

Polar research projects funded by NWO (incl. Netherlands Polar Programme) and the European Commission

Latest update: 7 August 2023 by R. Hokwerda.

Information missing? Please send an email to npp@nwo.nl.

Projects are or will be listed in the National Polar Data Center: <https://npdc.nl/project/>



Contents

Funded by NWO since 2021	3
Funded by the Polar Activities Programme (PAP) since 2021	5
Funded by NWO, 2016-2020	6
Polar projects with a Dutch affiliate funded by the EU, since January 2021	5
Polar projects with a Dutch affiliate funded by the EU, 2016-2020	12
Annex I Cumulative overview	14
Annex II other polar activities funded with public funding	17

Explanation key

Instrument	e.g. Netherlands Polar Programme calls, Talents scheme (Veni, Vidi, Vici), Open Competition
Region	Only projects with a clear polar profile are included.
Theme	<p>All projects are categorised according to the <i>Pole Position-NL 3.0</i> themes:</p> <ul style="list-style-type: none"> I. Climate change: Covering the current state and (anticipated) changes in Earth, ocean, atmosphere, cryosphere and their dynamics II. Ecosystem dynamics: Covering the state and changes in biology, ecology, stressors and permafrost III. Social sciences and humanities: Covering legal, social, economic, political, historical and cultural knowledge IV. Sustainable development: Covering integrated impact analyses, innovations and cold region technology <p>Disclaimer: this categorisation was executed at the private discretion of the NPP bureau and may neither be exhaustive nor entirely accurate. These themes were introduced in 2021 and therefore do not reflect the funding prior to this year.</p>
NWO grant	<p>In millions of euros (M€).</p> <p>A * denotes that only the NWO contribution is mentioned; the total budget including matching may be specified between brackets.</p>

For NPP projects the projects were sorted by period (2011-2015, 2016-2020, 2021-) using the year of the call-for-proposals deadline. For NWO projects the funding decision date was used. For European projects the project start date was used.

Funded by NWO since 2021

Netherlands Polar Programme

Includes Antarctic Tourism call 'NWA Line 2 PT-REPAIR', co-funded by Dutch Research Agenda NWA.

Instru- ment	Project leader	Region	Title	Theme	NWO grant
Antarctic tourism	S. Hart- man, NHL Stenden	Antarctica	ADAPT: Adaptation pathways through knowledge co-production to anticipate Antarctica's uncertain tourism futures With: Univ of Tasmania, Univ of Surrey, Hogeschool Rotterdam, Nipissing Univ	III, IV	1.01
Antarctic tourism	M. Lamers, WUR	Antarctica	ANTARC-SHIP: Fostering environmental stewardship among Antarctic tourism governance actors and institutions With: Utrecht Univ, Univ of Canterbury NZ, Lincoln Univ NZ, Madrid Autonomous Univ	III, IV	1.02
Antarctic tourism	A. Scheep- stra Arctic Centre RuG	Antarctica	GUIDE-BEST (Antarctica): Growing Understanding of Individual Drivers of Expectations and Behaviours to Enhance Sustainable Tourism in Antarctic With: Univ of Canterbury NZ, North Carolina State Univ	III, IV	1.02
Antarctic tourism	K. Bast- meijer, UvT/RuG	Antarctica	ANT-MICI: Antarctic tourism - developing knowledge and tools to minimise cumulative impacts on biodiversity and wilderness values in Antarctica VU Amsterdam, Monash Univ Melbourne, British Antarctic Survey, North Carolina State Univ	II, III, IV	1.02
Strategic oppor- tunity	R. Middag, NIOZ/RuG	Antarctica	East Antarctic Ice Sheet Expedition aboard FS <i>Polarstern</i> ; a strategic opportunity to unravel the role of trace metals in the current and past Antarctic System	I, II	0.33
Strategic oppor- tunity	M. Loo- nen, Arctic Centre RuG	Arctic	Second Netherlands SEES (Scientific Expedition Edgeøya Spitsbergen) data analysis and outreach subsidy	all	0.10
				Subtotal	4.4 M€
Call with BAS		Antarctica	Call closes 30 November 2023. Funding decision expected in April 2024.	I, II	4.0

Antarctic tourism	Antarctica	Phase II call for top-up subsidy closes 10 October 2024. Funding decision expected in January 2025.	III, IV	max 0.31
Total				8.7 M€

Funded by other NWO instruments since 2021

Instru- ment	Project leader	Region	Title	Theme	NWO grant
Talent Veni	W. Lenstra, RU	Antarctica and Arctic	Continental margin sediments as a source of bio-essential iron and manganese to high-latitude ocean waters	I, II	0.28
RUBICON	K. Keski- talo, Nor- thumbria	Arctic	Accelerated loss of permafrost and sea ice: investigating new climate-driven impacts on the Arctic seabed	I, II	0.20
Open M	R. van de Wal, UU	Antarctica and Arctic	New avenues for studying ice sheets in warmer climates	I	0.29
Talent Vici	A. von der Heydt, UU	Antarctica and Arctic (Global)	Interacting climate tipping elements: When does tipping cause tipping? Cascades of abrupt climate transitions	I	1.50
Open XS	G. Hens- gens, VU	Arctic	Scaling future methane emissions from Arctic lakes	I, II	0.05
Open M	F. Sangior- gi, UU	Antarctica	Antarctic ocean and cryosphere variability during warm climates: lessons from the Miocene Climatic Optimum	I	0.35
NWA L4 Science Communi- cation	M. Loonen, RuG	Arctic	Arctic Explorer (science education programme for schools, using VR)	all	0.05
JPI Cultural Heritage & Global Change	R. Fraser, UiTromsø & M. Loonen, RuG	Arctic	ArchHeritage: Arctic Heritage: Commodification, Identity, and Revitalisation in the Anthropocene	III	0.25
Space Support	P. Ditmar, TU Delft	Arctic	Quantification of meltwater storage in Greenland using a statistically-optimal estimation of mass anomalies with satellite gravimetry data	I	0.30
Talent Veni	J. Lattaud, VU	Arctic	Evolution of the biological methane filter in the Beaufort Sea Withdrawn due to relocation	I, II	0.28
Total					3.4 M€

Funded by the Polar Activities Programme since 2021

The Polar Activities Programme (PAP) is operated by the Interdepartmental Polar Committee (IPO) at 270 k€ per year. The budget is primarily used for contracts (e.g. Arctic Council working group membership) and small grants. The Programme is fully operated outside NWO without involvement of the NPP. This overview is therefore not exhaustive.

Beneficiary	Title	Regions	Theme	Year
M. van den Heuvel-Greve	Ecosystem Overview of the Arctic Ocean	Arctic	II	2022
WJ Strietman	Plastic in a Bottle, PAME	Arctic	II, III, IV	2021-202..
E. Kokmeijer	ANTARKTIKOS journal	Antarctica	all	2021-2022
M. de Jong (2022), L. Wiesebron (2023)	Arctic Frontiers Emerging Leaders Programme	Arctic	all	Since 2013

For contracted activities see Annex II.

EU polar projects with a Dutch affiliate funded by the European Commission since 2021



Horizon 2020 Consortia						
Coordinator, others involved	Acronym	Title	Region	Theme	Total M€	NL M€
Finnish Meteorological Inst., 19 partners incl. <u>RUG</u>	CRiceS	Climate relevant interactions and feedbacks: the key role of sea ice and snow in the polar and global climate system	Antarctica and Arctic	I	8.5	0.16
Norve, 16 partners incl. <u>UU</u>	PolaRES	Polar Regions in the Earth System	Antarctica and Arctic	I	8.1	0.84
Danish Meteorological Inst., 11 partners incl. <u>UU</u>	OCEAN:ICE (not to be confused with ERC Starting Grant OceanIce)	Ocean Cryosphere Exchanges in Antarctica: Impacts on Climate and the Earth system	Antarctica	I	4.9	0.19
						1.2 M€

The Dutch affiliates received a total of 1.2 M€.

Source: EU Cordis database.

Funded by NWO, 2016-2020

Netherlands Polar Programme

NPP call	Project leader	Region	Title	Theme	NWO grant
Policy-driven call (2019)					
Policy 2019	B. Nolet, NIOO-KNAW	Arctic	Vulnerability of Arctic migratory birds to rapid climate change	II	0.95
Policy 2019	R. van de Wal, UU	Antarctica and Arctic	Dutch Polar Climate and Cryosphere Change Consortium	I	2.00
Policy 2019	H. Cornelissen, VU	Antarctica	The Antarctic biota count (ABC): a functional trait-based approach to scale biodiversity from plot to region	II	1.26
Policy 2019	K. Bastmeijer, UvT	Antarctica	Proactive Management of Antarctic Tourism: Exploring the Role of ATS Principles and Values and Best Practices Beyond the ATS	III	1.29
Total					5.5 M€
Belmont Forum 'Arctic Resilience' (2019)					
Belmont Forum Arctic Resilience	J. van der Sluijs, UU	Arctic	Sense Making, Place attachment and Extended networks as sources of Resilience in the Arctic (SeMPER-Arctic)	III	*0.20
Belmont Forum Arctic Resilience	M. Loonen, RUG	Arctic	Understanding Resilience and Long-Term Ecosystem Change in the High Arctic: Narrative-Based Analyses from Svalbard (SVALUR)	II, III	*0.23
Total					0.4 M€
Dutch contribution to MOSAiC (2018)					
MOSAiC 2018	J. Stefels, RUG	Arctic	Arctic Sea Ice-Pelagic coupling of the Carbon and Sulfur cycles	II	0.62
MOSAiC 2018	J.A. van Franeker, WUR	Arctic	The role of sea ice in the life cycle of polar cod (<i>Boreogadus saida</i>) and its prey	II	0.19
MOSAiC 2018	L. Ganzeveld, WUR	Arctic	Multi-scale model analysis of Arctic surface-boundary layer exchange of climate-active trace gases and aerosol precursors	I, II	0.22
Total					1.0 M€
Arctic Topsector Water & Maritime (2017)					
Topsector Water 2017	M. Verlaan, TUD	Arctic	Forecast Arctic Surges and Tides for the Netherlands	I	*0.37

Topsector Water 2017	W. Uijtewaald, TUD	Antarctica and Arctic	Spray water of jets from wave run-up against ship bows and steep walls	IV	*0.22
Topsector Water 2017	W. Mooij, NIOO-KNAW	Arctic	An agent-based modelling tool to estimate the effect of retreating sea-ice and intensifying human activities on seals in the Arctic	II, IV	*0.27
Total NWO					0.9 M€

Science-driven call (2016)

Science 2016	P. Bijl, UU	Antarctica	The role of warm oceans in past Antarctic ice-sheet variability	I	0.26
Science 2016	R. Aerts, VU	Antarctica and Arctic	Aliens in the polar regions: Impacts of invasive species and invasion engineers on Arctic and Antarctic terrestrial ecosystems	II	0.58
Science 2016	M. Heijmans, WUR	Arctic	Shrub decline instead of shrub expansion in Siberian lowland tundra?	II	0.30
Science 2016	C. Tijn-Reijmer, UU	Antarctica and Arctic	An innovative Netherlands polar climate monitoring network on Antarctica, Greenland and Svalbard	I	0.55
Science 2016	T. Röckmann, UU	Antarctica	Reconstructing oxidation conditions in the past atmosphere with clumped isotope measurements of O ² in air from polar ice cores	I	0.29
Science 2016	Y. van der Velde, VU	Arctic	Permafrost thaw impacts on Arctic river flows	I, II	0.25
Science 2016	C. Brussaard, NIOZ/UvA	Antarctica	Polar marine viral diversity and dynamics	I	0.58
Science 2016	R. Middag, NIOZ	Arctic	Iron limitation and viral lysis, phytoplankton caught between a rock and a hard place	I	0.58
Science 2016	B. Nolet, NIOO-KNAW	Arctic	Towards prediction of the future breeding distribution and migration of pink-footed geese as a response to climate warming	II	0.58
Science 2016	H. van der Jeugd, NIOO-KNAW	Arctic	Quantifying behavioural and physiological adjustments to a new style of life in a traditionally arctic migratory bird	II	0.58
Science 2016	T. Elzenga, RUG	Antarctica	Predicting DMS(P) production in a high CO ₂ world. Does algal carbon-utilization provide the answer?	I, II	0.34
Science 2016	J. Weedon, VU	Arctic	Defining the temperature sensitivity of arctic soil microbial communities	II	0.31

Science 2016	J. van Gils, NIOZ	Arctic	BodyShrinkage: investigating Arctic warming-induced body shrinkage of long-distance migrants	II	0.53
				Total	5.8 M€
Strategic opportunities (2016-2019)					
2020	A. Scheepstra, RUG	Antarctica and Arctic	EU-PolarNet phase 2	-	*0.17
2020	M. Loonen, RUG	Arctic	SEES.nl II (originally scheduled August 2020, postponed to 2021)	-	0.21
2018	T. de Greef, TUD (for H. Sips, Icewhale)	Arctic	Design study to Modular Arctic Research Vessel (MARVEL)	-	0.14
2016	M. van den Broeke, UU	Antarctica	Beyond EPICA: European Project for Ice Coring in Antarctica	I	*0.30
NPP-Bespo, 2016	S. Lhermitte, TUD	Antarctica	East Antarctic surface mass Balance in the Anthropocene : Observations and multiscale modelling (Mass2Ant)	I	0.25
2020	European Polar Board	Antarctica and Arctic	Renewed hosting of the European Polar Board secretariat until 31 Dec 2024	-	0.25
					1.1 M€
				NPP total	14.7 M€

NWO Talent Scheme

Instrument	Project leader	Region	Title	Theme	NWO grant
Veni SSH	S. Desjardins, RUG	Arctic	How climate change and colonialism impacted traditional Inuit life in Arctic Canada	III	0.25
Veni ENW	L. Meire, NIOZ	Arctic	The melting of the Greenland Ice Sheet and its impact on coastal ecosystems	I	0.25
Veni ENW	M. van Wessem, UU	Antarctica	Improved projections of future Antarctic surface melt rates	I	0.25
Veni ENW	B. Noël, UU	Arctic	Resilience of the Greenland ice sheet firn layer in a future warming climate	I	0.25
Veni ENW	L. Stap, UU	Antarctica	Hot history of the Antarctic ice sheet	I	0.25
Vidi ENW	B. Wouters, UU	Antarctica and Arctic	Disentangling ice loss of mountain glaciers and ice caps	I	0.80

Vidi ENW	M. Ziegler, UU	Antarctica and Arctic	Cenozoic ice sheets and global warming: Insights from clumped isotopes	I	0.80
Vidi ENW	F. de Jong, NIOZ	Arctic	From ice to deep ocean: Where does the freshwater go?	I	0.80
Vidi ENW	S. Vera-verbeke, VU	Arctic	Fires pushing trees North	II	0.80
Vidi ENW	R. Middag, NIOZ	Arctic	Trace metals and the Arctic-Atlantic gateway in a changing world, local processes and global connections	I, II	0.80
Vidi ENW	J. Vonk, VU	Arctic	Warming frozen ground: the ultimate fate of permafrost carbon on the arctic shelves	I, II	0.80
Vici	J. van Gils, NIOZ	Arctic	Arctic warming and migrant shorebirds: an in-depth investigation of warming-induced phenotypic changes and their lifelong impact in both the Arctic and the tropics	II	1.50
Total					7.5 M€

NWO Open Competition

Instrument	Project leader	Region	Title	Theme	NWO grant
OPEN XL ENW	B. Wouters, UU/TUD	Antarctica	State and fate of Antarctica's gatekeepers: a High-Resolution approach for ice Shelf instability (HiRISE)	I	2.29
Open S ENW	A. von der Heydt, UU	Antarctica	Dynamics and climatic imprint of the early Antarctic Circumpolar Current	I	0.23
Open S ENW	V. Bense, WUR	Arctic	Release of deep carbon in areas of degrading permafrost through activation of groundwater flow	I, II	0.29
Open S ENW	M. van den Broeke, UU	Arctic	Extreme Greenland melt events: filling knowledge gaps in the contribution from sensible heat	I	0.31
Open S ENW	J. van Gils, NIOZ	Arctic	Coping with phenological mismatch: how an insectivorous migrant shorebird may mitigate the negative effects of a warming Arctic by prey and patch selection	II	0.31
Open S ENW	P. Bakker, VU	Antarctica	The Antarctic Ice Sheet during the Last Interglacial: what does it really tell us about the ice sheet's future?	I	0.27
Total					3.7 M€

NWO User Support Space Programme

Instrument	Project leader	Region	Title	Theme	NWO grant
Space	W. Jan van de Berg, UU,	Arctic	An interactive narrowband albedo model for the Greenland Ice Sheet	I	0.26
Space	K. van Huissteden, VU	Arctic	Quantifying shallow and deep permafrost changes using radar remote sensing	I, II	0.26
Space	B. Vermeersen, NIOZ	Arctic	Marginal No More: Constraining Sea-level Change in Scandinavia's Marginal Seas with Post-Glacial Rebound Models	I	0.22
Space	M. van den Broeke, UU	Arctic	Toward improved altimetry observations for the Greenland Ice Sheet	I	0.23
Space	S. Lhermitte, TUD	Antarctica and Arctic	Assessing firn processes from multi-source satellite data	I	0.24
Space	P. Kuipers Munneke, UU/KNMI	Antarctica	A benchmark surface melt product for the Antarctic ice sheet	I	0.20
Space	S. Lhermitte, TUD	Antarctica	Remote sensing of damage feedbacks and ice shelf instability in Antarctica	I	0.30
Space	B. Wouters, TUD	Antarctica	Antarctic Time Machine: unveiling five decades of ice sheet changes	I	0.31
Total					2.0 M€

Funded by other NWO instruments

Instrument	Project leader	Region	Title	Theme	NWO grant
Rubicon ENW	J. Lattaud, ETH Zürich	Arctic	Warming-induced Changes in Organic CarbOn cycling in the Arctic (Warm COCOA)	I, II	0.16
Rubicon ENW	A. Cabrera Arreola, Univ Copenhagen	Arctic	Genomic response of polar bears to past, present and future climate change	I, II	0.18
Rubicon ENW	A. Burson, Univ Nottingham	Arctic	Phytoplankton Dynamics in a Freshening Arctic	II	0.19

ERA4CS Climate Systems	M. Lamers, WUR	Arctic	Enhancing the Saliency of climate services for marine mobility Sectors in European Arctic Seas (SALIENSEAS) NL, DK, SE, NO	IV	0.17 (estimate) ¹
Visitor Grant	F. Sangiorgi, UU, for AWI	Antarctica	The role of the ocean on the Antarctic ice sheets stability: lessons from the past *NB instrument ceased to exist	I	0.09
Science Diplomacy	M. Kemper, UvA	Arctic	Sustainability and Geopolitics: Dutch-Russian Cooperation in Arctic Affairs *Cancelled due to Covid-19 and the Russian war in Ukraine	III	0.02
Computing time	A. von der Heydt, UU	Antarctica	The development of the Antarctic Circumpolar Current and its climatic impact	I	0
Computing time	S. van der Linden, TUD	Antarctica	Nocturnal equilibria of the atmospheric boundary layer at Dome C, Antarctica	I	0
Computing time	O. Klept- sova, TUD	Arctic	Hydrodynamic modelling of Canadian Arctic archipelago and Baffin Bay	I	0
Total					0.7 M€

Other public funds in the Netherlands (not exhaustive)

Funded by the Polar Activities Programme (PAP), 2016-2020

Project leader	Title	Regions, year	Theme	Funding specifications
W.J. Strietman, WUR	Arctic Marine Litter Project	Arctic	II	WUR, NL government (PAP), WWF (DK), CCU and Dolfinarium
Various	Advisory work (e.g. ICES, ATCM/CEP, AC)	Arctic and Antarctica	-	
Arctic Centre, RuG	CAFF, AMAP, SDWG	Arctic	II, III	
Arctic Centre, RuG	Netherlands Arctic Station and SIOS	Arctic	-	
E. Kokmeijer	ANTARKTIKOS journal	Antarctica	-	
Diverse	Arctic Frontiers Emerging Leaders Programme	Arctic	-	
Wing	Dutch Arctic Circle (DAC)	Arctic	IV	
IenM	Workshop Polar Tourism, Rotterdam, February 2019	Antarctica	II, III	
Total 1.35 M€ 2016-2020				

¹ Reconstructed estimate from total NWO contribution of 1.7 M€ to 10 Dutch projects in ERA-NET 4 climate.

Polar projects with a Dutch affiliate funded by the European Commission, 2016-2020



Project leader, others involved	Acronym	Title	Region	Theme	Funds in M€	
European Research Council Starting Grants						
A. Trueba, <u>TUD</u>	CoupledIce-Clim	Coupled climate and Greenland ice sheet evolution: past, present and future	Arctic	I	1.68	
J. Vonk, <u>VU</u>	THAWSOME	THAWing permafrost: the fate of Soil Organic Matter in the aquatic Environment	Arctic	II	1.50	
P. Bijl, <u>UU</u>	OceaNice	Paleoceanography of the Ice-proximal Southern Ocean during Past Warm Climates	Antarctica	I	1.50	
European Research Council Consolidator Grants						
S. Veraverbeke, <u>VU</u>	FireIce	Fire in the land of Ice	Arctic	I, II	2.37	
A. Sluijs, <u>UU</u>	SPANC	Evolution and Variability of Climate Sensitivity and Polar Amplification during CeNozoic Warm Climates	Antarctica and Arctic (global)	I	2.00	
European Union Marie Skłodowska-Curie Actions						
Copenhagen Univ., 3 partners incl. P. Jordan, <u>RUG</u>	ArchSci2020	Archaeology on the Edge: Northern Europe and the Circumpolar World (Joint Doctorate)	Arctic	III	NL 0.77 (total 4.1)	
T. Melchiore, <u>UvA</u>	EURARCTIKA	The European Union in the Arctic (Individual Fellowship)	Arctic	III	0.18	
Arctic Research Icebreaker Consortium (ARICE) call-for-access						
J. Vonk, <u>VU</u>	PECABEAU expedition	Permafrost Carbon on the Beaufort Shelf (2019, postponed to 2021)	Arctic	II	In-kind	
Horizon 2020 Consortia						
Coordinator, others involved	Acronym	Title	Region	The me	Total M€	NL M€
Lund Univ., 48 partners incl. <u>RUG</u>	INTERACT 1	International Network for Terrestrial Research and Monitoring in the Arctic	Arctic	-	10.0	0.02
DMI, 44 partners incl. NIOZ et al. ³	Blue-Action	Arctic Impact on Weather and Climate	Arctic	I	8.1 ¹	0.48

AWI, 13 partners incl. <u>UU</u>	Beyond EPICA	Oldest Ice <i>excl. NPP contribution (0.3 M€)</i>	Antarctica	I	2.6 ^{1,2}	0.005
CNRS, 11 others incl. <u>UU</u>	Beyond EPICA II	Oldest Ice Core: 1,5 Myr of greenhouse gas – climate feedbacks	Antarctica	I	11.0	0.13
AWI, 26 partners incl. <u>VU</u>	Nunataryuk	Permafrost thaw and the changing arctic coast: science for socio-economic adaptation	Arctic	II	11.5	0.55
Lund Univ., 64 partners incl. <u>RUG</u>	INTERACT 2	International Network for Terrestrial Research and Monitoring in the Arctic	Arctic	-	10.0	0.02
Uppsala Univ., 18 partners incl. <u>WUR</u> and <u>Erasmus U.</u> ⁴	JUSTNORTH	Toward Just, Ethical and Sustainable Arctic Economies, Environments and Societies	Arctic	III	6.2 ¹	0.26
CNRS, 25 partners incl. <u>UU</u> , <u>NIOZ</u> , <u>TUD</u> , <u>KNMI</u> ⁵	PROTECT	Projecting sea-level rise: from ice sheets to local implications	Antarctica and Arctic	I	10.0	1.63
AWI, 24 partners incl. <u>NWO-NPP</u> (for <u>RUG</u>)	EU-PolarNet 2	Co-ordinating and Co-designing the European Polar Research Area. A platform for European polar research actions.	Antarctica and Arctic	-	3.3 ²	0.17
AWI, 4 partners incl. <u>NIOZ</u>	CoastCarb	Coastal ecosystem carbon balance in times of rapid glacier melt	Arctic	II, III	1.8	0.10
CNRS, 9 partners incl. <u>UU</u>	DEEPICE	Research and training network on understanding Deep ice core Proxies to Infer past antarctic climate dynamics	Antarctica	I	4.2	0.27

The Dutch affiliates received a total of 13.6 M€.

Annex I Cumulative overview

Totals of number of projects funded since Jan 2021

Number of projects per polar region, 2021-present

	Arctic	Antarctic	Bipolar	Total projects
Netherlands Polar Programme	1	5		6
NWO without NPP	5	1	3	9
Talent Line	1		2	2
Open Competition	1	1	1	3
User Support Space	1			1
Other	2			2
Total NWO	6	6	3	15
European Commission	1	2	2	5

Research funding per polar region 2021-present, in million euros (M€)

	Arctic	Antarctic	Bipolar	Total
Netherlands Polar Programme	0.1	4.3		4.4
NWO without NPP	0.9	0.3	2.1	3.3
Talent Line	0.28		1.80	2.1
Open Competition	0.05	0.35	0.29	0.7
User Support Space	0.30			0.30
Other	0.26			0.26
Total NWO	1.0	4.6	2.1	7.7
European Commission	0.30	0.44	1.00	1.75
Polar Activities Programme	-	-	0.27	0.27
Total public project funding	1.4	5.0	3.4	9.8

Totals of number of projects funded between 2016-2020

Not including awards and EU contributions under Add.1 and Add.2.

Number of projects per polar region, 2016-2020¹

	Arctic	Antarctic	Bipolar	Total projects
Netherlands Polar Programme	21	6	5	32
NWO without NPP	23	10	3	36
Talent Line	9	3	2	14
Open Competition	3	2	-	5
User Support Space	5	2	1	8
Other	6	3	-	9
Total NWO	44	16	8	68
European Commission	10	4	2	17

¹ Includes nine projects of 0 to 20,000 euros funding.

Research funding per polar region 2016-2020, in million euros (M€)

	Arctic	Antarctic	Bipolar	Total
Netherlands Polar Programme	7.7	3.7	3.5	15.0
NWO without NPP	10.6	1.8	1.8	14.3
Total NWO	18.4	5.5	5.4	29.3
European Commission	7.8	1.7	3.8	13.3
Polar Activities Programme (PAP)		<i>unspecified</i>		1.4
Total public project funding	26.2	7.2	9.2	44.0 M€
Total NL public investment in Antarctic research	-	-	-	12.9 M€ NWO + 16.2 EC (5.3 M€/year)

Number of projects per theme, 2016-2020¹

	Theme I		Theme II		Theme III		Theme IV		N/A	Total
	main	second.	main	second.	main	second.	main	second.	-	main
Netherlands Polar Programme	10	4	13	7	2	3	2	2	5	32
NWO except NPP	25	3	8	2	3	-	-	1	-	36
Total NWO	35	7	22	9	5	3	2	3	5	69
European Commission	10	2	3	-	2	1	-	-	2	17

¹ Includes nine projects of 0 to 20,000 euros funding. Second.=secondary, projects with a major overlap with other themes. Most regular cross-overs are permafrost and algae research and their role in the ocean-ice-atmosphere system.

Beyond EPICA I and II counted separately.

Funding per theme 2016-2020, in million euros (M€)

	I	II	III	IV	N/A	Total
Netherlands Polar Programme	5.2	7.0	0.4	1.5	0.9	15.0
NWO except NPP	9.5	4.3	0.4	-	-	14.3
Subtotal NWO	14.7	11.3	0.9	1.5	0.9	29.3
European Commission	7.9	2.0	1.2	-	0.04	11.1
Polar Activities Programme	<i>unspecified</i>				1.4	1.4
Total secondary flow funding	22.6	13.3	2.1	1.5	2.3	41.8

Annex II other polar activities funded with public funding

Netherlands Polar Programme

Activity	Region	Full name	Theme	Contrib.
Collaboration BAS	Antarctica	British Antarctic Survey, including Dirck Gerritsz Laboratory		0.3 M€/yr
Collaboration AWI	Antarctica and Arctic	Alfred Wegener Institute		Under negotiation
Membership SCAR, COMNAP, 4 SCAR working groups	Antarctica	Scientific Committee on Antarctic Research; Council of Managers of National Antarctic Programs		All member-ships combined ca. 75 k€/yr
Membership IASC + 5 working groups; FARO; Arctic Funders	Arctic	International Arctic Science Committee; Forum of Arctic Research Operators. Arctic Funders suspended as of 2022.		
Membership EPB	Antarctica and Arctic	European Polar Board		
NPDC	Antarctica and Arctic	National Polar Data Center		0
SIOS	Arctic	Svalbard Integrated earth Observing System		
NL Arctic Station	Arctic	NL Arctic Station Ny-Ålesund		

NWO, other

Activity	Region	Full name	Theme	Contrib.
IODP	Incidentally Arctic and sub-Antarctica	International Ocean Discovery Program	I	0.6 M€/yr
NIOZ expedition to Denmark Strait	Arctic		I, II	-

Annex III. Special mentions and awards since 2011 (not exhaustive)

Project leader	Award	Regions	Theme	Funding
T. Piersma, RUG	Spinoza award, 2014	Arctic (global)	II	2,000,000
R. Middag, NIOZ	KNAW Heineken Young Scientist Award, 2014	Antarctica and Arctic	I, II	10,000
P. Bijl, UU	KNAW Heineken Young Scientist Award, 2018	Antarctica and Arctic	I	10,000
F. Schaafsma, WUR	CCAMLR Scholarship, 2019	Antarctica	II	Travel scholarship
T. Piersma, RUG	NWO Stairway to Impact, 2020	Arctic	II	50,000
F. Kruse, Kiel Univ, PhD alumnus RUG 2016, 2018	VolkswagenStiftung Freigeist-Stipendium	Arctic	III, IV	821,300
Julia Engelmann, NIOZ	Women in Science Excel (WISE) 2019, Modelling marine microbial communities in the North Sea and Antarctica	Antarctica	II	320,000
Rúna Magnusson	KNAW Ecology Fund: precipitation and permafrost (fieldwork Svalbard)	Arctic	I	Max 9,000