



**STScI** | SPACE TELESCOPE  
SCIENCE INSTITUTE

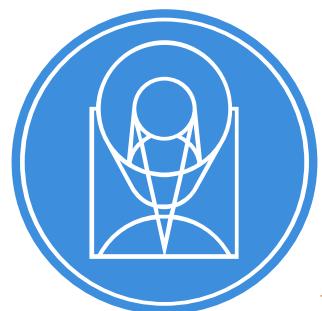
**EXPANDING THE FRONTIERS OF SPACE  
ASTRONOMY**

# Presentation to the CAA Roman Observations Working Group

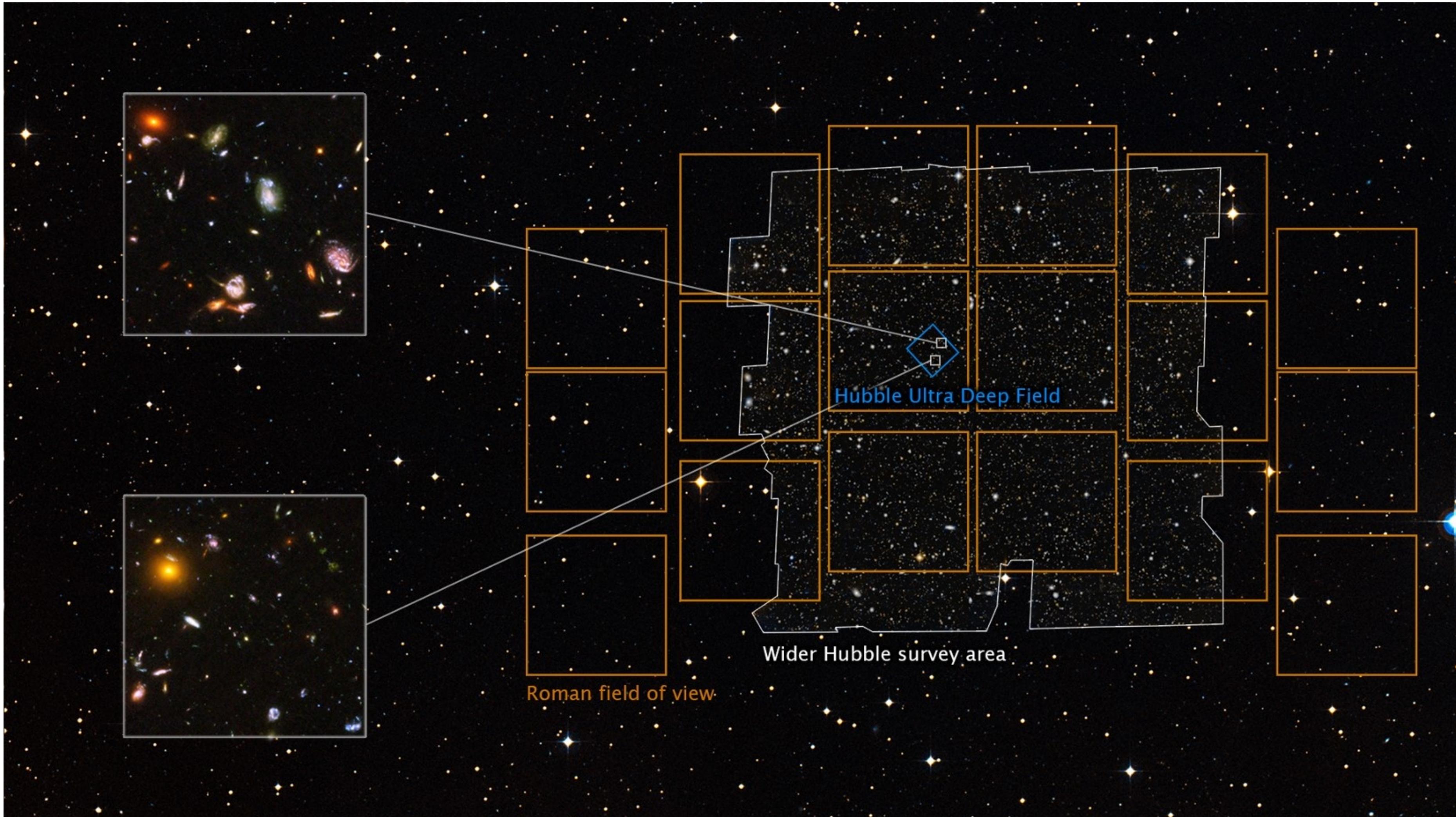
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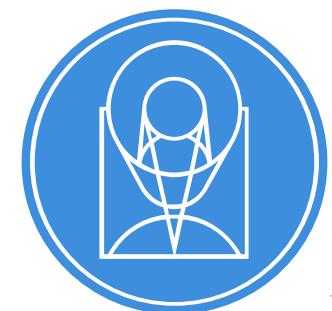
Kenneth Sembach  
Director, STScI

April 7, 2022

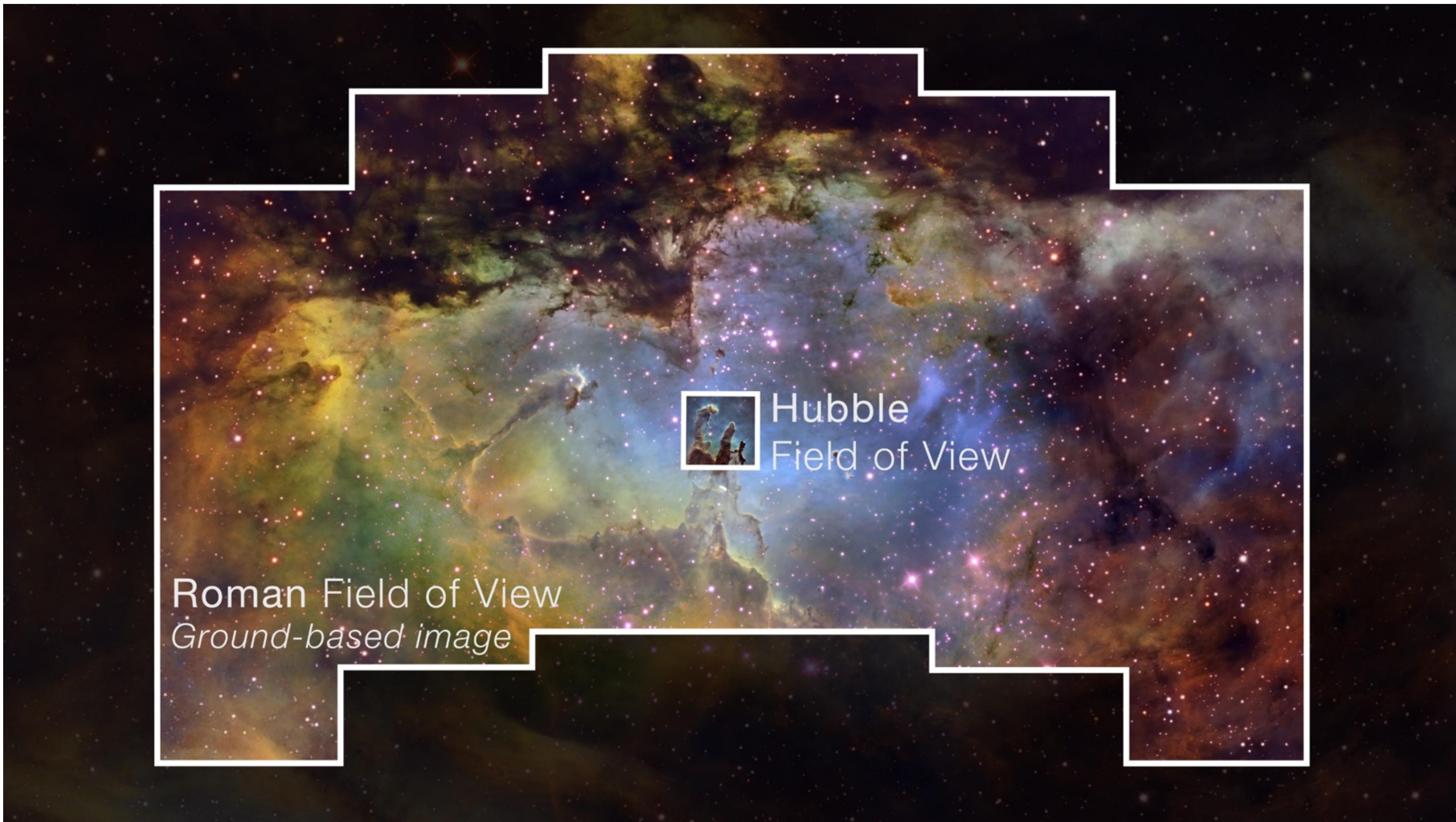


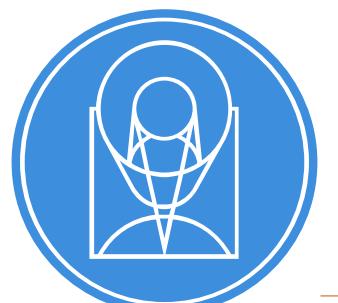
Every Roman image enables numerous science investigations.





Every Roman image is a survey.





## Other factors

Finally, respondents were given an opportunity to provide input on other factors that they believed are important for consideration in specifying the broad attributes of the Core Community Surveys and the GO/AR program. Some 115 responses were received, and Figure 15 collects some themes from those responses.

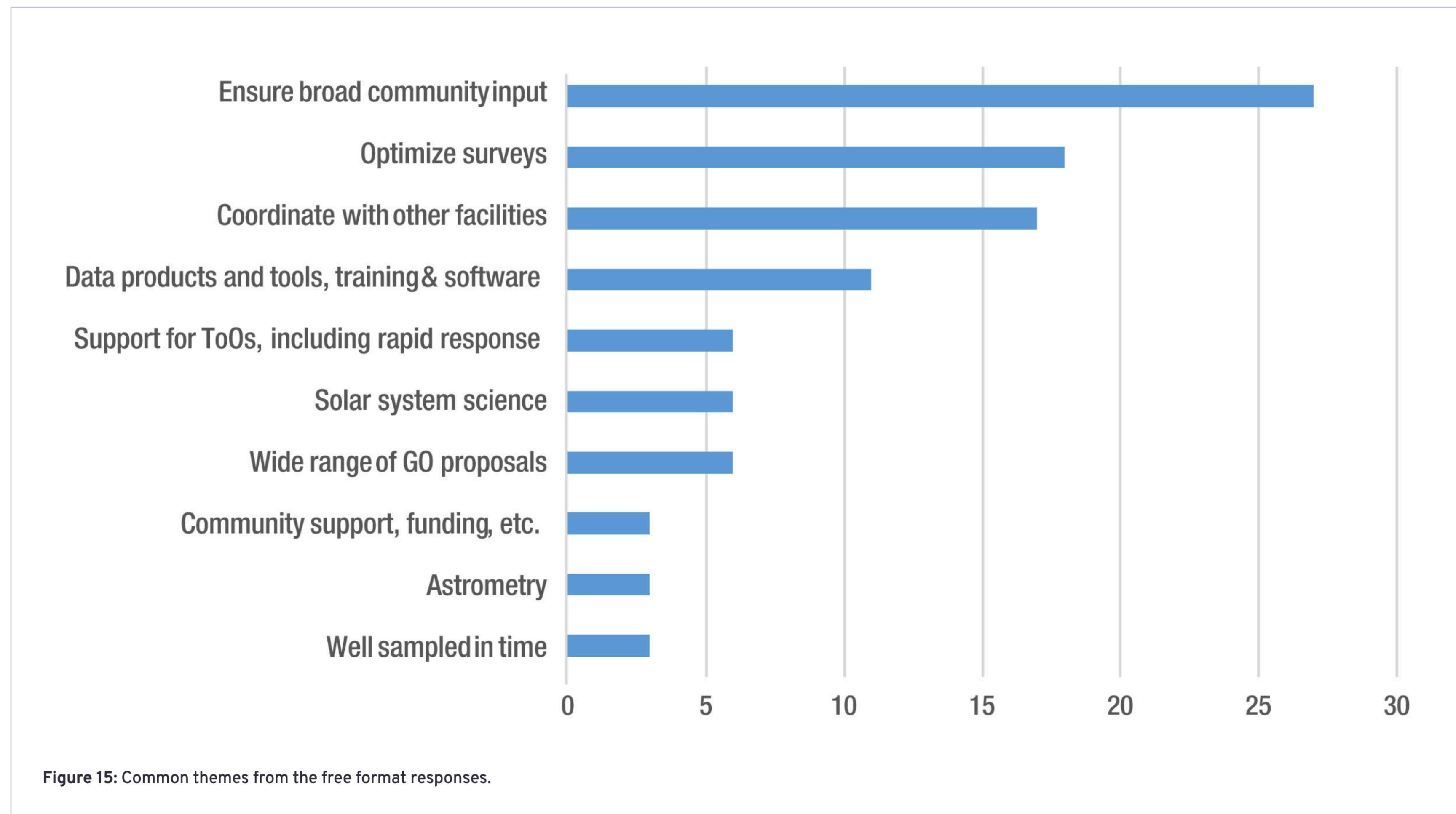


Figure 15: Common themes from the free format responses.

Source: Gilbert & Reid (2020)

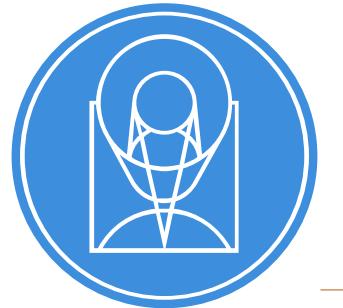
<https://www.stsci.edu/contents/newsletters/2020-volume-37-issue-01/community-science-with-the-nancy-grace-roman-space-telescope>



## Community Engagement in Defining the Core Community Surveys:

- The RSTAC recognized and celebrated the significant progress that continues to be made toward engaging the astronomical community in optimizing the design of the CCS. Early community input is crucial to ensure that the three core surveys (High Latitude Wide Area, High Latitude Time Domain Survey, and Galactic Bulge Time Domain) will enable a broad range of archival science investigations across many fields, while also meeting the mission's cosmology and exoplanet demographics objectives. The plan outlined during the discussion was to engage with the community in a variety of venues and solicit community input in a variety of formats, to thoughtfully construct committees that incorporate diverse areas of expertise relevant to each core survey and to task these committees with synthesizing their inputs into actionable survey designs. The RSTAC consensus was that this is the right direction to be going in, and we particularly valued that attention is continuing to be paid toward ensuring this is an inclusive process where many kinds of voices can be heard, including broad outreach to multiple communities, participation from early career scientists, and researchers at primarily undergraduate institutions and minority serving institutions.

Excerpt from the March 2022 RSTAC letter to the STScI Director.  
<https://www.stsci.edu/roman/about/roman-advisory-committee-rstac>



- The current SOC plans for the GAS is to allow up to 30 programs awarded over a 5 year timeline, which translates to ~2 weeks of Roman observing time per program (i.e., only large projects). As the RSTAC noted previously, this is in tension with what the community perceives its needs to be (as expressed in the SOC's Spring 2020 community survey) and might stifle innovative and important science programs that could be achieved with much less than two weeks of observing time, thanks to Roman's remarkable field of view. Offering only large programs also has the potential to limit access to Roman by early career researchers and researchers at smaller institutions for whom designing and executing large programs may pose unique challenges. The RSTAC encourages the SOC to expand the distribution of GAS programs across small, medium, and large categories. The RSTAC also recognizes that doing so will increase operational costs and suggests that the distribution between these different categories should, in part, be guided by a cost-analysis. Finally, the RSTAC discussed the benefits of having the community "self-organize" for large program submissions. In this framework, instead of having competing proposals for a single topic, ambitious science efforts could be achieved by community member coordination within a specific focus, following the example being set in exploring a possible Roman deep-field as part of the GAS time.

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