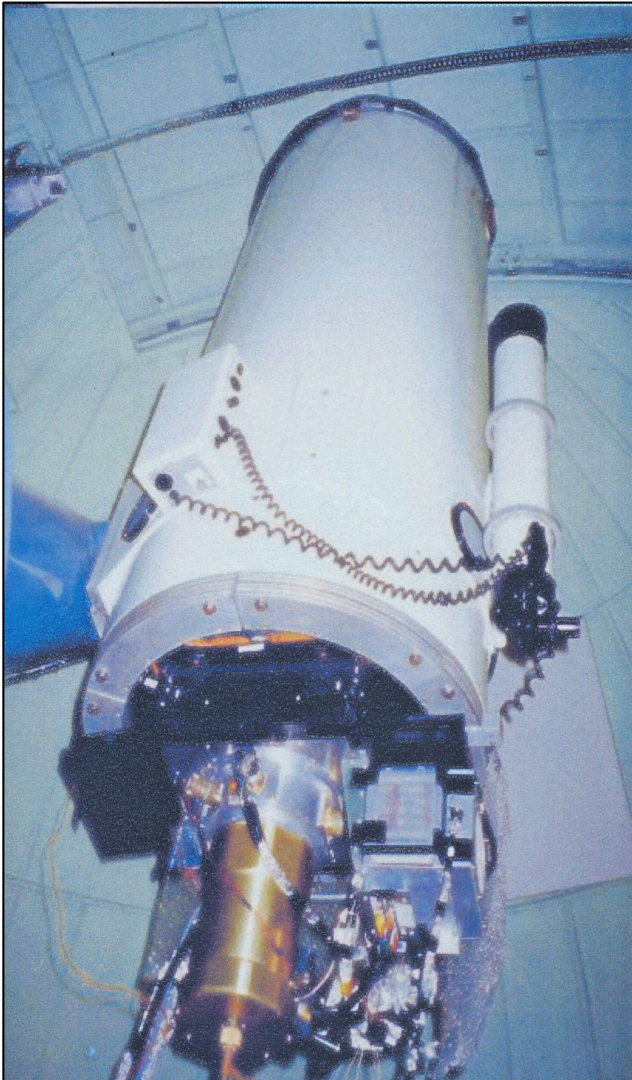


# MACHOs search and study of variable star by MOA-I telescope

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MOA-I telescope (61cm)

raw  
data

- The raw data of LMC region in 1999 to 2005 year

Measur  
ement

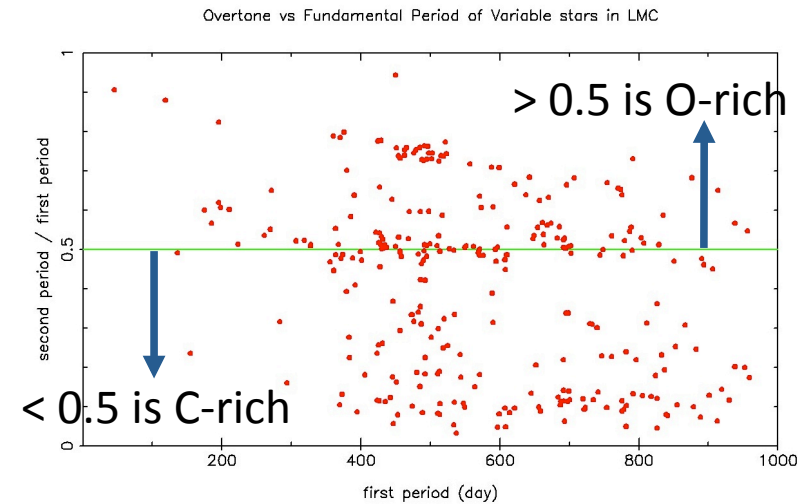
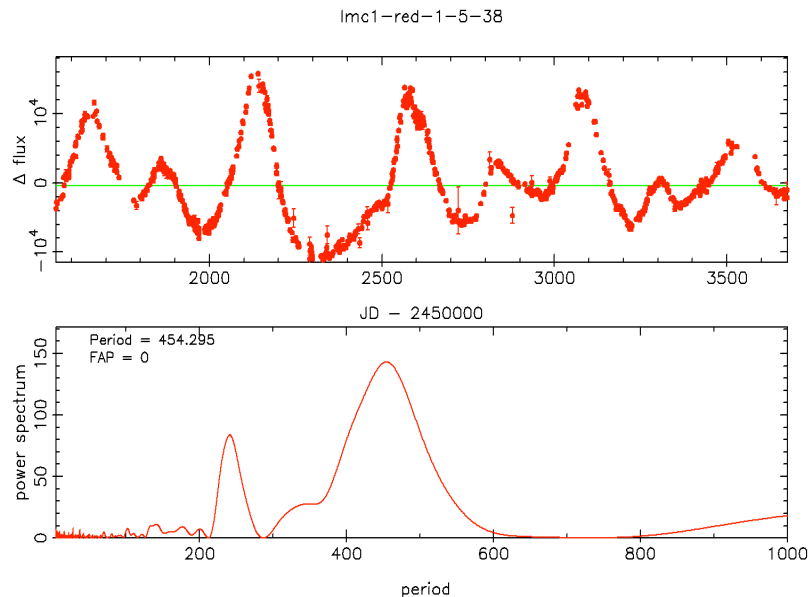
- Using DoPhot = isolation stars catalog
  - List up objects of 7 million events

Pick up for  
variable  
objects

- Using DIA = check light curve
  - Pick up 0.5 million variable objects

**The Data base was completed !!**

As the analysis result, this variable star has first period of **454 days** and second period of **241 days**.



The above figure is the horizontal axis: It is the variable first period and the vertical axis: It is the variable period ratio. It becomes the O-rich variable stars when the period ratio is  $> 0.5$ , and  $< 0.5$  is the C-rich variable stars.

This light curve is same event as the event found in the past. Therefore, This data base will be able to be used enough for the MACHOs search etc. We will publish the data base in the website.

