

radiochromic.com



Radiochromic.com is made by Medical Physicists for Medical Physicists

Radiochromic Film Dosimetry

Easy, fast, and accurate radiochromic film dosimetry developed by researchers in film dosimetry. We implement state-of-the-art multichannel film dosimetry as well as noise reduction, lateral, inter-scan, recalibration corrections, etc.

Image Analysis

Import and analyze films, EPID images, dose planes from your TPS, etc. Automatically register and compare absolute and relative dose distributions with the Gamma index. Apply transformations, calculate statistics, export images or profiles...

Machine QA

Complete your QA for radiotherapy (e.g., TG-142) and radiology with our automatic Catphan phantom analysis, MLC QA, Winston-Lutz test, Starshot test... Seamlessly calculate output factors for small fields with our Radiation Field functionality.

Software as a Service

Access your account anytime, anywhere. No installation required. Your software is always updated. Your work is secured, encrypted, anonymized, and backed up. Get help for a specific item with just one click.

Licenses and features

Core features	ESSENTIAL	ADVANCED
SaaS: access your account anytime, anywhere	✓	✓
No installation required	✓	✓
Always updated	✓	✓
Data encryption, storage and backup	✓	✓
Support, training, and guidance	✓	✓
Import		
Film scans (TIFF)	✓	✓
Dicom-RT image [e.g., EPID]	✓	✓
Dicom-RT dose 2D, Dicom-RT dose 3D [e.g., Varian, Raysearch, Accuray, ...]	✓	✓
Image series [e.g., DICOM-CT]	✓	✓
TIFF single-channel and multi-channel	✓	✓
Comma Separated Values	✓	✓
TPS dose plane formats: XiO and Monaco [Elekta], iPlan [Brainlab], ADAC Pinnacle [Philips]	✓	✓
Dosimeter 2D plane formats: OmniPro I'mRT .opg file [IBA]	✓	✓
Radiochromic Film Dosimetry		
State-of-the-art radiochromic film dosimetry	✓	✓
Uploading of repeated scans	✓	✓
Uploading scans before and after irradiation	✓	✓
Lot calibration using one or multiple images	✓	✓
Calibration of unflattened fields [Cyberknife, Zap-X, FFF beams]	✓	✓
Multichannel film dosimetry with the Multigaussian method	✓	✓
Lateral correction	✓	✓
Inter-scan correction	✓	✓
Recalibration correction	✓	✓
Noise correction	✓	✓
Export dose distributions as TIFF or DICOM images	✓	✓
Image Analysis		
Display and analysis of images in a web browser	✓	✓
Affine image transformations	✓	✓
Histograms and statistics	✓	✓
Image arithmetics: image addition, difference, and relative difference	✓	✓
Zoom/unzoom, ROIs, pixel values and coordinates	✓	✓
Profiles and average profiles	✓	✓
Export profiles and images	✓	✓
Isodoses	✓	✓
Automatic image registration using markers or dose distributions	✓	✓
2D Gamma Index: absolute and relative dose distributions, local and global normalization	✓	✓
2D Gamma Index: gamma angle	✓	✓
2D Gamma Index: automatic registration	✓	✓
Machine QA		
Starshot test	✓	✓
MLC QA: Picket Fence test [compatible with Bayouth and Hancock tests, includes Halcyon MLC]	✓	✓
MLC QA: Gravity test	✗	✓
MLC QA: Dynamic Delivery Control	✗	✓
Coincidence light-radiation field test	✓	✓
Radiation field test: WFF, FFF and cones, photons and electrons beams	✓	✓
Radiation field test: field size, central dose statistics, flatness, symmetry, penumbras, ...	✓	✓
Small fields output factors [including Volume averaging correction]	✓	✓
Winston-Lutz test	✓	✓
Automatic analysis of Catphan 500, 503, 504, 600, and 604	✗	✓
Imaging QA: Las Vegas	✗	✓
Reports: PDF, CSV, JSON	✓	✓