

# Where did the sun come from?

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## Introduction

I took part in **Kimission** last summer.

**Kimission** is shorter for 「君がつくる宇宙ミッション」 and this event is held by JAXA.

君が作る  
宇宙ミッション★



## Topics

I belonged to ASTRO group and we chose one topic

### Where was the sun formed Globules or large nebulas?

In order to approach this question, we thought about the way to observe globules.

## What are Globules?

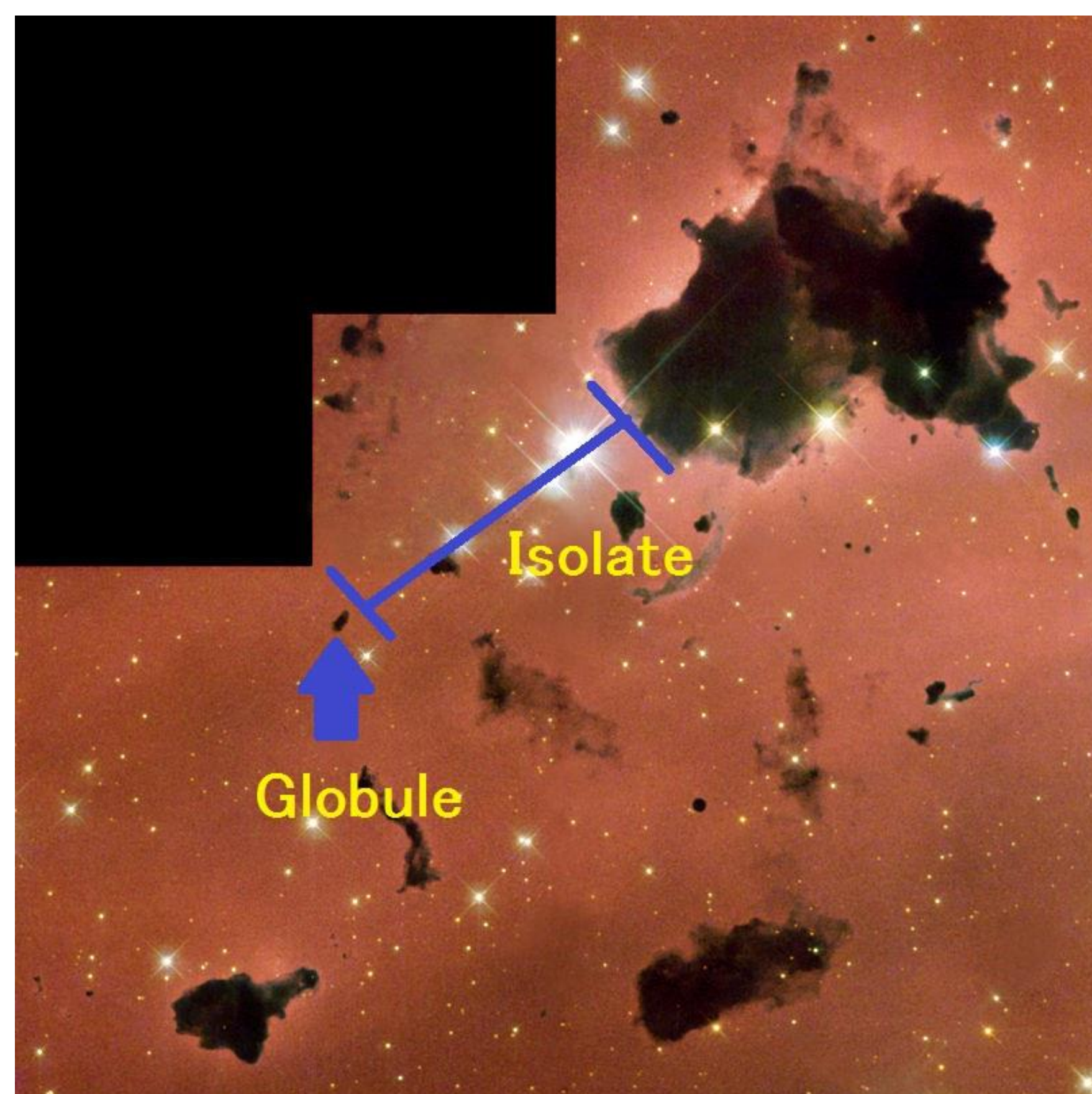
**Globules** are:

- a kind of molecular cloud
- made up of Hydrogen gas.
- small and isolated from large nebulas.



Barnard68

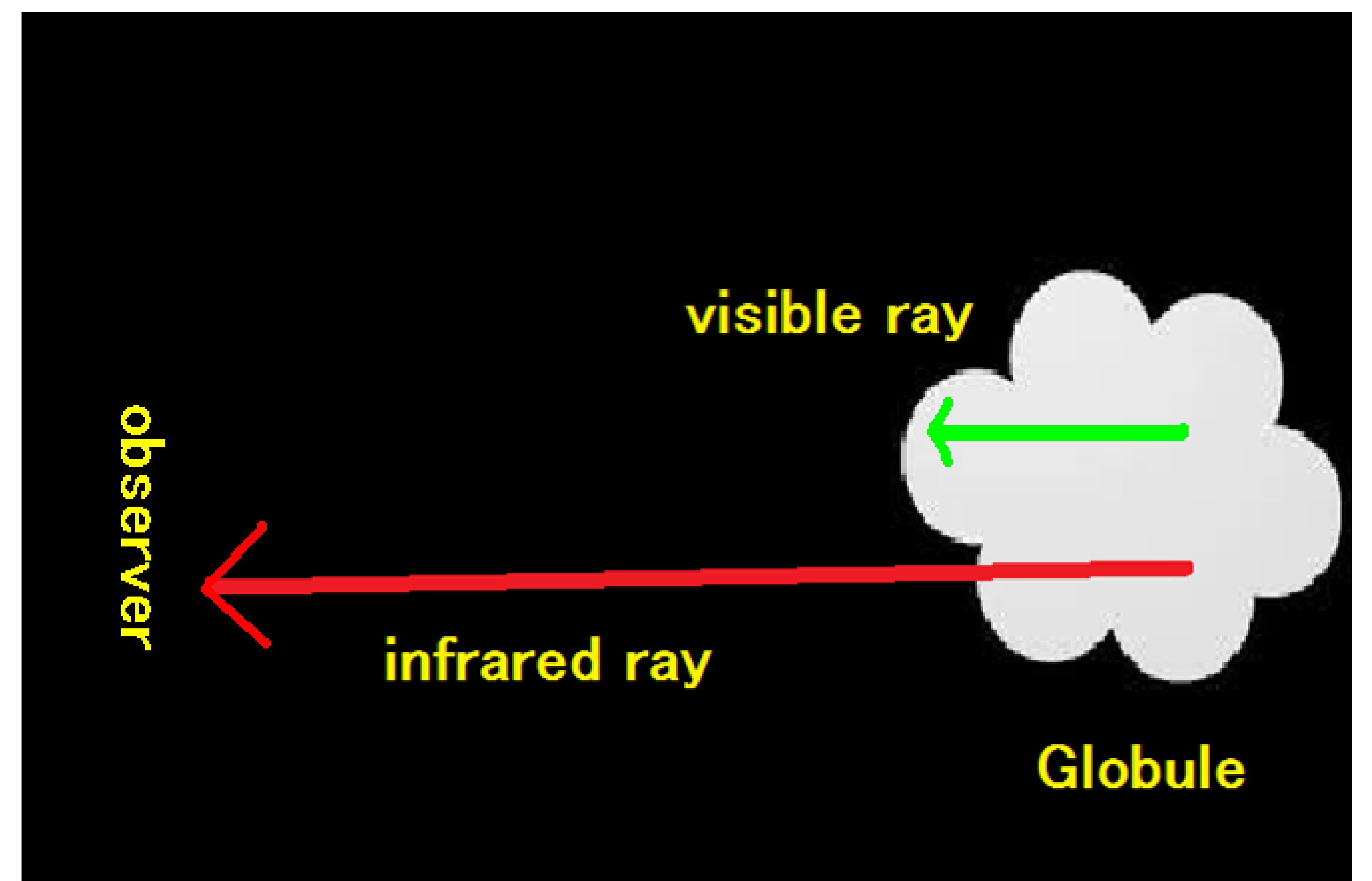
It is clear that globules **only make small stars**. The sun is a small star. so the sun maybe came from a globule.



Comparison of Globules and Nebulas

We can't see stars inside of Globules because **visible rays** are **blocked** by the gas cloud.

But **infrared rays** are **not blocked** by the gas cloud. so if we want some information about stars inside of globules, we should use infrared rays.



Comparison of light

## Method

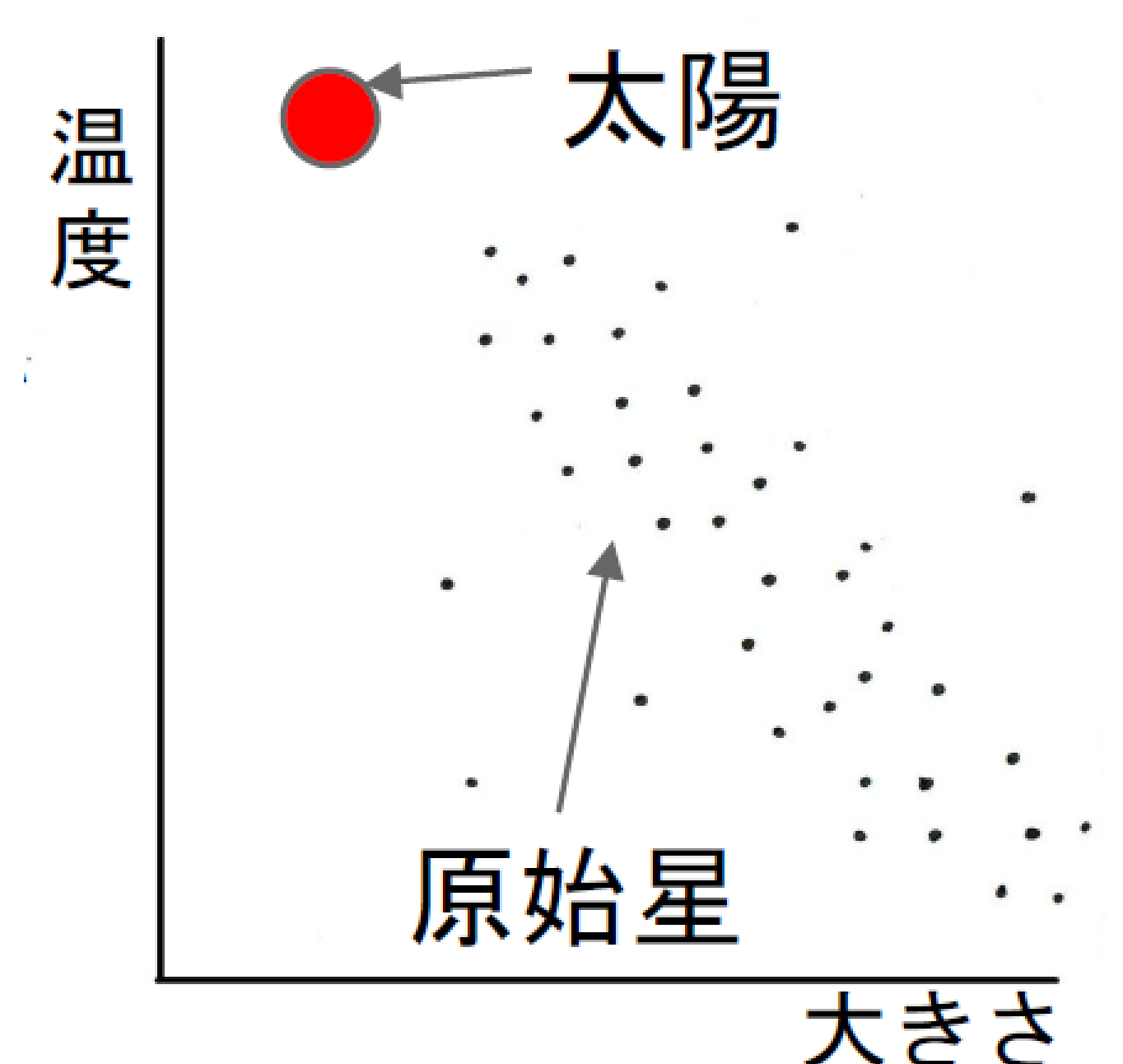
We would observe many stars inside of globules and plot the graph.

We thought of what variables to measure. We thought that **size** and **temperature** should be measured.

. Then we might see a **correlation** between the **sun** and the **stars inside of globules**.

This graph shows just **expected** results , not actual results.

If the sun continues the correlation we can expect that the sun was formed in a globule.



correlation between temperature and size

But if the correlation doesn't continue until the sun or there is not any correlation it is expected that the sun was not formed from a globule

## Future prospects

- 1 Establish a way to observe globules
- 2 validate if there is a correlation and then after that try to find further ways to verify the results through a different method
- 3 examine other parameter