




data :=   
E:\.\010826cgh.prn

olddata :=   
E:\.\010825cgh.prn

flag := 2

surfdata :=   
E:\.\Lens2srf.prn

oldflag := 2

Decenter data

$$\text{data}^{(0)} := \text{data}^{(0)} + \text{newdecenter}$$

$$\text{olddata}^{(0)} := \text{olddata}^{(0)} + \text{olddecenter}$$

Surface Parameters \_\_\_\_\_

Function describing probe trace \_\_\_\_\_

Calc surface touch points \_\_\_\_\_

Fit touchpoints to function \_\_\_\_\_

Sag eqn \_\_\_\_\_

Genfit function setup \_\_\_\_\_

Calc Surface Function \_\_\_\_\_

$$\text{meassurf} = \begin{pmatrix} 3.191642 \times 10^0 \\ -1.994563 \times 10^{-1} \\ 4.942637 \times 10^{-10} \\ -3.552209 \times 10^{-13} \\ -1.263419 \times 10^{-15} \\ 0.000000 \times 10^0 \end{pmatrix}$$

TOL ≡ .001

$$\text{oldmeassurf} = \begin{pmatrix} 3.191386 \times 10^0 \\ -2.004663 \times 10^{-1} \\ 4.987132 \times 10^{-10} \\ -5.950976 \times 10^{-13} \\ -1.520539 \times 10^{-15} \\ 0.000000 \times 10^0 \end{pmatrix}$$

CURRENT

Previous

measrad = 313.3183 mm    This is the measured vertex radius of the part    oldrad = 313.3435 mm

measconic = -0.1995    This is the measured conic of the part    oldconic = -0.2005

The last 4 entries in these vectors are the 4<sup>th</sup>, 6<sup>th</sup>, 8<sup>th</sup> and 10<sup>th</sup> order coefficients normalize to the aperture.

Calc residuals from function \_\_\_\_\_

Input the surface parameters to compare with the data (R, K). To compare with the nominal values, make R=rad, K=conic. To compare with the measured R & K, make R=measrad, K=measconic. Otherwise, just type in numbers for R & K.

$$R := \text{rad} + 0.015 \text{ mm}$$

$$K := \text{conic} - .0001$$

$$\left( \text{surf}^{(0)} \right)_{(nrows-1)} = 142.9569 \text{ mm}$$

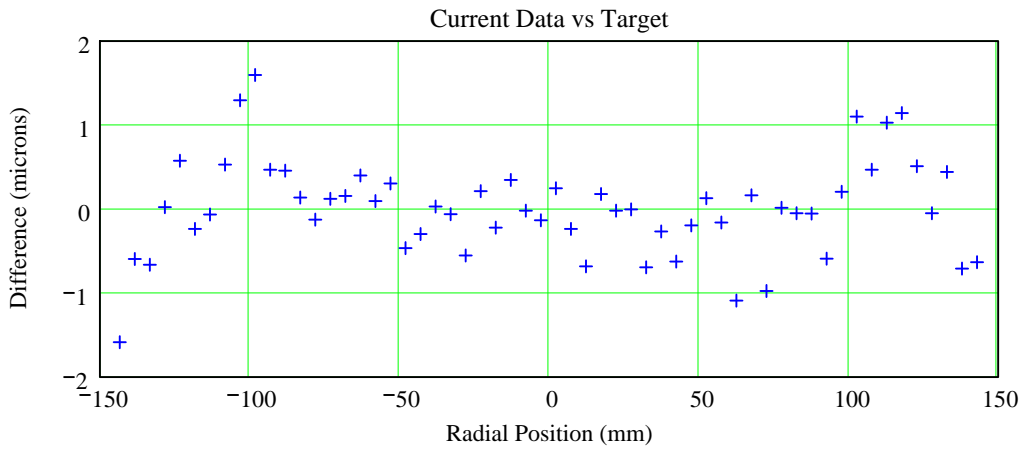
$$R = 312.5950 \text{ mm}$$

$$K = -0.249100$$

Conjugate distances

Calculate error from target

This plot shows the deviation of the current data from the target sphere (tilt removed):

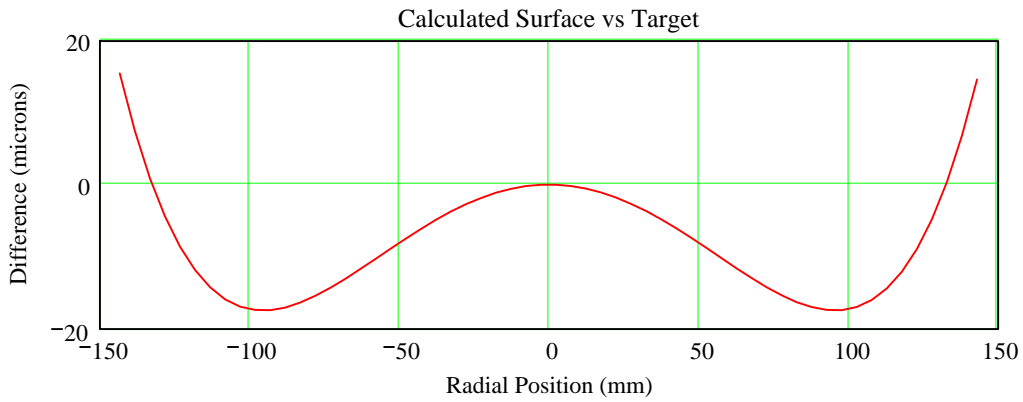


PtoV(DIF2) = 3.1816  $\mu$

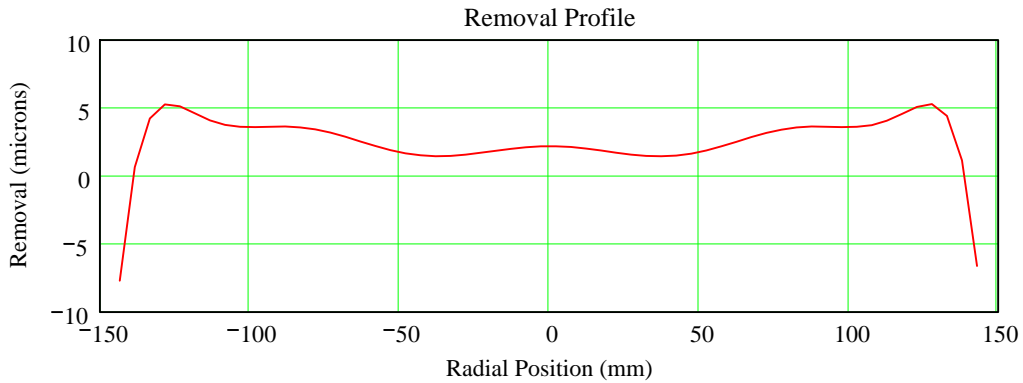
RMS(DIF2) = 0.5749  $\mu$

newdecenter  $\equiv$  -0.20

This plot compares the current asphere fit to the data with the target asphere:



This plot is the difference of the new data and the old data, a measure of removal:



olddecenter  $\equiv$  -0.1