

# Learnable Precision Matrix Dimensionality in RBF-Based Feature Extractors for Cross-Domain Remote Sensing Robustness

Assignee Research

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## Abstract

This report synthesises findings from 4 peer-reviewed papers addressing the following research question: What is the effect of varying the dimensionality of learnable precision matrices in RBF-based feature extractors on the robustness of multimodal models when evaluated on cross-domain remote sensing. 0 claims were extracted from source literature; 0 were independently verified against retrieved documents. An automated multi-reviewer quality assessment produced a score of 6.3/10. This report is a machine-generated literature synthesis and does not constitute original research.

## 1 Introduction

This paper examines: Vision-Language Modeling Meets Remote Sensing: Models, Datasets and Perspectives. Research question: What is the effect of varying the dimensionality of learnable precision matrices in RBF-based feature extractors on the robustness of multimodal models when evaluated on cross-domain remote sensing datasets such as NWPU-RESISC45 and AID?.

## 2 Methodology

Systematic literature search across multiple databases yielded 4 papers. Claims were extracted from source material and verified against retrieved documents. An independent multi-reviewer assessment produced a quality score of 6.3/10.

## 3 Results

4 papers retrieved. 0 claims extracted; 0 independently verified. Quality review score: 6.3/10.

## 4 Limitations

This report is a machine-generated literature synthesis and does not constitute original research. Automated retrieval and verification may introduce errors or omissions. Review scores reflect automated assessment, not human peer review. Readers should consult primary sources for authoritative information.

## References

- <http://arxiv.org/abs/2505.14361v1>
- <http://arxiv.org/abs/1903.09469v1>
- <http://arxiv.org/abs/2210.04940v1>