UCRL-MI-216312

Linac Coherent Light Source Spectral Flux Datasets

L.L.Ott, R.M.Bionta

October 18, 2005

This work was performed under the auspices of the U.S. Department of Energy by University of California, Lawrence Livermore National Laboratory under Contract W-7405-Eng-48.
Work supported in part by the DOE Contract DE-AC02-76SF00515. This work was performed in support of the LCLS project at SLAC.

This Review and Release is for 31 spectral flux datasets generated for the Linac Coherent Light Source (LCLS). The datasets can be viewed with the application **FluxViewer** which is being released separately as source code. The size of the datasets is over 500 MB (too large to be uploaded into the IM System) and the files are binary.

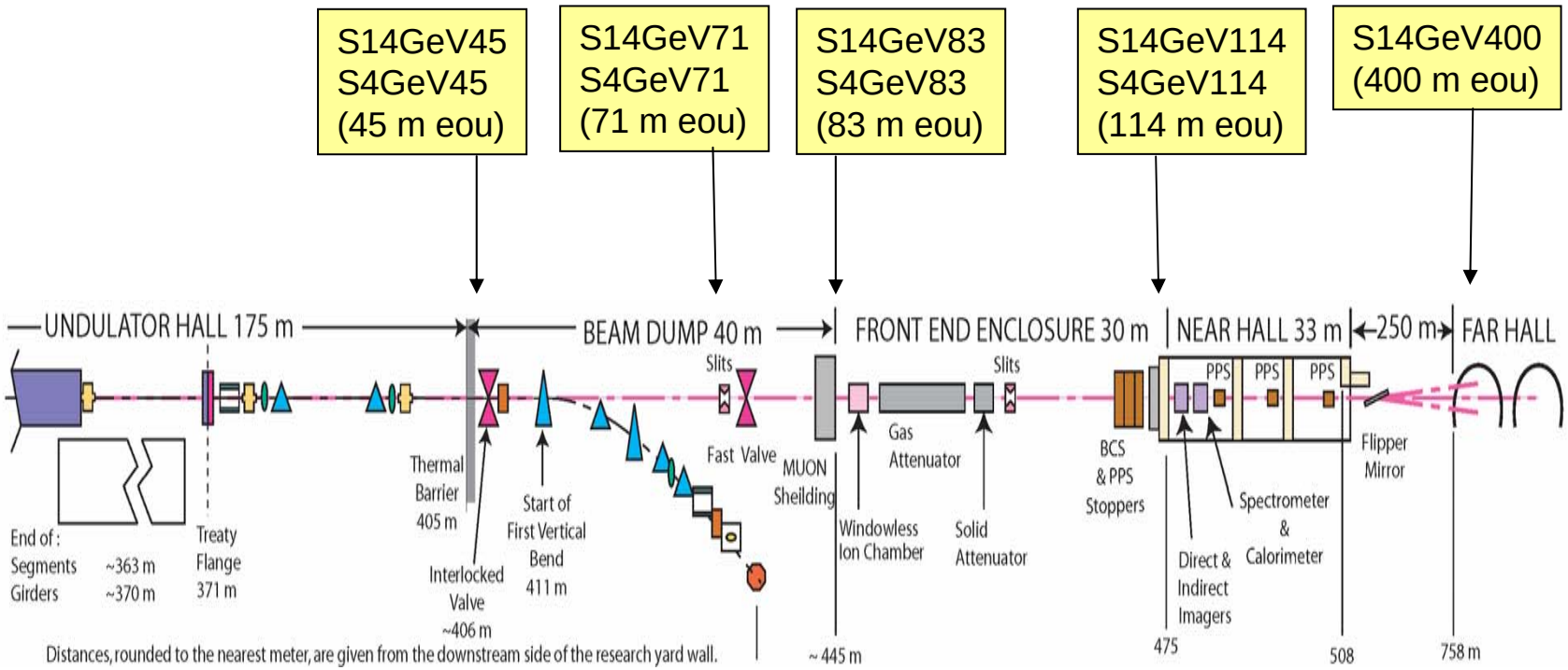
Each dataset contains two Paradox database tables: MasterSpontaneous.DB and SpontaneouBLOBData. The datasets are listed below.

Dir Name	EOU (m)	Linac E	Position
S14GeV45	45	14.08	Beginning of Beam Dump
S4GeV45	45	4.5	Beginning of Beam Dump
S14GeV71	71	14.08	In Beam Dump (“PCPM2”)
S4GeV71	71	4.5	In Beam Dump (“PCPM2”)
S14GeV83	83	14.08	Beginning of FEE (“MUS1”)
S4GeV83	83	4.5	Beginning of FEE (“MUS1”)
S14GeV114	114	14.08	End of FEE (“MUS2”)
S4GeV114	114	4.5	End of FEE (“MUS2”)
S14GeV400	400	14.34	Far Hall

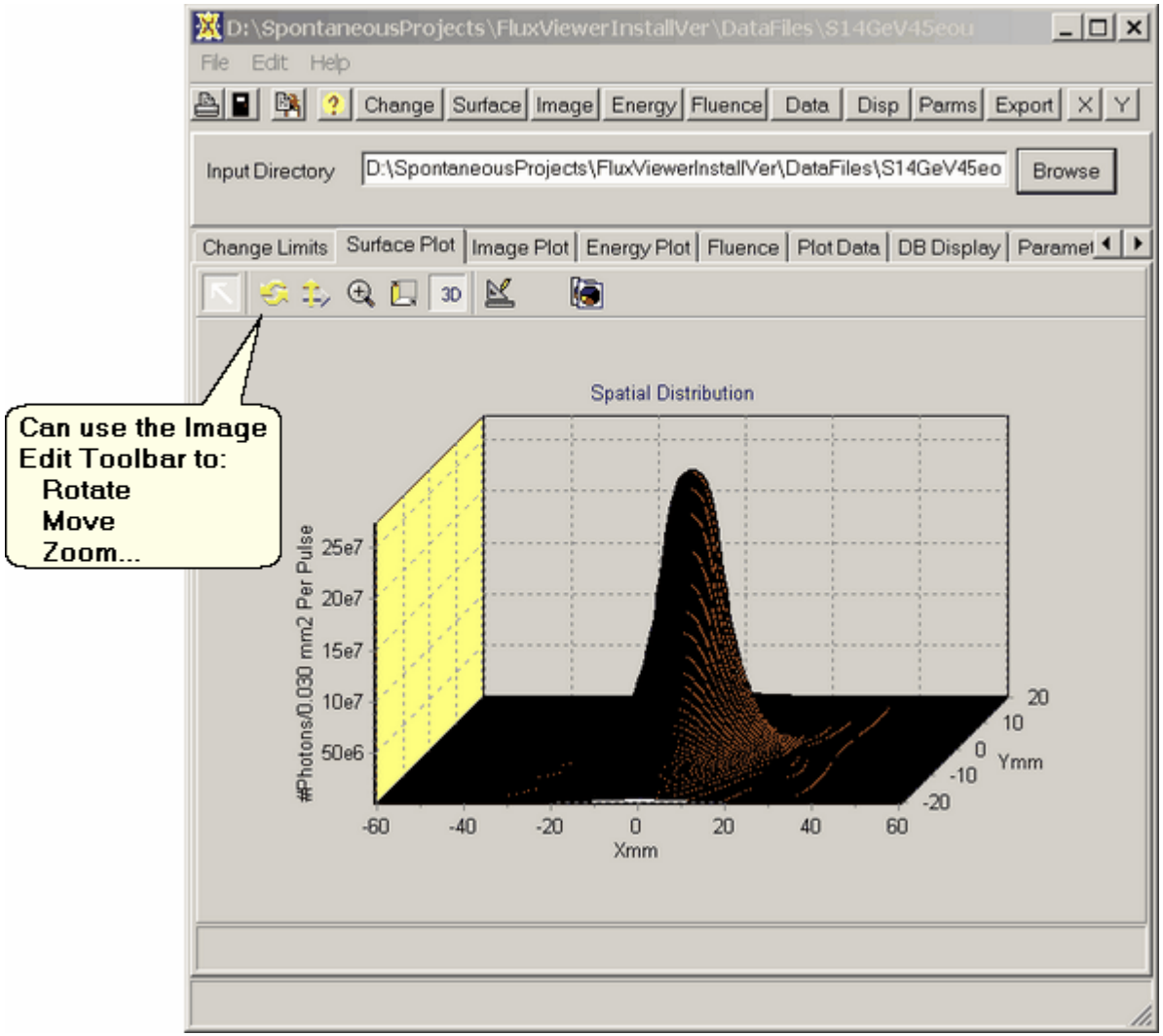
continued on next page

Folder	EOU (m)	Linac E
SMFirst4Gev	114	4.36
SMFirst14Gev	114	13.64
SMLast4Gev	114	4.36
SMLast14Gev	114	13.64
SMFirstDetuned-3	114	13.64
SMFirstDetuned-3_1eVBin	114	13.64
SMFirstDetuned-4	114	13.64
SMFirstDetuned-4_1eVBin	114	13.64
SMFirstNominal	114	13.64
SMFirstNominal_1eVBin	114	13.64
SMMidDetuned-3	114	13.64
SMMidDetuned-3_1eVBin	114	13.64
SMMidDetuned-4	114	13.64
SMMidDetuned-4_1eVBin	114	13.64
SMMidNominal	114	13.64
SMMidNominal_1eVBin	114	13.64
SMLastDetuned-3	114	13.64
SMLastDetuned-3_1eVBin	114	13.64
SMLastDetuned-4	114	13.64
SMLastDetuned-4_1eVBin	114	13.64
SMLastNominal	114	13.64
SMLastNominal_1eVBin	114	13.64

Approximate Location of Spontaneous Datasets in Beamline



Below is a surface plot of one of the datasets:



If more information is needed please contact the author, Linda Ott, at 925 422 6446.