Measurement of Profile

data := E:\..\010821cgh.prn

olddata := E:\..\010814acgh.prn

flag := 0

surfdata := E:\..\Lens2srf.prn

oldflag := 0

Decenter data

$data^{\langle 0 \rangle} := data^{\langle 0 \rangle} + newdecenter$

$olddata^{\langle 0 \rangle} := olddata^{\langle 0 \rangle} + olddecenter$

Surface Parameters

Function describing probe trace

Calc surface touch points

Fit touchpoints to function

Sag eqn

Genfit function setup

Calc Surface Function

$$meassurf = \begin{pmatrix} 3.192003 \times 10^{0} \\ -2.047355 \times 10^{-1} \\ 4.877410 \times 10^{-10} \\ -6.575732 \times 10^{-13} \\ 0.000000 \times 10^{0} \\ 0.000000 \times 10^{0} \end{pmatrix}$$

TOL ≡ .002

$$oldmeassurf = \begin{pmatrix} 3.191352 \times 10^{0} \\ -2.043429 \times 10^{-1} \\ 5.200307 \times 10^{-10} \\ -1.022543 \times 10^{-12} \\ 0.000000 \times 10^{0} \\ 0.000000 \times 10^{0} \end{pmatrix}$$

CURRENT Previous

measrad = 313.2829 mm This is the measured vertex radius of the part oldrad = 313.3469 mm

measconic = –0.2047 This is the measured conic of the part oldconic = –0.2043

The last 4 entries in these vectors are the 4th, 6th, 8th and 10th 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 := rad + .0·mm

K := conic + .000

R = 312.5800 mm

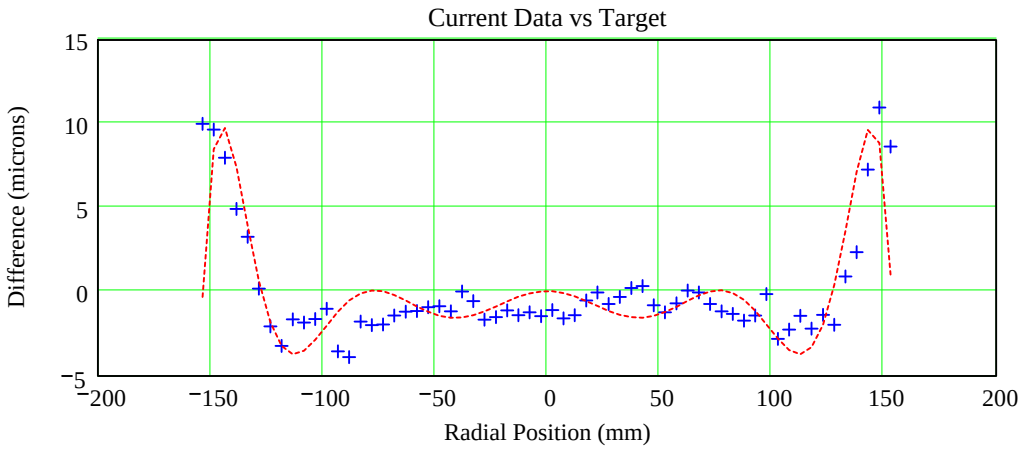
K = –0.249000

Measurement of Profile

Conjugate distances

Calculate error from target

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

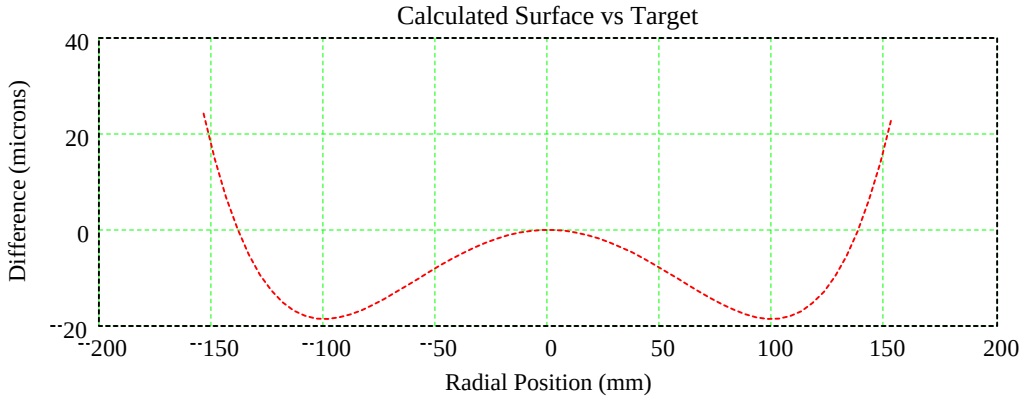


PtoV(DIF2) = 14.8561 μ

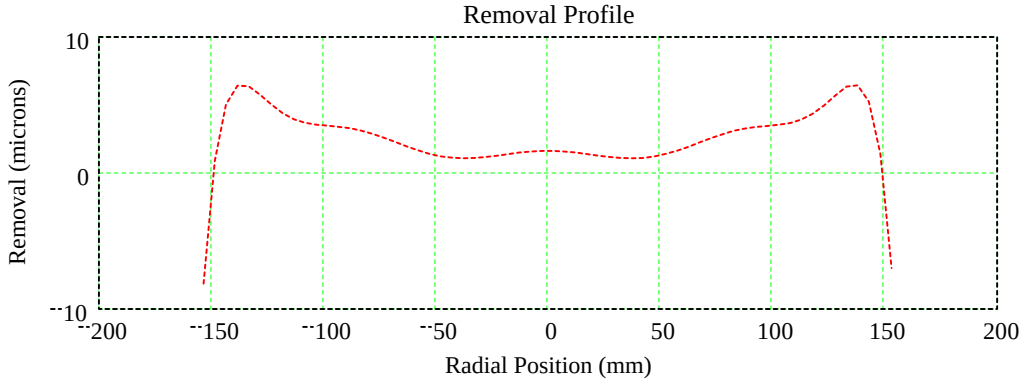
RMS(DIF2) = 3.2924 μ

newdecenter ≡ −.25

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 ≡ −0.1