

## 1: The Vulnerability of Northern High-Latitude Ecosystems to Climate and Disturbance-Induced Change

*Therefore, the changes occurring in the northern high latitude ecosystems can be characterized and quantified using remote sensing techniques based on information from various active and passive sensors on ground-, airborne- and satellite- based platforms.*

PhD and postdoc positions in high latitude fire dynamics Closing date: September 30th, Vrije Universiteit Amsterdam is a leading, innovative and growing university that is at the heart of society and actively contributes to new developments in teaching and research. Our university has ten faculties which span a wide range of disciplines, as well as several institutes, foundations, research centres, and support services. Its campus is located in the fastest-growing economic region in the Netherlands the Zuidas district of Amsterdam , and provides work for over 4, staff and scientific education for more than 23, students. At the department of Earth Sciences, we study our dynamic planet from nano- to planetary scale. We quantify the key cycles and interactions in system Earth over timescales from seconds to millions of years by combining fieldwork, lab work and computer simulations. The project will combine field work, remote sensing and statistical modeling to study interactions between climate, vegetation and fire in boreal and arctic systems. PhD student in carbon emissions from arctic-boreal fires Fte: Satellite data processing will encompass the entire circumpolar arctic-boreal biomes, and the applicant should therefore be able to handle big datasets efficiently. Field data includes existing and newly acquired data. The applicant should be able to deal with logistical issues and challenging conditions for field campaigns in Siberia. The research should lead to peer-reviewed publications that will be used to write a PhD thesis. The applicant will present the results at national and international conferences, and contribute to teaching courses. Further particulars The appointment will initially be for 1 year. After satisfactory evaluation of the initial appointment, it will be extended for a total duration of 4 years. Planned project start is November 1st, or soon after. Application Applicants should send a cover letter with their motivation maximum 2 pages , CV, and MSc thesis, as well as the names and contact details of two references before October 1st to f. Postdoc in high latitude feedbacks between climate, fire, vegetation and carbon Fte: The geographic scope will encompass the entire circumpolar arctic-boreal biomes, and the applicant should therefore be able to handle big datasets efficiently. The research should lead to peer-reviewed publications. After satisfactory evaluation of the initial appointment, it will be extended for a total duration of 3 years. Application Applicants should send a cover letter with their motivation maximum 1 page , a research proposal maximum 2 pages , and CV, as well as the names and contact details of two references before October 1st to f. In the non-binding research proposal applicants should outline what they see as high priority research topics for this position. Benefits You can find information about our excellent fringe benefits of employment at [www.vu.nl](http://www.vu.nl). Information For additional information please contact Sander Veraverbeke by email at [s.veraverbeke@vu.nl](mailto:s.veraverbeke@vu.nl). Any other correspondence in response to this advertisement will not be dealt with.

## 2: Remote Sensing | An Open Access Journal from MDPI

*High latitude climate and remote sensing / www.enganchecubano.com Kondratyev, O.M. Johannessen and V.V. Melentyev. QC K67 Polar and Arctic lows / edited by Paul F. Twitchell, Erik A. Rasmussen, and Kenneth L. Davidson.*

A substantial proportion of this dust remains within the high latitudes and is deposited in the sensitive marine, terrestrial and cryospheric environments of the Arctic and Antarctic; it may also affect air quality and human health. Until very recently sources of high-latitude dust have largely been considered in isolation and limited to specific regional areas such as Iceland Figure 1 and Patagonia. Dust sources in the low to middle latitudes have been well-mapped and well-studied, but less information is available from dust observations poleward of these limits. There are many reasons for this including remoteness, very low temperatures, snow and ice cover and lack of daylight during winter months, all of which hamper year-round field investigations. At lower latitudes some of these difficulties have been overcome through the use of satellite remote sensing data but this is more challenging for the polar regions due to high year-round cloud cover and seasonal light limitation. This means that to date, no attempt has been made to systematically quantify the magnitude, frequency, intensity or timing of high latitude dust emissions. This in turn limits our ability to understand the impact of high latitude dust both within Polar regions and at the global scale. A potential solution to the challenges of remote sensing at high latitudes is to adopt a multi-scale approach using a wide range of satellite sensors and data products alongside existing secondary ground-surface measurements. The aim of this studentship is to provide the first multi-scale, systematic, remote-sensing led quantification of high latitude dust sources, dynamics and transport pathways, providing an essential dataset for validating future global dust modelling outputs. Methodology Different satellites offer a range of spatial and temporal resolutions which can be manipulated to discern information about high latitude dust. The student will use both satellite reflectance and existing aerosol products to identify and map the distribution and pathways of high latitude dust events. This will be applied to the eight high latitude dust regions of the world. Satellite retrievals will be cross-referenced to multiple independent secondary ground-based measurements including meteorological data, aerosol databases and AERONET. Training and Skills The student will be trained in the use of satellite remote sensing data for environmental applications, specifically the identification of sources of dust emissions, atmospheric aerosol loading and dust transport pathways. They will be supported to develop expertise in quality control of satellite data and the use of secondary data sources meteorological data, AERONET aerosol data. The student will receive training in the use of industry-standard remote sensing software and geospatial data analysis platforms and techniques. For selected dust events, high resolution MODIS and other satellite data Landsat, Sentinel, Planet will be cross-referenced to evaluate the accuracy and precision of coarse scale analysis. Remote-sensing data for all regions will be validated by cross-referencing against multiple independent secondary ground-based measurements including meteorological data, aerosol databases e. Results will be used to construct inventories of high latitude dust sources, to quantify seasonality of dust emissions and compare this across regions, and to validate existing modelling outputs. The student will have the opportunity to undertake a short week internship at NASA working with Dr. For enquiries about the application process, please contact SocSciResearch Iboro.

## 3: Homepage | Summit Station

*latitude climate and of remote sensing techniques is less well developed than I would have liked (the use of the word 'and' in the title is quite proper).*

## 4: Remote Sensing | Special Issue : Remote Sensing of Changing Northern High Latitude Ecosystems

*Note: Citations are based on reference standards. However, formatting rules can vary widely between applications and fields of interest or study. The specific requirements or preferences of your reviewing publisher, classroom teacher,*

*institution or organization should be applied.*

## 5: Sarah Gille, Climate, Atmospheric Science & Physical Oceanography

*A comprehensive treatment of the microwave remote sensing techniques used to monitor alterations in the climate at high latitudes as a principal indicator of larger global climate change.*

## 6: High-latitude Vegetation Change - AWI

*High Latitude Climate and Remote Sensing (Wiley Praxis Series in Remote Sensing) by Kondratev, K. Ia, Johannessen, Ola M., Melentyev, V. V. John Wiley & Sons Inc. Used - Very Good.*

## 7: Multi-scale remote sensing of high latitude dust

*Remote sensing of polar ice and snow properties for the purpose of climate monitoring 4. The physical basis for microwave sounding of the Earth-atmosphere system with negative air temperatures.*

## 8: Faculty List | Scripps Institution of Oceanography, UC San Diego

*Any alteration in high latitude climate is a principal indicator of global climate change. A major method of monitoring these changes is by microwave remote sensing.*

## 9: Department of Atmospheric Sciences – People: Academic/Research Faculty

*The aim of this studentship is to provide the first multi-scale, systematic, remote-sensing led quantification of high latitude dust sources, dynamics and transport pathways, providing an essential dataset for validating future global dust modelling outputs.*

*Leaves from a Childs Garden of Verses V. 11. Sir Jasper Carew. Names of the dead The structure of knowledge arguments Sandwiches and pizza Reflections on cognitive and epistemic diversity : can a Stich in time save Quine? Michael Bishop Rwanda in the book collapse by Jared Diamond Best tablet for taking notes on Scilab from theory to practice i fundamentals Expert guide to visual basic 6 Terror in the Steel Mountains Christianity an end to magic. Space Plasma Simulations Treaty no. 5 between Her Majesty the Queen and the Sauteaux and Swampy Cree tribes of Indians at Berens Anna M. E. Ring and sisters. The SHOCKwealth System Robotic exploration of the solar system part 3 Everything is political in a divided society John Hume The Greatest Star of All Design pattern in java head first An employers guide to employee handbooks in Minnesota A phenomenological research design illustrated Limca book of records 2013 Litterbug bear written by Brian Conway Guarded by angels Marguerite Yourcenar in counterpoint Plastic materials used in automotive industry English romance novel 2nd Archives Bertrand Russell Aid, Trade, and Farm Policies: A Sourcebook on Issues and Interrelationships Reel 877. Montgomery, Prince Georges (part) Hypertension is not all bad The last days of Wolf Garnett Movement practices and fascist infections : from dance under the swastika to movement education in the Br Dictionary of Applied Math for Engineers and Scientists (Comprehensive Dictionary of Mathematics) More Perplexing Puzzles and Tantalizing Teasers 9. Complex verb formation revisited: Restructuring in Inuktitut and Nuuchah-nulth Christine M. Pittman Eliot the social function of poetry Gregory J. Howard, Graeme Newman and Joshua D. Freilich Reweaving Brigids Mantle, Restoring Airmids Cloak*