

ERRATUM

# Erratum: Search for photons with energies above $10^{18}$ eV using the hybrid detector of the Pierre Auger Observatory

To cite this article: A. Aab *et al* JCAP09(2020)E02

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# Erratum: Search for photons with energies above $10^{18}$ eV using the hybrid detector of the Pierre Auger Observatory

## The Pierre Auger collaboration

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Received August 22, 2020

Accepted August 22, 2020

Published September 23, 2020

**Erratum to:** [JCAP04\(2017\)009](#)

**ArXiv ePrint:** [1612.01517](#)

### 1 Exposure calculation

Due to a mistake in the numerical integration following eq. (6.2) of the original article [1], the exposure shown in figure 5 of the original article was incorrect. The correct exposure is shown in figure 1.

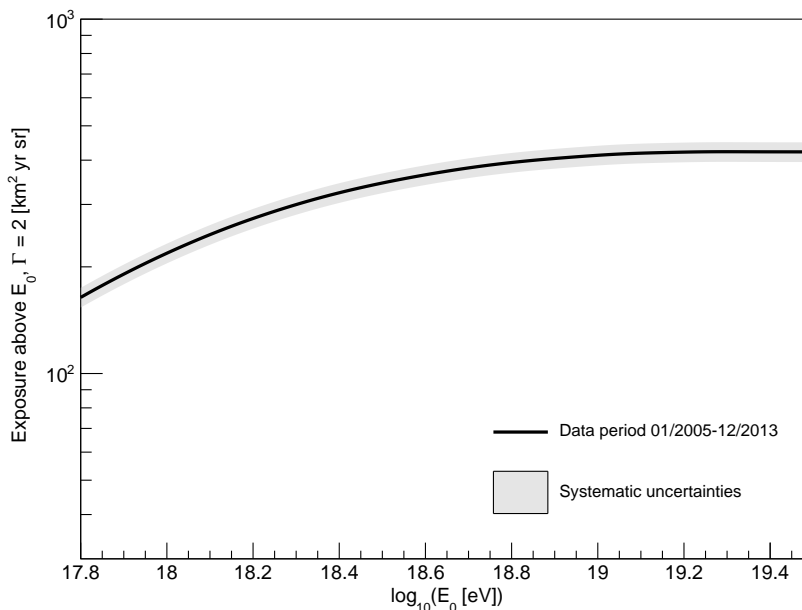
### 2 Upper limits on the integral photon flux and fraction

The incorrect exposure affects the calculation of the upper limits on the integral photon flux following eq. (6.1) of the original article. The correct values for the upper limits are 0.038, 0.010, 0.009, 0.008 and  $0.007 \text{ km}^{-2} \text{ sr}^{-1} \text{ yr}^{-1}$  for threshold energies of 1, 2, 3, 5 and 10 EeV. The correct values for the upper limits on the integral photon fraction subsequently derived are 0.14 %, 0.17 %, 0.42 %, 0.86 % and 2.9 % for the same threshold energies.

### 3 Author list

The author list of this erratum also corrects a mistake made in the original article, where F. Zuccarello was missing and Z. Zong was listed twice.





**Figure 1.** Hybrid exposure for primary photons in the time interval 1 January 2005–31 December 2013, assuming a power-law spectrum with  $\Gamma = 2$ . Systematic uncertainties due to the ontime and the trigger efficiency are shown as a gray band.

## References

- [1] PIERRE AUGER collaboration, *Search for photons with energies above  $10^{18}$  eV using the hybrid detector of the Pierre Auger Observatory*, *JCAP* **04** (2017) 009 [[arXiv:1612.01517](#)] [[INSPIRE](#)].

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