Reconstruction of Hydraulic Fractures Using Passive Ultrasonic Travel-Time Tomography

Wei Zhu, Xu Chang, Yibo Wang, Hongyu Zhai and Zhenxing Yao
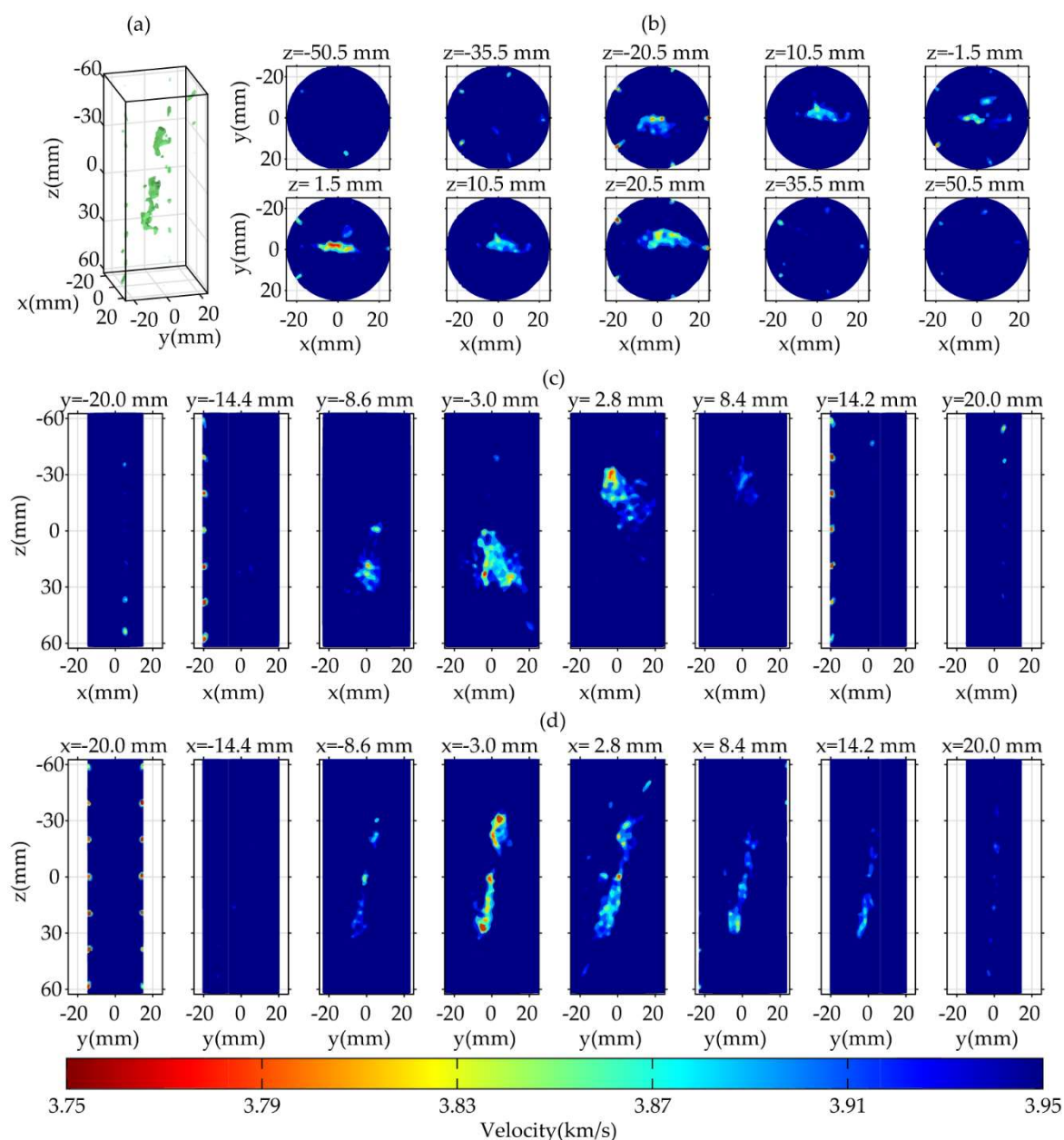

Figure S1. Tomographic images of Tikh under sparse ray coverage case (RNL=0.1%). (**a**) the 3D segmented image; (**b**) the transverse-view profile; (**c**) the coronal-view profile; and (**d**) the sagittal-view profile. The caption of each sub-image in (**b**–**d**) represents the profile position.
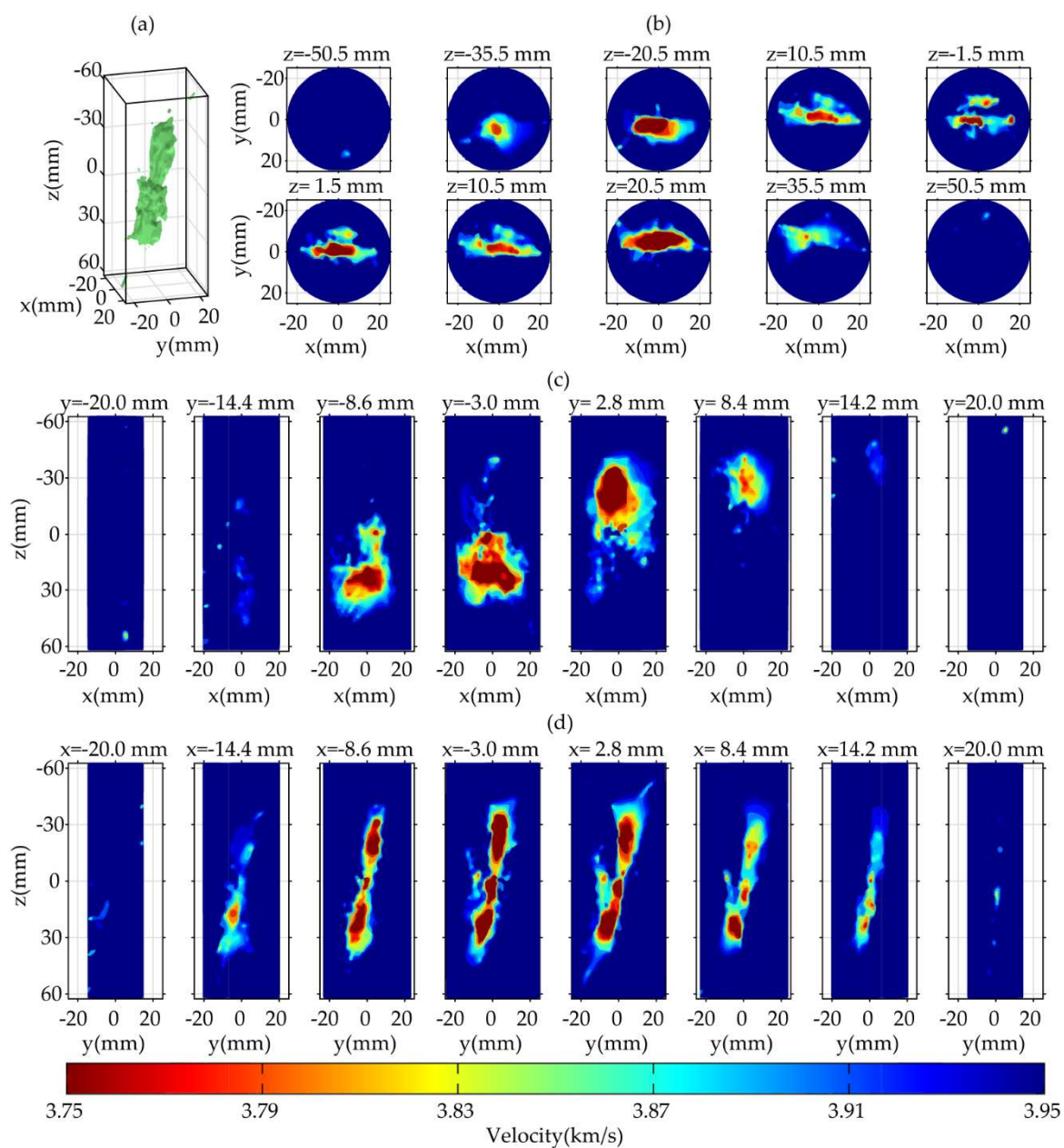
Figure S2. Tomographic images of TVR under sparse ray-coverage (RNL=0.1%). (**a**) the 3D segmented image; (**b**) the transverse-view profile; (**c**) the coronal-view profile; and (**d**) the sagittal-view profile. The caption of each sub-image in (**b**–**d**) represents the profile position.
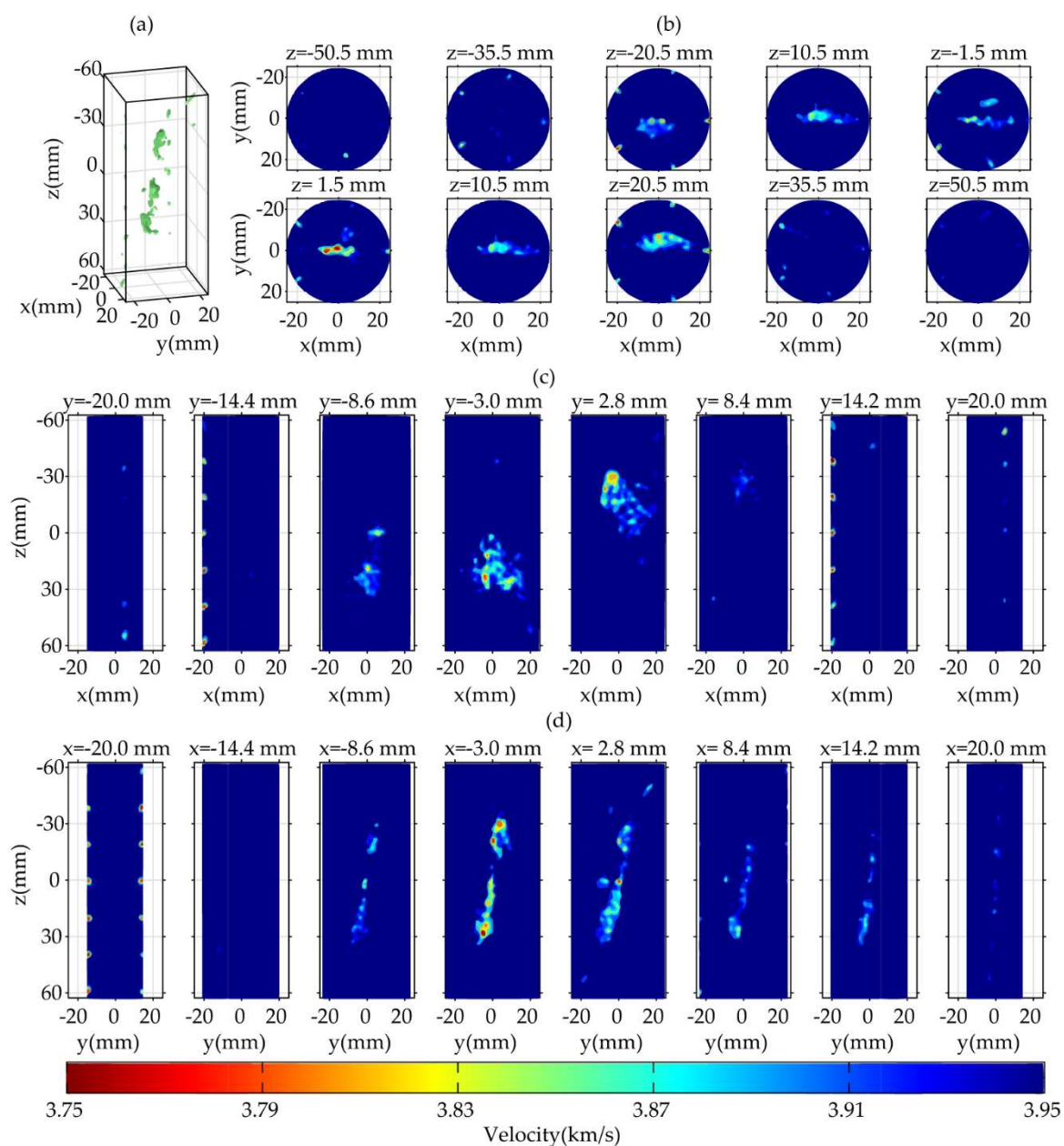
Figure S3. Tomographic images of Tikh under sparse ray coverage case (RNL=0.5%). (**a**) the 3D segmented image; (**b**) the transverse-view profile; (**c**) the coronal-view profile; and (**d**) the sagittal-view profile. The caption of each sub-image in (**b**–**d**) represents the profile position.
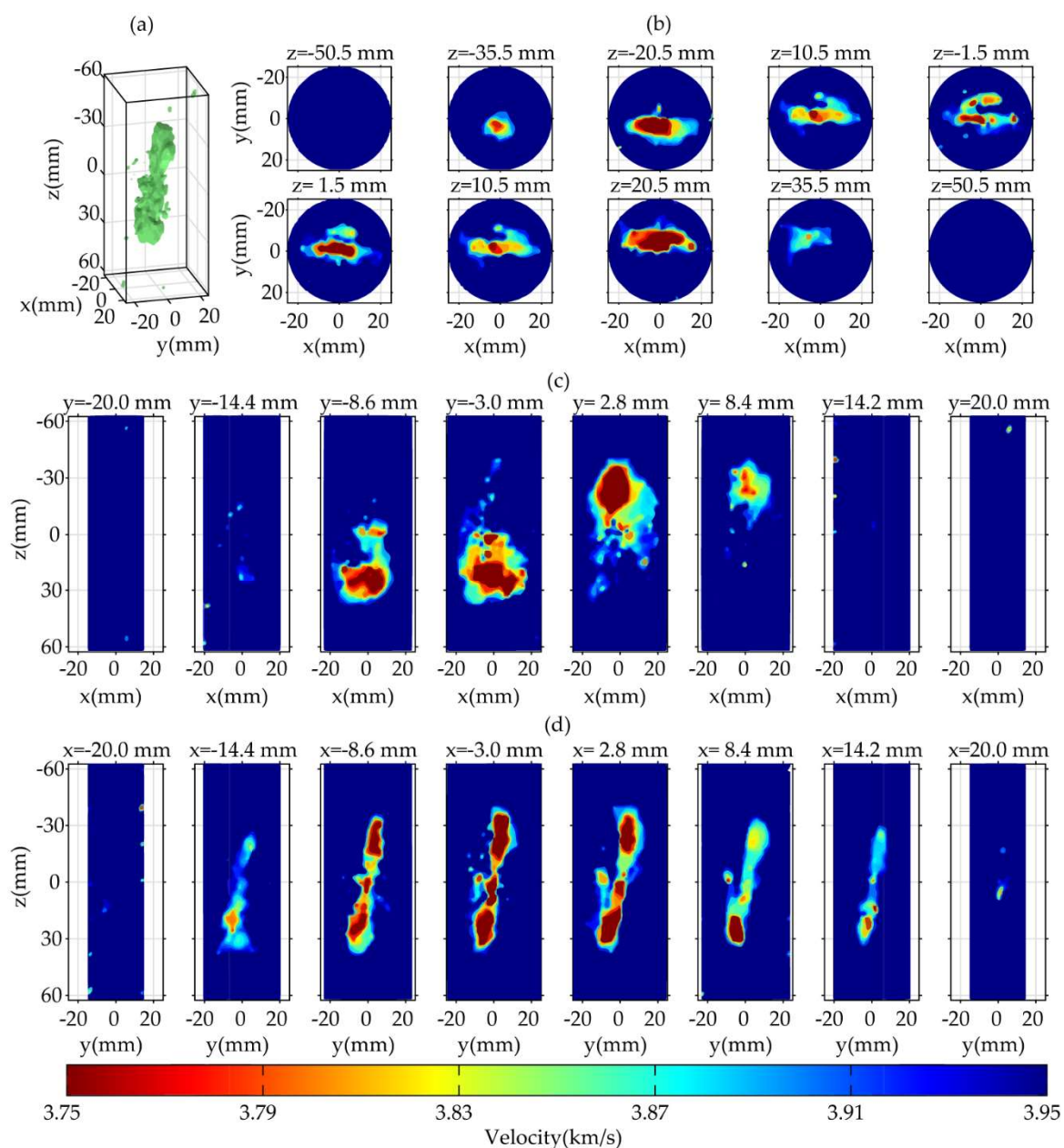
Figure S4. Tomographic images of TVR under sparse ray-coverage (RNL=0.5%). (**a**) the 3D segmented image; (**b**) the transverse-view profile; (**c**) the coronal-view profile; and (**d**) the sagittal-view profile. The caption of each sub-image in (**b**–**d**) represents the profile position.
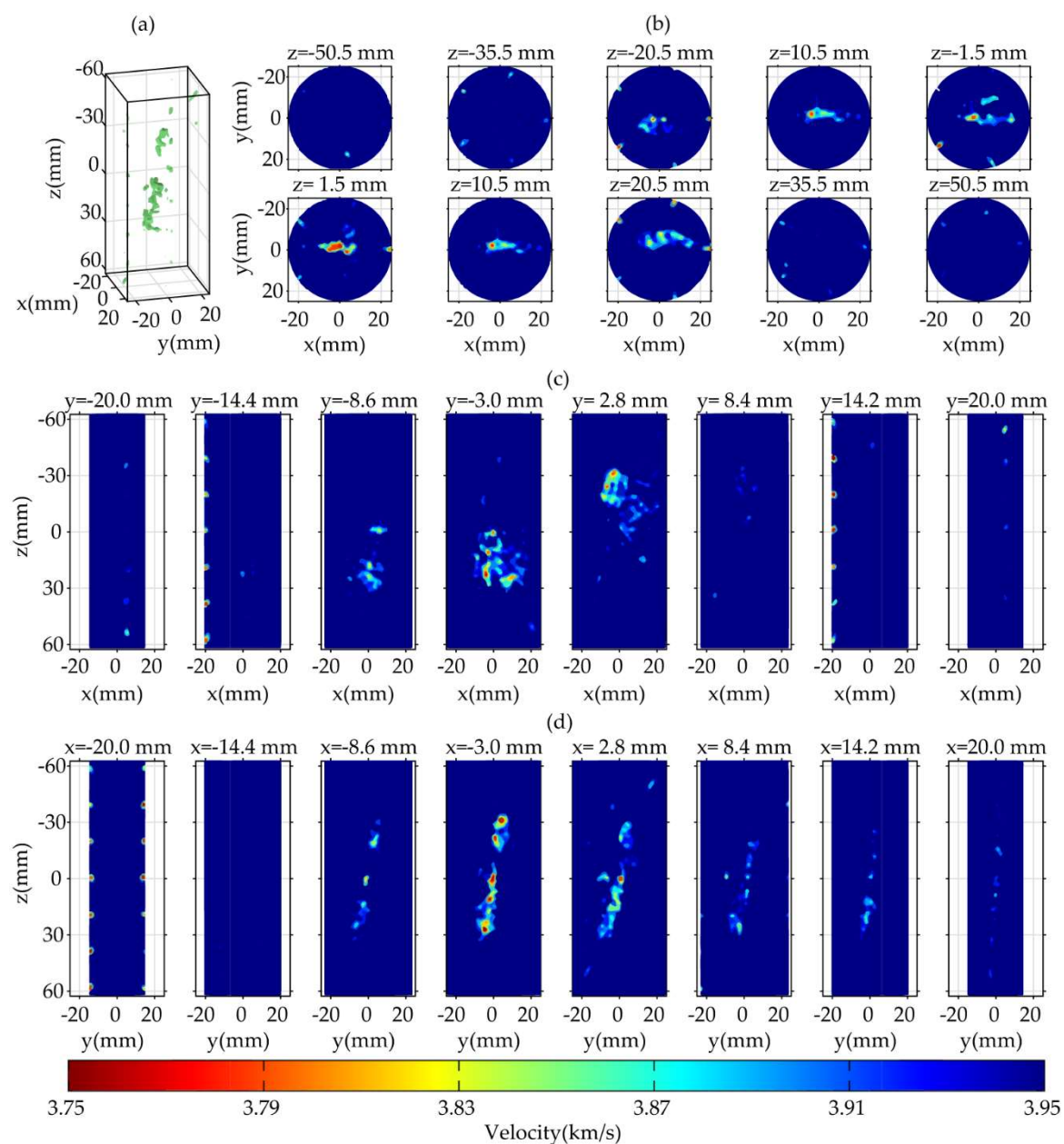
Figure S5. Tomographic images of Tikh under sparse ray coverage case (RNL=1%). (**a**) the 3D segmented image; (**b**) the transverse-view profile; (**c**) the coronal-view profile; and (**d**) the sagittal-view profile. The caption of each sub-image in (**b**–**d**) represents the profile position.
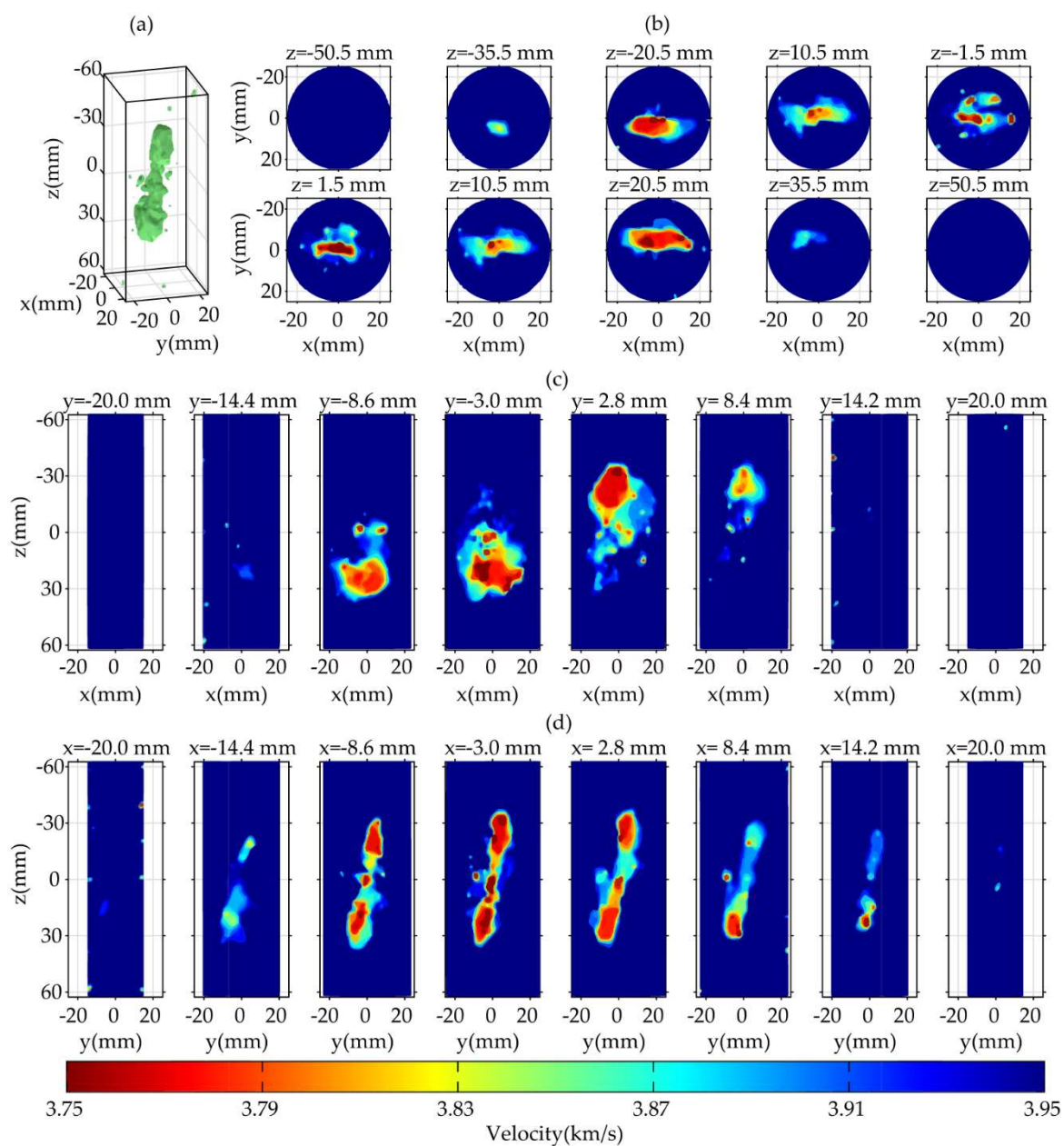
Figure S6. Tomographic images of TVR under sparse ray-coverage (RNL=1%). (**a**) the 3D segmented image; (**b**) the transverse-view profile; (**c**) the coronal-view profile; and (**d**) the sagittal-view profile. The caption of each sub-image in (**b–d**) represents the profile position.
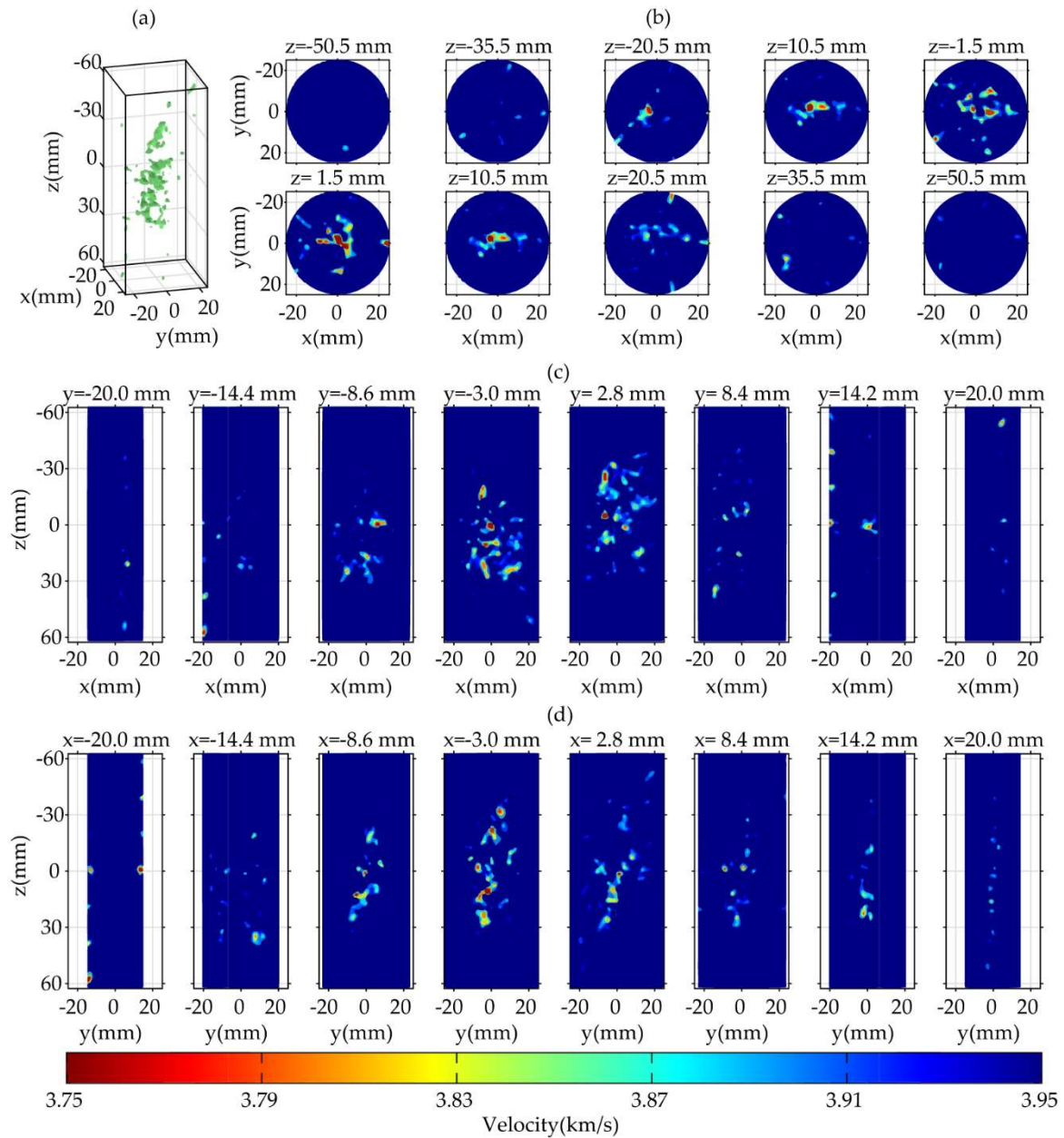
Figure S7. Tomographic images of Tikh under sparse ray coverage case (RNL=3%). (**a**) the 3D segmented image; (**b**) the transverse-view profile; (**c**) the coronal-view profile; and (**d**) the sagittal-view profile. The caption of each sub-image in (**b**–**d**) represents the profile position.
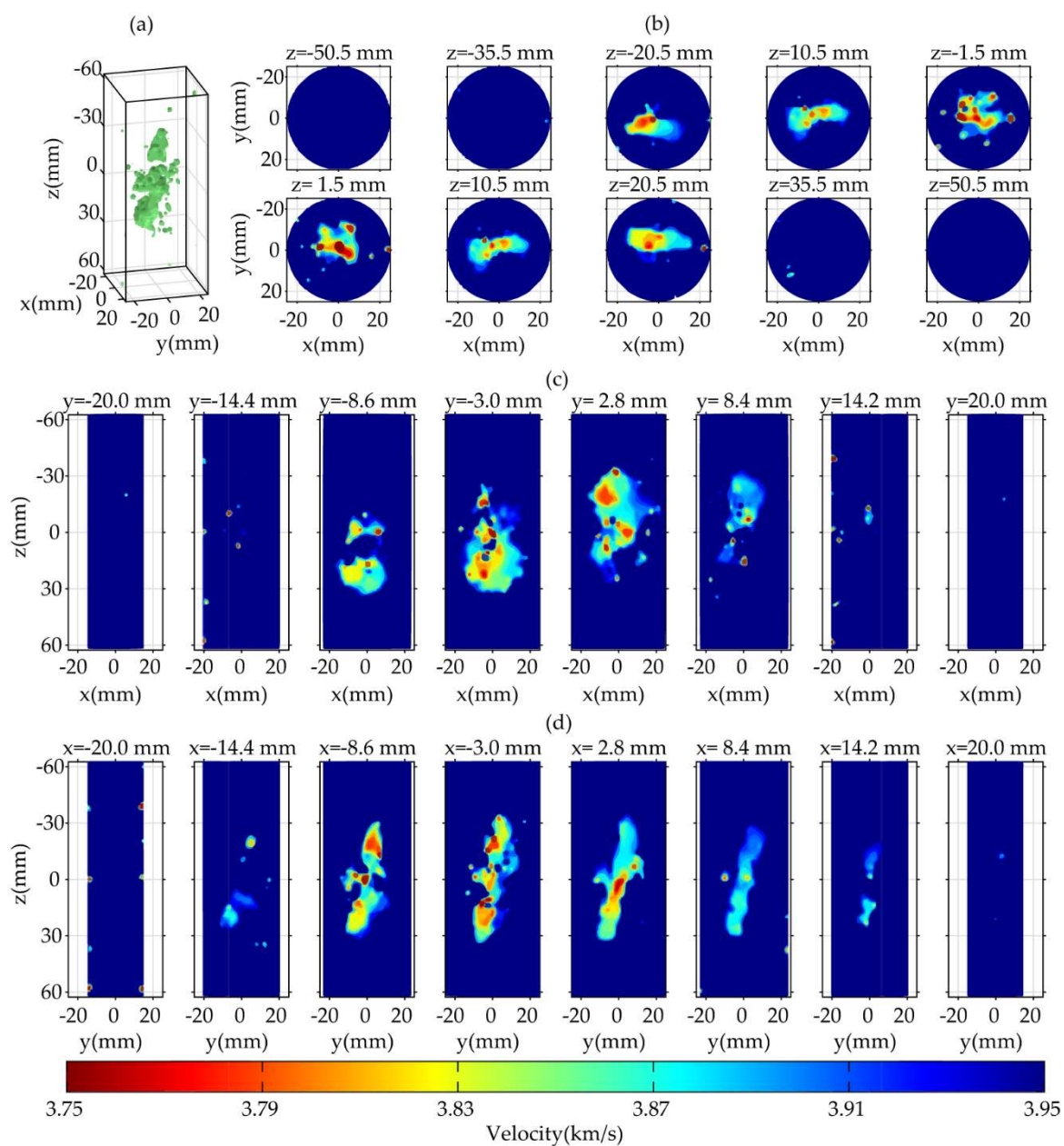
Figure S8. Tomographic images of TVR under sparse ray-coverage (RNL=3%). (**a**) the 3D segmented image; (**b**) the transverse-view profile; (**c**) the coronal-view profile; and (**d**) the sagittal-view profile. The caption of each sub-image in (**b**–**d**) represents the profile position.
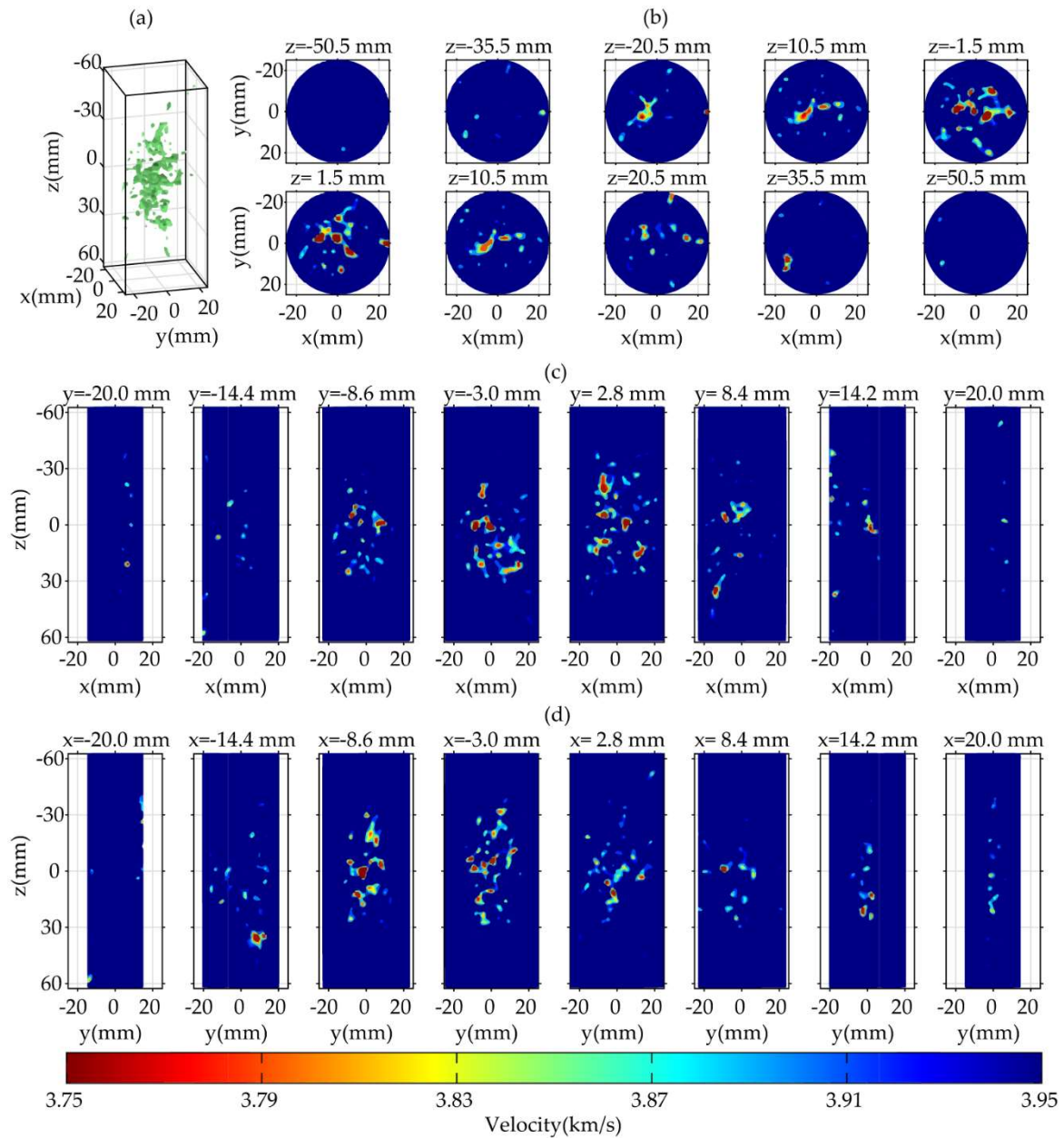
Figure S9. Tomographic images of Tikh under sparse ray coverage case (RNL=5%). (**a**) the 3D segmented image; (**b**) the transverse-view profile; (**c**) the coronal-view profile; and (**d**) the sagittal-view profile. The caption of each sub-image in (**b**–**d**) represents the profile position.
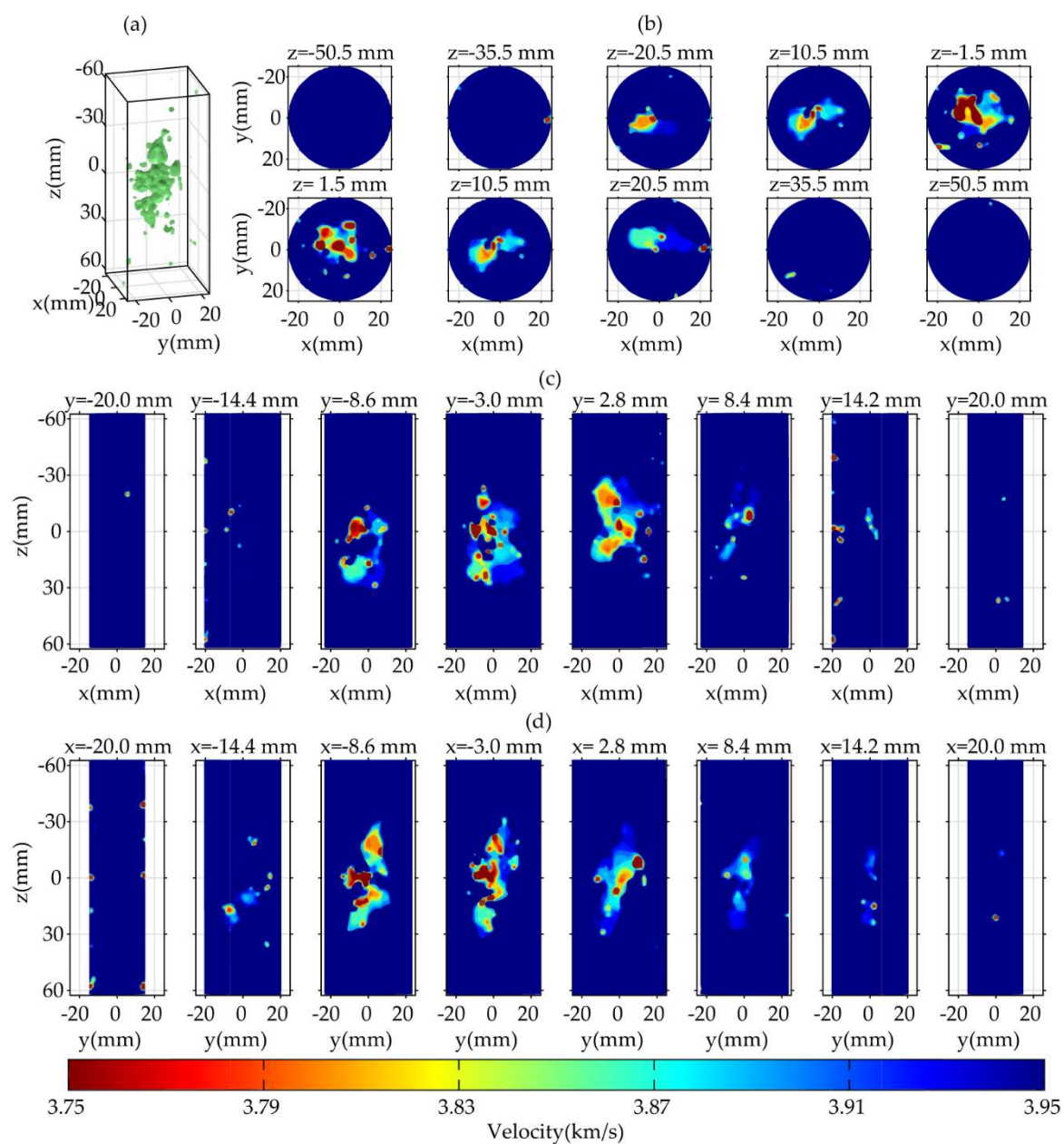
Figure S10. Tomographic images of TVR under sparse ray-coverage (RNL=5%). (**a**) the 3D segmented image; (**b**) the transverse-view profile; (**c**) the coronal-view profile; and (**d**) the sagittal-view profile. The caption of each sub-image in (**b**–**d**) represents the profile position.