

The growth of publications .of the Astronomical Society of India

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Abstract. Research papers published in the Bulletin of the Astronomical Society of India during the 17 years period since its inception in 1973 to 1989 have been examined with a view to discern the publication trends. It is pointed out that 73% of the published papers were accepted within 100 days of their receipt at the editorial office. Some comments are made on the declining popularity of the Bulletin.

1. Introduction

The Astronomical Society of India was formed in 1972 and publication of the quarterly *Bulletin of the Astronomical Society of India* (BAS1) was started in 1973. Two issues of *Memoirs* of the Astronomical Society of India were published in 1980, but the series has been discontinued.

To see the growth and evolution of BAS1, an analysis of the publications in the Bulletin is carried out here for the last 17 years *i.e.*, from 1973 to 1989. We analyse only such contributions that have been termed short research communications, research contributions or research papers in BAS1. We do not have data on total number of papers submitted to BAS1, so any comments on the number of rejected papers cannot be made.

2. Rate of publication per year and time taken to accept a paper

Yearly publication of the research papers and the growth of the Bulletin are shown in figures 1a and b respectively. From these figures, it can be seen that the maximum number of research papers were published during the period 1980 to 1985 and the growth of the Bulletin was steady till 1985. It should be appreciated here that till 1980, BAS1 was published on 22.5 cm \times 18.0 cm paper whereas after 1980, it began publishing on smaller sized papers (19.0 cm \times 14.5 cm). After 1986, the Bulletin is becoming thinner and thinner. This is partly due to less contributions in the other columns, *i.e.*, review papers, notes for the observer, reports from institutes, etc.

Figure 2 shows the time taken to accept a paper for publication in BAS1 after receiving it in the editor's office. The research papers were given a serial number in the order they appeared in the Bulletin. The papers in *Memoirs* and the papers on total solar eclipse of 1980 appear at the far right hand corner of the figure. Barring some notable exceptions, it takes 100 days to accept a majority (73%) of the papers. As the actual dates

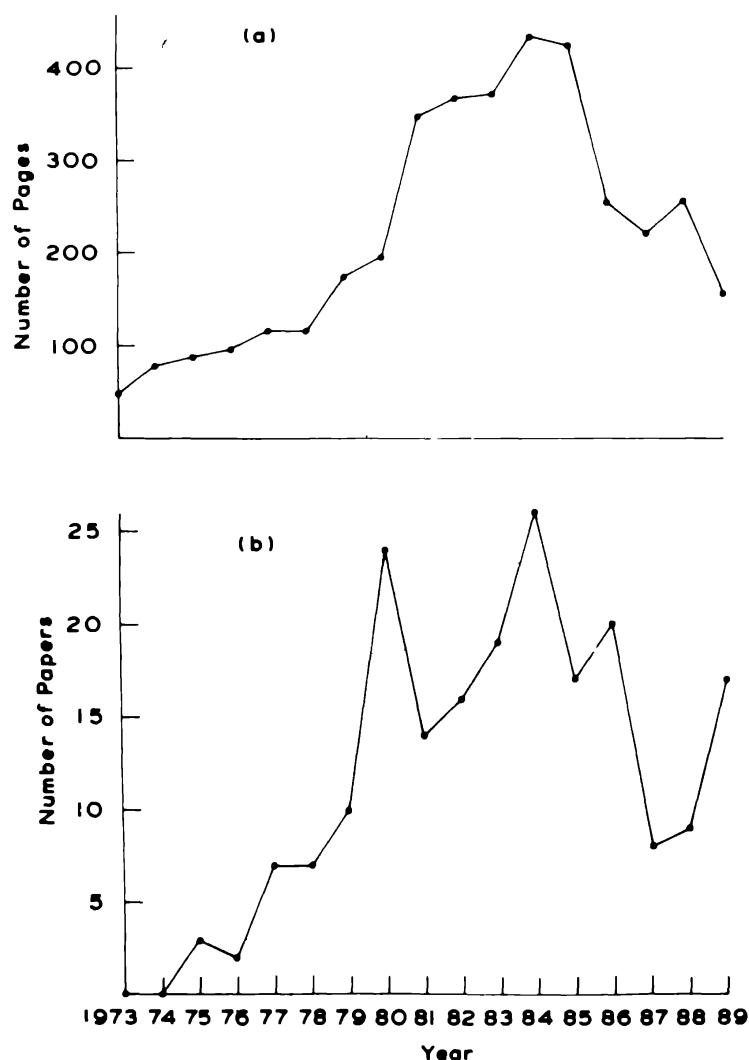


Figure 1. Growth of the Bulletin of the Astronomical Society of India witnessed over the years. The total number of pages (thickness) of each volume is plotted on the ordinate scale of (a) and the number of papers published per year is plotted in (b) on the same scale.

of publications of BASI are not available to us, we could not work out the total time taken to publish a paper.

In the light of the above it will be interesting to give data on the other Indian journal in astronomy, *i.e.* the *Journal of Astrophysics and Astronomy* (JAA). It may be noted that JAA started publishing quarterly since 1980. According to a circular received in 1984, JAA took final decision on 50% of papers within two months and on 85% of papers within four months of receipt. So JAA and BASI may be treated as almost equally efficient.

3. Contributions from Institutions

The research contributions from respective institutes are shown in figure 3. The major contributions came from Uttar Pradesh State Observatory, Naini Tal, Centre for

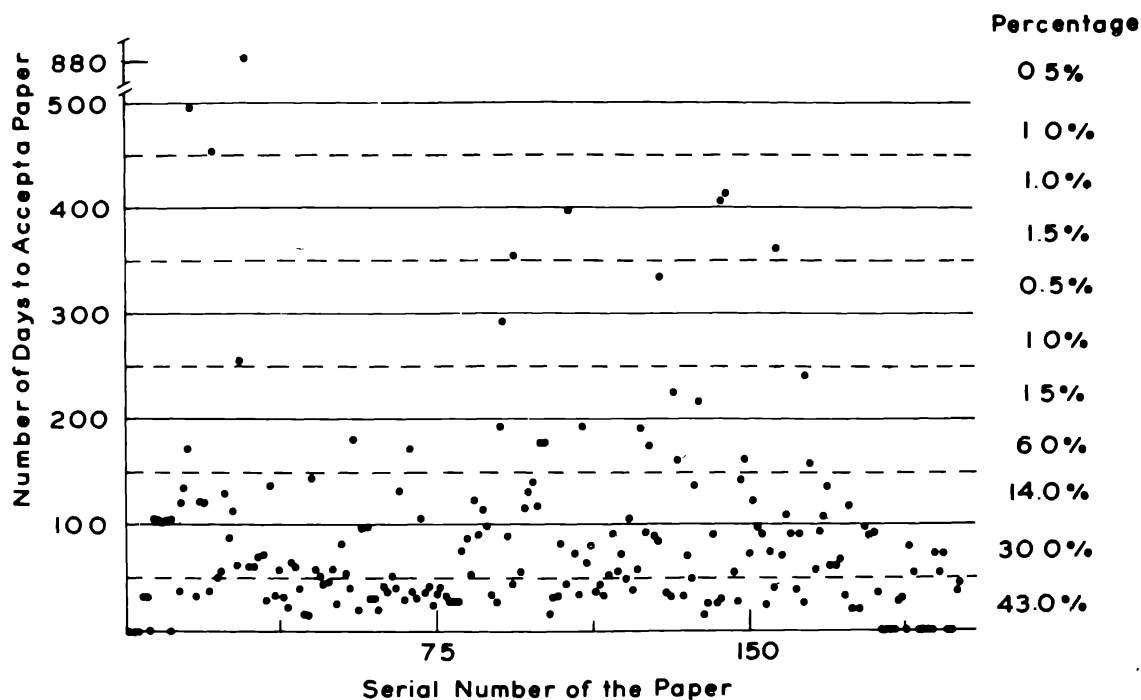


Figure 2. The time taken to accept a paper *i.e.*, the difference in the dates of receipt and acceptance of a paper is plotted. On the far right hand side, the percentages of papers accepted within successive time blocks of fifty days are shown.

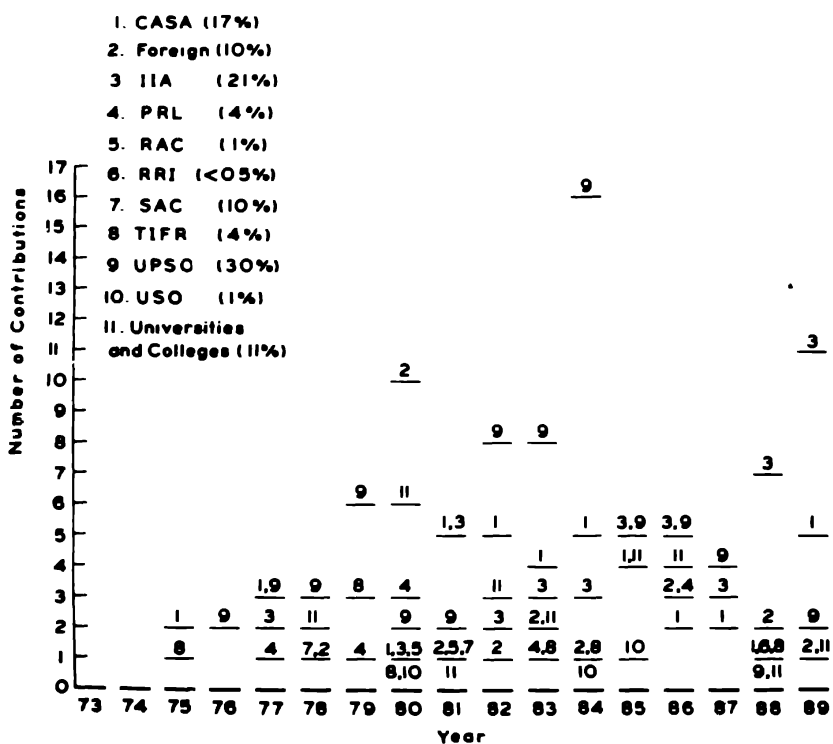


Figure 3. The yearly contributions from different institutes are displayed here in terms of a numerical code. Quantities within parantheses are the percentages of total contributions from each institute.

Advanced Study in Astronomy, Osmania University and from Indian Institute of Astrophysics, Bangalore. It might be due to the fact that these institutes are dedicated to research in astronomy. The contributions from universities are particularly low. The universities constitute a major work force but research in astronomy as an important activity is offered at only a few universities and perhaps they prefer to publish their work in foreign journals. This may be true for some contributions from institutes as well.

4. Contributions from the members of the executive and the editorial boards

For the present analysis, we assume that in the case of multiple-author-papers, each author contributed a paper.

During the period in which large contributions were made, *i.e.*, 1980-1986 (*cf.* figure 4), we observe that the maximum contribution came from two persons who were members of either the executive council or the editorial board or both. We recall that these two people were greatly involved in the very formation of the ASI.

During the period of 17 years under consideration, 150 authors published their research papers in BASI. Among these, only 78 authors published more than one paper and only four contributed in double digits. For a good growth of the Bulletin young astronomer award was instituted in 1982 to encourage young Indian astronomers to publish their papers in the Bulletin, but as it appears, it did not help much. A young researcher may find it more rewarding to publish in a journal of wider circulation and

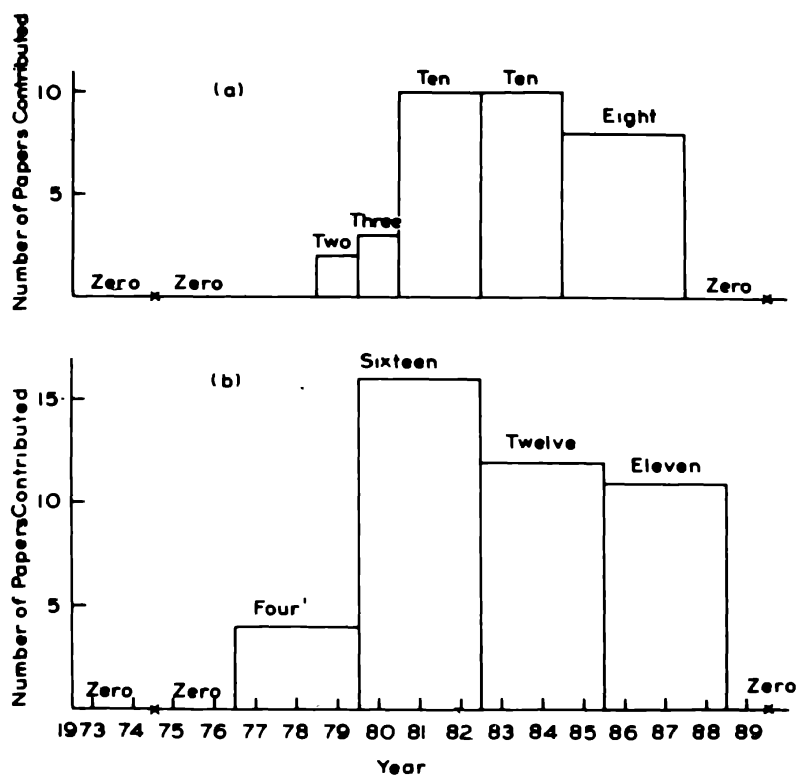


Figure 4. Contributions from members of Editorial Board and the Executive Council are analysed in (a) and (b) respectively.

better repute. It may be noted here that the Institute for Scientific Information, Philadelphia twice evaluated the Bulletin of the Astronomical Society of India for coverage in Current Contents and found it not suitable.

The time is perhaps due now to reconsider the suitability of continuation of Young Astronomer award in its present form.

5. Conclusions and suggestions

From the above analysis, it appears that the interest to publish research papers in BASI is declining and for this reason the health of the Bulletin is deteriorating. One of the causes may perhaps be more of emphasis in the Indian astronomical community on papers published in foreign journals. The following observations of Prof. S. Ramaseshan in the editorial of the first issue of *Pramana* deserves mention in this context.

It was during the twenties and thirties, the most remarkable years for the *quality* of research done in the country, that a number of Indian scientific journals came into being through the efforts of great names that dominated Indian science at that time. Since then there has been an enormous increase in the *quantity* of research work done in India. However, the fashionable notion that it is more prestigious to publish in foreign journals, and the consequent lowering of the quality of papers sent to and published in the existing Indian journals formed a vicious circle leading to the present unsatisfactory situation.

The publication in foreign journals of the major part of the work done in India today is having a deleterious effect on Indian science. Relegating the refereeing of our best scientific work leads to loss of judgement and self-confidence. This process has sapped the inner resources of Indian scientists and among other things, has led them to blindly fashions set elsewhere in choosing fields of work."

Should we repeat the above experience vis a vis BASI?

For a sustained growth of the Bulletin, it is necessary that at least the ASI members should contribute actively and others should be encouraged to publish their papers in the Bulletin.

It is noted that papers presented in the ASI meetings are largely not submitted to BASI for publications. It may be worth trying to invite all review articles and contributed papers presented in a meeting for publication. Financial support to attend the meeting should be given to only those people who are willing to submit their papers for the above. The fact that the papers published in BASI are eligible for considerations of an award should be mentioned in each issue of the Bulletin alongwith the instructions to the authors, giving the rules etc. in detail.

As noted above, besides active contributions from all the ASI members, a lot depends upon the efforts of the members of the Executive Council and the members of the Editorial Board.