

IMPLEMENTATION OF DCVF



KTH Electrical Engineering

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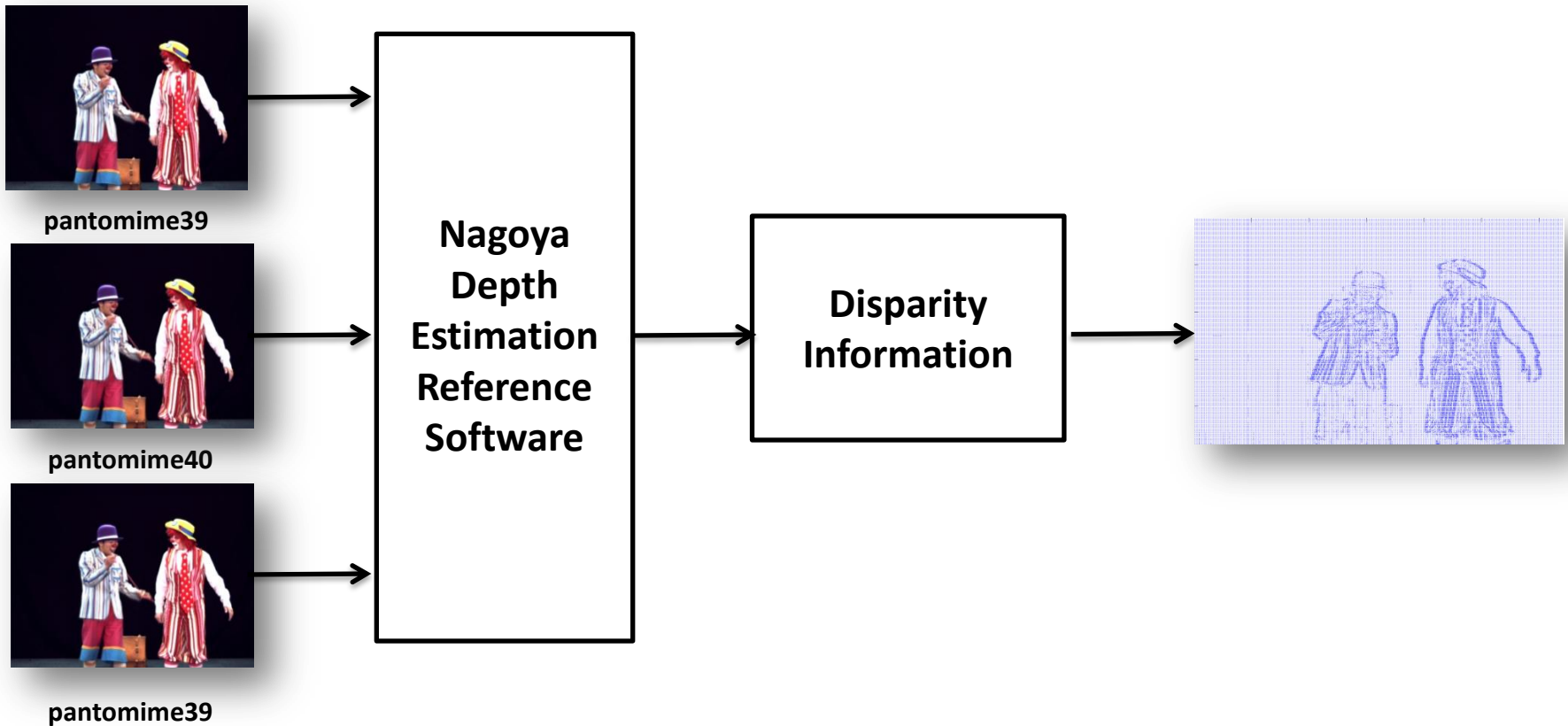
Sound and Image Processing Lab.(SIP)

KTH - Royal Institute of Technology

SE-10044 Stockholm, Sweden

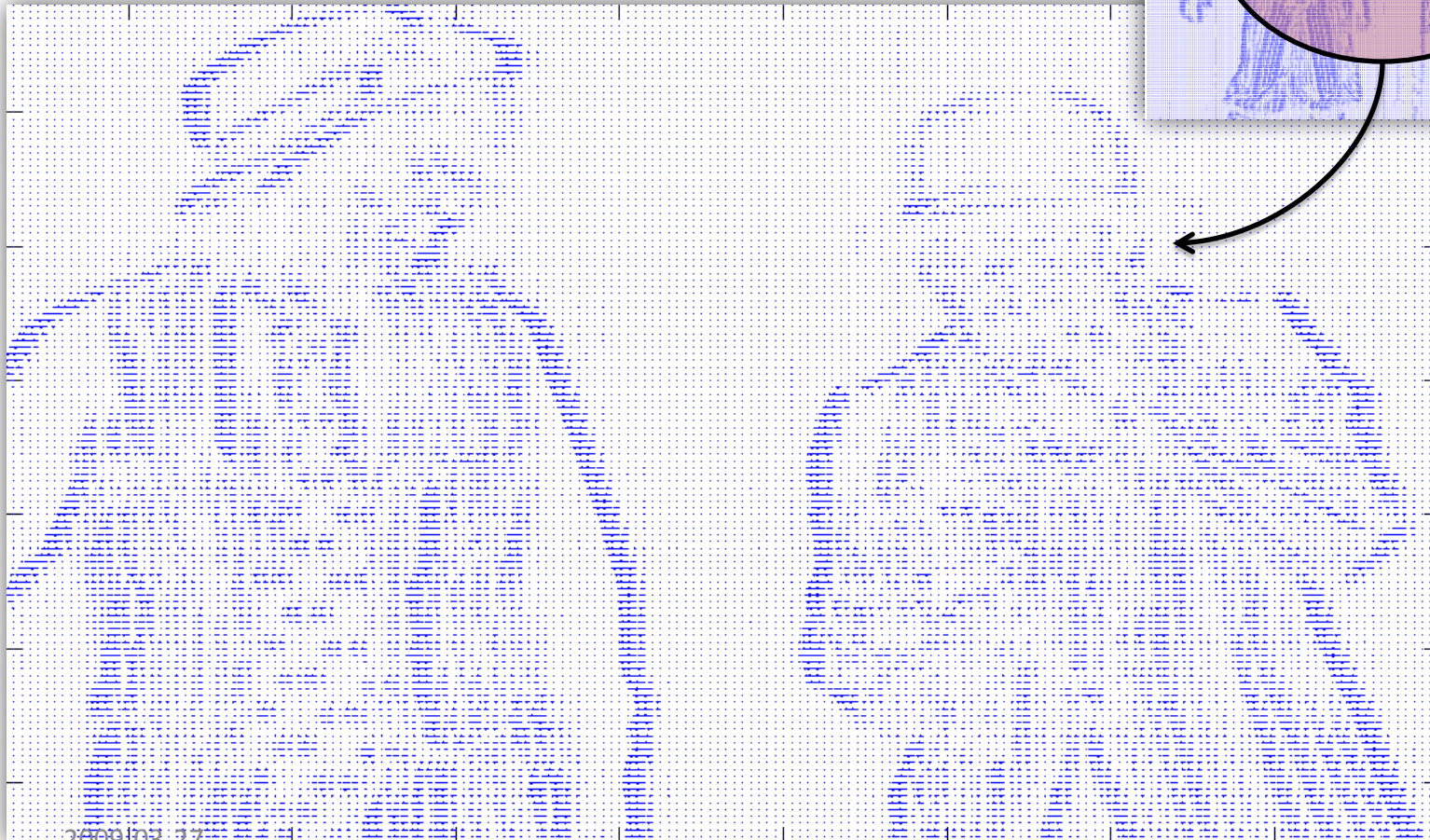
Disparity Information

Using NDE reference software



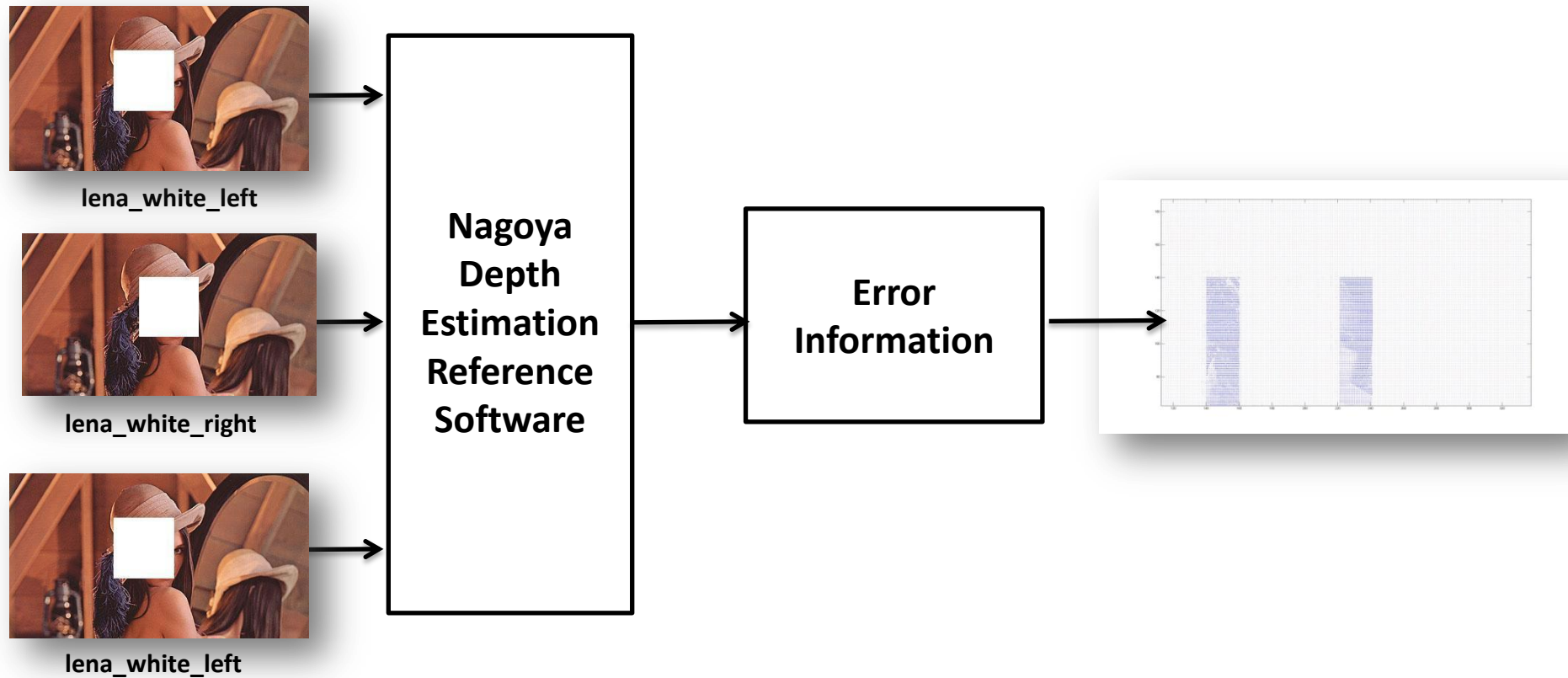
Disparity Vector Field

**Disparity information from the NDE
reference software**



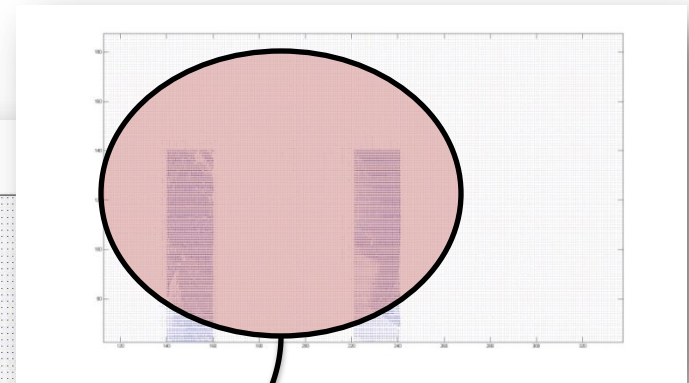
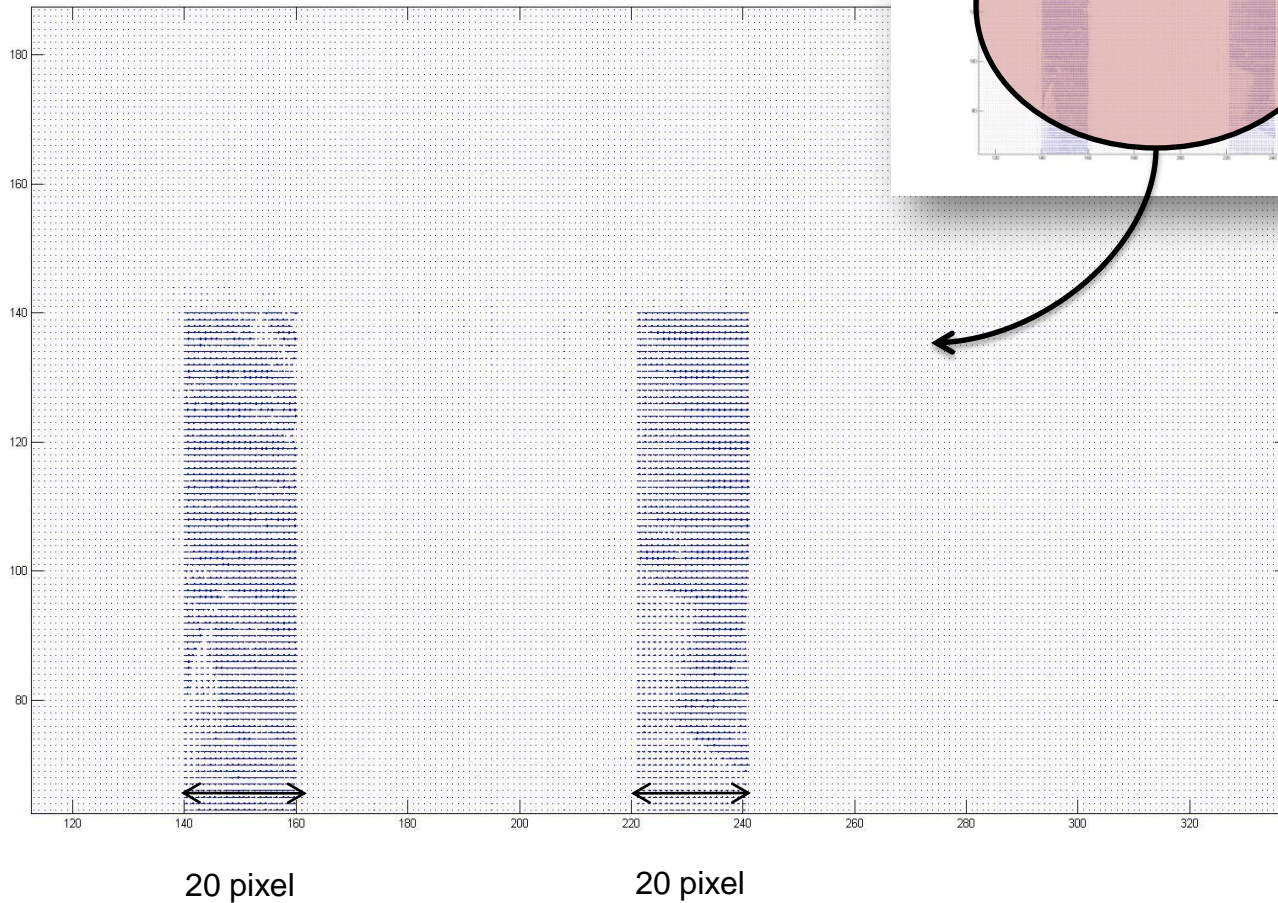
Disparity Information

Using NDE reference software

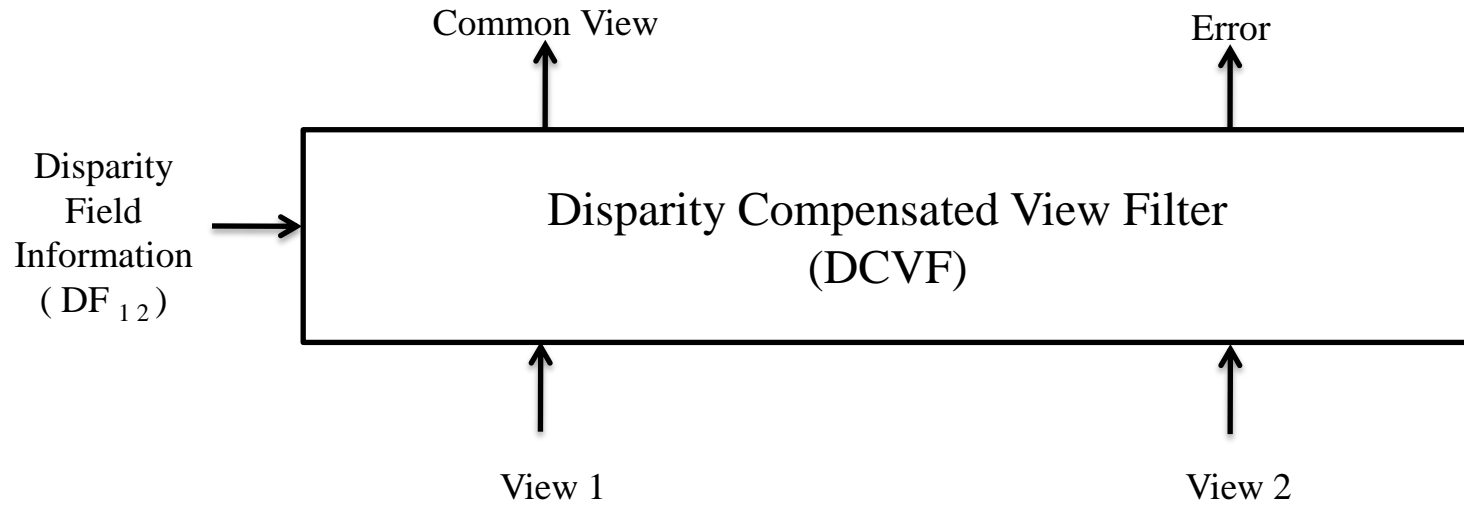


Disparity Vector Field

Synthetic disparity information



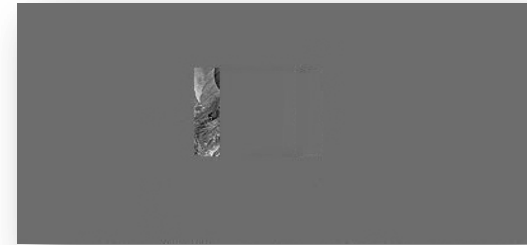
Disparity Compensated View Filter (DCVF)



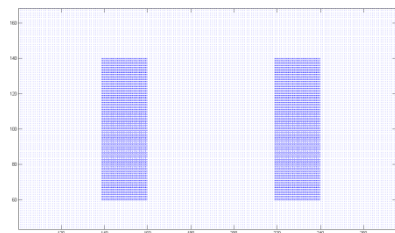
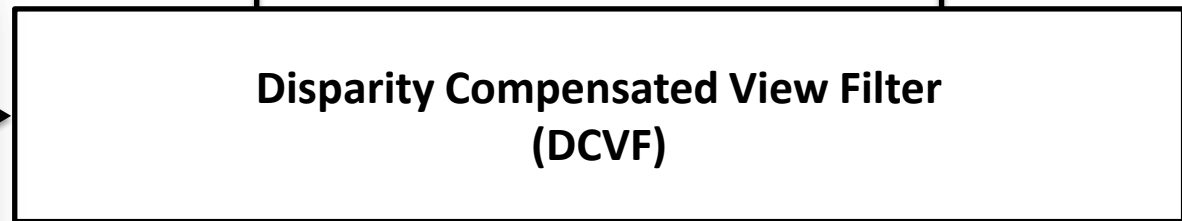
Disparity Compensated View Filter (DCVF)



Common View



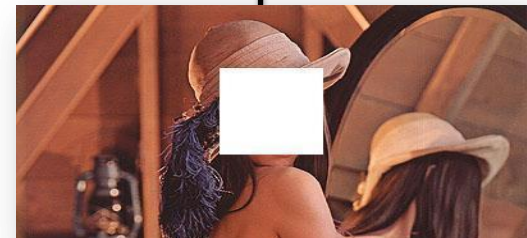
Error



Disparity
Field Information
(DF_{12})



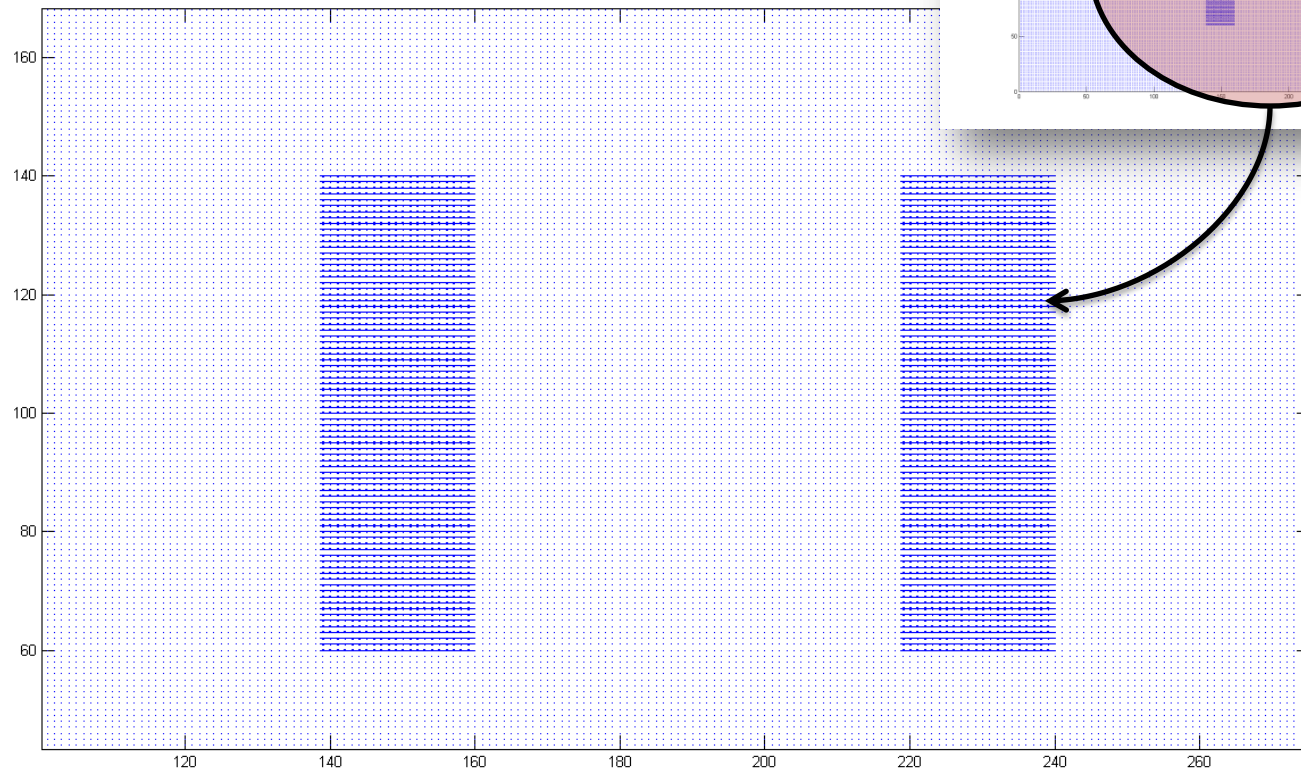
View 1



View 2

Disparity Vector Field

Synthetic disparity information

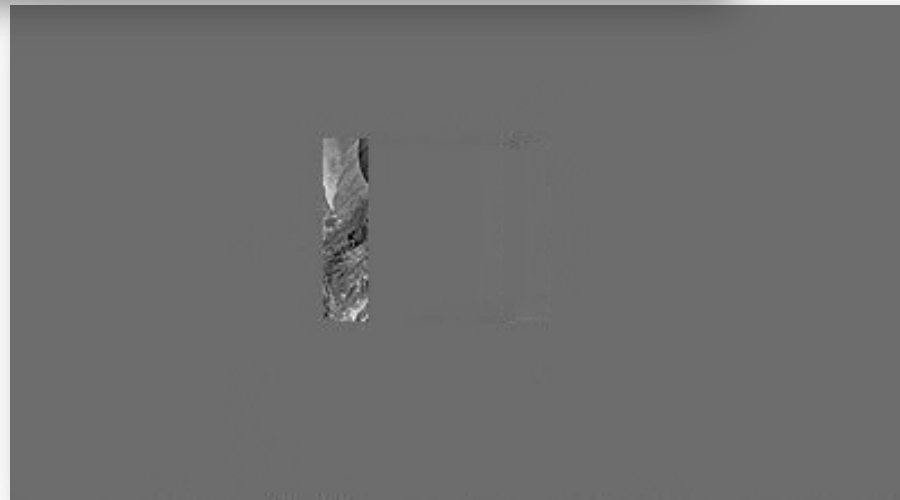


DCVF Output

Common View



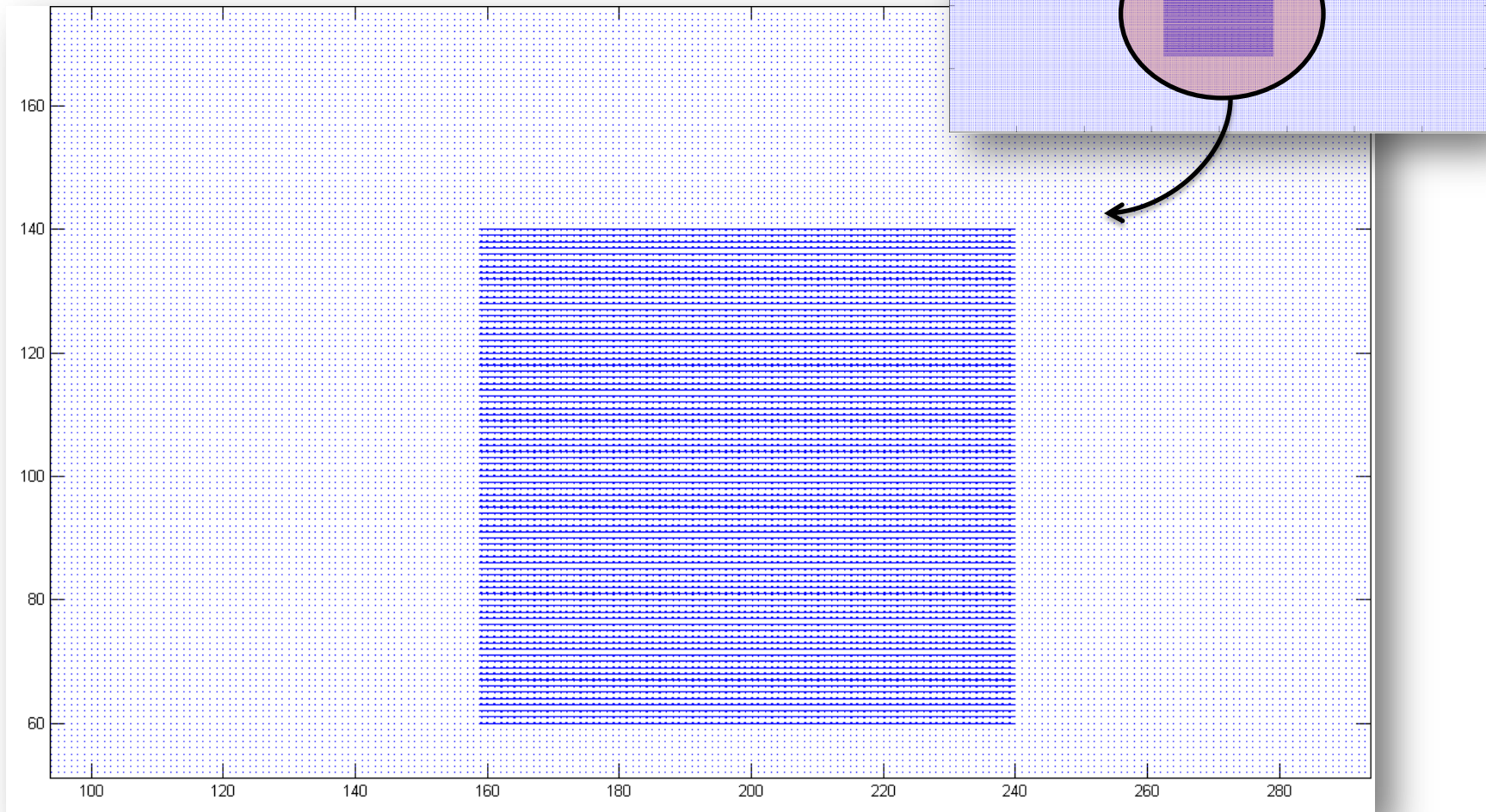
Error View



Using synthetic disparity information : **-20 -20 pixel shift**

Disparity Information

Synthetic disparity information

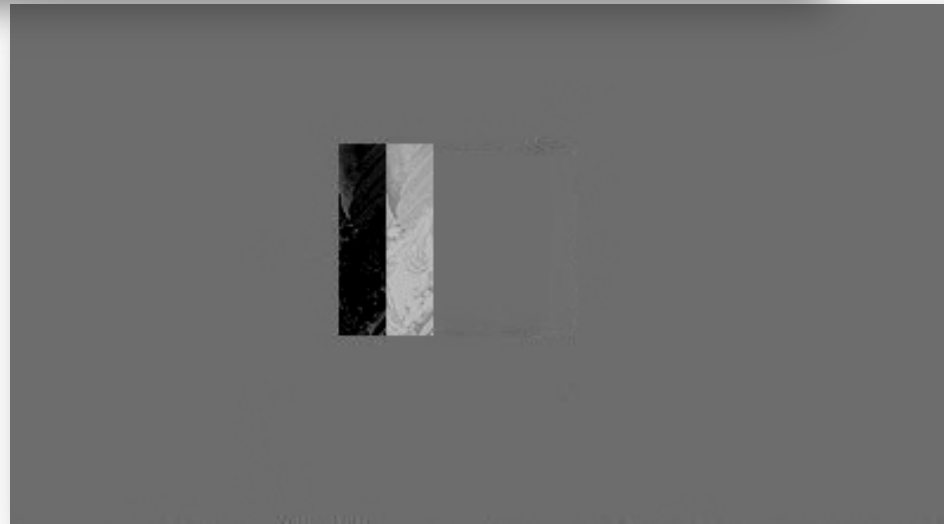


DCVF Output

Common View



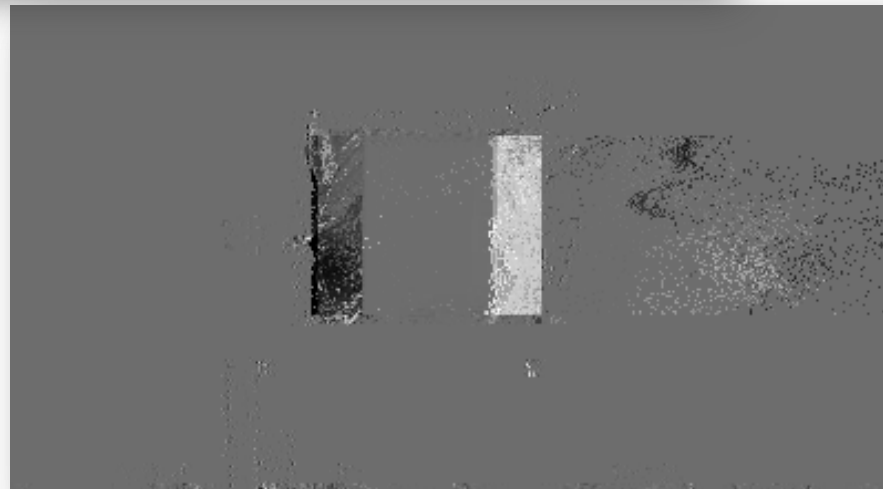
Error View



Using synthetic disparity information : **-20 pixel shift for all block pixel**

DCVF Output

Common View



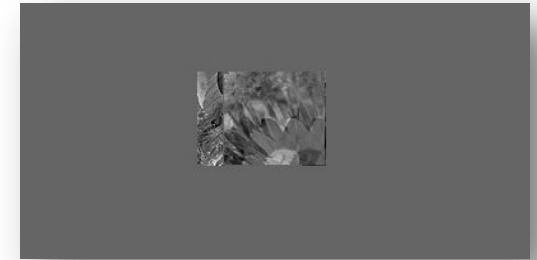
Error View

Using the NDE reference software information

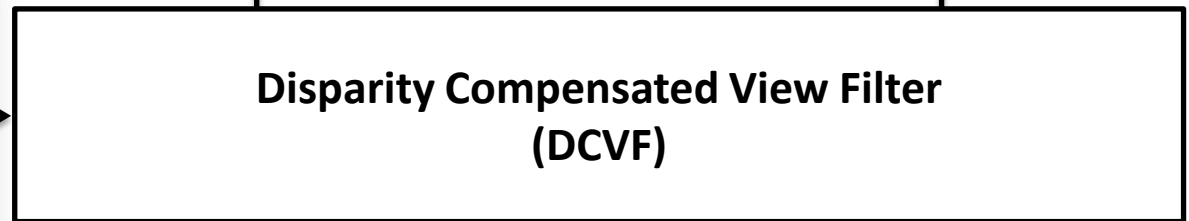
Disparity Compensated View Filter (DCVF)



Common View



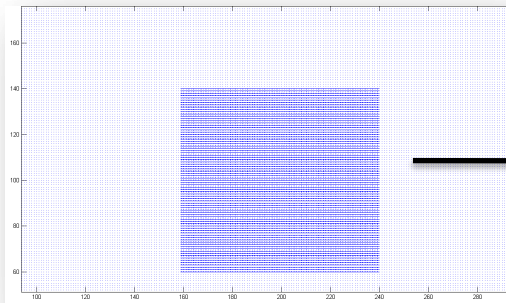
Error



View 1



View 2



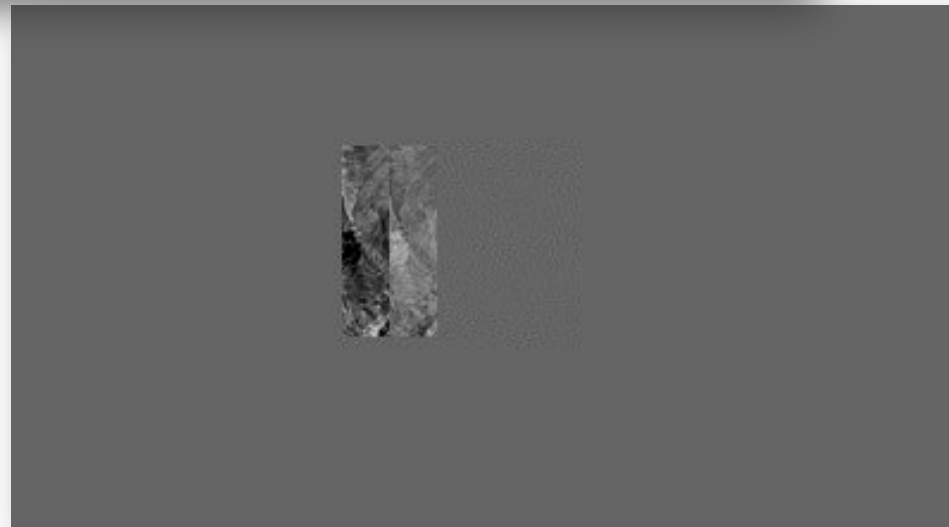
**Disparity
Field Information
(DF_{12})**

DCVF Output

Common View



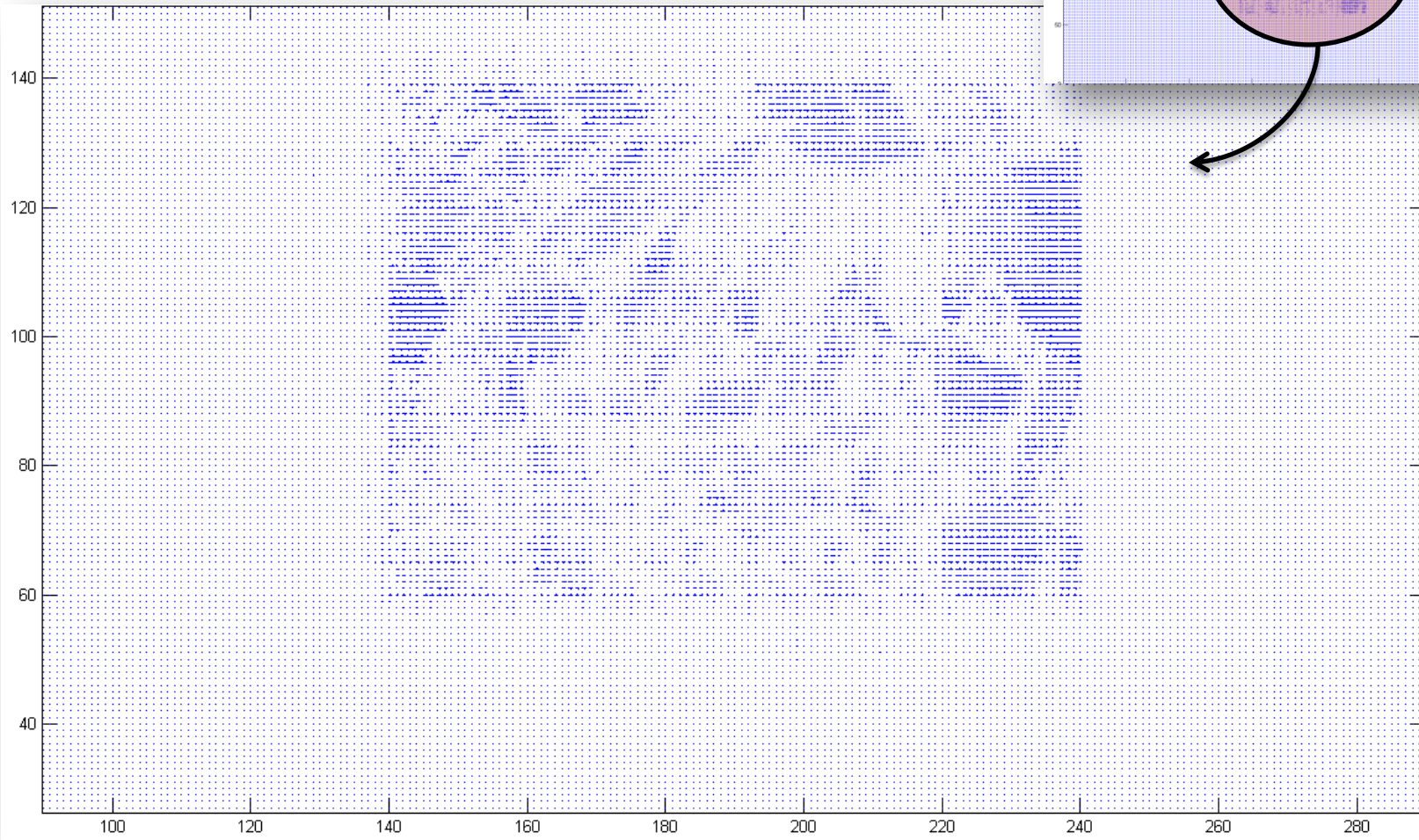
Error View



Using synthetic disparity information : **20 pixel shift**

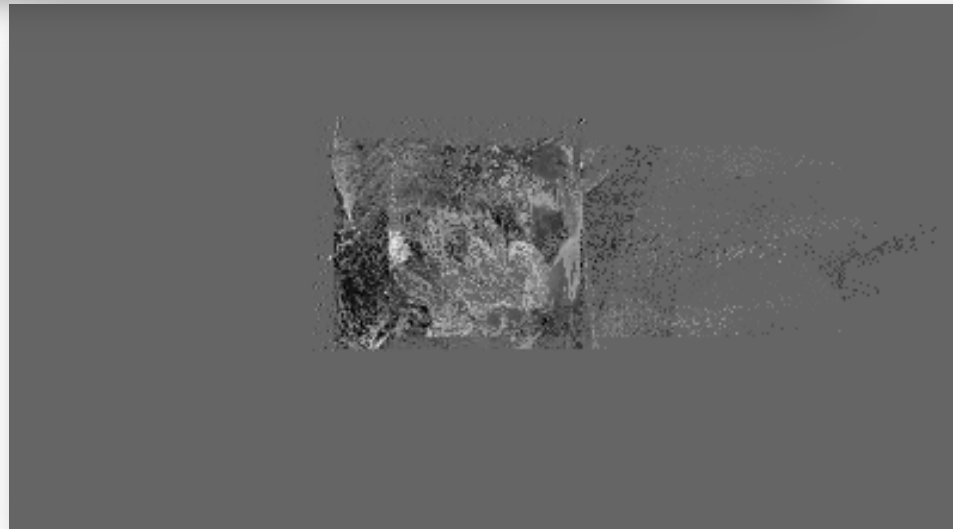
Disparity Information

**disparity information from the NDE
reference software**



DCVF Output

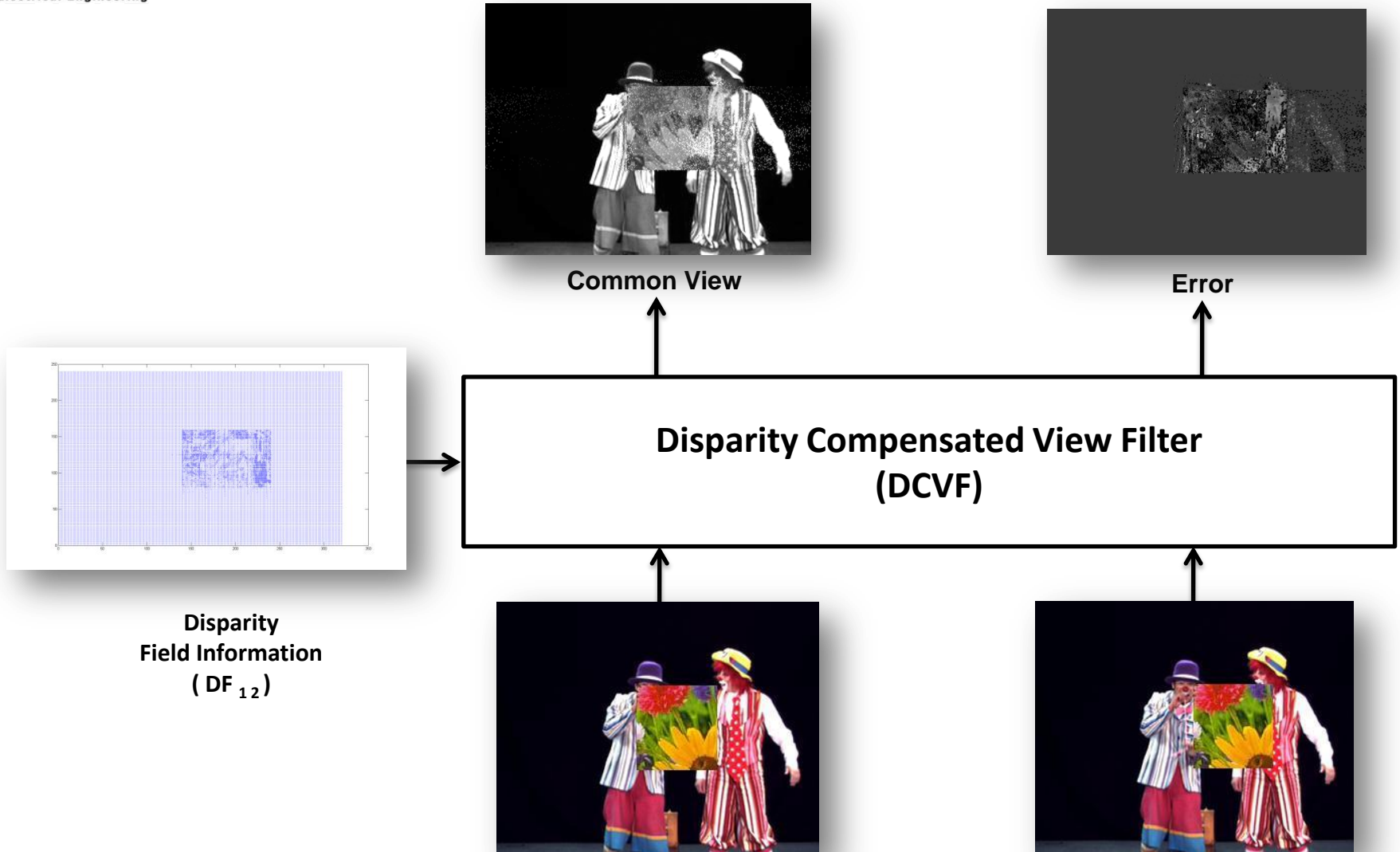
Common View



Error View

Using the NDE reference software information

Disparity Compensated View Filter (DCVF)



DCVF Output

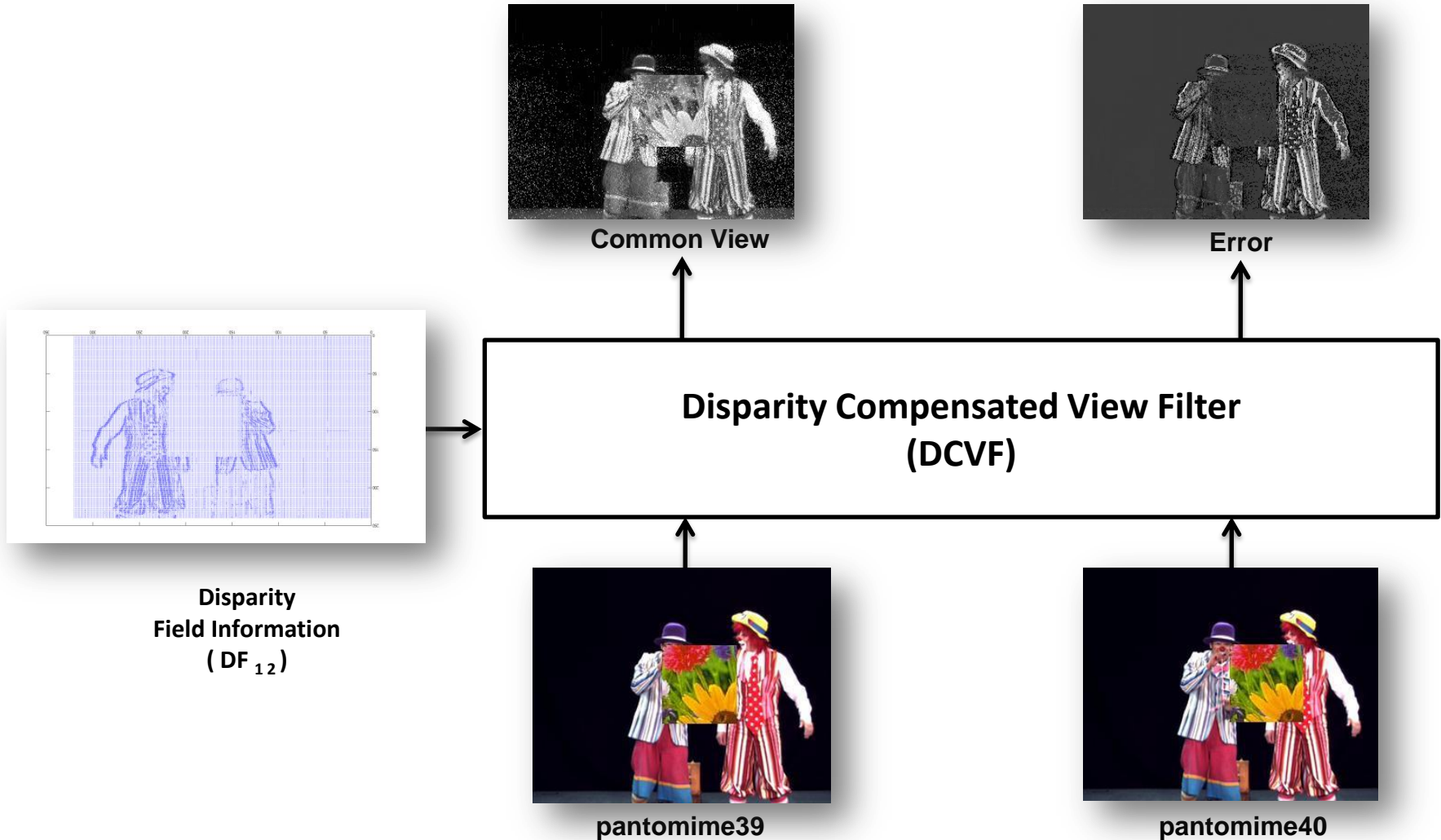
Common View



Error View

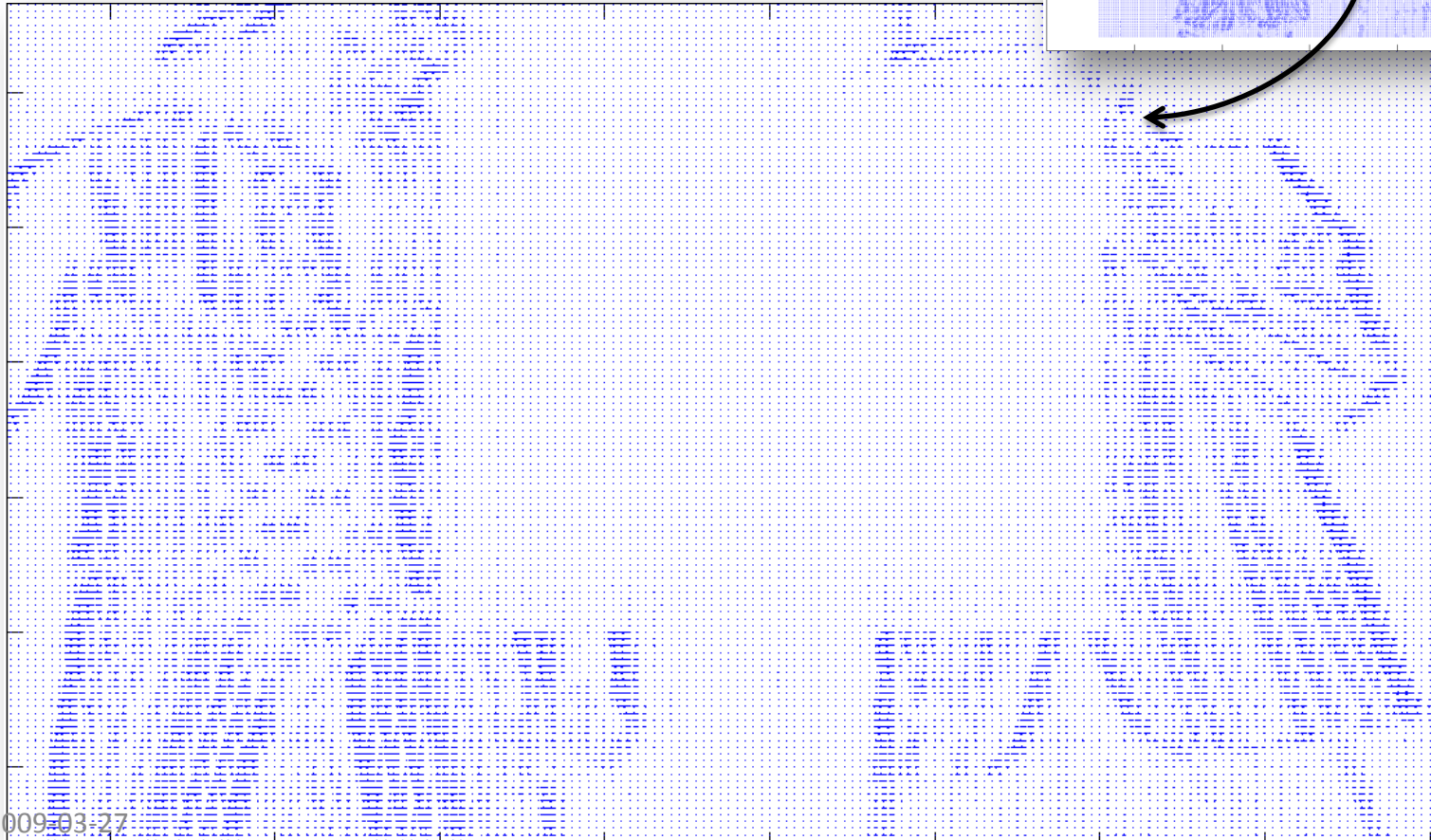
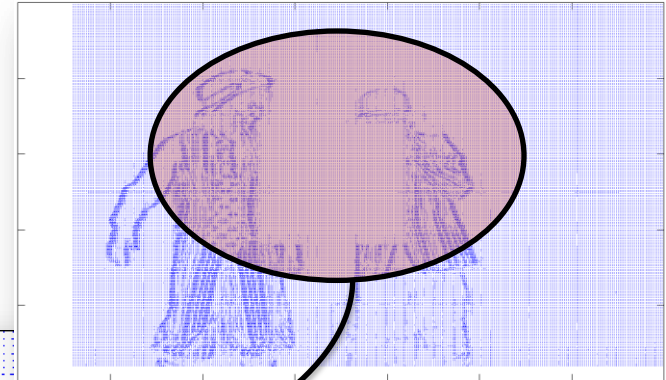


Disparity Compensated View Filter (DCVF)



Disparity Information

**disparity information from the NDE
reference software**



DCVF Output

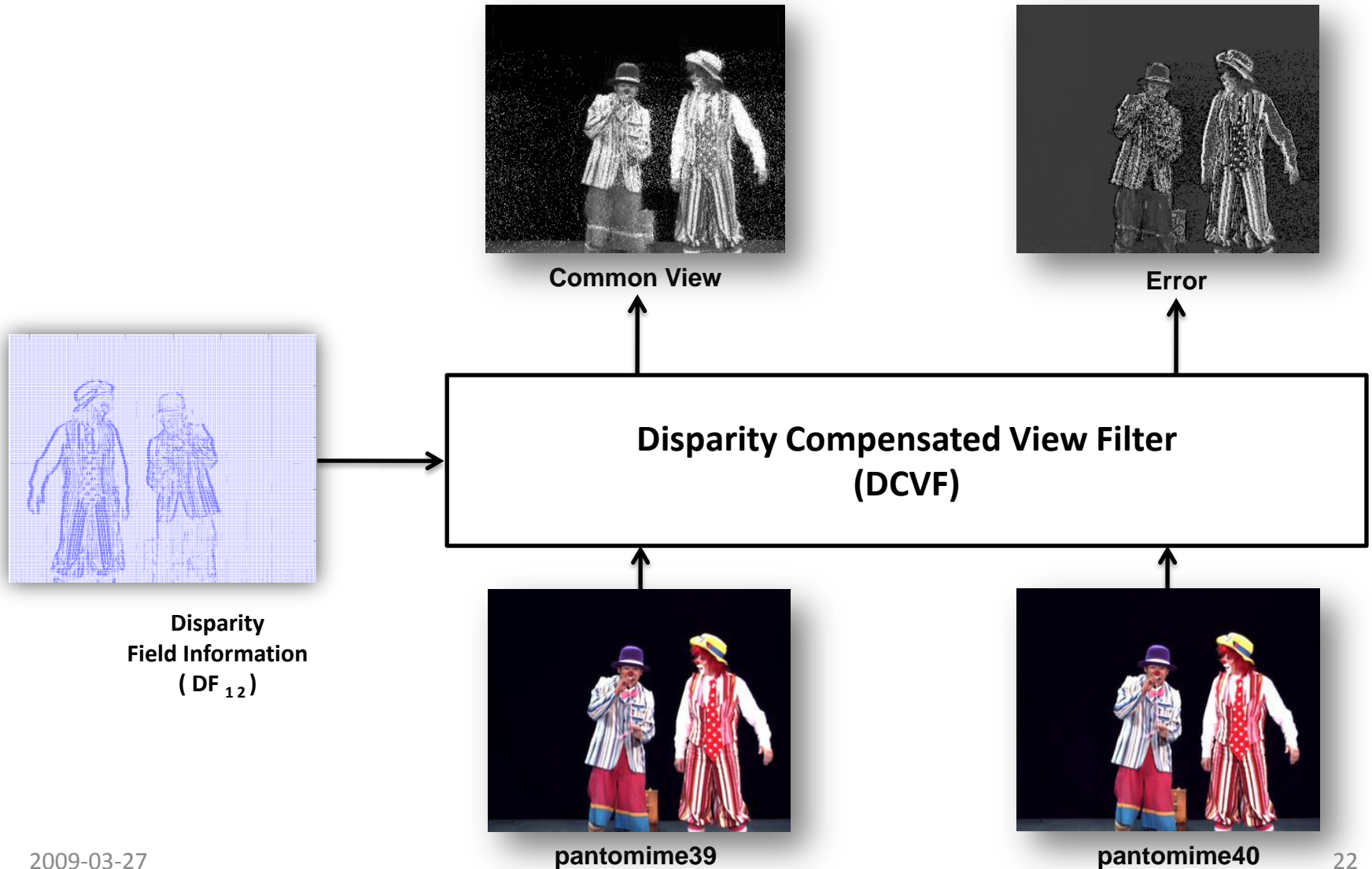
Common View



Error View



Disparity Compensated View Filter (DCVF)



DCVF Output

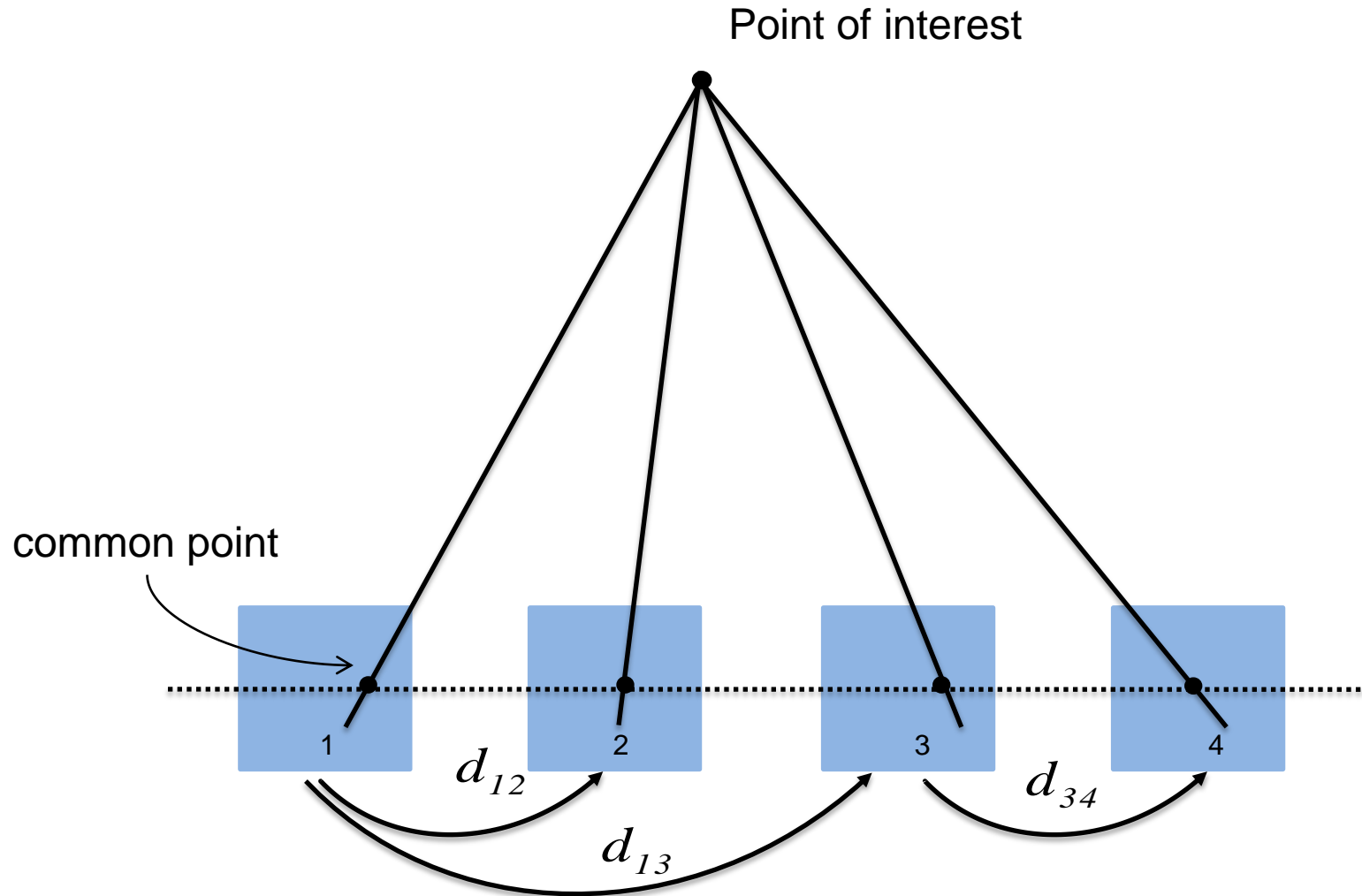
Common View



Error View



Epipolar Geometry



Epipolar Geometry

Checking visible points

Condition for relay points : $d_{13} + d_{34} = d_{14}$

Point of interest

