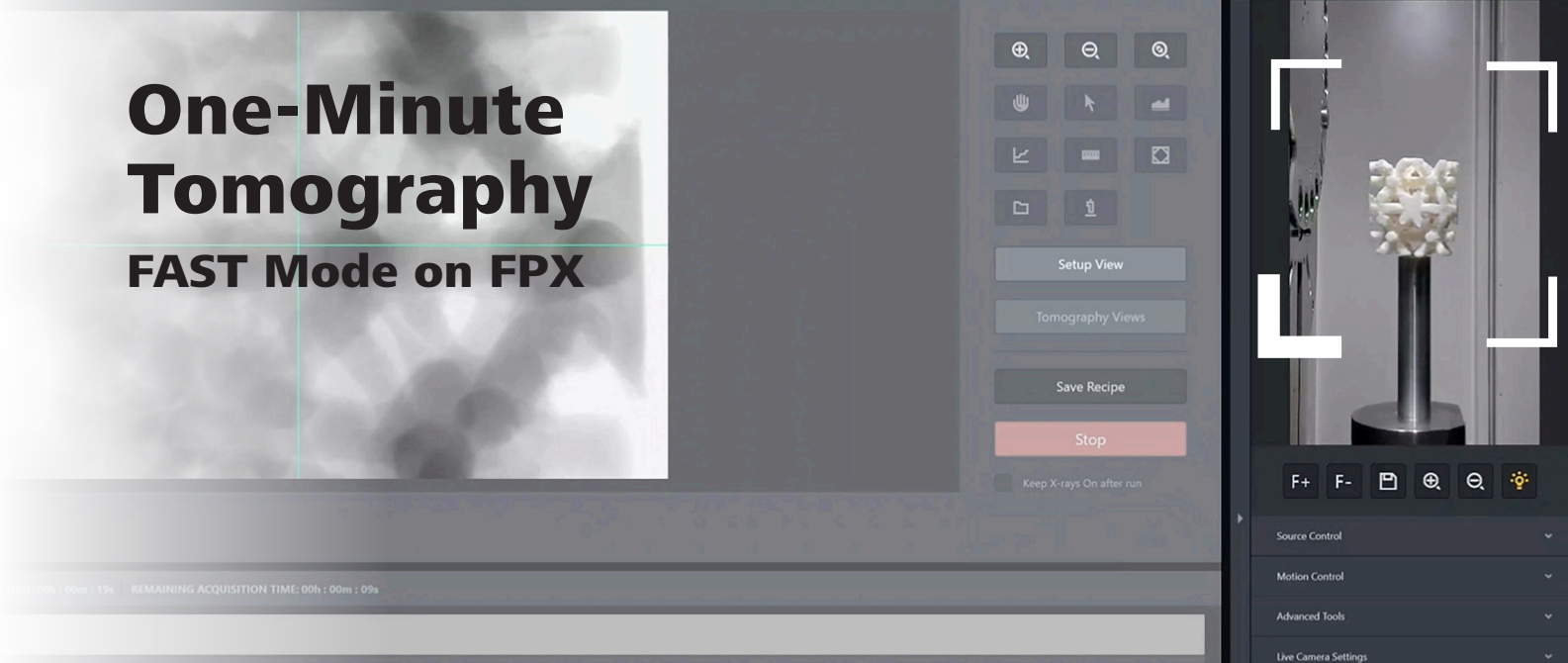


One-Minute Tomography

FAST Mode on FPX

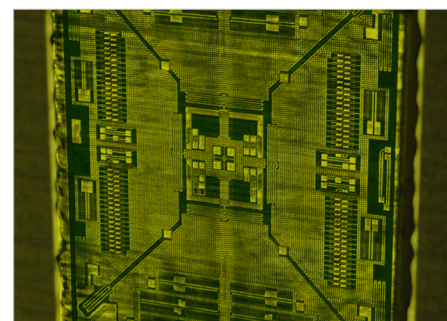
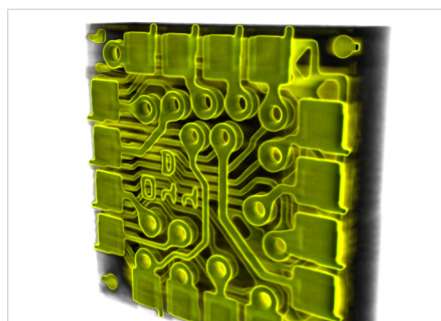


- Continuous motion tomographies with your FPX
- Reduce time for routine 3D imaging
- Volume Scout for 3D navigation to your ROI

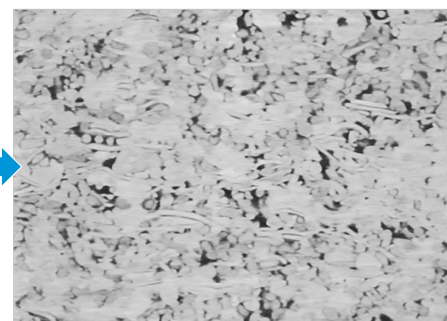
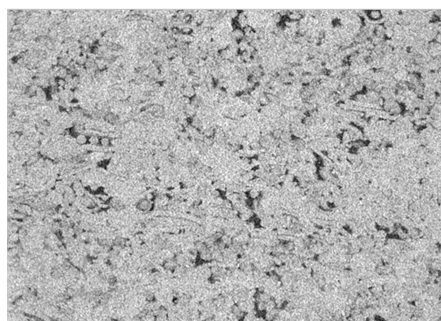
Fast Acquisition Scanning Technology (FAST)

FAST Mode is a continuous sample motion data collection mode that dramatically accelerates 3D imaging with FPX. FAST Mode enables true, nearly real-time 3D navigation for all samples thanks to full integration with the Volume Scout workflow in ZEN navx. It is built into ZEISS VersaXRM 730 and 615, enabled by the flat panel extension (FPX).

In FAST Mode, the sample rotates continuously while X-ray transmission images are acquired at different angles. This continuous rotation eliminates the overhead time of starting and stopping the rotation movements in a traditional step-and-shoot acquisition mode. By eliminating this overhead, dramatically faster scan times can be attained when exposure times are below 0.5 seconds (typical for the large, sensitive FPX detector). In practice, whole sample data collection times in the 1 to 5-minute range are now possible, and data collection times sub-30 seconds are achievable with relaxed image quality considerations.



One-minute FAST Mode 3D image acquisition of full MEMS gyroscope sample. Volume Scout non-destructively reveals hidden layer in gyroscope sensor.

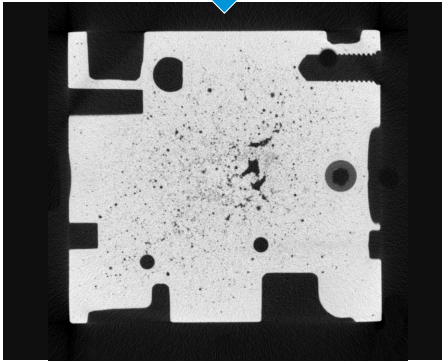
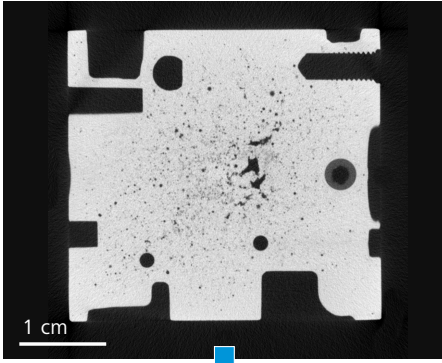


39-second scan of sandstone using FAST Mode with FPX (left), reconstructed with DeepRecon Pro (right)

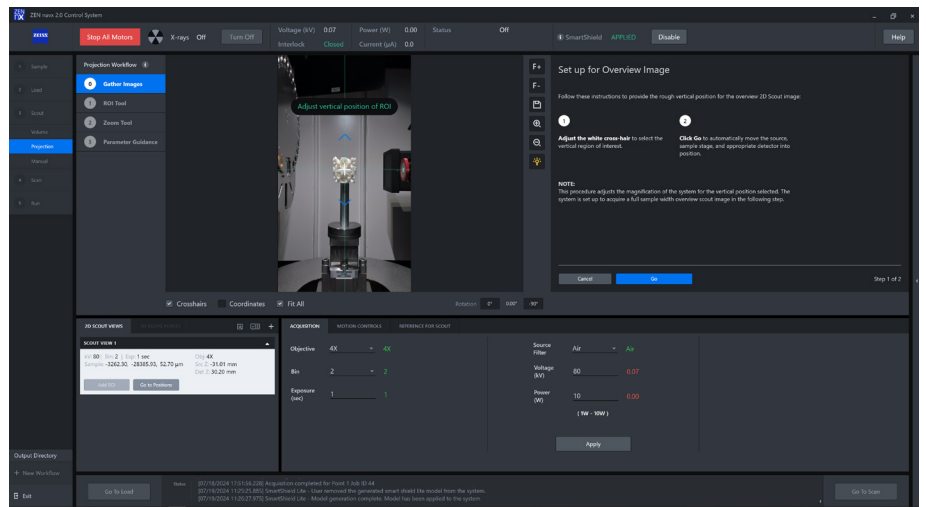
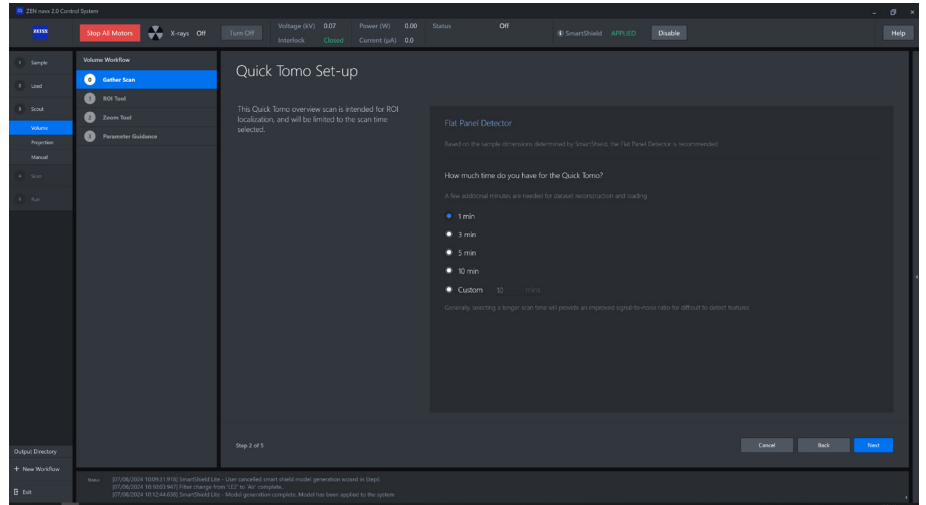
FAST Mode on VersaXRM maintains the high standards for artifact compensation users have come to expect through ZEISS proprietary scan trajectories, data handling and reconstruction approaches. FAST Mode acquisition integrates seamlessly with the Volume Scout workflow on ZEN navx to allow for near immediate feedback and true 3D navigation to the correct region of interest in your complex samples.



Seeing beyond



80% improvement in imaging time. Aluminum block imaged in traditional STEP Mode at 24 minutes, 29 seconds (top), compared to FAST Mode at 4 minutes, 7 seconds (bottom)



FAST Mode is built into every ZEISS VersaXRM platform, accessible with FPX. Volume Scout using FAST Mode is enabled by ZEN navx, the guidance and control system of ZEISS VersaXRM.



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