

App to look up best available dataset among many satellites

Many satellites provide information about land surface temperature (LST), vegetation status (e.g. NDVI), soil moisture or other parameters. However, they differ by pixel size of the image, frequency of taking image at the same point/study area, length of the image time series etc.

Manually sorting out all publicly available data sets from different data providers is time consuming but automated search engine could easily rank all data sets to tabular form which can further be used by interested parties.

For example some output tables could look like something like this:

Parameter*	Image pixel size / spatial resolution (or vertical profile in case of some parameters, e.g. atmospheric gas concentrations etc.)						
	<1 m	1-5m	5-10m	10-20m	20-30m	30-40m	> 40 m
Satellite 1							
Satellite 2							
Satellite 3							
...							
Satellite N							

* Parameter = anything like LST, NDVI, RGB, CO₂, SO₂, CH₄, SAR data, etc.,

Parameter*	Image taking interval / frequency						
	< 24 h	24-48 h	48-72h	72h - 7 days	7 – 14 days	14-30 days	> 30 days
Satellite 1							
Satellite 2							
Satellite 3							
...							
Satellite N							

Parameter*	Imaging time (UTC, calculated according to study area coordinates if available/given by search app user)						
	0-3 UTC	3-6 UTC	6-9 UTC	9-12 UTC	12-15 UTC	...	21-24 UTC
Satellite 1	Exact time				Exact time		
Satellite 2				Exact time			
Satellite 3				Exact time			
...							
Satellite N		Exact time		Exact time			Exact time

Parameter*	Length of images time series						
	< 1 yr	1-2 yr	2-3 yr	3-4 yr	4-5 yr	5-6 yr	> 6 yr
Satellite 1		start date					
Satellite 2							
Satellite 3	start date			start date			
...							
Satellite N						start date	

And final summary table based of above described (and any other additional) tables:

	Satellite 1	Satellite 2	Satellite 3	...	Satellite N
Image pixel size					
Image taking interval					
Imaging time (UTC)*					
Length of images time series					
Data availability**					
...					
Data provider /data set web link					

* Imaging time = (UTC, calculated according to study area coordinates if available/given by search app user)

** Data availability = public, public for academic use, public for EU or USA, paid service, etc.