Happy New Year 2025

Dear colleagues,

Happy New Year! To many of our team members, the past 2024---the year of the Loong---is a year to remember for a lifetime. On 9th January the Einstein Probe satellite was successfully launched from the Xichang satellite launch center, after 6 years of engineering development and more than 10 years of technology R&D. 10 days later, the first WXT module was switched on and saw the first light. On February 22nd, the cover of one of the two FXT units was successfully lifted up and the FXT saw its first light. The EP first light results were formally released on April 27. On July 9th, the commissioning phase was nominally ended, marking the start of the science operations. The official satellite delivery ceremony was held by the CAS on October 31st. Soon after the first light, WXT has started to detect X-ray transients, and has so far detected over 80 high-S/N transients. FXT has observed about 4000 targets.

The Mission Center and EP Science Center have been working extremely hard to make sure the valuable data are promptly transmitted, timely processed and properly calibrated. I would like to thank particularly our TAs, whose hard work ensured the transient information extracted and disseminated, many at the shortest possible latency. I would also like to thank the SMC members, STP chairs and cochairs for their efforts and support for the management and coordination of the EP science activities. Finally, I would like to thank all of our science team members, who have been working hard to make the most of these valuable data, and have already produced quite some impressive publications, and are working on more…...

Happy new year! Let's hope that EP will bring us more surprising and exciting discoveries in 2025!

Weimin Yuan
January 1, 2025

Latest News

EP General Meeting of the CAS STPs Held in Xiamen

On December 16, 2024, the EP General Meeting of the CAS STPs was held in Xiamen, Fujian. The conference was hosted by the Xiamen University. About 130 domestic experts and scientists attended the meeting. read more

EPSC-EPST Meeting Held Online

On November 19, 2024, EP Science Center held an two-hours meeting online with EP science team members. During the meeting, several aspects of EP science operations, including the update the status of the EP science operations, the instrument calibration and data analysis software, and also the interface between EPSC and STP members were generally introduced and discussed.

Events

Einstein Probe Mission Call for Observing Proposals (Cycle-2)

On December 26, EPSC announced the call for observing proposals using the Follow-up X-ray Telescope (FXT) of the Einstein Probe (EP) mission in its second year of operations (Cycle-2).

This call is open to EP STP members and associate members, as well as non-STP members through the EP Guest Observer (GO) program (primarily for users based at Chinese institutions). Proposals will undergo peer review organized separately by each of the Parties (CAS, MPE, ESA, and CNES), followed by final approval from the Science Management Committee (SMC). Proposals accepted for Cycle-2 will be formally considered for scheduling during the second observing year, starting from July 2025.

The EOPS website:
https://ep.bao.ac.cn/ep/proposal_submit/user_proposal_create_guide

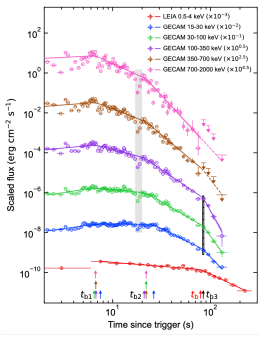
The online submission portal for Cycle-2 proposals is expected to open on January 20th, 2025. The due date of the proposal is 6:00 PM, Beijing Time (UTC+8) Friday, April 4th, 2025.

Einstein Probe Operation Updates

Since its launch, EP has performed a total of approximately 4,000 observations. In March 2024, 17 sources were observed within 10 days during the performance verification (PV) phase. EP has conducted observations in all the pre-planned multiple observation modes during the 6-month nominal operation, including ~ 3.4 Msec monitoring survey, ~ 1.7 Msec follow-up observations (including around 100 on-board triggering follow-up observations), and ~ 0.4 Msec ToO observations.

The monitoring survey includes the Cycle-1 FXT Survey Target Observations (FSTO) and gap-filling sources. About half of the Cycle-1 proposals have been observed. EP-FXT has performed around 400 ToO observations, half of which are follow-ups for EP transients, along with Cycle-1 anticipated ToO targets and regular ToO observations.

Publications



Magnetar Emergence in a Peculiar Gamma-ray Burst from a Compact Star Merger

Sun et al., National Science Review, nwae401

We present a comprehensive analysis of the broad-band prompt emission data of a peculiar, very bright GRB 230307A. Despite its apparently long duration, the prompt emission and host galaxy properties are consistent with a compact star merger origin, as suggested by its association with a kilonova. Intriguingly, an extended X-ray emission component shows up as the γ-ray emission dies out, signifying the likely emergence of a magnetar central engine. We also identify an achromatic temporal break in the high-energy band during the prompt emission phase, which was never observed in previous bursts. paper link