived from covariance
C3
 C4    input : covariance C4    output parameters derived from covariance
C4
 T3    input : coherency T3     output parameters derived from coherency
T3
 T4    input : coherency T4     output parameters derived from coherency
T4
```

---

process_elements.exe

Parameters:

Parameters:

```
 (string)  -id   input directory
 (string)  -od   output directory
 (string)  -iodf input-output data format
 (int)     -ofr  Offset Row
 (int)     -ofc  Offset Col
 (int)     -fnr  Final Number of Row
 (int)     -fnc  Final Number of Col
 (int)     -elt  Element Index
 (string)  -fmt  Format :
                 S2, SPP, IPP : A, Adb, I, Idb, pha
                 C3, C4, T3, T4, T6 : mod, db, pha
```

Optional Parameters:

```
 (string)  -mask mask file (valid pixels)
 (int)     -mem  Allocated memory for blocksize determination (in Mb)
 (string)  -errf memory error file
 (noarg)   -help displays this message
 (noarg)   -data displays the help concerning Data Format parameter
```

Usage:

Polarimetric Input-Output Data Format

```
 S2    input : quad-pol S2      output parameters derived from C3 or T3
 C2    input : covariance C2    output parameters derived from covariance
C2
 C3    input : covariance C3    output parameters derived from covariance
C3
 C4    input : covariance C4    output parameters derived from covariance
C4
```

```
 T3    input : coherency T3     output parameters derived from coherency
T3
 T4    input : coherency T4     output parameters derived from coherency
T4
 T6    input : coherency T6     output parameters derived from coherency
T6
 SPP   input : dual-pol SPP     output parameters derived from C3
 IPP   input : intensities IPP  output parameters derived from IPP
```

---

process_pauli.exe

Parameters:

```
 (string)  -id   input directory
 (string)  -od   output directory
 (string)  -fmt  Output Format (cmplx, mod, db, pha)
 (int)     -ofr  Offset Row
 (int)     -ofc  Offset Col
 (int)     -fnr  Final Number of Row
 (int)     -fnc  Final Number of Col
```

Optional Parameters:

```
 (string)  -mask mask file (valid pixels)
 (int)     -mem  Allocated memory for blocksize determination (in Mb)
 (string)  -errf memory error file
 (noarg)   -help displays this message
```

---

process_span.exe

Parameters:

```
 (string)  -id   input directory
 (string)  -od   output directory
 (string)  -iodf input-output data format
 (int)     -nwr  Nwin Row
 (int)     -nwc  Nwin Col
 (int)     -ofr  Offset Row
 (int)     -ofc  Offset Col
 (int)     -fnr  Final Number of Row
 (int)     -fnc  Final Number of Col
 (string)  -fmt  Output Format (lin, db)
```

Optional Parameters:

```
 (string)  -mask mask file (valid pixels)
 (int)     -mem  Allocated memory for blocksize determination (in Mb)
 (string)  -errf memory error file
 (noarg)   -help displays this message
 (noarg)   -data displays the help concerning Data Format parameter
```

Usage:

Polarimetric Input-Output Data Format

```
 S2    input : quad-pol S2      output parameters derived from C3 or T3
```

```
 C2    input : covariance C2    output parameters derived from covariance
C2
 C3    input : covariance C3    output parameters derived from covariance
C3
 C4    input : covariance C4    output parameters derived from covariance
C4
 T3    input : coherency T3     output parameters derived from coherency
T3
 T4    input : coherency T4     output parameters derived from coherency
T4
 SPP   input : dual-pol SPP     output parameters derived from C3
 IPP   input : intensities IPP  output parameters derived from IPP
```

---

raney_decomposition.exe

Parameters:

```
 (string)  -id   input directory
 (string)  -od   output directory
 (string)  -iodf input-output data format
 (int)     -nwr  Nwin Row
 (int)     -nwc  Nwin Col
 (int)     -ofr  Offset Row
 (int)     -ofc  Offset Col
 (int)     -fnr  Final Number of Row
 (int)     -fnc  Final Number of Col
```

Optional Parameters:

```
 (string)  -mask mask file (valid pixels)
 (int)     -mem  Allocated memory for blocksize determination (in Mb)
 (string)  -errf memory error file
 (noarg)   -help displays this message
 (noarg)   -data displays the help concerning Data Format parameter
```

Usage:

Polarimetric Input-Output Data Format

```
 SPP   input : dual-pol SPP     output parameters derived from C3
 C2    input : covariance C2    output parameters derived from covariance
C2
```

---

ratio_elements.exe

Parameters:

```
 (string)  -id   input directory
 (string)  -od   output directory
 (string)  -iodf input-output data format
 (int)     -nwr  Nwin Row
 (int)     -nwc  Nwin Col
 (int)     -ofr  Offset Row
 (int)     -ofc  Offset Col
 (int)     -fnr  Final Number of Row
 (int)     -fnc  Final Number of Col
```

```
 (string)  -rat  Ratio Element (lin, db)
```

Optional Parameters:

```
 (string)  -mask mask file (valid pixels)
 (int)     -mem  Allocated memory for blocksize determination (in Mb)
 (string)  -errf memory error file
 (noarg)   -help displays this message
 (noarg)   -data displays the help concerning Data Format parameter
```

Usage:

Polarimetric Input-Output Data Format

```
 S2    input : quad-pol S2      output parameters derived from C3 or T3
 C2    input : covariance C2    output parameters derived from covariance
C2
 C3    input : covariance C3    output parameters derived from covariance
C3
 C4    input : covariance C4    output parameters derived from covariance
C4
 T3    input : coherency T3     output parameters derived from coherency
T3
 T4    input : coherency T4     output parameters derived from coherency
T4
 SPP   input : dual-pol SPP     output parameters derived from C3
 IPP   input : intensities IPP  output parameters derived from IPP
```

RCSmax.exe

Parameters:

```
 (string)  -id   input directory
 (string)  -od   output directory
 (string)  -iodf input-output data format
 (int)     -nwr  Nwin Row
 (int)     -nwc  Nwin Col
 (int)     -ofr  Offset Row
 (int)     -ofc  Offset Col
 (int)     -fnr  Final Number of Row
 (int)     -fnc  Final Number of Col
```

Optional Parameters:

```
 (string)  -mask mask file (valid pixels)
 (int)     -mem  Allocated memory for blocksize determination (in Mb)
 (string)  -errf memory error file
 (noarg)   -help displays this message
 (noarg)   -data displays the help concerning Data Format parameter
```

Usage:

Polarimetric Input-Output Data Format

```
 S2    input : quad-pol S2      output parameters derived from C3 or T3
 C3    input : covariance C3    output parameters derived from covariance
C3
```

```
 T3    input : coherency T3     output parameters derived from coherency
T3
```

RVOG_PolSAR.exe

Parameters:

```
 (string)  -id   input directory
 (string)  -od   output directory
 (string)  -iodf input-output data format
 (int)     -nwr  Nwin Row
 (int)     -nwc  Nwin Col
 (int)     -ofr  Offset Row
 (int)     -ofc  Offset Col
 (int)     -fnr  Final Number of Row
 (int)     -fnc  Final Number of Col
```

Optional Parameters:

```
 (string)  -mask mask file (valid pixels)
 (int)     -mem  Allocated memory for blocksize determination (in Mb)
 (string)  -errf memory error file
 (noarg)   -help displays this message
 (noarg)   -data displays the help concerning Data Format parameter
```

Usage:

Polarimetric Input-Output Data Format

```
 S2    input : quad-pol S2      output parameters derived from C3 or T3
 C3    input : covariance C3    output parameters derived from covariance
C3
 T3    input : coherency T3     output parameters derived from coherency
T3
```

---

scattering_mechanism_entropy_freeman.exe

Parameters:

```
 (string)  -id   input directory
 (string)  -od   output directory
 (string)  -iodf input-output data format
 (int)     -nwr  Nwin Row
 (int)     -nwc  Nwin Col
 (int)     -ofr  Offset Row
 (int)     -ofc  Offset Col
 (int)     -fnr  Final Number of Row
 (int)     -fnc  Final Number of Col
```

Optional Parameters:

```
 (string)  -mask mask file (valid pixels)
 (int)     -mem  Allocated memory for blocksize determination (in Mb)
 (string)  -errf memory error file
 (noarg)   -help displays this message
 (noarg)   -data displays the help concerning Data Format parameter
```

Usage:

Polarimetric Input-Output Data Format

```
 S2    input : quad-pol S2      output parameters derived from C3 or T3
 C3    input : covariance C3    output parameters derived from covariance
C3
 T3    input : coherency T3     output parameters derived from coherency
T3
```

---

scattering_mechanism_entropy_vanzyl.exe

Parameters:

```
 (string)  -id   input directory
 (string)  -od   output directory
 (string)  -iodf input-output data format
 (int)     -nwr  Nwin Row
 (int)     -nwc  Nwin Col
 (int)     -ofr  Offset Row
 (int)     -ofc  Offset Col
 (int)     -fnr  Final Number of Row
 (int)     -fnc  Final Number of Col
```

Optional Parameters:

```
 (string)  -mask mask file (valid pixels)
 (int)     -mem  Allocated memory for blocksize determination (in Mb)
 (string)  -errf memory error file
 (noarg)   -help displays this message
 (noarg)   -data displays the help concerning Data Format parameter
```

Usage:

Polarimetric Input-Output Data Format

```
 S2    input : quad-pol S2      output parameters derived from C3 or T3
 C3    input : covariance C3    output parameters derived from covariance
C3
 T3    input : coherency T3     output parameters derived from coherency
T3
```

---

singh_4components_decomposition.exe

Parameters:

```
 (string)  -id   input directory
 (string)  -od   output directory
 (string)  -iodf input-output data format
 (string)  -mod  decomposition mode (G4U1, G4U2)
 (int)     -nwr  Nwin Row
 (int)     -nwc  Nwin Col
 (int)     -ofr  Offset Row
 (int)     -ofc  Offset Col
 (int)     -fnr  Final Number of Row
```

```
 (int)     -fnc  Final Number of Col

Optional Parameters:
 (string)  -mask mask file (valid pixels)
 (int)     -mem  Allocated memory for blocksize determination (in Mb)
 (string)  -errf memory error file
 (noarg)   -help displays this message
 (noarg)   -data displays the help concerning Data Format parameter
```

Usage:

Polarimetric Input-Output Data Format

```
 S2    input : quad-pol S2      output parameters derived from C3 or T3
 C3    input : covariance C3    output parameters derived from covariance
C3
 T3    input : coherency T3     output parameters derived from coherency
T3
```

---

soil_roughness_inversion.exe

Parameters:

```
 (string)  -id   input directory
 (string)  -od   output directory
 (string)  -iodf input-output data format
 (string)  -ang  incidence angle file
 (int)     -un   Angle Unit (0: deg, 1: rad)
 (int)     -nwr  Nwin Row
 (int)     -nwc  Nwin Col
 (int)     -ofr  Offset Row
 (int)     -ofc  Offset Col
 (int)     -fnr  Final Number of Row
 (int)     -fnc  Final Number of Col
 (int)     -fl1  Flag GtoV ratio Surface
 (int)     -fl2  Flag GtoV ratio Dihedral
 (int)     -fl3  Flag GtoV ratio Combined
 (int)     -fl4  Flag Roughness by GtoV
 (int)     -fl5  Flag Roughness by Anisotropy
 (int)     -fl6  Flag Roughness by Circular Correlation
 (int)     -fl7  Flag Soil from Xbragg
 (int)     -fl8  Flag Soil from Surface component
 (int)     -fl9  Flag Soil from Dihedral component
 (int)     -fl10 Vegetation model (1 / 2 / 3)
 (float)   -fl11 Rho parameter

Optional Parameters:
 (string)  -mask mask file (valid pixels)
 (int)     -mem  Allocated memory for blocksize determination (in Mb)
 (string)  -errf memory error file
 (noarg)   -help displays this message
 (noarg)   -data displays the help concerning Data Format parameter
```

Usage:

Polarimetric Input-Output Data Format

```
 S2    input : quad-pol S2      output parameters derived from C3 or T3
 C3    input : covariance C3    output parameters derived from covariance
C3
 C4    input : covariance C4    output parameters derived from covariance
C4
 T3    input : coherency T3     output parameters derived from coherency
T3
 T4    input : coherency T4     output parameters derived from coherency
T4
```

---

stat_extract.exe

Parameters:

```
 (string)  -id   input directory
 (string)  -iodf input-output data format
 (string)  -fist input statistics txt file
 (string)  -fisb input statistics bin file
 (string)  -fost output statistics txt file
```

Optional Parameters:

```
 (noarg)   -help displays this message
 (noarg)   -data displays the help concerning Data Format parameter
```

Usage:

Polarimetric Input-Output Data Format

```
 S2    input : quad-pol S2      output parameters derived from C3 or T3
 C2    input : covariance C2    output parameters derived from covariance
C2
 C3    input : covariance C3    output parameters derived from covariance
C3
 T3    input : coherency T3     output parameters derived from coherency
T3
 C4    input : covariance C4    output parameters derived from covariance
C4
 T4    input : coherency T4     output parameters derived from coherency
T4
 SPP   input : dual-pol SPP     output parameters derived from C3
```

StokesParameters.exe

Parameters:

```
 (string)  -id   input directory
 (string)  -od   output directory
 (string)  -iodf input-output data format
 (int)     -nwr  Nwin Row
 (int)     -nwc  Nwin Col
 (int)     -ofr  Offset Row
 (int)     -ofc  Offset Col
 (int)     -fnr  Final Number of Row
```

```
 (int)     -fnc  Final Number of Col
 (int)     -cha  Polarimetric channel (S2: 1 or 2, C2: 1)
 (int)     -fl1  Flag Stokes parameters g0 (1 = lin, 2 = dB)
 (int)     -fl2  Flag Stokes parameters g1 (1 = lin, 2 = dB)
 (int)     -fl3  Flag Stokes parameters g2 (1 = lin, 2 = dB)
 (int)     -fl4  Flag Stokes parameters g3 (1 = lin, 2 = dB)
 (int)     -fl5  Flag Stokes angle phi (0/1)
 (int)     -fl6  Flag Stokes angle tau (0/1)
 (int)     -fl7  Flag Eigenvalues (0/1)
 (int)     -fl8  Flag Probabilities (0/1) (int)    -fl9  Flag Entropy H
(0/1) (int)      -fl10      Flag Anisotropy A (0/1) (int)     -fl11
      Flag Wave Contrast (0/1)
 (int)     -fl12      Flag Wave DoLP (0/1)
 (int)     -fl13      Flag Wave DoCP (0/1)
 (int)     -fl14      Flag Wave LPR (0/1)
 (int)     -fl15      Flag Wave CPR (0/1)
```

Optional Parameters:

```
 (string)  -mask mask file (valid pixels)
 (int)     -mem  Allocated memory for blocksize determination (in Mb)
 (string)  -errf memory error file
 (noarg)   -help displays this message
 (noarg)   -data displays the help concerning Data Format parameter
```

Usage:

Polarimetric Input-Output Data Format

```
 S2    input : quad-pol S2      output parameters derived from C3 or T3
 C2    input : covariance C2    output parameters derived from covariance
C2
 SPP   input : dual-pol SPP     output parameters derived from C3
```

---

sub_aperture_anisotropy.exe

Parameters:

```
 (string)  -id   input directory
 (string)  -od   output directory
 (string)  -iodf input-output data format
 (int)     -subi initial sub-aperture number
 (int)     -subn number of sub-apertures
 (int)     -nwr  Nwin Row
 (int)     -nwc  Nwin Col
 (int)     -nlk  number of looks
 (int)     -fnr  Final Number of Row
 (int)     -fnc  Final Number of Col
```

Optional Parameters:

```
 (string)  -mask mask file (valid pixels)
 (int)     -mem  Allocated memory for blocksize determination (in Mb)
 (string)  -errf memory error file
 (noarg)   -help displays this message
 (noarg)   -data displays the help concerning Data Format parameter
```

Usage:

Polarimetric Input-Output Data Format

```
 S2    input : quad-pol S2      output parameters derived from C3 or T3
 C3    input : covariance C3    output parameters derived from covariance
C3
 T3    input : coherency T3     output parameters derived from coherency
T3
```

---

sub_aperture_check_spectrum.exe

Parameters:

```
 (string)  -id   input directory
 (int)     -azf  azimut flag
 (string)  -of1  output file: raw_spectrum.txt
 (string)  -of2  output file: raw_spectrum.bin
 (string)  -of3  output file: avg_spectrum.txt
 (string)  -of4  output file: avg_spectrum.bin
```

Optional Parameters:

```
 (noarg)   -help displays this message
```

---

sub_aperture_CV.exe

Parameters:

```
 (string)  -id   input directory
 (string)  -od   output directory
 (string)  -iodf input-output data format
 (int)     -subi initial sub-aperture number
 (int)     -subn number of sub-apertures
 (int)     -nwr  Nwin Row
 (int)     -nwc  Nwin Col
 (int)     -fnr  Final Number of Row
 (int)     -fnc  Final Number of Col
 (int)     -fh   Flag entropy
 (int)     -fa   Flag anisotropy
 (int)     -fal  Flag alpha
 (int)     -fs   Flag span
```

Optional Parameters:

```
 (string)  -mask mask file (valid pixels)
 (int)     -mem  Allocated memory for blocksize determination (in Mb)
 (string)  -errf memory error file
 (noarg)   -help displays this message
 (noarg)   -data displays the help concerning Data Format parameter
```

Usage:

Polarimetric Input-Output Data Format

```
 S2    input : quad-pol S2      output parameters derived from C3 or T3
```

```
 C3    input : covariance C3    output parameters derived from covariance
C3
 T3    input : coherency T3     output parameters derived from coherency
T3
```

---

sub_aperture_decomposition.exe

Parameters:

```
 (string)  -id   input directory
 (string)  -od   output directory
 (float)   -pct  percentage of resolution of output data
 (int)     -sub  number of sub-apertures
 (int)     -wgh  indicates if input data have been weighted
 (int)     -azf  azimut flag
```

Optional Parameters:

```
 (noarg)   -help displays this message
 (int)     -lim1 limit 1 (if wgh = 0)
 (int)     -lim2 limit 2 (if wgh = 0)
```

---

supervised_classifier.exe

Parameters:

```
 (string)  -id   input directory
 (string)  -od   output directory
 (string)  -iodf input-output data format
 (string)  -af   input area file
 (int)     -nwr  Nwin Row
 (int)     -nwc  Nwin Col
 (int)     -ofr  Offset Row
 (int)     -ofc  Offset Col
 (int)     -fnr  Final Number of Row
 (int)     -fnc  Final Number of Col
 (string)  -cf   input cluster file
 (int)     -bmp  BMP flag (0/1)
 (string)  -col  input colormap file (valid if BMP flag = 1)
 (int)     -rej  rejection mode flag (0/1)
 (float)   -std  distance std value for rejection
```

Optional Parameters:

```
 (string)  -mask mask file (valid pixels)
 (int)     -mem  Allocated memory for blocksize determination (in Mb)
 (string)  -errf memory error file
 (noarg)   -help displays this message
 (noarg)   -data displays the help concerning Data Format parameter
```

Usage:

Polarimetric Input-Output Data Format

```
 S2    input : quad-pol S2      output parameters derived from C3 or T3
 C2    input : covariance C2    output parameters derived from covariance
C2
```

```
 C3    input : covariance C3    output parameters derived from covariance
C3
 C4    input : covariance C4    output parameters derived from covariance
C4
 T3    input : coherency T3     output parameters derived from coherency
T3
 T4    input : coherency T4     output parameters derived from coherency
T4
 SPP   input : dual-pol SPP     output parameters derived from C3
 IPP   input : intensities IPP  output parameters derived from IPP
```

---

surface_inversion_dubois.exe

Parameters:

```
 (string)  -id   input directory
 (string)  -od   output directory
 (string)  -iodf input-output data format
 (string)  -ang  incidence angle file
 (int)     -ofr  Offset Row
 (int)     -ofc  Offset Col
 (int)     -fnr  Final Number of Row
 (int)     -fnc  Final Number of Col
 (float)   -fr   Central Frequency (GHz)
 (int)     -un   Angle Unit (0: deg, 1: rad)
 (int)     -caf  Calibration Flag
 (float)   -cac  Calibration Coefficient
 (float)   -th1  Threshold - HHHH/VVVV
 (float)   -th2  Threshold - HVHV/VVVV
```

Optional Parameters:

```
 (string)  -mask mask file (valid pixels)
 (int)     -mem  Allocated memory for blocksize determination (in Mb)
 (string)  -errf memory error file
 (noarg)   -help displays this message
 (noarg)   -data displays the help concerning Data Format parameter
```

Usage:

Polarimetric Input-Output Data Format

```
 S2    input : quad-pol S2      output parameters derived from C3 or T3
 C3    input : covariance C3    output parameters derived from covariance
C3
 C4    input : covariance C4    output parameters derived from covariance
C4
 T3    input : coherency T3     output parameters derived from coherency
T3
 T4    input : coherency T4     output parameters derived from coherency
T4
```

---

surface_inversion_histo.exe

Parameters:

```
 (string)   -id   input directory
 (string)   -iodf input-output data format
 (string)   -hvvv output file (ratio HVHV / VVVV)
 (string)   -hhvv output file (ratio HHHH / VVVV)
 (int)      -ofr  Offset Row
 (int)      -ofc  Offset Col
 (int)      -fnr  Final Number of Row
 (int)      -fnc  Final Number of Col
```

Optional Parameters:

```
 (string)   -mask mask file (valid pixels)
 (int)      -mem  Allocated memory for blocksize determination (in Mb)
 (string)   -errf memory error file
 (noarg)    -help displays this message
 (noarg)    -data displays the help concerning Data Format parameter
```

Usage:

Polarimetric Input-Output Data Format

```
 S2    input : quad-pol S2      output parameters derived from C3 or T3
 C3    input : covariance C3    output parameters derived from covariance
C3
 C4    input : covariance C4    output parameters derived from covariance
C4
 T3    input : coherency T3     output parameters derived from coherency
T3
 T4    input : coherency T4     output parameters derived from coherency
T4
```

---

surface_inversion_oh.exe

Parameters:

```
 (string)   -id   input directory
 (string)   -od   output directory
 (string)   -iodf input-output data format
 (string)   -ang  incidence angle file
 (int)      -ofr  Offset Row
 (int)      -ofc  Offset Col
 (int)      -fnr  Final Number of Row
 (int)      -fnc  Final Number of Col
 (int)      -un   Angle Unit (0: deg, 1: rad)
 (float)    -th1  Threshold - HHHH/VVVV
 (float)    -th2  Threshold - HVHV/VVVV
```

Optional Parameters:

```
 (string)   -mask mask file (valid pixels)
 (int)      -mem  Allocated memory for blocksize determination (in Mb)
 (string)   -errf memory error file
 (noarg)    -help displays this message
 (noarg)    -data displays the help concerning Data Format parameter
```

Usage:

Polarimetric Input-Output Data Format

```
 S2    input : quad-pol S2      output parameters derived from C3 or T3
 C3    input : covariance C3    output parameters derived from covariance
C3
 C4    input : covariance C4    output parameters derived from covariance
C4
 T3    input : coherency T3     output parameters derived from coherency
T3
 T4    input : coherency T4     output parameters derived from coherency
T4
```

---

surface_inversion_oh2004.exe

Parameters:

```
 (string)  -id   input directory
 (string)  -od   output directory
 (string)  -iodf input-output data format
 (string)  -ang  incidence angle file
 (int)     -ofr  Offset Row
 (int)     -ofc  Offset Col
 (int)     -fnr  Final Number of Row
 (int)     -fnc  Final Number of Col
 (float)   -fr   Central Frequency (GHz)
 (int)     -un   Angle Unit (0: deg, 1: rad)
 (float)   -th1  Threshold - mv
 (float)   -th2  Threshold - s
```

Optional Parameters:

```
 (string)  -mask mask file (valid pixels)
 (int)     -mem  Allocated memory for blocksize determination (in Mb)
 (string)  -errf memory error file
 (noarg)   -help displays this message
 (noarg)   -data displays the help concerning Data Format parameter
```

Usage:

Polarimetric Input-Output Data Format

```
 S2    input : quad-pol S2      output parameters derived from C3 or T3
 C3    input : covariance C3    output parameters derived from covariance
C3
 C4    input : covariance C4    output parameters derived from covariance
C4
 T3    input : coherency T3     output parameters derived from coherency
T3
 T4    input : coherency T4     output parameters derived from coherency
T4
```

---

surface_inversion_xbragg.exe

Parameters:

```
 (string)  -id   input directory
```

```
 (string)   -od   output directory
 (string)   -iodf input-output data format
 (string)   -ang  incidence angle file
 (int)      -nwr  Nwin Row
 (int)      -nwc  Nwin Col
 (int)      -ofr  Offset Row
 (int)      -ofc  Offset Col
 (int)      -fnr  Final Number of Row
 (int)      -fnc  Final Number of Col
 (int)      -un   Angle Unit (0: deg, 1: rad)
 (float)    -dif  dielectric factor
 (float)    -bef  beta factor
```

Optional Parameters:

```
 (string)   -mask mask file (valid pixels)
 (int)      -mem  Allocated memory for blocksize determination (in Mb)
 (string)   -errf memory error file
 (noarg)    -help displays this message
 (noarg)    -data displays the help concerning Data Format parameter
```

Usage:

Polarimetric Input-Output Data Format

```
 S2    input : quad-pol S2      output parameters derived from C3 or T3
 C3    input : covariance C3    output parameters derived from covariance
C3
 C4    input : covariance C4    output parameters derived from covariance
C4
 T3    input : coherency T3     output parameters derived from coherency
T3
 T4    input : coherency T4     output parameters derived from coherency
T4
```

---

texture_analysis.exe

Parameters:

```
 (string)   -if   input file
 (string)   -of   output file
 (string)   -ta   texture analysis (VI, VA, VL, U)
 (string)   -idf  input data format (cmplx, float, int)
 (string)   -odf  output data format (real, imag, mod, mod2, db, pha)
 (int)      -nwr  Nwin Row
 (int)      -nwc  Nwin Col
 (int)      -inc  Initial Number of Col
 (int)      -ofr  Offset Row
 (int)      -ofc  Offset Col
 (int)      -fnr  Final Number of Row
 (int)      -fnc  Final Number of Col
```

Optional Parameters:

```
 (string)   -mask mask file (valid pixels)
 (int)      -mem  Allocated memory for blocksize determination (in Mb)
 (string)   -errf memory error file
 (noarg)    -help displays this message
```

texture_statistics.exe

Parameters:

```
 (string)  -if   input file
 (string)  -of   output file
 (string)  -ta   texture analysis (mean, homogeneity, contrast,
dissimilarity, entropy, uniformity)
 (string)  -idf  input data format (cmplx, float, int)
 (string)  -odf  output data format (real, imag, mod, mod2, db, pha)
 (int)     -nwr  Nwin Row
 (int)     -nwc  Nwin Col
 (int)     -inc  Initial Number of Col
 (int)     -ofr  Offset Row
 (int)     -ofc  Offset Col
 (int)     -fnr  Final Number of Row
 (int)     -fnc  Final Number of Col
 (int)     -dir  direction (0, 45, 90, 135)
 (int)     -col  number of colors
```

Optional Parameters:

```
 (string)  -mask mask file (valid pixels)
 (int)     -mem  Allocated memory for blocksize determination (in Mb)
 (string)  -errf memory error file
 (noarg)   -help displays this message
```

training_set_sampler.exe

Parameters:

```
 (string)  -id   input directory
 (string)  -od   output directory
 (string)  -iodf input-output data format
 (string)  -af   input area file
 (string)  -cf   output cluster file
 (int)     -bmp  BMP flag (0/1)
 (string)  -col  input colormap file (valid if BMP flag = 1)
```

Optional Parameters:

```
 (string)  -mask mask file (valid pixels)
 (int)     -mem  Allocated memory for blocksize determination (in Mb)
 (string)  -errf memory error file
 (noarg)   -help displays this message
 (noarg)   -data displays the help concerning Data Format parameter
```

Usage:

Polarimetric Input-Output Data Format

```
 S2    input : quad-pol S2      output parameters derived from C3 or T3
 C2    input : covariance C2    output parameters derived from covariance
C2
 C3    input : covariance C3    output parameters derived from covariance
C3
```

```
 C4    input : covariance C4    output parameters derived from covariance
C4
 T3    input : coherency T3     output parameters derived from coherency
T3
 T4    input : coherency T4     output parameters derived from coherency
T4
 SPP   input : dual-pol SPP     output parameters derived from C3
 IPP   input : intensities IPP  output parameters derived from IPP
```

---

tree_classifier.exe

Parameters:

```
 (string)  -irf  input rule file
 (string)  -ipf  input parameters file
 (string)  -od   output directory
 (int)     -fnr  Final Number of Row
 (int)     -fnc  Final Number of Col
 (int)     -nit  number of iterations
 (int)     -pct  minimum purcentage
 (int)     -col  colormap
```

Optional Parameters:

```
 (noarg)   -help displays this message
```

---

tsvm_decomposition.exe

Parameters:

```
 (string)  -id   input directory
 (string)  -od   output directory
 (string)  -iodf input-output data format
 (int)     -nwr  Nwin Row
 (int)     -nwc  Nwin Col
 (int)     -ofr  Offset Row
 (int)     -ofc  Offset Col
 (int)     -fnr  Final Number of Row
 (int)     -fnc  Final Number of Col
 (int)     -fl1  Flag AlpPhiTauPsi
 (int)     -fl2  Flag Alpha
 (int)     -fl3  Flag Phi
 (int)     -fl4  Flag Tau
 (int)     -fl5  Flag Psi
```

Optional Parameters:

```
 (string)  -mask mask file (valid pixels)
 (int)     -mem  Allocated memory for blocksize determination (in Mb)
 (string)  -errf memory error file
 (noarg)   -help displays this message
 (noarg)   -data displays the help concerning Data Format parameter
```

Usage:

Polarimetric Input-Output Data Format

```
 S2    input : quad-pol S2      output parameters derived from C3 or T3
 C3    input : covariance C3    output parameters derived from covariance
C3
 T3    input : coherency T3     output parameters derived from coherency
T3
```

---

vanzyl92_3components_decomposition.exe

Parameters:

```
 (string)  -id   input directory
 (string)  -od   output directory
 (string)  -iodf input-output data format
 (int)     -nwr  Nwin Row
 (int)     -nwc  Nwin Col
 (int)     -ofr  Offset Row
 (int)     -ofc  Offset Col
 (int)     -fnr  Final Number of Row
 (int)     -fnc  Final Number of Col
```

Optional Parameters:

```
 (string)  -mask mask file (valid pixels)
 (int)     -mem  Allocated memory for blocksize determination (in Mb)
 (string)  -errf memory error file
 (noarg)   -help displays this message
 (noarg)   -data displays the help concerning Data Format parameter
```

Usage:

Polarimetric Input-Output Data Format

```
 S2    input : quad-pol S2      output parameters derived from C3 or T3
 C3    input : covariance C3    output parameters derived from covariance
C3
 T3    input : coherency T3     output parameters derived from coherency
T3
```

---

vanzyl92_3components_reconstruction.exe

Parameters:

```
 (string)  -id   input directory
 (string)  -od1  output directory - ground
 (string)  -od2  output directory - double
 (string)  -od3  output directory - volume
 (string)  -iodf input-output data format
 (int)     -nwr  Nwin Row
 (int)     -nwc  Nwin Col
 (int)     -ofr  Offset Row
 (int)     -ofc  Offset Col
 (int)     -fnr  Final Number of Row
 (int)     -fnc  Final Number of Col
```

Optional Parameters:

```
 (string)  -mask mask file (valid pixels)
```

```
 (int)     -mem  Allocated memory for blocksize determination (in Mb)
 (string)  -errf memory error file
 (noarg)   -help displays this message
 (noarg)   -data displays the help concerning Data Format parameter
```

Usage:

Polarimetric Input-Output Data Format

```
 S2    input : quad-pol S2      output parameters derived from C3 or T3
 C3    input : covariance C3    output parameters derived from covariance
C3
 T3    input : coherency T3     output parameters derived from coherency
T3
```

---

wishart_confusion_matrix.exe

Parameters:

```
 (string)  -id   input directory
 (string)  -od   output directory
 (string)  -af   input area file
 (int)     -nwr  Nwin Row
 (int)     -nwc  Nwin Col
 (int)     -ofr  Offset Row
 (int)     -ofc  Offset Col
 (int)     -fnr  Final Number of Row
 (int)     -fnc  Final Number of Col
 (int)     -bmp  BMP flag (0/1)
 (int)     -rej  Rejection flag (0/1)
 (string)  -col  input colormap file (valid if BMP flag = 1)
```

Optional Parameters:

```
 (string)  -mask mask file (valid pixels)
 (int)     -mem  Allocated memory for blocksize determination (in Mb)
 (string)  -errf memory error file
 (noarg)   -help displays this message
```

---

wishart_h_a_alpha_classifier.exe

Parameters:

```
 (string)  -id   input directory
 (string)  -od   output directory
 (string)  -iodf input-output data format
 (int)     -nwr  Nwin Row
 (int)     -nwc  Nwin Col
 (int)     -ofr  Offset Row
 (int)     -ofc  Offset Col
 (int)     -fnr  Final Number of Row
 (int)     -fnc  Final Number of Col
 (string)  -hf   input entropy file
 (string)  -af   input anisotropy file
 (string)  -alf  input alpha file
 (int)     -nit  maximum interation number
```

```
 (float)   -pct  maximum of pixel switching classes
 (int)     -bmp  BMP flag (0/1)
 (string)  -co8  input colormap8 file (valid if BMP flag = 1)
 (string)  -co16 input colormap16 file (valid if BMP flag = 1)

Optional Parameters:
 (string)  -mask mask file (valid pixels)
 (int)     -mem  Allocated memory for blocksize determination (in Mb)
 (string)  -errf memory error file
 (noarg)   -help displays this message
 (noarg)   -data displays the help concerning Data Format parameter
```

Usage:

Polarimetric Input-Output Data Format

```
 S2    input : quad-pol S2      output parameters derived from C3 or T3
 C3    input : covariance C3    output parameters derived from covariance
C3
 C4    input : covariance C4    output parameters derived from covariance
C4
 T3    input : coherency T3     output parameters derived from coherency
T3
 T4    input : coherency T4     output parameters derived from coherency
T4
```

---

wishart_h_a_alpha_classifierSPPC2.exe

Parameters:

Parameters:

```
 (string)  -id   input directory
 (string)  -od   output directory
 (string)  -iodf input-output data format
 (int)     -nwr  Nwin Row
 (int)     -nwc  Nwin Col
 (int)     -ofr  Offset Row
 (int)     -ofc  Offset Col
 (int)     -fnr  Final Number of Row
 (int)     -fnc  Final Number of Col
 (string)  -hf   input entropy file
 (string)  -af   input anisotropy file
 (string)  -alf  input alpha file
 (int)     -nit  maximum interation number
 (float)   -pct  maximum of pixel switching classes
 (int)     -bmp  BMP flag (0/1)
 (string)  -co8  input colormap8 file (valid if BMP flag = 1)
 (string)  -co16 input colormap16 file (valid if BMP flag = 1)

Optional Parameters:
 (string)  -mask mask file (valid pixels)
 (int)     -mem  Allocated memory for blocksize determination (in Mb)
 (string)  -errf memory error file
 (noarg)   -help displays this message
 (noarg)   -data displays the help concerning Data Format parameter
```

Usage:

Polarimetric Input-Output Data Format

```
 SPP   input : dual-pol SPP     output parameters derived from C3
 C2    input : covariance C2    output parameters derived from covariance
C2
```

---

wishart_supervised_classifier.exe

Parameters:

```
 (string)  -id   input directory
 (string)  -od   output directory
 (string)  -iodf input-output data format
 (string)  -af   input area file
 (int)     -nwr  Nwin Row
 (int)     -nwc  Nwin Col
 (int)     -ofr  Offset Row
 (int)     -ofc  Offset Col
 (int)     -fnr  Final Number of Row
 (int)     -fnc  Final Number of Col
 (string)  -cf   input cluster file
 (int)     -bmp  BMP flag (0/1)
 (string)  -col  input colormap file (valid if BMP flag = 1)
 (int)     -rej  rejection mode flag (0/1)
 (float)   -std  distance std value for rejection
```

Optional Parameters:

```
 (string)  -mask mask file (valid pixels)
 (int)     -mem  Allocated memory for blocksize determination (in Mb)
 (string)  -errf memory error file
 (noarg)   -help displays this message
 (noarg)   -data displays the help concerning Data Format parameter
```

Usage:

Polarimetric Input-Output Data Format

```
 S2    input : quad-pol S2      output parameters derived from C3 or T3
 C2    input : covariance C2    output parameters derived from covariance
C2
 C3    input : covariance C3    output parameters derived from covariance
C3
 C4    input : covariance C4    output parameters derived from covariance
C4
 T3    input : coherency T3     output parameters derived from coherency
T3
 T4    input : coherency T4     output parameters derived from coherency
T4
 SPP   input : dual-pol SPP     output parameters derived from C3
 IPP   input : intensities IPP  output parameters derived from IPP
```

---

wishart_training_set_sampler.exe

Parameters:
```
 (string)  -id   input directory
 (string)  -od   output directory
 (string)  -iodf input-output data format
 (string)  -af   input area file
 (string)  -cf   output cluster file
 (int)     -bmp  BMP flag (0/1)
 (string)  -col  input colormap file (valid if BMP flag = 1)
```

Optional Parameters:
```
 (string)  -mask mask file (valid pixels)
 (int)     -mem  Allocated memory for blocksize determination (in Mb)
 (string)  -errf memory error file
 (noarg)   -help displays this message
 (noarg)   -data displays the help concerning Data Format parameter
```

Usage:

Polarimetric Input-Output Data Format

```
 S2    input : quad-pol S2      output parameters derived from C3 or T3
 C2    input : covariance C2    output parameters derived from covariance
C2
 C3    input : covariance C3    output parameters derived from covariance
C3
 C4    input : covariance C4    output parameters derived from covariance
C4
 T3    input : coherency T3     output parameters derived from coherency
T3
 T4    input : coherency T4     output parameters derived from coherency
T4
 SPP   input : dual-pol SPP     output parameters derived from C3
 IPP   input : intensities IPP  output parameters derived from IPP
```

---

yamaguchi_3components_decomposition.exe

Parameters:
```
 (string)  -id   input directory
 (string)  -od   output directory
 (string)  -iodf input-output data format
 (int)     -nwr  Nwin Row
 (int)     -nwc  Nwin Col
 (int)     -ofr  Offset Row
 (int)     -ofc  Offset Col
 (int)     -fnr  Final Number of Row
 (int)     -fnc  Final Number of Col
```

Optional Parameters:
```
 (string)  -mask mask file (valid pixels)
 (int)     -mem  Allocated memory for blocksize determination (in Mb)
 (string)  -errf memory error file
 (noarg)   -help displays this message
```

```
 (noarg)    -data displays the help concerning Data Format parameter
```

Usage:

Polarimetric Input-Output Data Format

```
 S2     input : quad-pol S2      output parameters derived from C3 or T3
 C3     input : covariance C3    output parameters derived from covariance
C3
 T3     input : coherency T3     output parameters derived from coherency
T3
```

---

yamaguchi_3components_reconstruction.exe

Parameters:

```
 (string)   -id   input directory
 (string)   -od1  output directory - ground
 (string)   -od2  output directory - double
 (string)   -od3  output directory - volume
 (string)   -iodf input-output data format
 (int)      -nwr  Nwin Row
 (int)      -nwc  Nwin Col
 (int)      -ofr  Offset Row
 (int)      -ofc  Offset Col
 (int)      -fnr  Final Number of Row
 (int)      -fnc  Final Number of Col
```

Optional Parameters:

```
 (string)   -mask mask file (valid pixels)
 (int)      -mem  Allocated memory for blocksize determination (in Mb)
 (string)   -errf memory error file
 (noarg)    -help displays this message
 (noarg)    -data displays the help concerning Data Format parameter
```

Usage:

Polarimetric Input-Output Data Format

```
 S2     input : quad-pol S2      output parameters derived from C3 or T3
 C3     input : covariance C3    output parameters derived from covariance
C3
 T3     input : coherency T3     output parameters derived from coherency
T3
```

---

yamaguchi_4components_decomposition.exe

Parameters:

```
 (string)   -id   input directory
 (string)   -od   output directory
 (string)   -iodf input-output data format
 (string)   -mod  decomposition mode (Y4O, Y4R, S4R)
 (int)      -nwr  Nwin Row
```

```
 (int)     -nwc  Nwin Col
 (int)     -ofr  Offset Row
 (int)     -ofc  Offset Col
 (int)     -fnr  Final Number of Row
 (int)     -fnc  Final Number of Col
```

Optional Parameters:

```
 (string)  -mask mask file (valid pixels)
 (int)     -mem  Allocated memory for blocksize determination (in Mb)
 (string)  -errf memory error file
 (noarg)   -help displays this message
 (noarg)   -data displays the help concerning Data Format parameter
```

Usage:

Polarimetric Input-Output Data Format

```
 S2    input : quad-pol S2      output parameters derived from C3 or T3
 C3    input : covariance C3    output parameters derived from covariance
C3
 T3    input : coherency T3     output parameters derived from coherency
T3
```

---

zdr_elements.exe

Parameters:

```
 (string)  -id   input directory
 (string)  -od   output directory
 (string)  -iodf input-output data format
 (int)     -nwr  Nwin Row
 (int)     -nwc  Nwin Col
 (int)     -ofr  Offset Row
 (int)     -ofc  Offset Col
 (int)     -fnr  Final Number of Row
 (int)     -fnc  Final Number of Col
 (string)  -rat  Ratio Element (lin, db)
```

Optional Parameters:

```
 (string)  -mask mask file (valid pixels)
 (int)     -mem  Allocated memory for blocksize determination (in Mb)
 (string)  -errf memory error file
 (noarg)   -help displays this message
 (noarg)   -data displays the help concerning Data Format parameter
```

Usage:

Polarimetric Input-Output Data Format

```
 S2    input : quad-pol S2      output parameters derived from C3 or T3
 C2    input : covariance C2    output parameters derived from covariance
C2
 C3    input : covariance C3    output parameters derived from covariance
C3
```

```
 C4    input : covariance C4    output parameters derived from covariance
C4
 T3    input : coherency T3     output parameters derived from coherency
T3
 T4    input : coherency T4     output parameters derived from coherency
T4
 SPP   input : dual-pol SPP     output parameters derived from C3
 IPP   input : intensities IPP  output parameters derived from IPP
```