FIELD^{RT} report

"FIELDRT_PROSTATE1_test" attempt

18-Feb-2021

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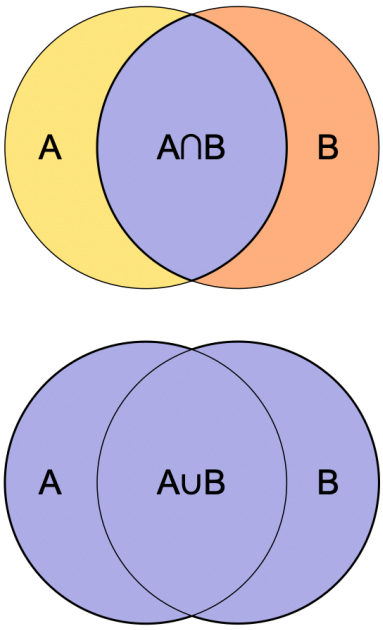
1. Over/under contoured regions

An under contoured region (showed as a cyan contour) is a region present in the reference contour but not outlined by the user.

An over contoured region (showed as a red contour) is a region outlined by the user but not present in the reference contour.

Quantitative evaluation of the user outline was performed in terms of volume, 2D and 3D Jaccard similarity index.

The Jaccard similarity index (sometimes called the Jaccard similarity coefficient) compares members for two sets to see which members are shared and which are distinct. It is a measure of similarity for the two sets of data, with a range from 0% to 100%. The higher the percentage, the more similar the two populations. It is computed as follow:



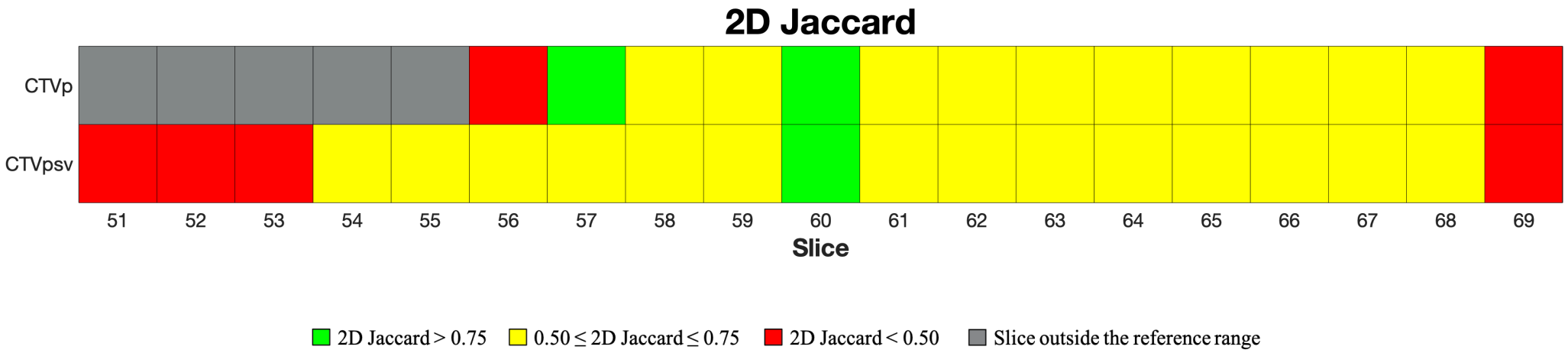
$$J(A,B) = \frac{|A \cap B|}{|A \cup B|}$$

In the following pages a summary of the global and local (only 2D Jaccard) quantitative perfomance of the user will be presented. In addition, slices where the 2D Jaccard was below a threshold (0.50) are showed.

1. 1. Quantitative evaluation

	Reference volume [ml]	User volume [ml]	3D Jaccard
CTVp	33.08	48.37	0.68
CTVpsv	42.05	66.21	0.63

Jaccard values below the threshold (0.50) are highlighted in red. Jaccard values between 0.50 and 0.75 are highlighted in yellow



Statistics - (1/1)

1. 2. Qualitative evaluation

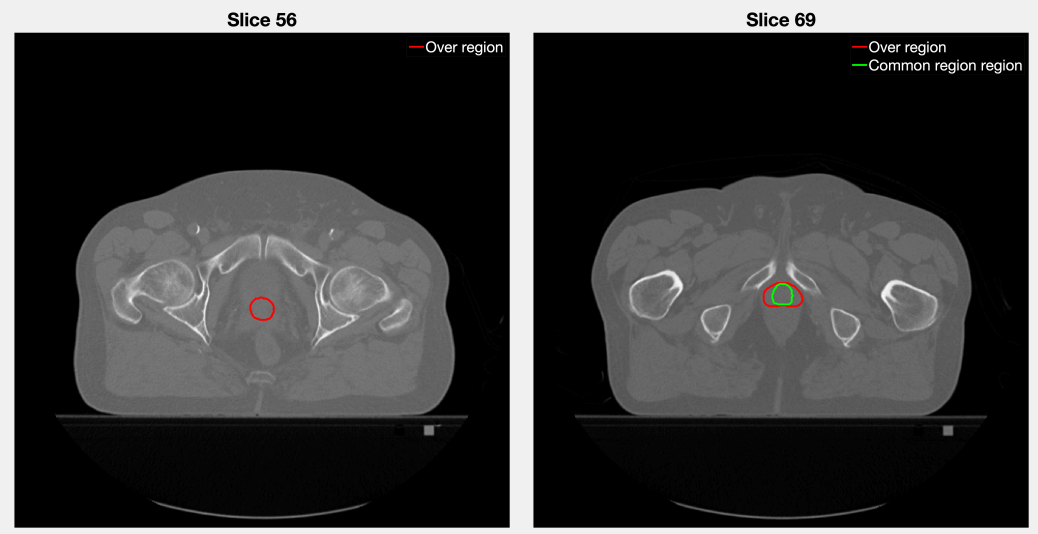
In this section, slices where the 2D Jaccard was below a threshold (0.50) are showed.

Under contoured regions are represented by cyan contours.

Over contoured regions are represented by red contours.

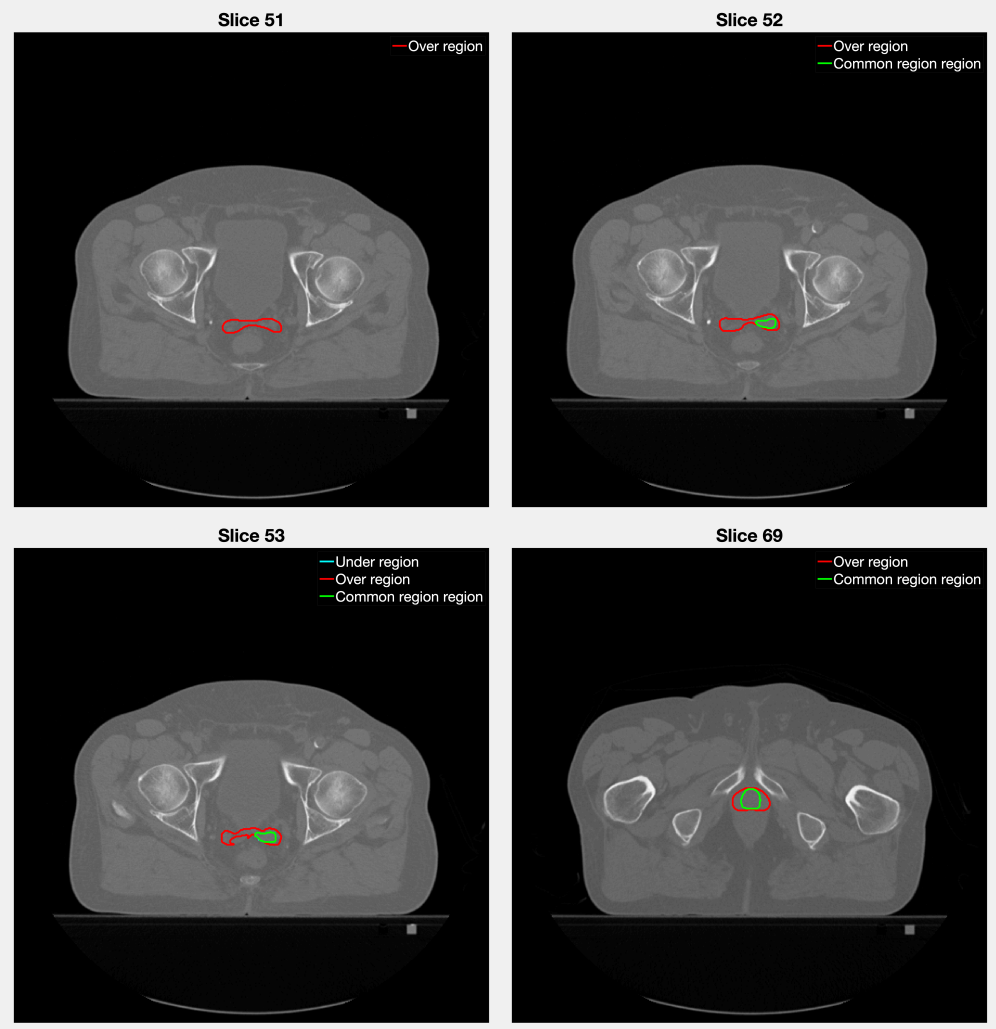
Regions of agreement are represented by green contours.

1.2.1. CTVp



CTVp - (1/1)

1.2.2. CTVpsv



CTVpsv - (1/1)

2. User outline + OARs

This section includes only the slices in which too much OAR has been in included in the regions outlined by the user. Reference contour (yellow), user contour (cyan) are showed with the following OARs (when present): bladder (dark green), bowel (red), lt femoral head (orange), penile bulb (pink), rectum (magenta), rt femoral head (blue).

There are no images to slow because no OARs have been included in the regions outlined by the user.

3. Min and max

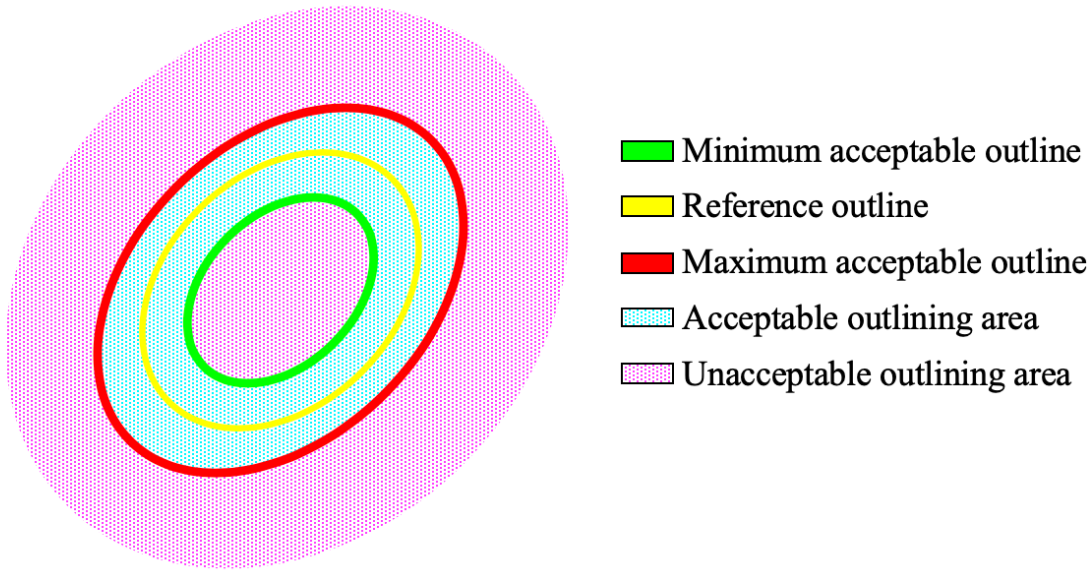
This section shows the user and the maximum/maximum acceptable outlining area.

Reference volume (represented as a yellow contour) is what we consider the ideal volume but there is variability.

Maximum volume (represented as a red contour) is what we consider the maximum acceptable outlining area.

Minimum volume (represented as a green contour) is what we consider the minimum acceptable outlining area.

Please have a look at the following image for a visual explanation of this concept.



Ideally your volume will be somewhere in between the maximum and minimum area.

There are no images to show. To see your performance for the min and max module please refer to the FIELD^{RT} viewer.