1. Evaluation Criteria

a. Publications and proposals.
This table is for information only. It presents the typical number of articles that previous successful candidates for promotion had published. The values represent the mode, not the average.

<table>
<thead>
<tr>
<th>Promotion</th>
<th>Refereed Pubs.</th>
<th>1st-author</th>
<th>Pubs since joining AOSC</th>
<th>Proposal activity</th>
</tr>
</thead>
<tbody>
<tr>
<td>To Assistant rank</td>
<td>8</td>
<td>4</td>
<td>1-2 per year</td>
<td>Co-I</td>
</tr>
<tr>
<td>To Associate rank</td>
<td>22</td>
<td>11</td>
<td>1-2 per year</td>
<td>P.I. even if unsuccessful</td>
</tr>
<tr>
<td>To Research rank</td>
<td>Significant number</td>
<td>1-2 per year</td>
<td>Self-supporting</td>
<td></td>
</tr>
</tbody>
</table>

Other metrics, such as number of citations, h-index or its alternatives, and journal’s impact factor, can also be used by the candidate who wants to highlight the relevance of their work.

b. Involvement in the educational mission
The educational mission of AOSC, as described in our Strategic Plan, consists of i) teaching and advising in support of our undergraduates and graduate students, and ii) educational outreach to the broader University community and the public on environmental issues. Teaching and advising may range from a heavy commitment such as teaching CORE courses and supporting and advising PhD students, to a less heavy commitment such as supervising undergraduate senior research projects. Candidates should provide a list of their contributions to the academic program as well as any information about outcomes such as student reviews of courses, papers coauthored with students, and dissertation titles. Applicants for the title of Research Professor should provide a separate document describing their serious involvement in teaching and advising.
c. Algorithm Development / Model Development / Dataset Development
AOSC recognizes the importance of algorithm development / model development / dataset development for large research projects. Applicants who focus primarily on this technical work may find the Research Engineer track appealing. To help document their contributions, they should provide specific discussion of their contributions along with any corroborative information such as presentations, websites and DOI numbers for datasets, and contributions to fieldwork.

2. AOSC AEP Evaluation Process
The AOSC AEP process establishes the procedures for the evaluation of candidates for appointment and promotion, while ensuring a fair treatment of each candidate.

a. AEP Subcommittee
The AOSC Professional Track AEP subcommittee will be responsible for evaluating all AEP appointments and promotions within AOSC: 1) Postdoc to Assistant Research Scientist/Engineer and Research Assistant Professor, 2) Assistant to Associate Research Scientist/Engineer and Research Associate Professor, and 3) Associate to Research Professor/Scientist/Engineer.

The AOSC Professional Track AEP subcommittee will be appointed by the AOSC Chair and will consist of two members of the AOSC AEP and one member of the AOSC tenure/tenure track faculty for three-year (renewable) terms, with the appointments chosen to run nonconcurrently (initial appointments will serve for 1, 2, and 3 years).

b. Candidate application materials
Candidates may seek a review for promotion at any following the calendar presented in item 3d. While there are no requirements for time-in-rank before seeking a promotion, generally a minimum of 2 years should pass between promotions.

The materials to be submitted by candidates by November 1 are as follows:

<table>
<thead>
<tr>
<th>Promotion</th>
<th>Material for Evaluation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Postdoc or Visiting Assistant to Assistant rank</td>
<td>Dossier including cover letter, CV, personal statement, 2 suggested reviewers who can provide reference letters, preferably the sponsor if one is identifiable.</td>
</tr>
<tr>
<td>Assistant or Visiting Associate to Associate rank</td>
<td>Cover letter, CV, personal statement; 3 suggested reviewers who can provide reference letters, supplemented by a letter from a</td>
</tr>
</tbody>
</table>
c. Preparation of the Subcommittee evaluative report

The role of the sub-committee is to summarize the candidate’s credentials and qualifications and the rationale for the promotion/appointment and to provide initial feedback to the candidates. During the subcommittee meetings, members will carefully consider all relevant factors, including those in the list below.

1. Articles, books ... (including assessment of journal’s relevance)
2. Letters of reference
3. Algorithm/Model/Dataset Development.
4. Other (awards, honors...)
5. Teaching and Mentoring
6. Service

The subcommittee chair will appoint a member to prepare an evaluative report that will include a summary of the case for promotion and a summary of the subcommittee discussions of the relevant factors listed above.

d. Full AOSC AEP Committee vote

The full AOSC AEP committee (also known as the AOSC APT Committee) consists of all AOSC tenure/tenure track and professional track faculty at the rank above the candidate’s. The AEP subcommittee

e. Approximate calendar for AEP process- (subject to change)

<table>
<thead>
<tr>
<th>Date</th>
<th>Event</th>
</tr>
</thead>
<tbody>
<tr>
<td>Nov 1</td>
<td>Candidates provide all required material</td>
</tr>
<tr>
<td>Nov 15</td>
<td>Review by AOSC AEP subcommittee Chair for completeness</td>
</tr>
<tr>
<td>Dec 1</td>
<td>Internal (2 for Assistant level, 3 for Associate and above) and external (1 for Assistant, 3 for Associate and above) letters will be requested</td>
</tr>
<tr>
<td>Jan 10</td>
<td>Initial dossier complete</td>
</tr>
<tr>
<td>Feb 1</td>
<td>AEP Subcommittee report complete and submitted to the appropriate AEP Committee for a vote</td>
</tr>
<tr>
<td>Feb 15</td>
<td>Final dossier, including evaluative report and AEP Committee voting results submitted to Director</td>
</tr>
<tr>
<td>Mar 15</td>
<td>Director submits final dossier and recommendation to CMNS for approval</td>
</tr>
</tbody>
</table>
Jul 1: Promotion pay increase effective

**f. Salary increases resulting from promotion**
The minimum rate for salary increases resulting from the promotion process is subject to CMNS policies. This salary increase is independent of, and in addition to, any merit or cost-of-living raises that are awarded through university-wide processes. A raise combined with limited grant funding may require a reduction in percent of salary received.

**g. Provisions for Mentoring**
AOSC will establish a process through which professional track faculty are mentored through the different career stage transitions by AOSC faculty similar track, but of higher rank. Mentoring will include career counselling, strategies for meeting the criteria for AEP in this track, and the mechanics of the AEP process.

**h. Appeals Process**
Candidates may appeal the outcome of the AOSC AEP process following the procedures stated Section V of the University of Maryland Policy and Procedures on Appointment, Promotion and Tenure.
References
University APT Manual
Faculty Handbook, APT Changes, 2015: https://pdc-svpaap1.umd.edu/policies/changes.html
University Policy and Procedures for APT on faculty

CMNS Promotions Guidelines
Patterson, D., L. Snyder J. Ullman: Best Practices Memo Evaluating Computer Scientists and Engineers For Promotion and Tenure,

Earth System Science Interdisciplinary Center
Appointment, Evaluation and Promotion Guidelines and Procedures
Professional Track