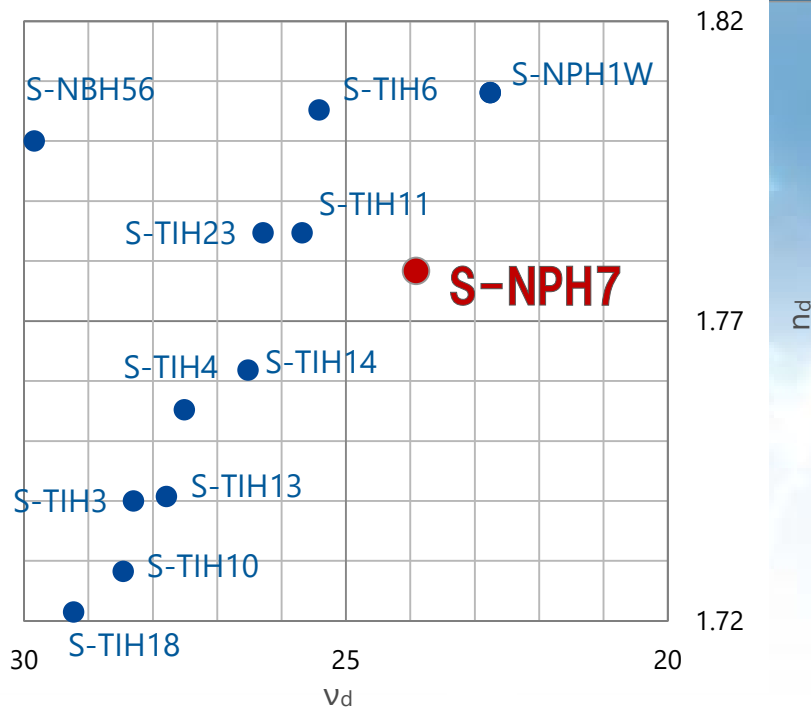


# S-NPH7 negative dn/dT in the NPH glass type region

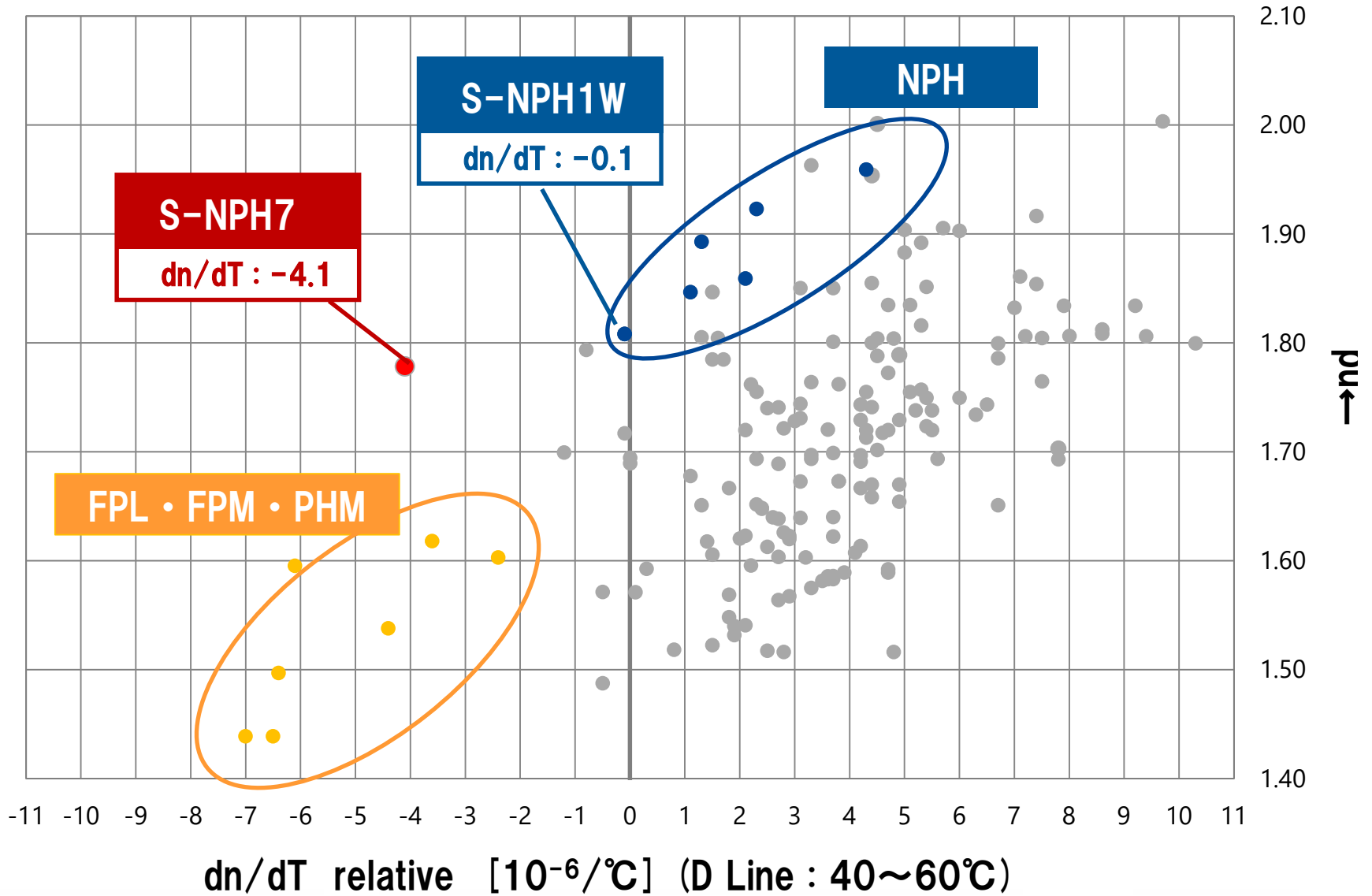
## Properties

1. Negative dn/dT in NPH region  
⇒ correct refractive index fluctuations
2. High CTE in NPH region  
⇒ good for cementing it and FP-Glasses
3. High Transmittance  
⇒ multiple S-NPH7 could be used in a lens



		S-NPH7	S-NPH1W
$n_d$		1.77830	1.80809
$v_d$		23.91	22.76
$\theta_{g,F}$		0.6248	0.6307
$\Delta \theta_{g,F}$		0.0220	0.0261
dn/dT (Dline 40°C~60°C)		<b>-4.1</b>	<b>-0.1</b>
CTE $\alpha$ ( $10^{-7}/^\circ\text{C}$ )	-30~70°C	<b>109</b>	<b>83</b>
	+100~300°C	<b>130</b>	<b>104</b>
Tg (°C)		569	552
At (°C)		598	589
Coloring	$\lambda_{80}(\lambda_{70})$	<b>420</b>	<b>420</b>
	$\lambda_5$	<b>370</b>	<b>375</b>
Chemical Properties	RW (P)	1	1
	RA (P)	1	1
	W (S)	2	1~2
	SR	1.0	1.0
	PR	1.0	1.0
Specific Gravity		3.30	3.29
Knoop Hardness Hk [Class]		350 [4]	460 [5]
Abrasion Aa		448	291

# S-NPH7 has negative dn/dT



# S-NPH7 internal transmittance

