**OSIRIS Release Notes Version 2.12**

**Improvements in OSIRIS Version 2.12**

Version 2.12 includes substantial improvements over previous versions

**New Features**

Improved Artifact Analysis

* Improved pull-up analysis by changing the pull-up artifact reporting so that pull-up is not reported between two channels when the pull-up peaks have no impact, such as when the pull-up is below detection threshold or is negative in the raw data.
* Added a pull-up analysis setting to the pull-up algorithm so that it is no longer necessary for the user to specify a minimum height below which a peak will not cause pull-up. This value is now calculated by the pull-up algorithm from the sample data and can vary both by primary channel and pull-up channel, as well as for linear and saturated peak data. This makes the algorithm accurate over a broader range of data. It also relieves the laboratory of having to empirically determine a value and can prevent selection of an inappropriate value. Users that want to may set the parameter to use the previous method.
* Improved pull-up analysis use of peak saturation data (laser off scale).
* Improved pull-up analysis where primary peaks have significant noise
* Improved analysis of split peak “craters” by taking peak widths into account.

**New Kit /Lab Settings**

* Added the COrDIS kit by user request

**Usage statistics**

OSIRIS version 2.12 collects unidentified usage statistics to help us improve the software. It does not collect information on samples, profiles, batches or information that would reveal the context of the analysis. Users can opt out or disable the statistics reporting. Details are in the Privacy section of the User Guide.

**Bug Fixes**

* Fixed minor bugs that did not impact accuracy.
* Fixed bug in normalization algorithm that in rare cases could cause a spike in normalized data. This would not have caused incorrect allele calls.
* Fixed a bug that prevented the peak residual from displaying in the allele hover box when the residual was zero.
* Fixed a bug that could cause OSIRIS to crash on the Mac under certain circumstances.