A Control System for the ESRF Synchrotron Radiation Therapy Clinical Trials

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a European Synchrotron Radiation Facility, F-38043 Grenoble 9, France.
b INSERM, U836, F-38042 Grenoble 9, France
c Univ Grenoble 1, F-38041 Grenoble 9, France

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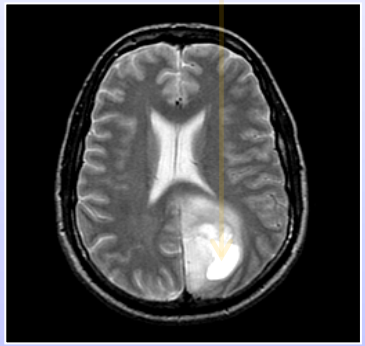
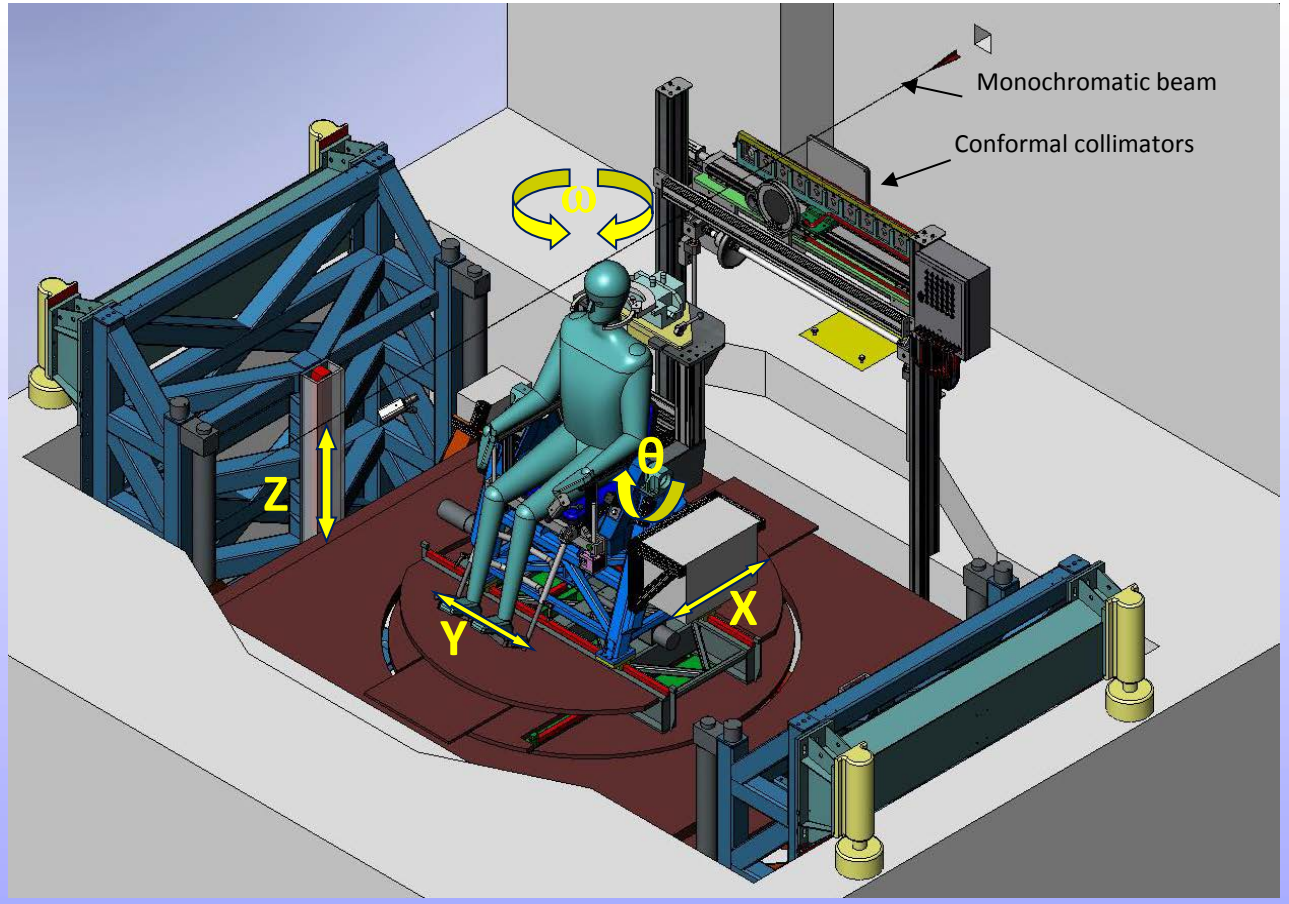
Principe of SSRT irradiation

Cerebral tumour loaded with high-Z contrast agent (Iodine)



X-ray monochromatic Beam tuned to Iodine K-edge



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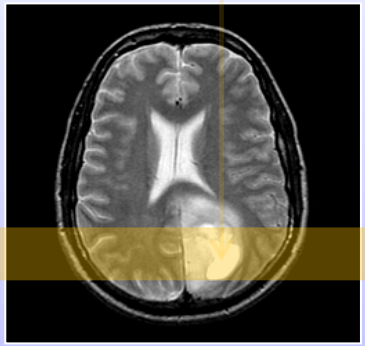

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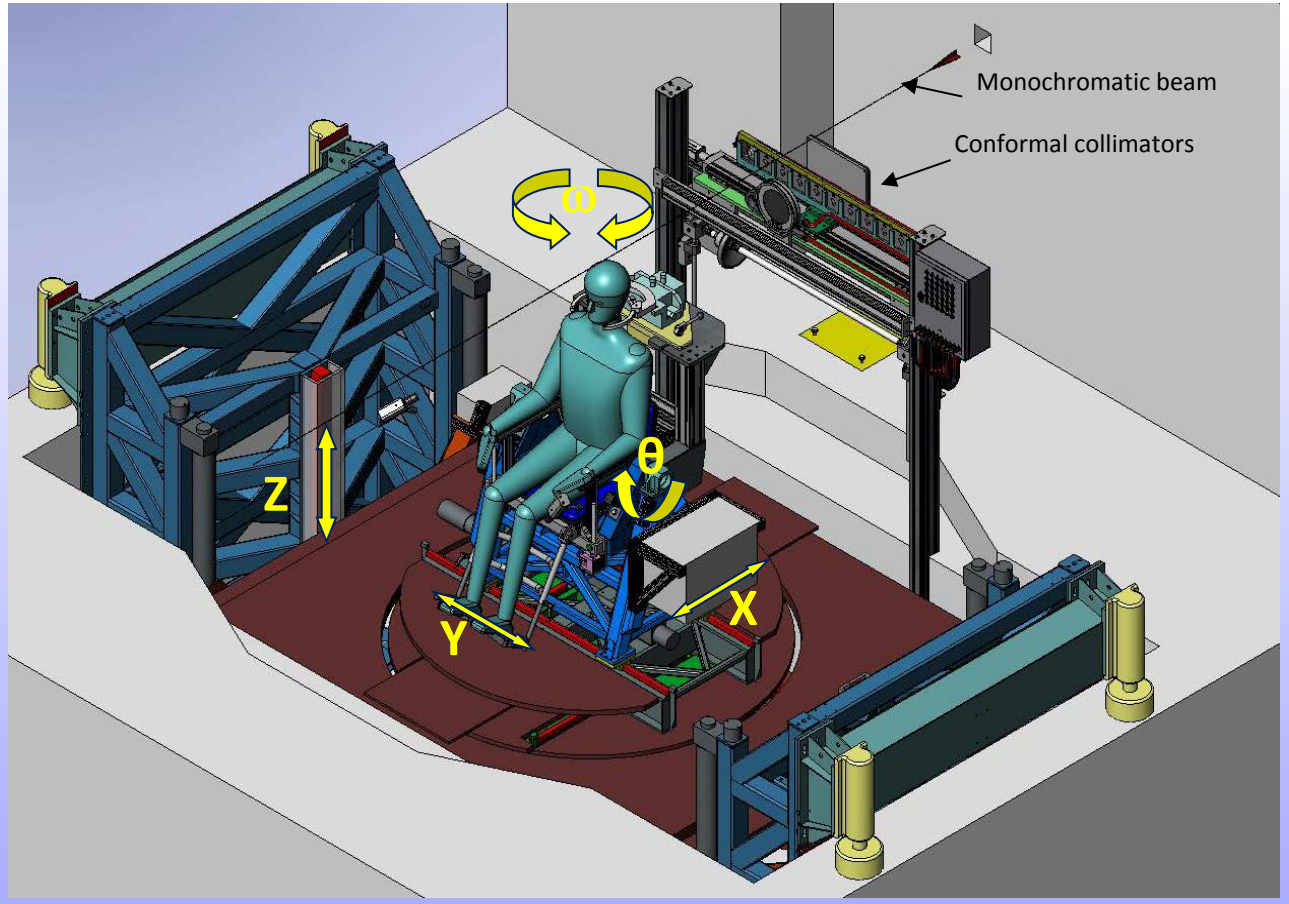

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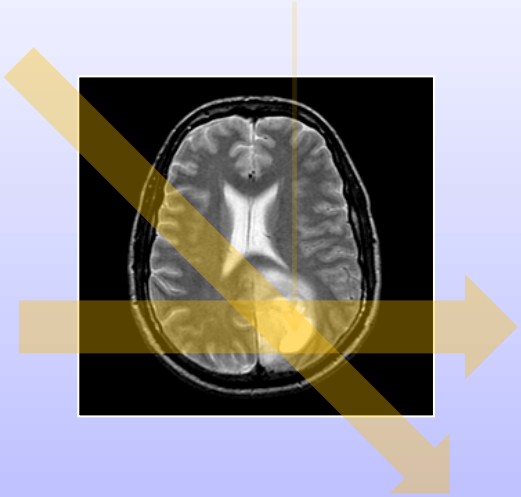

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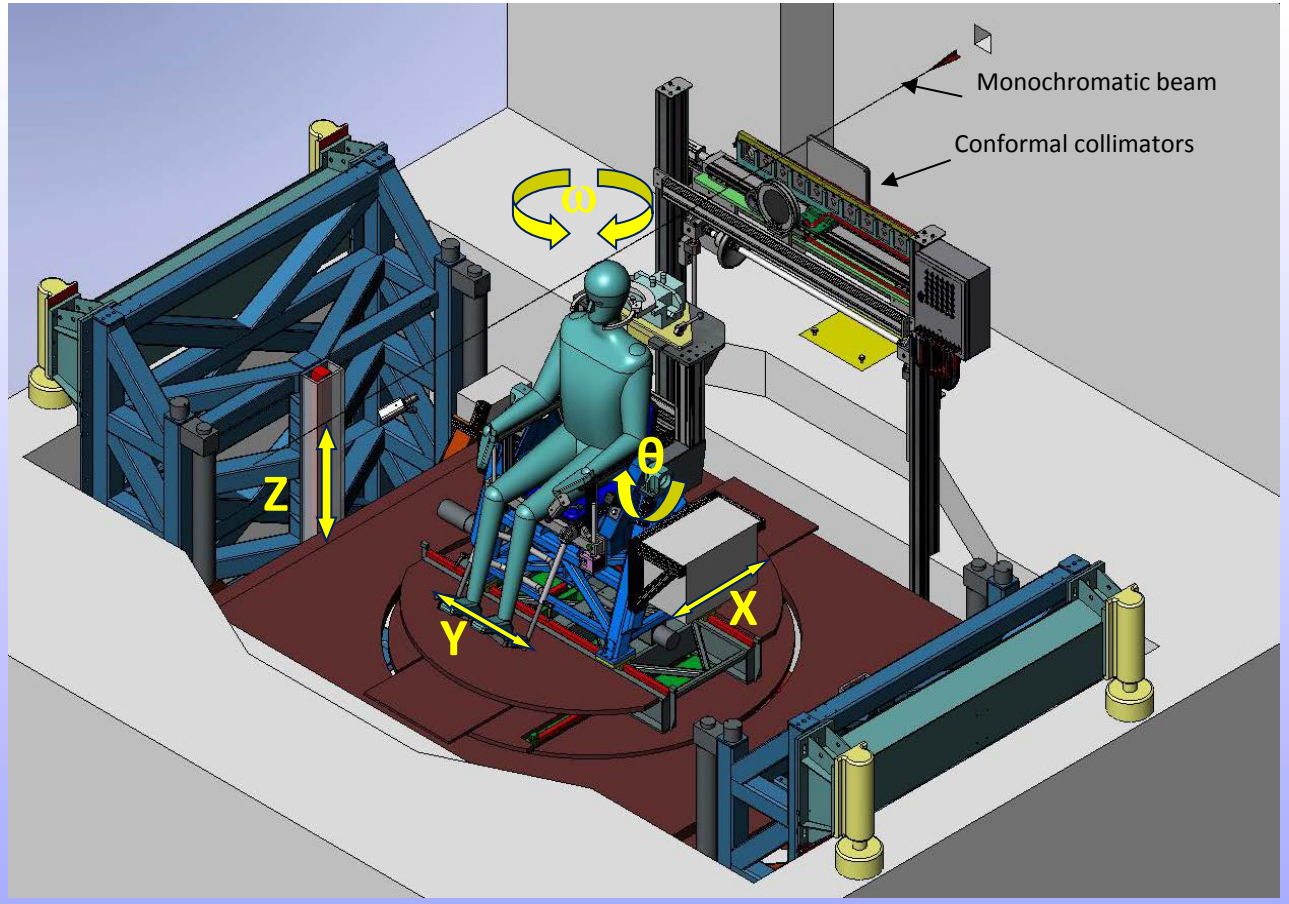
Beam tuned to Iodine K-edge



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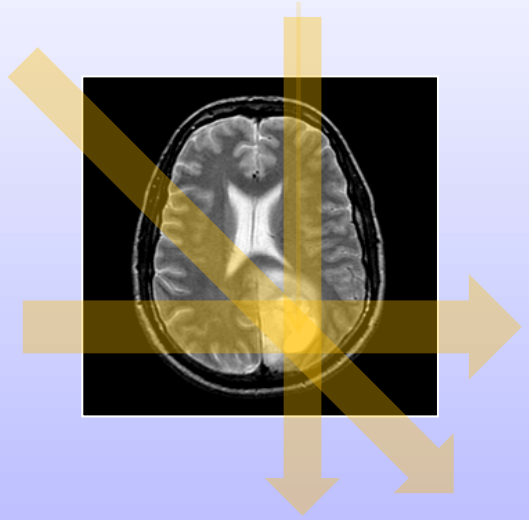

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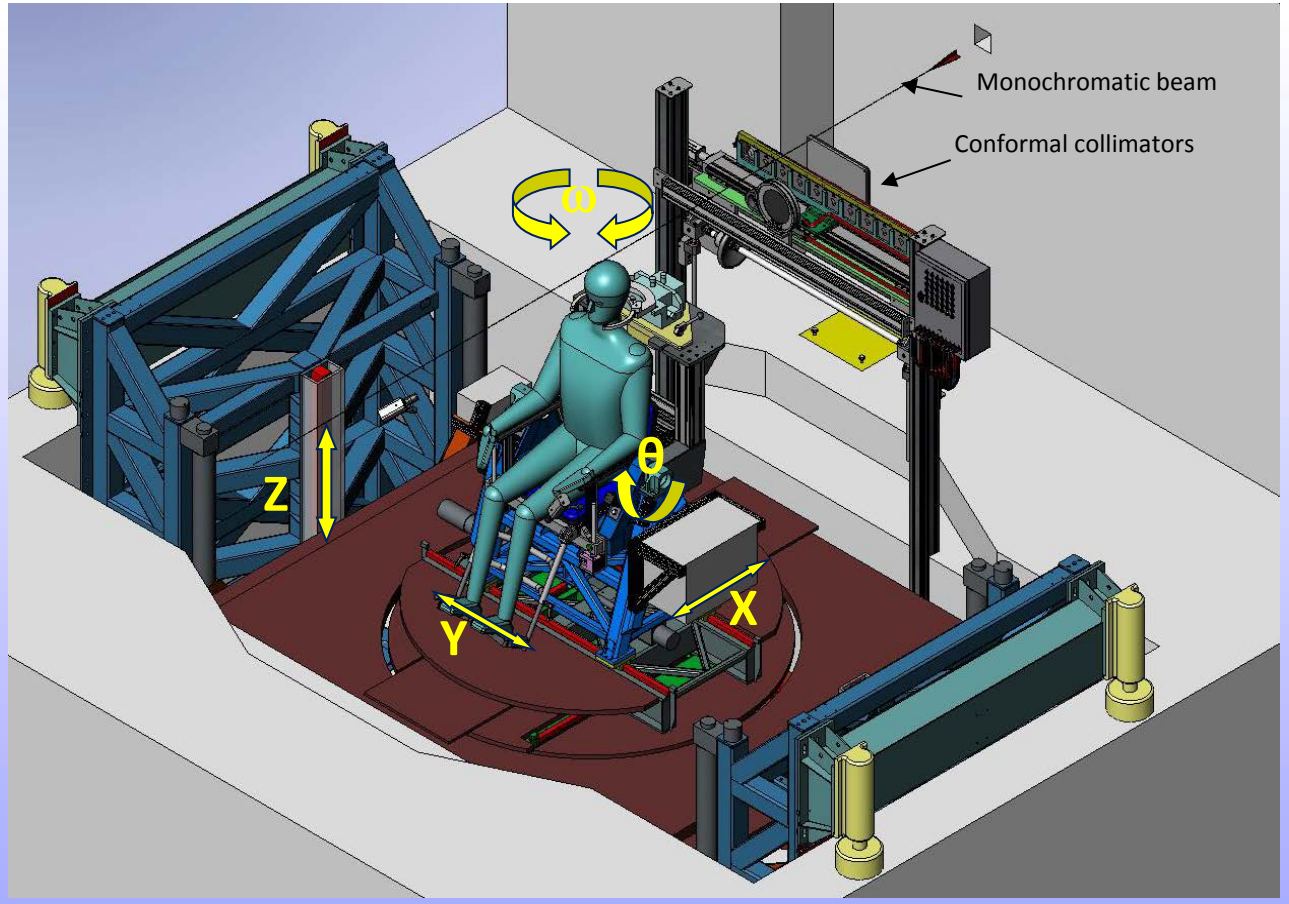

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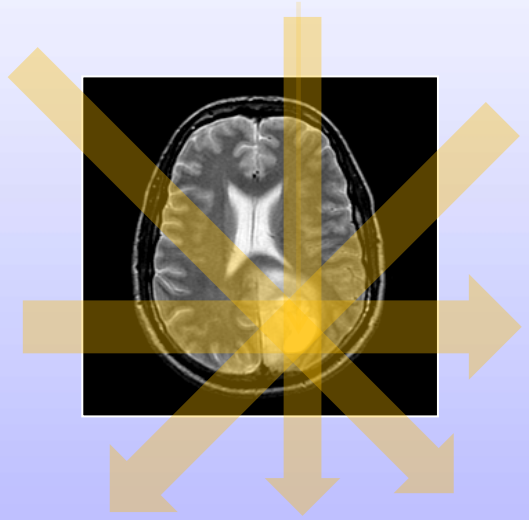

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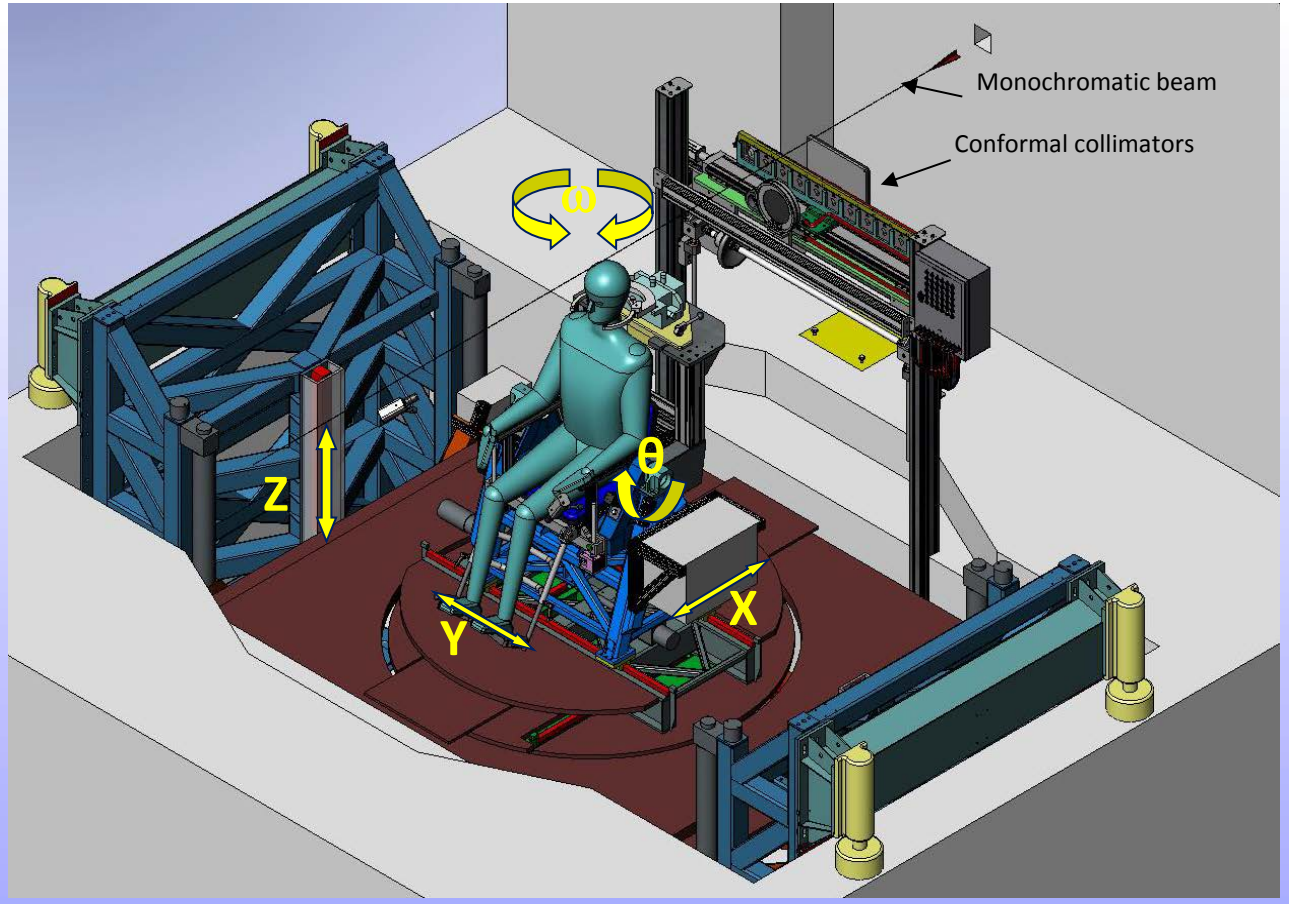
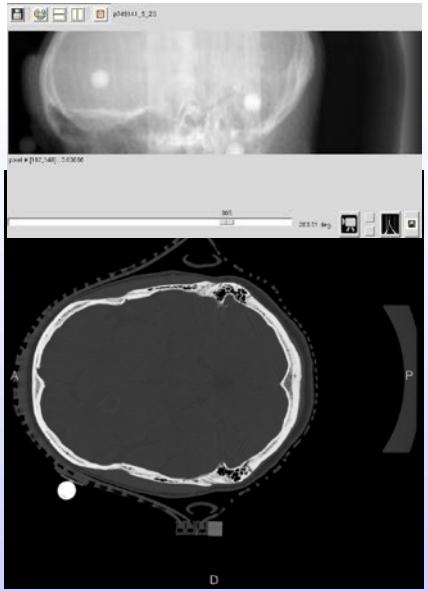


3D-Tomography Alignment



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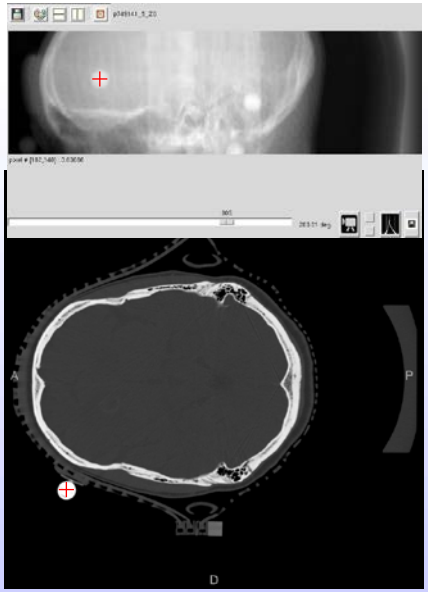

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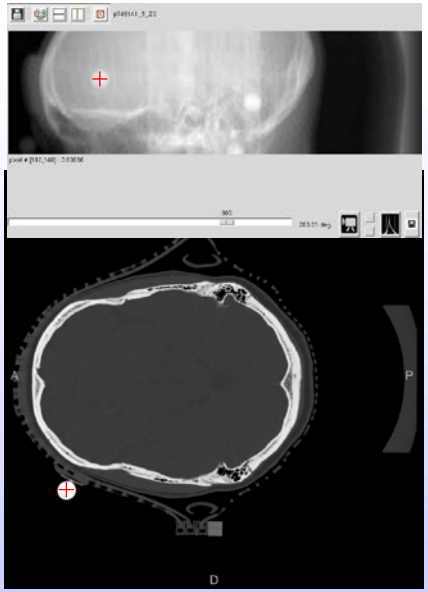
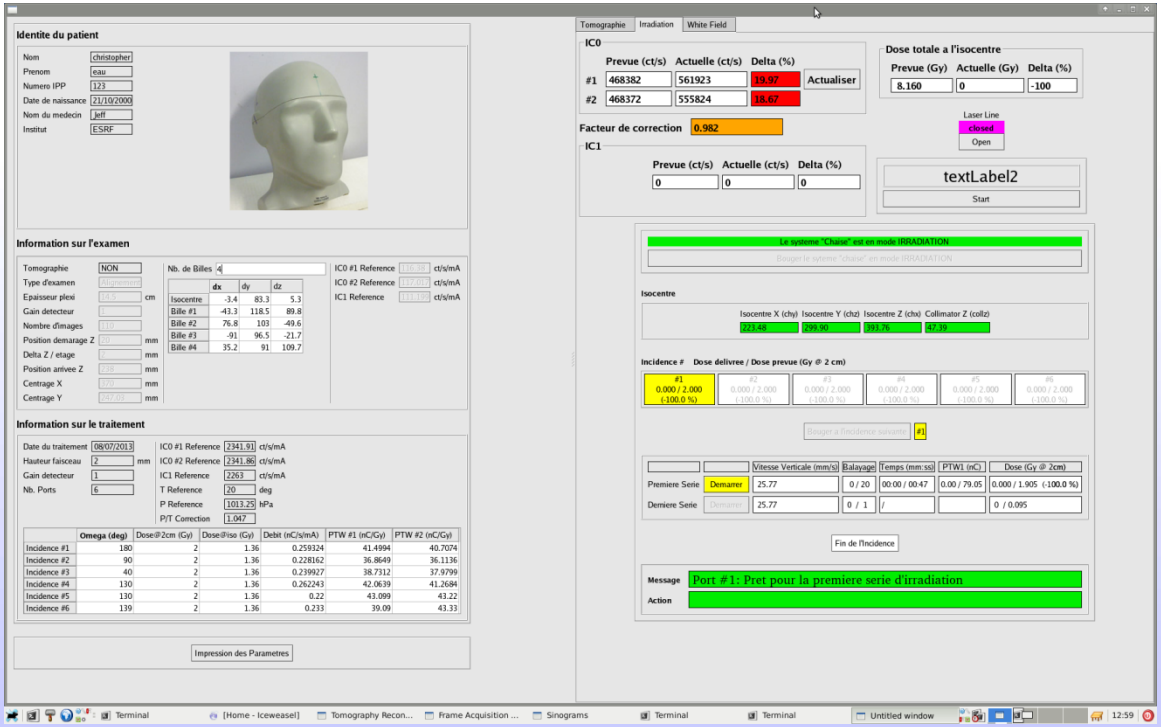


Control Panel



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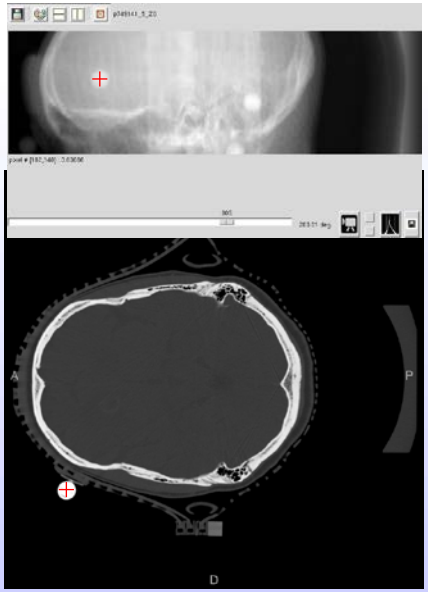

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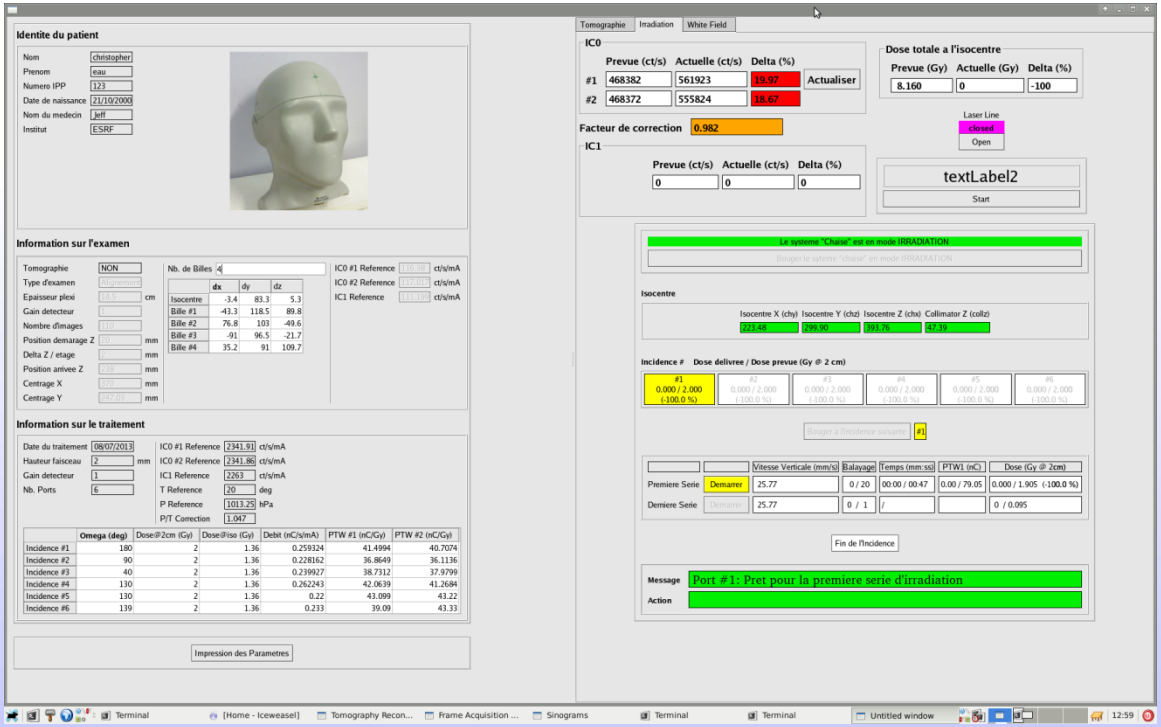
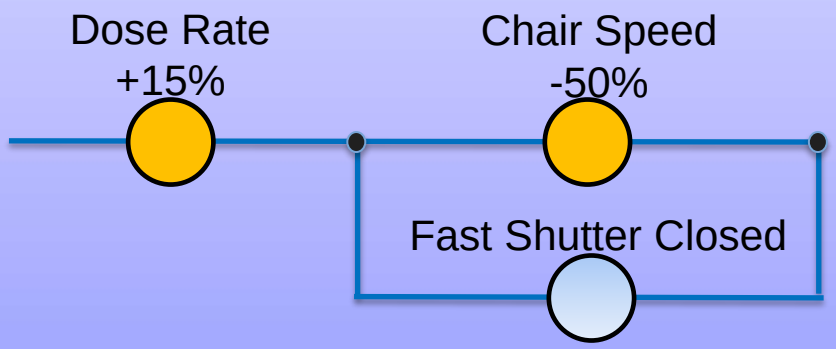


High Frequency Monitor 1 kHz



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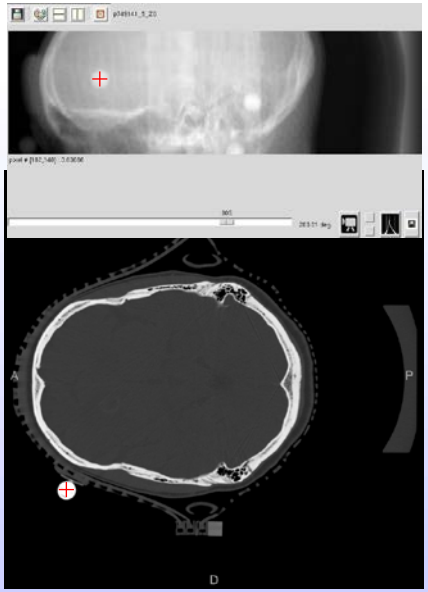

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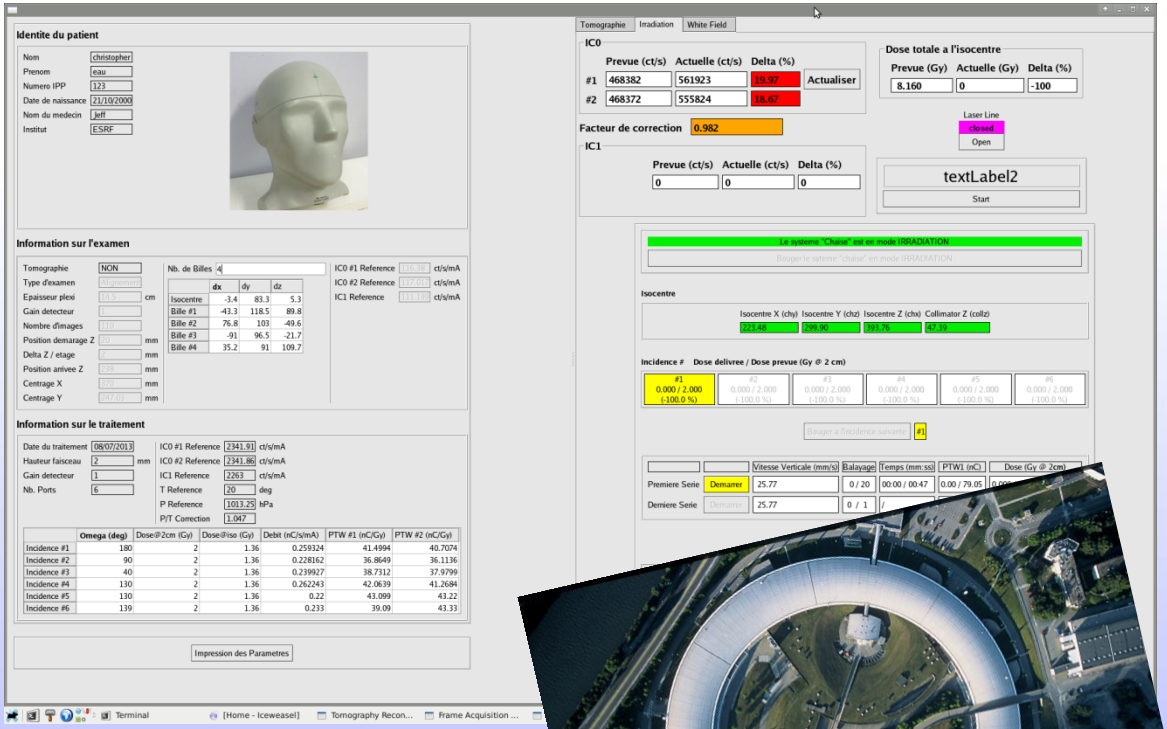

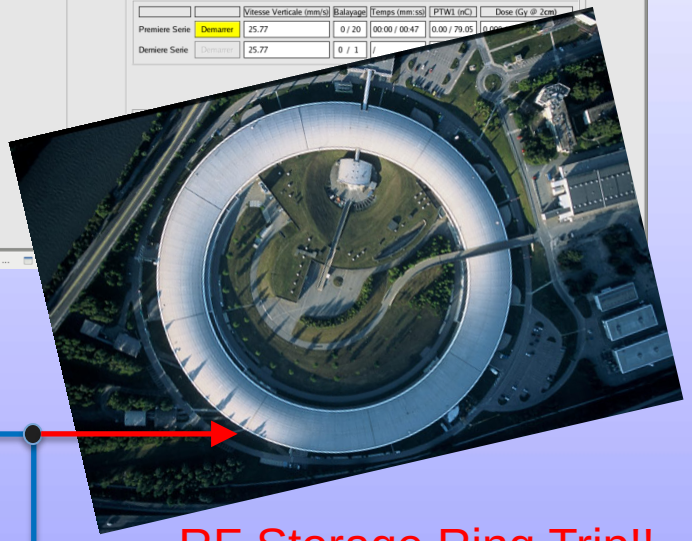

High Frequency Monitor 1 kHz

Dose Rate +15%

Chair Speed -50%

Fast Shutter Closed

RF Storage Ring Trip!!