Radiation Therapy Planning (PTMC 2025)

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GSI FAIR EMMI

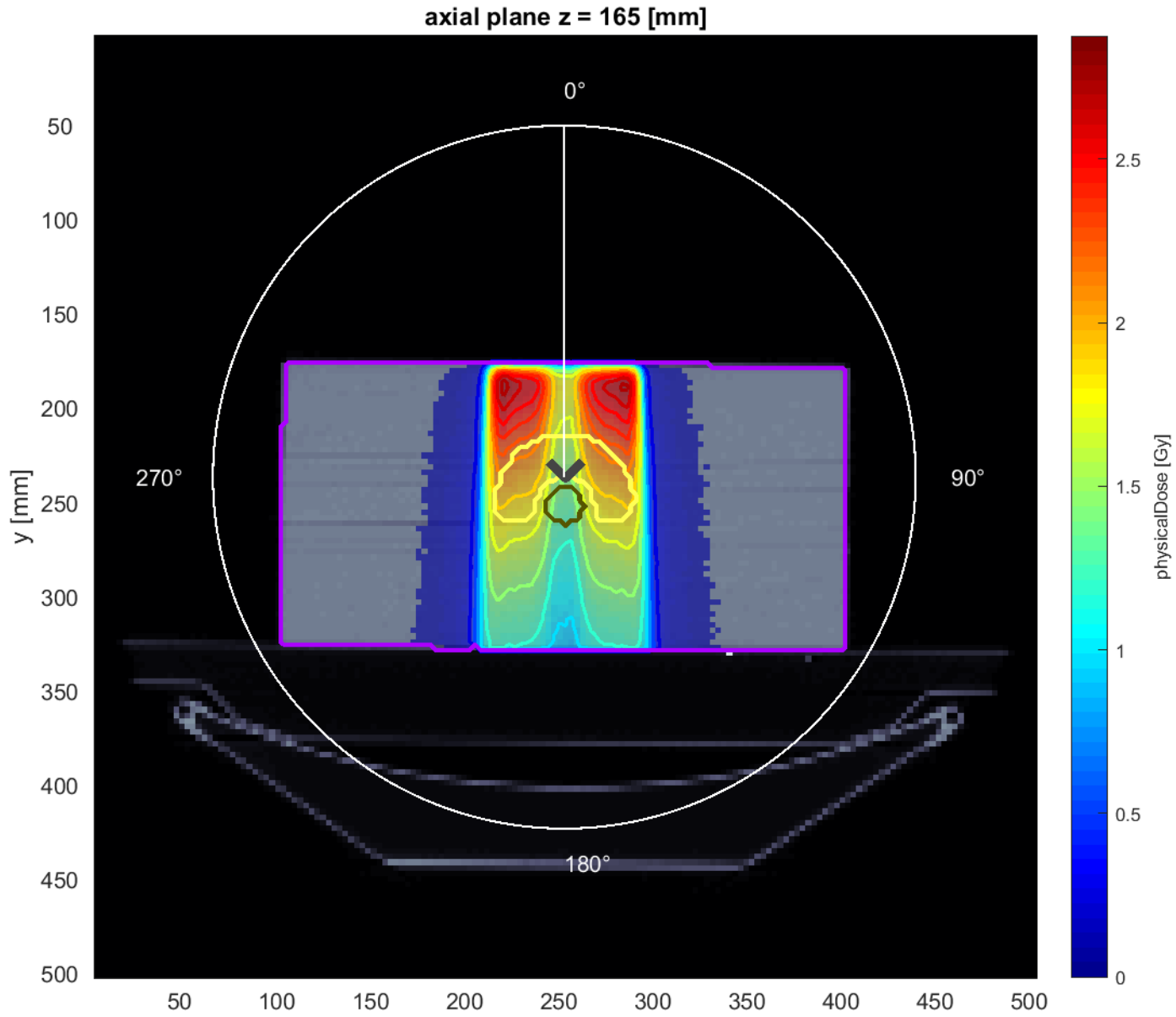
dkfz. GERMAN CANCER RESEARCH CENTER IN THE HELMHOLTZ ASSOCIATION

CERN

INTERNATIONAL MASTERCLASSES hands on particle physics

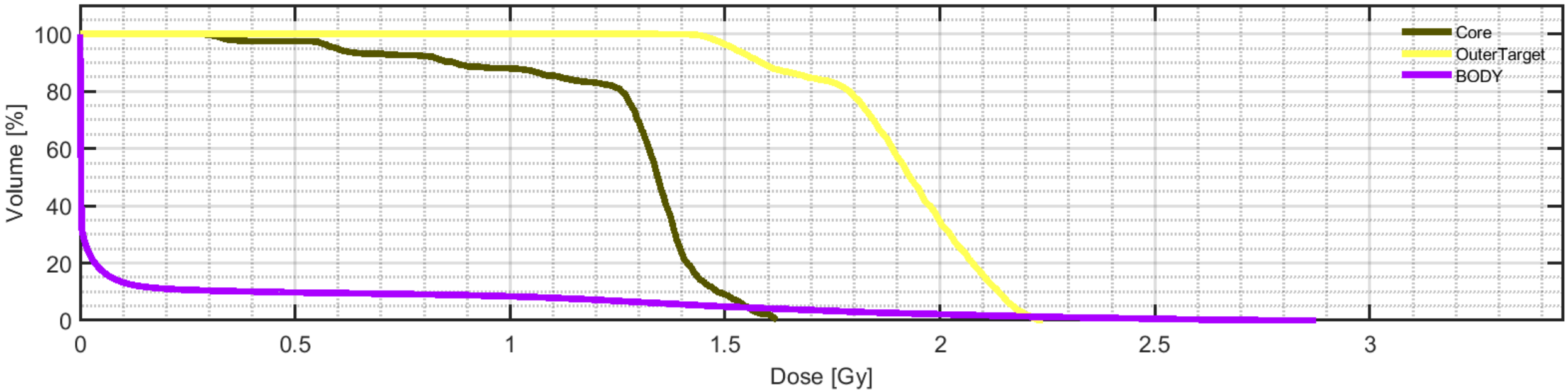
International Particle Physics Outreach Grou

Working, Experimenting and Having fun

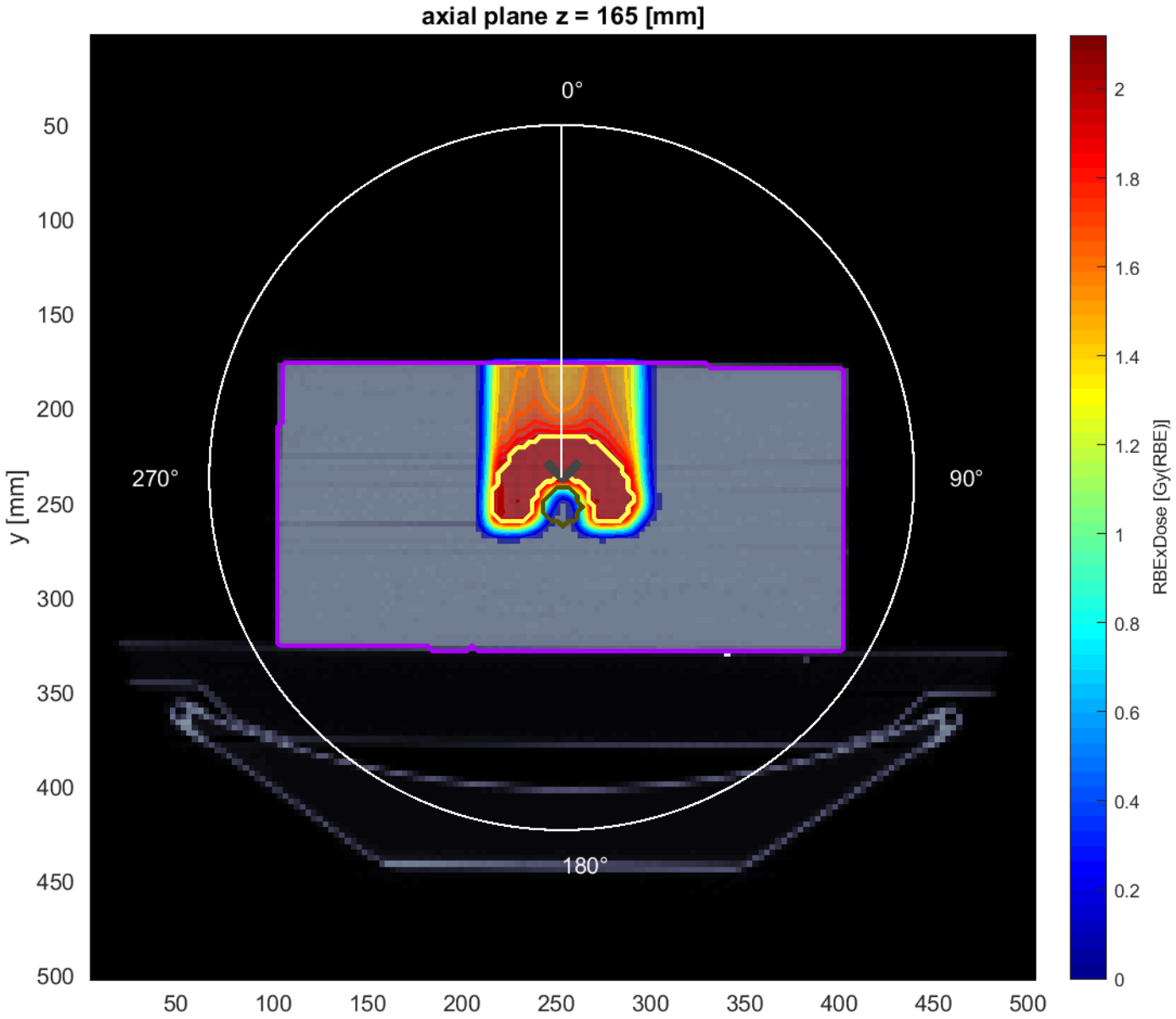


Photons, one angle
Angle = 0

Volume dose histograms

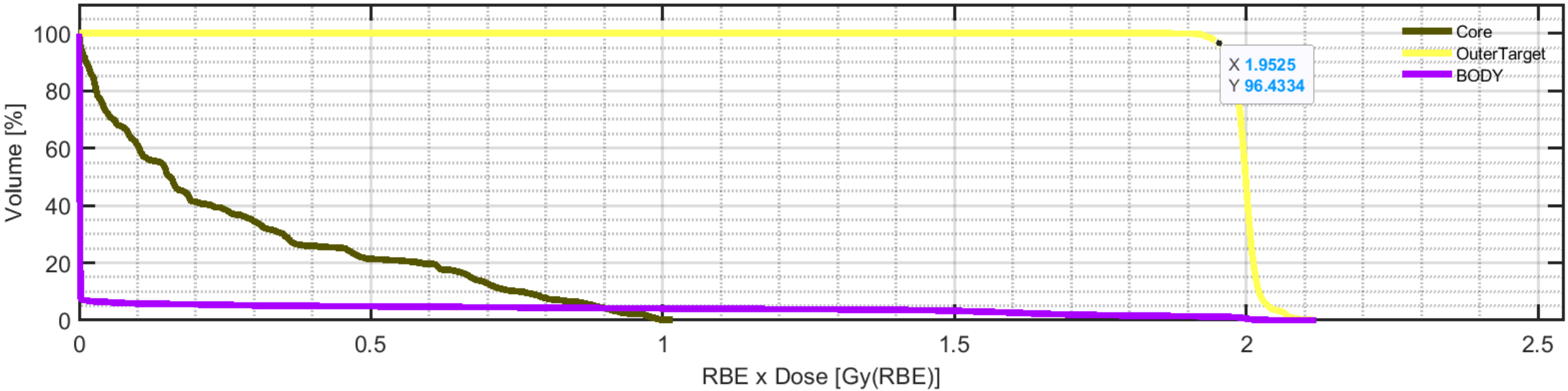


	mean	std	max	min	D_2	D_5	D_50	D_95	D_98	V_0Gy	V_0.5Gy	V_1.1Gy	V_1.7Gy	V_2.3Gy	V_2.8Gy	C
Core	1.2740	0.2615	1.6229	0.2843	1.6029	1.5451	1.3442	0.5969	0.3530	1	0.9750	0.8545	0	0	0	-
OuterTarget	1.9084	0.1896	2.2402	1.3158	2.2014	2.1701	1.9301	1.5204	1.4745	1	1	1	0.8467	0	0	
BODY	0.1647	0.4880	2.8763	0	2.0317	1.4721	0	0	0	1	0.0974	0.0784	0.0359	0.0106	1.6120e-04	-

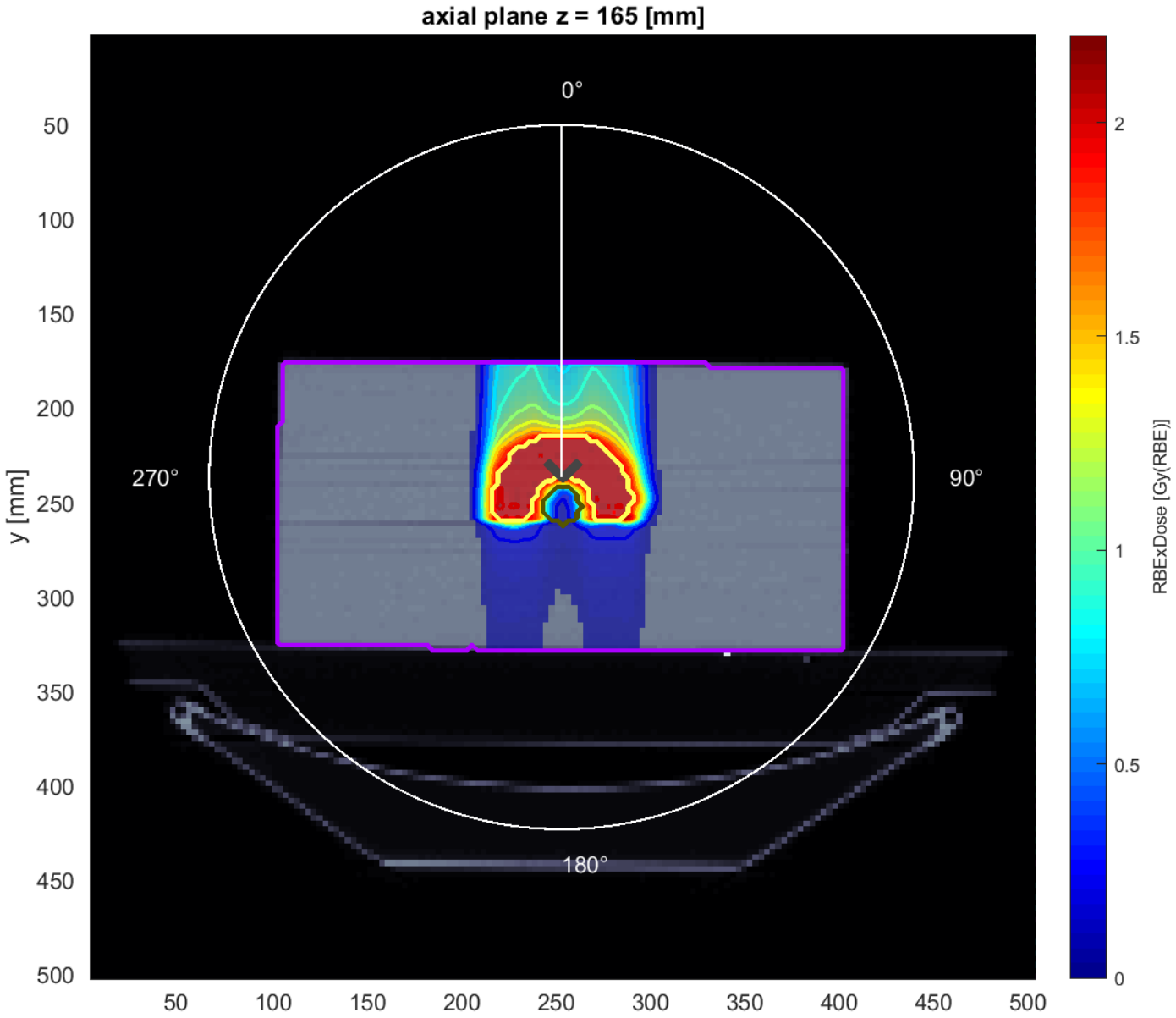


Protons, one angle
Angle = 0

Volume dose histograms

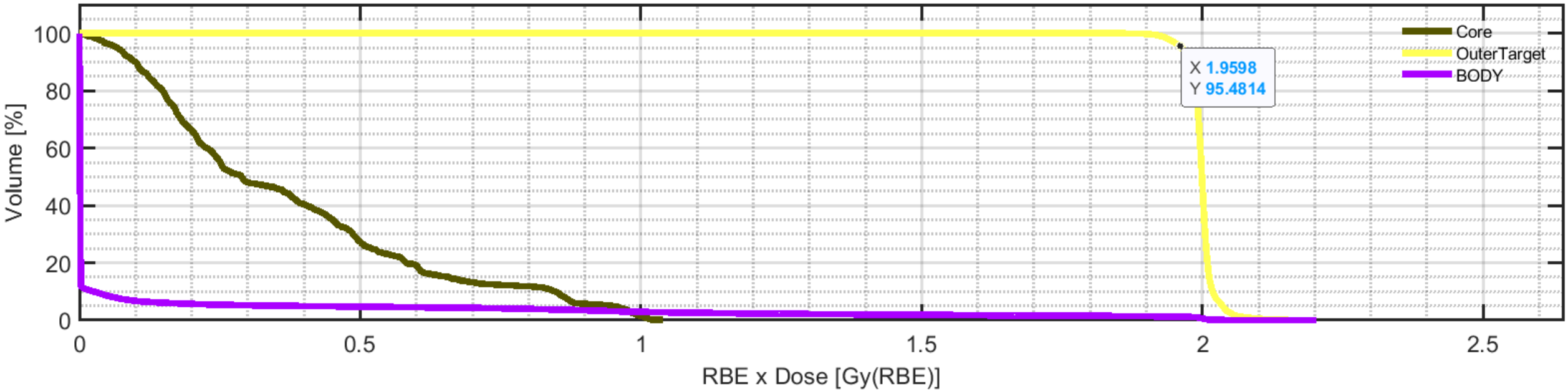


	mean	std	max	min	D_2	D_5	D_50	D_95	D_98	V_0Gy	V_0.4Gy	V_0.8Gy	V_1.2Gy	V_1.6Gy	V_2.1Gy	C
Core	0.2732	0.2863	1.0184	0	0.9670	0.8814	0.1546	0.0034	1.9166e-04	1	0.2591	0.0773	0	0	0	-
OuterTarget	1.9981	0.0245	2.1207	1.8666	2.0667	2.0369	1.9984	1.9590	1.9422	1	1	1	1	1	0.0019	
BODY	0.0782	0.3467	2.1207	0	1.6941	0.3687	0	0	0	1	0.0495	0.0438	0.0386	0.0262	2.3266e-05	-

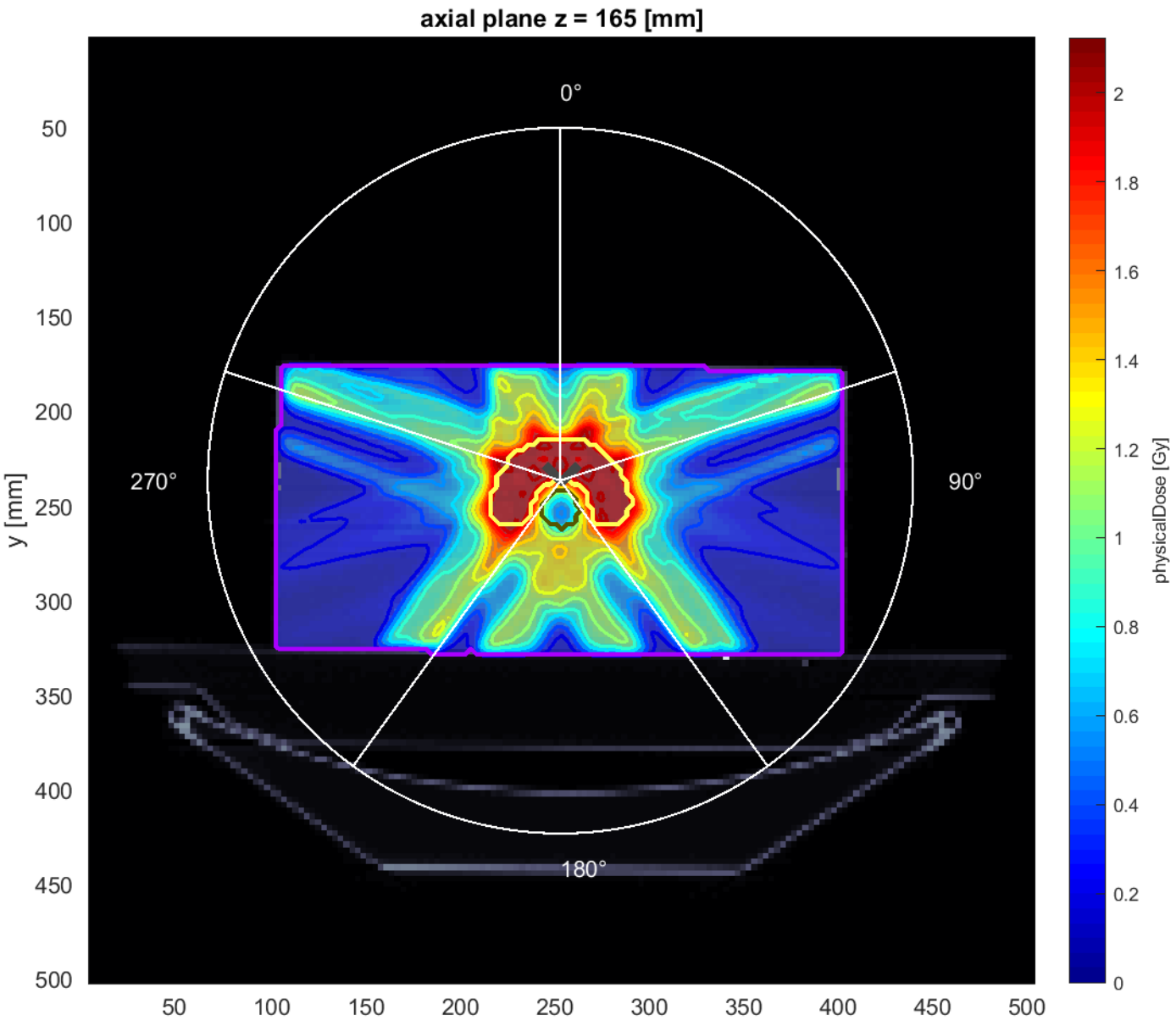


Carbons, one angle
Angle = 0

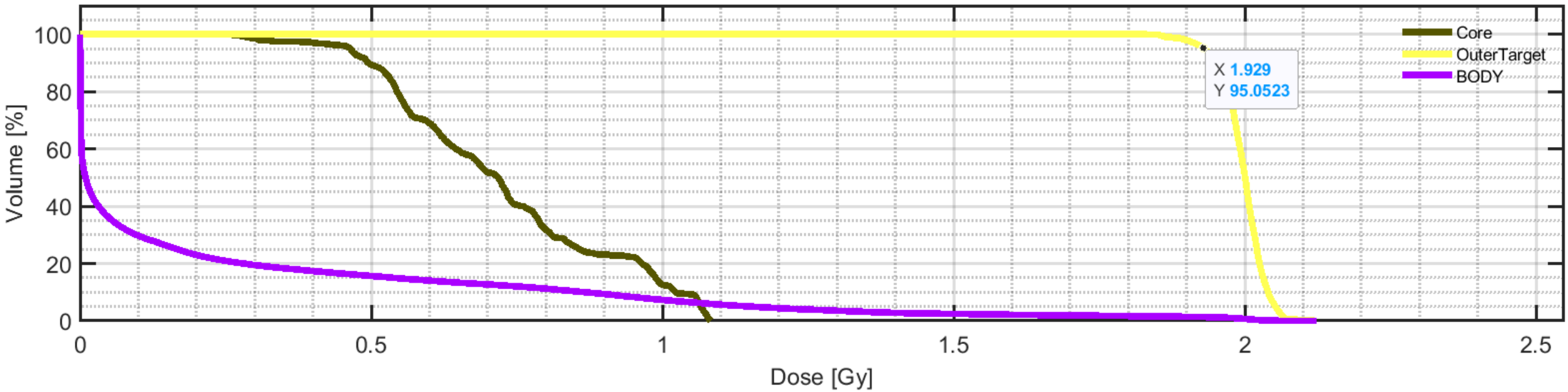
Volume dose histograms



	mean	std	max	min	D_2	D_5	D_50	D_95	D_98	V_0Gy	V_0.4Gy	V_0.8Gy	V_1.3Gy	V_1.7Gy	V_2.2Gy	C
Core	0.3744	0.2644	1.0418	0.0075	0.9917	0.9402	0.2889	0.0655	0.0337	1	0.4038	0.1182	0	0	0	-
OuterTarget	1.9990	0.0235	2.1817	1.8354	2.0545	2.0354	1.9992	1.9624	1.9386	1	1	1	1	1	0	
BODY	0.0693	0.3040	2.2040	0	1.3948	0.3671	0	0	0	1	0.0492	0.0393	0.0214	0.0160	1.6619e-06	-



Photons, five angle
Angle = 0, 72, 144, 216, 288



	mean	std	max	min	D_2	D_5	D_50	D_95	D_98	V_0Gy	V_0.4Gy	V_0.8Gy	V_1.2Gy	V_1.6Gy	V_2.1Gy	C
Core	0.7266	0.1991	1.0840	0.2535	1.0765	1.0660	0.7178	0.4645	0.3194	1	0.9705	0.3174	0	0	0	-
OuterTarget	1.9971	0.0375	2.1242	1.8259	2.0638	2.0524	2.0006	1.9302	1.8991	1	1	1	1	1	0.0038	
BODY	0.2094	0.4154	2.1242	0	1.6575	1.1509	0.0096	0	0	1	0.1738	0.1124	0.0444	0.0214	4.6532e-05	-

- ***Thank you for your attention***