

Postdoctoral Position available January 2024  
Duration 2 years

Postdoctoral scholar needed to conduct research in remote sensing of sea surface temperature from the ECOSTRESS thermal radiometer on the International Space Station

**Duties:**

Test alternative split-window sea surface temperature algorithms for ECOSTRESS by comparison to in-situ observations (NOAA iQuam, Saildrone, Ships4SST). Develop/implement ocean cloud mask algorithm for ECOSTRESS. Develop process for correcting systematic biases in ECOSTRESS imagery. Work on validation of sea surface temperature product, including gradients in collaboration with Jorge Vazquez (JPL). Develop product for distribution through the NASA PO.DAAC, including integration with cloud services and compliance with Group for High Resolution Sea Surface Temperature (GDS2) standards for SST products.

The distribution of duties is:

30% algorithm development

30% algorithm validation

20% develop product for distribution through NASA PO.DAAC

20% prepare written manuscripts for publication in the primary research literature, that describe the results and their significance.

**Knowledge/Skills:**

Experience with remotely sensed ocean data. Ability to write and edit programs in computer languages FORTRAN and C, and write and edit data processing scripts in Python, R or Matlab. Ability to carry out statistical analyses of data. Ph.D. degree required. Must be fluent in English. Some knowledge of French desirable but not required.

Site of Service: First 12-16 weeks will be based at the University of South Carolina, and after that will be based at the NASA Jet Propulsion Laboratory, Pasadena, California.

Constraints: NASA has a list of designated countries. We regret that foreign national candidates who are currently citizens of, or born in countries listed attached document cannot be considered.

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## NASA Designated Countries List



This NASA list of “Designated Countries” is a compilation of countries and territories with which the United States:

- I) Has no diplomatic relations.
- II) Countries determined by Department of State to be “State Sponsors of Terrorism” or identified by the Department of Commerce as “Terrorist Supporting Countries,”
- III) Countries under Sanction or Embargo by the United States.
- IV) Countries of Missile Technology Concern.

All Foreign National visitors require Center Export Administrator review and approval; in addition, Foreign National visitors to NASA born in or citizens of these countries require review and approval by an Agency International Desk Officer and the Headquarters Export Administrator. All NASA mail to these countries requires the concurrence of a NASA Center Export Administrator, in accordance with [NPR 1450.10D](#), NASA Correspondence Management and Communications Standards and Style, Appendix E. Foreign National Visitors who are currently citizens of, or born in, Countries Designated by an “X” in Column II will be denied, except in very particular circumstances.

### DESIGNATED STATUS \*

CODE	DESCRIPTION	I	II	III	IV
AF	Afghanistan			X	
BH	Bahrain				X
BY	Belarus			X	X
BT	Bhutan	X			
MM	Burma (Now Myanmar)			X	
KH	Cambodia			X	
CT	Central African Republic			X	
CN	China, Peoples Republic **			X	X
CG	Congo (Formerly Zaire; Democratic Republic of)			X	
CU	Cuba		X	X	
CY	Cyprus			X	
EG	Egypt				X
ER	Eritrea			X	
HT	Haiti			X	
IR	Iran	X	X	X	X
IQ	Iraq			X	X
IL	Israel				X
JO	Jordan				X
KP	Korea, North	X	X	X	X
KW	Kuwait				X
LB	Lebanon			X	X
LY	Libya			X	X
OM	Oman				X
PK	Pakistan				X
QA	Qatar				X
SA	Saudi Arabia				X

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CODE	DESCRIPTION	I	II	III	IV
SO	Somalia			X	
SS	South Sudan (Republic of)			X	
SU	Sudan			X	
SY	Syria		X	X	X
TW	Taiwan**	X			
AE	United Arab Emirates				X
VE	Venezuela			X	X
YE	Yemen				X
EH	Western Sahara	X			
ZW	Zimbabwe			X	

Reference: 22 CFR §126, as amended through 88 FR 21911 (current as of April 18, 2023); 15 CFR 746, as amended through 88FR 12112 (current as of April 18, 2023, and 15 CFR 740 Supplement No. 1 (current as of April 18, 2023) and <https://www.state.gov/state-sponsors-of-terrorism/> (current as of April 18, 2023).

\*Note: Russia is being excluded from the Designated Country List despite being added to Country Group D:4 on February 24, 2020, and to §126.1 (I) to avoid disruptions to operational cooperative activities.

\*\*Note: Hong Kong and Macau have been removed as separate entities from the Commerce Country Chart, 15 CFR Supplement 1 to Part 738, and although listed separately in this list, Taiwan is not recognized as a country by the Department of State.

#### Key to Designated Status

- I. [Countries with which the United States has no Diplomatic Relations](#)
- II. Countries determined by the Department of State to support Terrorism ([Department of State-State Sponsors of Terrorism](#)) and ([15 CFR Supplement 1 to Part 740, Country Group E:1](#)), of the Export Administration Regulations, administered by the Bureau of Industry and Security, Department of Commerce.
- III. Countries under Sanction or Embargo by the United States (22 CFR §126.1 (d.1), (d.2), (f), (g), (h), (i), (j), (k), (l), (m), (n), (o), (r), (s), (t), (u), (v) and (w) ([DDTC website Country Policies and Embargoes](#)); and [15 CFR Part 746 -EAR Embargoes and Other Special Controls](#))
- IV. Countries of Missile Technology Concern ([15 CFR Supplement 1 to Part 740, Country Group D:4](#), of the Export Administration Regulations, administered by the Bureau of Industry and Security, Department of Commerce)