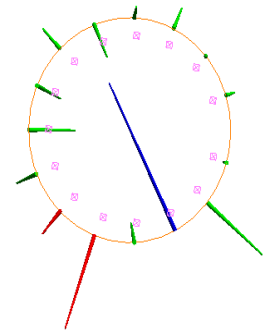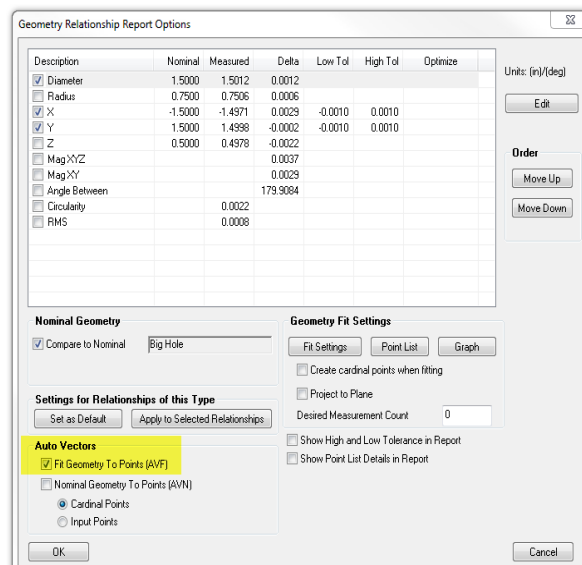# What's New In SA

One of the advantages of SpatialAnalyzer is that development occurs at a brisk pace. New feature requests, bug fixes, and changes are implemented quickly, giving you the opportunity to start taking advantage of newly implemented features in a very short period of time.
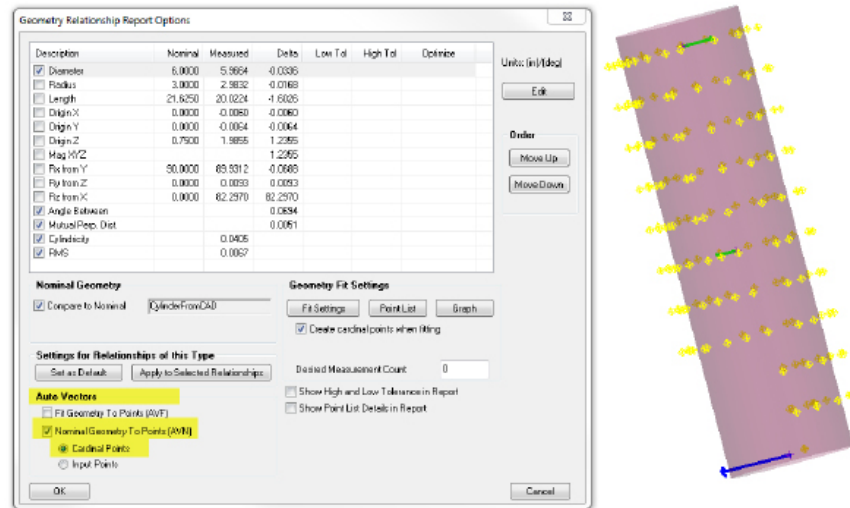
2015.07.28
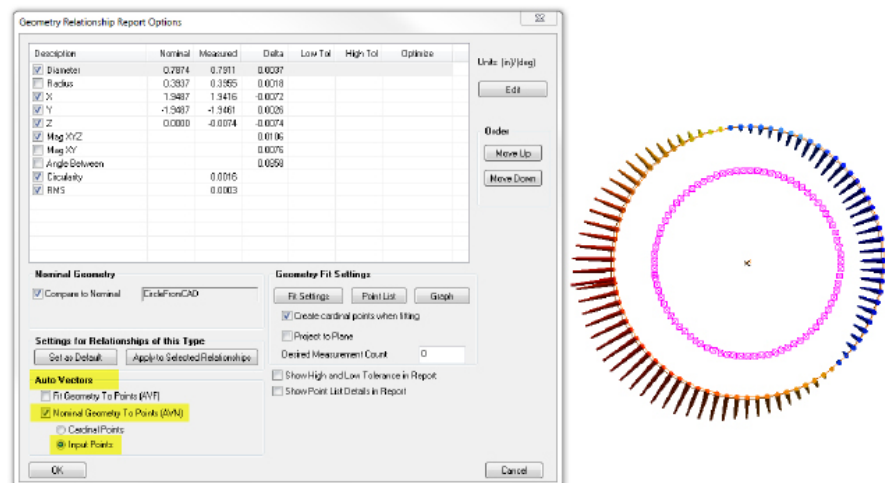
Relationship Enhancements

Auto Vectors

Users may now activate auto vectors to display the deviation of individual measurements to their fit geometry. The abbreviation *AVF* refers to *Auto Vector Fit*.

Auto vectors may also be activated to display the deviation between cardinal points of the measured feature to the nominal:
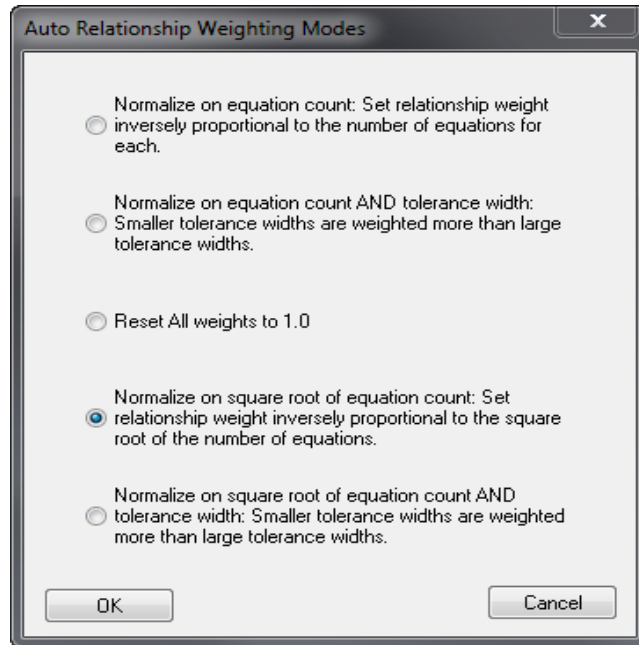

or between input points (compensated measurements) to the nominal geometry:

The abbreviation *AVN* refers to *Auto Vector Nominal*.

Normalize Weighting Options

Two new relationship weighting options have been added for relationship fitting. They use the inverse of the *square root(N)* where *N* equals the number of equations for relationship fit computation.

Average Point

Capability has been added to rename the average point and collect multiple average points in the same group.

The Apply to Selected Relationship option in the **Average Point Relationship Properties** dialog has been added.

Added Sweep + Move operation support in both the *Copy* and *Move* modes to preserve the same average point group/target name as it was defined in the source relationship.

Leica Automation Interface Driver

Added a Measure button for *TMAC* mode. This will send a measurement (at the probe tip center, if one is attached) to SA.

The Record button for the AT960 in the AIC will send the reflector center location for a subsequent beam reset command from MP.

New Measurement Plan Commands

Utility Operations

- **Get Screen Resolution.** Returns screen left, top, width and height for specified display.

Construction Operations

- **Rename Item.** Allows user to rename/relocate a callout view, chart, dimension, event, picture, relationship, SA Doc, SA Report, SA Report Template, scale bar and a table.

Instrument Operations (PCMM)

- **Configure and Measure.** The logic for this command as it pertains to arms is now identical to that of laser trackers. Please see the SA Readme file for more information.