

Goddard Space Flight Center
Greenbelt, Maryland
20771

July 1988

My dearest friend Virendra -

Kazuko and I have talked about you many times - even though I am a poor correspondent. Firstly, let me thank you for the copy of your book on the Chromosomes Atlas of Fl. Pls of the Indian Subcontinent. What a remarkable effort. This is a life time of work, and you and Subramanian must be very proud to have accomplished such an outstanding ~~work~~ edition.

The subject of biological diversity is becoming not only a scientific term but also now a household phrase. The documentation of the dicotyledons in this way does two things... to the expert this is a seminal source... to the mere biologist like myself it is overwhelming... it will never be lost... I am impressed by the ^{sheer} enormity of the part of the biota of your country. It appears that we are dealing with almost 5000 species of these organisms alone.

I received your thoughtful birthday greetings and the sweet tea that came by mail - many many thanks. Kazuko and I are still in Washington, musing about the lovely years when V.K. was here with us -- an intent look... of wisdom and knowledge and curiosity and love and tenderness.

We have a little news for you. We hope to see you in India in October - but first let me relate the latest episode of my professional life.

As you know of me, my friend I am both fearful and foolish. I have accepted a new post as the scientific director of a new NASA mission called EOS. It stands for Earth Observing Satellite (also for Eos - Greek goddess of dawn) NASA is planning this new venture - a massive effort to gain a planetary perspective of our own planet Earth. Since my experience on the Viking Missions was so appropriate, NASA decided that I am idea to orchestrate this new undertaking. My first reaction was to suggest other names; younger people, more famous, heroes, award winners, distinguished scientists, indefatigable workaholics or political animals.

After all I have done my share - with 15 years on Viking, but the pressure was unyielding and eventually I succumbed. and now I am the Project Scientist for the EOS mission.

The Earth Observing Satellite (EOS) mission ~~is~~ ^{is} an international effort based upon the dream that we talked about - of getting the focus of all of the earth's ^{scientists} ~~ologists~~ towards understanding the Earth as a Planetary system. Over the past few years, several of us have been dealing with this issue, and have published a plan which I will send you under separate cover. Dr Francis Bretherton was the editor. Now this has been translated into two actions. The first is a mission called Tropical Rainfall Measuring Mission - to look specifically at the physics of the hydrological cycle in the sunbelt. A dear friend of mine is the Project Scientist for that one - Dr Joanne Simpson. And the second mission is my mission - the EOS.

Dr. Gerald Soffen

Chief Project Scientist

EOS Mission, NASA.

Reply to Attn of:

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National Aeronautics and
Space Administration

NASA

lbs.

EOS consists of 4 orbiting polar platforms capable of carrying about 8000 lbs of remote sensing instruments; spectrometers, radiometers, imaging devices, laser altimeters etc to be launched in 1995-1996. These will remain in orbit for about 15 years. The international partners for the 4 platforms are Japan and the European nations that make up ESA (European Space Agency). They will each put up one spacecraft and NASA and NOAA will put up two. All four will work together to gather a common data base of the Earth. There are four themes all dealing with global change - the climate - the biogeochemical cycles - the hydrological cycle - and the geochemical changes. Step one was to organize the scientists and start on the instruments. We are deep into that stage right now. (I have read about 200 proposals and anticipating another 300 during the next month.) We have a modest ~~Project~~ Project Organization who have ^{has} started thinking about the instruments. The data system is by far the most complex aspect of the mission and ^{we} will generate data at the rate of 1000 tapes / day - of course by the time this mission takes place we will be using optical discs that can hold 10,000 images - and even newer technology. I could talk for hours about this - but I would rather talk about coming to India in October.

and the scientists who would participate in this venture.

As you know the IAU (International Astronomical Union) is being held in Bangalore from Oct 9-15.

I have been invited for two talks - one dealing with EOS and another on the hydrological cycle which is my passion these days.

Kozako will be coming with me. We will be arriving in New Delhi about October 8. On Monday October 10 I must be in Bangalore. We do anticipate spending 2 weeks in India. You know of my love of your country and its wonderful people - so beside the conference I will snatch a short week of rest by seeing the countryside and of course our dear friends.

I do not have the details of my travel yet - but as soon as I do have details I shall let you know our plans so that we can see one another and taste the see embrace of a reunion.

How is your family?

I hope this finds you well and happy.

We appreciate your niece in Oregon. would you convey our thanks to her for her thoughtful carrier service

With love and affection

Perry Saffer