

**Supplementary Table B: Boundary chemical widths and 95% confidence intervals as determined by the linear-regression/line-intersection approach<sup>†</sup>.**

	Atomic #	11	12	13	14	15	17	19	20	26	28
	Segregant	Na	Mg	Al	Si	P	Cl	K	Ca	Fe	Ni
Ol-Cpx	Width (nm)	6.619	3.858	4.872	3.144	<b>3.799</b>	<b>4.288</b>	**	4.753		5.091
Deformed	+95% CI	0.265	0.024	0.171	0.046	<b>0.086</b>	<b>0.004</b>		0.097		0.036
Proxigram	-95% CI	0.277	0.024	0.185	0.048	<b>0.087</b>	<b>0.003</b>		0.099		0.040
Ol-Cpx	Width (nm)	5.984	4.037	4.934	3.055	<b>3.776</b>	<b>4.524</b>		5.688	4.639	
Deformed	+95% CI	0.301	0.058	0.232	0.193	<b>0.110</b>	<b>0.058</b>		0.142	0.722	
1-D	-95% CI	0.338	0.060	0.273	0.223	<b>0.120</b>	<b>0.059</b>		0.149	0.636	
Ol-Ol	Width (nm)	<b>3.300</b>	**	<b>3.605</b>		<b>2.562</b>	<b>3.061</b>	<b>3.675</b>	<b>3.339</b>		<b>3.769</b>
Deformed	+95% CI	<b>0.018</b>		<b>0.033</b>		<b>0.009</b>	<b>0.004</b>	<b>0.065</b>	<b>0.004</b>		<b>0.154</b>
Proxigram	-95% CI	<b>0.018</b>		<b>0.033</b>		<b>0.032</b>	<b>0.004</b>	<b>0.065</b>	<b>0.004</b>		<b>0.155</b>
Ol-Ol	Width (nm)	<b>3.962</b>	<i>5.703</i>	<b>4.729</b>		<b>2.597</b>	<b>3.567</b>	<b>4.397</b>	<b>3.554</b>		<b>4.204</b>
Deformed	+95% CI	<b>0.017</b>	<i>0.354</i>	<b>0.076</b>		<b>0.099</b>	<b>0.064</b>	<b>0.036</b>	<b>0.031</b>		<b>0.018</b>
1-D	-95% CI	<b>0.017</b>	<i>0.463</i>	<b>0.078</b>		<b>0.116</b>	<b>0.064</b>	<b>0.038</b>	<b>0.032</b>		<b>0.018</b>
Cpx-Cpx	Width (nm)		**	<b>3.857</b>					**		
Deformed	+95% CI			<b>0.029</b>							
1-D	-95% CI			<b>0.028</b>							

<sup>†</sup>Values in bold are from incompatible elements and determined from the cumulative fraction regressions (e.g. Fig 4(a)). Values not in bold are determined from compatible element data regressions (e.g. Fig 4(b)). Cells that show \*\* are cases where enrichment is observed but the chemical width via the linear-regression approach cannot be determined at a 95% confidence level. The values in italics (Mg for Ol-Ol and Mg for Cpx-Cpx) are the widths of segregation away from the grain boundary (i.e., a deficiency at/near the boundary compared to the bulk).