

# News from the African Gamma-ray sky: Highlights from the H.E.S.S. experiment

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The H.E.S.S. experiment has entered a new phase with an advanced camera, improved hardware, optimized operational procedures and enhanced open source analysis tools. This results in a significant gain in performance, observing time and sensitivity with corresponding benefits for quantity and quality of observational results in time-domain and time-integrated studies.

Beyond individual results, recent studies provide major steps towards population studies, scan multidimensional parameter spaces for different types of objects and extend the base for the science program of more sensitive, future facilities.

The combination of improved angular resolution and extended spectral coverage sharpens conclusions on prototypical sources and focuses goals in formulating the next scientific questions.

Moreover, an extended time-domain program is combined with a thorough multi-frequency program to relate temporal variability throughout the electromagnetic spectrum and explore relations to other messengers.

In this presentation we will describe the highlights of the recent observations and the advancements of the H.E.S.S. experiment that enable these results. The implications for specific physical interpretation will be discussed in the broader context of different source classes.

## Keywords

## Collaboration

H.E.S.S.

## other Collaboration

## Subcategory

Experimental Results

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