

The National Space Grant Office requires two annual reports, the Annual Performance Data Report (APD – this document) and the Office of Education Performance Measurement System (OEPM) report. The former is primarily narrative and the latter data intensive. Because the reporting timeline cycles are different, data in the two reports may not necessarily agree at the time of report submission. OEPM data are used for official reporting.

Georgia Space Grant Consortium
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Consortium URL: <http://www.gasgc.org>
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PROGRAM DESCRIPTION

The National Space Grant College and Fellowship Program consists of 52 state-based, university-led Space Grant Consortia in each of the 50 states plus the District of Columbia and the Commonwealth of Puerto Rico. Annually, each consortium receives funds to develop and implement student fellowships and scholarships programs; interdisciplinary space-related research infrastructure, education, and public service programs; and cooperative initiatives with industry, research laboratories, and state, local, and other governments. Space Grant operates at the intersection of NASA's interest as implemented by alignment with the Mission Directorates and the state's interests. Although it is primarily a higher education program, Space Grant programs encompass the entire length of the education pipeline, including elementary/secondary and informal education. The Georgia Space Grant Consortium is a Designated Consortium funded at a level of \$575,000 for fiscal year 2014.

PROGRAM GOALS

Fellowships and Scholarships

Goal 1: Deliver a competitive scholarship/fellowship program that promotes STEM excellence in students and faculty.

Objective 1.1

Ensure competitive distribution of scholarship/fellowship funds.

Action 1.1.1: Institute a centralized statewide application process to ensure equitable distribution of awards.

Action 1.1.2: Engage women and underrepresented populations (consistent with their higher education enrollment according to the National Center for Education Statistics for the State of Georgia) with scholarship/fellowships in STEM disciplines.

Action 1.1.3: Utilize the GSGC advisory board for oversight of awards to ensure equitable distribution.

Objective 1.2

Create partnerships among student fellowships awardees and mentors involved in NASA's missions and at NASA centers

Action 1.2.1: Increase number of students placed at NASA Academies and other NASA programs.

Action 1.2.2: Pair students with faculty mentors.

Research

Goal 2: Support customer-focused research activities that develop innovative technologies, knowledge and infrastructures to advance NASA's space and aeronautics objectives.

Objective 2.1

Integrate research efforts with those of NASA and other stakeholders, with emphasis on research with direct applications to the state of Georgia.

Action 2.1.1: Facilitate researcher ties with aerospace industry.

Action 2.1.2: Connect NASA personnel, technology and resources to state programs.

Action 2.1.3: Award travel grants to encourage faculty to interact with NASA researchers at NASA field centers or other Federal labs.

Action 2.1.4: Leverage and support Georgia's expertise in Earth sciences, agricultural sciences and remote sensing to support NASA's environmental goals.

Objective 2.2

Provide authentic experiences for students to identify current and potential uses of NASA technologies.

Action 2.2.1: Expand existing collaborations with NASA Centers and Space Academies, NASA C-9 Microgravity aircraft, High Altitude Student Platform (HASP), sounding rockets, and other opportunities

Objective 2.3

Emphasize support for Space Grant Fellows opportunities.

Action 2.3.1: Create new initiatives among consortium members to give Space Grant Fellows opportunities to work at GSGC member institutions.

Action 2.3.2: Provide seed money for young faculty members to write proposals and start-up money for small research projects, with priority to young faculty members who mentor dual degree students or who have been space grant fellows and are currently working in the State of Georgia.

Objective 2.4

Ensure competitive distribution of research funds.

Action 2.4.1: Release an annual statewide call for proposals to all affiliates.

Action 2.4.2: Utilize a selection process that places emphasis on collaboration at HBCUs.

Action 2.4.3: Target strong participation from underrepresented populations in research projects.

Objective 2.5

Disseminate research results to NASA, stakeholders, and national audience.

Strategy 2.5.1: Require research award recipients to submit research outcomes for publication in conference proceedings and referred journals.

Education

Goal 3: Provide opportunities for students and educators in STEM disciplines through a progression of programs that immerse them in authentic science and engineering experiences to support the NASA mission and its human capital goals.

Pre-College

Objective 3.1

Provide STEM professional development programs using NASA's content and resources to provide pre-service and in-service teachers with learning experiences that build critical instructional STEM skills to better prepare their students for STEM careers.

Action 3.1.1: Provide short-term and long-term professional development workshops for K-12 educators. For example, these may include providing speakers, NASA educational materials sources, rocket launch assistance, etc.

Action 3.1.2: Provide stipends, scholarships, internships for educators to participate in professional development opportunities.

Action 3.1.3: Use social network tools, real-time videoconferencing, Internet multimedia, handheld devices, and other dissemination infrastructures to immerse educators in NASA science and technology.

Action 3.1.4: Create a NASA Community of Learners in the state of Georgia for collaboration, networking and support that will establish an affinity among their students to pursue careers in STEM fields.

Objective 3.2

Support Georgia's informal STEM education organizations that use NASA content to promote STEM literacy and support the development of innovative programs that help promote NASA's exploration mission.

Action 3.2.1: Establish a collaborative with informal education providers to develop a cadre of qualified presenters with experience in NASA missions and related content.

Action 3.2.2: Establish a network with informal education providers for accessing NASA materials that will enhance participant's skills in STEM disciplines and inform them of STEM career opportunities.

Objective 3.3

Engage pre-college students in hands-on research and engineering experiences which lead to an increased knowledge of NASA science and technology disciplines, missions, and exploration programs.

Action 3.3.1: Link students to NASA mission opportunities through the Internet, NASA social networks, and other interactive technologies.

Action 3.3.2: Support middle and high school students engaged in NASA challenges and competitions and other research applications that inspire and motivate them to pursue studies in STEM disciplines. Sample programs include Student Launch Initiative (SLI), Team America Rocketry Challenge, Fundamental Aeronautics Challenge, Great Moonbuggy Race, and the Waste Limitation Management and Recycling Design Challenge.

Action 3.3.3: Connect students to mentors and interns through social networking technologies to promote collaboration.

Action 3.3.4: Identify and publicize on GSGC website NASA and aerospace industry internships and outreach activities.

Objective 3.4

Recruit students and educators in NASA's missions, research, and innovations by engaging a diverse audience including women, under-represented minorities, and persons with disabilities through every part of the state of Georgia.

Action 3.4.1: Support the participation of students and teachers from underrepresented and underserved communities in all GSGC Pre-College activities.

Higher Education including Post-Secondary Education.

Objective 3.5

Provide mentoring opportunities to increase the enrollment and retention of undergraduate STEM students and to increase the number of students in STEM graduate programs.

Action 3.5.1: Research existing mentoring programs and identify the most effective strategies for the GSGC. If one or more can be identified which matches the capabilities of the GSGC, implement at least one, including quantitative metrics.

Objective 3.6

Provide higher education and post-secondary education students with enriched STEM-related resources and activities.

Action 3.6.1: Find and evaluate available opportunities such as undergraduate summer research at universities and NASA centers, COOP programs, field trips, team activities such as the microgravity and balloon programs, the concrete canoe competition, etc.; and steer STEM students into these opportunities. Establish a central clearinghouse of opportunities at the GSGC level. Conduct follow-up interviews and/or surveys to better advise the next students in the pipeline. Continually seek and exploit new opportunities to place in the clearinghouse.

Action 3.6.2: Encourage undergraduate research by providing travel funds for students to present project results at conferences such as the Georgia Academy of Science and a competitive undergraduate research Request for Proposals program.

Objective 3.7

Maximize opportunities for underrepresented groups pursuing higher education.

Action 3.7.1: Collaborate with HBCUs to design programs to engage and recruit underrepresented populations in the STEM fields.

Action 3.7.2: Utilize facilities such as the NASA-funded Optics Lab at Morehouse College to support research conducted by students of underrepresented groups.

Action 3.7.3: Conduct GRE prep sessions at HBCUs for underrepresented students pursuing STEM disciplines.

Action 3.7.4: Sponsor student organizations supporting STEM disciplines.

Objective 3.8

Collaborate with private industry to maximize and integrate resources into GSGC higher education and post-secondary education efforts in order to address the STEM workforce needs of Georgia.

Action 3.8.1: Establish links with aerospace industry. For example, each affiliate may recommend a corporation to participate in an introductory meeting of affiliates and representatives from each corporation. Conduct follow-up meetings and a publicize interactions to maintain and strengthen ties.

Objective 3.9

Recruit technical and community college members for the GSGC.

Action 3.9.1: Prepare a document outlining the advantages to a technical/community college to becoming a consortium member and the necessary steps to joining the consortium.

Action 3.9.2: Designate at least one current consortium member to recruit a technical-community college.

Informal Education

Goal 4: Increase the general public's and students' awareness and knowledge of NASA related technologies through collaborations with informal STEM education providers, NASA, private industry, and consortium members.

Objective 4.1

Provide unique opportunities to engage students, educators, families, and the general public, in inspiring authentic aerospace experiences that are derived from NASA's exploration plans.

Action 4.1.1: Offer programs for the public at consortium members' institutions on STEM-related topics that highlight NASA's activities and missions.

Objective 4.2

Implement public engagement activities by leveraging the infrastructure of the informal education community in the state.

Action 4.2.1: Coordinate informal education activities with museums and science centers in Georgia to more effectively reach and engage the public in NASA experiences.

Action 4.2.2: Designate a GSGC member near each informal education center, such as Fernbank, to establish a strategic partnership for collaboration and resource sharing.

Objective 4.3:

Promote public astronomical viewing sessions and planetarium programs that focus on NASA space science activities and missions such as Hubble Space Telescope findings.

Action 4.3.1: Provide viewing session/planetarium program providers with links to NASA resources and materials.

Action 4.3.2: Establish a mini-grant program for support of public viewing sessions and programs by the astronomy/physics departments of colleges, astronomy clubs, and planetaria around the state.

Action 4.3.4: Establish a blog for information sharing for the viewing session/planetarium program providers.

Consortium Management

Goal 5: Promote GSGC and manage its operations in a way which results in effective and collaborative programs that maximize the impact of each affiliate in achieving the GSGC mission.

Objective 5.1

Promote the accomplishments and capabilities of the GSGC within the state and nationally with public officials, NASA, industry, students and the general public.

Action 5.1.1: Develop and maintain a current, attractive, and effective GSGC website which promotes the vision, accomplishments, and capability of the consortium.

Action 5.2.3: Develop and maintain a contact list of GSGC stakeholders which includes the following: current and prior funded organizations and students, NASA and industry personnel who may support GSGC activities, public officials with influence in Space Grant, External Advisory Board members, and Affiliates.

Action 5.2.2: Produce a quarterly newsletter, post and disseminate to all GSGC stakeholders.

Action 5.2.3: Visit state and national public officials to communicate the accomplishments and capabilities of the GSGC.

Action 5.2.4: Promote presentations of student and faculty GSGC accomplishments at state and national meetings.

Objective 5.2

Ensure effective communication between the External Advisory Board, Affiliates and Directors office in regard to new funding opportunities, national initiatives, accomplishments and decision making activities.

Action 5.2.1: Hold semi-annual consortium meetings including External Advisory Board, Affiliates and the Directors Office to discuss GSGC operations, new opportunities, and to make recommendations and decisions. Produce and disseminate minutes of the meetings to all participants.

Action 5.2.2: Hold quarterly Advisory Board Meetings during the first 18 months and semi-annual meetings thereafter to review GSGC progress and policies.

Action 5.2.3: Acquire and disseminate feedback on GSGC operations from External Advisory board to all Affiliates

Action 5.2.4: Provide timely disseminate funding opportunity information to Affiliates and promote effective collaboration in new initiatives.

Objective 5.3

Implement, refine, and automate the proposal announcement, review and selection process

Action 5.3.1: Develop an efficient web-based proposal submission process for affiliates and others requesting funding

Action 5.3.3: Conduct systematic reviews and provide feedback on funding requests based on the following criteria: Relevance to Space Grant, Merit and Soundness of Proposal, Reasonableness of Budget and Reporting Success of Investigators.

Action 5.3.2: Develop an efficient web-based Fellowship and Scholarship application processes.

Action 5.3.3: Develop and implement a process for systematic review of Fellowship and Scholarship applications.

Objective 5.4

Ensure effective participation, fiscal accountability and data reporting responsibility by the GSGC Director's office and the GSGC Affiliates.

Action 5.4.1: Collect and disseminate progress reports which provide tracking data and status reports from each Affiliate and other funded organizations.

Progress reports will be required every 90 days for the first two years. For the subsequent years, progress reports will be required every 6 months.

Action 5.4.2: Develop and implement an efficient and accurate longitudinal tracking process for all GSGC students. Automate this system using either a GSGC based web server or through the services of the National Space Grant Foundation.

Action 5.4.3: Accurately and communicate spending and tracking data to GSGC Affiliates, Advisory Board and to NASA

Action 5.4.4: Ensure that prior data reporting accuracy is a significant factor in consideration of funding for all entities requesting funding.

PROGRAM/PROJECT BENEFIT TO OUTCOME (1, 2, and 3)

Outcome 1 - Dr. Anthony Choi, Mercer University was accepted to present a paper at two international conferences based on research work with students that was completely funded by the GSGC. The GSGC funding was used for research infrastructure as well as introducing students to research.

Outcome 2 – Clark Atlanta, Fort Valley State University, and Albany State University (HBCUs) all submitted NASA MUREP (Aerospace Academy and other Pre-K) proposals based on collaborations and resources the GSGC has throughout the state. These proposal will allow the GSGC affiliate members to further train teachers throughout the state.

Outcome 3 – The Bradley Observatory had its largest audience yet, in part due to the increase in GSGC use of social media. Informal Education providers are easier to reach through social media and heavily rely on it for opportunities.

PROGRAM ACCOMPLISHMENTS

Outcome 1: *Contribute to the development of the STEM workforce in disciplines needed to achieve NASA's strategic goals:*

The GSGS results for 2014 include:

67 Fellowships (22 at HBCUs)

9 Internships (4 in industry and 5 at NASA field centers)

31.8% female

39.2 % underrepresented groups

The GSGC strives to provide opportunities for students, including females and underrepresented minorities. The target is always the NCES demographics (which are also in the GSGC strategic plan). In 2014, the numbers currently reported are just short of NCES demographics, but by the end of the contract year, goals will have been met. Programs were offered in a wide variety of STEM areas, based on the focus at affiliate institutions. All programs were continuing programs with high degrees of success based on numbers reported in OEPM.

The GSGC was able to meet and/or exceed 2014 goals and objectives through the programs listed below:

- Georgia State University Fellowships
 - Morehouse Dixon Scholars
 - Savannah State University NASA Georgia Space Grant Fellows Scholars Program
 - KSU NASA Fellows Program
 - Professional Conference Presentations of Columbus State University Undergraduate Research
 - Spelman Georgia Space Grant STEM Scholarship
 - SpaceWorks Enterprises, Inc.
 - Generation Orbit Internships
 - The North Georgia University Space Grant Fellowship
 - Mercer Fellowships to Promote Innovative Graduate/Undergraduate Research and to Promote NASA
 - University of West Georgia Undergraduate Research: Physical Properties of Nano-Materials
 - Georgia State University Visiting Observer Program
 - KSU NASA Applied Leadership Program
 - Georgia Tech JSC Wearable Technology Symposium Support
 - Georgia Tech Rocket Rescue Robot Competition
 - University of North Georgia Student Telescope Operator Program
 - Albany State University (ASU) Research Experience in Scientific Payload Design and Launch
 - ASU Agricultural Application of Remotely Piloted Vehicle
 - Armstrong Atlantic State University Summer Undergraduate Research
 - Development of an Educational Radio Telescope
 - Undergraduate Research for the Confocal X-Ray Fluorescence Study and the XCITER Lab
 - Open Robotics Laboratory for Undergraduate/Graduate Students to Promote Hands-on Research
 - Feasibility study on the assessment of surface characteristics evaporative and carbon dioxide fluxes
 - A CO2-Monitoring Network for Climate Literacy

Outcome 2: *Attract and retain students in STEM disciplines through a progression of educational opportunities for students, teachers, and faculty*

The GSGC offered a variety of STEM programs throughout the state. Programs are still ongoing, but projected numbers for participant involvement for the 2014 fiscal year are:

In service Teachers – 800

Pre service Teachers – 100

K-12 students – 500

Demographics – 52% underrepresented groups and 47% female

The GSGC was able to meet and/or exceed 2014 goals and objectives through the programs listed below:

- Nuclear, Materials, and Space Sciences (NuMaSS) Summer Enrichment Program
- KSU NASA Precollege STEM Enrichment

Engineering Experience to Strengthen High and Middle School Science Education
 Georgia First Robotics Teams
 Each One Teach One
 Future Leaders in Engineering and Technology
 Fort Valley State University Cooperative Development Energy Program (CDEP)
 Pre College: In-School Presentations and NASA Related Resources for Local Science Teachers
 Agnes Scott College Supporting K-12 Astronomy Outreach at Bradley Observatory and Delafield Planetarium
 Museum of Aviation (MOA) Foundation STEM Summer Camps
 MOA Foundation NASA RERC STEM Educator Workshop Series
 Georgia Southern University Solar System Walk
 Orbit Education Beyond the Shuttle Competition
 Orbit Education High School Intern Program

Outcome 3: *Build strategic partnerships and linkages between STEM formal and informal education providers that promote STEM literacy and awareness of NASA's mission*

Three programs were offered that reached over 5000 students. All programs infused NASA content provided by GSGA affiliate and NASA Teacher Resource Center, the Museum of Aviation.

The GSGC was able to meet and/or exceed 2014 goals and objectives through the programs listed below:

- K-12 Student Enrichment
- Community Science Programs, Planetarium Presentations
Bradley Observatory Open House Lecture Series

PROGRAM CONTRIBUTIONS TO NASA EDUCATION PERFORMANCE MEASURES

The Georgia Space Grant Consortium includes six Minority Serving Institutions (MSIs). Albany State, Clark Atlanta, Fort Valley, Morehouse College, Savannah State, and Spelman College each receive funding for unique programs that capitalize on the strength of their institutions in particular STEM disciplines. Fort Valley has a longstanding pre-college program that sends middle and high school students to Georgia Tech each summer for a weekend of exposure to cutting edge technology in aerospace related fields. Albany State has a combination of higher education research projects for students, and activities for high schools students during National Engineering month. Savannah State and Spelman College focus on providing fellowships, and opportunities to attend technical conferences and give paper presentations. Morehouse had its first microgravity team; and for three years, they worked on a collaborative program in Space Weather Modeling with the University of Texas at Arlington. Morehouse also has an impactful

outreach program, NuMASS for K-12 students. Clark Atlanta has a balloon project at the research level, but also manages to engage teachers and students from Columbus High School.

During the 2014-2015 timeframe, Clark Atlanta University, Fort Valley and Albany State collaborated with Georgia Tech on three NASA MIRO proposals. Georgia Tech also has included HBCUs as contributors in proposals to other federal agencies. The School of Aerospace Engineering at Georgia Tech is currently working to have faculty teach courses at Clark Atlanta University, and also working to develop more collaborative programs. There is a thriving dual degree program between Georgia Tech and the HBCUs. This program has significantly increased the number of African Americans with engineering degrees. Georgia Tech also worked with Spelman College to send students to a research internship at NASA Ames, and an IGEM technical conference.

Diversity: of institutions, faculty, and student participants (gender, underrepresented, underserved)

Minority-Serving Institution Collaborations:

- **Morehouse College:** All male, undergraduate. Focus areas: workforce development, research opportunities for students, and collaborations with other institutions. Scholarship funding is provided for Morehouse students pursuing degrees in STEM.
- **Clark Atlanta University:** Focus area is collaborative engineering research with majority institutions that lead to NASA careers.
- **Savannah State University NASA Georgia Space Grant Fellows Scholars Program**
The College of Science and Technology will support faculty and students who will travel to conferences in STEM disciplines related to the mission and focus of NASA.
- **Albany State University:** Focus areas: providing research opportunities for undergrads, participation in ballooning activities with other Space Grants, collaborating with other HBCUs and majority institutions, bridge building and other hands on programs for high school students.

- **Fort Valley State University:** Focus area: enrichment program for precollege and undergraduates that encourage them to pursue STEM fields for employment or for advanced degrees.
- **Spelman College:** All female, undergrad, encouraging female students to pursue STEM, hands-on research opportunities and workforce development.
 - **NASA Education Priorities:**
Authentic, hands-on student experiences in science and engineering disciplines – the incorporation of active participation by students in hands-on learning or practice with experiences rooted in NASA-related, STEM-focused questions and issues; the incorporation of real-life problem-solving and needs as the context for activities. **The consortium provided opportunities for internships in industry, academia, and at NASA. Students were also funded for participating in competitions such as USLI, CubeSat, CanSat, Mars Challenges, and other competitions.**
 - Engage middle school teachers in hands-on curriculum enhancement capabilities through exposure to NASA scientific and technical expertise. Capabilities for teachers to provide authentic, hands-on middle school student

experiences in science and engineering disciplines (see above). **Orbit Education, the Museum of Aviation, Morehouse College, Georgia Tech, and the University of West Georgia provided in service and pre service workshops for teachers, and hands on rocket building and other aerospace related activities for middle school students.**

- Summer opportunities for secondary students on college campuses with the objective of increased enrollment in STEM disciplines or interest in STEM careers. **Fort Valley University (HBCU) conducted its annual 9th grade summer program in collaboration with Georgia Tech. This program has been ongoing for over 20 years. A summer camp for high school student was held at Georgia Tech in the School of Aerospace Engineering. Albany State and Armstrong Atlantic both had engineering summer camps for high school students.**
- Community Colleges – develop new relationships as well as sustain and strengthen existing institutional relationships with community colleges. **The GSGC added West Georgia Technical College, Central Georgia Technical College, and Atlanta Metropolitan State College as members and they are currently working on a NASA sponsored Community College Grant.**
- Aeronautics research – research in traditional aeronautics disciplines; research in areas that are appropriate to NASA's unique capabilities; directly address the fundamental research needs of the Next Generation Air Transportation System (NextGen). **The GSGC had student interns at Space Works Enterprises and Generation Orbit which are both GSGC affiliates dedicated to NextGen.**
- Environmental Science and Global Climate Change – research and activities to better understand Earth's environments. **Funding was provided for A CO2-Monitoring Network for Climate Literacy Program and the University of Georgia conducted research a Feasibility study on the assessment of surface characteristics evaporative and carbon dioxide fluxes.**

IMPROVEMENTS MADE IN THE PAST YEAR

The current program manager will retire from the GSGC at the end of the year. Her replacement, has been hired in a part time capacity so that there will be a seamless transition. The replacement, Mike Roberts, was a former Space Grant Fellow at Georgia Tech in the School of Aerospace Engineering. Together with the current program manager, they are reviewing administrative functions; and working to make sure that the consortium works more efficiently.

PROGRAM PARTNERS AND ROLE OF PARTNERS IN PROJECT EXECUTION

- **Agnes Scott College:** all-female institution with a strong astronomy program that engages undergraduate students and conducts programs that attract K-12, and the general public in the Atlanta metropolitan area.

- **Clark Atlanta University:** HBCU, undergrad and graduate programs, co-director is a former Space Grant Fellow, focus area is collaborative engineering research with majority institutions that lead to NASA careers.
- **Georgia Institute of Technology:** GSGC lead institution, undergraduate and graduate, focus areas: funding students for advanced degrees in STEM, collaborative research with HBCUs, providing workforce development opportunities for students
- **Georgia State University:** undergraduate and graduate, focus area: funding students for PhDs in Astronomy.
- **Generation Orbit:** An industrial affiliate that provide workforce development opportunities. GO serves micro and nano satellite developers struggling to find dedicated and cost-effective space access by offering fast, flexible and affordable primary launch manifesting through GOLauncher, an air-launched space transportation system specifically designed for small payloads.
- **Kennesaw State College:** undergraduate and graduate, focus areas: providing scholarships and funding undergrad students to work in STEM outreach programs with K-12 students, and mentoring programs for students in STEM.
- **Morehouse College:** HBCU, all male, undergraduate only, co-director is a former Space Grant Fellow, focus areas: workforce development, research opportunities for students, and collaborations with other institutions.
- **Orbit Education:** nonprofit, focus areas: in-service and pre-service teacher training using NASA content materials.
- **SpaceWorks Enterprises, Inc.:** Industrial Affiliate, provides internship opportunities.
- **Spelman College:** HBCU, all female, undergrad, acting co-director is a former Space Grant Fellow, focus areas: encouraging female students to pursue STEM, hands-on research opportunities and workforce development.
- **Mercer University:** undergrad and graduate programs, focus areas: undergraduate research, BOTBALL competitions for precollege, development of STEM Kiosks for general public.
- **Museum of Aviation:** non-profit organization that provides workshops with NASA content for teachers and students. MOA is a NASA regional educator resource center. MOA is one of the largest aviation museums in the United States and a major Air Force Heritage, Exhibit and Education Center in the Southeast. The Museum is the second largest museum in the US Air Force. It is only one of ten aviation museum in the U.S. to be accredited by the American Alliance of Museums.
- **Fort Valley State University:** HBCU, Land Grant, focus area: enrichment programs for precollege and undergraduates that encourage them to pursue STEM fields for employment or for advanced degrees.
- **Columbus State University:** undergrad, grad, focus areas: astronomy, space and earth sciences, working in conjunction with the Coca Cola Space Science Center.
- **North Georgia College and State University:** undergrad and grad, focus area is astronomy, and observatory programs.

- **University of Georgia:** largest institution, Land Grant, undergraduate and graduate programs, focus area is using NASA technology in agricultural applications, agricultural engineering, chemistry, geology.
- **Albany State University:** HBCU, undergrad and graduate programs, focus areas: providing research opportunities for undergrads, participation in ballooning activities with other Space Grants, collaborating with other HBCUs and majority institutions, bridge building and other hands on programs for high school students.
- **Armstrong Atlantic State University:** undergrad, co-director is a former Space Grant Fellow, focus areas: undergraduate research, mentoring for precollege, workforce development for students, collaborative research.
- **Savannah State University:** HBCU, undergrad, co-director is a former Space Grant Fellow, focus area is providing research opportunities and scholarships for students as well as collaborative programs.
- **Georgia Southern University:** undergrad and grad, focus area is informal education via the university operated observatory.
- **University of West Georgia:** undergrad and graduate programs, focus areas: undergrad research, planetarium shows for precollege and informal educators.