	Category 0	Category 1	2	3	4	5	6	7	8	9	10	11	12	13
	General area of			Atm/Ocean Structure/	Physical Meteorology and	Observational techniques and	Mathematical and statistical						Atmospheric Chemistry and	Artificial intelligence and
	expertise	Geographic location/entity	Circulation/ Dynamics	Phenomena	Climatology	algorithms	techniques	Forecasting	Models and modeling	Variability	Applications/Miscellaneous	AMS Administration	Aerosols	machine learning
						Acoustic								
1	Atmosphere	Africa	Abyssal circulation	Abyssal circulation	Absorption	measurements/effects	Bayesian methods	Automatic weather stations	Adaptive models	Annual variations	Agriculture	Administration	Aerosol hygroscopicity	Artificial intelligence
2	Ocean	Amazon region	Advection	Anticyclones	Advection	Aircraft observations	Bias		Anelastic models	Anomalies	Air pollution	Associate Editor-WCAS	Aerosol indriect effect	Automated systems
3	Social science	Antarctica	Ageostrophic circulations	Atmosphere-ocean	Aerosols	Algorithms	Changepoint analysis	Climate prediction	Baroclinic models	Arctic Oscillation	Air quality	Associate Editor-WAE	Aerosol nucleation	Ravesian methods
4	Ecology	Arctic	Airflow	Bottom currents/bottom water	Air quality	Automatic weather stations	Classification	Ensembles	Boundary conditions	Biennial oscillation	Animal studies	Associate Editor-MWR	Aerosol optical properties	Classification
5		Asia	Annular mode	Boundary currents	Air-sea interaction	Buoy observations	Differential equations	Forecast verification/skill	Climate models	Climate variability	Antarctic Oscillation	Associate Editor-JTECHA	Aerosol radiative effect	Clustering
6		Atlantic Ocean	Antarctic Oscillation	Poundary Javor	Albodo	Climate classification/regimes	Empirical orthogonal	Forecasting	Cloud parameterizations	Decadal variability	Anthropoganic offacts forcing	Associate Editor, ITECHO	Aeronal cloud interaction	Data coionea
7		Australia	Anticyclones	Cloud cover	Angular momentum	Climate classification/regimes	Error analysis	Forecasting techniques	Cloud parameterizations	Diurnal effects	Atmosphere-land interaction	Associate Editor-JPO	Aerosols/particulates	Data science Decision trees
8		Central America	Arctic Oscillation	Clouds	Antarctic Oscillation	Cloud retrieval	Filtering techniques	Hindcasts	Clouds	Interannual variability	Biofouling	Associate Editor-JHM	Air pollution	Deep learning
						Cloud tracking/cloud motion					Biosphere-atmosphere			
9		Coastlines	Atmosphere-land interaction	Cold air surges	Anthropogenic effects/forcing	winds	Fourier analysis	Mesoscale forecasting	Convective parameterization	Interdecadal variability	interaction	Associate Editor-JCLI	Air quality	Dimensionality reduction
10		Complex terrain	interaction	Cold fronts	Atmosphere-land interaction	Data mining	Interpolation schemes	Nowcasting	Coordinate systems	Intraseasonal variability	Boreal meteorology	Associate Editor-JAS	Air quality and climate	Expert systems
					Atmosphere-ocean			Numerical weather		,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,				Genetic
11		Continental shelf/slope	Atmospheric circulation	Cold pools	interaction	Data processing/distribution	Isentropic analysis	prediction/forecasting	Coupled models	Kelvin-Helmholtz instabilities	Cloud seeding	Associate Editor-JAMC	Air quality and health	algorithms/programming
		E.L	D	0	A	B.1	14 June 19 June	0	0	Microscale	0	1	A	March 2 and 1 and 2 and
12		Estuaries	Baroclinic nows	Contralis	Atmospheric electricity	Data quality control	Kaiman tiiters	Operational forecasting	Cumulus clouds	processes/variability	Coastal meteorology	Associate Editor-El	Air quality forecasts	Machine learning
13		Europe	Barotropic flows	Convection lines	interaction	Databases	Lvapunov vectors	forecasts/models/distribution	Data assimilation	Multidecadal variability	making	Associate Editor-BAMS	Air quality trends	visualization
								Probablistic Quantitative						
14		Extratronics	Riennial oscillation	Convertive clouds	Boreal meteorology	Dropsondes	Neural networks	(POPE)	Disgnostics	North Atlantic Oscillation	Crop growth	Editorial	Air-sea interaction	Neural networks
1.4		Exualiopica	Dienmaroscilation	Convective clodus	Doreal meteorology	Geographic information	Neural Hetworks	(ruri)	Diagnosics	Norul Audiluc Oscillation	Crop growin	Luitonai	Air-sea interaction	Neural networks
15		Forest canopy	Blocking	Cumulus clouds	Budgets	systems (GIS)	Numerical analysis/modeling	Seasonal forecasting	Ecological models	North Pacific Oscillation	Damage assessment		Airshed modeling	Pattern recognition
						Global positioning systems								
16		Glaciers	Bottom currents/bottom water	Cutoff lows	Buoyancy	(GPS)	Optimization	Short-range prediction	Ensembles	Oceanic variability	Deforestation		Aqueous-phase chemistry	Regression
17		Ice sheets	Boundary currents	Cyclogenesis/cyclolysis	CAPE	In situ atmospheric observations	Pattern detection	Statistical forecasting	General circulation models	Oscillations	Desert meteorology		Atmospheric composition	Support vector machines
				=, ==geneoloroyoloryolo			Principal components	energy in the second	a strat di odiation modela		y			Other artificial
18		Ice shelves	Buoyancy	Density currents	Carbon dioxide	Infrasound	analysis		Grid systems	Pacific decadal oscillation	Dust or dust storms		Atmospheric oxidation	intelligence/machine learning
19		Indian Ocean	unannel flows	Derecho	unemistry, atmospheric	instrumentation/sensors	quality assurance/control		Hazardous release modeling	Quasiblennial oscillation	Ecological models		Biomass burning	
20		zone	Cloud cover	Diabatic heating	Chemistry, oceanic	Isotopic analysis	Ranking methods		Hydrologic models	Seasonal cycle	Economic value		Biosphere emissions	
É													Biosphere-atmosphere	
21		Land surface	Cloud forcing	Diapycnal mixing	Cirrus clouds	Kinematics	Regression analysis		Interpolation schemes	Seasonal variability	Ecosystem effects		interactions	
22		Maritima Continent	Cloud tracking/cloud motion	Diumal offects	Climate change	Lidam/Lidar observations	Pick accordment		Inonyconal coordinator	Solar cuolo	Education		Enormy emissions	
22		Mediterranean Sea	Clouds	Downbursts	Climate classification/regimes	Microwave observations	Singular vectors		Laboratory/physical models	Southern Oscillation	Experimental design		Gas-to-particle conversion	
							Spectral		,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,					
24		North America	Coastal flows	Drainage flow	Climate prediction	Occultation	analysis/models/distribution		Land surface model	Spring season	Field experiments		Global bigeochemical cycles	
25		North Atlantic Ocean	Cold air surges	Drought	Climate sensitivity	Profilers, atmospheric	Statistical techniques		Large eddy simulations	Tropical variability	Flood events		Global transport modeling	
20		Noral Pacific Ocean	Cold Ironits	Drought	Cilinate variability	Quality association	Statistics		Mesoscale models	Tropical variability	Geographic information		Traiogen chemistry	
27		Northern Hemisphere	Cold pools	Drylines	Climatology	Radars/Radar observations	Superensembles		Model comparison	Subseasonal variability	systems (GIS)		Heterogeneous chemistry	
						Radiosonde/rawinsonde								
28		Pacific Ocean	Conditional instability	Dust or dust storms	Cloud cover	observations	Time series		Model errors Model	Internal variability	Heat Islands		Ionospheric chemistry	
29		Rivers	Conservation equations	Eddies	Cloud droplets	Remote sensing	Variational analysis		evaluation/performance		History		Marine chemistry	
30		Sea ice	Continental forcing	Ekman pumping	Cloud forcing	Sampling	Inverse methods		Model initialization		lcing		Measurements	
31		Seas/gulfs/bays	Continuity equation	El Nino	Cloud microphysics	Satellite observations Sonsitivity studios	Uncertainty		Model output statistics Multigrid models		Lake effects		Ozone Brimany portocol	
32		Sea/ocean sunace	Convection	Energy transport	Cidud radiative ellects	Sensitivity studies	Downscaling		Multight models		Land use		Primary aerosoi	
33		South America	Convection lines	ENSO	Cloud retrieval	Ship observations			Neural networks		Local effects			
		South Atlantic convergence												
34		zone South Atlantia Ocean	Convective adjustment	Extratropical cyclones	Cloud water/phase	Soundings			Nonhydrostatic models		Mountain meteorology		Secondary inorganic aerosol	
36		South Pacific Ocean	Convective clouus	Extreme events	Coastal meteorology	Tracers			Numerical analysis/modeling		Pollution		Stratospheric chemistry	
									Numerical weather				,	
37		Southern Hemisphere	Convective-scale processes	Fog	Cold air surges	Tree rings			prediction/forecasting		Regional effects		Toxic gases	
38		Southern Ocean	Convergence/divergence	Forest fires	Cold pools	Wind profilers			Ocean models		Renewable energy		Trace gas fluxes	
40		Tropics	Currents	Freshwater	Conservation equations	In situ oceanic observations			Parameterization		Seasonal effects		Urban air quality	
41		Watersheds	Cutoff lows	Frontogenesis/frontolysis	Conservation of mass	Profilers, oceanic			Primitive equations model		Societal impacts		Wildfires	
40		Valaanaa	Ovelessessis/eveletusis	Frants	Continental famina	Weather radar signal			Ourseineeskaskis medale		Calturan		Antifes Fine	
43		Inland seas/lakes	Deep convection	Greenhouse gases	Convective storms	Gauges			Regional models		Transportation meteorology		Collisions	
		South Pacific convergence									.,			
44		zone	Density currents	Gust fronts	Convective-scale processes	Unpiloted aerial systems			Semi-Lagrangian models		Urban meteorology			
45		Trench	Dianyonal mixing	Gyres	Cumulus clouds	Scatterometer			Single column models		Vegetation-atmosphere			
-43		memori	Support mixing	0,00	Comaide Cidude	oconcrometer			Spectral					
46		Water resources	Diffusion	Hail	Diabatic heating				analysis/models/distribution		Weather modification			
47			Dispersion	Heat islands	Diffusion				Stochastic models		Wind effects Windobill			
40			Drainage flow	Ice age	Drop size distribution				Tracers		Emergency preparedness			
50			Dry intrusions	Intermediate waters	Ecosystem effects				Vertical coordinates		Insurance			
51			Dynamics Eddior	Inversions	El Nino				Reanalysis data		Planning			
52			Ekman pumping/transport	Jets	Energy budget/balance ENSO				Global transport modeling		Crime			
54			El Nino	Katabatic winds	Entropy				Postprocessing		Emergency response			
55			Energy transport	La Nina	Evaporation				Idealized models		Adaptation			
56			ENSO Entrainment	Lightning Madden, Julian assillation	Evapotranspiration				Dynamical system model		Broadcasting Climate convices			
58			Extratropical cyclones	Mammatus clouds	Fluxes						Decision support			
59			Feedback	Marine boundary layer	Forcing						Policy			
60			Fluxes	Mei-yu fronts	Freezing precipitation						Space weather			
61			Funcing Frontogenesis/frontolysis	mesocyciones Microbursts	Gaseous absorption						rsesillence Vulnerability			
02				Microscale	2230000 00001pli011									
63			Fronts	processes/variability	Glaciation						Decision making			
64			Gravity waves	Middle atmosphere	Greenhouse gases						Indigenous knowledge			
66			Hadley circulation	Mixeu layer Mixing	Heat budgets/fluxes						Pandemic			
67			Heating	Monsoons	Heating						Virus			
68			Hurricanes/typhoons	North Atlantic Oscillation	Humidity						Health			
69			Hydrologic cycle	North Pacific Oscillation	Hurricanes/typhoons						Community			
71			Inertia-gravity waves	Optical phenomena	Hydrology						Antifouling			
72			Instability	Oscillations	Hydrometeorology						Water resources			
73			Internal waves	Pacific decadal oscillation	Ice crystals						Morphology			
74			Kelvin waves	Pacific-North American pattern/oscillation	Ice loss/growth									
75			Kelvin-Helmholtz instabilities	Polar lows	Ice particles									
76			La Nina	Precipitation	Ice thickness									
			Lagrangian		1.5.									
17			circulation/transport	Quasiblennial oscillation	rang									

		Radiative-convective						
78	Lake effects	equilibrium	Indices					
70	Large-scale motions	Rainfall	Infrared radiation					
04	Mass Russeliteneest	Can state	Imadianas					
01	wass inxes/italispoit	Sea sidle	Inaulance					
	Meridional overturning							
82	circulation	Sea breezes	Isonycnal mixing					
02	Managerale processo	Can lavel	Kinetia energy					
00	Wesoscale processes	Sealevel	Rifetic energy					
84	Mesoscale systems	Sea surface temperature	La Nina					
85	Mixing	Severe storms	Latent heating/cooling					
86	Momentum	Snow	Longwave radiation					
07	Meuntein	Cnowfell	Mass firms/increasest					
0/	Wountain waves	Showiali	Mass iluxes/traitsport					
88	Nonlinear dynamics	Snowmelt/icemelt	Mesoscale processes					
89	Ocean circulation	Snowpack	Mesoscale systems					
90	Ocean dynamics	Spring season	Mixed precipitation					
01	Occur dynamics	Cavell Free	Majatura (majatura hudaat					
91	Orographic ellects	Squairines	Moisture/moisture budget					
	Pacific-North American							
92	pattern/oscillation	Stability	Momentum					
03	Planetary atmospheres	Storm environments	Ontical properties					
04	Dianetary unicopricto	Charm aurona	Operation properties					
94	Pidlietal y waves	Storm surges	Orographic ellects					
95	Potential vorticity	Storm tracks	Ozone					
96	Pressure	Stratiform clouds	Paleoclimate					
		Stratophoro transport						
07	0	Suatopriere-troposphere	Burto Inter					
97	Quasibiennial oscillation	coupling	Particulates					
98	Rainbands	Stratosphere	Planetary atmospheres					
99	Rossby waves	Subsidence	Potential vorticity					
100	Shallow-water equations	Subtropical cyclones	Pressure					
404	Character equations	Cummerkungen anger	Dediesees					
101	Shear structure/nows	Summer/warm season	Radiances					
102	Small scale processes	Supercells	Radiation budgets					
103	Snowbands	Surface laver	Radiative fluxes					
104	Solitary waves	Synontic-scale processes	Radiative forcing					
104	Contary naves	The second proceeded	Put in the local g					
105	Southern Oscillation	Inermocline	Radiative transfer					
106	Stability	Thermocline circulation	Regional effects					
107	Stationary waves	Thermohaline circulation	Resonance					
108	Stratospheric circulation	Thunderstorms	Salinity					
100	Circomfau	Tidee	Conside besting					
109	Streamtow	lides	Sensible neating					
110	Streamfunction	Tornadoes	Shortwave radiation					
111	Subgrid-scale processes	Tropical cyclones	Small scale processes					
112	Suportio dimetology	Tropopauso	Snow covor					
112	Synoptic climatology	Торорацье	Only Cover					
113	Teleconnections	Troposphere	Soli moisture					
114	I hermocline circulation	Troughs/ridges	Soil temperature					
115	Topographic effects	Upper troposphere	Stability					
116	Tomadogenesis	Valley/mountain flows	Storm environments					
117	Trajactorias	Vegetation	Stroop					
117	Trajectories	vegetation	Juess					
118	Iransport	Vortices	Sublimation					
119	Turbulence	Warm fronts	Surface fluxes					
120	Updrafts/downdrafts	Warm pool	Surface pressure					
121	Lipwelling/downwelling	Water masses/storage	Surface temperature					
141	opweinigrdownweiling	mator masses/storage	ounde temperature					
	Vegetation-atmosphere							
122	interactions	Wave clouds	Iemperature					
123	Vertical motion	Wind	Thermodynamics					
124	Walker circulation	Wind bursts	Visibility					
125	Wave breaking	Wind gusts	Vorticity					
100	Wave preaking	Winterland engage	Mater hudget/helenee					
120	wave properties	winter/cool season	water budget/balance					
127	Wavelets	Wildfires	Water vapor					
128	Wind shear	Trace gases	Carbon cycle					
129	Wind stress	Precipitation	Secondary ice production					
120	Wind waven	Langmuir circulation	Climato					
130	Will waves	Langmuir circulation	Climate					
131	Secondary circulation	Secondary circulation	Collisions					
132	Wind stress curl	Warm water volume	Radiation					
133	Asymmetry	Atmospheric river						
134	Warm water volume	Extratronical transition						
405	Atmospheric Could Volume	Marabalage						
130	Atmospheric river	morphology						
136	Extratropical transition	Blizzard						
137	Intensification	Intensification						
138	Atmospheric waves	Climate						
420	Osessis usuas	Dediction						
150	Oceanic waves	Nauidilli						
140	Intensitication	Heat wave						
141		Atmospheric waves						
142		Oceanic waves						
143		Heat wave						
444		Marchalam						
1444		murphology						