PV Observations and Cycle-1 Proposals

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PV Observations

- **PV: announcement of PV target recommendation in 2023**

PV Observations

- **PV: collected a list of PV observations from STP members**
- Source type: XRB, galaxy cluster, AGN, pulsar, region survey, magnetar, SNR

Party	No of Proposals	Total Exposure Requested
ALL	33	1191 ks
CAS	26	1006.1 ks
MPE	4	115 ks
ESA	3	70 ks

PV time available: 350 ks → **Oversubscription factor: 3.4**

PV Observations

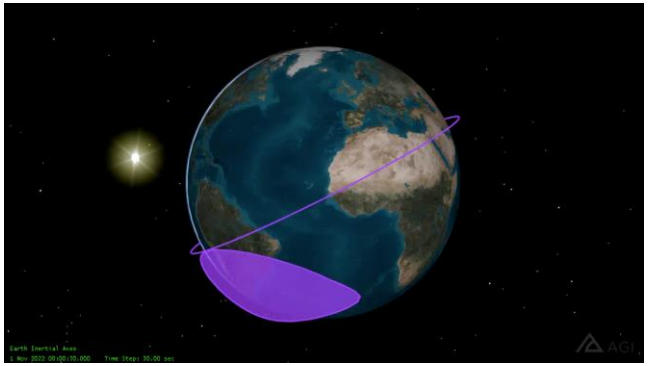
- **PV: observations have all been conducted**
- PV period: 22nd March to 5th April (interrupted by geomag. storm and ToO obs)
- Webpage: https://ep.bao.ac.cn/ep/cms/article/view?id=165

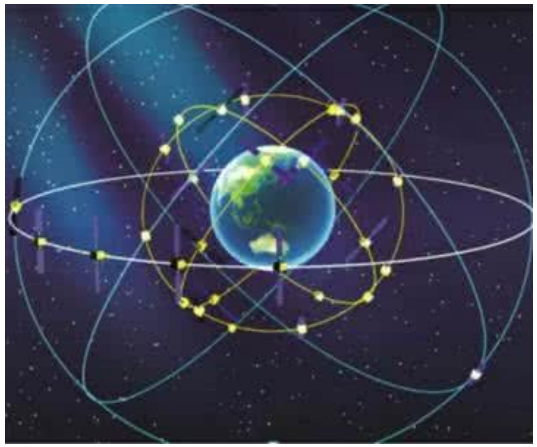
PV Targets and Schedule

Source Name	RA	Dec	Proposed Duration	Time Start (UTC)	Time Stop (UTC)	FXT-A Mode	FXT-B Mode	Contact Person	Status
WXT All-sky Survey	/	/	2 days	2024-03-22T00:58:04	2024-03-24T01:09:11	FF-thin	FF-thin	Yuan Liu	Observed
1LHAASO J1740+0948u	265.03	9.81	10000 s	2024-03-24T01:09:11	2024-03-24T07:33:55	FF-thin	FF-thin	Haiwu Pan	Observed
M86 pointing 2	186.3875	13.061944	20000 s	2024-03-27T09:27:29	2024-03-27T22:18:20	FF-thin	FF-thin	Jeremy Sanders	Observed
Galactic Center	266.416792	-29.007833	30000 s	2024-03-27T22:18:20	2024-03-28T19:10:58	FF-thin	FF-thin	Chichuan Jin	Observed
Lockman Hole	161.25	58	60000 s	2024-03-28T19:10:58	2024-03-30T06:23:55	FF-thin	FF-thin	Chichuan Jin	Observed
A3571	206.902792	-33.034642	35000 s	2024-03-30T06:23:55	2024-03-31T06:28:38	FF-thin	FF-thin	Heng Yu	Observed
1LHAASO J0428+5531	66.63	54.63	10000 s	2024-03-31T06:27:38	2024-03-31T13:01:02	FF-thin	FF-thin	Haiwu Pan	Observed
A1795 pointing 2	206.333333	26.595556	40000 s	2024-03-31T13:01:02	2024-04-01T14:42:23	FF-thin	FF-thin	Yong Chen	Observed
4U 1728-34	262.990542	-33.834028	20000 s	2024-04-01T14:42:23	2024-04-02T03:33:03	TM-medium	TM-medium	Alessio Marino	Observed
M86 pointing 1	186.54875	12.946222	20000 s	2024-04-02T03:33:03	2024-04-02T16:32:13	FF-thin	FF-thin	Jeremy Sanders	Observed
1E 1547.0-5408	237.7255	-54.306694	15000 s	2024-04-02T16:32:13	2024-04-03T00:25:21	PW-thin	PW-thin	Francesco Coti Zelati	Observed
1E 1547.0-5408	237.7255	-54.306694	15000 s	2024-04-03T00:25:21	2024-04-03T13:15:59	FF-thin	FF-thin	Francesco Coti Zelati	Observed
4U 1636-536	250.231658	-53.751375	10000 s	2024-04-03T13:15:59	2024-04-03T19:41:17	TM-medium	PW-medium	Renxin Xu, Guobao Zhang, Rongfeng Shen	Observed
W28 pointing 1	270.27	-23.49	18000 s	2024-04-03T19:41:17	2024-04-04T08:31:54	FF-thin	FF-thin	Fangjun Lu	Observed
W28 pointing 2	269.73	-23.49	18000 s	2024-04-04T08:31:54	2024-04-04T19:46:11	FF-thin	FF-thin	Fangjun Lu	Observed
A1795 pointing 1	207.220833	26.595556	10000 s	2024-04-04T19:46:11	2024-04-05T00:35:10	FF-thin	FF-thin	Yong Chen	Observed
4U 0614+091	94.280417	9.136944	15000 s	2024-04-05T00:35:10	2024-04-05T11:49:27	PW-medium	PW-medium	Chandreyee Maitra	Observed

Cycle-1 Proposals

- **EP Observation modes**
  - **(1) Survey mode**
  - (2) Autonomous follow-up mode: FXT
  - (3) ToO mode: FXT and WXT
  - (4) Calibration Mode
- Onboard data reduction & transient search & autonomous follow-up
- Alert data rapid downlink
  - BD satellite navigation system
  - VHF network
- fast ToO uplink (BD, tens of min.)





Cycle-1 Proposals

- **Assumed Time Allocation for different observing modes:**

Total Obs Time per year	~18 Ms (3.2ks*16orb*365d)
EP-transient Follow-up and ToO	6 Ms (80*5o*3.2ks+150*10orb*3.6ks)
External ToO with EP	6 Ms (2*2orb*3.2ks*365d)
AO-1 (EP Science Team)	5 Ms (75-10-10-5%)
AO-1 (GO)	100 ks (5% CAS time)
FXT Calibration	2 Ms

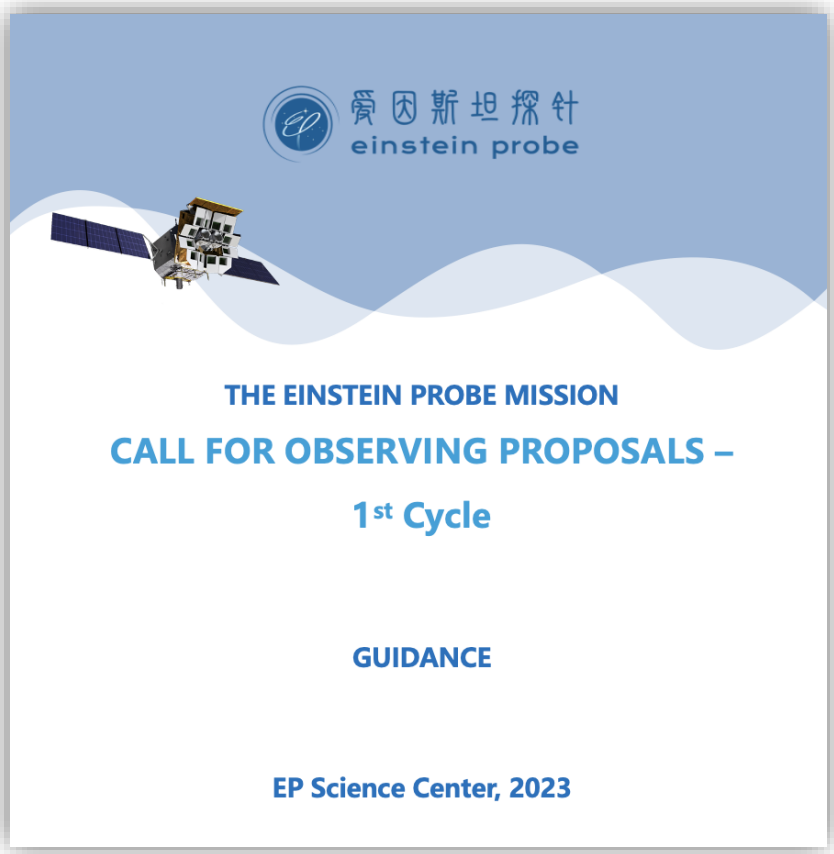
Cycle-1 Proposals

- **Cycle-1: Types of proposals accepted**
- Webpage: https://ep.bao.ac.cn/ep/cms/article/view?id=125

Type of Proposals	Included in Cycle-1?	Proposers in Cycle-1	Allowed Targets in Cycle-1	Type of Programs
FSTO	yes	STP observers, Guest observers*	known sources	single obs, monitoring, tilling
Anticipated-ToO	yes		known X-ray sources	

Cycle-1 Proposals

- **Cycle-1 call for proposals in Otc. 2023**
- Webpage: https://ep.bao.ac.cn/ep/cms/article/view?id=125



Cycle-1 Proposals

- **Cycle-1 proposal statistics:**
- **Total number of proposals received in Cycle-1: 105 proposals**
- **CAS**: 70 FSTO + 10 GO (received, before review), **MPE**: 8 proposals, **ESA**: 7 proposals, **CNES**: 11 proposals

FSTO+ToO	**5 Ms**
	MPE: **500 ks**, ESA: **500 ks**, CNES: **250 ks**
	CAS: **3.75 Ms**
	CAS Science Team: **2.6 Ms** (70%) EPSC guarantee time: **1.1 Ms** (30%)
Guest Observation	**100 ks**

*estimated obs time per year~20 Ms

Cycle-1 Proposals

- **Cycle-1 proposal statistics (for the CAS side):**

CAS Time to be allocated: 3.75 Ms, ~0.94 Ms for each STP				
STP	**Proposal No.**	**Source No.**	**Obs Time Requested**	**Oversubscription Factor**
1	25 (1)	237 (56)	2.94 Ms (27 ks)	**3.1**
2	3 (1)	10 (2)	0.23 Ms (11 ks)	**0.3**
4	29 (13)	460 (239)	10.45 Ms (3.51 Ms)	**11.2**
5	13 (2)	241 (17)	3.86 Ms (83 ks)	**4.1**
GO	10 (1)	86 (53)	2.04 Ms (22 ks)	**20.4**
Sum	80 (18)	1034 (367)	19.52 Ms (3.7 Ms)	**5.2**

*inside bracket: anticipated-ToO

Cycle-1 Proposals

- **Cycle-1 proposal statistics:**

Comparison of Oversubscription Factors:

5.2 in Cycle-1 (CAS)

Einstein Probe

6.3 in AO-23

XMM-Newton

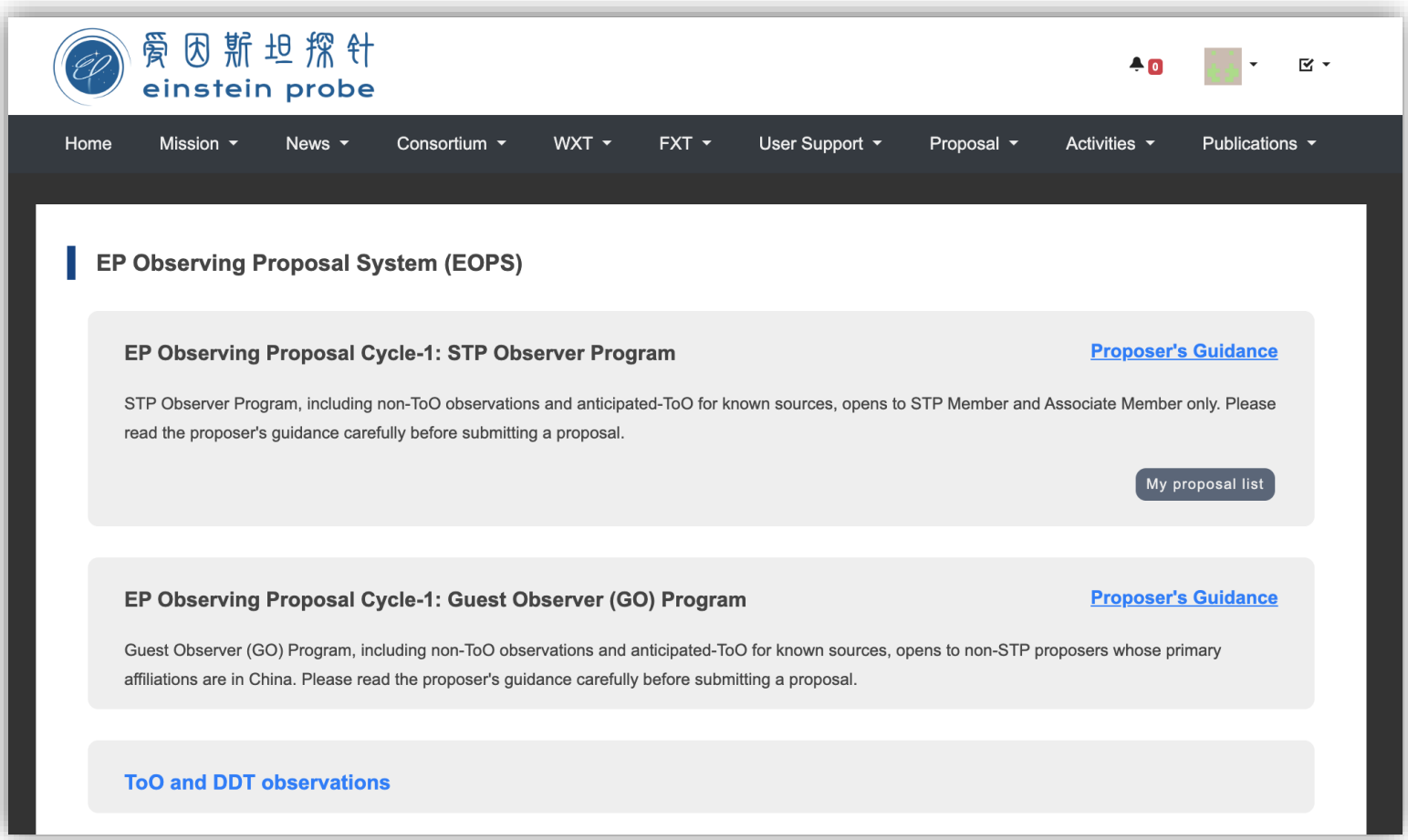
5.3 in Cycle-23

Chandra

- **Cycle-1 following work:**
  - Resolving overlapping proposals
  - Announcement of Cycle-1 result in May

EP Observing Proposals

- **EP Proposal Submission Page:**
- Webpage: https://ep.bao.ac.cn/ep/proposal_submit/user_proposal_create_guide



Thank You!