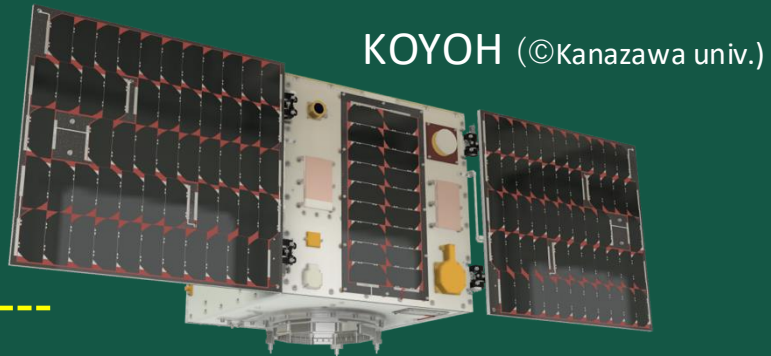


Summary of X-ray observations

Motoko Serino (AGU)

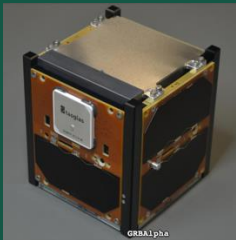
X-ray satellites / instruments

Wide FoV

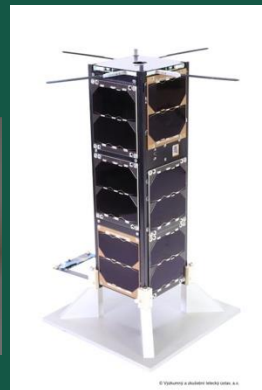


Sawano / Sugizaki

GRBApha
(grbalpha.konkoly.hu)



Mizuno



VZLUSAT-2
(www.vzlusat2.cz)

MAXI (©NASA/JAXA)



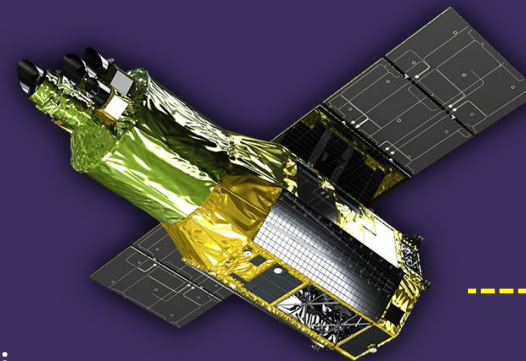
+ IceCube Iwakiri

+ GW Kondo (poster)



Mizuno

IXPE (©NASA)





XRISM (©JAXA)

Bamba

Follow-up

Fact sheet of X-ray instruments

Wide FoV

	Fermi/ GBM	CAMELOT	 Einstein Probe (EP)/WXT	Swift/ BAT	 KOYOHI	MAXI
FoV fraction	66%	66%	9%	8-25%	8%	2%
Energy (keV)	10 keV -30 MeV	70-890	0.5-4	15-150	4-300	2-20
E-reso.	10%	30%	17% @1keV	8% @60keV	27% @5.9keV	18% @5.9keV
PSF/loc.	/ 3-15°		5' / 1'	/3'	/15'	3° / 0.3°
eff. area	300 cm ²	50 cm ²	3-7.5cm ²	1400 cm ²	100 cm ²	4 cm ²

Improvement in <10 keV observation!

Fact sheet of X-ray instruments

Follow-up

	Swift /XRT	XRISM /Resolve	XRISM /Xtend	EP/ FXT	IXPE	NICER	NuSTAR	Chandra	XMM- Newton
FoV (diameter)	23.6'	2.9'	30'	38'	12.9'	5'	10'	16.9'	30'
Energy (keV)	0.3-10	0.3-12	0.4-12	0.3-10	2-8	0.2-12	3-78	0.4-11	0.15-15
E-resolution	190eV @10keV	7eV @6keV	250eV @6keV	170eV @1keV	570eV @2keV	137eV @6keV	400eV @10keV	280eV @5.9keV	150eV @5.9keV
PSF/position	18"/1"	1.7'/	1.7'/	0.5'/5"	28"	-	58"/1.5"	0.8"/0.5"	15"/
eff. area	110 cm ² @1.5keV	210 cm ² @6keV	300 cm ² @6keV	300cm ² @1keV	175 cm ² @3-6keV	1900 cm ² @1.5keV	800 cm ² @10keV	600 cm ² @1.5keV	1000 cm ² @1keV
ToO	<1h	1w		~hours?	3days	4h	~1day	~3days	~hours
Sun angle	47-180	60-120		120-180	56-124	45-180	43-180	46-170	70-110
comment					polarization	fast timing <300ns			

Conclusion

- You should select an appropriate instrument for your ToO.
- "The Multi-Messenger Observation Database and Viewer" (Next talk) may help you in planning ToO...