



Q PIESAT Information Technology Co., Ltd.

Address: PIESAT Building (Building No.4), No.2 Cuihu North Ring Road, Haidian District, Beijing, China

hotline: 400-890-0662 Website: www.piesat.cn



2023 **PIESAT ANNUAL ESG REPORT**

ABOUT THIS REPORT

Reporting Purpose

This Report is intended to conduct a frank and honest exchange with stakeholders regarding the ESG concept, practice performance and other aspects of PIESAT Information Technology Co., Ltd., and systematically respond to the expectations and appeals of stakeholders.

Reporting Period

This Report covers a period from January 1 to December 31, 2023, but part of it may exceed the above-mentioned period to make it more comparable and complete.

Reporting Cycle

This is an annual report, which is issued simultaneously with the Company's annual report. The English version of the 2023 ESG Report is disclosed at the same time. In case of any ambiguity in the understanding of it, the Chinese version shall prevail.

Data Description

The data sources used in this Report include the Company's internal statistics and public data from government departments and third-party institutions. The recording currency of the financial data in this Report is the Renminbi ("RMB").

Scope of Reporting

This Report covers PIESAT Information Technology Co., Ltd. and its main subsidiaries.

Reference

In this Report, "PIESAT Information Technology Co., Ltd." is referred to as "PIESAT" or "the Company".

Basis of Preparation

IChina National Standard GB/T36001-2015 Guidance on Social Responsibility Reporting

International standard ISO26000:2010 Guidance on Social Responsibility

United Nations 2030 Sustainable Development Goals (SDGs)

GRI Standards by Global Sustainability Standards Board

Guidelines on Corporate Social Responsibility Reporting for Chinese Enterprises (CASS-CSR4.0) issued by the Chinese Academy of Social Sciences

Guidelines for the Preparation of the "Report on Corporate Social Responsibility"

Reporting Form

The electronic version of this Report is available on the websites of the Shanghai Stock Exchange (www.sse.com.cn) and CNINFO (www.cninfo.com.cn).

CONTENTS

About PIESAT

President's Statement	03
Company Profile	04
Organizational Structure	05
Corporate Culture	06
Evolution History	07

Standardized Governance: Strengthening the Foundation for Stable Development

Enterprise Governance	10
Compliant Operation	10
Information Construction	11
The Foundation of Party Building	11
Responsibility Management	13

Steady Progress for Sustainable Success: Upholding Technological Innovation and Achieving New Heights in Innovation

The Inaugural Launch of the "Nuwa16Constellation" Fills the Void in the InSAR5Satellite Application Market.16

The Winning Bid of an RMB 100-million17Overseas Project Contributes to theDigital Transformation in BRI ParticipatingCountries.

New Products Constantly Emerge to Serve 18 the Building of a Digital China.

Listing of Remote Sensing Data Products 22 Ushers in a New Era of Digital Applications.

Green and Low-Carbon: Practicing Smart Environmental Protection to Boost Growth

Self-developed Electric UAVs Promote Energy 26 Conservation and Carbon Reduction.

The Smart Ecological Monitoring Platform 26 Empowers Precision Supervision.

It Remains Committed to Energy-saving and 28 Low-Carbon Practices and Embraces Green Development.

Surging Forward with Vigor: Each Tier of Talent Displaying Excellence

Professional Services Catering to Customer Needs	32
Professional Solidification of Business Foundation	33
Professional Support for Operational Assurance	33

Collaborative Dedication: Deepening Services Across the Entire Industry Chain

Securing the Upstream to Achieve Data Autonomy	36
Strengthening the Midstream for Platform Compatibility	36
Seizing Downstream Opportunities for Application Scalability	37
Collaborating in Unity to Build a Smart Ecosystem Together	37

Staying True to Our Original Aspiration: Practicing Public Welfare and Manifesting Corporate Responsibility Through Diligent Actions

Smart Earth Lecture Hall	40
Taking an Integrated Approach to Industry, Research, and Education	41
Immediate Flood Response Guaranteeing Strong Backing for Flood Control and Disaster Relief	42
"Youxing" Supporting and Ensuring Transportation and Meteorological Needs for the Asian Games	43
Cross-Border Integration Empowering the Launch of the Marathon "Air Ambulance"	43
Mixed Reality Being Utilized for Visual Interaction at Liang Qichao Memorial Hall	44
Digital Cultural Tourism Activating New Dynamics for Rural Revitalization	44
Science Popularization Lecture Illuminating Students' Dreams in Aerospace	45
Honors of 2023	46
Search Index	48

49

Reader Feedback



President's Statement

The year 2023 was the first year to fully implement the guiding principles of the 20th National Congress of the Communist Party of China (CPC), a pivotal year for the implementation of the 14th Five-Year Plan (2021-2025), and also marked the 15th anniversary of the establishment of PIESAT. On behalf of the Board of Directors of PIESAT, I would like to express our heartfelt thanks to customers who have placed their full trust in PIESAT, to ecological partners who have win-win cooperation with PIESAT, and to investors who have paid high attention to PIESAT.

The year 2023 was destined to be remarkable. It was a year of proactive preparation and decisive action, as we faced both internal and external challenges. We took anticipatory measures, navigated through challenges, and actively sought strategies to overcome obstacles.

In 2023, we successfully launched the satellites of the PIESAT-1 constellation, comprising a primary satellite and three supplementary radar remote sensing satellites. This breakthrough has facilitated the integration of upstream data resources, continually enhancing the comprehensive service capabilities of the satellite internet industry chain. We secured a significant overseas project worth over RMB 100 million, marking a turning point to further explore international markets, particularly the participating countries of the Belt and Road Initiative (BRI). Our data products have been listed on the Shanghai Data Exchange, contributing to a sustained improvement in data quality while expanding our brand recognition and influence.

In 2024, PIESAT will actively follow the historical trend and align with the national agenda. It is imperative not only to anticipate potential challenges and be more mindful of potential dangers but also to stand firm in our convictions, maintaining unwavering determination. The golden era of commercial aerospace has dawned, where opportunities favor those who stand resolute, forge ahead, and dare to venture. PIESAT will continue to leverage its strengths in the digitization and informatization of industries such as meteorology, water conservancy, emergency response, and geological disasters. Actively contributing to post-disaster reconstruction, the Company strives for robust growth in emergency response and disaster reduction operations. Simultaneously, with a focus on satellite operations, comprehensive urban remote sensing cloud services, meteorological numerical forecasting, unmanned aerial vehicles (UAVs), and other areas, PIESAT will persist in extending its core business to grassroots government and enterprise clients. By exploring larger market spaces, PIESAT aims to achieve leapfrog development.

The journey before us will be a long one, but with will and determination, we will brave the surging waves, forging ahead towards the future! Facing the new responsibilities and challenges of 2024, PIESAT will maintain the fortitude to overcome obstacles, the morale to ride the wind and cleave the waves, and the drive to forge ahead. We strive to create limitless possibilities in this new journey!



PIESAT Information Technology Co., Ltd.

President's Signature April 2024

Company Profile



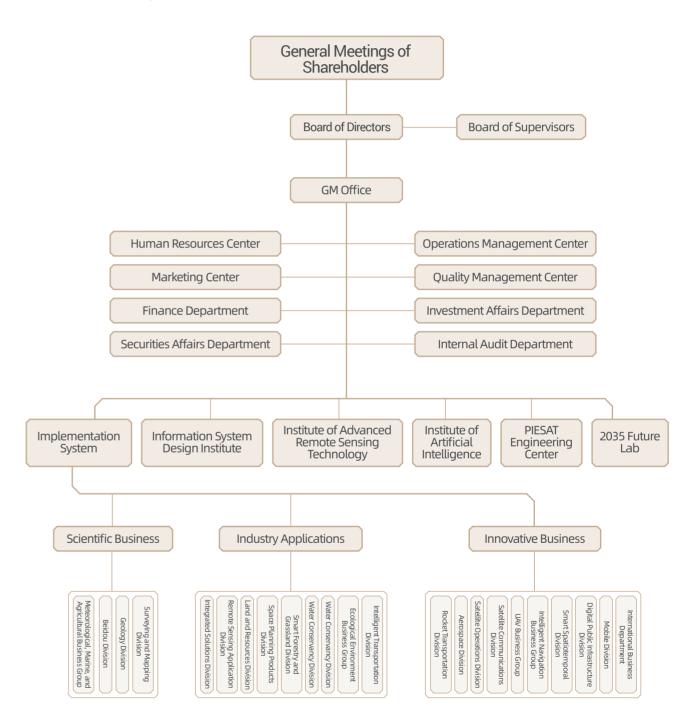
PIESAT Information Technology Co., Ltd. (stock code: 688066), founded in 2008, is a leading satellite internet company in China and among the first batch of listed enterprises on the Science and Technology Innovation Board (or STAR Market). The Company has researched and developed the Pixel Information Expert (PIE) software—the remote sensing and geographic information integrated software with fully-independent intellectual property rights (IPRs), and possesses PIE-Engine—the first remote sensing and geographic information cloud service platform in China, thus realizing the domestic production of the basic software of remote sensing. The Company has planned the "Nuwa Constellation," which is the largest multi-level, multi-mode hybrid remote sensing satellite constellation in China. In the first phase of the project, it is planned to launch 54 operational satellites, with the initial batch of 4 radar remote sensing satellites successfully launched on March 30, 2023, enhancing operational capabilities throughout the entire satellite industry chain. Additionally, the Company has provided government, businesses, universities, and other relevant departments with comprehensive solutions for spatial information applications, including foundational software products, system design and development, and remote sensing cloud services.

Headquartered in Beijing, the Company has more than 200 branches across the country and has set up research and development (R&D) centers in Xi'an, Chengdu, Wuhan, Nanjing, Changsha, etc. Now the Company has more than 3,300 employees, including over 130 employees with a doctoral degree, over 1,000 employees with a master's degree, and over 200 talented overseas returnees and industrial experts. Among them, engineering technicians account for more than 80%. The Company has established a postdoctoral workstation, collaborated with Academician Yue Qingrui's team to create an Academician Workstation for Urban Emergency Management Satellite Applications, and set up 1 Beijing Municipal Engineering Laboratory, and 2 key laboratories and 4 engineering & technological innovation centers under the Ministry of Natural Resources of China. The Company holds qualifications such as "National Key High-tech Enterprise", "Enterprise with the Recognition of Software Enterprise and Registration of Software Products", CMMI L5, Surveying and Mapping Certificate (Class A), Information System Building and Service Capability CS4 Certification, engineering consulting credit, a general aviation business operation license, and Certificate of Certification for Civil Unmanned Aircraft System Pilot Training institution. The Company also owns more than 200 patents for inventions and over 900 software copyrights.

Since its establishment, the Company has successively participated in more than 90% of China's major satellite projects including environmental disaster reduction satellite, high-resolution satellite, resource satellite, Fengyun meteorological satellite, and marine satellite. In addition, it has been engaged in the construction of the BeiDou-3 core system, and developed core technologies such as cloud-network integration and intelligent processing based on the integrated communication, sensing and computing, and the flexible adaptation and management of giant constellation payloads for the national satellite Internet project. Moreover, it has undertaken major projects such as the national ecological protection red line supervision platform, the meteorological big data cloud platform, the marine environment monitoring and early warning cloud platform, and the Earth System Science Numerical Simulator Facility (EarthLab), as well as more than 10 national key R&D programs.

Organizational Structure

In 2023, to enhance the overall strength of the Company and align with market opportunities and current business conditions, PIESAT established the Emergency and Digital Government Business Group, the Meteorological, Marine, and Agricultural Business Group, and the Water Conservancy Business Group, with a focus on building a management system with a strong front end, robust middle platform, and efficient back-end.





Corporate Culture



Evolution History

Established on January 24; Participating in the environmental

disaster reduction satellite project

Participating in the major project for high-resolution Earth observation

Participating in the construction of the Fengyun-3 satellite mission

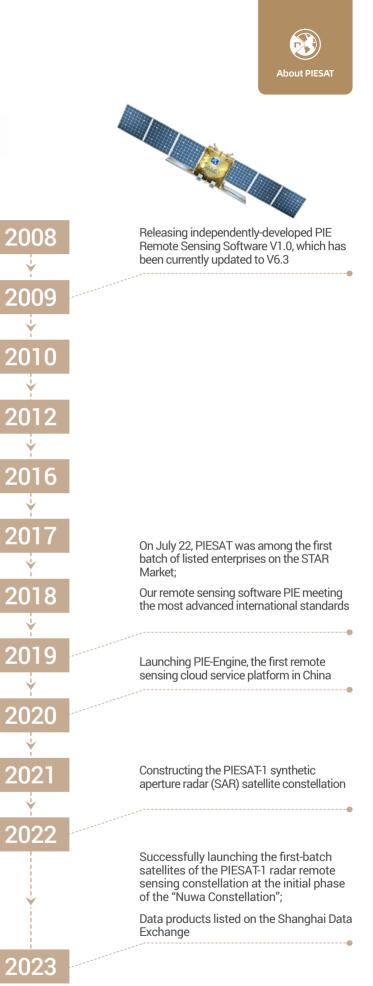
....

Participating in the airborne land and marine satellite project during the 12th Five-Year Plan period

Participating in the Fengyun-4 satellite mission and the BeiDou-3 satellite project

Participating in the airborne land and marine satellite project during the 13th Five-Year Plan period

Participating in the top-level design of the airborne land and marine satellite project during the 14th Five-Year Plan period



STANDARDIZED GOVERNANCE: STRENGTHENING THE FOUNDATION FOR STABLE DEVELOPMENT

© ENTERPRISE GOVERNANCE

◎ INFORMATION CONSTRUCTION



© COMPLIANT OPERATION © THE FOUNDATION OF PARTY BUILDING

Enterprise Governance

PIESAT combines systematic coordination with fine management, upgrades and reorganizes the natural resource, meteorological, marine, agricultural, and UAV business groups, etc., and establishes 6 regions and over 200 branch offices nationwide. Internationally, it has set up branches in countries such as Singapore, Malaysia, Thailand, and Pakistan, extending our service network across the globe.

The Company constantly improves its corporate governance structure, establishes and perfects its internal control system, standardizes the operation, and effectively protects the legitimate rights and interests of the Company and its shareholders. It timely and accurately disclosed information, strove to maintain good relations with investors, and sought legitimate rights and interests for investors. It also adhered to standardized internal control and improved the effectiveness of the Company's internal control.

Compliant Operation

The Company has constantly improved its corporate governance structure in accordance with the relevant requirements of the Company Law of the People's Republic of China, the Securities Law of the People's Republic of China, the Code of Corporate Governance for Listed Companies, the Rules Governing the Listing of Stocks on the STAR Market of the Shanghai Stock Exchange, and other laws, regulations and normative documents.

Since its listing, the Company has consistently enhanced its governance standards, refined internal systems, and improved the quality of information disclosure. The Company not only ensures legal and compliant operations but also places importance on investor relations. It has successively formulated the "Board Secretary's Working Rules," "Investor Relations Management System," and "Information Disclosure Management System." Through various forms, the Company comprehensively organizes investor communication activities from multiple perspectives. With a proactive and transparent approach, it actively communicates the Company's values to a wide range of investors.

The Board of Directors (BOD) of the Company is composed of 9 members, including economic, accounting, legal and technical experts from multiple professional fields, to provide effective guarantee for the Company's major decisions. The Board of Supervisors consists of 3 members, including one employee representative, which can effectively supervise the Company's operation decision-making and protect the interests of all shareholders.



Information Construction

To enhance collaborative efficiency, PIESAT actively implements an informationized office system, enabling online collaborative work, project management, client management, and knowledge training. The Company is replacing paper documents with digital archives to promote environmental friendliness. In 2023, the company implemented a paperless organizational asset repository with a regular updating and maintenance mechanism, which ensures timely updates and secure distribution while minimizing paper waste.



The Foundation of Party Building

The year 2023 was the first to see the implementation of the guiding principles of the 20th CPC National Congress, marking a pivotal year in advancing the 14th Five-Year Plan to build upon past achievements and pave the way for new prospects. It served as a cornerstone year within the 14th Five-Year Plan. Under the correct leadership of the CPC Beijing Municipal Committee and the Beijing Municipal Government, the CPC branch of PIESAT actively guides all Party members, officials, and members of the public within the Company. They earnestly implement the quiding principles of the 20th CPC National Congress, strictly adhere to the "Three Meetings and One Lecture" system, and organize political studies, ideological exchanges, and organizational activities for Party members to effectively enhance the caliber of Party members and their abilities in carrying out Party affairs.

Strengthening the Party building and deepening the joint study and 01 development

The CPC branch of PIESAT actively participates in various meetings organized by the local CPC town committee. The branch organized and led leadership members and Party affairs workers to participate in the "CPC Leadership" online courses for advancing Party building in the "two new" organizations and the internet industry Party building training sessions in Haidian District, Beijing, aiming to reinforce Party consciousness and raise the political awareness and moral standards of Party members. The Company actively participated in the launching ceremony of the Party Building Leading Joint Construction of Internet Civilization in the Haidian District. Additionally, it collaborated with the CPC Tongzhou Branch of Beijing Waterworks Group Co., Ltd. to jointly organize Party building and joint learning activities.





02 Playing a bridging role to strengthen the corporate political responsibility

In 2023, the Party branch actively participated in the "Learning from the 20th CPC National Congress, Singing Red Songs for the Party" red song competition organized by the Sijiqing Town Government of Haidian District to fully demonstrate its exemplary and vanguard role. At the end of December, the branch committee carried out a "Paying Grassroots Visits, Hearing People's Voices, and Bringing Warmth" outreach activity in Weidian Village, Bohai Town, Huairou District. They donated 450 sets of rice and flour and other essential daily necessities, bringing warmth and New Year blessings to the villagers.



Responsibility Management

The Company attaches great importance to communication with stakeholders, continuously understands the expectations and appeals of all parties, establishes diversified and effective communication methods, and actively listens to the opinions and suggestions of all parties.

Stakeholders	Issues	Ways of Communication
Government and regulatory authorities	 Compliant operation Tax payment according to law Response to national policies Obedience to regulatory requirements 	 Observe law and discipline Cooperate with supervision and inspection Participate in major meetings and activities Report work regularly
Shareholders and investors	 Steady development of the enterprise Stable return on investment Reasonable operation and information disclosure 	 Improve corporate governance Discloses information and announcements regularly Manage investor relations
• Product function iterationquality• Service quality improvement• Invest• Smooth communication channelscustor		 Constantly improve R&D ability and talent quality Investigate service evaluation system and customer satisfaction Daily visit and contact with users
Suppliers and partners	Fairness and integrityLong-term stability	 Optimize and perfect the supplier management system Fulfill contracts according to law
(O) CD Staff	 Protection of basic rights and interests Reasonable compensation and benefits Training and development Health and safety 	 Staff conferences Fair and just promotion channels Improved employee training Flat and multi-dimensional communication
Communities and the public	 Participation in public welfare undertakings Promoting the development of the industry 	 Take an active part in public welfare activities Constantly improve R&D capabilities
Ecological environment	Energy-saving operationEnvironmental protection	 Control carbon emissions Participate in environmental protection



STEADY PROGRESS FOR SUSTAINABLE SUCCESS: UPHOLDING TECHNOLOGICAL INNOVATION AND ACHIEVING NEW HEIGHTS IN INNOVATION



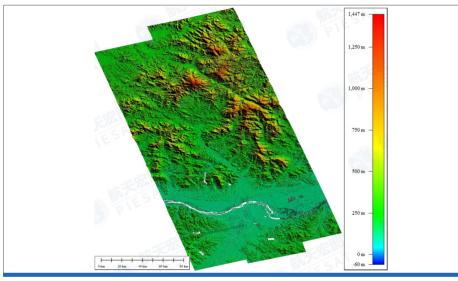
- THE INAUGURAL LAUNCH OF THE "NUWA CC SATELLITE APPLICATION MARKET.
- © THE WINNING BID OF AN RMB 100-MILLION OVERSEAS PROJECT CONTRIBUTES TO THE DIGITAL TRANSFORMATION IN BRI PARTICIPATING COUNTRIES.
- \odot NEW PRODUCTS CONSTANTLY EMERGE TO SERVE THE BUILDING OF A DIGITAL CHINA.
- © LISTING OF REMOTE SENSING DATA PRODUCTS USHERS IN A NEW ERA OF DIGITAL APPLICATIONS.

◎ THE INAUGURAL LAUNCH OF THE "NUWA CONSTELLATION" FILLS THE VOID IN THE INSAR



The Inaugural Launch of the "Nuwa Constellation" Fills the Void in the InSAR Satellite Application Market.

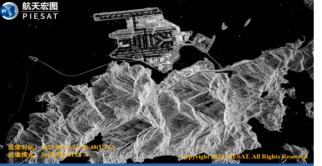
On March 30, 2023, the satellites of the PIESAT-1 radar remote sensing constellation at the initial phase of the "Nuwa Constellation," were successfully launched into space carried by the Long March-2D carrier rocket from the Taiyuan Satellite Launch Center in northern China's Shanxi Province. The launch mission achieved complete success as the satellite smoothly entered a preset orbit. The PIESAT-1 satellite constellation comprises four high-resolution X-band synthetic aperture radar satellites. It represents the inaugural mission of PIESAT's "Nuwa Constellation" and is China's first independently-developed multi-satellite, multi-baseline distributed interferometric radar satellite system. It is also the world's first multi-satellite distributed interferometric aperture radar system employing a four-star cartwheel formation configuration. Following in-orbit testing, the PIESAT-1 satellites' Earth observation system has met all development requirements. It has smoothly transitioned into the operational phase. As of now, it has accomplished various critical tasks, including Earth observation, global mapping, and emergency missions. The satellite has received an approximate data volume of 55TB, and processed around 45TB of standard image data, resulting in the creation of over 60,000 scenes.



DSM mosaic result over a specific region in northeast China's Heilongjiang Province captured by PIESAT-1



Singapore Changi Airport 1-meter resolution synthetic aperture radar (SAR) imagery captured by PIESAT-1

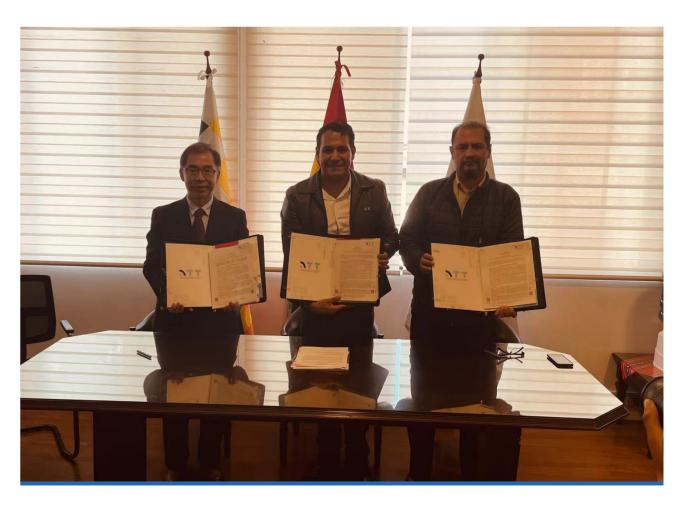


3-meter strip photograph over Hong Kong, China, captured by PIESAT-1

The Winning Bid of an RMB 100-million Overseas Project Contributes to the Digital Transformation in BRI Participating Countries.

In July 2023, PIESAT successfully secured an RMB 100-million overseas project, leveraging the Company's independentlydeveloped PIESAT "Nuwa Constellation" SAR satellites and UAV aerial survey technology. The project aims to provide Bolivia's Regulatory Authority for Telecommunications and Transportation with a comprehensive spectrum management system and high-precision topographic maps.

This project represents the Company's first successful bid for an international large-scale electromagnetic spectrum monitoring system development project. It is beneficial for expanding the international market, further enhancing the Company's leading position in the global electromagnetic spectrum monitoring field. Moreover, it serves as a concrete manifestation of BRI cooperation between China and Bolivia. Also, this project marks the first international remote sensing application order served by the "Nuwa Constellation." Looking ahead, with the successful launch of experimental satellites for satellite internet technology and the formal initiation of the domestic satellite internet constellation network, the Company will continue to target BRI participating countries. It will focus on meeting the market demands for overseas remote sensing applications, playing a crucial role in various areas such as mapping, disaster response, infrastructure monitoring, and smart city development.





New Products Constantly Emerge to Serve the Building of a Digital China.



PIESAT is constructing the "Tianquan" multimodal large-scale model, designed for various remote sensing data types to address the limitations in sample annotation and model generalization within the existing "AI + remote sensing" business model. The Company is dedicated to building an integrated intelligent remote sensing ecosystem encompassing segmentation, detection, and generation, aiming to empower various application domains, including national defense and security, land and natural resources, transportation, and water conservancy.

	子,我是"天权Chat聊天机器人"~						+17mma317810.040
作为一我展在	一个人工智能多模态大语言模型,我可以起意对话,回答您的 有以下能力:	问题,为您提供有用信息~		+ Materix	٠		
	AX28: 输入22212-2017日, 机械人体建址来等单并进行目	·····································		85 G LS			
21.	L 网络马利亚中国的东文 医核菌什么?	6.				No. R.E. 170072752049041785正线果:	
						截起 2 标正结果正然: 共完成1个交纬的标正, 产生1个类词, 检测出2个物体。	
17.	12000 EFERIENCE FOR STA	▲ 15元秋日・日本市会社会社会社会社会社会社会社会社会社会社会社会社会社会社会社会社会社会社会社					建市街北京市小道市6月的水路 。
6250	HINDH': BORBANIATOTA SKORMUSI. FRANKSIN NOPONOL MARCHIRITIONOLU	0 880(10)#: ::##15,201.8. 107.884589(200-000) R. O 80: [202011] 0:005.			٠		
- Ph. 1	+地路設置,将本地交付上市設備未会送成本付加的保好設置 ,利益人同時間的文件中的知识是行用場合等。 8時上市的支援。	※SSR用書現在: 設成使用面書や形式は、先系、専門電気回動行 書給作業以及用面面的行動を行動力。 の 作者になからなり的などの面面。					AMSOLIGH 94 WARDSCONTON MARK, 19274
•	NELECTIC.				*	力您查询到航天宏图女娲星座卫星于8月2日拍摄到的河北涿州暴雨淹没范围 数据:	
1993	(TIRN): BERNERALATNIBUE-GREETREE. BAT RECENSIONER, BELEARDERTER,	 Основник странов странову, положизацического, анарствать соловно насочности. 		 ■ 2012-016 6. (8)(C016) 			
				• ###RD		在地球上演畫	
	请介绍天现大课程			• (BFR)		(BMA392)	
						14.1.8.080101.3.7.9807 1277.8. NY DIMENSI AND A CONTRACT OF THE OWNER OF THE OWNER OF THE OWNER	
				天权Chat		alertaine - eas, regenerated excert	WebboAppinessThilder
(*) 80	10计中部分的内容图图末,可以2010年9月15日的月14日表。		Exercise Halanes	天权Chat		中地以至 第●→: 1052013-2022年間年11月分布已最合で2023世紀	REFERENCE
. († 1900) 1900 - 1900	N+46787AMBLIX, GLIBHOMMIXEN/NES.		ESMECHERHS.Amer	天权Chat + Kitex		анаста 18 Ф. – Варона - 2022 анда 11 узай оден «"Шатала 18 Пон — Варона - 2022 анда 11 узай оден «"Шатала 18 год. житата догоди и стата у догод 11 д. 2016 г. 11 д. 2016 18 год. 2016 г. 11 узай - 2022 инстата у на стата стата и стата стата и стата 19 ф. – 18 2013 - 2022 инстата у на стата ст	CANESDO AND THE OWNER OF ANY THE DATE
÷ 2	UL+MORTHELK, FLLMMARHELERSFICKS,		ESMOLO SH - S ANNO-	天权Chat + Kitex			(HIMPAREAMENTING RAS
•	NI-HEISENTHAIN, ULARNIBELEESIIASE,		ESMECHERHS.Amer	天权Chat + Kitex		하였다. 第월 -	
 • •	ni-engentain, uudeneeningulkee.		ESMECHERHS.Amer	天权Chat + Kitex		анция 2019. Волопо-молоница и профедентация вата динета дината дината дината дината дината дината вата дината дината дината дината дината се дината се до се д	
÷ .	nn - Cor Status Maria (1210-0694), alas saka, cidakus ka Sara, kanzaskara, kazaskarakarijika, fi	Levit, mac14002		天权Chat + Kitex		анция 2019. Волопо-молоница и профедентация вата динета дината дината дината дината дината вата дината дината дината дината дината се дината из дината вата дината дината се дината се дината се дината се дината вата дината се дината се дината се дината се дината се дината вата дината се дината се дината се дината се дината се дината вата дината се дината се дината се дината се дината се дината вата дината се дината се дината се дината се дината се дината се дината вата дината се дината ста се дината се динат	
 100 (100 (100 (100 (100 (100 (100 (100	nn - Cor Status Maria (1210-0694), alas saka, cidakus ka Sara, kanzaskara, kazaskarakarijika, fi	Levit, mac14002		天权Chat + Kitex		анция 2019. Волопо-молоница и профедентация вата динета дината дината дината дината дината вата дината дината дината дината дината се дината из дината вата дината дината се дината се дината се дината се дината вата дината се дината се дината се дината се дината се дината вата дината се дината се дината се дината се дината се дината вата дината се дината се дината се дината се дината се дината вата дината се дината се дината се дината се дината се дината се дината вата дината се дината ста се дината се динат	and the space of the set of the s
	INTERNATION - SOF, GERSVE, DOMINI ANTERNATION - SOF, GERSVE, DOMINI ANTERNA - RESIDENT, GERSVER, GOUST 4448 - HERDRORM, 18882448, GOUST	Leit: Buissen Barg, Alber Hydrich, Bart	UNERCOMPANY	天权Chat + Kitex		анция 2019. Волопо-молоница и профедентация вата динета дината дината дината дината дината вата дината дината дината дината дината се дината из дината вата дината дината се дината се дината се дината се дината вата дината се дината се дината се дината се дината се дината вата дината се дината се дината се дината се дината се дината вата дината се дината се дината се дината се дината се дината вата дината се дината се дината се дината се дината се дината се дината вата дината се дината ста се дината се динат	and the strategy of the second sec
* 100 * 100	AREINGAMONIA-BAY, ARAINER, DAMIN AREINGAMONIA-BAY, ARAINER, DAMIN AREING AREAN ARAINER AREING AREAN AREAN AREING AREING AREAN AREING AREING AREAN AREING AREING AREAN AREING AREINA AREING AREIN AREIN AREIN AREIN AREIN AREIN AREIN AREIN AREIN AREIN ARE	Leath, Ballyenn Barlin, Ballyenn Station, Galactic Sation, Galactic	UNERCOMPANY	天紀Chat 王田田子 Bata		A second material and a second	AND AND AND AND AND AND
* 100 * 100	ARTIGENROUTIN-GOF, REALINE, DOMINI ARTIGENROUTIN-GOF, REALINE, DOMINI ARTIGENROUTING, REALINER, DOMINI CHEMINARY, REALINER, DOMINI CHEMINIARY, REALINER, DOMINIARY, DOMINIARY, REALINER CHEMINIARY, REALINER, DOMINIARY, REALINER, DOMINIARY, REALINER CHEMINIARY, REALINER, REALINER, DOMINIARY, REALINER CHEMINIARY, REALINER,	Leath, Ballyenn Barlin, Ballyenn Station, Galactic Sation, Galactic	UNERCOMPANY	FRChat some: soc		анция 2019. Волопо-молоница и профедентация вата динета дината дината дината дината дината вата дината дината дината дината дината се дината из дината вата дината дината се дината се дината се дината се дината вата дината се дината се дината се дината се дината се дината вата дината се дината се дината се дината се дината се дината вата дината се дината се дината се дината се дината се дината вата дината се дината се дината се дината се дината се дината се дината вата дината се дината ста се дината се динат	

02 PIE-Engine Server spatiotemporal data service platform

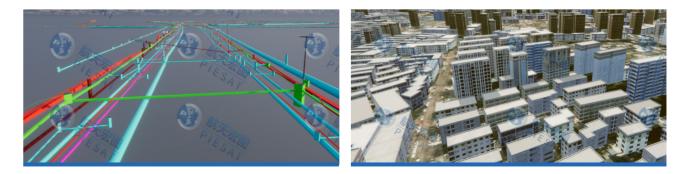
In November 2023, the public beta version of the PIE-Engine Server spatiotemporal data service platform was officially launched. The platform, following the Data Mesh architecture concept, is built on spatiotemporal data lakehouse technology. It encompasses capabilities such as data access, data management, service publishing, subscription distribution, online mapping, and geographic analysis. As an agile geospatial data operating system, it provides standard APIs or access protocols for centrally managed multisource spatiotemporal data products. It serves as a foundation for constructing industry-specific spatiotemporal applications and supporting the development of a realistic three-dimensional representation of China. The platform offers a multisource, heterogeneous spatiotemporal data lake, a big data analytics foundation, and continually upgraded SaaS services.

Here, you can discover over 8PB of free geospatial data, manage private data for individuals or organizations, and utilize data as a driving force to accomplish analysis, publication, and application of data. This enables the creation of diverse and engaging data scenarios, providing an opportunity to experience the joy of exploring spatial data.



03 PIE-3D Builder rule-based modeling software

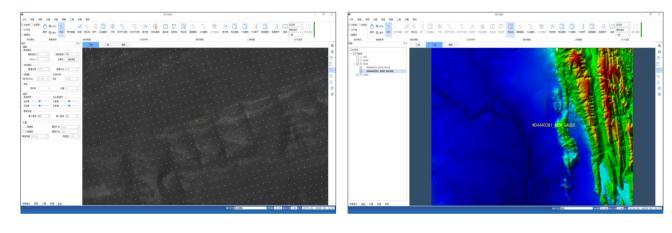
PIE-3D Builder supports the rapid and batch construction of large-scale 3D scene models, including underground utility networks, urban architectural complexes, high-precision maps (roads), underground tunnels, and property entities. It presents geographical spatial entities to users in three-dimensional form, vividly depicting the spatial relationships between objects. It enables three-dimensional spatial analysis and operations, saving users from the significant time and manpower costs typically associated with model construction and visualization expression. The software seamlessly integrates Building Information Modeling (BIM) with Geographic Information System (GIS), enabling the rapid and efficient construction of integrated digital twin foundations for both above-ground and underground environments. This empowers various fields, including City Information Modeling (CIM), the development of a realistic 3D China, digital twin cities, and transparent mines.





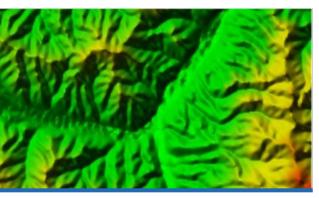
04 PIE-DEM intelligent acquisition and editing system

PIE-DEM intelligent acquisition and editing system is a specialized software designed for the professional editing of DSM/DEM generated from multiple sources of remote sensing images. It encompasses a range of professional processing functions, including the automatic establishment of satellite and aerial image projects, automatic stereo model recovery, 2D/3D editing of DSM/DEM, DEM stitching, DEM segmentation, accuracy checks for DSM/DEM, and auxiliary tools for DEM editing. The software features a clean and user-friendly interface, flexible operation, and efficient processing. It delivers reliable results and has been successfully applied to multiple DEM production projects in the field of surveying and mapping.

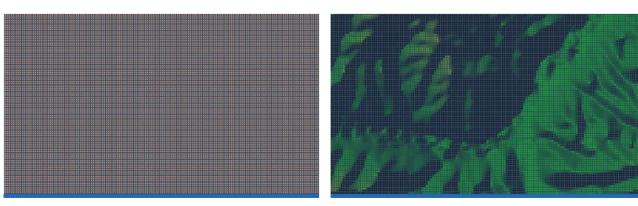




高效渲染



高精渲染





点渲染

05 PIESAT-OS 1.0, the next-generation satellite operating system

PIESAT-OS 1.0, the satellite operating system launched by PIESAT, is designed for various embedded software and computer hardware environments. It aims to be a reusable and platform-independent software product, providing robust support for satellite missions.

The core advantage of this system lies in its modular and layered design, enabling independent development, testing, and upgrading of various level components and functionalities, enhancing software quality and reliability. Furthermore, the system significantly simplifies the development process of flight software by providing comprehensive validation and testing services, abstract interfaces, and reusable foundational applications.

The satellite operating system PIESATOS 1.0 is adaptable to missions with short cycles, multiple application payload models, and satellites of various sizes. It accommodates diverse satellite constellations with satellites operating at different orbital heights, varied lifecycle requirements for low and high-orbit satellites, changes in satellite payload computer hardware platforms, variations in functionality for satellites in different orbits, and modifications in on-orbit satellite application tasks. Therefore, it can be widely applied in various satellite application scenarios, including navigation, communication, remote sensing, and scientific experiments.

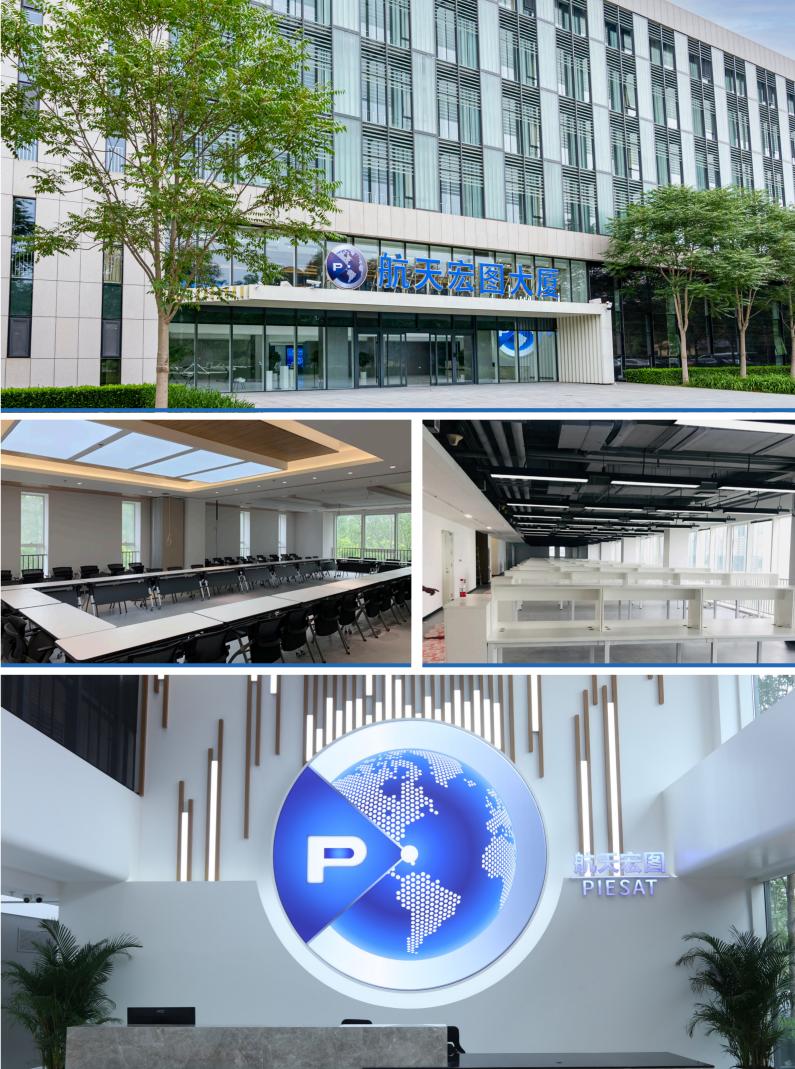




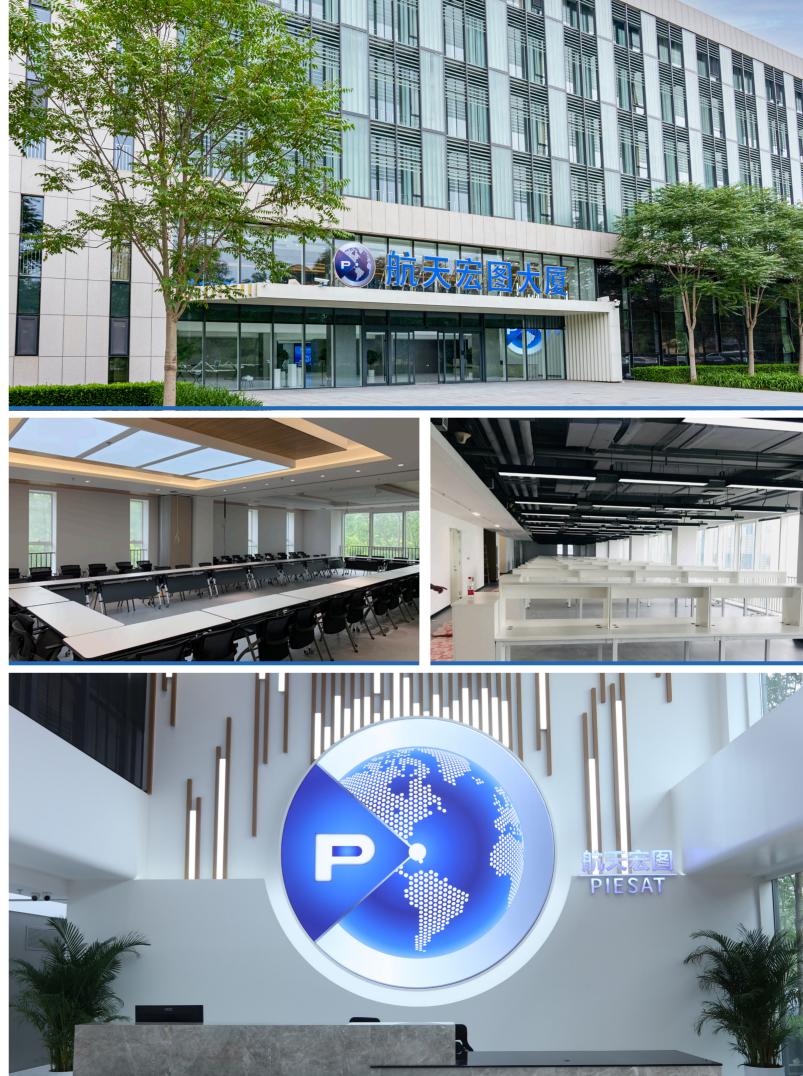
Listing of Remote Sensing Data Products Ushers in a New **Era of Digital Applications.**

In August 2023, PIESAT successfully listed 14 categories of data products across six major series on the Shanghai Data Exchange. These products are divided into such two main categories as standard products and thematic products. They aim to provide customers with stable and reliable data product support, along with continuous remote sensing data analysis services, and assist customers in achieving digitized and intelligent remote sensing application services. In the digital economy, where data elements are a core production factor, it holds significant importance for the high-quality development of Chinese modernization. PIESAT continues to seize the development opportunities in the era of data elements, aiming for more profound innovation. The Company is dedicated to exploring new paths in big data innovation applications and value creation. PIESAT aspires to become a leading "data service provider" in China, leveraging its robust data refinement capabilities to actively contribute to the construction of a digital government, digital economy, and a digitally integrated society.









IV.GREEN AND LOW-CARBON: PRACTICING SMART ENVIRONMENTAL PROTECTION TO BOOST GROWTH



- © SELF-DEVELOPED ELECTRIC UAVS PROMOTE ENERGY CONSERVATION AND CARBON **REDUCTION.**
- © THE SMART ECOLOGICAL MONITORING PLATFORM EMPOWERS PRECISION SUPERVISION.
- ◎ IT REMAINS COMMITTED TO ENERGY-SAVING AND LOW-CARBON PRACTICES AND EMBRACES GREEN DEVELOPMENT.

annan à B



Self-developed Electric UAVs Promote Energy Conservation and Carbon Reduction.

At present, China's ecological advancement has entered a crucial period with carbon reduction as a key strategic direction. This period focuses on promoting coordinated efficiency in pollution reduction and carbon reduction, facilitating comprehensive green transformation for economic and social development, and achieving a qualitative improvement in ecological and environmental quality from quantitative changes. As the deep integration of industrial digitization, intelligence, and green initiatives progresses, the vigorous development of strategic emerging industries and high-tech industries is a crucial aspect of accelerating the green transformation of development methods.

PIESAT independently develops and manufactures the PIE-U28 and PIE-U15 Pro electric UAVs, utilizing carbon fiber materials for their exteriors and powered by batteries. These specific practices involve lightweight design, energy-saving technologies, and environmentally friendly power sources. Through these measures, the energy consumption and carbon emissions of the UAVs can be reduced, contributing to carbon reduction and pollution control efforts. Moreover, electric UAVs generate relatively low levels of noise pollution, contributing to a reduction in their impact on human life and the ecological environment.



The Smart Ecological Monitoring Platform Empowers Precision Supervision.

Smart ecological big data platform

The "Guidelines to Comprehensively Promote the Development of a Beautiful China" issued by the Communist Party of China Central Committee and the State Council of China emphasizes the need to deepen the application of digital technologies such as artificial intelligence (AI). The goal is to build a digital governance system for a beautiful China and develop a green and intelligent digital ecological civilization.

Leveraging years of experience in the ecological environment sector and aligning with customer pain points, PIESAT has developed a smart ecological big data platform. This platform addresses challenges in ecological environmental protection, such as the proliferation of "chimneys" and data "islands," limited business collaboration, and constrained information development. By fully utilizing modern information technologies like big data, cloud computing, and AI, the platform aims to comprehensively enhance decision-making, regulatory governance, and public services in ecological environmental protection. It accelerates the transformation of environmental management approaches and working methods, fostering an "Internet+" green ecology. The ultimate goal is to achieve interconnected and open sharing of ecological environmental data.



02 Integrated space-air-ground monitoring platform in nature reserves

PIE Nature, PIESAT's integrated space-air-ground monitoring platform in nature reserves, is based on next-generation digital technologies such as satellite remote sensing, UAVs, Internet of Things (IoT) sensors, big data models, and digital twins. It utilizes multisource satellite remote sensing data to remotely interpret the types, distribution, and vegetation coverage of 23 categories within 5 classes of wetlands. This enables the monitoring of wetlands and mangrove resources, providing data support for the formulation of wetland conservation and planning policies.



 $\mathbf{0}$



03 Fine-scale remote sensing mapping analysis of wetlands

Wetlands, as an integral component of the community of life consisting of mountains, rivers, forests, farmlands, lakes, grasslands, and deserts, play a crucial role in ensuring ecological security and sustainable development. Based on the latest research achievements on the PIE-Engine Earth Science Cloud Computing Platform, a fine-scale classification of wetlands has been conducted. This research is aimed at addressing the global challenge of wetland degradation and focuses on the high-precision monitoring needs of wetlands in both China and worldwide. Leveraging the robust data resources and highperformance computing capabilities of the PIE-Engine platform, significant efforts have been dedicated to global fine-scale remote sensing mapping and analysis of wetlands. This achievement has been published in the international academic journal "GIScience & Remote Sensing."



It Remains Committed to Energy-saving and Low-Carbon **Practices and Embraces Green Development.**

PIESAT strictly abides by the Environmental Protection Law of the People's Republic of China, the Law of the People's Republic of China on Environmental Impact Assessment, and other relevant laws and regulations. Its daily operation does not involve the discharge of traditional industrial wastewater, waste gas, refuse and noise.

The Company regularly provides employees with training on energy-efficient office practices, environmental protection, and related topics. It consistently upholds the concept of green and sustainable development, implementing policies such as waste sorting and energy conservation to make a significant contribution to green development.









V. SURGING FORWARD WITH VIGOR: EACH TIER OF TALENT DISPLAYING EXCELLENCE

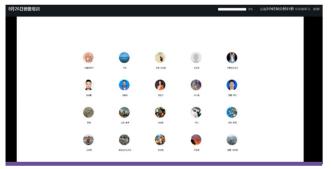
PROFESSIONAL SERVICES CATERING TO CUSTOMER NEEDS
 PROFESSIONAL SOLIDIFICATION OF BUSINESS FOUNDATION
 PROFESSIONAL SUPPORT FOR OPERATIONAL ASSURANCE



Professional Services Catering to Customer Needs

The Company's marketing service system extends across various regions nationwide, aiming to build a dedicated marketing team that wholeheartedly serves customers. The Company organizes periodic marketing system training sessions based on business needs and industry dynamics. In addition to on-site training, the Company relies on its corporate university and invites internal experts every week at a fixed time to provide training for the marketing team on aspects such as business knowledge, business etiquette, communication skills, and service awareness.







2023年8月26日销售培训: 销售 合同审批单填写要点及典型错... 2023-08-28





556人学习

2023年7月29日销售培训: 销售 合同审批单、开票流程培训&...



2023年8月19日销售培训: 近期 开票典型错误案例解析&女娲... 2023-08-22

2023年7月22日销售培训:保

函、保证金、询证函等财务流...



航天宏图 PIESAT

2023年8月12日销售培训: PMP 703人学习



2023年7月15日销售培训: 生态

环境信息化的发展与思考 &基...



股票代码

证金管理条例与中标服务费发.. ---2023-08-07 571人学习

王董谈如何做好一名销售(营销经理)

科技改变世界·遥感走进生活

PIESAT Infor

on Technology Co., Ltd.



2023年7月8日销售培训:财务专 题培训(发票表单填写等)&...

Professional Solidification of Business Foundation

Technology is the cornerstone for technology-based enterprises. In the current rapidly evolving and competitive environment, continuous enhancement of technical capabilities is essential to address the ever-changing market demands. In addition to regular specialized training for various business sectors, the Company consistently encourages employees to "go out" and participate in various professional academic forums and sharing sessions. This approach allows them to absorb knowledge from various sources, enhancing their own capabilities.



Professional Support for Operational Assurance

The Company organizes activities to enhance the capabilities of functional departments, aiming to promote their understanding of the business, strengthen service orientation, and contribute to operational excellence in collaboration with business departments. These activities include sessions where functional departments share business insights and participate in video skills improvement. The Company is driving the development of a functional team that possesses a deep understanding of the business, operates with high efficiency, provides strong service, and is capable of empowering others, which aims to support the Company's overall operational management.





VI. COLLABORATIVE DEDICATION: DEEPENING SERVICES ACROSS THE ENTIRE INDUSTRY CHAIN

SECURING THE UPSTREAM TO ACHIEVE DATA AUTONOMY
 STRENGTHENING THE MIDSTREAM FOR PLATFORM COMPATIBILITY
 SEIZING DOWNSTREAM OPPORTUNITIES FOR APPLICATION SCALABILITY
 COLLABORATING IN UNITY TO BUILD A SMART ECOSYSTEM TOGETHER

IT DEN





Securing the Upstream to Achieve Data Autonomy

The "Nuwa Constellation" project is undertaken by PIESAT with a focus on national strategic needs. It targets industry pain points such as data acquisition time lag, long information processing chains, lack of intelligent coordination in satellite operations, and inconvenience in mass applications. Centered around the new format of satellite internet, the project aims to build the entire industrial chain of high-resolution remote sensing. The goal is to achieve rapid global revisits for Earth observation, utilizing laser inter-satellite communication networking to establish a globally independent, controllable, and real-time remote sensing hybrid constellation.

Four SAR satellites at the first phase of the project were successfully launched into space on March 30, 2023. As of now, all systems are operating normally. The second phase, which involves the launch of 16 small SAR satellites under the "Zhuzhou Constellation" project, was officially announced in a launch ceremony held in July 2023. In the future, the Company aims to achieve full autonomy and control over its data sources. Leveraging real-time data from SAR, it plans to integrate and connect seamlessly with both upstream and downstream sectors of the industry chain.



Seizing Downstream Opportunities for Application Scalability

In 2023, PIESAT independently developed the remote sensing software series, PIE, and PIE-Engine products, which underwent more than ten upgrades and multiple iterations. These products serve various industry sectors, including natural resources, ecological environment, emergency management, meteorology, oceanography, water conservancy, agriculture, etc. They provide comprehensive consulting and design services, as well as full-process and full-factor remote sensing information analysis and processing. This supports government agencies in implementing precision regulation and scientific decision-making.



Strengthening the Midstream for Platform Compatibility

PIESAT, leveraging the distinctive features of its independently-developed PIE series products, initiated the process of preliminary and in-depth compatibility and adaptation with domestic infrastructure as early as 2019. It has actively contributed to the construction and support of a domestic ecosystem, accomplishing compatibility with various domestic information technology environments, including CPUs, databases, operating systems, and middleware. In 2023, the Company's PIE-Engine spatiotemporal data service platform achieved product compatibility and mutual recognition with Loongson. The PIE software also successfully completed rapid expansion and adaptation support for processing domestic and international commercial satellite imagery data, including Beijing-3 and other similar satellites. Additionally, PIE-Engine AI supported the world's first international standard for Geographic AI.

2008 2004	() () () () () () () () () ()	COLV.
200	ۥR#E	S THESE DELAY DELAY DELAY DELAY DELAY
C BREE PETRER		100
产品兼容互认证证书		Suma
产品兼容且从证证书		A NOW
EREBORARIO (L'IR 'EREF) BIRISH	产品兼容性认证证书	2 产品量容性不良证
Dependenties, and the set of the second second		and an and a state of the state
PECENCIPTO, N. 4-4-4-4-870182014400488398, 8917 1088339407088, 8483488 'X, A, B, R, A' 41445804	2712	Electronic box Statistics
ALBERT STOTA BY DECKER & O. R. E. N. YELENBERS ALBERT STOTA BY DOCUMENTS OF CONTRACTS		E. ezesttesttette. tite. sie
HES.	CARECOMMERCEMENTER	C. SCALES - BURNER - CONSTR. BA
	and the second s	esterested alter ester a
2. 9-		
-		The partition propage Anistry
AS RECEIN		S ANADIO-ANDREDHIM.
	(I	International Provider States
查目集中 有月27世	神州蜀春技术认证证书	SECONDER + 40 SELFE POILS. TO
	TAMORYTHING AND A CONTRACT	S STERRIGHT AND
	and the second division of the second divisio	8
		B) part second (
	a feel and the feel	
D		
产品要容性认证	RTBARN PIESAT	
广告兼各性以论	PERATURA	
	Party of Contract of Contract	解脱技术认证书
12222 20-014 2268 monteres	emperate a vigen of the fir her	BEBUIK TO BOAL 12
212*6	PERSONAL C VIRGIN DR. BO. DOC 181.	KARBABARABARCE <
	A	#795548B28
		学为云毓鹏云服务 开放能力 5.8
KING BASE	通用软硬件适配	PE-Expredition Review
产品集容性认证	联合认证计	555
	title strates	NAME INALL DATE DESCRIPTION
Construction of the All Constr		122 20238078-2024B068
Arada, thereaseness, tr, units instanticities		
TIRREPORTATION.	The second secon	
ALTERAL ADDRESS (BA. ALTER CONTACTION ADDRESS)		i.ek
CLARPERSONNELLER, ADDRESS '4. S. S. S. S. S' DIARBORINE		Anna Ling
PS. PROMINE, DR. DESCRIPTION.		Dealer States
PRIAMAGE, NE. EESTA, ASSAULT AND		Lan Parmera
MERTANELLE, DIGL. D. TARLEVELL		BOX HERITARY
ILLIGATE ADDRESS AND ADDRESS	Allegend house	And States
Partie Contraction		and the second

序号	产品	CPU	操作系统	数据库	포
1	PIE桌面工具集产品	飞腾、海光	银河麒麟V10	١	١
2	PIE-Engine 时空遥感云服务平台	鲲鹏、海光、 龙芯、飞腾	银河麒麟、统信		华为云、阿里云、 腾讯云、青云、 金山云等

Collaborating in Unity to Build a Smart Ecosystem Together

PIESAT, as a leading satellite internet company in China, relies on its perfect self-developed products, technical strength, brand influence and other superior resources and collaborates with external diversified ecological partners to build a smart spatial information industry ecosystem characterized by sustainable development and win-win partnership through such means as technical cooperation, service agent and business opportunity sharing.

In 2023, the Company entered into strategic cooperation agreements with various enterprises, including 360 Group, Beijing Xitong Wuzhou Zhilian Technology, CAS Space, Dahua Technology, China Mobile System Integration, as well as Henan Polytechnic University and the State Key Laboratory of Information Engineering in Surveying, Mapping and Remote Sensing (LIESMARS) at Wuhan University. Simultaneously, the Company's product, the "PIE-Engine Earth Science Remote Sensing Cloud Platform," has joined Huawei Cloud's cooperative products in its cloud store, officially becoming a cooperative partner with Huawei Cloud in the field of remote sensing satellites.





VII. STAYING TRUE TO OUR ORIGINAL ASPIRATION: PRACTICING PUBLIC WELFARE AND MANIFESTING CORPORATE RESPONSIBILITY THROUGH DILIGENT ACTIONS



© SMART EARTH LECTURE SERIES

- © SMELL THE FLOOD AND MOVE, DO FLOOD CONTROL AND DISASTER REDUCTION STRONG BACKING
- © CROSS-BORDER FUSION, INITIATE MARATHON AIR AMBULANCE
- © DIGITAL TRAVEL, ACTIVATE THE NEW MOMENTUM OF RURAL REVITALIZATION

- © PRODUCTION, TEACHING AND RESEARCH TO EDUCATE PEOPLE IN COORDINATION
- © "YOUXING" ESCORT, SUPPORT TO PROTECT THE ASIANGAMES AND METEOROLOGICAL
- MIXED REALITY, LIANG QICHAO MEMORIAL VISUAL INTERACTION
- © POPULAR SCIENCE LECTURES, LIGHTING UP STUDENT SPACE DREAM

Smart Earth Lecture Hall

PIESAT's "Smart Earth Lecture Hall" is dedicated to presenting the latest cutting-edge technologies, tracking real-time hot topics, and featuring prominent academicians, experts, and outstanding young talent in various fields such as aerospace, natural resources, ecological conservation, agriculture, and rural development. It aims to provide insights into current popular technological achievements.

In 2023, PIESAT expanded its "Smart Earth Lecture Hall" by incorporating industry-specific, regional, and segmented public demands. New additions include the Northwest Smart Earth Lecture Hall, the Atmosphere and Ocean Lecture Hall, and the Yangtze River Delta Smart Earth Lecture Hall. Renowned experts and scholars from various industries were invited to deliver cutting-edge presentations. These lectures were open to the public, both within and outside the industry, and collectively attracted nearly a million participants.



Taking an Integrated Approach to Industry, Research, and Education

Relying on school-enterprise cooperation strategic agreements, collaborative education-industry projects with the Ministry of Education of China, and other cooperative platforms, PIESAT adopts a three-pronged approach to collaboration known as "PIE into Campus," "Research Cooperation," and "Talent Development." Through this integrated cooperation model, the Company aims to deepen the integration of industry and education by involving enterprises in educational activities, bringing educational institutions into the corporate world, and jointly advancing the fusion of production and education. The collaboration facilitates the organic connection of the education chain, talent chain, innovation chain, and industry chain. By aligning with the latest demands of industrial and technological development, PIESAT contributes to driving reforms in university talent development.







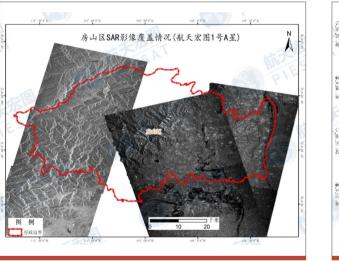


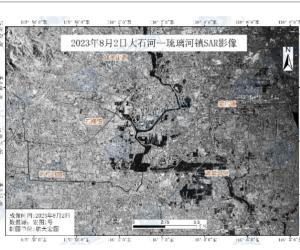


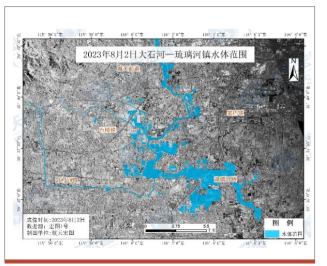


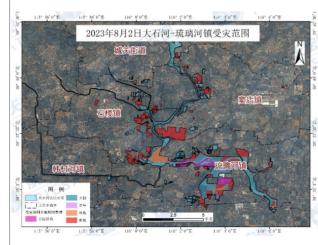
Immediate Flood Response Guaranteeing Strong Backing for Flood Control and Disaster Relief

Starting from July 29, 2023, Beijing and its surrounding areas experienced catastrophic heavy rain due to the influence of the residual circulation of Typhoon Doksuri, the subtropical high-pressure system, water vapor transport from Typhoon Khanun, and the combined effects of terrain. In the face of the severe flood control and disaster reduction situation, PIESAT took immediate action by mobilizing PIESAT-1 SAR satellites and deploying UAVs. Leveraging the 24/7 monitoring and alert system for flood and waterlogging disasters, they formed a collaborative monitoring and sensing system, known as the "Air-Space-Ground-Human-Internet," to support flood monitoring, flood evolution analysis, and disaster loss assessment in affected areas, including Fangshan District and Mentougou District in Beijing, 8 flood detention areas in Hebei Province, Zhuozhou under Baoding City in Hebei Province, Hebi City in Henan Province, Wuchang City in Heilongjiang Province, western Anhui Province, Zhejiang, Fujian, and other regions. PIESAT played a crucial role in providing fundamental support for flood control and disaster relief in the areas affected by the heavy rainfall.









"Youxing" Supporting and Ensuring Transportation and Meteorological Needs for the Asian Games

From September 23 to October 8, 2023, the 19th Asian Games took place in Hangzhou, Zhejiang Province. During the event, PIESAT provided comprehensive and effective information services and technical support for traffic meteorological warnings. Based on the characteristics of meteorological disasters occurring in different road sections around the Asian Games venue, the Company established road surface model algorithms and disaster identification algorithms specific to the traffic meteorological conditions in the road network around the Zhejiang area where the Asian Games were held.

It also disseminated relevant decision-making information. Due to unpredictable factors such as unusual weather and traffic accidents during the Asian Games, PIESAT's "Youxing" traffic meteorological service system was connected with public security agencies and emergency departments. This facilitated information sharing, presenting a comprehensive view that integrated three-in-one alarms, internet traffic congestion warnings, and road condition trend alerts. This system provided effective support for accurate assessment of emergencies and rapid emergency command during the event.

Cross-Border Integration Empowering the Launch of the Marathon "Air Ambulance"

On November 5, 2023, PIESAT partnered with the Ma'anshan 120 Emergency Center to ensure the successful organization of the "2023 Ma'anshan Caishiji" Half Marathon. The collaboration provided comprehensive medical emergency support services throughout the pre-race and race periods. The half marathon received A1 certification from the Chinese Athletics Association (CAA) and was themed "Leading the Way, Safeguarding the Yangtze." Co-hosted by the Anhui Provincial Sports Bureau and the People's Government of Ma'anshan City, PIESAT contributed to the event using the PIE-UX25 UAVs equipped with a self-developed multifunctional aerial delivery system, video transmission capabilities, remote voice communication, and other features. The UAVs provided comprehensive support and protection for the 15,000 participants throughout the entire race.









Mixed Reality Being Utilized for Visual Interaction at Liang Qichao Memorial Hall

In 2023, marking the 150th anniversary of the birth of Mr. Liang Qichao who is the foremost intellectual and educator of modern China, the PIESAT mixed reality team utilized cutting-edge technologies such as immersive projection, AR augmented reality, and MR mixed reality to digitize historical events related to Liang Qichao Memorial Hall in Tianjin. The perfect integration of science, technology, and artistic culture showcased the rich humanistic atmosphere, cultural heritage, and patriotic sentiment inherent in traditional Chinese culture. From the perspective of technological innovation, this achievement significantly improved the presentation of digital cultural and tourism content, providing visitors during the May 1st holiday with a visual interactive feast. Through innovative expression, it effectively conveyed and extended Mr. Liang Qichao's sincere dedication to the country.



Digital Cultural Tourism Activating New Dynamics for Rural Revitalization

Hidden deep in the heart of the Wuling Mountains, Shibadong Village was a small Miao ethnic minority village, where Chinese President Xi Jinping first proposed the idea of "targeted poverty alleviation." On the path of shaping tourism with culture and innovative exploration in Shibadong Village, PIESAT has digitally activated new dynamics for rural revitalization. For the Smart Cultural Tourism project in Shibadong Village, the Company provided a three-dimensional data foundation, constructing a virtual space and digital twin cultural tourism scene. This initiative aims to drive digital rural development, promote the cultural tourism industry in Shibadong Village, and empower overall rural development with smart solutions.





Science Popularization Lecture Illuminating Students' Dreams in Aerospace

PIESAT has been committed to collaborative efforts in the education market, creating PIE basic software training courses in specialized fields at universities. Simultaneously, the company extends its reach to primary and secondary schools, as well as kindergartens, using cutting-edge technologies to spark curiosity among children and inspire exploration in the realm of unknown scientific fields.







Honors of 2023

Award Category	Award Name	Awarding Institution		
	A Rating in the 2022 Listed Company Information Disclosure Assessment	Shanghai Stock Exchange		
	The 25th Golden Bull Award for Listed Companies	China Securities Journal		
Corporate governance	The 3rd "Best Interactive Communication IR Team" by COMEIN FINANCE	COMEIN FINANCE		
	Best ESG Practices Award for Listed Companies	Easy Board		
	Top 100 Service Enterprises in Beijing for the Year 2023	Beijing Enterprise Confederation, Beijing Entrepreneurs Association, and other units		
	First Prize for Technological Progress in Satellite Navigation and Positioning in 2023	GNSS & LBS Association of China (GLAC)		
Technical applications	Second Prize for the 2023 CCF Scientific and Technological Progress	China Computer Federation (CCF)		
	Digital Economy Industry Innovation Achievement Award	Global Digital Economy Conference 2023		
	First Prize in the 3rd "Tianzhi Cup" Al Challenge in 2023	Space Systems Department		
Competition and innovation	First Prize in the 2023 China's Innovation Challenge on Artificial Intelligence Application Scene (CICAS 2023) – Intelligent Remote Sensing Special Contest	Chinese Association for Artificial Intelligence, Next Generation Artificial Intelligence Development Center of the Ministry of Science and Technology of China		

航天宏图信息技术服份有限公司: 第三次全国土壤普查是国务院部署的一次重大的国情国力 调查,为落实各级政府对土壤皆查工作的邻署要求,我县于 2023 年 10 月份开始开展土壤普查外业调查工作,贵公司在中标后, 立即组织相关人员开展外重调查工作,在时间紧、任务重、标准 高、要求严的条件下,项目经理安喜军带领外业采样技术人员, 组织有方,克服种种困难,率先完成外业采样任务,在土壤普查 项目外业采样的四个标段中起到良好的表率作用,为我县土壤普 查进度奠定良好的基础,为我县顺利完成土壤三普工作提供了有 五足反矢足 (以前面), 所以至州的九风工来一直上厅足(1), 百 力支撑和技术保障。 在此, 谨向贵单位对我县第三次全国土壤普查工作的大力支 持和辛勤付出表示感谢!愿在以后的工作中携手并进,加强合作! 西吉县第三次全国人 北京市大数据中心 感谢信 救天宇国信息技术阶份有限公司. 我工艺面信息技不做好有限公司: 一元复始,万象更新,值此新春佳节未临之际,北京市大载 据中心现各位领导、全年于和职工新春快乐,竟年吉祥! 2022年,在市委市政府及市经济和信息化局的统一部署以 及大數据行动计划"回梁八柱深地基"的总体设计下,北京市大 数据中心在筑基工程中加速了政府数据和各行业领域空间数据 融合,实现了开展地理空间信息服务、运营、应用模式创新。这 些成绩的取得离不开费单位的大力支持。特别是王代林、刘扬炀、 周豪和张国传等同志爱岗敬业、技术能力强、专业程度高,展现 了优秀的业务水平和企业文化。有力的保障了遥感专区项目的正 1 化力加工方小1 下土业人口、百万加加市下、电池 (本 入加口) 带开展,在此, 酱肉黄单位一直以来的关心和支持, 致以最高的 敬意和衷心的感谢。 衷心希望费单位一如既住关心和支持北京市大数据中心发 恩,我们将不断提高工作水平,继续保持与要单位良好合作,共 同创新发展取得新成绩。 と京市大教報日 二月 16

感谢信

凌源市自然资源局 感谢信 辽宁航天宏图无人机科技有限公司: 首先,非常感谢责公司对凌源市智慧矿山工作的支持与 推动! 责公司作为我市招商引资的合作单位,公司基于空天地 一体化监测体系,协助我市解决矿山监管问题。自智慧矿山 项目工作开展以来,多次向市领导汇报、交流工作进展并沟 通需要解决的关键问题。以创新的技术思想、以用户为核心 的服务态度,初步突破了矿山监管所面临的问题和挑战。在 时间紧,任务重的严峻情况下,项目组成员加班加点,克服 因用,以扎实的技术优势、认真负责的工作态度,为项目的 顺利推进提供了技术保障。责公司既保证进度又严把项目质 量关,确保按时高质量完成此项工作,体现出贵公司资源雄 厚、实力超群,在极短的时间内完成了项目规划、调研和实 施工作。充分得到了市委领导、局领导的高度认可。 为此,凌源市自然资源局对贵公司凌源智慧矿山项目组 全体成员的辛勤付出表示由衷感谢!希望再接再历,与我单 位继续加强合作,为凌源市矿产资源有产产管保驾护航! 18 m



2023 PIESAT annual ESG report

Search index

	Contents	SDGs	GRI standards	CASS-4.0
	President's Statement		GRI 102	P2.1、P2.2
	Company Profile		GRI 102	P4.2、P4.3
About PIESAT	Organizational Structure		GRI 102	P4.1
	Corporate Culture		GRI 102	G1.1、G1.2
	Evolution History		GRI 102	
	Enterprise Governance		GRI 102	G3.2、G3.3、M1.1
Standardized Governance:	Compliant Operation		GRI 102	G4.1、M1.4
Strengthening the Foundation for Stable	Information Construction		GRI 418	S2.14、E3.1
Development	The Foundation of Party Building		GRI 102	G3.1
	Responsibility Management		GRI 101、GRI 102	G2.1、G6.1
	The Inaugural Launch of the "Nuwa Constellation" Fills the Void in the InSAR Satellite Application Market		GRI 102	P4.2、M3.6
Steady Progress for Sustainable Success: Upholding Technological	The Winning Bid of an RMB 100-million OverseasProject Contributes to the Digital Transformation in BRI Participating Countries		GRI 102	P3.1、M2.1、M3.6
Innovation and Achieving New Heights in Innovation	New Products Constantly Emerge to Serve the Building of a Digital China		GRI 102	P4.2、M2.1、M3.6
	Listing of Remote Sensing Data Products Ushers in a New Era of Digital Applications		GRI 102	P4.2、M3.6
Green and Low-Carbon:	Self-developed Electric UAVs Promote Energy Conservationand Carbon Reduction		GRI 201	E1.3、E1.7
Practicing Smart Environmental Protection to	The Smart Ecological Monitoring Platform Empowers Precision Supervision		GRI 201	E1.3
Boost Growth	It Remains Committed to Energy-saving and Low-Carbon Practices and Embraces Green Development		GRI 302、GRI 305	E1.1、E3.1
Surging Forward with Vigor.	Professional Services Catering to Customer Needs		GRI 404	S2.14、S2.16
Each Tier of Talent	Professional Solidification of Business Foundation		GRI 404	S2.8
Displaying Excellence	Professional Support for Operational Assurance		GRI 401	S2.14、S2.16
	Securing the Upstream to Achieve Data Autonomy		GRI 102	M3.4、M3.6
Collaborative Dedication:	Strengthening the Midstream for Platform Compatibility		GRI 102	M3.4、M3.6
Deepening Services Across the Entire Industry Chain	Seizing Downstream Opportunities for Application Scalability		GRI 102	M3.4、M3.6
	Collaborating in Unity to Build a Smart Ecosystem Together		GRI 102	M3.4、M3.6
	Smart Earth Lecture Hall		GRI 102	P3.1
	Taking an Integrated Approach to Industry, Research, and Education		GRI 102	P3.1
	Immediate Flood Response Guaranteeing Strong Backing for Flood Control and Disaster Relief		GRI 415	P3.1
Staying True to Our Original Aspiration:	"Youxing" Supporting and Ensuring Transportation and Meteorological Needs for the Asian Games		GRI 102	P3.1
Practicing Public Welfare and Manifesting Corporate Responsibility Through	Cross-Border Integration Empowering the Launch of the Marathon "Air Ambulance"		GRI 102	P3.1
Diligent Actions	Mixed Reality Being Utilized for Visual Interaction at Liang Qichao Memorial Hall		GRI 102	P3.1
	Digital Cultural Tourism Activating New Dynamics for Rural Revitalization		GRI 102	P3.1
	Science Popularization Lecture Illuminating Students' Dreamsin Aerospace		GRI 102	P3.1
	Honors		GRI 102	A3
		GRI 101	A5	
	Reader Feedback			A6

Reader feedback

Dear readers,

Thank you very much for taking time out of your busy schedule to read the 2023 Annual ESG Report of PIESAT Information Technology Co., Ltd. To provide you and other stakeholders with more valuable information and effectively promote the Company to improve its ability and level of fulfilling social responsibilities and optimize the quality of ESG reports, we are sincerely looking forward to your opinions and suggestions.

		Multiple-cho	ice (please tio	k your choice)			
1. Your overall assessment of this Report:							
□ Very good	□ Good	General	🗆 Bad	Very bad			
2.What do you thir	2.What do you think of the responses to and disclosure of the concerns of stakeholders in this Report?						
Very good	□ Good	General	🗆 Bad	Very bad			
3. What do you thi	3. What do you think of the performance of PIESAT in fulfilling its social responsibilities?						
□ Very good	🗆 Good	General	🗆 Bad	Very bad			
4.What do you thir	nk of the performar	ce of PIESAT in energ	gy conservation ar	d environmental protection?			
□ Very good	□ Good	General	🗆 Bad	Very bad			
5.What do you thir	nk of the performar	ce of PIESAT in busir	ness management	?			
Very good	□ Good	General	🗆 Bad	Very bad			
6.What do you thir	6.What do you think of the clarity, accuracy and completeness of the information, indicators and data disclosed in this Report?						
Very good	□ Good	General	🗆 Bad	Very bad			
7.Do you think the	layout and design	of this Report are rea	der-friendly?				
□ Yes	🗆 No						

What do you say about PIESAT and the content of this Report?

Your contact information:



Employer Position