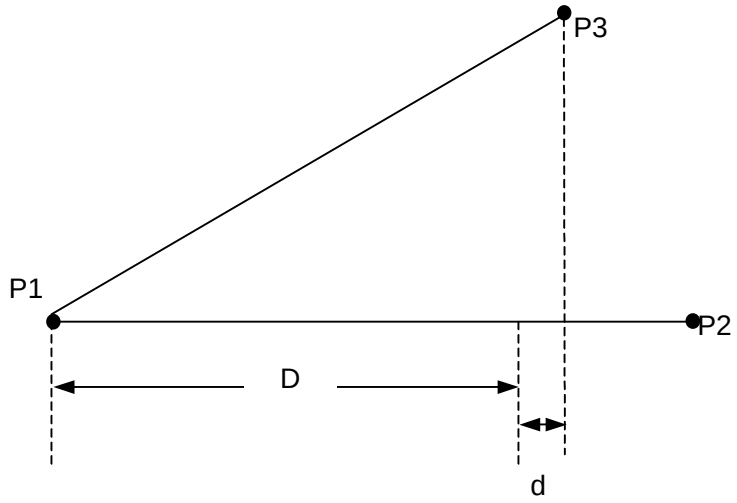
Amount of Correction of SLR Spider-Cal in 1999



Unit : m

	Koganei	Kashima
P1	X= 2.4754 Y= -1.9949 H=123.3574	X= -12.6578 Y= -12.7410 H= 70.1393
P2	X= 3.8258 Y= -2.5569 H=123.3606	X= -11.5431 Y= -13.6876 H= 70.1387
P3	X= 3.4934 Y= -2.5928 H=123.2348	X= -11.8742 Y= -13.6235 H= 70.0176
d	0.0127	0.0127
D	1.1566	1.1558

1. Survey point

P1・・・・・ SLR telescope reference point (SLR-CP0)
P2・・・・・ Rear center of SLR telescope secondary mirror
P3・・・・・ Rear center point of Spider-Cal

Offset

d ・・・・・ Offset value of Spider-Cal

2. Equation for calculating the amount of correction of Spider-Cal (D)

$$D = \frac{(x_2 - x_1)(x_3 - x_1) + (y_2 - y_1)(y_3 - y_1) + (z_2 - z_1)(z_3 - z_1)}{\sqrt{(x_2 - x_1)^2 + (y_2 - y_1)^2 + (z_2 - z_1)^2}} - d$$

Where

$$\begin{cases} P1(x_1, y_1, z_1) \\ P2(x_2, y_2, z_2) \\ P3(x_3, y_3, z_3) \end{cases}$$