

e@dimap.com.au

G.E.O.S.Ingenieurgesellschaft mbH

Dr. René Kalmt

Phone: +49 5131 369 401 Phone: +49 160 9189 3866 Mobile: +49 160 9189 3866

www.coresmart.services

r.Kahnt@geosfreiberg

BE OSCHIM BR

save on costs at the same time

Predict your metal grades with more

your geochemical analyses

than 85-9 to 250 accuracy even before

The coresman Freedor provides a metri ment of the grades for most metals in

RC or percussion drills)

Drill Core Scanning Mineral Mapping and metal contents

Jul Core 2 Canning • Mineral Mapping and meral contradictor Jusing the Artificial Intelligence of our coresmant predictor

· existing drill core archives

The coresmant predictor provides a method for assess

• existing drill core archives campaigns (diamond drilling, drill core archives campaigns (diamond drilling, drills) • cores from ongoing drills) • cores from encussion drills)

RC or percussion dritts) sampting and airborne missions material from surface sampting and airborne missions • material from surface from drone and airborne missions

The unmissable tool to

speed-up exploration and



The **CoreSmart Predictor** is a smart piece of Artificial Intelligence that has been trained on more than 1300 km hyperspectral core scan data and 130000 geochemical analyses.

Metal	Threshold (ppm), if not marked different	Accuracy of prediction in % checked against independend samples
Ag	2,5	81
Au	0,8	85
Fe	36,50%	95
Cu	3,90%	84
U	10,0	89
Ni	22,0	93
Pb	5,0	91
Zn	68,0	92
Sb	0,3	94
As	6,0	93
Bi	0,1	95

Achieved accuracy of the CoreSmart Predictor tested on independent assays for the metals at this stage available for predictions on hyperspectrally drilled core and rock samples. joint development

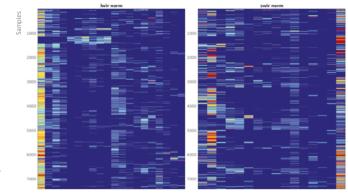
This AI is an especially developed Neural Network that processes hyperspectral scan data (VNIR/SWIR and/or TIR) and achieves an accuracy for metal grades between 85% and 95%.

During development it has been tested on independent samples for the most important industrial metals.

The CoreSmart Predictor includes:

₀y **Figure G.E.O.S.** d i m a p

- A validated and quality assured database containing hyperspectral scan data of more than 3000 drill holes and 700.000 assays from all Australian states and beyond
- CoreSmart predictions for all segments of publicly available hyperspectral scanned drill holes in Australia
- Tools for importing scanned drill core data from different sources



Simulated class (ore grade) response of Copper in relations to hyperspectral minerals list

"In summary, the authors have compiled a very interesting and useful data set and evaluated the potential for predicting geochemical parameters from hyperspectrally-derived mineralogy"

Carsten Laukamp (CSIRO)





Contact Dr. Holger Eichstaedt Website www.coresmart.services



For more information scan to read the full article https://doi.org/10.1080/ 08120099.2022.2017344