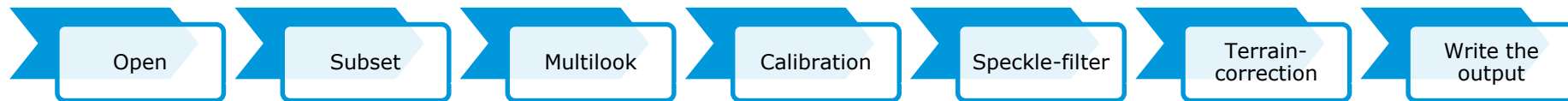


# Sentinel Application Platform - SNAP

## How to process radar data to map floods

Magdalena Fitrzyk  
RSAC c/o ESA

# Data processing chain – pre-crisis image

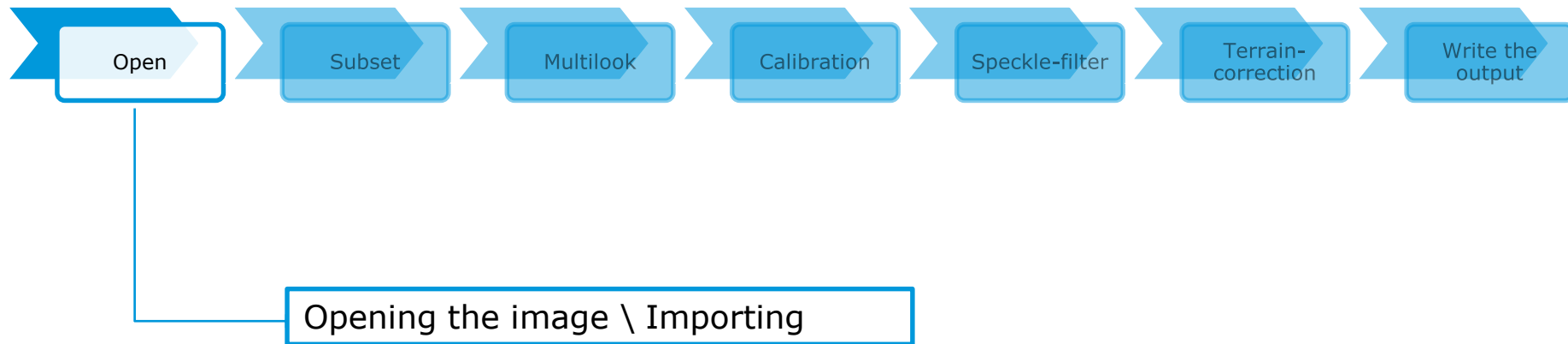


Two images for the AOI

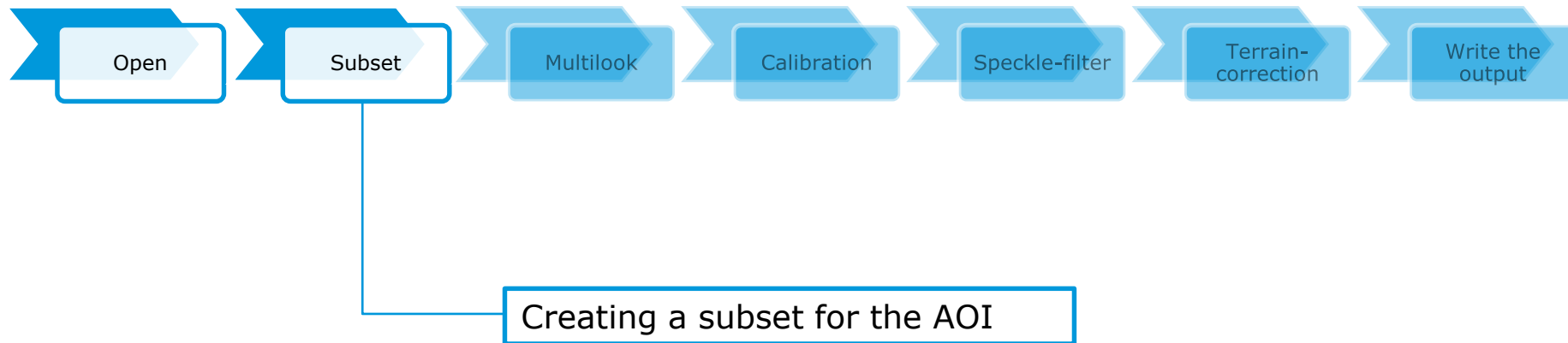
- Pre-crisis – 2019-03-13
- Crisis – 2019-03-19



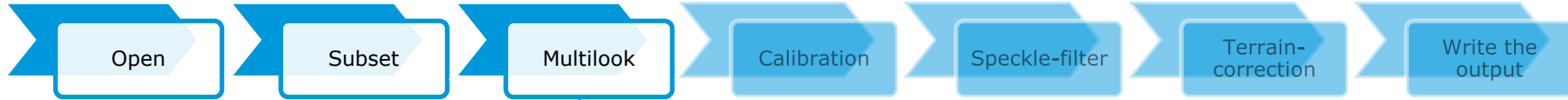
# Data processing chain – pre-crisis image



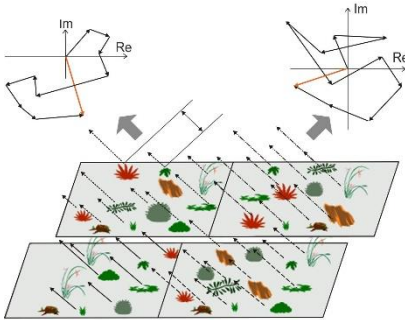
# Data processing chain – pre-crisis image



# Data processing chain – pre-crisis image

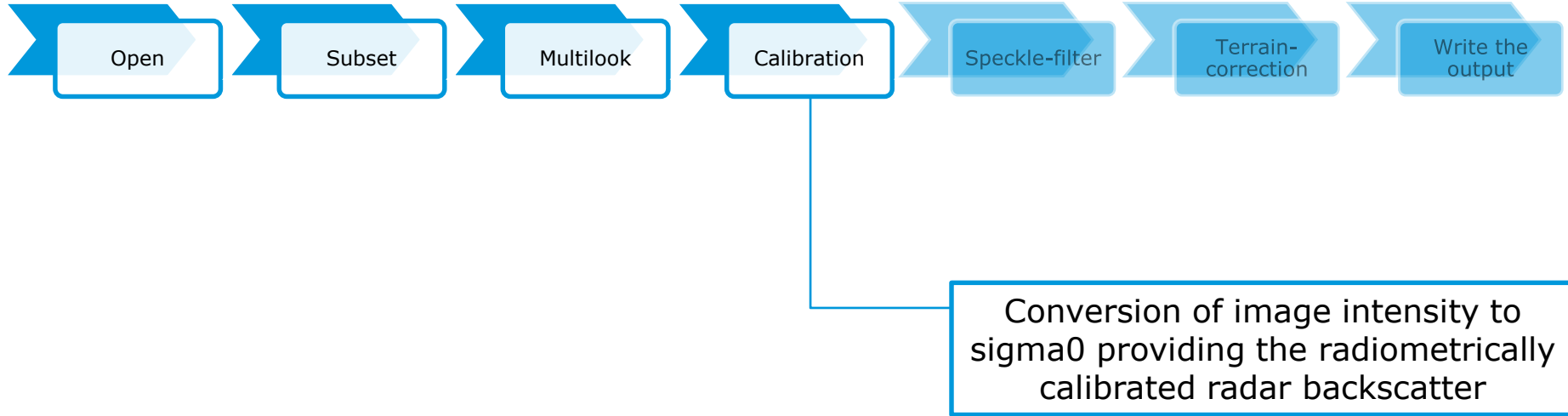


Multilooking in space-domain:  
averaging (in range and/or azimuth)  
a single look image with a small  
sliding window

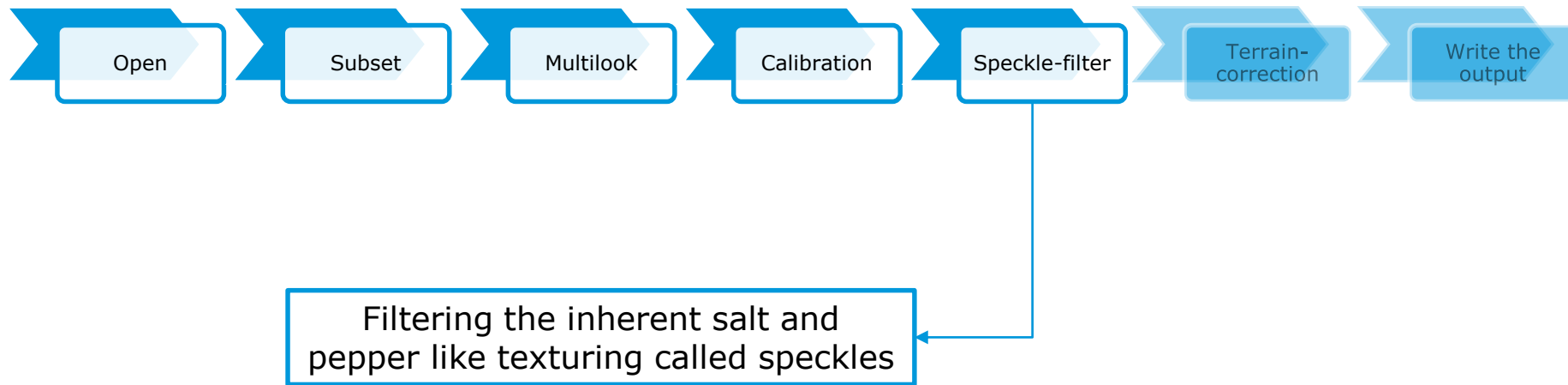


Random positive and negative interference of wave contributions  
from the many individual scatterers within one resolution cell

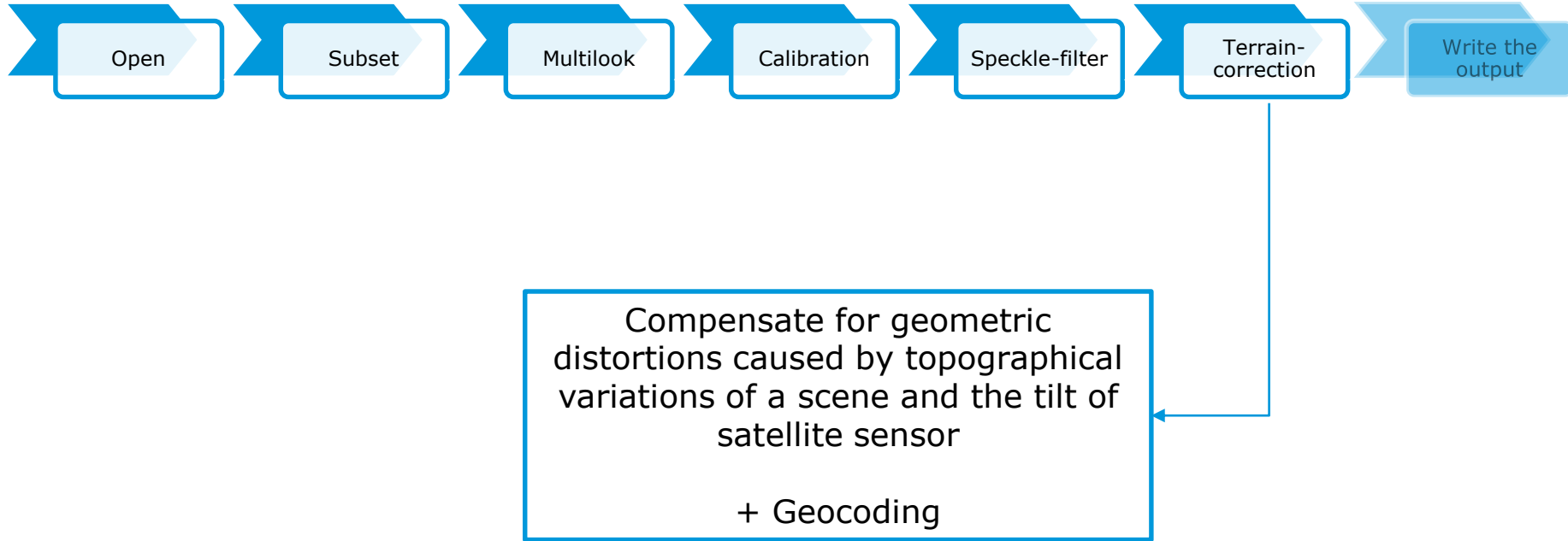
# Data processing chain – pre-crisis image



# Data processing chain – pre-crisis image

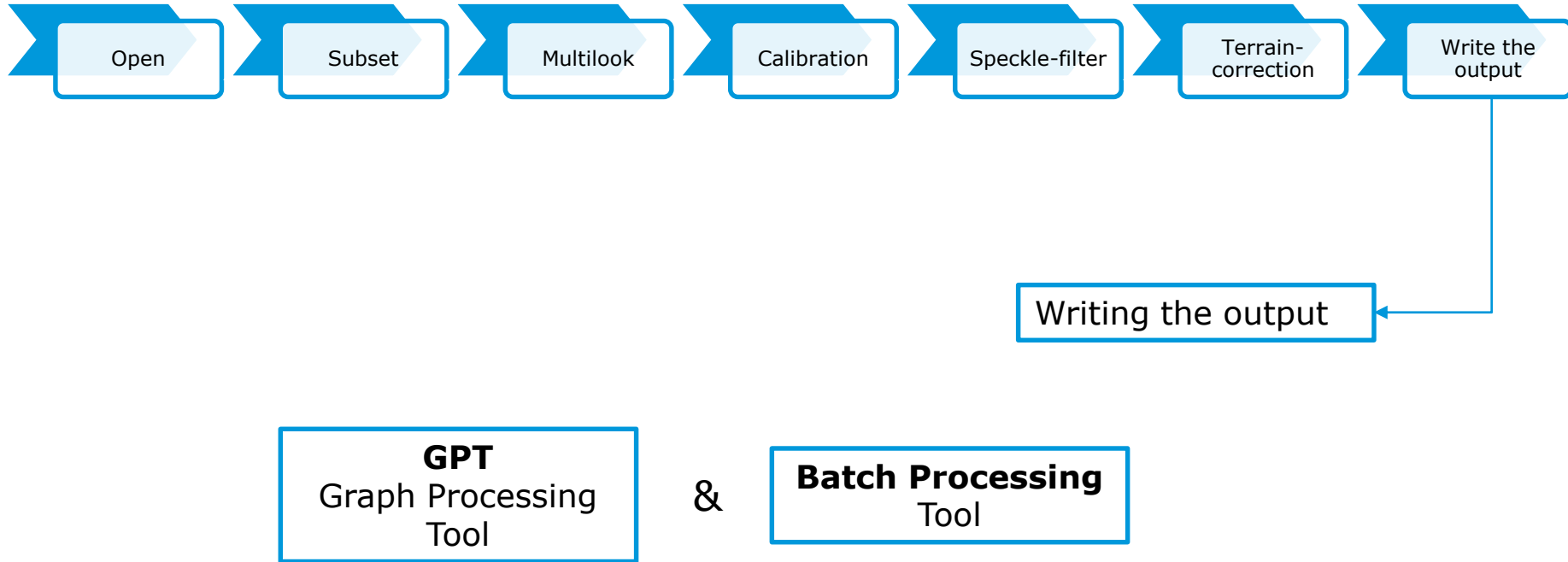


# Data processing chain – pre-crisis image

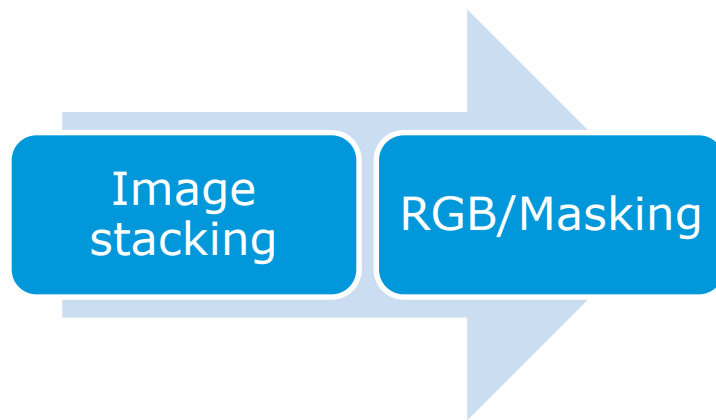
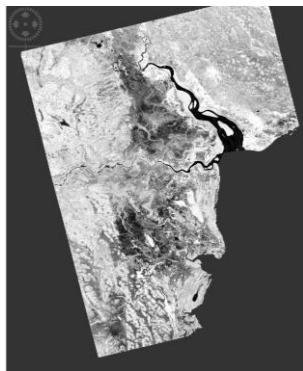
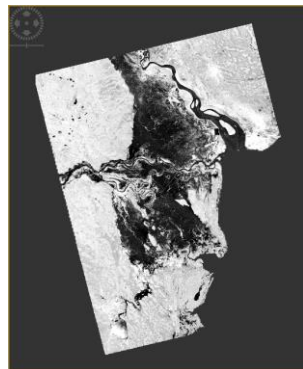




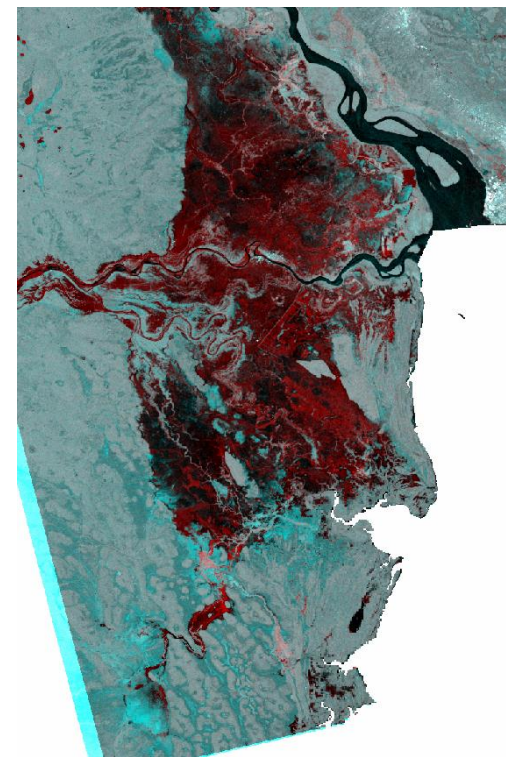
# Data processing chain – pre-crisis image



# Stacking pre-crisis and crisis image



Red: pre flood  
Green: during flood  
Blue: during flood



# DOWNLOAD SNAP

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