ARC Priority Matrix

The Analysis and Review of CMR (ARC) Team is responsible for conducting metadata quality evaluations for NASA's metadata records in the Common Metadata Repository (CMR). This process involves both automated and manual reviews of metadata records. In order to prioritize ARC's findings, each metadata element evaluated during the review process is flagged with a color code (red, yellow, blue, or green) to indicate the urgency of each finding. The ARC Priority Matrix, outlined in more detail in the table below, describes the color code, the priority categorization, the justification and the expected action from the data provider. Specific ARC priority matrix details for each element will be provided on the metadata curation concept wiki pages. ARC's metadata quality evaluations focus specifically on improving data discovery in the Earthdata Search Client. With this goal in mind, the ARC priority matrix primarily focuses on completeness, correctness, accuracy, and accessibility.

It is the responsibility of the NASA data provider to resolve any issues found during ARC's metadata quality review. The color codes specify the urgency of any issues found and therefore should assist the data provider in formulating a strategic plan to resolve issues. Color codes are also used by ARC to track the resolution of issues and to generate metadata quality metrics.

Priority Categorization	Justification
Red = high priority issue	High priority issues emphasize several characteristics of metadata quality including completeness, accuracy, and accessibility. For high priority issues, completeness is measured by a metadata record's compliance with required UMM elements. Any UMM required elements which are missing or incorrect will be prioritized as red. Accuracy is assessed by comparing how well the metadata record describes the the actual data. Incorrect or outdated information will be prioritized as red. Lastly, accessibility is evaluated by any barriers that may occur in accessing the described data. Therefore, broken URLs, broken services and incorrect persistent identifiers are prioritized as red. In general, high priority issues include (but are not limited to): • Broken URLs • Spelling and grammatical errors • Incorrect usage of controlled vocabulary • Required fields which are left blank • Outdated/incorrect information Issues flagged as red are required to be addressed by the data provider.
Yellow = medium priority issue	Medium priority issues emphasize consistency and completeness. Consistency is assessed by ensuring that similar information is presented the same way across collections. Consistency makes searching for data easier and more reliable for the user. Therefore, consistency issues are prioritized as yellow. For yellow issues, the idea of completeness is expanded to include more information beyond what is required by the UMM. Information which makes the metadata more complete and facilitates discovery for the user is prioritized as yellow. In general, medium priority issues include (but are not limited to): • Highly recommended (but not required) content is missing from the metadata • Recommended revisions to existing content Data providers are strongly encouraged to address yellow flagged issues. If a yellow flagged issue is not addressed, the data provider will be asked to provide a justification as to why.
Blue = low priority issue	Low priority issues also focus on completeness, consistency, and accuracy. Any additional information that may be provided to make the metadata more robust or complete is categorized as blue. Additionally, any minor inaccuracies or inconsistencies are categorized as blue. In general, low priority issues include (but are not limited to): • Minor errors and inconsistencies • Informational comments Blue issues may or may not require action on behalf of the data provider and are not required to be addressed. Recognizing that the perfect may be the enemy of the good, a blue issue may not be required to be resolved by a data provider as long as a justification is provided as to why the issue was not addressed. This justification is required in order for ARC to resolve issues and to provide updated quality metrics.
Green = no issue	Elements flagged green are free of issues. Green flagged elements require no action on behalf of the data provider.