This table describes the columns in the main table of the 1FGL catalog fits format file, gll_psc_v02.fit. In addition to the main catalog table, the extensions Hist_Start, containing the starting values (MET sec) of the time intervals used for evaluating variability, and the Good Time Intervals (GTI) used in the catalog analysis are included in the fits format file.

Column Name	Format	Unit	UCD	Comment
Source_Name	18A		meta.id;meta.main	1FGL JHHMM.m+DDMM; a few sources have an appended 'c' designator indicating that they may be confused with interstellar diffuse emission.
RA	E	deg	pos.eq.ra;meta.main	Right Ascension (J2000).
DEC	E	deg	pos.eq.ra;meta.main	Declination (J2000).
GLON	E	deg	pos.galactic.lon	Galactic Longitude.
GLAT	E	deg	pos.galactic.lat	Galactic Latitude.
Conf_68_SemiMajor	E	deg	pos;stat.error	Semimajor axis of error ellipse at 68% confidence.
Conf_68_SemiMinor	E	deg	pos;stat.error	Semiminor axis of error ellipse at 68% confidence.
Conf_68_PosAng	E	deg		Position angle of the 68% semimajor axis from celestial North, positive toward increasing RA (eastward).
Conf_95_SemiMajor	E	deg	pos;stat.error	Semimajor axis of error ellipse at 95% confidence.
Conf_95_SemiMinor	E	deg	pos;stat.error	Semiminor axis of error ellipse at 95% confidence.
Conf_95_PosAng	E	deg		Position angle of the 95% semimajor axis from celestial North, positive toward increasing RA (eastward).
Signif_Avg	E			Source detection significance in Gaussian σ units. Derived from the likelihood analysis Test Statistic.
Pivot_Energy	E	MeV		Energy at which the error on differential photon flux is minimal (decorrelation energy for the power-law fit). Derived from the likelihood analysis for 100 MeV-100GeV.
Flux_Density	E	photon/cm^2/MeV/s	phot.flux.density	Differential photon flux at the Pivot_Energy. Derived from the likelihood analysis for 100 MeV-100 GeV.
Unc_Flux_Density	E	photon/cm^2/MeV/s	phot.flux.density;stat.error	1-σ error on differential photon flux at the Pivot_Energy.
Spectral_Index	E		spect.index	Best fit for the photon number power-law index. Derived from the likelihood analysis for 100 MeV-100 GeV.
Unc_Spectral_Index	E		spect.index;stat.error	1-σ error on Spectral_Index.
Flux1000	E	photon/cm^2/s	phot.count;em.gamma	Photon flux for 1 GeV-100 GeV obtained by summing the photon flux values from likelihood analysis in the three bands from 1 GeV to 100 GeV. If Δflux/flux exceeds 0.5, then flux + 2*Δflux is given instead as an approximate 2-σ upper limit.
Unc_Flux1000	E	photon/cm^2/s	phot.count;em.gamma;stat.error	1-σ error on integral flux from 1 to 100 GeV obtained by summing in quadrature the errors from the three energy bands from 1 GeV to 100 GeV. If Δflux/flux exceeds 0.5, then this is set to 0.

Energy_Flux	E	erg/cm^2/s	phot.flux;em.gamma	Energy flux from 100 MeV to 100 GeV obtained by summing the energy flux values from the likelihood analysis in the five energy bands from 100 MeV to 100 GeV. If Δflux/flux exceeds 0.5, then flux + 2*Δflux is given instead as an approximate 2-σ upper limit.
Unc_Energy_Flux	E	erg/cm^2/s	phot.flux;em.gamma;stat.error	1-σ error on energy flux from 100 MeV to 100 GeV obtained by summing in quadrature the errors from each of the five energy bands. Set to 0 if Δflux/flux exceeds 0.5.
Curvature_Index	E			Result of a chi-squared test of the photon fluxes in the five bands against the predicted fluxes in those bands as derived from the best-fit power law for 100 MeV-100 GeV. A value greater than 11.34 indicates <1% chance that the power-law spectrum is a good fit to the 5-band fluxes. See the accompanying paper for details.
Flux30_100	E	photon/cm^2/s		Integral photon flux from 30 to 100 MeV - column intentionally set to NULL
Unc_Flux30_100	E	photon/cm^2/s		1-σ error on integral flux from 30 to 100 MeV - column intentionally set to NULL
Sqrt_TS30_100	E			Square root of the Test Statistic between 30 and 100 MeV - column intentionally set to NULL
Flux100_300	E	photon/cm^2/s		Integral photon flux from 100 to 300 MeV from the likelihood analysis in that band with fixed photon power-law index from the 100 MeV-100 GeV fit (Spectral_Index). 2-σ upper limit if the source is not significant in this band.
Unc_Flux100_300	E	photon/cm^2/s		1-σ error on integral flux from 100 to 300 MeV. Set to 0 if the source is not significant in this band.
Sqrt_TS100_300	E			Square root of the Test Statistic between 100 and 300 MeV
Flux300_1000	E	photon/cm^2/s		Integral photon flux from 300 MeV to 1 GeV from the likelihood analysis in that band with fixed photon power-law index from the 100 MeV-100 GeV fit (Spectral_Index). 2-σ upper limit if the source is not significant in this band.
Unc_Flux300_1000	E	photon/cm^2/s		1-σ error on integral flux from 300 MeV to 1 GeV. Set to 0 if the source is not significant in this band.
Sqrt_TS300_1000	E			Square root of the Test Statistic between 300 MeV and 1 GeV.
Flux1000_3000	E	photon/cm^2/s		Integral photon flux from 1 to 3 GeV from the likelihood analysis in that band with fixed photon power-law index from the 100 MeV-100 GeV fit (Spectral_Index). 2-σ upper limit if the source is not significant in this band.
Unc_Flux1000_3000	E	photon/cm^2/s		1-σ error on integral flux from 1 to 3 GeV. Set to 0 if the source is not significant in this band.

Sqrt_TS1000_3000	E		Square root of the Test Statistic between 1 and 3 GeV.
Flux3000_10000	E	photon/cm^2/s	Integral photon flux from 3 to 10 GeV from the likelihood analysis in that band with fixed photon power-law index from the 100 MeV-100 GeV fit (Spectral_Index). 2-σ upper limit if the source is not significant in this band.
Unc_Flux3000_10000	E	photon/cm^2/s	1-σ error on integral flux from 3 to 10 GeV. Set to 0 if the source is not significant in this band.
Sqrt_TS3000_10000	E		Square root of the Test Statistic between 3 and 10 GeV.
Flux10000_100000	E	photon/cm^2/s	Integral photon flux from 10 to 100 GeV from the likelihood analysis in that band with fixed photon power-law index from the 100 MeV-100 GeV fit (Spectral_Index). 2-σ upper limit if the source is not significant in this band.
Unc_Flux10000_100000	E	photon/cm^2/s	1-σ error on integral flux from 10 to 100 GeV. Set to 0 if the source is not significant in this band.
Sqrt_TS10000_100000	E		Square root of the Test Statistic between 10 and 100 GeV.
Variability_Index	E		Result of chi-squared test of deviations of the flux in 11 time segments from a flat lightcurve over the full 11-month catalog interval. A value greater than 23.21 indicates < 1% chance of being a steady source. See the accompanying paper for details.
Signif_Peak	E		Source significance in the time interval giving the maximum monthly value of the photon flux as derived from the likelihood analysis for 100 MeV-100 GeV. If the probability of steady emission is >1%, this is NULL.
Flux_Peak	E	photon/cm^2/s	Maximum monthly value of the integral photon flux derived from the likelihood analysis for 100 MeV- 100 GeV. If the probability of steady emission is >1% this is NULL.
Unc_Flux_Peak	E	photon/cm^2/s	1-σ error on Flux_Peak.
Time_Peak	D	s	Mission Elapsed Time (seconds since 2001 January 1 0 UT) at the center of the interval with the maximum photon flux. If the probability of steady emission is >1%, this is NULL.
Peak_Interval	E	s	Length of interval in which peak integral photon flux was measured.
Flux_History	nE	photon/cm^2/s	Vector of the integral fluxes from 100 MeV to 100 GeV in each interval (best fit from likelihood analysis with photon power-law index fixed to Spectral_Index).
Unc_Flux_History	nE	photon/cm^2/s	Vector of the 1-σ error on integral flux in each interval.
Unc_Flag_History	nB		Vector to flag error calculation used for Unc_Flux_History values. 0 if uncertainty is obtained from the covariance matrix; 1 if from (2-σ upper limit - best fit)/2.
0FGL_Name	18A		Name of a corresponding 0FGL source, if any.

ASSOC_GAM1	18A	Name of likely corresponding source from the 1AGL catalog, if any.
ASSOC_GAM2	18A	Name of likely corresponding source from the 3EG catalog, if any.
ASSOC_GAM3	18A	Name of likely corresponding source from the EGR catalog, if any.
TEVCAT_FLAG	A	TeV Association flag: 'N' for no TeV association, 'P' for small TeV source, 'E' for extended TeV source (diameter>40').
CLASS1	3A	Primary class designation of the identification or likely associated source. See accompanying paper for details of class designations and the association method.
CLASS2	3A	Secondary class designation of the identification or likely associated source.
ASSOC1	24A	Name of identified or likely associated source.
ASSOC2	24A	Alternate name of identified or likely associated source.
Flags	I	Analysis flags to indicate possible issues noted in detection or characterization of the source. The flag values are encoded in a single column with Flag n having value 2^{n-1}. Sources having no flags raised, Flags=0, are those without problems. See Table 2 in the accompanying paper.