Proceedings of the Dragon 4 Programme Mid-term Results Symposium

(2016 to 2018)

CALL FOR PAPERS

Background

Within the framework of the Dragon 4 cooperation, NRSCC and ESA propose to publish the **mid-term results** as a special publication of the Journal of Remote Sensing. This call for papers concerns the lead and principal investigators of the 76 sub-projects that are investigating the use of ESA, Sentinels, Chinese and Third Party Mission EO data for environmental monitoring.

For further information on the Journal of Remote Sensing see:
http://www.jors.cn

Objectives

The co-authored papers will provide the project teams' results after 2 years of research at the mid term stage of the Dragon 4 collaboration programme. The proceedings will be available to all Dragon 4 cooperation investigators and will be made accessible on-line and as printed proceedings. A team of independent Chinese and European remote sensing experts will be appointed by the Dragon 4 cooperation programme coordinators to undertake a scientific review of the papers.

Production costs and eligibility of authors

1 joint paper per Dragon 4 sub-project may be submitted by either the European or Chinese lead or principal investigators. There will be no direct costs for paper submission by an author or co-author(s) of a paper. All of the production costs will be met by ESA and NRSCC. Each paper must be submitted by either a European or Chinese Dragon 4 scientist as the 1st author. The list of eligible Dragon 4 projects and scientists are provided in Annex 1.

Themes

The papers will focus on the 76 sub-projects covering the exploitation of ESA, Sentinels, TPM and Chinese EO data during the life-time of the Dragon 4 Programme.

Guidelines for Submission

Papers must be submitted using the template for papers' submission. Please see the detailed guidelines for formats, fonts, titles, figure and table numbering and referencing. All papers must be submitted **by 1 September 2018** to the Dragon Beijing office attention of:

Prof. Gao Zhihai
Email: dragon_caf@163.com

Schedule

- This call for papers is open from: **6 July 2018**
- Papers must be submitted by: **1 September 2018**
- Editorial and scientific review: **From 2 September 2018** (2 months)
- Printing: **From 1 November 2018** (2.5 months)
- Publication: **By 31 January 2019.**

We look forward to receiving your papers and to producing an interesting special publication, which will provide the results and reporting at the mid-term stage of the Dragon 4 cooperation

Yves-Louis Desnos (ESA Dragon 4 coordinator) and Li Zengyuan (NRSCC Dragon 4 coordinator)

ANNEX-1: LIST OF DRAGON 4 SCIENTIISTS ELIGIBLE UNDER THIS CALL FOR PAPERS

PROJECT SUMMARY
DRAGON 4 ID. ***32244*** *(No. of topics: 2)*

EARTH OBSERVATIONS FOR GEOHAZARD MONITORING AND RISK ASSESSMENT

European Leader Investigator	*Chinese Leader Investigator*
Prof. Zhenhong Li Newcastle University, UNITED KINGDOM	Prof. Zeng Qiming Peking University, CHINA

List of Principal Investigators (PIs)

Topic Nr.	PIs	Title
32244_1	*Prof. Zhenhong Li,* *Prof. Jingfa Zhang*	***Active Faults and Seismic Risk Assessment in China***
32244_2	*Prof. Jan-Peter Muller,* *Prof. Qiming Zeng*	***Understanding Landslide hazards in the Three Gorges, China and landslides induced by large earthquakes***

PROJECT SUMMARY
DRAGON 4 ID. 38577 (1. topic)

EARTHQUAKE PRECURSORS FROM SPACE AND GROUND DETECTING SEISMIC ANOMALIES FROM SATELLITE AND GROUND DATA WITH MULTIPLE PARAMETERS

基于卫星和地面多参数数据的地震异常检测获取地震预兆

European Leader Investigator *欧方项目负责人*	*Chinese Leader Investigator* *中方项目负责人*
Dr Yaxin Bi (University of Ulster, UNITED KINGDOM) Yaxin Bi 博士（阿尔斯特大学，英国）	Prof. Guoze Zhao (Institute of Geology, China Earthquake Administration, CHINA) 赵国泽 教授（中国地震局地质所，中国）

List of Principal Investigators (PIs)
项目负责人列表

Topic Nr.	PIs	Title
38577_1	*Dr.YaxinBi,* *Prof. Guoze Zhao*	***Solid Earth & associated disaster risk reduction***

PROJECT SUMMARY
DRAGON 4 ID. ***32278*** *(No. of topics: 3)*

THREE- AND FOUR-DIMENSIONAL TOPOGRAPHIC MEASUREMENT AND VALIDATION

European Leader Investigator	*Chinese Leader Investigator*
Prof. Rocca Fabio Dipartimento di Elettronica ed Informazione Politecnico di Milano, ITALY	Prof. Deren Li State Key Lab. of Info. Eng. in Surveying, Mapping and Remote Sensing, CHINA

List of Principal Investigators (PIs)

Topic Nr.	PIs	Title
32278_1	*Prof. Norbert Haala,* *Prof. Timo Balz*	***Topographic Mapping - Validation; TMV***
32278_2	*Prof. Stefano Tebaldini,* *Prof. Mingsheng Liao*	***Multi-baseline SAR processing for 3D/4D reconstruction; MBSAR***
32278_3	*Prof. Ramon Hanssen,* *Prof. Xiaoli Ding*	***Towards Near-Real Time InSAR Deformation estimation; NRT***

ANNEX-1: LIST OF DRAGON 4 SCIENTIISTS ELIGIBLE UNDER THIS CALL FOR PAPERS (CONT.)

PROJECT SUMMARY
DRAGON 4 ID. ***32294*** *(No. of topics: 3)*

INTEGRATED ANALYSIS OF THE COMBINED RISK OF GROUND SUBSIDENCE SEA LEVEL RISE, AND NATURAL HAZARDS IN COASTAL DELTA REGIONS

European Leader Investigator	*Chinese Leader Investigator*
Dr. Antonio Pepe Istituto per il Rilevamento Elettromagnetico dell'Ambiente - CNR, ITALY	Prof. Qing Zhao College of Geography Sciences, East China Normal University, CHINA

List of Principal Investigators (PIs)

Topic Nr.	PIs	Title
32294_1	*Prof. Antonio Pepe,* *Prof. Qing Zhao*	***DEtection and Interpretation of Time Evolution of Costal Environments Through integrated DInSAR, GPS and geophysical surveys***
32294_2	*Dr. Martin Gade,* *Prof. Jiayi Pan*	***Derivation of Storm Surge-induced Submerged Area and Ocean Wave Field Using Satellite Images and Data in coastal waters***
32294_3	*Prof. Ole Baltazar Andersen,* *Dr. Qing Xu*	***Projection of sea level rise and potential submerged area in coastal regions***

PROJECT SUMMARY
DRAGON 4 ID. ***32365*** *(No. of topics: 4)*

LANDSLIDE IDENTIFICATION, MOVEMENT MONITORING AND RISK ASSESSMENT USING ADVANCED EARTH OBSERVATION TECHNIQUES

European Leader Investigator	*Chinese Leader Investigator*
Dr. J. Sousa Joaquim University of Trás-os-Montes e Alto Douro, PORTUGAL	Dr. Liu Guang Center for Earth Observation and Digital Earth, Chinese Academy of Sciences, CHINA

List of Principal Investigators (PIs)

Topic Nr.	PIs	Title
32365_1	*Dr. J. Sousa Joaquim,* *Prof. Fan Jinghui*	***Landslide and ice movement identification, monitoring near typical glacier lakes in Tibet using advanced earth observation techniques***
32365_2	*Dr. Perski Zbigniew,* *Dr. Liu Guang*	***Monitoring landslides movement over rugged mountain area integrated with multiband SAR and LIDAR***
32365_3	*Dr. Benni Thiebes,* *Dr. Bai Shibiao*	***Spatio-temporal landslide identification and activity assessment for hazard and risk investigations in Longnan region, Northwest China***
32365_4	*Dr. Stefano Salvi,* *Prof. Lixin Wu*	***Collaborative Monitoring of Multiple Geohazards over Traditional Heavy Industrial Region in Northeast China with Multi-source Remote Sensing Data***

ANNEX-1: LIST OF DRAGON 4 SCIENTIISTS ELIGIBLE UNDER THIS CALL FOR PAPERS (CONT.)

PROJECT SUMMARY
DRAGON 4 ID. ***32431*** *(No. of topics: 1)*

SEISMIC ACTIVITY MONITORING AND LITHOSPHERE DEFORMATION DETECTION BY RADAR INTERFEROMETRY IN CHINA AND SURROUNDING REGIONS

European Leader Investigator	*Chinese Leader Investigator*
Dr. Cecile Lasserre (Institut des Sciences de la Terre,FRANCE)	Dr. Sun Jianbao (Institute of Geology, China Earthquake Administration, CHINA)

List of Principal Investigators (PIs)

Topic Nr.	PIs	Title
32431_1	*Dr. Cecile Lasserre, Dr. Jianbao Sun*	***Seismic activity monitoring and lithosphere deformation detection by radar interferometry in China and surrounding regions***

PROJECT SUMMARY
DRAGON 4 ID. ***32248*** *(No. of topics: 3)*

EO BASED URBAN SERVICES FOR SMART CITIES AND SUSTAINABLE URBANIZATION

European Leader Investigator	*Chinese Leader Investigator*
Prof. Yifang Ban KTH Royal Institute of Technology, SWEDEN	Prof. Zhou Chenghu Institute of Geographic Sciences and Natural Resources Research, Chinese Academy of Sciences., CHINA

List of Principal Investigators (PIs)

Topic Nr.	PIs	Title
32248_1	*Prof. Paolo Gamba, Prof. Peijun Du*	***Mapping and Monitoring Urban Agglomeration and Urban Capacity in China for Smart and Sustainable Cities***
32248_2	*Prof. Andrea Monti-Guarnieri, Dr. Mi Jiang*	***Land Cover Mapping Over Textural Urban Area in East China by Combining Multi-Source Datasets and Accurate InSAR Parameters Estimation Methods***
32248_3	*Prof. Constantinos Cartalis, Prof. Huili Gong*	***Assessment of the impact of urbanization to urban climate in support of the development of smart tools for sustainable urbanism***

PROJECT SUMMARY
DRAGON 4 ID. ***32275*** *(No. of topics: 2)*

COMBINED EXPLOITATION OF SINO EU EARTH OBSERVATION DATA FOR SUPPORTING THE MONITORING AND MANAGEMENT OF AGRICULTURAL RESOURCES

European Leader Investigator	*Chinese Leader Investigator*
Dr. Pignatti Stefano Institute of Methodologies for Environmental Analysis, ITALY	Prof. Zhao Chunjiang National Engineering Research Center for Information Technology in Agriculture, CHINA

List of Principal Investigators (PIs)

Topic Nr.	PIs	Title
32275_1	*Prof. Raffaele Casa, Prof. Guijun Yang*	***Algorithm Development Exploiting Multitemporal and multisensor Satellite data for improving crop classification, biophysical and agronomic variables retrieval and yield prediction (ADEMS)***
32275_2	*Prof. Giovanni Laneve, Prof. Wenjiang Huang*	***Assimilating multi-source earth observation satellite data for crop pests and diseases monitoring and forecasting (AMEOS)***

ANNEX-1: LIST OF DRAGON 4 SCIENTIISTS ELIGIBLE UNDER THIS CALL FOR PAPERS (CONT.)

PROJECT SUMMARY
DRAGON 4 ID. ***32194*** *(No. of topics: 2)*

CROP MAPPING WITH COMBINED USE OF EUROPEAN AND CHINESE SATELLITE DATA

European Leader Investigator	***Chinese Leader Investigator***
Prof. Pierre Defourny Université catholique de Louvain, BELGIUM	Dr. Jinlong Fan National Satellite Meteorological Center, CHINA

List of Principal Investigators (PIs)

Topic Nr.	PIs	Title
32194_1	*Prof. Pierre Defourny,* *Dr. Jinlong Fan*	***Crop mapping with time series of high resolution European and Chinese satellite data***
32194_2	*Dr. Qinghan Dong,* *Dr. Jinlong Fan*	***Assessing Crops with PROBA-V and FY-3 MERSI Data***

PROJECT SUMMARY
DRAGON 4 ID. ***31470*** *(Nr. of topics: 3)*

FOREST BIOPHYSICAL RETRIEVALS AND LAND COVER DYNAMICS USING MULTI-TEMPORAL, MULTI-SENSOR (SAR-OPTICAL-LIDAR) AND MULTI-RESOLUTION EO SENSORS FOR CHINA AND SELECTED ASIAN REGIONS (FOREST DRAGON 4)

European Leader Investigator	***Chinese Leader Investigator***
Prof. Dr. Christiane Schmullius Friedrich-Schiller-University, GERMANY	Prof. Li Zengyuan Chinese Academy of Forestry, CHINA

List of Principal Investigators (PIs)

Topic Nr.	PIs	Title
31470_1	*Prof.Christiana Schmullius,* *Prof. Zengyuan Li*	***Forest biophysical retrievals using multi-temporal, multi-sensor (SAR-optical-LiDAR) and multi-resolution EO sensors for China and selected Asian regions (FOREST Dragon 4)***
31470_2	*Prof. Laurent Ferro-Famil,* *Prof. Erxue Chen*	***3-D geo-physical characterization of vegetated areas, including forests and cultivated areas, using polarimetric SAR tomography: techniques and applications***
31470_3	*Prof. Peter Krzystek,* *Prof. Yong Pang*	***Synergistic 3D mapping and characterization of diverse forested areas with multi-source remotely sensed data***

PROJECT SUMMARY
DRAGON 4 ID. ***32396*** *(No. of topics: 2)*

LAND DEGRADATION SURVEILLANCE OF DRYLANDS IN CHINA

European Leader Investigator	***Chinese Leader Investigator***
Dr. Del Barrio Gabriel Estacion Experimental de Zonas Aridas (CSIC), SPAIN	Prof. Zhihai Gao IFRIT, Chinese Academy of Forestry, CHINA

List of Principal Investigators (PIs)

Topic Nr.	PIs	Title
32396_1	*Prof. Joachim Hill,* *Dr. Xiaosong Li*	***Retrieval of vegetation and soil properties using multi-source optical remote sensing in drylands***
32396_2	*Dr. Gabriel del Barrio,* *Prof. Zhihai Gao*	***Advanced remote sensing methods for land degradation assessment by coupling vegetation productivity and climate in drylands***

ANNEX-1: LIST OF DRAGON 4 SCIENTIISTS ELIGIBLE UNDER THIS CALL FOR PAPERS (CONT.)

PROJECT SUMMARY
DRAGON 4 ID. ***32260*** *(No. of topics: 3)*

RISK EVALUATION, SURVEILLANCE AND FORECAST OF VECTOR-BORNE TROPICAL DISEASES BY EARTH OBSERVATION DATA MINING

European Leader Investigator	***Chinese Leader Investigator***
Prof. Jürg Utzinger Swiss Tropical and Public Health, SWITZERLAND	Prof. Xiao-Nong Zhou National Institute of Parasitic Diseases, Chinese Center for Diseases Control and Prevention, CHINA

List of Principal Investigators (PIs)

Topic Nr.	PIs	Title
32260_1	*Prof. Alfredo Milani,* *Prof. Jiming Liu*	***Mosquito-borne diseases***
32260_2	*Prof. Juerg Utzinger,* *Prof. Lingli Tang*	***Snail-transmitted diseases***
32260_3	*Prof. Laura Rinaldi,* *Prof. Xiao-Nong Zhou*	***Tick-borne diseases***

PROJECT SUMMARY
DRAGON 4 ID. ***32426*** *(Nr. of topics: 4)*

CALIBRATION AND DATA QUALITY ASSURANCE FOR QUANTITATIVE REMOTE SENSING

European Leader Investigator	***Chinese Leader Investigator***
Philippe Goryl ESA, ITALY	Prof. Chuan-rong Li Academy of Opto-Electronics, Chinese Academy of Sciences, CHINA

List of Principal Investigators (PIs)

Topic Nr.	PIs	Title
32426_1	*Dr. Philippe Goryl,* *Dr. Lingling Ma*	***Advanced On-orbit Optical Sensor Calibration and Product Quality Traceability***
32426_2	*ESA Dragon team* *Prof. Xiaolong Dong*	***Microwave RS sensor calibration and product generation (MIRSS-CAP)***
32426_4	*Dr. Michel Van Roozendael,* *Prof. Cheng Liu*	***MAXDOAS Fiducial Reference Measurements in Eastern China (MAXFRM)***
32426_4	*Dr. Bart Dils,* *Prof. Pucai Wang*	***Joint Optimization of Chinese ground-based FTIR Reference Measurements (JOCFRM)***

ANNEX-1: LIST OF DRAGON 4 SCIENTIISTS ELIGIBLE UNDER THIS CALL FOR PAPERS (CONT.)

PROJECT SUMMARY
DRAGON 4 ID. ***32442*** *(No. of topics: 2)*

NEW EARTH OBSERVATIONS TOOLS FOR WATER RESOURCE AND QUALITY MONITORING IN YANGTZE WETLANDS AND LAKES (EOWAQYWET)

European Leader Investigator	***Chinese Leader Investigator***
Prof. Hervé Yésou University of Strasbourg - SERTIT, FRANCE	Prof. Chen Xiaoling LIESMARS, Wuhan University, CHINA

List of Principal Investigators (PIs)

Topic Nr.	PIs	Title
32442_1	*Dr. Claudia Kunzer,* *Prof. Yeqiao Wang*	***Water resource behaviours in Yangtze intermediate basin and wetlands' biodoversity (WaRYWeBio)***
32442_2	*Prof. Steven Loiselle,* *Prof. Hongtao Duan*	***New Earth Observation tools for biogeochemical studies of Yangtze Valley lakes (BioGeoLakes)***

PROJECT SUMMARY
DRAGON 4 ID. ***32397*** *(No. of topics: 2)*

CALIBRATION AND VALIDATION OF MICROWAVE REMOTE SENSING DATA FOR WATER CYCLE RESEARCH

European Leader Investigator	***Chinese Leader Investigator***
Prof. Yann Kerr Center for Spatial and Biosphere of CNES, FRANCE	Prof. Shi Jiancheng Institue of Remote Sensing & Digital Earth, Chinese Academy of Sciences, CHINA

List of Principal Investigators (PIs)

Topic Nr.	PIs	Title
32397_1	*Prof. Yann Kerr,* *Prof. Shi Jiancheng*	***Calibration and validation of microwave remote sensing data for water cycle research***
32397_2	*Prof. Alain Geiger,* *Dr. Dongkai Yang*	***Calibration and validation of GNSS Remote sensing data for soil moisture and snow water***

ANNEX-1: LIST OF DRAGON 4 SCIENTIISTS ELIGIBLE UNDER THIS CALL FOR PAPERS (CONT.)

PROJECT SUMMARY
DRAGON 4 ID. ***32439*** *(No. of topics: 4)*

MULTI - SOURCE HYDROLOGICAL DATA PRODUCTS TO MONITOR HIGH ASIAN RIVER BASINS AND REGIONAL WATER SECURITY (MUSYCADHARB)

European Leader Investigator	*Chinese Leader Investigator*
Prof. Massimo Menenti Delft University of Technology, NETHERLANDS	Prof. Li Xin Cold and Arid Regions Environmental and Engineering Research Institute, CHINA

List of Principal Investigators (PIs)

Topic Nr.	PIs	Title
32439_1	*Prof. Massimo Menenti,* *Prof. Li Jia*	***Satellite data products on each component of the terrestrial water cycle at the land – atmosphere interface (SADTALE)***
32439_2	*Dr. Francesca Pellicciotti,* *Prof. Kun Yang*	***Observation and modeling of high elevation hydrological processes, including accumulation and ablation in glaciers***
32439_3	*Prof. Marco Mancini,* *Prof. Xin Li*	***Forcing, calibration, validation and data assimilation in basin scale hydrological models using satellite data products***
32439_4	*Dr. Maria Jose Escorihuela,* *Prof. Jiancheng Shi*	***Monitoring Water resources in Red River Basin using Microwave Remote Sensing***

PROJECT SUMMARY
DRAGON 4 ID. ***32388*** *(Nr. of topics: 3)*

MONITORING CRYOSPHERE DYNAMIC OVER HIGH MOUNTAIN ASIA WITH INTEGRATED EARTH OBSERVATIONS AND EVALUATING ITS HYDROLOGICAL IMPACTS AT UPSTREAM RIVER BASIN

European Leader Investigator	*Chinese Leader Investigator*
Prof. Andrew Hooper Institute of Geophysics and Tectonics, University of Leeds UNITED KINGDOM	Prof. Hui Lin Institute of Space and Earth Information Science, CHINA

List of Principal Investigators (PIs)

Topic Nr.	PIs	Title
32388_1	*Prof. Andrew Hooper,* *Prof. Liming Jiang*	***Monitoring Decadal Glacier and Frozen Ground Dynamic over High Mountain Asia Region with Integrated Earth Observations***
32388_2	*Prof. Liqiu Meng,* *Prof. Lan Cuo*	***Impacts of Cryospheric Component Changes on Hydrological Process in Typical Watersheds at High Mountain Asia Region***
32388_3	*Prof. Nico Sneeuw,* *Prof. Jiancheng Li*	***Monitoring Lake Level Variations over the Qinghai-Tibet Plateau by Consistent Multi-Satellite Altimetry (QTibMSA)***

ANNEX-1: LIST OF DRAGON 4 SCIENTIISTS ELIGIBLE UNDER THIS CALL FOR PAPERS (CONT.)

PROJECT SUMMARY
DRAGON 4 ID. ***32437*** *(No. of topics: 3)*

EARTH OBSERVATION TO INVESTIGATE THE CHARACTERISTICS AND CHANGES OF THE CRYOSPHERE IN HIGH MOUNTAIN ASIA (EOCRYOHMA)

European Leader Investigator	*Chinese Leader Investigator*
Dr. Tobias Bolch University of Zurich, SWITZERLAND	Prof. YAO Tandong (Institute of Tibetan Plateau Research, CHINA)

List of Principal Investigators (PIs)

Topic Nr.	PIs	Title
32437_1	*Dr.TobiasBolch, Prof. Tandong Yao*	***Mapping of (rock)glaciers and observation of glacier area and volume changes in High Mountain Asia using earth observation data (EOGlacHMA)***
32437_2	*Prof. Noel Gourmelen, Prof. Shiyin Liu*	***Observation of surface velocity over ice covered terrain with microwave and multispectral imager***
32437_3	*Prof. Roderik Lindenberg, Prof. Tao Che*	***Observation of extent and characteristics of snow and permafrost in High Mountain Asia (EOSnoPeHMA)***

PROJECT SUMMARY
DRAGON 4 ID. ***32292*** *(3)*

THE RESEARCH OF NEW OCEAN REMOTE SENSING DATA FOR OPERATIONAL APPLICATION

European Leader Investigator	*Chinese Leader Investigator*
Dr. Maite Muñoz IsardSAT, SPAIN	Dr. Junmin Meng The First Institute of Oceanography, SOA, CHINA

List of Principal Investigators (PIs)

Topic Nr.	PIs	Title
32292_1	*Dr. Wolfgang Dierking, Dr. Xi Zhang*	***Techniques for Sea Ice Parameter Extraction and Sea Ice Monitoring Using New Satellite Data***
32292_2	*Dr. Maite Muñoz, Dr. Jungang Yang*	***Data validation and oceanic application of new satellite altimeters and SWIM***
32292_3	*Prof. Jacqueline Boutin, Dr. Xiaobin Yin*	***Sea surface salinity algorithm based on combined active/passive microwave imagers***

ANNEX-1: LIST OF DRAGON 4 SCIENTIISTS ELIGIBLE UNDER THIS CALL FOR PAPERS (CONT.)

PROJECT SUMMARY
DRAGON 4 ID. ***32249*** *(No. of topics: 3)*

SYNERGISTIC MONITORING OF OCEAN WINDS, WAVES AND STORM SURGES FROM MULTI-SENSORS

European Leader Investigator	*Chinese Leader Investigator*
Dr. Bertrand Chapron Institut Francais de Recherche et Exploitation de la Mer, FRANCE	Prof. Yang Jingsong Second Institute of Oceanography, SOA, CHINA

List of Principal Investigators (PIs)

Topic Nr.	PIs	Title
32249_1	*Dr.Alexis Mouche,* *Prof. Biao Zhang*	***Algorithm for advanced wind and wave products from multi-sensors***
32249_2	*Prof. Bertrand Chapron,* *Dr. He Wang*	***Global climate on wind and wave from long term multi-sensor data***
32249_3	*Dr. Ole Andersen,* *Prof. Jingsong Yang*	***Extreme ocean event monitoring from multi-sensors***

PROJECT SUMMARY
DRAGON 4 ID. 32281 (No. of topics: 2)

MONITORING FROM SPACE FOR OCEAN AND COAST SUSTAINABILITY

European Leader Investigator	*Chinese Leader Investigator*
Dr. Sven Jacobsen German Aerospace Center, GERMANY	Prof. Xiaoming Li Institute of Remote Sensing and Digital Earth, Chinese Academy of Sciences, CHINA

List of Principal Investigators (PIs)

Topic Nr.	PIs	Title
32281_1	*Prof. Susanne Lehner,* *Prof. Ming-Xia HE*	***Derivation of ocean dynamic parameters from spaceborne SAR***
32281_2	*Dr. Konstantinos Topouzelis,* *Prof. Xiao-Ming Li*	***Marine pollution detection and tracing based on satellite observation and modeling***

PROJECT SUMMARY
DRAGON 4 ID. ***32405*** *(No. of topics: 2)*

MONITORING DYNAMICS OF COASTAL WETLANDS AND SUSPENDED SEDIMENT WITH HIGH (TEMPORAL/SPATIAL/SPECTRAL) RESOLUTION SATELLITE IMAGES

European Leader Investigator	*Chinese Leader Investigator*
Prof. Shubha Sathyendranath Plymouth Marine Laboratory, UNITED KINGDOM	Dr. Tingwei Cui First Institute of Oceanography, State Oceanic Administration, CHINA

List of Principal Investigators (PIs)

Topic Nr.	PIs	Title
32405_1	*Prof. Shubha Sathyendranath,* *Prof. Tingwei Cui*	***Synergistic ocean color observation based on polar-orbiting and geostationary satellite images***
32405_2	*Prof. Shubha Sathyendranath,* *Dr. Yi Ma*	***Wetlands monitoring using high resolution remote sensing images in Yellow River estuary***

ANNEX-1: LIST OF DRAGON 4 SCIENTIISTS ELIGIBLE UNDER THIS CALL FOR PAPERS (CONT.)

PROJECT SUMMARY
*DRAGON 4 ID. **32235** (Nr. of topics: 3)*

MICROWAVE SATELLITE MEASUREMENTS FOR COASTAL AREA AND EXTREME WEATHER MONITOR

European Leader Investigator	***Chinese Leader Investigator***
Dr. Ferdinando Nunziata Universita di Napoli Parthenope, Dipartimento di Ingegneria, ITALY	Prof. Li Xiaofeng International Center for Marine Studies, Shanghai Ocean University, CHINA

List of Principal Investigators (PIs)

Topic Nr.	PIs	Title
32235_1	*Dr. Ferdinando Nunziata,* *Prof. Xiaofeng Li*	***SARCO - SAR-based Coast Observation***
32235_2	*Dr. Armando Marino,* *Dr. Weizeng Shao*	***Ship and Coastal Water Pollution Observation with Polarimetric SAR Architectures (SCoPeSAR)***
32235_3	*Dr. Marcos Portabella,* *Prof. Xiaofeng Yang*	***SHENLONG: Sea-surface High-wind ExperimeNts with Long-range (satellite) Observations using Numerical Geophysical methods***

PROJECT SUMMARY
DRAGON 4 ID. 31451 (Nr. of topics:6)

OCEANIC AND ATMOSPHERIC PROCESSES IN CHINESE COASTAL ZONES

European Leader Investigator	***Chinese Leader Investigator***
Dr. Fabrice Collard Ocean data lab., FRANCE	Prof. Tang DanLing South China Sea Institute of Oceanology CHINA

List of Principal Investigators (PIs)

Topic Nr.	PIs	Title
31451_1	*Prof.Werner Alpers,* *Prof. DanLing Tang*	***Upwelling***
31451_2	*Dr. Alexis Mouche,* *Prof. Biao Zhang*	***Coastal Winds***
31451_3	*Prof. Johnny Johannessen,* *Prof. Yunxuan Zhou*	***River-diluted waters***
31451_4	*Prof. John Remedios,* *Prof. Chuqun Chen*	***SST retrieval***
31451_5	*Dr. Samantha Lavender,* *Dr. Shilin Tang*	***Atmospheric corrections***
31451_6	*Dr. Federica Braga* *Dr. Qianguo Xing*	***Water exchanges (EPHESURS)***

ANNEX-1: LIST OF DRAGON 4 SCIENTIISTS ELIGIBLE UNDER THIS CALL FOR PAPERS (CONT.)

PROJECT SUMMARY
DRAGON 4 ID. ***32070*** *(Nr. of topics: 3)*

MONITORING WATER AND ENERGY CYCLES AT CLIMATE SCALE IN THE THIRD POLE ENVIRONMENT (CLIMATE-TPE)

European Leader Investigator	*Chinese Leader Investigator*
Prof. Z. Bob Su University of Twente, ITC, NETHERLANDS	Prof. Ma Yaoming Institute of Tibetan Plateau Research (ITP/CAS) CHINA

List of Principal Investigators (PIs)

Topic Nr.	PIs	Title
32070_1	*Prof. Bob Su,* *Prof. Jun Wen*	***WP1: Observation and modelling of microwave scattering and emission under complex terrains and including permafrost and freeze and thawing***
32070_2	*Prof. Maria Jose Polo,* *Prof. Yaoming Ma*	***WP2: Advancement of physical understanding and quantification of changes of water and energy budgets in TPE***
32070_3	*Prof. Alexander Loew,* *Prof. Yaoming Ma*	***WP3: Advancement of quantifying changes in surface characteristics and monsoon interactions***

PROJECT SUMMARY
DRAGON 4 ID. ***32271*** *(Nr. of topics: 3)*

AIR QUALITY OVER CHINA

European Leader Investigator	*Chinese Leader Investigator*
Dr. Ronald van der A Royal Netherlands Meteorological Institute NETHERLANDS	Prof. Bai Jianhui Institute of Atmospheric Physiscs, Chinese Academy of Sciences, CHINA

List of Principal Investigators (PIs)

Topic Nr.	PIs	Title
32271_1	*Dr. Ronald van der A,* *Dr. Jianhui BAI*	***Air Quality Observations and Emission Estimates***
32271_2	*Prof. Gerrit de Leeuw,* *Prof. Yong Xue*	***AEROSOL: Satellite-derived aerosol properties over mainland China: application to air quality and trend analysis***
32271_3	*Dr. Nan Hao,* *Prof. Cheng Liu*	***Assessment of the characteristics, sources and impact of haze in China***

ANNEX-1: LIST OF DRAGON 4 SCIENTIISTS ELIGIBLE UNDER THIS CALL FOR PAPERS (CONT.)

PROJECT SUMMARY
DRAGON 4 ID. ***32301*** *(Nr. of topics: 2)*

MONITORING GREENHOUSE GASES FROM SPACE

European Leader Investigator	*Chinese Leader Investigator*
Dr. Hartmut Boesch University of Leicester, Department of Physics and Astronomy, UNITED KINGDOM	Prof. Liu Yi Institute of Atmospheric Physics, Chinese Academy of Sciences, CHINA

List of Principal Investigators (PIs)

Topic Nr.	PIs	Title
32301_1	*Dr. Hartmut Boesch,* *Prof. Yang Dongxu*	***Monitoring greenhouse gases from space: retrieval algorithm development and CO2 and CH4 flux inversion***
32301_2	*Dr. Johanna Tamminen,* *Prof. Liu Yi*	***Monitoring greenhouse gases from space: validation and uncertainties with focus in China and high latitudes***

PROJECT SUMMARY
DRAGON 4 ID. ***32296*** *(No. of topics: 3)*

LIDAR OBSERVATIONS FROM ADM-AEOLUS AND EARTHCARE - VALIDATION, STUDY OF LONG-RANGE TRANSPORT OF AEROSOL AND PREPARATION OF A FUTURE CHINESE CO2 LIDAR MISSION.

European Leader Investigator	*Chinese Leader Investigator*
Dr. Oliver Reitebuch Deutsches Zentrum f. Luft- u. Raumfahrt DLR, Institut f. Physik d. Atmosphaere, GERMANY	Prof. Wu Songhua Ocean University of China OUC - Ocean Remote Sensing Institute OSRI, CHINA

List of Principal Investigators (PIs)

Topic Nr.	PIs	Title
32296_1	*Dr. Oliver Reitebuch,* *Prof. Weibiao Chen*	***Preparation of Cal/Val of spaceborne Aerosol and Carbon dioxide Detection Lidar (ACDL) by ground-based and airborne sounding instruments observations***
32296_2	*Dr. Oliver Reitebuch,* *Prof. Songhua Wu*	***Validation of ADM-Aeolus by airborne and ground-based wind lidar observations***
32296_3	*Dr. Dietrich Althausen,* *Prof. Songhua Wu*	***Long-range dust transport and validation using ground-based and satellite lidar observations***