# Article information:

(PDF) Study on Outliers in the Big Stellar Spectral Dataset of the Fifth Data Release (DR5) of the Large Sky Area Multi-Object Fiber Spectroscopic Telescope (LAMOST)  
<https://www.researchgate.net/publication/353046692_Study_on_Outliers_in_the_Big_Stellar_Spectral_Dataset_of_the_Fifth_Data_Release_DR5_of_the_Large_Sky_Area_Multi-Object_Fiber_Spectroscopic_Telescope_LAMOST>

# Article summary:

1. An outlier analysis method was applied to the archived AFGK stars in the fifth data release (DR5) of LAMOST.

2. An improved Local Outlier Factor (LOF) method based on Principal Component Analysis and Monte Carlo was proposed to obtain the outlier ranking of each spectrum in the entire dataset.

3. Cross-matching with APOGEE revealed 122 common spectra, and parameters calculated from LASP agreed with APOGEE for these spectra.

# Article rating:

May be slightly imbalanced: The article presents the information in a generally reliable way, but there are minor points of consideration that could be explored further or claims that are not fully backed by appropriate evidence. Some perspectives may also be omitted, and you are encouraged to use the research topics section to explore the topic further.

# Article analysis:

The article is generally reliable and trustworthy, as it provides a detailed description of the research conducted and its results. The authors have provided evidence for their claims by cross-referencing their results with those obtained from APOGEE, which adds credibility to their findings. Furthermore, they have provided a link to a catalog and spectral atlas of all 3,627 outliers that were identified in their study, which allows readers to further explore their results.

The article does not appear to be biased or one-sided in any way; rather, it presents both sides of the argument equally and objectively. It also does not contain any promotional content or partiality towards any particular viewpoint or opinion. Additionally, possible risks associated with using bad spectra are noted in the article, thus providing readers with an informed perspective on the issue at hand.

In terms of missing points of consideration or evidence for claims made, there is no mention of how accurate or precise the parameters derived from LASP are compared to those obtained from APOGEE; this could be explored further in future studies. Additionally, while the authors have discussed how nebular contamination can affect parameter calculations from LASP, they do not provide any evidence for this claim; this could also be addressed in future research.

# Topics for further research:

* Accuracy of LASP parameters
* Nebular contamination effects on LASP parameters
* APOGEE parameter comparison
* Spectral atlas of outliers
* Risks associated with bad spectra
* Spectral parameter estimation methods

# Report location:

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