V1162 Orionis is variable star type delta-scuti with short period 0.078684 days or 1.88 hours. (RA 05h 32m 1.99s, Dec -07° 17’ 30.08”). The pulsating star are caused by expansion and collapsing in outer layer. Light curve of pulsating star change brightness over the time. In this study, we will examine the period change of V1162 Orionis.

The Study of the Period of V1162 Orionis Variable Star
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INTRODUCTION
V1162 Orionis is variable star type delta-scuti with short period 0.078684 days or 1.88 hours. (RA 05h 32m 1.99s, Dec -07° 17’ 30.08”). The pulsating star are caused by expansion and collapsing in outer layer. Light curve of pulsating star change brightness over the time. In this study, we will examine the period change of V1162 Orionis.

METHODS
1. Observed V1162 Orionis in filters B and V

   The 0.7-meter telescope at Spring Brook Observatory - NARIT (SBO)

   The O-C diagram shows a combination of a downward parabolic variation with a period decreasing rate of $2.81 \times 10^{-11}$ day/cycle or $1.66 \times 10^{-6}$ y$^{-1}$.

2. Reduction and Photometry

   Created graph between HJD and rel flux. Then fitting 2 linear in increasing and decreasing phase to find the times of maximum light.


5. Calculate color index (B-V) by using apparent magnitude B minimum V.

RESULTS

<table>
<thead>
<tr>
<th>Tmax(HJD)</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
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</thead>
<tbody>
<tr>
<td>V filter</td>
<td>Y=3.42x+21.51</td>
<td>Y=-1.3x+13.82</td>
<td>Y=-2.97x+21.55</td>
<td>Y=-2.38x+17.61</td>
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<tr>
<td>HJD +2458490</td>
<td>6.07</td>
<td>6.15</td>
<td>7.02</td>
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</table>

CONCLUSIONS
V1162 Orionis is δ Scuti-type star. The O-C diagram shows a combination of a downward parabolic variation with a period decreasing rate of $2.81 \times 10^{-11}$ day/cycle or $1.66 \times 10^{-6}$ y$^{-1}$, mean V1162 Orionis was provided in pre-main sequence star according to predicted theoretically from Breger & Pamyatnykh (1998). The color index (B-V) in the range 0.17-0.25 mag. That star have an effective temperature about 7500 K.

REFERENCE
Seung-Lee Kim.(2016). Three- Site Photometric Monitoring of δ Sct-Type Pulsating star V162 Orionis