

USING CITYGML TO DEPLOY SMART-CITY SERVICES FOR URBAN ECOSYSTEMS.F. Prandi a, *, R. De Amicis a, S. Piffer a, M. Soavea, S. Cadzowb, E. Gonzalez Boix c, E. D’Hont c

3D virtual city model, urban ecosystems, open design methodology and implementation proposal. Technical issues as well as environmental and social.

Water quality monitoring in smart city: A pilot project Author links open overlay panelYihengChen DaweiHan

Smart city infrastructure, real time monitoring of wireless water signals.

BEYOND VISUALISATION – 3D GIS ANALYSES FOR VIRTUAL CITY MODELS J. Moser¹, F. Albrecht¹, B. Kosar²

3D models for successful business processes. Looks at spatial factors, proximity, spread, density and visibility.

Computer generated solar envelopes in architecture Douglas Noble & Karen Kensek

Describes the development of a tool to calculate the solar envelope, to be used in architecture.

Energy Potential Mapping: Visualising Energy Characteristics for the Exergetic Optimisation of the Built Environment Siebe Broersma *, Michiel Fremouw and Andy Van den Dobbelsteen [OrcID]

Theoretical estimation of viability of solar output in an urban area.

Market value of solar power: Is photovoltaics cost-competitive? Author(s): Lion Hirth ¹

Market and value analysis of solar power. Cost premium/penalty as factors change.

A monitoring network for erythemally-effective solar ultraviolet radiation in Austria: determination of the measuring sites and visualisation of the spatial distribution A. W. SchmalwieserG. Schauburger

A plot of maximum irradiance at different times of the year.

Application of sky-view factor for the visualisation of historic landscape features in lidar-derived relief models Žiga Kokalj (a1) (a2), Klemen Zakšek (a2) (a3) and Krištof Oštir (a1) (a2)

Simulation and computing of diffuse light and sky visibility for points in Lidar and remote sensing.

Townscope II—A computer system to support solar access decision-making Author links open overlay panelJ.Teller S.Azar

Uses spherical projections to assess sites for solar. Also develops a “computer system” to support decision making. 3D urban “information system” with a set of solar tools. Townscope is important.

Title Use and validation of PVSYST, a user-friendly software for PV-system design Author Mermoud, André

Looks like a full-featured software tool to design all factors of pv-systems. 3d tools, calculations and data plots.

GIS-based decision support for solar energy planning in urban environments Author links open overlay panelMRylatt SGadsdenKLomas

Describes a relational database connected to a GIS-database and its impact in decisions on the urban scale. Focused on solar including pv. Instance of the map can be deployed based on the project scope.

State-of-the-art review of solar design tools and methods for assessing daylighting and solar potential for building-integrated photovoltaics Author links open overlay panelNebojsaJakica

This looks like an important article. Very large overview, looking at over 200 software products, factors of solar design and pv. Looking at integration into CAD and BIM.

Solar and daylight availability in the urban fabric Author links open overlay panelR.Compagnon

Study of solar potential through numerical methods.

Future visioning of local climate change: A framework for community engagement and planning with scenarios and visualisation Author links open overlay panelStephen R.J.Sheppard AlisonShawa1DavidFlandersa1SarahBurcha1ArnimWiekb2J

Based in BC, Canada. 3D city design for different scenarios such as flooding. Supports planning and decision making.

Solar Energy as a Design Parameter in Urban Planning Author links open overlay panelJouriKantersa MiljanaHorvatb

Planning for solar-buildings in an urban environment, considers effectiveness based on surrounding geometry.