Attachments of ILRS SLR Mission Support Request Form for HY-2D

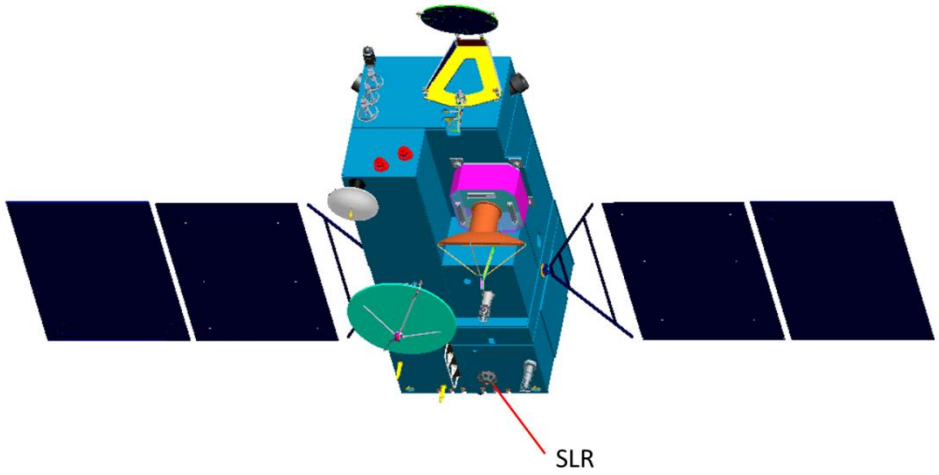

Fig.1 LRA on the HY-2D satellite

Fig.2 LRA configuration for HY-2D

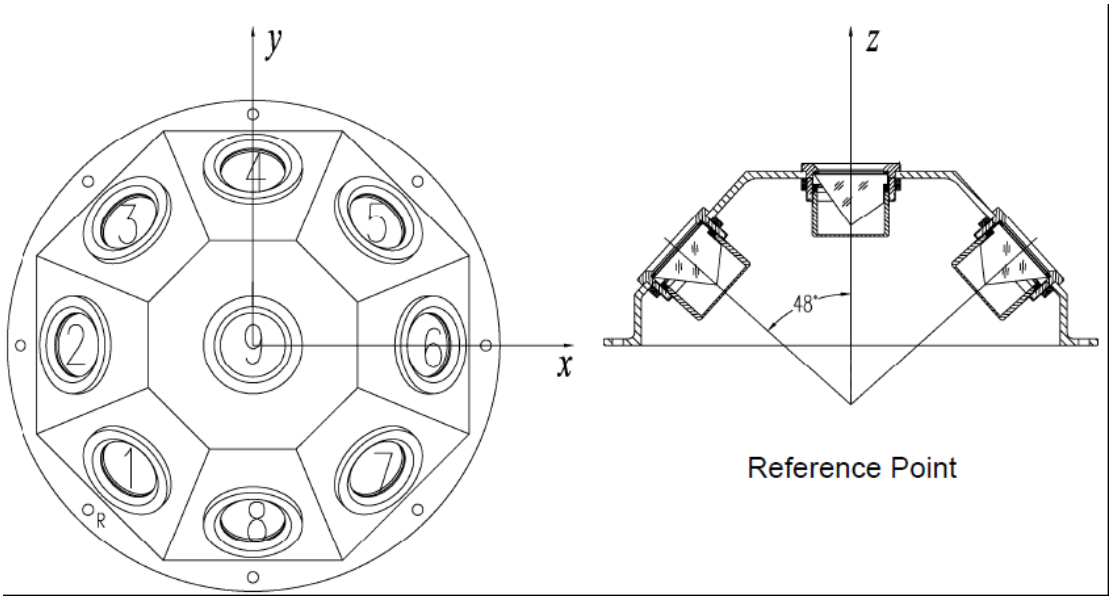

Fig.3 The structural profile of LRA for HY-2D

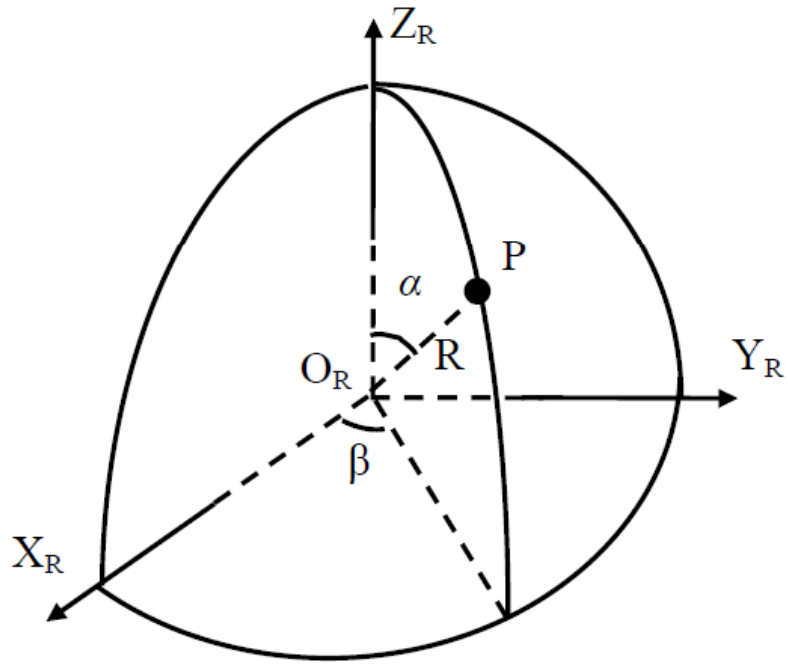

Fig.4 The definition of the orientation (α, β) of each cube **P** with spherical coordinates

Refractive Index and Dispersion:

Conditions: 22 °C, 760 mm Hg, N_2

Wavelength [Vacuum] [nm]	Refractive Index[2] n	Thermal Coefficient $\Delta n/\Delta T$[3] [ppm/C]	Polynomial Dispersion Equation Constants[1], 22 °C	
1128.950	1.448866	9.6	A_0	2.104025406E+00
1014.260 n_t	1.450241	9.6	A_1	-1.456000330E-04
852.344 n_s	1.452463	9.7	A_2	-9.049135390E-03
706.714 n_r	1.455144	9.9	A_3	8.801830992E-03
656.454 n_C	1.456364	9.9	A_4	8.435237228E-05
632.990	1.457016	10.0	A_5	1.681656789E-06
587.725 n_d	1.458461	10.1	A_6	-1.675425449E-08
546.227 n_e	1.460076	10.2	A_7	8.326602461E-10
486.269 n_F	1.463123	10.4		
435.957 n_g	1.466691	10.6	Sellmeier Dispersion Equation Constants[2], 22 °C	
404.770 n_h	1.469615	10.8	A_1	0.68374049400
365.119 n_i	1.474539	11.2	A_2	0.42032361300
334.244	1.479764	11.6	A_3	0.58502748000
312.657	1.484493	12.0		
253.728	1.505522	13.9	B_1	0.00460352869
228.872	1.521154	15.5	B_2	0.01339688560
214.506	1.533722	17.0	B_3	64.49327320000
206.266	1.542665	18.1		
194.227	1.558918	20.3	$\Delta n/\Delta T$ Dispersion Equation Constants[3], 20-25 °C	
184.950	1.575017	22.7	C_0	9.390590
			C_1	0.235290
			C_2	-1.318560E-03
			C_3	3.028870E-04

Other Optical Properties	
nF'-nC'	0.006797
Stress Coefficient	35.0 nm/cm MPa
Abbe Constants:	
V_e	67.6
V_d	67.8

**1 Polynomial Equation:* $n^2 = A_0 + A_1\lambda^{-4} + A_2\lambda^{-2} + A_3\lambda^{-2} + A_4\lambda^{-4} + A_5\lambda^{-6} + A_6\lambda^{-8} + A_7\lambda^{-10}$ *with λ in µm*

**2 Sellmeier Equation:* $n^2\text{-}1 = A_1\lambda^2/(\lambda^2 - B_1) + A_2\lambda^2/(\lambda^2 - B_2) + A_3\lambda^2/(\lambda^2 - B_3)$ *with λ in µm*

**3* $\Delta n/\Delta T$ *Equation:* $\Delta n/\Delta T\ [ppm/C] = C_0 + C_1\lambda^{-2} + C_2\lambda^{-4} + C_3\lambda^{-6}$ *with λ in µm*

The above dispersion equations for SiO_2 *were fit to the refractive indices of 20 wavelengths from 1129 nm to 185 nm.*