

**Original image**



**Fig. Aaa    Repository File 2**

**Contrast stretched image**



**Fig. AAb**

**RGB to gray (contrast stretched)**



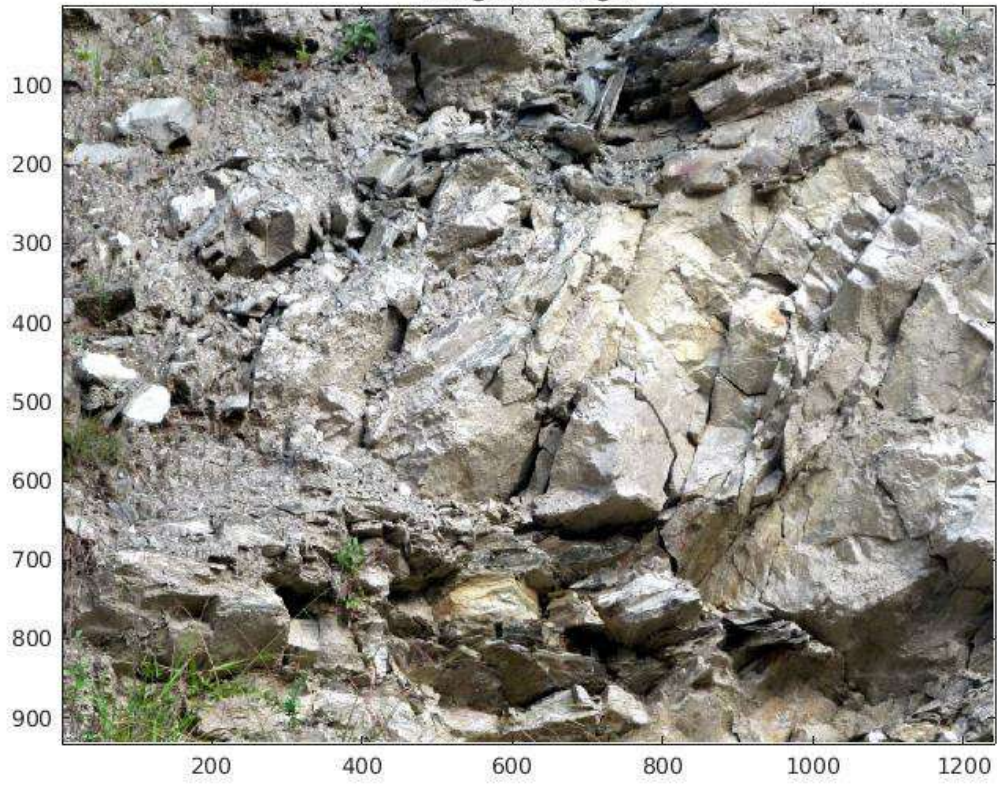
**Fig. Aac**

**Segmented cracks**

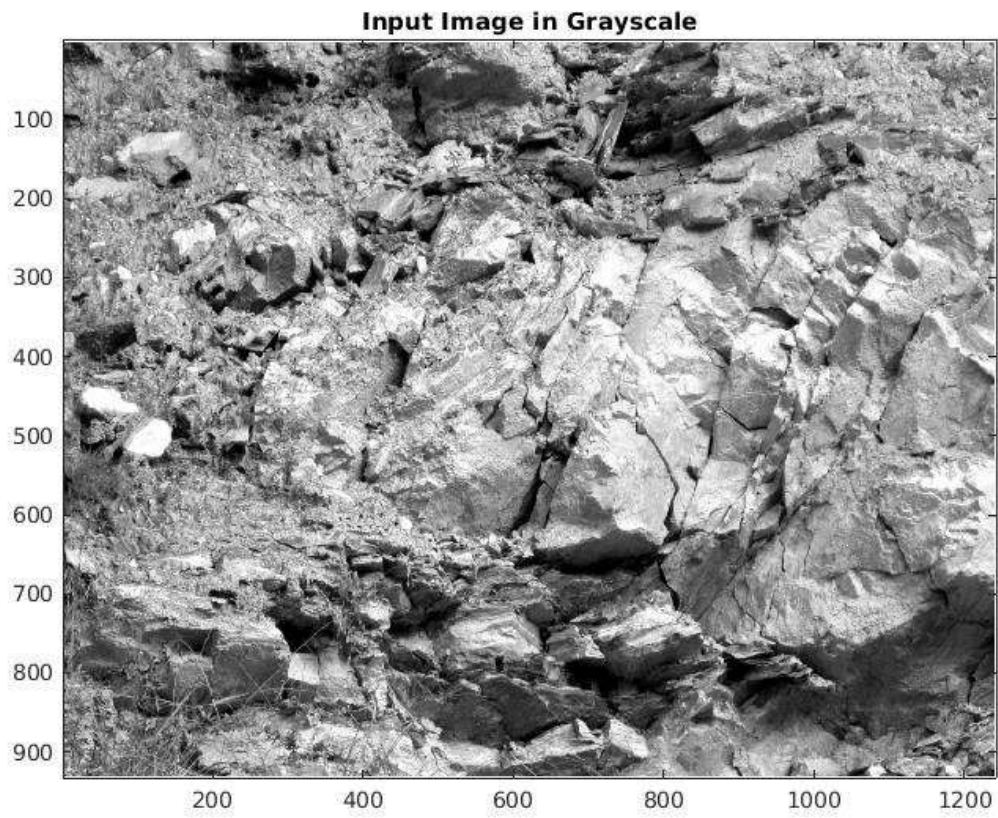


**Fig. Aad**

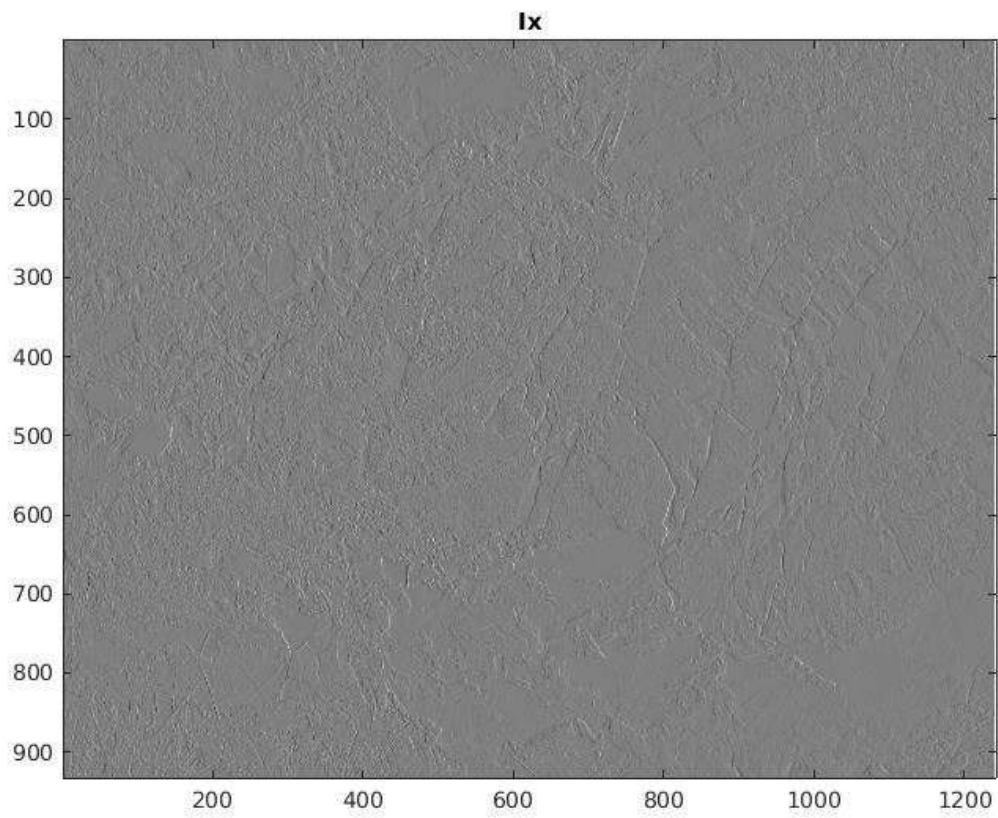
**Original Image**



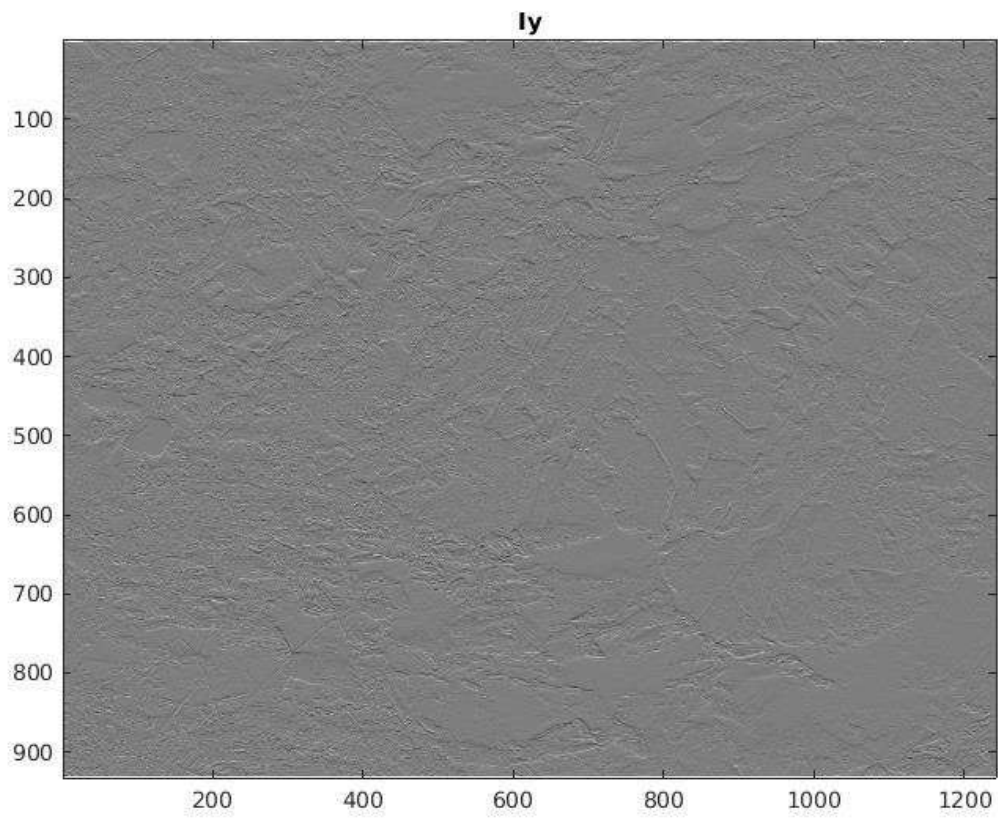
**Fig. Baa**



**Fig. Bab**



**Fig. Bac**



**Fig. Bad**



**Original Image**



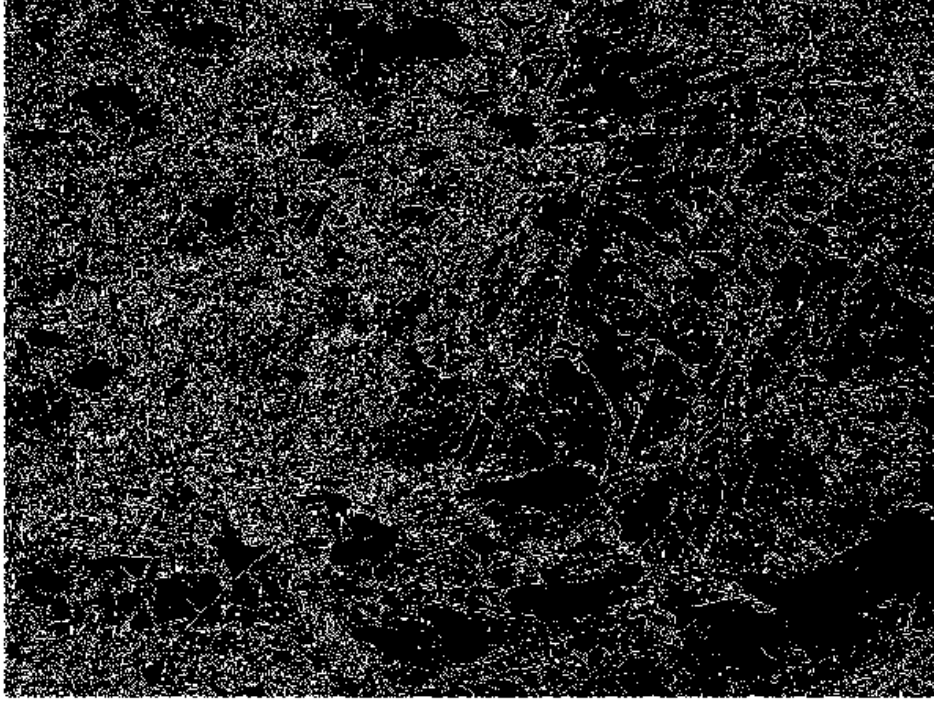
**Fig. Caa**

**Gray Image**



**Fig. Cab**

**Binary Gradient Mask**



**Fig. Cac**

**Dilated Gradient Mask**



**Fig. Cad**

**Bilateral Filtered Image**



**Fig. Cae**

**Original Image**



**Fig. Daa**

**Gray Image**



**Fig. Dab**

Sobel

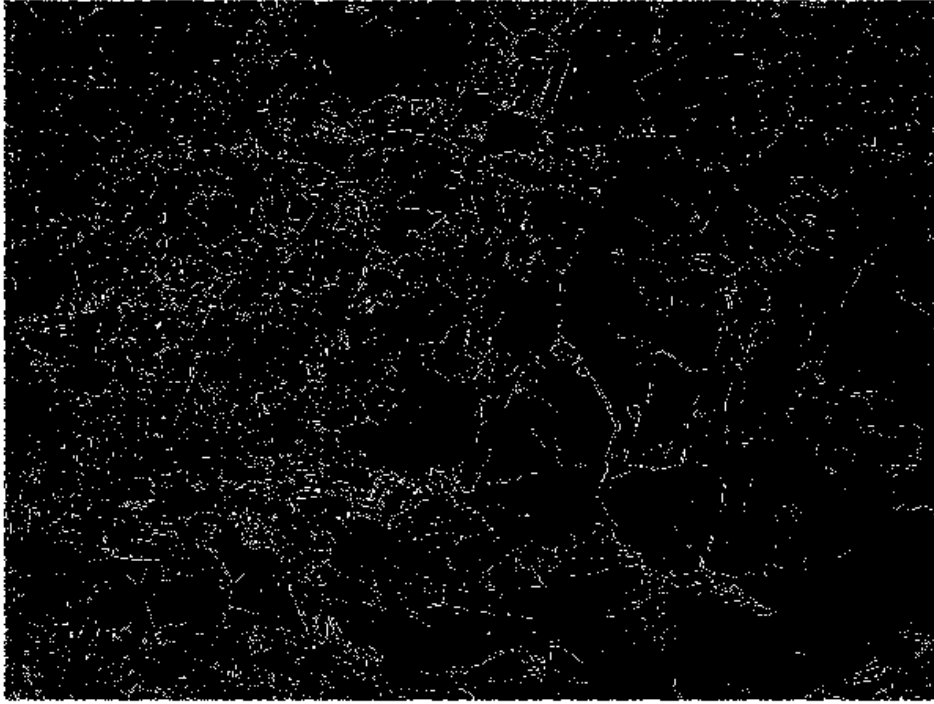


Fig. Dac



Canny

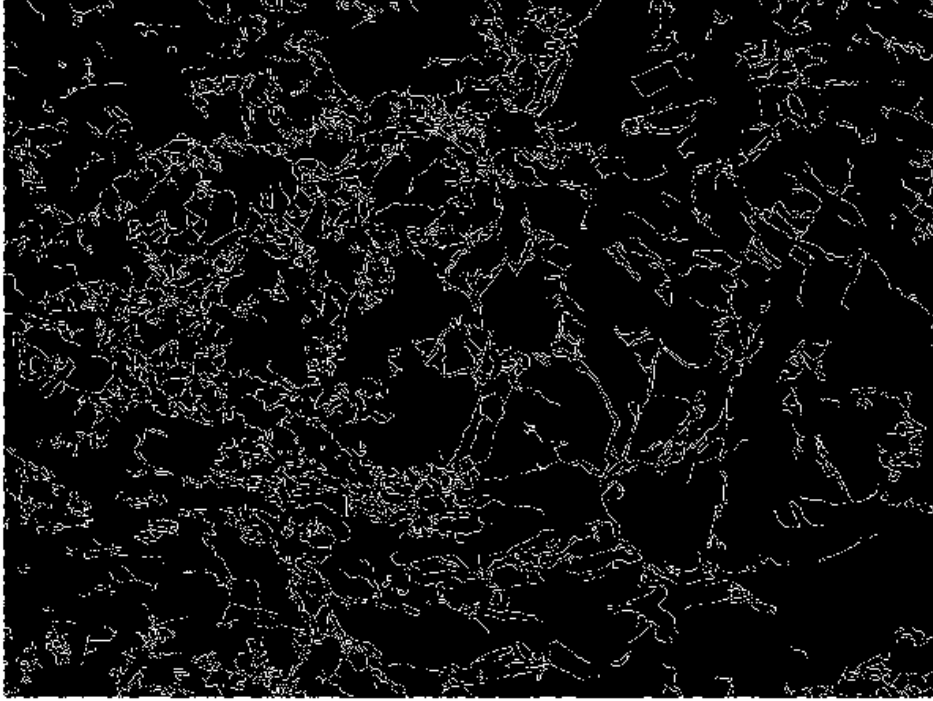


Fig. Dad

Prewitt

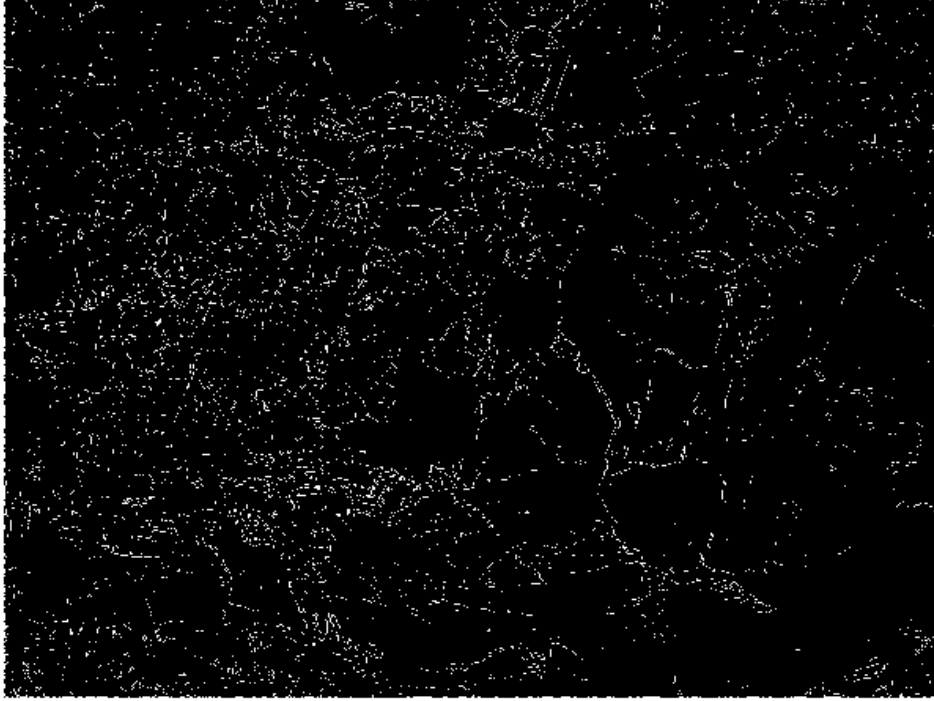
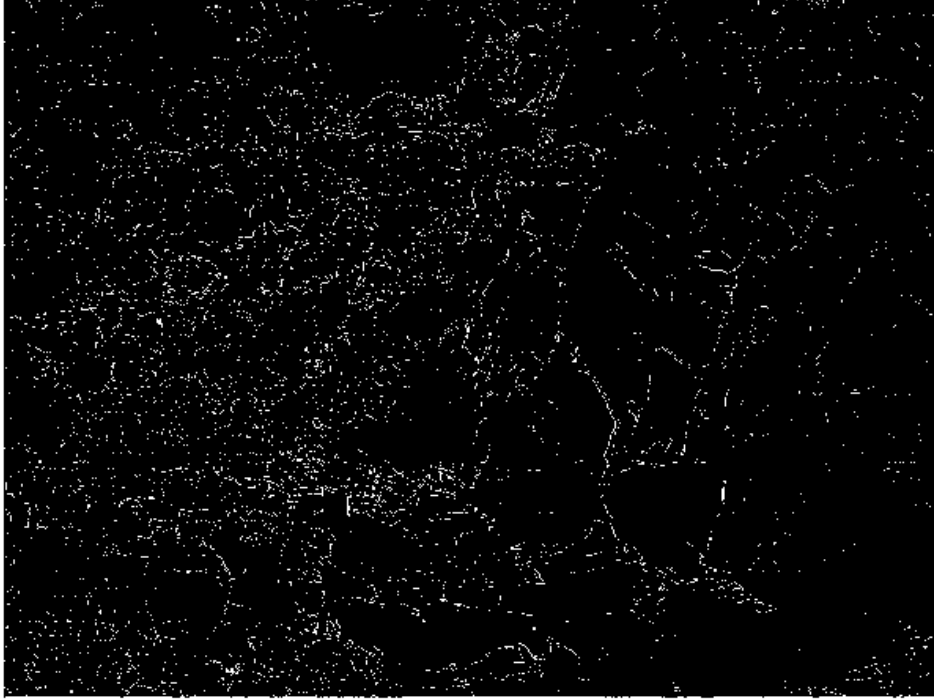


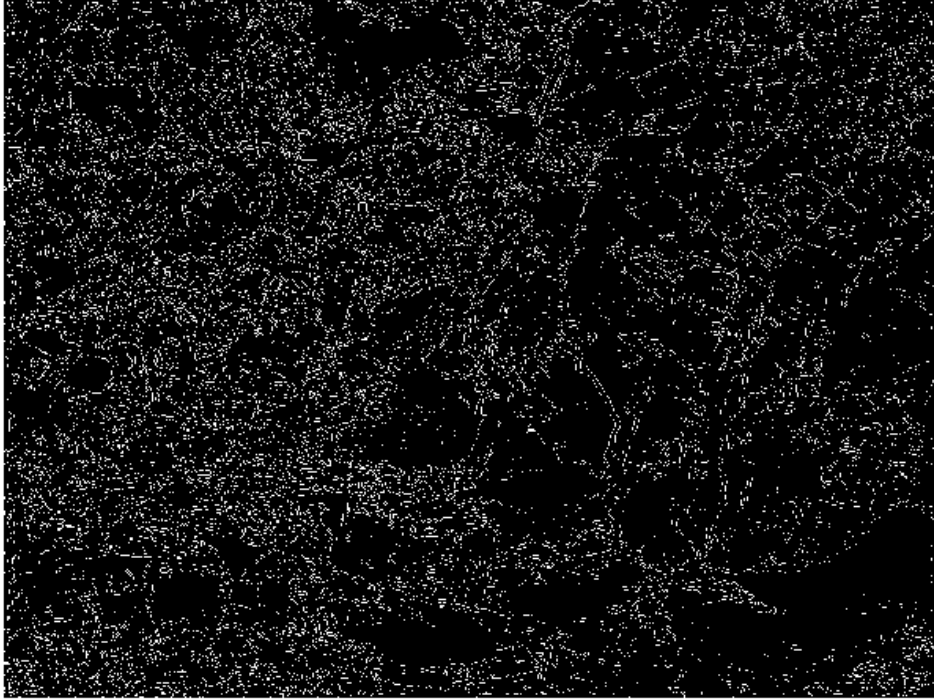
Fig. Dae

**Roberts**



**Fig. Daf**

**LoG**



**Fig. Dag**

Zerocross

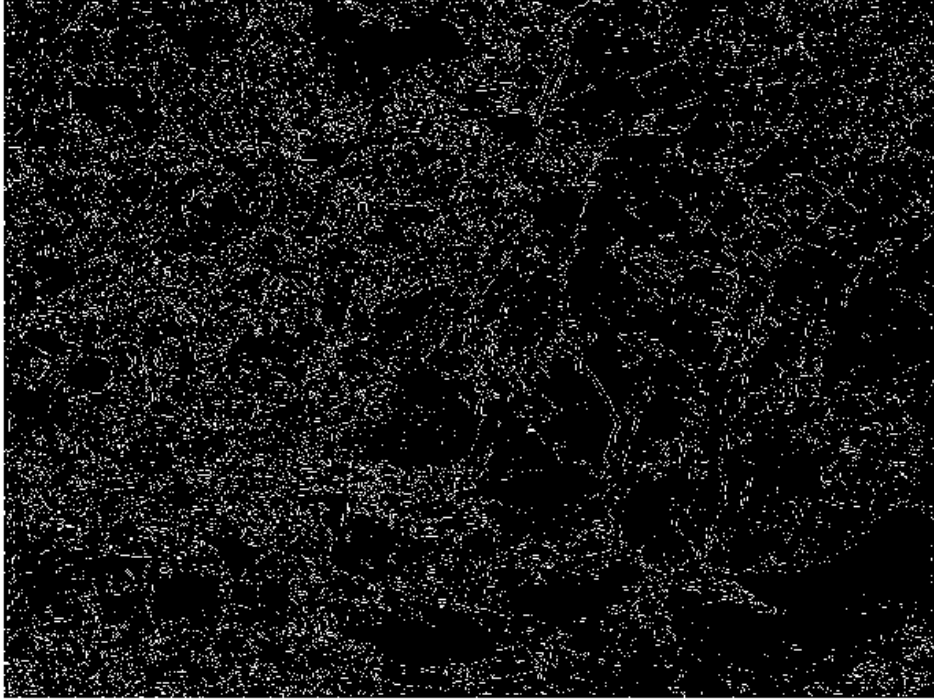


Fig. Dah

**Original image**



**Fig. Aba**

**Contrast stretched image**



**Fig. Abb**

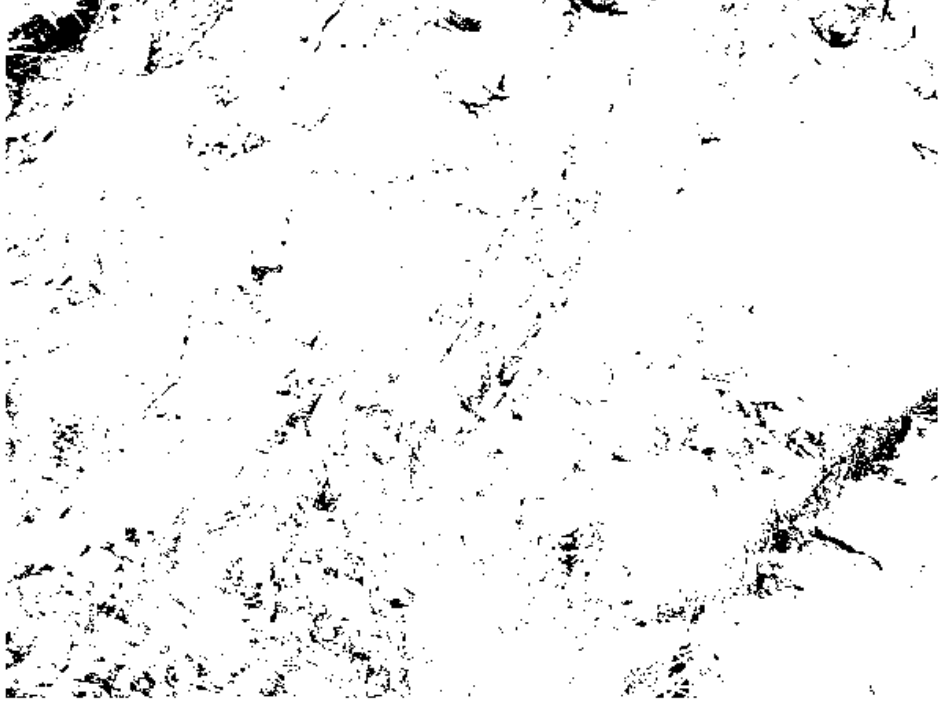
**RGB to gray (contrast stretched)**



**Fig. Abc**



**Segmented cracks**



**Fig. Abd**

Cleaned image

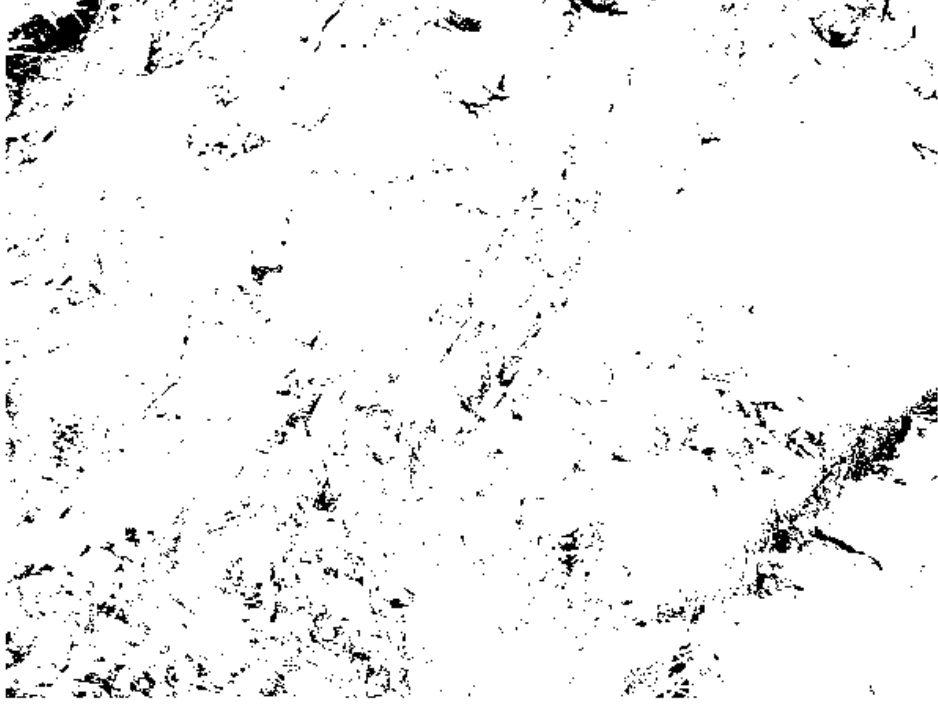
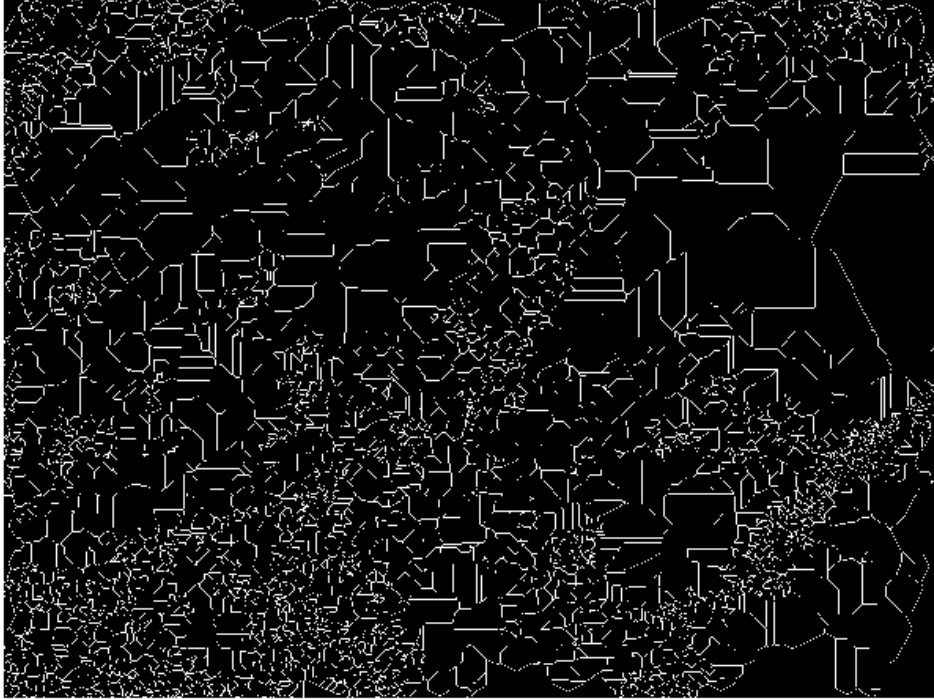


Fig. Abe

**Thinned image**

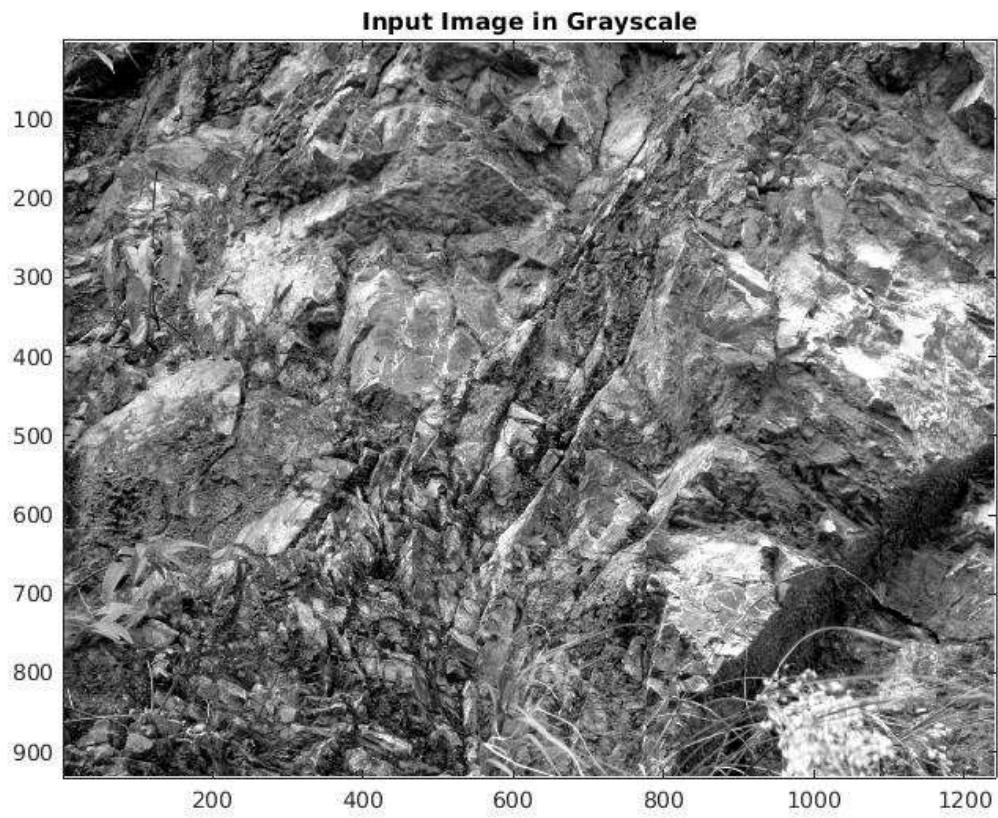


**Fig. Abf**

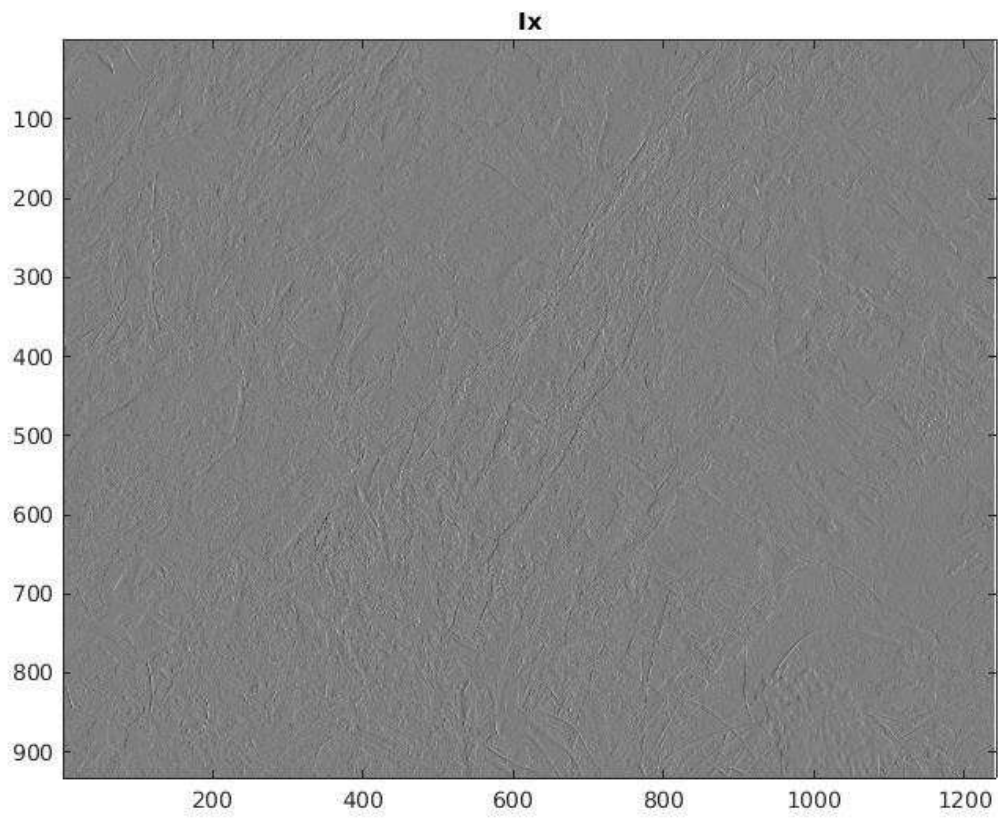
**Original Image**



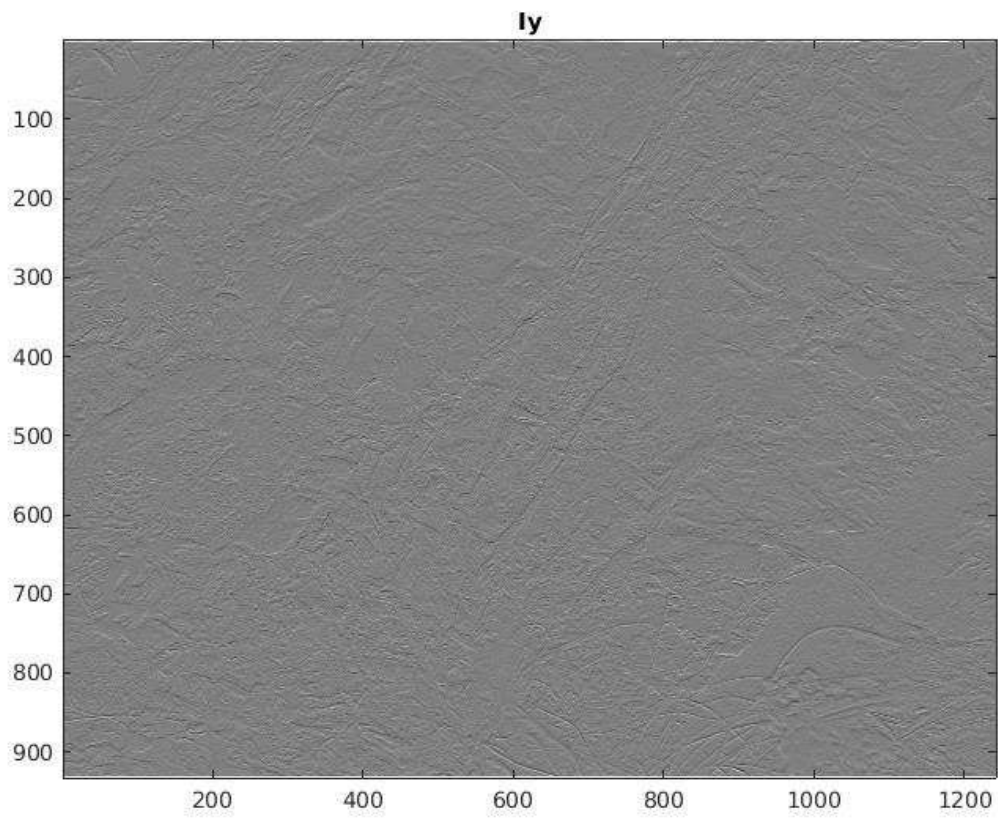
**Fig. Bba**



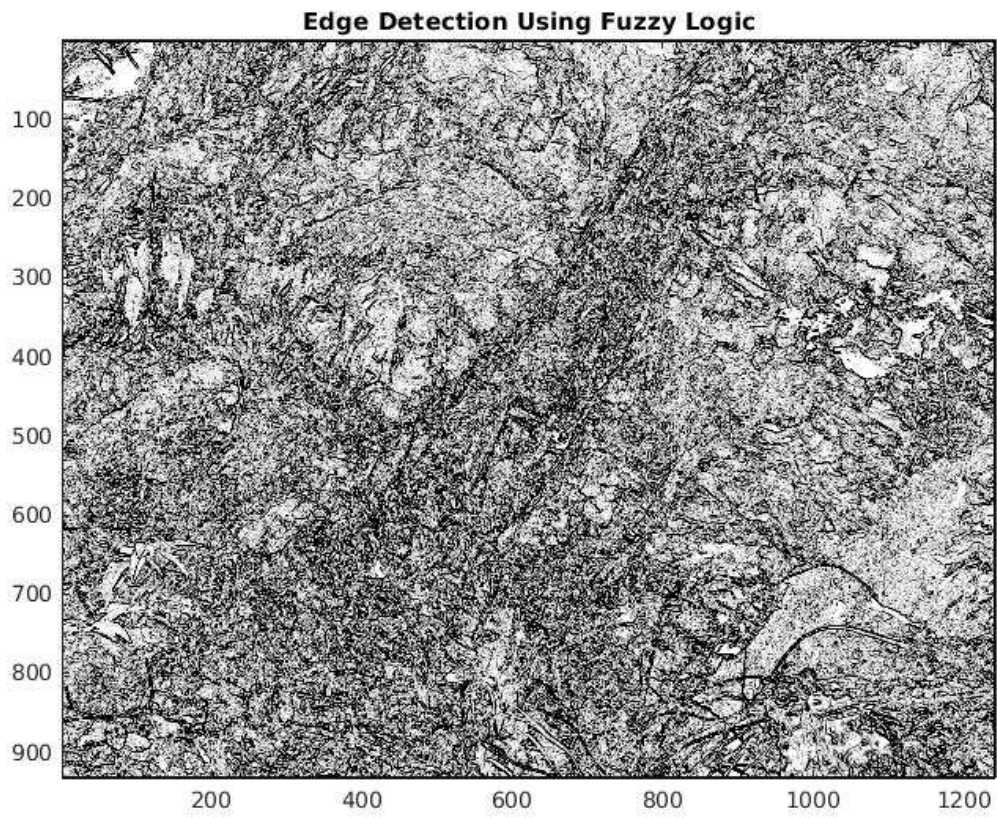
**Fig. Bbb**



**Fig. Bbc**



**Fig. Bbd**



**Fig. bbf**



**Original Image**



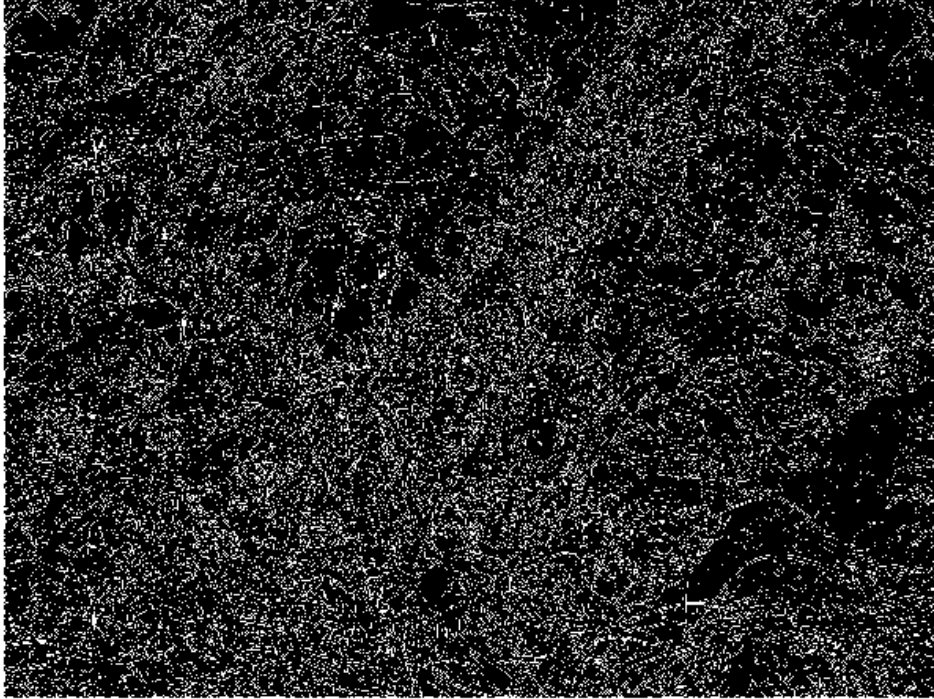
**Fig. Cba**

**Gray Image**



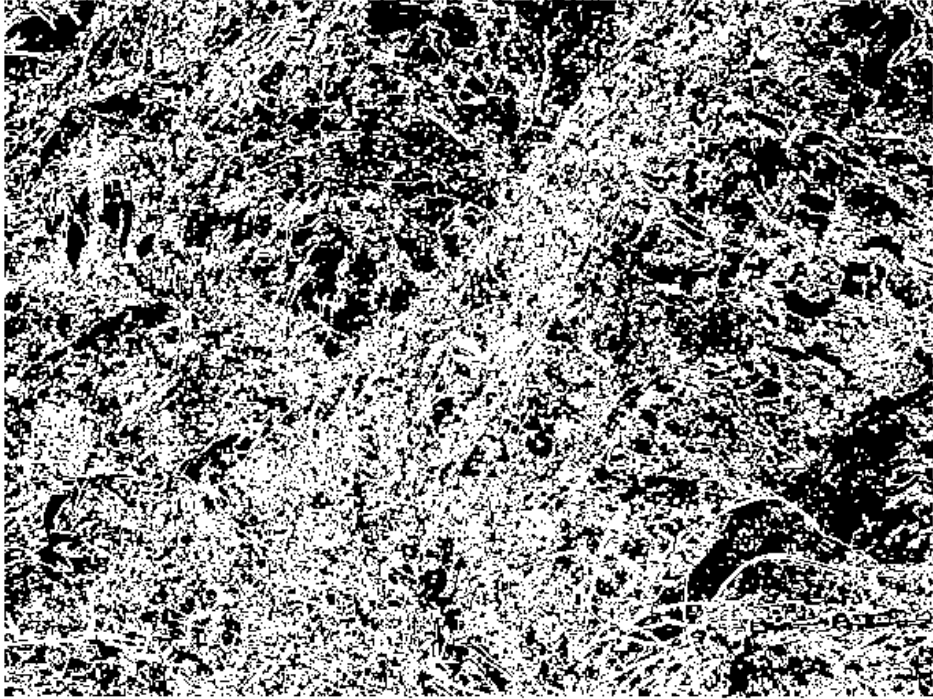
**Fig. Cbb**

**Binary Gradient Mask**



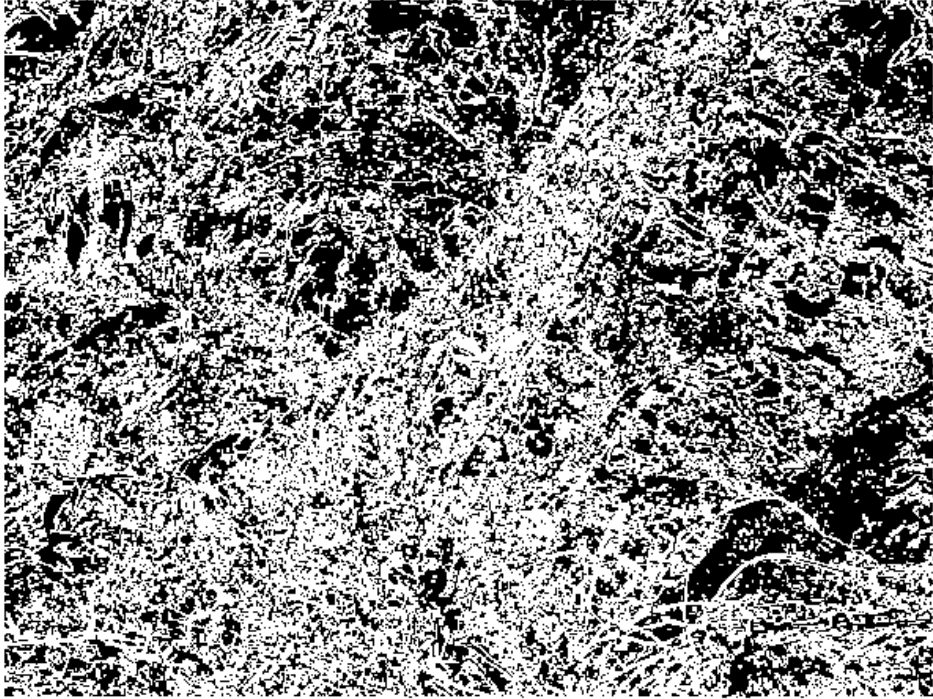
**Fig. Cbc**

**Dilated Gradient Mask**



**Fig. Cbd**

**Bilateral Filtered Image**



**Fig. Cbe**

**Original Image**



**Fig. Dba**

**Gray Image**



**Fig. Dbb**

Sobel

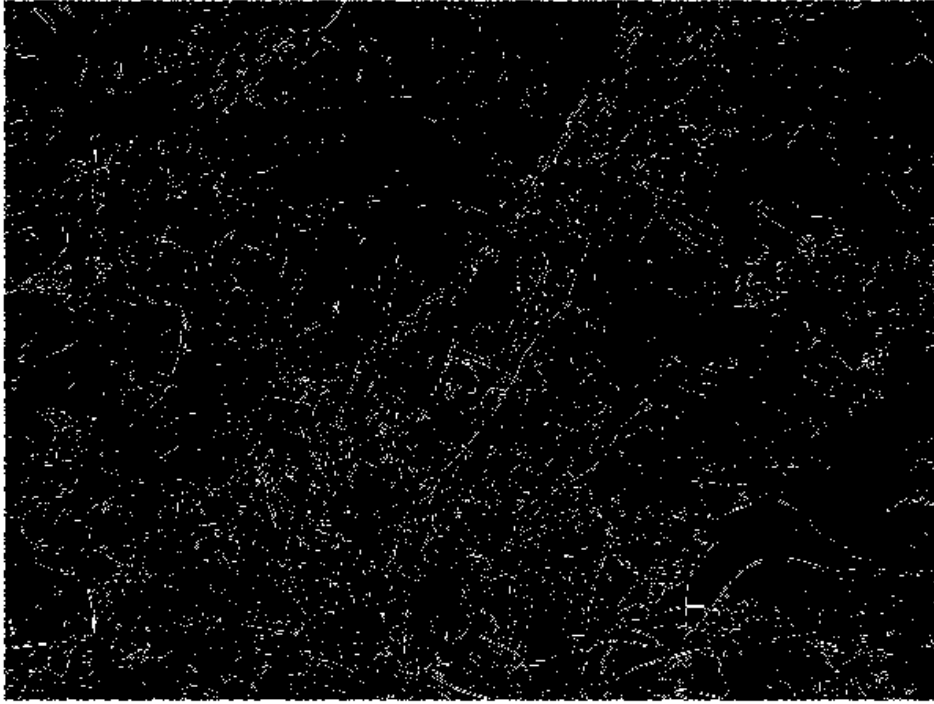


Fig. Dbc



Canny

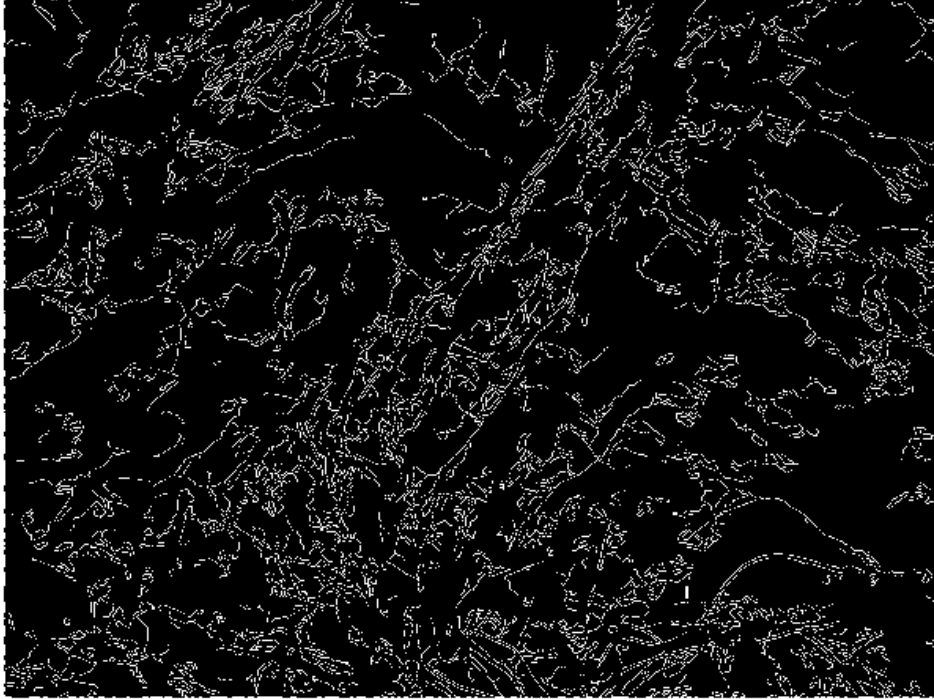


Fig. Dbd

Prewitt

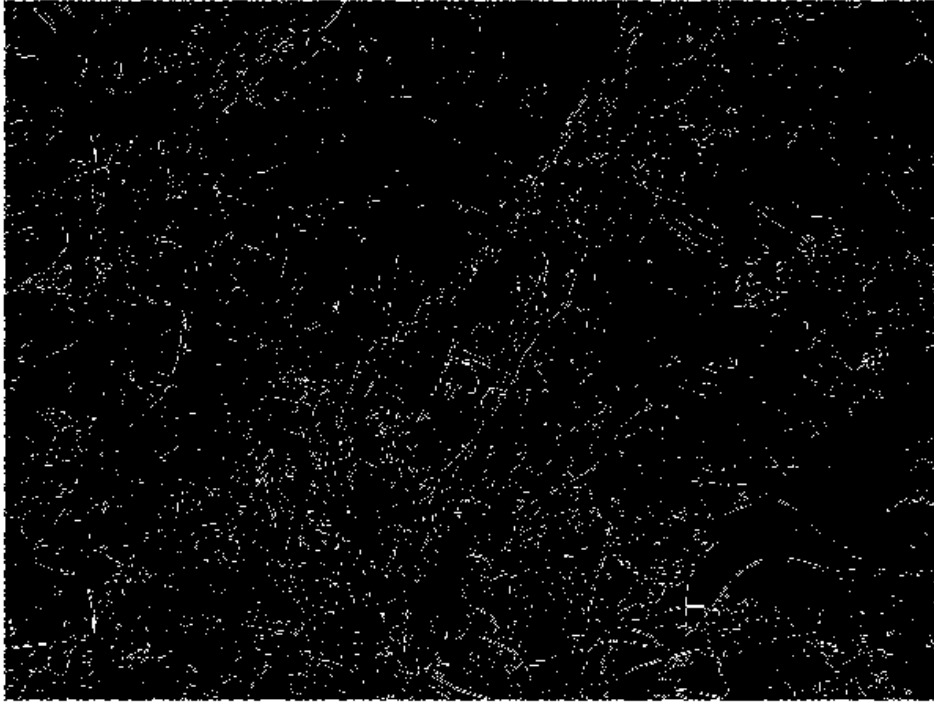
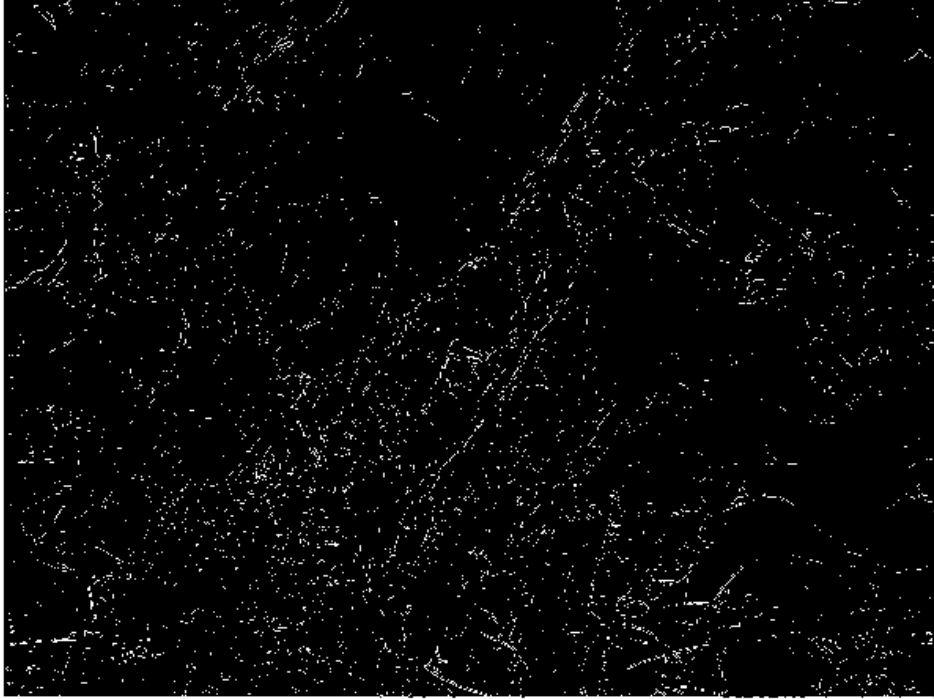


Fig. Dbe

**Roberts**



**Fig. Dbf**

LoG

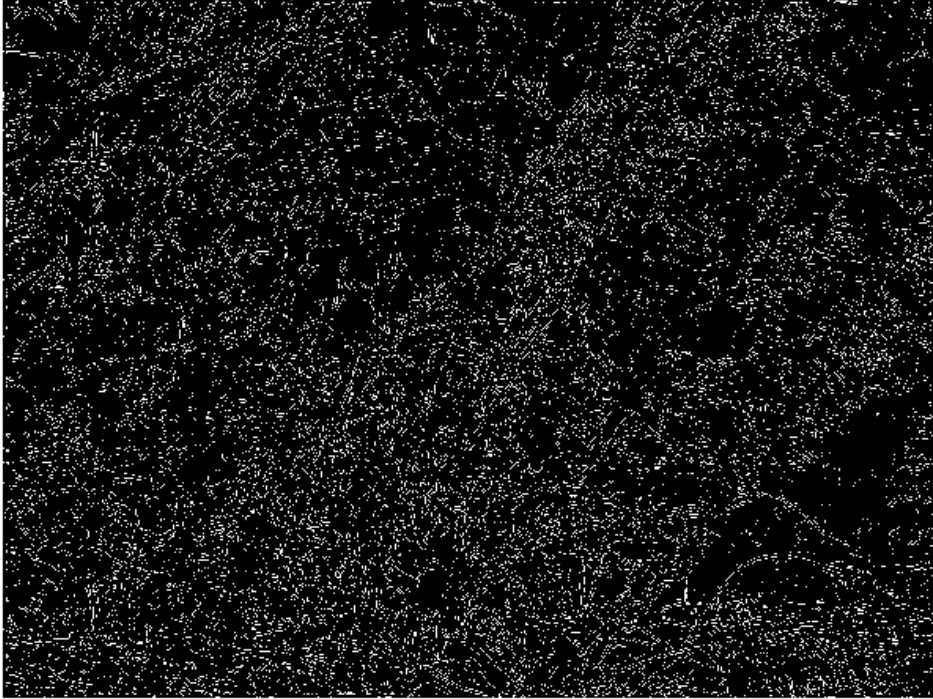
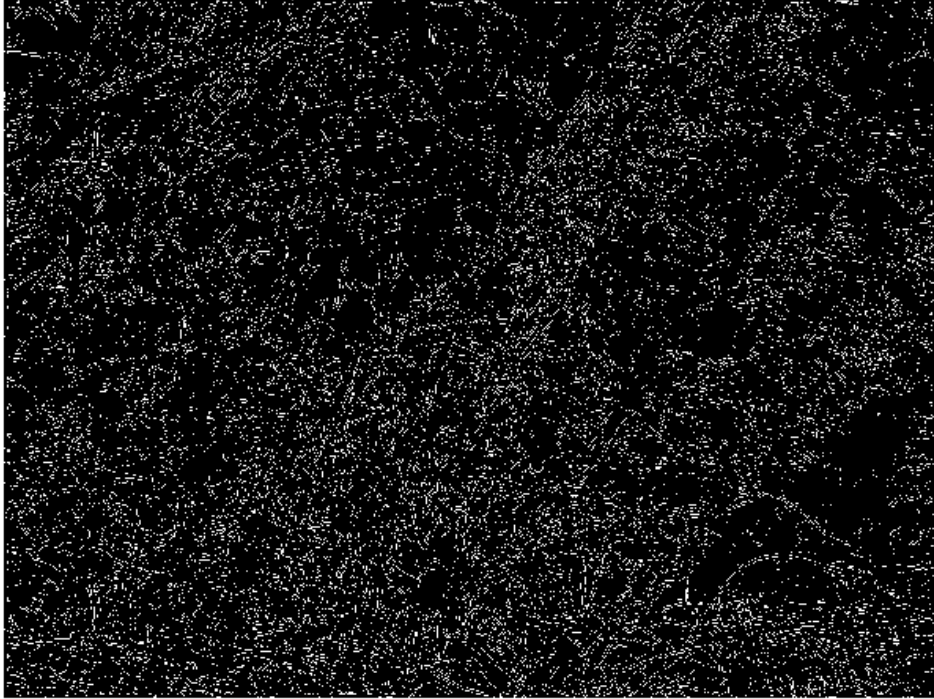


Fig. Dbg

**Zerocross**



**Fig. Dbh**

**Original image**



**Fig. Aca**

**Contrast stretched image**



**Fig. Acb**

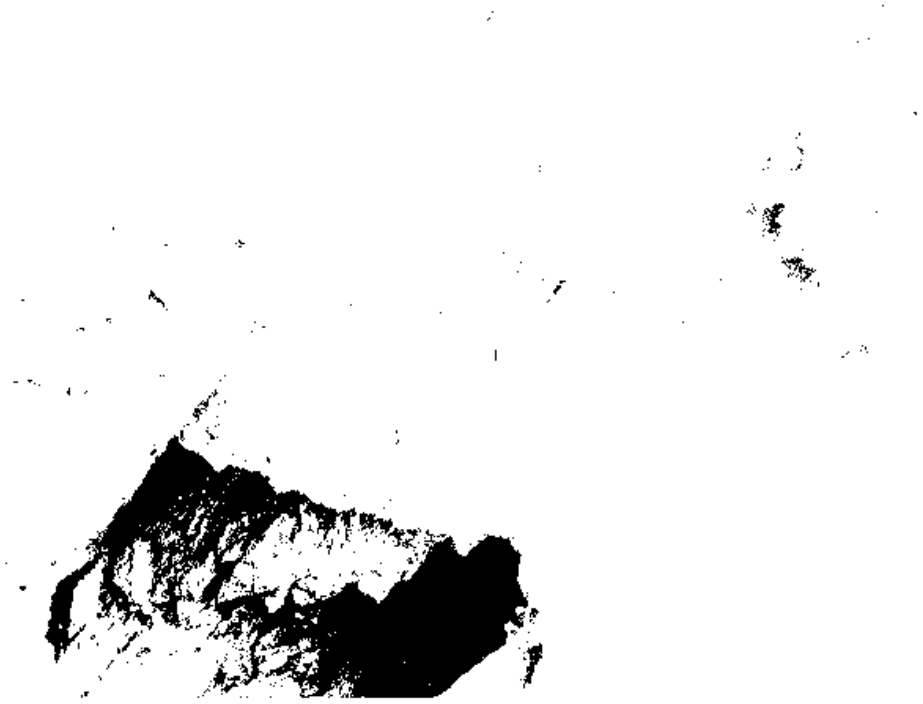
**RGB to gray (contrast stretched)**



**Fig. Acc**

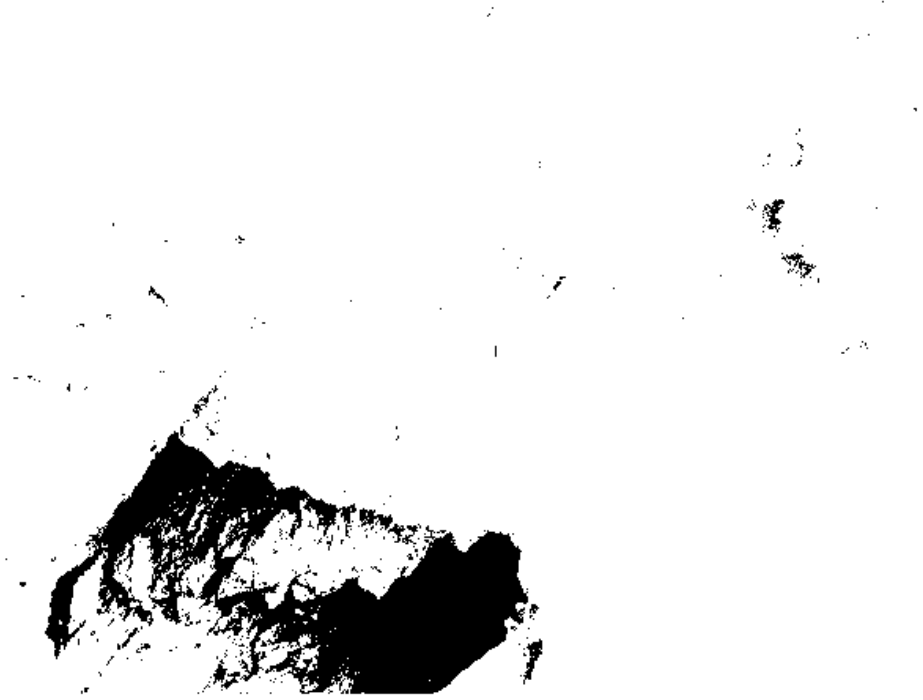


**Segmented cracks**



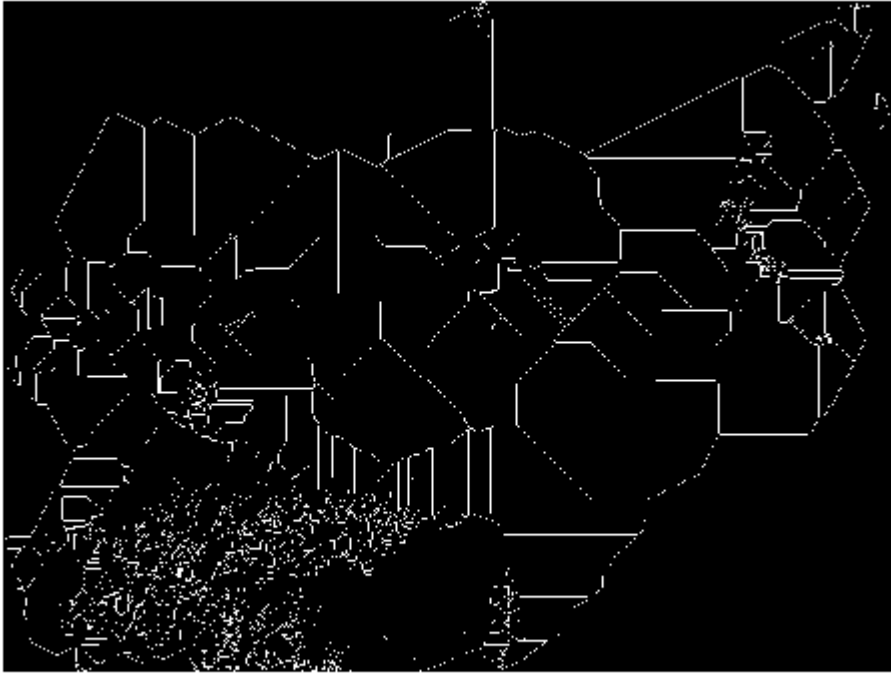
**Fig. Acd**

**Cleaned image**



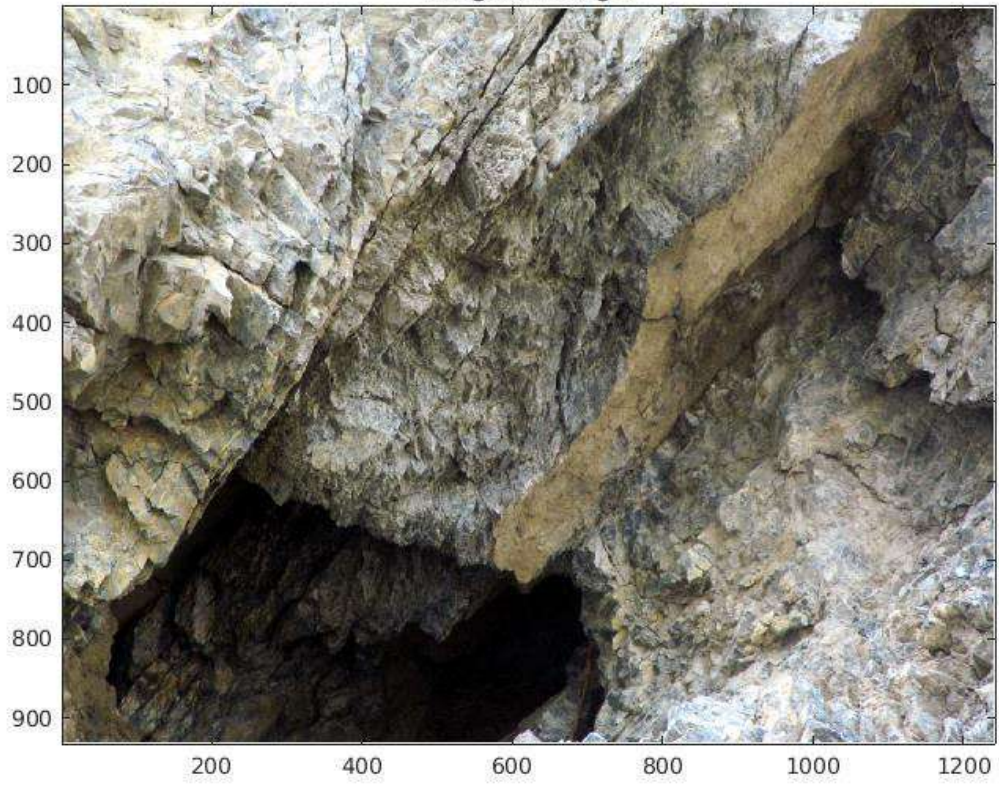
**Fig. Ace**

**Thinned image**

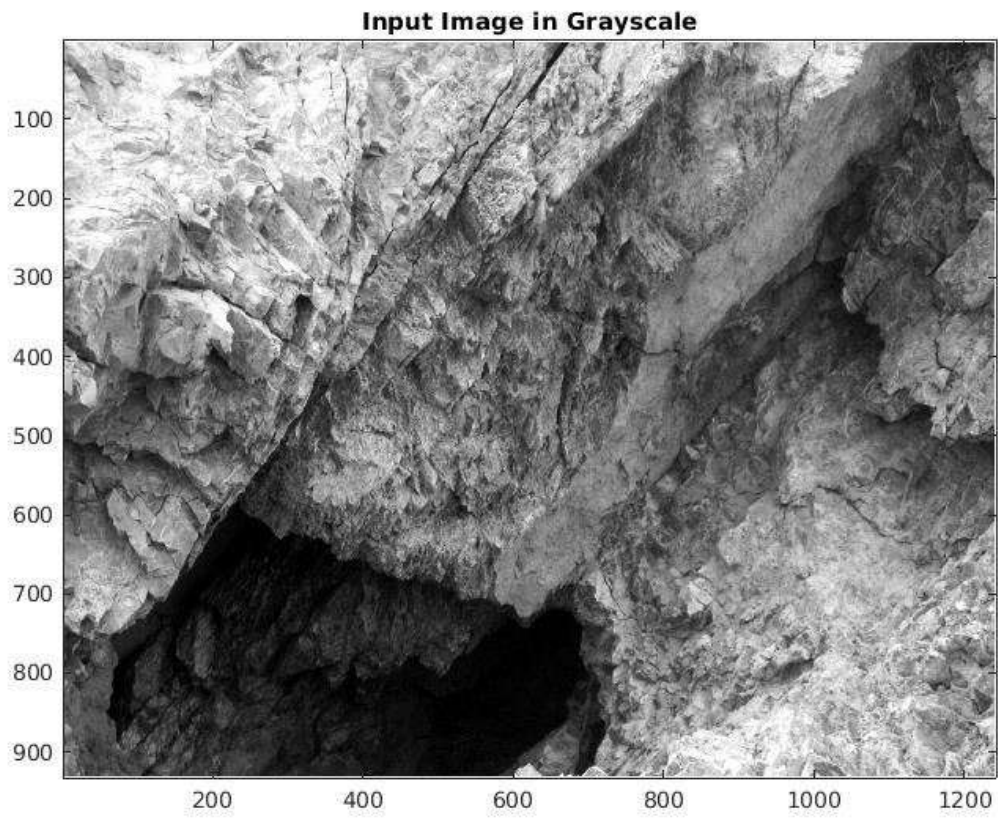


**Fig. Acf**

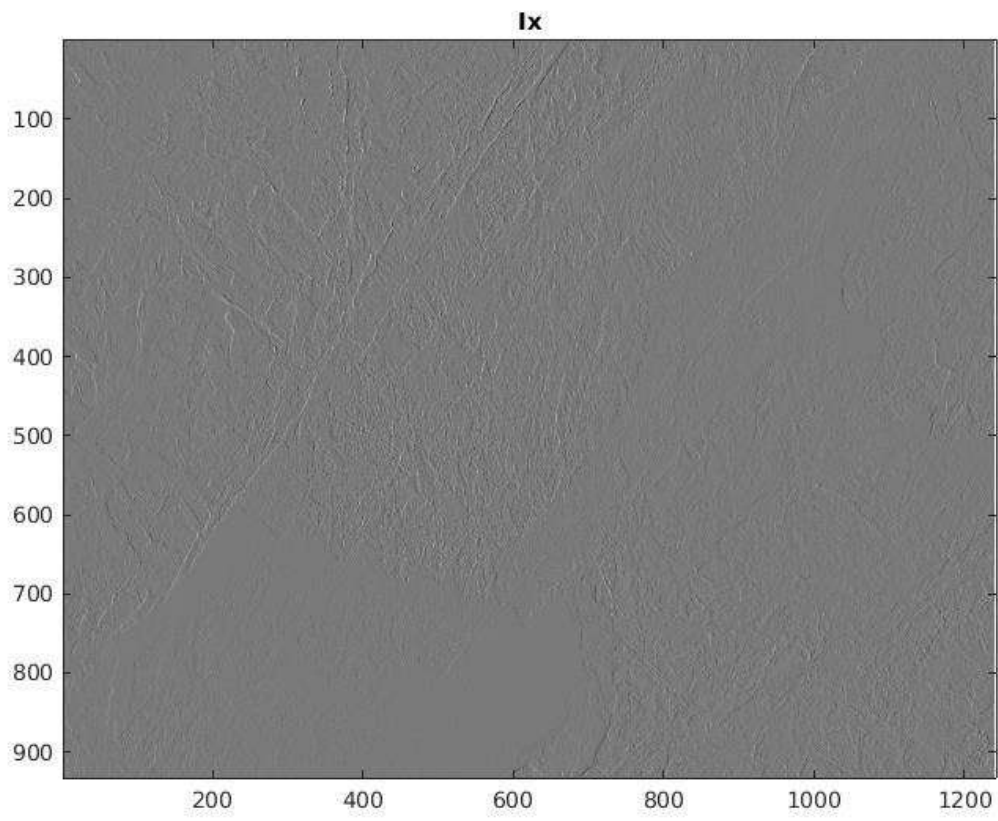
**Original Image**



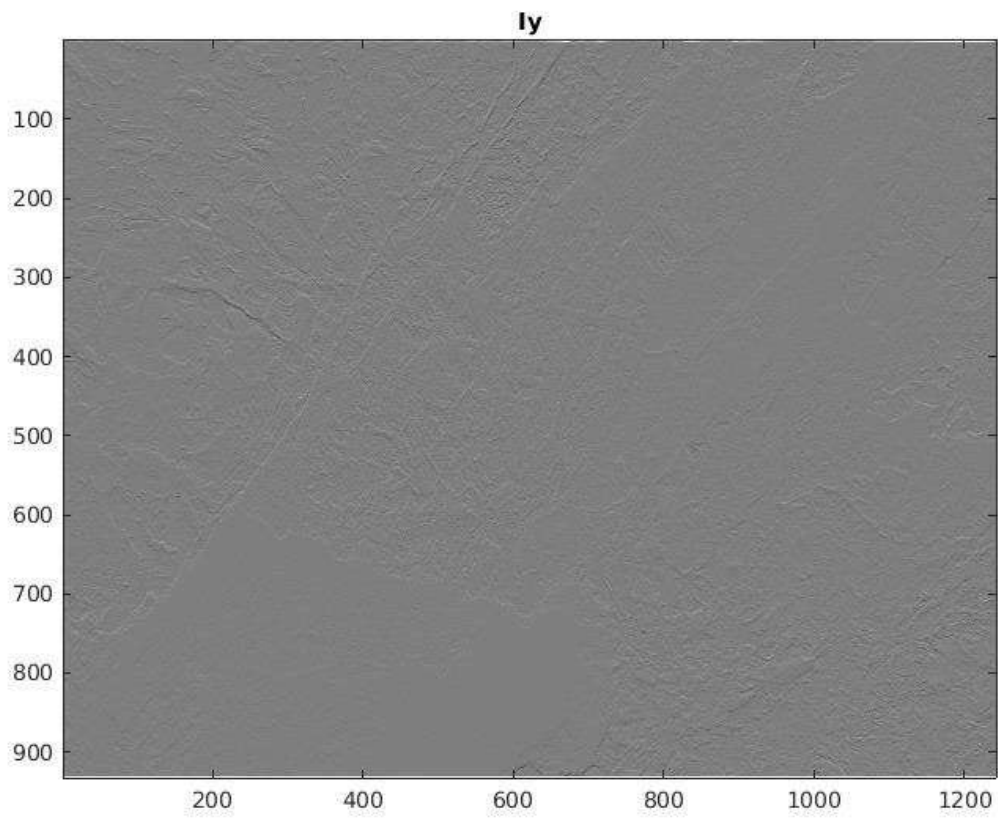
**Fig. Bca**



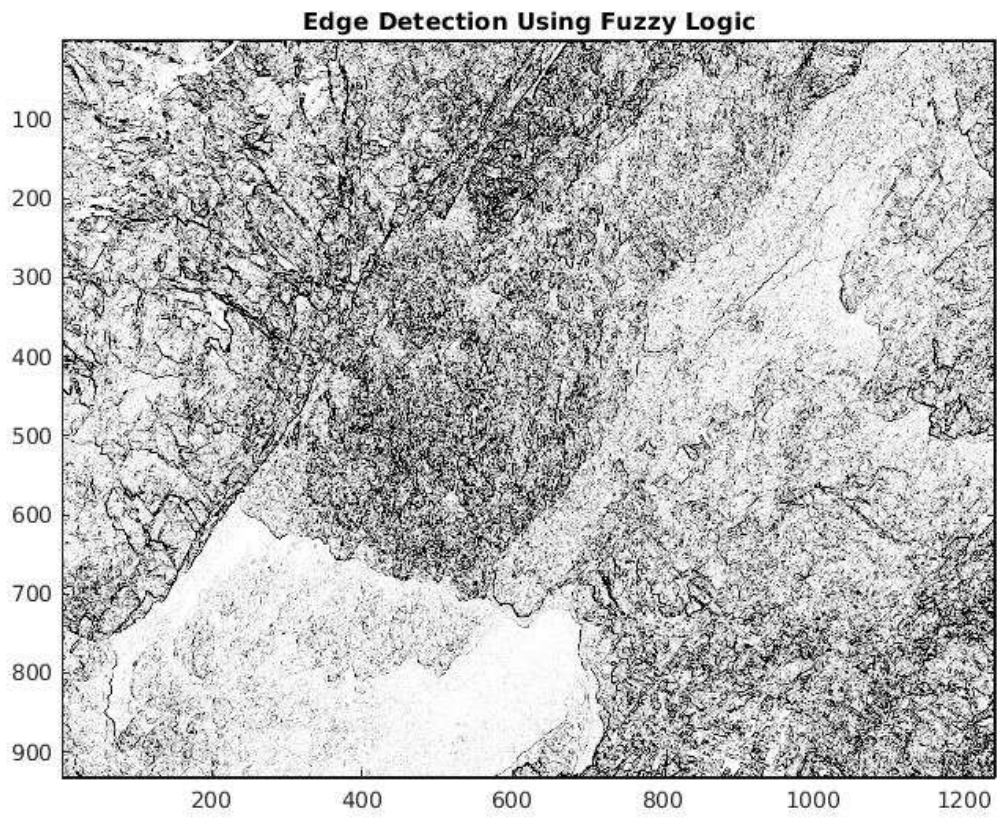
**Fig. Bcb**



**Fig. Bcc**



**Fig. Bcd**



**Fig. Bcf**



**Original Image**



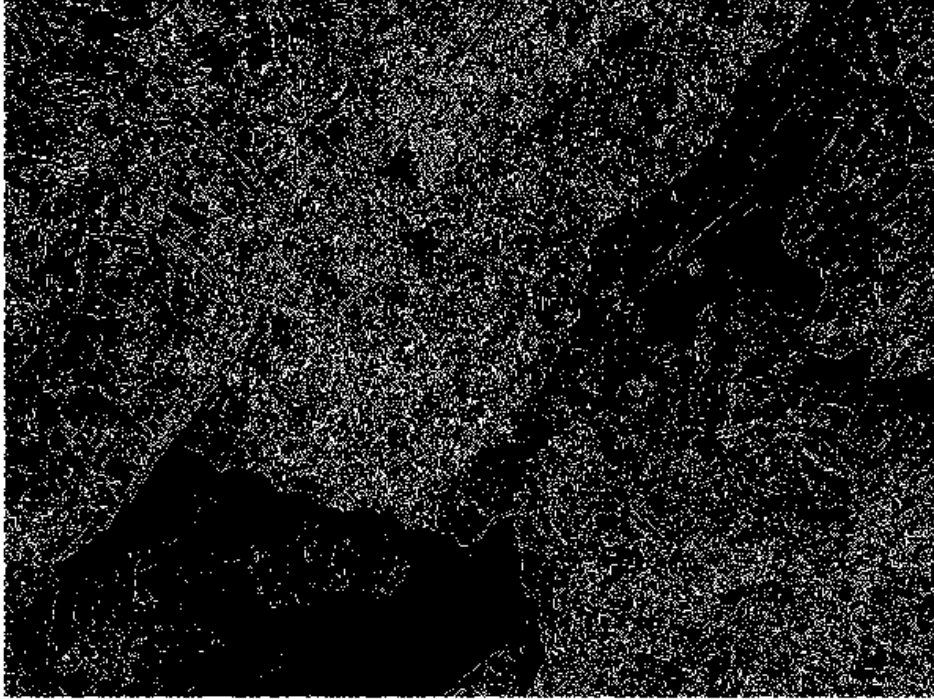
**Fig. Cca**

**Gray Image**



**Fig. Ccb**

**Binary Gradient Mask**



**Fig. Ccc**

**Dilated Gradient Mask**



**Fig. Ccd**

**Bilateral Filtered Image**



**Fig. Cce**

**Original Image**



**Fig. Dca**

**Gray Image**



**Fig. Dcb**

Sobel

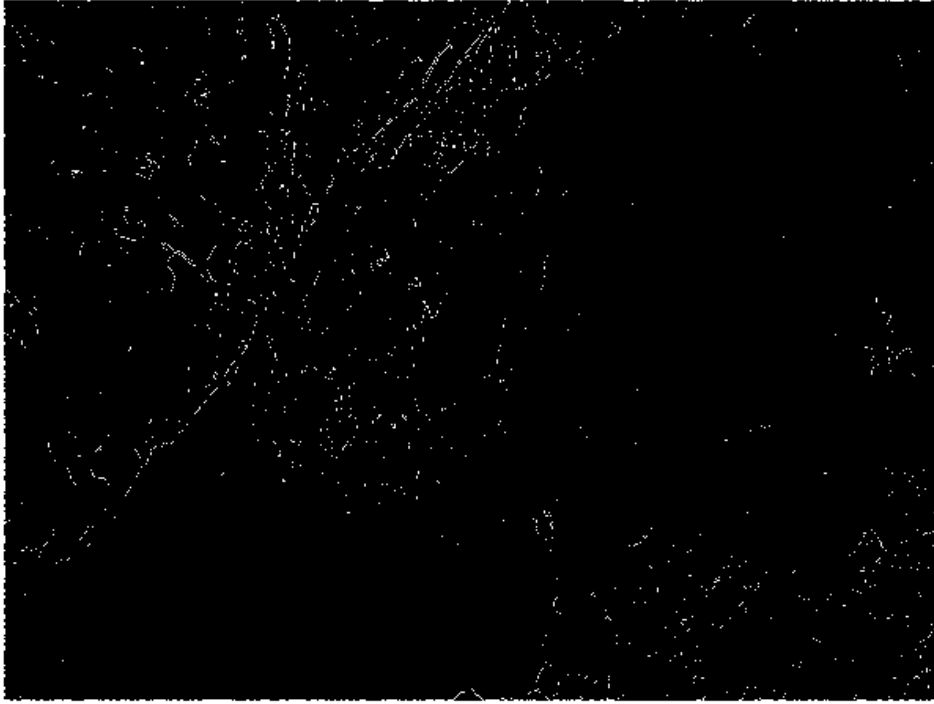


Fig. Dcc



Canny

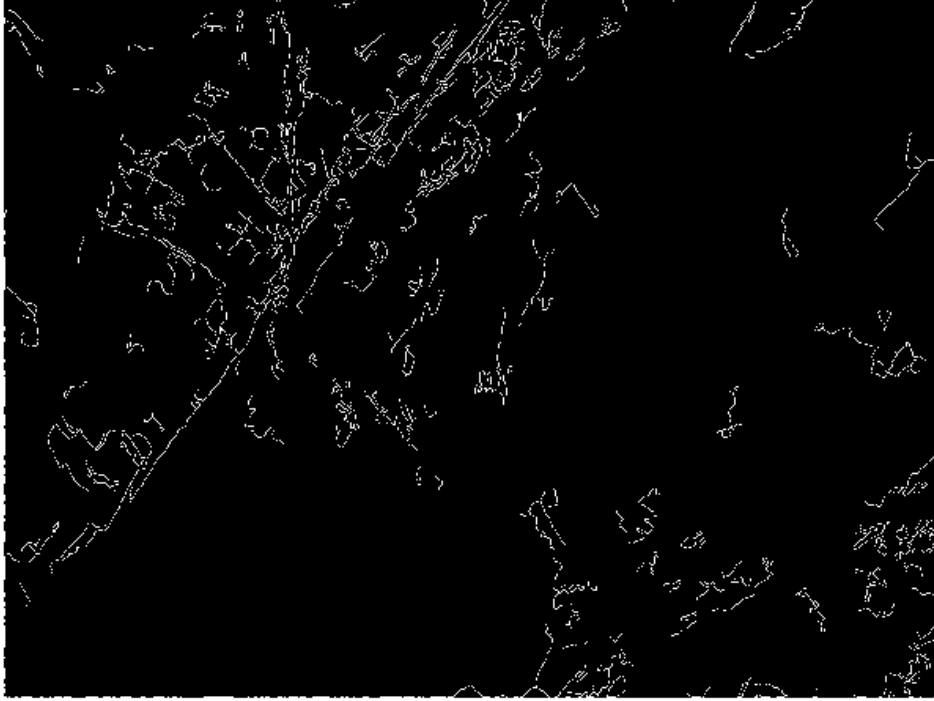


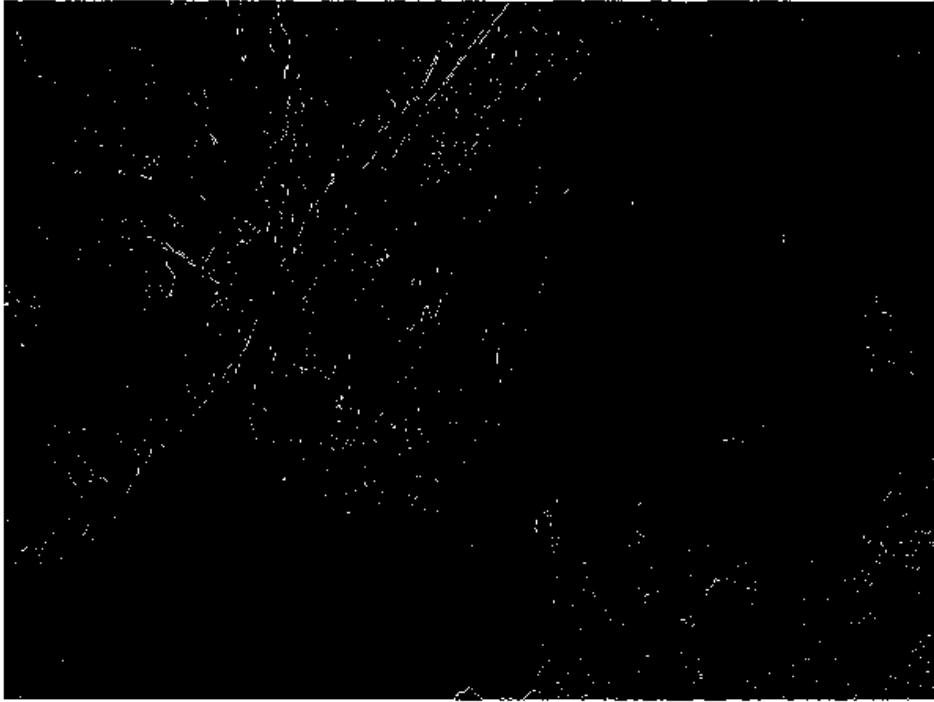
Fig. Dcd

Prewitt



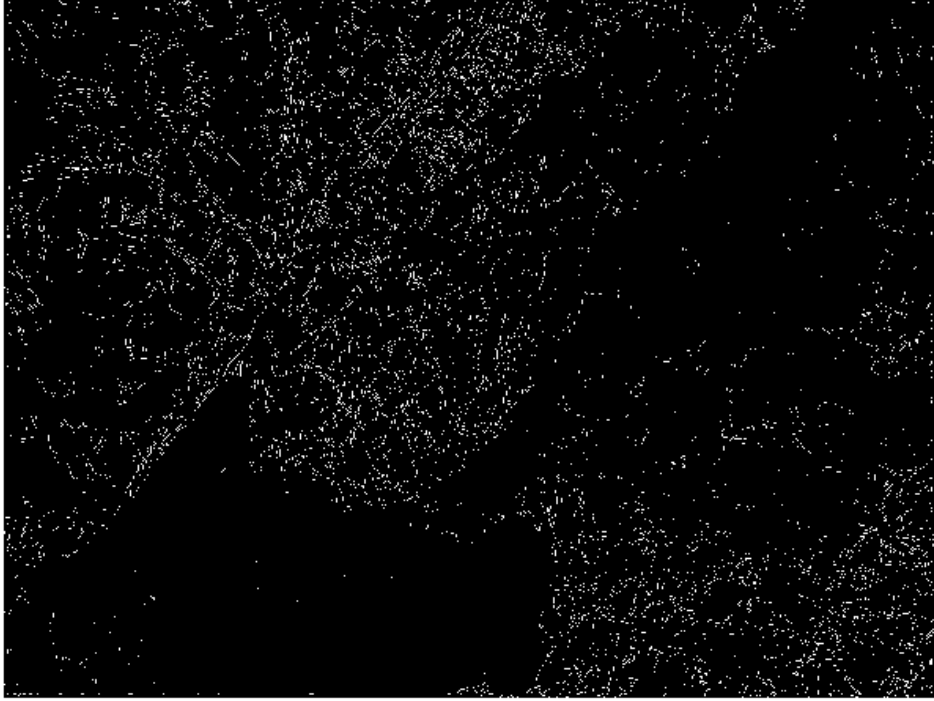
Fig. Dce

**Roberts**



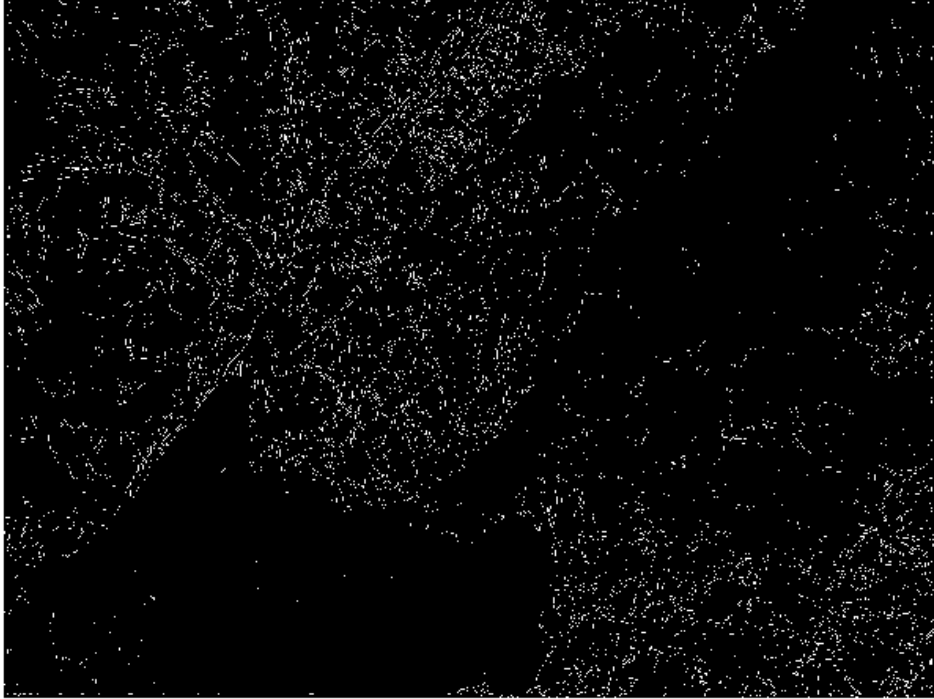
**Fig. Dcf**

**LoG**



**Fig. Dcg**

**Zerocross**



**Fig. Dch**