

A  
Project Report

ON

**Assessment of Change in Land Surface Temperature of  
Kamrup District, Assam  
Using Space-Borne Data & Geospatial Technology**

Prepared at



ISO 9001:2008  
ISO 27001:2013  
CMMI LEVEL-5

**Bhaskaracharya National Institute for Space Applications & Geo-informatics  
Ministry of Electronics and Information Technology, Govt. of India.**

Gandhinagar

Submitted By

**ANKITA GUPTA**

22001400301018

Under the guidance of

**Dr. Unnati A. Patel**

A Thesis submitted to

The Charutar Vidyamandal University in Partial Fulfillment of the  
Requirements for the Master of Science Degree in

**Geoinformatics**

May 2022

**Institute of Science & Technology for Advanced Studies & Research (ISTAR),  
Vallabh Vidhya Nagar, Gujarat-India**



INSTITUTE OF SCIENCE & TECHNOLOGY FOR ADVANCED STUDIES & RESEARCH  
ISTAR - Constituent Colleges of CVM University  
1st Rank among All Colleges of Gujarat by KCG (GSIRF) - 2021  
Recognized under Section 2(f) and 12(B) of the UGC Act, 1956



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## COMPLIANCE CERTIFICATE

This is to certify that the work embodied in this project work titled “Assessment of Change in Land Surface Temperature of Kamrup District, Assam, using Space Borne Data and Geospatial Technology” was carried out by Miss **ANKITA GUPTA - 22001400301018** at the **Institute of Science & Technology for Advanced Studies & Research (ISTAR)** for partial fulfillment of **Master of Science** degree in **Geoinformatics** to be awarded by **The Charutar Vidyamandal University**. This project work has been carried out under my guidance and supervision and it is up to my satisfaction.

Date: 02-05-2022

Place: ISTAR, V.V. Nagar

ANKITA GUPTA

(22001400301018)

A handwritten signature in black ink, appearing to read 'Alars', is written over a circular stamp.

External Guide



## CERTIFICATE

This is to certify that project work embodied in this project work titled "Assessment of Change in Land Surface Temperature of Kamrup District, Assam, using Space Borne Data and Geospatial Technology" was carried out by Miss ANKITA GUPTA at the **Institute of Science & Technology for Advanced Studies & Research (ISTAR)** for partial fulfillment of **Master of Science** degree in **Geoinformatics** to be awarded by **The Charutar Vidyamandal University**. This project work has been carried out under my guidance and supervision and it is up to my satisfaction.

Date: 02-05-2022

Place: ISTAR, V.V. Nagar

Internal Guide

*Unnati A. Patel*  
Dr. Unnati A. Patel  
Assistant Professor,  
M.Sc. Geoinformatics

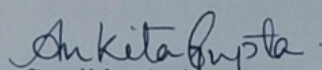


*K. H. Patel*  
7/5/22

Dr. K. H. Patel  
Director

## DECLARATION

I declare that the 4<sup>th</sup>-semester internship project report entitled **“Assessment of Change in Land Surface Temperature of Kamrup District, Assam Using Space-Borne Data & Geospatial Technology.”** is my own work conducted under the supervision of the external guide **Archana Shah** from BISAG-N (Bhaskaracharya National Institute for Space Applications & Geo-informatics). I further declare that to the best of my knowledge the report for this project does not contain any part of the work which has been submitted previously for such project either in this or any other institutions without proper citation.

  
Candidate's Signature

Ankita Gupta

22001400301018

### **Submitted To:**

Institute of Science & Technology for Advanced Studies & Research (ISTAR)

The Charutar Vidyamandal University, V.V. Nagar, Anand.

## ACKNOWLEDGMENT

I am grateful to **T.P. Singh**, Director General (BISAG-N) for giving me this opportunity to work under the guidance of renowned people in the field and provide me with the company's required resources.

I would like to express my endless thanks to my external guide **Mrs. Archana Shah**, and the Admin Department **Mr. Siddharth Patel** at Bhaskaracharya National Institute of Space Application and Geoinformatics for their sincere and dedicated guidance throughout the project development.

Also, my hearty gratitude to our Head of Department, and Internal Guide **Dr. Unnati A. Patel**, as well as Assistant Professor **Mr. Krunal B. Suthar** for giving me encouragement and technical support on the project, as well as in my studies.

**Ankita Gupta**

22001400301018