



T.C.

ÇANAKKALE ONSEKİZ MART UNIVERSITY

ASTROPHYSICS RESEARCH CENTER

and

**ULUPINAR
OBSERVATORY**

**2021-2025
STRATEGIC
PLAN**

Çanakkale –2021

1. UNIT/ SENIOR MANAGER PRESENTATION

The Çanakkale Onsekiz Mart University Astrophysics Research Center (ÇAAM) and the Ulupınar Observatory have become a well-known unit not only at our University but also at the international level with their history and achievements approaching 20 years. It ranks high among the most effective research centers and observatories in the field of astronomy, astrophysics and space sciences in our country. Thanks to the scientific studies carried out by the members of the Center and the publications and projects they produce, astronomy and space sciences have become one of the few most effective fields of our University. Apart from scientific activities, Ulupınar Observatory is one of the most prominent units visited by our University. Activities such as science-society activities, science camps, school visits, student-teacher trainings that have been held at the observatory for many years are important studies that show the meeting of our University with society. ÇAAM and Ulupınar Observatory have taken on an important role for the dissemination of science to society, the formation of space awareness and the increase of the social impact factor of our University and are trying to continue this responsibility by increasing.

The cooperation and protocol between ÇAAM and Ulupınar Observatory with Istanbul University Observatory Application and Research Center, as well as the establishment and operation of a robotic telescope with a diameter of 60 cm within our center, shows a partnership that is one of the exemplary collaborations in our country, and even the only example in its field. In this context, important activities such as joint TUBITAK projects, student exchanges and supporting graduate students with scholarships are carried out. There are also plans for these collaborations to be made with the TUBITAK National Observatory, the Eastern Anatolia Observatory and the Turkish Space Agency.

In order to further increase the quality and quantity of important scientific research and science-society activities being conducted, it is very important that we increase the number of young scientists, solve our physical space problems urgently, and support them by providing an annual budget in the name of sustainability.

Thanks to its competent members in its field, our center not only produces qualified publications and projects, but also devotes considerable effort and time to activities for the dissemination of scientific culture through national and international collaborations. In this sense, we think that we are the most prominent research center of our university and that we will make further progress in this regard, and we are making plans in this direction. We would like to state that we have the experience to sign much more important works for our country and science in the field with the support provided by our university administration, and we will work with all our efforts to achieve this.

Prof. Dr. Faruk SOYDUGAN
Manager

2. Astrophysics Research Center and Ulupinar Observatory Promotion:

May 19 Mart 2002 Çanakkale Onsekiz Mart University Astrophysics Research Center (ÇAAM) and Ulupinar Observatory were established in 2001 and officially opened on May 19, 2002. The Center and Observatory are located at an altitude of 410 m in the southern part of the "Radar Hill", 10 km from the center of Çanakkale, close to the village of Ulupinar.

Currently, a meteorological station, 4 telescopes with a mirror diameter of 30 cm, 40 cm, 60 cm and 122 cm are operated in our observatory in 4 different domes. There is also a library, workshop, classroom and conference hall in the building of the center. Our center has a total of 29 members, including 16 lecturers in the Physics Department of Çanakkale Onsekiz Mart University (ÇOMU), 6 lecturers in the Space Sciences and Technologies Department, 5 members in other faculties/colleges affiliated to our University and 2 retired members. The members of the Center are actively working in different fields of specialization in the fields of astronomy, astrophysics and space sciences. The titles related to the areas of expertise of the members of the Center can be listed as follows:

1. Stellar structure and evolution
2. Interacting double stars
3. Astroloids
4. Exoplanets
5. Solar physics
6. High energy astrophysics
7. Cosmology

Although many publications are made by the center members at national and international level every year at our center, many TUBITAK projects have been carried out by the center members or the center members have taken part in these projects as researchers. Under the supervision of the members of the Center, many graduate theses have been completed by using the facilities of the Center. In addition, our center has international cooperation with many countries (such as Italy, Poland, Czech Republic). Apart from all these scientific collaborations and publications, our research center plays an important role in science education and science transfer to society by organizing science-society events, camps, public days, teacher and student education programs. In this context, one of the most prominent units of our University opened to the society is he's someone.

3. MISSION, VISION, BASIC VALUES

3.1. Our mission

To provide observational and theoretical research opportunities in the field of astronomy, astrophysics and space sciences, to encourage the production of scientific publications, projects and events, to support education and training in astronomy and space sciences and to inform the society.

3.2. Our Vision

To be an effective organization at national and international level in the field of astronomy, astrophysics and space sciences, to contribute to the formation of space awareness and the meeting of science with society.

3.3. Our Core Values

- To be committed to scientific and ethical values.
- To adhere to the basic values of our Republic, the principles and reforms of Mustafa Kemal Atatürk.
- To work with a sense of patriotism by having national values.
- To provide equal service to everyone without discrimination of religion, language, race and gender.
- To respect employee rights.
- To follow scientific and technological developments continuously
- Being sensitive to the environment
- To be aware of social responsibility.

4. OBJECTIVES

- To provide observational research opportunities in the field of astronomy, astrophysics and space sciences.
- To contribute to scientific publications.
- To plan and conduct scientific research by establishing national and international partnerships.
- To contribute to the educational activities aimed at educating scientists
- To organize science camps, science-society projects and science trainings or to be a stakeholder in organized events.
- Within the scope of the region and the whole country, there are different classes from preschool to graduate and

to accept scientific-based visitors for schools and/or students of degrees and to inform them in the field of activity.

- Organizing popular events aimed at informing teachers, students and everyone who requests about the field of activity.

5. targets

- Increasing the quantity and qualities of scientific research in the field of astronomy, astrophysics and space sciences.
- Increasing the quantity and quality of national and international publications in the field.
- To increase the number of collaborations and projects at national and international level in the field of activity.
- Organizing popular events to create space awareness.
- To create effective research groups for the education of young scientists.
- To contribute to the Decoupling of the academy and the society by providing science-society meetings in the field of astronomy, astrophysics and space sciences.

6. LEGAL OBLIGATIONS AND LEGISLATION

The basic legislation that determines the legal boundaries of higher education institutions is the Higher Education Law No. 2547, which has the nature of a Constitution and framework.

6.1 Laws

- Law No. 2809 on the Organization of Higher Education Institutions
- Higher Education Personnel Law No. 2914
- Higher Education Law No. 2547
- Civil Servants Law No. 657
- Right to Information Law No. 4982
- Public Financial Management and Control Law No. 5018
- Allowance Law No. 6245
- Pension Fund Law of the Republic of Turkey No. 5434
- Social Insurance and General Health Insurance Law No. 5510
- Public Procurement Contracts Law No. 4735
- Public Procurement Law No. 4734

- Law No. 6183 on the Collection Procedure of Public Receivables
- Current Year Central Government Budget Law
- State Procurement Law No. 2886
- Law of the Court of Accounts No. 6085
- Tax Procedure Law No. 213
- Bail Law No. 2489
- Income Tax Law No. 193
- VAT Law No. 3065
- Stamp Duty Law No. 488
- Law No. 5746 on the Support of Extension and Development Activities

6.2 Regulations

Çanakkale Onsekiz Mart University Astrophysics Research Center and Ulupınar Observatory Regulations

7. INTERNAL AND EXTERNAL STAKEHOLDERS OF THE INSTITUTION

Determination of internal and external stakeholders within the scope of stakeholder identification studies and p aydaş

the interaction with our university has been determined.

Astrophysics Research Center and Ulupınar Observatory		
Our Stakeholders	Internal Stakeholder	External Shareholder
university		
Academic Staff	X	
Administrative Staff	X	
Students	X	
Student Families		X
Graduates		X
Other Universities(Domestic)		X
Other Universities(Abroad)		X
PUBLIC ORGANIZATIONS (<i>Prime Ministry, ministries, Governor's Office, Court of Accounts, TUBITAK-TUBA, KOSGEB, Turkish Patent Institute, etc. Specify the Institutions</i>)		
TUBITAK National Observatory (TUG)		X
Eastern Anatolian Observatory (DAG)		X
Provincial Directorate of		X
Provincial Directorate of Youth and Sports		X

8. DISTRIBUTION OF FACULTY MEMBERS WHO ARE MEMBERS OF OUR INSTITUTION

The following table shows the distribution of the teaching staff distributions in the research center according to age. There are a total of 29 members in the institution, but a total of 11 Professors, 5 Associate Professors, 3 Doctors. There are faculty members, 7 research assistants and 3 lecturers. 23% of the institution is made up of female employees and 77% of the institution is made up of male employees.

Academic Title	Age Groups							
	<30		30-39		40-50		>50	
	K	E	K	E	K	E	K	E
Prof. Dr.					1	2		8
Assoc. Dr.			1		3	1		
Dr. Teach.					1	2		
Arch. The		1		4		2		
Teach See. Dr.						1		1
Teach See.						1		

9. Dec. STRATEGIC OBJECTIVES, STRATEGIC TARGETS AND PERFORMANCE INDICATORS BETWEEN 2021-2025

9.1 Strategic Objective 1: To be a scientific, entrepreneurial and innovative university

Strategic Goal 1. Development of scientific, entrepreneurial and innovative studies at the same time

Strategy 1.1. Hosting scientific studies

Strategy 1.2. To conduct educational activities on entrepreneurship and innovation

Performance Indicators:	2021 H	2021 B	2022 H	2022 B	2023 H	2023 B	2024 H	2024 B	2025 H	2025 B
National and international congress, number of symposiums, workshops	1		1		1		1		1	
Number of projects with domestic	1		1		1		1		1	
Number of projects supported	1				1					
SCI, SSCI, AHCI number of articles	10		11		12		12		13	
Number of articles in national and international refereed	4		5		6		6		6	
The number of trainings given on entrepreneurship and innovation			1				1			
Number of specialty students	3		3		3		3		3	
Rating: Survey	1		1		1		1		1	

H: Targeted; B: Achieved

9.2 Strategic Objective 2: To provide quality education and training activities

Strategic Goal 1. Development of educational activities Strategy

1.1. To organize national training and seminars Strategy

1.2. To organize international training and seminars

Performance Indicators:	2021 H	2021 B	2022 H	2022 B	2023 H	2023 B	2024 H	2024 B	2025 H	2025 B
Graduate student activities	1		1		1		1		1	
Graduate student seminars	1		2		2		2		3	
Number of domestic and	5		6		7		7		8	

H: Targeted; B: Achieved

9.3 Strategic Objective 3: Development of relations with stakeholders

Strategic Goal 1. To make the relations with stakeholders effective

Strategy 1.1. Conducting joint activities with students and graduates

Strategy 1.2. Conducting joint activities with the public and private sectors

Performance Indicators:	2021 H	2021 B	2022 H	2022 B	2023 H	2023 B	2024 H	2024 B	2025 H	2025 B
Number of public days events	1		2		3		3		4	
Meeting with internal stakeholders	1		1		1		1		1	
Meeting with external stakeholders	1				1					
School visits	3		4		4		5		5	
Rating: Survey	1		1		1		1		1	

H: Targeted; B: Achieved

9.4 Strategic Objective 4: To Improve the Recognition of the Institution and to Strengthen the Institutionalization

Strategic Goal 1. Increasing corporate visibility **Strategy**

1.1. To increase the promotion activities of the
institution **Strategy 1.2.** Obtaining corporate
accreditation

Performance Indicators:	2021 H	2021 B	2022 H	2022 B	2023 H	2023 B	2024 H	2024 B	2025 H	2025 B
Improvement of the academic achievement order of the	1		2		2		2		2	
The number of news stories in the	1		2		3		3		4	
Number of activities of corporate	1		2		2		2		2	

H: Targeted; B: Achieved

10. ASTROPHYSICS RESEARCH CENTER and ULUPINAR OBSERVATORY NEEDED THE NECESSARY RESOURCES FOR THEIR PURPOSE OF PROVIDING SERVICESYACI

10.1 Need for Support Staff:

Although there are 29 members of the astrophysics research center (2 retired), there are many graduate theses, undergraduate education support activities, TUBITAK and BAP research projects and a significant number of science and society activities carried out at the center. There are a total of 4 actively used telescopes and various CCD cameras connected to them in the center. Apart from these instruments, they are also available in different telescopes used in science society events. In order to eliminate possible problems that may occur in the tools located in the center and to increase the security of the institution, the personnel whose numbers and qualifications are indicated in the table below are needed. Due to the fact that Ulupinar Observatory, which is connected to our center, is located on a separate campus outside the city, there are laboratory materials that have scientific and material value and researchers work overtime during the night, security personnel who will provide 24/7 security is an essential need.

Astrophysics Research Center and Ulupinar Observatory Personnel Requirement Table			
Adminis trative	Mission description	Numb er	Explain ma
Technical Support	Expert	2	The technique that will occur in the tools located in the center he performs the tasks assigned to him regarding failures.
Support Services	Security Personnel	2	It does business related to the security of the central buildings 24/7.

10.2 The Need for Physical Space:

Many graduate thesis, TUBITAK and BAP projects are carried out at our center.

At the same time, our center actively participates in science community events (teacher, student trainings, school visits, science camps, etc.) edits. Effectively carried out

considering that academic studies and scientific community activities will increase over the years, the need for a physics building can be summarized as follows. The central building, which has been used for about 20 years, is a prefabricated structure and although it was built for temporary use, it is being tried to be used despite the fact that it has been going on for many problematic years. The building is in danger of collapse and contains risks in terms of occupational safety. For this reason, this central building, which is still being used for research, education and science -society activities, urgently needs to be demolished and replaced with a durable building. In addition, those who have maintenance problems (getting water inside, plaster and paint spills, dome mold, moisture problems, etc.) laboratory instruments are damaged because telescope buildings are not maintained either. It is important that these buildings also undergo serious maintenance and repair at least once a year, and this becomes systematic. Otherwise, physical impossibilities will lead to significant disruption or even stoppage of both research and science-society activities. If the physics building and structure problems are not solved, it will not be possible to achieve the important part of the goals given above.

11. swot analysis

Education, training and management activities were examined from various angles and the strengths, weaknesses, opportunities and threats of the research center were evaluated in line with the institutional goals of our university. Evaluation;

- Compliance with the corporate mission, vision, goals and objectives,
- Corporate quality policy and predetermined strategic goals,
- Research activities,
- Evaluation of academicians,
- Student/academic communication,
- It was carried out within the scope of academic, administrative and support units.

11.1 Strengths

- In general, all employees of the university have the corporate mission, vision, purpose and
it depends on your goals.

- Corporate governance in accordance with the institutional mission, vision, goals and objectives of the university
trying to implement strategies by all personnel.
- The presence of academic staff with the necessary competence in the field.
- The fact that our academicians have the capacity to produce qualified academic publications and works on their subjects.
- The fact that our academicians have the potential to produce qualified projects about their subjects.
- The expected level of academic national and international connections
- The number of publications and citations per faculty member should be at the expected level
- Having library and e-library facilities offered to academicians and students
- Despite the limited physical opportunities, thanks to our successful education policy, the student quota allocated to our programs every semester is at a sufficient level.
- Academic staff should have sufficient formation in transferring information to students
- Academic staff to ensure that student communication is at the desired level
- Academic staff administrative staff communication should be at the desired level
- Our university has one of the largest and most comprehensive libraries in the region and provides instant access to online resources and databases with the username and password given to our students for off-campus access.
- To have the opportunity to participate in national and international seminars, conferences and scientific meetings requested by academic staff and to have partial support

11.2 weaknesses

- The presence of urgent and long-standing problems in physical spaces that will affect research and science-society activities at a high level
- There are interruptions in research opportunities (prolongation of troubleshooting and the effect of physical conditions)
- Staff problems of young scientists (especially the inability to hire research assistants, specialists and lecturers in the field of astronomy, astrophysics and space sciences in recent years)
- Some shortcomings in the library and especially e-library facilities offered to academics and students

11.3 Opportunities

- The experience, ability and development desire of the teaching staff is sufficient.
- The increase in the willingness of society to solve its current problems scientifically
- Different institutions and organizations of society need the support of the University
- Support to community-oriented projects of institutions such as SPO, TUBITAK and National Agency
giving
- The existence of European Union Framework Programmes
- Having the experience to contribute to the region for space awareness within the framework of the goals set due to the establishment of the Turkish Space Agency
- One of the most suitable observation conditions in the region in the field of observational astronomy and astrophysics
having someone
- Science-society activities, spreading science to society and having significant experience and team in the university-society meeting

11.4 Threats

- The number of young scientists is small and the staff opportunity cannot be offered to willing candidates
- The number of academic assistants, such as specialists, is lower than the optimal level.
- Budget problems experienced to ensure sustainability
- Lack of technical equipment, technicians, machinery equipment and consumables
- Rapid renewal of technology and the need for frequent renewal that occurs
- Lack of sufficient diversity in order to produce solutions to the technical and technological problems experienced in the regional industry
- The buildings at the observatory have serious renovation and maintenance problems at a level that will stop research

12. evaluation

When the opportunities we have, our weaknesses and strengths are evaluated, our Center the following are the things that need to be done for the purpose of development:

- Increasing the number of young scientists and staff opportunities (in relevant departments)
- Renovation of physical facilities (demolition of the central building, which is in danger of collapse)

renovation, radical maintenance and repairs of telescope buildings)
strengthening

- With different universities in the region (Istanbul U., Fishesir U., Uludağ Ü., Namık Kemal Ü., Kırklareli Ü. and Thrace U.) to cooperate and to make attempts to acquire the title of "Regional Observatory" and/or a joint research center and observatory
- Increasing the number and quality of national and international publications
- Increasing the number and quality of national and international projects
- Provision of an annual budget
- To carry out the necessary works, especially in the digital environment, in order to increase the recognition of our center
- Increasing the quantity and quality of science-society activities
- Providing a budget for science-society activities, student-teacher training and preparing areas and tools
- Increasing the number of support staff (experts and security guards)