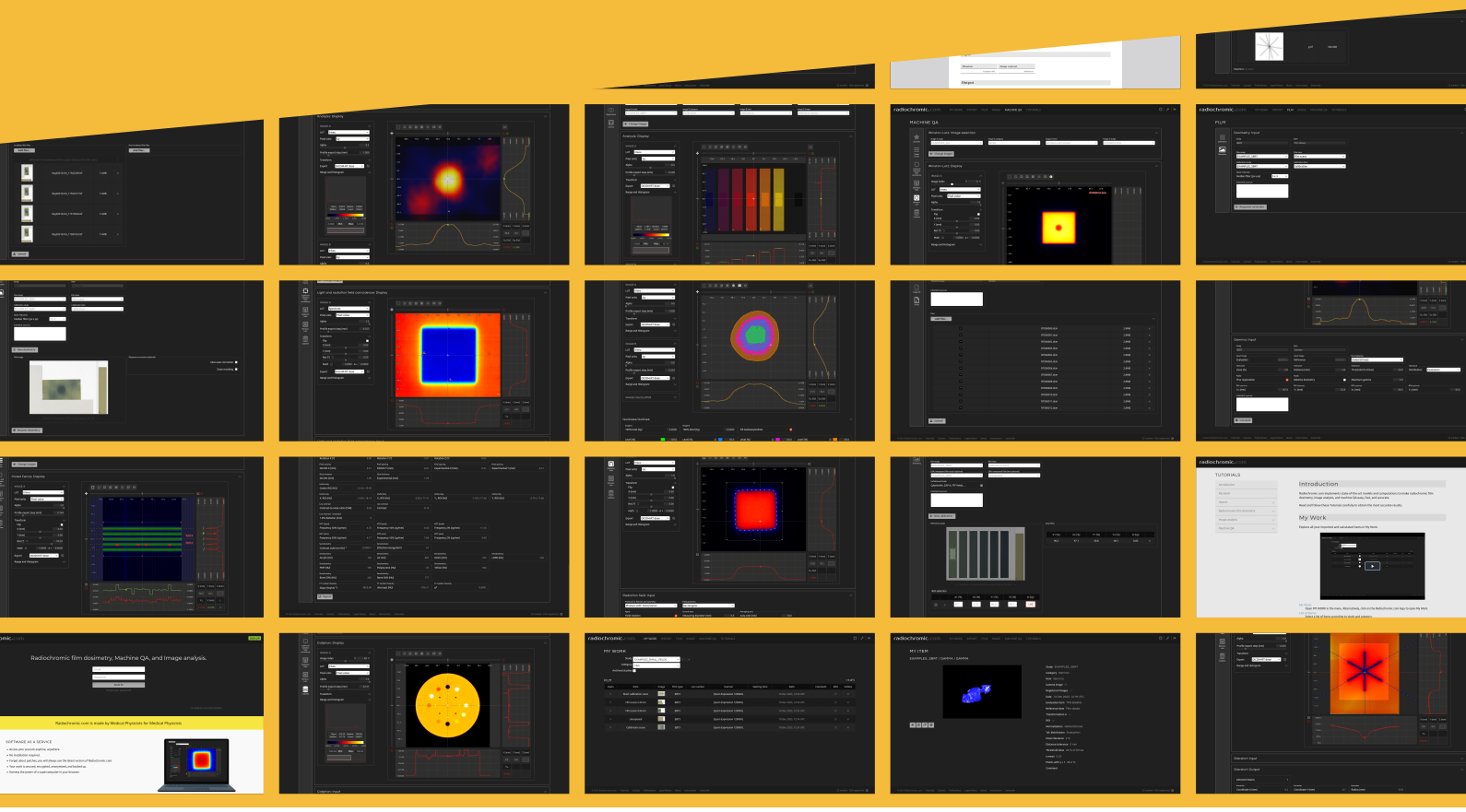
radiochromic.com



Radiochromic film dosimetry, Machine QA, and Image analysis

About us

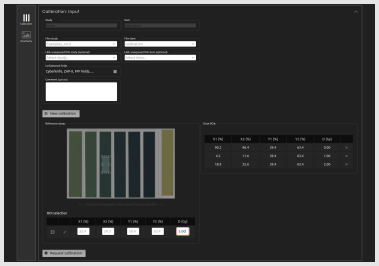
Radiochromic.com is a web application for radiochromic film dosimetry, machine quality assurance, and image analysis. Our mission is to leverage the latest technologies in medical computing to create the best resources for medical physicists. Research and Innovation drive us.

Radiochromic.com receives regular updates with new features and enhancements. We consistently implement new tools to facilitate the work of hundreds of medical physicists worldwide. Our commitment is to provide the highest quality and best support.

Radiochromic.com is a CE marked and U.S. FDA registered medical device.

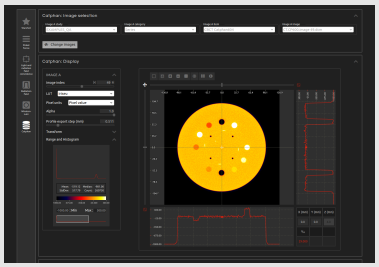
Radiochromic.com **is made by Medical Physicists for Medical Physicists.**

What can radiochromic.com do for you?



RADIOCHROMIC FILM DOSIMETRY

Radiochromic.com is state-of-the-art radiochromic film dosimetry.
Utilize advanced Multichannel film dosimetry with the Multigaussian method.
Improve your results with noise reduction, lateral, inter-scan, and re-calibration corrections.
Implement an up-to-date and accurate protocol based on continuous research in film dosimetry.
Experience easy, fast, and accurate radiochromic film dosimetry.



MACHINE QA

Measure the radiation isocenter with the Starshot test.
Check the positioning accuracy of your MLC with the Picket Fence test.
Automatically verify the Coincidence of Light and Radiation fields.
Characterize Radiation Fields of WFF photons, FFF photons, and electron beams.
Validate the coincidence of mechanical and radiation isocenters with the Winston-Lutz test.
Measure CT and CBCT image quality with automatic Catphan phantom analysis.

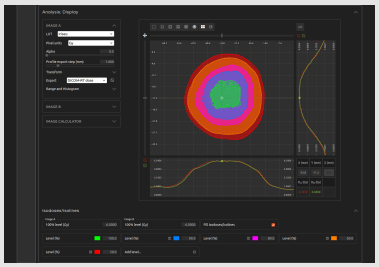


IMAGE ANALYSIS

Display and analyze images in your favorite web browser.
Use the 2D Gamma Index to compare absolute and relative dose distributions.
Automatically register two images and calculate the differences between them.
Work with films, EPID images, and imported dose planes from your TPS or 2D detector array.
Apply image transformations, compute histograms, and calculate statistics over a ROI.
Export images, profiles, and average profiles.

Software as a service

- Access your account anytime, anywhere.
- No installation required.
- Forget about patches; you will always use the latest version of Radiochromic.com.
- Your work is secured, encrypted, anonymized, and backed up.
- Harness the power of a supercomputer in your browser.

Excellent support

- Enjoy prompt and thorough support.
- Enhance your results when implementing film dosimetry with our expert guidance.
- Get help for a specific item with just one click.
- Book a personal training webinar.
- Save time and achieve optimal results with our tutorials.

radiochromic.com

v.5.0.5

Core features	ESSENTIAL	ADVANCED	CT IMAGE
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, ...)	✓	✓	✓
Dicom series (e.g., CT)	✓	✓	✓
TIFF single 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	✓	✓	✗
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	✓	✓	✗
2D Gamma Index: absolute and relative dose distributions	✓	✓	✗
2D Gamma Index: local and global normalization	✓	✓	✗
2D Gamma Index: automatic registration	✓	✓	✗
Radiation Therapy QA			
Starshot test	✓	✓	✗
Picket Fence test (including Halcyon MLC)	✓	✓	✗
Coincidence light-radiation field test	✓	✓	✗
Radiation field test: WFF photons, FFF photons, and electrons beams	✓	✓	✗
Radiation field test: field size, central dose statistics, flatness, symmetry, penumbras, ...	✓	✓	✗
Radiation field test: rectangular and circular fields (e.g., cones)	✓	✓	✗
Small fields output factors	✓	✓	✗
Winston-Lutz test	✓	✓	✗
Automatic analysis of Catphan 500, 503, 504, 600, and 604	✗	✓	✓
Reports: PDF, CSV, JSON	✓	✓	✓