























# Prioritised Science Pipelines Technical Debt

Please use the table below to nominate "technical debt" or longstanding issues which you feel should be prioritised during the F18 development cycle.

Some issues may be well described by a single ticket; if so, feel free just to mention that. Others may need more description — please add a concise summary of the issue, and link to any tickets you're aware of which are relevant.

Add your name to the "nominated by" to express your support for topics which you think are particularly important, even if you didn't originally nominate them. (But note that this is not a popular vote, and we won't necessarily simply address the topics with the most votes first.)

Description	Relevant Jira Tickets	Nominated By
flux->instFlux	 <a href="#">DM-10302</a> - Rename "**_flux" fields to "**_instFlux" in SourceCatalogs <span>DONE</span>	<a href="#">John Parejko</a>
Replace Calib with PhotoCalib	 <a href="#">DM-10153</a> - Replace Calib with finished PhotoCalib <span>DONE</span>	<a href="#">John Parejko</a>
Fix sigma/err	 <a href="#">DM-10932</a> - Fix "Sigma" and "Err" use in the stack <span>TO DO</span>	<a href="#">John Parejko</a>
Add TAN-SIP fitter to afw and SkyWcs	 <a href="#">DM-13170</a> - Make SkyWcs.getFitsMetadata fit a TAN-SIP WCS if necessary <span>TO DO</span>  <a href="#">DM-14429</a> - Implement RFC-460: move afw.geom content to new geom package <span>DONE</span>	Russell Owen
Fix bool array handling in PropertySet	 <a href="#">DM-13232</a> - Python PropertySet.set mis-handles array of bool <span>DONE</span>	Russell Owen
bin/genCameraRepository.py broken in obs_cfht & obs_sdss	 <a href="#">DM-11560</a> - bin/genCameraRepository.py broken in obs_cfht & obs_sdss <span>TO DO</span>	Russell Owen
Get rid of all use of astrometry.net in all unit tests except in meas_extensions_astrometry_net		Russell Owen
Stop using astrometry.net by default	 <a href="#">DM-10242</a> - Stop using astrometry_net by default <span>DONE</span>	Russell Owen
Use MatchPessimisticB by default, after proving its performance is adequate		Russell Owen
ndarray sometimes fails to build	 <a href="#">DM-9677</a> - ndarray sometimes fails to build using lsstsw <span>DONE</span>	Russell Owen
Modernize pybind11 wrappers for loading speed and fewer circular import issues		Russell Owen
With pybind11 it is easy to make statisticsControl fail badly	 <a href="#">DM-9396</a> - With pybind11 it is easy to make statisticsControl fail badly <span>TO DO</span>	Russell Owen
Switch ndarray from a tarball to checked out source	 <a href="#">DM-9396</a> - With pybind11 it is easy to make statisticsControl fail badly <span>TO DO</span>	Russell Owen
Change RADECSYS to RADESYS	 <a href="#">DM-6576</a> - Change RADECSYS to RADESYS in our code base <span>DONE</span>	Russell Owen
DateTime mishandles leap seconds	 <a href="#">DM-7589</a> - DateTime mishandles leap seconds <span>WON'T FIX</span>	Russell Owen
Test that measurement plugins get aperture-corrected fluxes	 <a href="#">DM-6070</a> - Test that measurement plugins get aperture-corrected fluxes <span>TO DO</span>	Russell Owen
making PSF candidates should be simpler (this may be obsolete, especially if the code is now in one task; if so, close it)	 <a href="#">DM-5578</a> - making PSF candidates should be simpler <span>TO DO</span>	Russell Owen

SourceDetectionTask can corrupt the image	 <a href="#">DM-4860</a> - SourceDetectionTask can corrupt image <span>TO DO</span>	Russell Owen
Get rid of the pex_policy package		Russell Owen
Change method names in all our tasks and parseAndRun parseAndRunDataRef	 <a href="#">DM-2639</a> - Standardize primary method names, run/runDataRef, across PipeTasks <span>DONE</span>	Yusra AISayyad (not sure I'm nominating it, but don't want to forget it)
Fix shbang lines to use python not python2	 <a href="#">DM-13339</a> - shebang needs to be changed in several places in bin.src directories <span>DONE</span>	Russell Owen
Python 3 gives different numerical answers to Python 2	 <a href="#">DM-11779</a> - Different processCcd outcomes using Py2 and Py3 stacks <span>DONE</span>  <a href="#">DM-12180</a> - Different processCcd matching outcomes using Py2 and Py3 stacks <span>TO DO</span>	<a href="#">John Swinbank</a>
Modernize use of ndarray in pybind11 wrappers	 <a href="#">DM-44625</a> - Fix ndarray compiler warnings <span>DONE</span>  <a href="#">DM-41307</a> - Enable usage of NumPy 1.7 API with ndarray in pybind11 modules <span>INVALID</span>	Russell Owen
Either fix example scripts in <b>examples/</b> directories or remove them all together. Broken/outdated examples are potentially dangerous (to newcomers in particular).		Lauren MacArthur