



# Particle therapy masterclass

THERAPY PLANING OF \*HERE\* (HERE TYPE THE ORGAN EG.  
HEAD AND NECK, LIVER, PROSTATE)


\*HERE\* (HERE TYPE WHICH INSTITUTION)

\*HERE\* (HERE TYPE YOUR NAME)



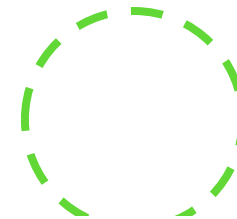


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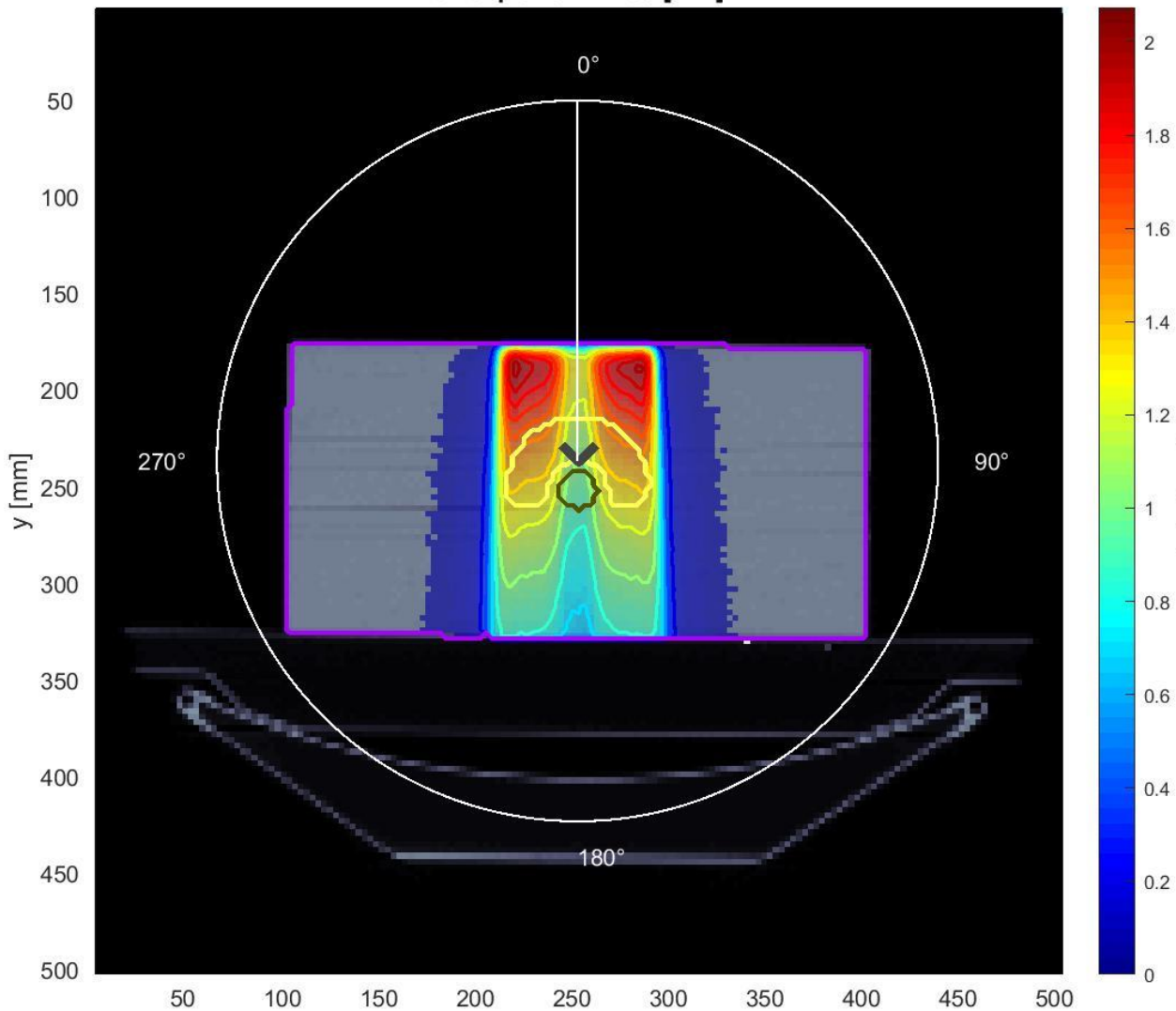
- TG-119 (test case)
  - Liver
  - COMPARAISON PHOTON vs PROTON THERAPY TG-119
  - COMPARISON PROTON vs CARBON ION THERAPY Tg-119
  - COMPARAISON PHOTON vs PROTON THERAPY Liver
  - COMPARAISON PHOTON vs CARBON ION THERAPY Liver
- 
- 

Cas TG-119

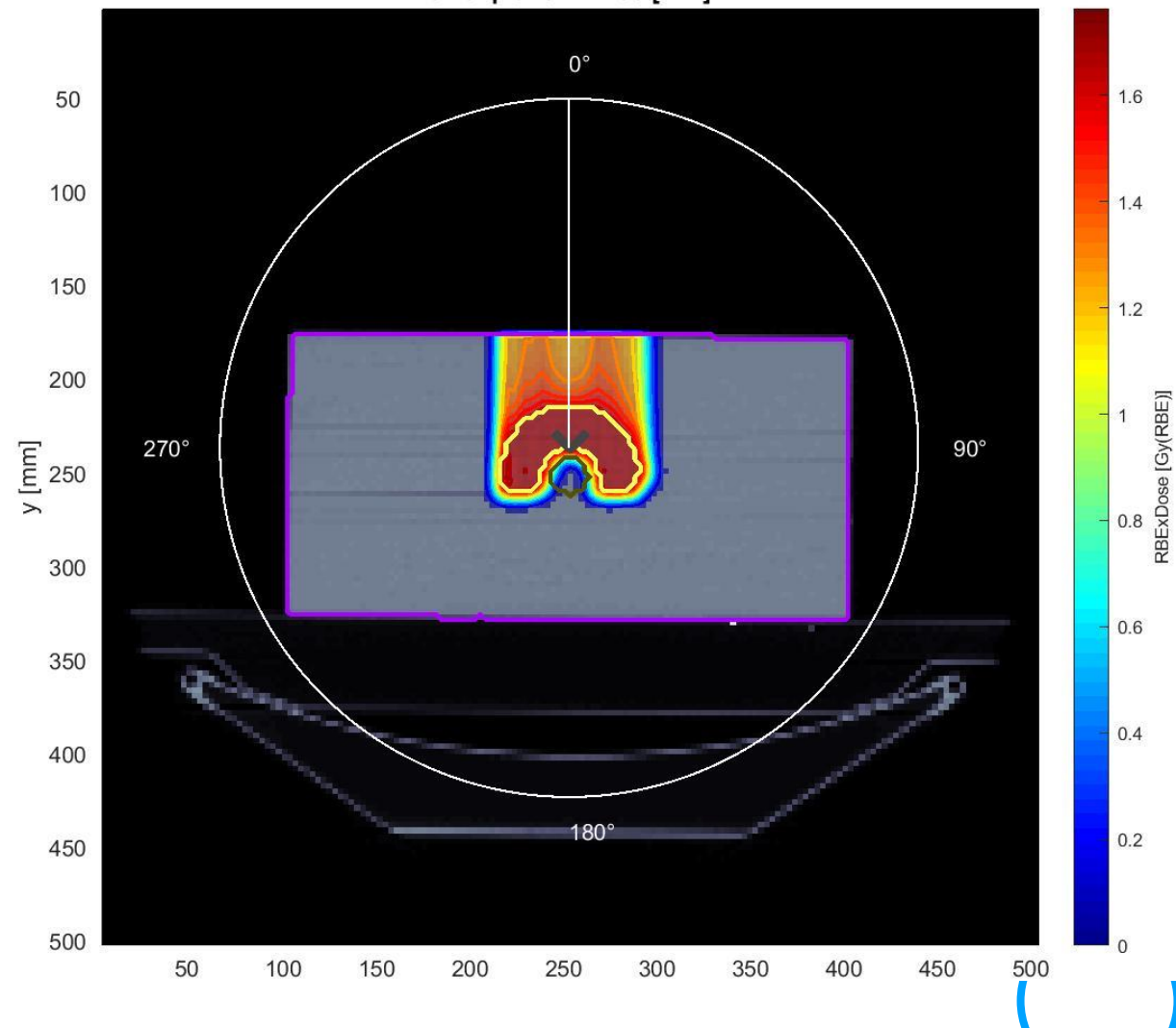
# COMPARAISON PHOTON VS PROTON



axial plane z = 165 [mm]

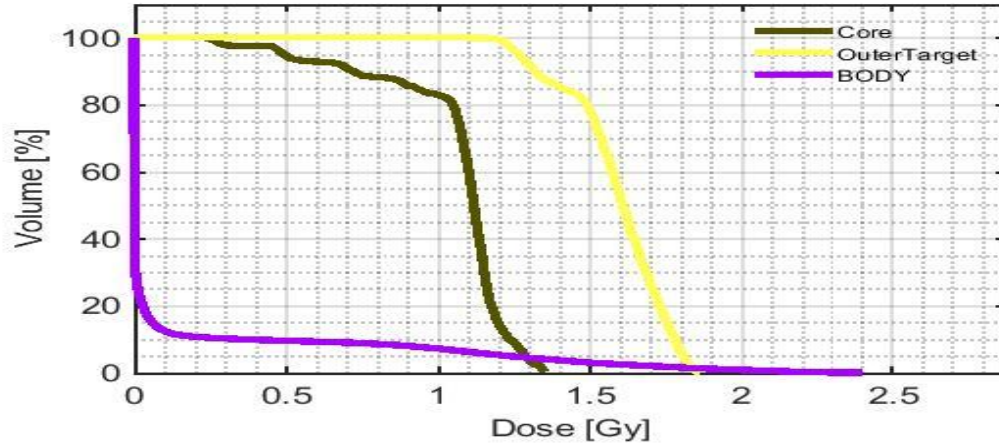
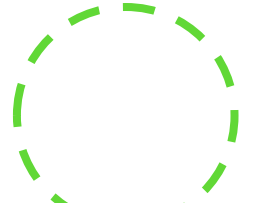


axial plane z = 165 [mm]

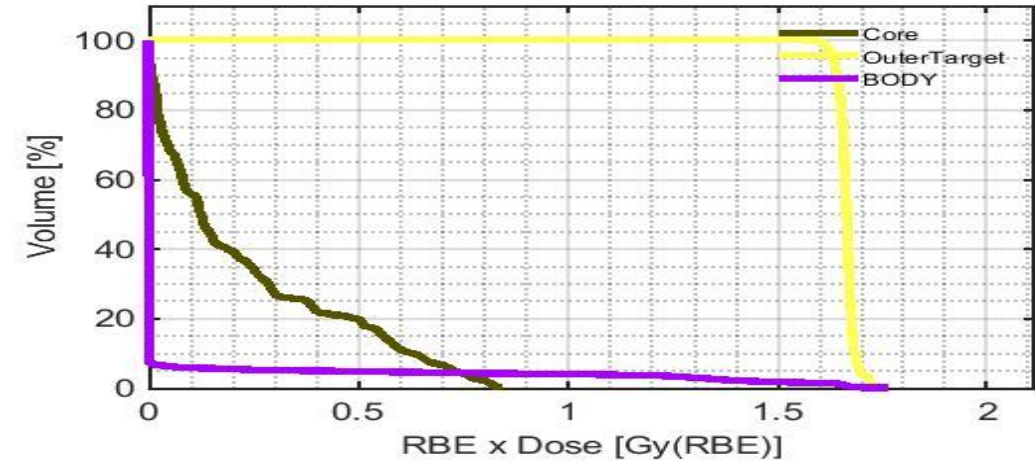


Cas TG-119

# COMPARAISON PHOTON VS PROTON



	max	min	mean	std
Core	1.3525	0.2364	1.0615	0.2183
OuterTarget	1.8672	1.0975	1.5905	0.1581
BODY	2.3969	0	0.1373	0.4068

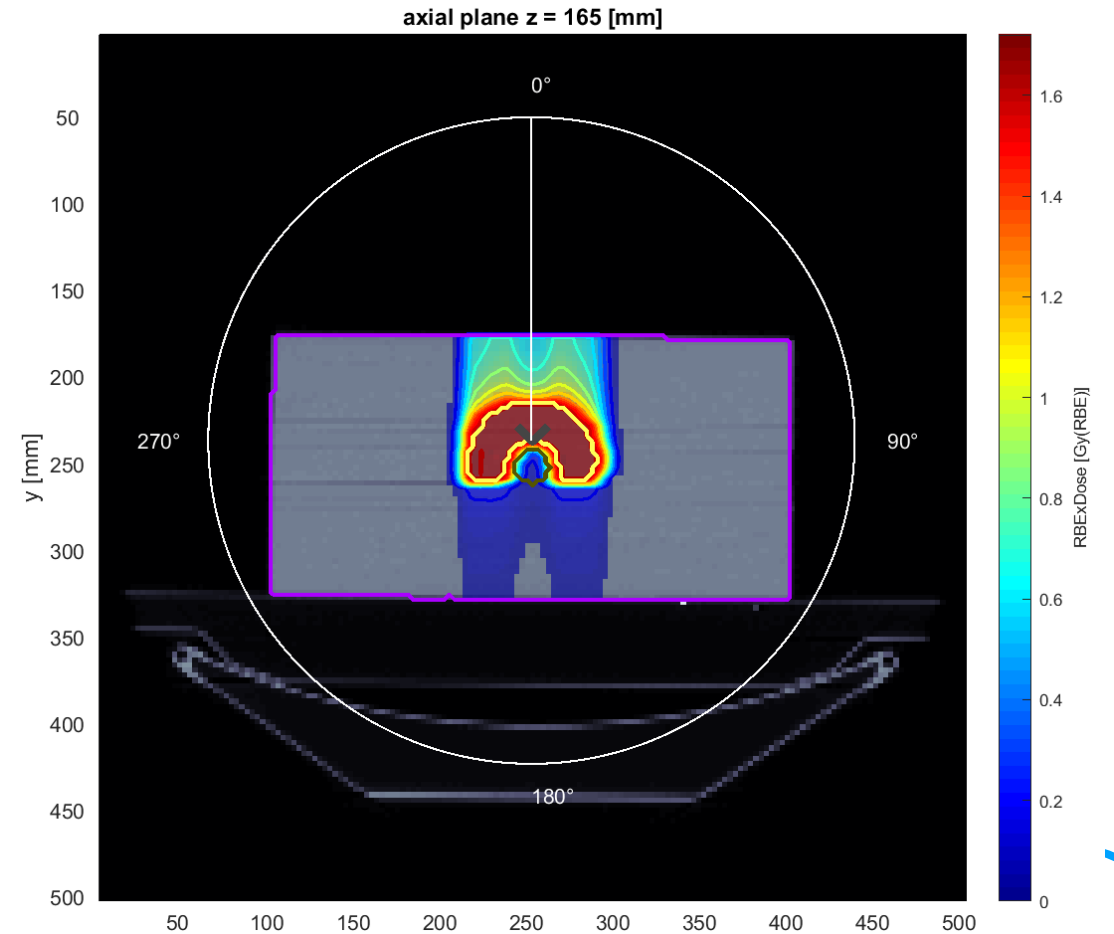
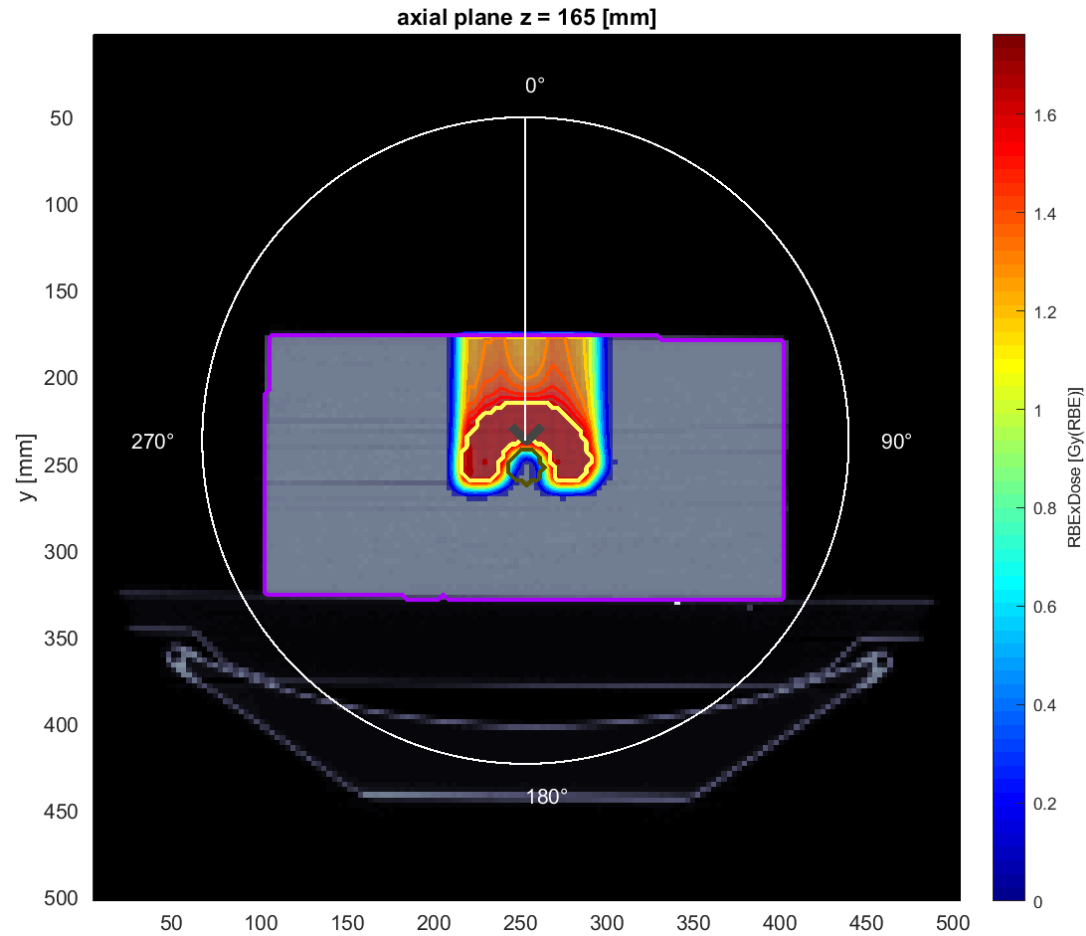
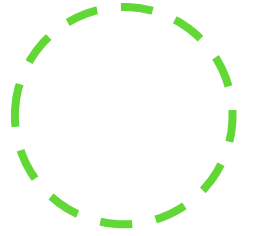


	max	min	mean	std
Core	0.8452	0	0.2258	0.2389
OuterTarget	1.7638	1.5600	1.6651	0.0201
BODY	1.7638	0	0.0652	0.2889



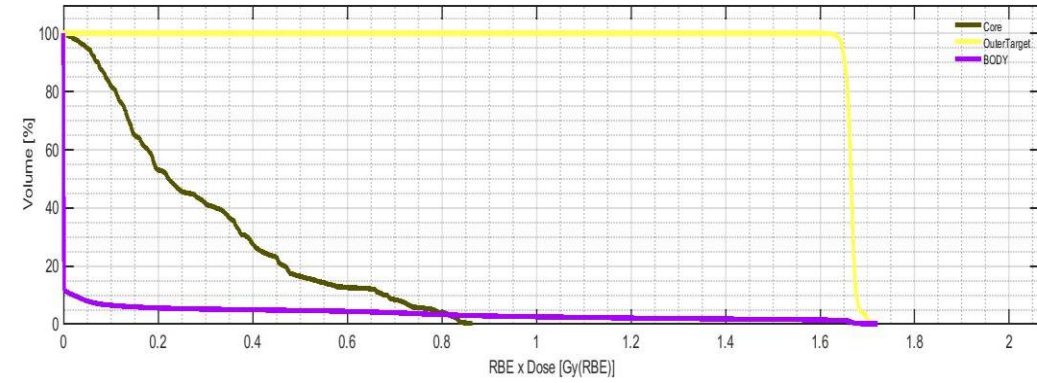
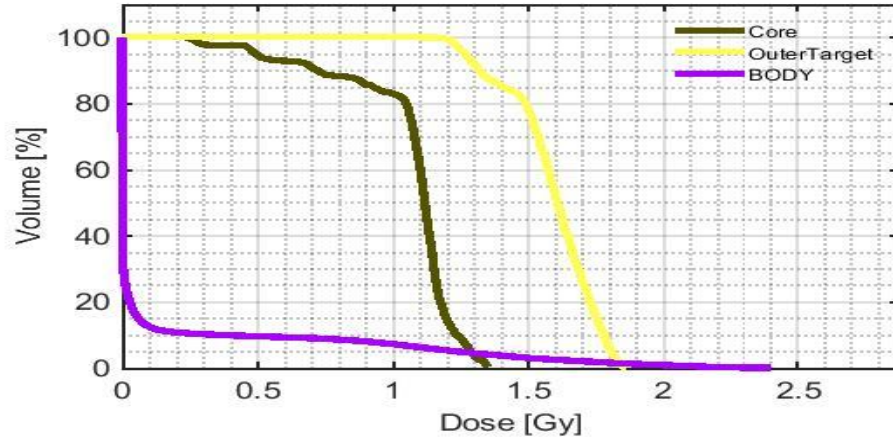
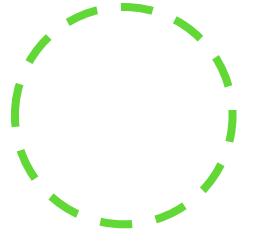
Cas TG-119

# COMPARAISON PROTON VS ION CARBONE



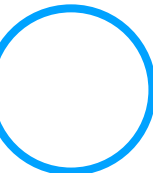
Cas TG-119

# COMPARAISON PROTON VS ION CARBONE



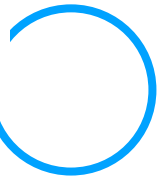
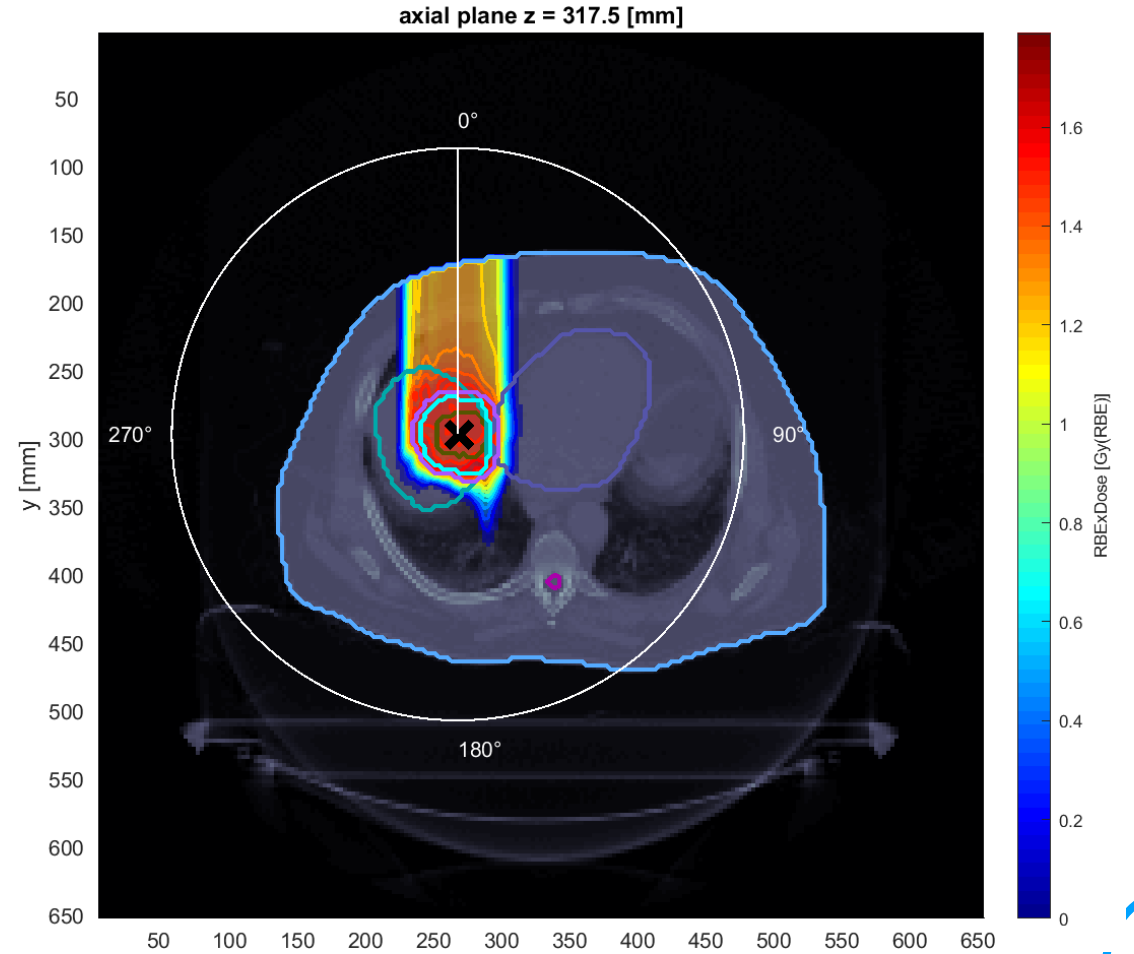
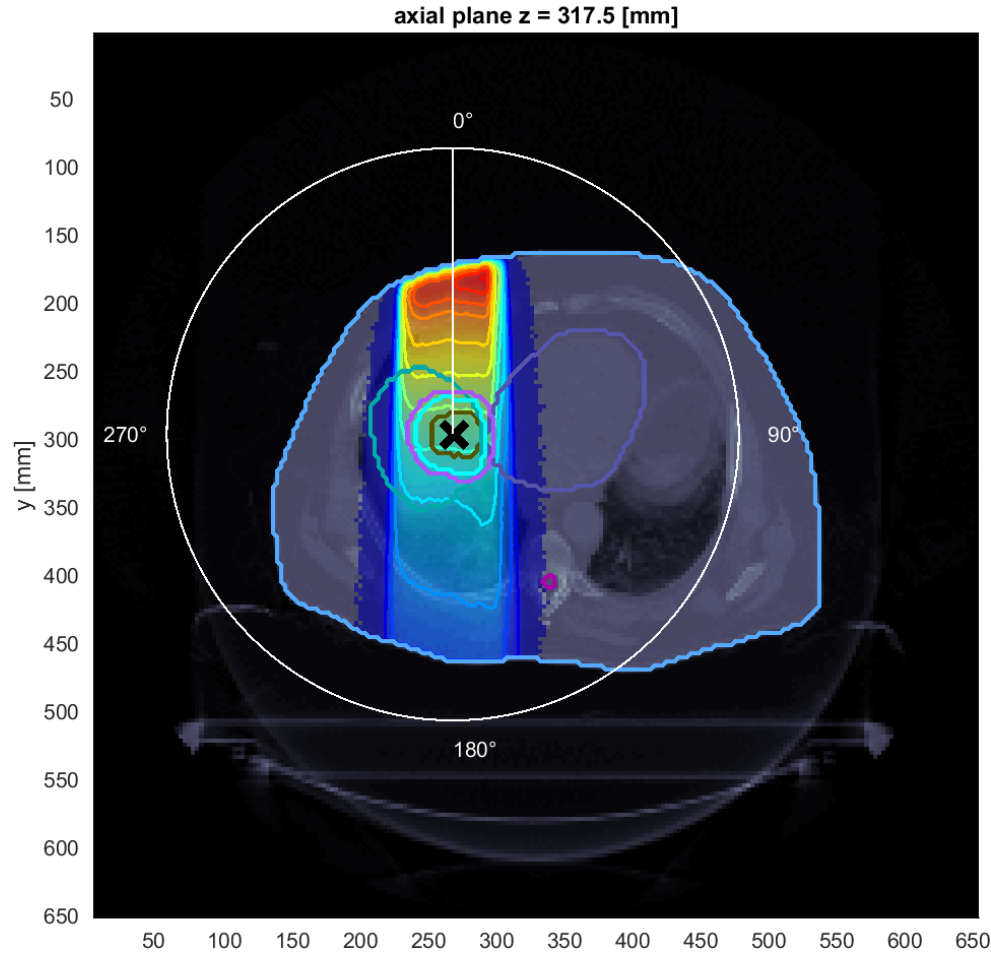
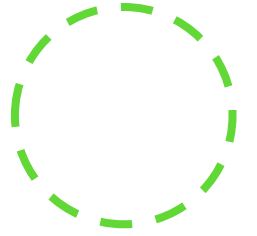
	max	min	mean	std
Core	1.3525	0.2364	1.0615	0.2183
OuterTarget	1.8672	1.0975	1.5905	0.1581
BODY	2.3969	0	0.1373	0.4068

	max	min	mean	std
Core	0.8667	0.0056	0.2975	0.2199
OuterTarget	1.7224	1.5989	1.6657	0.0118
BODY	1.7224	0	0.0582	0.2550



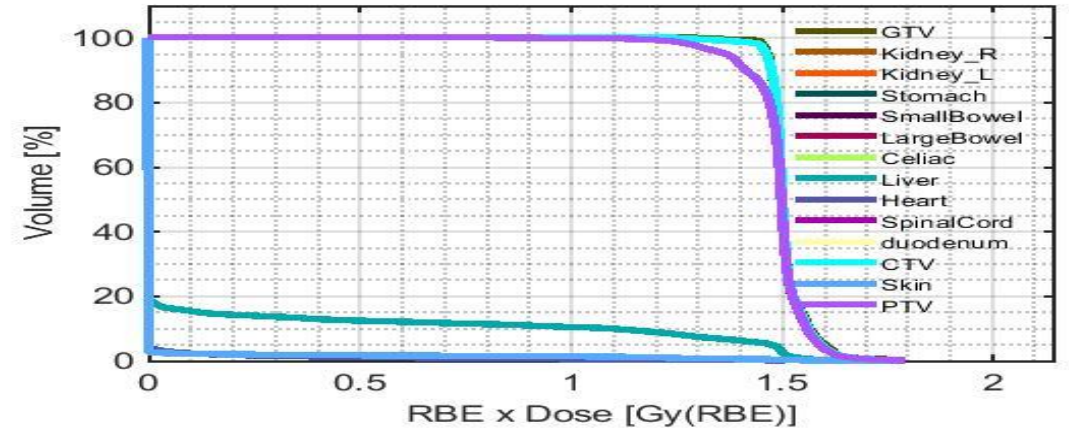
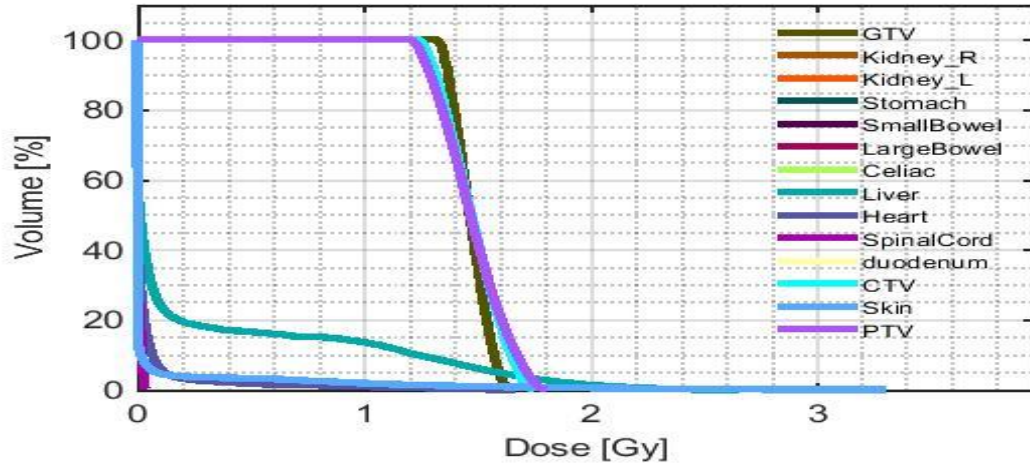
Cas Liver

# COMPARAISON PHOTON VS PROTON



Cas Liver

# COMPARAISON PHOTON VS PROTON



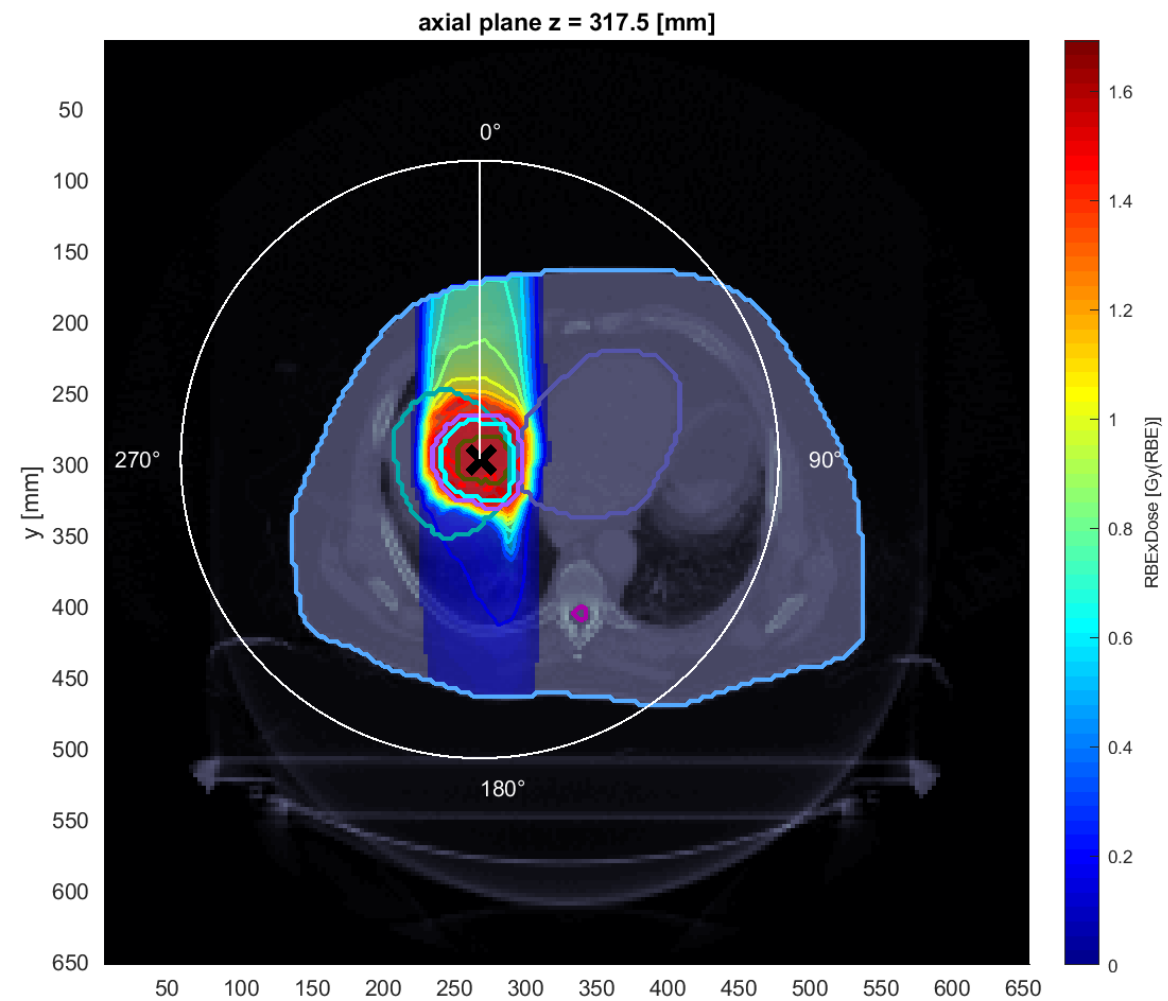
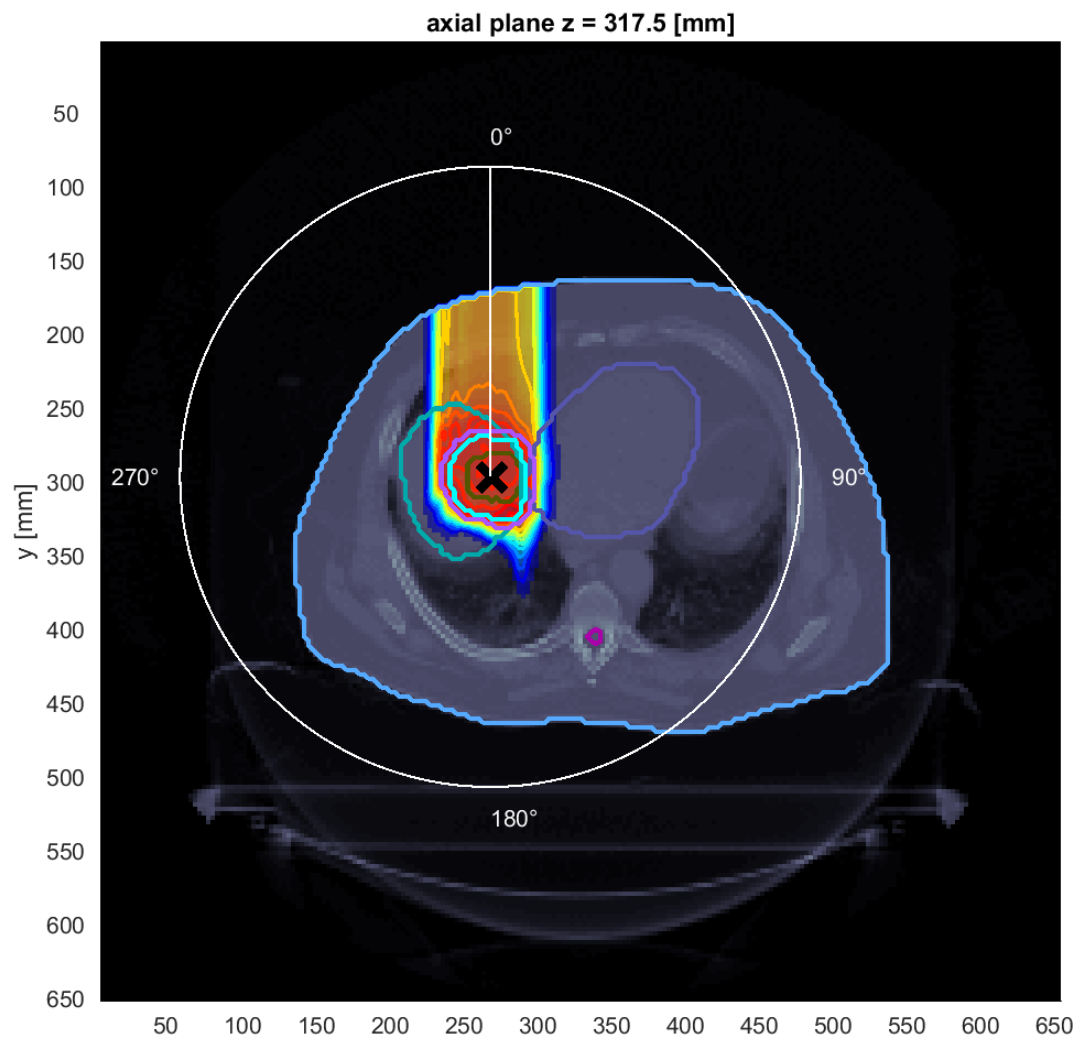
	max	min	mean	std
GTV	1.6406	1.3221	1.4716	0.0744
Kidney_R	0	0	0	0
Kidney_L	0	0	0	0
Stomach	0	0	0	0
SmallBowel	0	0	0	0
LargeBowel	0	0	0	0
Celiac	0	0	0	0
Liver	2.6562	0	0.2549	0.5303
Heart	1.6725	0	0.0371	0.1443
SpinalCord	0.0383	0	0.0054	0.0096
duodenum	0	0	0	0
CTV	1.7576	1.2454	1.4802	0.1219
Skin	3.3048	0	0.0464	0.2479
PTV	1.8082	1.2028	1.4790	0.1388

	max	min	mean	std
GTV	1.7558	1.2778	1.5102	0.0439
Kidney_R	0	0	0	0
Kidney_L	0	0	0	0
Stomach	0	0	0	0
SmallBowel	0	0	0	0
LargeBowel	0	0	0	0
Celiac	0	0	0	0
Liver	1.7912	0	0.1677	0.4339
Heart	1.5113	0	0.0130	0.1034
SpinalCord	0	0	0	0
duodenum	0	0	0	0
CTV	1.7912	1.2000	1.5087	0.0454
Skin	1.7912	0	0.0201	0.1527
PTV	1.7912	0.8193	1.4912	0.0731



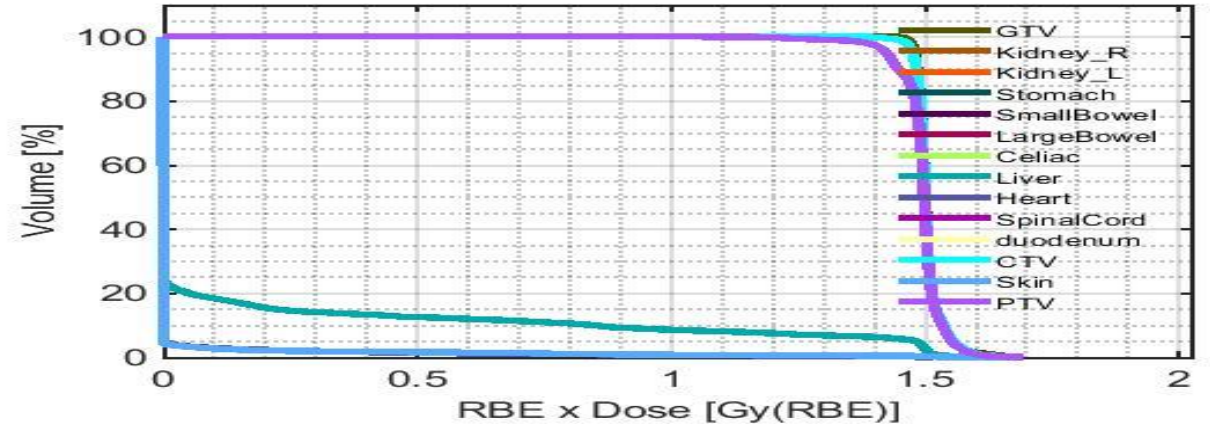
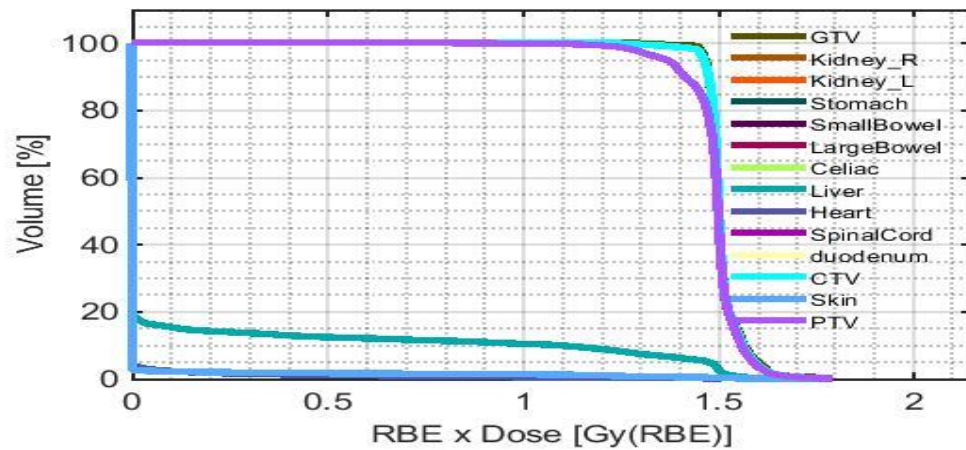


# Cas Liver Comparison Proton vs ion Carbone



Cas Liver

# Comparaison Proton vs ion Carbone

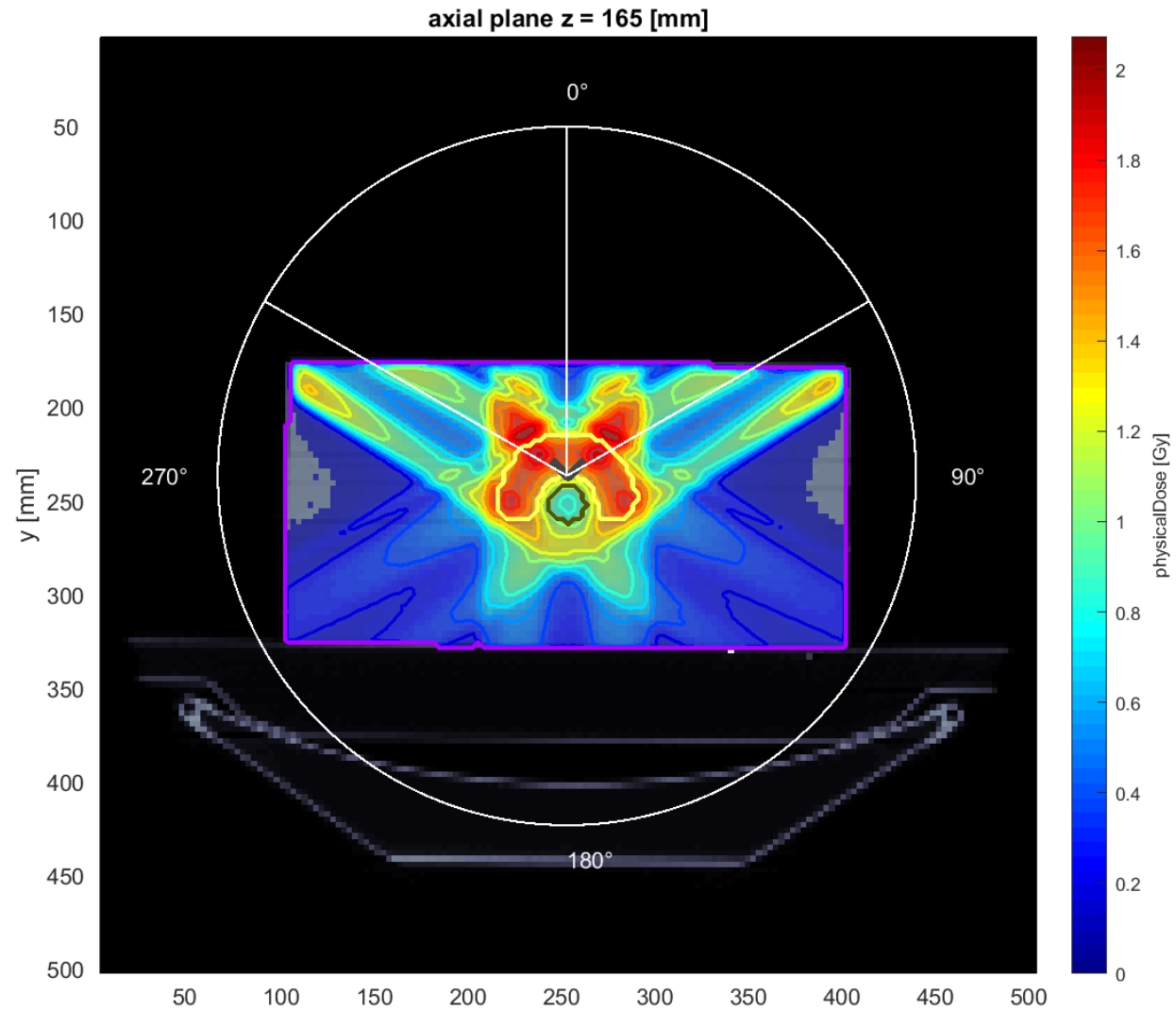


	max	min	mean	std
GTV	1.7558	1.2778	1.5102	0.0439
Kidney_R	0	0	0	0
Kidney_L	0	0	0	0
Stomach	0	0	0	0
SmallBowel	0	0	0	0
LargeBowel	0	0	0	0
Celiac	0	0	0	0
Liver	1.7912	0	0.1677	0.4339
Heart	1.5113	0	0.0130	0.1034
SpinalCord	0	0	0	0
duodenum	0	0	0	0
CTV	1.7912	1.2000	1.5087	0.0454
Skin	1.7912	0	0.0201	0.1527
PTV	1.7912	0.8193	1.4912	0.0731

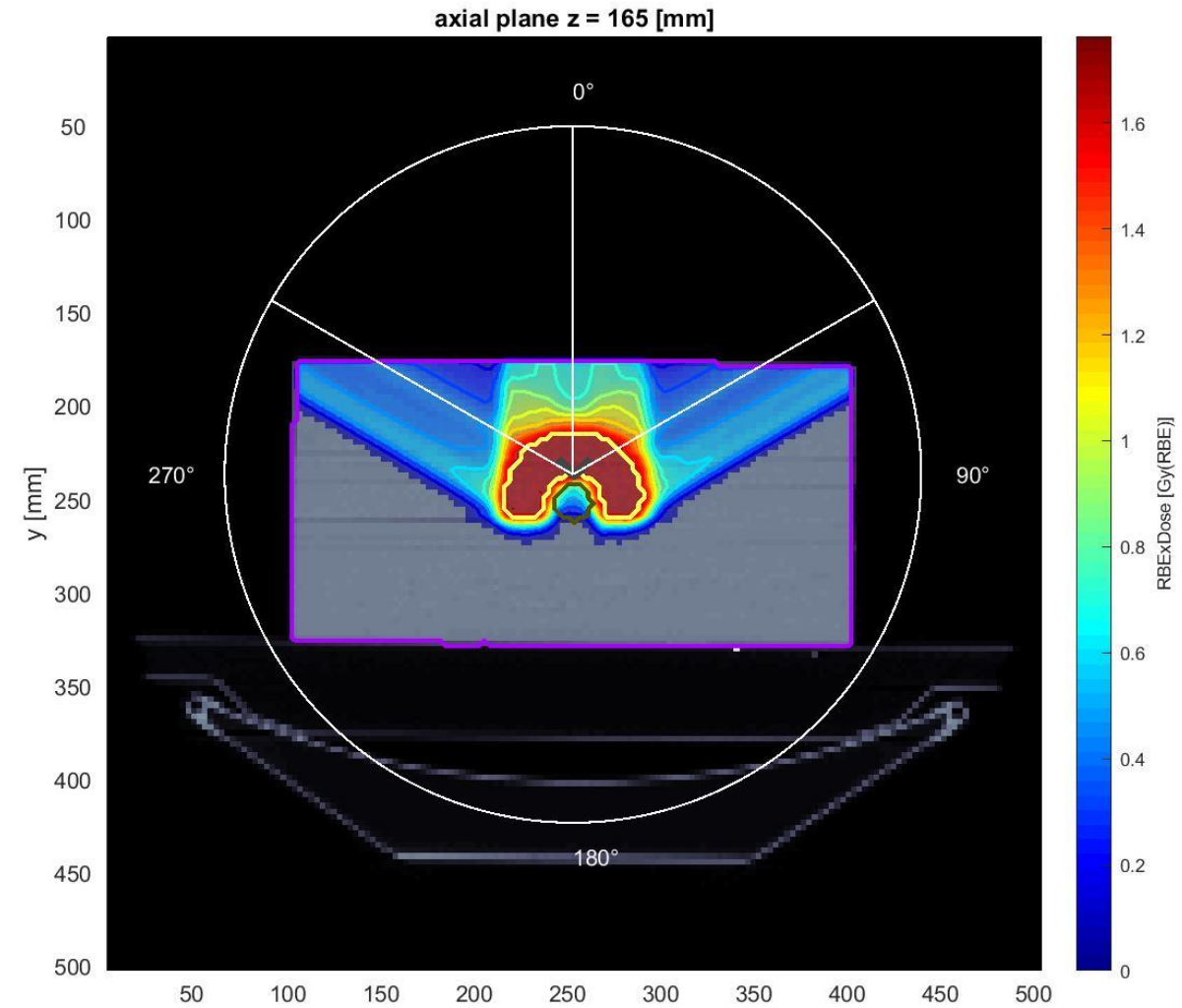
	max	min	mean	std
GTV	1.6657	1.4403	1.5064	0.0259
Kidney_R	0	0	0	0
Kidney_L	0	0	0	0
Stomach	0	0	0	0
SmallBowel	0	0	0	0
LargeBowel	0	0	0	0
Celiac	0	0	0	0
Liver	1.6937	0	0.1672	0.4164
Heart	1.5188	0	0.0175	0.1223
SpinalCord	0	0	0	0
duodenum	0	0	0	0
CTV	1.6937	1.2859	1.5055	0.0267
Skin	1.6937	0	0.0189	0.1354
PTV	1.6937	1.0604	1.4947	0.0447

Cas TG\_119

Photon 3 angles

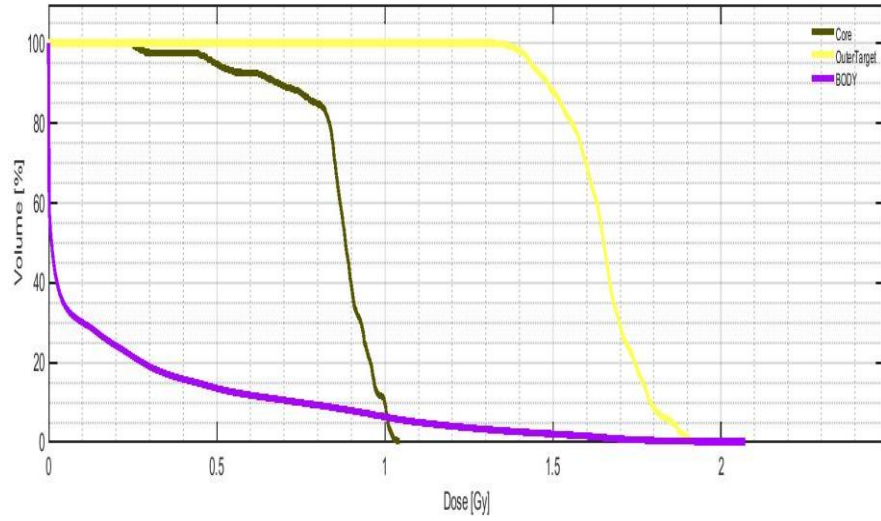


Proton 3 angles



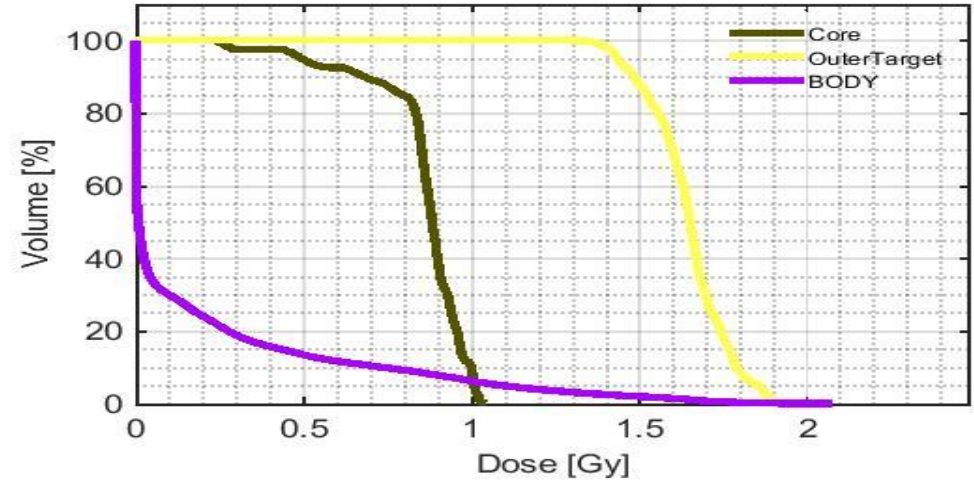
# Cas TG\_119

## Photon 3 angles



	max	min	mean	std
Core	1.0459	0.2372	0.8567	0.1486
OuterTarget	1.9397	1.2967	1.6462	0.1157
BODY	2.0736	0	0.1876	0.3705

## Proton 3 angles



	max	min	mean	std
Core	1.0459	0.2372	0.8567	0.1486
OuterTarget	1.9397	1.2967	1.6462	0.1157
BODY	2.0736	0	0.1876	0.3705

A decorative graphic featuring two large, overlapping pink arcs that frame the central text. On the left, a dashed orange circle is partially visible. On the right, a dashed green circle is partially visible. A small yellow dot is located on the left pink arc, and a small cyan dot is on the right pink arc. A solid blue circle is positioned at the bottom right, overlapping the pink arcs.

Thank you  
for your  
attentin