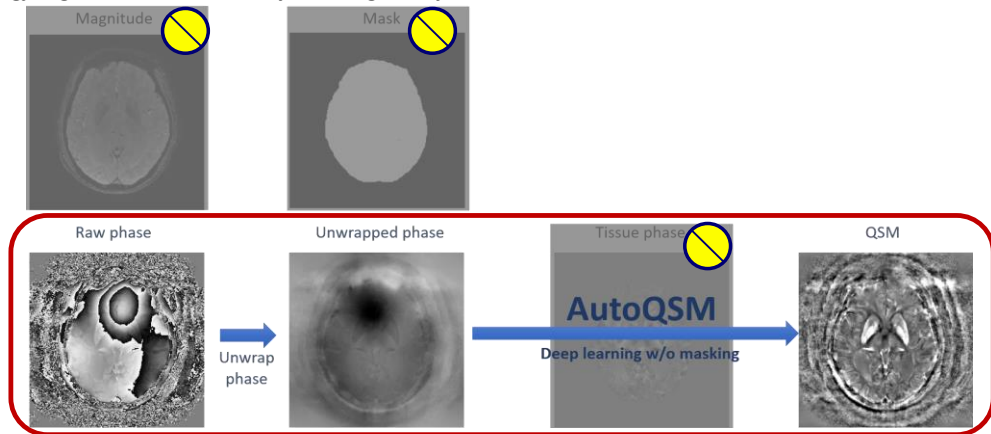


AutoQSM: Learning-based single-step quantitative susceptibility mapping reconstruction without brain extraction

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AutoQSM was developed by Prof. Hongjiang Wei, et al. It adopted a simple U-Net structure as the backbone. It was trained using a large dataset across 1-80 y/o subjects. It takes the unwrapped phase as the input and directly predicts high quality QSM.

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Our contributions:

- Without skull removal;
- No parameter tuning;
- Full FOV QSM with preserved cortical tissues, e.g., cortical vessels;
- Ultra-fast QSM reconstruction within a few seconds

Links:

download link: <https://github.com/AMRI-Lab/AutoQSM>

publication links: <https://www.sciencedirect.com/science/article/pii/S1053811919306469>

Wei et al. NIMG, 2019

The advantages of AutoQSM are: without skull removal, no background phase removal, full FOV QSM with cortical tissue. The source codes and trained networks ready for testing can be download at: <https://github.com/AMRI-Lab/AutoQSM>. The original paper has been published in NIMG 2019 at: <https://www.sciencedirect.com/science/article/pii/S1053811919306469>