WebDAV

(Web Distributed Authoring and Versioning) is a set of extensions
to the Hypertext Transfer Protocol (HTTP)

WebDAV is not aware of metadata

WebDAV does not compare the cheksum of the source with that of the destination

WebDAV clients implement the specification in different ways, giving the impression that some clients
are faster than others in transferring the data.
In most cases the data transfer speed is the same, but the overhead for each transfer operation differs.

SURF

Python API

It supports most of the command line operations

It is noticeable that the recent versions support parallel transfers with multiple threads

It offers flexibility and versatility, in particular in metadata queries and manipulation

It is still based on python, so it is slower than the native iRODS C API

SURF