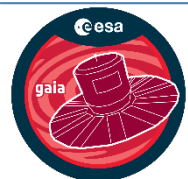




Gaia
Focused Product
Releases
Participación española

C. Jordi
University of Barcelona
ICCUB-IEEC



Gaia FPR presentación
10 Octubre 2023

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Una larga historia ...



Operaciones

- Lanzamiento 19-Dic-2013
- Operaciones científicas 25-Jul-2014
- Final misión nominal 16-Jul-2019
- Final primera extensión Dic-2020
- Final segunda extensión Dic-2022
- Final combustible Q1-2025

Publicación archivos:

- DR1 (14 meses) 14-Sep-2016
- DR2 (22 meses) 25-Abr-2018
- EDR3 (34 meses) 3-Dic-2020
- DR3 (EDR3+nuevos productos): 13-Jun-2022
- FPR (productos específicos): 10-Oct-2023

- DR4 (66 meses) no antes de fin 2025
- DR5 (misión completa) no antes de fin 2030

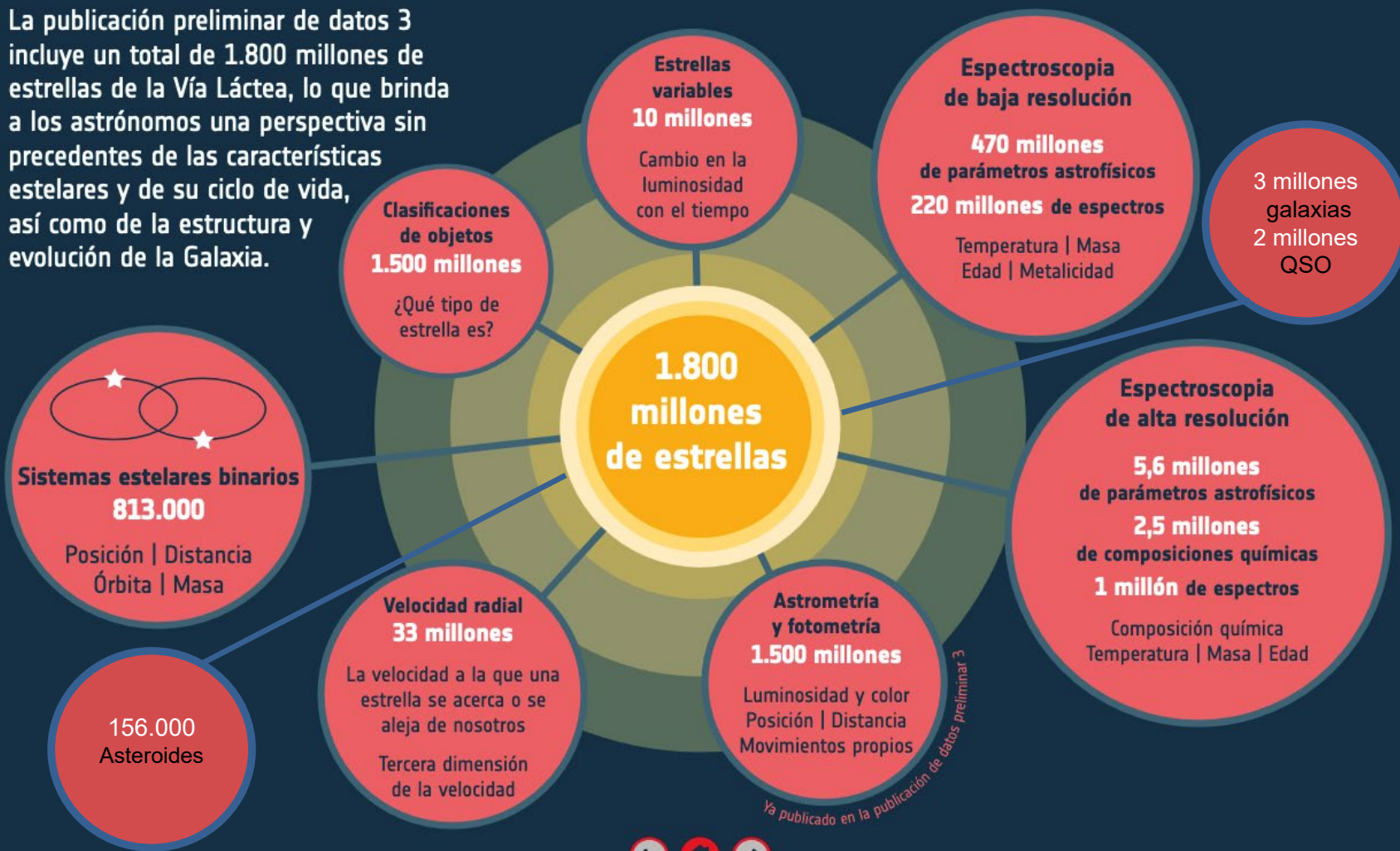
Credits: ESA/Gaia



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La publicación preliminar de datos 3 incluye un total de 1.800 millones de estrellas de la Vía Láctea, lo que brinda a los astrónomos una perspectiva sin precedentes de las características estelares y de su ciclo de vida, así como de la estructura y evolución de la Galaxia.



Ya publicado en la publicación de datos preliminar 3

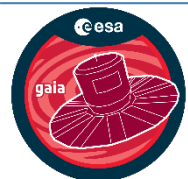


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Contenido FPR

Period of data observations	66 months of data	34 months of data	
Total number of Gaia sources	1,812,236,358 (Gaia DR3 AGIS + Gaia FPR SIFCF)		
	Gaia FPR	Gaia FPR	Gaia DR3
Total number of sources			1,811,709,771
Number of sources with full astrometry (AGIS)	-	-	1,467,744,818
Number of sources with full astrometry (SIF Crowded Fields)	526,457	-	-
Number of sources with 2-parameter solution (AGIS)	-	-	343,964,953
Number of sources with 2-parameter solution (SIF Crowded Fields)	130	-	-
Sources with mean G magnitude (PhotPipe)	-	-	1,806,254,432
Sources with mean G magnitude (SIF Crowded Fields)	526,587	-	-
Specific Object Studies – Long-period variables	-	-	1,720,588
Long Period Variables with radial velocity time series	-	9,614	-
Photometrically-variable sources with radial-velocity time series	-	-	1,898
Sources with a diffuse interstellar band (DIB) in their RVS spectrum	-	use Gaia DR3	472,584
Detection of diffuse interstellar bands (DIBs) in stacked spectra	-	235,428	-
List of quasar candidates used for Gravitational Lens search	-	3,760,032	-
Potential gravitational lens components (including the quasars)	-	4,760,920	-
Gravitational lens candidates (which will be ranked A+ to B-)	-	381	-
Solar system objects	156,823	-	158,152
Solar system objects - epoch astrometry (CCD transits)	46,264,083	-	23,336,467
Solar system objects - orbits	156,762	-	154,741
Solar system objects - average BP/RP reflectance spectra	use Gaia DR3	-	60,518
Solar system objects - planetary satellites	31	-	31



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Presentación de FPR

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Ferran Torra, UB-ICCUB/IEEC/Dapcom
- Astrometría mejorada para objetos del Sistema Solar y contribuciones de Barcelona al procesado de asteroides
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- Lentes gravitacionales
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- Caracterización de estrellas LPV
Pedro García-Lario, ESA/ESAC
- Bandas estelares difusas con espectros RVS
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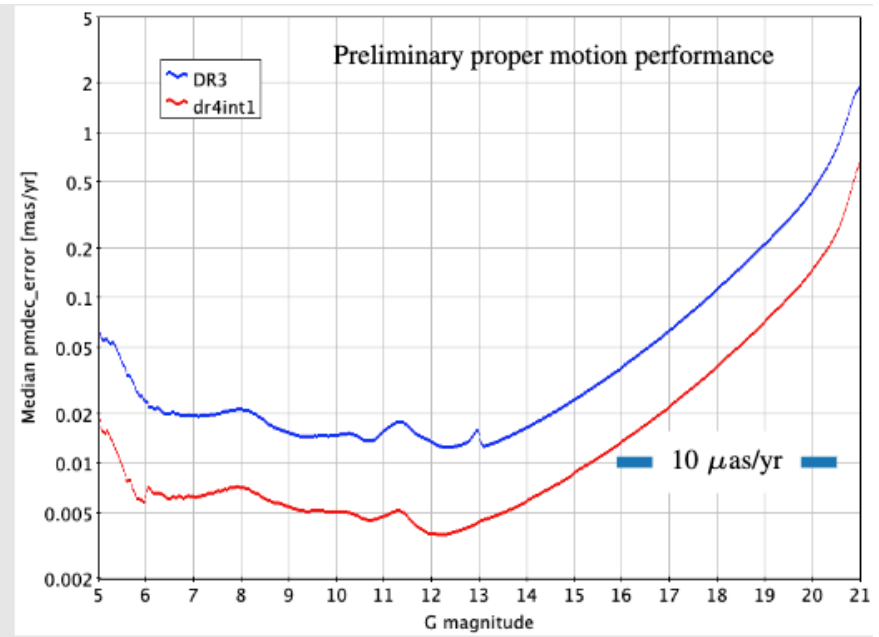
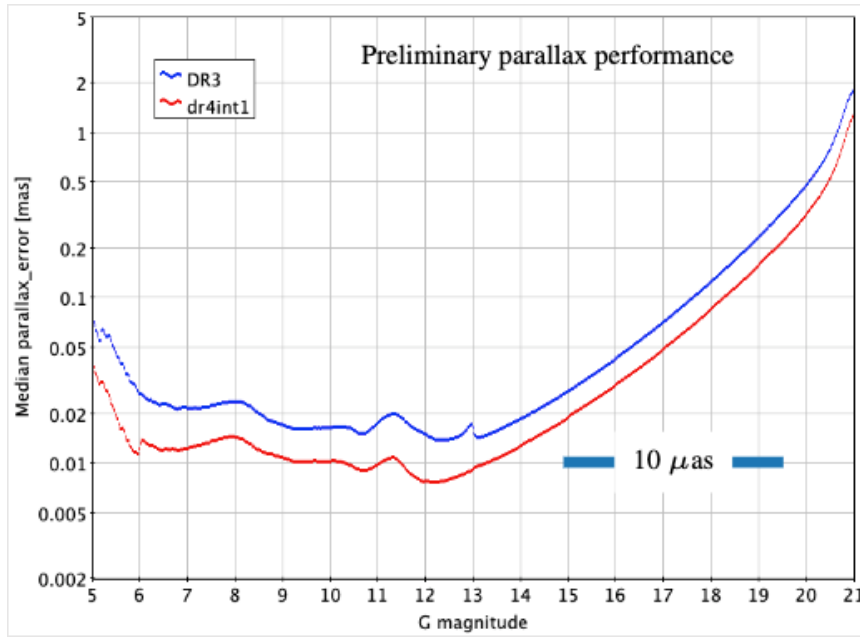


Preparación de DR4

66 meses de misión (25-Jul-2014 a 20-Ene-2020)

~2.5 mil millones de objetos

datos de época (astrometría, fotometría, velocidades radiales, espectros)



Crédito: DPAC/CU3/AGIS/DPCE

Ver presentación de A. Brown en EAS2023,
<https://great.ast.cam.ac.uk/Greatwiki/GreatMeet-PM16>

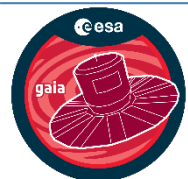


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