

Summary

Assessing the Impact of Confidence Levels in Funding and Budgeting NASA Science Missions

- Analysis shows that for a typical portfolio of multiple loosely coupled missions, NASA's baseline JCL policy of budgeting projects at the 70th percentile and funding to at least the 50th percentile seems to be a sound strategy
- However, for single-project Programs, NASA's baseline JCL policy may be less than an optimal strategy as data indicates that a CL of $\leq 50^{\text{th}}$ for Budgeting Confidence Level may be more cost effective depending on acceptable level of threshold breach tolerance
- Different budgeting and funding strategies could be beneficial depending on management FOM priorities and portfolio characteristics

