



# 中国科学院国家天文台

NATIONAL ASTRONOMICAL OBSERVATORIES  
CHINESE ACADEMY OF SCIENCES

Prof. Phil Goode  
Big Bear Solar Observatory  
40386 North Shore Lane  
Big Bear City, CA 92314

December 30, 2002

Dear Prof. Goode:

I am writing this letter to strongly support your proposed project for a 1.6-meter New Solar Telescope (NST) at Big Bear Solar Observatory (BBSO). My recommendations are based on the following reasons:

- (1) I visited BBSO a few times and I believe that BBSO has excellent seeing and weather condition. BBSO is an ideal site for new larger solar telescopes. The open design will get rid of the dome seeing. Huairou Solar Observing Station of my observatories used domeless observing mode and we know its advantage.
- (2) The NST will take the advantage of the Adaptive Optics (AO) system currently under development at BBSO. This will ensure diffraction-limited images. New imaging magnetograph systems in visible and near infrared are perfect focal plan systems for NST which will obtain cutting-edge scientific results, in particular, in the space weather research.
- (3) The development of NST will benefit the design of 4-meter Advanced Technology Solar Telescope (ATST). In addition to the open design, the off-axis design will also be used by ATST.
- (4) BBSO has excellent reputation in first-class research and training of graduate students. This project will further enhance the research and education.

In summary, I believe that the NST is an excellent project, which will benefit the solar physics research in US and in the world.

Sincerely yours,

A handwritten signature in black ink, consisting of the letters "G", "A", and "I" in a stylized, cursive script.

Guoxiang Ai  
Director of National Astronomical Observatories  
Member of Chinese Academy of Sciences  
Member of Third World Academy of Sciences