Aperçu du programme de recherche (1996 - 30 juin 2020)

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		96/97	97/98	98/99	99/00	00/01	01/02	02/03	03/04	04/05	05/06	06/07	07/08	08/09	09/10	10/11	11/12	12/13	13/14	14/15	15/16	16/17	17/18	18/19	19/20	20/21
AD	Analysis of discontinuity																							B	BZ	
AS	Anisotropy of stresses											C	C	C	C											
BB	Borehole behaviour deformation													B	B	B										
BF	Borehole fluid effects	AN	A	A																						
BI	Borehole inventory							F	F	F																
BN	Bitumen-Nitrate-Clay-Interaction											ACNS	ACNS	ACINS	AINS	AINS	AINS	AINS	AINS	AIS	AFIS	AFIS	AFIS	AFIS	AFIS	AFIMS
BS	Variability of brittleness of Opalinus Clay																					T				
BW	Short-term borehole wall develpom.														BN	BN										
CD	Cyclic deformations											HNT	HNT	HINT	HINT	HINT	HINT	HIT	BHIT							
CD-A	Influence of humidity on deformation																							BGHT	BGHTZ	BGHPTZ
CI	Cement clay interaction									N	N	N	AN	AIN	AIN	ACINS	ACINOS	ACINOS	ACINOS	ACNOS	ACFNOS	ACFNOS	ACFNOS	ACFNOSW	ACFNORSW	ACFNORSW
CI-D	Diffusion across concrete-clay interface																						ACFNOSW	ACFNOS	ACFNORSWZ	ACFNORSWZ
CL	CO2LPIE-CO2 Long-term Injection																						B	BT	BT	BKT
CP	Chem. and physical weathering							C	C	C																
CQ	Carbonate cap rocks quality																					T				
CS	CO2-sealing integrity																OTV	OT	OT	OT	OT					
CS-A	Well leakage simulation & remediation																	V	V	TV	TV	TV	TV	RTV	LRTV	LRTV
CS-B	Caprock integrity, remediation																			TV	TV					
CS-C	CO2-assessement shale properties																				FT	FT	FT	FT	FT	FT
CS-D	CO2:caprock and fault sealing integrity																							LT	KLTV	DKLTV
CW	High-pH cement porewater	AENO	AENO	ANO	ANO	NO																				
DB	Deep inclined borehole through OPA																	BGINTW	BGINTW	BGINTW	BGINTW	BGINTW	BGINTW			
DB-A	Porewater characterisation																		INTW	NTW	INTW					
DBS	Deep borehole simulation			N																						
DF	Drilling fluids for Opalinus Clay																				N	N	N	ANR	ANR	
DI	Diffusion in rock		AEINJS	AEINJS	AEINJS	AEINJS																				
DI-A	Long-term diffusion				IN	EIJN	EIJN	AEIN	AEIN	AEN	AN	AN	AN	AN												
DI-B	Hydrogeochemistry						EN	EN	EN	EN	E															
DM	Deformation mechanisms		AENO	ANO																						
DM-A	Long-term deformation measurement I																G	G	G	G	G	BG	BG	G	G	G
DM-B	Long-term deformation measurement II																	G	G							
DR	Diffusion and retention								AGIN	AGIN	AIN	AIN	AIN	AIN	AIN	AIN	AIN									
DR-A	Disturbances, diffusion and retention													N	NW	NW	NW	DNW	DNW	DNW	NW	NW	NW			
DR-B	Long-term diffusion															N	NW	DW	NW	NW	FNW	FNW	FNWT	FNRTW	FNRTW	FNRTW
DR-C	Porewater chemistry and diffusion																							F	FMZ	AFMZ
DR-D	Heterrogeneity of sandy facies																									BPZ
DS	Determination of stress											N	N	BCNW	BCNVW	BNVW	NV	NVW								
DT	Drilling techniques	AN																								
EB*	Engineered barriers					BEN	BEN	BEN	BEN	BEN	ABEN	ABEN	ABEN	ABEN	ABEN	ABEN	ABEN	ABEN								
ED-A	EDZ hydraulic and pneumatic testing	ABENO	AN																							
ED-B	EDZ evolution around Ga 98	AN	AEN	AEN	AEN	EN																				
ED-C	EDZ seismic characterisation	ABNO	B	ABEN	BN	B	B	B																		
EH	EDZ self-healing		ANS	ANS	ANS	NS	ANS																			
ER	Natural electromagnetic radiation														C											
EG	EDZ gas diffusion by carbon isotopes														C	C	C	C	C	C	C					
EZ-A	EDZ cut-off								ABN	ABN	ABN															
EZ-B	Fracture generation								H	BH	BH	H	BH													
EZ-E	Analysis of swollen EDZ								HN																	
EZ-G*	Geophysical characterisation of EDZ									A	A	A	A	A												
FE	Full scale emplacement demonstration														N	AN										
FE-A	Site preparation for FE															AN										
FE-B	THM part of FE																ANV	ABDGNW	ABDGNW	ABDGNW						
FE-C	Engineering part of FE																N	N	N	N						
FE-D*	Emplacement part of FE (LUCOEX)																		N	N						
FE-E	EDZ in vicinity of FE Gallery																		B N W	BNTW						

Partners

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New experiment from phase 26

bop May 19

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FE-G	Gas monitoring in FE																				ADNW	ANW	ANW	ANRW	AKNRW	AKNRW
FE-M	Long-term monitoring of FE																			DN	ABDFGNW	ABDFGNW	ABDFGNW	ABDFGNRW	ABDFGNRW	ABCDFGNRW
FI	Fluid-mineral interaction, faulting/heating																	T	T	T	T	T	T	RT	T	T
FM-A	Flow mechanism (fluid logging)	ANJS																								
FM-B	Flow mechanism (resin injection)	AEJN																								
FM-C	Flow mechanism (tracer)	AEJNS	AEJNS	AEJNS	AEJNS	AEJS	AES	AES																		
FM-D	Evaporation logging		AJ	AJ	J	J	F	F	F	F		T	T	HT	HT	HT	HT	HT	HT	HT	HT	HT				
FR	FracReact- reactive transport fractures																					B				
FS	In-situ fault slip																		HT	HTJ	DJHT	BDJHT	DHJT			
FS-A	Friction properties of Opalinus Clay																					NT	NT	JNT	JNT	JNT
FS-B	Imaging long-term loss fault rock integrity																						BNT	BVDIJHLT	BDHIJLTV	BDHIJKLTV
FS-C	Fault slip and subseq. sealing processes																							N	N	N
FS-D	Fault slip beahavior upon fluid pressuri.																									T
FP	Fracture propagation		AE	AE	AE																					
GC	Geomechanical in-situ characterisation																					BN	BN	BN		
GC-A	EDZ develpment in sandy facies																							BNW	BNVW	BNVW
GD	Analysis of geochemical data											AENS	AENS	AENS	ANS	ANS	ANS	ANS	AENS	AENS	AEFNS	AEFNS	AEFNS	AEFNS	AEFNRSW	AEFNRSW
GT	Evaluation of gas transport models																						FH	FHR	FHM	BFHKMS
GM	Geochemical modelling			AEIN	ABEIJN	ABEIJN																				
GM-A*	Geophysical monitoring											N	N	N	N	N	N	N								
GP	Hydraulic and gas permeability	ANS	ANS	ANS	AS																					
GP-A	Hydraulic and gas permeability				N																					
GP-B	Gas and water coupled processes						BN	BN																		
GR	Ground penetration radar			A																						
GS	Gasfrac self-sealing		N	N	N	N																				
HA	Hydrogeologic analyses				ABINO	BINO	BINO	BINO	BINO	BINO	BINO	BINO	BNO	BNO	BNO	BNO	BN	BN	BN	BN						
HA-A	Hydraulic & geoch. param. variability																				BFN	BFN	BFN	BNR	BN	
HC	Hydrogeology OPA Passwang Fm																						H	HRT	BHRTZ	
HE	Heater experiment		AE	AE	AEG	AEG																				
HE-B*	Heater experiment						BEGN	BEGN	BEGN	BEGN																
HE-C	Heater experiment						A	A																		
HE-D	THM behaviour of host rock (heater test)								AG	AG	AG	A														
HE-E*	In-situ heater test (PEBS)															BEGN	BEGN	BEGN	BEGN	BEGN	BEGN	BEGNO	BEGNO	BEGNO	BEGNO	BEGNO
HE-F	Gases & soluble compounds, heat																					BF	BF	BFZ	BZ	BZ
HE-S	Heater shaft maintainance									N																
HF	Hydraulic fracturing mine-back experiment																						VT	TV		
HG-A	Gas path through host rock+along seals								BN	ABN	ABN	ABN	ABN	ABNW	ABNW	ABNW	ABNW	ABNW	ABNW	ABNW						
HG-B	In situ gas permeability								AB	AB	AB	AB	AB	AB	B											
HG-C	Long-term gas migration											GN	GN	GN												
HG-D	Reactive gas transport in OPA														AN	AN	AN	AN	AN	AN						
HM	Lab tests on HM coupled behaviour																	HT	H	H	H	H				
HM-A	3D coupled HM model																			HT	HT					
HM-B	Mechanical suction in borecores																				BHT	BHT	BHT			
HM-C	Validation constitutive law in shales																					H	H	H	H	
HS	Aquifer survey around OPA																				T	T	T	RTZ	RTZ	BRTZ
HS-A	Characterization of the Staffelegg																									RTZ
HT	Hydrogen transfer													ABN	ABN	AN	ANW	ANW	ANW	AW	AFW	AFW	AFW	AFRW	AFRW	ABFRW
IC	Iron corrosion in clay												AJN	AJNW	AJNW	AJNW	AJNW	AJNW	AJNW	AJNW	AJNW	AJNW	AJNW			
IC-A	Iron corrosion of bentonite																NW	ANW	ANW	ANW	ANW	ANW	ANW	ANRW	AMNRWZ	AMNRWZ
IS-A	In-situ stress (over/undercoring)	AN																								
IS-B	In-situ stress (borehole slotter)	AN																								
IS-C	In-situ stress (hydraulic fracturing)		A	A																						
IS-D	In-situ stress (overcoring)				B	B	B	B	B	AB																
LP	Long-term monitoring pore pressures											ANT	ANT	AINTW	AINTW	AITW	AINTW	AINTVW	AINTVW							
LP-A	Long-term monit. parameters																			ABINTVW	ABFINTVW	ABFINTVW	ABFITVW			
LT	Laboratory (temperature) testing					BN	BN	B	B	B	B	BN	BN	BN												
LT-A	Properties analyses labtesting														BNV	BNV	BNV	BNV	BGN	BGN	BGN	BGN	B	BG	BG	B
MA	Microbial activity								ABCIN	ABCIN	ABN	ABN	ABN	ABNW	ABNW	ABNW	ABNW	ABNW	ABNW	ABNW	ABFNW	ABFNW	ABFNW	ABFNRWZ	ABFNRWZ	ABFNRWZ
MA-A	Platform microbial studies																			N	NT	NT	NT	N	N	NW

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MB	Mine-by test Gallery 08												ABGNO	ABGNOW	ABGNOW	ABGNOW										
MB-A	Mine-by test Gallery 18																						BFGT	BGT	BGTZ	BT
MB-B	Simulation MinebyTest2018																									BGT
MD	Cosmic myon density tomography														CT	CT	T	T	T	T	T	T	T	T	T	T
MF	Mont Terri modelling task force											N	HN													
MH	Long-term monitoring heaves													NT	NT	NT	NT	NT	T	T	T	T	T	T	T	BT
MO	Monitoring															AHT	AHT	AHT	AHT	AHT	AHT	AHT	AHT			
MO-A	Monitoring with passive geophysics																ANTV	NT	AT	AT	AT					
MR	Feasibility study of tunnel MRS																					B	BT	B	B	B
NT	Natural tracer profile									N		N														
OP	Osmotic pressure	ANS	AINS	AINS	AINS	INS	INS	INS																		
OP-A	Osmotic pore pressure measurements														NV	NV	NV	NV	NV							
PC	Porewater chemistry						ABENS	ABCJNS	ABCJNS	ABCJNS	ABCJNS	ABCJNS	ABCJNS	ABCJNS												
PC-A	Porewater chemistry							A																		
PC-B	Porewater dating							CN	CN	C																
PC-C	Gas and porew. equilibration								ABNS	ABNS	ABNS	ABNS	ABNS	ABNS	ABNS	ABNS	ANS	ANS								
PC-D	Porewater-gas-characterisation																									BMRW
PD	Physical defor. on isotropic signatures																									H
PE	Pre-excavation sandy facies																						BNT			
PF	Rock failure and overbreak sealing																							H	HT	HT
PP	Porewater pressure	A	A																							
PS	Petrofabric and strain determination													T	TV	TV	TV	TV	TV	T	NT	T	T			
RA	Rock mechanical analyses				ABINO	BINO	ABINO	ABINO	BHNO	BNO	BNO	ABNO	ABNO	ABNO	ABHNO	ABHNO	ABN	BN	BN	BN	BN	BN				
RB	Horizontal raise boring			AE	AE	AE																				
RC	Rock mass characterisation													BHT	BHTV	BHTV	BH	BH								
SB*	Selfsealing barriers clay-sand mixtures							BCEGNO	BGNO	BGN	BG	G	G	GN	G	G	G									
SB-A	Borehole sealing experiment																		BGN	BGN	BG	BG	BN	BR	BR	B
SE*	Selfrac MT						N	N	N	N																
SE-H*	Selfsealing with heat (Timodaz)											N	N	N	N	N										
SE-P	Self-sealing in old EDZ																					BHT	BHT	HRT	BHRT	BHRT
SF	Self-sealing of tectonic faults									N	N	N		N												
SI-A	Seismic imaging																							Z	Z	WZ
SM-B	High resolution seismic monitoring																	NT	T	T	T					
SM-C	Nanoseismic monitoring																			T	T	T	T	T	T	TW
SO	Sedimentology of Opalinus Clay																BT	BT	BT	BT	BT	BT	BT			
SO-A	Palynologie of Opalinus Clay																			NT						
SO-B	Analyses of periodic patterns in OPA																				T	T	T	T		
SO-C	Facies analyses OPA Passwang FM																						NT	NT	NT	
SR	Low-pH shotcrete for rock support													N	N	N										
ST	Seismic transmission measurem.																			B	B	B	B			
SW-A	Planning of SANDWICH experiment																					BEGNT	BEGNT	GRTW	BEGHRTW	BEGHRTW
SW-B	Scoping calculations of SANDWICH																					BGH	BGH	BGH		
TH-A	Microscale THMC								NO	NO	NO	NO														
TR	Look-ahead imaging with time reversal																NV									
TS	Testing tunnel suppoert sandy facies																						N	NR	NR	NR
TT	Twin hole disposal configuration test														CG											
UZ	Unsaturated zone	AN		N	N																					
VA	Spatial variability of Opalinus Clay																BN	N	BN	BN						
VE*	Ventilation test						EGIN	EGIN	EGIN	EGIN	BEGIN	BEGIN	BEGIN													
VR	Experiments and models in a VR context																									all
WS-A	Groundwater sampling (in-situ)	AENJS	AEINJS	AN	AN																					
WS-B	Porewater sampling (laboratory)	ANJS	AEINJS	AN																						
WS-C	Porewater chemistry		AEN	AEN																						
WS-D	Trace elements		AEIN	AEN																						
WS-E	Pore water profile through Opalinus Clay		AEIN	AIN																						
WS-F	BRGM analyses			A																						
WS-G	Porewater lab comparison FORPRO			A																						
WS-H	Investigation of wet spots I													N	BGNT	N										
WS-I	Investigation of wet spots II																	BN	BN	BN	BN	BN	N			
3M	3D-Model Mont Terri anticline												T	T												

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