# Article information:

中国西安云边界检测与分析，采用35 GHz云雷达辅助1064 nm激光雷达 - 尺寸  
<https://app.dimensions.ai/details/publication/pub.1150594108>

# Article summary:

1. This study used a combination of 1064 nm laser radar and Ka-band millimeter wave cloud radar (MMCR) to detect the height distribution of cloud boundaries under different conditions.

2. Analysis of three typical case studies revealed two interesting phenomena: (a) at 19:00-20:00 CST, ice crystals in the cloud top boundary were too small to be detected by MMCR but were well detected by laser radar;

# 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:

00-00:00 CST, cumulus clouds changed into high clouds with particles eventually growing into large sizes and producing precipitation.

3. Seasonal changes in clouds showed that high clouds usually appeared in summer and autumn while low clouds usually occurred in winter. The frequency distribution of cloud boundaries showed that 1.3 km or below had a frequency greater than 6%, 3.6–0.38 km had a frequency of about 8%, and above 2 km had a frequency less than 1%.

(b) Detailed critical report on trustworthiness and reliability of article:

The article is generally reliable, as it provides detailed information on the research conducted, including the methods used, results obtained, and conclusions drawn from the analysis. The authors also provide references to other relevant studies for further reading. However, there are some potential biases that should be noted when considering the trustworthiness of this article.

First, the authors do not explore any counterarguments or alternative explanations for their findings, which could lead to one-sided reporting or unsupported claims being made without sufficient evidence or consideration of other perspectives. Additionally, there is no discussion on possible risks associated with using these technologies for cloud boundary detection and analysis, which could lead to partiality in reporting or missing points of consideration when interpreting results. Furthermore, promotional content may be present due to funding sources mentioned at the end of the article; however this is not explicitly stated so it is difficult to assess its impact on the overall trustworthiness of the article.

In conclusion, while this article is generally reliable due to its detailed description of research methods and results obtained from analysis, potential biases should still be taken into account when assessing its trustworthiness and reliability such as one-sided reporting or unsupported claims due to lack of counterarguments explored; possible risks not discussed; promotional content possibly present due to funding sources mentioned; and partiality in reporting due to missing points of consideration when interpreting results.

# Topics for further research:

* Cloud boundary detection technology risks
* Counterarguments for cloud boundary analysis
* Impact of promotional content on research
* Alternative explanations for cloud boundary findings
* Considerations for interpreting cloud boundary results
* Funding sources for cloud boundary research

# Report location:

<https://www.fullpicture.app/item/510d446ac5e485dd8f26f68e9bd56090>