- Talk Ian & Bavo on HDF changes
- Data\_Source attribute
  - How do we IRWG use this attribute
- Creative Commons licensing
- DOI
- Who are our data users? New answer: ECMWF

"Because of the discussions that we had in the NDACC SC meeting last year and that we will pursue further during this year's SC meeting, it may be good that you also have a discussion about **DOI** and especially about **data licensing** with the IRWG"

It would be really useful to get the opinion from the IRWG about their choice...

'Grouping' of the data for a DOI"

- 1. For the DOI, my personal preference would be to have it per species/per site/per processing version
- 2. One DOI per yearly snapshot of entire NDACC archive
- 3. But there may be different options ?

For the data license, we proposed at the NDACC SC meeting to have only a few options

PI would have choice between:

(1) CC0 ->(mandatory choice for US Gov't data – much like how satellite data is available and used)

- (2) CC-BY-SA-4.0
- (3) CC-BY-NC-SA

Can the IRWG choose only one of the three or do we need all three ? Can we all agree with these three options ?

https://creativecommons.org/share-your-work/licensing-types-examples/

We would like to be in a position to make a decision at the next SC (Oct 2019)

It would be really useful to get the opinion from the IRWG about their choice...

For the data license, we proposed at the NDACC SC meeting to have only a few options

PI would have choice between:

- 1. CCO
  - a. mandatory choice for US Gov't data
  - b. much like how satellite data is available and used)
- 2. CC-BY-SA-4.0
- 3. CC-BY-NC-SA

Can the IRWG choose only one of the three or do we need all three ?

Can we all agree with these three options ?

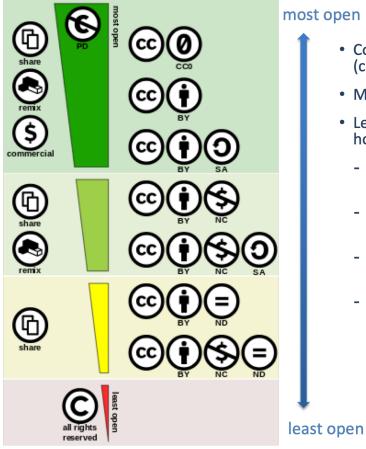
https://creativecommons.org/share-your-work/licensing-types-examples/

### **Creative Commons (CC) licence**

- **Creative Commons** is a non-profit organisation proposing legal and flexible solutions to give users the right to access, share, and use content and data.
- CC licences is one of several public **open** licences placing few restrictions (with the 'copyright' being the most restricting).
- Several types of CC licences exist, the different CC licences condition the terms of distribution and are based on <u>four conditions</u>:

lcon	Licencee Right	Description
$(\mathbf{i})$	BY	<b>Attribution</b> : allows to copy, distribute, <i>make</i> derivative work, remix work if credits are given to the author or licencor (in manner specified)
0	SA	<b>Share-alike</b> : allow to <i>distribute</i> derivate work under an identical licence ("not more restrictive").
	NC	<b>Non-commercial</b> : allows to copy, distribute, make derivative work, remix only for non-commercial purposes.
⊜	ND	No derivative works: allows to copy, distribute, and display but not to make derivate work or remix work.

#### **CC** licence spectrum



#### most open

- Commonly used are 7 CC licences (combination of conditions)
- Most open: CC0 (public domain waiver)
- Least open: "all rights reserved" (copyright owner hold all rights for own use)
  - CC-BY-NC-ND: share only, credits required, non commercial use, no modification
  - CC BY-NC: credits required, allows to share and remix, non-commercial only
  - CC BY-SA: credits required, allows to share and remix, same legal conditions
  - CC BY 4.0 (Attribution 4.0 International): latest version of CC licences, applicable to most jurisdictions: allows to
    - to copy and redistribute the material in any medium or format,
  - Remix, transform, and build upon the material for any purpose, even commercially.

- A paradigm shift in that large data ingesters may be the largest 'data users' not our nearest neighbor science researchers
  - They wish to take, manipulate, assimilate, repackage, post under another brand, sell...
- The more data users who are dependent on your data the better...
- The loop between funders recognizing value (they will pay for) being a large ingester (rather then e.g. publications) is not closed
- We did not previous to this decide to be data producers alone
- Most groups are already stressed
  - Limited funding, limited personnel, limited science production, limited ability for improvements
  - Without an operational commitment (certainly an unfunded / non-recognized, or appreciated one)
- IRWG needs to articulate this back to the SC (and others.)

#### DATA\_SOURCE

Reserved	Purpose	Γ
Keywords		
	No keyword: Describes a dataset obtained from a normal/default analysis	
VNNN	Describes a dataset obtained from an algorithm defined only by its version number NNN	
DEFAULT	Describes a dataset obtained from a normal/default analysis, but some alternate version exists	
HOURLY	Describes a dataset with a time granularity of 1 hour	
DAILY	Describes a dataset with a time granularity of 24 hours	
WEEKLY	Describes a dataset with a time granularity of 1 week	
MONTHLY	Describes a dataset with a time granularity of 1 month	
YEARLY	Describes a dataset with a time granularity of 1 year	
SUNRISE	Describes a dataset obtained from measurements made at sunrise	
SUNSET	Describes a dataset obtained from measurements made at sunset	
SUN	Describes a dataset obtained from measurements tracking the sun	
MOON	Describes a dataset obtained from measurements tracking the moon	
LIMB	Describes a dataset obtained from measurements made in a limb geometry	
NADIR	Describes a dataset obtained from measurements made in a nadir geometry	
ZENITH	Describes a dataset obtained from measurements made in a zenith geometry	
CALVAL	Describes a dataset with a spatio-temporal granularity tailored to calibration/validation	
CLIM	Describes a dataset with a spatio-temporal granularity tailored to climatology and trends	
HIRES	Describes a dataset with the highest possible spatial and/or temporal resolution	
LOWRES	Describes a dataset whose spatial and/or temporal resolution has been voluntarily degraded	
GRIDDED	Describes a dataset gridded or re-gridded onto a standardized grid	
HOMOGN	Describes a re-processed dataset as a result of an homogenization effort	
INHOUSE	Describes in-house-processed data	
CENTRLZD	Describes centrally-processed data	
CTRL	Describes a dataset produced from a "control run"	

Will have a 'fixed' set of keywords but adopted at GEOMS level. But we define by working Groups.

Description of variant in IRWG metadata file at archive.

RT data may be a variant

We plan to not have many variants!

For instance: Next Standard = HIT16.01

DATA\_SOURCE

DATA\_SOURCE = ftir.ch4\_ncar001

DATA\_FILE\_VERSION = 001

New DATA\_SOURCE = ftir.ch4\_ncar001\_HIT16.01 <- now contains variant tag

New full data version in this file: DATA\_SOURCE. DATA\_FILE\_VERSION :

ftir.ch4\_ncar001\_HIT16.01.001

DATA\_SOURCE composed of reserved names (at GEOMS) but defined by WG

DATA\_FILE\_VERSION reserved by PI for minor updates / error corrections