

# ALTOS : Managing water resources within Mediterranean agrosystems by accounting for spatial structures and connectivities.



# Monitoring Board meeting #2: calendar recall

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- Monitoring board meeting #1 split in 2 parts: April 2020 and October 2020
- Kick Off meeting in May 2021
- Mid term review in February 2022
- Monitoring board meeting #2 : now.



# Monitoring Board meeting #2 : agenda

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- Internal processes
  - Progresses about ongoing activities, deliverables and milestones
  - Forthcoming deliverables and milestones
  - Long term calendar
- External processes
  - Mid term review meeting : main outcomes, subsequent actions
  - Project extension demand
  - Consortium agreement



# Monitoring Board meeting #2 : agenda



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- Internal processes
  - Progresses about ongoing activities, deliverables and milestones
  - Forthcoming deliverables and milestones
  - Long term calendar
- External processes
  - Mid term review meeting : main outcomes, subsequent actions
  - Project extension demand
  - Consortium agreement



# Monitoring Board meeting #2 : progresses

- WP1 / Task 1.1: object geometries & landscape structures [Joaquim Bellvert]

TASK 1.1	Trees	Aquifer	Soil	Infiltrability	Climate
D111 Dataset	OK	OK	OK	OK	OK
D112 Publications (target : 2) <b>D112 finalised</b>	<ul style="list-style-type: none"> <li>• <a href="https://doi.org/10.3389/fpls.2021.608967">https://doi.org/10.3389/fpls.2021.608967</a></li> </ul>			<ul style="list-style-type: none"> <li>• <a href="https://doi.org/10.1016/j.catena.2022.106152">https://doi.org/10.1016/j.catena.2022.106152</a></li> </ul>	<ul style="list-style-type: none"> <li>• <a href="https://doi.org/10.3390/atmos12030370">https://doi.org/10.3390/atmos12030370</a></li> <li>• <a href="https://www.altos-project.org/sites/default/files/2022-03/sub-dailystchatic-N%20et%20a%20.pdf.pdf">https://www.altos-project.org/sites/default/files/2022-03/sub-dailystchatic-N%20et%20a%20.pdf.pdf</a></li> <li>• <a href="https://doi.org/10.1109/M2GARSS47143.2020.9105287">https://doi.org/10.1109/M2GARSS47143.2020.9105287</a></li> </ul>

- Milestones

**Milestone 1:** update of clustered database with collected data from monitoring systems @ Month 28 (new date) → 2022-05-01. **D111 to be finalised !!!** → **Link WP5.**



# Monitoring Board meeting #2 : progresses








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- WP1 / Task 1.1: object geometries & landscape structures [Joaquim Bellvert]



# Monitoring Board meeting #2 : progresses

- WP1 / Task 1.2: landscaping, practices, connectivities [Denis Feurer]

TASK 1.2	Reservoirs	Land use	Crop Biomass	Chemical treatments	Hydrological connectivities
D121 Dataset					
D122 Publications (target : 2) <b>D122 finalised</b>	<ul style="list-style-type: none"> <li>• <a href="https://doi.org/10.1080/02626667.2021.1988614">https://doi.org/10.1080/02626667.2021.1988614</a></li> </ul>	<ul style="list-style-type: none"> <li>• <a href="https://doi.org/10.1016/j.agry.2021.103281">https://doi.org/10.1016/j.agry.2021.103281</a></li> </ul>	<ul style="list-style-type: none"> <li>• <a href="https://doi.org/10.1109/M2GARSS47143.2020.9105153">10.1109/M2GARSS47143.2020.9105153</a></li> <li>• <a href="https://doi.org/10.1109/M2GARSS47143.2020.9105137">https://doi.org/10.1109/M2GARSS47143.2020.9105137</a></li> </ul>		

- Milestones

**Milestone 1:** update of clustered database with collected data from monitoring systems @ Month 28 (new date) → 2022-05-01. **D121 to be finalised !!!** → **Link WP5.**



# Monitoring Board meeting #2 : progresses

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- WP1 / Task 1.2: landscaping, practices, connectivities [Denis Feurer]





# Monitoring Board meeting #2 : progresses

- WP2 / Task 2.1: water and chemical fluxes [Fethi Lachaal]

TASK 2.1	ETR soil moisture and crop growth	Dam-aquifer transfers and upstream -downstream surface/subsurface transferts	Chemical pollutants: hydrological fluxes and retention processes
D211 Dataset			
D212 Publications (target : 2) <b>D212 finalised</b>	<ul style="list-style-type: none"> <li>• <a href="https://doi.org/10.3390/rs13163293">https://doi.org/10.3390/rs13163293</a></li> <li>• <a href="https://doi.org/10.3390/rs13163181">https://doi.org/10.3390/rs13163181</a></li> <li>• <a href="https://doi.org/10.3390/rs13163101">https://doi.org/10.3390/rs13163101</a></li> <li>• <a href="https://doi.org/10.3390/rs13142667">https://doi.org/10.3390/rs13142667</a></li> <li>• <a href="https://doi.org/10.3390/rs12244018">https://doi.org/10.3390/rs12244018</a></li> </ul>		

- Milestones

**Milestone 2:** update of clustered database with collected data from monitoring systems @ Month 28 (new date) → 2022-05-01. **D211 to be finalised !!!** → **Link WP5.**



# Monitoring Board meeting #2 : progresses


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- WP2 / Task 2.1: water and chemical fluxes [Fethi Lachaal]



# Monitoring Board meeting #2 : progresses

- WP2 / Task 2.2: characterization of spatial heterogeneities [Gilles Boulet]

TASK 2.2@	Canopy scale heterogeneity	Landscape scale heterogeneity
D221 Dataset	OK	OK
D222 Publications (target : 2) <b>D222 finalised</b>	<ul style="list-style-type: none"><li>• <a href="https://doi.org/10.1109/JSTARS.2021.3122573">https://doi.org/10.1109/JSTARS.2021.3122573</a></li><li>• <a href="https://doi.org/10.1029/2020EF001870">https://doi.org/10.1029/2020EF001870</a></li><li>• <a href="https://doi.org/10.2478/johh-2020-0022">https://doi.org/10.2478/johh-2020-0022</a></li><li>• <a href="https://doi.org/10.3390/rs14010167">https://doi.org/10.3390/rs14010167</a></li></ul>	

- Milestones

**Milestone 2:** update of clustered database with collected data from monitoring systems

@ Month 28 → 2022-05-01. **D221 to be finalised !!!** → **Link WP5.**



# Monitoring Board meeting #2 : progresses




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- WP2 / Task 2.2: characterization of spatial heterogeneities [Gilles Boulet]



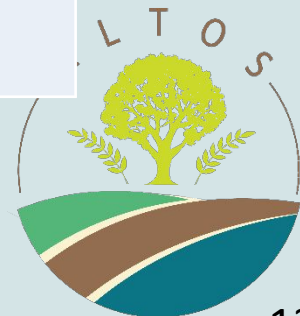
# Monitoring Board meeting #2 : progresses

- WP3 / Task 3.1: modeling individual processes [Nicola Montaldo]

TASK 3.1	Water fluxes	Evapotranspiration	Dam - aquifer exchanges.	Surface runoff.
D311 Report progress on modelling @ month 25 <b>D311 to be finalised!</b>	OK	OK		OK
D312 Publications (target : 2) <b>D312 @ month 36</b>		<ul style="list-style-type: none"> <li>• <a href="https://doi.org/10.5194/hess-24-3789-2020">https://doi.org/10.5194/hess-24-3789-2020</a></li> <li>• <a href="https://doi.org/10.3390/agronomy10101524">https://doi.org/10.3390/agronomy10101524</a></li> <li>• <a href="https://doi.org/10.3390/agronomy11122480">https://doi.org/10.3390/agronomy11122480</a></li> <li>• <a href="https://doi.org/10.1016/j.agrformet.2022.108882">https://doi.org/10.1016/j.agrformet.2022.108882</a></li> </ul>		<ul style="list-style-type: none"> <li>• <a href="https://doi.org/10.1175/JHM-D-20-0049.1">https://doi.org/10.1175/JHM-D-20-0049.1</a></li> </ul>

- Milestones

**MS3: improved versions of integrated modelling schemes are available for being used in WP4 @ Month 36.**



# Monitoring Board meeting #2 : progresses

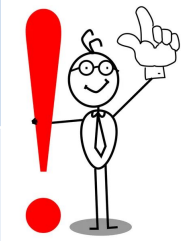


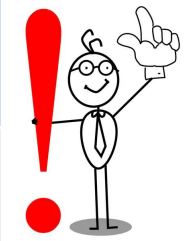


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- WP3 / Task 3.1: modeling individual processes [Nicola Montaldo]



# Monitoring Board meeting #2 : progresses

- WP3 / Task 3.2: modeling combined processes [Jalel Aouissi]

TASK 3.2	Coupling distributed hydrology modelling along with crop growth modelling	Semi-distributed hydrology along with subsurface hydraulic redistribution	Hydrological modelling and climate forcing
D321 Report on modelling improvements <b>@Month 43</b>			
D322 Publications (target : 2) <b>@Month 46</b>			

- Milestones

**MS3: improved versions of integrated modelling schemes are available for being used in WP4 @ Month 46.**



# Monitoring Board meeting #2 : progresses

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- WP3 / Task 3.2: modeling combined processes [Jalel Aouissi]





# Monitoring Board meeting #2 : progresses

- WP4 / Task 4.1: designing scenarios [Said Khabba]

TASK 4.1	Exploratory scenarios	Realistic scenarios	Mixing scenarios
D411 four scenarios of structure modulation [numerical representations] @ Month 34			

- Milestones

**MS4.1: 4 participative seminars on scenario design @ 32.**

**MS4.3: update of clustered database with reports on scenario design, scenario ranking and comparative analysis of irrigated / rainfed agrosystems @ 48**



# Monitoring Board meeting #2 : progresses



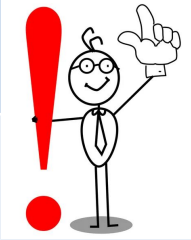



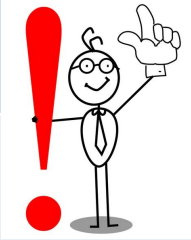

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- WP4 / Task 4.1: designing scenarios [Said Khabba]



# Monitoring Board meeting #2 : progresses

- WP4 / Task 4.2: impact assessment & scenario ranking [Insaf Mekki]

TASK 4.2	Selection of integrated modelling schemes	Simulations with integrated modelling schemes over the evolution scenarios	Production of indicators on the basis of integrated modelling simulations	Impact assessment of structure modulation scenarios
D421 Scenario ranking [report] @ Month 43				
D422 2 submitted publications @ Month 46				

- Milestones

MS4.2 participative seminars on scenario ranking @41

MS4.3: update of clustered database with reports on scenario design, scenario ranking and comparative analysis of irrigated / rainfed agrosystems @ 48



# Monitoring Board meeting #2 : progresses

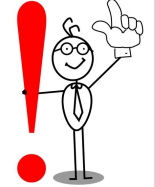


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- WP4 / Task 4.2: impact assessment & scenario ranking [Insaf Mekki]



# Monitoring Board meeting #2 : progresses

- WP4 / Task 4.3: comparing irrigated and rainfed agrosystems [Frédéric Jacob]

TASK 4.2	Cross-analysis for studying vulnerabilities and adaptation capabilities.	Production and comparison of simulation-based indicators for the above-discussed scenarios.	Spatial scales for indicators are farm / irrigated perimeter / land use class / catchment.
D431 report @ Month 43			

- Milestones

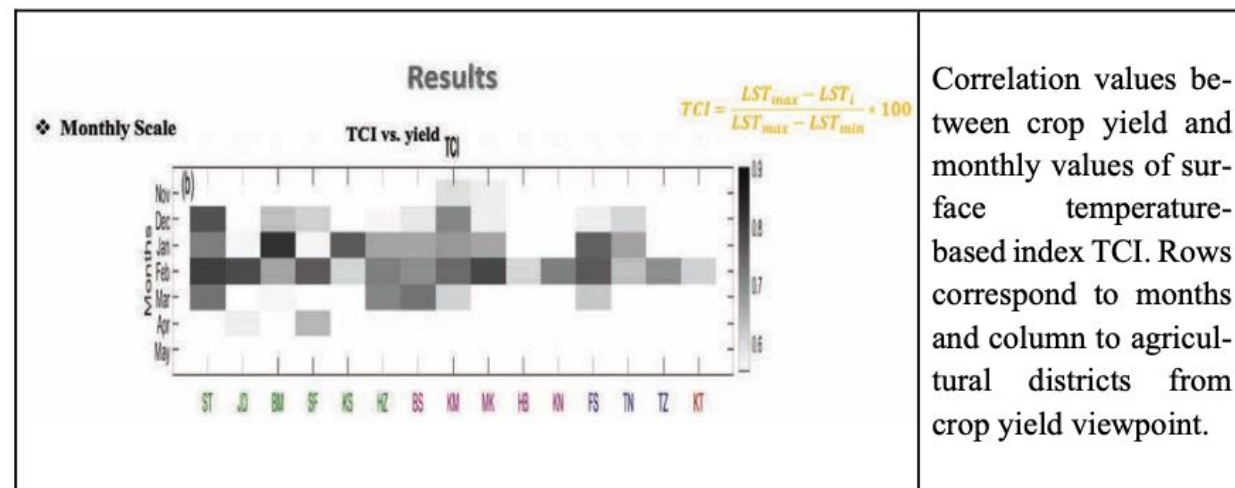
MS4.3: update of clustered database with reports on scenario design, scenario ranking and comparative analysis of irrigated / rainfed agrosystems @ 48



# Monitoring Board meeting #2 : progresses




- WP4 / Task 4.3: comparing irrigated and rainfed agrosystems [Frédéric Jacob]

- Cross-analysis for studying vulnerabilities and adaptation capabilities.
- Production and comparison of simulation-based indicators for the above-discussed scenarios.
  - Times series of water stress occurrences.
  - Yield and water use efficiency.
  - Spatial allocations between blue and green water compartments.
  - Sectoral allocation of water.
- Spatial scales for indicators are farm / irrigated perimeter / land use class / catchment.



# Monitoring Board meeting #2 : progresses

- WP5 / Task 5.1: sharing data and methods [ALL project PIs ]

TASK 5.1 sharing Tools	1/3	2/3	3/3
D511 Metadata and metamodels available on ALTOS project web site <a href="#">@ Month 6/24/43</a>	<b>Cancelled</b>	OK	
D512 Report on modelling work workshops <a href="#">@ Month 6/26/46</a>	<b>Cancelled</b>		

- Milestones

MS5.1: mobility plan for ALTOS partners OK - 3 versions  
 First version @14 Second version @22 Third version@26



# Monitoring Board meeting #2 : progresses

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- WP5 / Task 5.1: sharing data and methods [ALL project PIs ]





# Monitoring Board meeting #2 : progresses

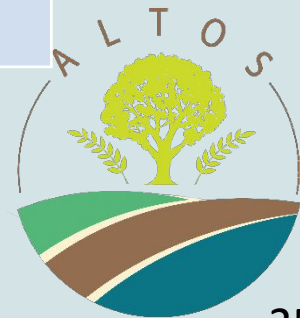
- WP5 / Task 5.2: result dissemination / exploitation [Rim Zitouna]

TASK 5.2	1/3	2/3	3/3
D521 knowledge management strategy @Month 12/24/42	OK		
D522 Technical reports for managers @Month 46			
D523 policy brief on adaptabilities @Month 48			

- Milestones

MS5.3: availability of materials for training sessions@28/40

MS5.2 Data for resource managers @36



# Monitoring Board meeting #2 : progresses


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- WP5 / Task 5.2: result dissemination / exploitation [Rim Zitouna]



# Monitoring Board meeting #2 : progresses

- WP6 / Task 6.1: coordination / management [Frederic Jacob & Habiba Nouri]

TASK 6.1	Status
D611PRIMA-IS mid-term report @ Month 18	OK
D612 PRIMA-IS final report @ Month 48	

- Milestones

**MS6.1: ALTOS kick-off meeting in Tunisia @ 15 OK.**

**MS6.3: Final conference in Italy @ Month 48.**



# Monitoring Board meeting #2 : progresses

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- WP6 / Task 6.1: coordination / management [Frederic Jacob & Habiba Nouri]
  - Budget : → Not enough feedbacks → next MB meeting.



# Monitoring Board meeting #2 : progresses

- WP6 / Task 6.2: communication [Habiba Nouri]

TASK 6.2	Status
D621 ALTOS communication plan @ Month 10	OK
D622 ALTOS website online, updated on a monthly basis @ Month 6	OK

- Forthcoming deliverables and milestones

**MS6.2: Monitoring Board meetings @ Month 4/10/18/24/30/36/42**

**MS6.3: Final conference @ Month 48.**



# Monitoring Board meeting #2 : agenda

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- Internal processes
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- External processes
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# Monitoring Board meeting #2 : mid-term review

- Reply to evaluator comments
  - Thanks for all replies



# Monitoring Board meeting #2 : mid-term review

- Transnational observation activities
  - CERTE / UNICA : geophysical soundings
- Database pooling
  - Efforts on metadata to be conducted
  - Datas under embargos for protecting ongoing works





# Monitoring Board meeting #2 : mid-term review

- Transnational modeling activities
  - INAT / UNICA : including hydraulic lift into SWAT
- Efforts on integrated modelling throughout the two next years.
- Ontological problem (lack of a common language) → modeling workshops



# Monitoring Board meeting #2 : mid-term review

- Warnings
  - Consideration for drip irrigation ?
  - Pest management ?
  - Enhancing climate forcing ?
  - Action towards the society (not in the proposal) ?
  - MS5.2: availability of data for resource managers ?



# Monitoring Board meeting #2 : mid-term review

- Interactions with stakeholders → targets ?
  - Co-building scenarios
  - Co-evaluating scenarios (numerical indicators)
  - Training sessions
- MS5.2: availability of data for resource managers
- DMP and stakeholders ?



# Monitoring Board meeting #2 : mid-term review

- Publications
  - ALTOS in acknowledgment sections / otherwise removal
  - No problem if acknowledging multiple funding bodies.



# Monitoring Board meeting #2 : project extension

- Once replies to evaluator comment send → official letter
- At least, 6 months before the current deadline (february 2023) → OK



# Monitoring Board meeting #2 : CA

- Officially acting the leaving of Lebanese partners
- Resetting the starting date one year before (Tunisian and French grant agreements)
- Setting the ending date by June 2024
- Current handled by the legal services of the French National Research Agency

