

an_yang_filter.exe

```
Parameters:
 (string) -id
                input directory
         -od output directory
 (string)
 (string) -iodf input-output data format
 (int)
          -nwr Nwin Row
 (int)
          -nwc Nwin Col
          -swr Swin Row
 (int)
 (int)
          -swc Swin Col
 (int)
          -nlk Nlook
                K parameter
          -k
 (float)
           -ofr Offset Row
 (int)
           -ofc Offset Col
 (int)
           -fnr Final Number of Row
 (int)
          -fnc Final Number of Col
 (int)
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
          -data displays the help concerning Data Format parameter
 (noarg)
```

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
C2
           input : covariance C2 output : covariance C2
C3
           input : covariance C3
                                 output : covariance C3
                                   output : covariance C4
           input : covariance C4
C4
Т2
           input : coherency T2
                                   output : coherency T2
Т3
           input : coherency T3
                                   output : coherency T3
           input : coherency T4
                                   output : coherency T4
Т4
                                   output : dual-pol SPP
           input : dual-pol SPP
SPP
IPP
           input : intensities IPP output : intensities IPP
```

boxcar_filter.exe

Parameters:

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

```
-ofr Offset Row
 (int)
           -ofc Offset Col
 (int)
           -fnr Final Number of Row
 (int)
           -fnc Final Number of Col
 (int)
Optional Parameters:
 (string) -mask mask file (valid pixels)
          -mem Allocated memory for blocksize determination (in Mb)
 (int)
 (string) -errf memory error file
 (noarg)
          -help displays this message
          -data displays the help concerning Data Format parameter
 (noarq)
```

Polarimetric Input-Output Data Format

```
S2C3
          input : quad-pol S2
                                  output : covariance C3
S2C4
                                  output : covariance C4
          input : quad-pol S2
          input : quad-pol S2
S2T3
                                  output : coherency T3
S2T4
          input : quad-pol S2
                                 output : coherency T4
C2
          input : covariance C2 output : covariance C2
C3
          input : covariance C3 output : covariance C3
C4
          input : covariance C4 output : covariance C4
T2
          input : coherency T2 output : coherency T2
Т3
          input : coherency T3 output : coherency T3
          input : coherency T4
                                 output : coherency T4
T4
          input : dual-pol SPP output : dual-pol SPP
SPP
IPP
          input : intensities IPP output : intensities IPP
```

boxcar_filter_dual.exe

```
Parameters:
if iodf = S2T6
 (string) -idm input master directory
 (string) -ids input slave directory
if iodf = T6
 (string) -id input master-slave directory
 (string) -od output directory
          -iodf input-output data format
 (string)
          -nwr Nwin Row
 (int)
 (int)
          -nwc Nwin Col
          -ofr Offset Row
 (int)
 (int)
          -ofc Offset Col
          -fnr Final Number of Row
 (int)
 (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
          -data displays the help concerning Data Format parameter
 (noarg)
```

Usage:

Polarimetric Input-Output Data Format

```
S2T6 input : 2*quad-pol S2 output : coherency T6
T6 input : coherency T6 output : coherency T6
```

boxcar_filter_dual_PP.exe

```
Parameters:
 if iodf = SPPT4
 (string) -idm input master directory
 (string) -ids input slave directory
 if iodf = T4
 (string) -id input master-slave directory
 (string) -od output directory
 (string) -iodf input-output data format
 (int)
          -nwr Nwin Row
          -nwc Nwin Col
 (int)
          -ofr Offset Row
 (int)
          -ofc Offset Col
 (int)
         -fnr Final Number of Row
 (int)
          -fnc Final Number of Col
 (int)
Optional Parameters:
 (string) -mask mask file (valid pixels)
          -mem Allocated memory for blocksize determination (in Mb)
 (int)
 (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

boxcar_filter_edge.exe

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

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

Polarimetric Input-Output Data Format

```
S2C3
           input : quad-pol S2
                                     output : covariance C3
           input : quad-pol S2
S2C4
                                    output : covariance C4
                                   output : coherency T3
           input : quad-pol S2
S2T3
S2T4
           input : quad-pol S2
                                   output : coherency T4
C2
           input : covariance C2 output : covariance C2
C3
           input : covariance C3 output : covariance C3
C4
           input : covariance C4 output : covariance C4
Т2
           input : coherency T2
                                    output : coherency T2
           input : coherency T3
                                    output : coherency T3
Т3
           input: interest T4 output: coherency T4 output: dual-pol SPP output: dual-pol SPP
T4
SPP
IPP
           input : intensities IPP output : intensities IPP
```

gaussian_filter.exe

```
Parameters:
```

```
(string) -id input directory
(string) -od output directory
(string) -iodf input-output data format
         -nwr Nwin Row
(int)
         -nwc Nwin Col
(int)
(int)
         -ofr Offset Row
         -ofc Offset Col
(int)
         -fnr Final Number of Row
(int)
(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
         -data displays the help concerning Data Format parameter
(noarg)
```

Usage:

```
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
C2
          input : covariance C2 output : covariance C2
          input : covariance C3 output : covariance C3
C3
C4
          input : covariance C4 output : covariance C4
T2
          input : coherency T2
                                 output : coherency T2
```

```
T3 input : coherency T3 output : coherency T3
T4 input : coherency T4 output : coherency T4
SPP input : dual-pol SPP output : dual-pol SPP
IPP input : intensities IPP output : intensities IPP
```

gaussian_filter_dual.exe

Parameters:

```
if iodf = S2T6
 (string) -idm input master directory
 (string) -ids input slave directory
 if iodf = T6
 (string) -id input master-slave directory
 (string) -od
                output directory
 (string) -iodf input-output data format
 (int)
          -nwr Nwin Row
          -nwc Nwin Col
 (int)
          -ofr Offset Row
 (int)
          -ofc Offset Col
 (int)
          -fnr Final Number of Row
 (int)
          -fnc Final Number of Col
 (int)
Optional Parameters:
 (string) -mask mask file (valid pixels)
          -mem Allocated memory for blocksize determination (in Mb)
 (int)
 (string) -errf memory error file
 (noarg) -help displays this message
          -data displays the help concerning Data Format parameter
 (noarq)
```

Usage:

Polarimetric Input-Output Data Format

```
S2T6 input : 2*quad-pol S2 output : coherency T6
T6 input : coherency T6 output : coherency T6
```

gaussian_filter_dual_PP.exe

```
Parameters:
 if iodf = SPPT4
 (string) -idm input master directory
 (string) -ids input slave directory
 if iodf = T4
 (string) -id input master-slave directory
 (string) -od output directory
 (string) -iodf input-output data format
 (int)
          -nwr Nwin Row
          -nwc Nwin Col
 (int)
          -ofr Offset Row
 (int)
          -ofc Offset Col
 (int)
          -fnr Final Number of Row
 (int)
          -fnc Final Number of Col
 (int)
```

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

```
SPPT4 input : 2*dual-pol SPP output : coherency T4
T4 input : coherency T4 output : coherency T4
```

generalized mean shift filter.exe

```
Parameters:
 (string) -id
                  input directory
 (string) -od
                  output directory
 (string) -iodf input-output data format
          -nlk
                  Nlook
 (int)
 (int)
           -nw
                  Nwin
                  Center pixel estimating window
 (int)
          -ncw
          -ct Convergence Threshold, usually set 0.001-0.1
 (float)
          -sig sigma: 5/6/7/8/9
 (float)
          -sk space kernel flag
-rk range kernel flag
-ce Center pixel estimation method
 (int)
 (int)
 (int)
          -gam gamma in gauss kernel
 (float)
          -ls
                 space limit
 (float)
 (float)
          -lr
                 range limit
          -ofr Offset Row
 (int)
          -ofc Offset Col
 (int)
          -fnr Final Number of Row
 (int)
          -fnc Final Number of Col
 (int)
Optional Parameters:
 (string) -mask mask file (valid pixels)
           -help displays this message
 (noarg)
          -data displays the help concerning Data Format parameter
 (noarq)
```

Usage:

```
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
           input : covariance C2
                                  output : covariance C2
C2
C3
           input : covariance C3
                                  output : covariance C3
C4
           input : covariance C4
                                  output : covariance C4
           input : coherency T2
                                  output : coherency T2
T2
Т3
           input : coherency T3
                                  output : coherency T3
```

```
T4 input : coherency T4 output : coherency T4 SPP input : dual-pol SPP output : dual-pol SPP
```

geometrical perturbation filter.exe

```
Parameters:
 (string) -id
                input directory
 (string) -od output directory
 (string) -iodf input-output data format
 (float) -thr Detection threshold
 (int)
          -nwrt Nwin Target Row
 (int)
          -nwct Nwin Target Col
          -nwrc Nwin Clutter Row
 (int)
          -nwcc Nwin Clutter Col
 (int)
           -ofr Offset Row
 (int)
          -ofc Offset Col
 (int)
          -fnr Final Number of Row
 (int)
          -fnc Final Number of Col
 (int)
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
          -data displays the help concerning Data Format parameter
 (noarg)
```

Usage:

Polarimetric Input-Output Data Format

```
S2
           input : quad-pol S2
                                  output : quad-pol S2
C2
           input : covariance C2
                                  output : covariance C2
          input : covariance C3 output : covariance C3
C3
C4
          input : covariance C4 output : covariance C4
T2
          input : coherency T2 output : coherency T2
          input : coherency T3 output : coherency T3
Т3
          input : coherency T4 output : coherency T4
Т4
          input : dual-pol SPP output : dual-pol SPP
SPP
```

lee_refined_filter.exe

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

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
```

Polarimetric Input-Output Data Format

```
S2C3
          input : quad-pol S2
                               output : covariance C3
S2C4
         input : quad-pol S2
                              output : covariance C4
         input : quad-pol S2
                              output : coherency T3
S2T3
S2T4
         input : quad-pol S2
                              output : coherency T4
C2
         input : covariance C2 output : covariance C2
C3
         input : covariance C3 output : covariance C3
C4
         input : covariance C4 output : covariance C4
                               output : coherency T2
Т2
         input : coherency T2
         input : coherency T3
Т3
                               output : coherency T3
T4
SPP
IPP
         input : intensities IPP output : intensities IPP
```

lee_refined_filter_dual.exe

Parameters:

```
if iodf = S2T6
 (string) -idm input master directory
 (string) -ids input slave directory
 if iodf = T6
 (string) -id input master-slave directory
 (string) -od output directory
 (string) -iodf input-output data format
          -nw Nwin Row and Col
 (int)
 (int)
          -nlk Nlook
          -ofr Offset Row
 (int)
          -ofc Offset Col
 (int)
          -fnr Final Number of Row
 (int)
          -fnc Final Number of Col
 (int)
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
          -data displays the help concerning Data Format parameter
 (noarg)
```

Usage:

```
S2T6 input : 2*quad-pol S2 output : coherency T6
T6 input : coherency T6 output : coherency T6
```

lee_refined_filter_dual_PP.exe

```
Parameters:
 if iodf = SPPT4
 (string) -idm input master directory
 (string) -ids input slave directory
 if iodf = T4
 (string) -id input master-slave directory
 (string) -od output directory
 (string) -iodf input-output data format
          -nw Nwin Row and Col
 (int)
          -nlk Nlook
 (int)
          -ofr Offset Row
 (int)
          -ofc Offset Col
 (int)
           -fnr Final Number of Row
 (int)
 (int)
          -fnc Final Number of Col
Optional Parameters:
 (string) -mask mask file (valid pixels)
         -mem Allocated memory for blocksize determination (in Mb)
 (int)
 (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
            input : 2*dual-pol SPP output : coherency T4
 SPPT4
Т4
            input : coherency T4
                                   output : coherency T4
```

lee_scattering_model_based_filter.exe

Parameters:

```
(string) -id input directory
 (string) -od output directory
 (string) -icf input classification file
 (string) -iodf input-output data format
 (string) -typ speckle filter type : box / mmse
          -nc Nunmber of final cluster per scattering type
 (int)
          -nw Nwin Row and Col
 (int)
          -nlk Nlook
 (int)
          -ofr Offset Row
 (int)
          -ofc Offset Col
 (int)
          -fnr Final Number of Row
 (int)
          -fnc Final Number of Col
 (int)
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
          -data displays the help concerning Data Format parameter
 (noarg)
```

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
```

lee_sigma_filter.exe

```
Parameters:
 (string) -id
                input directory
 (string) -od output directory
 (string) -iodf input-output data format
 (int)
          -nlk Nlook
 (int)
          -sig Sigma
          -nwe Nwin Row and Col - Environnement
 (int)
 (int)
          -nwt Nwin Row and Col - Target
           -ofr Offset Row
 (int)
           -ofc Offset Col
 (int)
           -fnr Final Number of Row
 (int)
           -fnc Final Number of Col
 (int)
Optional Parameters:
 (string) -mask mask file (valid pixels)
          -mem Allocated memory for blocksize determination (in Mb)
 (int)
 (string) -errf memory error file
           -help displays this message
 (noarg)
 (noarq)
          -data displays the help concerning Data Format parameter
```

Usage:

Polarimetric Input-Output Data Format

```
S2C3
           input : quad-pol S2
                                   output : covariance C3
           input : quad-pol S2
                                   output : covariance C4
S2C4
S2T3
           input : quad-pol S2
                                   output : coherency T3
S2T4
           input : quad-pol S2
                                   output : coherency T4
C2
           input : covariance C2
                                   output : covariance C2
C3
           input : covariance C3
                                   output : covariance C3
C4
           input : covariance C4
                                   output : covariance C4
                                   output : coherency T2
Т2
           input : coherency T2
           input : coherency T3
                                   output : coherency T3
Т3
           input : coherency T4
                                   output : coherency T4
T4
SPP
           input : dual-pol SPP
                                   output : dual-pol SPP
```

lopez_filter.exe

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

```
(string) -od output directory
 (string) -iodf input-output data format
 (int)
          -nwr Nwin Row
          -nwc Nwin Col
 (int)
 (int)
          -ofr Offset Row
          -ofc Offset Col
 (int)
          -fnr Final Number of Row
 (int)
          -fnc Final Number of Col
 (int)
          -nit Number of Iterations
 (int)
          -rho Improved Rho estimation (no 0 - yes 1)
 (int)
          -fcw Fc Weight
 (float)
 (float)
          -str Strq
Optional Parameters:
         -mem Allocated memory for blocksize determination (in Mb)
 (int)
 (string) -errf memory error file
 (noarg) -help displays this message
 (noarg) -data displays the help concerning Data Format parameter
```

Polarimetric Input-Output Data Format

```
S2C3
        input : quad-pol S2
                           output : covariance C3
        input : quad-pol S2
                          output : covariance C4
S2C4
        S2T3
S2T4
C2
C3
        input : covariance C3 output : covariance C3
        input : covariance C4 output : covariance C4
C4
T2
        Т3
        input : coherency T3 output : coherency T3
        input : coherency T4 output : coherency T4
T4
        input : dual-pol SPP
                          output : dual-pol SPP
SPP
```

nl_mean_filter.exe

```
Parameters:
 (string) -id input directory
 (string) -od output directory
 (string) -iodf input-output data format
         -nws Nwin Row and Col
 (int)
          -nwp Nwin Row and Col
 (int)
          -nlk Nlook
 (int)
               Threshold Coefficient
 (float)
          -k
          -ofr Offset Row
 (int)
          -ofc Offset Col
 (int)
          -fnr Final Number of Row
 (int)
          -fnc Final Number of Col
 (int)
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
```

Polarimetric Input-Output Data Format

S2C3 C3	input :	quad-pol S2	output	parameters	derived	from	covariance
S2C4 C4	input :	quad-pol S2	output	parameters	derived	from	covariance
S2T3 T3	input :	quad-pol S2	output	parameters	derived	from	coherency
S2T4 T4	input :	quad-pol S2	output	parameters	derived	from	coherency
C2 C2	input :	covariance C2	output	parameters	derived	from	covariance
C3	input :	covariance C3	output	parameters	derived	from	covariance
C4 C4	input :	covariance C4	output	parameters	derived	from	covariance
T2 T2	input :	coherency T2	output	parameters	derived	from	coherency
T3 T3	input :	coherency T3	output	parameters	derived	from	coherency
Т4 Т4	input :	coherency T4	output	parameters	derived	from	coherency
SPP	input :	dual-pol SPP	output	parameters	derived	from	C3

nl_mean_pre_filter.exe

```
Parameters:
```

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

```
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:

```
S2C3 input : quad-pol S2 output parameters derived from covariance
C3
```

```
S2C4 input : quad-pol S2
                                output parameters derived from covariance
C4
S2T3
      input : quad-pol S2
                                output parameters derived from coherency
Т3
S2T4 input : quad-pol S2
                                output parameters derived from coherency
Т4
       input : covariance C2
                                output parameters derived from covariance
C2
C2
C3
       input : covariance C3
                                output parameters derived from covariance
C3
C4
       input : covariance C4
                                output parameters derived from covariance
C4
Т2
       input : coherency T2
                                output parameters derived from coherency
T2
Т3
       input : coherency T3
                                output parameters derived from coherency
Т3
T4
       input : coherency T4
                                output parameters derived from coherency
Т4
       input : dual-pol SPP
                                output parameters derived from C3
SPP
```

nl_mean_sigma_filter.exe

```
Parameters:
```

(string) -id input directory (string) -od output directory (string) -iodf input-output data format (int) -nws Nwin Row and Col -nwp Nwin Row and Col (int) -nlk Nlook (int) Threshold Coefficient $-\mathbf{k}$ (float) -ofr Offset Row (int) -ofc Offset Col (int) (int) -fnr Final Number of Row -fnc Final Number of Col (int)

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:

S2C3	input	:	quad-pol	S2	output	parameters	derived	from	covariance
C3									
S2C4	input	:	quad-pol	S2	output	parameters	derived	from	covariance
C4									
S2T3	input	:	quad-pol	S2	output	parameters	derived	from	coherency
Т3									
S2T4	input	:	quad-pol	S2	output	parameters	derived	from	coherency
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
       input : coherency T2
                               output parameters derived from coherency
T2
T2
Т3
       input : coherency T3
                               output parameters derived from coherency
Т3
       input : coherency T4
                               output parameters derived from coherency
T4
T4
SPP
      input : dual-pol SPP
                               output parameters derived from C3
```

nl_mean_sigma_pre_filter.exe

```
Parameters:
```

```
(string) -id input directory
 (string) -od output directory
 (string) -iodf input-output data format
 (int)
          -nw Nwin Row and Col - Analysis
          -nwt Nwin Row and Col - Target
 (int)
          -nlk Nlook
 (int)
          -ofr Offset Row
 (int)
 (int)
          -ofc Offset Col
          -fnr Final Number of Row
 (int)
 (int)
          -fnc Final Number of Col
Optional Parameters:
```

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

Usage:

S2C3	input :	quad-pol S2	output	parameters	derived	from	covariance
C3							
S2C4	input :	quad-pol S2	output	parameters	derived	from	covariance
C4							
S2T3	input :	quad-pol S2	output	parameters	derived	from	coherency
Т3							
S2T4	input :	quad-pol S2	output	parameters	derived	from	coherency
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							
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
```

PWF_filter.exe

```
Parameters:
 (string) -id input directory
 (string) -od output directory
 (string) -iodf input-output data format
          -nwr Nwin Row
 (int)
          -nwc Nwin Col
 (int)
          -ofr Offset Row
 (int)
          -ofc Offset Col
 (int)
 (int)
          -fnr Final Number of Row
          -fnc Final Number of Col
 (int)
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
          -data displays the help concerning Data Format parameter
 (noarg)
```

Usage:

Polarimetric Input-Output Data Format

```
input : quad-pol S2 output : quad-pol S2
c2 input : covariance C2 output : covariance C2
c3 input : covariance C3 output : covariance C3
c4 input : covariance C4 output : covariance C4
c5 input : coherency T2 output : coherency T2
c6 input : coherency T3 output : coherency T3
c6 input : coherency T4 output : coherency T4
```

sirv_model_estimation.exe

Parameters: (string) -id input directory (string) -od output directory (string) -iodf input-output data format -nwr Nwin Row (int) -nwc Nwin Col (int) (int) -ofr Offset Row -ofc Offset Col (int) -fnr Final Number of Row (int) -fnc Final Number of Col (int) -norm Normalisation flag (1/0)

Optional Parameters:

```
(string) -mask mask file (valid pixels)
(noarg) -help displays this message
(noarg) -data displays the help concerning Data Format parameter
```

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
```

skou skriver restoration.exe

```
Parameters:
```

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

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:

```
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
C2
           input : covariance C2
                                   output : covariance C2
           input : covariance C3
                                  output : covariance C3
C3
C4
           input : covariance C4
                                  output : covariance C4
Т2
           input : coherency T2
                                  output : coherency T2
Т3
           input : coherency T3 output : coherency T3
Т4
           input : coherency T4
                                 output : coherency T4
SPP
           input : dual-pol SPP output : dual-pol SPP
```

system_noise_filter.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
```

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:

```
C4 input : covariance C4 output : covariance C4
T4 input : coherency T4 output : coherency T4
```