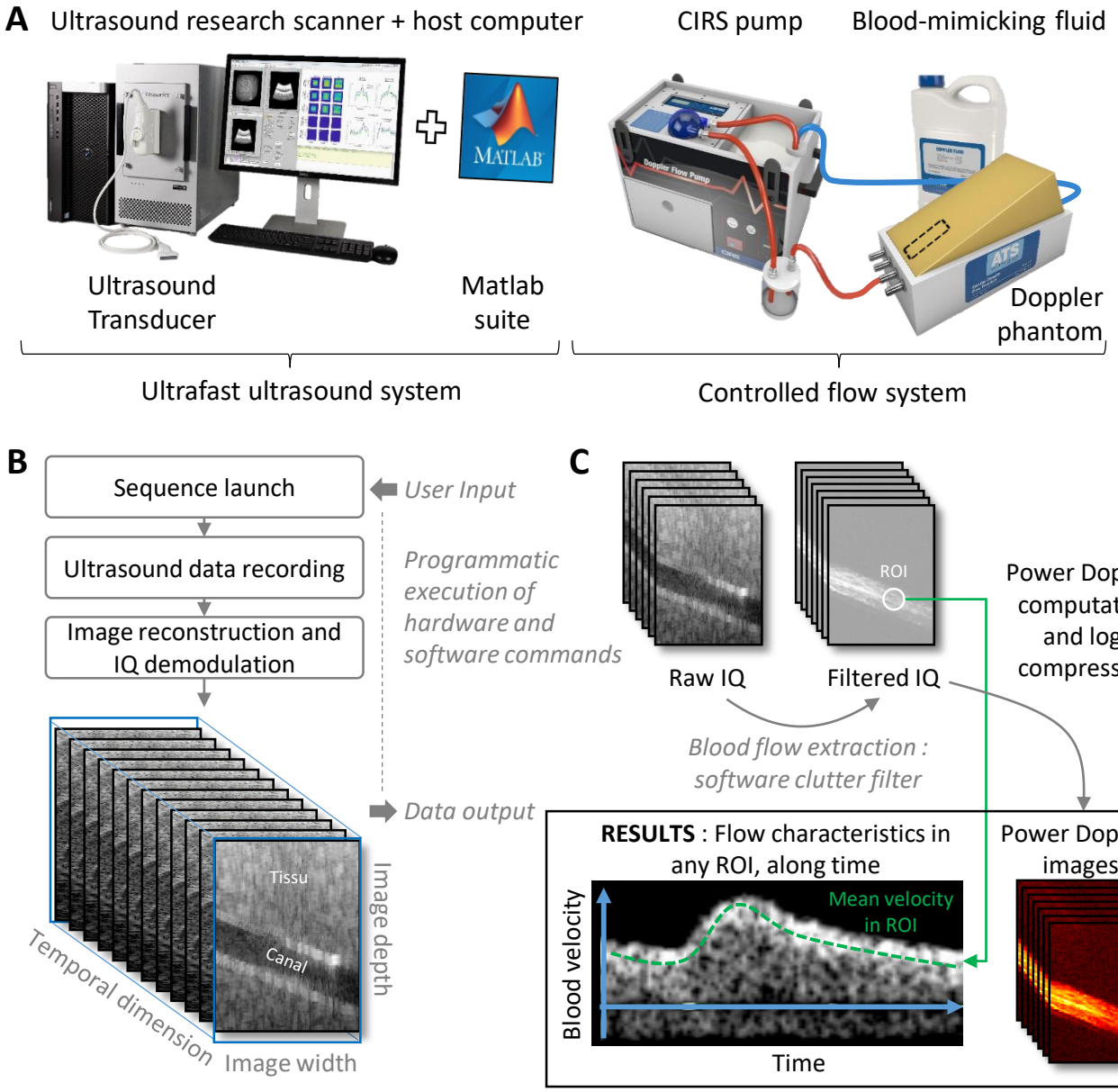
A
Ultrasound research scanner + host computer
CIRS pump
Blood-mimicking fluid
MATLAB
Ultrasound Transducer
Matlab suite
Doppler phantom
Ultrafast ultrasound system
Controlled flow system
B
Sequence launch
Ultrasound data recording
Image reconstruction and IQ demodulation
User Input
Programmatic execution of hardware and software commands
Data output
Tissu
Canal
Temporal dimension
Image depth
Image width
C
ROI
Raw IQ
Filtered IQ
Power Doppler computation and log-compression
Blood flow extraction : software clutter filter
RESULTS : Flow characteristics in any ROI, along time
Mean velocity in ROI
Blood velocity
Time
Power Doppler images