



ZWICKY TRANSIENT FACILITY

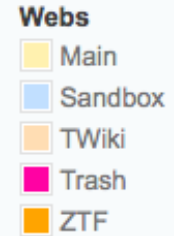
Technical Working Groups

Eric Bellm

May 21, 2016

Lots for *collaboration* to do! => Divide and conquer.

http://www.oir.caltech.edu/twiki_ptf/bin/view/ZTF/WorkingGroups



Self-organized; Work independently; check in bi-weekly

First and third Thursdays, 11 am Pacific Time

join ztfgeneral@lists.astro.caltech.edu for announcements

Look for what's missing, and for **where you want to help!**

Requirements Generation

lead: Eric B.

Purpose:

high-level planning & architecture;
consensus-building exercise. Not a wish list!

Drafted: (see www.oir.caltech.edu/twiki_ptf/bin/view/ZTF/RequirementsDocuments)

ZTF Science Requirements Document

ZTF Software Deliverables Document

QA Design Document

Marshal Design Document

Near-term needs:

Photometric Error Budget

Flat Field Requirements Document

Pipelines & Algorithms

lead: Frank M.

Purpose:

deliver best reduction of ZTF data—within technical and budgetary limits!

Completed:

ZTF Software Deliverables Document

ZTF simulated images

ZTF pipeline framework

Near-term needs:

Performance Analysis on iPTF data

ZOGY vs. PTFIDE performance testing

code contribution infrastructure

calibration modules

Calibration

lead: ???

Purpose:

enable high-fidelity science analysis!

1% absolute photometry *goal* (SN Ia science)

Recent progress:

improved astrometry algorithms in crowded fields (Dave S.)

Near-term needs:

Analysis of iPTF performance, scattered light/ZPVMs

Flat field requirements development; hardware testing

PS1 & Gaia analysis, calibration modules

Intermediate term:

Atmospheric monitoring?

Cadence & Survey Strategy

lead: Eric B.

Purpose:

develop and test survey plans; understand & present tradeoffs; optimize science productivity

In progress: (see https://github.com/ZwickyTransientFacility/ztf_sim)
ztf_sim: survey simulator
analyze with LSST Metrics Analysis Framework, astrobject

Near-term needs:

High-level goals

Proposed survey strategies

Quantitative metrics for key science cases

Quality Assurance (QA)

lead: Thomas K.

Purpose:

monitor ZTF execution, identify problems quickly!

Drafted: (see http://www.oir.caltech.edu/twiki_ptf/bin/view/ZTF/RequirementsDocuments)

“QA Marshal” design document

Near-term needs:

Full specification

Development effort?

Marshals and User Interfaces

lead: ???

Purpose:

Develop and maintain collaboration-only interfaces to ZTF data. “Unified marshal?”

Drafted: (see http://www.oir.caltech.edu/twiki_ptf/bin/view/ZTF/RequirementsDocuments)
“Marshal” design document

Near-term needs:

Full specification

Development effort?

Commissioning Group

lead: Thomas K.

Purpose:

Work with camera and data system teams to deliver a science-ready survey as soon as possible!

In progress:

early plans for camera-team activities (held by RGD)

Near-term needs:

Performance verification plan

During commissioning:

rapid technical/performance analysis of test data
[not science!]