

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

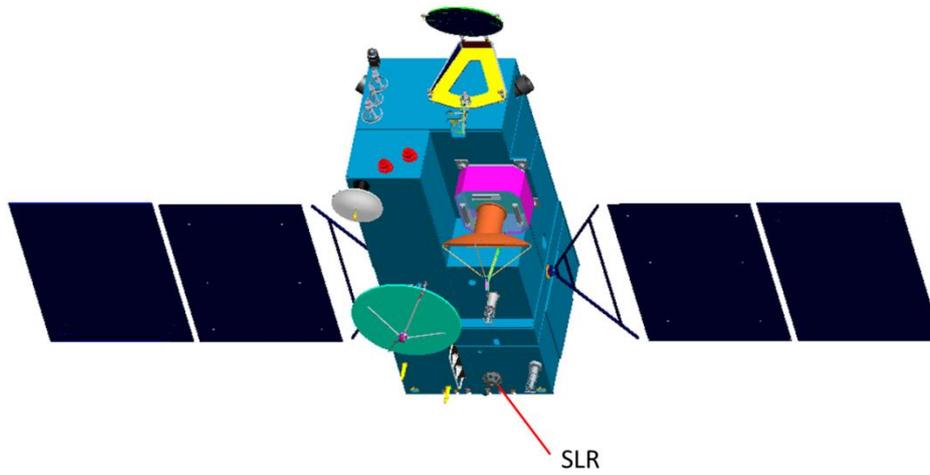


Fig.1 LRA on the HY-2C satellite



Fig.2 LRA configuration for HY-2C

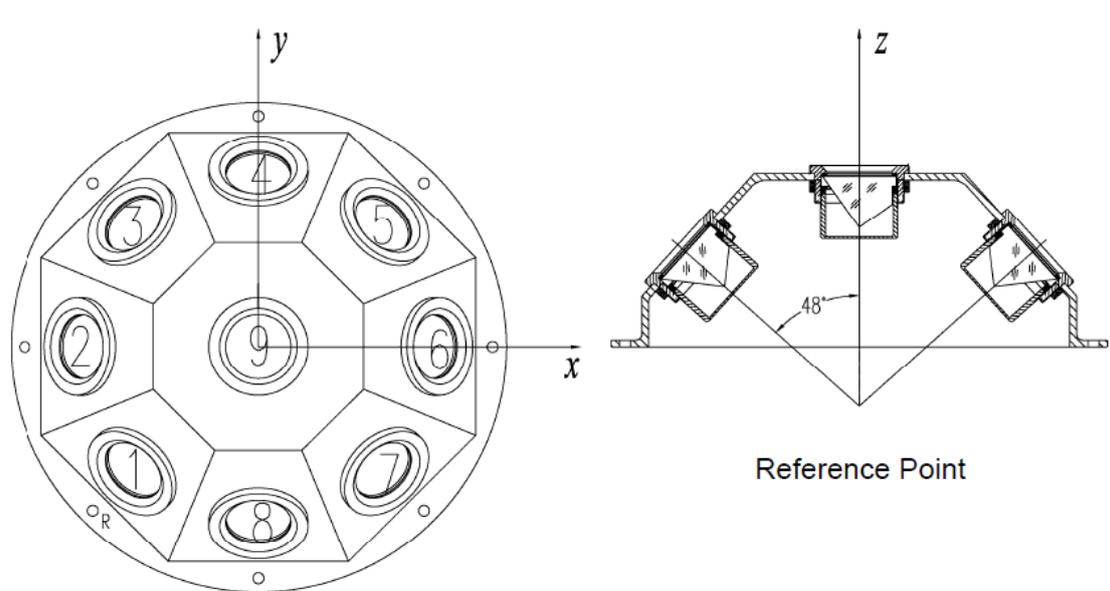


Fig.3 The structural profile of LRA for HY-2C

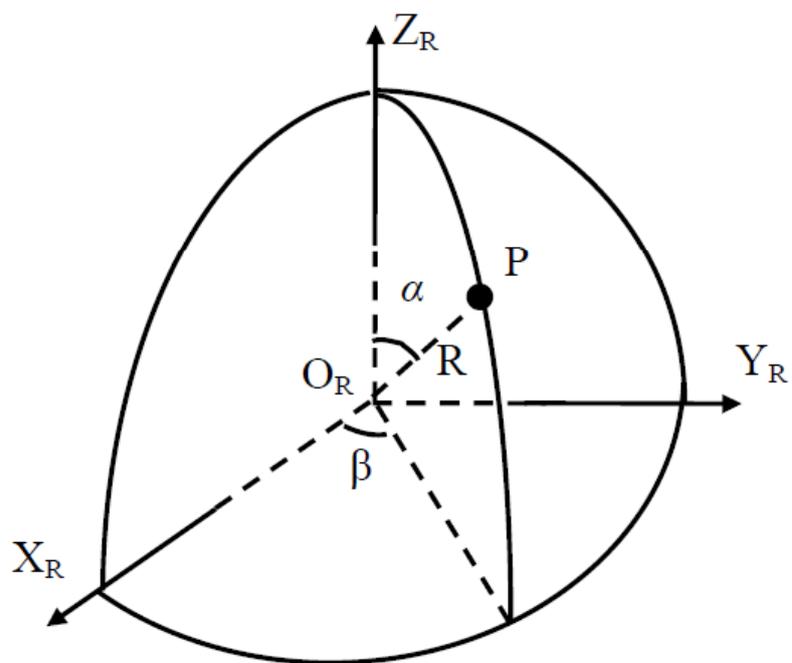


Fig.4 The definition of the orientation (α, β) of each cube \mathbf{P} with spherical coordinates

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 _i	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 _t	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	Sellmeier Dispersion Equation Constants ² , 22 °C			
435.957 n _g	1.466691	10.6				
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	$\Delta n/\Delta T$ Dispersion Equation Constants ³ , 20-25 °C			
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	Other Optical Properties			
194.227	1.558918	20.3			C ₀	9.390590
184.950	1.575017	22.7			C ₁	0.235290
					C ₂	-1.318560E-03
			C ₃	3.028870E-04		
			nF ² -nC ²		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: $n^2 - 1 = A_1 \lambda^2 / (\lambda^2 - B_1) + A_2 \lambda^2 / (\lambda^2 - B_2) + A_3 \lambda^2 / (\lambda^2 - B_3)$ 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 SiO₂ were fit to the refractive indices of 20 wavelengths from 1129 nm to 185 nm.