Content of the z-GAL public data package; version of May 25th, 2023
updated on Oct 3, 2023 for spectral data

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uv-tables (abbreviated "uvt") of all z-GAL scans taken with NOEMA are provided in both GILDAS format (*.uvt) and in uv-FITS format (*.fits). Spectral data as shown in Cox et al. 2023 are provided in ASCII format.

Spectral uv-tables.

For each target and NOEMA tuning (scan), two files are included, belonging to the two different side bands of NOEMA.

Filenames reflect the content of the given file:

'source_name'-'low_band_edge'-'high_band_edge-'flag'.uvt/fits

Where:
'source_name' = name of the source in the Herschel catalogs (HerBS, HeLMS, HerS)
'low_band_edge' = frequency [MHz] at the lower end of the covered freq. range
'high_band_edge' = frequency [MHz] at the upper end
'flag' = f if the IRAM pipeline flags were taken into account to exclude bad data
n if the IRAM pipeline flags were ignored
fn if the uv table is obtained merging two tracks,
the first with flag=f and the second with flag=n
nf viceversa (never the case so far)

Continuum uv-tables.

These were produced averaging over all spectral channels that do not contain spectral lines.

Filenames reflect the content of the given file:

'source_name'-c-'center_frequency'-'flag'.uvt

Where:
'source_name' = name of the source in the Herschel catalogs (HerBS, HeLMS, HerS
'center_frequency' = reference frequency for the continuum
'flag' = f if the IRAM pipeline flags were taken into account to exclude bad data
n if the IRAM pipeline flags were ignored
fn if the uv table is obtained merging two tracks,
the first with flag=f and the second with flag=n
nf viceversa (never the case so far)
c = continuum

Spectral data included as of Oct 3, 2023

Filenames are defined as follows:

'source_name'-spec-'id'.dat

where each spectrum shown in Cox et al. (2023) has a corresponding number ‘id’. The ‘id’s are ordered from top to bottom and left to right. For example, in the case of multiple sources with more than two emission lines per source, as for HeLMS-19, the first numbers refer to the three spectra in the left panel (1, 2, 3), the next numbers to the three spectra in the right panel (4, 5, 6), and the two spectra displayed in the lower part of the figure are numbered from left to right (7, 8). The first column in each file contains the line velocities, where the velocity zero corresponds to the redshift of the associated system. The second column contains the flux, spatially integrated over the line emission region.

Please, give credit to z-GAL (Cox et al. 2023; Ismail et al. 2023; Berta et al. 2023; Neri et al 2020), as well as to the z-GAL Cat and Tiger teams members who produced this data package, when using z-GAL data for your analysis/papers and when mentioning z-GAL in conferences and seminars.
