

# PROGRAMME GROUP SCHEDULE

## NH – NATURAL HAZARDS

**O: Oral Presentation (Lecture Room) / P: Poster Presentation (Poster Hall)**

**TB: 1: 8:30–10:00 / 2: 10:30–12:00 / 3: 13:30–15:00 / 4: 15:30–17:00 / 5: 17:30–19:00**

Session	Title	TB	MO	TU	WE	TH	FR
NH1.01	Satellite Remote Sensing Applications in Hydrometeorology, Water Cycle, and Flood Forecasting (co-listed in AS)	1					
		2					
		3	O (27)				
		4	O (27)				
		5	P (XY)				
NH1.02	Advances in radar, satellite and hydrological modelling methods for flash flood and droughts forecasting (co-listed in AS)	1					
		2					
		3					
		4					
		5					
NH1.03	Diagnosis, modelling and forecasting of meteorological and hydrological hazards produced by extreme weather and climate change (co-listed in AS & CL)	1	O (27)				
		2	O (27)				
		3					
		4					
		5	P (XY)				
NH1.04	Precipitation Science (co-listed in AS) (including Sergey Soloviev Medal Lecture)	1		O (24)	O (24)		
		2		O (24)	O (24)		
		3		O (24)	P (XY)		
		4		O (24)			
		5		O (24)			
NH1.05	Propagation of uncertainty in advanced meteo-hydrological forecast systems (co-listed in AS)	1				O (24)	
		2				P (XY)	
		3					
		4			O (24)		
		5			O (24)		
NH1.06	Lightning (co-listed in AS)	1					
		2					
		3			O (7)		
		4			O (7)		
		5			P (XY)		
HS40	Novel techniques for measuring rainfall micro- and macro-structure (co-listed in AS & NH)	1					
		2					O (31)
		3					
		4					P (A)
		5					
NH2.01	Flood Hazards: Historical Documentation, Reconstruction, Perception and Modern Risk Management (co-listed in HS)	1					
		2					
		3					
		4					
		5					
NH2.02	Operational tools for flash-flood forecasting (co-listed in HS)	1					P (XY)
		2					
		3				O (18)	
		4					
		5					
NH2.03	Uncertainty and non stationarity in flood risk predictions (co-listed in HS)	1					P (XY)
		2					
		3					
		4					
		5				O (18)	
NH2.04	Risk assessments of complex flood situations (co-listed in HS)	1					
		2					P (XY)
		3					
		4				O (18)	
		5					
NH2.05	Integrated Natural Hazard Protection (floods and mass movement): Structural and nonstructural measures – state-of-the-art (co-listed in HS)	1				O (18)	
		2				O (18)	P (XY)
		3					
		4					
		5					
HS36	Hydrological extremes: controls, spatial & temporal variability and regional patterns	1					
		2					P (A)
		3				O (30 (C))	
		4				O (30 (C))	
		5					

Session	Title	TB	MO	TU	WE	TH	FR
NP5.05	Ensemble prediction in hydrology (HEPEX) (co-listed in HS & NH)	1					
		2					
		3			O (24)		
		4					
		5		P (XY)			
HS46	Hydroinformatics: computational intelligence and technological developments in water science applications (co-listed in NH & GI)	1	O (30 (C))				
		2	O (30 (C))				
		3	O (30 (C))				
		4	P (A)				
		5					
HS24	Sediment tracing and risk assessment for sediment management	1					
		2	O (31)				
		3					
		4	P (A)				
		5					
NH3.01	Documentation and monitoring of landslides and debris flows for mathematical modelling and design of mitigation measures (co-listed in GM)	1	O (18)				
		2	O (18)				
		3					
		4					
		5	P (XY)				
NH3.02	Landslides and erosion monitoring and characterization using high resolution DEM, LIDAR and other DEM techniques	1				O (27)	
		2				O (27)	
		3					
		4					
		5			P (XY)		
NH3.03	Multidisciplinary monitoring, characterization and early warning projects on large landslides	1					
		2					
		3	O (18)				
		4	O (18)				
		5	P (XY)				
NH3.04	Remote sensing and geophysical techniques for investigating unstable slopes (co-listed in GM & GI)	1		O (27)			
		2		O (27)			
		3					
		4					
		5		P (XY)			
NH3.05	Landslides, ground-failures and mass movements induced by earthquakes and volcanic activity (co-listed in GM)	1					
		2					
		3		O (18)			
		4		O (18)			
		5		P (XY)			
NH3.06	Rainfall induced landslides and debris flows	1		O (18)			
		2		O (18)			
		3					
		4					
		5		P (XY)			
NH3.07	Mechanics of Mass Flows (co-listed in GM)	1					
		2					
		3		O (27)			
		4					
		5		P (XY)			
NH3.08	Rock falls: Analysis, Simulation and Protection	1					
		2					
		3					
		4		O (27)			
		5	O (27)	P (XY)			
NH3.09	Slope movements in weathered materials: recognition, analysis, and hazard assessment (co-listed in GM)	1	O (18)				
		2	O (18)				
		3					
		4					
		5		P (XY)			
NH3.10	Estimating landslide hazards and risk (co-listed in GM)	1				O (18)	
		2				O (18)	
		3				P (XY)	
		4					
		5					
NH3.13	Time and intensity prediction in landslide hazard assessment	1					
		2					
		3		O (18)			
		4		O (18)			
		5		P (XY)			
NH3.14	The role of vegetation in slope stability	1					
		2					
		3				O (27)	
		4				O (27)	
		5				P (XY)	

Session	Title	TB	MO	TU	WE	TH	FR
SSP6	Submarine Mass Movements and Their Consequences (co-listed in NH)	1 2 3 4 5			O (32) O (32)		
GM14	Natural hazards, extreme events, and mountain topography (co-listed in NH)	1 2 3 4 5			P (A) P (XY)		
NH4.01	Seismic hazard evaluation, precursory phenomena and reliability of prediction	1 2 3 4 5			O (16 (L)) O (16 (L))		
NH4.02	Electric, magnetic and electromagnetic phenomena related to earthquakes (co-listed in SM)	1 2 3 4 5			O (16 (L)) O (16 (L)) O (16 (L))	P (XY)	
NH4.03	Deformation processes and accompanying mechanical and electromagnetic phenomena, for rocks and other materials, from the laboratory to the geophysical scale	1 2 3 4 5			O (16 (L)) O (16 (L))	P (XY)	
TS3.3/ NH4.4	Earthquake Geology (co-organized by NH)	1 2 3 4 5	O (5 (I)) O (5 (I))	P (XY)			
GD11	Kinematics and Geodynamics of the Central and Western Mediterranean (co-listed in TS, G & NH)	1 2 3 4 5		O (23) P (A) P (A)			
NP4.05/ US8	Earthquake prediction: what can be done with the best science available? (co-organized by US) (co-listed in NH & SM)	1 2 3 4 5		P (XY)	O (4 (H)) O (4 (H)) O (4 (H))		
G7/ GD15	From depth to surface: Surface motion and deformation forced by crust-mantle processes (co-organized by GD) (co-listed in NH)	1 2 3 4 5		O (6 (K)) P (XY)			
NH5.01	Volcanic Hazards: pre-eruptive warnings, quantification of hazards and mitigation of risk (co-listed in GMPV)	1 2 3 4 5				O (16 (L)) O (16 (L)) P (XY)	
NH6.01	Tsunamis (co-listed in OS)	1 2 3 4 5				O (24) O (24) O (24) O (24) P (XY)	
NH6.02	Extreme Sea Waves (co-listed in OS) (including Plinius Medal Lecture)	1 2 3 4 5				O (24) O (24) P (XY)	
NH6.03	Coastal geohazards	1 2 3 4 5				P (XY)	
GI3	Instrumentation for Ocean Observatories and Early Warning Systems (co-listed in OS, NH & SM)	1 2 3 4 5			O (2)	P (XY)	
NH7.01	Snow cover, snow avalanche formation and dynamics, risk assessment	1 2 3 4 5			O (16 (L)) O (16 (L)) P (XY)		

Session	Title	TB	MO	TU	WE	TH	FR
CR20	Open session on permafrost (co-listed in CL, GM & NH)	1 2 3 4 5		O (29) P (A)			
CR30	Permafrost degradation: Geological, geophysical, biological, engineering and health implications (co-listed in NH)	1 2 3 4 5					
CR40	Climate change impacts on glaciers, permafrost and related hazards (co-listed in NH & CL)	1 2 3 4 5	O (6 (K)) O (6 (K)) P (A)				
NH8.01/ NP4.04	Extreme Events: Causes and Consequences (E2-C2) (co-organized by NH & NP ) (co-listed in GM)	1 2 3 4 5	O (16 (L)) O (16 (L)) P (XY)				
NH8.02/ BG1.06	Heavy-metal contamination of water, air, soil, and foodcrops (co-organized by NH and BG) (co-listed in SSS)	1 2 3 4 5		P (XY)			
NH8.03	Natural and anthropogenic hazards in karst areas (co-listed in GM & HS)	1 2 3 4 5		P (XY) O (16 (L)) O (16 (L)) O (16 (L))			
NH8.04/ BG1.04	Spatial and temporal patterns of wildfires: models, theory, and reality (co-organized by BG & NH)	1 2 3 4 5			P (XY) O (16 (L)) O (16 (L))		
NH9.01	Vulnerability assessments and spatial/temporal variability of natural hazards risk	1 2 3 4 5				O (18) O (18) P (XY)	
NH9.03	Early warning systems and multidisciplinary approaches in natural hazards and risk assessments	1 2 3 4 5		O (16 (L)) P (XY)			
NH9.05	Economic aspects and societal decision making in hazards and risk management	1 2 3 4 5				O (27) O (27) P (XY)	
NH9.06	Natural Hazards' Impact on Urban Areas and Infrastructure (co-listed in SM)	1 2 3 4 5		P (XY) O (16 (L)) O (16 (L)) O (16 (L))			
NH9.08	Spatial prediction modeling in natural hazards and risk	1 2 3 4 5					
NH10.01	Investigation of historical records on natural hazards	1 2 3 4 5					
NH10.02	Tree-ring reconstructions in natural hazards research	1 2 3 4 5				P (XY) O (16 (L)) O (16 (L))	
NH10.03	Geo-Databases and Information Systems for Natural Hazards and Risk Assessment	1 2 3 4 5				O (24) P (XY)	

Session	Title	TB	MO	TU	WE	TH	FR
G8/ NH11.02	Advances in GPS and InSAR techniques for geodynamic modelling and analysis of natural hazard (co-organized by G) (co-listed in GD)	1					
		2				P (XY)	
		3				O (6 (K))	
		4				O (6 (K))	
		5				O (6 (K))	
NH11.03	Satellite Remote Sensing Applications for Urban Damage Detection	1					
		2					
		3					
		4	P (XY)				
		5	O (18)				
NH11.04	Modelling, computer-assisted simulations, and mapping of dangerous phenomena for hazard assessment	1	O (24)				
		2	O (24)				
		3	O (24)				
		4	O (24)				
		5	P (XY)				
GI10	Informatics: distributed information systems - technology and applications (co-listed in AS, CL, G, CR, GD, GM, GMPV, HS, MPRG, OS, PS, ST, SM, TS, SSP, SSS & NH)	1					O (29)
		2					O (29)
		3					O (29)
		4					P (XY)
		5					
GI11	Open session on Geoscience Instrumentation (co-listed in GMPV, G, HS, MPRG, NH, OS & SM)	1					
		2					
		3	O (2)				
		4	O (2)				
		5	O (2)	P (XY)			
GD16	GPS and SAR Interferometry for Geodynamic Modelling and Monitoring of Natural Hazards (co-listed in G, GM & NH)	1					
		2					
		3					
		4					
		5					
NH12	Interoperability and data access requirements for disaster reduction and emergency management (co-listed in GI)	1					
		2					
		3					
		4					
		5		O (18)			
NP3.07	Scale, Scaling, and nonlinearity in Solid Earth (co-listed in GMPV, NH, SSS & TS)	1					
		2					
		3				O (27)	
		4		P (XY)	O (27)		
		5					