RFC: nagg -l option to specify characteristics of output files

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# Purpose

This RFC describes gathering characteristics for nagg output files from an example NPP data product file, either designated with –l(as in --**l**ike) on the nagg command line option or by default, when none of -l -t -n or -A are supplied, from the first NPP data product file encountered in the output directory.

# Introduction

The proposed –l option directs nagg to create its output files with these characteristics from an NPP data product example file:

Products to be included

Number of granules of each product in each full aggregation

Geolocation yes/no

Packaging

Origin

Domain

These will be determined as listed below according to groups and attributes found in the file:

Products to be included – subgroups of /Data\_Products are named with the same names as the products. These can be converted to DPIDs for the –t list.

Number of granules of each product - each <product name>\_Aggr dataset has an attribute “AggregateNumberGranules” containing this information. The number of granules can be overridden with –n or –A.

Geolocation – the geolocation information can be present as a subgroup of /Data\_Products or in another file specified by the /N\_GEO\_Ref attribute. If a geolocation subgroup is present in addition to another product subgroup, or if the /N\_GEO\_Ref attribute exists geolocation should be “yes”. If a geolocation subgroup is the only product subgroup present, geolocation should be the corresponding DPID. Otherwise geolocation should be “no”.

Packaging – files with multiple subgroups of /Data\_Products are packaged. The only possible unpackaged arrangement that will be detected from an example file is a single data product with separate geolocation.

Origin – the origin can be found in the /N\_Dataset\_Source attribute.

Domain – the domain can be found in the “N\_Processing\_Domain” attribute of each product subgroup of /Data\_Products.

# Requirements

If -l <filepath> is found in the nagg command, open <filepath> and determine the 6 characteristics listed above for the ouput files.

If neither -l or -t are found, open the first NPP data product file encountered in the output directory and determine the 6 characteristics listed above for the ouput files.

In the event one of the above is true and any of the command line options –A, -n, -g or -t are found, override any of the 6 characteristics according to the command line option.

Return an appropriate error message if the file cannot be opened or no NPP data product file is encountered in the output directory.

# Update for Reference Manual

These are the current and proposed reference manual entries for the –l option and making the output like the first file encountered when neither –l or –t are found.

## Current entry

-l *file*

*(To be supported in future implementation.)*

Package like the example *file* in number or type list.  Options on the command line override the example.  If both -l and -t are omitted, then the first NPP data product file encountered will be used as the example file.

## Proposed entry

-l *file*

Package like the example *file* in number or type list.  Options on the command line override the example.  If both -l and -t are omitted, then the first NPP data product file encountered will be used as the example file.

# User Guide additions

# Test Specification

–A and –n should not appear together; an error should be returned if they do.