

Table 2. Beamlines Available for 2023B Beamtime by Proposal Type

Beamlines		User Time Ratio to Total Beamtime	Review (per year)	Period	Proposal Type					Measurement Service ²	
No.	Name				Proprietary	General ^{1★}	Non-Proprietary Priority ¹		Graduate Student ^{1★}		Long-Term Graduate Student ¹
							regular	One-Year ⁹			
Public BLs (26 BLs)											
BL01B1	XAFS I	approx. 70%	six times	Oct - mid-Nov 2023 ³	✓	✓	✓		✓	✓	
BL02B1	Single Crystal Structure Analysis	approx. 70%	six times	Oct - mid-Nov 2023 ³	✓	✓	✓		✓	✓	
BL02B2	Powder Diffraction	approx. 80%	six times	Oct - mid-Nov 2023 ³	✓	✓	✓		✓	✓	
BL04B1	High Temperature and High Pressure Research	approx. 70%	twice	Oct 2023 - Feb 2024	✓	✓	✓		✓	✓	
BL04B2	High Energy X-ray Diffraction	approx. 80%	twice	Oct 2023 - Feb 2024	✓	✓	✓		✓	✓	
BL08W	High Energy Inelastic Scattering	approx. 80%	twice	Oct 2023 - Feb 2024	✓	✓	✓		✓	✓	
BL09XU	HAXPES I	approx. 80%	six times	Oct - mid-Nov 2023 ³	✓	✓	✓		✓	✓	
BL10XU	High Pressure Research	approx. 80%	twice	Oct 2023 - Feb 2024	✓	✓	✓		✓	✓	
BL13XU	X-ray Diffraction and Scattering I	approx. 80%	six times	Oct - mid-Nov 2023 ³	✓	✓	✓		✓	✓	
BL14B2	XAFS II	approx. 80%	six times	Oct - mid-Nov 2023 ³	✓	✓	✓		✓	✓	XAFS
BL19B2	X-ray Diffraction and Scattering II	approx. 80%	six times	Oct - mid-Nov 2023 ³	✓	✓	✓		✓	✓	Powder X-ray Diffraction, SAXS
BL20B2	Medical and Imaging I	approx. 80%	twice	Oct 2023 - Feb 2024	✓	✓	✓		✓	✓	
BL20XU	Medical and Imaging II	approx. 80%	twice	Oct 2023 - Feb 2024	✓	✓	✓		✓	✓	
BL25SU	Soft X-ray Spectroscopy of Solid	approx. 80%	twice	Oct 2023 - Feb 2024	✓	✓	✓		✓	✓	
BL27SU	Soft X-ray Photochemistry	approx. 80%	twice	Oct 2023 - Feb 2024	✓	✓	✓		✓	✓	
BL28B2	White Beam X-ray Diffraction	approx. 80%	twice	Oct 2023 - Feb 2024	✓	✓	✓		✓	✓	CT
BL35XU ⁴	Inelastic and Nuclear Resonant Scattering	approx. 80%	twice	Oct 2023 - Feb 2024	✓	✓	✓		✓	✓	
BL37XU	Trace Element Analysis	approx. 80%	twice	Oct 2023 - Feb 2024	✓	✓	✓		✓	✓	
BL39XU ¹⁰	Magnetic Materials	-	twice	-	✓	✓	✓		✓	✓	
BL40B2	SAXS BM	approx. 80%	twice	Oct 2023 - Feb 2024	✓	✓	✓		✓	✓	
BL40XU	High Flux	approx. 80%	twice	Oct 2023 - Feb 2024	✓	✓	✓		✓	✓	
BL41XU	Macromolecular Crystallography I	approx. 80%	twice	Research Fields except Structural Biology Oct 2023 - Feb 2024	✓	✓	✓		✓	✓	
				Structural Biology Oct 2023 - Aug 2024 ⁵	✓	✓		✓	✓		
BL43IR	Infrared Materials Science	approx. 80%	twice	Oct 2023 - Feb 2024	✓	✓	✓		✓	✓	
BL45XU	Macromolecular Crystallography II	approx. 80%	twice	Research Fields except Structural Biology Oct 2023 - Feb 2024	✓	✓	✓		✓	✓	
				Structural Biology Oct 2023 - Aug 2024 ⁵	✓	✓		✓	✓		
BL46XU	HAXPES II	approx. 65%	six times	Oct - mid-Nov 2023 ³	✓	✓	✓		✓	✓	HAXPES
BL47XU	Micro-CT	approx. 80%	twice	Reserch Fields except Industrial Oct 2023 - Feb 2024	✓	✓	✓		✓	✓	
				Industrial ⁸ Oct - mid-Nov 2023 ³	✓	✓	✓		✓	✓	
CryoTEMs											
CryoTEM	EM01CT / EM02CT / EM03CT / EM04CT ⁶	under trial operation	twice	Structural Biology Oct 2023 - Aug 2024 ⁵	✓	✓	✓		✓	△	
RIKEN BLs (11 BLs)											
BL05XU	R&D-ID I	approx. 8%	twice	Oct 2023 - Feb 2024	✓	✓	✓		✓	△	
BL07LSU	R&D-ID II	approx. 10%	twice	Oct 2023 - Feb 2024	✓	✓	✓		✓	△	Newly available from 2023B term
BL17SU	RIKEN Coherent Soft X-ray Spectroscopy	approx. 20%	twice	Oct 2023 - Feb 2024	✓	✓	✓		✓	△	
BL19LXU ⁴	RIKEN SR Physics	approx. 15%	twice	Oct 2023 - Feb 2024	✓	✓	✓		✓	△	
BL26B1	RIKEN Structural Genomics I	approx. 80%	twice	Research Fields except Structural Biology Oct 2023 - Feb 2024	✓	✓	✓		✓	△	
				Structural Biology Oct 2023 - Aug 2024 ⁵	✓	✓		✓	△		
BL29XU	RIKEN Coherent X-ray Optics	approx. 20%	twice	Oct 2023 - Feb 2024	✓	✓	✓		✓	△	
BL32XU	RIKEN Targeted Proteins	approx. 20%	twice	Research Fields except Structural Biology Oct 2023 - Feb 2024	✓	✓	✓		✓	△	
				Structural Biology Oct 2023 - Aug 2024 ⁵	✓	✓		✓	△		
BL36XU	RIKEN Materials Science II	approx. 20%	twice	Oct 2023 - Feb 2024	✓	✓	✓		✓	△	
BL38B1 ⁷	IRKEN Structural Biology I	approx. 10%	twice	Structural Biology Oct 2023 - Aug 2024 ⁵	✓	✓			✓	△	
BL43LXU ⁴	RIKEN Quantum NanoDynamics	approx. 20%	twice	Oct 2023 - Feb 2024	✓	✓	✓		✓	△	
BL44B2	RIKEN Materials Science I	approx. 5%	twice	Oct 2023 - Feb 2024	✓	✓	✓		✓	△	

★: Available for complementary use with SACLA, J-PARC MLF or HPCI including the K computer / the supercomputer Fugaku.

¹ Only non-proprietary research is available.

² Only proprietary research is available. Can be submitted at any time and be reviewed on a rolling basis.

³ JASRI will invite proposals to be conducted during the second and the third periods of 2023B in September and October 2023, respectively.

⁴ Proposals for high-resolution inelastic X-ray scattering will automatically be considered for both BL35XU and BL43LXU: please select BL35XU as beamline choice at application. Similarly, Nuclear Resonant Scattering proposals to BL35XU will also automatically be considered at BL19LXU.

⁵ The research period of proposals using BL41XU, BL45XU, BL32XU or BL26B1 for General Proposals, Graduate Student Proposals in the field of Structural Biology and Proprietary Proposals is set as one year, and the beamtime will be allocated 4 - 5 times a year as needed. In addition, BL38B1 and EM01CT/EM02CT/EM03CT/EM04CT are applicable only for the proposals in the field of Structural Biology and available proposal types are different from other beamlines.

⁶ Applications to CryoTEMs need to be accompanied by applications to other synchrotron beamlines, regardless of the types of proposal.

⁷ Only proposals for Biological Small-Angle Scattering (BioSAXS) research can be applied at BL38B1.

⁸ Only for proposals using the installed imaging equipment.

⁹ There is no call for the One-Year proposals of Non-Proprietary Priority Proposal for the 2023B term.

¹⁰ Due to beamline refurbishment, BL39XU has no call until the 2024A term.