



Vera C. Rubin Observatory
Data Management

The ZOGY image differencing kernel and PSF solutions and some practical implementation issues

Gabor Kovacs

DMTN-179

Latest Revision: 2021-01-20



Abstract

We present the ideal matching kernel and PSF solutions for Gaussian input PSFs in the ZOGY image matching, noise decorrelation and subtraction method. We discuss sources of numerical noise in Fourier-space that can lead to spatially badly bound image artefacts in the difference images.

Change Record

Version	Date	Description	Owner name
1	YYYY-MM-DD	Unreleased.	Gabor Kovacs

Document source location: <https://github.com/lstt-dm/dmtn-179>

Contents

A References	1
B Acronyms	1

The ZOGY image differencing kernel and PSF solutions and some practical implementation issues

A References

B Acronyms