

C2068W - (1) General Information

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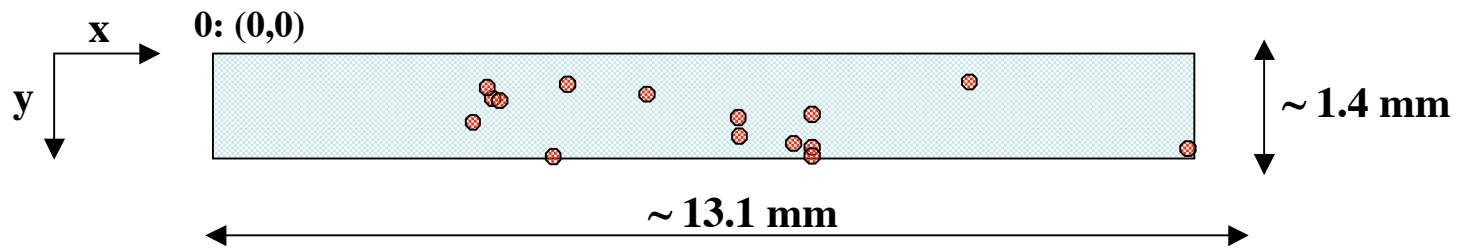
(mapping and chemical analysis performed in February and march 2006)

- **Dimensions of the foil: 13.1*1.4 mm².**
- **SEM-FEG Hitachi S4700, equipped with EDS system**
- **Search for craters at 20 kV, using the SE upper detector and I = 10 μ A**
- **G x 700.**
- **The sample was held with 2 strips of carbon double tape.**
- **The sample has been analyzed according to the following scheme:
(part A : start of scan)**

PartA (black dot on rear of foil)



(2) Craters localization



Crater #	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
x (mm)	3,38	3,63	3,57	3,73	4,44	4,64	5,69	6,93	6,92	7,65	7,90	10,02	12,89	7,90	7,89
y (mm)	0,82	0,5	0,36	0,52	1,45	0,31	0,44	1,0	0,75	1,10	1,27	0,28	1,36	0,71	1,14

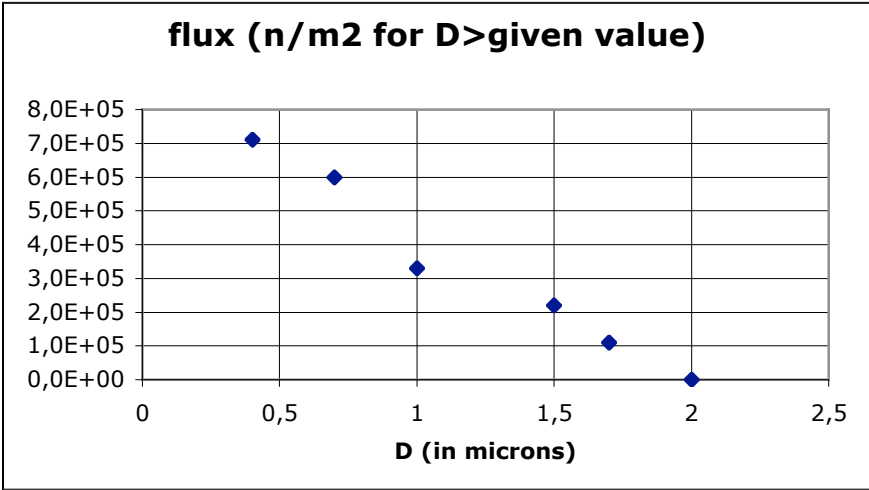
(3) Size distribution

Crater #	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
Diameter (μm)	1.74	0.82	0.57	0.82	0.77	1.32	0.98	1.08	0.75	0.44	1.57	1.54	0.95		

Minimal = 0.44 μm

Maximal = 1.74 μm

Total area analyzed: $S \sim 18.34 \text{ mm}^2$
 \Rightarrow Integrated flux: $\Phi \sim 8 \cdot 10^5 / \text{m}^2$



(4) Some representative craters

Some craters are characterized by the presence of some droplets in the vicinity (always on the left, see for example figure 1). The others are droplet free (see figure 2).

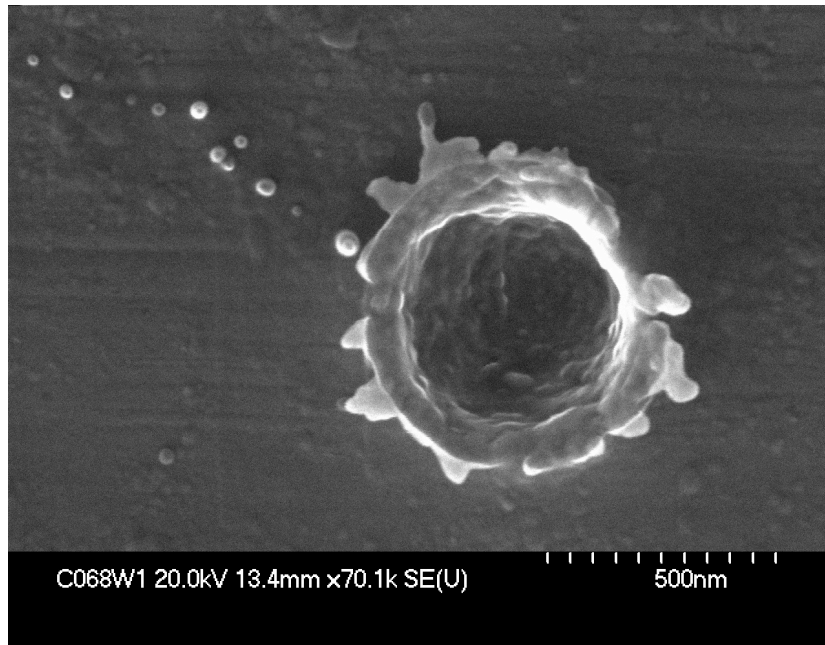


Figure 1: Crater # 3

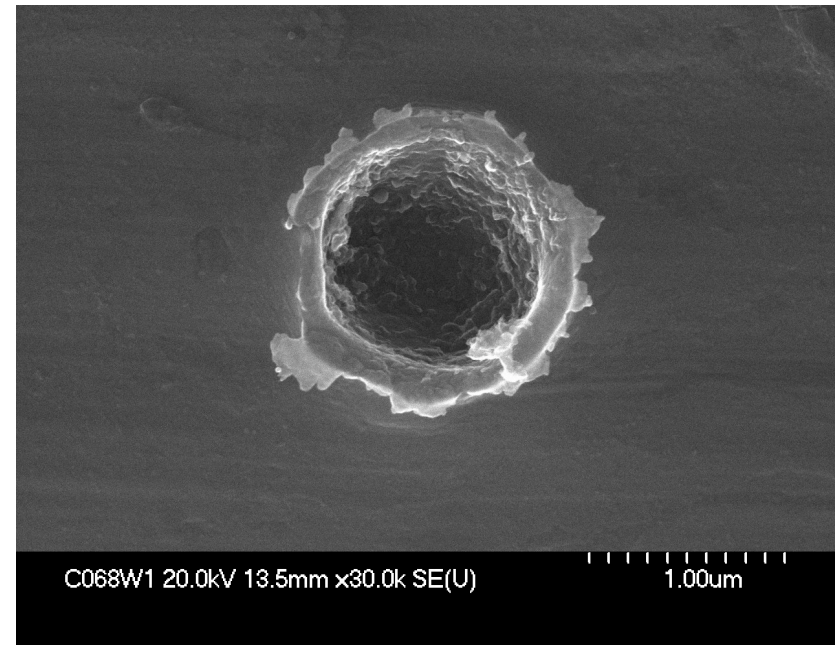
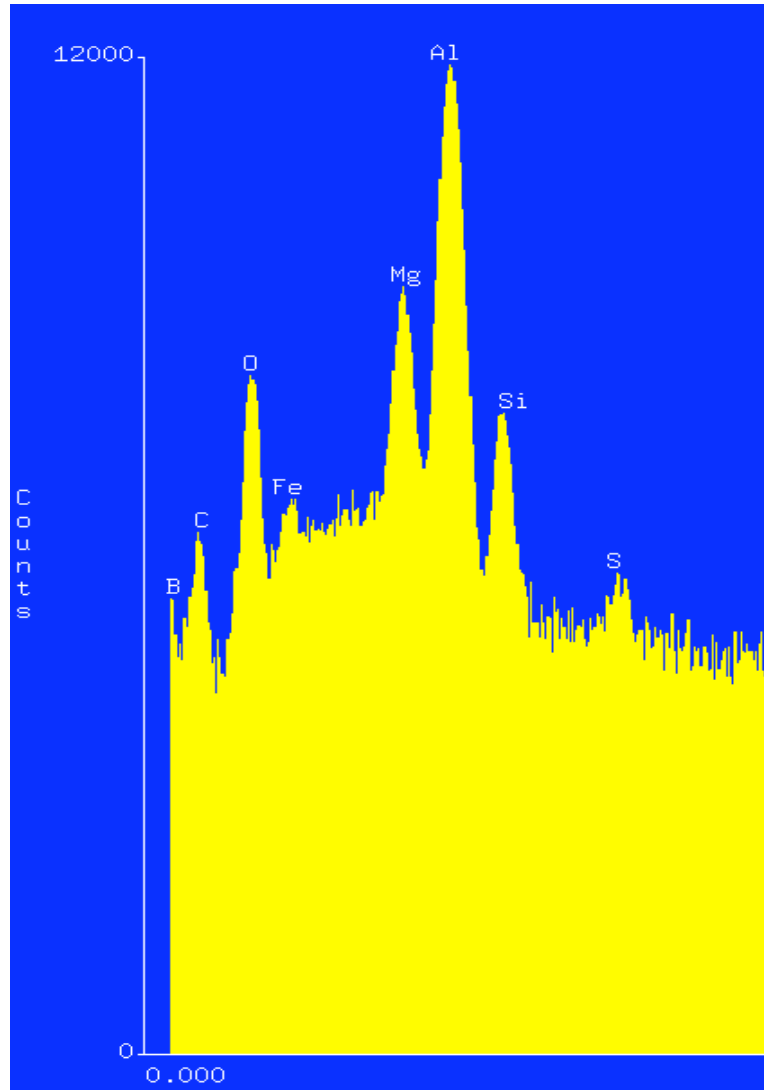


Figure 2: Crater # 6

(5) Composition data



crater	Elements present	Mg/Si	Fe/Si	Fe/S
1	Mg, Si, Fe	1,5	0,9	
2	(S) Si, Fe	0,9	0,5	
3	small	0,5		
4	small	0,9	0,4	
5	small	0,7		
6	S, Fe			1,4
7	small	12,4	5,2	
8	small	0,6	0,2	
9	Mg, Si, Fe	0,6	0,7	
10	mainly S, Fe	0,5	0,6	0,9
11	Mg, Si, some Fe	0,6	0,3	1,9
12	mainly Mg and Si, some Fe	2,1	0,6	
13	small	0,9	0,5	

(20 keV, ZAF, Gaussian Deconvolution Method)

spectrum of Crater 12, at 7 kV

(6) More

**FIB performed on crater 11 at Lille, France
(see joined report by Hugues Leroux et al.)**