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Dr. Dattatreya Gujjar
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June 29, 2017

Sub: Letter of Joint collaboration under project of GNSS network by NARL

Sir,


This is to initiate collaboration and joint research work for application of GNSS and ionospheric/atmospheric studies using navigation satellites under an on-going activity of ground based GNSS receiver network at NARL.

A GNSS receiver make "Septentrio PolaRxS PRO" with a "Septentrio GNSS MF-Antenna" and cables was installed at your institute on 17 April 2017 for the aforementioned objective. The plan is to study the delay over the satellite signals due to Earth's Atmosphere and Ionosphere and its effect in precise applications areas. The continuous data from the GNSS receiver installed at your lab would be utilized on collaboration basis.

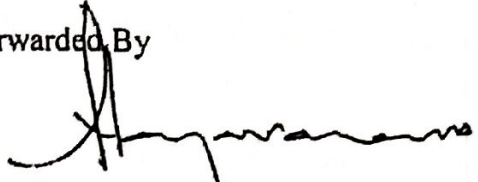
We wish that your institute also takes active part in using the data processing and research using the data recorded from this receiver at your site. Please note that the research publications using data from this receiver would be shared with you. Also, shall you wish to lead in specific scientific objectives under this plan and we assure you the best of our support.

This letter is intended to initiate the joint work and extend the operation of our GNSS receiver at your institute for 3 years. Please do the needful to support the installation of the receiver at your institute and send a response letter with similar intent. Thank you very much for your support to scientific research and development.

Sincerely yours


(Dr. Nirvikar Dashora)
Scientist/Engineer-SE
NARL, Gadanki

Forwarded By


Director
NARL, Gadanki

प्रो. ए. जयरामन / Prof. A. Jayaraman
निदेशक, एन.ए.आर.एल / Director, NARL
अन्तरिक्ष विभाग / Dept. of Space
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Certificate

This is to certify that the dissertation entitled **“ESTIMATION AND VISUALIZATION OF 3D ORBITS OF GPS SATELLITES USING GPS NAVIGATION DATA FILE FROM MANGALORE GNSS RECEIVER”** submitted by ANUSHREE SHETTIGAR, APOORVA.D, ASHOK SINGH RAJ PUROHIT and HARSHITH SOMANNA PB, DEPARTMENT OF ELECTRONICS & COMMUNICATION ENGINEERING, ALVA'S INSTITUTE OF ENGINEERING & TECHNOLOGY, for the partial fulfilment of award of the degree of Bachelor of Engineering during the academic year 2017-18, is a record of bonafidework carried out by him under our supervision at NARL, Gadanki.

ANUSHREE SHETTIGAR, APOORVA.D, ASHOK SINGH RAJ PUROHIT and HARSHITH SOMANNA PB have completed the project work between 08/2017 and 05/2018. Students are sincere, hardworking and innovative and had shown very good conduct during the course of work, which is commendable.

(Himanshu S. Sethi)

Sci./Engr-SC

NARL, Gadanki

(Dr. NIRVIKAR DASHORA)

Sci./Engr.-SF

NARL, Gadanki

Place: NARL, Gadanki

Date : June 2018