Ecosystem compartment	Subcategory/theme	Variable	Sum of all instances nr.	Source: sites [%]	Source: others [%]
Atmosphere		Eddy flux of ET, CO_2	35	52	48
		Air temperature	47	62	38
		Humidity	38	65	35
		Incoming shortwave radiation	42	62	38
		Wind speed/wind direction	37	66	34
		Precipitation	49	61	39
		Throughfall	25	41	59
		Snowpack distribution and duration	22	56	44
Vadose zone	Solid phase	Elemental composition and mineralogy	12	60	40
		Texture and physical characterization	33	59	41
		Structure (soil depth, layers)	35	61	39
		Organic carbon	24	61	39
		Radiogenic isotope composition	2	50	50
	Litter	Litter composition and biomass	19	48	52
		Soil respiration	15	50	50
		Microbial biomass above- or below-ground	10	36	64
		Root density	21	31	69
	Liquid phase	Soil moisture	32	57	43
		Soil temperature	24	62	38
		Hydraulic head	20	44	56
		Matric potential, specific conductivity	24	45	55
		Water chemistry	19	54	46
Saprolite and bedrock	Solid phase	Texture and physics/structure	18	45	55
		Element composition/organic matter	8	67	33
		Petrology/mineralogy	7	43	57
		Age or rate constraints (radionuclides)	3	25	75
	Liquid phase	Potentiometric head, temperature	7	38	63
		Groundwater chemistry	5	38	63
		Gas chemistry	2	100	0
Surface water	Hydraulics	Instantaneous discharge	34	54	46
		Sediments	17	62	38
	Water quality	Water temperature, electrical conductivity, pH	25	69	31
		Water quality – spectral absorption coefficient (DOC)	20	68	32
		Water quality (nutrients, major cations/anions, others)	29	63	37
		Stable isotopes	9	90	10
Biosphere	Habitat/vegetation/crop	Habitat mapping	27	42	58
		Structure (height) and dynamics	32	43	57
		Above-ground biomass	35	52	48
		Leaf area index	27	46	54
		Photosynthesis (chlor *a*)	16	45	55
	Biota, diversity	Birds	4	80	20
		Ground beetles/spiders	5	57	43
		Soil invertebrates/gastropods	7	56	44
		Soil microbial diversity	5	60	40
		Benthic invertebrates/fish	6	57	43
		eDNA (environmental DNA; species detection)	2	50	50
		Food web diversity (e.g. AMMOD)	7	67	33
		Vascular plant diversity	11	53	47
		Lower plant diversity	7	50	50
		Fungi	4	50	50
		Biofilm	1	100	0