# Transient Mapping

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## DATA COLLECTION

$$l^{II} = 202^{\circ}... \ b^{II} = \pm 5$$

	b = (0)	b = (0)	b = (1)	b = (1)
	min	max	min	max
RA (no offset)	93°	+108°	+102°	$+117^{\circ}$
Dec (no offset)	-20°	+8°	-15°	+12°
RA (offset)	+93°	+108°	+102°	+117°
Dec (offset)	-20°	+8°	-15°	+12°

#### 3D MAP GALAXY - VAR. STARS

- Use gri data to identify variable stars
- Use Period-Luminosity relationship to get distance
- Map 3D spatial distribution
- Determine deviation of variable stars from model

- Variations arise from non-gravitational effects
- Figure out dark matter distribution

## PAN-STARRS COMPARISON

- download Pan-STARRS data (running)
- compare generated variable star list to PS RA and Dec
- validate observed variable stars

# $\begin{array}{c} \textbf{CONFIRM ACCELERATED EXPANSION -} \\ \textbf{SUPER NOVEA} \end{array}$

• use PanStarrs data to identify supernova locations

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