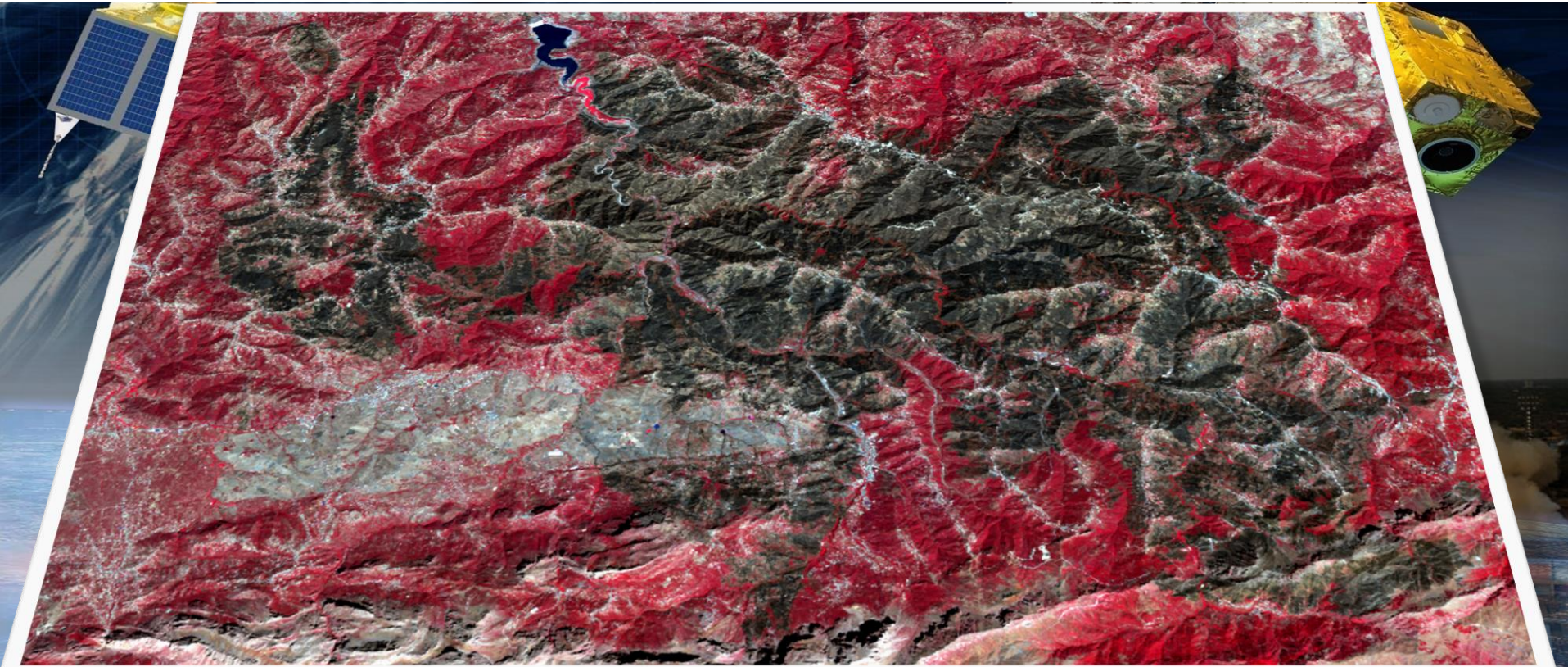


Use of space technologies to monitor forest fires in Algeria



Kamel TICHOUTI/ Algerian Space Agency

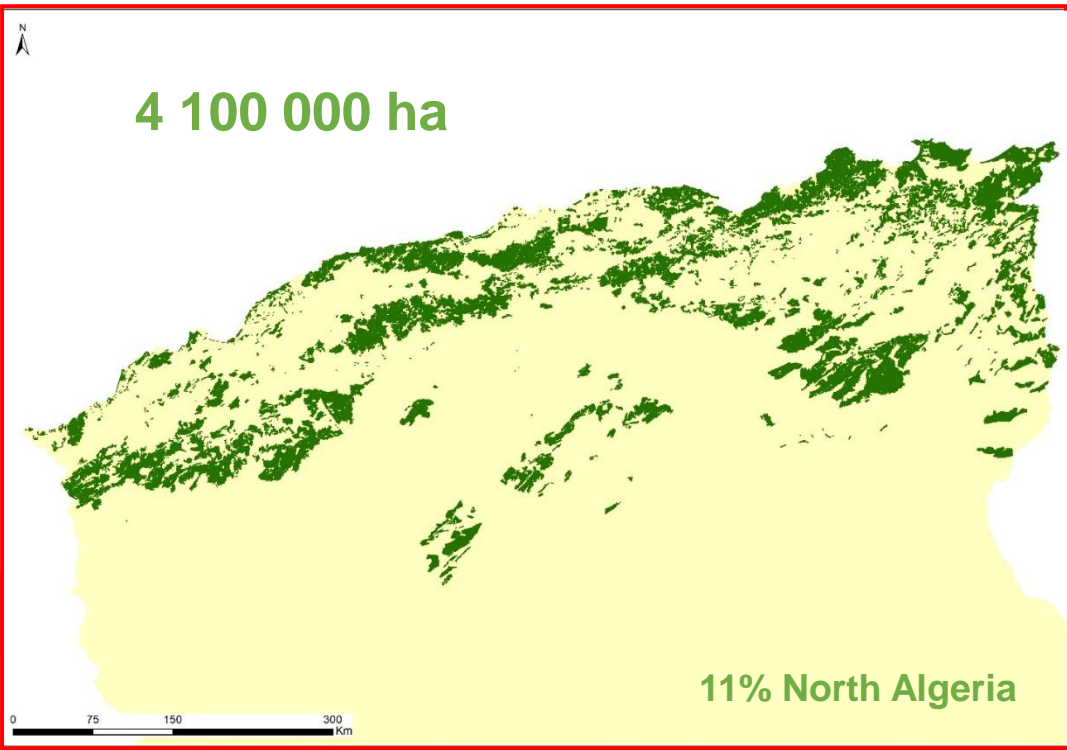
**UN-SPIDER Bonn International Conference
Space-based Solutions for Disaster Management in Africa: Networks and
Information Technologies in times of crisis.**

16 to 18 November 2021



Algerian forest

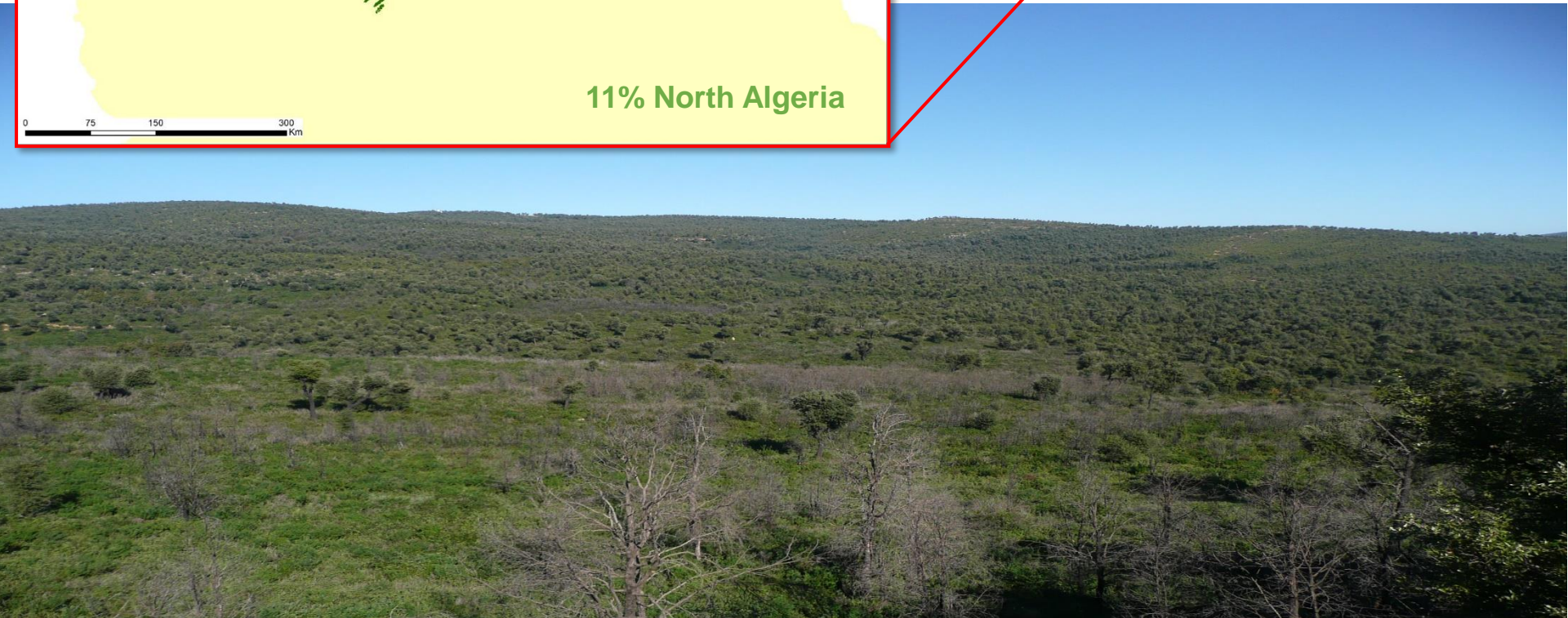
4 100 000 ha



11% North Algeria



2% All the country





47 °c
Drought

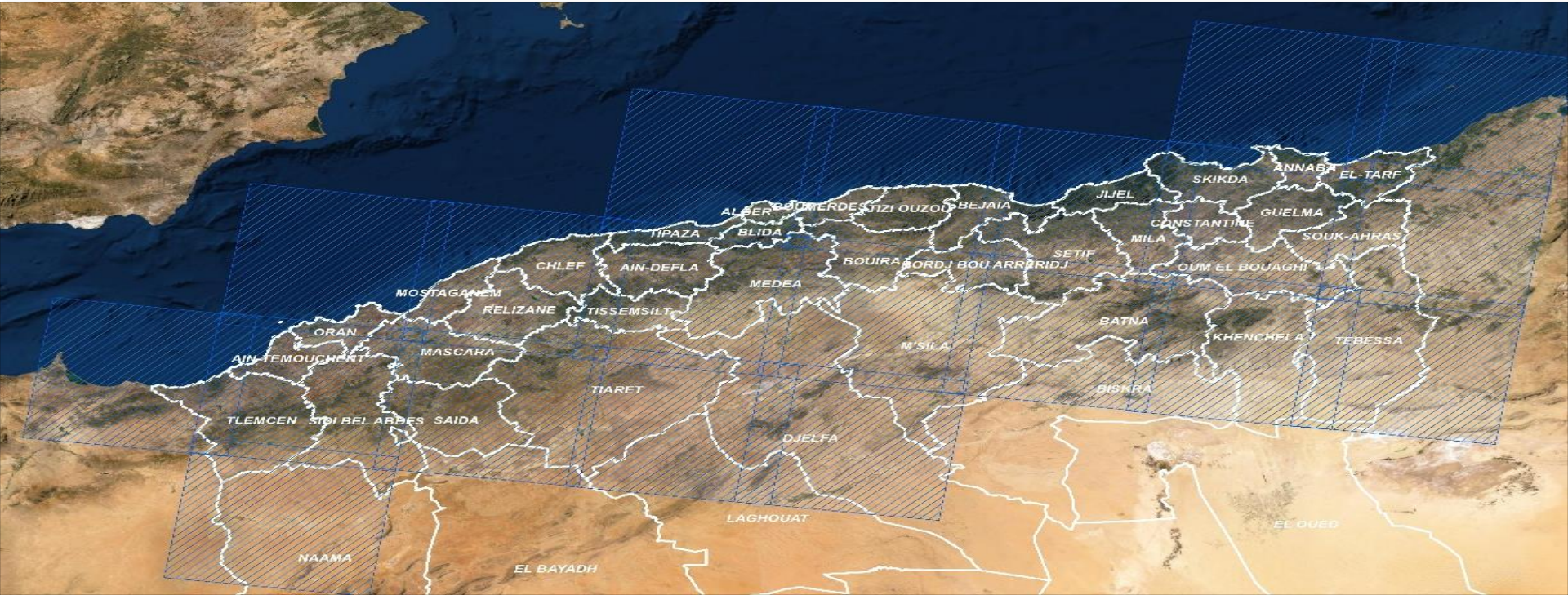
**More than 100 000 ha
forest areas burned**

More than 100 deaths



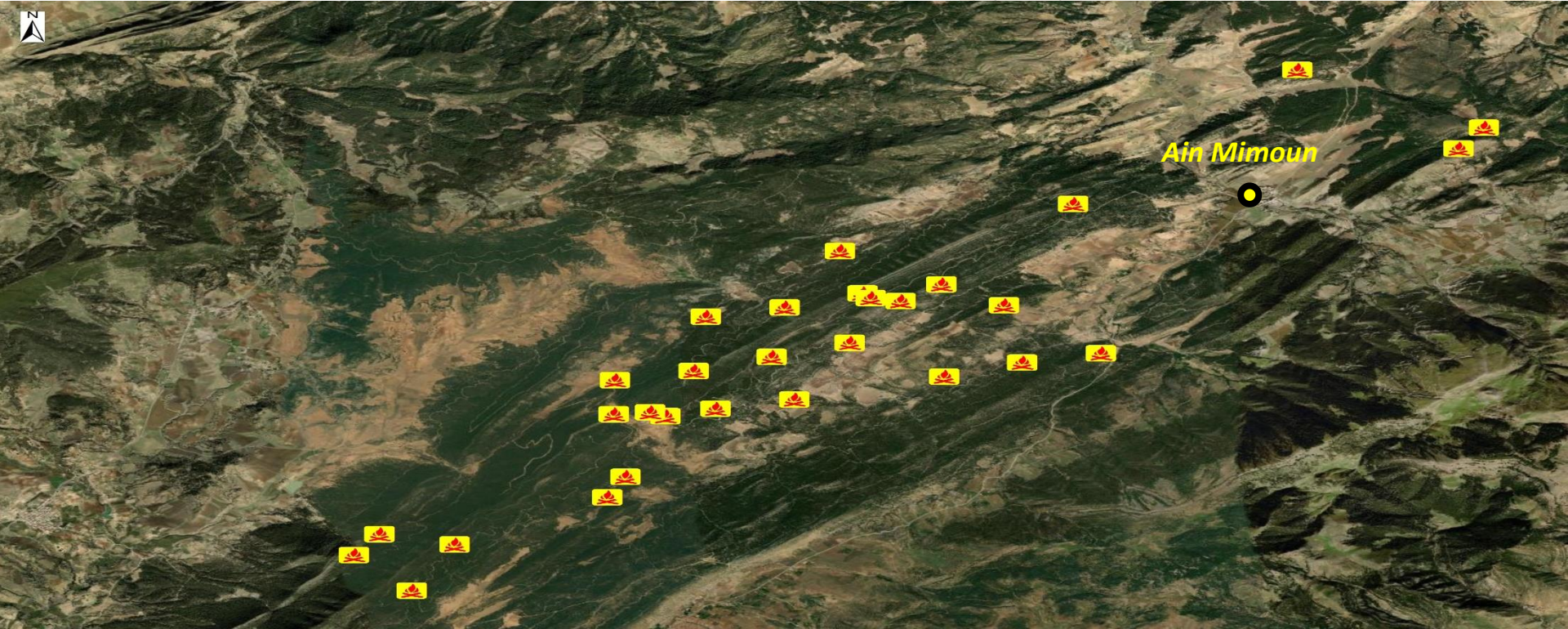
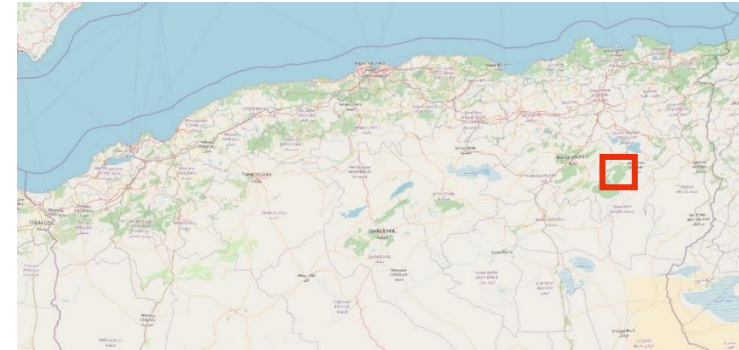
Priority axis in the program of activities of the Algerian Space Agency, because of its cyclical nature and its impact on the environment and Sustainable Development, the annual monitoring of forest fires using satellite imagery establishes a state of forest areas covered by fire, mainly during scorching periods. As part of the monitoring of forest fires during the 2021 summer season, ASAL used and analyzed the medium-resolution images ALSAT-1B and the high-resolution images ALSAT-2A, ALSAT-2B, covering the North of the Algeria, for the period from June to September, in order to locate and estimate the forest areas covered by fire.

Given the scale of the fires this summer, various international partners (European and Chinese) have been asked for more data on all the affected departments, especially those in the east and center of the country.

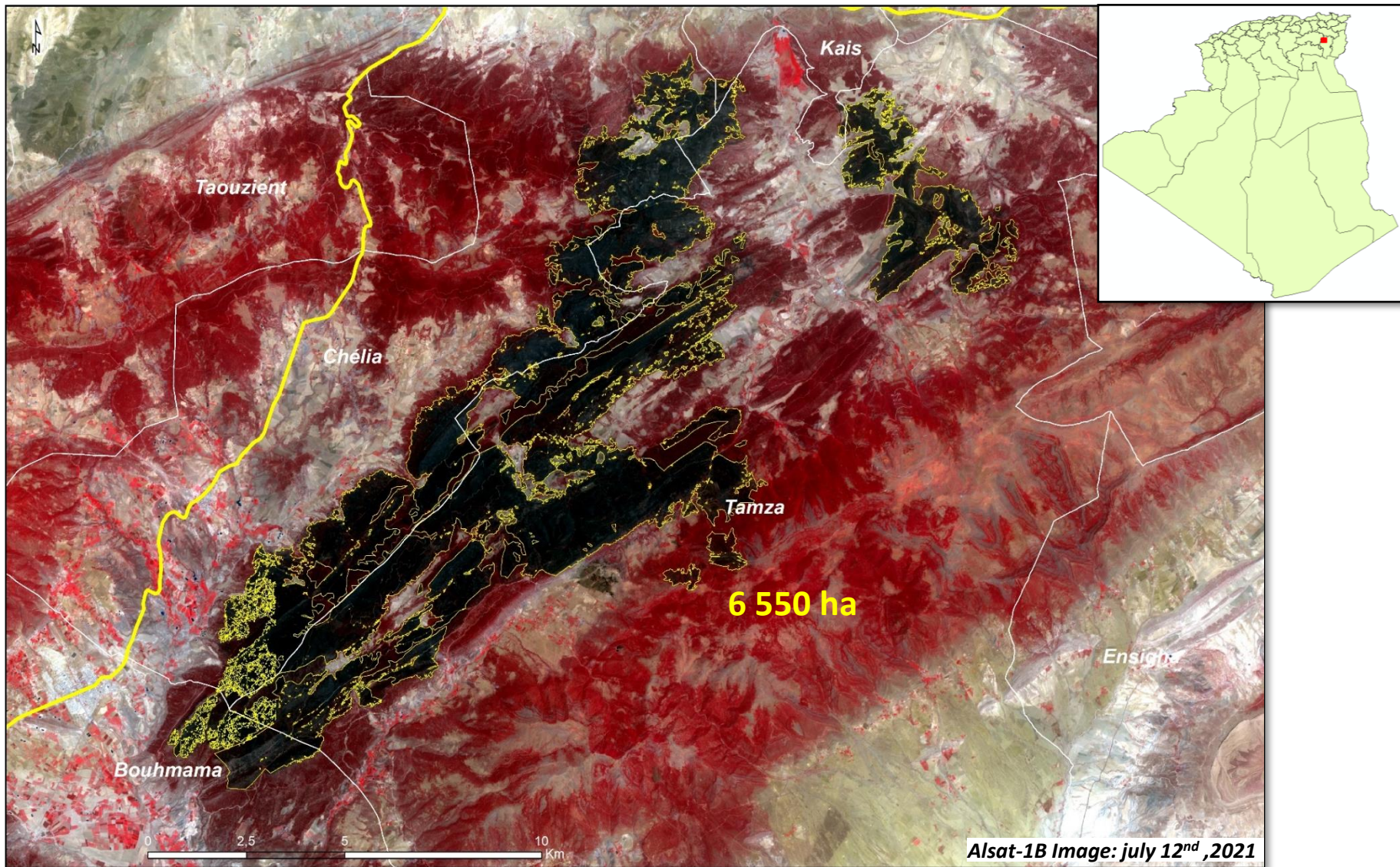


1. Analysis of the first fire starts:

***July 4th, 2021**

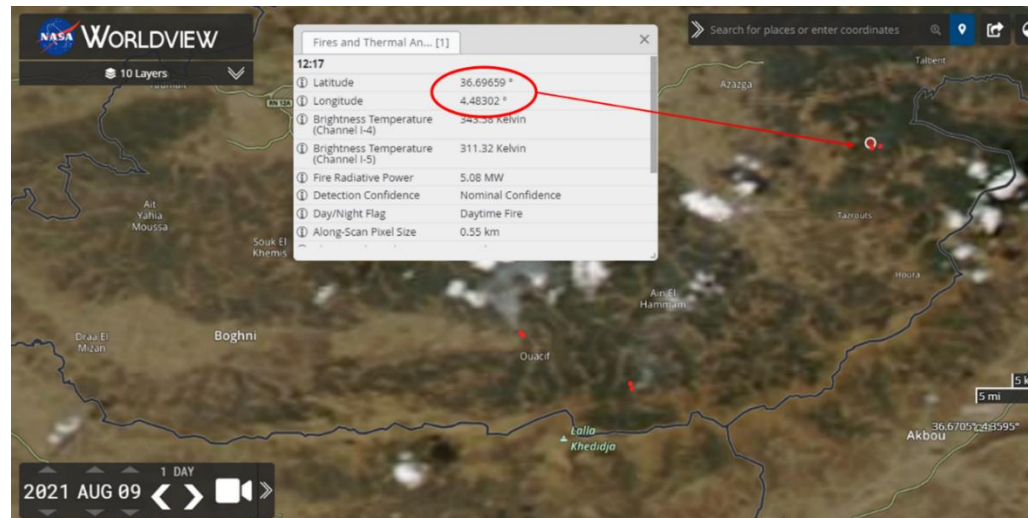
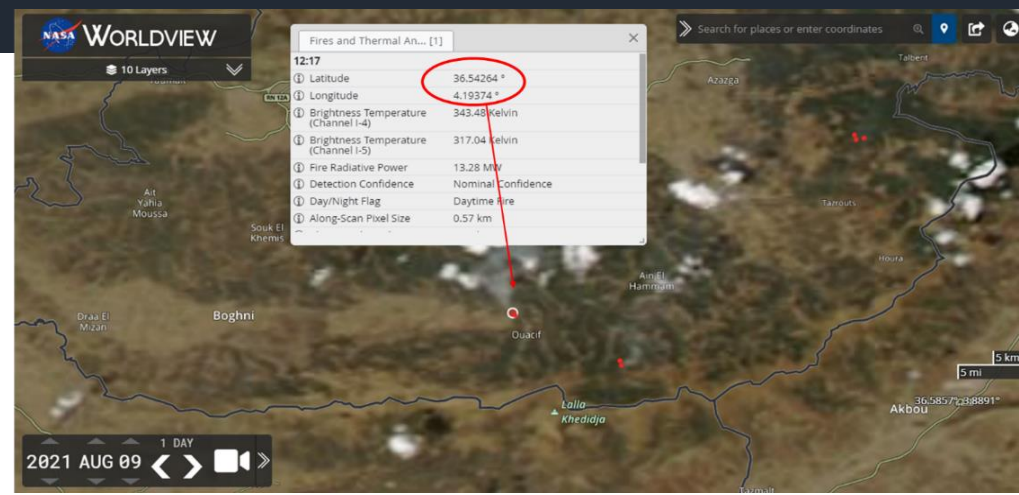
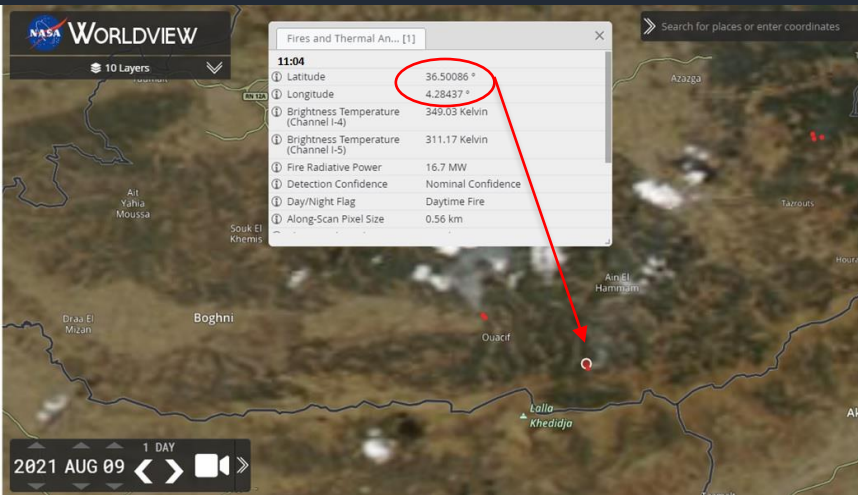


Forest areas burned down in the department of Khenchela



***August 9th, 2021**

Three first fire starts were recorded during the morning of August 09th, 2021 in Tizi Ouzou department.

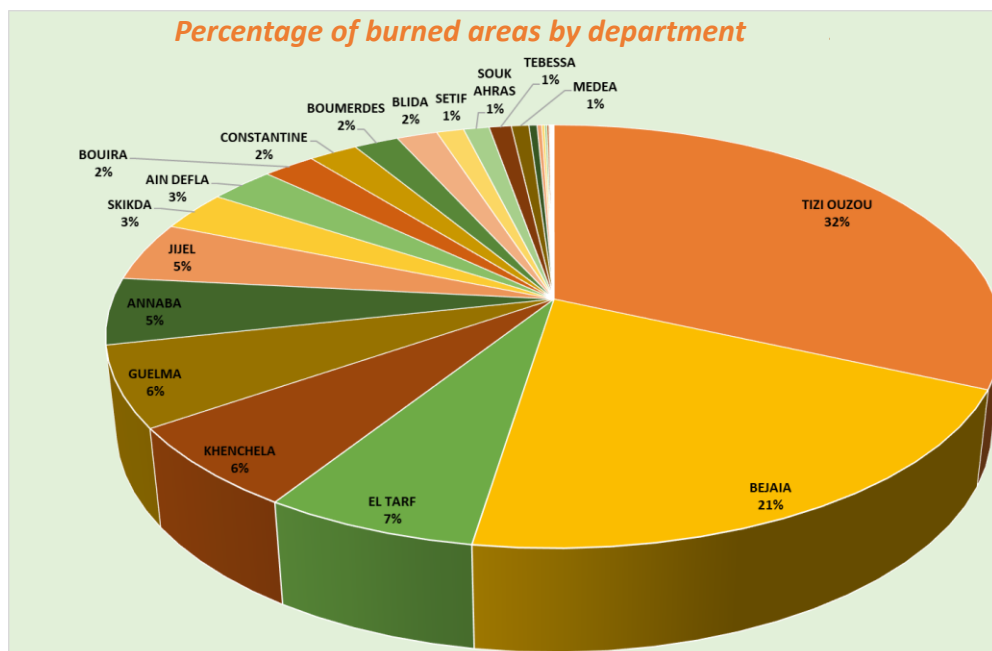
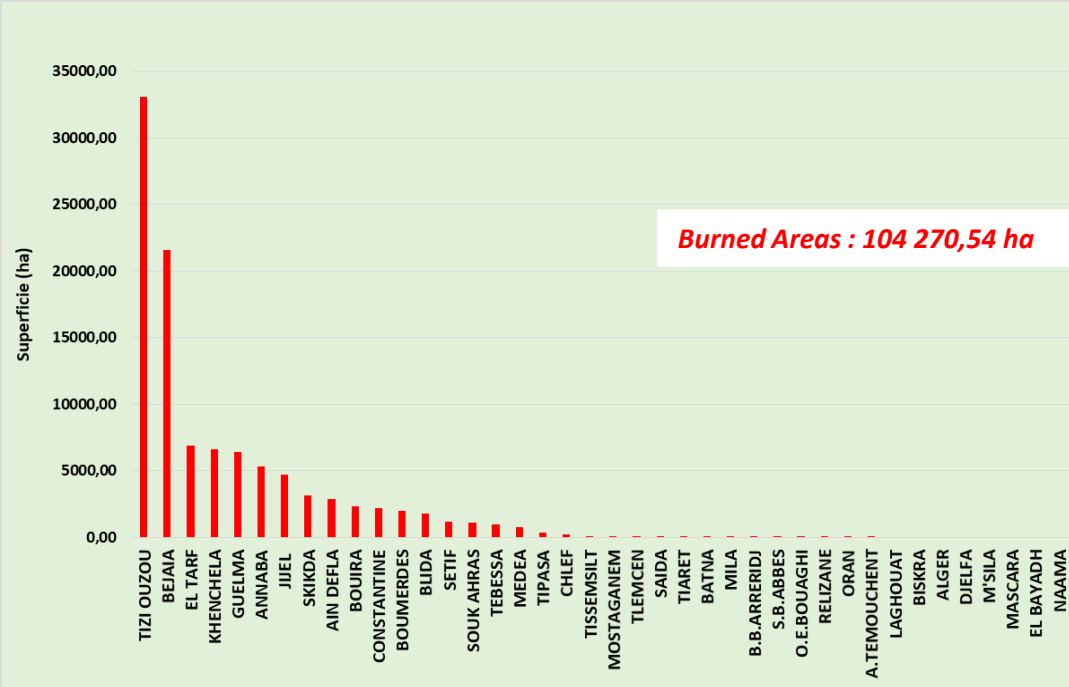


Global situation of fire departures for the week from 09 to 12 August 2021

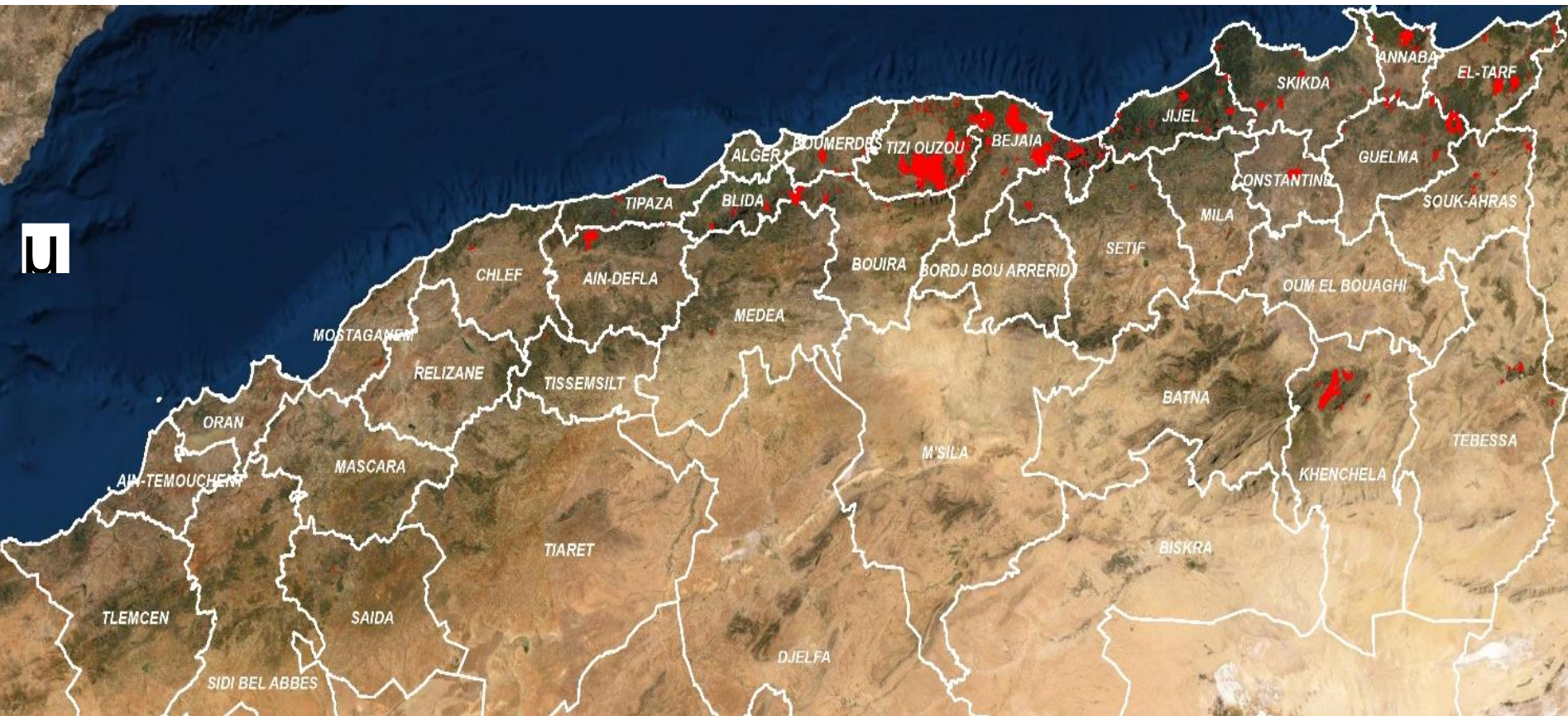


2. Analysis of the forest fire report for 2021

Department	Burned Area(ha)	(%)
TIZI OUZOU	33094,37	31,74
BEJAIA	21599,21	20,71
EL TARF	6867,71	6,59
KHENCHELA	6607,52	6,34
GUELMA	6419,95	6,16
ANNABA	5320,94	5,10
JIJEL	4728,46	4,53
SKIKDA	3179,14	3,05
AIN DEFLA	2895,25	2,78
BOUIRA	2337,87	2,24
CONSTANTINE	2174,64	2,09
BOUMERDES	1992,15	1,91
BLIDA	1813,00	1,74
SETIF	1213,44	1,16
SOUK AHRAS	1143,27	1,10
TEBESSA	985,75	0,95
MEDEA	782,30	0,75
TIPASA	362,64	0,35
CHLEF	209,42	0,20
TISSEMSILT	122,00	0,12
MOSTAGANEM	101,06	0,10
TLEMCEN	93,10	0,09
SAIDA	49,82	0,05
TIARET	40,92	0,04
BATNA	35,85	0,03
MILA	31,42	0,03
B.B.ARRERIDJ	24,93	0,02
S.B.ABBES	23,08	0,02
O.E.BOUAGHI	10,02	0,01
RELIZANE	5,91	0,01
ORAN	5,22	0,01
A.TEMOUCHENT	0,18	0,00
TOTAL	104270,54	100,00

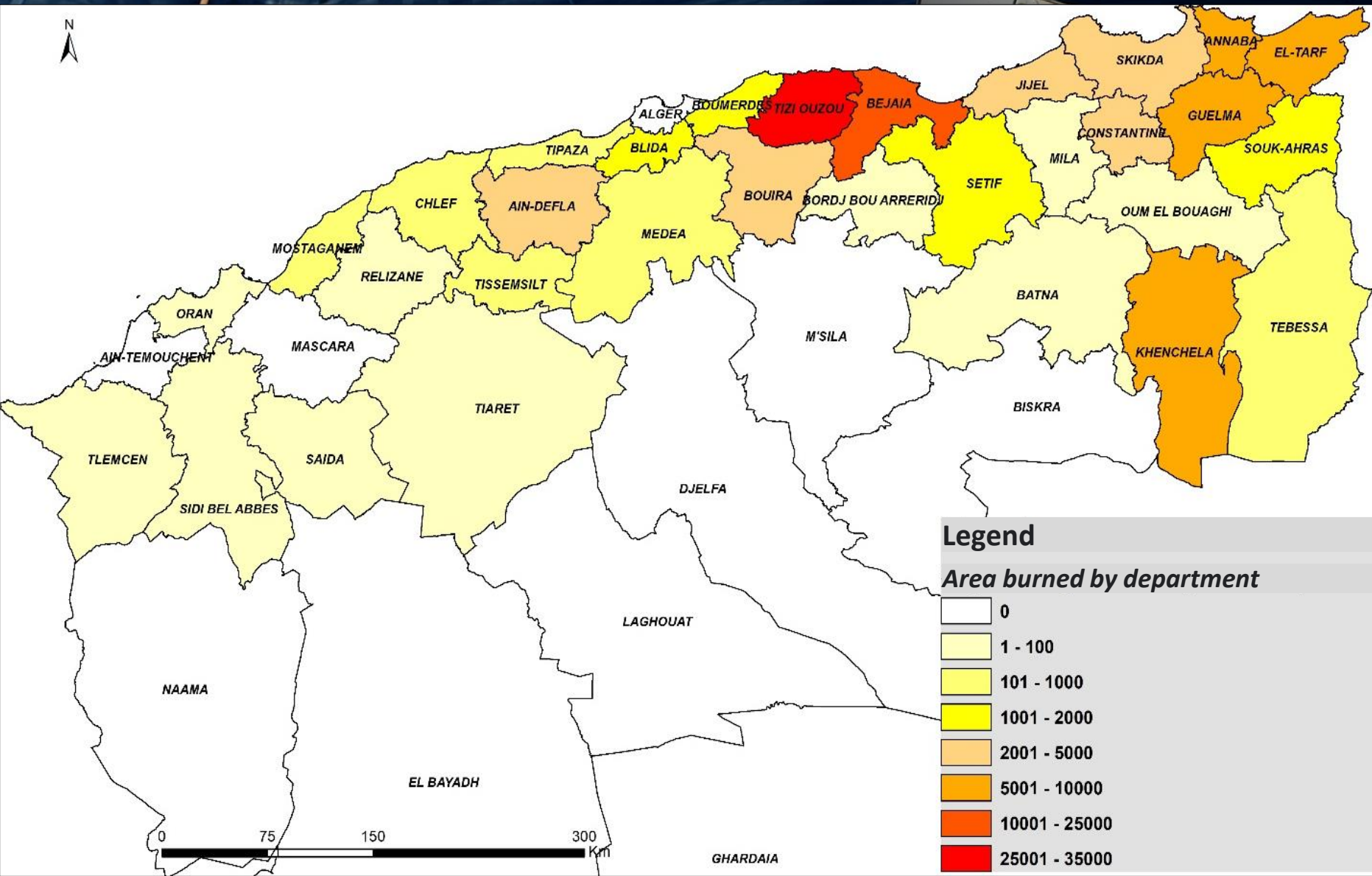


Location of areas affected by forest fires in summer 2021



 Burned areas

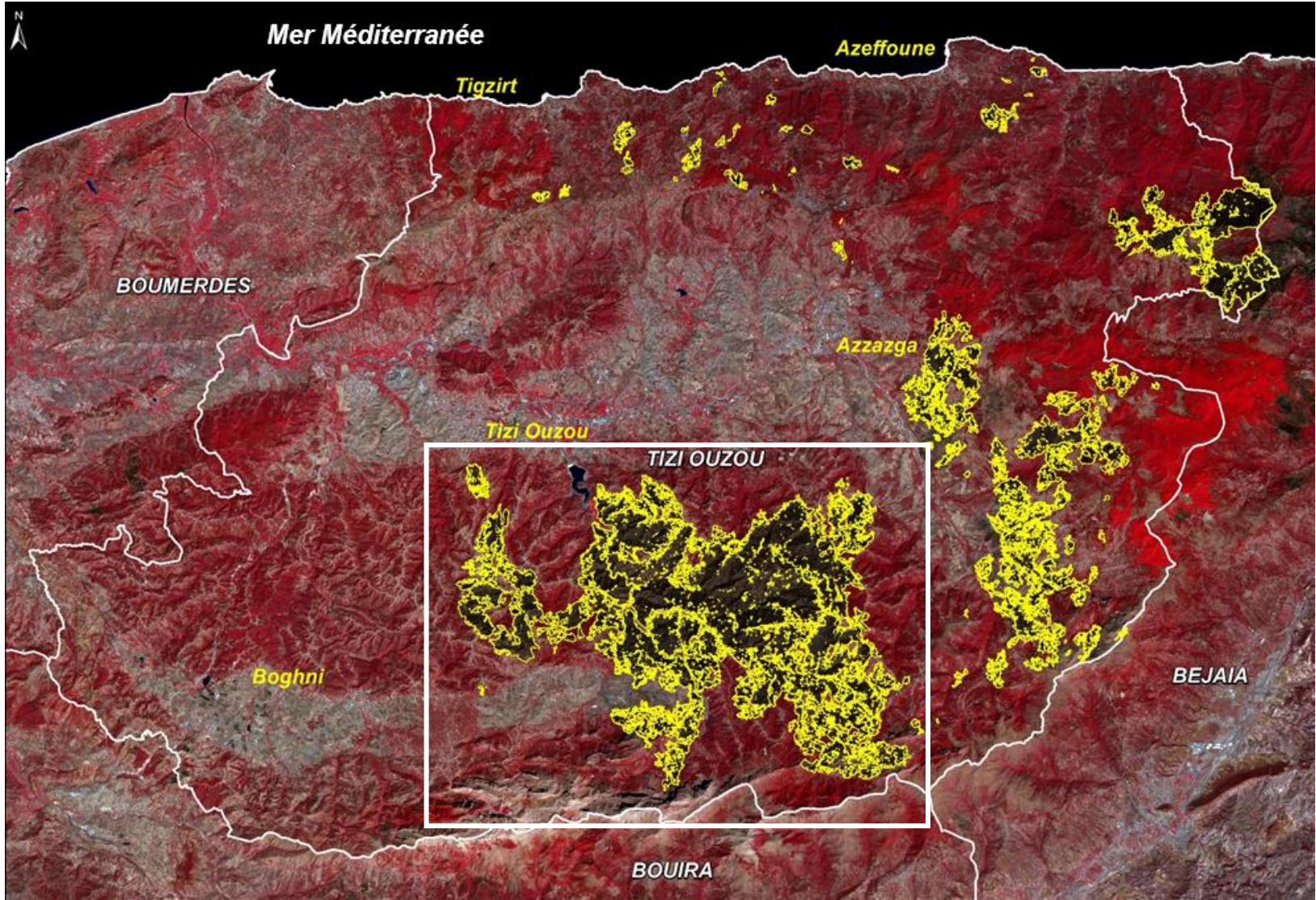
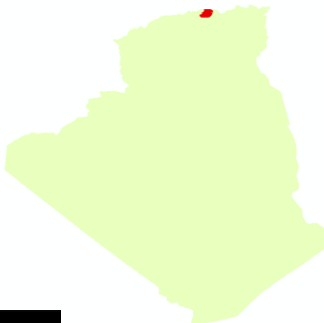
Geographical analysis of the department concerned, according to 08 classes of burned areas in 2021, ranging from 0 to 35,000 ha

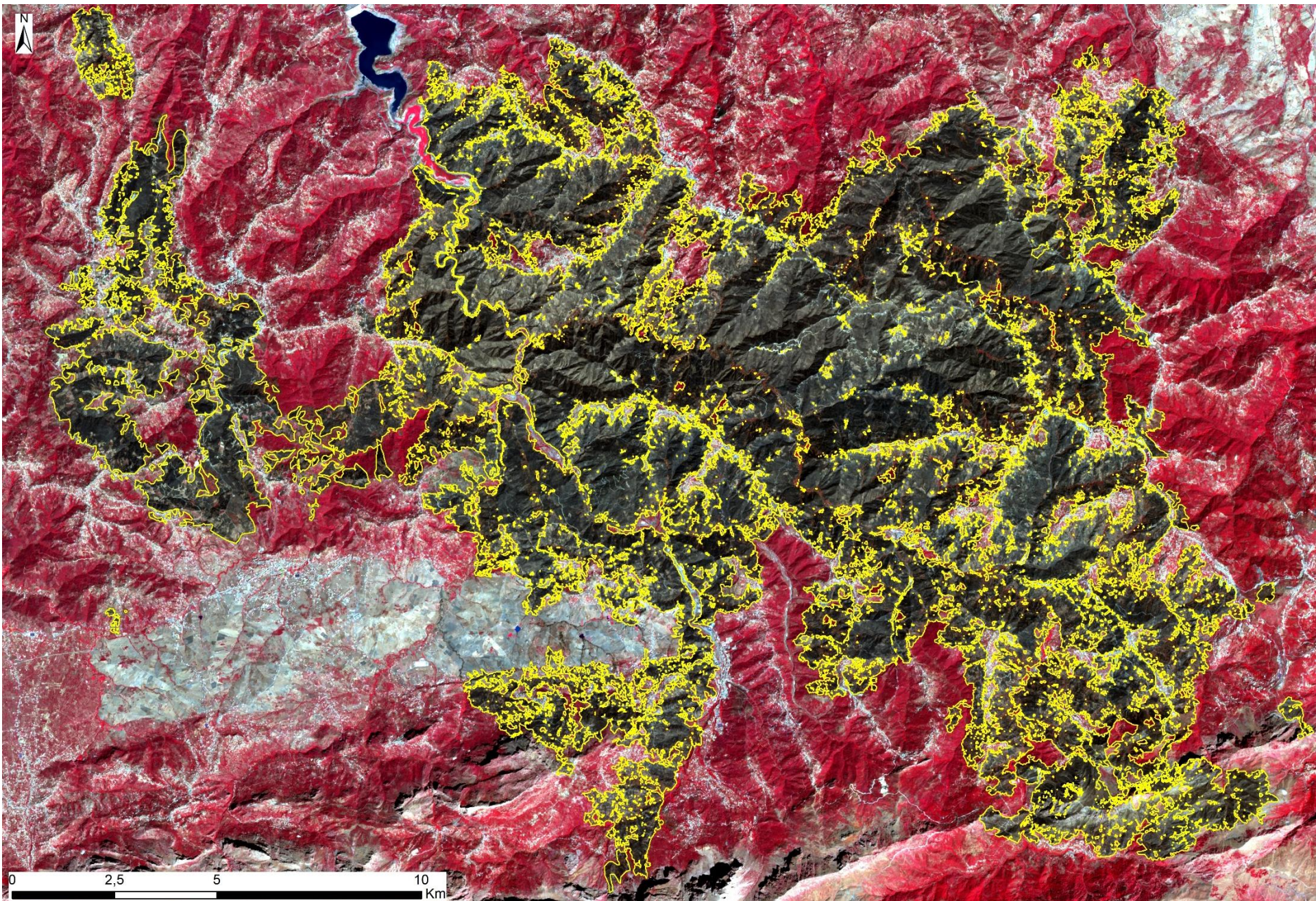


Maps illustrating the areas burned by Department

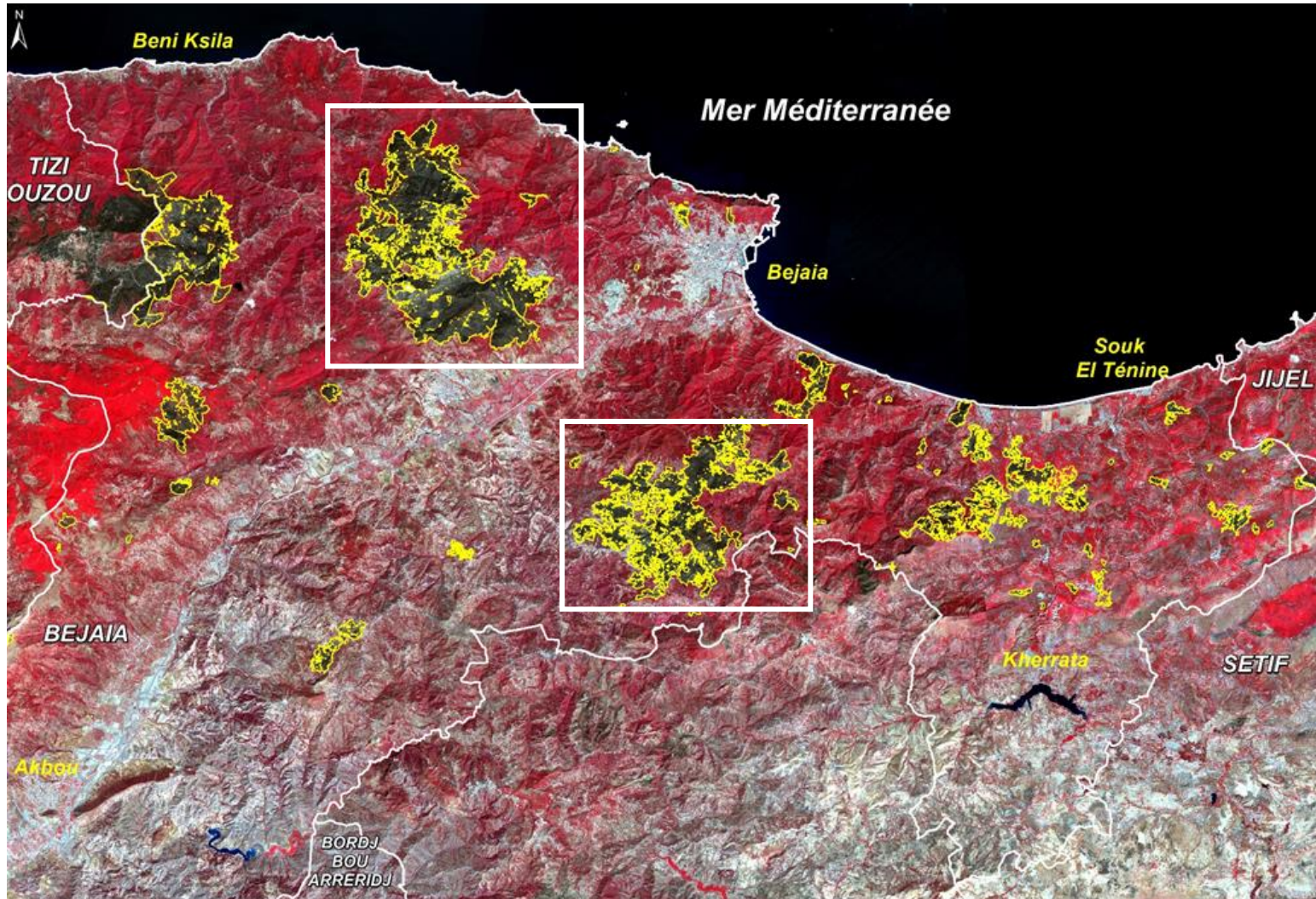


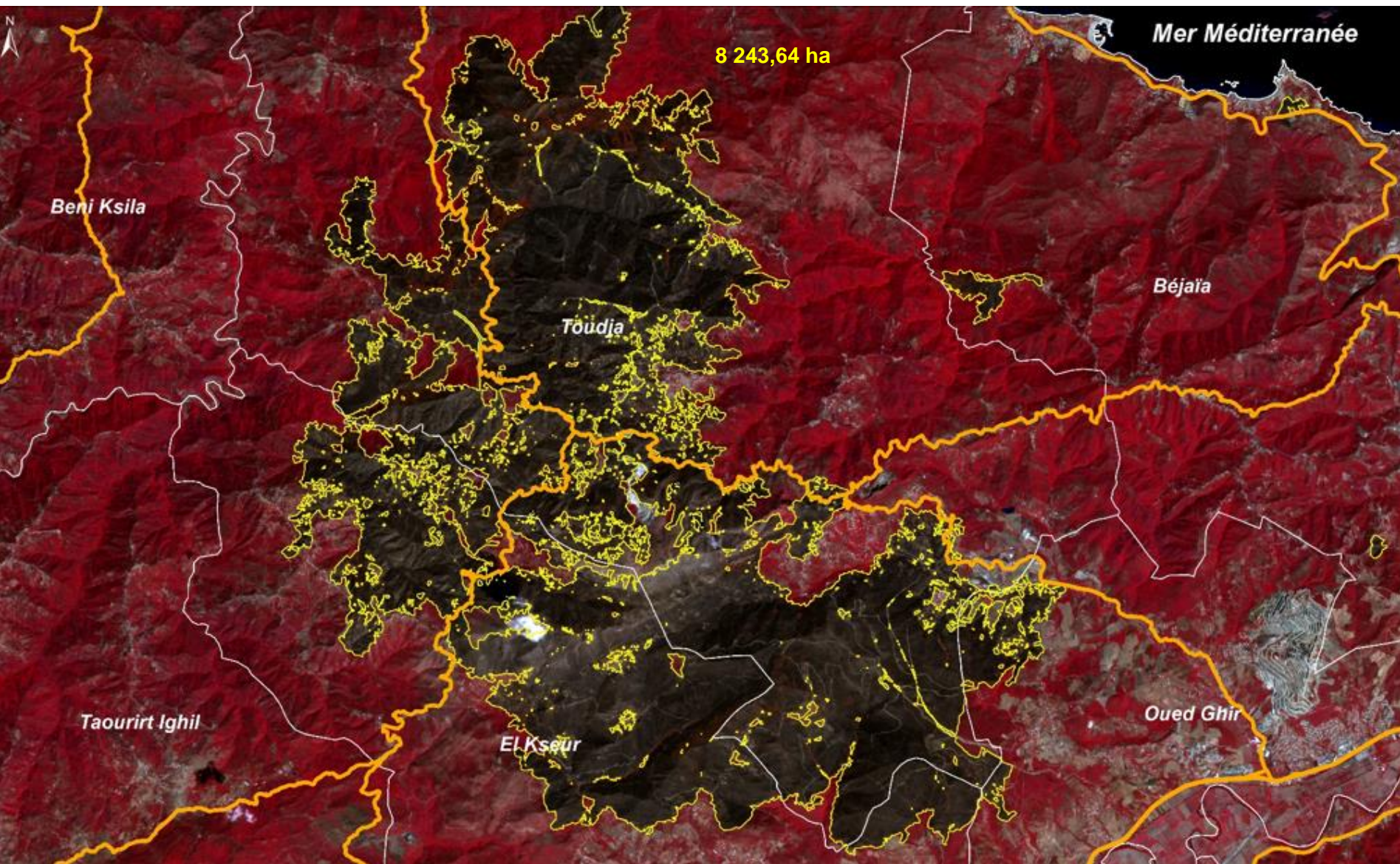
Tizi Ouzou Department

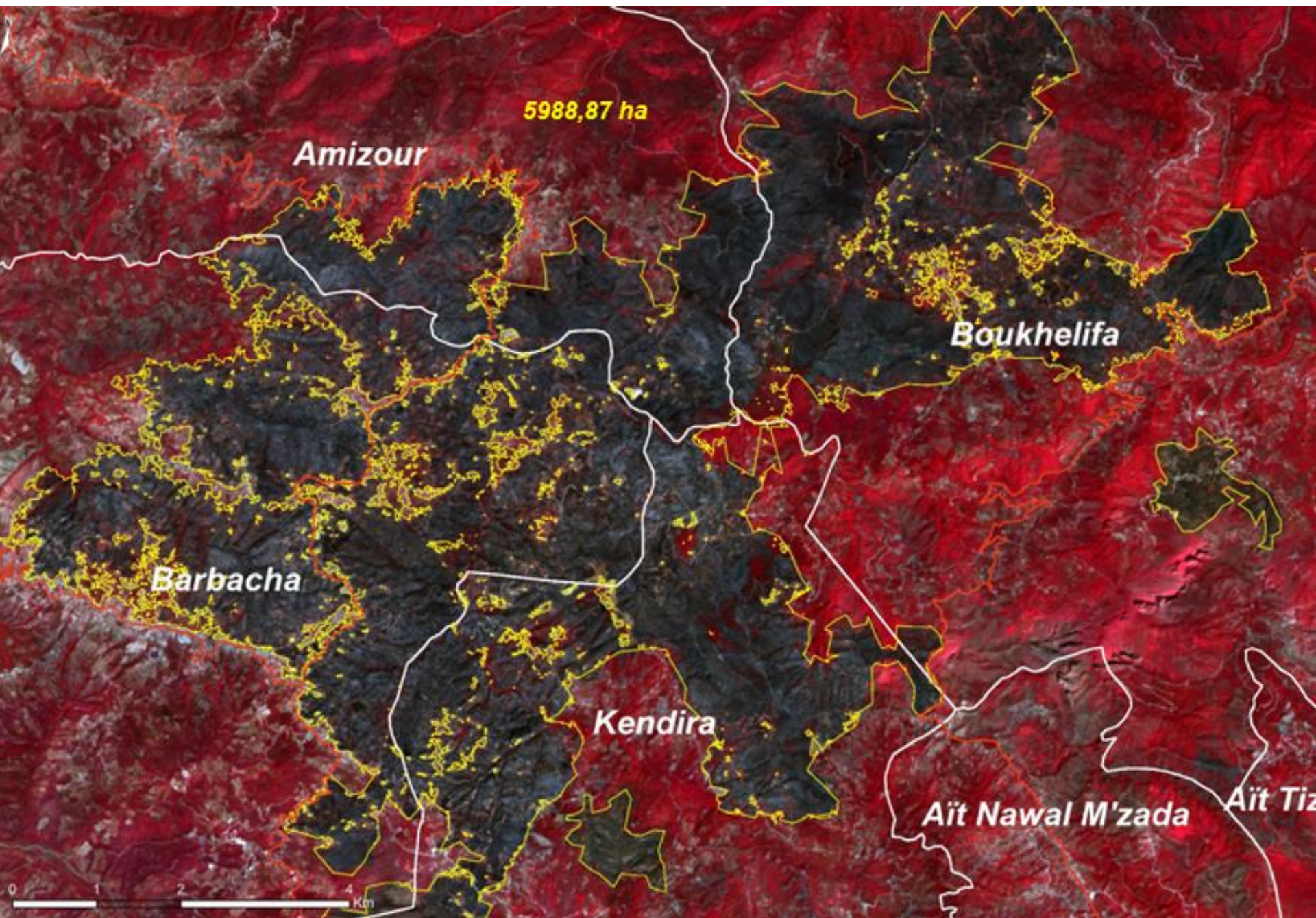




Bejaia Department







Thank you

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