Reviewer’s report

Title: Electronic cleansing in computed tomography colonography using AT layer identification with integration of gradient directional second derivative and material fraction model

Version: 0 Date: 11 Jun 2017

Reviewer: Yudong Zhang

Reviewer's report:

The proposed EC integrates the gradient directional second derivative (GDSD) into material fraction model to preserve submerged ST under FTM and remove artifacts at AT layers and T-junctions. In order to preserve ATT layers, AT layers can be distinguished from ATT layers using the proposed AT layer identification by considering the connectivity of these layers to FTM in leaping distance.

(1) How do you perform lung and bone removal?

(2) Is equation 2 the step function?

(3) Figure 4 is unclear

(4) Several related papers are missing, see


(5) An in-depth discussion is expected

Minor revision

Are the methods appropriate and well described?
If not, please specify what is required in your comments to the authors.
Yes

**Does the work include the necessary controls?**
If not, please specify which controls are required in your comments to the authors.

Yes

**Are the conclusions drawn adequately supported by the data shown?**
If not, please explain in your comments to the authors.

Yes

**Are you able to assess any statistics in the manuscript or would you recommend an additional statistical review?**
If an additional statistical review is recommended, please specify what aspects require further assessment in your comments to the editors.

I am able to assess the statistics

**Quality of written English**
Please indicate the quality of language in the manuscript:

Acceptable

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